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MITIGATED NEGATIVE DECLARATION

FINDINGS

In accordance with the County of El Dorado (County) Ordinances regarding implementation of the California Environmental Quality Act (CEQA), the County has prepared an Initial Study to assess the Project's potential effects on the environment and the significance of those effects. On the basis of that study the County hereby finds:

- ☐ The proposed project will not have a significant adverse effect on the environment; therefore, it does not require the preparation of an Environmental Impact Report and this **Negative Declaration** has been prepared.
- ☒ Although the proposed project could have a significant adverse effect on the environment, there will not be a significant adverse effect in this case because the County will adopt the Mitigation Monitoring and Reporting Program (Appendix B) that contains the mitigation measures necessary for the project to have a less than significant impact. A **Mitigated Negative Declaration** has thus been prepared.

Per Section 21082.1 of the CEQA Guidelines, the County has independently reviewed and analyzed the Initial Study and Proposed Mitigated Negative Declaration for the Proposed Project and finds that they reflect the independent judgment of the County. The environmental documents, which constitute the Initial Study and provide the basis and reasons for this determination are attached and/or referenced herein and are hereby made a part of this document.

Per Section 15072 (f) (5) of the CEQA Guidelines, the Project site is not on any list compiled pursuant to Government Code section 65962.5 as a hazardous waste facilities, land designated as a hazardous waste property, or a hazardous waste disposal site.

PROJECT INFORMATION

Title: Lake Tahoe Boulevard Enhancement Project (JNs 95163/95175/95186)	
Description: Construction of Class 1 and Class 2 bicycle paths and erosion control and water quality improvement facilities.	
Location: The Project area is located in eastern El Dorado County, in South Lake Tahoe California within the Lake Tahoe Basin. The Project is located in the southern section of the Lake Tahoe Basin in Sections 17-20, Township 12 North, Range 18 East, in the Echo Lake and Emerald Bay U.S. Geological Survey 7.5 minute quadrangle maps. The Project is along Lake Tahoe Boulevard from Viking Road to Clear View Drive.	
Owner/Applicant: County of El Dorado Department of Transportation – Tahoe Engineering Unit	
Lead Agency: County of El Dorado Department of Transportation – Tahoe Engineering Unit	
County Contact: Brendan Ferry, Senior Environmental Planner	Phone: 530-573-7900
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AVAILABILITY OF DOCUMENTS

The Initial Study for this Mitigated Negative Declaration is available for review at the County of El Dorado Department of Transportation – Tahoe Engineering Unit, 924B Emerald Bay Road, South Lake Tahoe, CA. The document is also available for review at the County of El Dorado South Lake Tahoe Branch Library at 1000 Rufus Allen Blvd., South Lake Tahoe, CA. The library's hours of operation are from 10:00 am – 8:00 pm on Tuesday and Wednesday; 10:00 am – 5:00 pm on Thursday, Friday, and Saturday. The library is closed on Sunday and Monday. In addition to the South Lake Tahoe locations, the document is available at the California State Clearinghouse located at 1400 Tenth St., Sacramento, CA.

PROJECT DESCRIPTION

The County of El Dorado - Department of Transportation (County) proposes to implement the Lake Tahoe Boulevard Enhancement Project (Project) during the 2013/2014/2015 construction seasons to assist with meeting the goals of the Tahoe Regional Planning Agency's (TRPA) Environmental Improvement Program (EIP). In 1997, the TRPA developed a Basin-wide EIP that defined various projects which, once implemented, would assist in attaining and maintaining TRPA Environmental Threshold Carrying Capacities (ETCC) as well as meet other federal and state environmental goals. TRPA has established thresholds for air quality, water quality, soil conservation, vegetation, noise, scenic resources, recreation, fisheries, and wildlife to address public health and safety of residents and visitors as well as the scenic, recreation, education, scientific, and natural values of the Lake Tahoe Basin. The Lake Tahoe Boulevard Enhancement Project is defined in the TRPA EIP as Project #s 991, 10036 and 10065.

The Project is also intended to provide a critical link in the regional bicycle path network. The Project supports TRPA's and the Tahoe Metropolitan Planning Organization's (TMPO) "2010 Lake Tahoe Region Bicycle and Pedestrian Plan" (Plan). The goals of the Plan are to provide access to local businesses, schools, and offices for bicyclists and pedestrians, to reduce vehicular transportation, and to enhance recreational opportunities within the Lake Tahoe Basin (Basin). The Plan serves as the Bicycle and Pedestrian element to both the TMPO Regional Transportation Plan (Mobility 2030), and the TRPA Transportation Plan. This Project is being designed and constructed with financial assistance from the State of California, the United States Forest Service - Lake Tahoe Basin Management Unit (USFS-LTBMU), Caltrans Congestion Mitigation for Air Quality (CMAQ) Program and TRPA mitigation funds.

The Project is located in eastern El Dorado County, in the Lake Tahoe Basin, along Lake Tahoe Boulevard (Figure A). The Project will install a Class 1 and Class 2 bicycle facility along Lake Tahoe Boulevard between Clear View Drive and Viking Road and will implement erosion control and water quality improvement measures along Lake Tahoe Boulevard. The Project is also intended to reduce nutrient and sediment loading to nearby waterways and to treat storm run-off from the existing roadway infrastructure by installing appropriate Best Management Practices (BMP). The County sees tremendous value in installing the Project for the benefit of the residents of El Dorado County and for the visitors to the Lake Tahoe Region.

PROJECT BACKGROUND

The County followed the Storm Water Quality Improvement Committee (SWQIC) guidelines and the guidance outlined in the Formulating and Evaluating Alternatives for Water Quality Improvement Projects document in developing and selecting the Preferred Project Alternative.ⁱ The Project Development Team (PDT) investigated a range of possibilities for the bike path and water quality improvements in the Project area. The process of evaluating and selecting a preferred alternative for this Project included the production and analysis of the following documents:

- Draft Existing Conditions and Feasibility Report (Stantec 2008)
- Final Existing Conditions and Feasibility Report (Stantec 2008)
- Draft Project Alternatives Evaluation Report (County 2011)
- Final Project Alternatives Evaluation Report (County 2011)
- Preferred Alternative Report (County 2011)

The County first developed a Draft Existing Conditions and Feasibility Report (ECFR) in July 2008.ⁱⁱ In order to inform the public of the final version of that report, a public meeting was held to present the feasible options for the Project and to obtain feedback from the community on what key components they were interested in for the Project. That public meeting provided critical feedback from the community that was utilized to develop the Final ECFR in December 2008.

The County then had to focus on other project priorities and deliverables, and some time lapsed until it was able to produce a Draft Project Alternatives Evaluation Report (PAER) in April 2011. The County considered the feedback from the PDT and revised the Draft PAER prior to releasing it to the public. The County then held another public meeting on April 29, 2011 to present the Project Alternatives to the community and to again receive feedback on which Project Alternative was preferred by the public. Over 200 comments were received as a result of the County public outreach efforts. This feedback was invaluable to helping the County to provide a Project that the community would value and support.

It was evident from the comments that the public favored PAER Project Alternative 3, although many varying opinions favoring different Alternatives were noted. Because of the support of Alternative 3, the County wanted to further explore that Alternative to ensure that all feasible options were investigated on how best to connect the bike path through the wet meadow area south of Sawmill Road. As a result, the County developed Alternatives 3A and 3B, which were slightly different versions of the original PAER Alternative 3. The County produced a website to disseminate the information

focusing on Alternatives 3A and 3B. The County also met with a reporter from the local print media, Tahoe Daily Tribune, in order to publicize the information contained in the website. After incorporating all of the feedback that it received and after further discussions with PDT members and County managers, the Final PAER was produced in July 2011.ⁱⁱⁱ That report was published on the County website and made available for review at the County Department of Transportation (DOT) office.

The County focused on safety as its number one priority, while looking for a Project that could be built within budget and that met the goals and objectives outlined for the Project. The County continually received and digested feedback on the two Project Alternatives (3A and 3B) that it presented on the website. After considering the two final Project Alternatives, the County decided, based on all the feedback that was received, to select Alternative 3B as the Preferred Project Alternative (Proposed Project). The County feels this Proposed Project most adequately satisfies the goals and objectives of the Project and can be feasibly constructed. The Proposed Project is described below.

PROPOSED PROJECT

The Proposed Project was selected by the County, the PDT and the public and is described in further detail below. It is a compilation of the most comprehensive design ideas for the Project area, which meets the goals and objectives of the EIP and the Project. All proposed measures will be in compliance with applicable laws and TRPA and Lahontan Regional Water Quality Control Board (Lahontan) regulations.

The Preferred Project Alternative is shown on **Figures 1 - 4**, and consists of several Project components:

- Bike Path and Bike Lane;
- Erosion Control;
- Hydraulic Conveyance;
- Water Quality;
- SEZ Enhancement;
- Safety;
- Land Coverage; and,
- Lake Tahoe Boulevard Lane Reduction Component.

These Project components are outlined in the following sections to describe the design opportunities and the features associated with each component.

Bike Path and Bike Lane Component

- ☐ Install Class 2 bike lanes along Lake Tahoe Boulevard from Clear View Drive to Tahoe Mountain Road.
- ☐ Install Class 2 bike lanes within the existing outside lanes of Lake Tahoe Boulevard from Tahoe Mountain Road to Sawmill Road. Remove and restore approximately four feet of pavement in the eastbound lanes and four feet of pavement in the westbound lanes of Lake Tahoe Boulevard. This includes removing fill material in the Stream Environment Zone (SEZ) and restoring the area.
- ☐ Install approximately 9,055 linear feet of 10 foot wide Class 1 bike path on the north side of Lake Tahoe Boulevard along the existing dirt path on United States Forest Service (USFS) property from Sawmill Road to Viking Road.

The proposed western portion of the Class 2 bike lanes will connect to the existing Class 2 bike lanes along Lake Tahoe Boulevard that end at Clear View Drive. Class 2 bike lanes are proposed on both sides of the existing two lanes of Lake Tahoe Boulevard from Clear View Drive to Tahoe Mountain Road. Additional minor pavement width will be required in this section to include the bike lanes.

Continuing east, Class 2 bike lanes are proposed along Lake Tahoe Boulevard within the two existing outside travel lanes from Tahoe Mountain Road to the intersection of Sawmill Road, reducing this section of Lake Tahoe Boulevard from four lanes to two lanes. This section also includes a speed limit reduction from 45 miles per hour to 35 miles per hour. The proposed six foot bike/pedestrian lanes in this section will be next to 12 foot wide inside travel lanes, which will have two

foot paved shoulders. Approximately two feet of pavement is proposed to be removed and restored on both sides of Lake Tahoe Boulevard, totaling four feet of pavement removal. The future Sawmill 2 Bike Path is proposed to end at the intersection of Lake Tahoe Boulevard and Sawmill Road where the Lake Tahoe Boulevard bike lanes will link with the proposed Sawmill 2 Bike Path. A crosswalk, a pedestrian refuge island and pedestrian actuated signals are proposed at this location to provide a safe crossing for pedestrians. This Lake Tahoe Boulevard crossing at Sawmill Road will link the Sawmill Bike Path to the Class 2 bike lanes along Lake Tahoe Boulevard and the proposed Class 1 bike path to the east to the City of South Lake Tahoe.

The eastern section of the proposed Class 1 bike path begins on the north side of Lake Tahoe Boulevard at the intersection of Sawmill Road. This section of the Class 1 bike path generally follows the existing dirt path on the north side of Lake Tahoe Boulevard to the intersection of Lake Tahoe Boulevard and Viking Road. This portion of the bike path will require the installation of approximately six culvert crossings to convey runoff from the uphill watersheds beneath the bike path. This portion of the Class 1 bike path will consist of a ten foot wide paved path with a two foot wide wood chip shoulder (clear-zone) on both sides of the path. The proposed bike path is approximately 9,055 linear feet. The bike path is proposed to span SEZ areas with new culverts and improved upstream and downstream channels. These areas slated for improvement are at existing drainages along the existing dirt path. This section of the proposed bike path will link to the existing Class 2 bike lanes along Lake Tahoe Boulevard ending at the intersection of Viking Road and Lake Tahoe Boulevard.

A Special Use Permit must be obtained from the USFS and an encroachment permit must be obtained from the City of South Lake Tahoe.

Erosion Control Component

- ☐ Revegetate eroding slopes and bare areas to provide sediment source control along Lake Tahoe Boulevard.
- ☐ Armor eroding conveyance channels to provide sediment source control along Lake Tahoe Boulevard.

The primary focus for erosion control will be to provide sediment source control on eroding roadside slopes and on bare road shoulders. Revegetation techniques will be used on eroding slopes and other bare eroding areas. Source control will also be achieved by armoring or vegetation lining portions of the bare soil conveyance ditches along Lake Tahoe Boulevard.

Hydraulic Conveyance Component

- ☐ Replace failing or undersized culverts to prevent road damage and flooding.
- ☐ Modify channels to correctly size conveyance upstream/downstream of culverts.
- ☐ Install drainage inlets to collect road runoff into storm drain system.
- ☐ Install new culverts beneath the newly proposed bike path.

Hydraulic conveyance will primarily be enhanced by upgrading failing or undersized culverts that exist along Lake Tahoe Boulevard. Also, as mentioned above; new culverts will be installed to properly convey upland runoff beneath the newly proposed bike path. Channel armoring upstream and downstream of culverts will enhance conveyance to minimize road and bike path damage and flooding.

Water Quality Component

- ☐ Install sediment traps, one sediment basin, rock bowls, and flow spreaders, to trap sediment and infiltrate runoff.
- ☐ Remove pavement in SEZ for water quality treatment.

Water quality treatment options for storm water include sediment traps, rock bowls, flow spreaders and sediment basins.

SEZ Enhancement Component

- ❑ SEZ enhancement will be achieved via installation of an additional culvert or bottom-less arch crossing Lake Tahoe Boulevard along the curve between Tahoe Mountain Road and Sawmill Road at a different location than the existing undersized culvert to increase hydraulic connectivity by routing previously diverted flows to additional parts of the SEZ to increase the stream zone treatment area.
- ❑ Pavement removal and revegetation from Tahoe Mountain Road to Sawmill Road.

Safety Component

- ❑ Safety improvements/traffic calming will be accomplished via reduction of Lake Tahoe Boulevard from four lanes to two lanes with an accompanying speed limit reduction from 45 miles per hour to 35 miles per hour from Tahoe Mountain Road to Sawmill Road.
- ❑ A two foot paved shoulder will provide safety adjacent to the 12 foot travel lane and the six foot wide Class 2 bike lanes will provide pedestrians and cyclists with an enhanced safety corridor.
- ❑ Safety improvements will be installed including a pedestrian crosswalk, a refuge island and a flashing beacon for crossing Lake Tahoe Boulevard at the intersection of Sawmill Road.

Land Coverage Component

- ❑ Hard coverage will be increased along the Class 1 portion of the bike path by approximately 90,550 square feet, although the majority of the hard coverage will be placed over the existing soft coverage USFS dirt road.
- ❑ Land coverage will be decreased by approximately 11,520 square feet in land capability class 1b due to the pavement removal along Lake Tahoe Boulevard from Tahoe Mountain Road to Sawmill Road.

LTB Lane Reduction Component

- ❑ Lanes will be reduced to one lane in each direction for the section of Lake Tahoe Boulevard between Tahoe Mountain Road and Sawmill Road. Additionally, intersections will be improved at Lake Tahoe Boulevard and Sawmill Road and at Lake Tahoe Boulevard and Tahoe Mountain Road. All other lane configurations remain unchanged.

SUMMARY OF ENVIRONMENTAL ANALYSIS

The County prepared an Initial Study to assess the Project's potential effects on the environment and the significance of those effects. Based on the Initial Study, the County determined that the Proposed Project will not have any significant environmental impacts with the implementation of mitigation measures. The County will adopt the mitigation measures located in the Mitigation Monitoring and Reporting Program. This conclusion is supported by the following findings:

- The Proposed Project will have no adverse impacts in the areas of agriculture and forest resources, cultural resources, land use and planning, mineral resources, population and housing and public services.
- The Proposed Project will have a less than significant impact in the areas of aesthetics, air quality, biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, recreation, transportation and traffic, utilities and service systems, and greenhouse gas emissions. Discussion on each of these findings is provided below.

Aesthetics: The Proposed Project area is not visible from any designated Scenic Highways. The intent of the Proposed Project is to improve the quality of the area for the community by installing a bicycle path, by stabilizing bare soil areas with native vegetation, by enhancing drainage and SEZ features and by installing infiltration systems that will benefit the environment. While there will be temporary aesthetic impacts due to construction, there will be no long term degradation of aesthetic quality in the Proposed Project area and therefore the Proposed Project has a less than significant impact.

Air Quality: The Proposed Project will have no long term impacts to air quality. A major goal of the Proposed Project is to improve air quality by installing a bicycle path, which provides a cleaner alternate mode of transportation to the automobile. Construction equipment may impact air quality for the short term during construction, but impacts are only temporary and will not result in a cumulative increase of criteria pollutants for which the Proposed Project region is in non-attainment nor will it expose sensitive receptors to substantial pollutant concentrations. The Proposed Project will not create objectionable odors affecting a substantial number of people. Proper best management practices (BMPs), per TRPA's Handbook of BMPs, and construction controls shall be implemented to prevent the Proposed Project activities from violating air quality standards and therefore the Proposed Project has a less than significant impact.

Biological Resources: Field surveys and assessments were conducted within the Proposed Project survey area for special status wildlife species on November 2, 2011 and special status botanical species on July 20, 2012 and July 31, 2012. The biological assessment and evaluation surveys observed no federal or state-listed candidate, or proposed botanical or wildlife species in the Project study area. However, there are recorded occurrences of special status species adjacent to the Project area. Suitable habitat conditions do exist within 0.5 miles of the Project area for bald eagle, osprey, northern goshawk, California spotted owl, American marten, upswept moonwort, scalloped moonwort, slender moonwort, common moonwort, mingan moonwort, western goblin, bolander's candle moss, subalpine fireweed, blandow's bog-moss, short-leaved hulsea, three-ranked hump moss and broad-nerved hump moss. Noxious weed surveys were also conducted within the Project survey area on November 2, 2011, July 20, 2012 and July 31, 2012. The surveys identified three noxious weed species within the Project area: cheatgrass (*Bromus tectorum*), bull thistle (*Cirsium vulgare*) and St. johns wort (*Hypericum perforatum*). A Noxious Weed Mitigation/Eradication Protocol will be implemented by the County as part of the Proposed Project which will help decrease habitat vulnerability to or below pre-construction levels. The Protocol includes pre-construction elements, such as treating existing noxious weed populations identified in the Project area, as well as during- and post-construction elements. Additionally, the County will specify weed-free seed mix and require all construction equipment be certified steam cleaned prior to accessing the site.

Cultural Resources: A cultural resource study, which included a literature search and an archaeological survey/inventory of the Project survey area, was completed on December 12, 2011. Five previous cultural resources studies have been conducted in the vicinity of the Project area, including portions of the Area of Potential Effects (APE). Three previously recorded sites (05-01149, 05-1150 and 05-01151) are adjacent to the Project area, but will not be affected by the Proposed Project. The APE is considered to have a low sensitivity for the discovery of prehistoric, ethno historic, or historic cultural material, or subsurface deposits. Because of this, no additional cultural resources work for this Project is recommended. However, in the event that cultural resources are discovered during Proposed Project implementation, Project personnel shall halt all activities in the immediate area and notify a qualified archaeologist to determine the appropriate course of action.

Geology/Soils: The Proposed Project involves earth-moving activities estimated at approximately 3,138 cubic yards, which will cause temporary soil erosion in the Project area. The County will prepare and require as part of the Contract Documents a Storm Water Pollution Prevention Plan (SWPPP) and a Revegetation Plan that the contractor must adhere to. The contractor will also implement temporary and permanent BMPs per the TRPA Handbook of BMPs prior to and during construction to prevent erosion within the Project area. The County will also perform two years of irrigation/vegetation establishment after the Proposed Project is complete to ensure that the site is restored to pre-project conditions, at a minimum. The SWPPP will also include and require appropriate measures to help sequence construction and minimize soil erosion through the use of approved sound construction practices to a less than significant level.

Hazards/Hazardous Materials: The Proposed Project will have no long term impacts from hazards or hazardous materials in the Project area. During construction there is a risk of accidental fuel spills from construction equipment. The contractor will be required to prepare and adhere to a Spill Contingency Plan as part of the SWPPP and shall have spill prevention kits and other approved BMPs and construction controls available to prevent and/or contain any accidental spills.

Hydrology/Water Quality: One of the primary goals of the Proposed Project is to benefit water quality by improving the existing stormwater conveyance system and associated facilities in the Project area; thereby reducing the amount of pollutants entering Angora Creek and ultimately, Lake Tahoe. The Proposed Project will have no long term negative impacts on hydrology/water quality. Proposed Project construction related activities can pose short term water quality impacts during storm events or accidental fuel spills from construction equipment, however the County will prepare a SWPPP, Temporary Erosion Control Plan and a Revegetation Plan that the contractor must adhere to in order to address short term impacts associated with soil disturbance. At a minimum, this will include containing the site with proper BMPs, protecting existing storm water facilities, staging and storing materials properly, and sweeping daily. To ensure all mitigation measures are addressed and monitored, the contractor will prepare and adhere to the SWPPP in accordance with TRPA and the Lahontan Regional Water Quality Control Board (Lahontan) requirements for storm water pollution prevention.

Noise: Proposed Project construction will result in a temporary increase in ambient noise levels due to equipment noise and construction activities. Per TRPA Standard Permit Conditions, operation shall be restricted to the hours of 8:00 a.m. to 6:30 p.m. All equipment and vehicles used for Project construction shall have proper muffler devices and be tuned to the manufacturer's specification. The County will advise potentially affected residents of the proposed construction activities including duration, schedule, and contacts for filing noise complaints. The County and/or contractor will respond to all noise complaints received within one working day and will work to resolve the issue immediately.

Recreation: Because it is one of the primary goals of the Project, the Proposed Project will have an impact on recreation and access within the Project area. The Proposed Project aims to construct bicycle and pedestrian facilities to improve the recreation and access experience for users in the Project area. There will be short term impacts to the dirt road west of Lake Tahoe Boulevard during construction that will limit access for users. In the long term, recreation opportunities will be improved by the Proposed Project.

Transportation/Traffic: The Proposed Project will eliminate two vehicle road lanes along Lake Tahoe Blvd. from Sawmill Rd. to Tahoe Mountain Rd. Goal 10.7 of TRPA's Regional Transportation Plan, Mobility 2035, allows Level of Service (LOS) "C" on rural recreational/scenic roads. Per the County's Lake Tahoe Boulevard Lane Reduction, Erosion Control and Bike Trail Project Traffic Study, Lake Tahoe Blvd. currently operates at a LOS "A". Based upon that same study, the proposed changes could cause Lake Tahoe Blvd. to operate at LOS "C" when the four lanes are reconfigured to two lanes. Therefore the Proposed Project may reduce the LOS on Lake Tahoe Blvd., however the reduction is in line with standards established by TRPA. There will be short term construction impacts on traffic from truck and daily work trips to the Project area. Traffic controls will only be implemented during work hours and when it is necessary to perform work, which will be outlined in a Traffic Control Plan prepared by and adhered to by the contractor. As mentioned above, there will be short term impacts to the dirt road west of Lake Tahoe Boulevard during construction that will limit access for users. At no time will access for local residents, emergency vehicles, school buses, pedestrians, or bicyclists be prohibited along Lake Tahoe Boulevard, therefore the Proposed Project will have a less than significant impact on transportation and traffic.

Utilities and Service Systems: During the Proposed Project construction, portions of the site will have exposed soil areas that, during a rain or high wind event or utility line breach, could cause minor erosion. Once construction is complete and the erosion control and water quality improvement measures are in place, surface runoff and erosion will be reduced and water quality will be improved. The contractor will prepare and adhere to a SWPPP and a Temporary Erosion Control which will include TRPA approved BMPs to minimize soil erosion during construction to a less than significant level.

Greenhouse Gas Emissions: Climate change refers to long-term fluctuations in temperature, precipitation, wind, and other elements of Earth's climate system. Natural processes such as solar-irradiance variations, variations in Earth's orbital parameters, and volcanic activity can produce variations in climate. The climate system can also be influenced by changes in the concentration of various gases in the atmosphere, which affect Earth's absorption of radiation.

During construction, the Proposed Project would temporarily cause direct greenhouse gas (GHG) emissions from the combustion of fossil fuels used to run construction equipment and vehicles, both onsite and offsite. These GHG emissions would be temporary and one-time emissions during the construction of the Proposed Project. Over its lifetime, the Proposed Project would directly and indirectly cause negligible GHG emissions from occasional maintenance and personal vehicle use. Therefore, the County's analysis focused on construction impacts estimated using the County's past project implementation database and the U.S. Environmental Protection Agency (USEPA) GHG emission factors for diesel fuel and gasoline combustion in construction equipment. The County has reviewed past construction logs for projects equivalent in size and scope to the Proposed Project to determine the typical number and type of vehicles that are actively working to construct the Proposed Project each day. Based on this analysis, the County has formulated the following assumptions:

- Fifteen workers per day, driving five vehicles to work an average of 40 miles roundtrip per day
- Vehicles average 20 miles per gallon
- Twelve pieces of construction machinery per day
- Crews work eight hours per day with machinery running half that time (4 hours)
- Machinery burns an average of two gallons of diesel fuel per hour
- Diesel fuel contributes approximately 22.5 lbs CO₂/gallon
- Gasoline contributes approximately 20 lbs CO₂/gallon
- The Proposed Project will be completed in 110 working days

Based on these assumptions, the Proposed Project would emit approximately 118 metric tons of CO₂ equivalents.

This estimated amount is negligible in comparison to the statewide inventory of 480,000,000 metric tons discussed below in the Initial Study (0.0000002 percent). The estimated amount is also significantly less than the San Luis Obispo Air Pollution Control District's (SLOAPCD) significance threshold of 1,150 metric tons of CO₂ equivalents. Because of this and the fact

that direct onsite and offsite GHG emissions would terminate following completion construction work, the Proposed Project will have a less than significant impact on GHG emissions.

PUBLIC NOTICE

The comment period for this document closes on April 24, 2013. A copy of the Initial Study/Proposed Mitigated Negative Declaration is available for public review at the County of El Dorado Department of Transportation – Tahoe Engineering Unit at 924 B Emerald Bay Road, South Lake Tahoe, CA 96150 between the hours of 8:00 am and 5:00 pm. The document is also available for review at the County of El Dorado Library – South Lake Tahoe Branch at 1000 Rufus Allen Blvd., South Lake Tahoe, CA 96150 between the hours of 10:00 am and 8:00 pm Tuesday and Wednesday and 10:00 am and 5:00 pm Thursday through Saturday. The Library is closed on Sunday and Monday.

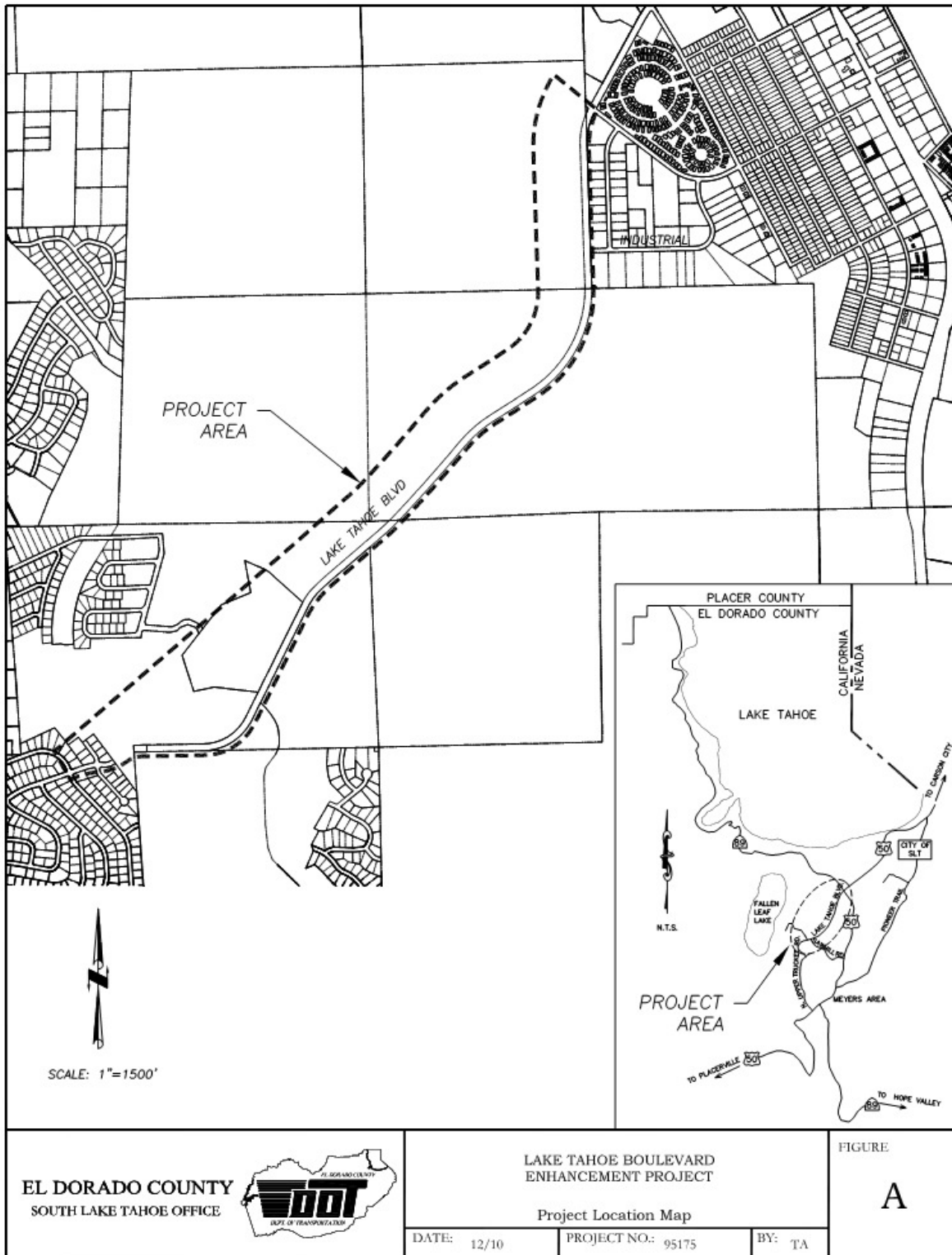
All parties providing written comments during this timeframe will be notified of the upcoming hearing before the Board of Supervisors. Additional information may be obtained by contacting the El Dorado County Department of Transportation – Tahoe Engineering Unit at (530) 573-7900 or 924 B Emerald Bay Road, South Lake Tahoe, CA 96150.

If you wish to appeal the appropriateness or adequacy of this document, address your written comments to our finding that the Proposed Project will not have a significant adverse effect on the environment: (1) identify the environmental effect(s), why they would occur, and why they would be significant, and (2) suggest any mitigation measures which you believe would eliminate or reduce the effect to an acceptable level. Regarding item (1) above, explain the basis for your comments and submit any supporting data or references.

Brendan Ferry, Senior Environmental Planner
County of El Dorado—Lead Agency

Recorder's Certification

FIGURE A



**CEQA
INITIAL STUDY/
PROPOSED MITIGATED NEGATIVE DECLARATION
LAKE TAHOE BOULEVARD ENHANCEMENT PROJECT
EIP PROJECT #s 991, 10036 and 10065
JNs 95163/95175/95186**



STATE CLEARINGHOUSE # 2013032066



Prepared by:

County of El Dorado
Department of Transportation
Tahoe Engineering Unit
924 B Emerald Bay Road
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FINAL
April 2013

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FIGURES

Figure A – Project Location Map

Exhibit 1, Figures 1A-1C – Alternative 1

Exhibit 2, Figures 2A-2C – Alternative 2

Exhibit 3, Figures 3A-3C – Alternative 3A

Exhibit 3, Figures 4A-4C – Alternative 3B

Exhibit 4, Figures 1A-1C – Alternative 4

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Figures 1-4 – Proposed Project Alternative

APPENDICES

Appendix A: CEQA Checklist

Appendix B: Mitigation Monitoring and Reporting Program

Appendix C: Plant, Noxious Weed and Wildlife Tables

1.0 INTRODUCTION

The County of El Dorado Department of Transportation-Tahoe Engineering Unit (County) prepared this Draft Initial Study to identify and assess the anticipated environmental impacts of the following Project. This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000 et seq.), the State CEQA Guidelines (14 CCR 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. This document may rely on previous environmental documents and site-specific studies prepared for the Project.

The Draft Initial Study is a public document used by the decision making lead agency to determine whether a Project may have a significant effect on the environment. If the lead agency finds substantial evidence that any aspect of the Project, either individually or cumulatively, may have a significant effect on the environment, regardless of whether the overall effect of the Project is adverse or beneficial, the lead agency is required to prepare an Environmental Impact Report (EIR). The lead agency may also use a previously-prepared EIR and supplement that EIR, or prepare a Subsequent EIR to analyze the Project. If the agency finds no substantial evidence that the Project or any of its aspects may cause a significant effect on the environment, a Negative Declaration shall be prepared. If in the course of analysis, the agency recognizes that the Project may have a significant impact on the environment, but that by incorporating specific mitigation measures the impact will be reduced to a less than significant effect, a Mitigated Negative Declaration shall be prepared.

County has reviewed the Proposed Project and determined that the Project, with mitigation measures, as identified in this document, will not have a significant effect on the environment. Therefore, a Mitigated Negative Declaration will meet the requirements of CEQA.

A CEQA Checklist (Appendix A) has been completed based on the Project's Feasibility Report; however, should significant impacts or new mitigation measures result from the CEQA review process, County will recirculate the document for public review. The public review period for the Draft Initial Study/Proposed Mitigated Negative Declaration shall begin on March 26, 2013 and end on April 24, 2013. Comments received after 5:00 pm on April 24, 2013 will not be considered. Written responses should be sent to Brendan Ferry, Senior Environmental Planner, at the following address:

County of El Dorado Department of Transportation
CEQA Compliance
924 B Emerald Bay Road
South Lake Tahoe, CA 96150
(530) 573-7900
brendan.ferry@edcgov.us

2.0 PROJECT DESCRIPTION AND LOCATION

The County proposes to implement the Lake Tahoe Boulevard Enhancement Project (Proposed Project) during the 2013/2014/2015 construction seasons to assist with meeting the goals of the Tahoe Regional Planning Agency's (TRPA) Environmental Improvement Program (EIP). In 1997, the TRPA developed a Basin-wide EIP that defined various projects which, once implemented, would assist in attaining and maintaining TRPA Environmental Threshold Carrying Capacities (ETCC) as well as meet other federal and state environmental goals. TRPA has established thresholds for air quality, water quality, soil conservation, vegetation, noise, scenic resources, recreation, fisheries, and wildlife to address public health and safety of residents and visitors as well as the scenic, recreation, education, scientific, and natural values of the Lake Tahoe Basin. The Lake Tahoe Boulevard Enhancement Project is defined in the TRPA EIP as Project #s 991, 10036 and 10065.

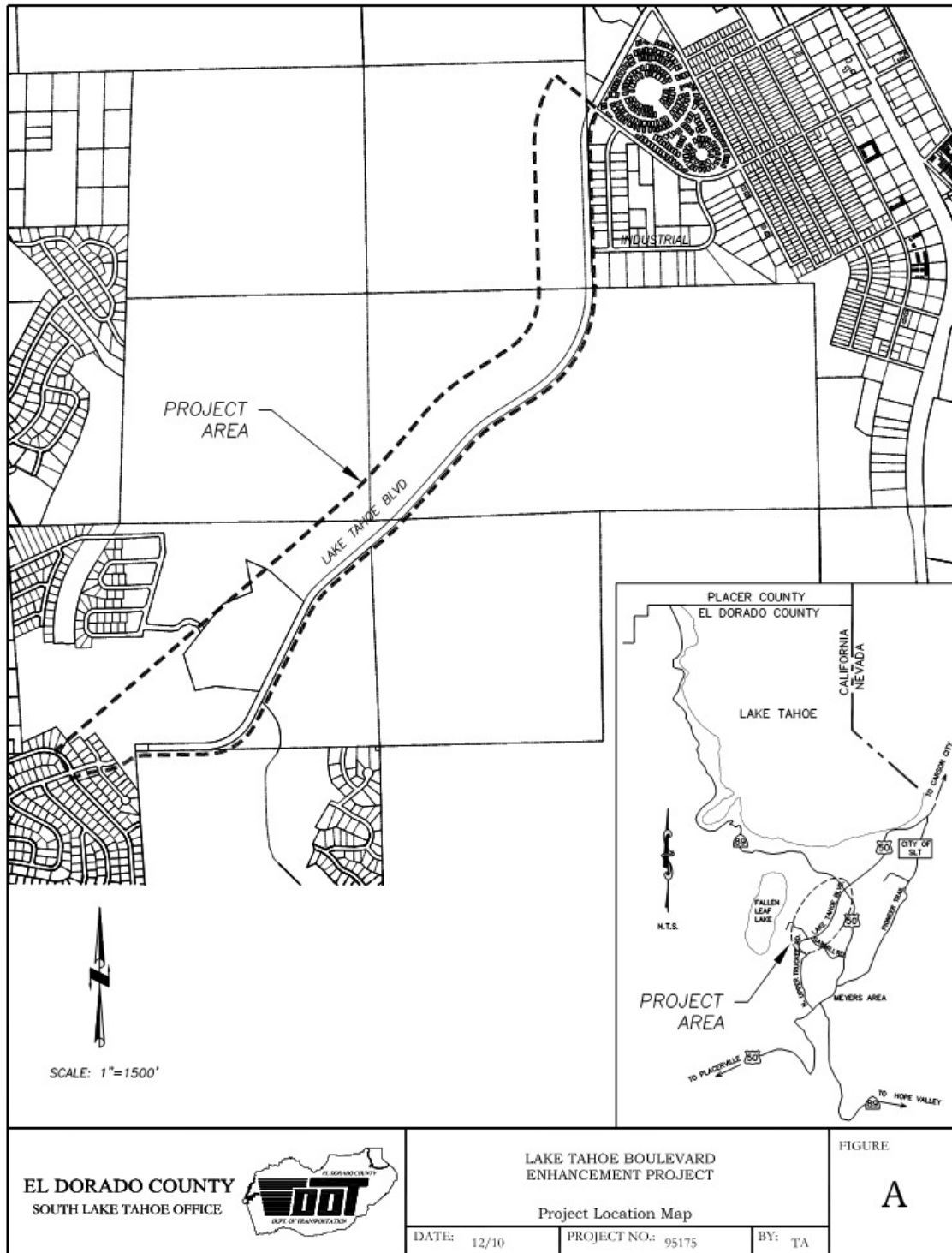
The Proposed Project is also intended to provide a critical link in the regional bicycle path network. The Proposed Project supports TRPA's and the Tahoe Metropolitan Planning Organization's (TMPO) "2010 Lake Tahoe Region Bicycle and Pedestrian Plan" (Plan). The goals of the Plan are to provide access to local businesses, schools, and offices for bicyclists and pedestrians, to reduce vehicular transportation, and to enhance recreational opportunities within the Lake Tahoe Basin (Basin). The Plan serves as the Bicycle and Pedestrian element to both the TMPO Regional Transportation Plan (Mobility 2030), and the TRPA Transportation Plan. This Proposed

Project is being designed and constructed with financial assistance from the State of California, the United States Forest Service - Lake Tahoe Basin Management Unit (USFS-LTBMU), Caltrans Congestion Mitigation for Air Quality (CMAQ) Program and TRPA mitigation funds.

The Proposed Project is located in eastern El Dorado County, in the Lake Tahoe Basin, along Lake Tahoe Boulevard (Figure A). The Proposed Project will install a Class 1 and Class 2 bicycle facility along Lake Tahoe Boulevard between Clear View Drive and Viking Road and will implement erosion control and water quality improvement measures along Lake Tahoe Boulevard. The Proposed Project is also intended to reduce nutrient and sediment loading to nearby waterways and to treat storm run-off from the existing roadway infrastructure by installing appropriate Best Management Practices (BMP). The County sees tremendous value in installing the Proposed Project for the benefit of the residents of El Dorado County and for the visitors to the Lake Tahoe Region.

The Proposed Project is intended to improve recreation, access, water quality and stream environment zone (SEZ) quality by constructing a bicycle path, by removing coverage in an SEZ and by reducing erosion and treating storm water runoff from the existing roadway infrastructure within the Project corridor by installing appropriate best management practices. A more detailed description of the Proposed Project can be found in Section 2.4 below. Figures 1 - 4 outline the Proposed Project alternative, and can be found at the end of this Initial Study.

Figure A



2.1 Project Need, Goals, Objectives & Existing Conditions

Project Need

In order to satisfy the recreational, water quality and erosion control objectives of the Proposed Project, the Project Development Team (PDT) identified recreational, SEZ, erosion, water quality and drainage/infrastructure problems within the Project area. The PDT investigated several factors, including but not limited to: topography, land ownership, connectivity to existing and future bike paths, public safety, American Disabilities Act (ADA) laws, cost, erosion source control, hydraulic design, and treatment of runoff. The resource areas being addressed as part of the Proposed Project are listed on TRPA's EIP project list as the following project numbers:

- ☐ #991 – Soil Conservation/SEZ Threshold
- ☐ #10036 – Air Quality/Transportation, Recreation
- ☐ #10065 – Water Quality

The Proposed Project will affect the following threshold indicators as defined in the EIP:

EIP #	Threshold Indicator
991	Multi-Use Trails
991	Hard Coverage
991	Naturally-Functioning SEZ
10036	Naturally-Functioning SEZ
10036	Vehicle Miles Traveled
10065	Runoff Water
10065	Pelagic Lake Tahoe Winter Water Clarity
10065	Groundwater

Project Goals

The following Project goals were recommended by the PDT to guide the Proposed Project and decisions regarding design, formulating alternatives, and planning of improvements:

1. Implementation of the Lake Tahoe Boulevard (LTB) Enhancement Project shall be consistent with General Plans, Master Plans, Community Plans, and other applicable elements of the TRPA Regional Plan. The LTB Enhancement Project should be consistent with the programmatic goals for recreation access of the California Tahoe Conservancy (CTC) and the US Forest Service (USFS).
2. Implementation of the LTB Enhancement Project should collaborate with adjoining property owners, as well as neighborhoods served by the Project, to find mutual benefit and meet Project objectives.
3. El Dorado County must meet its commitment to achieve Basin objectives through the LTB Enhancement Project in carrying out the County's environmental stewardship obligation under Basin restoration efforts.
4. Improvements/modifications to LTB should be implemented to reduce motor vehicle speeds in the corridor and accidents associated with speed and improve overall safety.
5. Traffic calming measures shall be considered at the LTB and Sawmill Road (SR) intersection to facilitate safe bicycle and pedestrian crossing from the Sawmill 2 Bike Trail to the LTB bicycle facility, National Forest lands, and associated trails, as well as create an accommodating environment in and around the Sawmill Pond area which is a popular destination for families. The LTB and SR intersection exhibits dangerous roadway characteristics and driver behavior. A particular area of concern is the curve in LTB west of SR.
6. The roadway shall include wide paved shoulders such that automobiles may pull off onto them to allow emergency vehicles to bypass in the through travel lanes. This is especially helpful in light of the Angora Fire.

Project Objectives

The Project objectives represent physical conditions that can be measured to assess the success of the Proposed Project in achieving the outlined goals. The LTB Enhancement Project will conform to the Preferred Design Approach as detailed in the Storm Water Quality Improvement Committee (SWQIC) process.

The objective of the Proposed Project is to improve recreational opportunities and accessibility, bicycle and pedestrian safety, scenic resources, and air and water quality by:

1. Providing a bike trail link that is part of TMPO's and TRPA's *2010 Lake Tahoe Region Bicycle and Pedestrian Plan*.
2. Providing access to local businesses, schools, and the South "Y" Transit Center.
3. Reducing Vehicle Miles Traveled (VMT).
4. Improving safety of the Lake Tahoe Boulevard corridor.
5. Improving aesthetics along Lake Tahoe Boulevard via landscaping.
6. Enhancing recreational opportunities within the Tahoe Basin.
7. Restoring SEZ.
8. Reducing peak runoff rate.
9. Capturing fine and coarse sediment
10. Reducing storm water runoff volume.
11. Treating runoff before it reaches the Upper Truckee River and other nearby waterways.
12. Stabilizing eroding cut slopes.
13. Stabilizing roadside ditches.
14. Capturing road sand/cinders to prevent discharge.
15. Providing for a more accommodating environment through reductions in speeds and vehicle conflicts.

Existing Watershed Conditions

Sub watershed LTB-1

Sub-watershed LTB-1 consists of approximately 15.2 acres, of which approximately 5.5% is impervious roadways. The smallest watershed in the Project area extends generally to the north of LTB, in the vicinity of Tahoe Mountain Road (TMR) and Boulder Mountain Road (BMR). The County right-of-way portion of the watershed is approximately 1.7 acres. Watershed LTB-1 includes a small number of houses along BMR with additional impervious surfaces. The highest point in the watershed is at approximately the 6443' elevation, with the outfall point at approximately the 6365' elevation.

Runoff from the lower portion of BMR currently collects at the intersection of LTB and BMR and then flows along the north side of LTB in a roadside channel and a section of eroding channel to the inlet of culvert LTB1. Another section of eroding channel on the west side of TMR also leads to the inlet of culvert LTB1. The existing 18 inch outfall culvert LTB1 is located at the intersection of LTB and TMR and conveys runoff beneath TMR. This culvert discharges into a section of eroding channel followed by open meadow before reaching the watershed LTB-2 outfall culvert LTB2.

Treatment

Water quality treatment options for storm water include the installation of a sediment trap at the intersection of LTB and BMR, and a culvert to connect to the existing storm drain beneath LTB at BMR. The installation of armored channels in both eroding channels leading to the inlet of culvert LTB1. Two sediment traps are proposed at the culvert inlet. Replacement of the existing culvert is proposed, including a flared end section at the outlet. The culvert outlet channel is also proposed to be armored to a point where the existing channel is less steep and stable. Runoff from watershed LTB-1 discharges into watershed LTB-2 and the open meadow between TMR and SR, a natural resource for water quality treatment.

Sub watershed LTB-2

Sub-watershed LTB-2 consists of approximately 139.7 acres, of which approximately 2.3% is impervious roadways. The third largest watershed in the Project area extends generally to the north of LTB, between TMR and SR. The County right-of-way portion of the watershed is approximately 10.3 acres. Watershed LTB-2 includes a large number of houses along the upper part of BMR and Iron Mountain Circle with additional impervious surfaces. The highest point in the watershed is at approximately the 7000' elevation, with the outfall point at approximately the 6320' elevation.

The existing 24 inch outfall culvert LTB2 is located at the low point of a large area of open meadow bisected by LTB. Runoff from watershed LTB-1 also reaches this point after flowing across the open meadow. Culvert LTB2 conveys runoff beneath LTB into the lower part of the open meadow and eventually Angora Creek.

Treatment

Water quality treatment options for storm water include replacement of the existing 24 inch culvert LTB2, including flared end sections and rock dissipaters at the inlet and outlet. Also the installation of three sediment traps connected to culvert LTB2 in the road median area is proposed. Also proposed is the installation of a new 24 inch culvert beneath LTB approximately 300 feet to the east, including installation of three sediment traps connected to the new culvert in the road median area, and flared end sections and rock dissipaters at the inlet and outlet. This new culvert is proposed to alleviate chronic flooding of the roadway and split a portion of the meadow runoff to other parts of the downstream meadow. This new culvert also includes the installation of three sediment traps connected to the new culvert in the road median area. Runoff from watersheds LTB-1&2 ultimately reaches the lower portion of the open meadow between TMR and SR, a natural resource for water quality treatment.

Sub watershed LTB-3

Sub-watershed LTB-3 consists of approximately 68.2 acres, of which approximately 3.1% is impervious roadways. The fifth largest watershed in the Project area is located generally to the north of LTB, including the middle portion of TMR and Forest Mountain Drive (FMD). The County right-of-way portion of the watershed is approximately 4.3 acres. Watershed LTB-3 includes a small number of houses along BMR and FMD with additional impervious surfaces. The highest point in the watershed is at approximately the 6950' elevation, with the outfall point at approximately the 6357' elevation.

The existing 24 inch outfall culvert LTB3 is located on USFS property approximately 600 feet north of the intersection of SR. This culvert conveys runoff beneath the existing dirt trail into a section of eroding channel on USFS property then into the outfall culvert LTB4 of watershed LTB-4.

Treatment

The following proposed treatment option only applies to Alternatives 1, 3A, 3B, and 4.

Water quality treatment options for storm water include the construction of a sediment basin near the outlet of culvert LTB3. The proposed sediment basin will be located within a disturbed area just south and east of culvert LTB3. Armored channel is proposed from the outlet of culvert LTB3 to the proposed basin and out of the basin back to the existing downstream channel.

Sub watershed LTB-4

Sub-watershed LTB-4 consists of approximately 155.8 acres, of which approximately 3.6% is impervious roadways. The second largest watershed in the Project area is located generally to the north of LTB, in the vicinity of the upper part of TMR including a large portion of the Angora Highlands subdivision. The County right-of-way portion of the watershed is approximately 11.3 acres. Watershed LTB-4 also includes a large number of houses along BMR and the Angora Highlands subdivision with additional impervious surfaces. The highest point in the watershed is at approximately the 7125' elevation, with the outfall point at approximately the 6337' elevation.

The existing 18 inch outfall culvert LTB4 is located just east of the intersection of SR and conveys runoff from watersheds LTB-3&4 beneath LTB to the south into the outlet channel of Sawmill Pond.

Treatment

Water quality treatment options for storm water include the installation of three sediment traps at the inlet of culvert LTB4. Replacement of the existing culvert LTB4 is proposed, including a flared end section and rock dissipater at the outlet. The installation of armored channel leading to the proposed sediment traps at the inlet of the culvert is also proposed. Also the installation of three sediment traps connected to culvert LTB4 in the road median area will occur. Runoff from watersheds LTB-3&4 ultimately reaches the Sawmill Pond outlet channel leading to the open meadow between TMR and SR, a natural resource for water quality treatment.

Sub watershed LTB-5

Sub-watershed LTB-5 consists of approximately 114.6 acres, of which approximately 1.3% is impervious roadways. The fourth largest watershed in the Project area is located generally to the north of LTB, and east of SR. The County right-of-way portion of the watershed is approximately 1.8 acres. Watershed LTB-5 does not include any additional impervious surfaces. The highest point in the watershed is at approximately the 7125' elevation, with the outfall point at approximately the 6350' elevation.

The existing 18 inch outfall culvert LTB5 is located just east of the intersection of SR and conveys runoff beneath LTB into the east end of Sawmill Pond.

Treatment

Water quality treatment options for storm water include the installation of two sediment traps at the inlet of culvert LTB5. Replacement of the existing culvert LTB5 is proposed, including a flared end section rock dissipater at the outlet. The installation of armored channel leading to the proposed sediment traps at the inlet of the culvert, along with the installation of two sediment traps connected to culvert LTB5 in the road median area are also proposed. Runoff from watershed LTB-5 discharges into Sawmill Pond.

Sub watershed LTB-6

Sub-watershed LTB-6 consists of approximately 304.6 acres, of which approximately 0.01% is impervious roadways. The largest watershed in the Project area is located generally to the north of LTB, on the eastern end of the Project area to D Street/Viking Road. The County right-of-way portion of the watershed is approximately 5.8 acres. Watershed LTB-6 does not include any additional impervious surfaces. The highest point in the watershed is at approximately the 7125' elevation, with the outfall point at approximately the 6287' elevation.

The runoff from watershed LTB-6 eventually reaches the existing large sediment basin on City of South Lake Tahoe property installed after the Angora Fire, prior to discharging into the 30 inch outfall culvert crossing LTB at D Street.

Treatment

Water quality treatment options for storm water include the diversion of the western most portion of the LTB roadside channel. The channel diversion is proposed to direct the flows into a large, well vegetated natural channel treatment area on the north side of LTB. This channel then reenters the roadside channel just downstream of culvert LTB7, eventually reaching the existing large sediment basin at LTB and D Street/Viking Road.

Sub watershed LTB-7

Sub-watershed LTB-7 consists of approximately 48.8 acres, of which approximately 0.3% is impervious roadways. The seventh largest watershed in the Project area is located generally to the south of LTB, on the eastern end near Industrial Ave. The County right-of-way portion of the watershed is approximately 0.5 acres. Watershed LTB-7 does not include any additional impervious surfaces. The highest point in the watershed is at approximately the 7008' elevation, with the outfall point at approximately the 6320' elevation.

The existing 18 inch outfall culvert LTB7 is located just west of the intersection of IA and conveys runoff beneath LTB to the north into watershed LTB-6.

Treatment

Water quality treatment options for storm water include the installation of two sediment traps at the inlet of culvert LTB7. Replacement of the existing culvert LTB7 is proposed, including a flared end section and armored channel

at the outlet. Runoff from Watershed LTB-7 discharges into the roadside channel on the north side of LTB, eventually reaching the existing large sediment basin at LTB and D Street/Viking Road.

Sub watershed LTB-8

Sub-watershed LTB-8 consists of approximately 49.9 acres, of which approximately 4.6% is impervious roadways. The sixth largest watershed in the Project area is located generally to the south of LTB, on the eastern end of the Project. The County right-of-way portion of the watershed is approximately 2.9 acres. Watershed LTB-8 does not include any additional impervious surfaces. The highest point in the watershed is at approximately the 6467' elevation, with the outfall point at approximately the 6353' elevation.

The existing 18 inch outfall culvert LTB-8 is located west of the intersection of IA and conveys runoff beneath LTB to the north into watershed LTB-6.

Treatment

Water quality treatment options for storm water include the installation of two sediment traps at the inlet of culvert LTB8. Replacement of the existing culvert LTB8 is proposed, including flared end sections and rock dissipaters at the inlet and outlet. Also the installation of three sediment traps connected to culvert LTB8 in the road median area is proposed. Watershed LTB-8 treatment area is the same as watershed LTB-6. Proposed improvements include diverting the runoff into the existing large well vegetated natural channel treatment area on the north side of LTB. This channel then reenters the LTB roadside channel, just downstream of culvert LTB7, eventually reaching the existing large sediment basin at LTB and D Street/Viking Road.

2.2 Project Approach

The County followed the Storm Water Quality Improvement Committee (SWQIC) guidelines and the guidance outlined in the Formulating and Evaluating Alternatives for Water Quality Improvement Projects document in developing and selecting the Preferred Project Alternative. The PDT investigated a range of possibilities for the bike path and water quality improvements in the Project area. The process of evaluating and selecting a preferred alternative for this Proposed Project included the production and analysis of the following documents:

- Draft Existing Conditions and Feasibility Report (Stantec 2008)
- Final Existing Conditions and Feasibility Report (Stantec 2008)
- Draft Project Alternatives Evaluation Report (County 2011)
- Final Project Alternatives Evaluation Report (County 2011)
- Preferred Alternative Report (County 2011)

The County first developed a Draft Existing Conditions and Feasibility Report (ECFR) in July 2008. In order to inform the public of the final version of that report, a public meeting was held to present the feasible options for the Project and to obtain feedback from the community on what key components they were interested in for the Project. That public meeting provided critical feedback from the community that was utilized to develop the Final ECFR in December 2008.

The County then had to focus on other project priorities and deliverables, and some time lapsed until it was able to produce a Draft Project Alternatives Evaluation Report (PAER) in April 2011. The County considered the feedback from the PDT and revised the Draft PAER prior to releasing it to the public. The County then held another public meeting on April 29, 2011 to present the Project Alternatives to the community and to again receive feedback on which Project Alternative was preferred by the public. Over 200 comments were received as a result of the County public outreach efforts. This feedback was invaluable to helping the County to provide a Project that the community would value and support.

It was evident from the comments that the public favored PAER Project Alternative 3, although many varying opinions favoring different Alternatives were noted. Because of the support of Alternative 3, the County wanted to further explore that Alternative to ensure that all feasible options were investigated on how best to connect the bike path through the wet meadow area south of Sawmill Road. As a result, the County developed Alternatives 3A and 3B, which were slightly different versions of the original PAER Alternative 3. The County produced a website to disseminate the information focusing on Alternatives 3A and 3B. The County also met with a reporter from the local print media, Tahoe Daily Tribune, in order to publicize the information contained in the website. After incorporating all of the feedback that it received and after further discussions with PDT members and County

managers, the Final PAER was produced in July 2011. That report was published on the County website and made available for review at the County Department of Transportation (DOT) office.

The County focused on safety as its number one priority, while looking for a Project that could be built within budget and that met the goals and objectives outlined for the Project. The County continually received and digested feedback on the two Project Alternatives (3A and 3B) that it presented on the website. After considering the two final Project Alternatives, the County decided, based on all the feedback that was received, to select Alternative 3B as the Preferred Project Alternative (Proposed Project). The County feels this Project most adequately satisfies the goals and objectives of the Project and can be feasibly constructed. The Proposed Project is described below.

2.3 Concept Alternatives

In order to meet the recreational and erosion control portions of the Project goals and objectives, the do nothing alternative was not considered. This is because the bike path must be constructed for the entire length of Lake Tahoe Boulevard between D Street/Viking Road and Clear View Drive for the Project goals and objectives to be met. Also, because each aspect of the erosion control mitigation process addresses different objectives, without implementation of each aspect, the benefits of one measure could be negated. If designed, constructed, and properly maintained, each alternative will meet the goals and objectives of the Proposed Project.

Alternatives 1, 2, 3A, 3B, 4, 5, and 6 are presented below. The combinations of various alternatives for bike path design, bike path alignment, source control, hydraulic design and treatment are all based on economically achieving the Proposed Project goals and objectives.

Alternative 1

Alternative 1 is shown in Exhibit 1 and Figures 1A, 1B, and 1C, and consists of the following components:

- ❑ Install Class 2 bike lanes along Lake Tahoe Boulevard (LTB) from Clear View Drive (CVD) to Tahoe Mountain Road (TMR).
- ❑ Install Class 2 bike lanes within the existing outside lanes of LTB from TMR to Sawmill Road (SR).
- ❑ Install Class 1 bike path on the north side of LTB along the existing dirt path on USFS property from SR to D Street/Viking Road (VR).

The proposed western portion of the Class 2 bike lanes will connect to the existing Class 2 bike lanes along LTB that end at CVD. Class 2 bike lanes are proposed on both sides of the existing two lanes of LTB from CVD to TMR. Additional minor pavement width will be required in this section to include the bike lanes.

Continuing east, Class 2 bike lanes are proposed along LTB within the two existing outside travel lanes from TMR to the intersection of SR, reducing this section of LTB from four lanes to two lanes. This section also includes a speed limit reduction from 45 mph to 35 mph. The proposed bike lanes in this section will include a five foot separation from the inside travel lanes for bicycle and pedestrian safety. The additional road width will be maintained to utilize the bike lane and 5 foot separation to accommodate emergency vehicles or special traffic control situations. The future Sawmill 2 Bike Path is proposed to end at the intersection of LTB and SR where the LTB bike lanes will link with the proposed Sawmill 2 Bike Path. A crosswalk and pedestrian warning light is proposed at this location to provide a safe crossing for pedestrians. This LTB crossing at SR will also link the Sawmill 2 Bike Path to the Class 2 bike lanes along LTB to the west and the proposed Class 1 bike path along the existing dirt path to the east.

The eastern section of the proposed Class 1 bike path begins on the north side of LTB at the intersection of SR. This section of the Class 1 bike path will generally follow the existing dirt path on the north side of LTB to the intersection of LTB and D Street/Viking Road. This portion of the bike path will require the installation of approximately six culvert crossings to convey runoff from the uphill watersheds beneath the bike path. The Class 1 bike path will consist of an eight foot wide paved path with a two foot wide wood chip shoulder (clear-zone) on both sides of the bike path. The bike path is proposed to span stream environment zone (SEZ) areas with new culverts and improved upstream and downstream channels. These areas slated for improvement are at existing drainages along the existing dirt path. This section of the proposed bike path will link to the existing Class 2 bike lanes along LTB ending at the intersection of VR and LTB.

This alternative requires that a Special Use Permit be obtained from public property owners along the north side of LTB (USFS and City of South Lake Tahoe).

Erosion Control Component

- ☐ Revegetate eroding slopes and bare areas to provide source control.
- ☐ Armor eroding conveyance channels to provide source control.

The primary focus for erosion control will be to provide source control on eroding roadside slopes and on bare road shoulders. Revegetation techniques will be used on eroding slopes and other bare eroding areas. Source control will also be achieved by armoring or vegetation lining portions of the bare soil conveyance ditches along LTB.

Hydraulic Conveyance Component

- ☐ Replace failing or undersized culverts to prevent road damage and flooding.
- ☐ Modify channels to correctly size conveyance upstream and downstream of culverts.
- ☐ Install one drainage inlet to collect road runoff into the existing storm drain system at the intersection of LTB and BMR.
- ☐ Install new culverts beneath the newly proposed bike path.

Hydraulic conveyance will primarily be enhanced by upgrading failing or undersized culverts that exist along LTB. Also, as mentioned above, new culverts will be installed to properly convey upland runoff beneath the newly proposed bike path. Channel armoring upstream and downstream of culverts will enhance conveyance to minimize road and bike path damage and flooding.

Water Quality Component

- ☐ Install sediment traps, one sediment/infiltration basin and rock bowls to trap sediment and infiltrate runoff.

Water quality treatment options for storm water include sediment traps, rock bowls, and sediment basins.

SEZ Enhancement Component

- ☐ SEZ enhancement will be achieved via installation of an additional culvert or bottom-less arch crossing LTB at a different location to increase hydraulic connectivity by routing previously diverted flows to additional parts of the SEZ to increase the stream zone treatment area.

Safety Component

- ☐ Safety improvements/traffic calming will be accomplished via reduction of LTB from four lanes to two lanes with an accompanying speed limit reduction from 45 mph to 35 mph from TMR to SR.
- ☐ Safety improvements will be installed including a pedestrian crosswalk and flashing beacon for crossing LTB at the intersection of SR.
- ☐ A separation of 5 feet is designed between the bike lane and the traffic lane.

Land Coverage Component

- ☐ Hard land coverage will be increased by approximately 71,352 ft², however due to the existing soft coverage on the forest path, that overall amount of added coverage will be significantly less due to the fact that there is a no net increase in coverage from soft to hard coverage.

Road Lane Component

- ☐ Lanes will be reduced to one lane in each direction for the section of LTB between TMR and SR. All other lane configurations remain unchanged.

Alternative 2

Alternative 2 is shown in Exhibit 2 and Figures 2A, 2B, and 2C, and consists of the following components:

Bike Path and Bike Lane Component

- ❑ Install Class 2 bike lanes along Lake Tahoe Boulevard (LTB) from Clear View Drive (CVD) to Tahoe Mountain Road (TMR).
- ❑ Install Class 2 bike lanes within the existing outside lanes of LTB from TMR to 400 feet southwest of the intersection of Industrial Ave (IA).
- ❑ Install Class 2 bike lanes along LTB from approximately 400 feet southwest of the intersection of Industrial Ave on both sides of the existing four lane road. An additional four feet of pavement width will be required on both sides of LTB to accommodate the bike lanes.

The proposed western portion of the Class 2 bike lanes will connect to the existing Class 2 bike lanes along LTB that end at CVD. Class 2 bike lanes are proposed on both sides of the existing two lanes of LTB from CVD to TMR. Additional minor pavement width will be required in this section to include the bike lanes.

Continuing east, Class 2 bike lanes are proposed along LTB within the two existing outside travel lanes from TMR to the intersection of SR, reducing this section of LTB from four lanes to two lanes. This section also includes a speed limit reduction from 45 mph to 35 mph. The proposed bike lanes in this section will include a five foot separation from the existing inside travel lanes for bicycle and pedestrian safety. The additional road width will be maintained to utilize the bike lane and five foot separation to accommodate emergency vehicles or special traffic control situations. The future Sawmill 2 Bike Path is proposed to end at the intersection of LTB and SR where the proposed LTB bike lanes will link with the proposed Sawmill 2 Bike Path. A crosswalk and pedestrian warning light is proposed at this location to provide a safe crossing for pedestrians.

Continuing east, Class 2 bike lanes are proposed along LTB within the two existing outside travel lanes from SR to approximately 400 feet southwest of the intersection of (IA), reducing this section of LTB from four lanes to two lanes. This section also includes a speed limit reduction from 55 mph to 45 mph. The proposed bike lanes in this section will include a five foot separation from the inside travel lanes.

Continuing east, Class 2 bike lanes are proposed along LTB from approximately 400 feet southwest of the intersection of IA on both sides of the existing four lane road. This portion of the roadway is proposed to remain a four lane road due to the high volume of truck traffic in this location. This section of the proposed bike lanes will link to the existing Class 2 bike lanes along LTB ending at the intersection of VR and LTB. An additional four feet of pavement width will be required on both sides of LTB to accommodate the bike lanes.

Erosion Control Component

- ❑ Revegetate eroding slopes and bare areas to provide source control.
- ❑ Armor eroding conveyance channels to provide source control.

The primary focus for erosion control will be to provide source control on eroding roadside slopes and on bare road shoulders. Revegetation techniques will be used on eroding slopes and other bare eroding areas. Source control will also be achieved by armoring or vegetation lining portions of the bare soil conveyance ditches along LTB.

Hydraulic Conveyance Component

- ❑ Replace failing or undersized culverts to prevent road damage and flooding.
- ❑ Modify channels to correctly size conveyance upstream and downstream of culverts.
- ❑ Install drainage inlets to collect road runoff into storm drain system.

Hydraulic conveyance will primarily be enhanced by upgrading failing or undersized culverts that exist along LTB. Channel armoring upstream and downstream of culverts will enhance conveyance to minimize road and bike path damage and flooding.

Water Quality Component

- ❑ Install sediment traps and rock bowls to trap sediment.

Water quality treatment options for storm water include sediment traps, rock bowls, and sediment basins.

SEZ Enhancement Component

- ❑ SEZ enhancement will be achieved via installation of an additional culvert or bottom-less arch crossing LTB at a different location to increase hydraulic connectivity by routing previously diverted flows to additional parts of the SEZ to increase the stream zone treatment area.

Safety Component

- ❑ Safety improvements/traffic calming will be accomplished via reduction of LTB from four lanes to two lanes with an accompanying speed limit reduction from 45 mph to 35 mph from TMR to SR, and 55 mph to 45 mph from SR to IA.
- ❑ Safety improvements will be installed including a pedestrian crosswalk and flashing beacon for crossing LTB at the intersection of SR.
- ❑ A separation of five feet is designed between the bike lane and the traffic lane.

Land Coverage Component

- ❑ Land coverage will be increased by approximately 16,584 ft² due to added pavement width within the road shoulder area. This area is most likely already considered soft coverage, which will therefore create a no net increase in coverage.

Road Lane Component

- ❑ Lanes will be reduced to one lane in each direction for the section of LTB between TMR and approximately 400 feet west of IA. All other lane configurations remain unchanged.

Alternative 3A

Alternative 3A is shown in Exhibit 3 and Figures 3A, 3B, and 3C, and consists of the following components:

Bike Path and Bike Lane Component

- ❑ Install Class 2 bike lanes along Lake Tahoe Blvd. (LTB) from Clear View Drive (CVD) to Tahoe Mountain Road (TMR).
- ❑ Install Class 1 bike path on the north side of LTB along the existing dirt path on USFS property from TMR to the intersection of Sawmill Road (SR).
- ❑ Install Class 1 bike path on the north side of LTB along the existing dirt path on USFS property from the intersection of SR to D Street/Viking Road (VR).

The proposed western portion of the Class 2 bike lanes will connect to the existing Class 2 bike lanes along LTB that end at CVD. Class 2 bike lanes are proposed on both sides of the existing two lanes of LTB from CVD to TMR. Additional minor pavement width will be required in this section to include the bike lanes.

Continuing east, the proposed Class 1 bike path begins on the north side of LTB at the intersection of TMR. Two crosswalks and pedestrian warning lights are proposed at this location to provide a safe crossing to link the Class 2 bike lanes along LTB and the proposed Class 1 bike path to the east. This section of the Class 1 bike path generally follows the existing dirt path on the north side of LTB to the intersection of LTB and SR. This portion of the bike path will require the installation of approximately 120' of elevated bike path to span a section of meadow and stream zone. This portion of the Class 1 bike path will consist of an eight foot wide paved path with a two foot wide wood chip shoulder (clear-zone) on both sides of the path. The future Sawmill 2 Bike Path is proposed to end at the intersection of LTB and SR where the LTB bike lanes will link with the proposed Sawmill 2 Bike Path. A crosswalk and pedestrian warning light is proposed at this location to provide a safe crossing for pedestrians. This LTB crossing at SR will link the Sawmill Bike Path to the proposed Class 1 bike path to the east and west.

Continuing east, the proposed Class 1 bike path begins on the north side of LTB at the intersection of SR. This section of the Class 1 bike path generally follows the existing dirt path on the north side of LTB to the intersection of LTB and D Street/Viking Road. This portion of the bike path will require the installation of approximately six culvert crossings to convey runoff from the uphill watersheds beneath the bike path. This portion of the Class 1 bike path will consist of an eight foot wide paved path with a two foot wide wood chip shoulder (clear-zone) on both sides of the path. The bike path is proposed to span stream environment zone (SEZ) areas with new culverts and improved upstream and downstream channels. These areas slated for improvement are at existing drainages along the existing dirt path. This section of the proposed bike path will link to the existing Class 2 bike lanes along LTB ending at the intersection of VR and LTB.

This alternative requires that a Special Use Permit can be obtained from public property owners along the north side of LTB (USFS and City of South Lake Tahoe).

Erosion Control Component

- ☐ Revegetate eroding slopes and bare areas to provide source control.
- ☐ Armor eroding conveyance channels to provide source control.

The primary focus for erosion control will be to provide source control on eroding roadside slopes and on bare road shoulders. Revegetation techniques will be used on eroding slopes and other bare eroding areas. Source control will also be achieved by armoring or vegetation lining portions of the bare soil conveyance ditches along LTB.

Hydraulic Conveyance Component

- ☐ Replace failing or undersized culverts to prevent road damage and flooding.
- ☐ Modify channels to correctly size conveyance upstream and downstream of culverts.
- ☐ Install drainage inlets to collect road runoff into storm drain system.
- ☐ Install new culverts beneath the newly proposed bike path.

Hydraulic conveyance will primarily be enhanced by upgrading failing or undersized culverts that exist along LTB. Also, as mentioned above, new culverts will be installed to properly convey upland runoff beneath the newly proposed bike path. Channel armoring upstream and downstream of culverts will enhance conveyance to minimize road and bike path damage and flooding.

Water Quality Component

- ☐ Install sediment traps, one sediment basin, and rock bowls to trap sediment and infiltrate runoff.

Water quality treatment options for storm water include sediment traps, rock bowls, and sediment basins.

SEZ Enhancement Component

- ☐ SEZ enhancement will be achieved via installation of an additional culvert or bottom-less arch crossing LTB at a different location to increase hydraulic connectivity by routing previously diverted flows to additional parts of the SEZ to increase the stream zone treatment area.

Safety Component

- ☐ Safety improvements will be installed including a pedestrian crosswalk and flashing beacon for crossing LTB at the intersections of SR and TMR.
- ☐ A greater percentage of the bike path is located away from the roadway which increases bicycle and pedestrian safety.

Land Coverage Component

- ☐ Hard land coverage will be increased by approximately 86,264 ft², however due to the existing soft coverage on the forest path, that overall amount of added coverage will be significantly less due to the fact that there is a no net increase in coverage from soft to hard coverage.

Road Lane Component

- ❑ All lane configurations remain unchanged.

Alternative 3B

Alternative 3B is shown in Exhibit 4 and Figures 4A, 4B, and 4C, and consists of the following components:

Bike Path and Bike Lane Component

- ❑ Install Class 2 bike lanes along Lake Tahoe Blvd. (LTB) from Clear View Drive (CVD) to Tahoe Mountain Road (TMR).
- ❑ Install Class 1 bike lanes within the existing outside lanes of LTB from TMR to Sawmill Road (SR). Remove and restore approximately four feet of pavement in the eastbound lanes and four feet of pavement in the westbound lanes of LTB.
- ❑ Install Class 1 bike path on the north side of LTB along the existing dirt path on USFS property from SR to VR.

The proposed western portion of the Class 2 bike lanes will connect to the existing Class 2 bike lanes along LTB that end at CVD. Class 2 bike lanes are proposed on both sides of the existing two lanes of LTB from CVD to TMR. Additional minor pavement width will be required in this section to include the bike lanes.

Continuing east, Class 2 bike lanes are proposed along LTB within the two existing outside travel lanes from TMR to the intersection of SR, reducing this section of LTB from four lanes to two lanes. This section also includes a speed limit reduction from 45 mph to 35 mph. The proposed six foot bike/pedestrian lanes in this section will be next to 12 foot wide inside travel lanes, which will have two foot paved shoulders. Approximately two feet of pavement is proposed to be removed and restored on both sides of LTB, totaling four feet of pavement removal. The future Sawmill 2 Bike Path is proposed to end at the intersection of LTB and SR where the LTB bike lanes will link with the proposed Sawmill 2 Bike Path. A crosswalk, a pedestrian refuge island and pedestrian actuated signals are proposed at this location to provide a safe crossing for pedestrians. This LTB crossing at SR will link the Sawmill Bike Path to the Class 2 bike lanes along LTB and the proposed Class 2 bike path to the east.

The eastern section of the proposed Class 2 bike path begins on the north side of LTB at the intersection of SR. This section of the Class 1 bike path generally follows the existing dirt path on the north side of LTB to the intersection of LTB and VR. This portion of the bike path will require the installation of approximately six culvert crossings to convey runoff from the uphill watersheds beneath the bike path. This portion of the Class 1 bike path will consist of an eight foot wide paved path with a two foot wide wood chip shoulder (clear-zone) on both sides of the path. The bike path is proposed to span stream environment zone (SEZ) areas with new culverts and improved upstream and downstream channels. These areas slated for improvement are at existing drainages along the existing dirt path. This section of the proposed bike path will link to the existing Class 2 bike lanes along LTB ending at the intersection of VR and LTB.

This alternative requires that a Special Use Permit be obtained from public property owners along the north side of LTB (USFS and City of South Lake Tahoe).

Erosion Control Component

- ❑ Revegetate eroding slopes and bare areas to provide source control.
- ❑ Armor eroding conveyance channels to provide source control.

The primary focus for erosion control will be to provide source control on eroding roadside slopes and on bare road shoulders. Revegetation techniques will be used on eroding slopes and other bare eroding areas. Source control will also be achieved by armoring or vegetation lining portions of the bare soil conveyance ditches along LTB.

Hydraulic Conveyance Component

- ❑ Replace failing or undersized culverts to prevent road damage and flooding.
- ❑ Modify channels to correctly size conveyance upstream and downstream of culverts.

- ☐ Install drainage inlets to collect road runoff into storm drain system.
- ☐ Install new culverts beneath the newly proposed bike path.

Hydraulic conveyance will primarily be enhanced by upgrading failing or undersized culverts that exist along LTB. Also, as mentioned above; new culverts will be installed to properly convey upland runoff beneath the newly proposed bike path. Channel armoring upstream and downstream of culverts will enhance conveyance to minimize road and bike path damage and flooding.

Water Quality Component

- ☐ Install sediment traps, one sediment basin, rock bowls, and flow spreaders, to trap sediment and infiltrate runoff.
- ☐ Remove pavement in SEZ for water quality treatment.

Water quality treatment options for storm water include sediment traps, rock bowls, and sediment basins.

SEZ Enhancement Component

- ☐ SEZ enhancement will be achieved via installation of an additional culvert or bottom-less arch crossing LTB at a different location to increase hydraulic connectivity by routing previously diverted flows to additional parts of the SEZ to increase the stream zone treatment area.
- ☐ Pavement removal and revegetation from TMR to SR.

Safety Component

- ☐ Safety improvements/traffic calming will be accomplished via reduction of LTB from four lanes to two lanes with an accompanying speed limit reduction from 45 mph to 35 mph from TMR to SR.
- ☐ A two foot paved shoulder will provide safety adjacent to the 12 foot travel lane and the six foot wide Class 2 bike path will provide pedestrians with an enhanced safety corridor.
- ☐ Safety improvements will be installed including a pedestrian crosswalk, a refuge island and a flashing beacon for crossing LTB at the intersection of SR.

Land Coverage Component

- ☐ Land coverage will be decreased by approximately 11,520 ft² due to the pavement removal along LTB from TMR to SR.

Road Lane Component

- ☐ Lanes will be reduced to one lane in each direction for the section of LTB between TMR and SR. All other lane configurations remain unchanged.

Alternative 4

Alternative 4 is graphically the same as what is shown in Exhibit 4 and Figures 1A, 1B, and 1C, and consists of the following components:

Bike Path and Bike Lane Component

- ☐ Install Class 2 bike lanes along Lake Tahoe Blvd. (LTB) from Clear View Drive (CVD) to Tahoe Mountain Road (TMR).
- ☐ Install Class 2 bike lanes within the existing outside lanes of LTB from TMR to Sawmill Road (SR). Remove and restore approximately 5 feet of pavement on both sides of LTB.
- ☐ Install Class 1 bike path on the north side of LTB along the existing dirt path on USFS property from SR to VR.

The proposed western portion of the Class 2 bike lanes will connect to the existing Class 2 bike lanes along LTB that end at CVD. Class 2 bike lanes are proposed on both sides of the existing two lanes of LTB from CVD to Tahoe Mountain Road. Additional minor pavement width will be required in this section to include the bike lanes.

Continuing east, Class 2 bike lanes are proposed along LTB within the two existing outside travel lanes from TMR to the intersection of SR, reducing this section of LTB from four lanes to two lanes. This section also includes a speed limit reduction from 45 mph to 35 mph. The proposed five foot bike lanes in this section will be next to 12 foot wide inside travel lanes. Approximately five feet of pavement is proposed to be removed and restored on both sides of LTB. The future Sawmill 2 Bike Path is proposed to end at the intersection of LTB and SR where the LTB bike lanes will link with the proposed Sawmill 2 Bike Path. A crosswalk and pedestrian warning light is proposed at this location to provide a safe crossing for pedestrians. This LTB crossing at SR will link the Sawmill Bike Path to the Class 2 bike lanes along LTB and the proposed Class 1 bike path to the east.

The eastern section of the proposed Class 1 bike path begins on the north side of LTB at the intersection of SR. This section of the Class 1 bike path generally follows the existing dirt path on the north side of LTB to the intersection of LTB and VR. This portion of the bike path will require the installation of approximately six culvert crossings to convey runoff from the uphill watersheds beneath the bike path. This portion of the Class 1 bike path will consist of an eight foot wide paved path with a two foot wood chip shoulder (clear-zone) on both sides of the path. The bike path is proposed to span stream environment zone (SEZ) areas with new culverts and improved upstream and downstream channels. These areas slated for improvement are at existing drainages along the existing dirt path. This section of the proposed bike path will link to the existing Class 2 bike lanes along LTB ending at the intersection of VR and LTB.

This alternative requires that a Special Use Permit be obtained from public property owners along the north side of LTB (USFS and City of South Lake Tahoe).

Erosion Control Component

- ☐ Revegetate eroding slopes and bare areas to provide source control.
- ☐ Armor eroding conveyance channels to provide source control.

The primary focus for erosion control will be to provide source control on eroding roadside slopes and on bare road shoulders. Revegetation techniques will be used on eroding slopes and other bare eroding areas. Source control will also be achieved by armoring or vegetation lining portions of the bare soil conveyance ditches along LTB.

Hydraulic Conveyance Component

- ☐ Replace failing or undersized culverts to prevent road damage and flooding.
- ☐ Modify channels to correctly size conveyance upstream and downstream of culverts.
- ☐ Install drainage inlets to collect road runoff into storm drain system.
- ☐ Install new culverts beneath the newly proposed bike path.

Hydraulic conveyance will primarily be enhanced by upgrading failing or undersized culverts that exist along LTB. Also, as mentioned above; new culverts will be installed to properly convey upland runoff beneath the newly proposed bike path. Channel armoring upstream and downstream of culverts will enhance conveyance to minimize road and bike path damage and flooding.

Water Quality Component

- ☐ Install sediment traps, one sediment basin, rock bowls, and flow spreaders, to trap sediment and infiltrate runoff.

Water quality treatment options for storm water include sediment traps, rock bowls, and sediment basins.

SEZ Enhancement Component

- ☐ SEZ enhancement will be achieved via installation of an additional culvert or bottom-less arch crossing LTB at a different location to increase hydraulic connectivity by routing previously diverted flows to additional parts of the SEZ to increase the stream zone treatment area.

- ❑ Pavement removal and revegetation from TMR to SR.

Safety Component

- ❑ Safety improvements/traffic calming will be accomplished via reduction of LTB from four lanes to two lanes with an accompanying speed limit reduction from 45 mph to 35 mph from TMR to SR.
- ❑ Safety improvements will be installed including a pedestrian crosswalk and flashing beacon for crossing LTB at the intersection of SR.

Land Coverage Component

- ❑ Land coverage will be decreased by approximately 17,280 ft² due to pavement removal along LTB.

Road Lane Component

- ❑ Lanes will be reduced to one lane in each direction for the section of LTB between TMR and SR. All other lane configurations remain unchanged.

Alternative 5

Alternative 5 is graphically the same as what is shown in Exhibit 5 and Figures 2A, 2B, and 2C, and consists of the following components:

Bike Path and Bike Lane Component

- ❑ Install Class 2 bike lanes along Lake Tahoe Blvd. (LTB) from Clear View Drive (CVD) to Tahoe Mountain Road (TMR).
- ❑ Install Class 2 bike lanes within the existing outside lanes of LTB from TMR to approximately 400 feet southwest of the intersection of Industrial Ave (IA). Remove and restore approximately five feet of pavement on both sides of LTB.
- ❑ Install Class 2 bike lanes along LTB from approximately 400 feet southwest of the intersection of IA on both sides of the existing four lane road. An additional four feet of pavement width will be required on both sides of LTB to accommodate the bike lanes.

The proposed western portion of the Class 2 bike lanes will connect to the existing Class 2 bike lanes along LTB that end at CVD. Class 2 bike lanes are proposed on both sides of the existing two lanes of LTB from CVD to TMR. Additional minor pavement width will be required in this section to include four foot bike lanes.

Continuing east, Class 2 bike lanes are proposed along LTB within the two existing outside travel lanes from TMR to the intersection of SR, reducing this section of LTB from four lanes to two lanes. This section also includes a speed limit reduction from 45 mph to 35 mph. The proposed five foot bike lanes in this section will be next to 12 foot wide inside travel lanes. Approximately six feet of pavement is proposed to be removed and restored on both sides of LTB. The future Sawmill 2 Bike Path is proposed to end at the intersection of LTB and SR where the LTB bike lanes will link with the proposed Sawmill 2 Bike Path. A crosswalk and pedestrian warning light is proposed at this location to provide a safe crossing. This LTB crossing at SR also will link the Sawmill 2 Bike Path to the Class 2 bike lanes along LTB and the proposed Class 1 bike path to the east.

Continuing east, Class 2 bike lanes are proposed along LTB within the two existing outside travel lanes from SR to approximately 400 feet southwest of the intersection of IA, reducing this section of LTB from four lanes to two lanes. This section also includes a speed limit reduction from 55 mph to 45 mph. The proposed five foot bike lanes in this section will be next to 12 foot wide inside travel lanes. Approximately five feet of pavement is proposed to be removed and restored on both sides of LTB.

Continuing east, Class 2 bike lanes are proposed along LTB from approximately 400 feet southwest of the intersection of IA to VR on both sides of the existing four lane road. This portion of the roadway is proposed to remain a four lane road due to the high volume of truck traffic in this location. This section of the proposed bike lanes will link to the existing Class 2 bike lanes along LTB ending at the intersection of VR and LTB. Additional pavement four feet wide will be required on both sides of LTB to accommodate the bike lanes.

Erosion Control Component

- ☐ Revegetate eroding slopes and bare areas to provide source control.
- ☐ Armor eroding conveyance channels to provide source control.

The primary focus for erosion control will be to provide source control on eroding roadside slopes and on bare road shoulders. Revegetation techniques will be used on eroding slopes and other bare eroding areas. Source control will also be achieved by armoring or vegetation lining portions of the bare soil conveyance ditches along LTB.

Hydraulic Conveyance Component

- ☐ Replace failing or undersized culverts to prevent road damage and flooding.
- ☐ Modify channels to correctly size conveyance upstream and downstream of culverts.
- ☐ Install drainage inlets to collect road runoff into storm drain system.

Hydraulic conveyance will primarily be enhanced by upgrading failing or undersized culverts that exist along LTB. Channel armoring upstream and downstream of culverts will enhance conveyance to minimize road and bike path damage and flooding.

Water Quality Component

- ☐ Install sediment traps and rock bowls to trap sediment.

Water quality treatment options for storm water include sediment traps, rock bowls, and sediment basins.

SEZ Enhancement Component

- ☐ SEZ enhancement will be achieved via installation of an additional culvert or bottom-less arch crossing LTB at a different location to increase hydraulic connectivity by routing previously diverted flows to additional parts of the SEZ to increase the stream zone treatment area.
- ☐ Pavement removal and revegetation from TMR to SR.

Safety Component

- ☐ Safety improvements/traffic calming will be accomplished via reduction of LTB from four lanes to two lanes with an accompanying speed limit reduction from 45 mph to 35 mph from TMR to SR, and 55 mph to 45 mph from SR to IA.
- ☐ Safety improvements will be installed including a pedestrian crosswalk and flashing beacon for crossing LTB at the intersection of SR.

Land Coverage Component

- ☐ Land coverage will be decreased by approximately 93,080 ft² due to pavement removal along LTB.

Road Lane Component

- ☐ Lanes will be reduced to one lane in each direction for the section of LTB between TMR and approximately 400 feet west of IA. All other lane configurations remain unchanged.

Alternative 6

Alternative 6 is shown in Exhibit 6 and Figures 5A, 5B, and 5C, and consists of the following components:

Bike Path and Bike Lane Component

- ☐ Install Class 2 bike lanes along Lake Tahoe Blvd. (LTB) from Clear View Drive (CVD) to Tahoe Mountain Road (TMR).

- ❑ Install Class 2 bike lanes within the existing outside lanes of LTB from TMR to Sawmill Road (SR).
- ❑ Install a Class 1 bike path within the existing eastbound lanes of LTB from SR to the intersection of Industrial Ave (IA).
- ❑ Route both directions of traffic to the existing westbound lanes from SR to the intersection of IA.
- ❑ Install Class 2 bike lanes along LTB from IA to D Street/Viking Road (VR) on both sides of the existing four lane road. An additional four feet of pavement width will be required on both sides of LTB to accommodate the bike lanes.

The proposed western portion of the Class 2 bike lanes will connect to the existing Class 2 bike lanes along LTB that end at CVD. Class 2 bike lanes are proposed on both sides of the existing two lanes of LTB from CVD to TMR. Additional minor pavement width will be required in this section to include four foot bike lanes.

Continuing east, Class 2 bike lanes are proposed along LTB within the two existing outside travel lanes from TMR to the intersection of SR, reducing this section of LTB from four lanes to two lanes. This section also includes a speed limit reduction from 45 mph to 35 mph. The proposed bike lanes in this section will include a five foot separation from the existing inside travel lanes for bicycle and pedestrian safety. The additional road width will be maintained to utilize the bike lane and five foot separation to accommodate emergency vehicles or special traffic control situations. The future Sawmill 2 Bike Path is proposed to end at the intersection of LTB and SR where the proposed LTB bike lanes will link with the proposed Sawmill 2 Bike Path. A crosswalk and pedestrian warning light is proposed at this location to provide a safe crossing for pedestrians.

Continuing east, a Class 1 bike path is proposed along LTB within the two existing eastbound travel lanes from SR to the intersection of Industrial Avenue, reducing this section of LTB from four lanes to two lanes. Both directions of traffic will be routed to the existing westbound lanes from SR to the intersection of IA. Excess pavement in this section will be removed and the area will be restored. This section also includes a speed limit reduction from 55 mph to 45 mph.

Continuing east, Class 2 bike lanes are proposed along LTB from the intersection of IA to VR on both sides of the existing four lane road. This portion of the roadway is proposed to remain a four lane road due to the high volume of truck traffic in this location. This section of the proposed bike lanes will link to the existing Class 2 bike lanes along LTB ending at the intersection of VR and LTB. Additional pavement four feet wide will be required on both sides of LTB to accommodate the bike lanes.

Erosion Control Component

- ❑ Revegetate eroding slopes and bare areas to provide source control.
- ❑ Armor eroding conveyance channels to provide source control.

The primary focus for erosion control will be to provide source control on eroding roadside slopes and on bare road shoulders. Revegetation techniques will be used on eroding slopes and other bare eroding areas. Source control will also be achieved by armoring or vegetation lining portions of the bare soil conveyance ditches along LTB.

Hydraulic Conveyance Component

- ❑ Replace failing or undersized culverts to prevent road damage and flooding.
- ❑ Modify channels to correctly size conveyance upstream and downstream of culverts.
- ❑ Install drainage inlets to collect road runoff into storm drain system.

Hydraulic conveyance will primarily be enhanced by upgrading failing or undersized culverts that exist along LTB. Channel armoring upstream and downstream of culverts will enhance conveyance to minimize road and bike path damage and flooding.

Water Quality Component

- ❑ Install sediment traps and rock bowls to treat sediment.
- ❑ Water quality treatment options for storm water include sediment traps, rock bowls, and sediment basins.

SEZ Enhancement Component

- ❑ SEZ enhancement will be achieved via installation of an additional culvert or bottom-less arch crossing LTB at a different location to increase hydraulic connectivity by routing previously diverted flows to additional parts of the SEZ to increase the stream zone treatment area.
- ❑ Pavement removal and revegetation from SR to IR.

Safety Component

- ❑ Safety improvements/traffic calming will be accomplished via reduction of LTB from four lanes to two lanes with an accompanying speed limit reduction from 45 mph to 35 mph from TMR to SR, and 55 mph to 45 mph from SR to IA.
- ❑ Safety improvements will be installed including a pedestrian crosswalk and flashing beacon for crossing LTB at the intersections of SR and IA.

Land Coverage Component

- ❑ Land coverage will be decreased by approximately 126,432 ft² due to significant pavement removal along LTB.

Road Lane Component

- ❑ Lanes will be reduced to one lane in each direction for the section of LTB between TMR and approximately 400 feet west of IA. All other lane configurations remain unchanged.

2.4 Proposed Project

The Proposed Project was selected by the County, the PDT and the public and is described in further detail below (outlined on Figures 1 - 4) and is a compilation of the most comprehensive design ideas for the Proposed Project area which meets the goals and objectives of the EIP and the Proposed Project. All proposed measures will be in compliance with applicable laws and TRPA and Lahontan Regional Water Quality Control Board (Lahontan) regulations.

The Preferred Project Alternative is shown on Figures 1 - 4 and consists of several Project components:

- Bike Path and Bike Lane;
- Erosion Control;
- Hydraulic Conveyance;
- Water Quality;
- SEZ Enhancement;
- Safety;
- Land Coverage; and,
- Lake Tahoe Boulevard Lane Reduction Component.

These Project components are outlined in the following sections to describe the design opportunities and the features associated with each component.

Bike Path and Bike Lane Component

- ❑ Install Class 2 bike lanes along Lake Tahoe Boulevard from Clear View Drive to Tahoe Mountain Road.
- ❑ Install Class 2 bike lanes within the existing outside lanes of Lake Tahoe Boulevard from Tahoe Mountain Road to Sawmill Road. Remove and restore approximately four feet of pavement in the

eastbound lanes and four feet of pavement in the westbound lanes of Lake Tahoe Boulevard. This includes removing fill material in the SEZ and restoring the area.

- ❑ Install approximately 9,055 linear feet of 10 foot wide Class 1 bike path on the north side of Lake Tahoe Boulevard along the existing dirt path on United States Forest Service (USFS) property from Sawmill Road to Viking Road.

The proposed western portion of the Class 2 bike lanes will connect to the existing Class 2 bike lanes along Lake Tahoe Boulevard that end at Clear View Drive. Class 2 bike lanes are proposed on both sides of the existing two lanes of Lake Tahoe Boulevard from Clear View Drive to Tahoe Mountain Road. Additional minor pavement width will be required in this section to include the bike lanes.

Continuing east, Class 2 bike lanes are proposed along Lake Tahoe Boulevard within the two existing outside travel lanes from Tahoe Mountain Road to the intersection of Sawmill Road, reducing this section of Lake Tahoe Boulevard from four lanes to two lanes. This section also includes a speed limit reduction from 45 miles per hour to 35 miles per hour. The proposed six foot bike/pedestrian lanes in this section will be next to 12 foot wide inside travel lanes, which will have two foot paved shoulders. Approximately two feet of pavement is proposed to be removed and restored on both sides of Lake Tahoe Boulevard, totaling four feet of pavement removal. The future Sawmill 2 Bike Path is proposed to end at the intersection of Lake Tahoe Boulevard and Sawmill Road where the Lake Tahoe Boulevard bike lanes will link with the proposed Sawmill 2 Bike Path. A crosswalk, a pedestrian refuge island and pedestrian actuated signals are proposed at this location to provide a safe crossing for pedestrians. This Lake Tahoe Boulevard crossing at Sawmill Road will link the Sawmill Bike Path to the Class 2 bike lanes along Lake Tahoe Boulevard and the proposed Class 1 bike path to the east to the City of South Lake Tahoe.

The eastern section of the proposed Class 1 bike path begins on the north side of Lake Tahoe Boulevard at the intersection of Sawmill Road. This section of the Class 1 bike path generally follows the existing dirt path on the north side of Lake Tahoe Boulevard to the intersection of Lake Tahoe Boulevard and Viking Road. This portion of the bike path will require the installation of approximately six culvert crossings to convey runoff from the uphill watersheds beneath the bike path. This portion of the Class 1 bike path will consist of a ten foot wide paved path with a two foot wide wood chip shoulder (clear-zone) on both sides of the path. The proposed bike path is approximately 9,055 linear feet. The bike path is proposed to span SEZ areas with new culverts and improved upstream and downstream channels. These areas slated for improvement are at existing drainages along the existing dirt path. This section of the proposed bike path will link to the existing Class 2 bike lanes along Lake Tahoe Boulevard ending at the intersection of Viking Road and Lake Tahoe Boulevard.

A Special Use Permit must be obtained from the USFS and an encroachment permit must be obtained from the City of South Lake Tahoe.

Erosion Control Component

- ❑ Revegetate eroding slopes and bare areas to provide sediment source control along Lake Tahoe Boulevard.
- ❑ Armor eroding conveyance channels to provide sediment source control along Lake Tahoe Boulevard.

The primary focus for erosion control will be to provide sediment source control on eroding roadside slopes and on bare road shoulders. Revegetation techniques will be used on eroding slopes and other bare eroding areas. Source control will also be achieved by armoring or vegetation lining portions of the bare soil conveyance ditches along Lake Tahoe Boulevard.

Hydraulic Conveyance Component

- ❑ Replace failing or undersized culverts to prevent road damage and flooding.
- ❑ Modify channels to correctly size conveyance upstream/downstream of culverts.
- ❑ Install drainage inlets to collect road runoff into storm drain system.
- ❑ Install new culverts beneath the newly proposed bike path.

Hydraulic conveyance will primarily be enhanced by upgrading failing or undersized culverts that exist along Lake Tahoe Boulevard. Also, as mentioned above; new culverts will be installed to properly convey upland runoff

beneath the newly proposed bike path. Channel armoring upstream and downstream of culverts will enhance conveyance to minimize road and bike path damage and flooding.

Water Quality Component

- ☐ Install sediment traps, one sediment basin, rock bowls, and flow spreaders, to trap sediment and infiltrate runoff.
- ☐ Remove pavement in SEZ for water quality treatment.

Water quality treatment options for storm water include sediment traps, rock bowls, flow spreaders and sediment basins.

SEZ Enhancement Component

- ☐ SEZ enhancement will be achieved via installation of an additional culvert or bottom-less arch crossing Lake Tahoe Boulevard along the curve between Tahoe Mountain Road and Sawmill Road at a different location than the existing undersized culvert to increase hydraulic connectivity by routing previously diverted flows to additional parts of the SEZ to increase the stream zone treatment area.
- ☐ Eight feet of pavement removal and revegetation from Tahoe Mountain Road to Sawmill Road.

Safety Component

- ☐ Safety improvements/traffic calming will be accomplished via reduction of Lake Tahoe Boulevard from four lanes to two lanes with an accompanying speed limit reduction from 45 miles per hour to 35 miles per hour from Tahoe Mountain Road to Sawmill Road.
- ☐ A two foot paved shoulder will provide safety adjacent to the 12 foot travel lane and the six foot wide Class 2 bike lanes will provide pedestrians and cyclists with an enhanced safety corridor.
- ☐ Safety improvements will be installed including a pedestrian crosswalk, a refuge island and a flashing beacon for crossing Lake Tahoe Boulevard at the intersection of Sawmill Road.

Land Coverage Component

- ☐ Hard coverage will be increased along the Class 1 portion of the bike path by approximately 90,550 square feet, although the majority of the hard coverage will be placed over the existing soft coverage USFS dirt road.
- ☐ Land coverage will be decreased by approximately 11,520 square feet in land capability class 1b due to the pavement removal along Lake Tahoe Boulevard from Tahoe Mountain Road to Sawmill Road.

LTB Lane Reduction Component

- ☐ Lanes will be reduced to one lane in each direction for the section of Lake Tahoe Boulevard between Tahoe Mountain Road and Sawmill Road. Additionally, intersections will be improved at Lake Tahoe Boulevard and Sawmill Road and at Lake Tahoe Boulevard and Tahoe Mountain Road. All other lane configurations remain unchanged.

3.0 ENVIRONMENTAL SETTING AND SITE CHARACTERISTICS

The Project area is located in eastern El Dorado County, in South Lake Tahoe California within the Lake Tahoe Basin. The Proposed Project is located in the southern section of the Lake Tahoe Basin in Sections 17-20, Township 12 North, Range 18 East, in the Echo Lake and Emerald Bay U.S. Geological Survey 7.5 minute quadrangle maps. The Proposed Project is along Lake Tahoe Boulevard from Viking Road to Clear View Drive. Improvements within the Project area include a partially divided four lane paved roadway, unpaved roads, culvert pipes, roadside channels, and overhead and underground utilities.

The Project area consists of public parcels owned by the County, the United States Forest Service – Lake Tahoe Basin Management Unit (LTBMU) and the City of South Lake Tahoe.

Topography: The approximate elevation range of the Proposed Project site is from 6,290 to 6,400 feet above mean sea level (NGVD 1929). The terrain ranges in slope from 0-10% slope (29% of area) to 10-30% slope.

Hydrology: The United States Geological Survey (USGS) has divided the Tahoe Basin into 110 hydrologic basins and intervening areas contributing to outflow from Lake Tahoe. The Project area is located within USGS Basin 73 (Upper Truckee River Watershed), which has a drainage area of 56.5 square miles. The watershed drains into Angora Creek which confluent with the Upper Truckee River, which then flows into Lake Tahoe.

Runoff from the Project area is directed toward drainage facilities within the County's Right-of-Way (ROW) and is generally conveyed along the existing roadside ditches and existing culverts. The County has divided the Project area into eight primary watersheds using topographic maps based on aerial photography and field surveys.

Groundwater/Wetlands: Jurisdictional waters of the U.S. are classified into multiple types based on topography, edaphics (soils), vegetation, and hydrologic regime. Primarily, the U.S. Army Corps of Engineers establishes two distinctions: Wetland and non-wetland waters of the U.S. Non-wetland waters are commonly referred to as other waters.

In December of 2008, County's consultant, Stantec Consulting, Inc. performed a review of published documents to determine the presence of wetlands within the Project boundary. In August 2012, County staff conducted a field inspection of the Project area to determine the presence and of wetlands within the Project boundary. Jurisdictional wetlands were identified within the Project area. The Proposed Project will avoid all identified jurisdictional wetlands with the exception of one location, which has been previously disturbed by a dirt roadway where the bike path is proposed. The results of the findings will be submitted to the U.S. Army Corps of Engineers for a permit, if needed.

Geology/Soils: A preliminary review of regional geology within the Project area from the Natural Resources Conservation Service's (NRCS) current *Soil Survey for the Tahoe Basin Area: California and Nevada* (2007), reveals this geomorphic unit has a gentle to moderate slope comprised of ten main geologic map units outlined below.

- ❑ Watah peat, 0 to 2 percent slopes (7071). This complex is on fens, flood plains, valley flats and mountains. The parental material consists of organic material over alluvium. This soil is very poorly drained and the water movement in the most restrictive layer is moderately high. Shrink-swell potential is low and the soil is also frequently flooded. Surface runoff is very high and the erosion hazard is slight.
- ❑ Cagwin-Rock outcrop complex, 5 to 15 percent slopes (7411). Complex consists of rolling soils on foot slopes along the fringe of the granitic uplands. Along the contact with the glacial outwash deposits are scattered inclusions of Inville gravelly coarse sandy loam, Jabu coarse sandy loam, and Jabu coarse sandy loam, shallow variant.
- ❑ Cagwin-Rock outcrop complex, 15 to 30 percent slopes (7412). This complex consists of hilly soils on granitic uplands. The surface layer of the Cagwin soil does not absorb water readily.
- ❑ Cagwin-Rock outcrop complex, 30 to 50 percent slopes, extremely stony (7413). This soil is somewhat excessively drained. Water movement in the most restrictive layer is moderately high and the shrink-swell potential is low. The surface runoff is medium and the erosion hazard is severe.
- ❑ Cassenai gravelly loamy coarse sand, 5 to 15 percent slopes, very stony (7421). This soil is somewhat excessively drained. Water movement in the most restrictive layer is high. Surface runoff is low and the erosion hazard is slight to moderate.
- ❑ Christopher-Gefo complex, 0 to 5 percent slopes (7444). This soil is somewhat excessively drained. The shrink-swell potential is low. Surface runoff is very low and the erosion hazard is slight.

- ☐ Gefo gravelly loamy coarse sand, 9 to 30 percent slopes (7452). This soil is somewhat excessively drained. Water movement in the most restrictive layer is high and shrink-swell potential is low. This soil is not flooded or ponded. Surface runoff is low and the erosion hazard is slight to moderate.
- ☐ Jabu coarse sandy loam, 0 to 9 percent slopes (7461). This soil is well drained. Surface runoff is slow and the erosion hazard is only slight to moderate, even if the soil lacks vegetation.
- ☐ Jabu coarse sandy loam, 9 to 30 percent slopes (7462). This soil is well drained. Water movement in the most restrictive layer is moderately low and shrink-swell potential is low. Surface runoff is low and the erosion hazard is moderate.
- ☐ Ubaj sandy loam, 0 to 9 percent slopes (7541). This soil is moderately well drained. The surface runoff is medium and the erosion hazard is slight to medium.

NRCS has investigated the hydrologic characteristics of soils as related to runoff potential, and has developed a system used to classify soils into four hydrologic soil groups (see Table below). The Project area soils fall primarily within group 7444.

Distribution by Hydrologic Soil Group and Erosion Hazard			
SCS Series	Hydrologic Group	Erosion Hazard	% Of Area
7071	A/D	Slight	6.80
7411	B	Moderate	12.60
7412	B	Severe	10.20
7413	B	Severe	1.26
7421	B	Moderate	1.00
7444	A	Slight	54.10
7452	A	Moderate	11.00
7461	B	Moderate	2.50
7462	B	Moderate	0.19
7541	C	Moderate	0.35

Land Use: TRPA has primary jurisdiction over land use and regulatory decisions for the Lake Tahoe Basin. According to TRPA Plan Area Statements (PAS), the Project area falls into six plan areas which are outlined in the table below.

Surrounding Land Use Designations			
TRPA Plan Area Number	TRPA Plan Area Statement	Land Use Classification	Special Designation
113	Industrial Tract	Commercial/ Public Service	Preliminary Community Plan Area; TDR Receiving Area For Existing Development

Surrounding Land Use Designations			
TRPA Plan Area Number	TRPA Plan Area Statement	Land Use Classification	Special Designation
Special Area 2	South "Y"	Commercial/ Public Service	Preliminary Community Plan Area; TDR Receiving Area For Existing Development; Preferred Affordable Housing Area; Multi-residential Incentive Program; Scenic Restoration Area
118	Twin Peaks	Conservation	None
119	Country Club Meadow	Recreation	Scenic Restoration Area
131	Angora Highlands	Residential	None
132	Mountain View	Residential	None

Cultural Resources: A cultural resource study, which included a literature search and an archaeological survey/inventory of the Project survey area, was completed on December 12, 2011. Five previous cultural resources studies have been conducted in the vicinity of the Project area, including portions of the Area of Potential Effects (APE). Three previously recorded sites (05-01149, 05-1150 and 05-01151) are adjacent to the Project area, but will not be affected by the Proposed Project. The APE is considered to have a low sensitivity for the discovery of prehistoric, ethno historic, or historic cultural material, or subsurface deposits. Because of this, no additional cultural resources work for this Proposed Project is recommended. However, in the event that cultural resources are discovered during Project implementation, Project personnel shall halt all activities in the immediate area and notify a qualified archaeologist to determine the appropriate course of action.

Botanical Resources: Field surveys and assessments were conducted within the Project survey area for special status botanical species on July 20, 2012 and July 31, 2012. The biological assessment surveys observed no federal or state-listed candidate, or proposed botanical species in the Project study area. However, there are recorded occurrences of special status species immediately adjacent to the Project areas. Suitable habitat conditions do exist within 0.5 miles of the Project area for upswept moonwort, scalloped moonwort, slender moonwort, common moonwort, mingan moonwort, western goblin, bolander's candle moss, subalpine fireweed, blandow's bog-moss, short-leaved hulsea, three-ranked hump moss and broad-nerved hump moss. A noxious weed survey was also conducted within the Project survey area on November 2, 2011, July 20, 2012 and July 31, 2012. The surveys identified three noxious weed species within the Project area: cheatgrass (*Bromus tectorum*), bull thistle (*Cirsium vulgare*) and St. johns wort (*Hypericum perforatum*). A Noxious Weed Mitigation/Eradication Protocol will be implemented by the County as part of the Proposed Project which will help decrease habitat vulnerability to or below pre-construction levels. The Protocol includes pre-construction elements, such as treating existing noxious weed populations identified in the Project area, as well as during- and post-construction elements. Additionally, the County will specify weed-free seed mix and require all construction equipment be certified steam cleaned prior to accessing the site.

Vegetation types found in and/or adjacent to the Project area are typical of those found in the Lake Tahoe Basin. The project area is composed primarily of jeffrey pine while adjacent vegetation communities include lodgepole pine, montane riparian scrub and wet montane meadow. An assessment of habitat types is described in depth in Appendix C.

Wildlife Resources: Field surveys and assessments were conducted within the Project survey area for special status wildlife species on November 2, 2011. The biological assessment surveys observed no federal or state-listed candidate, or proposed wildlife species in the Project study area. However, there are recorded occurrences of special status species immediately adjacent to the Project areas. Suitable habitat conditions do exist within 0.5 miles of the Project area for bald eagle, osprey, northern goshawk, California spotted owl and American marten. An assessment of habitat types is described in depth in Appendix C.

Greenhouse Gas Emissions: Climate change refers to long-term fluctuations in temperature, precipitation, wind, and other elements of Earth's climate system. Natural processes such as solar-irradiance variations, variations in Earth's orbital parameters, and volcanic activity can produce variations in climate. The climate system can also be influenced by changes in the concentration of various gases in the atmosphere, which affect Earth's absorption of radiation.

State law defines greenhouse gases (GHG) to include the following: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (Health and Safety Code, Section 38505(g)). According to the Governor's Office of Planning and Research (OPR), the most common GHG that results from human activity is carbon dioxide, followed by methane and nitrous oxide.

According to California Air Resources Board (CARB) emission inventory estimates, California emitted approximately 480 million metric tons of carbon dioxide equivalents (CO₂eq) in 2004. The California EPA Climate Action Team stated in its March 2006 report that the composition of gross climate change pollutant emissions in California in 2002 (expressed in terms of CO₂eq) was as follows:

- Carbon dioxide (CO₂) accounted for 83.3 percent;
- Methane (CH₄) accounted for 6.4 percent;
- Nitrous oxide (N₂O) accounted for 6.8 percent; and
- Fluorinated gases (HFCs, PFC, and SF₆) accounted for 3.5 percent.

CARB estimates that transportation was the source of approximately 38 percent of California's GHG emissions in 2004, followed by electricity generation (both in-state and out-of-state) at 23 percent, and industrial sources at 20 percent. The remaining sources of GHG emissions are residential and commercial activities at 9 percent, agriculture at 6 percent, high global warming potential (GWP) gases accounting for 3 percent, and recycling and waste at 1 percent.

Regulatory Setting

Global Warming Solutions (AB 32)

The Global Warming Solutions Act of 2006 (AB 32) codifies California's goal of reducing statewide emissions of GHGs to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased-in starting in 2012 to achieve maximum technologically feasible and cost-effective GHG reductions. In order to effectively implement the cap, AB 32 directs CARB to develop appropriate regulations and establish a mandatory reporting system to track and monitor GHG emissions.

Executive Order S-3-05

On June 1, 2005 Governor Arnold Schwarzenegger signed S-3-05 (Order) which established GHG emission reduction targets as follows: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels.

Senate Bill 97

As directed by Senate Bill 97 (SB 97), the Natural Resources Agency adopted Amendments to the CEQA Guidelines for greenhouse gas emissions on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010.

Senate Bill 375

California Senate Bill 375 (SB 375) aims to reduce GHG emissions by curbing sprawl because the largest sources of GHG emissions in California are passenger vehicles and light trucks. SB 375 provides emission reduction goals for which regions can plan, integrates disjointed planning activities, and provides incentives for local governments and developers to follow new conscientiously-planned growth patterns.

Senate Bill 1368

California Senate Bill 1368 (SB 1368) adds sections 8340 and 8341 to the Public Utilities Code (effective January 1, 2007) with the intent “to prevent long-term investments in power plants with GHG in excess of those produced by a combined-cycle natural gas power plant with the aim of “reducing emissions of greenhouse gases from the state’s electricity consumption, not just the state’s electricity production.” The bill provides a mechanism for reducing the greenhouse gas emissions of electricity providers, both in-state and out-of-state, thereby assisting CARB in meeting its mandate under AB 32, the Global Warming Solutions Act of 2006.

Significance Criteria

CARB has proposed that different GHG thresholds of significance may apply to projects in different sectors, e.g., industrial, commercial, residential. Two primary reasons that sector-specific thresholds are appropriate are: 1) some sectors contribute more substantially to the problem, and therefore should have a greater obligation for emissions reductions, and, 2) there are differing levels of emissions reductions expected from different sectors in order to meet California’s objectives under AB 32. Different types of thresholds – quantitative, qualitative, and performance-based – can apply to different sectors under the premise that the sectors can and must be treated separately given the state of the science and data. The sector-specific approach is consistent with CARB’s Proposed Scoping Plan.

Working with CARB in 2008, the OPR drafted amendments to the CEQA Guidelines for GHG emissions as required by SB 97. In January 2009, OPR held workshops in Los Angeles and Sacramento to present the preliminary draft amendments and obtain input from the public. The workshops included a presentation by OPR and the Resources Agency staff, an overview of the preliminary draft CEQA Guideline amendments, and the process for adopting the regulations by 2010. On April 13, 2009, OPR submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines. As directed by SB 97, the Natural Resources Agency adopted Amendments to the CEQA Guidelines for greenhouse gas emissions on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010.

CEQA requires lead agencies to identify project GHG emissions impacts and their “significance,” but is not clear what constitutes a “significant” impact. GHG impacts are inherently cumulative, and since no single project could cause global climate change, the CEQA test is if impacts are “cumulatively considerable.” Not all projects emitting GHG contribute significantly to climate change. CEQA authorizes reliance on previously approved plans (i.e., a Climate Action Plan (CAP), etc.) and mitigation programs adequately analyzing and mitigating GHG emissions to a less than significant level. “Tiering” from such a programmatic-level document is the preferred method to address GHG emissions. El Dorado County does not have an adopted CAP or similar program-level document; therefore, the project’s GHG emissions must be addressed at the project-level.

The El Dorado County Air Quality Management District (EDCAQMD) has established thresholds of significance for criteria air pollutants (Guide to Air Quality Assessment (February 2002) (“CEQA Guide”))¹. However, the EDCAQMD has not yet adopted GHG emissions thresholds for land use development projects. In the absence of County adopted thresholds, EDCAQMD recommends using the thresholds adopted by other Counties that were found consistent with the goals of AB 32. Until the County adopts a CAP consistent with CEQA Guidelines Section 15183.5, and/or establishes GHG thresholds, the County will follow an interim approach to evaluate GHG emissions utilizing significance criteria adopted by the San Luis Obispo Air Pollution Control District (SLOAPCD) to determine the significance of GHG emissions. The County believes that since climate change is a global problem and the location of the individual sources of GHG emissions is somewhat irrelevant, it’s appropriate to use thresholds established by other jurisdictions as a basis for impact significance determinations. Projects exceeding these thresholds would have a potentially significant impact and be required to mitigate those impacts to a less than significant level.

The County chose SLOAPCD’s thresholds because they are comprehensive and have not been challenged. SLOAPCD’s thresholds are very similar to the Bay Area Air Quality Management District (BAAQMD) thresholds.

¹ EDCAQMD CEQA Guide: http://edcgov.us/Government/AirQualityManagement/Guide_to_Air_Quality_Assessment.aspx
 Lake Tahoe Boulevard Enhancement Project
 County of El Dorado DOT

However, BAAQMD's GHG thresholds are under legal challenge because BAAQMD failed to comply with CEQA when adopting the thresholds. Additionally, SLOAPCD developed a screening table using CalEEMod which allows quick assessment of projects to "screen out" those below the thresholds as their impacts would be less than significant.

The thresholds are summarized below:

Significance Determination Thresholds	
GHG Emission Source Category	Operational Emissions
Non-stationary Sources	1,150 MTCO ₂ e/yr OR 4.9 MT CO ₂ e/SP/yr
Stationary Sources	10,000 MTCO ₂ e/yr

SP = service population, which is resident population plus employee population of the project

Impacts

Construction Emissions

Project construction would generate temporary and one-time GHG emissions mainly from diesel-powered construction equipment and on-road trucks, with a small amount from workers' personal vehicles during the construction of the Proposed Project. Greenhouse gases emitted during the combustion of diesel fuel in off-road construction equipment and on-road vehicles would consist mainly of carbon dioxide, along with small amounts of methane and nitrous oxide during the construction period. Construction emissions would be intermittent, and short-term, during one summer construction season. Construction emissions would permanently cease at the end of the Proposed Project. Over the long-term, these temporary emissions would be partially offset or mitigated by the establishment of native vegetation at designated areas. The revegetation work, including shrubs, forbs and grasses would be maintained over the life of the Proposed Project, up-taking carbon dioxide for decades.

There currently is only limited federal, state, or local regulatory guidance for determining whether a project advances or hinders California's GHG reduction goals and no promulgated thresholds of significance for GHG impacts have been established. For purposes of this analysis, per the amendments to the CEQA Guidelines, an impact could be considered significant if the Proposed Project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

During construction, the Proposed Project would temporarily cause direct GHG emissions from the combustion of fossil fuels used to run construction equipment and vehicles, both onsite and offsite. These GHG emissions would be temporary and one-time emissions during the construction of the Proposed Project only. Over its lifetime, the Project would directly and indirectly cause negligible GHG emissions from occasional maintenance and personal vehicle use. Therefore, this analysis focuses on construction impacts estimated using the County's past project implementation database and the U.S. Environmental Protection Agency (USEPA) GHG emission factors for diesel fuel and gasoline combustion in construction equipment. The County has reviewed past construction project logs for projects equivalent in size and scope to the Proposed Project to determine the typical number and type of vehicles that are actively working to construct the Project each day. Based on this analysis, the County has formulated the following assumptions:

- Fifteen workers per day, driving five vehicles to work an average of 40 miles round-trip per day
- Vehicles average 20 miles per gallon
- Twelve pieces of construction machinery per day
- Crews work eight hours per day with machinery running half that time (4 hours)
- Machinery burns an average of two gallons of diesel fuel per hour
- Diesel fuel contributes approximately 22.5 lbs CO₂/gallon

- Gasoline contributes approximately 20 lbs CO₂/gallon
- The Proposed Project will be completed in 110 working days

Based on these assumptions, the Proposed Project would emit approximately 118 metric tons of CO₂ equivalents.

This estimated amount is negligible in comparison to the statewide inventory of 480,000,000 metric tons discussed above (0.0000002 percent). The estimated amount is also significantly less than the San Luis Obispo Air Pollution Control District's (SLOAPCD) significance threshold of 1,150 metric tons of CO₂ equivalents. Because of this and the fact that direct onsite and offsite GHG emissions would terminate following completion construction work, the Project will have a less than significant impact on GHG emissions.

4.0 PUBLIC INPUT AND PDT COORDINATION

The County followed the Storm Water Quality Improvement Committee (SWQIC) guidelines and the guidance outlined in the Formulating and Evaluating Alternatives for Water Quality Improvement Projects document in developing and selecting the Preferred Project Alternative. The Project Development Team (PDT) investigated a range of possibilities for the bike path and water quality improvements in the Project area. The process of evaluating and selecting a preferred alternative for this Project included the production and analysis of the following documents:

- Draft Existing Conditions and Feasibility Report (Stantec 2008)
- Final Existing Conditions and Feasibility Report (Stantec 2008)
- Draft Project Alternatives Evaluation Report (County 2011)
- Final Project Alternatives Evaluation Report (County 2011)
- Preferred Alternative Report (County 2011)

The County first developed a Draft Existing Conditions and Feasibility Report (ECFR) in July 2008. In order to inform the public of the final version of that report, a public meeting was held to present the feasible options for the Project and to obtain feedback from the community on what key components they were interested in for the Project. That public meeting provided critical feedback from the community that was utilized to develop the Final ECFR in December 2008.

The County then had to focus on other project priorities and deliverables, and some time lapsed until it was able to produce a Draft Project Alternatives Evaluation Report (PAER) in April 2011. The County considered the feedback from the PDT and revised the Draft PAER prior to releasing it to the public. The County then held another public meeting on April 29, 2011 to present the Project Alternatives to the community and to again receive feedback on which Project Alternative was preferred by the public. Over 200 comments were received as a result of the County public outreach efforts. This feedback was invaluable to helping the County to provide a Project that the community would value and support.

It was evident from the comments that the public favored PAER Project Alternative 3, although many varying opinions favoring different Alternatives were noted. Because of the support of Alternative 3, the County wanted to further explore that Alternative to ensure that all feasible options were investigated on how best to connect the bike path through the wet meadow area south of Sawmill Road. As a result, the County developed Alternatives 3A and 3B, which were slightly different versions of the original PAER Alternative 3. The County produced a website to disseminate the information focusing on Alternatives 3A and 3B. The County also met with a reporter from the local print media, Tahoe Daily Tribune, in order to publicize the information contained in the website. After incorporating all of the feedback that it received and after further discussions with PDT members and County managers, the Final PAER was produced in July 2011. That report was published on the County website and made available for review at the County Department of Transportation (DOT) office.

The County focused on safety as its number one priority, while looking for a Project that could be built within budget and that met the goals and objectives outlined for the Project. The County continually received and digested feedback on the two Project Alternatives (3A and 3B) that it presented on the website. After considering the two final Project Alternatives, the County decided, based on all the feedback that was received, to select Alternative 3B as the Preferred Project Alternative (Proposed Project). The County feels this Proposed Project most adequately satisfies the goals and objectives of the Project and can be feasibly constructed. The Proposed Project is described below.

5.0 RIGHT OF WAY REQUIREMENTS

County made every effort to locate proposed improvements within the County right-of-way, however in order to satisfy the goals and objectives of the Proposed Project, some public easements are required. These include the following Assessor Parcel Numbers (APNs):

United States Forest Service APNs:

- 033-010-03
- 033-010-18
- 032-080-01
- 032-070-01

City of South Lake Tahoe APNs:

- 032-302-02
- Viking Road Right-of-Way

6.0 COVERAGE AND PERMIT ISSUES

Clean Water Act Section 404

The fieldwork was conducted for the Delineation of Waters of the U.S., including wetlands, as defined by Section 404 of the Clean Water Act. That fieldwork determined that jurisdictional waters and wetlands are present within the Project area. Thus, a wetland delineation report will be prepared and delivered to the U.S. Army Corps of Engineers that includes maps identifying the type, location, and size of all Waters of the U.S. within the Project boundary. A Section 404 Permit will be obtained prior to Project construction, if necessary.

Clean Water Act Section 401

If the Proposed Project involves the discharge to surface waters, which includes Waters of the U.S., Waters of the State, and all other surface waters, a 401 Water Quality Certification will be required from the Lahontan Regional Water Quality Control Board (RWQCB). A 401 Water Quality Certification application will be prepared and submitted to the RWQCB based on the final Project design and its potential to discharge to surface waters.

Lahontan RWQCB NPDES Permit and Basin Plan

Any disturbance to a Stream Environment Zone (SEZ) requires approval from the Lahontan RWQCB. Since it is anticipated that over an acre of overall disturbance is slated to occur during construction, compliance with the NPDES General Construction Permit will be required.

Tahoe Regional Planning Agency General Permit and Stream Environment Zones (SEZ)

A TRPA General EIP Permit will be obtained prior to construction. A Land Capability Verification has been completed by the TRPA. The Proposed Project requires minor disturbance within sensitive Land Capability District 1b lands (SEZ), and thus the County will work with TRPA to ensure compliance with TRPA throughout the permitting process.

7.0 MITIGATION AND MONITORING

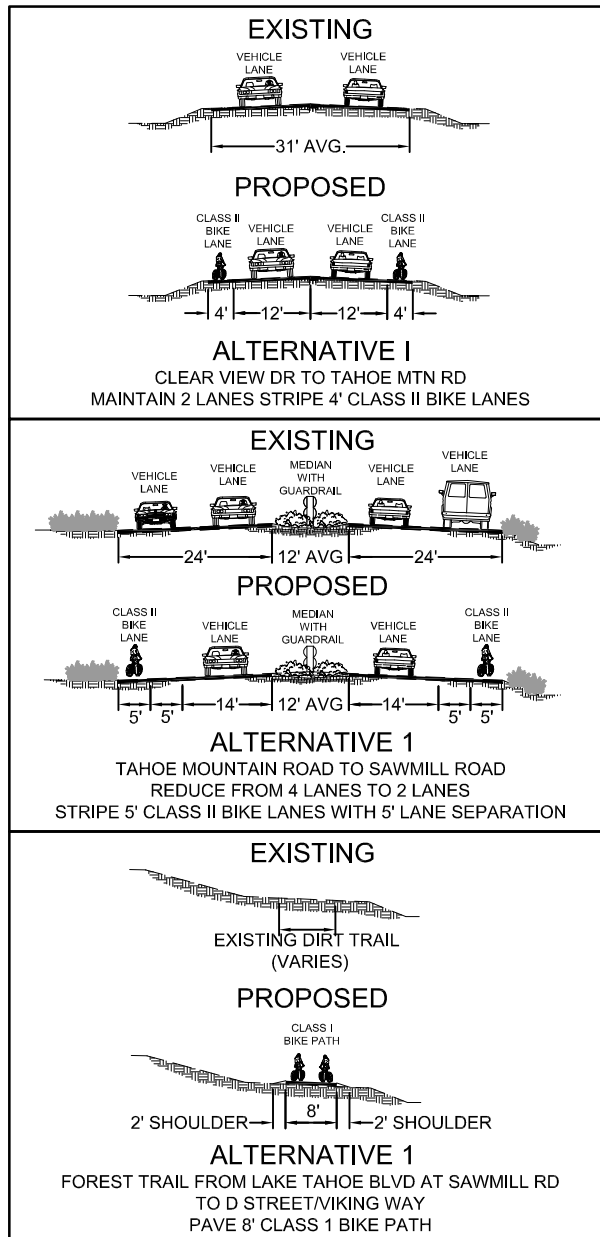
Mitigation measures are described in the attached Mitigation Monitoring and Reporting Program (Appendix B). County staff and/or their contractor will conduct on-site monitoring to ensure that mitigation measures are implemented as proposed. A full time construction inspector provided by the County and/or contractor will monitor proposed mitigation measures for potential temporary impacts associated with construction. The inspector will ensure that the contractor strictly adheres to all temporary erosion control requirements and other environmental protection requirements. In addition to County inspections, regulatory agencies will review Project plans and specifications to ensure compliance with local, state, and federal requirements. Any additional mitigation measures required by regulatory agencies will be monitored in the same manner. Throughout the construction of the Proposed Project, the agencies will be invited to weekly "tailgate" meetings and will conduct periodic visits to the Project site to enforce the BMPs and ensure compliance with all other mitigation measures.

The maintenance and monitoring of the Proposed Project improvements will continue for 20 years after construction completion. Revegetation monitoring will continue for a minimum of two years following construction. Plant establishment will include irrigation and replanting, if necessary. The County will inspect all Proposed Project improvements during the spring and fall of each year during the twenty-year maintenance period. County engineering staff will direct maintenance based on results of the inspections. Photographs will be taken before and after construction for a period of two years, and following significant storm events to monitor Proposed Project improvement performance.

8.0 REFERENCES

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FIGURES



EL DORADO COUNTY
TAHOE ENGINEERING DIVISION



LAKE TAHOE BOULEVARD
ENHANCEMENT PROJECT
ALTERNATIVE 1

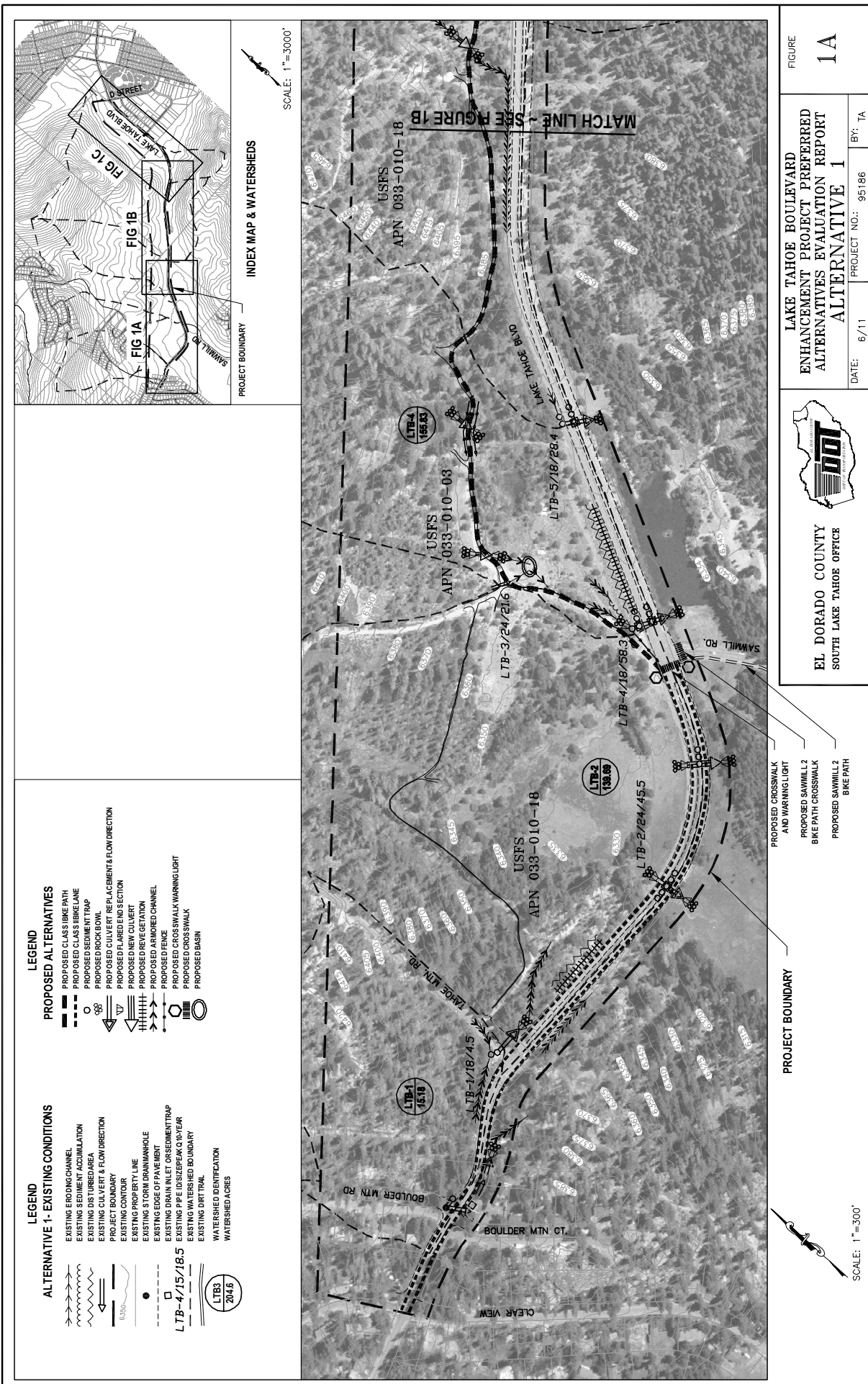
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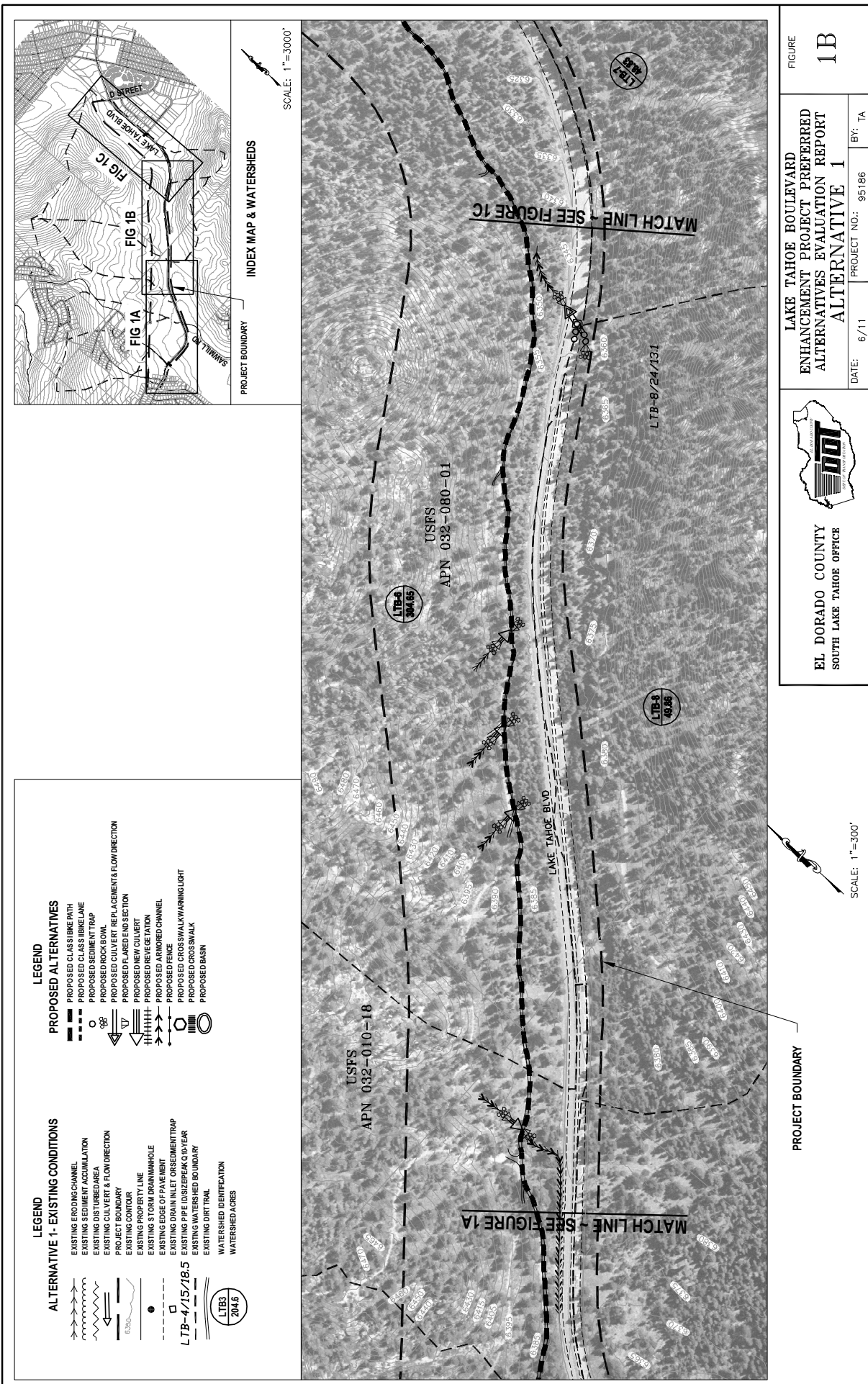
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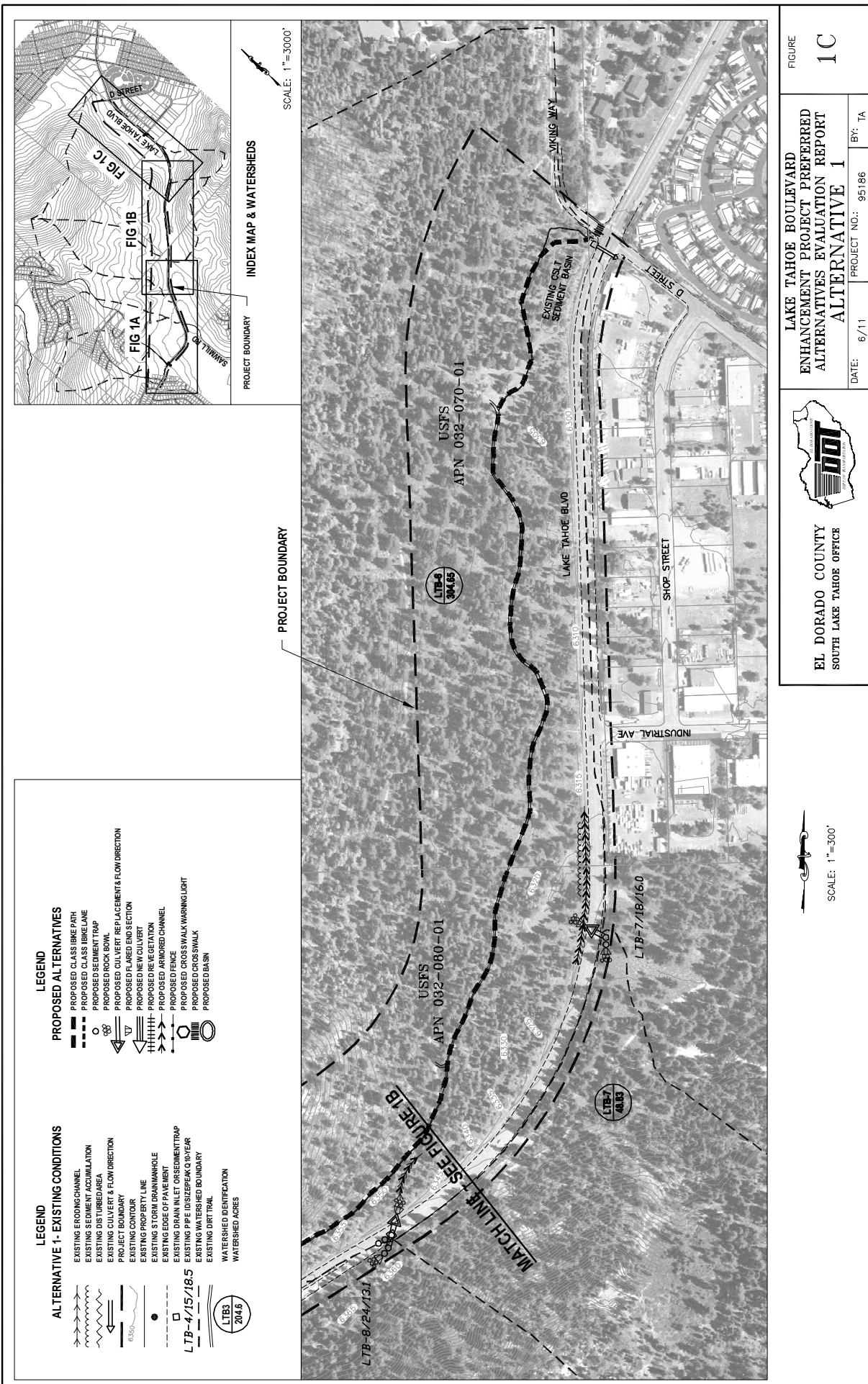
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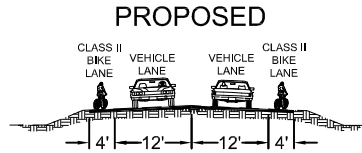
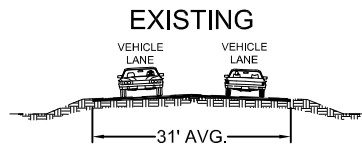
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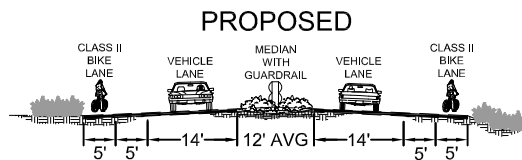
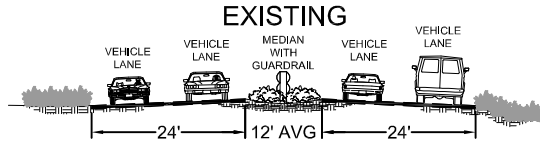




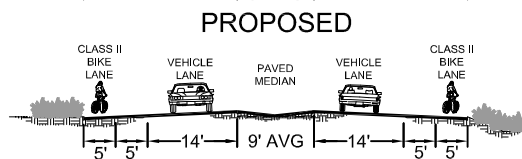
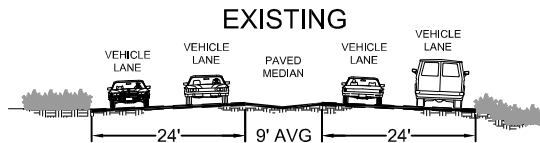




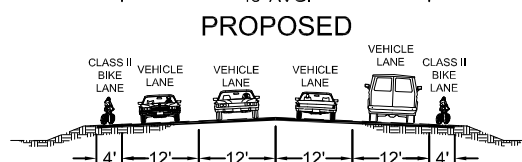
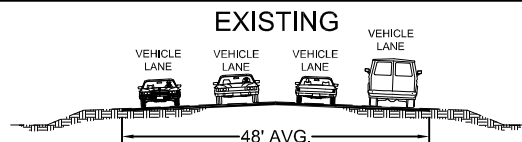
ALTERNATIVE 2
 CLEAR VIEW DR TO TAHOE MTN RD
 MAINTAIN 2 LANES STRIPE 4' CLASS II BIKE LANES



ALTERNATIVE 2
 TAHOE MOUNTAIN ROAD TO SAWMILL ROAD
 REDUCE FROM 4 LANES TO 2 LANES
 STRIPE 5' CLASS II BIKE LANES WITH 5' LANE SEPARATION



ALTERNATIVE 2
 SAWMILL ROAD TO 400' SOUTHWEST OF INDUSTRIAL AVE
 REDUCE FROM 4 LANES TO 2 LANES
 STRIPE 5' CLASS II BIKE LANES WITH 5' LANE SEPARATION



ALTERNATIVE 2
 400' SOUTH OF INDUSTRIAL AVE TO D STREET/VIKING WAY
 MAINTAIN 4 LANES PAVE 4' BIKE LANES BOTH SIDES
 STRIPE 4' CLASS II BIKE LANES

EL DORADO COUNTY
 TAHOE ENGINEERING DIVISION



LAKE TAHOE BOULEVARD
 ENHANCEMENT PROJECT
 ALTERNATIVE 2

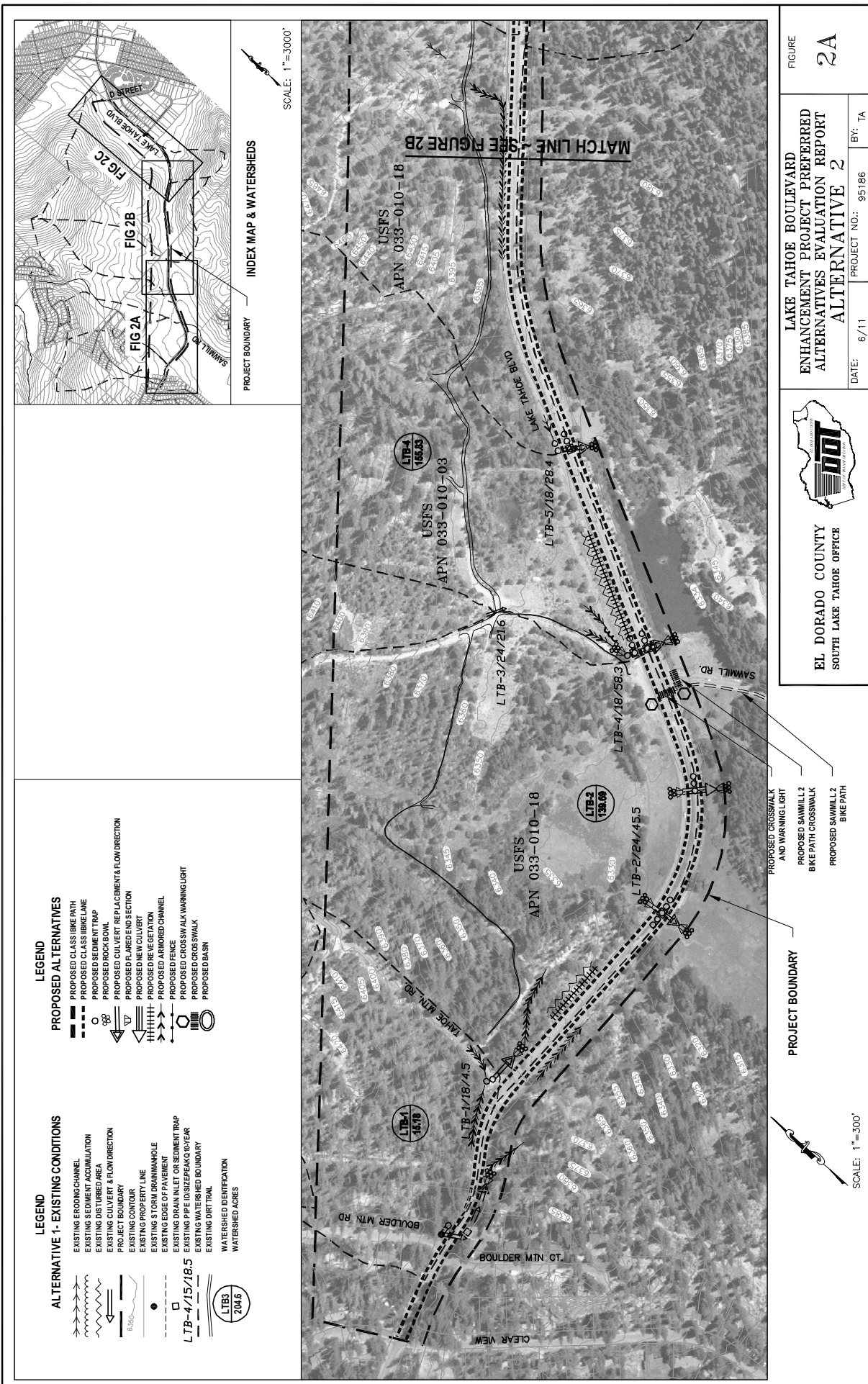
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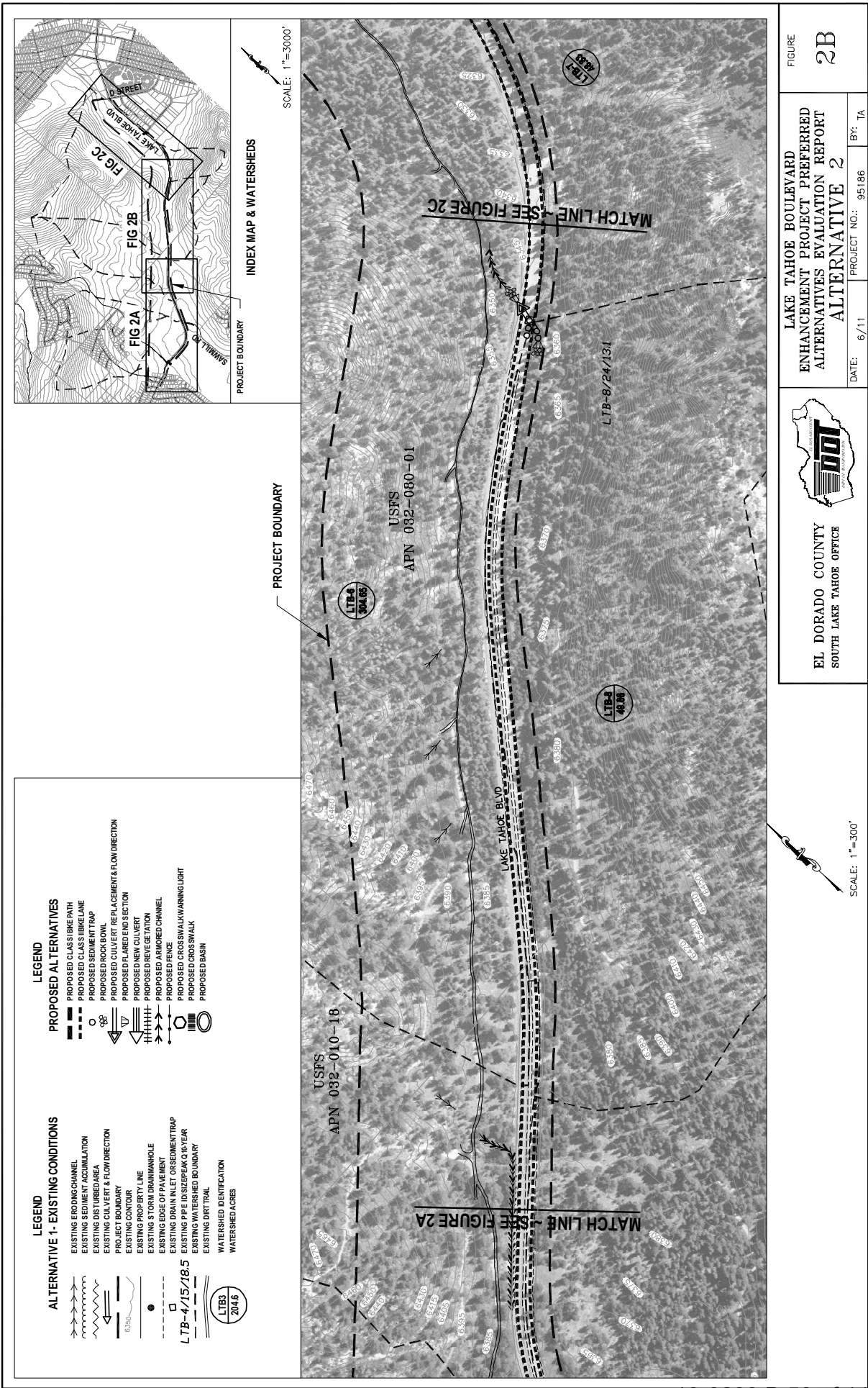
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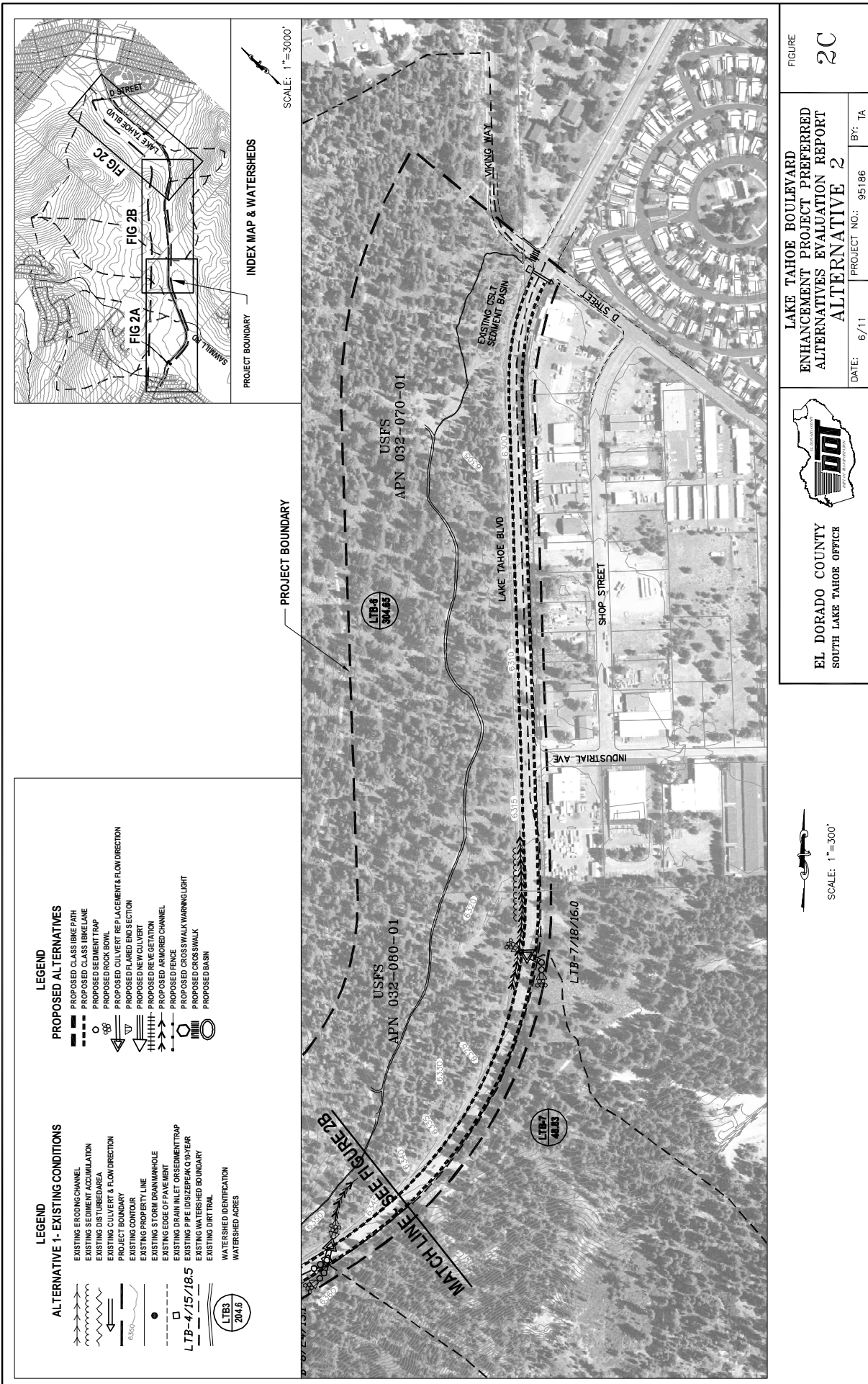
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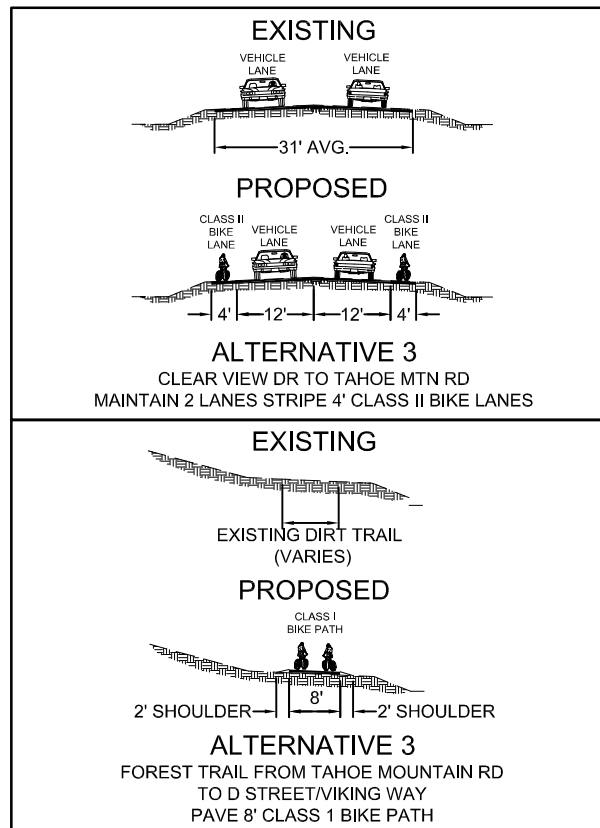
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EL DORADO COUNTY
TAHOE ENGINEERING DIVISION



**LAKE TAHOE BOULEVARD
ENHANCEMENT PROJECT
ALTERNATIVE 3**

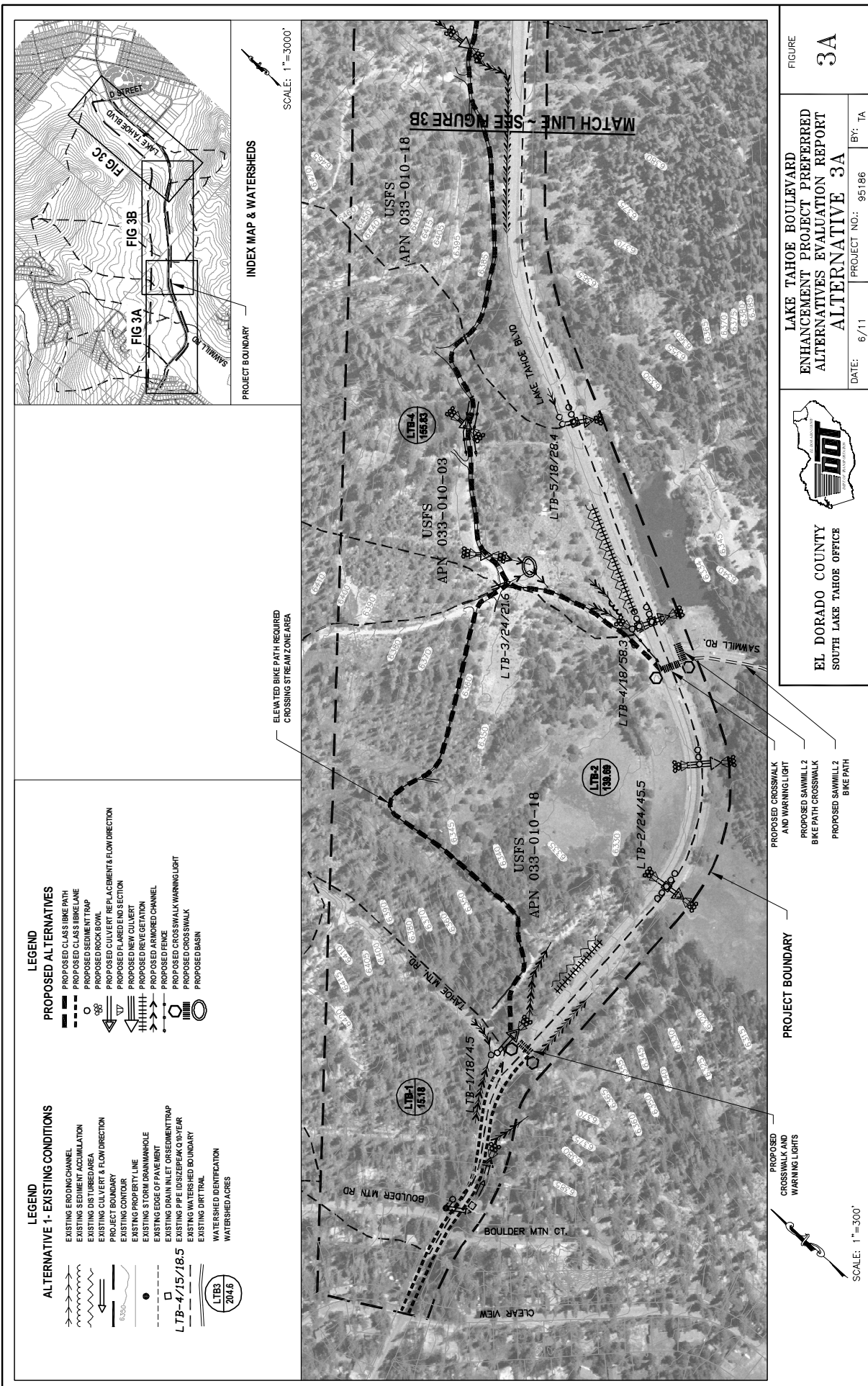
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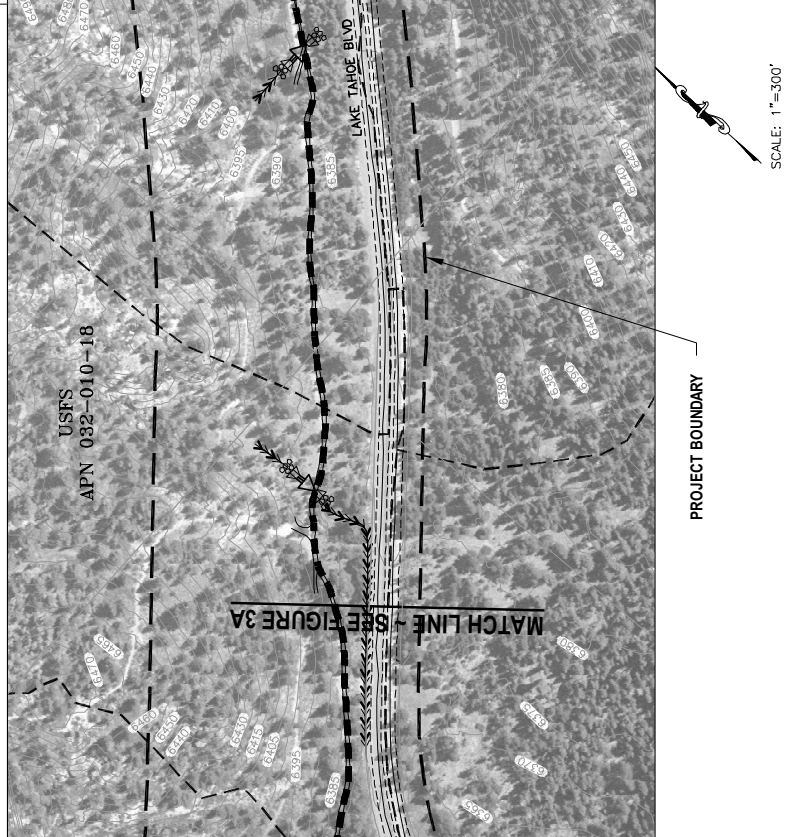
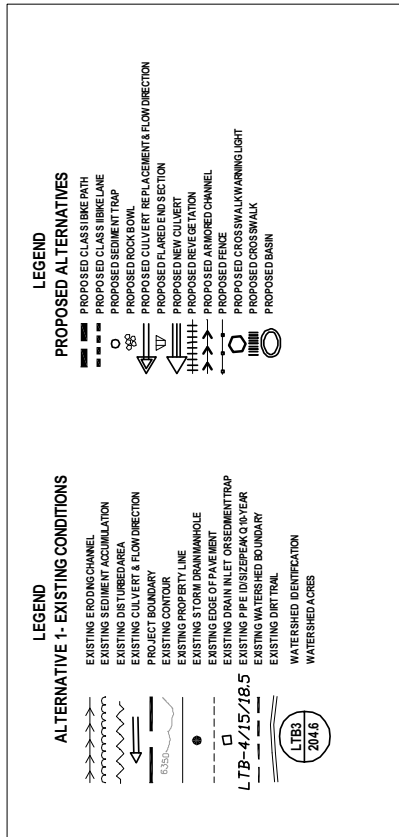
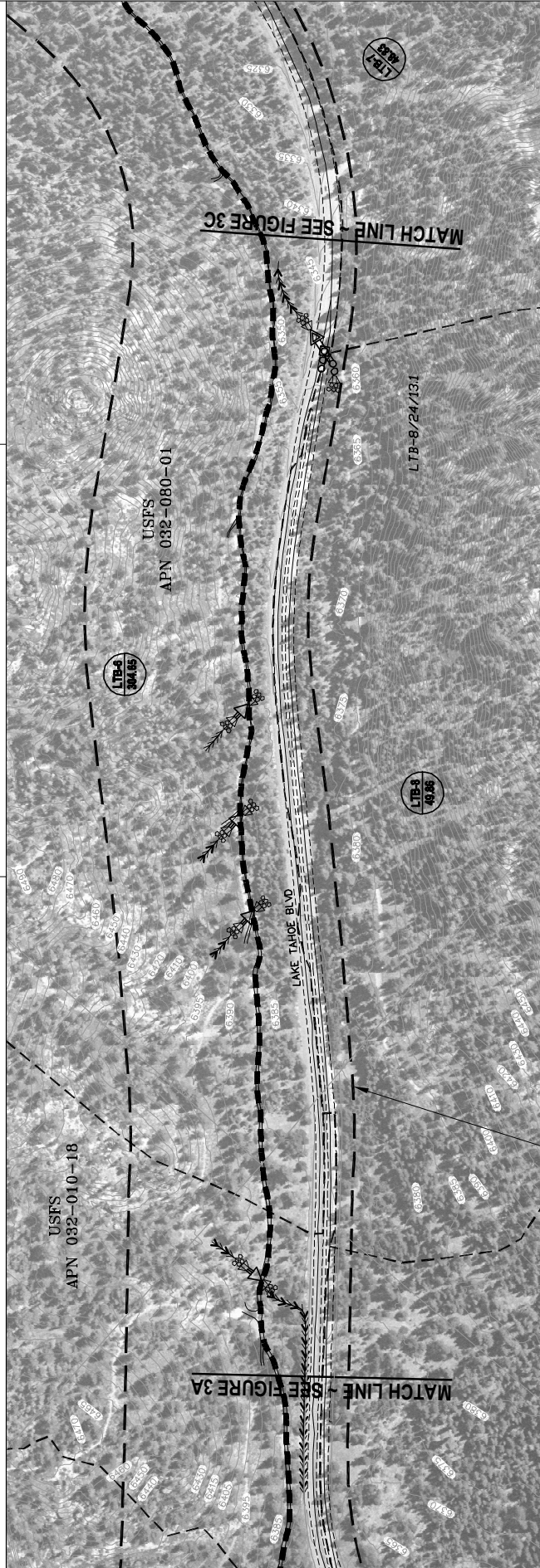
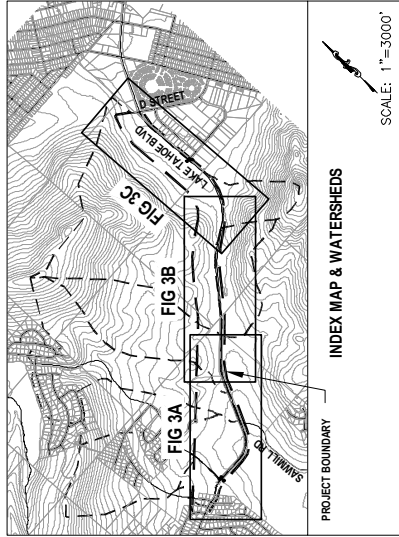
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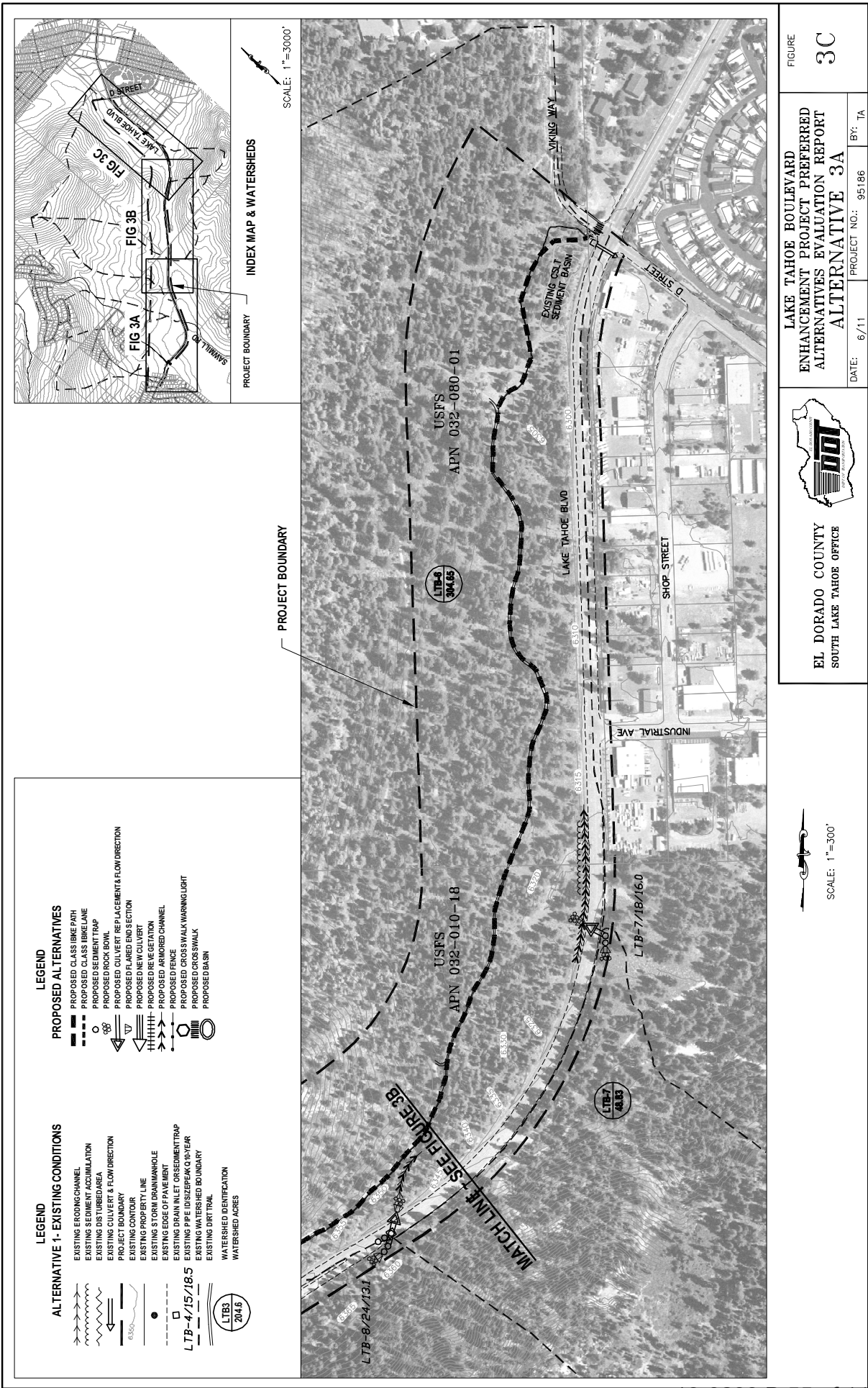
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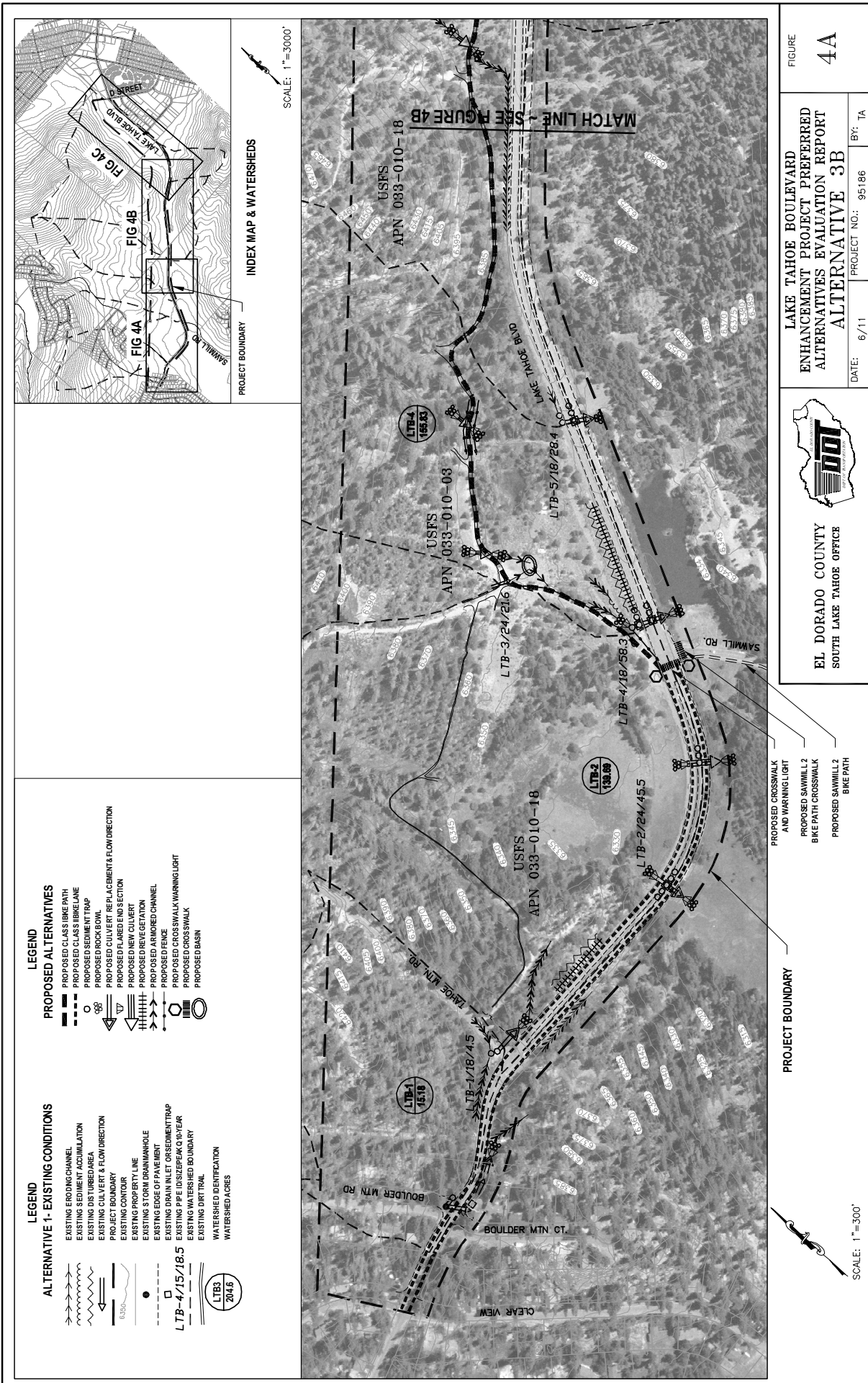
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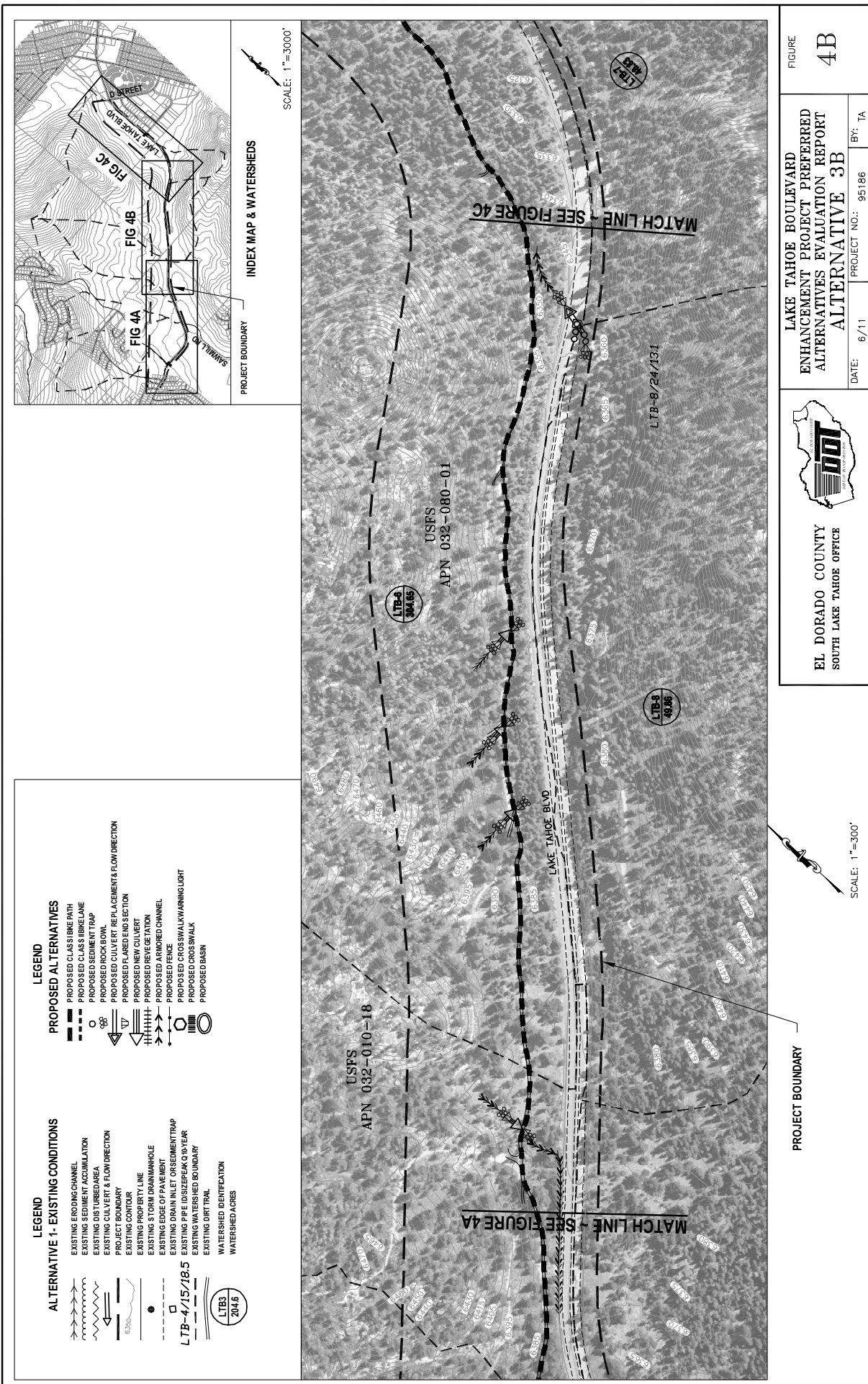
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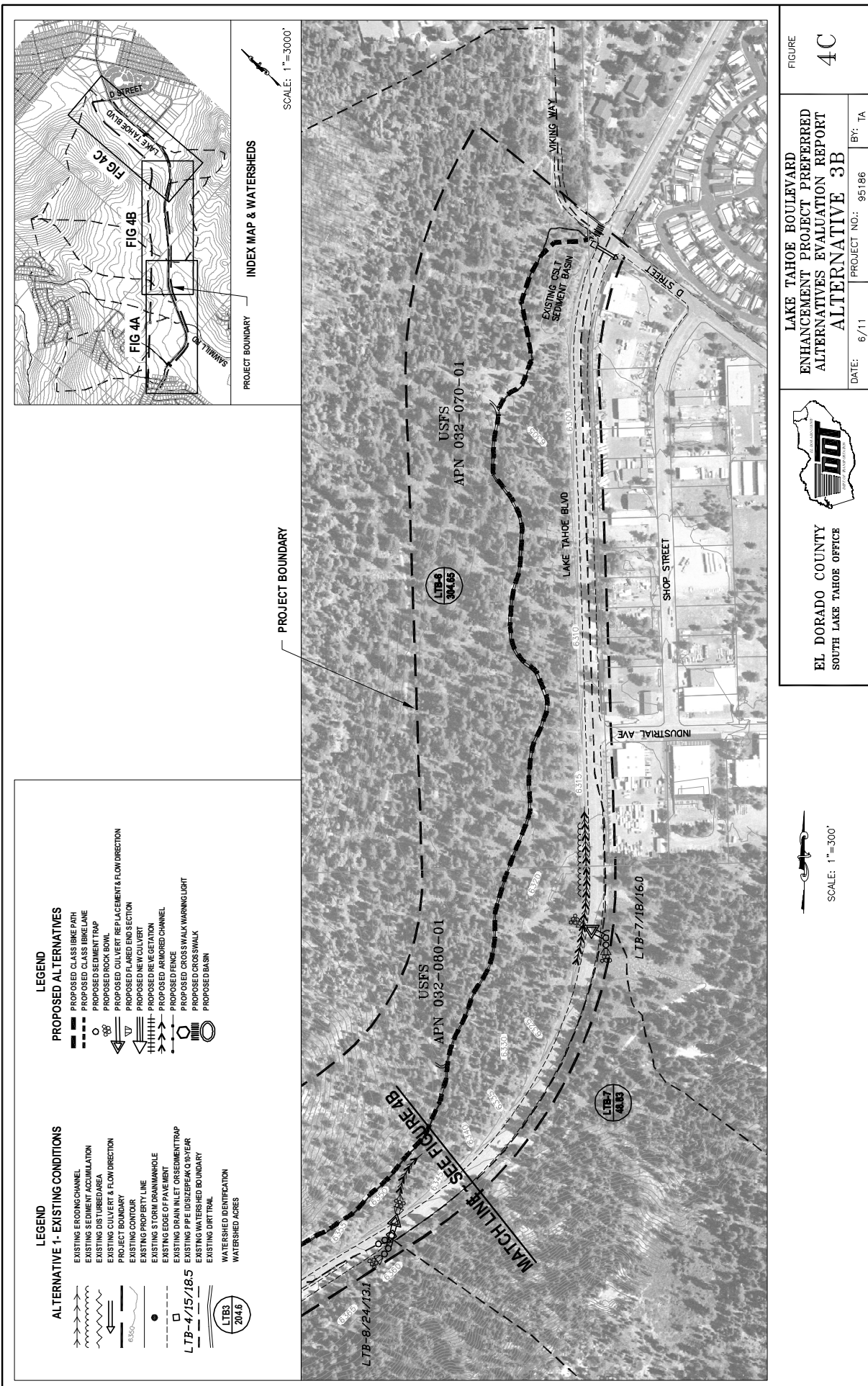


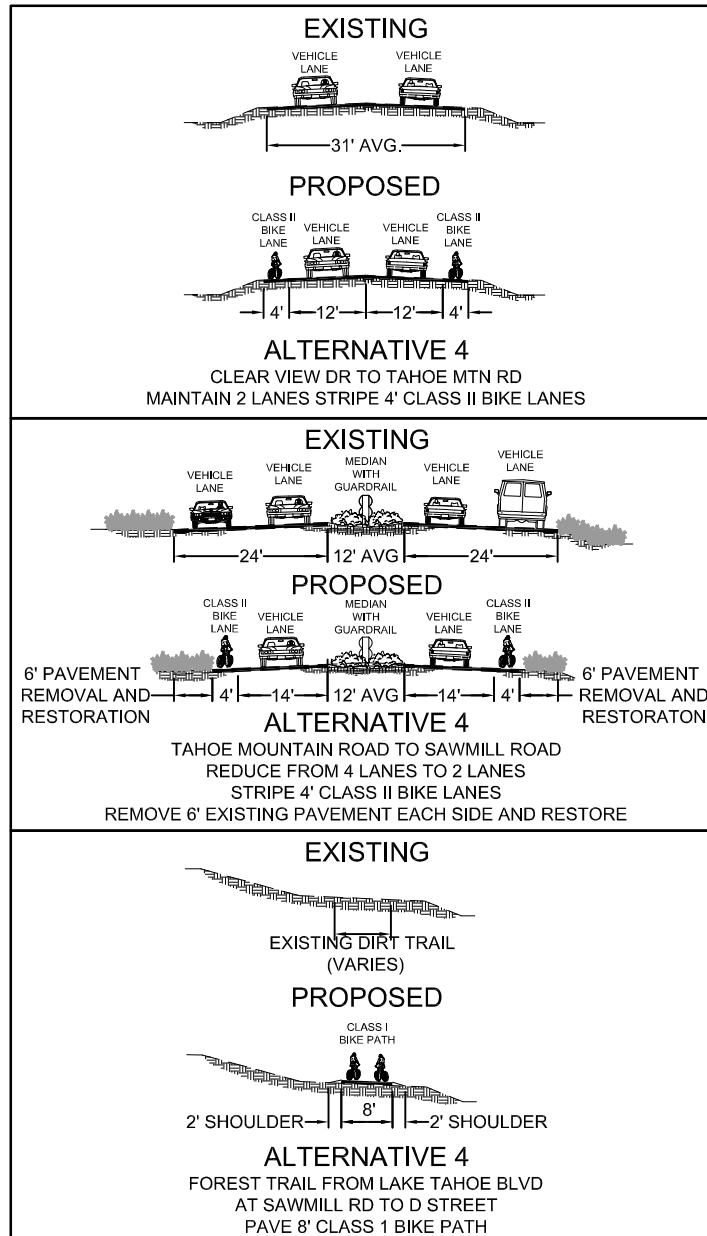












EL DORADO COUNTY
TAHOE ENGINEERING DIVISION



**LAKE TAHOE BOULEVARD
ENHANCEMENT PROJECT
ALTERNATIVE 4**

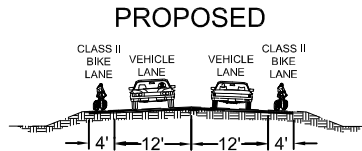
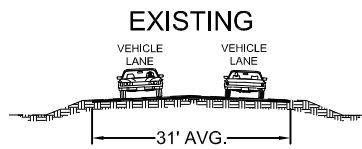
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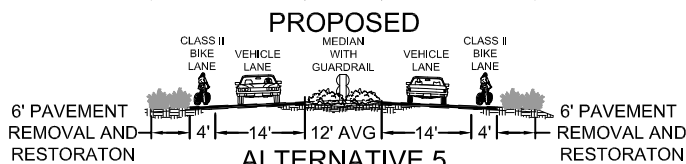
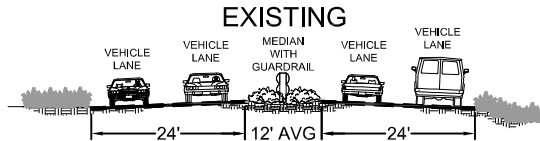
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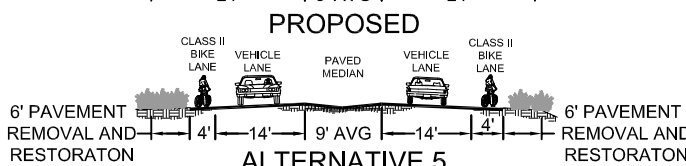
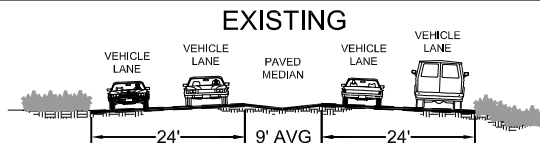
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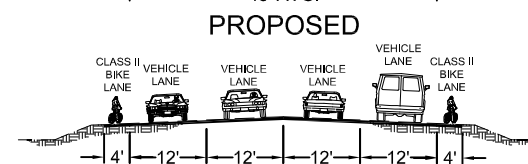
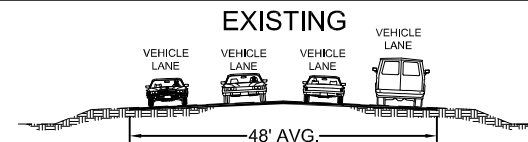
ALTERNATIVE 5
 CLEAR VIEW DR TO TAHOE MTN RD
 MAINTAIN 2 LANES STRIPE 4' CLASS II BIKE LANES



ALTERNATIVE 5
 TAHOE MOUNTAIN ROAD TO SAWMILL ROAD
 REDUCE FROM 4 LANES TO 2 LANES
 STRIPE 4' CLASS II BIKE LANES
 REMOVE 6' EXISTING PAVEMENT EACH SIDE AND RESTORE



ALTERNATIVE 5
 SAWMILL ROAD TO 400' SOUTHWEST OF INDUSTRIAL AVE
 REDUCE FROM 4 LANES TO 2 LANES
 STRIPE 4' CLASS II BIKE LANES
 REMOVE 6' EXISTING PAVEMENT EACH SIDE AND RESTORE



ALTERNATIVE 5
 400' SOUTH OF INDUSTRIAL AVE TO D STREET/VIKING WAY
 MAINTAIN 4 LANES PAVE 4' BIKE LANES BOTH SIDES
 STRIPE 4' CLASS II BIKE LANES

EL DORADO COUNTY
 TAHOE ENGINEERING DIVISION



LAKE TAHOE BOULEVARD
 ENHANCEMENT PROJECT
 ALTERNATIVE 5

DATE: 12/10

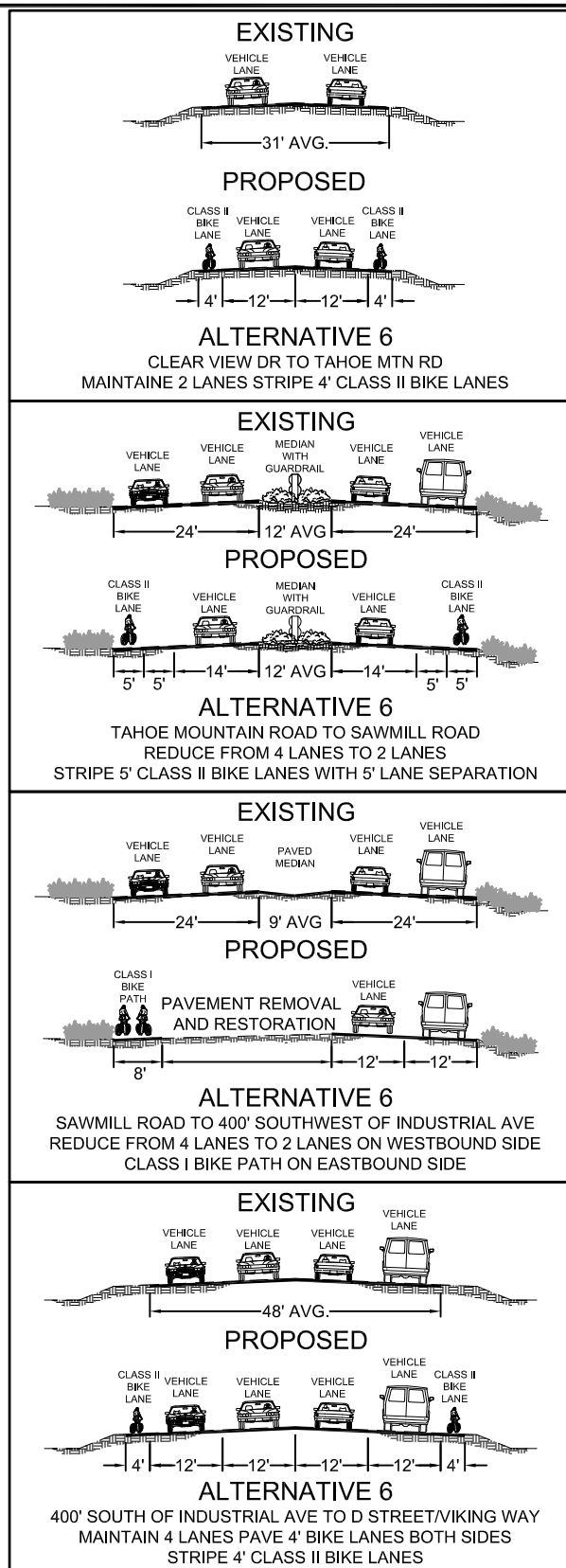
PROJECT NO.: 95186

BY: TA

EXHIBIT

5

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EL DORADO COUNTY
TAHOE ENGINEERING DIVISION



**LAKE TAHOE BOULEVARD
ENHANCEMENT PROJECT
ALTERNATIVE 6**

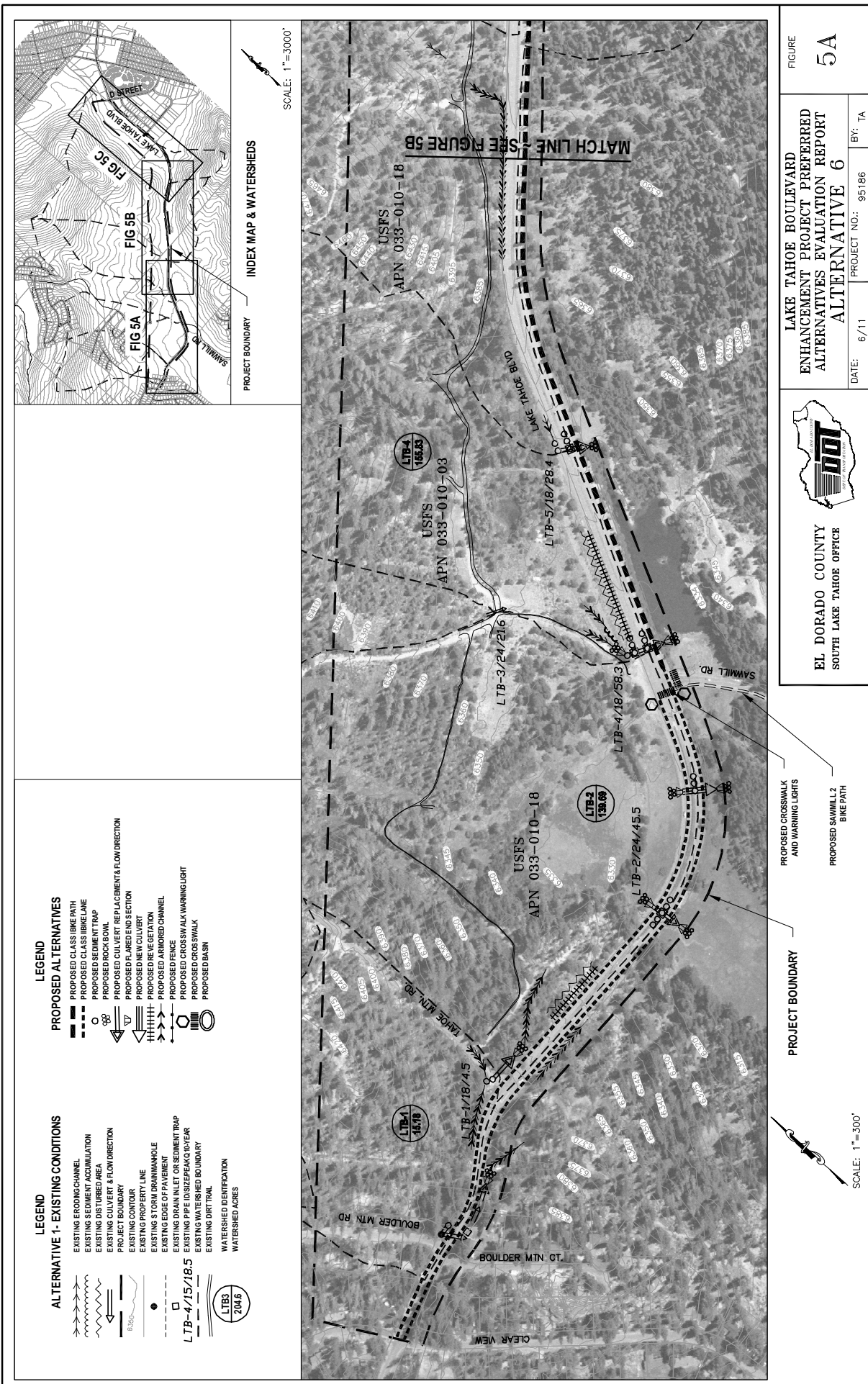
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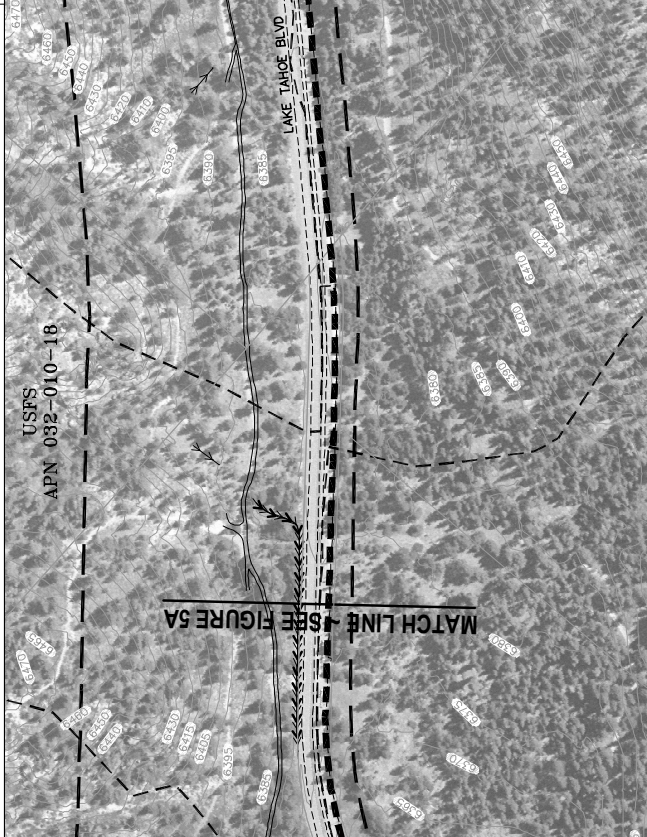
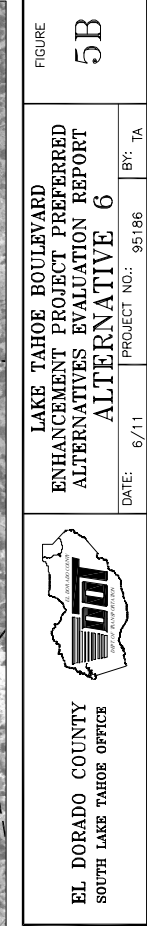
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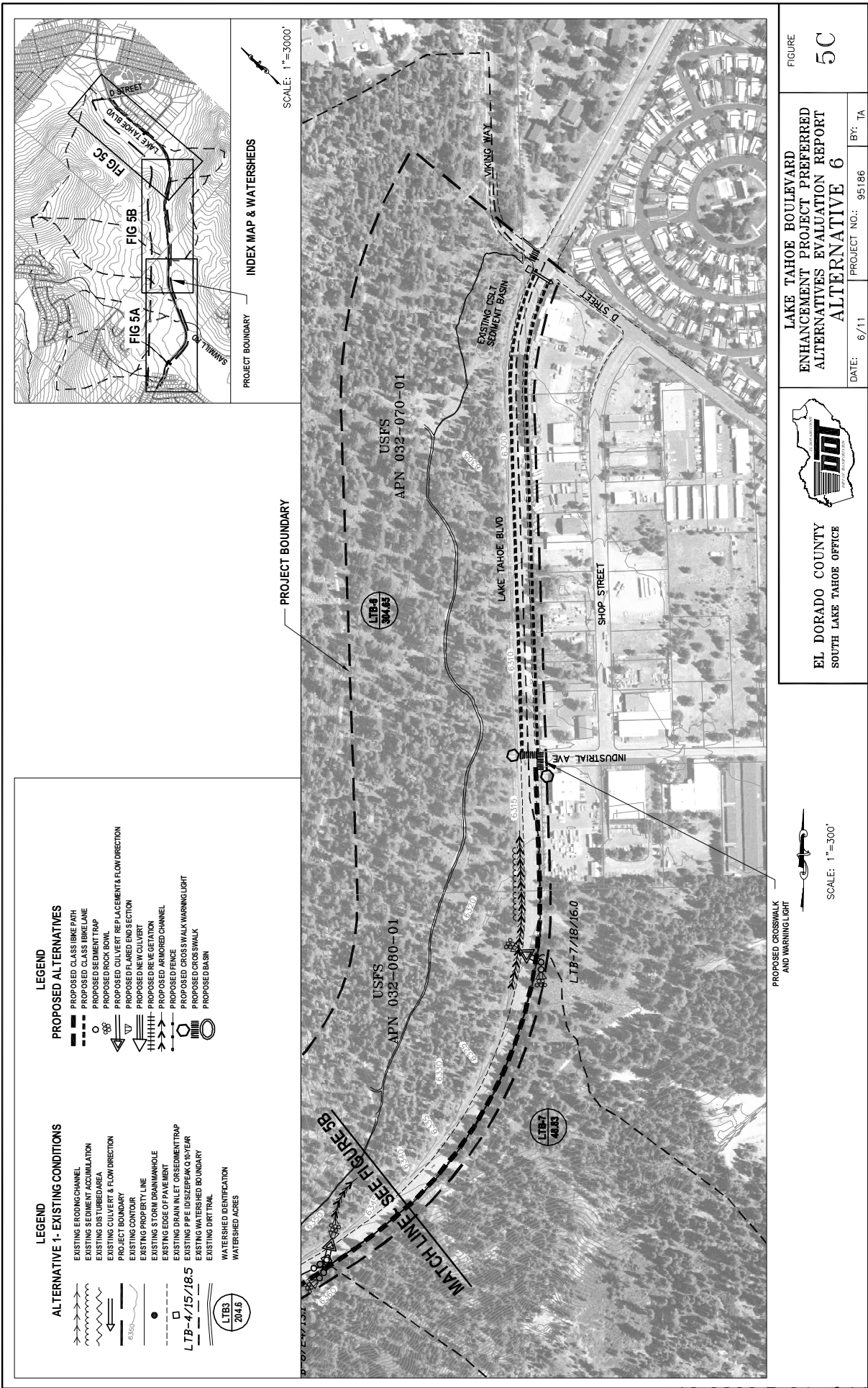
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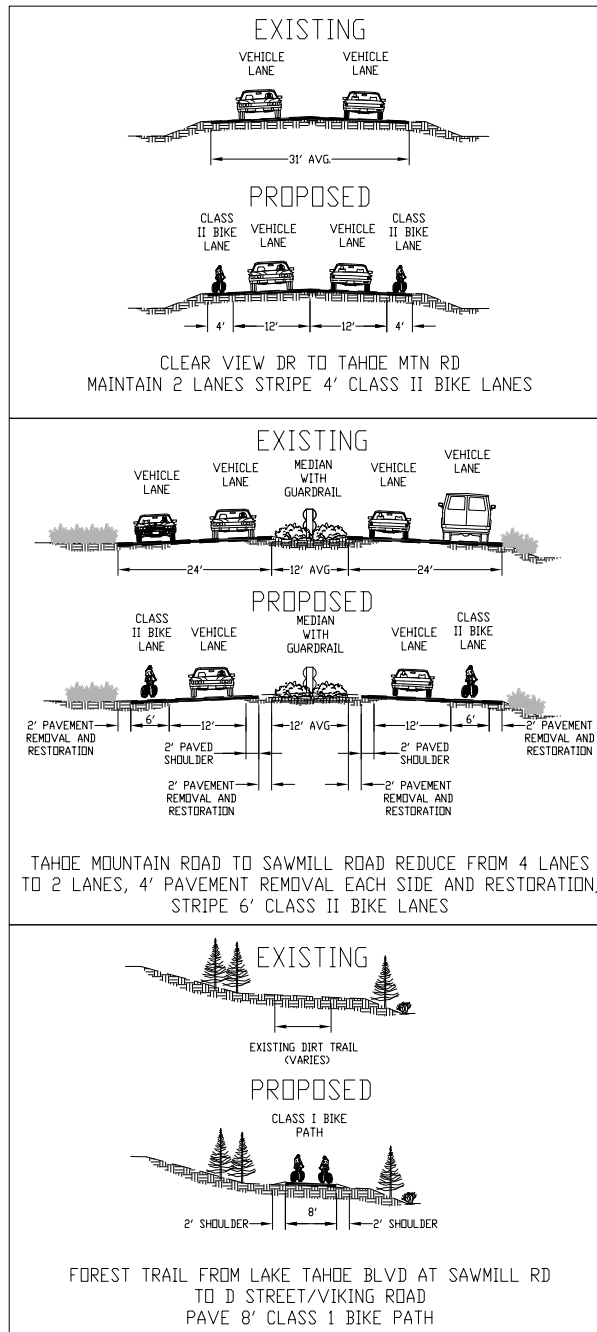
EXHIBIT

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EL DORADO COUNTY
TAHOE ENGINEERING DIVISION



LAKE TAHOE BOULEVARD
ENHANCEMENT PROJECT
PREFERRED PROJECT ALTERNATIVE REPORT

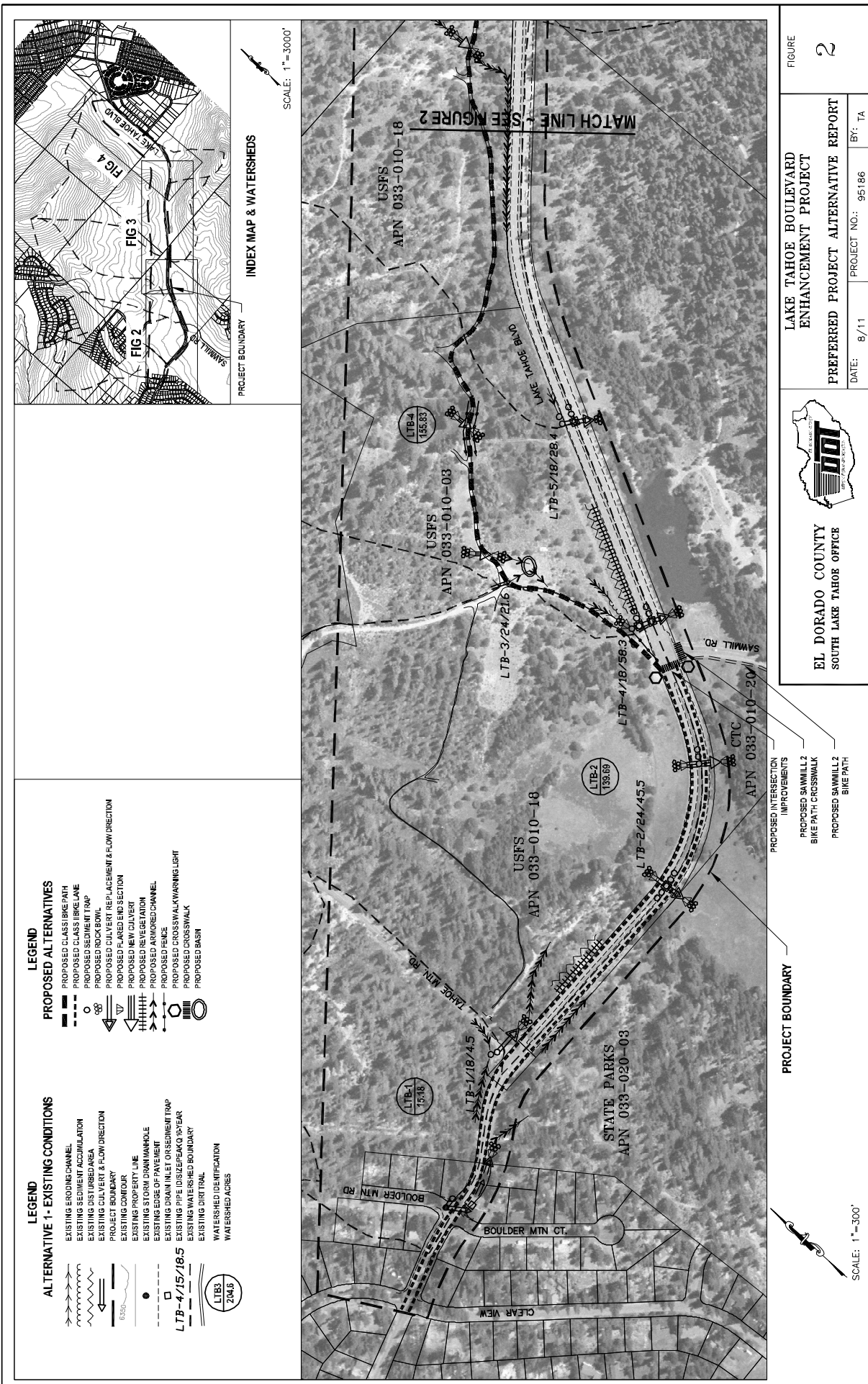
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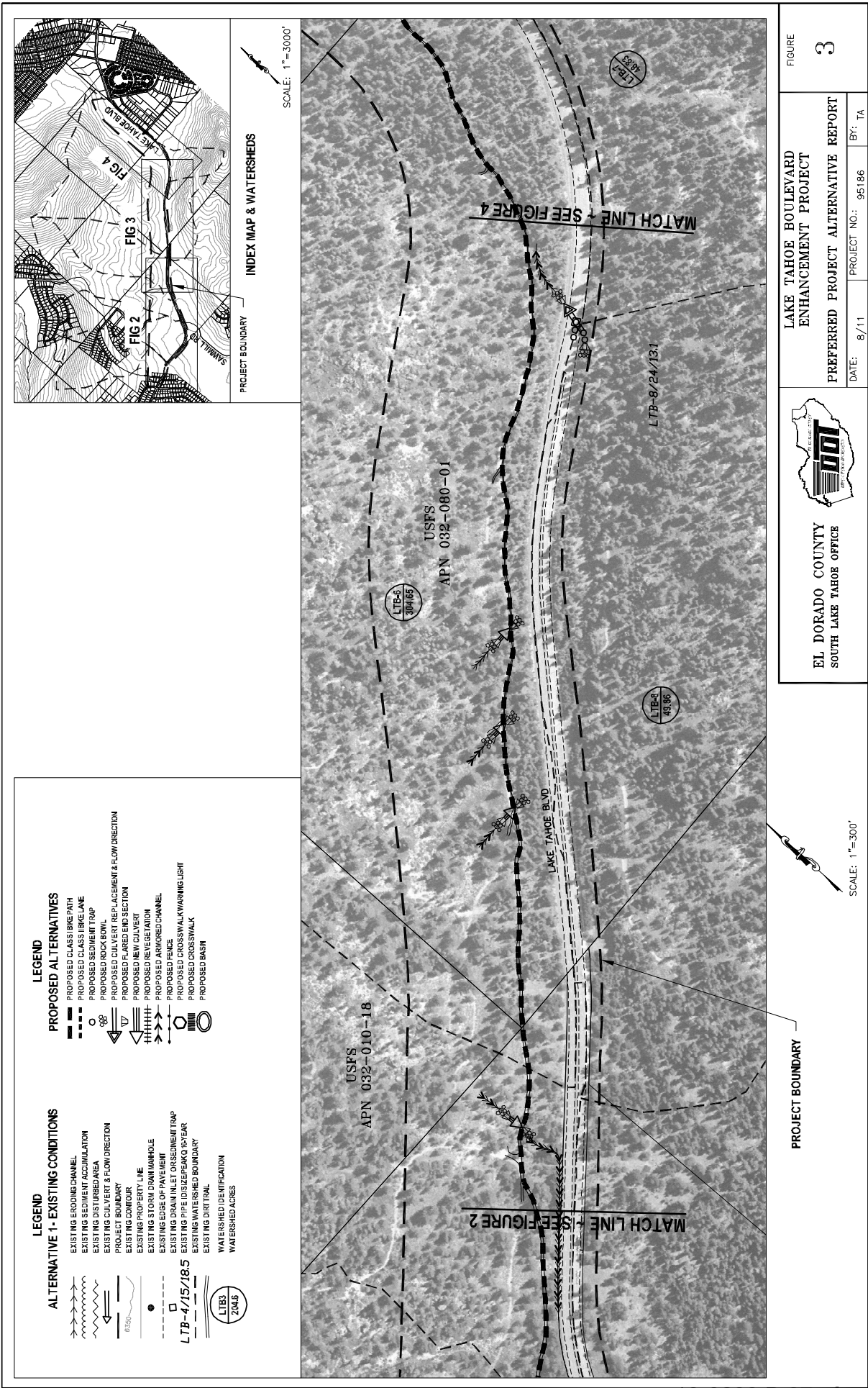
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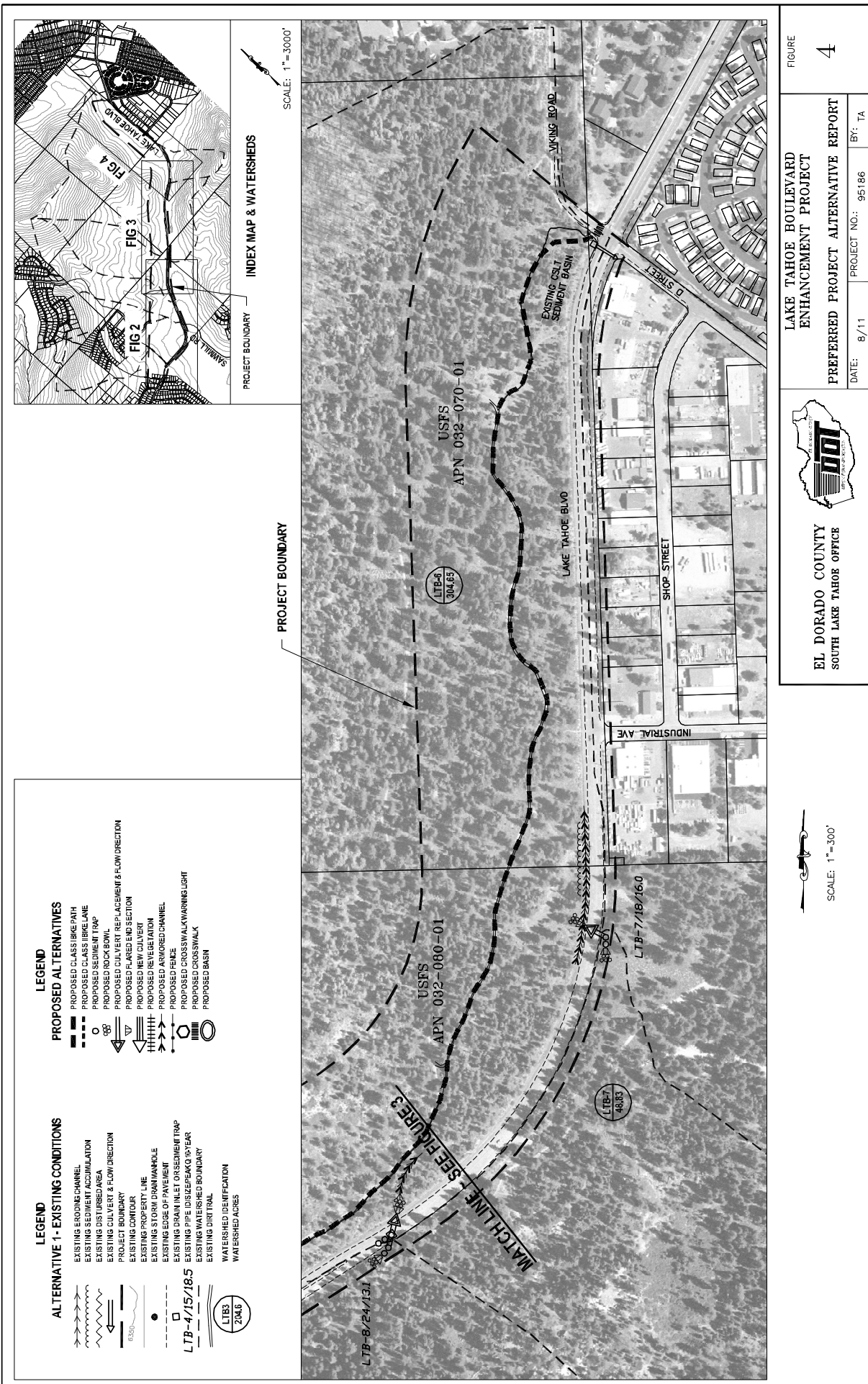
BY: TA

FIGURE

1







APPENDIX A:
CEQA CHECKLIST



TAHOE ENGINEERING
924B Emerald Bay Road
South Lake Tahoe, CA 96150
Phone: (530) 573-7900
Fax: (530) 541-7049

KIMBELY A. KERR
Interim Director of
Transportation
Internet Web Site:
<http://edcgov.us/dot>

MAIN OFFICE
2850 Fairlane Court
Placerville CA 95667
Phone: (530) 621-5900
Fax: (530) 626-0387



CEQA Checklist

Title: Lake Tahoe Boulevard Enhancement Project (JNs 95163/95175/95186)	
Description: Construction of Class 1 and Class 2 bicycle paths and erosion control and water quality improvement facilities.	
Location: The Project area is located in eastern El Dorado County, in South Lake Tahoe California within the Lake Tahoe Basin. The Project is located in the southern section of the Lake Tahoe Basin in Sections 17-20, Township 12 North, Range 18 East, in the Echo Lake and Emerald Bay U.S. Geological Survey 7.5 minute quadrangle maps. The Project is along Lake Tahoe Boulevard from Viking Road to Clear View Drive.	
Owner/Applicant: County of El Dorado Department of Transportation – Tahoe Engineering Unit	
Lead Agency: County of El Dorado Department of Transportation – Tahoe Engineering Unit	
County Contact: Brendan Ferry, Senior Environmental Planner	Phone: 530-573-7900
Address: 924 B Emerald Bay Road, South Lake Tahoe, CA 96150	

The CEQA Checklist recommended by the California Environmental Quality Act (CEQA) Guidelines is used to determine potential impacts of the Proposed Project on the physical environment. The Checklist provides a list of questions concerning a comprehensive array of environmental issues potentially affected by the Project. An evaluation of impacts for each resource follows:

- a) A brief explanation is required for all answers except 'No Impact' answers that are adequately supported by the information a lead agency following each question. A 'No Impact' answer is adequately supported if the referenced information shows that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A 'No Impact' answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- b) All answers must account for the whole action involved, including off-site and on-site impacts. The answer must also consider cumulative and project-level impacts, indirect and direct impacts and construction and operational impacts.
- c) Once the lead agency has determined that a particular physical impact may occur, the Checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. A potentially significant impact is appropriate if there is substantial evidence that an effect may be significant. If there are one or more potentially significant impacts when the determination is made, an EIR is required.
- d) Mitigated Negative Declaration - Less than Significant with Mitigation: This applies when mitigation measures have been incorporated into a project, which reduced an effect from a potentially significant impact to a less than significant impact. The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII and earlier analyses may be cross-referenced).
- e) Earlier analyses may be used where, pursuant to the tiering, programmatic EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
 - i. **Earlier Analysis Used.** Identify and state where they are available for review.

- ii. **Impacts Adequately Addressed.** Identify which effects from the Checklist were within the scope of an earlier document pursuant to applicable legal standards, and state whether such effects were adequately analyzed and addressed by mitigation measures.
 - iii. **Mitigation Measures.** For effects that are less than significant with mitigation measures, describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they addressed site-specific conditions for the project.
- f) Lead agencies are encouraged to incorporate references into the checklist to provide information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- g) Supporting Information Sources: A source list should be attached. Individuals who were contacted should be cited in the discussion.
- h) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- i) The explanation of each issue should identify:
- i. The significance criteria or threshold, if any, used to evaluate each question.
 - ii. The mitigation measure identified, if any, to reduce the impact to less than significant.

I. AESTHETICS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Item I-B Discussion: The Proposed Project will remove trees; however the Project area is not along a scenic highway. No rock outcroppings or historic buildings will be damaged during construction of the Proposed Project; therefore, the Proposed Project will have a less than significant impact.

Item I-C Discussion: The Proposed Project will implement new erosion control and water quality protection measures. Care will be taken in the design and construction of the improvements to integrate them into the natural surroundings. The Proposed Project will restore degraded channels and bare soil areas within the County right-of-way, along the existing dirt road and on the specified parcels. The proposed bicycle path and erosion control and water quality improvement measures will increase the visual character and quality of the site. While construction activities may affect the scenic resources during construction, these impacts will be temporary. The Proposed Project will not substantially degrade the existing visual character or quality of the site or its surroundings; therefore, the Proposed Project will have a less than significant impact.

Item I-D Discussion: The Proposed Project will implement pedestrian activated flashing beacons at the intersection of Sawmill Rd. and Lake Tahoe Blvd. The flashing beacons are proposed as traffic calming measures to enhance public safety at the intersection. The flashing beacons will produce a new source of light in the Project area; however the light will be intermittent and temporary in nature. The beacons will only flash when a pedestrian pushes the activation button, indicating that they wish to cross the road. The flashing light will be directed at the existing travel lanes to alert motorists of the pedestrian in the roadway. Because the flashing beacons will be intermittent, temporary and directed at an existing roadway area, the impacts from the new light source will not provide substantial light or glare which could adversely affect day or nighttime views; therefore the Proposed Project will have a less than significant impact.

II. AGRICULTURE AND FOREST RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. – Would the project:

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

Category II Discussion: The Project area does not contain any lands used for agriculture, nor do the plan area statements that encompass the Project area allow for agriculture. Additionally, the Proposed Project proposes to pave a bicycle and pedestrian path along an existing United States Forest Service (USFS) dirt road. The dirt road currently allows access for tree removal operations and the paved pedestrian and bicycle path will continue to allow access for tree removal operations in the future. The Proposed Project does propose to remove up to 55 trees, however the USFS is continuing tree removal operations along the existing dirt road during the summer of 2013 and many of the 55 trees that the Proposed Project would remove may be removed by the USFS. The tree removal aspects of the Proposed Project will not degrade the surrounding forest land and are not considered to be significant due to the significant number of trees within the Project area. Therefore, the Proposed Project will have no impact on agriculture or forest resources.

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

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Item III-B Discussion: The Proposed Project will involve excavation and grading. The El Dorado County Air Quality Management District (EDCAQMD) Rule 223 Fugitive Dust General Requirements states that “visible emissions shall not exceed 20% opacity at point-of-origin and shall not extend more than 50 feet from point-of-origin, or cross the Project boundary line, whichever is less.” The contractor will comply with the Air Quality Plan and EDCAQMD regulations by implementing air quality Best Management Practices (BMPs) from the TRPA Handbook of Best Management Practices and practices outlined in the EDCAQMD Rule 223 to address fugitive dust. Compliance with the TRPA Air Quality Plan will attain TRPA threshold standards and, therefore, federal and state air quality standards.

The Proposed Project will have no long term impacts to air quality. The proposed bicycle path will be paved, will only allow non-motorized transportation and will be swept bi-annually with the County’s sweeper to clean any dirt and dust from the surface. Over time, the Proposed Project will improve air quality by providing an alternate transportation option to the automobile. Compliance with EDCAQMD and TRPA regulations through the permitting process will ensure that the Proposed Project will not conflict with or obstruct implementation of the air quality plans. Additionally, the Proposed Project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Finally, the Proposed Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment. With the implementation of the mitigation measures outlined below in *Item III-B Mitigation Measures*, the Proposed Project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation; therefore, the Proposed Project will have a less than significant impact.

Item III-B Mitigation Measures:

Mitigation Measure AQ-1: The construction contractor shall implement air quality Best Management Practices from the TRPA Code of Ordinances and Handbook of Best Management Practices.

Mitigation Measures AQ-2: The construction contractor shall water exposed soil twice daily, or as needed, to control wind borne dust. All haul/dump truckloads shall be covered securely.

Mitigation Measure AQ-3: The contractor shall sweep the Project site a minimum of once daily to remove all dirt and mud that has been generated from or deposited on roadways by construction equipment going to and from the construction site.

Mitigation Measure AQ-4: On-site vehicle speed shall be limited to 15 miles per hour on unpaved surfaces.

Mitigation Measure AQ-5: Construction activities shall comply with EDCAQMD Rule 223 - Fugitive Dust, so that emissions do not exceed hourly levels. The contractor will use approved BMPs as outlined in the TRPA Handbook of Best Management Practices and the EDCAQMD Rule 223 to address fugitive dust. Dust mitigation measures and dust control BMPs will include, but are not limited to, stabilizing unpaved areas subject to vehicular traffic, stabilizing storage piles and disturbed areas, suppressing dust by watering disturbed areas, cleaning all construction vehicles leaving the site, mulching bare soil areas, and ceasing grading and earth moving activities when wind speeds are high enough to result in dust emissions crossing the Project boundary.

Mitigation Measure AQ-6: Construction equipment idling shall be restricted to 5 minutes when not in use.

Mitigation Measure AQ-7: The construction contractor shall post a publicly visible sign on the Project site during construction operations that specifies the telephone number and person/agency to contact for complaints and/or inquiries on dust generation and other air quality problems resulting from Project construction.

Item III-C Discussion: Construction activities may impact air quality, but the impacts will be well below established significance levels since the activity is temporary and there will not be any long-term impacts. The Proposed Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment; therefore, the Proposed Project will have a less than significant impact.

Item III-D Discussion: Construction activities may impact air quality, but the impacts will be well below established significance levels since the activity is temporary and there will not be any long-term impacts. The Proposed Project will not expose sensitive receptors to substantial pollutant concentrations; therefore, the Proposed Project will have a less than significant impact.

Item III-E Discussion: Construction activities may impact air quality, but the impacts will be well below established significance levels since the activity is temporary and there will not be any long-term impacts. The Proposed Project will not create objectionable odors affecting a substantial number of people; therefore, the Proposed Project will have a less than significant impact.

IV. BIOLOGICAL RESOURCES – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item IV-A Discussion: A *Wildlife Biological Assessment and Biological Evaluation (BABE)* was performed for the Proposed Project. The biological assessment surveys observed no federal or state-listed candidate, or proposed wildlife species in the Project study area. However, there are recorded occurrences of special status species immediately adjacent to the Project area. Suitable habitat conditions do exist within 0.5 miles of the Project area for bald eagle, osprey, northern goshawk, California spotted owl and American marten. This determination was based on a thorough data review and a survey of the Project area. The primary purpose of the field survey was to identify and determine the occurrence of, or the suitability of, habitat for special status wildlife species within the Project site.

A *Botanical Biological Assessment and Biological Evaluation (BABE)* was also performed for the Proposed Project. The biological assessment surveys observed no federal or state-listed candidate, or proposed botanical species in the Project study area. However, there are recorded occurrences of special status species immediately adjacent to the Project area. Suitable habitat conditions do exist within 0.5 miles of the Project area for upswept moonwort, scalloped moonwort, slender moonwort, common moonwort, mingan moonwort, western goblin, bolander's candle moss, subalpine fireweed, blandow's bog-moss, short-leaved hulsea, three-ranked hump moss and broad-nerved hump moss.

A *Noxious Weed Risk Assessment (NWRA)* was performed for the Proposed Project. The surveys indicated that three noxious weed species were known to exist within the Project area. These species cheatgrass (*Bromus tectorum*), bull thistle (*Cirsium vulgare*) and St. johns wort (*Hypericum perforatum*). The locations of the noxious weeds are documented in the NWRA.

With the implementation of the mitigation measures outlined below in *Item IV-A Mitigation Measures*, the Proposed Project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish & Game (CDFG) or U.S. Fish & Wildlife Service (USFWS); therefore, the Proposed Project will have a less than significant impact.

Item IV-A Mitigation Measures:

Mitigation Measure B-1: Prior to construction, the County will confirm if any new special status species have been identified by the USFS-LTBMU or the CA Fish & Wildlife Service (via the California Natural Diversity Database - *CNDDDB*) within, or immediately adjacent to, the Project area. If new activity or occurrences have been identified, appropriate limited operating periods (LOP) will be observed.

Mitigation Measure B-2: If special status plant species are found prior to or during construction, these populations will be identified and protected with appropriate measures per TRPA and the USFS-LTBMU.

Mitigation Measure B-3: The County will implement and require the contractor to adhere to a Noxious Weed Mitigation Plan (Plan) to decrease habitat vulnerability to or below pre-construction levels. The Plan includes pre-construction elements such as treatment methodologies for existing noxious weed populations identified in the Project area, as well as operating procedures for both during and post-construction. Recommended BMPs will

include, but are not limited to: hand removal of existing weeds prior to going to seed, equipment cleaning prior to use, area of disturbance minimization, disturbed ground stabilization upon completion of construction with mulch or other means, certified weed-free mulch and other materials, and disturbed areas revegetation with native plants.

Item IV-B Discussion: A Land Capability Verification, which delineated sensitive Class 1B (stream environment zone (SEZ)) lands within the Project area, was completed and certified by the TRPA. The Proposed Project has been designed to avoid SEZs in all possible instances; however, in order to construct some elements of the Proposed Project, as determined by the PDT and the public, some improvements may encroach slightly into an SEZ. Additionally, fieldwork has been completed to delineate Waters of the U.S., including wetlands. Using the data, a wetland delineation report will be prepared and submitted as part of the Section 404 Permit application to the U.S. Army Corps of Engineers (USACOE) to make a formal determination. By implementing the mitigation measures outlined below in *Item IV-B Mitigation Measures*, the Proposed Project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; therefore, the Project will have a less than significant impact.

Item IV-B Mitigation Measures:

Mitigation Measure B-4: Construction limit fencing, per TRPA's Code of Ordinances and the Handbook of BMPs, shall be designed and implemented by the contractor to limit SEZ disturbance to an area not to exceed five feet outside of the disturbance zone of the water quality and erosion control improvements. All disturbed areas will be stabilized and revegetated with compost, native seed and mulch. All revegetated areas will be irrigated for a minimum of two years following construction. Construction measures will include, but are not limited to, the use of hand or low impact equipment and the implementation of temporary BMPs such as filter fencing, coir logs, gravel bags, tree protection, and construction limit fencing to minimize disturbance. Although groundwater is not expected to be encountered during construction, if groundwater is encountered and the excavated area requires dewatering to complete the work, TRPA and the Lahontan Regional Water Quality Control Board shall be notified immediately to determine the appropriate course of action. The Storm Water Pollution Prevention Plan (SWPPP) for the Proposed Project will include a Dewatering Contingency Plan (Item VI-B Mitigation Measures) that the contractor shall follow.

Mitigation Measure B-5: Stormwater facilities will be designed per TRPA and Lahontan to improve the water quality of stormwater entering SEZs, as compared to the pre-project conditions. The erosion control aspects of the Proposed Project will enhance hydrology, soils, and vegetation.

Mitigation Measure B-6: The Proposed Project was designed around the findings of the wetland delineation to avoid or minimize impacts to wetlands and/or other WOUS. The County will also obtain a 404 Permit and a 401 Water Quality Certification, if necessary, and will implement the required mitigation measures. The County will obtain a TRPA EIP Project Permit and will implement the required mitigation measures. Up to 10,000 square feet of designated SEZ areas could be temporarily and/or permanently disturbed by implementing the Proposed Project. The locations of the potential SEZ disturbance are at the existing drainage features along the bike path and in the roadside channel improvement areas along Lake Tahoe Blvd. As part of the Proposed Project, the County will remove coverage and fill in the SEZ area along the sharp curve in Lake Tahoe Blvd. near Tahoe Mountain Rd. that can be used to mitigate the new SEZ disturbance, if necessary, and comply with any permit requirements.

Item IV-C Discussion: A Land Capability Verification, which delineated sensitive Class 1B (stream environment zone (SEZ)) lands within the Project area, was completed and certified by the TRPA. The Project has been designed to avoid SEZs in all possible instances; however, in order to construct some key elements of the Proposed Project, as determined by the PDT and the public, some improvements may encroach into SEZs. Additionally, fieldwork has been completed to delineate Waters of the U.S., including wetlands. Using the data, a wetland delineation report will be prepared and submitted as part of the Section 404 Permit application to the U.S. Army Corps of Engineers (USACOE) to make a formal determination. With the implementation of the mitigation measures outlined above in *Item IV-B Mitigation Measures* and below in *Item IV-C Mitigation Measures*, the Proposed Project will not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act; therefore, the project will have a less than significant impact.

Item IV-C Mitigation Measures:

Mitigation Measure B-7: Should any construction work be required in or adjacent to wetlands, it shall be conducted from the existing pavement or dirt road and/or shall be confined to the smallest area possible to complete the work by restricting the contractor's equipment access through the use of construction limit fencing per the TRPA Code of Ordinances.

Mitigation Measure B-8: All excavated material not required to complete the construction work shall be immediately removed from the wetland areas and be contained by BMP measures per TRPA's Handbook of Best Management Practices.

Item IV-D Discussion: With the implementation of Mitigation Measures B-1 - B-3 found in Section IV-A above, the Proposed Project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; therefore, the Project will have a less than significant impact.

V. CULTURAL RESOURCES – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique Paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Category V Discussion: A cultural resources study, which included a literature search and an archaeological survey/inventory of the Proposed Project survey area, was completed. Five previous cultural resources studies have been conducted in the vicinity of the Project area, which included portions of the Area of Potential Effects (APE). Three previously recorded sites (05-01149, 05-1150 and 05-01151) are adjacent to the Project area, but will not be affected by the Proposed Project. No cultural resources have been previously recorded within the APE and none were identified within the APE during the pedestrian survey. The APE is considered to have a low sensitivity for the discovery of prehistoric, ethno historic, or historic cultural material or subsurface deposits. Because of this, no additional cultural resources work for this Proposed Project is recommended. However, in the event that cultural resources are discovered during Project implementation, Project personnel shall halt all activities in the immediate area and notify a qualified archaeologist to determine the appropriate course of action. Therefore, the Proposed Project will have no impact on cultural resources.

VI. GEOLOGY & SOILS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item VI-B Discussion: One major goal of the Proposed Project is to implement erosion control and water quality improvements within the Project area that will stabilize bare soils and improve stormwater quality. During construction, portions of the site will have exposed soil areas that may, during a rain storm, high wind event or utility line breach, erode and pose a threat to water quality. Up to 3,138 cubic yards of soil may be disturbed by construction. However, due to the installation of best management practices, once Project construction is complete, there will be an overall decrease of erosion in the Project area. With the implementation of the mitigation measures outlined below in *Item VI-B Mitigation Measures*, the Proposed Project will not result in any significant increase in wind or water erosion of soils, either on or off the site; therefore, the Proposed Project will have a less than significant impact.

Item VI-B Mitigation Measures:

Mitigation Measure G-1: The contractor shall prepare, submit and adhere to a Storm Water Pollution Prevention Plan (SWPPP) to the County, Lahontan Regional Water Quality Control Board (Lahontan), and TRPA prior to construction. The SWPPP shall be in accordance with TRPA and Lahontan requirements for stormwater pollution prevention in the Tahoe Basin. As part of the SWPPP, the contractor will be required to prepare and adhere to a Temporary BMP Plan, a Spill Contingency Plan and a Dewatering Plan.

The Temporary BMP Plan will include design and specifications that detail the required construction BMPs that shall be installed prior to and during construction to prevent any erosion that may occur during a rain or wind event. All temporary BMPs shall be installed and maintained per TRPA's Handbook of Best Management Practices. Temporary BMPs will include, but are not limited to: gravel bags, silt fencing, tree protection fencing,

construction limit fencing, coir logs, visqueen, and construction access gravel. Prior to construction, all storage, access, and staging areas shall be secured by the contractor and approved by County, Lahontan, and TRPA. No staging or storage will occur in Stream Environment Zones (SEZs). The contractor shall be responsible for maintenance of mobilization sites, including placement and maintenance of BMPs. All equipment, vehicles, and materials shall be stored on paved or previously disturbed surfaces only; in locations approved by the County, Lahontan, and TRPA.

The contractor shall limit the areas to be disturbed to the area within the boundary of the construction limit fencing, which shall be designed and installed prior to commencement of construction. The boundary of the construction limit fencing shall be displayed on the EC Sheets of the construction plans and shall be set to the minimum size required to construct proposed improvements, per the Projects plans and specifications. All disturbed areas shall be restored to a better than pre-construction condition. The contractor shall meet the permit requirements for BMPs, staging areas, revegetation, grading season restrictions, and all other permitting agency approval conditions. Construction grading will take place within the Lake Tahoe construction season (between May 1st and October 15th); unless a TRPA-granted grading exception is obtained.

The Spill Contingency Plan, which the contractor shall adhere to, shall outline how to properly handle accidental construction related spills and must include the requirement for spill prevention kits to be available on site to contain and properly clean any accidental spills. The Spill Contingency Plan will help the contractor to minimize the potential for and effects from spills of hazardous, toxic, or petroleum based substances during construction activities. The Spill Prevention Kit will contain, but is not limited to, absorbent pads, plastic bags, containment devices, drain seals and drip pans. This plan will also outline who to call if utility lines are damaged during construction.

The Dewatering Plan, which the contractor shall adhere to, will outline the process that will be required of the contractor if groundwater is intercepted during construction. The Dewatering Plan shall be prepared and submitted for approval by the County, Lahontan, and TRPA prior to commencement of construction. Construction sequencing shall be designed to avoid and minimize the potential of encountering groundwater during construction. However, if groundwater is encountered and the excavated area requires dewatering to complete the work, construction shall immediately cease and TRPA, Lahontan, and the County shall be notified immediately. The agencies will then observe the construction work to ensure that the approved dewatering plan is being adhered to and that dewatering effluent is properly contained and disposed of.

Mitigation Measure G-2: The contractor shall attend the TRPA pre-grade onsite inspection meeting to ensure that proper BMPs are in place per the SWPPP and that all permit conditions have been met prior to commencement of construction.

Mitigation Measure G-3: The County shall conduct daily inspections of BMPs to ensure they are properly placed and maintained for maximum water quality benefit. As part of this process, County and/or the contractor will complete inspection forms for submittal to regulatory agencies to demonstrate deficiencies and that corrective action has been immediately taken.

VII. GREENHOUSE GAS EMISSIONS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item VII-A Discussion: Project construction would generate temporary and one-time greenhouse gas (GHG) emissions mainly from diesel-powered construction equipment and on-road trucks, with a small amount from workers' personal vehicles during construction of the Proposed Project. Greenhouse gases emitted during the combustion of diesel fuel in off-road construction equipment and on-road vehicles would consist mainly of carbon dioxide, along with small amounts of methane and nitrous oxide. Construction emissions would be intermittent, and short-term, during one summer construction season. Construction emissions would permanently cease at the end of the Proposed Project. Over the long-term, these temporary emissions would be offset or mitigated by the creation of the bicycle and pedestrian path which will allow an alternate mode of transportation to the automobile. Also, a portion of the carbon emissions will be offset by the growth of native vegetation at designated restoration areas. The revegetation work, including trees, grasses, and shrubs would be maintained over the life of the Proposed Project to sequester carbon dioxide.

There currently is no federal, state, or local regulatory guidance for determining whether a project advances or hinders California's GHG reduction goals and no promulgated thresholds of significance for GHG impacts have been established. Therefore, this analysis focuses on construction impacts estimated using the County's past project implementation database and the U.S. Environmental Protection Agency (USEPA) GHG emission factors for diesel fuel and gasoline combustion in construction equipment. The County has reviewed past construction logs for projects equivalent in size and scope to the Proposed Project, to determine the typical number and type of vehicles that are actively working to construct the project each day. Based on this analysis, the County has formulated the following assumptions:

- o Fifteen workers per day, driving five vehicles to work an average of 40 miles roundtrip per day
- o Vehicles average 20 miles per gallon
- o Twelve pieces of construction machinery per day
- o Crews work eight hours per day with machinery running half that time (4 hours)
- o Machinery burns an average of two gallons of diesel fuel per hour
- o Diesel fuel contributes approximately 22.5 lbs CO₂/gallon
- o Gasoline contributes approximately 20 lbs CO₂/gallon
- o The Proposed Project will be completed in 110 working days

Based on these assumptions, the Proposed Project would emit approximately 118 metric tons of CO₂ equivalents.

This estimated amount is negligible in comparison to the statewide inventory of 480,000,000 metric tons discussed above (0.0000002 percent). The estimated amount is also significantly less than the San Luis Obispo Air Pollution Control District's (SLOAPCD) significance threshold of 1,150 metric tons of CO₂ equivalents. GHG emissions would terminate following completion of construction work. Therefore, due to the intent of the Proposed Project and with the implementation of Mitigation Measures AQ-1 - AQ-7 found in Section III above, the Proposed Project will not create a substantial amount of greenhouse gas emissions; therefore, the Project will have a less than significant impact.

VIII. HAZARDS & HAZARDOUS MATERIALS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item VIII-A Discussion: During Project construction, there exists a risk of accidental fuel spills from construction equipment. With the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI above, the Proposed Project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; therefore, the Proposed Project will have a less than significant impact.

Item VIII-B Discussion: During Project construction, there exists a risk of accidental fuel spills from construction equipment. With the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI above, the Proposed Project will not 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; therefore, the Proposed Project will have a less than significant impact.

Item VIII-C Discussion: During Project construction, there exists a risk of hazardous emissions and hazardous construction materials within one-quarter mile of the South Tahoe High School. The hazardous emissions will come from standard construction machinery and asphalt paving operations. The hazardous construction materials will come from accidental fuel spills from construction equipment. With the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI above, the Proposed Project will not emit a significant amount of hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; therefore, the Proposed Project will have a less than significant impact.

IX. HYDROLOGY & WATER QUALITY – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

requirements?				
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item IX-A Discussion: During construction, grading and excavation will take place that may have the potential to cause erosion. Up to 3,138 cubic yards of disturbance may occur while implementing the Project. During Project construction, there exists a risk of accidental fuel spills from construction equipment. Once construction is complete and the proposed erosion control and water quality improvement measures are in place, water quality in the area will be improved. With the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI above, the Proposed Project will not violate any water quality standards; therefore, the Proposed Project will have a less than significant impact.

Item IX-C Discussion: One of the goals of the Proposed Project is to reduce peak flows and volumes while providing treatment for the pollutants of primary concern. The Proposed Project will slightly affect drainage patterns in order to construct the proposed improvements and to improve hydraulic and hydrologic connectivity of the site and move stormwater to where it can be infiltrated. As a result, flow rates and volumes at the Project outflow locations will likely be decreased due to the infiltration components of this Proposed Project. The Proposed Project will not substantially alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on- or off-site; therefore, the Proposed Project will have a less than significant impact.

Item IX-D Discussion: One of the goals of the Proposed Project is to reduce peak flows and volumes while providing treatment for the pollutants of primary concern. The Proposed Project will affect drainage patterns in order to construct the proposed improvements and to improve hydraulic and hydrologic connectivity of the site and move stormwater to where it can be infiltrated. The Proposed Project will also create approximately 90,055

square feet of hard coverage, primarily over existing soft coverage, by paving the bike path. The bike path is designed to sheet flow runoff into the surrounding forested area or to route storm water to culverts where downstream treatment options exist. Because the soils in the surrounding forested area are so permeable, there is adequate capacity to capture and infiltrate runoff generated from the bike path. In the current situation, the compacted USFS dirt road generates runoff during precipitation events, which the surrounding forest soils have been able to capture and infiltrate. With the installation of best management practices, flow rates and volumes at the Project outflow locations will likely be decreased due to the infiltration components of this Proposed Project. The Proposed Project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site; therefore, the Proposed Project will have a less than significant impact.

Item IX-E Discussion: During construction of the Proposed Project, grading and excavation will take place that may have a potential to cause increased surface runoff. The Proposed Project will also create approximately 90,055 square feet of hard coverage, primarily over existing soft coverage, by paving the bike path. The bike path is designed to sheet flow runoff into the surrounding forested area or to route storm water to culverts where downstream treatment options exist. Because the soils in the surrounding forested area are so permeable, there is adequate capacity to capture and infiltrate runoff generated from the bike path. In the current situation, the compacted USFS dirt road generates runoff during precipitation events, which the surrounding forest soils have been able to capture and infiltrate. With the installation of best management practices, flow rates and volumes at the Project outflow locations will likely be decreased due to the infiltration components of this Proposed Project. With the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI above, the Proposed Project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; therefore, the Proposed Project will have a less than significant impact.

Item IX-F Discussion: During construction of the Proposed Project, grading and excavation will take place that may have a potential to cause increased surface runoff and minor erosion. The Proposed Project will also create approximately 90,055 square feet of hard coverage, primarily over existing soft coverage, by paving the bike path. The bike path is designed to sheet flow runoff into the surrounding forested area or to route storm water to culverts where downstream treatment options exist. Because the soils in the surrounding forested area are so permeable, there is adequate capacity to capture and infiltrate runoff generated from the bike path. In the current situation, the compacted USFS dirt road generates runoff during precipitation events, which the surrounding forest soils have been able to capture and infiltrate. With the installation of best management practices, flow rates and volumes at the Project outflow locations will likely be decreased due to the infiltration components of this Proposed Project. With the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI above, the Proposed Project will not otherwise substantially degrade water quality; therefore, the Project will have a less than significant impact.

X. LAND USE & PLANNING – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Category X Discussion: The Proposed Project will not physically divide an established community; conflict with any applicable land use plan, policy, or regulation; or conflict with any applicable habitat conservation plan or natural community conservation plan. The Project area is located in an unincorporated area of El Dorado County within the Tahoe Basin. Land use policies for the Project area are discussed in the El Dorado County General Plan, the TRPA Regional Plan, and the TRPA Plan Area Statements (PAS). The majority of the Project lies within PAS 118, which has a land use classification of Conservation. The Proposed Project will not impact or change the land use of the area and is consistent with the existing allowable uses; therefore, the Proposed Project will have no impact on land use or planning.

XI. MINERAL RESOURCES – Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Category XI Discussion: There are no known mineral resources that would be of value to the region or the state in the Project area. Therefore, the Proposed Project will have no impact on mineral resources.

XII. NOISE – Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Item XII-A Discussion: Standard construction equipment shall be used to construct the improvements associated with the Proposed Project. The equipment will increase noise levels over that of regular levels in the neighborhood, but the noise levels will be within allowable noise decibel standards imposed by the County and the TRPA. The TRPA Code of Ordinances states that TRPA-approved construction projects are exempt from the quantitative limits contained in the Noise Ordinance and Community Plan if construction activities take place between the hours of 8:00 a.m. and 6:30 p.m. With the implementation of the mitigation measures outlined below in *Item XII-A Mitigation Measures*, the Proposed Project may result in a temporary or periodic exposure to or generation of noise levels in excess of standards established in the local General Plan, Community Plan, or Noise Ordinance, but it will be temporary and is allowable under local ordinances. Therefore, the Proposed Project will have a less than significant impact.

Item XII-A Mitigation Measures:

Mitigation Measure N-1: In order to mitigate the impacts of temporarily increased ambient noise levels, construction noise emanating from all construction activities shall only occur between the hours of 8:00 a.m. and 6:30 p.m. per TRPA Code and the County's General Plan, unless other hours are approved by TRPA.

Mitigation Measure N-2: All construction equipment and vehicles used for Project construction shall be fitted with factory installed muffling devices and will be maintained in good working order. County will advise potentially affected residents of the proposed construction activities including duration, schedule of activities, and contacts for filing noise complaints. County staff and/or the contractor shall respond to all noise complaints received within one working day and resolve the issue within two working days.

Item XII-B Discussion: Standard construction equipment will be used to construct the proposed improvements. The equipment will create groundborne vibrations and noise levels over that of regular levels in the neighborhood, but the groundborne vibrations and noise levels will be within acceptable noise decibel standards imposed by the County and the TRPA. The Proposed Project will not result in exposure of persons to or generation of groundborne vibration or noise levels in excess of standards established in the local General Plan, Community Plan, or Noise Ordinance, or applicable standards of other agencies; therefore, the Proposed Project will have a less than significant impact.

Item XII-D Discussion: Refer to the information stated in the *Item XII-A Discussion*. With the implementation of Mitigation Measures N-1 and N-2 found in Section XII above, the Proposed Project may result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Proposed Project, but it will be temporary and is allowable under local ordinances. Therefore, the Proposed Project will have a less than significant impact.

XIII. POPULATION & HOUSING – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Category XIII Discussion: The Proposed Project will not directly or indirectly induce or displace existing or future housing. Therefore, the Proposed Project will have no impact on population and housing.

XIV. PUBLIC SERVICES – Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or 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 public services, including:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Category XIV Discussion: The Proposed Project will have no impact on fire protection, police protection, schools, parks, or other public facilities. Improvements are designed and located to ensure that regular access and maintenance can take place. The Proposed Project will not result in substantial adverse physical impacts associated with the new or altered facilities; therefore, the Proposed Project will have no impact on public services.

XV. RECREATION – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Item XV-A Discussion: The Proposed Project will implement approximately 9,055 linear feet of a 10 foot wide Class 1 bicycle and pedestrian path on the existing USFS dirt road that will connect with existing user trails on USFS land in the Twin Peaks / Tahoe Mountain area. Although the new bicycle and pedestrian path will bring additional users to the area, the increase in users leaving the proposed paved path and accessing the surrounding trails, which are relatively steep and primitive due to the topography of Twin Peaks, is not expected to be great enough to create a substantial physical deterioration of the environment. The existing dirt road currently has frequent users on mountain bikes or on horseback, and users that walk or run. These users, if they should choose, may currently access the surrounding trails and environment. Because the new path will be paved, it is

unlikely that a substantially greater number of users will leave the paved path to access the steep unpaved surrounding trails because they will be under-equipped (on road bikes, on skateboards, with strollers, etc.) to do so. The Proposed Project's bicycle and pedestrian path will also tie-in with the existing Sawmill 2 bike path that provides access to Washoe Meadows State Park (Park) and Sawmill Pond (Pond). The Park is managed by the California Department of Parks and Recreation and the Pond is managed by the USFS. Both of these agencies have been members of the Project Delivery Team (PDT) for the Proposed Project throughout the Project planning process, and are on-board with the Proposed Project alternative. The Park currently has no facilities besides an unmanaged network of dirt roads and trails. While the newly proposed bike path will likely bring more recreational users to these areas, measures were designed and implemented to prevent users from leaving the Sawmill 2 bike path and creating new trails in the Park which could disturb native soils and potentially pose a threat to water quality. A fence was constructed between the bike path and the Park to prevent users from creating new trails and new disturbance to the Park. Also, no new access points were created as part of the Sawmill 2 Bike Path Project and none are proposed as part of the Proposed Project. Also, the Pond is currently a busy recreational destination due to the fishing opportunities that exist for children. Because the Pond can currently be accessed by automobile, where ample parking exists, it is unlikely that the Proposed Project will bring sufficient additional users where substantial physical deterioration of the facility would occur. The Proposed Project may increase the use of existing regional parks or other recreational facilities, however the additional use is not expected to create a substantial physical deterioration of the facility; therefore the Proposed Project will have a less than significant impact.

Item XV-B Discussion: The Proposed Project will implement approximately 9,055 linear feet of a new 10 foot wide Class 1 and Class 2 bicycle and pedestrian path along Lake Tahoe Boulevard that will create new disturbance in certain areas. However, the design of the Proposed Project will focus on implementing measures to prevent the path from having an adverse physical effect on the environment. The Class 1 bicycle path will primarily be constructed within the existing USFS dirt road corridor, which has been previously disturbed. The Class 2 bicycle lanes will be constructed entirely within the existing paved roadway area along Lake Tahoe Boulevard. The erosion control and water quality features of the Proposed Project will primarily be constructed in areas where runoff currently flows, which have been previously disturbed. In areas of new disturbance, measures will be taken to minimize impacts during construction. For further detail, refer to the information outlined above in the *Mitigation Measures VI-B* section. As part of Project design and construction, the bike path will avoid stream environment zones (SEZ) and wetlands, as identified by TRPA and the Wetland Delineation, in all possible instances and will span SEZs and wetlands with culverts and rock where they cannot be avoided to minimize impacts to sensitive environments. Large trees, per TRPA's Code of Ordinances, will remain and will not be harmed by Project construction through the use of TRPA approved temporary BMPs. Permits will be required prior to construction from TRPA and the Lahontan RWQCB outlining conditions to minimize impacts to sensitive areas, which County and the contractor shall abide by. The Proposed Project will include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment, however with the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI; the Proposed Project will have a less than significant impact.

XVI. TRANSPORTATION & TRAFFIC – Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item XVI-A Discussion: The Proposed Project will eliminate two vehicle road lanes along Lake Tahoe Blvd. from Sawmill Rd. to Tahoe Mountain Rd. Goal 10.7 of TRPA's Regional Transportation Plan, Mobility 2035, allows Level of Service (LOS) "C" on rural recreational/scenic roads, which is what Lake Tahoe Blvd. is classified as. Per the County's *Lake Tahoe Boulevard Lane Reduction, Erosion Control and Bike Trail Project Traffic Study*, Lake Tahoe Blvd. currently operates at a LOS "A". Based upon that same study, the proposed changes could cause Lake Tahoe Blvd. to operate at LOS "C" when the four lanes are reconfigured to two lanes. Therefore the Proposed Project may reduce the LOS on Lake Tahoe Blvd., however the reduction is in line with standards established by TRPA. The bike path portion of the Proposed Project is outlined in TRPA's 2010 *Lake Tahoe Regional Bicycle and Pedestrian Plan*, and therefore is consistent with TRPA's regional pedestrian and bicycle path planning efforts.

Item XVI-B Discussion: The Proposed Project will eliminate two vehicle road lanes along Lake Tahoe Blvd. from Sawmill Rd. to Tahoe Mountain Rd. Goal 10.7 of TRPA's Regional Transportation Plan, Mobility 2035, allows Level of Service (LOS) "C" on rural recreational/scenic roads, which is what Lake Tahoe Blvd. is classified as. Per the County's *Lake Tahoe Boulevard Lane Reduction, Erosion Control and Bike Trail Project Traffic Study*, Lake Tahoe Blvd. currently operates at a LOS "A". Based upon that same study, the proposed changes could cause Lake Tahoe Blvd. to operate at LOS "C" when the four lanes are reconfigured to two lanes. Therefore the Proposed Project may reduce the LOS on Lake Tahoe Blvd., however the reduction is in line with standards established by TRPA.

Item XVI-D Discussion: The Proposed Project will bring new users to the intersection of Sawmill Rd. and Lake Tahoe Boulevard, which is a dangerous intersection. However, the Proposed Project will implement traffic calming measures at the intersection to maximize safety. These features incorporate some of the most advanced pedestrian safety measures known to bicycle path design. Pedestrians will be able to press the flashing beacons activation button when they wish to cross the road, which will produce highly visible flashing lights alerting motorists that pedestrians are within the roadway. If the pedestrian cannot cross the road entirely before an automobile is present, they may stop at the refuge island and wait for the vehicle to pass. With the implementation of the mitigation measures outlined below in *Item XVI-D Mitigation Measures*, the Proposed Project will not substantially increase hazards due to design features or incompatible uses; therefore, the Proposed Project will have a less than significant impact.

Item XVI-D Mitigation Measures:

Mitigation Measure T-1: The Proposed Project will implement the following traffic calming and safety features: a.) pedestrian activated flashing beacons, b.) new signage, c.) a striped piano-bar crosswalk, d.) a pedestrian refuge island, e.) restriped Lake Tahoe Blvd. lane configurations, and a reduced speed limit near the curve in Lake Tahoe Boulevard.

Item XVI-E Discussion: At some locations, temporary lane closures may be necessary to facilitate Project construction; however, at no time would access for local residents, school buses, or emergency vehicles be prohibited. Traffic controls will only be implemented during work hours and when it is necessary to perform work. With the implementation of the mitigation measures outlined below in *Item XVI-E Mitigation Measures*, the Proposed Project will not result in inadequate emergency access; therefore, the Proposed Project will have a less than significant impact.

Item XVI-E Mitigation Measures:

Mitigation Measure T-2: The contractor will be required to prepare and adhere to a Traffic Control Plan for TRPA and County review and approval. Elements of the plan will include appropriate use of signage, flaggers, traffic calming, and alternative routes to accommodate local and through traffic. In addition, County will advise local residents regarding schedules for construction traffic detours through signage, press releases, and distribution of flyers in area neighborhoods well in advance of construction initiation. Access will not be prohibited, at any time, for local residents, school buses or emergency vehicles.

XVII. UTILITIES & SERVICE SYSTEMS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item XVII-C Discussion: The Proposed Project will implement erosion control and water quality improvement measures that will reduce the discharge of sediment and pollutants to Lake Tahoe from the County rights-of-way. The Proposed Project will install new storm water drainage and treatment facilities to supplement and improve the existing storm water infrastructure. All newly proposed stormwater facilities will be installed within existing drainage areas. This Project is identified in the Lake Tahoe Environmental Improvement Program and is intended to improve the environment by addressing stormwater deficiencies, erosion, stream environment zones and water quality problems. The Proposed Project will require or result in the construction of new stormwater drainage

facilities or expansion of existing facilities, however with the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI above, the construction will not cause significant environmental effects; therefore, the Proposed Project will have a less than significant impact.

MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Issue	Yes	No
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (Cumulatively considerable means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

OTHER RESPONSIBLE AND TRUSTEE AGENCIES (whose approval is required)

<input checked="" type="checkbox"/> California Department of Fish and Game	<input type="checkbox"/> Local Agency Formation Commission (LAFCO)
<input checked="" type="checkbox"/> California Department of Forestry	<input type="checkbox"/> National Marine Fisheries Service
<input type="checkbox"/> California Department of Health Services	<input checked="" type="checkbox"/> Tahoe Regional Planning Agency
<input type="checkbox"/> California Department of Toxic Substances	<input checked="" type="checkbox"/> U.S. Army Corps of Engineers
<input checked="" type="checkbox"/> California Department of Transportation (Caltrans)	<input checked="" type="checkbox"/> U.S. Fish and Wildlife Service
<input type="checkbox"/> California Integrated Waste Management Board	<input checked="" type="checkbox"/> USFS - LTBMU
<input checked="" type="checkbox"/> California Regional Water Quality Control Board	<input checked="" type="checkbox"/> California Tahoe Conservancy

LIST OF PREPARERS**Principal Author**

Brendan Ferry, Senior Environmental Planner, El Dorado County

Contributor

United States Forest Service – Lake Tahoe Basin Management Unit

DETERMINATION – The Environmental Review Committee finds that (choose one):

<input type="checkbox"/>	I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the Proposed Project MAY have a potentially significant impact or potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the Proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION , including revisions or mitigation measures that are imposed upon the Proposed Project, nothing further is required .

Signature _____ Date April 26, 2013
 Brendan Ferry, County of El Dorado

APPENDIX B:
MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM

PROJECT NAME: LAKE TAHOE BOULEVARD ENHANCEMENT PROJECT

MITIGATED NEGATIVE DECLARATION #: 2013032066

REGULATORY BACKGROUND

This Mitigation Monitoring and Reporting Plan (MMRP) was prepared to comply with Section 21081.6 of the Public Resources Code, which requires the following:

“The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.”

This MMRP is intended to ensure the effective implementation of mitigation measures that are within the authority of the County of El Dorado (County). The mitigation measures will be implemented (including monitoring where identified) throughout all phases of the development and operation of the Lake Tahoe Boulevard Enhancement Project (Proposed Project). Monitoring of such mitigation measures may extend through Project permitting, construction, and Project operations, as necessary.

The required monitoring and reporting shall be accomplished through the County’s Standard Mitigation Monitoring Program and/or the Project Specific Mitigation Monitoring and Reporting Program as defined in the County of El Dorado Code.

PROGRAM IMPLEMENTATION

The MMRP Checklist (Table C-1) lists all mitigation measures identified in the *CEQA Checklist* for the Proposed Project. In general, monitoring becomes effective at the time the action is taken on the Project. Timing of monitoring is organized as follows:

- Prior to Construction: The monitoring activity consists of ensuring that a particular mitigation action has taken place prior to the beginning of any construction or grading activities.
- During Construction: The monitoring activity consists of active monitoring while grading or construction is occurring on the Project site.
- Prior to Operation: The monitoring activity consists of active monitoring after initial site grading and facility construction has occurred, but prior to the initiation of Project operations.
- Ongoing: The monitoring activity consists of monitoring after the grading and construction phase of the Project has been completed, and relates to ongoing operation of the Project.

The mitigation measures listed in Table C-1 are numbered as they are described in the *CEQA Checklist*. County of El Dorado staff will be responsible for implementing and/or ensuring that the mitigation measures listed in the MMRP are undertaken for this Project, to the extent such mitigation measures apply to the Project within the County of El Dorado. Implementation includes ensuring that any required actions are included in bid documents and contracts as part of the design/build process for the Project, and ensuring that the contractor includes specified mitigation activities in plans and specifications for construction. County staff shall designate mitigation measure responsibility and oversee the contractor and consultants.

APPENDIX C:
TABLES

TABLE C-1. MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LAKE TAHOE BOULEVARD ENHANCEMENT PROJECT

MITIGATION MEASURE	IMPLEMENTING RESPONSIBILITY ^{1,3}	MONITORING RESPONSIBILITY ^{2,3}	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
AESTHETICS				
<i>No mitigation measures required.</i>				
AGRICULTURAL RESOURCES				
<i>No mitigation measures required.</i>				
AIR QUALITY- Item III-B				
Mitigation Measure AQ-1: The construction contractor shall implement air quality Best Management Practices from the TRPA Code of Ordinances and Handbook of Best Management Practices.	DOT or its Contractor	DOT	Prior to and During Construction	
Mitigation Measures AQ-2: The construction contractor shall water exposed soil twice daily, or as needed, to control wind borne dust. All haul/dump truckloads shall be covered securely.	DOT or its Contractor	DOT	Prior to and During Construction	
Mitigation Measure AQ-3: The contractor shall sweep the Project site a minimum of once daily to remove all dirt and mud which has been generated from or deposited on roadways by construction equipment going to and from the construction site.	DOT or its Contractor	DOT	Prior to and During Construction	
Mitigation Measure AQ-4: On-site vehicle speed shall be limited to 15 miles per hour on unpaved surfaces.	DOT or its Contractor	DOT	Prior to and During Construction	
Mitigation Measure AQ-5: Construction activities shall comply with EDCAQMD Rule 223-Fugitive Dust, so that emissions do not exceed hourly levels. The contractor will use approved BMP practices as outlined in the TRPA Handbook of Best Management Practices and the EDCAQMD Rule 223 to address fugitive dust. Dust mitigation measures and dust control BMPs will include, but are not limited to, stabilization of unpaved areas subject to vehicular traffic, stabilization of storage piles and disturbed areas, dust suppression through watering of areas to be disturbed, cleaning of all construction vehicles leaving the site, mulching of bare soil areas, and suspension of grading and earth moving activities when wind speeds are high enough to result in dust emissions crossing the Project boundary.	DOT or its Contractor	DOT	Prior to and During Construction	

MITIGATION MEASURE	IMPLEMENTING RESPONSIBILITY ^{1,3}	MONITORING RESPONSIBILITY ^{2,3}	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
Mitigation Measure AQ-6: Construction equipment idling shall be restricted to 5 minutes when not in use.	DOT or its Contractor	DOT	Prior to and During Construction	
Mitigation Measure AQ-7: The construction contractor shall post a publicly visible sign on the Project site during construction operations that specify the telephone number and person/agency to contact for complaints and/or inquiries on dust generation and other air quality problems resulting from Project construction.	DOT or its Contractor	DOT	Prior to and During Construction	
BIOLOGICAL RESOURCES- Item IV-A				
Mitigation Measure B-1: Prior to construction, the County will confirm if any new special status species have been identified by the USFS-LTBMU or the CA Fish & Wildlife Service (via the California Natural Diversity Database - <i>CNDDB</i>) within, or immediately adjacent to, the Project area. If new activity or occurrences have been identified, appropriate limited operating periods (LOP) will be observed.	DOT or its Consultant	DOT	Prior to Construction	
Mitigation Measure B-2: If special status plant species are found prior to or during construction, these populations will be identified and protected with appropriate measures per TRPA and the USFS-LTBMU.	DOT or its Consultant	DOT	Prior to Construction	
Mitigation Measure B-3: The County will implement and require the contractor to adhere to a Noxious Weed Mitigation Plan (Plan) to decrease habitat vulnerability to or below pre-construction levels. The Plan includes pre-construction elements such as treatment methodologies for existing noxious weed populations identified in the Project area, as well as operating procedures for both during and post-construction. Recommended BMPs will include, but are not limited to: hand removal of existing weeds prior to going to seed, equipment cleaning prior to use, area of disturbance minimization, disturbed ground stabilization upon completion of construction with mulch or other means, certified weed-free mulch and other materials, and disturbed areas revegetation with native plants.	DOT or its Consultant	DOT	Prior to Construction	

MITIGATION MEASURE	IMPLEMENTING RESPONSIBILITY ^{1,3}	MONITORING RESPONSIBILITY ^{2,3}	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
BIOLOGICAL RESOURCES - ITEM IV-B				
<p>Mitigation Measure B-4: Construction limit fencing, per TRPA's Code of Ordinances and the Handbook of BMPs, shall be designed and implemented by the contractor to limit SEZ disturbance to an area not to exceed five feet outside of the disturbance zone of the water quality and erosion control improvements. All disturbed areas will be stabilized and revegetated with compost, native seed and mulch. All revegetated areas will be irrigated for a minimum of two years following construction. Construction measures will include, but are not limited to, the use of hand or low impact equipment and the implementation of temporary BMPs such as filter fencing, coir logs, gravel bags, tree protection, and construction limit fencing to minimize disturbance. Although groundwater is not expected to be encountered during construction, if groundwater is encountered and the excavated area requires dewatering to complete the work, TRPA and the Lahontan Regional Water Quality Control Board shall be notified immediately to determine the appropriate course of action. The Storm Water Pollution Prevention Plan (SWPPP) for the Proposed Project will include a Dewatering Contingency Plan (Item VI-B Mitigation Measures) that the contractor shall follow.</p>	DOT or its Consultant	DOT	Prior to and During Construction	
<p>Mitigation Measure B-5: Stormwater facilities will be designed per TRPA and Lahontan criteria to improve the water quality of storm water entering SEZs, as compared to the pre-Project conditions. The erosion control aspects of the Proposed Project will enhance hydrology, soils, and vegetation.</p>	DOT or its Consultant	DOT	Prior to and During Construction	

MITIGATION MEASURE	IMPLEMENTING RESPONSIBILITY ^{1,3}	MONITORING RESPONSIBILITY ^{2,3}	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
<p>Mitigation Measure B-6: The Proposed Project was designed around the findings of the wetland delineation to avoid or minimize impacts to wetlands and/or other WOUS. The County will also obtain a 404 Permit and a 401 Water Quality Certification, if necessary, and will implement the required mitigation measures. The County will obtain a TRPA EIP Project Permit and will implement the required mitigation measures. Up to 10,000 square feet of designated SEZ areas could be temporarily and/or permanently disturbed by implementing the Proposed Project. The locations of the potential SEZ disturbance are at the existing drainage features along the bike path and in the roadside channel improvement areas along Lake Tahoe Blvd. As part of the Proposed Project, the County will remove coverage and fill in the SEZ area along the sharp curve in Lake Tahoe Blvd. near Tahoe Mountain Rd. that can be used to mitigate the new SEZ disturbance, if necessary, and comply with any permit requirements.</p>	DOT or its Consultant	DOT	Prior to and During Construction	
BIOLOGICAL RESOURCES - Item IV-C				
<p>Mitigation Measure B-7: Should any construction work be required in or adjacent to wetlands, it shall be conducted from the existing pavement or dirt road and/or shall be confined to the smallest area possible to complete the work by restricting the contractor's equipment access through the use of construction limit fencing per the TRPA Code of Ordinances.</p>	DOT or its Consultant	DOT	Prior to and During Construction	
<p>Mitigation Measure B-8: All excavated material not required to complete the construction work shall be immediately removed from the wetland areas and be contained by BMP measures per TRPA's Handbook of Best Management Practices.</p>	DOT or its Consultant	DOT	Prior to Construction	
CULTURAL RESOURCES				
<i>No mitigation measures required.</i>				
GEOLOGY AND SOILS - Item VI-B				

MITIGATION MEASURE	IMPLEMENTING RESPONSIBILITY ^{1,3}	MONITORING RESPONSIBILITY ^{2,3}	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
<p>Mitigation Measure G-1: The contractor shall prepare, submit and adhere to a Storm Water Pollution Prevention Plan (SWPPP) to the County, Lahontan Regional Water Quality Control Board (Lahontan), and TRPA prior to construction. The SWPPP shall be in accordance with the TRPA and Lahontan requirements for storm water pollution prevention in the Tahoe Basin. As part of the SWPPP, the contractor will be required to prepare and adhere to a Temporary BMP Plan, a Spill Contingency Plan, and a Dewatering Plan.</p> <p>The Temporary BMP Plan will include design and specifications that detail the required construction BMPs that shall be installed prior to and during construction to prevent any erosion that may occur during a rain or wind event. All temporary BMPs shall be installed and maintained per TRPA's Handbook of Best Management Practices. Temporary BMPs will include, but are not limited to: gravel bags, silt fencing, tree protection fencing, construction limit fencing, coir logs, visqueen and gravel construction access. Prior to construction, all storage, access, and staging areas shall be secured by the contractor and approved by EDOT, Lahontan and TRPA. No staging or storage will occur in Stream Environment Zones (SEZs). The contractor shall be responsible for maintenance of mobilization sites, including placement and maintenance of BMPs. All equipment, vehicles, and materials shall be stored on paved or previously disturbed surfaces only; in locations approved by the County, Lahontan and TRPA.</p> <p>The contractor shall limit the areas to be disturbed to the area within the boundary of the construction limit fencing, which shall be designed and installed prior to commencement of construction. The boundary of the construction limit fencing shall be displayed on the EC Sheets of the construction plans and shall be set to the minimum size required to construct proposed improvements, per the Projects plans and specifications. All temporary BMPs shall be maintained during construction and shall be monitored daily by the construction site inspector. All disturbed areas shall be restored to a better than pre-construction condition.</p>	<p>DOT and its Contractor</p>	<p>DOT</p>	<p>Prior to and During Construction</p>	

MITIGATION MEASURE	IMPLEMENTING RESPONSIBILITY ^{1,3}	MONITORING RESPONSIBILITY ^{2,3}	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
<p>Mitigation Measure G-1 (Continued): The contractor shall meet the permit requirements for BMPs, staging areas, revegetation, grading season restrictions, and all other permitting agency approval conditions. Construction grading will take place within the Lake Tahoe construction season (between May 1st and October 15th).</p> <p>The Spill Contingency Plan, which the contractor shall adhere to, shall outline how to properly handle accidental construction related spills and must include the requirement for spill prevention kits to be available on site to contain and properly clean any accidental spills. The Spill Contingency Plan will help the contractor to minimize the potential for and effects from spills of hazardous, toxic, or petroleum based substances during construction activities. The Spill Prevention Kit will contain, but is not limited to, sorbent pads, plastic bags, containment devices, drain seals, and drip pans. This plan will also outline who to call if utility lines are damaged during construction.</p> <p>The Dewatering Plan, which the contractor shall adhere to, will outline the process that will be required of the contractor if groundwater is intercepted during construction. The Dewatering Plan shall be prepared and submitted for approval by EDOT, Lahontan and TRPA prior to commencement of construction. Construction sequencing shall be designed to avoid and minimize the potential of encountering groundwater during construction, however if groundwater is encountered and the excavated area requires dewatering to complete the work, construction shall immediately cease and TRPA, Lahontan and the County shall be notified immediately to observe the construction work to ensure that the approved dewatering plan is being adhered to and that dewatering effluent is properly contained and disposed of. Based on the results of the Soils/Hydrology Analysis, which is performed by TRPA prior to construction, dewatering areas will be better identified to avoid and reduce the potential of groundwater interception.</p>	DOT and its Contractor	DOT	Prior to And During Construction	

MITIGATION MEASURE	IMPLEMENTING RESPONSIBILITY ^{1,3}	MONITORING RESPONSIBILITY ^{2,3}	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
Mitigation Measure G-2: The contractor shall attend the TRPA pre-grade onsite inspection meeting to ensure that proper BMPs are in place per the SWPPP and that all permit conditions have been met prior to commencement of construction.	DOT and its Contractor	DOT	Prior to and During Construction	
Mitigation Measure G-3: EDOT shall conduct daily inspections of BMP measures to ensure they are properly placed and maintained for maximum water quality benefit. As part of this process, EDOT and/or the contractor will complete formal inspection forms for submittal to regulatory agencies to demonstrate deficiencies and that corrective action has been immediately taken.	DOT and its Contractor	DOT	Prior to and During Construction	
GREENHOUSE GAS EMISSIONS - Item VII-A				
Mitigation Measure: Implement Mitigation Measures identified under Item III-B Mitigation Measures.	DOT or its Contractor	DOT	Prior to and During Construction	
HAZARDS AND HAZARDOUS MATERIALS - Item VIII-A, VIII-B and Item VIII-C				
Mitigation Measure: Implement Mitigation Measures identified under Item VI-B Mitigation Measures.	DOT or its Contractor	DOT	Prior to and During Construction	
HYDROLOGY AND WATER QUALITY - Item IX-A, Item IX-E and Item IX-F				
Mitigation Measure: Implement Mitigation Measures identified under Item VI-B Mitigation Measures.	DOT or its Contractor	DOT	Prior to and During Construction	
LAND USE AND PLANNING				
<i>No mitigation measures required.</i>				
MINERAL RESOURCES				
<i>No mitigation measures required.</i>				
NOISE - Item XII-A and Item XII-D				

MITIGATION MEASURE	IMPLEMENTING RESPONSIBILITY ^{1,3}	MONITORING RESPONSIBILITY ^{2,3}	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
Mitigation Measure N-1: In order to mitigate the impacts of temporarily increased ambient noise levels, construction noise emanating from all construction activities shall only occur between the hours of 8:00 a.m. and 6:30 p.m. per TRPA Code and the County's General Plan, unless other hours are approved by TRPA.	DOT or its Contractor	DOT	During Construction	
Mitigation Measure N-2: All construction equipment and vehicles used for Project construction shall be fitted with the factory installed muffling devices and will be maintained in good working order. EDOT will advise potentially affected residents of the proposed construction activities including duration, schedule of activities, and contacts for filing noise complaints. EDOT staff and/or contractor shall respond to all noise complaints received within one working day and resolve the issue within two working days.	DOT or its Contractor	DOT	Prior to and During Construction	
POPULATION AND HOUSING				
No mitigation measures required.				
PUBLIC SERVICES				
No mitigation measures required.				
RECREATION – ITEM XV-B				
Mitigation Measure: Implement Mitigation Measures identified under Item VI-B Mitigation Measures.	DOT	DOT	Prior to and During Construction	
TRANSPORTATION AND TRAFFIC - Item XVI-D and Item XVI-E				
Mitigation Measure T-1: The Proposed Project will implement the following traffic calming and safety features: a.) pedestrian activated flashing beacons, b.) new signage, c.) a striped piano-bar crosswalk, d.) a pedestrian refuge island, e.) restriped Lake Tahoe Blvd. lane configurations, and a reduced speed limit near the curve in Lake Tahoe Boulevard.	DOT	DOT	Prior to and During Construction	

MITIGATION MEASURE	IMPLEMENTING RESPONSIBILITY ^{1,3}	MONITORING RESPONSIBILITY ^{2,3}	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
Mitigation Measure T-2: The contractor will be required to prepare and adhere to a Traffic Control Plan for TRPA and County review and approval. Elements of the plan will include appropriate use of signage, flaggers, traffic calming, and alternative routes to accommodate local and through traffic. In addition, EDOT will advise local residents regarding schedules for construction traffic detours through signage, press releases, and distribution of flyers in area neighborhoods well in advance of construction initiation. Access will not be prohibited, at any time, for local residents, school buses or emergency vehicles.	DOT	DOT	Prior to and During Construction	
UTILITIES AND SERVICE SYSTEMS - Item XVI-C				
Mitigation Measure: Implement Mitigation Measures identified under Item VI-B Mitigation Measures.	DOT or its Contractor	DOT	Prior to and During Construction	

¹ The department listed in the Implementing Responsibility column is the department responsible for conducting the mitigation measure.

² The department listed in the Monitoring Responsibility column is responsible for verifying that compliance with the mitigation measure occurs and that all monitoring and reporting is completed.

³ Responsible Entity: DOT-Department of Transportation

Table 1. Lake Tahoe Boulevard Enhancement Project - Special Status Plant Species List and Habitat Analysis

Species	Legal Status ^a	Known to occur in project area	Potential habitat in project area	No habitat in project area	Sensitive species habitat characteristics found in project area
<i>Arabis rigidissima</i> var. <i>demota</i> Galena Creek rockcress	S			X	Species is found in open, rocky areas along forest edges of conifer and/or aspen stands. Usually found on northerly aspects above 7,500 ft. There are no rocky open areas, and the project is on a southeast-facing slope at a lower elevation.
<i>Arabis tielmii</i> Tiehm's rockcress	S			X	Species is known from open rocky soils in the Mt. Rose Wilderness. There are not open rocky soils; the area is vegetated by conifers and shrubs, and generally has a thick duff layer.
<i>Botrychium ascendens</i> Upswept moonwort	S		X		<i>Botrychium</i> species share similar preferences in habitat, <i>i.e.</i> wet or moist soils such as marshes, meadows, and along the edges of lakes and streams at elevations between 4,700 and 9,000 ft. They generally occur with mosses, grasses, sedges, rushes, and other riparian vegetation. The project contains areas with wet or moist soils and riparian vegetation.
<i>Botrychium crenulatum</i> Scalloped moonwort	S		X		See <i>Botrychium ascendens</i>
<i>Botrychium lineare</i> Slender moonwort	S		X		See <i>Botrychium ascendens</i>
<i>Botrychium lunaria</i> Common moonwort	S		X		See <i>Botrychium ascendens</i>
<i>Botrychium minganense</i> Mingan moonwort	S		X		See <i>Botrychium ascendens</i>
<i>Botrychium montanum</i> Western goblin	S		X		See <i>Botrychium ascendens</i>
<i>Bruchia bolanderi</i> Bolander's candle moss	S		X		Montane meadows and stream banks are favored habitat. This moss grows on bare, slightly eroding soil where competition with is minimal. The project contains areas with wet or moist soils and riparian vegetation.
<i>Dendrocollybia racemosa</i> Branched collybia	S			X	This species is a mycoparasite growing on old decayed or blackened mushrooms or occasionally in coniferous duff, usually within old growth stands. There is no old growth forest within the project, and the project is confined to existing disturbed sites within the forested portion of the project.

Species	Legal Status ^a	Known to occur in project area	Potential habitat in project area	No habitat in project area	Sensitive species habitat characteristics found in project area
<i>Draba asterophora</i> var. <i>asterophora</i> Tahoe draba	S, SI			X	Species is found in rock crevices and open granite talus slopes at high elevations between 8,000 to 10,200 ft on north-east facing slopes. The project area does not contain open granite talus slopes; it is heavily vegetated with a thick duff layer, and is well below the species' elevation range.
<i>Draba asterophora</i> var. <i>macrocarpa</i> Cup Lake draba	S, SI			X	This species is found on steep, gravelly or rocky slopes at elevations of 8,400 to 9,235 ft. The project area does not contain open granite talus slopes, and is well below the species' elevation range.
<i>Epilobium howellii</i> Subalpine fireweed	S		X		Plants are known from wet meadows and mossy seeps at 6,500 to 9,000 ft in subalpine coniferous forest. The project area contains some moist areas and mossy seeps.
<i>Erigeron miser</i> Starved daisy	S			X	Plants are known from high elevation granitic rock outcrops above 6,000 ft. There are no rock outcrops in the project area.
<i>Eriogonum umbellatum</i> var. <i>torreyanum</i> Torrey's or Donner Pass buckwheat	S			X	This species grows in dry gravelly or stony sites, often on harsh exposures such as ridge tops or steep slopes. There are no gravelly/rocky sites on harsh exposures in the project area.
<i>Helodium blandowii</i> Blandow's bog-moss	S		X		Habitat for this moss is in bogs and fens, wet meadows, and along streams under willows. There is one meadow that may contain suitable habitat for this species.
<i>Hulsea brevifolia</i> Short-leaved hulsea	S		X		This species is known from red fir forest, but has also been found in mixed conifer forests. It occurs on gravelly soils between 4,920 and 8,860 ft. The project is in mixed conifer forest with gravelly soil.
<i>Lewisia kelloggii</i> ssp. <i>hutchisonii</i> Kellogg's lewisia	S			X	Habitat for this plant occurs on ridge tops or flat open spaces with widely spaced trees and sandy granitic to erosive volcanic soil from about 5,000 to 7,000 ft. There are no ridge tops or flat open spaces (the area is forested).
<i>Lewisia kelloggii</i> ssp. <i>kelloggii</i> Kellogg's lewisia	S			X	See <i>Lewisia kelloggii</i> ssp. <i>hutchisonii</i>
<i>Lewisia longipetala</i> Long-petaled lewisia	S, SI			X	This species occurs on the northerly exposures on slopes and ridge tops at elevations between 8,000 and 12,500 ft where snow banks persist

Species	Legal Status ^a	Known to occur in project area	Potential habitat in project area	No habitat in project area	Sensitive species habitat characteristics found in project area
					throughout the summer. The plants are often found near the margins of the snow banks in wet soils. The project does not occur where snow banks persist, the area is forested and the elevation is too low.
<i>Meesia triquetra</i> Three-ranked hump-moss	S		X		This moss prefers bogs and fen habitats, but is also found in very wet meadows. There is one meadow that may contain suitable habitat for this species.
<i>Meesia uliginosa</i> Broad-nerved hump-moss	S		X		This moss prefers bogs and fen habitats, but is also found in very wet meadows. There is one meadow that may contain suitable habitat for this species.
<i>Peltigera hydrothyria</i> Veined water lichen	S			X	This species is found in cold unpolluted streams in mixed conifer forests. There are no perennial streams in the project area.
<i>Pinus albicaulis</i> Whitebark Pine	C, S, SI			X	This species occurs in the subalpine zone and at timberline. Soils are rocky, well drained, and derived from granitic or volcanic parent materials. The project is not in the subalpine zone or at timberline.
<i>Rorippa subumbellata</i> Tahoe yellow cress	C, S, SI			X	This species is endemic to the shore zone of Lake Tahoe, typically in back beach areas between 6,223 and 6,230 ft. The project is not adjacent to Lake Tahoe.

Sources: USFWS 2010, USFS 2010, USDA 2005a-b, CNDDB 2008, CDFG 2010, CNPS 2001, TRPA 1987

Notes:

- No special status species were found within the project area.

Table 2. Lake Tahoe Boulevard Enhancement Project – Invasive and Noxious Weed Plant Species List and Habitat Analysis

Common Name	Scientific Name	Weed Code	SNFPA	NDA	CDEA	Cal-IPC	LTBWCG	LBTMU	Species Present? Y or N
Russian knapweed	<i>Acroptilon repens</i>	ACRE3	NW	B	B	Moderate	Group 1	Medium	?
Tree of heaven	<i>Ailanthus altissima</i>	AIAL	NW		C	Moderate	Group 1	N/A	?
Cheat grass	<i>Bromus tectorum</i>	BRTE	NW			High		Low	Y
Heart-podded hoary/cress/whitetop	<i>Cardaria draba</i>	CADR	NW	C	B	Moderate	Group 1	Medium	?
Globe-podded hoary/cress/hairy whitetop	<i>Cardaria pubescens</i>	CAPU6	NW		B	Limited	Group 1	Medium	?
Musk thistle	<i>Carduus nutans</i>	CANU4	NW	B	A	Moderate	Group 1	High	?
Purple starthistle/red starthistle	<i>Centaurea calcitrapa</i>	CECA2	NW	A	B	Moderate	Group 1	N/A	?
Diffuse knapweed	<i>Centaurea diffusa</i>	CEDI3	NW	B	A	Moderate	Group 1	Medium	?
Spotted knapweed	<i>Centaurea maculosa</i>	CEMA4	NW	A	A	High	Group 2	Medium	?
Yellow starthistle	<i>Centaurea solstitialis</i>	CESO3	NW	A	C	High	Group 1	Medium*	?
Squarrose knapweed	<i>Centaurea virgata ssp. squarrosa</i>	CESQ	NW	A	A	Moderate		Medium	?
Rush skeletonweed	<i>Chondrilla juncea</i>	CHJU	NW	A	A	Moderate	Group 1	High	?
Canada thistle	<i>Cirsium arvense</i>	CIAR4	NW	C	B	Moderate	Group 1	Medium	?
Bull thistle	<i>Cirsium vulgare</i>	CIVU	NW		C	Moderate	Group 2	High	Y
Poison hemlock	<i>Conium maculatum</i>	COMA2		C		Moderate		Medium	?
Scotchbroom	<i>Cytisus scoparius</i>	CYSC4	NW		C	High	Group 2	Medium	?
Teasel/Fuller's teasel	<i>Dipsacus fullonum</i>	DIFU2				Moderate Alert	Group 1	N/A	?
Stinkwort	<i>Diurichia graveolens</i>	DIGR3				Moderate Alert	Group 1	N/A	?
Quackgrass	<i>Elytrigia repense</i>	ELRE3	NW		B			N/A	?
Hydrilla/Waterthyme	<i>Hydrilla verticillata</i>	HYVE3	NW	A	A	High Alert		N/A	?
St. John's wort / Klamath weed	<i>Hypericum perforatum</i>	HYPE	NW	A	C	Moderate	Group 2	Medium	Y
Dyer's woad	<i>Isatis tinctoria</i>	ISTI	NW	A	B	Moderate	Group 1	Medium	?
Tall whitetop / Perennial pepperweed/ broadleaved pepperweed	<i>Lepidium latifolium</i>	LELA2	NW	C	B	High	Group 2	Medium	?

Common Name	Scientific Name	Weed Code	SNFPA	NDA	CDEA	Cal-IPC	LTBWCG	LBTMU	Species Present? Y or N
Oxeye daisy	<i>Leucanthemum vulgare</i>	LEVU	NW			Moderate	Group 2	Medium	?
Dalmatian toadflax	<i>Linaria genistifolia</i> spp. <i>deltoidea</i>	LIDAD	NW	A	A	Moderate	Group 2	High	?
Yellow toadflax/butter & eggs	<i>Linaria vulgaris</i>	LIVU2		A		Moderate	Group 2	Medium	?
Purple loosestrife	<i>Lythrum salicaria</i>	LYSA2	NW	A	B	High	Group 1	Medium*	?
Eurasian water milfoil	<i>Myriophyllum spicatum</i>	MYSP2	NW	A		High		N/A	?
Scotch thistle	<i>Onopordum acanthium</i> ssp. <i>acanthium</i>	ONAC	NW	B	A	High	Group 1	High	?
Curlyleaf pondweed/curl pondweed	<i>Potamogeton crispus</i>	POCR3				Moderate		N/A	?
Sulfur cinquefoil	<i>Potentilla recta</i>	PORE5		A	A		Group 1	Low	?
Himalaya blackberry	<i>Rubus armeniacus</i> (formerly <i>R. discolor</i>)	RUAR9	NW			High		Low	?
Medusahead	<i>Taeniatherum caput-medusae</i>	TACA8	NW	B	C	High	Group 1	High*	?
Tamarisk/saltcedar	<i>Tamarix chinensis</i> , <i>T. ramosissima</i> , & <i>T. parvifolia</i>	TACH2 TARA TAPA4	NW	C	B	High	Group 1	High*	?
Woolly mullein/common mullein	<i>Verbascum thapsus</i>	VETH	NW			Limited			?

Sierra Nevada Forest Plan Amendment (SNFPA) part 3.6 defines noxious weeds as: those plant species designated as noxious weeds by Federal or State law. Noxious weeds generally possess one or more of the following characteristics: aggressive and difficult to manage, poisonous, toxic, parasitic, a carrier or host of serious insects or disease, and generally non-native.

Nevada Department of Agriculture (NDA) noxious weed list (http://agri.nv.gov/nwae/PLANT_NoxiousWeedList.htm) divides noxious weeds into categories A, B, and C. Category A: Weeds not found or limited in distribution throughout the state; actively excluded from the state and actively eradicated wherever found; actively eradicated from nursery stock dealer premises; control required by the state in all infestations. **Category B:** Weeds established in scattered populations in some counties of the state; actively excluded where possible, actively eradicated from nursery stock dealer premises; control required by the state in areas where populations are not well established or previously unknown to occur. **Category C:** Weeds currently established and generally widespread in many counties of the state; actively eradicated from nursery stock dealer premises; abatement at the discretion of the state quarantine officer.

The California Department of Food and Agriculture's (CDEA) noxious weed list (<http://www.cdffa.ca.gov/phpps/ipe/>) divides noxious weeds into categories A, B, and C. A-listed weeds are those for which eradication or containment is required at the state or county level. With B-listed weeds, eradication or containment is at the discretion of the County Agricultural Commissioner. C-listed weeds require eradication or containment only when found in a nursery or at the discretion of the County Agricultural Commissioner. Q-listed weeds require temporary "A" action pending determination of a permanent rating.

California Invasive Plant Council (Cal-IPC) invasive plant inventory (<http://www.cal-ipc.org/ip/inventory/weedlist.php>) categorizes non-native invasive plants by the ecological impacts of each plant on wildlands into three categories high, moderate, & limited as well as an alert. An "alert" is assigned for species with significant potential for invading new ecosystems. High: these species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Moderate: these species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Limited: these species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score.

Lake Tahoe Basin Weed Coordinating Group (LTBWCG) prioritizes invasive weeds of concern by management group. Group 1: watch for, report, and eradicate immediately. Group 2: manage infestations with the goal of eradication (2010).

The Lake Tahoe Basin Management Unit (LBTMU) prioritized noxious weeds based on their ecological impact and invasive potential and on the potential for effective management and control given the tools available to the LBTMU. A noxious weed can fall in one of three categories: high, medium, or low. High: species that have a large ecological impact and/or invasive potential and that are easily controlled.

Medium: species that have a medium ecological impact and/or invasive potential and medium ability to be controlled. Low: species that have a low ecological impact and/or invasive potential and are not easily controlled. The weighted ranking was used in this table except on those species where a weighted ranking was not given; those species are indicated with an asterisk (*). Species with an N/A were not evaluated.

California Invasive Plant Council (Cal-IPC) invasive plant inventory (<http://www.cal-ipc.org/ip/inventory/weedlist.php>) categorizes non-native invasive plants by the ecological impacts of each plant on wild lands into three categories high, moderate, & limited as well as an alert. An "alert" is assigned for species with significant potential for invading new ecosystems.

- o High: these species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure.
- o Moderate: these species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure.
- o Limited: these species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score.

Table 3. Special Status Wildlife Species Considered for the Lake Tahoe Boulevard Enhancement Project

Wildlife (genus and species)	Legal status ¹	Distribution	Suitable habitat	Known to occur ²	Determi- nation ³	Rationale for determination
Birds						
Bald eagle (<i>Haliaeetus leucocephalus</i>)	D, S, SI, MB	Occurs throughout California. Nests in dense forest with supercanopy trees, within one mile of large lakes with abundant fish prey.	yes	yes	Not Affect	Suitable habitat within 0.5 mile of the project area. No bald eagles were detected during 2010 surveys. 1 historical bald eagle perch tree. The nearest nest is 5.9 miles northwest of the project area, which was last active in 2010. Disturbance is unlikely, because there would be no habitat manipulation within 0.5 mile of the bald eagle nest, there would be no removal of bald eagle perch trees, and snags would be retained for wildlife unless deemed a hazard tree.
Golden eagle (<i>Aquila chrysaetos</i>)	SI, MB	Occurs throughout California. Found in grassland, chaparral, riparian, and open coniferous forest in mountainous regions, with abundant medium-sized small mammal prey.	yes	no	Not Affect	Suitable habitat within 0.5 mile of the project area. Forested areas may be used for foraging, but human disturbance and road traffic make nesting unlikely.
Osprey (<i>Pandion haliaeetus</i>)	SI	Occurs throughout California. Nests in dense forest with supercanopy trees, within one mile of large lakes with abundant fish prey.	yes	yes	Not Affect	Suitable habitat within 0.5 mile of the project area. No ospreys were detected during 2010 surveys. The nearest historical nest is 0.3 mile west of the project area, which was last active in 1995. The nest tree is gone.
Peregrine falcon (<i>Falco peregrinus anatum</i>)	D, SI, MB	One of the most widely distributed warm blooded terrestrial vertebrate. Introduced to urban areas as DDT was banned. Prefers to nest on cliff faces near meadows or wetlands with abundant avian prey.	no	no	Not Affect	No suitable habitat within 0.5 mile of the project area. Delisted in 1999.
Northern goshawk (<i>Accipiter gentiles</i>)	S, SI	Occurs in the north Coast Ranges, Sierra Nevada, Klamath, Cascade, Warner, San Jacinto, and San Bernardino Mountains. Found in older-age coniferous, mixed conifer, and deciduous forest habitats	yes	yes	Not Affect	Suitable habitat within 0.5 mile of the project area. A northern goshawk nest was detected during 2010, which produced 1 fledgling. The nest is on the other side of the four lane Lake Tahoe Blvd. No northern goshawk protected activity center. Burned forest may be used for foraging, but disturbance from existing road traffic, commercial, residential, recreational,

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Table 3. Special Status Wildlife Species Considered for the Lake Tahoe Boulevard Enhancement Project

Wildlife (<i>genus and species</i>)	Legal status ¹	Distribution	Suitable habitat	Known to occur ²	Determi- nation ³	Rationale for determination
		at mid to high elevations during breeding season.				and logging activity makes nesting unlikely.
California spotted owl (<i>Strix occidentalis occidentalis</i>)	S, MIS, MB	Occurs from the southern Cascades, through the Sierra Nevada, the central Coast Ranges, and into the mountains of southern California. Usually found in old, dense, and layered mixed conifer forest. Also found in riparian/hardwood, ponderosa pine/hardwood, red fir, and east side pine.	yes	no	Not Affect	Suitable habitat within 0.5 mile of the project area. No spotted owls were detected during 2010 and 2011 surveys. No California spotted owl protected activity center. Removal of large and structurally complex trees would be minimized. Residual canopy cover would provide thermal protection, snags would be retained for cavity nesting unless deemed a hazard tree, and coarse woody debris would be retained for small mammal prey.
Great gray owl (<i>Strix nebulosa</i>)	S	Occurs in the Sierra Nevada. Nests in mature mixed conifer, red fir, and lodgepole pine within 600 feet of meadow openings greater than 10 acres.	no	no	Not Affect	No suitable habitat within 0.5 mile of the project area. Not known to occur in the Lake Tahoe Basin. The nearest detection is 30 miles south of the project area near Carson Pass.
Willow flycatcher (<i>Empidonax traillii</i>)	S, MB	Occurs in the Sierra Nevada in wet meadow and montane riparian habitats larger than 15 acres. Nests in dense willow thickets, with standing or running water on June 1.	no	no	Not Affect	No suitable habitat within 0.5 mile of the project area. No protocol-level willow flycatcher surveys. The nearest nest is 1.6 miles southeast of the project area, which was last active in 2000. No construction would occur adjacent to Sawmill Pond.
Waterfowl, ex. mallard (<i>Anas platyrhynchos</i>)	SI	Occurs throughout the U.S. Most abundant, widely distributed, and hunted dabbling duck. Prefers to nest near ephemeral ponds and marshes with dense vegetative cover.	yes	yes	Not Affect	Suitable habitat within 0.5 mile of the project area. Disturbance effects may include flushing of individuals, but not affect adult or juvenile survival. Minor disturbance to individuals during construction, but improved habitat conditions in the long term. Understory herbaceous and shrub cover would recover beyond existing conditions as native plants are reestablished after two growing seasons.
Mammals						
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	S	Occurs throughout California in desert scrub and pine forest. Strongly associated	no	no	Not Affect	No suitable roosting habitat within 0.5 mile of the project area. The nearest detection is 2.7 miles northwest of the project area.

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Wildlife (<i>genus and species</i>)	Legal status ¹	Distribution	Suitable habitat	Known to occur ²	Determi nation ³	Rationale for determination
		with caves, mines, tunnels, or rocky outcrops near wetlands or forest edges with moths. Occasionally found in old abandoned buildings.				
American marten (<i>Martes americana</i>)	S, MIS	Occurs in the North Coast, Sierra Nevada, Klamath, and Cascades. Found in dense late successional coniferous forest with snags, down logs, debris piles, and abundant squirrel prey.	yes	yes	Not Affect	Suitable habitat within 0.5 mile of the project area. Detection 0.23 mile northwest of the project area. This species is exceptionally inquisitive, and may not be disturbed by human activity.
Sierra Nevada red fox (<i>Vulpes vulpes necator</i>)	S	Occurred throughout the Sierra Nevada. Currently occurs in Lassen National Park. Detected at Sonora Pass in 2010. Found in lodgepole pine, red fir, subalpine conifer, and alpine dwarf shrub with meadows or alpine fell-fields over 7,000 feet.	no	no	Not Affect	No suitable habitat within 0.5 mile of the project area. Species has not been documented in the Lake Tahoe Basin, and usually avoids areas of human disturbance (Perrine et al., 2010).
California wolverine (<i>Gulo gulo luteus</i>)	S, C	Occurred throughout the Sierra Nevada and the North Coast in red fir, mixed conifer, lodgepole pine, subalpine conifer, alpine dwarf shrub, barren, wet meadows, montane chaparral, and Jeffrey pine. Has a large home range, and avoids human disturbance.	no	no	Not Affect	No suitable habitat within 0.5 mile of the project area. Species has not been documented in the Lake Tahoe Basin (CDFG, 2011). DNA was analyzed of the male American wolverine that dispersed from the Sawtooth Range in Idaho to the Tahoe national forest in February 2008.
Mule deer (<i>Odocoileus hemionus</i>)	SI	Occurs throughout western U.S., infrequently in the Lake Tahoe Basin as snowpack permits. Found in meadows, shrubs, and riparian areas with low human disturbance during the fawning season.	yes	no	Not Affect	Suitable fawning habitat within 0.5 mile of the project area. Fawning season is May through June. Disturbance from existing road traffic, commercial, residential, and recreational activity deters mule deer movement.
Amphibians: Refer to aquatics species review for this project.						

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Wildlife (<i>genus and species</i>)	Legal status ¹	Distribution	Suitable habitat	Known to occur ²	Determi- nation ³	Rationale for determination
Fish: Refer to aquatics species review for this project.						
Aquatic invertebrates: Refer to aquatics species review for this project.						

¹ Legal status:

- E = Endangered species listed by the USFWS under the Endangered Species Act.
T = Threatened species listed by the USFWS under the Endangered Species Act. The Delta smelt and Central Valley steelhead are threatened species for the LTBMU. The LTBMU is outside the current and historical range of these species, and would not be affected by this project.
C = Candidate species for federal listing by the USFWS under the Endangered Species Act. The American wolverine, Pacific fisher, and Yosemite toad are candidate species for the LTBMU. The LTBMU is outside the current and historical range of these species, and would not be affected by this project. No federally listed wildlife species would require technical assistance from the USFWS.
D = Delisted species by the USFWS under the Endangered Species Act. Species will be monitored for 5 years.
S = Sensitive species listed by Region 5, US Forest Service. Regional Forester sensitive species list was revised on October 15, 2007.
MIS = Management indicator species listed by Region 5, US Forest Service. Sierra Nevada MIS amendment on December 14, 2007
SI = Special interest species listed by the TRPA. Regional plan of Lake Tahoe Basin, code of ordinances, 1987
MB = Migratory bird.
² Known to occur within 0.5 mile of the project area to account for potential direct and indirect effects according to TRPA guidelines.
³ Not Affect = The project will not affect the species. The project area is outside the range of the species or lacks suitable habitat; the species have not been detected during recent surveys by the Forest Service, California Department of Parks and Recreation, Nevada Department of Wildlife, CTC, TRPA, or private contractors; the species are probably absent from their historical range, or the project would not harm individuals or alter the species habitat.
U.S. Fish and Wildlife Service threatened and endangered species:
NLAA = The project may affect but is not likely to adversely affect the species or its designated critical habitat.
LAA = The project may affect and is likely to adversely affect the species or its designated critical habitat.
Forest Service sensitive species:
MANL = The project may affect individuals, but is not likely to result in a trend toward Federal listing or a loss of viability. Project activities may result in some loss of habitat, reduction of habitat quality, or timing of nesting, denning, and foraging for the species. However, the scale of this reduction is small, and design features and mitigation measures would reduce both direct and indirect impacts.
MALT = The project may affect individuals, and is likely to result in a trend toward Federal listing or loss of viability. This determination is appropriate when the project occurs in or affects suitable habitat, or results in disturbance to the species, and compliance with existing conservation strategies cannot be demonstrated.