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MITIGATED NEGATIVE DECLARATION

FINDINGS

In accordance with El Dorado County (County) ordinances regarding implementation of the California Environmental Quality Act, El Dorado County has prepared an Initial Study to assess the Project's potential effects on the environment and the significance of those effects, and on the basis of that study 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 El Dorado 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, El Dorado 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 El Dorado 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: Rubicon 5 Erosion Control Project (JN 95178)	
Description: Construction of water quality improvement measures.	
Location: The Project area is located on the west shore of Lake Tahoe. More specifically, the area includes Rubicon Drive which is a loop street bounded by Lake Tahoe to the East, State Route 89 to the West, and Lonely Gulch to the North.	
Owner/Applicant: County of El Dorado Department of Transportation – Tahoe Engineering Division	
Lead Agency: County of El Dorado Department of Transportation – Tahoe Engineering Division	
County Contact: Russell Wigart, Assistant Civil Engineer	**Phone:** 530-573-7900
Address: 924 B Emerald Bay Road, South Lake Tahoe, CA 96150	

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 Division 924 B Emerald Bay Road, South Lake Tahoe, CA. The document is also available for review at the County of El Dorado's 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

In 1997, the Tahoe Regional Planning Agency (TRPA) developed a Basin-wide Environmental Improvement Program (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 enviromental 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 Rubicon 5 Erosion Control Project (Project) is defined in the TRPA EIP as Project # 713.3. County of El Dorado Department of Transportation (Department) proposes to initiate implementation of the Project during the 2010/2011 construction seasons to assist with meeting the goals of the EIP. This Project is being designed and constructed with financial assistance from the California Tahoe Conservancy (CTC), United States Forest Service - Lake Tahoe Basin Management Unit (USFS-LTBMU), and TRPA mitigation funds.

The Project area is located on the west shore of Lake Tahoe. More specifically, the area includes Rubicon Drive which is a loop street bounded by Lake Tahoe to the East, State Route 89 to the West, and Lonely Gulch to the North (Figure A).

The Project site includes existing County of El Dorado (County) and Caltrans road rights-of-way (ROW), CTC, USFS, privately owned property, and parcels owned by the Rubicon Home Owners Association (HOA). Subdivision improvements include approximately 18-foot wide paved County roads within a 40-foot wide ROW, and overhead and underground utilities. The Proposed Project will construct erosion control and water quality improvement measures that will reduce the discharge of sediment and pollutants to Lake Tahoe from County administered ROW. The Proposed Project will not change the use of the site or surrounding area. The Project will provide benefits to the community and natural environment through the improvements proposed as part of the Project.

PROJECT BACKGROUND

The Project utilized the Lake Tahoe Basin Stormwater Quality Improvement Committee's (SWQIC) Formulating and Evaluating Alternatives for Water Quality Improvement Projects document for guidance in moving towards the selection of a preferred Project alternative which satisfied the intent of the EIP. The Project Development Team (PDT) investigated a range of possibilities for the 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:

- Existing Conditions/Feasibility Report (EDOT 2008)
- Draft/Final Project Alternatives Evaluation Report (EDOT 2008)
- Final Preferred Alternative Report (EDOT 2008)

In June 2008, the Department completed the Existing Conditions/Feasibility Report (ECFR) which investigated and described the physical and environmental characteristics of the Project area and vicinity that were relevant to the design of the Project. The information collected and analyzed as part of the existing conditions analysis provided the PDT and other stakeholders with a clear representation and analysis of existing conditions and their relationship to any impacts on the constructability and location of the improvements on water quality. Figure C demonstrates the feasibility and analysis of conceptual alternatives to help correct existing problem areas within the Project area. The information presented in the ECFR directly informed the development of Project strategies and alternatives.

In July 2008, the Department hosted a meeting to discuss the ECFR document and the three Project alternatives with the public to obtain their feedback on their preferred Project. At the July 2008 PDT meeting the Department received feedback from the PDT that their preferred Project alternative was Alternative 1 (the Proposed Project). This information was processed and in August 2008 the Department completed a Draft Project Alternatives Evaluation Report (DPAER) which compiled and analyzed three different conceptual Projects, each with unique BMP alternatives. The DPAER utilized the goals and objectives, as well as the opportunities and constraints, identified in the ECFR to investigate the range of alternatives for the erosion control and water quality improvements along with Project cost and an entire suite of other variables to help the PDT and public select the preferred Project alternative. Also, based on the evaluation matrix within the document, Project Alternative number 1 scored the highest, indicating that it most optimally met the stated goals and objectives of the Project. The Department incorporated these comments and produced the final PAER in October 2008.

In October 2008, the Department completed the Final Preferred Alternative Reports (PAR), based on feedback from the PDT and the public, which presented the preferred Project alternative. The final alternative was revised and changes were incorporated into the final PAR. The PAR was again updated in September 2009 after supplemental information was obtained and needed revisions incorporated into the Project. The Project has since moved to the design phase, with

50% level plans completed by October 2009. The above documents are available through the Department. Below is a synopsis of alternatives that were evaluated as part of the planning process.

PROPOSED PROJECT

The Proposed Project selected by the PDT is described below. The Proposed Project is a compilation of the most comprehensive design ideas for the Project area which most optimally meet the goals and objectives of the Project.

The Project proposes to construct water quality improvements within the County ROW including Rubicon Drive which is a loop street bounded by Lake Tahoe to the East, State Route 89 to the West, and Lonely Gulch to the North. The Project also encompasses residential streets surrounding Rubicon Drive including Forest Drive, King George Drive, Williams Lane, and South Lane. All improvements will be constructed within the County ROW and no additional coverage or impervious areas will be constructed as part of this Project. Water Quality treatment improvements will consist of small infiltration basins constructed in the ROW outside the edge of pavement, sediment traps to capture coarse sediment while providing for volume reduction/infiltration, and subsurface infiltration galleries. The subsurface infiltration galleries proposed as part of this Project will collect water in a drop inlet and route via an underground piping network to subsurface infiltration facilities. The subsurface facilities will be designed to capture and infiltrate generated stormwater into the soil. Once the infiltration galleries are full, all stormwater will bypass the system then flow into the existing stormwater conveyance. All systems as proposed with this Project will operate in the "first flush", treating only a certain amount of the storm generated volume then bypassing remaining storm volumes. This will provide for storm generated volume reductions and infiltration. Water Quality source control improvements will consist of road shoulder stabilization and retaining walls. Road shoulder stabilization will consist of using either angular aggregate or articulated concrete block to prevent soil mobilization and provide for infiltration. Retaining walls will be constructed only in critical areas of Rubicon Drive where slopes present erosion potential.

The Proposed Project will comply with all Tahoe Basin permitting agencies' requirements, including the TRPA, the Lahontan Regional Water Quality Control Board (Lahontan), the USFS-LTBMU, and the US Army Corps of Engineers (ACOE) (if required). More specifically, the water quality improvement Project will comply with TRPA Code of Ordinances Chapters and with Lahontan's Basin Plan. The following permits will be obtained in order to construct the Proposed Project:

- TRPA EIP Permit
- TRPA Soils/Hydro Permit
- Lahontan National Pollutant Discharge Elimination System (NPDES) Permit
- USFS-LTBMU Special Use Permit (if needed)

A Land Capability Verification was performed and certified by TRPA prior to the design of the Project. The Land Capability Verification identifies distinct land capability districts within the Project area, particularly sensitive stream environment zones (SEZ). The water quality improvement Project has been designed to avoid SEZs.

The water quality improvement Project has been designed to avoid and/or minimize impacts on the environment, while still meeting the stated goals and objectives of the Project. Sensitive lands (land capability Class 1b) have been identified and thorough environmental surveys (vegetation, wildlife, and cultural) have been conducted within the Project area to ensure that the Proposed Project has been designed to avoid significant environmental impacts and/or proposes appropriate mitigation measures to minimize environmental harm to a less than significant level. The impacts associated with the Proposed Project have been thoroughly analyzed and appropriate mitigation measures are proposed in the Checklist section of this document. All Project disturbances will occur within the County ROW. With the proposed mitigation measures, it has been determined that the Project will not have a significant effect on the environment.

PROPOSED PROJECT & EXISTING WATERSHED CONDITIONS

Existing Conditions

The Project area is within the Emerald Bay Hydrologic Area based on the TRPA Water Quality Management Plan (TRPA, 1988) and USGS Basins 85 and 86 (Jorgensen et al., 1978). Runoff generally flows from residential sloping mountainous terrain towards the east. The two primary watersheds within the Project area include the northern watershed N-1 which has a drainage basin area of 1.7 acres, 3.4% impervious cover, and drains into Lonely Gulch, and the southern watershed which has a drainage basin area of 41.4 acres, 8.3% impervious cover, and drains into Rubicon Bay.

Runoff from the northern watershed is collected along King George Drive and conveyed to Lonely Gulch. Runoff from the forested area and the developed portions of the southern watershed is collected along Williams Lane, Forest Drive, and

Rubicon Drive and generally conveyed along the road shoulder to a low point along Rubicon Drive at elevation 6270. The southern watershed was subdivided into four sub-watersheds based on the locations of potential storm water treatment locations and includes S-1, S-2, S-3, and S-4. Sub-watershed S-1, includes King George Drive and Williams Lane, is the least steep sub-watershed and drains directly into sub-watershed S-2. Sub-watershed S-2 includes Forest Drive and portions of Rubicon Drive. Sub-watershed S-3 is the steepest sub-watershed within the Project area and includes a portion of Rubicon Drive. Sub-watershed S-4 includes the lowest portions of Rubicon Drive and receives runoff from sub-watersheds S-2 and S-3.

Sub-watershed S-1

Existing Conditions

Sub-watershed S-1, includes King George Drive, Williams Lane, and portions of Rubicon Drive. The area is the least steep sub-watershed and drains directly into sub-watershed S-2. Sub-watershed S-1 is 9.6 acres.

King George Drive, Williams Lane and Rubicon Drive are two lane residential roads with no curb and gutter. The bare road shoulders convey water downstream to sub-watershed S-2. There is minimal sediment accumulation and erosion present in this portion of the watershed with the majority of the erosion occurring in the south west portion of Rubicon Drive.

Source Control

For the eastern portion of King George Drive the Proposed Project consists mainly of road shoulder stabilization and some infiltration treatment measures. The road shoulder treatments will utilize crushed aggregate or similar material and/or revegetation to stabilize shoulders and promote infiltration.

Hydraulic Design

The Proposed Project would include constructing two small sediment basins within the ROW and installing a sediment trap to remove coarse solids from being conveyed downstream. Infiltration on King George Drive will utilize existing ROW shoulders to construct the small infiltration basins (micropools) to promote infiltration and provide for storage volume.

Treatment

The design storm volume of runoff from this sub-watershed is equal to approximately 2,800 cubic feet of on-site runoff. The saturated hydrologic conductivity of the soils at the location of the proposed treatment facility for this sub-watershed are between 6 and 20 inches per hour. Due to limited treatment area and the potential for shallow groundwater depth, it is probable that there is not sufficient area to treat all stormwater generated volumes. The primary treatment for the Proposed Project includes a sediment trap and a shallow basin. Basin infiltration on King George Drive will utilize existing ROW to construct the small linear infiltration basins (micropools) to promote infiltration and provide for some storage volume. The size and volume of these basins will be determined at the 50% plan level.

Sub-watershed S-2

Existing Conditions

Sub-watershed S-2 is 14.4 acres. Sub-watershed S-2 includes Forest Drive and southwest portions of Rubicon Drive. The historic drainage pattern conveyed water from S-1 and western portions of S-2 to a culvert at 8713 Rubicon Drive. This culvert has since been plugged and no easement is present on the property. The water currently is conveyed down Rubicon Drive and combines with Forest Drive to sub-watershed S-3. At the north intersection of Forest Drive and Rubicon Drive is a 12” culvert that convey flows generated across Rubicon Drive to upper portions of sub-watershed S-3. There is no outlet that exists for the flow from this entire watershed. The water currently discharges to a private parcel located at APN 016-221-15 and then straight to Lake Tahoe. The northeast end of Rubicon Drive is a one lane road that has an asphalt dike on the eastern portion of the road that conveys water to lower portions of the watershed. Rubicon Drive is steep and has a moderate erosion potential. There are sections of bare road shoulders.

Source Control

For the northwestern portion of Rubicon Drive and northern portions of Forest Drive the Proposed Project consists mainly of road shoulder stabilization and asphalt conveyance removal. The road shoulder treatments will utilize crushed aggregate or other stabilization measures to stabilize road shoulders and promote infiltration.

Hydraulic Design

The Proposed Project may include installing an upgraded HDPE pipe with scour protection. Several sediment traps will also be placed on Forest Drive. At the bottom of the steep hill located in the northeast end of Rubicon Drive improvements are proposed including sediment traps and culvert piping to convey stormwater into the primary treatment system.

Treatment

The design storm volume of runoff from this sub-watershed is equal to approximately 4,300 cubic feet of on-site runoff. The saturated hydrologic conductivity of the soils at the location of the proposed treatment facility for this sub-watershed are between 6 and 20 inches per hour. For Forest Drive the primary treatment for the Proposed Project includes small linear infiltration basins placed in the ROW outside the edge of pavement. These basins will include a sediment trap prior to each basin to pre-treat coarse solids and promote infiltration. The primary treatment proposed for the northeast portion of Rubicon Drive is located at the bottom of the steep hill draining toward the Rubicon Estates beach access. The treatment includes a large subsurface infiltration system that is intended to infiltrate thereby treating much of the water generated from Rubicon Drive. The infiltration gallery will contain a large portion of the storm generated volume and be designed to bypass all flows to the existing drainage conveyance flow path once design limits are exceeded. Several sediment traps and drainage inlets are designed into the Project to pre-treat stormwater prior to entering the subsurface infiltration system.

Sub-watershed S-3

Existing Conditions

Sub-watershed S-3 is 6.7 acres. Sub-watershed S-3 is the steepest sub-watershed within the Project area and includes a portion of Rubicon Drive and contributes water to sub-watershed S-4. This portion of Rubicon Drive is a one lane road that has no curb and gutter. Some generated stormwater is conveyed downstream to S-4 and some of the generated stormwater sheet flows off the road. There is a moderate erosion potential and sections of bare road shoulders.

Source Control

The Project is proposing three retaining walls and/or slope protection in areas that have sediment erosion potential within the County ROW. The work will be limited to the ROW and available USFS parcels within the Project area. Very limited source control activities are proposed for this sub-watershed.

Hydraulic

The Proposed Project would include a drop inlet(s), associated culvert piping, and a sediment trap to convey water to the subsurface infiltration gallery located at the south end of S-3 at Rubicon Drive and South Lane.

Treatment

The design storm volume of runoff from this sub-watershed is equal to approximately 2,000 cubic feet of on-site runoff. The saturated hydrologic conductivity of the soils at the location of the proposed treatment facility for this sub-watershed is between 6 and 20 inches per hour. The primary treatment for the Proposed Project includes subsurface infiltration and volume storage. The infiltration gallery and sand traps will contain and infiltrate a portion of the storm generated volume and be designed to bypass all flows to the existing drainage conveyance flow path once design limits are exceeded. Several sediment traps and drainage inlets are designed into the Project to pre-treat stormwater prior to entering the subsurface infiltration system.

Sub-watershed S-4

Existing Conditions

Sub-watershed S-4 is 10.6 acres. Sub-watershed S-4 includes the lowest portions of Rubicon Drive and receives runoff from sub-watersheds S-2 and S-3. This portion of Rubicon Drive is a one lane road that has no curb and gutter. The erosion potential in this area is low to moderate with bare road shoulders. Generated stormwater currently sheet flows off Rubicon Drive into private residences. The drainage in this watershed has been flowing in this current configuration since development.

Source Control

For this portion of Rubicon Drive the Proposed Project consists mainly of road shoulder stabilization. The road shoulder treatments will utilize crushed aggregate or other stabilization measures to stabilize road shoulders and promote infiltration.

Hydraulic Design

The Proposed Project proposes a drop inlet(s), associated culvert piping, and sediment traps to convey water to the sub-surface infiltration gallery located at the southeast end of Rubicon Drive.

Treatment

The design storm volume of runoff from this sub-watershed is equal to approximately 3,000 cubic feet of on-site runoff. The saturated hydrologic conductivity of the soils at the location of the proposed treatment facility for this sub-watershed is between 6 and 20 inches per hour. The primary treatment for the Proposed Project includes subsurface infiltration and volume storage. The infiltration gallery and sediment traps will contain and infiltrate a portion of the storm generated volume and be designed to bypass all flows to the existing drainage conveyance flow path once design limits are exceeded. Several sediment traps and drainage inlets are designed into the Project to pre-treat stormwater prior to it entering the subsurface infiltration system.

SUMMARY OF ENVIRONMENTAL ANALYSIS

An Initial Study has been prepared to assess the Project's potential effects on the environment and the significance of those effects. Based on the Initial Study, it has been determined that the Proposed Project will not have any significant environmental impacts with the implementation of the mitigation measures outlined in the Initial Study. The County will adopt the mitigation measures which are 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 aesthetics, biological resources, agricultural resources, cultural resources, land use and planning, mineral resources, population and housing, public services, and recreation resources.

- The Proposed Project will have a less than significant impact in the areas of air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, transportation and traffic, utilities and service systems, and greenhouse gas emissions. Discussion on each of these findings is provided below.

Air Quality: The Project will have no long term impacts to air quality. 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 Project region is in non-attainment nor will it expose sensitive receptors to substantial pollutant concentrations, or 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 Project activities from violating air quality standards.

Hazards/Hazardous Materials: The 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 Storm Water Pollution Prevention Plan (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: The main goal of the 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 Lake Tahoe. The Project will have no long term negative impacts on hydrology/water quality. 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 Temporary Erosion Control Plan, Revegetation Plan, and a Dust Suppression Plan that the contractor must adhere to in order to address short term impacts associated with soil disturbance. At a minimum, this will include containment of the site with proper BMPs, protection of existing storm water facilities, staging and storage of materials, and daily sweeping. To ensure all mitigation measures are addressed and monitored, the contractor will prepare and adhere to a SWPPP in accordance with TRPA and the Lahontan Regional Water Quality Control Board (Lahontan) requirements for storm water pollution prevention.

Noise: 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 am to 6:30 pm. 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 of activities, and contacts for filing noise complaints. The County and/or contractor will respond to all noise complaints received within one working day and resolve the issue immediately.

Transportation/Traffic: 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. At no time will access for local residents, emergency vehicles, school buses, pedestrians, or bicyclists be prohibited.

Utilities and Service Systems: During Project construction, portions of the site may 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 Plan which will include TRPA approved BMP measures to minimize soil erosion during construction to a less than significant level.

Greenhouse Gas Emissions: During Project construction, greenhouse gas emissions will increase temporarily from construction related machinery, however due to the erosion control nature of the Project; there will be no long term increase in greenhouse gas emissions from the Project.

PUBLIC NOTICE

The comment period for this document closes on January 21, 2010. 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 Division 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 County of El Dorado Department of Transportation – Tahoe Engineering Division 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 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.

for

Russell Wigart, Assistant in Civil Engineering
County of El Dorado —Lead Agency

Recorder's Certification

CEQA
FINAL INITIAL STUDY/
PROPOSED MITIGATED NEGATIVE DECLARATION

RUBICON 5
EROSION CONTROL PROJECT
EIP PROJECT # 713.3
JN 95178

STATE CLEARINGHOUSE # 2009122086

Prepared by:

County of El Dorado
Department of Transportation
Tahoe Engineering Division
924 B Emerald Bay Road
South Lake Tahoe, CA 96150

With Assistance from:

Nichols Consulting Engineers
PO Box 1760
Zephyr Cove, NV 89448

FINAL
January 2010

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FIGURES

APPENDICES

1.0 INTRODUCTION

This Draft Initial Study has been prepared to identify and assess the anticipated environmental impacts of the following described Project. The document may rely on previous environmental documents and site-specific studies prepared to address in detail the effects or impacts associated with the 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.), and the California Tahoe Conservancy (CTC) grant funding requirements. 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.

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), use a previously prepared EIR and supplement that EIR, or prepare a subsequent EIR to analyze the Project at hand. 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 of El Dorado Department of Transportation-Tahoe Engineering Division (Department) 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 and the CTC.

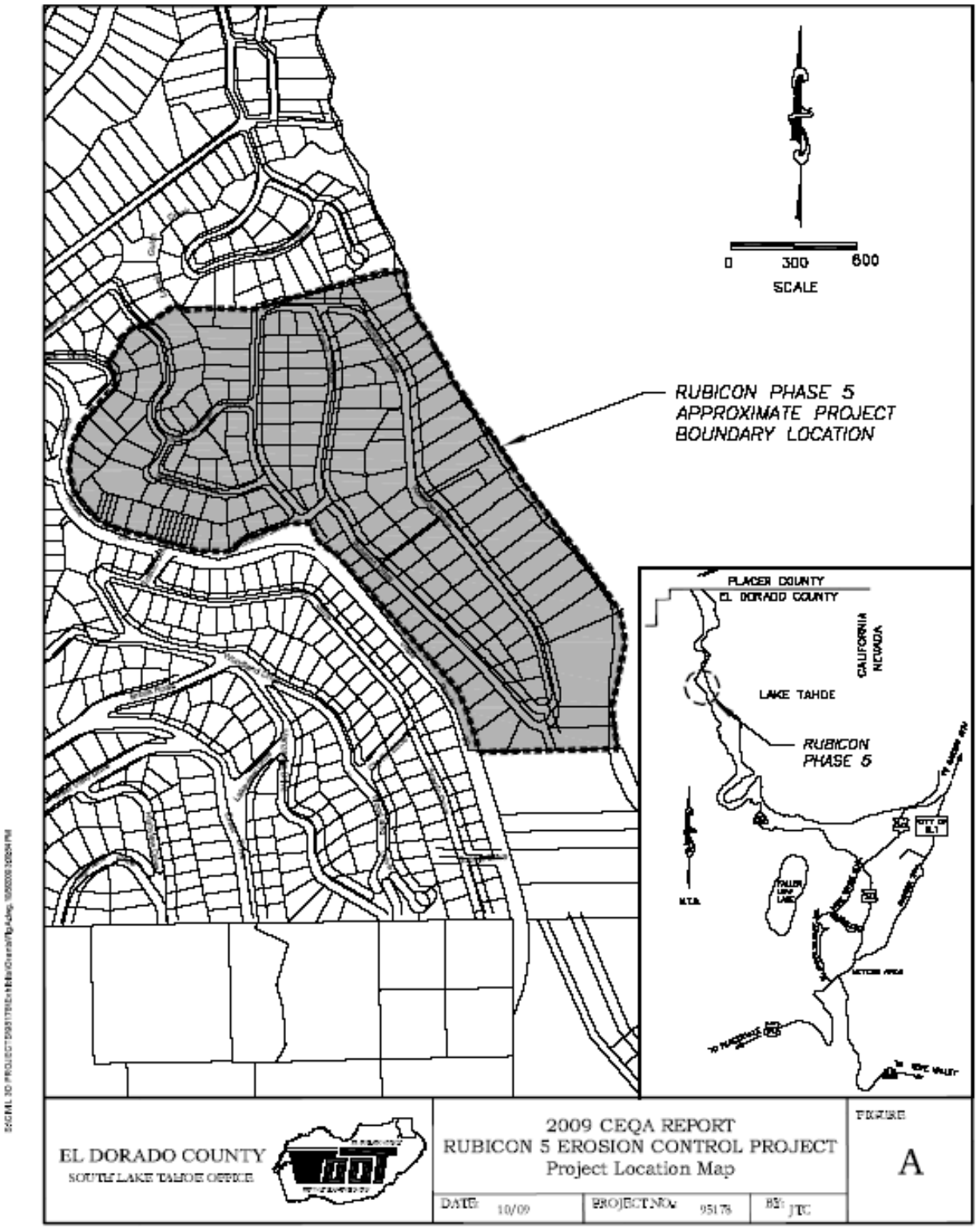
A CEQA Checklist (Appendix A) has been completed based on the Project Alternatives Evaluation Report (PAER); however, should significant impacts or new mitigation measures result from the CEQA review process, the Department will re-circulate the document for public review. The public review period for the Draft Initial Study/Proposed Mitigated Negative Declaration shall begin on December 21, 2009 and end on January 21, 2010. Comments received after 5:00 pm on January 21, 2010 will not be considered. Written responses should be sent to Russell Wigart, Assistant in Civil Engineering, 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
russell.wigart@edcgov.us

2.0 PROJECT DESCRIPTION AND LOCATION

In 1997, the Tahoe Regional Planning Agency (TRPA) developed a Basin-wide Environmental Improvement Program (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 enviromental 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 Rubicon Estates 5 Erosion Control Project (Project) is defined in the TRPA EIP as Project # 713.3. The Department proposes to initiate implementation of the Project during the 2010/11 construction season to assist with meeting the goals of the EIP. This Project is being designed and constructed with financial assistance from the CTC, United States Forest Service - Lake Tahoe Basin Management Unit (USFS-LTBMU), and TRPA mitigation funds.

The Project area is located on the west shore of Lake Tahoe. More specifically, the area includes Rubicon Drive which is a loop street bounded by Lake Tahoe to the East, State Route 89 to the West, and Lonely Gulch to the North (Figure A).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SCALE
RUBICON PHASE 5
APPROXIMATE PROJECT
BOUNDARY LOCATION
PLACER COUNTY
EL DORADO COUNTY
CALIFORNIA
NEVADA
LAKE TAHOE
RUBICON
PHASE 5
EL DORADO COUNTY
SOUTH LAKE TAHOE OFFICE
2009 CEQA REPORT
RUBICON 5 EROSION CONTROL PROJECT
Project Location Map
DATE 10/09
PROJECT NO. 95178
BY JTC
FIGURE
A

Figure A

This Project is intended to improve water quality by reducing erosion and treating storm water runoff from the existing roadway within the Project corridor by installing appropriate BMPs. Figure C outlines the Proposed Project alternative and can be found at the end of this Initial Study.

2.1 Project Need

The Project is one of the last erosion control projects (ECP) within the Rubicon Estates area. To date there have been seven (7) ECP built in this area, Victoria Drive ECP, Rubicon (1-4) ECPs, Mountain Drive ECP, Woodland ECP, Tamarack ECP, Silvertip ECP, and Lonely Gulch ECP. The first three (3) projects were part of the Soil Erosion Control Program administered by the CTC which preceded the Environmental Improvement Program (EIP). The remaining projects took place in the Rubicon neighborhood west of State Route 89. The Woodland, Tamarack, and Lonely Gulch ECPs were combined into EIP #713.1 and the Silvertip ECP into EIP #713.2. Therefore, this Project will complete the Rubicon Properties erosion control series (see Figure A) and is referred to as EIP #713.3.

Additionally, pursuant to the requirements of Section 208 of the Clean Water Act, the TRPA prepared a Water Quality Management Plan for the Lake Tahoe Basin (208 Plan). This plan identified erosion, runoff, and disturbance resulting from developments, such as subdivision roads, in the Lake Tahoe Basin as major causes of the decline of Lake Tahoe's water quality and clarity. The 208 Plan also mandates that capital improvement projects such as the Rubicon Estates 5 Erosion Control Project be implemented to bring all County of El Dorado roads into compliance with BMP requirements. Additionally, the TRPA developed the EIP to assist in attaining and maintaining TRPA's Environmental Thresholds. The EIP identified the need to improve the quality of water entering Lake Tahoe by controlling upstream pollutant sources. Pollutant sources primarily include fine sediment and nutrients such as nitrogen and phosphorus.

Source erosion, water quality, and drainage/infrastructure problems have been identified within the Project area. The problems within the Project area are typical of those found within older residential subdivisions and commercially developed areas in the Tahoe Basin. The problems were evaluated during site inspections by the Department, TRPA, USFS-LTBMU, and CTC staff. The problem areas the Project intends to address are listed below.

Source Erosion
- Eroding Slopes
- Eroding Roadside Shoulders
- Compacted Parking Areas

Water Quality
- Road Sand and Cinder Accumulation
- Sediment Deposition and Tracking
- Concentration of Stormwater Flows
- Discharge of Untreated Stormwater

Drainage and Infrastructure
- Eroding Drainage Ditches and Channels
- Undersized and Damaged Culverts
- Undersized or Nonexistent Roadside Ditches

2.2 Project Approach

The Project utilized the Lake Tahoe Basin Stormwater Quality Improvement Committee's (SWQIC) Formulating and Evaluating Alternatives for Water Quality Improvement Projects document for guidance in moving towards the selection of a preferred Project alternative. The Project Development Team (PDT) investigated a range of possibilities for the 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:

- Existing Conditions/Feasibility Report (EDOT 2008)
- Draft/Final Project Alternatives Evaluation Report (EDOT 2008)
- Final Preferred Alternative Report (EDOT 2008)

In June 2008, the Department completed the Existing Conditions/Feasibility Report (ECFR) which investigated and described the physical and environmental characteristics of the Project area and vicinity that were relevant to the design of the Project. The information collected and analyzed as part of the existing conditions analysis provided the PDT and other stakeholders with a clear representation and analysis of existing conditions and their relationship to any impacts on the constructability and location of the improvements on water quality. Figure C demonstrates the feasibility and analysis of conceptual alternatives to help correct existing problem areas within the Project area. The information presented in the ECFR directly informed the development of Project strategies and alternatives.

In July 2008, the Department hosted a meeting to discuss the ECFR document and the three (3) Project alternatives with the public to obtain their feedback on their preferred Project. At the July 2008 PDT meeting the Department received feedback from the PDT that their preferred Project alternative was Alternative 1 (the Proposed Project). This information was processed and in August 2008 the Department completed a Draft Project Alternatives Evaluation Report (DPAER) which compiled and analyzed three different conceptual Projects, each with unique BMP alternatives. The DPAER utilized the goals and objectives, as well as the opportunities and constraints, identified in the ECFR to investigate the range of alternatives for the erosion control and water quality improvements along with Project cost and an entire suite of other variables to help the PDT and public select the preferred Project alternative. Also, based on the evaluation matrix within the document, Project Alternative number 1 scored the highest, indicating that it most optimally met the stated goals and objectives of the Project. The Department incorporated these comments and produced the final PAER in October 2008.

In October 2008, the Department completed the Final Preferred Alternative Reports (PAR), based on feedback from the PDT and the public, which presented the preferred Project alternative. The final alternative was revised and changes were incorporated into the final PAR. The PAR was again updated in September 2009 after supplemental information was obtained and needed revisions incorporated into the Project. The Project has since moved to the design phase, with 50% level plans completed by October 2009. The above documents are available through the Department. Below is a synopsis of alternatives that were evaluated as part of the planning process.

2.3 Concept Alternatives

In order to develop the Project alternatives, the Department presented three (3) feasible alternatives. Each had pros and cons that were outlined and analyzed in the PAER. Each alternative was weighted using an evaluation matrix consisting of several factors that affected the feasibility and effectiveness of each alternative. These were factors like: cost, affects to sensitive species and cultural sites, safety, scenic issues, permitability, fundability, etc. Once each alternative was scored, the PDT and public had a chance to weigh in on the preferred Project alternative.

The Department utilized a comprehensive watershed-based approach to develop BMP alternatives within the Project area. This strategy helped to identify the existing storm water flow paths, sources of sediment, and hydrologic and hydraulic characteristics in a very practical fashion and assisted in identifying how to properly address the erosion and water quality issues. The Project design focuses mainly on capturing and infiltrating storm water and fine sediment. The BMP alternatives were designed for each problem area and were analyzed at the Project site for effectiveness at solving the water quality issue in a cost effective, easily maintainable manner. The BMP alternatives were developed using erosion source control, hydrologic design, and infiltration/treatment runoff strategies.

The preferred Project alternative is presented in Figure C. Figure A presents the configuration of the Project area and the Project area location. Figure A also identifies the locations and extent of the proposed improvements for the preferred Project alternative (Proposed Project), which is described in further detail below.

Proposed Project Erosion and Water Quality Control Summary

The Proposed Project shall implement source control, hydrologic conveyance, and infiltration/treatment options to meet Project goals and objectives. See Figure C.

The primary focus for erosion control will be to provide source control on targeted eroding roadside slopes and road shoulders. Source control on roadside drainages will be achieved by utilizing rock protection or retaining walls on overly steepened slopes; and revegetation on other bare eroding areas where conditions permit.

Hydrologic controls for the Project will be accomplished by stabilizing road shoulders using aggregate base or equivalent materials. This measure will provide for infiltration and reduce sediment transport, while still conveying water to treatment areas. Many sediment traps will be placed throughout the subdivision to slow down, infiltrate and store generated runoff volumes while still providing for ease of maintenance by County maintenance crews. Sediment traps will be placed above infiltration/treatment structures to provide for particle settling and ease of maintenance. Pipes will only be placed in those areas that have subsurface infiltration and/or sediment traps. Pipes will only be installed in those areas where storm generated flows need safe conveyance to existing conveyance flow paths. Areas that have impervious conveyance such as asphalt ditches will have asphalt removed and supplemented with aggregate to promote infiltration.

Treatment options for storm water include sediment traps, micro pool sediment infiltration basins, and subsurface infiltration galleries. Sediment traps will be located prior to all basins and subsurface infiltration galleries. All infiltration basins and subsurface infiltration galleries will be located within or adjacent to the ROW and will be designed to capture and infiltrate/treat the first flush of runoff.

2.4 Detailed Site Conditions and Proposed Project

The following describes the Proposed Project alternative (outlined in Figure C) which has been determined by the Department, the PDT, and the public to be the most comprehensive Project alternative which meets the goals and objectives of the Project.

The Project proposes to construct water quality improvements within the County ROW including Rubicon Drive which is a loop street bounded by Lake Tahoe to the East, State Route 89 to the West, and Lonely Gulch to the North. The Project also encompasses residential streets surrounding Rubicon Drive including Forest Drive, King George Drive, Williams Lane, and South Lane. All improvements will be constructed within the County ROW and no additional coverage or impervious areas will be constructed as part of this Project. Water Quality treatment improvements will consist of small infiltration basins constructed in the ROW outside the edge of pavement, sediment traps to capture coarse sediment while providing for volume reduction/infiltration, and subsurface infiltration galleries. The subsurface infiltration galleries proposed as part of this Project will collect water in a drop inlet and route via an underground piping network to subsurface infiltration facilities. The subsurface facilities will be designed to capture and infiltrate generated stormwater into the soil. Once the infiltration galleries are full, all stormwater will bypass the system then flow into the existing stormwater conveyance. All systems as proposed with this Project will operate in the “first flush”, treating only a certain amount of the storm generated volume then bypassing remaining storm volumes. This will provide for storm generated volume reductions and infiltration. Water Quality source control improvements will consist of road shoulder stabilization and retaining walls. Road shoulder stabilization will consist of using either angular aggregate or articulated concrete block to prevent soil mobilization and provide for infiltration. Retaining walls will be constructed only in critical areas of Rubicon Drive where slopes present erosion potential.

The Proposed Project will comply with all Tahoe Basin permiting agencies’ requirements, including the TRPA, the Lahontan Regional Water Quality Control Board (Lahontan), the USFS-LTBMU, and the US Army Corps of Engineers (ACOE) (if required). More specifically, the water quality improvement Project will comply with TRPA Code of Ordinances Chapters and with Lahontan’s Basin Plan. The following permits will be obtained in order to construct the Proposed Project:

- TRPA EIP Permit
- TRPA Soils/Hydro Permit
- Lahontan National Pollutant Discharge Elimination System (NPDES) Permit
- USFS-LTBMU Special Use Permit (if needed)

A Land Capability Verification was performed and certified by TRPA prior to the design of the Project. The Land Capability Verification identifies distinct land capability districts within the Project area, particularly sensitive stream environment zones (SEZ). The water quality improvement Project has been designed to avoid SEZs.

The water quality improvement Project has been designed to avoid and/or minimize impacts on the environment, while still meeting the stated goals and objectives of the Project. Sensitive lands (land capability Class 1b) have been identified and thorough environmental surveys (vegetation, wildlife, and cultural) have been conducted

within the Project area to ensure that the Proposed Project has been designed to avoid significant environmental impacts and/or proposes appropriate mitigation measures to minimize environmental harm to a less than significant level. The impacts associated with the Proposed Project have been thoroughly analyzed and appropriate mitigation measures are proposed in the Checklist section of this document. All Project disturbances will occur within the County ROW. With the proposed mitigation measures, it has been determined that the Project will not have a significant effect on the environment.

EROSION CONTROL

As described above, the following erosion control and water quality related measures are included in the Proposed Project. All proposed measures will be in compliance with applicable TRPA laws and Lahontan regulations, including following the Basin Plan and Chapters 25 and 81 of TRPA's Code of Ordinances.

Existing Conditions

The Project area is within the Emerald Bay Hydrologic Area based on the TRPA Water Quality Management Plan (TRPA, 1988) and USGS Basins 85 and 86 (Jorgensen et al., 1978). Runoff generally flows from residential sloping mountainous terrain towards the east. The two primary watersheds within the Project area include the northern watershed N-1 which has a drainage basin area of 1.7 acres, 3.4% impervious cover, and drains into Lonely Gulch, and the southern watershed which has a drainage basin area of 41.4 acres, 8.3% impervious cover, and drains into Rubicon Bay.

Runoff from the northern watershed is collected along King George Drive and conveyed to Lonely Gulch. Runoff from the forested area and the developed portions of the southern watershed is collected along Williams Lane, Forest Drive, and Rubicon Drive and generally conveyed along the road shoulder to a low point along Rubicon Drive at elevation 6270. The southern watershed was subdivided into four sub-watersheds based on the locations of potential storm water treatment locations and includes S-1, S-2, S-3, and S-4. Sub-watershed S-1, includes King George Drive and Williams Lane, is the least steep sub-watershed and drains directly into sub-watershed S-2. Sub-watershed S-2 includes Forest Drive and portions of Rubicon Drive. Sub-watershed S-3 is the steepest sub-watershed within the Project area and includes a portion of Rubicon Drive. Sub-watershed S-4 includes the lowest portions of Rubicon Drive and receives runoff from sub-watersheds S-2 and S-3.

Sub-watershed S-1

Existing Conditions

Sub-watershed S-1 includes King George Drive, Williams Lane, and portions of Rubicon Drive. The area is the least steep sub-watershed and drains directly into sub-watershed S-2. Sub-watershed S-1 is 9.6 acres.

King George Drive, Williams Lane, and Rubicon Drive are two lane residential roads with no curb and gutter. The bare road shoulders convey water downstream to sub-watershed S-2. There is minimal sediment accumulation and erosion present in this portion of the watershed with the majority of erosion occurring in the south west portion of Rubicon Drive.

Source Control

For the eastern portion of King George Drive the Proposed Project consists mainly of road shoulder stabilization and some infiltration treatment measures. The road shoulder treatments will utilize crushed aggregate or similar material and/or revegetation to stabilize shoulders and promote infiltration.

Hydraulic Design

The Proposed Project would include constructing two small sediment basins within the ROW and installing a sediment trap to remove coarse solids from being conveyed downstream. Infiltration on King George Drive will utilize existing ROW shoulders to construct the small infiltration basins (micropools) to promote infiltration and provide for storage volume.

Treatment

The design storm volume of runoff from this sub-watershed is equal to approximately 2,800 cubic feet of on-site runoff. The saturated hydrologic conductivity of the soils at the location of the proposed treatment facility for this sub-watershed are between 6 and 20 inches per hour. Due to limited treatment area and the potential for shallow groundwater depth, it is probable that there is not sufficient area to treat all stormwater generated volumes. The

primary treatment for the Proposed Project includes a sediment trap and a shallow basin. Basin infiltration on King George Drive will utilize existing ROW to construct the small linear infiltration basins (micro pools) to promote infiltration and provide for some storage volume. The size and volume of these basins will be determined at the 50% plan level.

Sub-watershed S-2

Existing Conditions

Sub-watershed S-2 is 14.4 acres. Sub-watershed S-2 includes Forest Drive and southwest portions of Rubicon Drive. The historic drainage pattern conveyed water from S-1 and western portions of S-2 to a culvert at 8713 Rubicon Drive. This culvert has since been plugged and no easement is present on the property. The water currently is conveyed down Rubicon Drive and combines with Forest Drive to sub-watershed S-3. At the north intersection of Forest Drive and Rubicon Drive is a 12" culvert that convey flows generated across Rubicon Drive to upper portions of sub-watershed S-3. There is no outlet that exists for the flow from this entire watershed. The water currently discharges to a private parcel located at APN 016-221-15 and then straight to Lake Tahoe. The northeast end of Rubicon Drive is a one lane road that has an asphalt dike on the eastern portion of the road that conveys water to lower portions of the watershed. Rubicon Drive is steep and has a moderate erosion potential. There are sections of bare road shoulders.

Source Control

For the northwestern portion of Rubicon Drive and northern portions of Forest Drive the Proposed Project consists mainly of road shoulder stabilization and asphalt conveyance removal. The road shoulder treatments will utilize crushed aggregate or other stabilization measures to stabilize road shoulders and promote infiltration.

Hydraulic Design

The Proposed Project may include installing an upgraded HDPE pipe with scour protection. Several sediment traps will also be placed on Forest Drive. At the bottom of the steep hill located in the northeast end of Rubicon Drive improvements are proposed including sediment traps and culvert piping to convey stormwater into the primary treatment system.

Treatment

The design storm volume of runoff from this sub-watershed is equal to approximately 4,300 cubic feet of on-site runoff. The saturated hydrologic conductivity of the soils at the location of the proposed treatment facility for this sub-watershed are between 6 and 20 inches per hour. For Forest Drive the primary treatment for the Proposed Project includes small linear infiltration basins placed in the ROW outside the edge of pavement. These basins will include a sediment trap prior to each basin to pre-treat coarse solids and promote infiltration. The primary treatment proposed for the northeast portion of Rubicon Drive is located at the bottom of the steep hill draining toward the Rubicon Estates beach access. The treatment includes a large subsurface infiltration system that is intended to infiltrate thereby treating much of the water generated from Rubicon Drive. The infiltration gallery will contain a large portion of the storm generated volume and be designed to bypass all flows to the existing drainage conveyance flow path once design limits are exceeded. Several sediment traps and drainage inlets are designed into the Project to pre-treat stormwater prior to entering the subsurface infiltration system.

Sub-watershed S-3

Existing Conditions

Sub-watershed S-3 is 6.7 acres. Sub-watershed S-3 is the steepest sub-watershed within the Project area and includes a portion of Rubicon Drive and contributes water to sub-watershed S-4. This portion of Rubicon Drive is a one lane road that has no curb and gutter. Some generated stormwater is conveyed downstream to S-4 and some of the generated stormwater sheet flows off the road. There is a moderate erosion potential and sections of bare road shoulders.

Source Control

The Project is proposing three retaining walls and/or slope protection in areas that have sediment erosion potential within the County ROW. The work will be limited to the ROW and available USFS parcels within the Project area. Very limited source control activities are proposed for this sub-watershed.

Hydraulic

The Proposed Project would include a drop inlet(s), associated culvert piping, and a sediment trap to convey water to the subsurface infiltration gallery located at the south end of S-3 at Rubicon Drive and South Lane.

Treatment

The design storm volume of runoff from this sub-watershed is equal to approximately 2,000 cubic feet of on-site runoff. The saturated hydrologic conductivity of the soils at the location of the proposed treatment facility for this sub-watershed is between 6 and 20 inches per hour. The primary treatment for the Proposed Project includes subsurface infiltration and volume storage. The infiltration gallery and sand traps will contain and infiltrate a portion of the storm generated volume and be designed to bypass all flows to the existing drainage conveyance flow path once design limits are exceeded. Several sediment traps and drainage inlets are designed into the Project to pre-treat stormwater prior to entering the subsurface infiltration system.

Sub-watershed S-4

Existing Conditions

Sub-watershed S-4 is 10.6 acres. Sub-watershed S-4 includes the lowest portions of Rubicon Drive and receives runoff from sub-watersheds S-2 and S-3. This portion of Rubicon Drive is a one lane road that has no curb and gutter. The erosion potential in this area is low to moderate with bare road shoulders. Generated stormwater currently sheet flows off Rubicon Drive into private residences. The drainage in this watershed has been flowing in this current configuration since development.

Source Control

For this portion of Rubicon Drive the Proposed Project consists mainly of road shoulder stabilization. The road shoulder treatments will utilize crushed aggregate or other stabilization measures to stabilize road shoulders and promote infiltration.

Hydraulic Design

The Proposed Project proposes a drop inlet(s), associated culvert piping, and sediment traps to convey water to the subs urface infiltration gallery located at the southeast end of Rubicon Drive.

Treatment

The design storm volume of runoff from this sub-watershed is equal to approximately 3,000 cubic feet of on-site runoff. The saturated hydrologic conductivity of the soils at the location of the proposed treatment facility for this sub-watershed is between 6 and 20 inches per hour. The primary treatment for the Proposed Project includes subsurface infiltration and volume storage. The infiltration gallery and sediment traps will contain and infiltrate a portion of the storm generated volume and be designed to bypass all flows to the existing drainage conveyance flow path once design limits are exceeded. Several sediment traps and drainage inlets are designed into the Project to pre-treat stormwater prior to it entering the subsurface infiltration system.

2.5 Project Benefits

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

1. Implementation of the Project should include collaboration with adjoining property owners to find mutual benefit and meet project objectives.

2. County must meet the commitment to achieve Basin objectives through the Project in carrying out the County's environmental stewardship obligation under Basin restoration efforts.

3. Reduce the amount of very fine, fine, and coarse inorganic sediment from the urbanized watershed bounded by the Project boundary to the maximum extent practicable prior to discharging into Lake Tahoe. Very fine sediment is defined as particles with a diameter of 20 microns or less (<20 µm), fine sediment is defined as particles which pass a #200 sieve (<74 µm), and coarse sediment is defined as particles retained on or greater than the #200 sieve (>74 µm).

4. Reduce the 25- year, 1- hour storm surface water volume from the urbanized watershed bounded by the Project boundary to the maximum extent practicable prior to discharging into Lake Tahoe.

5. Reduce the 25- year, 1- hour storm surface water peak flow from the urbanized watershed bounded by the Project boundary to the maximum extent practicable prior to discharging into Lake Tahoe.

6. Drainage improvement design shall provide a system that is resilient to deteriorating forces and more consistent or harmonious with natural processes, features, and systems that are sustainable.

The Project objectives represent physical conditions that can be measured to assess the success of the Project in achieving the Project goals. The Project will conform to the Preferred Design Approach as detailed in the SWQIC process.

The O*bjectives* of the Project are to improve water quality by:

1.1 Treating (infiltrating) runoff before it reaches Lake Tahoe by constructing BMPs utilizing County and Basin standards to focus on treating fine sediment.

2.1 Utilize various sediment trapping BMPs (sediment traps, infiltration, sediment basins etc.) to capture sediment from impervious surfaces and eroding areas.

3.1 Stabilizing where feasible, eroding cut slopes utilizing County and Basin BMP standards to prevent sediment discharge to Lake Tahoe.

4.1 Stabilizing roadside ditches utilizing County and Basin BMP standards to control storm water runoff and to prevent sediment discharge to Lake Tahoe.

5.1 Reducing fine sediment utilizing County and Basin BMP standards to prevent sediment discharge to Lake Tahoe.

6.1 Reducing exposed road shoulders and compacted surfaces utilizing County and Basin BMP standards to control storm water runoff and to prevent sediment discharge to Lake Tahoe.

3.0 ENVIRONMENTAL SETTING AND SITE CHARACTERISITCS

The Rubicon Estates 5 Project (Project) area is located on the west shore of Lake Tahoe. More particular, the area includes Rubicon Drive which is a loop street bounded by Lake Tahoe to the East, State Route 89 to the West, and Lonely Gulch to the North.

The Project is located in the southwestern section of the Lake Tahoe Basin in portions of Sections 32 and 33, Township 14 North, Range 17 East, Mount Diablo Meridian. The Project area is bounded by Lonely Gulch to the northwest, Paradise Flat to the south, and Rubicon Bay to the east. The approximate elevation range of the Project site is from 6,230 to 6,440 feet above mean sea level (NGVD 1929).

Topography: Project area topography mostly consists of sloping terrain with typical slopes ranging from 5% to 15% but areas as great as 50% are present.

Hydrology: According to the United States Geological Survey (USGS), there are 110 hydrologic basins and intervening areas contributing to outflow from Lake Tahoe. The Project area is located within USGS Basins 85 and 86. Basin 85 has a drainage area of 0.46 square miles and is defined as the Intervening Area between the Lake Tahoe Tributary at Paradise Flat and Lonely Gulch Creek. Basin 86 is defined as Lonely Gulch Creek and has a drainage area of 1.08 square miles (Jorgensen et al., 1978).

Runoff from the Project area is directed toward drainage facilities within the County's ROW and generally conveyed along the existing road shoulders. The Department has divided the Project area into 2 primary watersheds using topographic maps which were developed based on aerial photography in 2000. The 1.7 acre northern watershed drains to Lonely Gulch and the 41.4 acre southern watershed drains into Rubicon Bay. A

21.9 acre watershed outside of the Project boundary conveys runoff to the Project area via an 18" diameter Caltrans culvert at Post Mile 22.42 under State Route 89.

Groundwater/Wetlands: Soils in the Project area are generally well drained with groundwater in the Project area exceeding 60" in depth. No wetland or non-wetland waters of the United States were identified in the Project study area. Therefore, wetland features are not further described in this report.

Geology/Soils: A preliminary review of regional geology within the Project area has shown that this geomorphic unit has a moderate to steep slope, has revealed no rock outcrops, and has three main soil types. The soil types include Tahoe Glacial Till (Qta), Flood Plain Deposits (Qfp), and Tioga Glacial Outwash Deposits (Qtio), and are described below. Soils present within the Project area include glacial deposits and outwash deposits associated with glaciation events, as well as younger flood plain and lake deposits. Rock outcropping upslope and outside of the Project area (within the same hydrologic basin) include the Rockbound Valley Granodiorite and the Camper Flat Granodiorite. Weathered components of these rock types may be expected to occur in sediment at the Project site (Nichols, 2007).

The Project encompasses 3 soil types (SCS 1974). They are outlined in further detail below:

- *Christopher gravelly loamy coarse sand, 9-30 percent slopes (7443).* The soil consists of outwash derived from granodiorite and is somewhat excessively drained. Average total available water in the top five feet of soil is 4.1 inches. Saturated hydraulic conductivity class is high, hydrologic soil group is A, and runoff class is low. The soil has a soil loss tolerance (T factor) of five.
- *Meeks gravelly loamy coarse sand, 5 to 15 percent slopes, extremely bouldery (7484 and 7485).* The soil consists of till derived from granodiorite and is somewhat excessively drained. Average total available water in the top five feet of soil is 3.0 inches. Saturated hydraulic conductivity class is moderately low, hydrologic soil group is A, and runoff class is very low. The soil has a soil loss tolerance (T factor) of five.
- *Ubaj sandy loam, 0 to 9 percent slopes (7541).* The soil consists of alluvium and/or colluvium derived from granodiorite over lacustrine deposits and is moderately well drained. Average total available water in the top five feet of soil is 13.9 inches. Saturated hydraulic conductivity class is moderately low, hydrologic soil group is C, and runoff class is medium. The soil has a soil loss tolerance (T factor) of five. Average depth to water table is 60 inches.

Land Use: The Project area lies completely within the TRPA Plan Area Statement (PAS) area 149 – Rubicon. The land use classification is residential, the management strategy is mitigation, and the special designation is none. The existing use is residential, primarily at a density of one single family dwelling per parcel. The planning area is approximately 50 percent built out and is currently zoned low density residential and is generally forested (TRPA, 2002).

Cultural Resources: The Department consultant Nichols Consulting Engineers (NCE) completed an archival research with the intent of determining the location and extent of previous archaeological inventories in and near the Project area, and the location of previously recorded archaeological or historical sites located in or near the Project area (Nichols, 2007).

This archival research is an assessment of results of research which have been conducted to date. Efforts have focused on submitting a request to the North Central Information Center (NCIC), a component of the California Historical Resources Information System, and examination of files maintained by the USFS, Lake Tahoe Basin Management Unit.

Nichols Consulting Engineers (NCE) retained Zeier & Associates, LLC as a subcontractor to conduct such studies as necessary to demonstrate compliance with the National Historical Preservation Act. This report describes a heritage resources inventory conducted by Zeier & Associates, LLC as the initial step in that process. All work was designed to comply with current California State, federal (Forest Service), and professional standards. Those standards state that the goals of an intensive archaeological inventory (maximum 15 meter transect interval) are to:

- Establish an Area of Potential Effect
- Identify prehistoric and historic period archaeological resources in the study area
- Evaluate identified resources as to their eligibility to the National Register of Historic Places (National Register)
- Provide management recommendations for those properties considered eligible to the National Register

This information will be used during preparation of environmental documents in compliance with the National, state, regional, and local regulations.

An important component of an intensive inventory is the development of recommendations as to whether or not identified heritage resources are eligible for listing on various registers of historic places. Eligibility is based on a consideration of two site characteristics: significance and integrity. The significance of a heritage resource is evaluated in accordance with standards set by federal, state, and local entities. Federal standards are defined in the National Register, specifically in 36 CFR 60.4. California standards are prescribed as part of the California Environmental Quality Act, while local standards are prescribed in Chapter 29 of the TRPA Code of Ordinances. Essentially, the same significance criteria apply under all three programs. These criteria revolve around whether a resource contributes to a major pattern in history, was associated with an individual important in history, is an exemplary representative of a distinctive type of resource, or it has the capability to contribute to the discussion of important research questions. Also, it is important to consider whether the resource might be of special value to a traditional cultural group. Integrity is measured based on seven elements: location, design, setting, materials, workmanship, feeling, and association. Although the general threshold for sites to be considered eligible at the federal and TRPA levels is 50 years of age, the California Office of Historic Preservation uses a working threshold of 45 years.

Work conducted as part of the present study consisted of an archival review, an intensive surface inspection of the individual project area (5.43 acres), documentation of identified resources, and evaluation of resources within the Project area. The work was assigned report number TB-2008-048 (R2008051900074) by the U.S. Forest Service (USFS). It should be noted that architectural resources are present in the immediate vicinity of the Project area. However, given the nature of the Proposed Project, there is no potential to impact buildings or structures. As a result, the age of nearby buildings and structures was not determined and none were formally recorded. The present report addresses only archaeological resources that date to the prehistoric and historic periods.

Fieldwork in the study area was performed in accordance with generally accepted federal and State of California standards. The objective of the investigation was to locate, describe, and evaluate cultural resources present in the study area. Although a gridded and standardized set of rights of way have been defined, roadways do not always follow the established convention. In some cases, roadways are located, in part, outside of the defined right of way. For purposes of project planning and development, the County has specified that project elements will be located within the defined rights of way. As a result, the archaeological inventory was limited to the County defined 40-foot wide right of way. In areas where the roadway was located within the right of way, this involved walking along the undeveloped strip of land located to either side of the roadway. In areas where the roadway was located partially or fully outside the right of way, this involved walking the undeveloped right of way to one side of the roadway. Much of the study area has experienced some level of previous disturbance. The most predominant types of disturbance include cut and fill slopes associated with the existing streets, disturbance associated with access roads and driveways, residential development (most typically landscaping), and utility construction. Emphasis was placed on the examination of undisturbed or relatively undisturbed ground. Of the parcels included within the Area of Potential Effect, none had been examined previously. All eleven were examined in their entirety. In all cases, the boundary of the parcel was walked, followed by a series of transects spaced no more than 15 meters (49.2 feet) apart.

Intensive inventory of proposed improvement locations associated with the Project did not result in the identification of prehistoric or historic resources. Proposed drainage improvements would be located along the road margin in previously disturbed areas, or in selected parcels.

The NCIC request was submitted on October 15, 2007. A response from the Information Center was received in early November. That record search (number Eld-07-174) indicates that two archaeological inventories have been previously performed in the vicinity of the Project area. Both projects were conducted along segments of State Route 89 along the immediate west edge of the Project area (Bass 1987, Offermann and Noble 1991). No archaeological or historical resources were identified as a result of either Project. The listing of California Points of Historical Interest (1992) contains one listing that is within the general Project area. That is the Newhall Estate Entrance Pillars (Register Number ELD-009). The following description is provided regarding the pillars:

> "The north and south entrance pillars to the old Newhall Estate on the west side of Lake Tahoe would serve as excellent monuments to the historic estate. The estate was sold and subdivided to become known as Rubicon Properties. The pillars remained in place to continue serving as entrance pillars for the Rubicon Subdivision. The pillars were constructed between the years 1915 and 1921; the stone masonry is classic, not found in today's construction of rock walls or pillars. The rock was hand worked to

form square corners and the spaces between the rocks was chinked with chips of granite rock. These pillars are one-of-a kind in the Tahoe Basin, as no other pillars have been located with the same style of masonry."

Examination of records held by the USFS indicates that two archaeological inventory projects have occurred in part within the Project area. Those inventories are listed below:

• USFS Report TB-1995-004: Examination of selected urban and urban/forest interface lots, including several located within the immediate Project area. No cultural resources were recorded in those portions of the inventoried area located within the Project area (Dexter 1995).

• USFS Report TB-1998-026: Examination of selected urban and urban/forest interface lots, including one located within the immediate Project area. No cultural resources were recorded in that portion of the inventoried area located within the Project area (Weichman 1999).

Examination of records held by the USFS indicates that a variety of archaeological inventory projects have occurred outside but in the vicinity of the Project area. Those inventories are listed below:

• USFS Project 05-19-29: Examination of a proposed borrow pit restoration project located southwest of State Route 89 near its intersection with Sierra Drive. No cultural resources were identified as a result of this inventory (Smith 1979).

• USFS Report 05-19-148: Examination of roads to be treated as part of the Project (Tahoe Hills and Rubicon Palisades subdivisions). No cultural resources were identified as a result of this inventory (Hardy 1986).

• USFS Report 05-19-261 (305E): Examination of a parcel near the intersection of Sierra Drive and State Route 89. A can dump was recorded (USFS site number 05-19-382) that was determined not to be significant (Rucks et. al 1991).

• USFS Report TB-2004-034: Examination of the Quail Vegetation and Fuel Treatment Project, portions of which were located upslope of the Rubicon area. No cultural resources were recorded in those portions located above the Rubicon area (Jones & Stokes 2005).

• USFS Report TB-2004-043: Examination of selected urban and urban/forest interface lots, including some parcels in areas to the west of State Route 89 in the general Rubicon area. No cultural resources were recorded in those portions located above the Rubicon area (Lundgren 2004).

• Inventory of the Lonely Gulch Stream Restoration Project area at the end of Brock Drive, west of State Route 89. The reservoir complex was recorded but was recommended not to be significant (Lindstrom 1995).

The archaeological inventory carried out on behalf of the Proposed Project focused on the examination of selected County administered rights of way and parcels within the Project area.

An Area of Potential Effect was defined for the Proposed Project. It included selected County administered rights of way located within the subdivision and parcels on which project-related improvements might be placed. Previous inventories have been performed adjacent to portions of the study area. Review of those inventories revealed that no prehistoric or historic period archaeological resources have been recorded within the immediate study area. An intensive archaeological inventory was conducted of 5.43 acres in the Area of Potential Effect. The current inventory resulted in the following observations:

- No prehistoric or historic period archaeological resources were identified within the Project Area of Potential Effect.
- Recent (less than 50 years in age) items (scatters and roadside debris) and architectural resources were observed but not recorded.
- The Newhall Estate Pillars are not located within the Project area.

It is recommended that significant archaeological resources are not present within the Project Area of Potential Effect. Thus, the Project proposed by the County in that area will not impact properties listed on or eligible to the National Register. Nor will it impact historic resources that meet criteria outlined in Section 5024.1 of the California Public Resources Code or Section 29 of the TRPA Code of Ordinances. Therefore, it is recommended that further consideration of the Project's effect on historic properties is not necessary. It is recommended that "no historic

properties will be affected," as that phrase is viewed within the context of compliance with Advisory Council on Historic Preservation regulations (36 CFR part 800).

Although improbable, it is possible that prehistoric burials might be found in the study area (none were apparent based on an examination of the ground surface). Should human remains be encountered while engaged in construction activities, work must cease in the immediate area and the contractor must immediately report the finding to the State Historic Preservation Office and USFS representatives, if the find is located on USFS administered lands and other designated officials. That office will contact the appropriate tribal representatives and consult on disposition of the remains and any associated artifacts.

Zeier & Associates, LLC prepared this report at the direction of NCE and the County for use by the County as the intended beneficiary of this work. Interpretations, conclusions, and recommendations contained within the report are based in part on information presented in other reports that are cited in the text and listed in the references. This report is subject to limitations and qualifications inherent to the referenced documents. Techniques and methods used during this investigation were such that existing resources of a prescribed size (15 meters [49.2 feet] across, and a sample of smaller resources) in the study area that were visible to surface examination have been identified. Every reasonable effort was made to identify cultural resources in the study area. If, however, prehistoric or historic period resources are subsequently discovered that could be adversely affected by Project-related activities, all such activities should cease immediately. The State Historic Preservation Office and USFS representatives should be contacted immediately.

Botanical Resources: Background data investigations were conducted to determine special status plant species, vegetation classifications, and invasive/noxious weed species within and around the Project area within a three mile radius. The agencies contacted for this research and the information received, are discussed in Table 1 below. More detailed vegetation occurrence and distribution research is summarized in Table 2 (Appendix C). Preliminary field reconnaissance was conducted on August 21, 2008 to evaluate this research. The findings of the data investigations are discussed below (Nichols, 2008).

Table 1 - Vegetation Research Summary

Agency/Entity	Date	Information Received
USFWS	8/21/2008	• Federally Protected Species List for threatened, endangered, candidate, de-listed, and special concern species
USFS – LTBMU	Request Sent 11/14/07, Feedback Received 9/29/08	• USFS-LTBMU Sensitive Species List • No recent surveys have been conducted and no rare plant occurrences are known in or adjacent to the project area • Modeled habitat for a total of 15 sensitive species lies within the project area
USFS – LTBMU	3/19/2008	• CALVEG GIS layers
California Native Plant Society (CNPS)	8/15/2008 and 9/2/2008	• CNPS Inventory of Rare and Endangered Vascular Plants
California Department of Fish and Game (CDFG)	8/15/2008 and 9/2/2008	• California Natural Diversity Database (CNDDB)

Agency/Entity	Date	Information Received
TRPA	4/10/2008	• TRPA Special Interest Species List • TRPA Threshold Evaluation • TRPA Code of Ordinances

SPECIAL STATUS PLANT SPECIES

There are no known occurrences of special status plant species within the Project boundary (CDFG 2007). Five special status species are known to occur within three miles of the Project area, including *Botrychium montanum* (western goblin), *Epilobium oreganum* (Oregon fireweed), *Potamogeton filiformis* (slender-leaved pondweed), *Rorippa subumbellata* (Tahoe yellow cress), and *Scutellaria galericulata* (marsh skullcap) (CDFG 2008). Descriptions of these species and all other species with modeled habitat or the potential to occur in the Project area are provided below. Species that were not found in the Project area or do not have potential habitat in the Project area will not be further analyzed in this document. Information on habitat, distribution range, and blooming period is based on the USFS – LTBMU Sensitive Species List and the *CNPS Inventory of Rare and Endangered Vascular Plants of California, 6th edition* (CNPS 2008), unless otherwise noted. Known occurrence information is derived from the California Natural Diversity Database (CDFG 2008) and the USFS – LTBMU (VinZant 2007).

Tahoe yellow cress is listed as endangered in California, and is a candidate for federal listing. Since Tahoe yellow cress is found on sandy shores directly adjacent to Lake Tahoe, potential habitat for this species may exist within the Project boundary on the privately owned lakefront parcels. However, no disturbance is proposed on the beach or near Lake Tahoe, therefore no Tahoe Yellow Cress surveys or any other sensitive plant surveys will be completed as a part of this Project.

INVASIVE WEEDS

Concurrent with the botanical survey, a noxious weed survey was conducted by NCE Botanist, Megan Scheeline, on August 21, 2008. Survey area parcels and County rights of way were identified by County staff as areas that could potentially incur impacts due to the Project (improvements, staging areas, and areas of disturbance). All plant species encountered in the Project area were identified to the level necessary to determine whether they were a noxious species.

Information obtained from the USFS indicates there are no known locations of noxious weeds in the project area on USFS parcels (VinZant 2007). The Lake Tahoe Basin Invasive Weed Map (Mila 2008) shows two species, Scotch broom (*Cytisus scoparius*) and Dalmatian toadflax (*Linaria genistifolia* ssp. *dalmatica*), as occurring either within or very near the project area; however, neither of these species were identified within the project area during the field surveys.

Three noxious weed species were identified during the field survey within the Project area: oxeye daisy (*Leucanthemum vulgare*), woolly mullein (*Verbascum thapsus*), and yellow toadflax (*Linaria vulgaris*).

CALVEG TYPES

The Project area is composed mainly of Mixed Conifer – Fir vegetation type, with some Jeffrey pine, Upper Montane Mixed Chaparral, and Urban types interspersed throughout the Project area. Plant communities were initially identified through the use of CALVEG (Classification and Assessment with Landsat of Visible Ecological Groupings) (USDA 2005) data searches and then verified during ground level field surveys. Plant communities found in and adjacent to the Project area are typical of those found in the Lake Tahoe Basin. Unless otherwise noted, the descriptions below are based on the USFS North Sierran Ecological Province Vegetation Descriptions (USDA 2007).

Mixed Conifer – Fir Alliance (CALVEG Code MF)

The Mixed Conifer - Fir Alliance occurs within an elevation range of about 3,700 to 8,800 feet, typically on frigid soils. Three major species define this Mixed Conifer type, including white fir (*Abies concolor*), Jeffrey pine (*Pinus jeffreyi*), and sometimes lodgepole pine (*Pinus contorta* var. *murrayana*). Red fir (*Abies magnifica*) becomes more prominent at higher elevations, while sugar pine (*Pinus lambertiana*) and incense cedar (*Calocedrus decurrens*) can be found at all elevations throughout this type. This vegetation type makes up the western and central portions of the project area.

Jeffrey Pine Alliance (CALVEG Code JP)

The Jeffrey Pine Alliance can be found in eastside northern Sierra Nevada habitats up to an elevation of about 7,300 feet. This vegetation type grows in xeric micro-environments on granitic outcrops or on glaciated soils such as tills and outwash deposits. It is prominent in the Sierra Valley and Carson Range Subsections on the east side of the range. This forest is tall and open, and is dominated by Jeffrey pine with a sparse understory of chaparral or sagebrush shrubs and young trees. The understory may include white fir, greenleaf manzanita (*Arctostaphylos patula*), mountain whitethorn (*Ceanothus cordulatus*), wax currant (*Ribes cereum*), and mountain sagebrush (*Artemisia tridentata* ssp. *vaseyana*). Lodgepole pine can be found in areas that collect more moisture (Holland 1986). The Jeffrey Pine vegetation type is mapped in the north-central portion of the Project and along the northwestern edge of the Project along State Route 89.

Upper Montane Mixed Chaparral Alliance (CALVEG Code CX)

The Upper Montane Mixed Chaparral Alliance is a mixed shrub type that occurs abundantly at moderate to high elevations in the northern Sierra, between about 2,200 and 8,900 feet. Understory species such as greenleaf manzanita, mountain whitethorn, snowbrush (*Ceanothus velutinus*), and deerbrush (*Ceanothus integerrimus*) are indicators of this vegetation type. This vegetation type occurs in the southwestern portion of the project.

Urban or Developed (CALVEG Code UB)

The Urban or Developed type applies to landscapes that are dominated by urban structures, residential units, or other developed land use elements such as highways or city parks. This vegetation type is mapped as occurring in two areas within the Project boundary near the shore of Lake Tahoe. However, the entire Project area can be described as a mix of forested vegetation and residential development.

Wildlife Resources: Field investigations and assessments were conducted for presence of populations, habitat, and range by NCE Biologist, Madelyn Comer, on August 22, 2008. The focus of this investigation was to evaluate the habitat located on specified parcels and determine the likelihood that special status wildlife species would occur within, or be impacted by the Project. Survey parcels and County rights of way were identified by County staff as areas that could potentially incur impacts due to the Project (improvements, staging areas, or areas of disturbance)

- Non-Botanical Threatened and Endangered Species

  Endangered: None listed currently.
  Threatened:
  - Delta smelt (*Hypomesus transpacificus*)
  - Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*)
  - Central Valley steelhead (*Oncorhynchus mykiss*)

Based on the above species analysis, the Proposed Project will have no effect on federally listed threatened or endangered species. Therefore, there will be no cumulative effects to federally listed threatened or endangered species.

- Non-Botanical Region 5 Sensitive Species
  - Bald eagle (*Haliaeetus leucocephalus)*
  - California spotted owl (*Strix occidentalis occidentalis*)
  - Great gray owl (*Strix nebulosa*)

- Northern goshawk (*Accipter gentilis*)
- Willow flycatcher (*Empidinax traillii*)
- American marten (*Martes amercicana*)
- California wolverine (*Gulo gulo luteus*)
- Sierra Nevada red fox (*Vulpes vulpes necator*)
- Townsend's big-eared bat (*Corynorhinus townsendii*)
- Mountain yellow-legged frog (*Rana muscosa*)
- Northern leopard frog (*Rana pipiens*)
- Lahontan Lake tui chub (*Gila bicolor pectinifer)*
- Great Basin rams-horn (*Helisoma (Carninifex) newberryi*)

Based on the above species analysis, the Proposed Project will have no effect on USFS Region 5 Sensitive Species. Therefore, there will be no cumulative effects to USFS Region 5 Sensitive Species.

❖ Non-Botanical MIS Species

- Aquatic macroinvertebrates
- Yellow warbler (*Dendroica petechia)*
- Pacific tree frog (*Pseudacris regilla)*
- Mountain quail *(Oreortyx pictus)*
- California spotted owl (*Strix occidentalis occidentalis*)
- American marten (*Martes americana)*
- Northern flying squirrel (*Glaucomys sabrinus*)
- Hairy woodpecker (*Picoides villosus*)
- Black-backed woodpecker (*Picoides arcticus*)
- Sooty (blue) grouse (*Dendragapus obscurus*)

Based on the above species analysis, the Proposed Project will have no effect on TRPA Special Interest Species. Therefore, there will be no cumulative effects to TRPA Special Interest Species.

The Project area is within the urbanized Rubicon Estates residential community. This area is developed and displays traits associated with urban areas such as altered landscapes, compacted parking areas, litter, noise, recreational use, and housing communities. No special status species or features were noted within the Project area during the field visits, and historical occurrences and territories would not be affected by the proposed improvements because 1) construction is limited to County rights of way, and 2) moderate to high levels of disturbance currently exist in this region. Once implemented, the proposed stormwater runoff and drainage improvements would reduce the amount of pollutants and sediment entering Lake Tahoe, and increase the quality of wildlife habitat. This could bring an overall positive effect to the Paradise Flat and Lonely Gulch Creek watersheds and associated habitats. Additionally, it could potentially increase the likelihood that wildlife would better utilize this area for their foraging and reproductive needs.

Greenhouse Gas Emissions: During Project construction, greenhouse gas emissions will increase temporarily from construction related machinery. However, due to the erosion control nature of the Project, there will be no long term increase in greenhouse gas emissions from the Project.

4.0 PUBLIC INPUT AND PDT COORDINATION

The public involvement process for the Project included a public meeting held on July 31, 2008. At the public meeting, the Department provided the public with information on the existing conditions, existing problem areas and draft conceptual alternatives and asked the public to express their concerns on the Project related to environmental impacts. The public was also invited to identify opportunities and constraints in the Project area, which included visual documenting proposed locations of erosion control features and discussion of the Proposed Project/preferred alternative. Public notices for the July 2008 meeting were mailed to all property owners within a 300 foot radius of the Project boundary.

The Department met with the PDT during the Project development process to identify problems and to develop and refine Project alternatives. The PDT consists of resource agency representatives in the Lake Tahoe Basin,

including, but not limited to, the Tahoe Regional Planning Agency, USFS-Lake Tahoe Basin Management Unit, California Tahoe Conservancy, Tahoe Resource Conservation District, and Lahontan Regional Water Quality Control Board. The initial PDT meeting on the Project was held in September 2007. At this meeting the PDT reviewed and endorsed the Project. After the development of the Project goals and objectives, a Feasibility/Existing Conditions Report was produced which was provided to the PDT April 2008. The Department then produced a Draft and Final Project Alternatives Evaluation Report based on comments received from the PDT and public. These documents were provided to the PDT and public in July 2008. A Final Preferred Alternative Report was then developed based on those recommendations and was provided to the PDT and public in August 2008. The preferred alternative/Proposed Project was then updated again in September 2009 based on new findings and information.

5.0 RIGHT OF WAY REQUIREMENTS

- Every effort has been made to locate proposed improvements within the County ROW or on publicly owned parcels. The Department will not require any easements to construct the Proposed Project.

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 no jurisdictional wetland or Waters of the U.S. are present within the Project area.

Clean Water Act Section 401

If the Proposed Project involves 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). However, no wetlands or Waters of the U.S. are present therefore no certification is required.

Lahontan RWQCB NPDES Permit and Basin Plan

Any disturbance of a SEZ requires consultation with and potentially a permit from Lahontan RWQCB. If one acre or more of overall disturbance is slated to occur during construction, compliance with the NPDES General Construction Permit will be required. However, no SEZ disturbance is planned as part of this Project and disturbance will be less than one acre, therefore no permit is required.

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

A TRPA General Permit will be obtained prior to construction. A Land Capability Verification has been completed by the TRPA. The Proposed Project requires no disturbance within sensitive Land Capability District 1b lands (SEZ).

United States Forest Service - Lake Tahoe Basin Management Unit Special Use Permit

Due to the Proposed Project incorporating a retaining wall for source control parallel to a USFS-LTBMU parcel, a Special Use Permit may need to be obtained prior to construction of the Project.

7.0 MITIGATION AND MONITORING

Mitigation measures are described in the attached Mitigation Monitoring and Reporting Program (Appendix B). The Department staff and/or their contractor will conduct on-site monitoring to ensure that mitigation measures are implemented as proposed. A construction inspector provided by the Department 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 as a condition of approval will be monitored in the same manner. Throughout the construction of the Project, the agencies will be invited to weekly “tailgate” meetings and

will conduct periodic visits to the Project site to enforce the implementation of BMPs and ensure compliance with all other mitigation measures.

The maintenance and monitoring of the Project improvements will continue for 20 years after construction completion. Any revegetation monitoring and establishment will continue for a minimum of two years following construction. Plant establishment will include irrigation and replanting, if necessary. The Department will inspect all Project improvements during the spring and fall of each year during the twenty-year maintenance period as required by CTC Erosion Control Grant Guidelines. The Department engineering staff will direct maintenance staff to provide maintenance of new facilities 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 project improvement performance.

8.0 REFERENCES

El Dorado County Department of Transportation (EDOT). 2008. Rubicon Estates Erosion Control Project Draft Project Alternatives Evaluation Report.

El Dorado County Department of Transportation (EDOT). 2008. Rubicon Estates Erosion Control Project Final Preferred Alternative Report.

Natural Resources Conservation Service (NRCS). 1974. Soil Survey, Tahoe Basin Area, California and Nevada. U.S. Department of Agriculture, Soil Conservation Service and U.S. Forest Service in cooperation with UC Agricultural Experiment Station and NV Agricultural Experiment Station.

Nichols Consulting Engineers, Chtd. 2008. Rubicon Estates Erosion Control Project Botanical Biological Assessment and Biological Evaluation.

Nichols Consulting Engineers, Chtd. 2008. Rubicon Estates Erosion Control Project Wildlife and Aquatic Species Low-Level Biological Evaluation and Biological Assessment.

Nichols Consulting Engineers, Chtd. 2008. Rubicon Estates Erosion Control Project Heritage Resource Inventory Report.

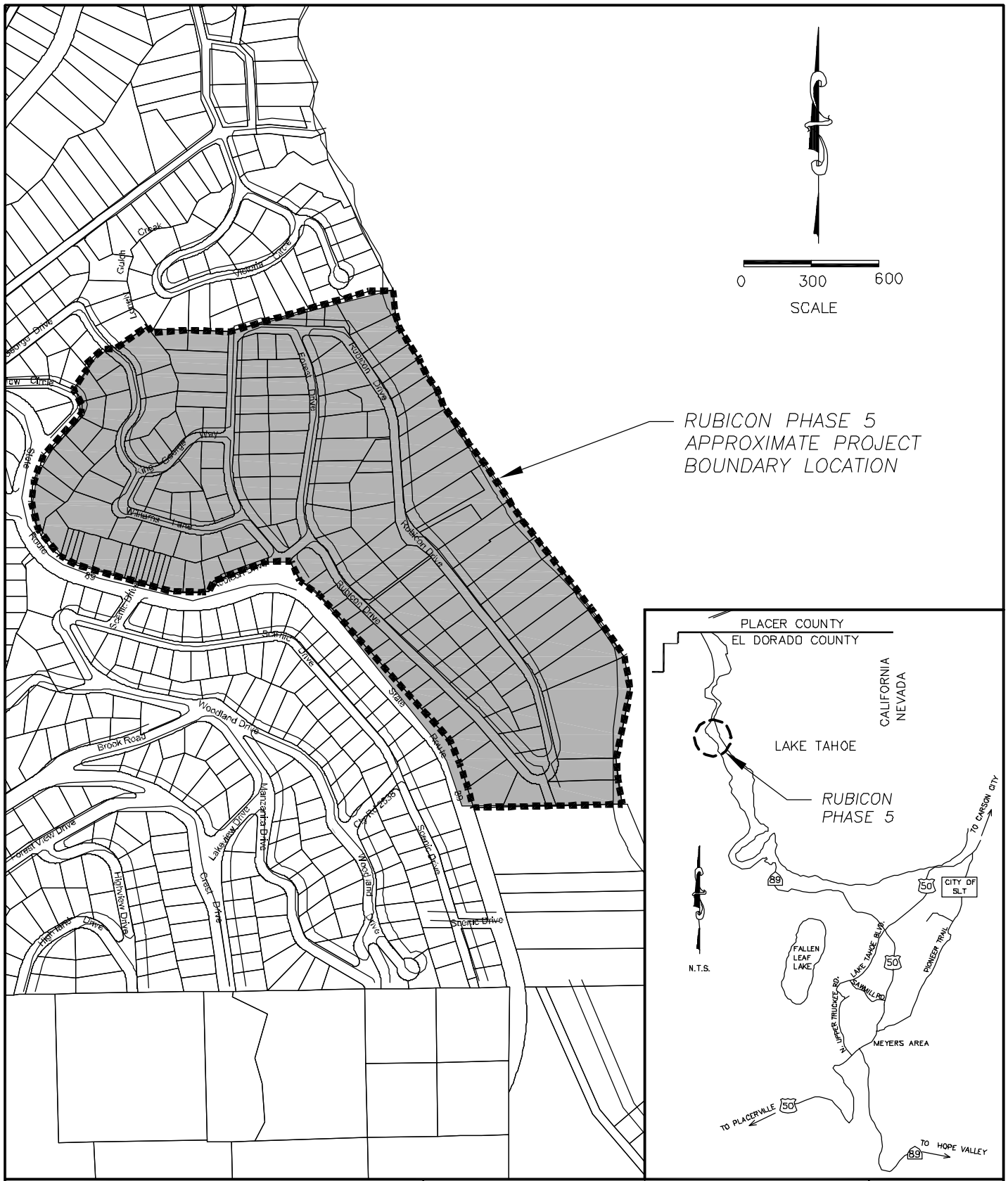
Nichols Consulting Engineers, Chtd. 2008. Rubicon Estates Erosion Control Project Noxious Weed Risk Assessment.

State Water Resources Control Board (SWRCB). 1994. State Water Resources Control Board, Stream Environment Zones.

Tahoe Regional Planning Agency (TRPA). 2002. TRPA Plan Area Statements (PAS).

Tahoe Resource Conservation District (TRCD). (October 2007). Soil Characteristics Survey.

FIGURES



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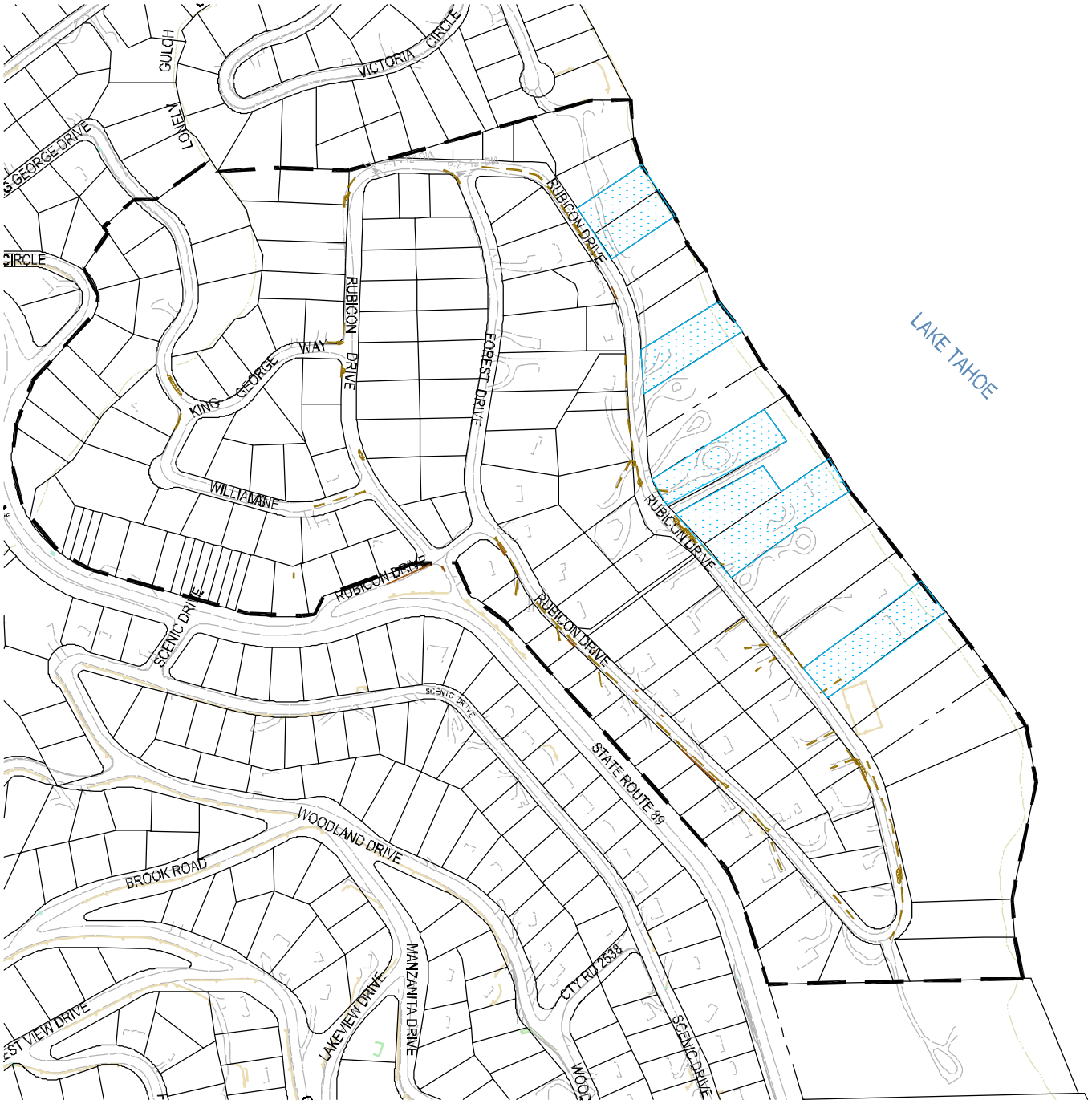
EL DORADO COUNTY
SOUTH LAKE TAHOE OFFICE

2009 CEQA REPORT
RUBICON 5 EROSION CONTROL PROJECT
Project Location Map

FIGURE
A

DATE:	PROJECT NO.:	BY:
10/09	95178	JTC



LEGEND

- EXISTING ERODING SHOULDER, ERODING ROADSIDE DITCH, OR ERODING CHANNEL
- EXISTING ERODING SLOPE
- PIPE LOCATION AND DIRECTION
- SEDIMENT ACCUMULATION
- EXISTING AC DITCH OR CHANNEL
- FLOODING REPORTED
- PROJECT BOUNDARY
- WATERSHED BOUNDARY

SCALE: 1"=400'

0' 100' 400'

EL DORADO COUNTY
SOUTH LAKE TAHOE OFFICE

2009 CEQA REPORT
RUBICON 5 EROSION CONTROL PROJECT
Existing conditions and problem areas

FIGURE B

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10/09	95178	JTC

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LAKE TAHOE

RUBICON DRIVE

RUBICON DRIVE

FOREST DRIVE

RUBICON DRIVE

RUBICON DRIVE

RUBICON DRIVE

RUBICON DRIVE

KING GEORGE DRIVE

WILLIAMS LANE

LEGEND

- EXISTING ERODING SHOULDER, ERODING ROADSIDE DITCH, OR ERODING CHANNEL
- EXISTING ERODING SLOPE
- PIPE LOCATION AND DIRECTION
- SEDIMENT ACCUMULATION
- EXISTING AC DITCH OR CHANNEL
- PROPOSED ROCK LINED CHANNEL
- PROPOSED REVEGETATION
- PROPOSED CURB AND GUTTER
- PROPOSED CURB AND PERMEABLE GUTTER
- PROPOSED SEDIMENT TRAP
- PROPOSED ROCK SLOPE PROTECTION
- PROPOSED DI
- PROPOSED AGGREGATE BASE
- ROPOSED CULVERT
- PROPOSED BASIN
- PROPOSED INFILTRATION
- PROPOSED RETAINING WALL
- PROPOSED SAND FILTER
- PROPOSED PRIVATE BMPs

0' 100' 200'

EL DORADO COUNTY
SOUTH LAKE TAHOE OFFICE

2009 CEQA REPORT
RUBICON 5 EROSION CONTROL PROJECT
PREFERRED ALTERNATIVE

FIGURE
C

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10/2009	95178	JTC

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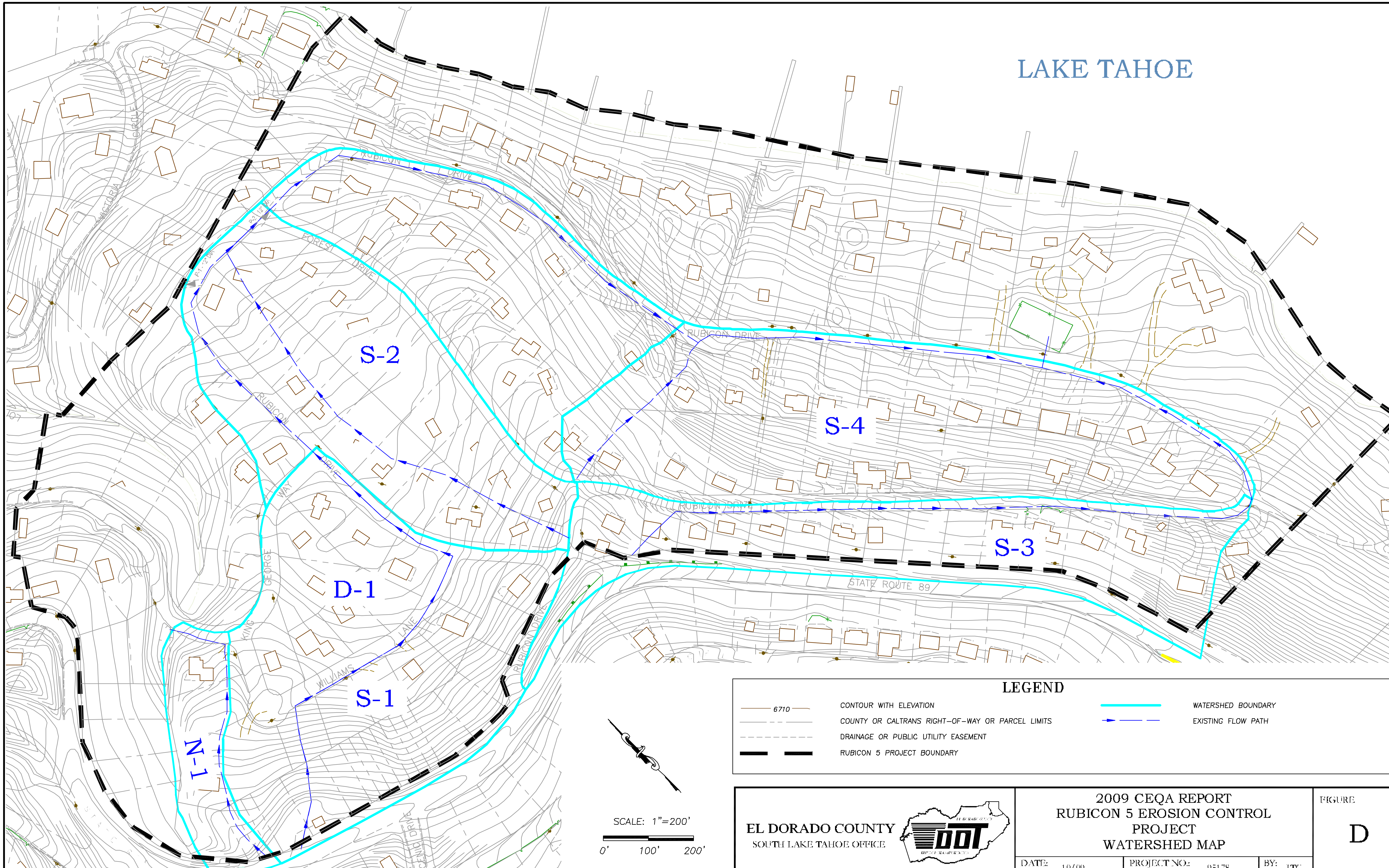

EL DORADO COUNTY
SOUTH LAKE TAHOE OFFICE

2009 CEQA REPORT
RUBICON 5 EROSION CONTROL PROJECT
WATERSHED MAP

FIGURE D

DATE: 10/09 | PROJECT NO.: 95178 | BY: JTC

09-1290.B.33

APPENDIX A:
CEQA CHECKLIST

COUNTY OF EL DORADO **DEPARTMENT OF TRANSPORTATION**

TAHOE ENGINEERING
924B Emerald Bay Road
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Fax: (530) 541-7049

JAMES WARE, P. E.
Director of Transportation
Internet Web Site:
http://co.el-dorado.ca.us/dot

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

CEQA Checklist

Title: Rubicon 5 Erosion Control Project (JN 95178)	
Description: Construction of erosion control and water quality improvement measures.	
Location: The Project area is located on the west shore of Lake Tahoe. More specifically, the area includes Rubicon Drive which is a loop street bounded by Lake Tahoe to the East, State Route 89 to the West, and Lonely Gulch to the North.	
Owner/Applicant: County of El Dorado Department of Transportation – Tahoe Engineering Division	
Lead Agency: County of El Dorado Department of Transportation – Tahoe Engineering Division	
County Contact: Russell Wigart, Assistant in Civil Engineering	**Phone:** 530-573-7900
Address: 924 B Emerald Bay Road, South Lake Tahoe, CA 96150	

The CEQA Checklist recommended by the State of 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 issue areas 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 sources a lead agency cites in the parentheses following each question. A No Impact answer is adequately supported if the referenced information sources show 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 take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

c) Once the lead agency has determined that a particular physical impact may occur, then 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 impact entries when the determination is made, an EIR is required.

d) Negative Declaration: Less than significant with mitigation incorporated applies where the incorporation of mitigation measures has 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, Earlier Analyses, may be cross-referenced).

e) Earlier analyses may be used where, pursuant to the tiering, program 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 above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards,

and state whether such effects were addressed by mitigation measures based on the earlier analysis.

iii. **Mitigation Measures.** For effects that are less than significant with mitigation measures incorporated, describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

f) Lead agencies are encouraged to incorporate into the checklist references to 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, and other sources used or individuals 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?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Category I Discussion: The Proposed Project will be working strictly within the County right-of-way for drainage conveyance improvements and treatment. No adverse effect on any scenic resource or vista that may degrade the site or affect its visual character shall occur. Therefore, the proposed project will have no impact on aesthetics.

II. AGRICULTURAL RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. 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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

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. Therefore, the Proposed Project will have no impact on agriculture.

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?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
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)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

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 the Best Management Practices (BMPs) related to air quality from the TRPA Handbook of Best Management Practices and practices as outlined in the EDCAQMD Rule 223 to address fugitive dust. Compliance with the TRPA Air Quality Plan will lead to the attainment of the TRPA threshold standards and, therefore, federal and state air quality standards.

The Project will have no long term impacts to air quality. Compliance with EDCAQMD and TRPA regulations through the permitting process will ensure that the Project will not conflict with or obstruct implementation of the air quality plans, will not violate any air quality standard or contribute substantially to an existing or projected air quality violation, and will not result in a cumulatively considerable net increase of any criteria 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 Project will have a less than significant impact.

Item III-B Mitigation Measures:

Mitigation Measure AQ-1: The construction contractor shall implement Best Management Practices as they relate to air quality 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 which 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, 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.

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 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 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 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the 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?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Category IV Discussion: The Project will not disturb any lands which contain sensitive habitat as described above. All disturbances will take place within the County right of way in already disturbed locations just outside the edge of pavement. Therefore, the Proposed Project will have no impact on biological resources.

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?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique Paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

Item V-A Discussion: Two pillars that remain from the former Newhall Estate are still present along either side of the road leading into the Rubicon Bay subdivision. The pillars are included in the listing of California Points of Historical Interest (1992) (Register Number ELD-009). However, there are three highway entrances into the subdivision and in order to avoid the pillars; all construction traffic will be directed through alternative entrances into the estate. Thus, equipment ingress and egress will not affect the two pillars.

Although improbable, should human remains be disturbed inadvertently while engaged in construction activities, work must cease in the immediate area and the contractor must immediately report the finding to the State Historic Preservation Office and USFS representatives, if the find is located on USFS administered lands, and other designated officials. That office will contact the appropriate tribal representatives and/or authorities and consult on disposition of the remains and any associated artifacts. At that point, determinations must be made by the designated officials on how to proceed with Project construction.

With the implementation of mitigation measures V-A below, the Proposed Project will not cause any change in the significance of a historical resource as defined in §15064.5; therefore, the Project will have a less than significant impact.

Item V-A Mitigation Measures:

Mitigation Measure CR-1: The two remnant pillars from the former Newhall Estate that are considered "California Points of Historical Interest" will be protected by redirecting construction traffic ingress and egress

through alternative entrances. This will be mandated in the Contract Documents, signed at the entrance with the pillars and enforced by the onsite inspector.

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: 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.	☐	☐	☐	☒
i. Strong seismic ground shaking?	☐	☐	☐	☒
ii. Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iii. Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Item VI-B Discussion: The major component of the Proposed Project is to implement erosion control and water quality improvements within the Project area that will assist in stabilizing bare soils and improving storm water 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. 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 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) that will be certified by 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.

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 the 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.

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. The contractor shall meet the permit requirements for BMPs, staging areas, revegetation, grading season restrictions, and all other permitting agency approval conditions. Construction will take place within the Lake Tahoe construction season (between May 1st and October 15th).

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.

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 Department, 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 adhere 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.

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: Department 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, the Department 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.

VII. 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?	☐	☒	☐	☐

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?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g) Impair implementation of or interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Item VII-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-B 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 Project will have a less than significant impact.

Item VII-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-B 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 Project will have a less than significant impact.

VIII. 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 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)?	☐	☐	☐	☒
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☒	☐	☐
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
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?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	☐	☐	☐	☒
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?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Item VIII-A Discussion: During construction, grading and excavation will take place that may have the potential to cause erosion. Once construction is complete and the erosion control and water quality improvement measures are in place, water quality in the area will be improved. With the implementation Mitigation Measures G-1, G-2 and G-3 found in Section VI-B above, the Proposed Project will not violate any water quality standards; therefore, the Proposed Project will have a less than significant impact.

Item VIII-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 Project will construct several improvements that will treat and convey storm generated flows to the same location it flowed in a pre project condition. As a result of the project, flow rates and volumes at the Project outflow locations will be decreased due to the infiltration components of this 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 VIII-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. As a result, flow rates and volumes at the Project outflow locations will be decreased due to the infiltration components of this 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 VIII-E Discussion: During construction of the Proposed Project, grading and excavation will take place that may have a potential to cause increased surface runoff. Once construction is complete and the erosion control and water quality improvement measures are in place, surface flows and volumes will be reduced from their existing condition and an improved stormwater system will be in place. With the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI-B 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 Project will have a less than significant impact.

Item VIII-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. 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. With the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI-B above, the Proposed Project will not otherwise substantially degrade water quality; therefore, the Project will have a less than significant impact.

IX. 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Category IX 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 Proposed Project is consistent with the existing allowed uses; therefore, the Proposed Project will have no impact on land use or planning.

X. 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Category X 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.

XI. 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?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Item XI-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 El Dorado County and the TRPA. The TRPA Code of Ordinances (Chapter 23.8) 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 XI-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 Project will have a less than significant impact.

Item XI-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 the factory installed muffling devices and will be maintained in good working order. The Department will advise potentially affected residents of the proposed construction activities including duration, schedule of activities, and contacts for filing noise complaints. The Department staff and/or contractor shall respond to all noise complaints received within one working day and resolve the issue within two working days.

Item XI-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 El

Dorado 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 Project will have a less than significant impact.

Item XI-D Discussion: Refer to the information stated in the *Item XI-A Discussion*. With the implementation of Mitigation Measures N-1 and N-2 found in Section XI-A 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 Project, but it will be temporary and is allowable under local ordinances. Therefore, the Project will have a less than significant impact.

XII. 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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Category XII 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.

XIII. 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?	☐	☐	☐	☒
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

Category XIII Discussion: The Proposed Project will have no impact on fire protection, police protection, schools, parks, or other public facilities. The Project will implement new storm water facilities in the Project area. 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 Project will have no impact on public services.

XIV. 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?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Item XIV Discussion: The Proposed Project will not incorporate any new recreational facilities or increase the use of any existing facilities; therefore, the Proposed Project will have no impact on the environment as a result of recreation.

XV. 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) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☒	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☒	☐	☐
f) Result in inadequate parking capacity?	☐	☐	☒	☐
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

Item XV-A 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. Increased vehicle trips are expected during construction as a result of construction vehicles mobilizing to and from the Project site. 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 XV-A Mitigation*

Measures, the Proposed Project will not cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system; therefore, the Project will have a less than significant impact.

Item XV-A Mitigation Measures:

Mitigation Measure T-1: The contractor will be required to prepare and adhere to a Traffic Control Plan for TRPA and El Dorado 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, the Department 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.

Mitigation Measure T-2: New parking facilities are not proposed by the Project and no new parking spaces will be created for the Project. The traffic levels will be kept to a similar level as the pre-project condition.

Item XV-E Discussion: At some locations, temporary lane closures may be necessary to facilitate construction; however, at no time would access for local residents, school buses, or emergency vehicles be prohibited. With the implementation of Mitigation Measures T-1, T-2 found in Section XV-A above, the Proposed Project will not result in inadequate emergency access; therefore, the Project will have a less than significant impact.

Item XV-F Discussion: The Proposed Project will not add any parking; and proposes to add BMPs to help stabilize bare soil areas to improve water quality. Some right of way areas within the Project area will have sediment basins constructed to reduce storm generated water volumes outside the edge of pavement. The proposed work for this will be constructed in the County right of way and not on private residences. Therefore the Project will have a less than significant impact on parking.

XVI. 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☒	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Item XVI-C Discussion: A major component of the Project is to design and implement erosion control and water quality improvement measures that will reduce the discharge of sediment and pollutants to Lake Tahoe from the County right 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 storm water 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 storm water deficiencies, erosion, and water quality problems. The Proposed Project will require or result in the construction of new storm water 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-B above, the construction will not cause significant environmental effects; therefore, the Project will have a less than significant impact.

XVII. GREENHOUSE GAS EMISSIONS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Create a substantial amount of greenhouse gas emissions?	☐	☒	☐	☐

Item XVII-A Discussion: During Project construction, greenhouse gas emissions will increase temporarily from construction related machinery. However, the impacts from construction will only be temporary and due to the erosion control nature of the Project, there will be no long term increase in greenhouse gas emissions from the Project. Therefore, due to the intent of the Project and with the implementation of Mitigation Measures AQ-1 - AQ-7 found in Section III-B above, the Proposed Project will not create a substantial amount of greenhouse gas emissions; therefore, the 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?	☐	☒
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)?	☐	☒
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒

OTHER RESPONSIBLE AND TRUSTEE AGENCIES (whose approval is required)

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

LIST OF PREPARERS

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

☐	I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
☒	I find that although the proposed project could have a significant effect on the environment, there will not be 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.
☐	I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
☐	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.
☐	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 _____ for _____ Date 1/29/2010

Russell Wigart, El Dorado County

APPENDIX B:
MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM

PROJECT NAME: RUBICON 5 EROSION CONTROL PROJECT

MITIGATED NEGATIVE DECLARATION #: 2009122086

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 El Dorado County to implement (including monitoring where identified) throughout all phases of the development and operation of the Rubicon 5 Erosion Control 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 El Dorado County 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*. El Dorado County 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 El Dorado County. 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(s) include specified mitigation activities in plans and specifications for construction. El Dorado

County staff responsibility includes designation of certain mitigation measure responsibility to, and continued oversight of, the contractor(s) and consultant(s).

TABLE C-1. MITIGATION MONITORING AND REPORTING PROGRAM FOR THE RUBICON ESTATES 5 ECP

MITIGATION MEASURE	IMPLEMENTING RESPONSIBILITY[1,3]	MONITORING RESPONSIBILITY[2,3]	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
AESTHETICS				
No mitigation measures required.				
AGRICULTURAL RESOURCES				
No mitigation measures required.				
AIR QUALITY- Item III-B				
Mitigation Measure AQ-1: The construction contractor shall implement Best Management Practices as they related to air quality 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				
No mitigation measures required.				
CULTURAL RESOURCES - Item V-A				
The two remnant pillars from the former Newhall Estate that are considered "California Points of Historical Interest" will be protected by redirecting construction traffic ingress and egress through alternative entrances. This will be mandated in the Contract Documents, signed at the entrance with the pillars and enforced by the onsite inspector.	DOT or its Consultant	DOT	Prior to Construction	
GEOLOGY AND SOILS - Item VI-B				

MITIGATION MEASURE	IMPLEMENTING RESPONSIBILITY[1,3]	MONITORING RESPONSIBILITY[2,3]	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
Mitigation Measure G-1: The contractor shall prepare, submit and adhere to a Storm Water Pollution Prevention Plan (SWPPP) that will be certified by 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. 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 the 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. 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. The contractor shall meet the permit requirements for BMPs, staging areas, revegetation, grading season restrictions, and all other permitting agency approval conditions. Construction will take place within the Lake Tahoe construction season (between May 1st and October 15th).	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-1 (Continued): 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. 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 Department, 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 adhere 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.	DOT and its Contractor	DOT	Prior to And During Construction	
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	IMPLEMENTING RESPONSIBILITY[1,3]	MONITORING RESPONSIBILITY[2,3]	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
Mitigation Measure G-3: Department 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, the Department 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	
HAZARDS AND HAZARDOUS MATERIALS - Item VII-A and Item VII-B				
Mitigation Measure: Implement Mitigation Measures identified under Item VI-B Mitigation Measures.	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)
HYDROLOGY AND WATER QUALITY - Item VIII-A, Item VIII-E and Item VIII-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				
No mitigation measures required.				
MINERAL RESOURCES				
No mitigation measures required.				
NOISE - Item XI-A and Item XI-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. The Department will advise potentially affected residents of the proposed construction activities including duration, schedule of activities, and contacts for filing noise complaints. The Department 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				
No mitigation measures required.				

MITIGATION MEASURE	IMPLEMENTING RESPONSIBILITY[1,3]	MONITORING RESPONSIBILITY[2,3]	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
TRANSPORTATION AND TRAFFIC - Item XV-A				
Mitigation Measure T-1: The contractor will be required to prepare and adhere to a Traffic Control Plan for TRPA and El Dorado 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, the Department 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	
Mitigation Measure T-2: New parking facilities are not proposed by the Project and no new parking spaces will be created for the Project. The traffic levels will be kept to a similar level as the pre-project condition.	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	
GREENHOUSE GAS EMISSIONS - Item XVII-A				
Mitigation Measure: Implement Mitigation Measures identified under Item III-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

APPENDIX C:
TABLES

Table 1. Special Status Plant Species List and Habitat Analysis

Species	Regulatory Status (Federal; State; TRPA; CNPS)	Habitat Requirements	Identification Period	Potential for Occurrence in the Project Area and Results of Survey
Arabis rigidissima var. *demota* Galena Creek rockcress	S, SI, 1B	Broad-leaved upland forests, upper montane coniferous forests on rocky substrates. Known in CA from only two occurrences near Martis Peak and in NV from eleven occurrences in the Carson Range. Elevation range 7,398 to 8,398 feet.	August	Unlikely; site lacks suitable habitat and is not within the known elevation range of this species. Not encountered. Documented in LTBMU.
Arabis tiehmii Tiehm's rockcress	S, 1B	High elevation metavolcanic or decomposed granite ridges and steep slopes. Elevation range 9,745 to 11,775 feet.	July to August	Unlikely; site lacks suitable habitat and is not within the known elevation range of this species. Not encountered.
Botrychium ascendens Upswept moonwort	S, 2	Lower montane coniferous forests. Elevation range 4,950 to 6,039 feet.	Fertile July through August	Not encountered. May occur. Modeled habitat exists in the project area, though the project is not within the known elevation range of this species.
Botrychium crenulatum Scalloped moonwort	S, 2	Lower montane coniferous forests, meadows and seeps, marshes and swamps. Elevation range 4,950 to 10,800 feet.	Fronds mature June to September	Not encountered. May occur. Modeled habitat exists in the project area.
Botrychium lineare Slender moonwort	S, 1B	Upper montane coniferous forests. Elevation range from sea level to 10,640 feet.	Fronds mature June to September	Not encountered. May occur. Modeled habitat exists in the project area.
Botrychium lunaria Common moonwort	S, 2	Montane coniferous forests, meadows and seeps. Elevation range 7,524 to 11,220 feet.	Fertile in August	Not encountered. May occur. Modeled habitat exists in the project area, though the project is not within the known elevation range of this species.
Botrychium minganense Mingan moonwort	S, 2	Lower montane coniferous forests. Elevation range 4,950 to 6,039 feet.	Fronds mature June to September	Not encountered. May occur. Modeled habitat exists in the project area, though the project is not within the known elevation range of this species.

Table 1. Special Status Plant Species List and Habitat Analysis (cont.)

Species	Regulatory Status (Federal; State; TRPA; CNPS)	Habitat Requirements	Identification Period	Potential for Occurrence in the Project Area and Results of Survey
Botrychium montanum Western goblin	S, 2	Lower montane coniferous forests. Elevation range 4,950 to 6,039 feet.	Fronds mature July to August	Not encountered. May occur. Modeled habitat exists in the project area, though the project is not within the known elevation range of this species. Known to exist within 3 miles of the project area.
Bruchia bolanderi Bolander's candle moss	S, 2	Meadows in mixed conifer and subalpine communities, streams and wet meadows, from 5,577 to 9,186 feet.	Moss	Not encountered. May occur. Modeled habitat exists in the project area, although this species is not known to occur in the LTBMU.
Carex limosa Shore sedge	2	Bog and fens, meadows and seeps, marshes and swamps in lower montane coniferous forests. Elevation range 3,960 to 8,910 feet.	Blooms June to August	Not encountered. May occur. Documented in LTBMU.
Carex mariposana (also known as *Carex paucifructus*) Mariposa sedge	SI	Meadows and slopes in coniferous forests. Elevation range 4,000 and 11,400 feet.	June to August	Not encountered. May occur. Documented in LTBMU.
Chaenactis douglasii var. *alpina* Alpine dusty maidens	2	Alpine boulders and rock fields. Open subalpine to alpine gravel and crevices, granitic substrate, from 8,900 to 11,200 feet.	July to September	Unlikely; outside of elevation range. Not encountered. Documented in LTBMU.
Cryptantha crymophila Subalpine cryptantha	1B	Subalpine forests (volcanic, rocky). Elevation range 8,500 to 10,500 feet.	July to August	Unlikely; outside of elevation range. Not encountered.
Dendrocollybia racemosa Branched collybia	S	Grows on decayed, blackened mushrooms or coniferous duff, usually within old growth stands.	Fall and Winter	Unlikely; site lacks suitable habitat. Not encountered. Documented in LTBMU.
Draba asterophora var. *asterophora* Tahoe draba	S, SI, 1B	Alpine boulder and rock fields in crevices, and open talus slopes of decomposed granite in subalpine coniferous forests. Elevation range 8,325 to 11,670 feet.	July to August	Unlikely; outside of elevation range. Not encountered. Documented in LTBMU.

Table 1. Special Status Plant Species List and Habitat Analysis (cont.)

Species	Regulatory Status (Federal; State; TRPA; CNPS)	Habitat Requirements	Identification Period	Potential for Occurrence in the Project Area and Results of Survey
Draba asterophora var. *macrocarpa* Cup Lake draba	S, SI, 1B	Alpine boulder and rock fields in shade of granitic rocks in subalpine coniferous forest. Elevation range 8,202 to 9,235 feet.	July to August	Unlikely; outside of elevation range. Not encountered. Documented in LTBMU.
Epilobium howellii Subalpine fireweed	S, 1B	Meadows and seeps in montane coniferous forests. Elevation range 6,600 to 8,910 feet.	July to August	Not encountered. May occur. Modeled habitat exists in the project area, though the project is not within the known elevation range of this species.
Epilobium oreganum Oregon fireweed	1B	Bogs and fens, montane coniferous forests. Elevation range 1,650 to 7,392 feet.	Blooms June to September	Not encountered. May occur. Documented in LTBMU. Known to exist within 3 miles of project area.
Epilobium palustre Marsh willowherb	2	Bogs and fens, meadows and seeps. Known in California only from Grass Lake, in El Dorado County at 7,200 feet elevation.	Blooms July to August	Not encountered. May occur. Documented in LTBMU.
Erigeron miser Starved daisy	S, 1B	Rocky places in upper montane coniferous forests. Elevation range 6,072 to 8,646 feet.	Blooms June to October	Unlikely; site lacks suitable habitat. Not encountered.
Eriogonum umbellatum var. *torreyanum* Torrey's buckwheat	S, 1B	Meadows and seeps, upper montane coniferous forests; volcanic, rocky soils. Elevation range 6,121 to 8,646 feet.	July to September	Not encountered. May occur.
Helodium blandowii Blandow's bog-moss	S, 2	Bogs and fens that are not too rich in iron. Elevation range 6,562 to 8,859 feet.	Moss	Not encountered. May occur. Modeled habitat exists in the project area, though the project is not within the known elevation range of this species.
Hulsea brevifolia Short-leaved hulsea	S, 1B	Lower and upper montane coniferous forests. Granitic or volcanic, sandy, or gravelly substrate. Elevation range 4,950 to 10,560 feet.	Blooms May to August	Not encountered. May occur.

Table 1. Special Status Plant Species List and Habitat Analysis (cont.)

Species	Regulatory Status (Federal; State; TRPA; CNPS)	Habitat Requirements	Identification Period	Potential for Occurrence in the Project Area and Results of Survey
Lewisia kelloggii ssp. *hutchisonii* Kellogg's lewisia	S, 3	Ridge tops or flat open spaces with widely spaced trees and sandy granitic to erosive volcanic soil. Elevation range 5,000 to 7,000 feet.	June to July	Not encountered. May occur. Modeled habitat exists in project area.
Lewisia kelloggii ssp. *kelloggii* Kellogg's lewisia	S	Ridge tops or flat open spaces with widely spaced trees and sandy granitic to erosive volcanic soil. Elevation range 5,000 to 7,000 feet.	June to July	Not encountered. May occur. Modeled habitat exists in project area.
Lewisia longipetala Long-petaled lewisia	S, SI, 1B	Alpine boulder and rock fields in subalpine coniferous forests. Elevation range 8,325 to 9,740 feet.	June to August	Unlikely; site lacks suitable habitat and is not within the known elevation range of this species. Not encountered. Documented in LTBMU.
Meesia triquetra Three-ranked hump-moss	S, 2	Bogs and fens, meadows and seeps, montane coniferous forests. Elevation range 4,290 to 8,250 feet.	Moss	Not encountered. May occur. Modeled habitat exists in project area. Documented in LTBMU.
Meesia uliginosa Broad-nerved hump-moss	S, 2	Bogs and fens, meadows and seeps, montane coniferous forests. Elevation range 4,290 to 8,250 feet.	Moss	Not encountered. May occur. Modeled habitat exists in project area. Documented in LTBMU.
Peltigera hydrothyria Veined water lichen	S	Mixed coniferous forests, bogs, fens, wet meadows, seeps, and clear, cold streams. Elevation range 4,000 to 8,000 feet.	Lichen	Not encountered. May occur. Modeled habitat exists in project area, although this species is not known to occur in the LTBMU.
Potamogeton epihydrus ssp. *nuttallii* Nuttall's pondweed	2	Marshes and swamps, associated freshwater habitats. Elevation range 1,320 to 6,270 feet.	Blooms July to August	Not encountered. May occur.
Potamogeton filiformis Slender-leaved pondweed	2	Marshes and swamps, associated freshwater habitats. Elevation range 990 to 7,095 feet.	Blooms May to July	Not encountered. May occur. Documented in LTBMU. Known to exist within 3 miles of project area.

Table 1. Special Status Plant Species List and Habitat Analysis (cont.)

Species	Regulatory Status (Federal; State; TRPA; CNPS)	Habitat Requirements	Identification Period	Potential for Occurrence in the Project Area and Results of Survey
Rorippa subumbellata Tahoe yellow cress	FC, S, SE, SI, 1B	Shoreline supporting decomposed granitic soils; known only from the shoreline of Lake Tahoe. Elevation range 6,210 to 6,230 feet.	Blooms May to September	Not encountered. May occur. Known to exist within 3 miles of project area.
Scirpus subterminalis Water bulrush	2	Marshes and swamps, montane lake margins, in shallow water. Elevation range 2,460 to 7,660 feet.	Blooms July to August	Unlikely; site lacks suitable habitat. Not encountered.
Scutellaria galericulata Marsh skullcap	2	Lower montane coniferous forests, meadows and seeps, marshes and swamps. Elevation range from sea level to 6,900 feet.	Blooms June to September	Not encountered. May occur. Known to exist within 3 miles of project area.

Federally Listed Species:
FE = Federally Endangered
FT = Federally Threatened
FC = Federal Candidate
FPD = Proposed for Delisting
FD = Federally Delisted
PT = Proposed Threatened
S = USFS sensitive

CA State Listed Species:
SE = CA State Endangered
ST = CA State threatened
SR = CA State Rare
SC = Candidate for listing in California

Tahoe Regional Planning Agency:
SI = TRPA Special Interest Species

CNPS List Categories:
1A = Plants presumed extinct in California.
1B = Plants rare, threatened, or endangered in California and elsewhere.
2 = Plants rare, threatened or endangered in California, but common elsewhere
3 = Plants about which we need more information.
4 = Plants of limited distribution.

Other Special-Status Listing:
SLC = Species of local or regional concern or conservation significance.

Note: Federal Species of Concern no longer exists as a category.

Sources: CDFG (2008); CNPS (2008); Gross (2007); VinZant (2007); Vollmer (2007).

Note: The LTBMU does not currently support any plant species listed as threatened or endangered under the ESA.

Table 2.

Federally Threatened and Endangered Species List and Habitat Analysis

Wildlife Species	Legal Status[1]	Known to Occur Within 0.5 Miles of Project Area	Suitable Habitat Within 0.5 Miles of Project Area	Reason Why Habitat Not Considered Suitable
Mammals				
Fisher (*Martes pennanti)*	FC, SSC	No	Yes	
Amphibians				
Mountain yellow-legged frog *(Rana muscosa)*	FC, FSS	No	No	Appropriate riparian habitat not present.
Yosemite toad (*Bufo canorus)*	FC, SSC	No	No	Appropriate riparian and wet meadow habitats not present.
Fish				
Central Valley steelhead *(Oncorhynchus mykiss)*	FT	No	No	Does not occur in the LTBMU.
Delta smelt *(Hypomesus transpacificus)*	FT	No	No	The LTBMU is outside of the range of the Delta smelt.
Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi)*	FT	No	Yes	

Note: A more detailed discussion of Federally Threatened and Endangered Species is found in Section 6.0.

[1]Status Explanations:
Note: No species in the Lake Tahoe Basin are currently listed as "Endangered" by the USFWS under the ESA.
FT = USFWS listed as "Threatened" under the ESA
FC = USFWS "Candidate species" for listing as threatened or endangered under the ESA
DL = USFWS De-listed, species will be monitored for 5 years
CE = California Endangered
CT = California Threatened
SSC = California DFG Species of Special Concern
FP = California DFG Fully Protected
FSS = USFS LTBMU Sensitive Species, Regional Forester's Sensitive Species List (Region 5), Revised Oct. 2007
MIS = USFS LTBMU Management Indicator Species
TRPA = TRPA Special Interest Species, Regional Plan for the Lake Tahoe Basin: Goals and Policies (1986) and Code of Ordinances (1987)

Table 2.

USFS Sensitive Wildlife Species List and Habitat Analysis

Wildlife Species	Legal Status[1]	Known to Occur Within 0.5 Miles of Project Area	Suitable Habitat Within 0.5 Miles of Project Area	Reason Why Habitat Not Considered Suitable
Birds				
Bald eagle *(Haliaeetus leucocephalus)*	FSS, TRPA, CE, FP	No	Yes	
California spotted owl *(Strix occidentalis occidentalis)*	FSS, MIS, SSC	No	Yes	
Great gray owl *(Strix nebulosa)*	FSS, CE	No	Yes	
Northern goshawk *(Accipiter gentiles)*	FSS, TRPA, SSC	No	Yes	
Willow flycatcher *(Empidonax traillii adastus)*	FSS, CE	No	Yes	
Mammals				
American marten *(Martes americana)*	FSS, MIS	No	Yes	
California wolverine *(Gulo gulo luteus)*	FSS, CT, FP	No	No	Alpine environment not available; excessive human disturbance present.
Sierra Nevada red fox *(Vulpes vulpes necator)*	FSS, CT	No	Yes	
Townsend's big-eared bat (*Corynorhinus townsendii)*	FSS, SSC	No	Yes	
Amphibians				
Mountain yellow-legged frog *(Rana muscosa)*	FC, FSS	No	No	Appropriate riparian habitat not present.
Northern leopard frog *(Rana pipiens)*	FSS, SSC	No	No	Appropriate riparian habitat not present.
Fish				
Lahontan Lake tui chub *(Gila bicolor pectinifer)*	FSS, SSC	No	Yes	
Invertebrates				
Great Basin rams-horn *(Helisoma (Carninfex) newberryi)*	FSS	No	Yes	

Note: A more detailed discussion of USFS Sensitive Wildlife Species is found in Section 7.0.

[1]Status Explanations:

Note: No species in the Lake Tahoe Basin are currently listed as "Endangered" by the USFWS under the ESA.

FT = USFWS listed as "Threatened" under the ESA

FC = USFWS "Candidate species" for listing as threatened or endangered under the ESA

DL = USFWS De-listed, species will be monitored for 5 years

CE = California Endangered

CT = California Threatened

SSC = California DFG Species of Special Concern

FP = California DFG Fully Protected

FSS = USFS LTBMU Sensitive Species, Regional Forester's Sensitive Species List (Region5), Revised Oct. 2007

MIS = USFS LTBMU Management Indicator Species

TRPA= TRPA Special Interest Species, Regional Plan for the Lake Tahoe Basin: Goals and Policies (1986) and Code of

Table 2.

LTBMU Management Indicator Species and Habitat Analysis

Habitat or Ecosystem Component	CWHR Type(s) defining the habitat or ecosystem component[1]	CWHR Size Class & Canopy Closure[2]	Wildlife and Aquatic MIS *Scientific Name*	Category for Project Analysis[3]
Riverine & Lacustrine	• Lacustrine (LAC) • Riverine (RIV)	All	Aquatic macroinvertebrates	2
Riparian	• Montane riparian (MRI) • Valley foothill riparian (VRI)	All	Yellow warbler *Dendroica petechia*	1
Wet Meadow	• Wet meadow (WTM) • Freshwater emergent wetland (FEW)	All	Pacific tree frog *Pseudacris regilla*	1
Coniferous Forest, early seral	• Ponderosa pine (PPN) • Sierran mixed conifer (SMC) • White fir (WFR) • Red fir (RFR) • Eastside pine (EPN)	1 (<1" dbh) 2 (1"-5.9" dbh) 3 (6"-10.9" dbh) Canopy Closures: S,P,M,D	Mountain quail *Oreortyx pictus*	2
Coniferous Forest, mid seral	• Ponderosa pine (PPN) • Sierran mixed conifer (SMC) • White fir (WFR) • Red fir (RFR) • Eastside pine (EPN)	4 (11"-23.9" dbh); Canopy Closures: S,P,M,D	Mountain quail *Oreortyx pictus*	2
Coniferous Forest, late seral, open canopy	• Ponderosa pine (PPN) • Sierran mixed conifer (SMC) • White fir (WFR) • Red fir (RFR) • Eastside pine (EPN)	5 (>24" dbh) Canopy Closures: S, P	Sooty (blue) grouse *Dendragapus obscurus*	1
Coniferous Forest, late seral, closed canopy	• Ponderosa pine (PPN) • Sierran mixed conifer (SMC) • White fir (WFR) • Red fir (RFR)	5 (>24" dbh) Canopy Closures: M, D 6 (Multi-layered tree) in PPN and SMC	California spotted owl *Strix occidentalis occidentalis* American marten *Martes americana* Northern flying squirrel *Glaucomys sabrinus*	1
Snags in green forest	Medium and large snags (both sound and rotten) in green forest		Hairy woodpecker *Picoides villosus*	2
Snags in burned forest	Medium and large snags (both sound and rotten) in burned forest (stand-replacing fire)		Black-backed woodpecker *Picoides arcticus*	1

Note: A more detailed discussion of Management Indicator Species is found in Section 8.0.

[1] **CWHR Habitat Types**: A detailed description of the CWHR types can be found in Appendix C

[2] **CWHR Size Class & Canopy Closure:**
dbh = diameter at breast height
S=Sparse Cover (10-24% canopy closure);
P= Open cover (25-39% canopy closure);
M= Moderate cover (40-59% canopy closure);
D= Dense cover (60-100% canopy closure);
Snags are standing dead or mostly dead trees (Mayer and Laudenslayer 1988)

[3] **Category 1:** MIS whose habitat is not in or adjacent to the project area and would not be affected by the project.
Category 2: MIS whose habitat is in or adjacent to project area, but would not be either directly or indirectly affected by the project.
Category 3: MIS whose habitat would be either directly or indirectly affected by the project.

Table 2.

W-1 Standard Threshold for TRPA Special Interest Species

Species	Population Sites[1]	Disturbance Zone (mi.)	Potential to Impact Threshold Standard?
Northern goshawk (*Accipter gentilis*)	12	0.50	No
Osprey (*Pandion haliaetus*)	4	0.25	No
Bald eagle (winter) (*Haliaeetus leucocephalus*)	2	Mapped	No
Bald eagle (nesting) (*Haliaeetus leucocephalus*)	1	0.50	No
Golden eagle (*Aquila chrysaetos*)	4	0.25	No
American peregrine falcon (*Falco peregrinus anatum*)	2	0.25	No
Waterfowl	18	Mapped	No
Mule deer (*Odocoileus hemionus*)	Critical fawning habitat	Meadows-Critical fawning habitat is mapped	No

Note: A more detailed discussion of Management Indicator Species is found in Section 9.0

[1]Based on the TRPA Threshold Evaluation (TRPA 2002), many of the population site goals have not been attained and may never be realized for species like the golden eagle and peregrine falcon considering the Lake Tahoe Basin has historically been considered sub-optimal nesting habitat for both of these species. The northern goshawk threshold standard has a low likelihood of attainment due to habitat fragmentation attributed to recreational encroachment of nesting areas. The mule deer threshold is not likely to be realized due to recreational encroachment into meadows during fawning season.

Table 2.

Special Status Wildlife Species Occurrences within 3 Miles of the Rubicon 5 ECP

Species and Special Status	Date	Location	Distance from Project (miles)	Details
Northern goshawk (*Accipiter gentilis*) FSS, TRPA, SSC	2005	Sugar Pine State Park, north of General Creek	2.5	Active nest with 2 chicks observed; only 1 chick fledged
Osprey (*Pandion haliaetus*) TRPA	1988	Rubicon Point	1.3	Adult with nestling observed
	1988	D.L. Bliss State Park	1.6	1 juvenile in nest observed
	2005	D.L. Bliss State Park	1.75	Inactive nest (nest gone)
	1993	D.L. Bliss State Park	1.8	Active nest in 1993
	2005	D.L. Bliss State Park	1.9	Inactive nest (nest gone)
	2005	D.L. Bliss State Park	2.2	Active in 2005
	2005	D.L. Bliss State Park	2.6	Inactive nest (nest gone)
	2005	West of D.L. Bliss State Park	2.5	Inactive nest (nest gone)
America marten (*Martes americana*) FSS, MIS	1995	D.L. Bliss State Park	2.25	1 adult observed
Pacific fisher (*Martes pennanti pacifica*) FC, SSC	1989	Sugar Pine State Park	2.7	Observed by CDFG employee
Sierra Nevada snowshoe hare (*Lepus americanus tahoensis*) SSC	1959	Rubicon Properties	Within Project Area	2 males and 1 female collected
Great Basin rams-horn (*Helisoma newberryi*) FSS	n/a	Lake Tahoe	Shoreline and lake bottom	No additional information given

Source: California Natural Diversity Database (CNDDB 2008) and TRPA (2007)

[1] **Status Explanations:**
Note: No species in the Lake Tahoe Basin are currently listed as "Endangered" by the USFWS under the ESA.
FT = USFWS listed as "Threatened" under the ESA
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Table 2.

Birds Observed in the Rubicon 5 ECP Area

Common Name	Scientific Name
American robin	*Turdus migratorius*
Brown creeper	*Certhia americana*
Cassin's vireo	*Vireo cassini*
Downy woodpecker	*Picoides pubescens*
Dusky flycatcher	*Empidonax oberholseri*
Mountain chickadee	*Poecile gambeli*
Pygmy nuthatch	*Sitta pygmaea*
Red-breasted nuthatch	*Sitta canadensis*
Spotted sandpiper	*Actitis macularia*
Steller's jay	*Cyanocitta stelleri*
Western tanager	*Piranga ludoviciana*