Chapter 5. CEQA Impacts/Mandatory Findings of Significance

5.1 Introduction

The project is subject to federal, as well as Placer County, TRPA, and state environmental review requirements because Placer County proposes the use of federal funds and/or the project requires a federal approval action. Project documentation, therefore, has been prepared in compliance with both the CEQA and NEPA. Placer County is the project proponent and the lead agency under CEQA. FHWA's responsibility for environmental review, consultation, and any other action required in accordance with NEPA and other applicable federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or some lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require Caltrans to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be

disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of mandatory findings of significance, which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

This chapter constitutes the CEQA impact evaluation for the proposed project (see *Chapter 3* for the NEPA evaluation); the impacts outlined in this chapter are summarized in Table ES-2 in the *Executive Summary*. Determining and documenting whether a project may have a significant impact on the environment plays a critical role in the CEQA process. CEQA requires lead agencies to know what constitutes a significant impact on the environment and whether mitigation measures are available to reduce a significant impact to a less-than-significant level. CEQA also requires mitigation of all significant impacts on the environment to the extent feasible.

5.2 Determining Significance under CEQA and TRPA

As noted in the introduction to *Chapter 3*, CEQA and NEPA documents address impacts differently. Although CEQA requires environmental documents to judge the significance of individual environmental impacts, NEPA uses the term *significance* only to determine the type of environmental document to be prepared. Federal and state lead agencies can also use different thresholds for determining the need for mitigation. For the purposes of the impact discussions in this chapter, significance conclusions are provided in the context of CEQA only. The following significance conclusions are indicated as appropriate.

- **No Impact:** This level of significance is used for impacts where there is clearly no impact.
- Less than Significant: This level of significance is used for impacts where there
 would be an impact, but the degree of the impact would not meet or exceed the
 identified thresholds.

- Less than Significant with Mitigation Incorporated: This level of significance is
 used for impacts that would meet or exceed the identified thresholds but would be
 reduced to a less-than-significant level through the implementation of mitigation
 measures.
- **Significant and Unavoidable:** This level of significance describes significant impacts for which mitigation to reduce the significant impact to a less-than-significant level is not available or feasible.

In addition, to approve any project, TRPA must determine the following.

- The project is consistent with, and will not adversely affect, implementation of the Regional Plan, including all applicable goals and policies, plan area statements and maps, the Code and other TRPA plans and programs.
- The project will not cause the environmental threshold carrying capacities thresholds to be exceeded.
- Wherever federal, state, or local air and water quality standards applicable for the
 region (whichever are strictest) must be attained and maintained pursuant to
 Article V(d) of the Tahoe Regional Planning Compact, the project meets or exceeds
 such standards (Tahoe Regional Planning Agency 2004b).

5.3 Impacts under CEQA

5.3.1 Air Quality

See Section 3.1, Air Quality, for a discussion of the existing setting and relevant plans and policies. Based on Appendix G of the State CEQA Guidelines (14 CCR 15000 et seq.), the proposed project is considered to have a significant impact on air quality if it would:

• Conflict with or obstruct implementation of the applicable air quality management plan;

 Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

- Result in a cumulatively considerable net increase of any criteria pollutant for which
 the project region is in nonattainment under an applicable federal or state ambient air
 quality standard (including releasing emissions that exceed quantitative thresholds for
 ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

The CEQA guidelines further state that the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make these determinations. Emission thresholds used by the PCAPCD were obtained through consultation with PCAPCD staff (Vintze pers. comm.). The thresholds at which emissions are considered to have a significant impact on air quality throughout the PCAPCD are 82 pounds per day for ROG, NO_X, and PM10 and 550 pounds per day for CO.

For this analysis, the following criteria are used to evaluate the significance of air quality impacts.

- Project emissions from construction activities or operations would exceed PCAPCD thresholds.
- If the proposed project is not listed in the local adopted RTP, TIP, or other 3-year transportation plan, it would be considered a nonconforming project with regards to the federal transportation conformity requirements.
- CO hotspot concentrations from vehicle trips would violate the federal, state, or Lake Tahoe–specific ambient air quality standards for CO.
- Diesel emissions from project construction and operation would result in an increased health risk.

 Re-entrained fugitive dust from roadways would increase atmospheric particulate matter and phosphorus concentrations and contribute to particulate matter and phosphorus loading in Lake Tahoe from atmospheric deposition.

- The proposed project would result in substantial levels of odors.
- The proposed project would generate significant levels of MSAT emissions.
- The proposed project would generate significant levels of greenhouse gasses.

Impact AIR-1: Generation of Construction-Related Emissions of Ozone Precursors (Reactive Organic Gases and Oxides of Nitrogen), Carbon Monoxide, and Particulate Matter in Excess of Placer County Air Pollution Control District Standards

Alternative 1

Under Alternative 1, no construction or associated emissions would occur. Consequently, this impact is considered **less than significant**, and no mitigation is required.

Alternatives 2-4

The results of modeling for construction activities, summarized in Table 3.1-4, indicate that impacts from construction activities would not exceed the PCAPCD thresholds, and is considered **less than significant**. Although emissions are below PCAPCD threshold levels, they recommend that projects with construction emissions below the threshold of 82 pounds per day should implement all feasible control measures recommended by the PCAPCD in order to reduce the project's contributions to cumulative air quality impacts and for the project to be consistent with the PCAPCDs air quality attainment plan. Mitigation Measure AIR-1 implements this recommendation. In addition, Mitigation Measures AIR-2 and AIR-3 implement TRPA recommendations and Caltrans requirements, respectively.

Mitigation Measure AIR-1: Implement All Applicable PCAPCD Best-Available Mitigation Measures

Placer County DPW will implement all feasible and applicable fugitive dust mitigation measures from the PCAPCD's best-available mitigation measures, which are summarized below.

- Placer County DPW will require the construction contractor to submit to the PCAPCD and receive approval of a construction emission/dust control plan prior to groundbreaking. This plan must address the minimum Administrative Requirements found in section 300 and 400 of District Rule 228, Fugitive Dust (www.placer.ca.gov/airpollution/airpolut.htm).
- Placer County DPW will require the construction contractor to have a
 preconstruction meeting for grading activities for 20 or more acres to discuss
 the construction emission/dust control plan with employees and/or contractors
 and the District is to be invited.
- Placer County DPW will require the construction contractor to suspend all grading operations when fugitive dusts exceed District Rule 228 Fugitive Dust limitations.
- It is to be noted that fugitive dust is not to exceed 40% opacity and not go
 beyond property boundary at any time. If lime or other drying agents are
 utilized to dry out wet grading areas, they will be controlled so as to not to
 exceed District Rule 228 (fugitive dust limitations).
- Construction equipment exhaust emissions will not exceed District Rule 202, visible emission limitations. Operators of vehicles and equipment found to exceed opacity limits are to be immediately notified, and the equipment must be repaired within 72 hours.
- Apply water to control dust as needed to prevent dust impacts off-site.
 Operational water truck(s) will be on-site, as required, to control fugitive dust.

Construction vehicles leaving the site will be cleaned to prevent dust, silt, mud, and dirt from being released or tracked off-site.

- Apply approved chemical soil stabilizers, vegetative mats, or other appropriate BMPs to manufacturers' specifications to all-inactive construction areas (previously graded areas that remain inactive for 96 hours).
- Spread soil binders on unpaved roads and employee/equipment parking areas and wet broom or wash streets if silt is carried over to adjacent public thoroughfares.
- Install wheel washers or wash all trucks and equipment leaving the site.

Mitigation Measure AIR-2: Implement all applicable TRPA Best Management Practices

Placer County DPW will implement all feasible and applicable BMPs required by TRPA. Guidance is available from TRPA Best Management Practices Retrofit Program, TRPA Erosion Control Team's general information, and BMP Contractors Notes. (Tahoe Regional Planning Agency 2005.) This includes a limitation that all construction-related vehicles will idle for no more than 5 minutes.

Mitigation Measure AIR-3: Implement Caltrans Standard Specification 7-1.01F and Standard Specification 10

Placer County DPW will follow Caltrans Standard Specification 7-1.01F and Standard Specification 10, which address the following of local air pollution control district rules and dust control, respectively.

Impact AIR-2: Generation of Operation-Related Emissions of Ozone Precursors (Reactive Organic Gases and Oxides of Nitrogen), Carbon Monoxide, and Particulate Matter in Excess of Placer County Air Pollution Control District Standards

Alternative 1

Table 3.1-5 indicates that operational emissions would not exceed the PCAPCD's thresholds. Consequently, this impact is considered **less than significant**.

Alternatives 2-4

Table 3.1-5 indicates that emissions for all alternatives under future-year conditions would be well below the PCAPCD's thresholds for all alternatives. Consequently, this impact is considered **less than significant**, and no mitigation is required.

Impact AIR-3: Generation of Carbon Monoxide Hotspot Emissions in Excess of the Federal or State Standards

Alternative 1

Table 3.1-6 indicates that CO concentrations resulting from Alternative 1 would not exceed the federal or state 1- and 8- hour standards. Consequently, this impact is considered **less than significant,** and no mitigation is required.

Alternatives 2-4

Modeled CO concentrations plus background CO levels for Alternatives 2, 3, and 4 are presented in Table 3.1-6 and indicate emissions of CO hotspots are not anticipated to exceed the federal or state 1- and 8-hour standards. Consequently, this impact is considered **less than significant**, and no mitigation is required.

Impact AIR-4: Exposure of Sensitive Receptors to Elevated Levels of Diesel Exhaust and an Increased Health Risk

Alternative 1

Under Alternative 1, no construction or increases in diesel emissions would occur. Consequently, this impact is considered **less than significant**.

Alternatives 2-4

Construction activities are anticipated to involve the operation of diesel-powered equipment for various activities. In October 2000, the ARB identified diesel exhaust as a TAC. It is anticipated that construction activities would occur over a 12-month period. An assessment of cancer health risks associated with exposure to diesel exhaust is typically for chronic exposure, in which a 70-year exposure period is often assumed. However, while cancer risks can result from exposure periods of less than 70 years, acute

exposure periods to diesel exhaust (i.e., exposure periods of 2 to 3 years) are not anticipated to result in increased health risks because health risks are typically seen in exposures periods that are chronic in nature. Because construction activities would occur over a 12-month period and would not result in long-term emissions of diesel exhaust at the project site, this impact is considered **less than significant**. In addition, implementation of Mitigation Measure AIR-4 would further reduce diesel emissions from construction activities.

Guidance provided by the ARB indicates that elevated health risks from operational exposure to diesel exhaust is associated primarily with facilities that have substantial diesel exhaust emissions, including truck stops, warehouse/distribution centers, large retail or industrial facilities, high-volume transit centers, schools with high volumes of bus traffic, high-volume highways, and high-volume arterials/roadways. The proposed project does not fall under any of these land use types and would not increase the number of truck trips or truck traffic throughputs in the vicinity of the project area. Consequently, this impact is considered **less than significant**.

Mitigation Measure AIR-4: Implement Construction Emissions Control Technology

Placer County DPW will provide a construction work plan to the PCAPCD demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NO_X reduction and 45 percent particulate reduction compared to the most recent ARB fleet average at time of construction. Control measures available to achieve emissions reductions include, but are not limited to use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology (e.g., diesel particulate matter filters and lean- NO_X or diesel oxidation catalysts) after-treatment products, and/or other options as they become available.

Impact AIR-5: Atmospheric Deposition of Phosphorus from Re-Entrained Roadway Fugitive Dust into Lake Tahoe

Alternative 1

Under Alternative 1, no increases in atmospheric deposition of phosphorus from reentrained roadway fugitive dust into Lake Tahoe would occur. Consequently, this impact is considered **less than significant**.

Alternatives 2-4

It is not anticipated that proposed project would result in an increased contribution to the atmospheric deposition of phosphorus in Lake Tahoe from re-entrained fugitive dust due to physical features associated with the proposed project (i.e., narrowing of the roadway lanes and installation of roundabouts to reduce speeds during peak hours). Consequently, this impact is considered **less than significant**, and no mitigation is required.

Impact AIR-6: Generation of Significant Levels of Odors

Alternative 1

Under Alternative 1, no construction or associated emissions would occur, so potential odors from construction equipment and volatile organic compounds from construction activities (i.e., paving) would not occur. Operation of the proposed project is not anticipated to generate any objectionable odors that affect a substantial number of people. Consequently, this impact is considered **less than significant**.

Alternatives 2-4

Diesel emissions from construction equipment and volatile organic compounds from paving activities may create off-site odors during construction. These odors would be temporary and localized, and they would cease once construction activities have been completed. Operation of the proposed project is not anticipated to generate any objectionable odors that affect a substantial number of people. Consequently, this impact is considered **less than significant**, and no mitigation is required.

Impact AIR-7: No Generation of Significant Levels of MSAT Emissions

Alternatives 1, 2, 3, and 4

Based on the FHWA's interim guidance for MSATs, the proposed project meets the criteria for a qualitative project-level MSAT analysis (Federal Highway Administration 2006). When conducting a qualitative analysis, following factors should be considered.

- For projects on an existing alignment, MSATs are expected to decline unless VMT more than doubles by 2020 (due to the effect of new EPA engine and fuel standards).
- Projects that result in increased travel speeds will reduce emissions of the VOC-based MSATs (acetaldehyde, benzene, formaldehyde, acrolein, and 1,3-Butadiene); the effect of speed changes on diesel particulate matter is unknown. This speed benefit may be offset somewhat by increased VMT if the more efficient facility attracts additional vehicle trips.
- Projects that facilitate new development may generate additional MSAT emissions
 from new trips, truck deliveries, and parked vehicles (due to evaporative emissions).
 However, these may also be activities that are attracted from elsewhere in the metro
 region (thus, on a regional scale there may be no net change in emissions).
- Projects that create new travel lanes, relocate lanes or relocate economic activity closer to homes, schools, businesses, and other sensitive receptors may increase concentrations of MSATs at those locations relative to No Action.

As discussed in *Section 3.1*, *Air Quality*, technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects prevent meaningful or reliable estimates of MSAT emissions and effects of this project. However, even though reliable methods do not exist to accurately estimate the health impacts of MSATs at the project level, it is possible to qualitatively assess the levels of future MSAT emissions under the project. Although a qualitative analysis cannot identify and measure health impacts from MSATs, it can give a basis for identifying and comparing the potential differences among MSAT emissions—if any—from the various alternatives.

The qualitative assessment presented below is derived in part from a study conducted by the FHWA, titled *A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives*. (That study can be found at http://www.fhwa.dot.gov/environment/airtoxic/msatcompare/msatemissions.htm).)

For each alternative in this EA/EIR/EIS, the amount of MSATs emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT estimated for each of the Build Alternatives is slightly higher than that for the No Build Alternative, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. These increases in VMT would lead to higher MSAT emissions for the action alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOBILE6 emissions model, emissions of all of the priority MSATs except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases will offset VMT-related emissions increases cannot be reliably projected due to the inherent deficiencies of technical models.

Because the estimated VMT under each of the Alternatives would be the same, as the proposed action is not a traffic-generating project and would not result in differences in traffic volumes throughout the action area between build and no-build conditions, it is expected there would be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce MSAT emissions by 57 to 87 percent between 2000 and 2020. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases. Consequently, this impact is considered less than significant.

5.3.2 Cultural Resources

See Section 3.2, Cultural Resources, for a discussion of the existing setting and relevant plans and policies. Section 15064.5 of the CEQA Guidelines requires that proponents of public and private projects financed or approved by public agencies assess the impacts of the proposed project on significant historical resources and unique archaeological resources (as defined in Section 21083.2). Historical resource is a CEQA term that includes buildings, sites, structures, objects, or districts, each of which may have historical, prehistoric, architectural, archaeological, cultural, or scientific importance and is eligible for listing or is listed in the CRHR. According to the CEQA Guidelines (Section 15064.5 [a]), a resource can qualify as a significant historical resource for the purposes of CEQA review if it meets any of the following criteria.

- It is listed in or determined eligible for listing in the CRHR.
- It is included in a local register of historical resources, as defined in Section 5020.1[k] of the PRC, or identified as significant in a historical resource survey that meets the requirements of Section 5024.1[g] of the PRC, unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- The lead agency determines it is significant as supported by substantial evidence in light of the whole record.

CEQA requires lead agencies to use specific criteria in evaluating the significance of historical resources potentially affected by a proposed project. The criteria required under CEQA are the same as the CRHR significance criteria discussed in the following section.

California Register of Historical Resources

The CRHR was created by the California State Legislature in 1992 and is intended to serve as an authoritative listing of historical and archaeological resources in California. Additionally, the eligibility criteria for the CRHR are intended to serve as the definitive criteria for assessing the significance of historical resources for purposes of CEQA

compliance, establishing a consistent set of criteria for use by all public agencies statewide.

For a historical resource to be eligible for listing in the CRHR, it must be significant at the local, state, or national level under one or more of the following criteria from CEQA Guidelines Section 15064.5(a)(3), Subsections (A)–(D).

- It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- It is associated with the lives of persons important in our past.
- It embodies the distinctive characteristics of a type, period, region, or method of
 construction or represents the work of an important creative individual or possesses
 high artistic values.
- It has yielded, or may be likely to yield, information important in prehistory or history.

Historical resources automatically listed in the CRHR include those historic properties listed in, or formally determined to be eligible for listing in, the NRHP (*PRC 5024.1*).

This analysis used criteria from CEQA Guidelines Section 15064.5(b)(1) and (2) that identify a significant impact as one with the potential to cause a substantial adverse change in the significance of a historical resource. Substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. The significance of a historical resource is materially impaired when a project results in:

 demolition or material alteration in an adverse manner of those physical characteristics of a historical significance that justifies its inclusion in, or eligibility for inclusion in, the CRHR; • demolition or material alteration in an adverse manner of those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1 (k) of the PRC or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the impacts of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

 demolition or material alteration in an adverse manner of those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

Impact CR-1: Potential Disturbance to Unidentified Archaeological Resources during Construction

Alternative 1

Alternative 1 avoids all impacts on cultural resources. Consequently, this impact is considered **less than significant**.

Alternatives 2-4

The proposed project includes Alternatives 2, 3, and 4, which all involve modifications to SR 28 within the Kings Beach Commercial Core. Though a pedestrian inventory of the action area has been conducted and no cultural resources were located, only the ground surface was examined and there is the potential that buried deposits could be inadvertently unearthed during ground-disturbing activities associated with project construction. This is considered a potentially significant effect, but implementing Mitigation Measure CR-1 will minimize this effect.

Mitigation Measure CR-1: Stop Work if Buried Resources are Discovered Inadvertently

Placer County DPW and its construction contractor will take the steps specified below during project construction. If buried cultural resources, such as chipped or ground stone, historic debris, building foundations, or bone, are discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until a archaeologist who meets the Secretary of the Interior's qualification standards can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the Caltrans, the SHPO, and other appropriate agencies. Appropriate treatment measures may include development of avoidance or protection methods, archaeological excavations to recover important information about the resource, research, or other actions determined during consultation.

Impact CR-2: Inadvertent Discovery of Native American Human Remains Alternative 1

Alternative 1 avoids all impacts on cultural resources. Consequently, this impact is considered **less than significant**.

Alternatives 2-4

No human remains are known to be located in the project area. However, there is always the possibility that unmarked burials may be unearthed during construction. This impact is considered potentially **significant**. Implementation of Mitigation Measure CR-2 reduces this impact to **less than significant**.

Mitigation Measure CR-2: Comply with State and Federal Laws Relating to Native American Remains

If human remains of Native American origin are discovered during project construction, it will be necessary to comply with federal and state laws relating to the disposition of Native American burials, which fall under the jurisdiction of the NAHC (*PRC Section 5097*). If any human remains of Native American origin are discovered or recognized in any location other than a dedicated cemetery, Caltrans will be contacted and there will be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent human remains, until:

- the Placer County coroner has been informed and has determined no investigation of the cause of death is required, or
- if the remains are of Native American origin:
 - the NAHC has notified Tribal representatives for any federally or state recognized tribes or other interested grounds by telephone with written confirmation. Notification will include information about the kinds of human remains, etc., present, their condition, and the circumstances of their discovery. Return receipt mail provides proof of written notification. This initiates the 30-day waiting period. If a federally recognized tribe can claim the territory associated with the find, NAGPRA procedures will be followed. If no federally recognized tribes can claim the territory associated with the find, proceed directly to the requirements of California NAGPRA and *PRC Section 5097.98*.
 - the descendents of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods or the NAHC is unable to identify a descendant or the descendant fails to make a recommendation within 24 hours after being notified by the NAHC.

Impact CR-3: Destruction or Disturbance to a Significant Architectural Resource—Felte Building (No Impact)

Alternative 1

Alternative 1 avoids all impacts on cultural resources. Consequently, this impact is considered **less than significant**.

Alternative 2

No impacts on significant cultural resources would occur.

Alternative 3

The proposed project would construct a sidewalk along the east side of the Felte Building (8399 North Lake Boulevard). Proposed construction is not expected to materially impair (i.e., demolish or substantially alter the physical characteristics of) the building. Thus, the Felte Building would continue to convey its historical significance. Consequently, this impact is considered **less than significant**.

Alternative 4

No impacts on significant cultural resources would occur.

5.3.3 Social Environment

See *Section 3.3, Social Environment*, for a discussion of the existing setting and relevant plans and policies. Under CEQA, consideration of economic and/or social changes only occurs when they result in a physical change to the environment (CEQA Guidelines secs. 15064[f], 15382).

Based on Appendix G of the State CEQA Guidelines (14 CCR 15000 et seq.) and professional judgment, a project may have a significant impact on the environment if it would:

- displace a substantial number of people or housing units;
- impact on community cohesion;
- result in a loss of property tax revenue; or
- result in negative revenue impacts on local and roadside businesses.

Impact SOC-1: Displacement of a Substantial Number of People or Housing Units Alternative 1

Alternative 1 is the no-build alternative, and it is assumed that the existing conditions would persist under this alternative. No changes would occur to the social environment

within the project area under this alternative that would affect population or housing. This is a **less-than-significant** impact and no mitigation is required.

Alternatives 2-4

No population or housing impacts resulting from either of these alternatives have been identified. Therefore, this would be a **less-than-significant** impact and no mitigation is required.

Impact SOC-2: Impacts on Community Cohesion

Alternative 1

Alternative 1 is the no-build alternative. Existing conditions would persist under this alternative and impacts would be **less than significant**. No mitigation is required.

Alternatives 2-4

As described above under NEPA impacts, the SR 28 roadway would be slightly narrowed under alternatives 2–4 and would include bike lanes, pedestrian crosswalks, and sidewalks. These structures would serve to reduce the existing physical barrier that separates the opposing sides of the commercial strip from the surrounding neighborhoods. This is a **beneficial impact** and no mitigation measures are required.

Impact SOC-3: Disproportionate Environmental Effects on Races, Cultures, or Incomes (Environmental Justice)

This impact is not discussed in this chapter because environmental justice impacts are not covered under CEQA.

Impact SOC-4: Loss of Property Tax Revenue

Alternative 1

Alternative 1 is the no-build alternative. Existing conditions would persist under this alternative, and no loss of tax revenue would result. This impact is considered **less than significant**, and no mitigation is required.

Alternatives 2-4

The loss of property tax revenue is not typically evaluated as an environmental impact under CEQA because the loss of tax revenue does not have a direct impact on environmental resources. Because Alternatives 2, 3, and 4 would have minimal property tax revenue impacts, the impacts are considered **less than significant**, and no mitigation is required.

Impact SOC-5: Revenue Effects on Local and Roadside Businesses

Alternative 1

Alternative 1 is the no-build alternative. Existing conditions would persist under this alternative, and no negative impacts to local and roadside businesses would occur. This impact is considered **less than significant**, and no mitigation is required.

Alternative 2

Under Alternative 2, ROW acquisition and changes in access and parking could cause impacts on businesses located adjacent to SR 28 between SR 267 and Chipmunk Street.

- Vehicular access from the south side of the building on APN 090-123-023 (7-Eleven) would be affected. However, access would continue to be provided on the southeast side of the building from Coon Street. Construction of this access area would displace two parking spaces in front of the building, although seven additional spaces would be created with the closure of the SR 28 entrance. This impact is considered less than significant, and no mitigation is required.
- APN 090-142-002 may lose vehicle access along SR 28. This parcel currently has no
 existing buildings, and as such the severity of impacts depends on the future use of
 this property. This impact is considered less than significant, and no mitigation
 measure is required.
- APN 090-071-026/090-071-025 would lose approximately 10 spaces of parking.
 Although access is also being discontinued from SR 28, these impacts are not anticipated to affect the operation of the businesses at this location. This impact is

considered **less than significant** because Placer County has committed to compensating for parking spaces that would be lost as a result of either build alternative (see discussion under *Section 3.7*).

• SR 28 improvements and ROW acquisition would displace the entire amount of parking used by customers of the business located at 8160 SR 28 (APNs 090-072-023/090-072-024). This impact is considered **less than significant** because Placer County has committed to compensating for parking spaces that would be lost as a result of either build alternative (see discussion under *Section 5.3.7*). 8338 SR 28 (APNs 090-080-001/090-080-002) would lose approximately 12 parking spaces due to right-of-way acquisitions. These spaces make up the entire amount of parking available for the retail businesses in this building. This impact is considered **less than significant** because Placer County has committed to compensating for parking spaces that would be lost as a result of either build alternative (see discussion under *Section 5.3.7*). Total loss of front parking is likely to occur at 8345 SR 28 (APN 090-075-018). Approximately six spaces would be displaced by the installation of the sidewalk area. This impact is considered **less than significant** because Placer County has committed to compensating for parking spaces that would be lost as a result of either build alternative (see discussion under *Section 5.3.7*).

Alternative 3

Impacts on businesses in the project area caused by changes in setbacks, access, and parking would be the same as those described for Alternative 2 with the following exceptions:

- The business located at 8593 SR 28 (APN 090-123-023) would not be impacted as described under Alternative 2. This alternative creates no change on the existing parcel other than a small corner frontage take. This is a **less-than-significant** impact and no mitigation measure is required.
- The existing entry to the Jenkin's Building (APN 090-123-008) would be discontinued in this alternative. No break in the sidewalk is planned for the parcel,

and access may be entirely pedestrian along SR 28. However, entry in front of APNs 090-123-010 and 090-123-023 would be maintained so these changes should not create major problems for businesses located in this building. This is a **less-than-significant** impact and no mitigation measure is required.

Alternative 4

Impacts on businesses in the project area caused by changes in setbacks, access, and parking would be the same as those described for Alternative 2 with the following exceptions:

- The existing entry along SR 28 to Dave's Ski Shop and Tahoe's Paddle and Oar (APN 090-071-029) would be discontinued in this alternative. No break in the sidewalk is planned for the parcel and access may be entirely pedestrian along SR 28. However, entry along Deer Street would be maintained, so these changes are not anticipated to create major problems for businesses located in this building. This is a less-than-significant impact, and no mitigation measure is required.
- A secondary point of entry for the business located at 8700 SR 28 (APN 090-134-029) is not planned under this alternative. A single entry along SR 28 would be used by customers to access the business. This change is not expected to impact the operation of the business located at 8700 SR 28. This is a less-than-significant impact, and no mitigation measure is required.

Impact SOC-6: Construction-Related Economic Impacts

Alternative 1

Alternative 1 is the no-build alternative. Existing conditions would persist under this alternative, and no construction related economic effects would occur. Thus, this impact is considered **less than significant**, and no mitigation is required.

Alternatives 2, 3, and 4

Because SR 28 is a main corridor within the action area, the secondary economic impacts that could occur during construction periods are related to tourism. Access changes,

parking disruptions, and traffic delays could discourage visitors and decrease local tax revenues and sales within the action area. The extent of the economic effect of the construction-related decrease in tourist volumes on the local and regional economy would depend on the length and season of the construction period and the construction timing of other related projects. Implementation of a CIPP through Mitigation Measure LU-1, as described in *Section 3.8, Land Use*, and a TMP through Mitigation Measure TRA-2 in *Section 3.6, Traffic*, would minimize this impact to **less than significant.**

Mitigation Measure LU-1: Implement a Community Involvement and Public Participation Plan

This mitigation measure is described in Section 3.8, Land Use.

Mitigation Measure TRA-3: Implement Construction Traffic Management Plan during Construction

This mitigation measure is described in *Section 3.6*, *Traffic*.

5.3.4 Hydrology and Floodplains

See Section 3.4, Hydrology and Floodplains, for a discussion of the existing setting and relevant plans and policies. For the purposes of this analysis, an impact pertaining to hydrology was considered significant if it would result in any of the following conditions, which are based on professional practice and Appendix G of the State CEQA Guidelines (14 CCR 15000 et seq.). This analysis assumes that these CEQA thresholds also are a sufficient evaluation of impacts under NEPA thresholds. An impact was considered significant if it resulted in:

- substantial alteration in the quantity of surface runoff;
- placement of structures that would impede or redirect floodflows within a 100-year floodplain;
- exposure of people, structures, or facilities to significant risk from flooding, including flooding as a result of the failure of a levee or dam; or

• creation of or contribution to runoff that would exceed the capacity of an existing or planned stormwater management system.

A preliminary review of the information resulted in a conclusion that the proposed project would not cause exposure of persons or property to increased risks involving seiche, tsunami, or mudflow because of the action area's distance from an ocean. In addition, flooding as a result of failure of a levee or a dam is not discussed further because no dam is located in the upstream watershed. There would be no impact, and no mitigation is required. Therefore, further discussion of this topic in this EIR was determined not to be necessary. The remaining thresholds identified above are discussed in the analysis below.

Impact HYD-1: Substantial Alteration in the Quantity of Surface Runoff Alternative 1

The no-build alternative will not alter the quantity of surface water. Consequently, this impact is considered **less than significant**.

Alternatives 2-4

The proposed Alternatives 2, 3, and 4 involve a variation of improvements to the current SR 28 along with many drainage improvements that would result in increased amount of impervious surfaces that will concentrate stormwater runoff. As indicated in the NEPA analysis in *Chapter 3.4*, *Hydrology*, conveyance, and treatment improvements will be implemented as part of the Kings Beach WIP to improve water quality in the Kings Beach region and proposed project area. The proposed project's drainage, collection, conveyance, and treatment facilities that tie into and interface with the WIP improvements would be designed and built to handle these flows at all culverts, crossings, and drainage facilities affected by the proposed action. In addition, all parking lots would be designed to maintain a 20-year storm flow. Consequently, while implementation of the proposed project would increase the quantity of surface runoff due to increased impervious surfaces (i.e., additional paved surfaces due to the construction of new bike paths, sidewalks, and off-site parking areas), the improvements as part of the

proposed project and WIP will sufficiently handle these increased flows. Consequently, this impact is considered **less than significant**.

Impact HYD-2: Placement of Structures that Would Impede or Redirect Flood-Flows within a 100-Year Floodplain

Alternative 1

Implementation of Alternative 1 would not involve the placement of structures that would impede or redirect any flows within the 100-year floodplain. Consequently, this impact is considered **less than significant**.

Alternatives 2–4

Implementation of Alternatives 2, 3, and 4 would involve placement of structures in the 100-year floodplain. As indicted in the NEPA analysis, *Chapter 3.4, Hydrology*, the *Location Hydraulic Study* prepared for the proposed project indicates these structures will not be in the direct path of flow and would not impede or redirect flow with implementation of the proposed project. In addition, the proposed project will not include any change in the roadway footprint at the Griff Creek crossing and will not change the configuration of the current culverts, and the highway grade (elevation and profile) will be maintained at this crossing with no change in the post-project condition. As a result, the culvert hydraulics and overtopping will not change and flood damage risk will remain the same as under existing conditions. Although no substantial change to the course or flow of 100-year floodwaters is expected, if unanticipated projects did occur that would result in a substantial change, appropriate applications with USACE would occur with plans for mitigation through appropriate stormwater conveyance, control, and treatment facilities. Consequently, this impact is considered **less than significant**.

Impact HYD-3: Exposure of People, Structures, or Facilities to Significant Risk from Flooding, Including Flooding as a Result of the Failure of a Levee or Dam

Alternative 1

Implementation of Alternative 1 would not expose people to flooding from levee or dam failure due to the relative proximity of a levee or dam within the area. The existing

culverts under SR 28 at Griff Creek are currently undersized and experience flooding and overtopping of SR 28. However, this is a preexisting condition and is not the result of the

proposed project. Consequently, this impact is considered less than significant.

Alternatives 2-4

Implementation of Alternatives 2, 3, and 4 would not expose people, structures, or facilities to significant risk from flooding. In addition, Alternatives 2, 3, and 4 involve various improvements to current drainage facilities decreasing the chances of localized flooding in the area and would result in a **beneficial impact**.

Impact HYD-4: Creation of or Contribution to Runoff that Would Exceed the Capacity of an Existing or Planned Stormwater Management System

Alternative 1

Current existing drainage facilities are outdated and frequently involve small amounts of flooding and overtopping of the roadways. The existing culverts under SR 28 at Griff Creek are currently undersized and experience flooding and overtopping of SR 28. However, this is a preexisting condition and is not the result of the proposed project. Consequently, this impact is considered **less than significant**.

Alternatives 2-4

Implementation of Alternatives 2, 3, and 4 will increase impervious surface resulting in an increase in stormwater runoff. As indicted in the NEPA analysis, *Chapter 3.4*, *Hydrology*, conveyance and treatment improvements will be implemented as part of the Kings Beach WIP to improve water quality in the Kings Beach region and action area. The proposed project's drainage, collection, conveyance, and treatment facilities that tie into and interface with the WIP improvements would be designed and built to handle these flows at all culverts, crossings, and drainage facilities affected by the proposed action. In addition, all parking lots would be designed to maintain a 20-year storm flow. Consequently, while implementation of the proposed project would increase the quantity of surface runoff due to increased impervious surfaces (i.e., additional paved surfaces due to the construction of new bike paths, sidewalks, and off-site parking areas), the

improvements as part of the proposed project and WIP will sufficiently handle these increased flows. Consequently, this impact is considered **less than significant**.

5.3.5 Hazardous Waste/Material

See Section 3.5, Hazardous Waste/Material, for a discussion of the existing setting and relevant plans and policies. Based on Appendix G of the State CEQA Guidelines (14 CCR 15000 et seq.) and professional standards, an impact related to hazards and hazardous materials was considered significant if it would:

- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school;
- be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;
- be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area;
- be located in the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area;
- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or

 expose people or structures to a significant risk of loss, injury, or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands.

Impact HAZ-1: Potential Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials

Alternative 1

Alternative 1 represents the existing roadway configuration, which would remain unchanged into the future. Under Alternative 1, no construction or associated earth moving would occur. It is assumed that the existing conditions would persist under this alternative and that there would be no incremental change in the public's exposure to hazardous waste/material associated with the routine transport, use or disposal of hazardous materials. There would be **no impact**.

Alternatives 2-4

The proposed project is a roadway and streetscape improvement. Operation of either Alternative 2, 3, or 4 would not involve the routine transport, use, or disposal of hazardous materials in excess of current conditions in the area and surrounding areas. There would be **no impact**, and no mitigation is necessary.

Impact HAZ-2: Potential Accidental Release of Hazardous Materials into the Environment

Alternative 1

Alternative 1 represents the existing roadway configuration, which would remain unchanged into the future. Under Alternative 1, no construction or associated earth moving would occur and no hazardous materials would be used. Under existing conditions, there would be no incremental change in the public's exposure to hazardous waste/material associated with hazardous materials use. There would be **no impact**.

Alternatives 2-4

Small quantities of hazardous materials or potentially toxic substances (such as diesel fuel and hydraulic fluids) would be used in the project area during construction.

Accidental releases of small quantities of these substances could contaminate soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard. Because of the relatively small volumes of materials on site and the limited duration of construction, the potential for release and exposure is limited. In addition, BMPs incorporated as part of the project would minimize the potential for release.

However, the removal of yellow traffic markings in the existing portion of the roadway could result in a significant impact because they may contain heavy metals such as lead and chromium, which may produce toxic fumes when heated. Mitigation Measure HAZ-1 would reduce this impact to **less than significant**.

Mitigation Measure HAZ-1: Incorporate Measures to Reduce Potential for Accidental Release or Exposure to Hazardous Materials

- If yellow stripe is to be removed, the roadway will be ground in its entirety instead of removing just the yellow paint stripe. If it is not feasible to grind the roadway in its entirety, the removed paint material will be disposed of at a Class 1 disposal facility. If any yellow traffic markings are going to be removed separate from the adjacent pavement, the levels of lead and chromium need to be determined. Common practice has been to determine the levels during construction. Otherwise, a PSI to determine the concentration of lead chromate should be performed prior to construction. Removal of Yellow Traffic Stripe and Pavement Markings shall be conducted in accordance with Caltrans SSP 15-300 for removal of "Stripe Removal."
- Potential exposure to chromium and lead from traffic striping will be minimized. A project-specific Lead Compliance Plan approved by an industrial hygienist certified in comprehensive practice by the American Board of Industrial Hygiene to prevent or minimize worker exposure to lead in accordance with the CCR Title 8, Section 1532.1 (Title 8, Lead) will be

implemented. Before performing work in areas containing lead, personnel who have no prior training, including state personnel, will complete a safety training program, including use of personal protective equipment and washing facilities, as required by *Title 8, Lead*. In addition, an EPA hazardous waste generator identified number (EPA ID#) is to be obtained for this project and is to be included on the labels of any containers holding hazardous waste.

- Any removed yellow thermoplastic and yellow painted traffic stripe and pavement marking residue will be stored and labeled in covered containers in a secured enclosure at a location within the project limits for no more than 90 days until disposal. Labels will conform to the provisions of CCR Title 22. Labels will be marked with the date when the waste is generated, the words *Hazardous Waste*, composition and physical state of the waste (for example, asphalt grindings with thermoplastic or paint), the word *Toxic*, the name and address of the Placer County project Resident Engineer (RE), the RE's telephone number, contract number, and contractor or subcontractor. The containers will be a type approved by the U.S. Department of Transportation for the transportation and temporary storage of the removed residue. The containers will be handled so that no spillage will occur. Removed yellow thermoplastic and yellow paint will be disposed of at a Class 1 disposal facility in conformance with the requirements of the disposal facility operator. Testing will include, at a minimum, (1) total lead and chromium by EPA Method 7000 series, (2) soluble lead and chromium by California Waste Extraction Test, and (3) soluble lead and chromium by the Total Characteristic Leaching Procedure. If the yellow thermoplastic and yellow-painted traffic stripe and pavement-marking residue is transported to a Class 1 disposal facility as a hazardous waste, a manifest will be used, and the transporter will be registered with the Department of Toxic Substances Control (DTSC).
- If the project involves any structure modifications, such as widening or demolition, asbestos and lead based-paint surveys will be performed prior to

construction. The asbestos surveys must be performed by qualified federal Asbestos Hazard Emergency Response Act (AHERA)/Division of Occupational Safety and Health (Cal-OSHA) certified asbestos inspector, and a lead based–paint survey will be performed by a California Department of Health Services (CDHS) certified inspector/assessor.

- Placer County is to provide records regarding any contamination encountered
 in regards to this project, to any appropriate requesting party, concerning any
 investigation as to the extent of any such contamination. An appropriate
 requesting party includes, but is not limited to, the LRWQCB, Placer County
 Health and Human Services (HHS)-Environmental Health, any responsible
 party or potentially responsible party, or the designated environmental
 consultant to any responsible party or potentially responsible party.
- All encountered soil and groundwater impacted with petroleum hydrocarbons must be managed (see Mitigation Measure HAZ-2 for management of soil and Mitigation Measures WQ-1 and WQ-2 for management of groundwater).

Impact HAZ-3: Potential Exposure of School Children to Hazardous Materials All Alternatives

No schools are located within 0.25 mile of the project site. There would be **no impact**, and no mitigation is necessary.

Impact HAZ-4: Potential Exposure of the Public to Contaminated Soils Alternative 1

Alternative 1 represents the existing roadway configuration, which would remain unchanged into the future. Under Alternative 1, no construction or associated earth moving would occur and no hazardous materials would be used. Under existing conditions, there would be no incremental change in the public's exposure to hazardous waste/material associated with hazardous materials use. There would be **no impact**.

Alternatives 2–4

As discussed in the ISA, soil and groundwater contaminated with petroleum hydrocarbons are known to exist in the project area. Proposed construction activities associated with the proposed project may require excavation and dewatering activities in locations where recognized environmental conditions occur. Information reviewed in the preparation of the ISA suggests sufficient subsurface characterization has not been performed on the majority of these identified sites to determine the horizontal and vertical location and concentrations of petroleum hydrocarbon occurrences that may be encountered during construction activities related to the proposed project. Seasonal surface and groundwater movements may substantially relocate petroleum hydrocarbon compounds from the point of origin over time. Inconsistent subsurface conditions and buried utility corridors may also contribute to irregular, accelerated, or restricted movements of these compounds through soil and groundwater.

Known hazardous materials and potentially contaminated soils located in the proposed project area could create a hazard to the public or the environment by creating a potential exposure pathway for the hazardous materials and surrounding residences and sensitive receptors. Soil disturbance could generate windblown particulates that also contain hazardous material. This material could be transported to nearby sensitive receptors or create an increased health risk for construction workers. Disturbance of soils potentially contaminated with hazardous materials could create a short-term exposure through airborne transport and inhalation. Long-term exposure through local waterways could also potentially occur. Consequently this impact is potentially significant. Implementation of Mitigation Measure HAZ-2 would reduce the impact to a less-than-significant level.

Mitigation Measure HAZ-2: Implement Measures to Reduce Potential Exposure to Contaminated Soils

 Project features in potential conflict with contaminated soil/groundwater will be eliminated or moved if possible. If conflicts cannot be eliminated, the handling of the contaminated material can be covered in contract special provisions. If encountered, all soil and groundwater impacted with petroleum hydrocarbons and/or all solvents must be removed, managed, and disposed of properly as hazardous waste or as non-hazardous waste disposed to a receiving landfill facility. This will apply to excavated soil as well as groundwater or water resulting from dewatering activities. Impacted soil is not to be used as backfill. Impacted soil and groundwater encountered during this project are to be removed to the fullest extent feasible, within areas of the project that are accessible to Placer County (i.e., public ROWs under the control of Placer County or Caltrans).

- A Phase II Site Assessment was prepared and areas with elevated levels of petroleum hydrocarbons were identified through soil and groundwater sampling. Prior to performing any excavation work at the location containing material classified as petroleum-impacted, all personnel, including state personnel, will complete a safety training program that meets requirements of the Contractor's Health and Safety Work Plan covering the potential hazards as identified. The Contractor will provide the training and a certification of completion of the safety-training program to all personnel.
- During excavation activities, monitoring will be conducted for any suspected petroleum hydrocarbons contamination with a photo ionization detector, combustible gas meter, or similar equipment approved by Caltrans. The Consultant must be present on site to identify any impacted soil/groundwater. If any suspected contaminated materials are encountered, work will immediately stop, and the suspected contamination will be managed appropriately. If contamination is confirmed, the Contractor will prepare a detailed Health, Safety and Work Plan for all site personnel in accordance with the DTSC and Cal-OSHA regulations. The Health, Safety and Work Plan will include a plot plan indicating the exclusion zones and clear zones as defined by CCR, Title 26, a schedule of procedures, sampling and testing procedures, and physical barriers and will be submitted at least 10 working

days prior to beginning any excavation for review and acceptance by the RE. Prior to submittal, the Contractor will have the Health, Safety and Work Plan approved by a civil engineer registered in the State of California and by an industrial hygienist certified by the American Conference of Governmental Industrial Hygienists (ACGIH).

- In the event suspected contaminated materials are encountered, the Contractor will stop work in the affected area and notify the RE immediately. The Contractor, or the Contractor's listed environmental subcontractor, will prepare, and submit for approval, a Site Safety Plan consistent with the requirements of 29 CFR 1910.120. The contractor will be required to comply with the provisions of the approved Site Safety Plan during construction.
- Any construction that is found to hinder any ongoing/future remediation needs to be reviewed/modified so as to not hinder the remediation.

Impact HAZ-5: Potential Safety Hazards in an Airport Zone

All Alternatives

The proposed project is not located within any of the airport land use planning areas of nearby airports. Therefore, **no impacts** related to potential safety hazards for people residing or working in the project area are anticipated.

Impact HAZ-6: Potential Conflict with Emergency Response

Alternative 1

The proposed project would not involve any construction and therefore would not result in an incremental change in emergency response. Thus, **no impacts** related to potential emergency response are anticipated.

Alternatives 2–4

During construction, emergency access to and in the vicinity of the project site could potentially be affected by lane closures, detours, and construction-related traffic. This

impact is potentially significant. Mitigation measure TRA-3 will reduce the impact to a **less-than-significant** level.

Mitigation Measure TRA-3: Implement Construction Traffic Management Plan during Construction

This mitigation measure is described in Section 3.6, Traffic.

Impact HAZ-7: Potential Risk of Wild Fire

Alternative 1

The proposed project would not involve any construction and therefore would not result in an incremental change in wild fire risk. Therefore, **no impacts** related to potential increase in wild fires would result from Alternative 1.

Alternatives 2-4

The urban/rural interface is generally considered an area of concern because these areas tend to have a greater amount of vegetation and when construction activities are introduced the areas have the potential to result in wildfires. The proposed project corridor is primarily urban. However, there are areas within the proposed project area that could result in increased risk of wild fire. This impact is potentially significant. Mitigation Measures HAZ-4 and HAZ-5 will reduce the impact to a **less-than-significant** level.

Mitigation Measure HAZ-3: Require Spark-Generating Construction Equipment Be Equipped with Manufacturers' Recommended Spark Arresters

Placer County will require contractors to fit any construction equipment that normally includes a spark arrester with an arrester in good working order. Subject equipment includes, but is not limited to, heavy equipment and chainsaws.

Implementation of this measure will minimize a source of construction-related fire.

Mitigation Measure HAZ-4: Clear Materials That Could Serve as Fire Fuel from Areas Slated for Construction Activities Before Construction Begins

If dry vegetation or other fire fuels exist on or near staging areas, welding areas, or any other area on which equipment will be operated, contractors will clear the immediate area of fire fuel. To maintain a firebreak and minimize the availability of fire fuels, Placer County will require contractors to maintain areas subject to construction activities clear of combustible natural materials to the extent feasible. To avoid conflicts with policies to preserve riparian habitat, areas to be cleared will be identified with the assistance of a qualified biologist.

5.3.6 Traffic

See *Section 3.6, Traffic*, for a discussion of the existing setting and relevant plans and policies. Based on Appendix G of the State CEQA Guidelines (14 CCR 15000 et seq.), a project would have a significant land use impact if it would:

- degrade roadway LOS below applicable standards;
- increase average daily traffic on residential streets in excess of applicable standards;
- degrade intersection levels of service below applicable standards;
- degrade bicycle and pedestrian conditions along SR 28;
- degrade transit operations;
- degrade of emergency access response times; or
- result in short-term construction-related changes in circulation and local traffic patterns.

Impact TRA-1: Degradation of SR 28 Roadway Level of Service (LOS) Below Applicable Standards

Alternative 1

Alternative 1 would attain roadway LOS standards in 2008 and 2028. Consequently, this impact is considered **less than significant**.

Alternative 2

Table 3.4-4 indicates that LOS impacts would exceed applicable LOS standards for 2008 and 2028 conditions under Alternative 2. Consequently, this impact is considered significant. However, no feasible mitigation measures are available to reduce this impact to a less-than-significant level. Consequently, this impact is **significant and unavoidable**.

Alternative 3

Table 3.4-4 indicates that LOS impacts would not exceed applicable LOS standards for 2008 and 2028 conditions under Alternative 3. Consequently, this impact is considered **less than significant**.

Alternative 4

Table 3.4-4 indicates that LOS impacts would exceed applicable LOS standards for 2008 and 2028 conditions under Alternative 4. Consequently, this impact is considered significant. However, no feasible mitigation measures are available to reduce this impact to a less-than-significant level. Consequently, this impact is **significant and unavoidable**.

Impact TRA-2: Increase in Average Daily Traffic on Residential Streets in Excess of Applicable Standards

Alternative 1

Alternative 1 would not increase ADT on residential streets. Consequently, this impact is considered **less than significant**.

Alternative 2

Alternative 2 would increase ADT on residential streets in excess of the diverted traffic standard of 3,000 ADT, with total diverted ADT forecast to reach as high as 4,000 on Coon Street between Trout Avenue and Rainbow Avenue and 3,500 on Fox Street between Minnow Avenue and Salmon Avenue. This is a significant impact. Mitigation

Measure TRA-1 would reduce this effect, but not to a less-than-significant level. Consequently, this impact is **significant and unavoidable**.

Mitigation Measure TRA-1: Prepare a Neighborhood Traffic Management Plan

This mitigation measure is described in Section 3.6, Traffic.

Alternative 3

Alternative 3 would not cause SR 28 road volumes to exceed capacity, and no significant delays would result on SR 28. Because no delays would occur on SR 28, traffic would be unlikely to divert onto residential streets. This impact is **less than significant**.

Alternative 4

Alternative 2 would increase ADT on residential streets in excess of the diverted traffic standard of 3,000 ADT, with total diverted ADT forecast to reach as high as 4,000 on Chipmunk Street between SR 28 and Minnow Avenue and 4,500 on Fox Street between Minnow Avenue and Salmon Avenue. This is a significant impact. However, no feasible mitigation measures are available to reduce this impact to a less-than-significant level. Consequently, this impact is **significant and unavoidable**.

Impact TRA-3: Degradation of Intersection Levels of Service Below Applicable Standards

Alternative 1

Under Alternative 1, the worst approach (side street) LOS on Secline Street, Bear Street, and Fox Street would be LOS F for both summer and winter. Deer Street and Chipmunk Street) would both provide LOS E/worst-approach conditions in the summer and LOS C at Deer Street and LOS D at Chipmunk Street in the winter. By 2028, LOS F would be provided at the SR 267/SR 28 intersection and LOS C at the SR 28/Coon Street intersection. LOS F conditions would occur at least 1 hour per day throughout the summer and on all busy ski days in the winter. To provide adequate LOS at the SR 267/SR 28 intersection, a separate westbound right-turn lane would be required. All side street approaches to SR 28 would provide LOS F conditions. Winter LOS would be

equal to or better than summer conditions. Consequently, this impact is considered **significant and unavoidable**.

Alternative 2

Adequate LOS of C or better would be provided in 2008, except that the stop sign controlled intersections along SR 28 (Secline, Deer, Fox and Chipmunk Streets) would provide poor (LOS E or F) conditions for side street approaches to the state highway in 2008. Winter LOS analysis results are very similar, with the roundabouts providing an LOS equal to or better than summer conditions and the unsignalized intersections providing worst-approach LOS of E or F. By 2028, LOS would not attain TRPA standards at any study intersection. Consequently, this impact is considered significant. Implementation of Mitigation Measure TRA-2 would help to minimize this impact but not to a less-than-significant level. Consequently, this impact is considered **significant and unavoidable**.

Mitigation Measure TRA-2: Provide Westbound Right-Turn Lane at SR 28/267 Intersection

Placer County will provide a westbound right-turn lane at SR 28/SR 267 intersection.

Alternative 3

Adequate summer LOS of C or better would be provided under this alternative in 2008, except that the Stop sign controlled intersections along SR 28 (Secline, Deer, Fox and Chipmunk Streets) would provide poor (LOS E or F) conditions for side street approaches to the state highway in 2008. Winter peak-day LOS would be similar to summer LOS, except that better worst-approach LOS will be provided at the Deer Street and Chipmunk Street intersections (LOS C and D, respectively).

Summer LOS would attain TRPA standards in 2028, except for the stop sign controlled intersections along SR 28, which will continue to provide poor (LOS F) conditions for side street approaches. In addition, a separate westbound right-turn lane would be required to provide adequate LOS at the SR 267/SR 28 signal; this would provide a total

intersection LOS of D, while LOS F conditions would occur at least 1 hour per day throughout the summer and on all busy ski days in the winter. The results of the winter LOS analysis parallel those of the summer analysis.

The project alternative configuration of the SR 28/SR 267 intersection would provide unacceptable LOS F conditions in 2028 (but not in 2008). Consequently, this impact is considered significant. Implementation of Mitigation Measure TRA-2 would help to minimize this impact but not to a less-than-significant level. Consequently, this impact is considered **significant and unavoidable**.

Mitigation Measure TRA-2: Provide Westbound Right-Turn Lane at SR 28/267 Intersection

This mitigation measure is described in Section 3.6, Traffic.

Alternative 4

Impacts under Alternative 4 are similar to those identified for Alternative 2.

Mitigation Measure TRA-2: Provide Westbound Right-Turn Lane at SR 28/267 Intersection

This mitigation measure is described in Section 3.6, Traffic.

Impact TRA-4: Degradation of Bicycle and Pedestrian Conditions along SR 28 Alternative 1

Under Alternative 1, existing poor pedestrian and bicycle conditions along SR 28 would remain, but would not result in the degradation of bicycle and pedestrian conditions along SR 28. Consequently, this impact is considered **less than significant.**

Alternative 2

Alternative 2 would provide sidewalks and Class II bike lanes along both sides of SR 28 through the commercial core area. The provision of a roundabout at SR 28/Bear Street would provide a substantially improved pedestrian crossing opportunity of the state highway, as the presence of a median "splitter island" would allow pedestrians to only cross one lane of traffic at a time and as the roundabout would slow traffic and increase

the proportion of drivers yielding to pedestrians at the crosswalks. The reduction of SR 28 from four to three travel lanes would also benefit pedestrians crossing at other locations. This would result in a **beneficial impact**.

Alternative 3

Alternative 3 would provide sidewalks and Class II bike lanes along both sides of SR 28 through the commercial core area. The provision of a signal at SR 28/Bear Street would provide an additional pedestrian crossing opportunity of the state highway. This would result in a **beneficial impact**.

Alternative 4

Impacts under Alternative 4 are similar to those identified for Alternative 2.

Impact TRA-5: Degradation of Transit Operations

Alternative 1

Alternative 1 would not result in the degradation of transit operations. Consequently, this impact is considered **less than significant**.

Alternative 2

The traffic congestion that would result from Alternatives 2 and 4 would result in delays to TART operations. As a result, the ability to adhere to the existing schedule (half-hour runs between Tahoe City and Crystal Bay) and make timed service connections along the route would be degraded, and the on-time performance of the service would be reduced. This would be a significant impact. No mitigation is available to reduce this impact to a less-than-significant level. Consequently, this impact is considered **significant and unavoidable**.

Alternative 3

The traffic congestion associated with Alternative 3 would not be substantially different than for Alternative 1. Consequently, this impact is considered **less than significant**.

Alternative 4

Impacts under Alternative 4 are similar to those identified for Alternative 2.

Impact TRA-6: Degradation of Emergency Access or Response Times

Alternative 1

Because Alternative 1 is the no-build alternative, there would be no change in emergency access. This impact is considered **less than significant**.

Alternative 2

Emergency access under Alternative 2 would tend to be reduced due to increased congestion along SR-28. However, the provision of bicycle lanes along both sides of SR 28 would allow motorists to move out of travel lanes in advance of fire or medical vehicles. Observations of emergency vehicle travel along SR 28 in Tahoe City (which has a similar roadway configuration to this alternative) under congested conditions indicate that auto drivers have the space to maneuver out of the traffic lane to make way for emergency vehicles and that emergency vehicle travel speeds are not significantly reduced. Consequently, this impact is considered **less than significant**.

Alternative 3

The traffic congestion associated with Alternative 3 would not be substantially different than for Alternative 1, the no-build alternative. Consequently, this impact is considered **less than significant**.

Alternative 4

Impacts under Alternative 4 are similar to those identified for Alternative 2.

Impact TRA-7: Short-Term Construction-Related Changes in Circulation and Local Traffic Patterns

Alternative 1

No construction activities would occur under Alternative 1. Consequently, there would be **no impact**.

Alternatives 2–4

Although detailed construction plans and phasing are not available, it can be expected that Alternative 2 would require significant periods of lane closures and turn restrictions along SR 28. Although it should be possible to provide one lane of travel in each direction except for relatively short periods, traffic volumes in peak periods exceed the capacity provided by one lane of travel in each direction. This would be a significant traffic impact. Implementation of Mitigation Measure TRA-3 would reduce this impact to **less than significant**.

Mitigation Measure TRA-3: Implement a Construction Traffic Management Plan during Construction

During the final stage of project design, Placer County will prepare a CTMP in accordance with the Manual on Uniform Traffic Control Devices, California Supplement 2003, Part 6 Temporary Traffic Control (or current version) and Caltrans draft *Guidelines for Projects Located on the California State Highways in the Lake Tahoe Basin* (California Department of Transportation n.d.) that specifies those days and periods of each day over the construction season that specific lane closures can be accommodated without resulting in delays exceeding Caltrans construction delay standards. In addition, traffic diverting onto local streets should be monitored when delays to SR 28 traffic is expected, and temporary traffic controls should be implemented as necessary. When implemented, a CTMP reduces project-related traffic delay and fewer accidents through the effective combination of public and motorist information, demand management, incident management, system management, alternate route strategies, construction strategies, and other strategies.

The CTMP will be designed to reduce the amount of significant delay time due to lane closures and construction related activity. Significant delay time is 30 minutes above normal recurring traffic delay on the existing facility or the delay threshold set by the district traffic manager, whichever is less. Caltrans traffic management has indicated that SR corridors on the North Shore of Lake Tahoe might require a cumulative delay time of less than 30 minutes per TMP guidelines. The Caltrans TMP Unit is shall make determinations of thresholds for delays as the development of the CTMP is being undertaken. Once these thresholds have been established, Placer County will ensure that

they are incorporated into the TMP. The CTMP will include, but is not limited to, the following measures:

- Maintain 2 lanes of traffic at all times through the commercial core of Kings Beach during construction of the new curb, gutter, and sidewalk. (Not required that existing lanes of traffic be provided throughout project).
- Require that one lane of traffic be open during working hours.
- Maintain a maximum vehicle delay of 20 minutes.
- Disperse public information such as brochures and mailers.
- Hold public meetings prior to construction.
- Install changeable message signs (portable) and ground mounted signs.
- Utilize the highway advisory radio and the Caltrans Highway Information Network to provide road/construction information to the traveling public.
- Construction Zone Enhanced Enforcement Program.
- Construction strategies such as lane closure charts, reduced speed zones, moveable barriers, K-Rails, staged construction, and Traffic Contingency Plan/Emergency Detour Plan.
- Enforce alternate route strategies and parking restrictions.
- BMPs, such as seasonal construction restrictions, to avoid impacting the Griff Creek Watershed.
- Maintain pedestrian and bicycle traffic during construction.
- Allow active construction on one side of the roadway at a time.
- Mitigate the loss of parking before construction as much as possible.

Caltrans shall develop an RTMP due to the large number of transportation improvement proposals scheduled to occur within a similar timeframe in the greater action area. The RTMP would be expected to promote greater coordination between agencies and projects to minimize potentially significant impacts associated with multiple construction projects.

The following are objectives to be achieved from the RTMP, as described in the Caltrans draft *Guidelines for Projects Located on the California State Highways in the Lake Tahoe Basin* (California Department of Transportation n.d.).

- Provide accurate and timely information to the public.
- Minimize traffic delays while maximizing public and worker safety during construction.
- Minimize impacts on businesses, residences, schools, public services, and special events during construction.
- Provide design and instructional information regarding traffic management to the Project Engineer, Resident Engineer, and project specific Standard Special Provisions (SSPs) to be included in the project contract.
- Ensure that no more than 30 minutes of cumulative corridor delay will occur.

Timing and execution remain the greatest concern for most proposed construction projects in the immediate and greater action area. Project coordination between Caltrans' functional units is crucial and will take place. In particular, interagency synchronization within Caltrans will include the TMP Unit, Environmental Management, District 03 Public Information Office, Construction Engineering, and the project development teams. Close contact with local stakeholder agencies will be maintained in order to minimize cumulative socioeconomic-related impacts that would otherwise result from these related projects.

5.3.7 Parking

See *Section 3.7, Parking*, for a discussion of the existing setting and relevant plans and policies. The Placer County and TRPA *Standards and Guidelines for Signage, Parking, and Design* provides standards for the number of parking spaces required for a wide variety of land use types (Placer County and Tahoe Regional Planning Agency 1994). These standards were used as the basis for the Kings Beach Commercial Core Parking Study, on which this analysis is based. Based on Placer County Standards, a significant

parking impact defined as a net loss of parking that causes public parking utilization to exceed 90% along any portion of the project corridor.

Impact PK-1: Parking Utilization in Excess of 90%

Alternative 1

Alternative 1 would result in no change to either on-street spaces or spaces on private parcels accessed directly from the highway. Consequently, there would be **no impact**.

Alternative 2

Under Alternative 2, on-street parallel parking would be provided along both sides of SR 28 between Secline Street and Chipmunk Street. However, parking would be prohibited during the peak summer season, which would be accomplished by signing, temporary barricades, and enforcement.

Although Alternative 2 (as well as the other build alternatives) would not change parking demand in the project area, it would impact parking supply by reducing on-street parking spaces along SR 28 between Secline Street and Chipmunk Street during the peak summer season and reducing access to existing perpendicular and angled parking spaces on private property currently accessed directly off of the state highway. As indicated in Table 3.7-1, the net result associated with impacts on public and private parking spaces associated with Alternative 2 would be a net reduction of 280 parking spaces in the project area. Any reduction over 60 spaces would result in parking utilization rates that exceed 90%.

To compensate for the loss of parking, Placer County, as part of the project, will provide new parking spaces to meet the 90% utilization rate, which would ensure adequate parking availability. In addition, Placer County will ensure the new parking spaces are located within a reasonable walking distance (i.e., one block) of the specific subareas of impact.

New parking spaces will be provided so that the parking requirements of each block, either within that block or within an adjacent block, are met to ensure that adequate

parking conditions are maintained for all subareas (by block) within the action area. This block-level analysis is warranted because the proposed project's area is too large to be considered as a single parking area, as drivers will not typically walk the distances from outlying areas to the areas of parking shortages. For instance, new parking spaces within the area provided between Deer and Bear Streets above the 39 required for this specific block could be used to offset the loss of parking along the adjacent blocks between Secline and Deer Streets to the west and Bear and Coon Streets to the east. Providing new parking supply in accordance with this pattern will focus parking on those blocks that have the greatest need. Unless new parking supply can be developed to exactly match this pattern, more new spaces would be provided in excess of the 220 total new spaces required to provide adequate new parking for each block.

The number of adequate parking spaces required by block is estimated by subtracting the available parking capacity (60 spaces) from the net impact of the alternative (280 spaces). A minimum of 220 new parking spaces is required. The largest number of new spaces, 61 spaces, will be required to compensate for the loss of parking between Deer and Bear Streets.

The analysis of construction phasing and staging necessary to evaluate temporary construction parking impacts has also not been conducted. It can be expected that short-term loss of public parking and loss of access to private parking will occur as part of project construction. To date, Placer County has constructed one new public parking lot that can be used to offset spaces lost during construction and intends to construct several more prior to the SR 28 project. In addition, Placer County DPW will develop construction plans to minimize the number and duration of temporary loss of parking during construction, will monitor parking conditions during construction, and will work with affected property owners to minimize effects. Placer County will also provide new lots and off-site parking spaces to compensate for the loss of on-street parking.

As part of the project, Placer County has committed to compensating for parking spaces lost as a result of the project. Consequently, Alternative 2 would result in **less than significant** parking impacts.

Alternative 3

Under Alternative 3, on-street parallel parking would be provided along both sides of SR 28 year-round. Alternative 3 would result in a net loss of 94 spaces, while maintaining 108 parking spaces along SR 28. As with Alternative 2, any reduction over 60 spaces would result in parking utilization rates that exceed 90%. The additional net loss of 78 existing spaces on private lots accessed directly off of the highway would result in a total reduction of 172 parking spaces (Table 3.7-1).

To compensate for the loss of parking, Placer County, as part of the project, will provide new parking spaces to meet the 90% utilization rate, which would ensure adequate parking availability. In addition, Placer County will ensure the new parking spaces are located within a reasonable walking distance (i.e., one block) of the specific subareas of impact.

New parking spaces will be provided in a manner that addresses the parking requirements of each block, either within that block or within an adjacent block, in order to ensure that adequate parking conditions are maintained for all sub-areas (by block) within the action area. This block-level analysis is warranted because the proposed project's area is too large to be considered as a single parking area, as drivers will not typically walk the distances from outlying areas to the areas of parking shortages. No compensation is required for the block between SR 267 and Secline Street; the nine spaces available in this block would be available to partially address the parking spaces needed for the adjacent Secline-Deer Street block.

The analysis of construction phasing and staging necessary to evaluate temporary construction parking impacts has also not been conducted. It can be expected that short-term loss of public parking and loss of access to private parking will occur as part of

project construction. To date, Placer County has constructed one new public parking lot that can be used to offset spaces lost during construction and intends to construct several more prior to the SR 28 project. In addition, Placer County DPW will develop construction plans to minimize the number and duration of temporary loss of parking during construction, will monitor parking conditions during construction, and will work with affected property owners to minimize effects. Placer County will also provide new lots and off-site parking spaces to compensate the loss of available on-street parking spaces.

As part of the project, Placer County has committed to compensating for parking spaces lost by adding spaces. Consequently, Alternative 3 would result in **less than significant** parking impacts.

Alternative 4

Under Alternative 4, on-street parallel parking would not be provided along the entire length of the proposed project, effectively prohibiting on-street parking year-round rather than solely in the summer, as with Alternative 2. Off-street parking would be provided with side street parking and newly constructed parking lots to mitigate this loss. Alternative 4 would eliminate all on-street parking spaces along SR 28 in the project area, resulting in a loss of 202 spaces. As with Alternative 2, any reduction over 60 spaces would result in parking utilization rates that exceed 90%. Moreover, an additional net loss of 78 existing spaces on private lots accessed directly off of the highway would result in a net reduction of 280 spaces (Table 3.7-1).

To compensate for the loss of parking, Placer County, as part of the project, will provide new parking spaces to meet the 90% utilization rate, which would ensure adequate parking availability. In addition, Placer County will ensure the new parking spaces are located within a reasonable walking distance (i.e., one block) of the specific subareas of impact.

Alternative 4 results in a net reduction in parking supply of 280 spaces. The number of adequate parking spaces required by block can be estimated by subtracting the available parking capacity of 60 spaces currently available within the 90% utilization standard from the net impact of the alternative. A minimum of 220 spaces is required to compensate for this alternative's impact on parking conditions. The largest number of new spaces, 61 spaces, will be required to compensate for the loss of existing spaces between Deer and Bear Streets.

The analysis of construction phasing and staging necessary to evaluate temporary construction parking impacts has also not been conducted. It can be expected that short-term loss of public parking and loss of access to private parking will occur as part of project construction. To date, Placer County has constructed one new public parking lot that can be used to offset spaces lost during construction and intends to construct several more prior to the SR 28 project. In addition, Placer County DPW has indicated that it will develop construction plans to minimize the number and duration of temporary loss of parking during construction, will monitor parking conditions during construction, and will work with affected property owners to minimize effects. Placer County will provide new lots and off-site parking spaces to compensate for the loss of available on-street parking.

As part of the project, Placer County has committed to compensating for parking spaces lost by adding spaces. Consequently, Alternative 4 would result in **less than significant** parking impacts.

5.3.8 Land Use and Planning

See *Section 3.8*, *Land Use and Planning*, for a discussion of the existing setting and relevant plans and policies. Based on Appendix G of the State CEQA Guidelines (14 CCR 15000 et seq.) and professional practice, a project would have a significant land use impact if it would:

- conflict with any applicable land use plan, policy, or regulation of an agency with
 jurisdiction over the project (including, but not limited to, a general plan, specific
 plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding
 or mitigating an environmental impact;
- conflict with existing land uses; or
- impact parking availability.

Impact LU-1: Potential Inconsistency with Existing Land Uses

Alternative 1

Under Alternative 1, it is assumed that the existing conditions of the project area would continue to persist and that the proposed project would not be constructed. No ROW acquisitions would result under Alternative 1. Consequently, this impact is **less than significant**.

Alternatives 2-4

Under Alternatives 2–3, the ROW proposed for the SR 28 improvements would not require full acquisitions of any parcels. Partial acquisitions under Alternative 2 would be required from 41 properties. Most of these acquisitions would consist of sliver or corner takes from parcels adjacent to the existing SR 28 ROW and would not result in substantial impacts on existing land uses, but several of the acquisitions would displace uses within the existing or proposed new ROW. The size of the acquisitions for the affected parcels would be limited to a few feet. Consequently, this impact is considered significant. However, implementation of Mitigation Measures LU-1 and TRA-2 would reduce this impact to **less than significant**.

Mitigation Measure LU-1: Implement a Community Involvement and Public Participation Plan

Placer County will implement a Community Involvement and Public Participation Plan with the following measures to mitigate for the land use impacts of the proposed project: • Create a CIPP in accordance with Caltrans' Tahoe Basin Public Communication and Outreach Guidelines. Placer County will identify stakeholders within the project area and create a CIPP that will allow for coordination between local agencies and generate public awareness about the proposed project. By providing the following outreach mechanisms, the CIPP would minimize construction related impacts through advanced planning and public participation. Caltrans' Tahoe Basin Public Communication and Outreach Guidelines recommend that the following public outreach actions be included in the CIPP.

- Informational brochures or flyers sent to homeowners, renters, and business operators with information and updates regarding construction related details.
- Implementation of regularly conducted 'stakeholder wide' PDT meetings.
 These meetings can also be used as a mechanism for spreading project related information to the constituencies of the various groups.
- Use of the local media outlets, including radio, newspaper, and television ads, to publicize the project and update information.

Mitigation Measure TRA-3: Implement Construction Traffic Management Plan during Construction

This mitigation measure is described in Section 3.6, Traffic.

Impact LU-2: Potential Inconsistency with Local and Regional Plans and Policies Alternative 1

Under Alternative 1, no project would be constructed. Alternative 1 would be consistent with the Kings Beach Community Plan. Consequently, this impact is considered **less** than significant.

Alternative 2

Alternative 2 would be inconsistent with Policy 3C-1 from the Transportation Element of the Kings Beach Community Plan, as Policy 3C-1 specifies SR 28 will have four lanes. Consequently, this impact is significant. Implementation of Mitigation Measure LU-2 would reduce this impact to **less than significant**.

Mitigation Measure LU-2: Amend the Kings Beach Community Plan Placer County and TRPA will amend Policy 3C-1 in the Transportation Element of the Kings Beach Community Plan to maintain consistency with Policy 3C-1, which will allow for a three-lane configuration on SR 28.

Alternative 3

Alternative 1 would be consistent with the Kings Beach Community Plan. Consequently, this impact is considered **less than significant**.

Alternative 4

Impacts under Alternative 4 are similar to those identified for Alternative 2.

Mitigation Measure LU-2: Amend the Kings Beach Community Plan This mitigation measure is described in *Section 3.8, Land Use*.

Impact LU-3: Impacts on Parking Availability

Alternative 1

Alternative 1 would result in no change to either on-street spaces or spaces on private parcels accessed directly from the highway. Consequently, there would be **no impact**.

Alternative 2

Under Alternative 2, on-street parallel parking would be provided along both sides of SR 28 between Secline Street and Chipmunk Street. However, parking would be prohibited during the peak summer season, which would be accomplished by signing, temporary barricades, and enforcement.

Although Alternative 2 (as well as the other build alternatives) would not change parking demand in the project area, it would affect parking supply by reducing on-street parking spaces along SR 28 between Secline Street and Chipmunk Street during the peak summer season and reducing access to existing perpendicular and angled parking spaces on private property currently accessed directly off of the state highway. As indicated in Table 3.7-1, the net result associated with impacts on public and private parking spaces associated with Alternative 2 would be a net reduction of 280 parking spaces in the project area. Any reduction over 60 spaces would result in parking utilization rates that exceed 90%. However, as part of the project, Placer County has committed to compensating for the loss of parking spaces as described in Section 5.3-7. Consequently, this impact is **less than significant** and no mitigation is required.

Alternative 3

Under Alternative 3, on-street parallel parking would be provided along both sides of SR 28 year-round. Alternative 3 would result in a net loss of 94 spaces, while maintaining 108 parking spaces along SR 28. As with Alternative 2, any reduction over 60 spaces would result in parking utilization rates that exceed 90%. The additional net loss of 78 existing spaces on private lots accessed directly off of the highway would result in a total reduction of 172 parking spaces (Table 3.7-1). However, as part of the project, Placer County has committed to compensating for the loss of parking spaces as described in Section 5.3-7. Consequently, this impact is **less than significant** and no mitigation is required.

Alternative 4

Under Alternative 4, on-street parallel parking would not be provided along the entire length of the proposed project, effectively prohibiting on-street parking year-round rather than solely in the summer, as with Alternative 2. Off-street parking would be provided with side street parking and newly constructed parking lots to mitigate this loss. Alternative 4 would eliminate all on-street parking spaces along SR 28 in the project area, resulting in a loss of 202 spaces. As with Alternative 2, any reduction over 60

spaces would result in parking utilization rates that exceed 90%. Moreover, an additional net loss of 78 existing spaces on private lots accessed directly off of the highway would result in a net reduction of 280 spaces (Table 3.7-1). However, as part of the project, Placer County has committed to compensating for the loss of parking spaces as described in *Section 5.3-7*. Consequently, this impact is **less than significant** and no mitigation is required.

5.3.9 Noise

See *Section 3.9, Noise*, for a discussion of the existing setting and relevant plans and policies. Thresholds of significance for noise impacts have been established for this assessment based on the CEQA Environmental Checklist found in Appendix G of the State CEQA Guidelines (14 CCR 15000 et seq.) and professional practice. The assessment of noise impacts and traffic noise impacts are assessed using local standards.

Based on a review of local noise standards, a noise impact under CEQA is considered significant if the either of the following occurs.

- Construction noise exceeds Placer County's noise ordinance standards (Table 3.9-5) outside the hours of 6:00 a.m. to 8:00 p.m., Monday through Friday, and 8:00 a.m. to 8:00 p.m., Saturdays and Sunday.
- The incremental increase in traffic noise directly attributed to the project is greater than 3 dB where the design year noise level exceeds 55 dBA, CNEL. The incremental increase in traffic noise directly attributable to the project is the difference between design-year conditions with the project and the design-year conditions without the project.

Impact NZ-1: Generation of Construction Noise in Excess of Standards Alternative 1

No construction activities would occur under Alternative 1. Consequently, there is **no impact**.

Alternatives 2-4

Table 3.9-11 indicates that nighttime construction activities could exceed Placer County's noise ordinance sound level standards (Table 3.9-5, described in *Section 3.9, Noise*, of this Final EA/EIR/EIS). Consequently, this is considered a significant impact. However, implementation of Mitigation Measures NZ-1 through NZ-3 would reduce this impact to a **less-than-significant** level.

Mitigation Measure NZ-1: Employ Noise-Reduction Construction Measures The construction contractor will employ noise-reducing construction practices such that noise from construction does not exceed 55 dBA, L_{eq} at noise-sensitive uses during daytime hours. Measures that can be used to limit noise may include but are not limited to the following.

- Locating equipment as far a practical from noise sensitive uses.
- Using sound control devices such as mufflers on equipment.
- Turning off idling equipment.
- Using equipment that is quieter than standard equipment.
- Selecting construction access routes that affect the fewest number of people.
- Using noise-reducing enclosures around noise-generating equipment.
- Constructing barriers between noise sources and noise-sensitive land uses or taking advantage of existing barrier features (terrain, structures) to block sound transmission.
- Temporarily relocating residents during periods of high construction noise that cannot be effectively reduced by other means.

The construction contractor will prepare a detailed noise control plan based on the construction methods proposed. This plan will identify specific measures determined to be feasible by Placer County that will be taken to ensure compliance with the noise limits specified above. The noise control plan will be

construction activity begins.

reviewed and approved by Placer County before any noise-generating

Mitigation Measure NZ-2: Prohibit Nighttime Construction ActivitiesConsistent with TRPA's construction noise limitations, Placer County will ensure that construction activities are limited to the hours between 8:00 a.m. and 6:30 p.m. This stipulation will be made a part of the construction contract.

Mitigation Measure NZ-3: Disseminate Essential Information to Residences and Implement a Complaint/Response Tracking Program

The construction contractor will notify residences within 500 feet of the construction areas of the construction schedule in writing, prior to construction. The construction contractor will designate a noise disturbance coordinator who will be responsible for responding to complaints regarding construction noise. The coordinator will determine the cause of the complaint and will ensure that reasonable measures are implemented to correct the problem. A contact telephone number for the noise disturbance coordinator will be conspicuously posted on construction site fences and will be included in the written notification of the construction schedule sent to nearby residents.

Impact NZ-2: Exposure of Noise Sensitive Land Uses to Traffic Noise in Excess of Standards

Alternative 1

Near-Term (2008) Traffic Noise Impacts

The traffic noise modeling results summarized in Table 3.9-7 from *Section 3.9* indicate that predicted Alternative 1 future near-term (2008) traffic noise levels range between 63 and 71 dB, CNEL, which are well in excess of Placer County standards (Table 3.9-4). Nevertheless, this impact is considered **less than significant** because the noise levels are not directly attributed to implementation of the proposed project.

Future-Year (2028) Traffic Noise Impacts

not directly attributed to implementation of the proposed project.

The traffic noise modeling results presented in Table 3.9-8 from *Section 3.9* indicate that the predicted Alternative 1 Future Year 2028 traffic noise levels range between 65 and 73 dBA, CNEL, which are well in excess of Placer County standards (Table 3.9-4). Nevertheless, this impact is considered **less than significant** because the noise levels are

Alternatives 2-4

Near-Term (2008) Traffic Noise Impacts

The results of traffic noise modeling for near-term conditions are summarized in Table 3.9-7. Table 3.9-7 indicates that traffic noise levels for Alternatives 2–4 will exceed Placer County's noise level standard for transportation noise sources (60 dBA, L_{dn}/CNEL) and the Kings Beach Community Plan standard for the SR 28 corridor (55 dBA, CNEL). However, Table 3.9-8 also indicates that Alternatives 2–4 would not result in traffic noise increases relative to 2008 no-build conditions (Alternative 1). Because the built alternatives would not result in a 3 dB or greater increase in traffic noise, this impact is not considered **less than significant.**

Future-Year (2028) Traffic Noise Impacts

The results of traffic noise modeling for future-year conditions are summarized in Table 3.9-8. Table 3.9-8 indicates that traffic noise levels for Alternatives 2–4 will exceed Placer County's noise level standard for transportation noise sources (60 dBA, L_{dn}/CNEL) and the Kings Beach Community Plan standard for the SR 28 corridor (55 dBA, CNEL). However, Table 3.9-8 also indicates that Alternatives 2–4 would not result in traffic noise increases relative to 2028 no-build conditions (Alternative 1). Because the built alternatives would not result in a 3 dB or greater increase in traffic noise, this impact is considered **less than significant**.

5.3.10 Recreation

See *Section 3.10, Recreation*, for a discussion of the existing setting and relevant plans and policies. Based on Appendix G of the State CEQA Guidelines (14 CCR 15000 et

seq.) a project would have a significant effect on recreation if it would:

- increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- include recreational facilities or require the construction or expansion of recreational facilities that might have a significant physical impact on the environment.

Of these two criteria, only the first is evaluated below. Recreation facilities are not included as part of the proposed project, nor does it require construction or expansion of recreation facilities in the project area. Consequently, the second criterion is not evaluated.

Impact REC-1: Increase the Use of Recreational Facilities That Would Cause Physical Deterioration of the Facility

Alternative 1

No changes would occur to recreational areas in the project area under this alternative. Therefore, this impact is considered **less than significant** and no mitigation is required.

Alternatives 2-4

Implementation of Alternatives 2, 3, and 4 would all require a Section 4(f) use of land from the Kings Beach SRA. FHWA has determined that the proposed project will have a de minimis impact on the Kings Beach SRA. Implementation of Mitigation Measure REC-1 presented below, reduce this impact to the Kings Beach SRA to **less than significant**.

Mitigation Measure REC-1: Implement Measures to Minimize Impacts to Kings Beach SRA

Placer County will implement measures to minimize impacts on the Kings Beach SRA. Measures include, but are not limited, to the following.

- Placer County and Caltrans will work with the agencies having jurisdiction over the Kings Beach SRA to provide advanced notice of construction activities.
- Placer County will ensure that the area of the construction footprint is kept to
 a minimum and that parking lot access and parking, to the extent feasible, will
 be maintained. In addition, Placer County will restore the construction area to
 its original condition (or better) and will repave and restripe the affected
 construction area to maintain the most efficient use of the parking area.
- The automatic pay gate at the main entrance will be maintained in place as long as feasible and relocation/reinstallation of the gate will be coordinated with the NTPUD.
- Any signage removed will be replaced.
- Timely information will be provided relating to any potential traffic delays, and access will be maintained to the greatest extent feasible. Construction activities with high noise levels will be limited to daytime hours. Measures will be taken to reduce, minimize, and compensate for impacts on vegetation and the existing terrain and within the Kings Beach SRA. Removal and disturbance of vegetation will be limited as feasible. Facilities will be designed to blend in with the existing terrain. Disturbed areas will be revegetated upon completion of construction. During construction, measures may include watering of disturbed areas and prompt covering and removal of dirt. Dust generation will be minimized by inclusion in the construction contract specification to reduce this irritant.

5.3.11 Public Services and Utilities

See Section 3.11, Public Services and Utilities, for a discussion of the existing setting and relevant plans and policies. Based on Appendix G of the State CEQA Guidelines (14 CCR 15000 et seq.), the project is considered to have a significant impact on air quality if it would 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:

- Fire protection
- Police protection
- Schools
- Parks
- Other public facilities

Impact UT-1: Impacts on Utilities

Alternative 1

Under Alternative 1, the proposed improvements would not be constructed. Therefore, this impact is considered **less than significant** and no mitigation is required.

Alternatives 2-4

Impacts on utilities are not anticipated as a result of the implementation of this project. Consequently, this impact is considered **less than significant** and no mitigation is required.

Impact UT-2: Impacts on Law Enforcement, Fire Protection, and Emergency Medical Services

Alternative 1

Under Alternative 1, the proposed improvements would not be constructed. Therefore, this impact is considered **less than significant** and no mitigation is required.

Alternatives 2-4

Travel on SR 28 could be temporarily disrupted during project construction. Response times for law enforcement and emergency service providers could be impacted during construction periods. Consequently, impacts on law enforcement, fire protection, and emergency medical services are considered significant. However, implementation of Mitigation Measure UT-1 would reduce this impact to **less than significant.**

Mitigation Measure UT-1: Implement Measures to Reduce Potential Impacts on Law Enforcement, Fire Protection, and Emergency Medical Services

Placer County will ensure that its Contractor implements the following measure to reduce potential impacts on law enforcement, fire protection, and emergency medical services during project construction.

- Control Devices, California Supplement 2003, Part 6 Temporary Traffic Control (or current version) (American Association of State Highway and Transportation Officials 2003) and Caltrans draft *Guidelines for Projects Located on the California State Highways in the Lake Tahoe Basin* (California Department of Transportation n.d.) during the final stage of project design to ensure local traffic is accommodated during construction and that access to businesses and residences is maintained. Among other things, the TMP will provide the following:
- reduce, to the extent feasible, the number of vehicles (construction and other) on the roadways adjacent to the proposed action;

- reduce, to the extent feasible, the interaction between construction equipment and other vehicles;
- promote public safety through actions aimed at driver and road safety;
- ensure safety for bicyclists and pedestrians throughout the action area; and
- ensure adequate emergency access for police, fire, ambulance, and other emergency service vehicles.
- The provisions of the TMP will be incorporated into the project bid documents.
- In addition, the following measures will be incorporated into the TMP prepared for the proposed action.
- Notify law enforcement, fire protection, and emergency medical services at least 1 week in advance of detours and roadway or lane closures so that alternative routes or response actions can be taken. Notifications will specify the location and duration of closures, allowing providers to advise dispatchers and station personnel about alternative routes. Notification and providing continued access on SR 28 would ensure that response times for emergency service providers are not adversely affected during construction periods.
- Allow emergency vehicles through any roadway segments temporarily closed for construction purposes
- Placer County will undertake USA requirements to ensure that no
 underground utilities are disturbed. These requirements include outlining the
 digging location in a manner sufficient to enable underground facility
 members to determine the area of digging to be field marked and calling USA
 2 days prior to digging.

Impact UT-3: Impacts on Stormwater Drainage Facilities

Alternative 1

Under Alternative 1, the proposed improvements would not be constructed. Therefore, this impact is considered **less than significant** and no mitigation is required.

Alternatives 2-4

The stormwater conveyance system in Kings Beach is not sized to accommodate flows generated up-gradient and does not meet current standards. The restricted capacity of culverts underneath the roadway limits the extent to which up-gradient waters can be conveyed through the ROW. Therefore, impacts on stormwater drainage facilities are considered significant, but implementation of Mitigation Measure UT-2 would improve stormwater drainage facilities and reduce this impact to **less than significant.**

Mitigation Measure UT-2: Develop a Comprehensive Stormwater Drainage Conveyance Plan

Prior to completion of project design, Caltrans and Placer County will, in cooperation with TRPA, develop a comprehensive stormwater drainage conveyance plan for the proposed project that will provide sufficient conveyance capacity beneath the roadway to accommodate design flows. The design flows will be determined by agreement of the three agencies. This plan will be implemented in conjunction with construction of the project and will be operative upon project completion. These proposed project's drainage improvements are those within the action area as shown on Figure 3.13-2. They do not include planned water quality improvements in the upgradient watershed improvement project (WIP) area. The WIP improvements will be made as funding becomes available and likely be implemented in phases as separate projects following and possibly during proposed project construction with priority given to areas of the project watershed having the poorest drainage conditions. At a minimum, drainage upgrades will be made within the action area as part of the proposed action (see Figure 3.13-2).

The drainage conveyance plan will include the following components (within the proposed project area):

- source control and reduction of the quantity of runoff reaching stormwater conveyances;
- provision of stormwater collection facilities along SR 28, along side streets (if necessary), and in parking areas (if necessary);
- sizing of conveyance facilities (particularly those extending under SR 28) to accommodate agreed-upon design flows; and
- provisions for continued operations and maintenance of the conveyance facilities.

5.3.12 Geology and Soils

See Section 3.12, Geology and Soils, for a discussion of the existing setting and relevant plans and policies. Based on Appendix G of the State CEQA Guidelines (14 CCR 15000 et seq.), the proposed project is considered to have a significant impact on the geologic or soil resources if it would:

- expose people or structures to 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;
- expose people or structures to strong seismic ground shaking;
- expose people or structures to seismic-related ground failure, including liquefaction;
- expose people or structures to landslides;
- result in substantial soil erosion or the loss of topsoil;
- 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 an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse; or

 be located on expansive soil, as defined in Table 18-1-B of the UBC (International Code Council 1997), creating substantial risks to life or property.

Impact GEO-1: Increase the Potential for Structural Damage and Injury Caused by Fault Rupture

Alternative 1

Under Alternative 1, the proposed improvements would not be constructed. Therefore, this impact is considered **less than significant** and no mitigation is required.

Alternatives 2-4

The risk of surface rupture and faulting in the Kings Beach area is low. This impact is considered **less than significant** and no mitigation is required.

Impact GEO-2: Increase the Potential for Structural Damage and Injury Caused by Ground Shaking

Alternative 1

Under Alternative 1, the proposed improvements would not be constructed. Therefore, this impact is considered **less than significant** and no mitigation is required.

Alternatives 2-4

A large earthquake could potentially cause moderate ground shaking in the action area. Anticipated ground acceleration at the site is great enough to cause structural damage to new features. The area project improvements that could potentially be affected by ground shaking would not significantly increase in size and have a low potential to result in any adverse effects, structural damage, or injury. Furthermore, the proposed action itself does not increase the present ground-shaking hazard. This impact is considered **less than significant.** However, Mitigation Measure GEO-1 is recommended to further reduce this impact.

Mitigation Measure GEO-1: Incorporate Recommendations from Geotechnical Reports into Project Design

Recommendations in Appendix B (not included) of each Kleinfelder geotechnical report (Kleinfelder 2004, 2006) concerning site preparation, excavation, structural

fill, compacted fill, utility trench bedding and backfill, subsurface drainage, subgrade and aggregate base for paved areas, aggregate base for concrete slabs, and asphalt concrete pavement will be incorporated into the project design, thus minimizing any negative effects associated with ground-shaking hazards, and runoff, erosion, and sedimentation from construction activities. In addition, these recommendations, if fully implemented, will result in well-built, long-term improvements. The project applicant and its contractor(s) will be required to implement this mitigation measure before any construction activities begin. The recommendations will be incorporated into the project construction specifications as appropriate.

Impact GEO-3: Increase the Potential for Structural Damage and Injury as a Result of Development on Materials Subject to Liquefaction

Alternative 1

Under Alternative 1, the proposed improvements would not be constructed. Therefore, this impact is considered **less than significant** and no mitigation is required.

Alternatives 2-4

Based on the sedimentological characteristics of the soils and the nonsaturated nature of the soil types and moderate depth to groundwater, the liquefaction hazard is expected to be low for the project area. This impact is considered **less than significant** and no mitigation is required.

Impact GEO-4: Increase the Potential for Structural Damage and Injury as a Result of Landsliding

Alternative 1

Under Alternative 1, the proposed improvements would not be constructed. Therefore, this impact is considered **less than significant** and no mitigation is required.

Alternatives 2-4

There is no risk of naturally occurring large landslides because the project area is essentially flat and topographically featureless. Therefore this impact is considered **less than significant** and no mitigation is required.

Impact GEO-5: Temporarily Increase the Potential for Accelerated Runoff, Erosion, and Sedimentation as a Result of Grading and Construction Activities

Alternative 1

Under Alternative 1, the proposed improvements would not be constructed. Therefore, this impact is considered **less than significant** and no mitigation is required.

Alternatives 2-4

The proposed roadway and off-street improvements would involve grading, removal of vegetation cover, and loading activities associated with construction activities. These activities could temporarily increase runoff, erosion, and sedimentation. Construction activities could also result in soil compaction and wind erosion effects that could result in significant impacts to soils and reduce the revegetation potential at the construction sites and staging areas. This impact is considered significant, but compliance with the BMPs outlined in *Section 3.12* and Mitigation Measure GEO-1 would reduce this impact to **less than significant.**

Impact GEO-6: Increase the Potential for Structural Damage and Injury as a Result of Development on Expansive Soils

Alternative 1

Under Alternative 1, the proposed improvements would not be constructed. Therefore, this impact is considered **less than significant** and no mitigation is required.

Alternatives 2-4

Soil map units within the project area are not considered expansive. Expansive materials are those that could pose a risk to structural damage due to their significant clay content

that can result in welling and compression during changes in moisture content.

Therefore, this impact is considered **less than significant** and no mitigation is required.

5.3.13 Water Quality

See *Section 3.13*, *Water Quality*, for a discussion of the existing setting and relevant plans and policies. Based on Appendix G of the State CEQA Guidelines (14 CCR 15000 et seq.) and professional practice, the project is considered to have a significant impact on water quality if it resulted in

- substantial alteration in the quality of surface runoff;
- substantial degradation of water quality or violation of any water quality standards or waste discharge requirements;
- substantial alterations of the existing drainage pattern of the site area, such that flood risk and/or erosion and siltation potential would increase; or
- substantial reduction in groundwater quantity or quality.

Impact WQ-1: Substantial Alteration in the Quality of Surface Runoff

Alternative 1

Under Alternative 1, outdated drainage facilities would remain the same and overtopping of the road would continue to occur which would continue to increase the transport of roadway contaminant loading during the storm season. However, this is a preexisting condition and is not the result of the proposed project. Consequently, this impact is considered **less than significant**.

Alternatives 2-4

Alternatives 2–4 will result in some short-term construction-related impacts.

Construction activities associated with the proposed project will not result in the physical alteration of the course of any annual or perennial creeks, streams, or streambeds present in the project area. Construction will stay within the existing ROW. Concentrations of TOC, TSS, turbidity, DO, and nutrients such as nitrogen and phosphorus in creeks and

groundwater will not be affected substantially by construction activities as streambeds will not be physically altered or moved. However, construction activities could result in short-term elevated nutrient loads from the erosion of disturbed soils during construction could occur if precipitation events would occur simultaneously with construction activities. In addition, spills of hazardous, toxic, toxic, or petroleum substances during construction activities could result in temporary effects to water quality. Consequently, this impact is considered significant. However, implementation of Mitigation Measures WO-1 and WO-2 would reduce this impact to **less than significant**.

Alternatives 2–4 would result in various improvements to the drainage facilities that would ultimately improve water quality in the long term through the implementation of drainage, collection, conveyance, and treatment facilities. As indicated in *Chapter 2*, *Alternatives*, and Figure 3.13-2, the drainage, collection, conveyance, and treatment improvements will be implemented as part of the WIP and the proposed project's drainage, collection, conveyance, and treatment facilities that tie into and interface with the WIP improvements would improve the quality of the surface runoff through the proposed project area. Drainage improvements will be implemented as part of the proposed project. However, the proposed WIP improvements will be implemented in phases, probably as separate projects with priority given to areas of the project watershed having the poorest drainage conditions. Impacts associated with implementation of the proposed project would result in a **beneficial** impact

Mitigation Measure WQ-1: Implement Construction BMPs Contained in the SWPPP

To reduce or eliminate construction-related water quality effects before onset of any construction activities, Placer County will require that project contractors obtain coverage under the NPDES General Construction Permit. Placer County will be responsible for ensuring that construction activities comply with the conditions in this permit, which will require development of a SWPPP, implementation of BMPs identified in the SWPPP, and monitoring to ensure that effects on water quality are minimized.

All projects in the Lake Tahoe Basin are required to implement BMPs to protect water quality from impacts related to temporary construction activities and permanent site improvements. BMP guidance issued by regulatory agencies include:

- TRPA's Handbook of Best Management Practices (1988a);
- TRPA Best Management Practices Retrofit Program;
- TRPA Erosion Control Team's general information;
- BMP Contractors Notes (TRPA 2005);
- TRPA guidance for BMP installation developed to incorporate advancing technology; and
- Nevada Department of Transportation Storm Water Quality Manuals:
 Construction Site BMPs Manual (Nevada Department of Transportation 2004).

As part of this process, Placer County will require the implementation of multiple erosion and sediment control BMPs in areas with potential to drain to Lake Tahoe. These BMPs will be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMPs to be implemented as part of this mitigation measure may include, but are not limited to, the following measures.

- Temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, checkdams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas.
- Drainage facilities in downstream off-site areas will be protected from sediment using BMPs acceptable to the Placer County, the RWQCB, and TRPA.

• Grass or other vegetative cover will be established on the construction site as soon as possible after disturbance.

In addition, construction-related BMPs should be used to minimize the mobilization of sediment from construction activities. The following erosion and sediment control measures, which are based on standard measures and standard dust-reduction measures, will be included in the SWPPP, which is to be included in the construction specifications and project performance specifications.

- Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways.
- Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.
- Contain soil and filter runoff from disturbed areas by berms, vegetated swales, silt fencing, straw wattle, plastic sheeting, catch basins, infiltration basins, or other means necessary to prevent the escape of sediment from the disturbed area.
- Refrain from depositing or placing earth or organic material where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water.
- Prohibit the following types of materials from being rinsed or washed into the streets, shoulder areas, or gutters: concrete, solvents and adhesives, thinners, paints, fuels, sawdust, dirt, gasoline, asphalt and concrete saw slurry, and heavily chlorinated water.
- Employ temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) to control erosion from disturbed areas.

TRPA requires that projects address water quality by reducing the projected level of contaminant loading. Untreated urban runoff from parking lots and roads does not typically meet the numeric standards for discharge to surface water. The following contaminant types and associated sources are considered during project design and construction.

- **Sediment-related issues:** sediment generated from erosion during storm events and from increased flow attributable to impermeable surfaces; sediment generated during construction.
- **Nutrient-related issues:** nutrients transported with sediment, atmospheric deposition, organic matter (leaves, grass clippings), and landscape fertilizer.
- **Trash-related issues:** debris from construction and debris deposited by facility users.
- Oil- and grease-related issues: oil and grease deposited by vehicles present on site during construction and facility use.
- Toxic contaminant—related issues: concrete-washing during construction, paving during construction (loose gravels, sealants), materials used in structures (paint, wood preservatives), and landscape pesticides.

To address the potential generation of contaminated stormwater discharges, temporary BMPs will be applied during and immediately after the construction period. The conscientious application and maintenance of temporary BMPs can protect water quality during construction periods. The minimum temporary BMPs needed to be consistent with TRPA and Caltrans guidance documents referenced above and satisfy TRPA Code requirements, Chapters 25, 64, and 81, are outlined in Table 3.13-3.

Final selection of BMPs will be subject to review by Placer County. Placer County will verify that an NOI and a SWPPP have been filed before allowing

construction to begin. Placer County or its contractor will perform routine inspections of the construction area to verify that the BMPs specified in the SWPPP are properly implemented and maintained. Placer County will notify contractors immediately if there is a noncompliance issue and will require compliance.

Mitigation Measure WQ-2: Implement a Spill Prevention and Control Program

Placer County will require contractors to develop and implement a Spill Prevention and Control Program to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during construction activities. The program will be completed before any construction activities begin. This plan will be a part or section of the SWPPP required for the project as the SWPPP addresses non-stormwater releases.

Placer County will review and approve the spill prevention and control program before onset of construction activities. Placer County will routinely inspect the construction area to verify that the measures specified in the spill prevention and control program are properly implemented and maintained. Placer County will notify contractors immediately if there is a noncompliance issue and will require compliance.

The federal reportable spill quantity for petroleum products, as defined in the EPA's CFR (40 CFR 110), is any oil spill that (1) violates applicable water quality standards, (2) causes a film or sheen upon or discoloration of the water surface or adjoining shoreline, or (3) causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.

If an appreciable spill has occurred and is reportable, the contractor's superintendent will notify Placer County and the county will need to take action to contact the appropriate safety and clean-up crews to ensure the spill prevention plan is followed. A written description of reportable releases must be submitted

to the RWQCB and TRPA. This submittal must include a description of the release, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases. The releases would be documented on a spill report form. If the results determine that project activities have adversely affected surface water or groundwater quality, a detailed analysis will be performed by a registered environmental assessor to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials standards and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, Placer County and its contractors will select and implement measures to control contamination, with a performance standard that surface water quality groundwater quality must be returned to baseline conditions. These measures will be subject to approval by Placer County.

Impact WQ-2: Substantial Degradation of Water Quality or Violation of any Water Quality Standards or Waste Discharge Requirements

Alternative 1

Alternative 1 would not substantially degrade water quality or result in a violation of any water quality standards or waste discharge requirements. Consequently, this impact is considered **less than significant**.

Alternatives 2-4

Construction activities associated with Alternatives 2–4 are not anticipated to violate or cause a violation of federal, state, or local water quality standards. Proposed construction activities do not involve treating, altering, or discharging materials from construction activities to streams or water bodies. All construction related materials will be held onsite, and construction activities are not expected to occur during the storm season. This impact is considered **less than significant**, and no mitigation is required.

Impact WQ-3: Substantial Alterations of the Existing Drainage Pattern of the Site Area Such That Flood Risk and/or Erosion and Siltation Potential Would Increase

Alternative 1

Current existing drainage facilities are outdated and frequently involve small amounts of flooding and overtopping of the roadways. The existing culverts under SR 28 at Griff Creek are currently undersized and experience flooding and overtopping of SR 28, which would continue to increase the transport of sediment loading during the storm season. However, this is a preexisting condition and is not the result of the proposed project. Consequently, this impact is considered **less than significant**.

Alternatives 2-4

Significant levels of erosion of siltation may occur if construction related TRPA BMPs are not implemented. Consequently, this impact is considered significant. However, implementation of Mitigation Measures WQ-1 and WQ-2 would reduce this impact to less than significant.

Alternatives 2–4 would result in various improvements to the drainage facilities that would ultimately improve water quality in the long term through the implementation of drainage, collection, conveyance, and treatment facilities. As indicated in Chapter 2, *Alternatives*, and Figure 3.13-2, the drainage, collection, conveyance, and treatment improvements will be implemented as part of the WIP and the proposed project's drainage, collection, conveyance, and treatment facilities that tie into and interface with the WIP improvements would improve the quality of the surface runoff through the proposed project area. Impacts associated with implementation of the proposed project would result in a **beneficial** impact.

Mitigation Measure WQ-1. Implement Construction BMPs Contained in the SWPPP

This mitigation measure is described in Section 3.13, Water Quality.

Mitigation Measure WQ-2. Implement a Spill Prevention and Control Program

This mitigation measure is described in *Section 3.13*, *Water Quality*.

Impact WQ-4: Substantial Reduction in Groundwater Quantity or Quality Alternative 1

Alternative 1 would not result in the reduction of groundwater quantity or quality. Current regulatory enforcement maintains maximum concentrations in groundwater of dissolved inorganic nitrogen, dissolved phosphorus, and dissolved iron and attains the 90th percentile value for suspended sediment concentration of 60 mg/L. Consequently, this impact is considered **less than significant**.

Alternatives 2-4

Implementation of Alternatives 2–4 would not result in the reduction of groundwater quantity or quality but instead will result in improvements to water quality in the project area. Consequently, this impact is considered **less than significant**.

5.3.14 Growth-Inducing Impacts

See *Section 3.14, Growth-Inducing Impacts*, for a discussion of the existing setting and relevant plans and policies. Based on Appendix G of the State CEQA Guidelines (14 CCR 15000 et seq.), a project would have a significant growth effect if it would:

• induce substantial population growth in an area, either directly or indirectly.

Impact GI-1: Induce Substantial Population Growth, Either Directly or Indirectly Alternative 1

Under Alternative 1, existing conditions would persist under this alternative and that the proposed project would not be constructed. Growth, temporary or permanent, is not associated with this alternative. Therefore, this is considered a **less-than-significant** impact and no mitigation is required.

Alternatives 2-4

Alternatives 2, 3, and 4 do not create new roadways or increase capacity on existing roadways. Consequently, none of these alternatives would induce growth through either

hastening planned growth or promoting unplanned growth. This impact is considered **less than significant**.

5.3.15 Visual Resources

See Section 3.15, Visual Resources, for a discussion of the existing setting and relevant plans and policies. Based on Appendix G of the State CEQA Guidelines (14 CCR 15000 et seq.), the project is considered to have a significant impact on visual resources if it would:

- have an significant impact on a scenic vista;
- substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- substantially degrade the existing visual character or quality of the site and its surroundings; or
- create a new source of substantial light or glare that would significantly impact day or nighttime public views.

Impact VIS-1: Temporary Visual Impacts Caused by Construction Activities Alternative 1

Under these scenarios, no construction-related visual impacts would occur. Consequently, this impact is considered **less than significant**.

Alternatives 2-4

Construction activities in the project area would create temporary changes in views of and from the project area. Construction activities associated with the proposed project would introduce considerable heavy equipment and associated vehicles, including dozers, graders, and trucks into the viewshed of all viewer groups. However, this is not considered to result in a significant impact because construction activities are intermittent and temporary and all viewer groups in the project area and vicinity are accustomed to seeing construction activities and equipment. Additionally, construction activities would

be limited to the hours of 8:00 a.m. to 6:30 p.m. to comply with TRPA requirements for construction activities. Consequently, this impact is considered **less than significant**.

Impact VIS-2: Adversely Affect a Scenic Vista

Alternative 1

Under this scenario, no impacts to scenic vistas would occur. Consequently, this impact is considered **less than significant**.

Alternative 2

The proposed traffic circles would remove obstructing traffic signals from the roadway viewshed to the east and west, while they would also cause motorists to be slightly more spatially aware of traffic at intersections. Limiting on-street parking during the summer would also remove the obstruction to views of Lake Tahoe for businesses, recreationists, and motorists and remove a distraction to motorists. Consequently, Alternative 2 would not adversely affect scenic vistas. This impact is considered **less than significant**.

Alternative 3

Alternative 3 consists of four-lane cross-section and on-street parking along both sides of SR 28, with traffic signals at SR 267, Bear Street, and Coon Street. Left turn lanes would be provided on SR 28 at Fox Street. A sidewalk would be provided in both directions. The proposed minimal changes in Alternative 3 would not adversely affect scenic vistas. This impact is considered **less than significant**.

Alternative 4

Alternative 4 is identical to Alternative 2, except that on-street parking would be prohibited over the entire year (including winter). The proposed traffic circles would remove obstructing traffic signals from the roadway viewshed to the east and west. Limiting on-street parking over the entire year would further remove the obstruction to views of Lake Tahoe for businesses, recreationists, and motorists. Therefore, the proposed changes in Alternative 4 would not adversely affect scenic vistas. This impact is considered **less than significant**.

Impact VIS-3: Degrade the Existing Visual Character or Quality of the Site and Its Surroundings

Alternative 1

Under this scenario, no degradation of the existing visual character or quality of the site and its surroundings effects would occur. This impact is considered **less than significant**.

Alternatives 2, 3, and 4

Each proposed alternative includes 5-foot bicycle lanes and improved sidewalks extending the length of the action area from east to west. Each alternative also includes improved bicycle and pedestrian crosswalks across SR 28 as well as aesthetic improvements such as new streetlights, benches, transit facilities, planters, bicycle racks, trash receptacles, and additional landscaping.

These common actions would have a variable effect based on viewer group and location within the landscape. Residents (private views) and businesses would experience the greatest effect, whereas recreationists and roadway travelers (public views) would experience less change in viewshed.

Alternative 2

Alternative 2 consists of a three-lane cross-section and no on-street parking during the summer on either side of SR 28, with roundabouts at Bear Street and Coon Street. A subalternative also involves adding a traffic circle at the intersection with SR 267. An 18-foot sidewalk/planting area would be provided in both directions. Finally, Alternative 2 compensates for lost on-street parking with proposed side-street parking and newly constructed parking lots to mitigate this loss (Figure 3.15-16).

Reducing the number of lanes on SR 28 would potentially increase the number of vehicles in each lane at any one time, creating a slightly higher distraction for motorists. Constructing off-street parking lots would involve removing 64 trees that are up to 29 inches dbh and would severely damage an additional 110 trees including 67 LSOGs

for a total loss of up to 174 trees. The loss of dense canopy along SR 28 or within the proposed off-street parking lots north of SR 28 would degrade the existing visual character or quality of the site and its surroundings. While Mitigation Measure VIS-1 would replace removed or permanently damaged trees with thousands of saplings, the off-street parking would introduce several areas of open space where those trees may not be planted. Also, those saplings will take close to 20 years to reach a similar level of maturity where they would create a comparable tree canopy as the existing trees. However, reducing the number of lanes, removing on-street parking in the summer, and adding an expansive sidewalk would improve the overall visual quality on SR 28.

The proposed changes in Alternative 2 are anticipated to significantly degrade the existing visual character or quality of the site and its surroundings. Implementing Mitigation Measure VIS-1 would reduce this impact to **less than significant with mitigation.**

Alternative 3

Alternative 3 consists of a four-lane cross-section and on-street parking along both sides of SR 28 with traffic signals at SR 267, Bear Street, and Coon Street. Alternative 3 is the only alternative with nonstandard 11-foot lanes rather than the 12-foot lanes for Alternatives 2 and 4. Left turn lanes would be provided on SR 28 at SR 267, Bear Street, Fox Street, Coon Street, and Chipmunk Street. A sidewalk would be provided in both directions.

While nonstandard 11-foot lanes would slow traffic and distract motorists somewhat, adding sidewalks and left turn lanes would reduce motorist distractions. The proposed changes in Alternative 3 are not anticipated to significantly degrade the existing visual character or quality of the site and its surroundings. Thus, impacts in Alternative 3 are considered **less than significant**.

Alternative 4

Alternative 4 is similar to Alternative 2 with the significant difference being that on-street parking would be prohibited over the entire year (including winter) and sidewalks would be the widest at 17.4 feet. As with Alternative 2, impacts are considered significant although no on-street parking and 17.4 foot sidewalks improve the area's visual character compared to Alternative 2. Implementing Mitigation Measure VIS-1 would reduce this impact to **less than significant with mitigation.**

Mitigation Measure VIS-1: Implement Project Landscaping Plan to Replace Trees that are Removed, Using the Specified Guidelines

In addition to Biological Resources *Mitigation Measure 3.16.4.4*, *Revegetate Disturbed Areas* to the greatest extent possible, selecting the proposed off-street parking lots will be prioritized in the order of those that severely damage LSOGs from least to most (Table 3.15-3).

These practices will also be followed to implement the project landscaping plan.

- Vegetation will consist of plant material that is indigenous to the Lake Tahoe Basin
- Vegetation will be planted within the first year following project completion.
- Vegetation will be used to screen newly established parking areas using a planting design that is randomized to mimic natural patterns.
- Measures will be taken to ensure revegetation success such as emending any insufficient soils.
- An irrigation and maintenance program will be implemented during the plant establishment period.

Impact VIS-4: Create a New Source of Light and Glare that Affects Views in the Area

Alternative 1

Under Alternative 1, no light or glare effects would occur. This impact is considered **less** than significant.

Alternatives 2-4

Alternatives 2, 3, and 4 each propose replacing existing standard tall galvanized steel streetlights, presumably with a larger number of shorter lights, each with a more narrow spread of light. Alternatives 2 and 4 would reduce the number of primary traffic lanes by two, which would reduce the effects of vehicle headlights at any one time on SR 28. It is presumed that chrome-colored streetlights would presumably replaced with shorter earth-toned materials that would provide less daytime and nighttime glare. However, because the exact type and configuration of the lighting is unknown, potentially new light and glare could be created that affects views in the area. This impact is considered significant. Implementation of Mitigation Measures VIS-2, VIS-3, and VIS-4 would improve the aesthetics and would reduce this impact to **less than significant**.

Mitigation Measure VIS-2: Lighting Levels

Avoid consistent overall lighting and overly bright lighting. The location of lighting should respond to the anticipated use and should not exceed the amount of light actually required by users. Lighting for pedestrian movement should illuminate entrances, changes in grade, path intersections, and other areas along paths that, if left unlit, would cause the user to feel insecure. As a general rule of thumb, one foot candle per square foot over the entire project area is adequate. Lighting suppliers and manufacturers have lighting design handbooks that can be consulted to determine fixture types, illumination needs, and light standard heights.

Mitigation Measure VIS-3: Directed Lighting

Lights will be screened and directed away from residences to the highest degree possible and the amount of nighttime lights used will be minimized to the highest

degree possible. In particular, lighting will employ shielding to minimize off-site light spill and glare. In addition, the following measures apply.

- Luminaire spacing should be the maximum allowable for traffic safety.
- Luminaires should be cutoff-type fixtures that cast low-angle illumination to minimize incidental spillover of light onto adjacent private properties and undeveloped open space. Fixtures that project upward or horizontally should not be used.
- Luminaires should be directed toward the roadway and away from adjacent residences and open space areas.
- Luminaire lamps should provide good color rendering and natural light qualities. Low-pressure and high-pressure sodium fixtures that are not colorcorrected should not be used.
- Luminaire intensity should be the minimum allowable for traffic safety.
- Luminaire mountings should be downcast and the height of the poles
 minimized to reduce potential for backscatter into the nighttime sky and
 incidental spillover of light into adjacent private properties and open space.
- Luminaire mountings should have nonglare finishes.

Mitigation Measure VIS-4: Highway Fixtures with Low-Sheen and Non-Reflective Surface Materials

Guardrails and other highway fixtures, including but not limited to, retaining walls, safety barriers, traffic signals and controllers, light standards, and other structures, will be limited to the minimum length, height, and bulk necessary to adequately provide for the safety of the highway user. Earth tone colors of dark shades and flat finish will be used on all highway fixtures. New and replacement guardrails will not have a shiny reflective finish. (These features are typically galvanized steel, which weathers naturally to a non-glare finish typically within a year or so.) Retaining walls and other erosion control devices or structures, will

be constructed of natural materials whenever possible and will, to the maximum extent possible, be designed and sited as to not detract from the scenic quality of the corridor. Such structures will incorporate heavy texture or articulated plane surfaces that create heavy shadow patterns. Adopted community plans may establish equal or superior standards for highway fixtures.

Impact VIS-5: Conflict with Policies or Goals Related to Visual Resources (No Impact)

Alternative 1

No features will be constructed as part of Alternative 1. This impact is considered **less than significant**.

Alternatives 2-4

Design features incorporated into the project will be representative of the character of the commercial core area and will be designed to comply with adopted community plans.

This impact is considered **less than significant**.

5.3.16 Biological Resources

See Section 3.16, Biological Resources, for a discussion of the existing setting and relevant plans and policies. Based on Appendix G of the State CEQA Guidelines (14 CCR 15000 et seq.), the project is considered to have a significant impact on air quality if it would:

- Disturb urban –altered Jeffrey Pine Forest;
- Result in a loss or disturbance of wetlands and streams;
- Impact a regional wildlife species of concern; or
- Spread a weedy plant species.

Impact BIO-1: Disturbance of Urban-Altered Jeffery Pine Forest

Alternative 1

Under Alternative 1, the existing conditions would persist and impacts on biological resources, including the existing Jeffrey Pine Forest, would be **less than significant**. No mitigation measures would be required.

Alternatives 2-4

Alternatives 2–4 would result in tree and understory vegetation removal and incidental damage to trees and tree root systems. These and other effects would directly and indirectly affect the urban-altered Jeffrey pine forest in the project area and would result in a significant impact. This impact can be reduced to a **less-than-significant** level through implementation of Mitigation Measures BIO-1 through BIO-4.

Mitigation Measure BIO-1: Establish Exclusion Zones

The contractor will install orange construction barrier fencing to demarcate environmentally sensitive areas (e.g., wetlands, riparian vegetation, streams, tree root zones). The construction specifications will require that a qualified biologist identify sensitive biological habitats on-site and identify areas to avoid during construction. Before construction, the construction contractor will work with the project engineer and a resource specialist to identify the locations for the barrier fencing and will place stakes around the sensitive resource sites to indicate these locations. The protected areas will be designated as environmentally sensitive areas and clearly identified on the construction plans and specifications. The fencing will be installed before construction activities are initiated and will be maintained throughout the construction period.

Mitigation Measure BIO-2: Seasonal Restrictions on Construction

The construction specifications entered into by TRPA and the contractor will minimize construction impacts on wetlands and streams. Ground-disturbing activities will only be conducted when soils are sufficiently dry to avoid or minimize compaction and sufficiently stable to avoid and/or minimize erosion.

Soils are considered sufficiently dry when they are not inundated or saturated. Construction activities that could disturb nesting migratory birds and/or spawning trout will be conducted outside of the nesting and spawning season for these species. Appropriate noise and vibration mitigation measures (*Section 3.9, Noise*) will be implemented to minimize disturbance impacts on these species.

Mitigation Measure BIO-3: Avoid the Introduction of New Noxious Weeds The contractor will be responsible for avoiding the introduction of new noxious weeds in the project area. Accordingly, the following measures will be implemented during construction.

- Educate construction supervisors and managers on weed identification and the importance of controlling and preventing the spread of noxious weed infestations.
- Clean construction equipment at designated wash stations before entering the construction area.
- Conduct a follow-up inventory of the construction area to verify that
 construction activities have not resulted in the introduction of new noxious
 weed infestations. If new noxious weed infestations are located during the
 follow-up inventory, the appropriate resource agency will be contacted to
 determine the appropriate species-specific treatment methods.

Mitigation Measure BIO-4: Revegetate Disturbed Areas

The contractor will revegetate all temporarily disturbed areas of natural vegetation, including wetlands, riparian habitat, and trees, according to the standards provided in the TRPA *Code of Ordinances* (Section IX, Chapter 77). Chapter 77 provides standards for revegetation following activities that disturb vegetation and soils. Trees that die or fall over as a result of root damage will be compensated for by replanting new trees at a ratio not less than 1:1 (inches dbh of trees lost: inches dbh of trees planted).

Impact BIO-2: Loss or Disturbance of Wetlands and Streams

Alternative 1

Under Alternative 1, the existing conditions would persist, and impacts on biological resources, including wetlands and streams, would be **less than significant**. No mitigation measures would be required.

Alternatives 2-4

Under Alternatives 2–4, SR 28 improvements are proposed adjacent to Griff Creek. However, these improvements would occur in existing, paved highway ROWs and would not affect wetlands or streams under any proposed alternative. Roadside drainages are located where they would be impacted by proposed on-street parking on Deer Street, Trout Avenue, near the intersection of Trout Avenue and Coon Street, Salmon Avenue, and Chipmunk Street, and where ditch lining and revegetation is proposed on Bear Street. Two proposed parking elements are also located adjacent to rock-lined drainage ditches that support some herbaceous plant species. Permanent direct and/or temporary direct effects on these ditches would occur as a result of alterations to existing hydrology, removal of vegetation, root zone disturbance of shrubs and trees in or adjacent to these ditches, and other disturbances associated with the installation of ditch linings and revegetation of existing roadside ditches and swales. Indirect effects due to vegetation removal would include increased sediment loading during runoff events, airborne dust, and increased potential for the establishment of weedy plant species. Consequently, this impact is considered significant. This impact can be reduced to a less-than-significant level through implementation of Mitigation Measures BIO-1 through BIO-4.

Mitigation Measure BIO-1: Establish Exclusion Zones

This mitigation measure is described in Section 3.16, Biological Resources.

Mitigation Measure BIO-2: Seasonal Restrictions on Construction This mitigation measure is described in *Section 3.16*, *Biological Resources*.

Mitigation Measure BIO-3: Avoid the Introduction of New Noxious Weeds This mitigation measure is described in *Section 3.16*, *Biological Resources*.

Mitigation Measure BIO-4: Revegetate Disturbed Areas

This mitigation measure is described in Section 3.16, Biological Resources.

Impact BIO-3. Effects on Regional Wildlife Species of Concern

Alternative 1

Under Alternative 1, the existing conditions would persist and impacts on biological resources, including wildlife species of concern, would be **less than significant**. No mitigation measures would be required.

Alternatives 2-4

Direct and temporary effects from construction activity disturbance and noise could impact any individual bald eagle utilizing habitat within and adjacent to the project area during the project construction period. Implementation of Mitigation Measure BIO-2 (seasonal restrictions on construction) and construction noise mitigation measures would reduce this impact to a **less-than-significant** level.

Permanent and direct impacts to migratory bird habitat would occur from proposed onand off-street project elements that result in the removal of vegetation (including trees). Implementation of Mitigation Measure BIO-2 (seasonal restrictions on construction) and Bio-4 (revegetate disturbed areas) and construction noise mitigation measures would reduce this impact to a **less-than-significant** level.

Rainbow and brook trout habitat could also potentially be affected by Alternatives 2–4. Noise and disturbance from SR 28 construction activities could displace trout from the lower portion of Griff Creek adjacent to the roadway. These impacts are considered significant. Implementation of Mitigation Measure BIO-2 (seasonal restrictions on construction) and standard erosion control BMPs would reduce these impacts to a **less-than-significant** level.

Impact BIO-4: Spread of Weedy Plant Species

Alternative 1

Under Alternative 1, the existing conditions would persist and impacts on biological resources, including the dispersal of weedy plant species, would be **less than significant**. No mitigation measures would be required.

Alternatives 2-4

Because the project area is primarily urban, the proposed project would not substantially add to the level of disturbance already present in the area and would not substantially add to the area available for colonization by weedy plant species. However, roads, highways, and related construction projects are some of the principal dispersal vectors for weedy plant species. The introduction and spread of weedy plant species could degrade natural plant communities by displacing native plant species that provide shelter and forage for wildlife species. Therefore, the proposed project could result in the spread of weedy or noxious plant species into the project area, which could result in a significant impact. However, it should be noted that none of the species on the California list of noxious weeds is currently used by Caltrans for erosion control or landscaping in Placer County. Mitigation Measures BIO-3 and BIO-4 would reduce this impact to a **less-than-significant** level.

5.4 Discussion of Significant Impacts and Mitigation Under CEQA

5.4.1 Significant and Unavoidable Impacts

A significant and unavoidable impact is one that would cause a substantial adverse effect on the environment and for which no mitigation is available to reduce the impact to a less-than-significant level. The significant and unavoidable impacts of the proposed alternatives are all related to traffic. As discussed previously in this chapter, the following significant and unavoidable traffic impacts would occur:

- Impact TRA-1: Degradation of SR 28 Roadway Level of Service (LOS) Below Applicable Standards
 - Alternative 2
 - Alternative 4
- Impact TRA-2: Increase in Average Daily Traffic on Residential Streets in Excess of Applicable Standards
 - Alternative 2
 - Alternative 4
- Impact TRA-3: Degradation of Intersection Levels of Service Below Applicable Standards
 - Alternative 1
 - Alternative 2
 - Alternative 3
 - Alternative 4
- Impact TRA-5: Degradation of Transit Operations
 - Alternative 2
 - Alternative 4

5.4.2 Significant and Irreversible Environmental Changes

Section 15126(f) of the State CEQA Guidelines provides the following direction for the discussion of irreversible changes:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvements which provides access to a

previously inaccessible area, generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to ensure that current consumption is justified.

All of the alternatives would result in an irreversible commitment of energy resources, primarily in the form of fossil fuels (e.g., fuel, oil, natural gas, and gasoline) for construction equipment, as well as consumption or destruction of other nonrenewable and slowly renewable resources (e.g., gravel, metals, and water).

5.5 Climate Change

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. In 2002, with the passage of Assembly Bill (AB) 1493, California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. AB 1493 requires the ARB to develop and implement regulations to reduce automobile and light truck GHG emissions; these regulations will apply to automobiles and light trucks beginning with the 2009 model year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80% below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of AB 32, the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that ARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change.

Impact CC-1: Generation of Significant Levels of Greenhouse Gasses Alternatives 1, 2, 3, and 4

According to a recent white paper by the Association of Environmental Professionals, "an individual project does not generate enough greenhouse gas emissions to significantly influence global climate change (Hendrix and Wilson 2007). Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing the Climate Action Program at Caltrans (December 2006).

One of the main strategies in Caltrans' Climate Action Program to reduce GHG emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0–25 miles per hour) and speeds over 55 mph. Relieving congestion by enhancing operations and improving travel times in high congestion travel corridors will lead to an overall reduction in GHG emissions. As noted previously, the proposed action is not a traffic-generating project and would not result in any differences in traffic volumes throughout the action area between build and no-build conditions. Consequently, implementation of the proposed project is not anticipated to result in significant increases in GHG emissions.

Caltrans recognizes the concern that carbon dioxide emissions raise for climate change. However, modeling and gauging the impacts associated with an increase in GHG emissions levels, including carbon dioxide, at the project level is not currently possible. No federal, state or regional regulatory agency has provided methodology or criteria for GHG emission and climate change impact analysis. Therefore, Caltrans is unable to provide a scientific or regulatory based conclusion regarding whether the project's contribution to climate change is cumulatively considerable."

Caltrans continues to be actively involved on the Governor's Climate Action Team as ARB works to implement AB 1493 and AB 32. As part of the Climate Action Program at Caltrans (December 2006), Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. Caltrans is working closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority. Caltrans is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks. However it is important to note that the control of the fuel economy standards is held by the United States Environmental Protection Agency and ARB. Lastly, the use of alternative fuels is also being considered; Caltrans is participating in funding for alternative fuel research at the University of California, Davis.