State Route 29 (SR 29) Improvements at Rutherford Road and Oakville Cross Road Intersections

NAPA COUNTY, CALIFORNIA

Initial Study with Proposed Mitigated Negative Declaration



Prepared by Metropolitan Transportation Commission

November 2023

Table of Contents

| Pr | oject | Inform | ation | v |
|----|-------|---------|--|------|
| Pr | opose | ed Miti | gated Negative Declaration | vi |
| 1 | Pro | posed | I Project | 1-1 |
| | 1.1 | INTR | ODUCTION | 1-1 |
| | 1.2 | CEQA | A REQUIREMENTS | 1-1 |
| | 1.3 | CEQA | A Lead Agency Contact Information | 1-2 |
| | 1.4 | PRO | IECT BACKGROUND AND OBJECTIVES | 1-2 |
| 2 | Pro | ject D | escription | 2-1 |
| | 2.1 | PRO | IECT LOCATION AND SITE DESCRIPTION | 2-1 |
| | 2.1 | .1 | Rutherford Road Intersection | 2-5 |
| | 2.1 | .2 | Oakville Cross Road Intersection | 2-8 |
| | 2.2 | ENVI | RONMENTAL SETTING | 2-10 |
| | 2.2 | .1 | Aesthetics | 2-10 |
| | 2.2 | .2 | Agriculture | 2-11 |
| | 2.2 | .3 | Air Quality | 2-12 |
| | 2.2 | .4 | Biological Resources | 2-15 |
| | 2.2 | .5 | Cultural and Tribal Cultural Resources | 2-16 |
| | 2.2 | .6 | Geology and Soils | 2-20 |
| | 2.2 | .7 | Hazards and Hazardous Materials | 2-20 |
| | 2.2 | .8 | Hydrology and Water Quality | 2-21 |
| | 2.2 | .9 | Land Use and Planning | 2-22 |
| | 2.2 | .10 | Mineral Resources | 2-23 |
| | 2.2 | .11 | Noise | 2-23 |
| | 2.2 | .12 | Population and Housing | 2-24 |
| | 2.2 | .13 | Recreation | 2-24 |
| | 2.2 | .14 | Transportation | 2-24 |
| | 2.2 | .15 | Utilities | 2-28 |
| | 2.2 | .16 | Wildfire | 2-28 |
| : | 2.3 | PRO | IECT CHARACTERISTICS | 2-28 |
| | 2.3 | .1 | Rutherford Road Intersection | 2-28 |
| | 2.3 | .2 | Oakville Cross Road Intersection | 2-29 |
| | 2.3 | .3 | Real Property Acquisition | 2-29 |
| | 2.3 | .4 | Timeframe | 2-31 |

| 2.3 | 8.5 | Construction Activities | 2-31 |
|-----|--|---|---|
| 2.3 | 8.6 | Temporary Construction Easements | 2-31 |
| 2.4 | AGE | NCY APPROVALS NEEDED | 2-32 |
| 2.5 | TRIB | AL CONSULTATION | 2-32 |
| Ca | lifornia | a Environmental Quality Act (CEQA) Evaluation | 3-1 |
| 3.1 | ENVI | RONMENTAL FACTORS POTENTIALLY AFFECTED | 3-1 |
| 3.2 | DETE | ERMINATION | 3-1 |
| 3.3 | CEQ | A ENVIRONMENTAL CHECKLIST | 3-3 |
| 3.3 | 8.1 | Aesthetics | 3-3 |
| 3.3 | 8.2 | Agriculture and Forestry Resources | 3-6 |
| 3.3 | 8.3 | Air Quality | 3-8 |
| 3.3 | 8.4 | Biological Resources | 3-19 |
| 3.3 | 8.5 | Cultural Resources | 3-23 |
| 3.3 | 8.6 | Energy | 3-28 |
| 3.3 | 8.7 | Geology and Soils | |
| 3.3 | 8.8 | Greenhouse Gas Emissions | 3-32 |
| 3.3 | 8.9 | Hazards and Hazardous Materials | 3-34 |
| 3.3 | 8.10 | Hydrology and Water Quality | 3-39 |
| 3.3 | 8.11 | Land Use and Planning | 3-46 |
| 3.3 | 8.12 | Mineral Resources | 3-47 |
| 3.3 | 8.13 | Noise | 3-48 |
| 3.3 | 8.14 | Population and Housing | 3-51 |
| 3.3 | 8.15 | Public Services | 3-51 |
| 3.3 | 8.16 | Recreation | 3-52 |
| 3.3 | 8.17 | Transportation | 3-52 |
| 3.3 | 8.18 | Tribal Cultural Resources | 3-55 |
| 3.3 | 8.19 | Utilities and Service Systems | 3-57 |
| 3.3 | 8.20 | Wildfire | 3-58 |
| 3.3 | 8.21 | Mandatory Findings of Significance | 3-60 |
| | 2.3 2.4 2.5 Ca 3.1 3.2 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 | 2.3.5 2.3.6 2.4 AGEI 2.5 TRIB. California 3.1 ENVI 3.2 DETE 3.3 CEQ, 3.3.1 3.3.2 3.3.3 3.3.4 3.3.5 3.3.6 3.3.7 3.3.8 3.3.7 3.3.8 3.3.7 3.3.8 3.3.7 3.3.8 3.3.10 3.3.10 3.3.11 3.3.12 3.3.10 3.3.11 3.3.12 3.3.13 3.3.14 3.3.15 3.3.16 3.3.15 3.3.16 3.3.17 3.3.18 3.3.19 3.3.20 3.3.21 | 2.3.5 Construction Activities 2.3.6 Temporary Construction Easements 2.4 AGENCY APPROVALS NEEDED 2.5 TRIBAL CONSULTATION. California Environmental Quality Act (CEQA) Evaluation 3.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED 3.2 DETERMINATION 3.3 CEQA ENVIRONMENTAL CHECKLIST 3.3.1 Aesthetics 3.3.2 Agriculture and Forestry Resources 3.3.3 Air Quality 3.3.4 Biological Resources 3.3.5 Cultural Resources 3.3.6 Energy 3.7 Geology and Soils 3.8 Greenhouse Gas Emissions 3.9 Hazards and Hazardous Materials 3.10 Hydrology and Water Quality 3.3.11 Land Use and Planning 3.3.12 Mineral Resources 3.3.13 Noise 3.3.14 Population and Housing 3.3.15 Public Services 3.3.16 Recreation 3.3.17 Transportation 3.3.18 Tribal Cultural Resources 3.3.20 Wildfire 3.3.21 Mandatory Findings of Significance |

| 4 | Lis | t of Preparers | 4-1 |
|---|-----|----------------|-------|
| | 4.1 | Caltrans Staff | 4-1 |
| | 4.2 | MTC | 4-1 |
| | 4.3 | GHD | 4-1 |
| | 4.4 | WSP | 4-1 |
| 5 | Re | ferences | . 5-1 |

List of Tables

| Table 2-1. | State and Federal Attainment Status | 2-13 |
|------------|--|------|
| Table 2-2. | Air Quality Concentrations for the Past 3 Years Measured at | |
| | Napa-Valley College | 2-13 |
| Table 3-1. | Estimated Short-term Construction Emissions (pounds per day) | 3-12 |
| Table 3-2. | Regional Emissions Burden Summary | 3-16 |

List of Figures

| Project Location | 2-2 |
|---|---|
| Project Vicinity | 2-3 |
| Project Footprint | 2-4 |
| Rutherford Road Intersection Aerial | 2-6 |
| Napa Valley Wine Train Crossing at Rutherford Road and SR 29: Approach from west | 2-7 |
| Napa Valley Wine Train Crossing at Rutherford Road and SR 29: | |
| Approach from east | 2-8 |
| Oakville Cross Road Aerial | 2-9 |
| Walnut Lane and SR 29, Looking east | 2-10 |
| Existing Bicycle Facilities | 2-25 |
| Existing Transit Routes | 2-27 |
| | Project Location Project Vicinity Project Footprint Rutherford Road Intersection Aerial Napa Valley Wine Train Crossing at Rutherford Road and SR 29: Approach from west Napa Valley Wine Train Crossing at Rutherford Road and SR 29: Approach from east Oakville Cross Road Aerial Walnut Lane and SR 29, Looking east Existing Bicycle Facilities Existing Transit Routes |

Appendices

| Appendix A | Visual Impact Report |
|------------|--|
| Appendix B | Air Quality Report |
| Appendix C | Natural Environmental Study Minimal Impact |
| Appendix D | Cultural Resources Review Memorandum |
| Appendix E | Initial Site Assessment Overview Study |
| Appendix F | Water Quality Assessment Report |
| Appendix G | Noise Study Report |
| Appendix H | Vibration Damage Risk Assessment |
| Appendix I | Traffic Operations Analysis Report |

| Project Title | State Route 29 Intersection Improvement | | |
|---------------------------------|--|--|--|
| | Project at Rutherford Road and Oakville | | |
| | Cross Road | | |
| Lead Agency Name & Address | Metropolitan Transportation Commission | | |
| | Bay Area Metro Center | | |
| | 375 Beale Street Suite 800 | | |
| | San Francisco, CA 94105 | | |
| Contact Person & Phone Number | Ingrid Supit, Principal Engineer - Capital | | |
| | Project Delivery | | |
| | (415) 778-6691 | | |
| Project Location | Rutherford, Napa County and Oakville, | | |
| | Napa County along State Route 29 | | |
| General Plan Designation/Zoning | Right of Way, Agricultural Preserve, | | |
| | Limited Commercial | | |

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The Metropolitan Transportation Commission (MTC), in cooperation with Napa Valley Transportation Authority (NVTA) and the California Department of Transportation (Caltrans), proposes to improve the operation and safety of SR 29 at the intersections of Oakville Cross Road (PM 22.72) and Rutherford Road (PM 24.59). A single-lane roundabout is proposed at the intersection of SR 29 and Oakville Cross Road. Due to right of way limitations, a roundabout will not be feasible at the Rutherford Road intersection without substantial right of way impact. Hence, the project proposes to install a traffic signal and/or other traffic calming measures at the intersection of SR 29/Rutherford Road.

DRAFT Determination

This Draft Mitigated Negative Declaration (MND) has been prepared to give notice to interested agencies and the public that it is MTC's intent to adopt an MND for this project. This does not mean that MTC's decision regarding the project is final. This MND is subject to change based on comments received by interested agencies and the public.

MTC has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no effect on Energy, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Utilities and Service Systems, and Wildfire.

In addition, the proposed project would have less than significant effects to Aesthetics, Agriculture and Forestry Resources, Air Quality, Geology and Soils, Greenhouse Gas Emissions, Hydrology and Water Quality, and Transportation.

With the following mitigation measures incorporated, the proposed project would have less than significant effects to: Biological Resources, Cultural Resources, Hazards and Hazardous Waste, Noise, and Tribal Cultural Resources.

- MM-BIO-1 Pre-construction Field Inspections for Yellow-legged Frog
- MM-BIO-2 Pre-construction Nest Checks
- MM-CUL-1 Cultural Management Measures within Designated ESA Locations
- MM-CUL-2 Archeological and Native American Monitoring

- MM CUL-3 Discovery of Archeological Resources
- MM-HAZ-1 Phase II Investigation
- MM HAZ-2 Hazardous Waste Management Plan
- MM NOI-1 Photo Visual Documentation
- MM NOI-2 Vibration Control Plan
- MM NOI-3 Vibration Monitoring

Ingrid Supit, MTC *Principal Engineer – Capital Project Delivery* Date

1 Proposed Project

1.1 INTRODUCTION

State Route 29 (SR 29) (St. Helena Highway) in the communities of Rutherford, Oakville, and Yountville in the County of Napa is a key route providing north/south connectivity within Napa Valley. This section of the SR 29 corridor regularly experiences heavy traffic congestion during the peak periods.

In 2020, MTC in cooperation with Napa Valley Transportation Authority (NVTA) created the Napa Valley Forward Program, aiming to address the mobility needs of the area.

In March 2023, MTC completed a Traffic Operations Analysis Report (TOAR) to identify the causes of and potential solutions to congestion in the greater project vicinity. The results indicated that constructing a roundabout or installing traffic signals at the intersections of SR 29 and Rutherford Road and SR 29 and Oakville Cross Road would improve multimodal traffic operations performance along SR 29. For the purposes of discussion, SR 29 shall be referred to as north-south orientation and cross-streets Oakville Cross Road/Walnut Drive and Rutherford Road/SR-128 will be referenced as oriented east-west.

MTC grouped these intersections under the SR 29 Napa Valley Forward Intersection Improvements Project (Project).

1.2 CEQA REQUIREMENTS

Metropolitan Transportation Commission (MTC), serving as the California Environmental Quality Act (CEQA) Lead Agency, has prepared this Initial Study to provide the public, responsible agency, and trustee agencies with information about the potential environmental effects of the State Route SR 29 Intersection Improvement Project at Rutherford Road and Oakville Cross Road (hereafter referred to as the "project").

The purpose of this Initial Study is to provide a basis for deciding the proper level of environmental document for CEQA clearance whether to prepare an Environmental Impact Report, a Mitigated Negative Declaration, or a Negative Declaration. This Initial Study has been prepared to satisfy the requirements of CEQA (Public Resources Code, Division 13, Sec 21000-21177) and the CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387). Section 15063(d) of the State CEQA Guidelines states the content requirements of an Initial Study as follows:

- 1. A description of the project including the location of the project;
- 2. An identification of the environmental setting;

- 3. An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
- 4. A discussion of the ways to mitigate the significant effects identified, if any;
- 5. An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls;
- 6. The name of the person or persons who prepared or participated in the Initial Study.

1.3 CEQA LEAD AGENCY CONTACT INFORMATION

The CEQA lead agency for the project is MTC. The contact person for the MTC is:

Ingrid Supit, Principal Engineer – Capital Project Delivery **Metropolitan Transportation Commission** Bay Area Metro Center 375 Beale Street Suite 800 San Francisco, CA 94105 (415) 778-6691

1.4 PROJECT BACKGROUND AND OBJECTIVES

In January 2020, MTC completed a traffic operations analysis to identify the causes of and potential solutions to congestion in the greater project vicinity. The results indicated that enhanced intersection control at the two intersections would improve multimodal traffic operations performance along SR-29. Preliminary crash data analysis provided by Caltrans indicates that the total rate of fatal and injury crash at these two intersections are above the average crash rate for similar facilities statewide. Based on the results of traffic and safety analyses and feedback received from project stakeholders, the implementation of a traffic signal and roundabout are viable options to address the operations and safety needs.

Federal Highway Administration (FHWA) studies indicate that a properly designed roundabout would slow down traffic and, hence, reduce the probabilities of most severe types of intersection crashes and injuries. Roundabouts also allow for continuous flow of traffic at lower speed through this segment of the corridor and would be the ideal candidate to address the safety and operations challenges associated with the corridor.

In March 2023, MTC completed a Traffic Operations Analysis Report (TOAR) to identify the causes of and potential solutions to congestion in the greater project vicinity. The results indicate constructing roundabouts or traffic signals at the intersections of SR 29 and Rutherford Road and SR 29 and Oakville Cross Road would improve multimodal traffic operations performance along SR 29.

The objectives of the project are to enhance both safety and traffic operations at the intersections of SR 29 and Oakville Cross Road and SR 29 and Rutherford Road. The project would improve travel time and reduce delay for side streets accessing SR 29, through enhancing traffic safety and improving turning movements at these intersections.

2 Project Description

2.1 PROJECT LOCATION AND SITE DESCRIPTION

The project is located in the communities of Rutherford and Oakville in unincorporated Napa County. It is located approximately 7 miles north of the outskirts of the City of Napa. The intersections are located approximately 2 miles from each other, with Rutherford to the north.

Figure 2-1. Project Location



Figure 2-2. Project Vicinity



Figure 2-3. Project Footprint



2.1.1 RUTHERFORD ROAD INTERSECTION

The existing SR 29/Rutherford Road intersection is asphalt paved. It is an unsignalized T-intersection with an unnamed privately owned driveway located opposite and offset from Rutherford Road on the west side of SR 29. There is no existing stop control along SR 29 at the intersection. Rutherford Road and the unnamed privately owned driveway have stop signs at the intersection of SR 29. On the northeast corner of the intersection is the Rutherford Grill and a United States Post Office. Southeast of the intersection is the Elizabeth Spencer Winery, with residences and commercial structures located further south. The southwest parcel supports vineyards. Located on the northwest parcel is the Rutherford Fire Department and a vineyard.

Figure 2-4. Rutherford Road Intersection Aerial



Source: GHD 2023

On the west side, the SR 29 corridor is bordered by the NVWT railroad right of way. The NVWT operates six to nine trains per day, depending on the season on a single track.

At Rutherford Road, the NVWT track crosses an existing privately owned driveway, which provides access to the parcels on the west side of the track.

Figure 2-5. Napa Valley Wine Train Crossing at Rutherford Road and SR 29: Approach from west



The intersection area is relatively flat with the existing crossing constructed at grade with asphalt concrete. There are no railroad crossing panels, gate or existing curb, gutter, or sidewalks at or near the crossing. There is no fence separating track from SR 29.

Because the crossing is offset to the south of the intersection and connects to the private driveway, there are no railroad crossing gates and signal.

Figure 2-6. Napa Valley Wine Train Crossing at Rutherford Road and SR 29: Approach from east



2.1.2 OAKVILLE CROSS ROAD INTERSECTION

The intersection is an asphalt paved, unsignalized intersection. The roadways crossing SR 29 are known as Oakville Cross Road on the east of SR 29 and Walnut Lane west of SR 29. The Oakville Grocery structure and vineyard sits on the northeast corner of the intersection with two driveways providing access from/to SR 29. A sidewalk wraps around the southeast parcel, surrounding the Napa Wine Company and parking lot. A Class II bikeway runs north and south on SR 29. The southwest parcel is mainly vineyards, with a set of residences located further south of the intersection. On the northwest parcel, a small structure housing a commercial business sits on the corner in addition to vineyards.

Figure 2-7. Oakville Cross Road Aerial



Source: GHD 2023

On the west side, the existing SR 29 corridor is bordered by NVWT railroad right of way. At Oakville Cross Road, the NVWT track crosses an existing privately owned driveway, which provides access to the parcels on the west side of the track.



Figure 2-8 Walnut Lane and SR 29, Looking east

The existing crossing is constructed with asphalt concrete. There are no railroad crossing panels, gate, existing curb, gutter, or sidewalks at or near the crossing. There is no existing fence separating track from the SR 29. The crossing is private access and thus the reason for the absence of the railroad crossing gates and signal.

2.2 ENVIRONMENTAL SETTING

2.2.1 AESTHETICS

A Visual Impact Assessment was prepared for the project and approved by Caltrans (WSP 2023) (refer to Appendix A).

The Project intersections at Rutherford and Oakville are set in rural locations along the main thoroughfare of SR 29, which offers wide lanes and shoulders to accommodate bikers and automobiles as they travel through the scenic vineyard landscape of Napa Valley. The SR 29 corridor stretches through regionally acclaimed vineyards and local wineries. The lack of condensed urbanization and multi-storied buildings surrounding the corridor provide an unfiltered horizon line with additional views of mountain ridgelines, green hillsides, and valleys in the distance. Late-nineteenth and early-twentieth century architectural resources, including a rural mercantile and a historic rail line may also be considered distinct visual features along the roadway. On either side of the corridor, mature trees, ornamental landscaping, and agricultural vineyards obscure direct views of adjacent commercial land use and provide continuity and intactness between the roadway and the vast agricultural landscape.

Local businesses such as the Oakville Grocery in Oakville and Rutherford Grill in Rutherford are built in a historic style, and the scale of these buildings create a small, rural village character. Land uses along the Project corridor are primarily exurban, supporting low-density housing and commercial businesses, such as wineries, restaurants, grocery stores, and a post office. Much of the remaining surrounding area is used for the cultivation and harvest of grapes for wine production.

The visual character and quality of the Rutherford Road intersection are characterized by street signs, lighting, ornamental landscaping, and the adjacent train tracks and fire station. The 1902 Rutherford Depot and the Napa Valley Wine Train tracks are present on the eastern side of the intersection. The Napa Valley Wine Train is eligible as a California Point of Interest for its historical significance between ca. 1860 to ca. 1920. Roadside vegetation, foliage, as well as ornamental landscaping provide a focused view of the roadway blocking the vast agricultural landscape that surrounds the corridor. This dominated view of the roadway provides a strong corridor focused view with the skyline, surrounding vegetation, and roadway creating a cohesive image. However, roadway signage reduces intactness somewhat, the large-scale vegetation obscures views of the horizon, and the vast agricultural landscape that surrounds the corridor on either side minimizes visual quality.

The roadway corridor at the Oakville Cross Road intersection stretches through regionally acclaimed vineyards and local wineries. The lack of condensed urbanization and multi-storied buildings surrounding the corridor provide an unfiltered horizon line with additional views of mountain ridgelines, green hillsides, and valleys in the distance. Late-nineteenth and early-twentieth century architectural resources, including a rural mercantile and a historic rail line, may also be considered distinct visual features along the roadway. On either side of the corridor, mature trees, ornamental landscaping, and agricultural vineyards obscure direct views of adjacent commercial land use and provide continuity and intactness between the roadway and the vast agricultural landscape.

Architectural resources that reside within the Oakville Cross Road intersection's visual corridor include the Oakville Grocery and the Durrant House. The Oakville Grocery, built in 1921, resides on the northeast side of the Oakville Cross Road intersection providing historical significance of feeling, time, and place. The Durrant House, located behind the Oakville Grocery on the north side, was built in 1885 and provides historical 1885 significance in its exterior integrity that preserves the original rural interpretation of the Italianate-style of architecture.

According to the California State Scenic Highway System Map (California Department of Transportation, 2021), there are no officially designated State Scenic Highways within the Project vicinity. However, SR 29 is eligible for listing as a State Scenic Highway.

2.2.2 AGRICULTURE

Napa County is in the American Viticultural Area (AVA) of the northern California wine region and is known for the hundreds of hillside vineyards. The project is located in a corridor lined by prime farmland with urban and built-up land scattered along the

corridor, as mapped by the California Important Farmland Finder. Prime farmland is irrigated land with the best combination of physical and chemical features able to sustain long term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Urban and Built-Up land is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel.¹

2.2.3 AIR QUALITY

An Air Quality Report, approved by Caltrans, was prepared for the project and is included as Appendix B. The project site is in proximity to the communities of Rutherford and Oakville in Napa County, an area within the San Francisco Bay Area Air Basin, which also includes Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties. Air quality regulation in San Francisco Bay Area Air Basin Air Basin is administered by the Bay Area Air Quality Management District (BAAQMD).

The air pollution potential in the Napa Valley could be high if there were sufficient sources of air contaminants nearby. Summer and fall prevailing winds can transport ozone precursors northward from the Carquinez Strait Region to the Napa Valley, effectively trapping and concentrating the pollutants when stable conditions are present. The local upslope and downslope flows created by the surrounding mountains may also recirculate pollutants already present, contributing to buildup of air pollution. The Napa Valley is bordered by relatively high mountains. With an average ridge line height of about 2000 feet, with some peaks approaching 3000 to 4000 feet, these mountains are effective barriers to the prevailing northwesterly winds. High ozone concentrations are a potential problem to sensitive crops such as wine grapes, as well as to human health. The high frequency of light winds and stable conditions during the late fall and winter contribute to the buildup of particulate matter from motor vehicles, agriculture and wood burning in fireplaces and stoves.

2.2.3.1 CRITERIA POLLUTANTS AND ATTAINMENT STATUS

The project area is designated as "nonattainment" for the 2008 federal ozone standard, the 2015 federal ozone standard, and the 2006 federal $PM_{2.5}$ standard. Additionally, the project area is nonattainment for the state ozone, PM_{10} , and $PM_{2.5}$ standards. Table 2-1 lists the state and federal attainment status for all regulated pollutants.

Table 2-2 lists air quality trends in data collected at Napa-Valley College for the past 3 years. The Napa-Valley College station is the closest monitoring station to the project site, located 13 miles to the southeast. Several exceedances of the State 1-hour ozone, State and Federal 8-hour ozone, State 24-hour PM₁₀ and Federal 24-hour PM_{2.5} standards were recorded during the 2019 – 2021 period.

¹ California Department of Conservation. *California Important Farmland Finder*, <u>https://maps.conservation.ca.gov/DLRP/CIFF/.</u> Accessed February 13, 2023.

Table 2-1. State and Federal Attainment Status

| Pollutant | State Attainment Status | Federal Attainment Status |
|---|-------------------------|------------------------------|
| Ozone (O ₃) | Nonattainment | Marginal Nonattainment |
| Respirable Particulate Matter (PM ₁₀) | Nonattainment | Attainment-Unclassified |
| Fine Particulate Matter (PM _{2.5}) | Nonattainment | Marginal Nonattainment |
| Carbon Monoxide (CO) | Attainment | Attainment-Unclassified |
| Nitrogen Dioxide (NO ₂) | Attainment | Attainment-Unclassified |
| Sulfur Dioxide (SO ₂) | Attainment | Attainment-Unclassified |
| Lead (Pb) | Attainment | Attainment-Unclassified |
| Visibility-Reducing Particles | Unclassified | N/A |
| Sulfates | Attainment | N/A |
| Hydrogen Sulfide | Unclassified | N/A |
| Vinyl Chloride | N/A | N/A |

Source: ARB, http://www.arb.ca.gov/desig/adm/adm.htm

Table 2-2. Air Quality Concentrations for the Past 3 Years Measured at Napa-Valley College

| Pollutant | Standard | 2019 | 2020 | 2021 | | |
|----------------------------------|----------------------|-------|-------|-------|--|--|
| Ozone | | | | | | |
| Max 1-hr concentration | | 0.095 | 0.091 | 0.070 | | |
| No. days exceeded: State | 0.09 ppm | 1 | 0 | 0 | | |
| Max 8-hr concentration: State | - | 0.077 | 0.077 | 0.064 | | |
| Max 8-hr concentration: Federal: | - | 0.076 | 0.076 | 0.064 | | |
| No. days exceeded: State | 0.070 ppm | 2 | 1 | 0 | | |
| No. days exceeded: Federal | 0.070 ppm | 2 | 1 | 0 | | |
| PM ₁₀ | | | | | | |
| Max 24-hr concentration: State | - | 39.0 | 125.0 | 24.0 | | |
| Max 24-hr concentration: Federal | - | 37.5 | 122.9 | 22.9 | | |
| No. days exceeded: State | 50 µg/m³ | 0 | 2 | 0 | | |
| No. days exceeded: Federal | 150 µg/m³ | 0 | 0 | 0 | | |
| Annual average concentration | | * | 19.0 | * | | |
| No. days exceeded: State | 20 µg/m ³ | - | - | - | | |

| Pollutant | Standard | 2019 | 2020 | 2021 | | |
|--|------------|------|-------|------|--|--|
| PM _{2.5} | | | | | | |
| Max 24-hr concentration | | 21.5 | 148.5 | 17.6 | | |
| No. days exceeded: Federal | 35 µg/m³ | 0 | 14.7 | * | | |
| Annual average concentration: State | - | 6.0 | 10.4 | * | | |
| Annual average concentration: Federal | - | 5.9 | 10.3 | * | | |
| No. days exceeded: State | 12 µg/m³ | - | - | - | | |
| No. days exceeded: Federal | 12.0 µg/m³ | - | - | - | | |
| Nitrogen Dioxide | | | | | | |
| Max 1-hr concentration: State | - | 36 | 29 | 29 | | |
| Max 1-hr concentration: Federal | - | 36.6 | 29.9 | 29.0 | | |
| No. days exceeded: State | 0.18 ppm | 0 | 0 | 0 | | |
| No. days exceeded: Federal | 100 ppb | 0 | 0 | 0 | | |
| Annual average concentration: State | - | 4 | 4 | * | | |
| Annual average concentration: Federal | - | - | - | - | | |
| No. days exceeded: State | 0.030 ppm | - | _ | - | | |
| No. days exceeded: Federal | 53 ppb | - | - | - | | |

Notes:

2022 data is not yet available from ARB.

* means there was insufficient data available to determine the value

- means not available

Source: California Air Resources Board: http://www.arb.ca.gov/adam/welcome.html

Mobile Source Air Toxics

Sources of emissions of priority Mobile Source Air Toxics (MSAT) pollutants in the project area are from passenger and freight vehicles traveling on roadways. There are no other nearby facilities that serve on- or off-road motor vehicles, such as rail yards or transit terminals. There is no ambient MSAT concentration data available in the project vicinity.

Greenhouse Gas Emissions

According to the 2015 GHG inventory in the 2017 Clean Air Plan, the transportation sector contributed 40 percent of the estimated CO₂e GHG emissions in the Bay Area that year.

Sensitive Receptors

Sensitive populations (sensitive receptors) are more susceptible to the effects of air pollution than the general population. Sensitive populations that are in proximity to

localized sources of toxics and CO are of particular concern. Sensitive receptors for air quality include residential areas, schools, hospitals, other health care facilities, child/day care facilities, parks, and playgrounds. Research shows that the zone of greatest concern near roadways is within 500 feet (or 150 meters). Sensitive receptors within 500 feet (or 150 meters) of the two intersections affected by the proposed project include single family homes.

2.2.4 BIOLOGICAL RESOURCES

A Natural Environment Study - Minimal Impact (NESMI) was prepared for the project and approved by Caltrans (refer to Appendix C). The NESMI identifies any specialstatus plant and wildlife species and sensitive habitats that have the potential to occur on or in the vicinity of the project site. The assessment includes literature and database searches in the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database, California Native Plant Society's Inventory of Rare and Endangered Plants, US Department of Agriculture Natural Resource Conservation Service Web Soil Survey, US Fish and Wildlife Service (USFWS) Information for Planning and Consultation, and USFWS National Wetland Inventory. In addition to the database search, a reconnaissance field survey was conducted on September 9, 2021, by a WSP biologist to determine what species might have potential to be present on the project site. The survey methods were intended to identify land cover/land use, suitable habitat for migratory birds, raptor nests, and habitat for special status species. Where the habitat allowed the surveyor to walk without risk of damaging nests or dens and surrounding vegetation, the survey included a physical search of the area. This included inspecting the ground, shrubs, and trees for the presence of any wildlife species. The information and data collected for the habitat assessment have been used as the basis of this biological resources analysis.

A California Natural Diversity Database (CNDDB) search identified one species of concern with potential to occur within 3 miles of the project area: the foothill yellowlegged frog. The foothill yellow-legged frog is a Federal Species of Concern. It is the only species for which habitat is mapped in CNDDB for this project. According to CNDDB, the entire Rutherford USGS 7.5-minute Quadrangle map is considered yellowlegged frog habitat, but there is no suitable breeding habitat for this species within the project area. Adult frogs typically congregate at breeding sites during the reproductive season and then disperse following reproductive activity. Seasonal movements occur among breeding, post breeding summer, and overwintering habitats. Movement data on foothill yellow-legged frogs is limited to a few studies at this time, but it is likely that frogs are more mobile than commonly believed and likely utilize a wide range of watershed features including different order tributaries. Foothill yellow-legged frog upland habitat use and movement are poorly understood; however, anecdotal observations suggest that foothill yellow-legged frogs utilize upland habitat in relative proximity to streams, particularly in more mesic parts of California. There are no recorded occurrences in CNDDB within one mile of the project, but there are several recorded instances within three miles of the project area. No suitable habitat for this species was observed during a field visit in September 2021.

To account for local concerns, field survey for Swainson's Hawk and the California redlegged frog was also completed in September 2021. Swainson's hawks are protected under the MBTA and CFGC §§ 3503, 3503.5, and 3800 that prohibit the take, possession, or destruction of birds, their nests, or eggs. According to CNDDB, there was one known Swainson's hawk nest that was recorded in 2013 approximately 0.5 mile from SR 29 along the Napa River approximately 1 mile from both Rutherford and Oakville intersections. It appears that the nest tree could be within direct line of sight from SR 29 along Glos Lane. The California red-legged frog is listed under the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA) as Threatened. There are no recorded occurrences of the red-legged frog was recorded in CNDDB within 3 miles of the project area. No suitable habitat for either of these species was observed during the field visit, nor were Swainson's hawks or unoccupied raptor nests observed.

The Project footprint is located outside of the National Oceanic and Atmospheric Administration (NOAA) Fisheries jurisdiction. According to the California Essential Habitat Connectivity Project data, the Project footprint is not located in an Essential Connectivity Area of California. In addition, the Information for Planning and Consultation (IPaC) report lists Birds of Conservation Concern as potentially occurring in the vicinity of the Project footprint either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in the project location.

2.2.5 CULTURAL AND TRIBAL CULTURAL RESOURCES

A Cultural Resources Review memo was prepared in support of this IS/MND (WSP, 2023; Appendix D). The CEQA Cultural Resources Review memo is based upon several technical studies that were prepared in consultation with Caltrans to identify cultural and tribal resources near the project site. The following is a list of draft technical studies that are available to qualified viewers at the Caltrans District 4 Office (111 Grand Ave Oakland, CA 94612).:

- An Historic Property Survey Report includes the archaeological resources and historical resources survey results and a record of tribal outreach.
- All project correspondence for this report.
- The State Historic Preservation Office determinations and property documents.
- A Historic Resources Evaluation Report that identifies and records previously identify and record previously unrecorded architectural resources in the APE, resurveys previously recorded resources in the APE and assess the potential eligibility of these resources.
- An extended Phase I and Archeological Survey Report summarizes the pedestrian archeological survey that included an analysis of six archeological sites that extend horizontally into the Area of Direct Impact identified for the project.

- An Environmentally Sensitive Area Action Plan for the Proposed Napa Forward Intersection Improvements Project (ESA Action Plan) was prepared in accordance with the Caltrans Section 106 Programmatic Agreement/5024 Memorandum of Understanding (MOU to support a Finding of No Adverse Effect with Standard Conditions – ESA under Stipulation X.B.1.a. for the State Route 29 Improvements Project. It is intended to ensure that provisions for the protection of archaeological sites and historic properties identified in the project Area of Potential Effect (APE) are carried out.
- A Finding of No Adverse Effect was prepared to summarize findings from the Historic Property Survey Report (HPSR), Historical Resources Evaluation Report (HRER), and the Archaeological Survey Report (ASR) and document the findings.

2.2.5.1 HISTORICAL/ARCHITECTURAL RESOURCES

The project is located in the two communities of Rutherford and Oakville. These communities are located along SR 29 and developed in the mid-nineteenth century as agricultural and viticultural communities in the heart of Napa Valley. Both communities historically had railroad depots with modest commercial and residential development in the mid-1870s and late 1880s concurrent with a boom in the wine industry. Oakville gained a post office in 1857 and Rutherford followed suit in 1871. The 1871 Rutherford post office purportedly now functions as the tasting room for the Elizabeth Spencer Winery. Other downtown Rutherford businesses included a grocery and general merchandise store at the turn of the twentieth century, now the site of the Rutherford Grill at the corner of SR 29 and Rutherford Road.

A total of twelve architectural resources are within the Project's Area of Potential Effect (APE). Of these resources, one had been previously listed in the NRHP, one had been previously determined eligible for listing in the NRHP, and one had been previously determined not eligible for listing in the NRHP. Of the remaining nine resources, none appear eligible for listing in the NRHP or CRHR.

Of these architectural resources, the Oakville Grocery is the only resource listed in the National Register of Historic Places (NRHP) at the local level of significance under Criterion A for its association with events that have made a significant contribution to the broad patterns of our history in the area of commerce. The grocery is also a historical resource for the purposes of CEQA. Locally, the Oakville Grocery is the only surviving example of a 1920s mercantile. Its period of significance is ca. 1921- 1940. The resource boundary is the building and the southwest quarter of the Napa County Assessor's Parcel Number 031-020-010-000, which has historically been associated with the building, excluding non-contributing resources.

The Durant House, located at 7862 SR 29, Oakville, is eligible for the NRHP at the local level of significance under Criterion C as an example of rural interpretation of the Italianate style of architecture. Its period of significance is 1885, the year it was constructed. The house is also a historical resource for purposes of CEQA. The historic

resource boundary includes the building and the northwest quarter of the Napa County Assessor's Parcel Number 031-020-010-000, which has historically been associated with the building.

All resources are also historical resources for purposes of CEQA.



2.2.5.2 ARCHAEOLOGICAL RESOURCES

State Route 29 (SR 29) Improvements at Rutherford Road and Oakville Cross Road Intersections Initial Study/Proposed MND | 2-18



2.2.5.3 TRIBAL CULTURAL RESOURCES/SACRED LANDS

A Sacred Lands File search was requested from the Native American Heritage Commission (NAHC). A response was received on April 22, 2022, indicating that sacred lands have been identified within the vicinity of the project. The NAHC recommended consultation with tribal entities and other interested parties be conducted as part of the review process and provided a list of contacts specific to Napa County for that purpose. Tribal consultation letters were drafted by MTC and distributed to the identified 13 tribal representatives by email or mail on August 18 and 28, 2022. This letter formally invited tribal representatives to consult on the proposed SR 29 Improvements Project. Scott Gabaldon of the Mishewal-Wappo Tribe of Alexander Valley, responded by email on August 21, 2022, and requested that the Tribe be involved in all ground disturbance aspects of the project. Laverne Bill of the Yocha Dehe Wintun Nation, in a letter dated October 3, 2022, declined to comment on the project, and deferred correspondence to the Mishewal-Wappo Tribe of Alexander Valley and Middletown Rancheria.



Documentation of correspondence with the NAHC and identified tribal representatives is provided in Appendix D. The Mishewal-Wappo Tribe was contacted prior to archaeological field surveys held in November 2022, and invited to accompany the archaeologists. No response was received from the tribe and no tribal monitors accompanied the survey team. MTC will continue to involve the Tribe in monitoring opportunities, including during construction. As of the drafting of this document, no tribal cultural resources have been identified during consultation.

2.2.6 GEOLOGY AND SOILS

The project area is underlain by alluvium and terrace of Pliocene to Holocene age formations³. The project is not located in an Alquist-Priolo Earthquake fault zone that requires special studies for structures for human occupancy. The closest fault is the West Napa Fault located approximately 7 miles south from Oakville Intersection, and 9.3 miles south from Rutherford Intersection. The Rodgers Creek Fault Zone is located approximately 13.5 miles to the west. The areas surrounding the project area at the Rutherford and Oakville intersections have a moderate earthquake liquefaction susceptibility rating⁴. Subsurface soils near Rutherford Road are characterized as Bale clay loam with 0 to 2 percent slopes and soils near Oakville Road are Bale loam with 0 to 2 percent slopes. Both soil groups are within Hydrologic Soil Group B and have moderately low runoff potential and moderately high infiltration (USDA, 2023).

2.2.7 HAZARDS AND HAZARDOUS MATERIALS

A Phase I Initial Site Assessment (ISA) (GEOCON 2022) included in Appendix E was generated to identify subsurface conditions and hazardous materials associated in the Project Area. An initial site assessment for the project area identified potential pesticide impacts to soil from historical agricultural land use, potential herbicides, polyaromatic hydrocarbons (PAH), and metals associated with the railroad ROW, potential hydrocarbon impacts from historic roadway uses, and aerially deposited lead (ADL) primarily due to historic leaded fuel emissions from automobile exhaust and typical roadway uses.

Federal, state, and local environmental databases were searched within one mile of the project site (GeoCheck, September 27, 2022). Active groundwater monitoring wells were not identified within ¹/₄-mile of the project limits.

The existing intersection does not appear on regulatory database listings. Two adjacent properties proposed for partial ROW acquisition are included in database listings as former Leaking Underground Storage Tank (LUST) sites. The locations of the LUST facilities are currently operating as The Napa Wine Company located at 7830 St. Helena Highway (APN 031-090-017-000) and a neighboring wine facility at 1187

³ Caltrans. *Caltrans Water Quality Planning Tool*. 2023, http://svctenvims.dot.ca.gov/wqpt/wqpt.aspx. Accessed July 26, 2023.

⁴ Metropolitan Transportation Commission. *MTC/ABAG Hazard Viewer Map*. 2023, <u>https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8</u>. Accessed July 26, 2023.

Oakville Cross Road. One additional adjacent site coinciding with the location of Oakville Grocery at 7856 St. Helena Highway (APN 031-020-010-000) is listed as an Underground Storage Tank (UST) non-release site.

One property is included in database listings as former LUST site within ¼-mile of the project site. The property was a former hardware store with a documented underground gasoline storage tank, located approximately 500 feet east of the site. The property was granted closure by the San Francisco Regional Water Quality Control Board (SFRWQCB) in 1998 and has a low potential to have caused an impact to the project area.

2.2.7.1 7830 ST. HELENA HIGHWAY (SR 29) & 1187 OAKVILLE CROSS ROAD

The property located at the southeast corner of SR 29 and Oakville Cross Road (7830 St. Helena Highway) is currently occupied by The Napa Wine Company. Four gasoline USTs and two septic tanks were removed from a former service station that operated previously at the site. The tanks were previously located in the current parking lot area proposed for partial ROW acquisition and reconstruction. Additionally, one underground diesel and one gasoline UST were removed from a former agricultural maintenance facility adjacent to the east of the former service station (1187 Oakville Cross Road). Petroleum impacts to soil, groundwater, and soil vapor were investigated subsequent to the removal of the tanks. The combined sites were granted low-threat closure from the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) in 2018.

2.2.7.2 7856 ST. HELENA HIGHWAY

The search lists the property near the northeast corner of the SR 29/Oakville Cross Road as a UST facility. The property, currently occupied by Oakville Grocery, does not appear on Geotracker or Envirostor. The southern periphery of the parcel is located within the area of proposed partial ROW acquisition. Property records received from Napa County did not indicate the presence of a permitted UST or indicate environmental concerns.

2.2.7.3 VINEYARDS

Use of the area for agricultural purposes may have resulted in contamination from pesticide applications.

2.2.7.4 RAILROAD RIGHT OF WAY

Soil in the railway area may contain contamination such as metals, herbicides, and polyaromatic hydrocarbons (PAHs) used for weed suppression and railroad tie preservation.

2.2.8 HYDROLOGY AND WATER QUALITY

A Water Quality Assessment Report was produced for the Project and is included in Appendix F. The Project area is entirely contained within an undefined hydrologic sub-

area (206.50) of the Napa River hydrologic area and San Pablo hydrologic unit. The Project's receiving water body is the Napa River. The San Francisco Bay RWQCB lists the Napa River as having beneficial uses and being pollutant impaired. The Project is entirely located within the Napa Valley groundwater subbasin (2-002.01) of the Napa-Sonoma Valley groundwater basin.

Stormwater at the Oakville Cross Road intersection flows away from the roadway's centerline towards the eastern and western edges of the roadway and then through several conveyance systems. South of the intersection, gutter systems run parallel to the roadway, conveying stormwater south. An existing stormwater system composed of several inlets captures the runoff and discharges to a grassy ditch running parallel to the SR 29 northbound lane and adjacent to the right of way line. Stormwater runoff northwest of the intersection along the southbound lane is collected by an existing ditch and conveyed northwest away from the Project limits. Runoff within the stretch of roadway along the northbound lane, northeast of the intersection, sheet flows to the adjacent properties onto the vineyards. Stormwater ultimately drains to the Napa River, which is located about 0.5 mile east of the Oakville Cross Road intersection.

The drainage pattern for the Rutherford Road intersection is similar to that of the Oakville Cross Road intersection. Stormwater sheet flows away from the SR 29 centerline and concentrates along the roadway outer edges to be conveyed away from the Project limits. Stormwater also drains to the Napa River, which is located approximately 0.5 mile east of the Rutherford Road intersection.

2.2.9 LAND USE AND PLANNING

The project is surrounded mostly by parcels zoned for Agricultural Preserve district (AP), and by parcels zoned for commercial limited district (CL) and residential single building site (RS:B-1) at the intersections.⁵

The AP district classification is intended to be applied in the fertile valley and foothill areas of Napa County in which agriculture is and should continue to be the predominant land use, where uses incompatible to agriculture should be precluded and where the development of urban type uses would be detrimental to the continuance of agriculture and the maintenance of open space which are economic and aesthetic attributes and assets of the county.

The intent of the CL district classification is to establish areas, which will provide the tourist, vacationer and highway traveler with needed uses and services.

The RS district classification is intended to be applied in appropriate locations to allow residential developments of varying population density to meet the housing needs of present and future population in the unincorporated area in accordance with the county's general plan. RS districts will be located within established urban areas where existing urban services and facilities are adequate to serve the intended development.

⁵ County of Napa. *Zoning Map*, <u>https://www.countyofnapa.org/DocumentCenter/View/8436/Napa-County-Zoning-Map?bidId=</u>. Accessed July 2023.

Limited RS development is intended to assist in the preservation of the natural and agricultural resources of the county. The building site combination district (RS:B-1) classification is intended to be applied in land areas where existing or proposed development, topography, soil conditions or lack of availability of public facilities, utilities and services indicate a need for building sites of greater area than that required in the principal zoning district.

2.2.10 MINERAL RESOURCES

The project is not located on a mineral resource recovery site as identified in the County of Napa General Plan Conservation Element.⁶

2.2.11 NOISE

A Noise Study Report, approved by Caltrans, was generated for the Project and is included in Appendix G. Additionally, a Vibration Damage Risk Assessment to the Oakville Grocery was conducted to specifically address vibration concerns to the only affected structure located beyond the construction limits and is included in Appendix H. The project is located in a semi-rural area on a segment of SR 29 that passes through a tourist focused part of Napa Valley. Uses that line both sides of SR 29 include vineyards, wineries and tasting rooms, storefronts, hotel/motels, residences, and public services such as the fire station.

A field investigation was conducted in September 2022, to identify land uses that could be subject to traffic and construction noise impacts from the project. Land uses in the project area have been grouped into a series of lettered analysis areas that are identified in the Noise Study Report (NSR) prepared for this project and here forth referred to as Noise Study Areas (NSA). Each of these analysis areas is considered to be acoustically equivalent.

- Area A: Area A is located on the east side of SR 29 north of Oakville Cross Road. A single residential unit and an outdoor eating area of the Oakville Grocery Store are located in this area. This area is generally flat and provides no topographic shielding to the residential unit. Vineyards are located in the project area but have no outdoor uses and therefore are not noise sensitive.
- Area B: Area B is located on the west side of SR 29 north of Oakville Cross Road. This area is generally flat. No sensitive land uses were found in this area. The land use is primarily agriculture with no outdoor uses.
- Area C: Area C is located on the east side of SR 29 south of Oakville Cross Road. A commercial winery is located in this area. Outdoor areas immediately adjacent to the commercial land uses are parking lots. Therefore, no outdoor areas associated with the commercial uses are considered to be areas of

⁶ County of Napa. General Plan Conservation Element. 2009, <u>https://www.countyofnapa.org/DocumentCenter/View/3337/Conservation-Element-PDF</u>. Accessed July 2023.

frequent human use. The ground is generally flat for the majority of this area but slopes away from the highway at the residential developments. An existing six-foot sound barrier is located between the highway and the residential area. No topographic shielding occurs at the residential units.

• Area D: Area D is located on the west side of SR 29 south of Oakville Cross Road. Residential and agricultural land uses are located in this area. An existing eight-foot property wall shields the highway and this area.

2.2.12 POPULATION AND HOUSING

Residential uses abut SR 29 within the project corridor south of the Oakville Cross Road intersection. Residential uses are present along both sides of SR 29 as well as east along Rutherford Road.

2.2.13 RECREATION

The nearest park to the project corridor is the Napa County Regional Park, located approximately 7 miles to the east of the project corridor.

2.2.14 TRANSPORTATION

A Traffic Operations Analysis Report, included in Appendix I, was generated to identify existing transportation facilities as well as evaluate traffic operations for roundabout alternative and a traffic signal alternative.

Transportation Facilities

SR 29 is a two-lane, north-south conventional highway with discontinuous two-way-leftturn lanes (TWLTL) between the two subject intersections. The highway serves residential, commercial and agricultural land uses within the County of Napa. North of Rutherford Road, SR 29 and SR 129 are contiguous. Further south of the study intersection locations, SR 29 and SR 121, as well as SR 29 and SR 12 are contiguous. The posted speed limit along SR 29 within the study area ranges from 40 to 50 miles per hour (mph) between Rutherford Road and just north of Madison Street. Just south of Madison Street, SR 29 becomes a four-lane divided highway, and the speed limit increases to 55 mph.

Rutherford Road, contiguous with SR 128, is a two-lane, east-west highway located in the community of Rutherford that serves residential and commercial land uses. It connects to one of three SR 29 study intersections to the west, forming the east leg of the study intersection, and becomes Conn Creek Road/SR 128 to the east. The posted speed limit on Rutherford Road near the study intersection is 30 mph.

Oakville Cross Road is a two-lane, east-west collector roadway located in the community of Oakville that serves commercial and agricultural uses. It connects to one of three SR 29 study intersections to the west, forming the east leg of the study intersection, and connects to Silverado Trail to the east. There is no posted speed limit

on Oakville Cross Road other than a 25-mph zone near the bridge over the Napa River, about 0.5 miles to the east of SR 29. There are 30 mph advisory signs along the eastern segment of the roadway.

Bicycle Facilities

A Class II bicycle facility exists on SR 29 between Rutherford Road and Madison Street. A Class III bicycle facility exists on Oakville Cross Road between SR 29 and Silverado Trail.





Source: GHD, July 2022
Pedestrian Facilities

A curb ramp exists at the northeast corner of the SR 29 and Rutherford Road/SR128 intersection with sidewalk segments that wrap around the same corner. The sidewalk continues for about 700 feet to the east along the north side of Rutherford Road and about 150 feet north from the intersection along the east side of SR 29. There are no other sidewalks or curb ramps, and no marked crosswalks at the study intersection.

There is a curb ramp at the southeast corner of the SR 29 and Oakville Cross Road intersection, with sidewalk segments that wrap around the same corner. The sidewalk continues for about 200 feet to the east along the south side of Oakville Cross Road and about 450 feet south from the intersection along the east side of SR 29. There are no other sidewalks or curb ramps, and no marked crosswalks at the study intersection.

Transit Services

Transit service along SR 29 between the study intersection includes two Vine Transit bus routes operated by the NVTA. These routes include Routes 10 and 10X, which both run from Napa to Calistoga. Route 10 provides local service between Napa Valley College and Calistoga, while Route 10x provides express service between the Soscal Gateway Transit Center and Calistoga.

Figure 2-10 Existing Transit Routes



Source: GHD, July 2022

Rail Activity

The Napa Wine Train is a privately owned train operator that serves as a tourist activity for Napa Valley's winemaking region, beginning at the Napa Train Station in downtown Napa and ending in St. Helena. The train runs along the Napa Valley Railroad adjacent to the west side of SR 29. While the Napa Wine Train schedule is adjusted frequently to match customer demands, the train currently facilitates six to nine trains per day with crossings occurring at the study intersections between 10:15 a.m. and 8:20 p.m.

2.2.15 UTILITIES

Existing utilities lines are present within the SR 29 right of way, including telephone, City of Napa (Water), City of Saint Helena (Water), cable, and PG&E natural gas and electric lines. Existing stormdrains also exist within the ROW.

2.2.16 WILDFIRE

The project is located less than a mile from lands classified as very high and high fire hazard severity zones by the State Fire Marshal to the east and west of the corridor.⁷

2.3 PROJECT CHARACTERISTICS

The MTC, in cooperation with Napa Valley Transportation Authority (NVTA) and the California Department of Transportation (Caltrans), proposes to improve the operation and safety of SR 29 at the intersections of Oakville Cross Road (PM 22.72) and Rutherford Road, (PM 24.59). In January 2020, MTC completed a traffic operations analysis to identify the causes of and potential solutions to congestion in the greater project vicinity. The results indicated that enhanced intersection control at the two intersections would improve multimodal traffic operations performance along SR 29. Preliminary crash data analysis provided by Caltrans indicates that the total rate of fatal and injury crash at these two intersections are above the average crash rate for similar facilities statewide. Based on the results of traffic and safety analyses and feedback received from project stakeholders, the implementation of a traffic signal and roundabout are viable options to address the operations and safety needs.

The FHWA studies indicate that a properly designed roundabout would slow down traffic and, hence, reduce the probabilities of most severe types of intersection crashes and injuries. Roundabouts also allow for continuous flow of traffic at lower speed through this segment of the corridor and would be the ideal candidate to address the safety and operations challenges associated with the corridor. A single-lane roundabout is proposed at the intersection of SR 29 and Oakville Cross Road. Due to right of -way limitations, a roundabout will not be feasible at the Rutherford Road intersection without substantial right-of-way impact. Hence, the project proposes to install a traffic signal and/or other traffic calming measures at the intersection of SR 29/ Rutherford Road.

2.3.1 RUTHERFORD ROAD INTERSECTION

At the Rutherford Road intersection, the project proposes the construction of a traffic signal, extensions and improvements to bicyclist and pedestrian facilities, and restriping along the mainline. In addition, a bus only pullout would be constructed along SR 29. The limits of improvements on SR 29 would extend approximately 0.5 miles northerly

⁷ Office of the State Fire Marshal. *Fire Hazard Severity Zones in State Responsibility Area*, <u>https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/</u>. Accessed February 3, 2023.

and southerly from the center of the Rutherford Road intersection, and approximately 500 feet easterly along Rutherford Road.

Due to the proximity to the Napa Wine Train tracks, railroad crossings improvements will be needed at this intersection as described in Real Property Acquisition Section below.

2.3.2 OAKVILLE CROSS ROAD INTERSECTION

At the Oakville Cross Road intersection, the project proposes the construction of a roundabout, bicyclist and pedestrian infrastructure improvements (including bike route, sidewalk, crosswalks and bulb outs), center medians along the mainline, and the installation of lighting.

The limits of construction on SR 29 extend approximately 0.5 miles northerly and southerly from the center of the Oakville Cross Road intersection, approximately 500 feet in easterly direction along Oakville Cross Road, and approximately 200 feet in the westerly direction at the existing driveway crossing the railroad tracks.

The Oakville roundabout would maintain existing traffic patterns; however, ingress to the Oakville grocery would be modified to right-in and right-out only. The project would not preclude southbound access to the Oakville Grocery driveway (currently a left turn-in); rather traffic would be routed through the roundabout to access the grocery. Construction of the roundabout also would include the installation of intersection lighting, a pedestrian and bicyclist shared use path with bike ramps, and splitter islands with curb ramps. In addition, the existing drainage system would be used to accommodate the proposed roundabout, and the existing signage within the right of way would be replaced or upgraded.

The existing channelization at the intersection of SR 29 and Oakville Grade Road may be restriped as part of the mainline improvement required for the construction of the roundabout at the intersection of SR 29 and Oakville Cross Road.

Due to the proximity to the Napa Wine Train tracks, railroad crossings improvements will be needed at this intersection as described in Real Property Acquisition Section below.

2.3.3 REAL PROPERTY ACQUISITION

Figures 2.4 and 2.7 illustrate and quantify the anticipated right of way acquisition that would be required from the adjacent parcels.

2.3.3.1 RUTHERFORD ROAD

As shown in Figure 2-4 at the Rutherford Road intersection, right of way would be required from the parcel at the northeast corner, Houston Restaurants Inc., 1180 Rutherford Road. At the southeast corner, all work is anticipated to be completed within the existing right of way. Upon the completion of right of way acquisition, the newly

acquired land becomes part of the state right of way. At the west side, near the existing railroad crossing, the Inglenook Winery driveway would remain at its current location. The anticipated construction activities consist of pavement approaches on both sides of the track and some striping and new signage. Additionally, temporary construction easements (TCE) would be required from NVWT, Houston Restaurants Inc. and the other affected parcels in order to complete all phases of construction. The proposed project would not impact the rails and would not change the rail's elevation. The construction activities at the railroad crossing are proposed to occur during the train's non-operational hours.

a permanent construction easement will be required from NVWT to reconstruct the driveway on the west side of SR 29. Upon the completion of the right of way acquisition, the newly acquired lands would become part of the state highway right of way. The work on the west side of SR 29 at this intersection would not impact the rails, railroad ties, or the elevation of the rails. As part of the traffic signal construction, the project proposes to grind and overlay the existing pavement adjacent to the track on both sides of the crossing, construct curb, gutter, and a sidewalk east of the railroad tracks. The existing drainage culvert under the driveway would be extended and existing utility boxes would be adjusted to grade. The materials used to overlay the pavement will include hot mixed asphalt concrete. All curbs, gutters and sidewalks will be constructed with concrete. The project would reconstruct curb returns to accommodate truck turns and place new striping on the pavement.

2.3.3.2 OAKVILLE CROSS ROAD

As shown in Figure 2-7, the roundabout construction at Oakville Cross Road would require take from the Napa Wine Company (APN-031-090-017), Opus One (APN 031-020-009) properties and Jean-Claude Wines USA Inc. (APN 031-020-009). The Napa Wine Company's parking lot would require reconfiguration and result in the loss of a few of the parking stalls, and access to the parking lot will be limited to one driveway. The Opus One's vineyard will be impacted and would require removal of some of the existing vines. The Jean-Claude Wines USA Inc. southerly driveway would be partially reconstructed to conform to the existing grades and driveway layout. Upon the completion of right of way acquisition, the newly acquired lands would become part of the state right of way. Additionally, a portion of Oakville Cross Road, owned by Napa County, will be transferred to the State as part of the construction of the roundabout. At the west side, at the existing railroad crossing, the private driveway is proposed to remain at its current location. The anticipated construction activities consist of widening the driveway to conform to the proposed roundabout design, constructing pavement approaches on both sides of the track, and installing signage and striping. Additionally, TCEs would be required from the NVWT, Napa Wine Company, Opus One and the other affected parcels in order to complete all phases of construction. The proposed project would not impact the rails and does not change the rails elevation.

As part of the roundabout construction, the project proposes to reconstruct the existing pavement adjacent to the track on both side of the crossing. The project would also construct a curb, gutter, and a sidewalk east of the railroad tracks. The materials used

to reconstruct the pavement will include aggregate and hot mixed asphalt concrete. All curbs, gutters and sidewalks will be constructed with concrete. Additionally, a small traffic island is proposed immediately east of the track. The depth of reconstruction is anticipated to be 3 feet or less. Construction at the driveway will be completed during NVWT's non-operation times; therefore, the construction of the proposed roundabout would not impact the NVWT train operations. CONSTRUCTION INFORMATION

2.3.4 TIMEFRAME

MTC anticipates that project construction would begin in the Summer of 2024, and require approximately 16 months to complete. Construction would take place within the hours defined in section 8.16.080 of the Napa Municipal Code, which is generally defined as between the hours of 7:00 a.m. to 7:00 p.m.

2.3.5 CONSTRUCTION ACTIVITIES

Project construction activities would include demolition, site preparation, grading and excavation, and paving. Impact pile driving is not anticipated as a method of construction. Equipment to be used would include, but not necessarily be limited to, excavators, backhoes, front end loaders, scrapers, graders, concrete saws, cranes, jackhammers, winches, chainsaws, forklifts, rollers, asphalt road pavers, compactors, air compressors, generator sets, and pneumatic tools. A variety of trucks including cement mixers, haul trucks, and water trucks would also be required.

Site preparation, including demolition, clearing, and grading of the project site as necessary would require the removal and off-haul of materials. This would include, but not necessarily be limited to, vegetation, concrete, asphalt and fill, and certain existing utilities that may be relocated within the existing right of way. The project does not propose removing trees or existing plants at the Rutherford Road intersection. A portion of the existing landscape area in the southeast corner is proposed to be removed as part of the roundabout construction at the Oakville Cross intersection. The proposed area of landscape removal is included in the right of way acquisition as shown in Figure 2-4 and 2-7.

2.3.6 TEMPORARY CONSTRUCTION EASEMENTS

2.3.6.1 RUTHERFORD ROAD

To construct the proposed traffic signal, the project will require a TCE) from NVWT as well as Houston Restaurants Inc. After the project construction is complete, all TCE areas will be restored in accordance with the agreements made with each property owner. The right of way needed to install the traffic signal would also encroach onto the parcel located on the northeast corner (where Houston Restaurants Inc. is located). The project would reconstruct the irrigation system, stone wall, and landscaping impacted on this parcel.

2.3.6.2 OAKVILLE CROSS ROAD

To construct the proposed roundabout, the project would require TCEs from the NVWT as well as Napa Wine Company, Opus One Winery and the Oakville Grocery store. After the project construction is complete, all TCE areas would be restored in accordance with the agreements made with each property owner.

The roundabout would impact the southeast corner parcel of the intersection, on which the Napa Wine Company is located. The project would result in the temporary loss of all parking during reconstruction of the parking lot as shown in Figure 2-7. Reconstruction of the existing parking lot consists of excavation to a depth of 3 feet or less, removal and disposal of the excavated materials, constructing pavement with hot mixed asphalt, and concrete to construct curb, gutters and sidewalk. In addition to reconstruction of the parking lot, existing parking lot lighting would be relocated. The existing landscape and irrigation on the corner of the parcel would also be temporarily removed and reconfigured during replacement.

The roundabout would impact the northeast corner parcel of the intersection, on which the Oakville Grocery is located. To fit the roundabout, a portion of the established vineyard would be removed and access around the vineyard would be relocated. Due to this acquisition, the existing irrigation system and fence would need to be reconstructed.

2.4 AGENCY APPROVALS NEEDED

The project may require the following approvals:

- Adoption of the Mitigated Negative Declaration by MTC Board;
- Approval of the Project Study Report (PSR)/Project Report (PR) and Supplemental (PSR/PR) by Caltrans;
- Issuance of a NEPA Categorical Exemption (CE) by Caltrans; and
- General Construction Permit approval from the State Water Resources Control Board for disturbance of one or more acres of soil.
- County Right of Way encroachment Permit

2.5 TRIBAL CONSULTATION

Public Resources Code 21080.3.1 and Chapter 532 Statues of 2014 (i.e., AB 52) requires CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes.

A Sacred Lands File search was requested from the Native American Heritage Commission (NAHC). A response was received on April 22, 2022, indicating that sacred lands have been identified within the vicinity of the project.

Initial outreach letters were sent to tribal organizations on the NAHC contact list on August 18, 2022. MTC received requests for notification of ground disturbance from tribes, including the Mishewal-Wappo Tribe of Alexander Valley and the Yocha Dehe Wintun Nation. MTC initiated contact with these Native American tribes as part of preparing this MND. Follow-up coordination and emails were sent regarding the project. Please refer to Chapter 3, Tribal Cultural Resources, for additional information.

3 California Environmental Quality Act (CEQA) Evaluation

3.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

| Biological Resources | \boxtimes | Cultural Resources | | Energy |
|------------------------------|--|--|--|---|
| Geology/Soils | | Greenhouse Gas Emissions | \boxtimes | Hazards and Hazardous Materials |
| Hydrology/Water Quality | | Land Use/Planning | | Mineral Resources |
| Noise | | Population/Housing | | Public Services |
| Recreation | | Transportation | \boxtimes | Tribal Cultural Resources |
| Utilities/Service Systems | | Wildfire | | Mandatory Findings of Significance |
| | Biological Resources Geology/Soils Hydrology/Water Quality Noise Recreation Utilities/Service Systems | Biological Resources⊠Geology/Soils□Hydrology/Water Quality□Noise□Recreation□Utilities/Service Systems□ | Biological ResourcesImage: Cultural ResourcesGeology/SoilsImage: Greenhouse Gas EmissionsHydrology/WaterImage: Land Use/Planning ValityNoiseImage: Population/HousingRecreationImage: TransportationUtilities/ServiceImage: Wildfire | Biological ResourcesImage: Cultural ResourcesImage: Cultural ResourcesGeology/SoilsImage: Greenhouse Gas EmissionsImage: Cultural ResourcesHydrology/Water QualityImage: Land Use/PlanningImage: Cultural ResourcesNoiseImage: Population/HousingImage: Cultural ResourcesRecreationImage: Cultural ResourcesImage: ResourcesUtilities/ServiceImage: ResourcesImage: ResourcesSystemsImage: ResourcesImage: Resources |

3.2 DETERMINATION

On the basis of this initial evaluation:

- □ I find the proposed project COULD NOT have a significant effect on the environment, and that a NEGATIVE DECLARATION will be prepared.
- ☑ I find that although the proposed project could have a significant effect on the environment, there will not be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- □ I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.

- □ I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- □ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects: 1) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards; and 2) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the Proposed Project, nothing further is required.

Signature:

Date:

Ingrid Supit Principal Engineer – Capital Project Delivery Metropolitan Transportation Commission

3.3 CEQA ENVIRONMENTAL CHECKLIST

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a particular resource. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to CEQA impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below.

3.3.1 AESTHETICS

| Question | CEQA Determination |
|---|--|
| a) Have a substantial adverse effect on a scenic vista? | Less Than Significant with Mitigation Incorporated |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | No Impact |
| c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | Less Than Significant Impact |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | Less Than Significant Impact |

Except as provided in Public Resources Code Section 21099, would the project:

3.3.1.1 CEQA SIGNIFICANCE DETERMINATIONS FOR AESTHETICS

a) Less than Significant

Napa County is in the American Viticultural Area (AVA) of the northern California wine region and is known for hillside vineyards. Located within the North Coast appellation of the AVA, Napa Valley is 50 miles northeast of San Francisco and is one of the world's famous wine regions with notable views of the local mountain ranges. The landscape is

characterized by the nearby wineries and vineyards, along with the Mayacamas Mountains visible to the west and natural rural landscaping that offers the area a "wine country" atmosphere. According to the Napa County General Plan, Rutherford Road, Oakville Cross Road and SR 29 are all county-designated scenic roads. Land uses along the project corridor are primarily exurban, supporting low-density housing and commercial businesses, such as wineries, restaurants, grocery stores, and post office. Much of the remaining surrounding area is used for the cultivation and harvest of grapes for wine production. The proposed project would add new visual elements as part of the roadway environment, but they would be contained within the existing roadway right of way and, therefore, would not impact views of the scenic vistas as seen from SR 29.

Development of the roundabout at the Oakville intersection would require the acquisition of additional ROW resulting in removal of the ornamental landscaping in front of the Napa Wine Co. and Opus Winery and a portion of the vineyard south of the Oakville Grocery. The addition of sidewalks at the northeast corner of the Oakville intersection would also result in the removal of a large, mature pine tree located in close proximity to the proposed improvements (as illustrated in Figure 8 of the VIA, included as Appendix A). Additionally, the eastern-most extent of roadway improvements along Oakville Cross Road would be in close proximity to a cluster of oaks. Any grading, trenching or paving work within the dripline of these trees could result in damage to oaks adjacent to the ROW (**Impact AES-1**). It is the intent of the project to retain all oak trees. Implementation of **MM-AES-1** would ensure that the project would not result in impacts to oaks.

Vegetation removal at the Oakville intersection would increase the visual dominance of the roadway. However, aesthetic treatments, including the retention of existing vegetation that blocks or obscures views of the Project and the replacement of affected landscaping, would help neutralize these adverse impacts for most roadway neighbors. Additionally, none of the tree species to be removed as part of the Project are protected under the City of Napa's tree protection policies.

The installation of new traffic signals at the Rutherford Road intersection would require acquisition of new ROW from Houston Restaurants to accommodate shifting the northside driveway, adjusting utility boxes, and providing new pavement and striping. These improvements are not expected to result in the removal of existing plants or trees.

The overall Resource Change would be low for both intersections. The proposed improvements would be compatible with the existing visual quality of the corridor and would retain the integrity and character of the adjacent architectural resources. Vegetation removal will be limited and where possible, landscaped areas will be restored in a manner that is compatible and consistent with existing landscaping. Therefore, impacts on scenic vistas would be *less than significant with mitigation*.

The following mitigation measure shall be required:

MM-AES-1 Protection of Oaks

During the Plans, Specifications, and Estimate (PS&E) phase, it shall be demonstrated that all oaks will be avoided. Specifically, the roadway improvements along the eastern extent of Oakville Cross Road would taper to an existing meet point just past the maintenance access path that runs perpendicular to Oakville Cross Road and before the first oak tree in that row. The control point for street modifications along Oakville Cross Road is the second driveway into the Napa Wine Co. and Opus Winery, which is about 60' north of the oak trees. Should the roadway taper need to be shifted or shortened to avoid the dripline of the oak trees, there is sufficient room to adjust the taper. Prior to completion of PS&E, the location of the oak trees will be surveyed to identify their exact location and the design shall be adjusted as needed to avoid conflicts.

a) <u>No impact</u>

The project is located on SR 29 and SR-128 (Rutherford Road), both of which are eligible state scenic highways according to the California State Scenic Highway System Map. There would be *no impact* to scenic resources within a state scenic highway because the project is not located on a listed state scenic highway.

b) Less than Significant

The project is located in an unurbanized area of mostly farmland with segments of small communities scattered along SR 29.

The project would add a roundabout, additional medians, and a traffic light to the roadway to ease congestion along the corridor and increase safety for roadway travelers. These improvements would occur within the existing roadway and therefore not impede on the current visual resources. Existing vegetation, land cover, and topography would not change substantially and continue to block or obscure views of the roadway for most roadway neighbors.

Construction activities and equipment can introduce temporary changes that may impact the visual quality and character of the existing environment. Brightly colored construction equipment, construction signage, traffic control devices, flaggers, and other temporary impacts such as dust generation and freshly cleared areas could temporarily reduce visual quality and character. However, these effects would be short-term, limited in scale, and are a relatively common occurrence in urbanized and semi-urbanized areas. Construction site best management practices, such as limiting vegetation removal, keeping the site clean and orderly, and requiring additional street sweepers and water trucks for construction activities likely to produce dust, could be implemented to reduce the effects of construction activities on visual quality and character. The proposed traffic signal at the Rutherford Road Intersection is anticipated to have a minimal visual impact to present roadway conditions. The project elements would be compatible and unified with the existing visual environment, limiting changes to existing vegetation, landscaping, and trees adjacent to the project area. This vegetation offers natural visual elements and softens or blocks views of the roadway, traffic signal, vehicular traffic, and other roadway elements for roadway neighbors. Likewise, it is not anticipated for the Project to alter the setting or feeling for historic resources in the vicinity.

The proposed roundabout at Oakville Road would add visual elements to present roadway conditions. It is anticipated that roadway users would have direct views to proposed elements such as new pavement, lane striping and signage; however, resource changes are anticipated to remain compatible and unified with the existing visual environment. Vegetation (trees, foliage, ornamental landscaping) will offer natural visual elements and soften views of roadway, signage, vehicular traffic, and other roadway elements for roadway neighbors. Although viewers may be subject to views of project elements, including the installation of new landscaping, intersection lighting, a pedestrian and bicyclist shared use path with bike ramps, and splitter islands with curb ramps, the new elements would be compatible and coherent with the existing roadway corridor.

Therefore, impacts on the existing visual character or quality of public views would be *less than significant*.

c) Less than Significant

The proposed traffic signal would add a new light source; however, it would be of low intensity and hooded to direct light toward vehicles within the corridor. The project is located in an urbanized corridor within the Napa area surrounded by agricultural land with existing light poles at both intersections. New streetlights would be installed at the intersections but would not significantly increase the intensity of lighting in a way that would affect nighttime views. The new streetlights would be installed to comply with Nighttime Sky-Title 24 and Napa County outdoor lighting standards. Therefore, impacts would be *less than significant*.

3.3.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and

the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

| Question | CEQA Determination |
|--|---------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | Less Than Significant Impact |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | No Impact |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | No Impact |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | No Impact |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | No Impact |

3.3.2.1 CEQA SIGNIFICANCE DETERMINATIONS FOR AGRICULTURE AND FORESTRY RESOURCES

a) Less than Significant

At the Oakville Cross Road intersection, the project would require right of way from the adjoining established Opus One Winery vineyard at the northeast corner of the intersection. Upon the completion of the right of way acquisition, the newly acquired lands become part of the state highway right of way. The project would also require a TCE from Opus One Winery. After the project construction is complete, all TCE areas will be restored in accordance with the agreements made with each property owner. The remaining vineyard land would not be impacted by construction or operation of the roundabout.

This portion of the Opus One Winery vineyard is categorized as Prime Farmland by the California Department of Conservation as noted on the California Important Farmland Finder.⁸ Approximately 0.96-acre is mapped within area of direct impact for the project. This represents 0.002% of Napa County's Prime Farmland. The 0.96 acre take at this location would not impact the viability of the rest of the vineyard's production and

⁸ California Department of Conservation. *California Important Farmland Finder*. <u>https://maps.conservation.ca.gov/DLRP/CIFF/</u>. Accessed February 13, 2023.

operation. Therefore, the project would not result in the in the conversion of important farmland to a non-agricultural use.

There are no impacts to agricultural land at the Rutherford Road intersection.

Therefore, impacts would be *less than significant*.

b) <u>No Impact</u>

Multiple parcels under a Williamson Act contract are located within the project footprint. No parcels with an active Williamson Act contract would be impacted by the project. No conflicts with agricultural zoning are anticipated. Therefore, there would be *no impact*.

c, d) <u>No Impact</u>

There are no forests or timberlands within the project limits. Therefore, there would be *no impact.*

e) <u>No Impact</u>

There are no other changes anticipated to farmland or forest land. Therefore, there would be *no impact.*

3.3.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

| Question | CEQA Determination |
|--|--|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | Less Than Significant Impact |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard? | Less Than Significant with Mitigation Incorporated |
| c) Expose sensitive receptors to substantial pollutant concentrations? | Less Than Significant Impact |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | Less Than Significant Impact |

3.3.3.1 REGULATORY SETTING

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality, while the California Clean Air Act (CCAA) is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB), set standards for the

concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and state ambient air quality standards have been established for six criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO); nitrogen dioxide (NO₂); ozone (O₃); particulate matter (PM), which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM₁₀) and particles of 2.5 micrometers and smaller (PM_{2.5}); Lead (Pb); and sulfur dioxide (SO₂). In addition, state standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H₂S), and vinyl chloride. The NAAQS and state standards are set at levels that protect public health with a margin of safety and are subject to periodic review and revision. Both state and federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

The Transportation Project-Level Carbon Monoxide Protocol (CO Protocol) provides qualitative and quantitative screening procedures, as well as quantitative (modeling) analysis methods to assess project-level CO impacts. The qualitative screening step is designed to avoid the use of detailed modeling for projects that clearly cannot cause a violation, or worsen an existing violation, of the CO standards. Although the CO Protocol was designed to address federal standards, it has been recommended for use by several air pollution control districts in their CEQA analysis guidance documents and should also be valid for California standards because the key criterion (8-hour concentration) is similar: 9 ppm for the federal standard and 9.0 ppm for the state standard. The transportation conformity requirements for CO ceased to apply on June 1, 2018. In order to determine the project-level CO impacts of the proposed project, guidance from the CO Protocol was applied.

CEQA requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. CEQA documents address CCAA requirements for transportation projects. While state standards are often more strict than federal standards, the state has no conformity process.

Bay Area Air Quality Management District

The BAAQMD attains and maintains air quality conditions in the San Francisco Bay Area Air Basin through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of the BAAQMD includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. The BAAQMD monitors ambient air quality and meteorological conditions, and implements programs and regulations required by the FCAA and the CCAA.

In 2017, the BAAQMD released the latest update to its CEQA Guidelines. This is an advisory document that provides the Lead Agency, consultants, and project applicants

with uniform procedures for addressing air quality in environmental documents. The handbook contains the following applicable components:

- 1) Criteria and thresholds for determining whether a project may have a significant adverse air quality impact;
- Specific procedures and modeling protocols for quantifying and analyzing air quality impacts;
- 3) Methods available to mitigate air quality impacts;
- 4) Information for use in air quality assessments and environmental documents that will be updated more frequently such as air quality regulatory setting, climate, topography⁹

In April 2022, the BAAQMD adopted CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans. This document presents thresholds of significance for use in determining whether a proposed project will have a significant impact on climate change and provides the substantial evidence that lead agencies will need to support their use of these thresholds. The BAAQMD is in the process of preparing Updated CEQA Guidelines for applying these thresholds of significance¹⁰.

Air Quality Plans

As stated above, the BAAQMD prepares plans to attain ambient air quality standards in the San Francisco Bay Area Air Basin. The BAAQMD prepares ozone attainment plans for the national ozone standard and clean air plans for the California standard both in coordination with the MTC and the Association of Bay Area Governments (ABAG).

In April 2017, the BAAQMD adopted the 2017 Clean Air Plan, which provides a regional strategy to protect public health and protect the climate. To protect public health, the plan describes how the BAAQMD will continue progress toward attainment of all state and federal air quality standards and elimination of health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious GHG reduction targets for 2030 and 2050 and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets.

The 2017 Clean Air Plan includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as PM, ozone, and toxic air contaminants; to reduce emissions of methane and

⁹ Bay Area Air Quality Management District (BAAQMD). May 2017. *California Environmental Quality Act Air Quality Guidelines*.

¹⁰ Bay Area Air Quality Management District (BAAQMD). *CEQA Thresholds and Guidelines Update*, 2022, <u>https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-actceqa/updated-ceqa-guidelines</u>. Accessed March 2023.

other "super-GHGs" that are potent climate pollutants in the near-term; and to decrease emissions of CO₂ by reducing fossil fuel combustion.

3.3.3.2 CEQA SIGNIFICANCE DETERMINATIONS FOR AIR QUALITY

a) Less than Significant Impact

The BAAQMD 2017 Clean Air Plan, Spare the Air-Cool the Climate (2017 Plan) is the most recently adopted regional air quality plan that pertains to the project. The 2017 Plan focuses on two closely related goals: protecting public health and protecting the climate. The 2017 Plan is a multi-pollutant air quality plan addressing four categories of air pollutants:

- Ground-level ozone and the key ozone precursor pollutants (reactive organic gases and oxides of nitrogen), as required by State law;
- Particulate matter (PM), primarily PM2.5, as well as the precursors to secondary PM2.5;
- Toxic air contaminants; and
- Greenhouse gases.

The 2017 Plan includes 85 control measures in nine economic sectors: 1) stationary sources; 2) transportation (mobile) sources; 3) energy; 4) buildings; 5) agriculture; 6) natural and working lands; 7) waste management; 8) water; and 9) super-GHG pollutants. The project would not prevent the BAAQMD from implementing these actions, and none directly apply to the project. Furthermore, the project is non-VMT inducing and therefore, would not result in additional emissions beyond those accounted for in the Air Quality Plan. The project would not preclude implementation of the 2017 Clean Air Plan. Therefore, the project would have a *less than significant* impact.

b) Less than Significant Impact with Mitigation Incorporated

The project is located within the San Francisco Bay Area Air Basin, which is considered a non-attainment area for the 2008 federal ozone standard, the 2015 federal ozone standard, and the 2006 federal PM_{2.5} standard. Additionally, the proposed project area is nonattainment for the state ozone, PM₁₀, and PM_{2.5} standards. As part of an effort to attain and maintain ambient air quality standards for ozone, PM_{2.5} and PM₁₀, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds apply to both construction period and operational period impacts.

Construction

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and

other construction-related activities. Emissions from construction equipment would include CO, nitrogen oxide (NO_X), volatile organic compounds (VOCs) / reactive organic gasses (ROG), SO₂, directly emitted PM₁₀ and PM_{2.5}, and toxic air contaminants such as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NO_X and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction would involve clearing, cut-and-fill activities, grading, existing asphalt removal, and paving of roadway surfaces. Construction-related effects on air quality would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. These activities could temporarily generate enough PM₁₀, PM_{2.5}, and small amounts of CO, SO₂, NO_x, and VOCs to be of concern.

In addition to dust related PM₁₀ emissions, heavy-duty trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO₂, NO_x, VOCs and some soot particulate (PM₁₀ and PM_{2.5}) in exhaust emissions.

Construction-related air pollutant emissions associated with the proposed project were estimated using the Sacramento Metropolitan Air Quality Management District (SMAQMD)'s Roadway Construction Emissions Model (RCEM), version 9.0.1. The RCEM is used to estimate emissions from construction of roadway projects throughout California. RCEM emissions output is provided in Appendix C of the Air Quality Report (Appendix B). The results were then compared to the BAAQMD thresholds of significance for criteria pollutants. Table 3-1 shows average daily construction of the project. The average daily emissions were calculated using the total construction-generated emissions and an estimated 264 working days (12 months, 22 working days per month). As shown in the table, the project's estimated construction emissions would not exceed the BAAQMD's recommended thresholds of significance. The impact of construction-related activities on local and regional air quality would be less than significant.

| | ROG | NOx | PM ₁₀ | PM _{2.5} |
|-----------------------|------|-------|-------------------------|-------------------|
| Project Average Daily | 3.19 | 30.53 | 1.32 | 1.18 |
| Construction Exhaust | | | | |
| Emissions | | | | |
| BAAQMD Thresholds | 54 | 54 | 82 | 54 |
| Threshold Exceeded? | No | No | No | No |

Table 3-1. Estimated Short-term Construction Emissions (pounds per day)

The BAAQMD does not recommend a numerical threshold for fugitive dust from construction activities. Instead, the BAAQMD bases the determination of significance for fugitive dust on a consideration of control measures to be implemented. Fugitive dust impacts are generally considered potentially significant (**Impact AQ-1**) in the absence of those measures. If the basic construction measures recommended by the BAAQMD are

implemented for a project, then fugitive dust emissions during construction are not considered significant.

To limit dust, criteria pollutants, and precursor emissions associated with the construction activity, the following BAAQMD recommended Basic Construction Measures will be included in construction contract specifications for the project, along with Caltrans' Standard Specifications in Section 14-9 (2022). Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.

The following mitigation measure shall be required:

MM-AQ-1: Final Specifications for the Project shall include the following dust control measures for the Project, as recommended by BAAQMD:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day;
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered;
- All visible mud or dirt trackout onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited;
- All vehicle speeds on unpaved areas shall be limited to 15 miles per hour (mph);
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used;
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph;
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site;
- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel;
- Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

Caltrans' Standard Specifications Section 14-9:

- Water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions.
- Soil binder will be spread on any unpaved roads used for construction purposes, and on all project construction parking areas.
- Trucks will be washed as they leave the right of way as necessary to control fugitive dust emissions.
- Construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by California Code of Regulations (CCR) Title 17, Section 93114.
- A dust control plan will be developed documenting sprinkling, temporary paving, speed limits, and timely re-vegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- Equipment and materials storage sites will be located as far away from residential and park uses as practicable. Construction areas will be kept clean and orderly.
- Areas near sensitive air receptors will be designated environmentally sensitive areas. Within these areas, construction activities involving the extended idling of diesel equipment or vehicles will be prohibited, to the extent feasible.
- Track-out reduction measures, such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic, will be used.
- All transported loads of soils and wet materials will be covered before transport, or adequate freeboard (space from the top of the material to the top of the truck) will be provided to minimize emission of dust during transportation.
- Dust and mud that are deposited on paved, public roads due to construction activity and traffic will be promptly and regularly removed to reduce PM emissions.
- To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.
- Mulch will be installed or vegetation planted as soon as practical after grading to reduce windblown PM in the area.

Therefore, with implementation with **MM-AQ-1** the proposed project would meet the BAAQMD's construction-related threshold for fugitive dust (PM₁₀ and PM_{2.5}). The construction-related impact would be *less than significant with mitigation*.

Operation

The Proposed Project is an intersection safety and operations project that would not increase the capacity of SR 29, VMT or increase diesel traffic. This type of project improves highway operations by reducing traffic congestion at existing intersections and improving merge operations. Regional VMT are expected to increase over time due to regional growth not associated with the project. Despite increases in VMT, emissions are expected to decrease over time due to improvements in fuel efficiency and vehicle technology. The estimated change in pollutant burden with the Project, when compared to the existing conditions, varies by pollutant. Emissions of ROG, NOX, and CO would decrease in the opening year, design year, and Regional Transportation Plan (RTP) horizon year when compared to existing conditions, while emissions of PM10 and PM2.5 would increase. PM emission increases are a result of increased road dust, tire wear, and brake wear emissions tied to increased VMT in future years due to regional growth not associated with the project. The results of the regional emissions analysis provided in Appendix B are shown in Table 3-2.

<u>CO</u>

Based on the criteria listed in the CO Protocol, the project would not significantly increase CO such that there would be significant impact. The project does not include any parking facilities where vehicles would be cold started. Therefore, the proposed project would not affect cold start percentages in the area. The proposed project would not increase traffic volumes and is expected to improve traffic flow. As a result, the Proposed Project does not require further project-level CO hot-spot analysis, and CO impacts from project operations would be *less than significant*.

<u>PM</u>

The estimated PM_{2.5} and PM₁₀ pollutant burdens would not change with implementation of the project when compared to the existing condition. However, PM₁₀ emissions in the study area would increase approximately 9 percent in the opening year, 19 percent in the design year, and 41 percent in the RTP horizon year with the Project when compared to existing conditions. PM_{2.5} emissions in the study area would increase approximately 7 percent in the opening year, 15 percent in the design year, and 33 percent in the RTP horizon year with the Project when compared to existing conditions. PM_{2.5} emissions in the study area would increase approximately 7 percent in the opening year, 15 percent in the design year, and 33 percent in the RTP horizon year with the Project when compared to existing conditions. PM emission increases are a result of increased road dust, tire wear, and brake wear emissions tied to increased VMT in future years due to regional growth not associated with the project.

| | Daily Vehicle Miles | Emission Burdens (pounds/day) | | | | Emission Burdens (MT/day) ² | |
|--------------------------------|---------------------------|-------------------------------|------|-------|------|--|----------|
| Scopario | | POG | NO | 0 | DM | DM | <u> </u> |
| 2022 Existing | 45 100 | 5.9 | 10 7 | 102.6 | | 2 8 | 15.5 |
| 2022 Existing | 40,220 | 5.5 | 15.7 | 00.2 | 15.6 | 2.0 | 15.5 |
| | 49,330 | 5.5 | 15.0 | 09.2 | 15.0 | 3.0 | 15.7 |
| 2025 Bulla | 49,330 | 5.5 | 15.0 | 89.2 | 15.6 | 3.0 | 15.7 |
| 2035 No-Build | 54,621 | 4.2 | 8.3 | 65.0 | 17.2 | 3.2 | 13.9 |
| 2035 Build | 54,621 | 4.2 | 8.3 | 65.0 | 17.2 | 3.2 | 13.9 |
| 2050 No-Buil | 63,615 | 3.5 | 6.0 | 64.8 | 20.4 | 3.7 | 14.4 |
| 2050 Build | 63,615 | 3.5 | 6.0 | 64.8 | 20.4 | 3.7 | 14.4 |
| 2025 % Change from Existing | 9% | -7% | -21% | -13% | 9% | 7% | 1% |
| 2025 % Change from No-Build | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 2035 % Change from Existing | 21% | -29% | -58% | -37% | 19% | 15% | -10% |
| 2035 % Change from No-Build | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 2050 % Change from Existing | 41% | -40% | -70% | -37% | 41% | 33% | -7% |
| 2050 % Change from No-Build | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |

Table 3-2. Regional Emissions Burden Summary

¹ Estimated based on AADT and study area, which includes a 2.2-mile segment of SR-29 2 MT = metric tons

Source: ARB, http://www.arb.ca.gov/desig/adm/adm.htm

Because the project is in a PM_{2.5} nonattainment area, it was also evaluated to determine whether it would be considered a project of air quality concern (POAQC), requiring a PM hot-spot analysis. The proposed project does not meet the definition of a POAQC as defined in U.S. EPA's Transportation Conformity Guidance. The proposed project is not a new or expanded highway project with a significant number of or significant increase in diesel vehicles (U.S. EPA's Transportation Conformity Guidance defines significant as greater than 125,000 AADT and 8% or more of such AADT is diesel truck traffic, or in practice 10,000 truck AADT or more regardless of total AADT; significant increase is defined in practice as a 10% increase in heavy duty truck traffic).

The proposed project is an intersection safety and operations project that would not increase the capacity of SR 29 or increase diesel traffic. This type of project improves highway operations by reducing traffic congestion at existing intersections and improving merge operations. The project is not a capacity enhancing or VMT-inducting project; therefore, no VMT analysis was performed for the project pursuant to Caltrans guidance. The proposed project would not affect intersections that are at LOS D, E, or F with a significant number of diesel vehicles. The proposed project would not affect

intersections with a significant number of diesel vehicles or increase the number of diesel vehicles at affected intersections. The purpose of the project is to enhance safety and traffic operations at the affected intersections, which is anticipated to decrease congestion in the study area and may improve travel time, reduce delay, and increase free-flow speeds. Furthermore, the proposed project is not in or affecting locations, areas, or categories of sites that are identified in the PM2.5 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation. The Proposed Project was presented to the air quality conformity task force on February 23, 2023, and IAC participants concurred that the project is not a POAQC. For these reasons, a PM hot-spot analysis was not required, and PM impacts from project operations would be *less than significant*.

<u>NO2</u>

For project-level analysis, an NO2 assessment protocol is not available. As shown in Table 3-2 above, the estimated NOX pollutant burden under the Project would not change when compared to the future year No Project condition. However, NOX emissions in the study area would decrease by approximately 21 percent in the opening year, 58 percent in the design year, and 70 percent in the RTP horizon year with the Build Alternative when compared to existing conditions due to improvements in vehicle technology and fuel economy regulations.

Cumulative Impacts

Ozone, secondary PM10, and secondary PM2.5 are normally regional issues because they are formed by photochemical and chemical reactions over time in the atmosphere. MTC's RTP for the San Francisco Bay Area, known as Plan Bay Area 2050, includes a list of all regionally significant transportation projects planned in the region to be implemented by 2050. The emissions analysis performed as part of the conformity determination evaluates the cumulative impact of all listed transportation projects.

The 2021 Final Environmental Impact Report (FEIR) evaluated environmental impacts and identified that implementation of Plan Bay Area 2050 would result in significant and unavoidable impacts to air quality in the nine-county Bay Area region even after mitigation. As an intersection channelization project, the proposed project is exempt from regional conformity analysis per 40 CFR 93.127 and would not contribute to the significant and unavoidable cumulative impacts described in the FEIR.

Conclusion

The project would not result in the cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment (i.e., ozone, $PM_{2.5}$, and/or PM_{10}). The project does not cause or contribute to any new localized ozone, $PM_{2.5}$, and/or PM_{10} violations. Therefore, there would be a *less than significant* impact.

c) Less than Significant Impact

Sensitive receptors for air quality include residential areas, schools, hospitals, other health care facilities, child/day care facilities, parks, and playgrounds. Research shows that the zone of greatest concern near roadways is within 500 feet (or 150 meters). Sensitive receptors within 500 feet (or 150 meters) of the two intersections affected by the project include single family homes.

Construction-related effects on sensitive receptors from most highway projects would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. These activities could temporarily generate enough PM₁₀, PM_{2.5}, and small amounts of CO, SO₂, NO_x, and VOCs to be of concern. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site could deposit mud on local streets, which could be an added source of airborne dust after it dries. PM₁₀ emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM₁₀ emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

The project would implement measures to reduce potential construction impacts through establishing environmentally sensitive areas near sensitive air receptors. Within these areas, construction activities involving the extended idling of diesel equipment or vehicles will be prohibited, to the extent feasible. In addition, the project would comply with Caltrans' Standard Specifications in Section 14-9 (2015). The specifications include Section 14-9.02, which specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. Other measures to be implemented, per typical construction specifications, would reduce impacts to sensitive receptors, such as through locating equipment and materials storage sites will be located as far away from residential and park uses as practicable and keeping construction areas clean.

The change from a four-way intersection to a roundabout at the Oakville Cross Road intersection would incrementally bring vehicles closer to sensitive receptors at this intersection. However, there is no concern regarding exposing sensitive receptors to substantial pollutant concentrations during operations, especially as the project is designed to reduce idling vehicles along local roads during peak travel times. Federal Highway Administration's guidance on assessing mobile source air toxics (MSAT) impacts from transportation projects recommended additional analysis for projects that create or add significant capacity to facilities where the AADT is projected to be in the range of 140,000 to 150,000, or greater, by the design year. The projected traffic volume, minor changes in flow, and nominal change in location would not result in the exposure of sensitive receptors to substantial pollutant concentrations. According to the traffic analysis, the annual average daily trips is suspected to be below 22,000. This

improvement in operations would reduce Mobile Source Air Toxics from impacting sensitive receptors.

Therefore, impacts would be *less than significant*.

d) Less than Significant Impact

Some phases of construction, particularly asphalt paving, may result in short-term odors in the immediate area of each paving site. Such odors would quickly disperse to below detectable levels as distance from the site increases. Therefore, there would be *less than significant* impacts.

3.3.4 BIOLOGICAL RESOURCES

Would the project:

| Question | CEQA Determination |
|---|--|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries? | Less Than Significant with Mitigation Incorporated |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | No Impact |
| c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | No Impact |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | No Impact |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | Less Than Significant Impact |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | No Impact |

3.3.4.1 REGULATORY SETTING

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seg. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA. Section 2080 of the California Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFW. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of FESA, the CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

3.3.4.2 CEQA SIGNIFICANCE DETERMINATIONS FOR BIOLOGICAL RESOURCES

a) Less Than Significant with Mitigation Incorporated

CNDDB search results identified one species of concern with the potential to occur in the project area: the foothill yellow-legged frog (*Rana boylii*). There are recorded instances of this species within three miles of the project; therefore, direct impacts to dispersing or migrating foothill yellow-legged frogs were considered. No suitable breeding habitat for the foothill yellow-legged frog was identified during the field survey conducted in 2021, and there are no watershed features in the project area that would provide suitable dispersal corridors for this species. Based on the *Considerations for Conserving the Foothill Yellow-Legged Frog*, adult frogs congregate at breeding sites during the reproductive season and then disperse following reproductive activity. Seasonal movements occur among breeding, post breeding summer, and overwintering habitats. With their patterns of migration, the potential for observations of yellow-legged frogs has the potential to occur during construction depending on the season. Therefore, direct impacts to dispersing or migrating foothill yellow-legged frogs be present at the time of construction (**Impact BIO-1**).

In addition, Caltrans identified two species of local concern: the California red-legged frog and Swainson's Hawk due to occurrences of these species on other local projects in the area.

The California red-legged frog is listed under FESA and CESA as Threatened. There are no recorded occurrences of this species recorded in CNDDB within three miles of the project footprint. No suitable breeding habitat for the California red-legged frog was identified in the project footprint during the field survey in 2021. No direct impacts to breeding, dispersing, or migrating California red-legged frogs would result since there is no suitable breeding habitat in the project area and since it is outside this species' known dispersal range.

Swainson's hawks are protected under the MBTA and CFGC § 3503, 3503.5, and 3800 that prohibit the take, possession, or destruction of birds, their nests, or eggs. According to CNDDB, there was one known Swainson's hawk nest that was recorded in 2013, approximately one mile from the project footprint. Direct impacts to Swainson's hawk are unlikely as the project would not impact any suitable nesting trees or foraging habitat found within the project footprint. However, the Project footprint does contain suitable foraging habitat and nesting trees for Swainson's hawk. Therefore, direct impacts to Swainson's hawk could result should hawks be present at the time of construction (**Impact BIO-2**).

The following mitigation measure shall be required:

MM-BIO-1 Pre-construction Field Inspections for Yellow-legged Frog.

Site inspections for the yellow-legged frog species are recommended prior to conducting work. If frogs in any life stage are found during inspections, work should be suspended, and the project proponent should notify CDFW for the purpose of developing coordinated conservation measures prior to recommencing work.

MM-BIO-2 Pre-construction Nest Checks.

If an active Swainson's hawk nest is identified within 0.5 mile of the project area, the following conservation measures are recommended to avoid and minimize impacts to nesting Swainson's Hawk:

If construction activities occur between February 1 and August 31, surveys for Swainson's hawk in accordance with the current CDFW guidance, e.g., *Swainson's Hawk Technical Advisory Committee 2000 guidelines*, are recommended (SHTAC 2000). Surveys will cover a minimum of a 0.5-mile radius around the construction area. If nesting Swainson's hawks are detected, CDFW will establish a 0.5-mile no disturbance buffer. Buffers will be maintained until a qualified CDFW biologist has determined that the young have fledged and are no longer reliant upon the nest or parental care for survival.

If potential nesting trees are to be removed during construction activities, the following conservation measures are recommended:

Removal will take place outside of Swainson's hawk and nesting season and CDFW will be consulted to determine if nest trees should be replaced offsite. If replacement planting is implemented, monitoring will be conducted annually for 5

years to assess the mitigation's effectiveness. The performance standard for the mitigation will be 65% survival of all replacement plantings.

Therefore, there would be *less than significant impacts with mitigation* incorporated.

b) <u>No Impact</u>

There are no USFWS-designated Critical Habitats, Natural Communities of Concern, or riparian habitat within the Project footprint. Therefore, there is *no impact*.

c, d) <u>No Impact</u>

There are no streams, wetlands, or other bodies of water within the project footprint. The project would not affect any state or federally protected wetlands or any migratory wildlife corridors or the movement of any native resident or migratory fish or wildlife species. The project would not impede the use of native wildlife nursery sites. Therefore, there is *no impact*.

e) Less than Significant Impact

The County of Napa's adopted General Plan Conservation Element contains policies to protect the County's natural resources. These policies include measures to preserve land uses of greenbelts, forests, recreation, flood control, water supply, wildlife movement or natural beauty (Policy CON-1), measures to improve and conserve agricultural land (Policy CON-2), measures to preserve watershed or open space critical to support agriculture (Policy CON-4), measures to improve rangelands (Policy CON-5), limiting development in environmentally sensitive areas (Policy CON-6), protecting native grasslands (Policy CON-17) maintaining and enhancing the existing level of biodiversity (Goal CON-2) and conserving, protecting, and improving habitats for all native species (Goal CON-4). The project does not propose removing trees or existing plants at the Rutherford Road intersection. However, a portion of the existing landscape area in the southeast corner is proposed to be removed as part of the roundabout construction at the Oakville Cross Road intersection. The proposed area of landscape removal is included in the right of way acquisition as shown in Figure 2-7.

As discussed under Issue C, there are no streams, wetlands or other bodies of water within the project footprint or adjacent to the project footprint that would be impacted by the project. As discussed under Issue A above, there is potential for sensitive species to occur within or near the project area including the foothill yellow-legged frog as well as California red-legged frog and Swainson's Hawk due to occurrences of these species on other local projects in the area. However, with MM-BIO-1 and MM-BIO-2 implemented, impacts would be reduced to less than significant for the special status species and therefore would comply with Napa County Goal CON-4 for preserving habitats for native or special status species. Therefore, this project would not conflict with any local policies or ordinances protecting biological resources and would have a *less than significant impact*.

f) No Impact

The project footprint does not lie within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, there is *no impact*.

3.3.5 CULTURAL RESOURCES

Would the project:

| Question | CEQA Determination |
|--|--|
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5? | Less Than Significant with Mitigation Incorporated |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | Less Than Significant with Mitigation Incorporated |
| c) Disturb any human remains, including those interred outside of dedicated cemeteries? | Less Than Significant Impact |

3.3.5.1 REGULATORY SETTING

The term "cultural resources," as used in this document, refers to the "built environment" (e.g., structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including "historic properties," "historic sites," "historical resources," and "tribal cultural resources." Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on those undertakings, following regulations issued by the ACHP (36 Code of Federal Regulations [CFR] 800). On January 1, 2014, the First Amended Section 106 Programmatic Agreement (PA) among the FHWA, the ACHP, the California State Historic Preservation Officer (SHPO), and Caltrans went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the ACHP's regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The FHWA's responsibilities under the PA have been assigned to Caltrans as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as "unique" archaeological resources. California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources (CRHR) and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the CRHR and, therefore, a historical resource. Historical resources are defined in PRC Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term "tribal cultural resources" to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in PRC Section 21074(a), a tribal cultural resource is a CRHR or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources are referenced in PRC Section 21083.2.

PRC Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the NRHP listing criteria. It further requires Caltrans to inventory state-owned structures in its rights of way.

Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the NRHP or are registered or eligible for registration as California Historical Landmarks. Procedures for compliance with PRC Section 5024 are outlined in a Memorandum of Understanding (MOU) between Caltrans and SHPO, effective January 1, 2015. For most Federal-aid projects on the State Highway System, compliance with the Section 106 PA will satisfy the requirements of PRC Section 5024.

3.3.5.2 CEQA SIGNIFICANCE DETERMINATIONS FOR CULTURAL RESOURCES

a) Less than Significant with Mitigation Incorporated

Oakville Grocery

As detailed in the Cultural Resources setting in Chapter 2, the Oakville Grocery Store is the only NRHP listed historic property to be potentially impacted by the project.

The proposed roundabout at Oakville Cross Road would maintain existing traffic patterns; however, ingress to the Oakville Grocery would be modified to right-in and right-out only. The Project would not preclude southbound access to the Oakville Grocery driveway (currently a left turn-in); rather, traffic would be routed through the roundabout to access the grocery. To construct the proposed roundabout, the project will require a TCE from the Oakville Grocery. No permanent construction easement will be required. After the project construction is complete, all TCE areas will be restored in accordance with the agreements made with each property owner. Therefore, the proposed project would not alter the property permanently.

The grocery building is the closest structure that would be affected by the construction activities at the Oakville Cross Road intersection. It is expected that the nearest construction activities to the Oakville Grocery structure would be 10 feet away. Anticipated construction activities include the use of heavy-duty machinery for the demolition and removal of excavated material; grading; spreading of material; compacting; the preparation and placement of pavement; and the construction of curbing, gutters, sidewalk, and hardscape. Although no portions or features of the Oakville Grocery building are to be removed or altered during construction activities, the building would be extremely susceptible to construction vibration damage (**Impact CUL-1**) (refer to Appendix H *Vibration Damage Risk Assessment to the Oakville Grocery During Intersection Construction and Roadway Reconstruction for the SR 29 Intersections Improvement Project,* WSP 2022).

The introduction of a roundabout at this intersection would not result in a change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance as the property's use will not change and the property's setting does not contribute to its historic significance.

The proposed project would not introduce visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features as the significant historical features of the grocery include its exterior and interior architectural features and use, which will not be altered by the construction of or design of the roundabout.

Overall, the Project would not result in any direct impacts on the significance of the historical resource. As noted, indirect vibration impacts to the structural integrity of the building are possible from construction activities. With implementation of **MM-CUL-1** and **MM-NOI-1 through NOI-3**, impacts to the Oakville Grocery would be reduced to less than significant.

Durant House

The NRHP-eligible Durant House is located north of the Oakville Grocery on the east side of State Route 29. No physical destruction or damage to all or part of the property would result from the proposed project because activities are concentrated farther south. Therefore, the proposed project would not cause physical destruction of or damage to the property. The proposed Project would not take any permanent or temporary easements from the Durant House boundary, which includes the building and the northwest quarter of the Napa County Assessor's Parcel Number 031-020-010-000. Therefore, the proposed Project would not alter the property.

The introduction of a roundabout at the Oakville Cross Road intersection would not result in a change of the character or use of the Durant House or of physical features within the property's setting that contribute to its historic significance because the property's use would not change, and the property's setting does not contribute to its historic significance.

The proposed project would not introduce visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features because the significant historic features of the Durant House are its exterior architectural features and use, which will not be altered by the construction of or design of the roundabout.

Overall, the project would have no impact on this historic property.

Therefore, the proposed project's impact to historical resources would be *less than significant with mitigation* incorporated.

b) Less Than Significant with Mitigation Incorporated

There was no indication of subsurface deposits at any of the six sites identified within/adjacent to the APE, and only fragmentary glass was observed. Due to this, periods of occupation could only be generally assigned, information such as diagnostic artifacts addressing specific chronology was not located, and site formation process could not be assessed. All the areas where sites intersected with the ADI were significantly disturbed by the presence of underground utilities, construction of State Route 29 within the ROW, and by the significant landscape alteration of modern vineyards. No subsurface deposits of any of the six sites were encountered within the area of direct impact.

Site P-28-000015/CA-NAP-1/H, the "Goddard Site" near Oakville is assumed eligible for inclusion in the NRHP. The project could result in impacts to this resource (**IMPACT CUL-2**) and would require mitigation in the form of the establishment of an Environmentally Sensitive Area (ESA) per **MM-CUL-1**.

The potential for unrecorded or unrecognized surficial prehistoric era archeological resources exists within the project area. Additionally, the Mishewal-Wappo Tribe has expressed interest in the project indicating that Native American resources could occur within or near the project area. If such resources were to represent unique archaeological resources as defined by CEQA, any substantial change to or destruction of these resources would be a significant impact. Impacts to unknown subsurface resources is potentially significant (**Impact CUL-3**).

The following mitigation measure shall be implemented:

MM CUL-1 Cultural Management Measures within Designated ESA Locations.

- 1) At least one week prior to work, the contractor shall install a Temporary High-Visibility Fence (THVF) at designated ESA locations, including:
 - ESA 1 at Site P-28-000015 along SR 29 on the east side of Postmile 22; and
 - ESA 2 at Oakville Grocery located on SR 29 on the east side between Postmiles 22.70 and 22.79.,

- No project-related activities may take place within the ESA.
- 2) At least three weeks in advance of the start of construction, the project Residential Engineer (RE) will contact the Caltrans Archaeologist and Architectural Historian at the District 4 Office of Cultural Resource Studies (OCRS). Caltrans staff archaeologists will delineate the ESA in the field and supervise and monitor fence installation by the contractor. The ESA fence will not block access to private property.
- 3) Spot monitoring and photo-documentation shall occur at various times throughout project construction to ensure the integrity of the ESA and that the cultural resources are protected. In the event that an ESA is breached, Caltrans OCRS will be notified immediately. As per Attachment 5 of the PA, the Caltrans District PQS shall report all ESA violations to headquarters Cultural Studies Office (CSO) within 48 hours. Caltrans Districts shall report ESA violations where properties are impacted in accordance with Stipulation XV.B. Post-Review Discoveries.
- 4) Monitoring records will be included in the Environmental Commitments Records (ECR) and the RE File.
- 5) The ESAs will be clearly delineated on the project plans and included in the specifications and estimates package (PS&E). These conditions shall be considered special provisions to be provided to the RE.

MM-CUL-2 Archaeological and Native American Monitoring.

A qualified archaeological and/or Native American monitor shall be present during construction activities that involve subsurface grading and/or excavation involving the disturbance of native soils more than 3 feet in depth. The monitor(s) would ensure that unanticipated finds are not damaged or destroyed.

MM-CUL-3 Discovery of Archaeological Resources.

In the event of an unanticipated discovery of archaeological resources during construction, construction should stop on the site until a qualified archaeologist can survey the resource and determine potential impacts and necessary preservation measures. Any archaeological resources that are found would be identified, adequately documented in the field, and/or preserved, as recommended by a qualified archaeologist.

With implementation of the above measures, the impacts to archeological resources are *less than significant with mitigation* incorporated.

c) Less Than Significant

There are no known cemeteries within the project footprint. However, as noted in Chapter 2 under Cultural Resources, the project footprint is also within an area of tribal interest with known subsurface archaeological sites. Although available records indicate that no human remains occur, the possibility of encountering human remains during project construction could occur. Therefore, the impact related to the potential disturbance or damage of previously undiscovered human remains, if present, is considered significant. Mitigation Measure CUL-3 is proposed to address the discovery of unanticipated remains, associated grave goods, or items of cultural patrimony consistent with appropriate laws and requirements. Therefore, as regulations are in place to treat any inadvertent uncovering of human remains during grading, impacts to human remains would be *less than significant*.

MM-CUL-3 Discovery of Human Remains.

The County shall ensure the following measures are implemented to protect human remains. If human remains, associated grave goods, or items of cultural patrimony are encountered during construction, work shall halt in the vicinity of the find and the County Coroner shall be notified immediately. The following procedures shall be followed as required by Public Resources Code § 5097.9 and Health and Safety Code § 7050.5. If the human remains are determined to be of Native American origin, the coroner shall notify the Native American Heritage Commission within 24 hours of the determination. The Native American Heritage Commission shall then notify the Most Likely Descendant (MLD). The MLD shall complete an inspection and make its MLD recommendation for disposition of the remains within 48 hours of receiving access to the site. The County and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects. Said determination may include avoidance of the human remains, reburial on-site, or reburial on tribal or other lands that will not be subject to future. Any reburial of human remains shall be accomplished in compliance with the California Public Resources Code Sections 5097.98(a) and (b). Unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed.

3.3.6 ENERGY

Would the project:

| Question | CEQA Determination |
|---|---------------------------|
| a) Result in potentially significant environmental impact due | No Impact |
| to wasteful, inefficient, or unnecessary consumption of | |
| energy resources, during project construction or | |
| operation? | |
| b) Conflict with or obstruct a state or local plan for | No Impact |
| renewable energy or energy efficiency? | |
3.3.6.1 CEQA SIGNIFICANCE DETERMINATIONS FOR ENERGY

a, b) <u>No impact</u>

Equipment required for construction would consume energy, including gasoline/diesel fuels and electricity. As stated in Section 3.3.3 Air Quality, the BAAQMD Basic Construction Measures require provisions the contractor must implement. These measures, although designed to reduce fugitive dust, (i.e., minimizing idling time to 5 minutes or less during construction, requiring construction equipment to be maintained per specifications established by the manufacturer, and using electric equipment and/or equipment using alternative fuels as feasible and appropriate) would also reduce wasteful, inefficient or unnecessary use of energy resources. The project would not utilize energy resources during construction above and beyond a typical roadway improvement project.

Project operation would require only minor use of energy resources, such as electricity for traffic lights and streetlights. The project would not induce additional traffic volumes or VMT that would result in the wasteful or inefficient consumption of vehicle fuel and would instead improve traffic operations in a way that would improve fuel efficiency.

The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The County does not have a standalone local energy plan; however, the County General Plan does include policies focused on energy conservation and efficiency, including policies focused on increasing the use of energy-efficient forms of transportation (Policy CIR-16), conserving energy and producing renewable energy locally (Policy CON-16), and promoting green building designs (Policy CON-67). The project would provide a bicycle and pedestrian pathway, which is consistent with one of the County's General Plan policies that focuses on increasing energy-efficient forms of transportation. The project would not conflict with or obstruct future implementation of the County's energy conservation and efficiency policies included in their General Plan Sustainability Plan. Therefore, there is *no impact*.

3.3.7 GEOLOGY AND SOILS

Would the project:

| Question | CEQA Determination |
|---|---------------------------|
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | No Impact |
| Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | |

| Question | CEQA Determination |
|---|---------------------------------|
| ii) Strong seismic ground shaking? | No Impact |
| iii) Seismic-related ground failure, including liquefaction? | No Impact |
| iv) Landslides? | No Impact |
| b) Result in substantial soil erosion or the loss of topsoil? | Less Than Significant Impact |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | Less Than Significant Impact |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | Less Than Significant Impact |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water? | No Impact |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | Less Than Significant Impact |

3.3.7.1 CEQA SIGNIFICANCE DETERMINATIONS FOR GEOLOGY AND SOILS

a) <u>No Impact</u>

Based on a desktop search of the California Earthquake Hazards Zone Application (EQ Zapp), the project is not located in a Alquist-Priolo Earthquake fault zone.¹¹ The closest fault zone to the Project site is the Rodgers Creek Fault Zone and the West Napa Fault Zone, which is located approximately 13.5 miles west and 7 miles to the south of the Project site, respectively. The project would be constructed on an existing roadway and would not expose users to strong seismic ground shaking, seismic induced ground failure or liquefaction, or landslides. Therefore, there would be *no impact*.

b) Less than Significant Impact

The project would require grading and ground disturbance. Erosion control measures would be implemented during construction activities in accordance with the Best Management Practices (BMPs) outlined in the Stormwater Pollution Prevention Plan (SWPPP) to be completed for the project to minimize soil erosion or the loss of topsoil. Thus, impacts from the project on soil erosion would be *less than significant*.

¹¹ California Department of Conservation. *Earthquake Zones of Required Investigation.* <u>https://maps.conservation.ca.gov/cgs/EQZApp/app/</u>. Accessed February 1, 2023.

c) Less than Significant Impact

On a Countywide basis, the potential for liquefaction-induced ground failures is relatively low. A majority of the County is not susceptible to lateral spreading, although limited lateral spreading could occur in alluvial areas adjacent to open stream channels where a bank or terrace face exists. The Project would take place within an existing State Highway, where no unstable geologic units are present. Therefore, impacts from on- or off-site landslides, lateral spreading, subsidence, or collapse would be *less than significant*.

d) Less than Significant Impact

Soils near the Rutherford Road intersection are classified as Bale clay loam, while soils near the Oakville Cross Road intersection are classified as Bale loam. According to the Napa County General Plan EIR Chapter 4.10¹², certain clay-rich soils are known to be expansive in the County, and predominantly occur near Yountville. If expansive soils are anticipated to be present underneath the Project site through map review, their actual presence or absence would be determined prior to construction by site-specific geotechnical investigations. Since the Project proposes intersection improvements within an existing, developed roadway corridor, the potential for risks associated with expansive soils is low. Therefore, the Project would have a *less than significant* direct or indirect risk to life or property due to expansive soils.

e) No Impact

As a roadway improvement project, the project would have no need for a septic tank or wastewater disposal systems.

Therefore, there would be no impact.

f) Less than Significant Impact

The project area is underlain by alluvium and terrace of Pliocene to Holocene age deposits ¹³. The vertical APE will be 36 inches for the maximum anticipated depth of excavation for repaving work across the project footprint and up to 6 feet deep in areas of utilities and drainages. Due to the limited depth of ground disturbance, the likelihood of modifying or encountering paleontological resources is low. However, the potential still exists with any project requiring ground disturbance. In the unlikely event that a discovery of paleontological resource is identified, then procedures outlined in Public Resource Code Section 5097.5 would be followed. All construction would halt until a professional paleontologist evaluates the finding as well as its recovery. Any fossils collected would be deposited at an accredited and permanent scientific institution where they will be properly preserved. Due to the low potential for paleontological resources

¹² County of Napa. *General Plan – Draft Environmental Impact Report*. February 2007, <u>https://www.countyofnapa.org/1760/General-Plan</u>. Accessed July 2023.

¹³ Caltrans. *Caltrans Water Quality Planning Tool*. 2023, <u>http://svctenvims.dot.ca.gov/wqpt/wqpt.aspx</u>. Accessed July 26, 2023.

and measures identified in the unlikely event that a paleontological resource is found, the impacts would be *less than significant*.

3.3.8 GREENHOUSE GAS EMISSIONS

Would the project:

| Question | CEQA Determination |
|--|---------------------------------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | Less Than Significant Impact |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | Less Than Significant Impact |

3.3.8.1 CEQA SIGNIFICANCE DETERMINATIONS FOR GREENHOUSE GAS (GHG) EMISSIONS

a) Less than Significant

Global climate change is inherently a cumulative problem, caused by a large number of sources around the world emitting GHGs that collectively create a significant impact. An individual project does not generate enough GHG emissions to significantly influence global climate change but may contribute to a potential impact through its incremental change in emissions when combined with the contributions of all other sources of GHG.

BAAQMD's approach to developing thresholds of significance for climate impacts is to use a "fair share" approach for determining whether an individual project's GHG emissions would be cumulatively considerable. If a project would contribute its "fair share" of what is needed to achieve the State's long-term GHG reduction goals, then the project would adequately contribute to solving the problem of global climate change and that project's impact would be less than significant.

For a land use project to do its fair share to address the climate crisis, the project cannot include sources that will "lock in" GHG emissions for decades into the future. A project that locks in GHG sources, without a clear path to reduce the emissions from those sources, prevents the State from achieving long-term climate goals. For this reason, the climate impact thresholds of significance specify that certain design elements must be incorporated into the project, or the project must be consistent with a local GHG reduction strategy that meets the criteria under CEQA Guidelines Section 15183.5(b).

The design elements identified in the thresholds of significance for land use projects would not apply to the Proposed Project, as it is a transportation safety enhancement project The Project would not add capacity to the roadway, increase traffic volumes or VMT, or increase the amount of truck traffic in the study area, and therefore, would not directly contribute to operational GHG emissions. VMT would increase in the study area

in future years when compared with existing conditions as a result of regional growth that is not due to the Project. This VMT would result in a 1 percent increase in CO₂e emissions at the time of the Project's opening year in 2025. CO₂e emissions would decrease by approximately 10 percent in the design year of 2035 and 7 percent in the RTP horizon year of 2035 when compared to existing conditions, despite an increase in VMT, due to improvements in vehicle technology and increased use of alternative fuels. None of the changes in GHG emissions are attributable to the Project.

A discussion of the Project's consistency with local and regional GHG reduction strategies is included under issue (b), below.

GHG emissions would occur over the short-term from Project construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There is currently no applicable federal, State, or local standard or significance threshold pertaining to construction related GHG emissions. However, the BAAQMD does recommend that lead agencies quantify and disclose construction-related emissions.

As described in Section 3.3.3 (Air Quality), construction-related emissions associated with the Project were estimated using SMAQMD's RCEM, version 9.0.1. Construction emissions calculated using RCEM were adjusted to account for the Safer Affordable Efficient (SAFE) Vehicle Rule Part Two using off-model adjustment factors developed by ARB (ARB, 2020). ARB developed the factors to account for the impact of the rule, which revoked California's authority to set its own GHG emission standards and set zero emission vehicle mandates. The off-model adjustment factors apply to gasoline light duty vehicle CO₂ emissions in EMFAC2014 and EMFAC2017. RCEM utilizes on-road emission factors from EMFAC2017; therefore, ARB's adjustment factors have been applied to CO₂ emissions from gasoline light duty vehicle trips (i.e., construction worker commute trips).

Construction of the project would result in short-term emissions of approximately 818.08 metric tons (MT) of CO₂e. When annualized over an assumed 30-year life, construction emissions would equate to 27.27 MT CO₂e/year.

The Project would not add long-term sources of GHG emissions or conflict with GHG reduction strategies. Therefore, impacts would be *less than significant*.

b) Less than Significant

According to the BAAQMD, if a project is consistent with an adopted qualified GHG Reduction Strategy, it can be presumed that the project will not have significant GHG emission impacts. However, Napa County does not, itself, have an adopted qualified Climate Action Plan or other qualified GHG Reduction Strategy.

The project is listed in the Air Quality Conformity Analysis Report for the MTC's RTP for the San Francisco Bay Area, known as Plan Bay Area 2050 (RTP ID 21-T07-056). In addition, the BAAQMD adopted the *2017 Clean Air Plan: Spare the Air, Cool the Climate*, which provides a regional strategy to protect public health and the climate in

the Bay Area. The project would not prevent the BAAQMD from implementing its control strategy to reduce emissions and would support the plan in promoting bicycling and walking through its infrastructure improvements. Therefore, impacts would be *less than significant*.

3.3.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

| Question | CEQA Determination |
|---|-----------------------|
| a) Create a significant hazard to the public or the | Less Than Significant |
| environment through the routine transport, use, or | Impact |
| disposal of hazardous materials? | |
| b) Create a significant hazard to the public or the | Less Than Significant |
| environment through reasonably foreseeable upset and | with Mitigation |
| accident conditions involving the release of hazardous materials into the environment? | Incorporated |
| c) Emit hazardous emissions or handle hazardous or | No Impact |
| acutely hazardous materials, substances, or waste within | |
| one-quarter mile of an existing or proposed school? | |
| d) Be located on a site which is included on a list of | No Impact |
| hazardous materials sites compiled pursuant to | |
| Government Code Section 65962.5 and, as a result, | |
| would it create a significant hazard to the public or the | |
| environment? | |
| e) For a project located within an airport land use plan or, | No Impact |
| where such a plan has not been adopted, within two | |
| nautical miles of a public airport or public use airport, | |
| would the project result in a safety hazard of excessive | |
| f) Impair implementation of or physically interfore with an | Loss Than Significant |
| adopted emergency response plan or emergency | Impact |
| evacuation plan? | Inpact |
| g) Expose people or structures, either directly or indirectly, | No Impact |
| to a significant risk of loss, injury or death involving | |
| wildland fires? | |

3.3.9.1 REGULATORY SETTING

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health, and land use.

The primary federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, and the Resource Conservation and Recovery Act (RCRA) of 1976. The purpose of CERCLA,

often referred to as "Superfund," is to identify and cleanup abandoned contaminated sites so that public health and welfare are not compromised. The RCRA provides for "cradle to grave" regulation of hazardous waste generated by operating entities. Other federal laws include:

- Clean Water Act
- Clean Air Act
- Occupational Safety and Health Act (OSHA)
- Toxic Substances Control Act (TSCA)

California regulates hazardous materials, waste, and substances under the authority of the CA Health and Safety Code and is also authorized by the federal government to implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and cleanup of contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

3.3.9.2 CEQA SIGNIFICANCE DETERMINATIONS FOR HAZARDS AND HAZARDOUS MATERIALS

a) Less than Significant Impact

The project would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials.

Construction

Construction activities would involve the use of hazardous materials, such as fuels, lubricants, paints, and solvents. These materials are commonly used during construction, are not acutely hazardous and would be used in small quantities. Regular transport of such materials to and from the project site during construction could result in an incremental increase in the potential for accidents. However, numerous laws and regulations ensure the safe transportation, use, storage, and disposal of hazardous materials. For example, Caltrans and the California Highway Patrol regulate the transportation of hazardous materials and wastes, including container types and packaging requirements, as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers. Worker safety regulations cover the prevention of exposure to hazardous materials and the release of hazardous materials to the environment. The California Division of Occupational Safety and Health (Cal-OSHA) also enforces hazard communication program regulations, which contain worker safety training and hazard information requirements, such as procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees. As contractors would be required to comply with existing hazardous materials laws and regulations, the impact associated with transport, use, and disposal of hazardous materials during construction would be *less than significant*.

Operations

The project is an intersection improvement project and would not directly involve the routine transport of hazardous materials. Although, as a roadway project, users of the roadway would include vehicles that routinely transport hazardous materials to supply the operations of the various farms and commercial businesses in Napa Valley to which SR 29 provides connections. Commercial vehicle traffic, which may include hazardous loads, would be regulated by all applicable state and federal laws and regulations. Therefore, operational impacts associated with transport, use, and disposal of hazardous materials would be *less than significant*.

b) Less than Significant Impact with Mitigation Incorporated

Construction

Project construction plans call for resurfacing the existing roadways, installing bicycle paths, curbs, ramps, pedestrian cross walks, lighting, and pullouts. Construction of the project could impact soils contaminated with elevated levels of hydrocarbons and aerially deposited lead (ADL) from roadway use, pesticides from agricultural use, herbicides, metals, and Polycyclic Aromatic Hydrocarbons (PAHs) near railroad ROW. The following sites were identified as areas of potential concern in the Phase 1 ISA prepared for the Project.

7830 SR 29 (St. Helena Highway) & 1187 Oakville Cross Road

Residual petroleum may remain at the site at depth greater than 6 feet; however, concentrations in soil have been documented as being below residential land use screening levels. Based on a construction depth of 30 inches, the planned construction activities in the area would not encounter residual petroleum hydrocarbons in soil.

7856 St. Helena Highway

The record search indicating the presence of a UST did not indicate a release at the site. However, an undocumented UST and/or potential associated piping may be present in this location.

<u>Vineyards</u>

Construction activities include partial ROW acquisitions in existing vineyard areas. Use of the area for agricultural purposes may have resulted in impacts from pesticide applications.

Railroad Right of Way

Construction activities also include plans for the excavation and replacement of a rail crossing in the western portion of the intersection. Soil in the railway area may be impacted from metals, herbicides, and polyaromatic hydrocarbons (PAHs) used for weed suppression and railroad tie preservation. Therefore, project construction could result in the accidental upset and release of hazardous materials into the environment (**Impact HAZ-1**).

In order to reduce potential impacts associated with an accidental release or upset of hazardous materials, the following mitigation measure shall occur:

MM-HAZ-1: Phase II Investigation.

Prior to ground disturbance, a Phase II investigation, including shallow soil sampling and analytical testing would be required to evaluate concentrations of metals, total petroleum hydrocarbons as gasoline (TPHg), as motor oil (TPHmo), and diesel (TPHd) in the project areas. Additionally, soil adjacent to vineyards should be tested for organochlorine pesticides, and to railroad areas for herbicides and PAHs. Any excess soil generated from construction excavations should be evaluated for the listed constituents prior to offsite reuse or landfill disposal.

MM-HAZ-2: Hazardous Waste Management Plan.

Based on the results of the Phase II testing, a hazardous waste management plan shall be prepared for the project that identifies the appropriate treatment and disposal location of any contaminants found.

The project would have a less than significant impact with mitigation.

c, d, e) <u>No impact</u>

The nearest school to the Rutherford Road/ SR 29 Intersection and the Oakville Cross Road/ SR 29 intersection is approximately 3.5 miles away.

The project is not located on any sites listed on the Cortese List.¹⁴ The project is not located in an airport land use plan for Napa County nor is it within 2 miles of a public airport or public use airport.¹⁵ Therefore, there would be *no impact*.

f) Less than Significant Impact

The proposed roundabout and median improvements at Oakville Cross Road/ SR 29 would be designed to accommodate emergency response vehicles per Caltrans' design standards. The proposed traffic signal and median improvements at the Rutherford Road/ SR 29 intersection would widen the road to accommodate the traffic signal poles and would also be designed to accommodate emergency response vehicles per Caltrans' design standards.

Therefore, there would be a *less than significant* impact.

g) <u>No Impact</u>

According to the Fire Hazard Severity Viewer (FHSZ) the Project is not located in a Fire Hazard Severity Zone.¹⁶ As the project is a roadway improvement project in an existing area that is not located in a fire severity hazard area, there would be *no impact* in exposing people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

¹⁵ County of Napa. GIS Data Catalog, airprt_napa_compat.

¹⁴ California Department of Toxic Substances Control. *Hazardous Waste and Substances Site List* (Cortese), <u>https://dtsc.ca.gov/dtscs-cortese-</u>

list/#:~:text=The%20Hazardous%20Waste%20and%20Substances.of%20hazardous%20materials%20rel ease%20sites. Accessed February 1, 2023.

https://gis.napa.ca.gov/giscatalog/catalog_xml.asp, Accessed February 1, 2023, Napa County Airport Land Use Commission. *Airport Land Use Compatibility Plan.* December 1999,

https://www.countyofnapa.org/DocumentCenter/View/1980/Airport-Land-Use-Compatibility-Plan-PDF. Accessed July 2023.

¹⁶ California Office of the State Fire Marshal. *Fire Hazard Severity Zones in State Responsibility Areas*. <u>https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones</u>. Accessed February 1, 2023.

3.3.10 HYDROLOGY AND WATER QUALITY

Would the project:

| Question | CEQA Determination |
|---|---------------------------------|
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | Less Than Significant Impact |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | Less Than Significant Impact |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | Less Than Significant Impact |
| (i) result in substantial erosion or siltation on- or off-site; | Less Than Significant Impact |
| (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; | Less Than Significant Impact |
| (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | Less Than Significant Impact |
| (iv) impede or redirect flood flows? | Less Than Significant Impact |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | No Impact |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | Less Than Significant Impact |

3.3.10.1 REGULATORY SETTING

Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source¹⁷ unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and

¹⁷ Metropolitan Transportation Commission. Napa Valley Forward. <u>https://mtc.ca.gov/operations/programs-projects/forward-commute-initiatives/napa-valley-forward</u>. Accessed August 1, 2023.

industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S.; Regional Water Quality Control Boards (RWQCBs) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The goal of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."

State Requirements: Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined, and this definition is broader than the CWA definition of "pollutant." Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, RWQCBs designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect those uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters

are then included in a Statewide List for further evaluation in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB administers water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

• National Pollutant Discharge Elimination System (NPDES) Program

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water discharges, including Municipal Separate Storm Sewer Systems (MS4s). An MS4 is defined as "any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that is designed or used for collecting or conveying storm water." The SWRCB has identified Caltrans as an owner/operator of an MS4 under federal regulations. Caltrans' MS4 permit covers all Department rights of way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

Caltrans' MS4 Permit, NPDES No. CAS000003, SWRCB Order No. 2022-0033-DWQ (adopted on June 22, 2022; effective January 1, 2023) contains four basic requirements:

- 1. Caltrans must comply with the requirements of the Construction General Permit (see below);
- 2. Caltrans must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges;
- 3. Caltrans storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs), to the maximum extent practicable, and other measures as the SWRCB and/or other agency having authority reviewing the stormwater component of the project; and

4. Caltrans must implement trash control measures to meet trash regulation compliance. This requirement is per the California Water Code Section 13383 Order issued by the SWRCB to Caltrans, applicable to all Caltrans projects (SWRCB, 2017). However, per the Caltrans Trash Control Implementation Workplan CTSWRT-21-379.08.4 (2021), full trash capture BMPs are only considered for Significant Trash Generating Areas.

To comply with the permit, Caltrans developed the Statewide Storm Water Management Plan (SWMP) to address storm water pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The SWMP assigns responsibilities within Caltrans for implementing storm water management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices Caltrans uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of BMPs.

Construction General Permit

The Construction General Permit (CGP) (NPDES No. CAS000002, SWRCB Order No. 2022-0057-DWQ, became effective on September 1, 2023. The CGP regulates stormwater discharges from construction sites which result in a Disturbed Soil Area (DSA) of 1.0 acre or greater, and/or are smaller sites that are part of a larger common plan of development. For all projects subject to the CGP, the applicant is required to hire a Qualified Stormwater Pollution Prevention Plan (SWPPP) Developer to develop and implement an effective SWPPP. All Project Registration Documents, including the SWPPP, are required to be uploaded into the SWRCB's on-line Stormwater Multiple Application and Report Tracking System at least 30 days prior to construction.

Local Agency Construction Activity Permitting

For local agency transportation projects off the State Highway System (SHS), the local agency (as owner of the land where the construction activity is occurring) is responsible for obtaining the NPDES permit if required and for signing certification statements (when necessary). Local agencies contact the appropriate RWQCB to determine what permits are required for their construction activity. The local agency is also responsible for ensuring that all permit conditions are included in the construction contract and fully implemented in the field.

3.3.10.2 CEQA SIGNIFICANCE DETERMINATIONS FOR HYDROLOGY AND WATER QUALITY

a) Less Than Significant Impact

Construction

Ground disturbing activities, such as cut-and-fill, grading, and excavation would potentially temporarily impact water quality during construction. Sediment laden flow has the potential to enter storm drainage facilities after moving over disturbed soil areas after rainfall events or from water usage on the construction site. Fueling or maintenance of construction vehicles could occur within the Project site during construction, so there would be a risk of accidental spills or releases of fuels, oils, or other potentially toxic materials. An accidental release of these materials could pose a threat to water quality if contaminants enter the local receiving waters and storm drains. The magnitude of the impact from an accidental release depends on the amount and type of material spilled.

The contractor would implement construction site BMPs to minimize short-term impacts to water quality and conflicts with waste discharge requirements. Temporary BMPs would be consistent with the practices required under the Caltrans MS4 and Phase II Small MS4 permits. Compliance with the requirements of these permits and adherence to their conditions would reduce or avoid potential construction-related impacts. Therefore, with implementation of standard BMPs, impacts would be *less than significant*.

Operation

The project would create/replace approximately 0.34 acres of impervious surfaces comprised of road widening to accommodate the roundabout and the shared use path (located around the roundabout). Stormwater from impervious surfaces at the project site would drain to the outskirts of the project area, consistent with the current drainage pattern. No new low impact development (LID) techniques are proposed as less than 10,000 square feet of impervious surface would be created or replaced. Once operational, stormwater would be absorbed via existing grassy permeable ground surfaces and drainage pathways. There would be a minor increase in impervious pavement near the northern drainage ditch mostly due to the shared use path. This would result in a potential increase in stormwater conveyance within the intermittent ditch, which has sufficient capacity for this potential increase in stormwater. Project operation related to water quality degradation would be *less than significant*.

b) Less Than Significant Impact

The Project would increase the amount of impervious surface area, which has the potential to reduce the amount of runoff infiltrating through native soil. This reduction could result in loss in volume or amount of water that previously recharged localized aquifers and reduce regional groundwater volumes. These would be *less than significant* because the increase in impervious surface created by the Project is minimal

compared to the overall watershed. In addition, the implementation of stormwater treatment BMPs would allow for stormwater infiltration to minimize impacts to groundwater.

c) Less than Significant Impact

(i) Project cut-and-fill, grading, and excavation activities would temporarily increase localized erosion. Earth moving and other construction activities can cause minor erosion and runoff of topsoil into the drainage systems. Temporary erosion control measures can be applied to all areas during construction, including the trapping of sediment within the construction area through the placement of barriers, such as fiber rolls, to prevent sheet flow from concentrating and establishing gullies. Other methods of minimizing erosion impacts include the implementation of hydromulching and/or limiting the amount and length of exposure of graded soil. Permanent erosion control measures would be applied to all exposed areas once grading or soil disturbance work is completed as a permanent measure to achieve final slope stabilization. These measures may include hydraulically applying a combination of hydroseed with native seed mix, hydromulch, straw, tackifier, and compost to promote vegetation establishment, and installing fiber rolls to prevent sheet flow from concentrating and causing gullies. The Project area is mostly flat; however, for steeper slopes or areas that may be difficult for vegetation to establish, measures such as netting, blankets, or slope paving could be considered to provide stabilization. The proposed project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

(ii),(iii),(iv) The Project would result in an increase in impervious area of 0.34acre that would minimally reduce infiltration opportunities and would not increase the rate or amount of surface runoff in a way that would result in flooding. The Project has been designed to maintain the watershed's drainage patterns and would convey flows to the existing drainage systems and incorporate water quality treatment elements to reduce the impacts of added impervious area. The Project would not provide any substantial additional sources of polluted runoff during operations, and as described above, would implement BMPs to reduce potential temporary construction impacts. The Proposed Project would not substantially impede or redirect flows.

Therefore, the Project would result in *less than significant* impacts from erosion, siltation, flooding, or runoff from alteration of the existing drainage pattern of the site.

d) No Impact

The Project is located within the FEMA Zone X outside of the 100-year floodplain zone. Zone X areas are classified as being outside of the 0.2 percent-annual-chance flood. The Project is located away from the ocean or any large bodies of water and therefore is not within a tsunami or seiche zone. Therefore, there would be *no impact*.

e) Less than Significant

The project site is located within the area subject to the San Francisco Bay Water Quality Control Board's Basin Plan (Basin Plan). The Basin Plan lists action plans and policies to achieve water quality objectives, protect present and future beneficial water uses, protect public health, and prevent nuisance¹⁸. As described under Impact 'a', the project would comply with applicable storm water standards and permits that are specifically designed to reduce potential water quality impacts to a less-than-significant level. The project would not conflict with or obstruct implementation of the regional Basin Plan. Therefore, impacts related to obstruction of a water quality control plan would be *less than significant*.

The Napa Valley Groundwater Subbasin is categorized by the Department of Water Resources as a high priority groundwater basin and is subject to the Sustainable Groundwater Management Act requirements. The Napa Valley Subbasin is categorized as high priority due to the amount of irrigate lates, density of wells, population and degree in which people in the area rely on groundwater. The draft Sustainable Groundwater Management Plan was submitted to the Napa County Groundwater Sustainability Agency on November 1, 2021. The Groundwater Stability Plan was adopted on January 11, 2022, and approved by the Department of Water Resources¹⁹. As described in Impact 'b' above, the project would not utilize or decrease groundwater supplies at the project site, nor substantially interfere with groundwater recharge. There are no site-specific standards for groundwater management within the Napa Valley Subbasin with which the project would conflict. *No impact* would result.

 ¹⁸San Francisco Bay Regional Water Quality Control Board. Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin. March 2023, <u>Basin Planning | San Francisco Bay Regional Water Quality</u> <u>Control Board (ca.gov)</u>. Accessed August 2023.
 ¹⁹ California Department of Water Resourced. <u>https://water.ca.gov/News/News-Releases/2023/Jan-</u>

23/DWR-Approves-Groundwater-Sustainability-Plans-for-Four-Northern-California-Basins. Accessed August 11, 2023.

3.3.11 LAND USE AND PLANNING

Would the project:

| Question | CEQA Determination |
|--|---------------------------|
| a) Physically divide an established community? | No Impact |
| b) Cause a significant environmental impact due to a | Less Than Significant |
| conflict with any land use plan, policy, or regulation | Impact |
| adopted for the purpose of avoiding or mitigating an | |
| environmental effect? | |

3.3.11.1 CEQA SIGNIFICANCE DETERMINATIONS FOR LAND USE AND PLANNING

a) No Impact

Division of an established community through a physical feature would typically occur in the form of a highway or railroad that would bisect an established community. The project is an intersection improvement project on an existing roadway and would not introduce any features that would limit or preclude access to both sides of the community. Although medians would be introduced along the corridor, they would include access points to local business from and to SR 29. Due to the construction of new sidewalks, bike lanes, and connections to the Napa Valley Wine Trail, pedestrian and bicyclist connectivity would improve. Therefore, the project would have *no impact* on the physical division of the established communities of Rutherford and Oakville.

b) Less than Significant

As a roadway improvement project, the project is not subject to typical land use regulations, as included in the County General Plan and Zoning Code. However, the project is consistent with the County Circulation Element, Agricultural Preservation and Land Use Element, and Community Character Element.

The project is consistent with the County's General Plan Circulation Element policies CIR-31 and CIR-32, which seek to implement operational improvements along SR 29, including roundabouts and infrastructure to reduce conflicts for vehicles, bicyclists and pedestrians.²⁰ As per Policy CIR-33, the project brings together Caltrans, NVTA, local jurisdictions, and other agencies to implement projects and policies identified in the Countywide Bicycle and Pedestrian Plan. In addition, policy CIR-34 includes a requirement to add bicycle and pedestrian facilities consistent with the Countywide Bicycle and Pedestrian Plans, a Class III Bike Route is proposed for SR 29 between Rutherford Road and Madison St (project no. 154). The bicycle infrastructure being implemented for the segment of the project would be consistent with this

²⁰ County of Napa. General Plan Circulation Element. February 2019, <u>https://www.countyofnapa.org/DocumentCenter/View/3332/Circulation-Element-PDF</u>. Accessed July 2023.

proposed route and would support local efforts to reduce GHG emissions from the transportation system (policy CIR-4). In addition, the project would be consistent with goals of the County to encourage active transportation, as detailed in the Napa Countywide Pedestrian Plan. This includes seeking opportunities to include sidewalk projects and other pedestrian improvements in the unincorporated areas, including through continuing ongoing sidewalk gap closures, per the 2015 CTP Program (Project No. 23).

The project is consistent with the County's General Plan Agricultural Preservation and Land Use Element's policies for the communities of Oakville and Rutherford in which the project is located. While Oakville and Rutherford are two small centers of urban development along SR 29, they are not reflected on the General Plan Land Use Map. Despite this, the project is consistent with Policy AG/LU-98, which states: "The County supports improvements to the intersections of Highway 29 and the Rutherford Road and the Oakville Cross Road to improve safety and accessibility".

The project is consistent with the County's Community Character Element Policy CC-13, which partially states "The County's roadway construction and maintenance standards and other practices shall be designed to enhance the attractiveness of all roadways and in particular scenic roadways."

Therefore, the project would have *a less than significant impact* regarding a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

3.3.12 MINERAL RESOURCES

Would the project:

| Question | CEQA Determination |
|--|---------------------------|
| a) Result in the loss of availability of a known mineral | No Impact |
| resource that would be a value to the region and the | |
| residents of the state? | |
| b) Result in the loss of availability of a locally important | No Impact |
| mineral resource recovery site delineated on a local | |
| general plan, specific plan or other land use plan? | |

3.3.12.1 CEQA SIGNIFICANCE DETERMINATIONS FOR MINERAL RESOURCES

a, b) No<u>Impact</u>

No mineral resources have been identified on the project site²¹. The project would involve limited site grading and excavation. Materials generated from these activities would be primarily reused on site. Little to no native material off-hauling would occur, as

²¹ Napa County. *Napa County General Plan*. https://www.county.ofpapa.org/DocumentCenter///iew/7936/410-0

https://www.countyofnapa.org/DocumentCenter/View/7936/410-Geology-General-Plan-DEIR-PDF. Accessed August 11, 2023.

described in the Project Description. Therefore, construction and operation of the project would not affect existing mining operations or result in the loss of availability of a known mineral resource. Therefore, there would be *no impact*.

3.3.13 NOISE

Would the project result in:

| Question | CEQA Determination |
|---|--|
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | Less Than Significant Impact |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | Less Than Significant with Mitigation Incorporated |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two nautical miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | No Impact |

3.3.13.1 CEQA SIGNIFICANCE DETERMINATIONS FOR NOISE

a) Less than Significant

Construction

During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction equipment is expected to generate noise levels ranging from 80 to 90 dB at a distance of 50 feet, and noise produced by construction equipment would be reduced at a rate of about 6 dB per doubling of distance.

Construction would be required to comply with Caltrans Standard Specification Section 14-8.02, "Noise Control," which states the following:

Do not exceed 86 dBA Lmax at 50 feet from the job site activities from 9 p.m. to 6 a.m.

Equip an internal combustion engine with the manufacturer-recommended muffler. Do not operate an internal combustion engine on the job site without the appropriate muffler.

Temporary construction noise impacts would be unavoidable at areas immediately adjacent to the Project alignment. However, construction noise would be short-term, intermittent, and typically overshadowed by local traffic noise.

Operations

A significant noise impact would occur if traffic generated by the project would substantially increase noise levels at sensitive receptors in the project vicinity. Existing noise levels at the project site are characterized by motorists at the heavily trafficked Oakville Road and Rutherford Road intersections. The proposed project is expected to improve traffic flow via the roundabout and to reduce stop-and-go at the Oakville Road intersection.

The Napa County General Plan identifies roundabouts as an operational improvement to be explored to improve traffic flow and reduce conflicts (Napa County 2019). Roundabouts favor the reduction of approach speed and fluidity of circulation, as opposed to the stop-and-go of a typical intersection and have been shown to reduce noise by approximately 4-5 dB compared to standard intersections (Distefano and Leonardi 2019).

Operationally, the Proposed Project would not directly induce more vehicles to pass through the corridor. However, reconfiguration of the roadway at the Oakville intersection could result in the flow of traffic occurring in greater proximity to sensitive receptors near the roundabout, thereby resulting in potentially greater noise levels. The NSR modelled future noise levels at four locations within the project area. The vehicular volumes modelled to assess operational noise impacts were based off predicted regional growth. The NSR concluded that the relatively minor increases in noise are not predicted to approach or exceed the noise abatement criterion assigned for each sensitive receptor.

Therefore, impacts to ambient noise levels would be less than significant.

b) Less than Significant with Mitigation Incorporated

The project would require construction of additional pavement and reconstruction of existing pavement, which would require the use of heavy-duty machinery. The general activities include demolition and removal of the excavated material, grading, spreading of material, and compacting.

Per the Vibration Study completed for the project (Appendix H), construction activities within 10 feet of the Oakville Grocery structure would exceed the vibration damage risk criteria of 0.20 Peak Particle Velocity (PPV) for fragile historic structures. Therefore, project construction would result in potentially significant indirect impacts associated with vibration (**Impact CUL-1**).

To minimize potentially significant impacts to the structure from vibration, heavy duty equipment would need to be restricted to distances of more than 20 feet from the Oakville Grocery structure. Before construction begins, the Contractor would be

required to prepare a Vibration Control Plan (VCP) specifying construction activities, monitoring locations, equipment, procedures, schedule of measurements and reporting methods to be used. Weekly reports shall indicate whether the vibration monitoring data exceeds the damage risk criteria of 0.20 in/sec PPV allowable limits. If exceeded the activity causing the exceedance shall be immediately halted. Work on that activity shall be suspended until such time as an alternative construction method can be used and additional Abatement Measures can be implemented as specified in the Vibration Control Plans.

Therefore, the project would have a *less than significant impact with mitigation* incorporated on the generation of excessive groundborne vibration.

The following mitigation measures shall be required:

MM-NOI-1 Photo/Visual Documentation

A pre-construction photo survey/video survey of the Oakville Grocery structure would be completed by a qualified architectural historian to document exterior and interior conditions of the structure. In the event of potential concerns regarding vibration induced damage to the structure by the property owner during construction, this photo documentation will serve as a point of comparison for liability claims.

MM-NOI-2 Vibration Control Plan

Prior to construction, the Contractor shall prepare a Vibration Control Plan (VCP) specifying construction activities, monitoring locations, equipment, procedures, schedule of measurements and reporting methods to be used throughout construction for the protection of the Oakville Grocery structure.

MM-NOI-3 Vibration Monitoring

Weekly reports to the Project Engineer by the Contractor shall indicate whether the vibration monitoring data exceeds the damage risk criteria of 0.20 in/sec PPV allowable limits. If exceeded, the activity causing the exceedance shall be immediately halted. Work on that activity shall be suspended until such time as an alternative construction method can be identified by the Project Engineer and Contractor and until additional Abatement Measures can be implemented as specified in the Vibration Control Plan.

c) No Impact

The project is not located in the vicinity of a private airstrip or within an airport land use plan and would not expose residents or workers in the project area to excessive noise levels. Therefore, there would be *no impact*.

3.3.14 POPULATION AND HOUSING

Would the project:

| Question | CEQA Determination |
|---|--------------------|
| a) Induce substantial unplanned population growth in an | No Impact |
| area, either directly (for example, by proposing new | |
| homes and businesses) or indirectly (for example, | |
| through extension of roads or other infrastructure)? | |
| b) Displace substantial numbers of existing people or | No Impact |
| housing, necessitating the construction of replacement | |
| housing elsewhere? | |

3.3.14.1 CEQA SIGNIFICANCE DETERMINATIONS FOR POPULATION AND HOUSING

a) No Impact

The project would implement roadway improvements at two intersections along an existing roadway in Napa. These improvements would not provide access to new areas or widen the existing roadway to accommodate additional capacity that would indirectly induce substantial unplanned population growth. Therefore, there would be *no impact*.

b) <u>No Impact</u>

No housing would be impacted by the project, nor would the project displace any people or businesses. Therefore, there would be *no impact*.

3.3.15 PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

| Question | CEQA Determination |
|-----------------------------|---------------------------|
| a) Fire protection? | No Impact |
| b) Police protection? | No Impact |
| c) Schools? | No Impact |
| d) Parks? | No Impact |
| e) Other public facilities? | No Impact |

3.3.15.1 CEQA SIGNIFICANCE DETERMINATIONS FOR PUBLIC SERVICES

a through e) <u>No Impact</u>

As discussed in Population and Housing, the project would not induce population growth and therefore, would not require expansion of public facilities to maintain acceptable service ratios, response times, or other performance objectives. Therefore, there would be *no impact* on public services.

3.3.16 RECREATION

| Question | CEQA Determination |
|--|---------------------------|
| a) Would the project increase the use of existing | No Impact |
| neighborhood and regional parks or other recreational | |
| facilities such that substantial physical deterioration of | |
| the facility would occur or be accelerated? | |
| b) Does the project include recreational facilities or require | No Impact |
| the construction or expansion of recreational facilities | |
| which might have an adverse physical effect on the | |
| environment? | |

3.3.16.1 CEQA SIGNIFICANCE DETERMINATIONS FOR RECREATION

a, b) No<u>Impact</u>

As noted above in Population and Housing, the project would not directly or indirectly induce population growth and therefore would not increase the use of existing neighborhood and regional parks or other recreational facilities. Therefore, there would be *no impact*.

3.3.17 TRANSPORTATION

Would the project:

| Question | CEQA Determination |
|---|-----------------------|
| a) Conflict with a program, plan, ordinance, or policy | Less Than Significant |
| addressing the circulation system, including transit, | Impact |
| roadway, bicycle and pedestrian facilities? | |
| b) Conflict or be inconsistent with CEQA Guidelines section | Less Than Significant |
| 15064.3, subdivision (b)? | Impact |
| c) Substantially increase hazards due to a geometric | Less Than Significant |
| design feature (e.g., sharp curves or dangerous | Impact |
| intersections) or incompatible uses (e.g., farm | |
| equipment)? | |
| d) Result in inadequate emergency access? | Less Than Significant |
| | Impact |

3.3.17.1 REGULATORY SETTING

Plan Bay Area 2050

Plan Bay Area 2050 is the Bay Area's regional long-range plan adopted by MTC and the Association of Bay Area Governments (ABAG). Thirty-five strategies are included in the plan to improve housing, the economy, transportation, and the environment across the Bay Area's nine counties. Plan Bay Area 2050 serves as the Bay Area's Regional Transportation Plan (RTP), as required by federal regulations, and the Sustainable Communities Strategy (SCS), as required by state statute.

2023 Transportation Improvement Program (TIP)

The Transportation Improvement Program (TIP) signifies the start of implementation of the programs and policies approved in the Bay Area's long-range regional transportation plan (RTP), Plan Bay Area 2050. All projects included in the TIP are consistent with Plan Bay Area 2050. The Bay Area's 2023 TIP includes more than 300 transportation projects with approximately \$11 billion in committed federal, state, and local funding for federal fiscal years 2022-23 through 2025-26, as well as over 200 projects shown for informational purposes.

MTC has developed the 2023 TIP and Conformity Analysis in cooperation with the County Transportation Agencies, Caltrans, individual cities, counties, transit operators, and other project sponsors, and in consultation with the FHWA, FTA and the U.S. Environmental Protection Agency (EPA).

While not required, the project is included in the MTC's 2023 TIP (TIP ID NAP190007), which is included in Caltrans' 2023 Federal Statewide Transportation Improvement Program (FSTIP) by reference.

2023 Federal-Statewide Transportation Improvement Program (FSTIP)

MTC forwarded the 2023 TIP to Caltrans to be included in the 2023 Federal-Statewide Transportation Improvement Program (FSTIP) by reference. The State approved the 2023 FSTIP on November 16, 2022. FHWA and FTA approved the 2023 FSTIP on December 16, 2022.

Napa County General Plan

Napa County General Plan Circulation Element identifies roadway types and uses throughout Napa County. SR 29 is an arterial that is characterized as a two- or fourlane roadway designated for longer-distance travel between major centers of activity with limited direct driveway access.

Napa Countywide Bike Plan

The Napa Countywide Bike Plan is a local plan generated by Napa County and the Napa Valley Transportation Authority to identify and improve bicycle facilities. The first plan was adopted in 2003 with a most recent updated in 2019.

Napa Countywide Pedestrian Plan

The Napa Countywide Pedestrian Plan was created in 2016 to address pedestrian facilities and opportunities for safety and mobility throughout Napa County. This plan was created with the joint effort between Napa County and the Napa Valley Transportation Authority.

3.3.17.2 CEQA SIGNIFICANCE DETERMINATIONS FOR TRANSPORTATION

a) Less than Significant Impact

The project is consistent with the County's General Plan Circulation Element policy CIR-31 and CIR-32 which seeks to implement operational improvements along SR 29, including roundabouts and infrastructure to reduce conflicts for vehicles, bicyclists and pedestrians.²² As per Policy CIR-33, the project brings together Caltrans, NVTA, local jurisdictions, and other agencies to implement projects and policies identified in the Countywide Bicycle and Pedestrian Plan. In addition, policy CIR-34 includes a requirement to add bicycle and pedestrian facilities consistent with the Countywide Bicycle and Pedestrian Plans when repaying or upgrading of the roadway occurs. Per the Napa Countywide Bicycle Plan, a Class III Bike Route is proposed for SR 29 between Rutherford Road and Madison St (project no. 154). The bicycle infrastructure being implemented for the segment of the project would be consistent with this proposed route and would support local efforts to reduce GHG emissions from the transportation system (policy CIR-4). In addition, the project would be consistent with goals of the County to encourage active transportation, as detailed in the Napa Countywide Pedestrian Plan. This includes seeking opportunities to include sidewalk projects and other pedestrian improvements in the unincorporated areas, including through continuing ongoing sidewalk gap closures, per the 2015 CTP Program (Project No. 23). The NVTA VINE Transit system operates nine local bus routes, one of which operates on SR 29 including the project areas on Rutherford and Oakville. The project site intersections would continue to operate during construction and would not impact local bus operations. Therefore, the project would result in less than significant impacts regarding a conflict with a program, plan, ordinance, or policy.

²² County of Napa. General Plan Circulation Element. February 2019, <u>https://www.countyofnapa.org/DocumentCenter/View/3332/Circulation-Element-PDF</u>. Accessed July 2023.

b) Less than Significant Impact

CEQA Guidelines § 15064.3, Subdivision (b) indicates that land use projects would have a significant impact if the project resulted in vehicle miles traveled (VMT) exceeding an applicable threshold of significance. The Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA²³ notes that the installation of a roundabout would not lead to a substantial or measurable increase in vehicle travel and generally should not require an induced transportation analysis where the lead agency would need to quantify the additional vehicle traffic associated with the project. Since the project is designed to reduce vehicular conflicts at the intersection to improve safety and would not widen roadways to accommodate additional capacity, it would not result in increased VMT. In addition, the improvements to sidewalk infrastructure and the continuation of the bike route on SR 29 would improve opportunities for pedestrian and bicycle travel along the corridor. Therefore, there would be *less than significant* impacts.

c) Less than Significant Impact

During construction, use of SR 29 would consist of construction-related vehicles traveling to and from the project site and construction staging. Materials would be staged within the corridor at a location to be selected by the contractor. The project would be constructed in phases that would allow for traffic control to be routed around the work area utilizing the Caltrans ROW. The re-routing would be temporary and only occur during construction.

The project is designed to improve safety along the SR 29 corridor through the installation of a roundabout at Oakville Cross Road and a traffic signal at Rutherford Road. The intent of the project is to reduce conflicts at these intersections, improve flow, and improve safety through reducing hazards due to an existing design feature. Therefore, the project would have a *less than significant* impact.

d) Less than Significant Impact

The project would be designed to Caltrans and County of Napa standards for roadways, which includes emergency access requirements, such as allowing adequate turning radii for fire trucks and/or other emergency vehicles. Therefore, the project would have *less than significant* impacts.

3.3.18 TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and

²³ Office of Planning and Research. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December 2018, <u>https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf</u>. Accessed July 2023.

scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

| Question | CEQA Determination |
|---|--|
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | Less Than Significant with Mitigation Incorporated |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | No Impact |

3.3.18.1 REGULATORY SETTING

Assembly Bill (AB) 52 requires a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation, prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project.

3.3.18.2 CEQA SIGNIFICANCE DETERMINATIONS FOR TRIBAL CULTURAL RESOURCES

a) Less than Significant Impact with Mitigation Incorporated

There are no known resources of significance to a local tribe that is also listed in the CRHR or in a local register of historical resources. However, as noted through the tribal consultation process, the corridor was identified as an area of significance to the local Mishewal-Wappo Tribe of Alexander Valley. Therefore, the project could result in potentially significant impacts to unknown subsurface tribal cultural resources (**Impact TCR-1**). The project would incorporate monitoring during ground disturbance to avoid impacts to any unanticipated resources per tribal direction.

The following mitigation measure shall be required:

MM-CUL-1 Archaeological and/or Native American Monitoring.

b) No Impact

Per PRC Section 5024.1 subdivision (c), a resource may be listed as a historical resource in the CRHR if it meets the NRHP criteria. However, as no specific NRHP

resource in the project area with significance to the Tribe has been identified, there would be *no impact* on a resource as defined by PRC Section 5024.1 subdivision (c).

3.3.19 UTILITIES AND SERVICE SYSTEMS

Would the project:

| Question | CEQA Determination |
|--|---------------------------------|
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | Less Than Significant Impact |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | No Impact |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | No Impact |
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | Less Than Significant Impact |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | Less Than Significant Impact |

3.3.19.1 CEQA SIGNIFICANCE DETERMINATIONS FOR UTILITIES AND SERVICE SYSTEMS

a) Less than Significant Impact

The project would extend the drainage culvert found under the driveway of the west side of the NVWT and would introduce a dike along the borders of SR 29 to prevent flooding of sidewalks. There would be minimal ground disturbance related to the construction of this stormwater infrastructure, and all impacts would be within the project footprint. No relocation or extension of other utilities would be required in conjunction with the Project, and therefore, impacts would be *less than significant*.

b, c) No<u>Impact</u>

The project is an intersection improvement project and would not require water supplies to serve the project during operation, nor would it result in a need for additional capacity for wastewater treatment. Contractors would bring water tanks as needed for the dust

suppression and would not generate any wastewater requiring treatment during construction or operation of the project. Therefore, there would be *no impact*.

d, e) Less<u>than Significant Impact</u>

The project would result in a temporary increase in solid waste during construction, as generated by ground disturbance for pavement removal and for excavation. Debris with no practical reuse or that cannot be salvaged or recycled would be disposed of at a local landfill. Waste generated during construction would be required to be disposed of in accordance with standard County operating procedures pursuant to federal, State, and local regulations. Debris generated during construction would not be in excess of the capacity of local landfills. Local landfills can include Potrero Hills Landfill (13.8 million cubic yards of remaining capacity and 4,330 tons/day max permitted throughput), Redwood Landfill (26 million cubic yards remaining capacity and 2,300 tons/day max permitted throughput), Vasco Road Sanitary Landfill (11.5 million cubic yards of remaining capacity and 2,518 ton/day max permitted throughput), and Keller Canyon Landfill (63.4 million cubic yards remaining capacity and 3,500 tons/day max permitted throughput)²⁴.

As an intersection improvement project, no solid waste would be generated nor would compliance with laws related to solid waste be required during operation.

Therefore, impacts would be *less than significant*.

3.3.20 WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

| Question | CEQA Determination |
|---|---------------------------|
| a) Substantially impair an adopted emergency response | Less Than Significant |
| plan or emergency evacuation plan? | Impact |
| b) Due to slope, prevailing winds, and other factors, | No Impact |
| exacerbate wildfire risks, and thereby expose project | |
| occupants to, pollutant concentrations from a wildfire or | |
| the uncontrolled spread of a wildfire? | |
| c) Require the installation or maintenance of associated | No Impact |
| infrastructure (such as roads, fuel breaks, emergency | |
| water sources, power lines or other utilities) that may | |
| exacerbate fire risk or that may result in temporary or | |
| ongoing impacts to the environment? | |

²⁴ CalRecycle. *Solid Waste Information System (SWIS) Facility Search*. 2023, <u>https://www2.calrecycle.ca.gov/SolidWaste/Site/Search</u>. Accessed July 28, 2023.

| Question | CEQA Determination |
|---|--------------------|
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | No Impact |

3.3.20.1 CEQA SIGNIFICANCE DETERMINATIONS FOR WILDFIRE

a) Less than Significant Impact

To construct the roundabout at Oakville Cross Road, portions of the intersection and corridor may be required to be temporarily closed off. At the Rutherford Road intersection, traffic signals would be installed within the shoulders and would not be likely to require temporarily closing the intersection to through traffic. Along segments at both intersections, medians would be constructed, which may require access to be shifted to an adjacent lane to accommodate construction vehicles and crew. As a major throughfare for the area, detours would be required to allow traffic to continue through the area and would be required to be coordinated with local emergency service providers through a Traffic Management Plan. Therefore, there would not be a substantial impairment of a local emergency response of evacuation plan.

Therefore, the project would have a *less than significant* impact resulting from conflicts with an adopted emergency plan.

b, d) No<u>Impact</u>

Wildfires are dependent on existing environmental conditions, including but not limited to surrounding vegetation, topography, and climate. The project would not exacerbate wildfire risks as the project would be an intersection improvement project mostly within the existing road right of way. Surrounding the project intersections are maintained vineyards and urban structures, including residences and commercial structures. As the purpose of the project is to improve operations at the intersection and would not place residents or other occupants at the intersection, the project would not exacerbate wildfire risks nor expose people or structures to significant risks related to wildfires.

Therefore, there would be no impact.

c) <u>No Impact</u>

The project would construct new roadway infrastructure, including a roundabout, installation of traffic lights and light poles. This infrastructure would not exacerbate the risk of a wildfire through its construction or maintenance. No other infrastructure such as roads, fuel breaks, or other utilities would be constructed. Therefore, there would be *no impact*.

3.3.21 MANDATORY FINDINGS OF SIGNIFICANCE

| Question | CEQA Determination |
|--|--|
| a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | Less Than Significant with Mitigation Incorporated |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | Less Than Significant with Mitigation Incorporated |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | Less Than Significant with Mitigation Incorporated |

3.3.21.1 CEQA SIGNIFICANCE DETERMINATIONS FOR MANDATORY FINDINGS OF SIGNIFICANCE

a) Less than Significant Impact with Mitigation

There are no streams, wetlands or other bodies of water within the project footprint or adjacent to the project footprint that would be impacted by the project. As discussed under Issue IV, several species of state and local concern have the potential to occur within the vicinity of the project area, including the foothill yellow-legged frog as well as the California red-legged frog and the Swainson's Hawk. However, with MM-BIO-1 and MM-BIO-2 implemented, impacts would be reduced to less than significant for the special status species. The project improvements would be within the existing right of way, with the exception of takes from a part of an adjacent vineyard, and therefore, would not eliminate a plant or animal community.

The historic, NRHP and CRHR-listed Oakville Grocery structure is located at the intersection of Oakville Cross Road and SR 29 where the roundabout will require acquisitions from the adjacent vineyard and in which construction activities will be less than 100 feet away from the structure. Despite this, the project would not eliminate the character defining features or impact the structure itself in a way that would eliminate the historic nature of the resource. In addition, the project has been designed to avoid known archaeological sites and would dispatch a qualified archaeological monitor and/or Native American monitor during ground disturbance. Therefore, impacts would be *less than significant with mitigation*.

b) Less than Significant Impact with Mitigation

The Proposed Project considered effects that would be individually limited, but cumulatively considerable under cultural resources and tribal cultural resources, especially as these resources are non-renewable. However, as detailed in Sections V. Cultural Resources and XVIII. Tribal Cultural Resources above, project design has considered the findings of the site-specific technical studies in order to avoid these resources. In addition, mitigation has been incorporated to avoid, minimize, and mitigate potential impacts. Therefore, impacts would not be cumulatively considerable.

In addition, the Proposed Project considered the potential cumulative impacts of GHG emissions. Per CEQA Guidelines Section 15064.4(b), "In determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions." However, as the Project would only generate a temporary and minimal amount of GHG emissions from construction, it can be concluded that the project would not result in cumulatively considerable impacts from GHG emissions.

c) Less than Significant Impact with Mitigation

The Proposed Project would not have substantial environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly. As detailed through Sections I through XXI above, potentially significant impacts would occur to biological resources, cultural resources, hazardous materials, noise and vibration, and tribal cultural resources. However, as discussed under each topic area, these impacts would be mitigated to *less than significant*.

4 List of Preparers

4.1 CALTRANS STAFF

Sean Marquis

Nathan Roberts

Maxwell Lammert

Shilpa Mareddy

Va Lee

Nancy Frost

Lindsay Busse

Alicia Sanhueza

4.2 MTC

Ingrid Supit

Erik Chang

4.3 GHD

James Zandian

Stephanie Ledbetter

4.4 WSP

Stephanie Whitmore, Project Manager

Annie Lee, AICP, Environmental Planner

Elizabeth Diaz, Environmental Scientist

Camilla McDonald, Architectural Historian

Kate Umlaf, Architectural Historian

Daniel Woodward, Archaeologist

Marlis Muschal, Archaeologist

Kathryn Wilkins, Archaeologist Lindsay Mitchell, Archaeologist Andrew Wilkins, Archaeologist Steven Wolf, Vibration Specialist Michael Lieu, Noise Specialist Rebecca Frohning, Air Quality Specialist Elizabeth Schwing, Air Quality Specialist Theresa Dickerson, Environmental Planner Melissa Symmes, Environmental Planner Randy Burton, Visualization Specialist Randy Lawrence, Visualization Specialist Deidre Duffy, Biologist Katrina Wille, Biologist Anne Broache, Environmental Planner

5 References

- Bay Area Air Quality Management District (BAAQMD). May 2017. *California Environmental Quality Act Air Quality Guidelines*.
- Bay Area Air Quality Management District (BAAQMD). *CEQA Thresholds and Guidelines Update*. 2022, <u>https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-actceqa/updated-ceqa-guidelines</u>. Accessed March 2023.
- California Department of Conservation. *Earthquake Zones of Required Investigation*. <u>https://maps.conservation.ca.gov/cgs/EQZApp/app/</u>. Accessed February 1, 2023.
- California Department of Conservation. *California Important Farmland Finder*. <u>https://maps.conservation.ca.gov/DLRP/CIFF/.</u> Accessed February 13, 2023.
- California Department of Toxic Substances Control. *Hazardous Waste and Substances Site List (Cortese)*. <u>https://dtsc.ca.gov/dtscs-cortese-</u> <u>list/#:~:text=The%20Hazardous%20Waste%20and%20Substances,of%20hazard</u> <u>ous%20materials%20release%20sites</u>. Accessed February 1, 2023.
- California Department of Water Resourced. <u>https://water.ca.gov/News/News-</u> <u>Releases/2023/Jan-23/DWR-Approves-Groundwater-Sustainability-Plans-for-</u> <u>Four-Northern-California-Basins</u>. Accessed August 11, 2023.
- California Office of the State Fire Marshal. *Fire Hazard Severity Zones in State Responsibility Areas*. <u>https://osfm.fire.ca.gov/divisions/community-wildfire-</u> <u>preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones</u>. Accessed February 1, 2023.
- CalRecycle. Solid Waste Information System (SWIS) Facility Search. 2023, https://www2.calrecycle.ca.gov/SolidWaste/Site/Search. Accessed July 28, 2023.
- Caltrans. *Caltrans Water Quality Planning Tool*. 2023, <u>http://svctenvims.dot.ca.gov/wqpt/wqpt.aspx</u>. Accessed July 26, 2023.
- C.I. Busby, A.M. Banet, and D.M. Garabenta, Archaeological Disturbance Evaluations of Sites CA-NAP_1, -705H, -666, and -708, Located Within Right of Way 4-NAP-29 Between PM 22.2/28.4, Napa County California, E.A. 04234-111331, Contract 04E634-EP (San Francisco: MS on file, Department of Transportation District 4, Environmental Analysis Branch A, 1992).
- County of Napa. *General Plan Draft Environmental Impact Report*. February 2007, <u>https://www.countyofnapa.org/1760/General-Plan</u>. Accessed July 2023.
- County of Napa. *General Plan Circulation Element*. February 2019, <u>https://www.countyofnapa.org/DocumentCenter/View/3332/Circulation-Element-PDF</u>. Accessed July 2023.
County of Napa. *GIS Data Catalog*, airprt_napa_compat. <u>https://gis.napa.ca.gov/giscatalog/catalog_xml.asp</u>, Accessed February 1, 2023.

County of Napa. Zoning Map.

https://www.countyofnapa.org/DocumentCenter/View/8436/Napa-County-Zoning-Map?bidId=. Accessed July 2023.

County of Napa. *General Plan Conservation Element*. 2009, <u>https://www.countyofnapa.org/DocumentCenter/View/3337/Conservation-Element-PDF</u>. Accessed July 2023.

- Metropolitan Transportation Commission. *Napa Valley Forward*. <u>https://mtc.ca.gov/operations/programs-projects/forward-commute-initiatives/napa-valley-forward</u>. Accessed August 1, 2023.
- Metropolitan Transportation Commission. *MTC/ABAG Hazard Viewer Map*. 2023, <u>https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42e</u> <u>ab29b35dfcd086fc8</u>. Accessed July 26, 2023.
- Napa County Airport Land Use Commission. *Airport Land Use Compatibility Plan*. December 1999, <u>https://www.countyofnapa.org/DocumentCenter/View/1980/Airport-Land-Use-Compatibility-Plan-PDF</u>. Accessed July 2023.
- Office of Planning and Research. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December 2018, <u>https://opr.ca.gov/docs/20190122-</u> <u>743 Technical Advisory.pdf</u>. Accessed July 2023.
- Office of the State Fire Marshal. *Fire Hazard Severity Zones in State Responsibility Area*. <u>https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/</u>. Accessed February 3, 2023.
- San Francisco Bay Regional Water Quality Control Board. *Water Quality Control Plan* (*Basin Plan*) for the San Francisco Bay Basin. March 2023, <u>Basin Planning | San</u> <u>Francisco Bay Regional Water Quality Control Board (ca.gov).</u> Accessed August 2023.