# Marlette Creek Restoration and SR28 Crossing Improvement Project
# Contract Documents and Specifications

## WASHOE COUNTY, NEVADA
## EIP #01.01.01.0177

**Federal Aid Project No. 20-PA-11051900-018**

**Bid: July 31, 2025**

Nevada Tahoe Conservation District
PO Box 915
Zephyr Cove, NV 89448
775-586-1610

**Section 00 01 02 – Table of Contents**

**Division 00 – Procurement and Contracting**

**Section 00 11 01 – Advertisement for Bids**

1. Sealed Bids for the construction of the Marlette Creek Restoration and SR28 Crossing Improvement Project will be received in person or via email to mkelly@ntcd.org by the Nevada Tahoe Conservation District at the office of Nevada Tahoe Conservation District, 400 Dorla Court, Zephyr Cove, Nevada 89448 (Issuing Office), until 3:00 pm local time on Thursday, July 31, 2025, at which time the Bids received will be publicly opened and read and broadcast online. A meeting link for the virtual bid opening will be posted on ntcd.org at least 24 hours prior to the bid opening. The Project consists of tree removal, dewatering, grading, culvert, rock, and wood placement, and revegetation along Marlette Creek located on Nevada Department of Transportation and USDA Forest Service Lands near State Route 28 in Washoe County, Nevada. The Nevada Tahoe Conservation District Board of Supervisors will consider award of the contract at a subsequently scheduled meeting in August 2025.

2. Bid Documents may be examined and obtained electronically at ntcd.org or obtained in person at no cost at the Nevada Tahoe Conservation District at 400 Dorla Court, Zephyr Cove, NV 89449, (775)586-1610 between the hours of 9 AM and 4 PM or by appointment.

3. An optional pre-bid conference will be held at 10:00 am local time on Thursday, July 24, 2025 at Chimney Beach Parking Area located at 39°10'03.9"N 119°55'35.3"W https://maps.app.goo.gl/m1sDqsyTaWgAbsGV8 Attendance at the pre-bid conference is highly encouraged but is not mandatory.

4. The Engineers estimate for base bid is $1,200,000 to $1,400,000.

5. No proposal will be considered unless accompanied by a bid security in the form of a Bid Bond in an amount not less than five percent (5%) of the base bid.

6. Nevada Tahoe CD contact: Eamonn Kerley, P.E.
   Phone: (775)524-3484
   Email: ekerley@ntcd.org

7. Contracts to work under this proposal will obligate the contractors and subcontractors not to discriminate in employment practices pursuant to Title 24 Subtitle A Part 1 and Section 338.125 NRS. The Project involves federal funds; Bidder is therefore also directed to the federal minimum wage rate requirements and the Wage Determination provided in Section 00 43 01.

8. In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident. Persons with disabilities who require alternative means of communication for

program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English. To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary or Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov. USDA is an equal opportunity provider, employer, and lender. Bidder must comply with Title VI requirements attached in Appendix A.

9. Federal funds are being utilized on this Project. In addition to any other applicable federal laws, statutes or regulations, Bidder acknowledges that it is familiar with, and shall strictly comply with, all laws, statutes, regulations, requirements, and obligations referenced in Title 7, Code of Federal Regulations, Section 3016.36(i).

10. The last date for submitting questions to the Owner to be addressed by Addendum is Tuesday, July 29, 2025. Question should be submitted in person or via phone or email to Eamonn Kerley, ekerley@ntcd.org or (775)524-3484.

Dated July 3, 2025

Nevada Tahoe Conservation District
Meghan Kelly, P.E., Principal Engineer

**Section 00 21 01 – Bidders Checklist**

Bidders are instructed to complete and return the following forms as part of the bid package in order for their bids to be complete. If a contractor fails to submit the following forms the contractor's bid will be deemed not responsive.

A. _____ Section 00 31 01 – Bid Form

B. _____ Section 00 31 06 – Bid Schedule

C. _____ Section 00 31 14 – Bid Bond

D. _____ Section 00 31 16 – Bidder's Qualification Statement

E. _____ Section 00 31 19 – Bidder Certifications

F. _____ Section 00 31 22 – List of Proposed Subcontractors (Submitted with Bid)

G. _____ Section 00 31 24 – List of Major Equipment Manufacturers

H. _____ Evidence of authority to do business in the state of the Project (on bidder supplied form)

Within 2 hours after the completion of the opening of the bids, the Contractors who submitted the three lowest bids are instructed to complete and return the following forms to complete the bid package. If a contractor fails to submit the following forms within 2 hours of the bid closing the contractors bid will be deemed not responsive.

I. _____ Section 00 31 23 – List of Subcontractors (Submitted after Bid)

# 00 21 02 INSTRUCTIONS TO BIDDERS

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**ARTICLE 1 – DEFINED TERMS**

1.01 Terms used in these Instructions to Bidders have the meanings indicated below:

A. *Issuing Office* – The office from which the Bidding Documents are to be issued.

Nevada Tahoe Conservation District
400 Dorla Court
Zephyr Cove, Nevada 89448
(775)586-1610

B. *Engineer* – The Engineer is defined as:

Meghan Kelly
Nevada Tahoe Conservation District
400 Dorla Court
Zephyr Cove, Nevada 89448
(775)524-3481
mkelly@ntcd.org

C. *Owner* – The Owner is defined as:

Nevada Tahoe Conservation District
400 Dorla Court
PO Box 915
Zephyr Cove, NV 89448

D. *Bidder* – further defined as one who is submitting a bid to complete the work as indicated in the plans and specifications.

**ARTICLE 2 – COPIES OF BIDDING DOCUMENTS**

2.01 Complete sets of the Bidding Documents may be obtained as stated in the advertisement or invitation to bid.

2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

**ARTICLE 3 – QUALIFICATIONS OF BIDDERS**

3.01 To demonstrate Bidder's qualifications to perform the Work, Bidder shall submit with its Bid: (a) the completed Bidder's Qualification Statement establishing its qualifications and including information such as general financial data, previous experience, principal personnel, performance history, and present commitments; and (b) the following additional information:

A. Evidence of Bidder's authority to do business in the State of Nevada.

B. If applicable, evidence of the Bidder's valid Contractor's license of a class corresponding to the Work required.

C. As requested, Subcontractor and Supplier qualification information. It is the Bidder's responsibility to provide information sufficient to establish that Bidder's selected subcontractors and suppliers are qualified.

D. Certification that the Bidder and his Subcontractors have not been suspended or debarred, 2 CFR 200.214.

E. Certification regarding lobbying related to Federal Regulations.

3.02 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.

3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.

3.04 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

**ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE**

4.01 *Site and Other Areas*

A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

4.02 *Existing Site Conditions*

A. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or adjacent to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

B. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in the Standard Specifications and Project Plans.

4.03 *Site Visit and Testing by Bidders*

A. Bidder may conduct a site visit at any time to the site assuming all local laws are adhered to.

B. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.

C. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.

D. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.

E. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

4.04 *Other Work at the Site*

A. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

**ARTICLE 5 – BIDDER'S REPRESENTATIONS**

5.01 It is the responsibility of each Bidder before submitting a Bid to:

A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;

B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;

C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;

D. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and if applicable, the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;

E. certify, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;

F. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;

G. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;

H. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and

I. understand and agree that all documents submitted, filed or deposited with Owner, unless designated as confidential by a specific statute of the State of Nevada and properly marked to that effect by Bidder, will be subject to Nevada's Public Records Laws (Chapter 239 of

the Nevada Revised Statutes), and will be available for inspection and copying by any person or governmental entity at any time after Bid Opening.

J. certify that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required within the time required by the Bidding Documents.

**ARTICLE 6 – PRE-BID CONFERENCE**

6.01 A pre-Bid conference will be held at the time and location stated in the invitation or advertisement to bid. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

**ARTICLE 7 – INTERPRETATIONS AND ADDENDA**

7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Owner or Engineer in response to such questions will be issued by Addenda delivered to all parties recorded as having received the Bidding Documents. Questions received less than seven days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.02 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents.

**ARTICLE 8 – BID SECURITY**

8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of 5% percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a Bid bond (on the form included in the Bidding Documents) issued by a surety meeting the requirements of Nevada law.

8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released at the request of the Bidder. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.

8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released at the request of the Bidders.

8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the Bid opening at the request of the Bidders.

**ARTICLE 9 – CONTRACT TIMES**

9.01 The number of days within which, or the dates by which, Milestones are to be achieved, and the Work is to be substantially completed, and completed and ready for final payment, are set forth in the Agreement.

**ARTICLE 10 – LIQUIDATED DAMAGES**

10.01 Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

**ARTICLE 11 – SUBSTITUTE AND "OR-EQUAL" ITEMS**

11.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration during the bidding and Contract award process of possible substitute or "or-equal" items. In cases in which the Contract allows the Contractor to request that Engineer authorize the use of a substitute or "or-equal" item of material or equipment, application for such acceptance may not be made to and will not be considered by Engineer until after the Effective Date of the Contract.

11.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of "or-equal" or substitution requests are made at Bidder's sole risk.

**ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS**

12.01 A Bidder shall be prepared to retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of the Work if required by the Bidding Documents (most commonly in the Specifications) to do so. If a prospective Bidder objects to retaining any such Subcontractor, Supplier, or other individual or entity, and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.

12.02 Subsequent to the submittal of the Bid, Owner may not require the Successful Bidder or Contractor to retain any Subcontractor, Supplier, or other individual or entity against which Contractor has reasonable objection.

12.03 Each bidder must submit a completed List of Subcontractors on the Form furnished with the completed Bid Form. The apparent low bidder, and any other bidder so requested, shall within two (2) hours after Bid opening, submit to Owner a list of all such Subcontractors (including the bidder) proposed for those portions of the Work for which such identification is required per NRS 338.141.

If requested by Owner, such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit a substitute, Bidder's Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.

12.04 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, or other individuals or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder.

**ARTICLE 13 – PREPARATION OF BID**

13.01 The Bid Form is included with the Bidding Documents.

A. All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.

B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words "No Bid" or "Not Applicable."

13.02 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. If the corporation has a corporate seal, then the corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown.

13.03 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The partnership's address for receiving notices shall be shown.

13.04 A Bid by a limited liability company shall be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the firm's address for receiving notices shall be shown.

13.05 A Bid by an individual shall be signed by the individual and show the Bidder's name and address for receiving notices.

13.06 A Bid by a joint venture shall be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The joint venture's address for receiving notices shall be shown.

13.07 All names shall be printed in ink below the signatures.

13.08 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.

13.09 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.

13.10 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located. The number, if any, of the license issued to the Contractor by the State Contractor's Board pursuant to chapter 624 of the NRS, shall also be shown on the Bid Form.

**ARTICLE 14 – BASIS OF BID**

14.01 *Unit Price*

A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Schedule (00 42 43). Items listed as "LS" shall be bid on a lump sum basis.

B. The "Bid Price" (sometimes referred to as the extended price) for each unit price Bid item will be the product of the "Estimated Quantity" (which Owner or its representative has set forth in the Bid Schedule (00 42 43)) for the item and the corresponding "Bid Unit Price" offered by the Bidder. The total of all unit price Bid items will be the sum of these "Bid Prices"; such total will be used by Owner for Bid comparison purposes.

C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

**ARTICLE 15 – SUBMITTAL OF BID**

15.01 Documentation required to constitute a complete bid is outlined in the Bidder's Checklist (00 21 11). This documentation shall be submitted under the terms of Article 7 of the Bid Form.

15.02 A Bid shall be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to the address indicated in the Advertisement for Bids.

15.03 Bids received after the date and time prescribed for the opening of bids or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

**ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID**

16.01 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.

16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.

16.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, based upon the nature of the mistake, that Bidder may be disqualified from further bidding on the Work.

**ARTICLE 17 – OPENING OF BIDS**

17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

**ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE**

18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security, at Bidders request, prior to the end of this period.

**ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT**

19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.

19.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Base Bid.

19.03 Evaluation of Bids

A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

B. The Base Bid will be used to determine the Bid prices for purposes of comparison. After determination of the Successful Bidder based on this comparative process and on the responsiveness, responsibility, and other factors set forth in these Instructions, the award may be made to said Successful Bidder on its Base Bid.

C. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.

19.04 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents or pursuant to NRS 338.141.

19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

19.06 If the Contract is to be awarded, Owner will award the contract to the Bidder whose Bid is in the best interests of the Project.

**ARTICLE 20 – BONDS AND INSURANCE**

20.01 When the Successful Bidder delivers the Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

**ARTICLE 21 – SIGNING OF AGREEMENT**

21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder shall execute and

deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Within ten days thereafter, Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder.

**ARTICLE 22 – PROTEST BY BIDDERS**

22.01 Any bidder may protest a pending bid award prior to award by Owner. The appellant's protest must be in compliance with NRS 338.142.

22.02 The timelines set forth in NRS 338.142(1) will begin to run upon Nevada Tahoe Conservation District's issuance of a written Notice of Recommendation to Award the Contract. The written Notice will be posted on http://ntcd.org website. It is solely the protesting Bidder's responsibility to monitor the aforementioned website for such postings and to ensure that its protest is filed within five (5) business days of such posting.

22.03 At the time the notice of protest is filed, the appellant must post a bond with a good and solvent surety authorized to do business in this state to the Owner who shall hold the bond until a determination is made on the protest. A bond posted with a notice of protest must be in an amount equal to the lesser of:

A. Twenty-five percent of the total value of the bid submitted by the bidder filing the notice of protest; or

B. Two hundred fifty thousand dollars.

C. Not seek any type of judicial intervention until Owner has rendered its final decision on the protest and has awarded the contract.

22.04 If the protest is upheld, the full amount of the posted bond or security will be returned to the protestor. If the protest is rejected, a claim may be made against the bond for expenses suffered by the Owner because of the unsuccessful appeal.

22.05 Owner is not liable for any costs, expenses, attorney's fees, loss of income, or other damages sustained by the protestor in a bid process.

**ARTICLE 23 – CONTRACTS TO BE ASSIGNED**

*None.*

# 00 31 01 BID FORM
# FOR CONSTRUCTION CONTRACTS

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**ARTICLE 1 – BID RECIPIENT**

1.01 This Bid is submitted to:

Nevada Tahoe Conservation District for the Marlette Creek Restoration and SR28 Improvement Project.

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

**ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS**

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

2.02 Bidder acknowledges the provisions of the Agreement as to the assignment of the procurement contract for procurement of goods and special services for Marlette Creek Restoration and SR28 Improvement Project.

**ARTICLE 3 – BIDDER'S REPRESENTATIONS**

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

| **Addendum No.** | **Addendum, Date** |
|---|---|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.

E. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data

are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.

F. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

G. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.

H. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.

I. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

**ARTICLE 4 – BIDDER'S CERTIFICATION**

4.01 Bidder certifies that:

A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;

B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;

C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and

D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;

2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and

4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the e execution of the Contract.

**ARTICLE 5 – BASIS OF BID**

Bidder will complete the Work in accordance with the Contract Documents for the total price indicated in Section 00 31 06 – Bid Schedule.

Bidder acknowledges that (1) Bid includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit, and (2) when applicable, estimated quantities are not

guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

**ARTICLE 6 – TIME OF COMPLETION**

6.01 Bidder agrees that the Work will be substantially complete and will be completed before October 15, 2025 where possible and prior to June 30, 2026 for items with longer lead times and ready for final payment on or before the dates or within the number of calendar days indicated in the Agreement.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

**ARTICLE 7 – ATTACHMENTS TO THIS BID**

7.01 The documentation required to constitute a complete bid is outlined in the Bidder's Checklist (00 21 11). These documents are submitted with and made a condition of the bid.

**ARTICLE 8 – BID SUBMITTAL**

BIDDER: *[Indicate correct name of bidding entity]*

_____

By:
*[Signature]* _____

*[Printed name]* _____
*(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)*

Attest:
*[Signature]* _____

*[Printed name]* _____

Title: _____

Submittal Date: _____

Address for giving notices:

_____

_____

_____

Telephone Number: _____

Fax Number: _____

Contact Name and e-mail address: _____

_____

Bidder's License No.: _____
*(where applicable)*

**Section 00 31 06 – Bid Schedule**

**Base Bid Schedule**

All required equipment, personnel, sweeping, traffic control, public notification, and signage for the complete project shall be part of the unit prices. All items not covered by in the Plans, Special Provisions, and Special Technical Specifications but are necessary for completion of the project are incidentals to the listed Bid Items.

| Item No. | Item Description | | Quantity | Unit Cost | Total Cost |
|---|---|---|---|---|---|
| 1 | Mobilization and Demobilization | LS | 1 | | |
| 2 | Staging and Storage | LS | 1 | | |
| 3 | Traffic Control | LS | 1 | | |
| 4 | Gravel Construction Entrance | EA | 2 | | |
| 5 | Filter Fence | LF | 1,000 | | |
| 6 | Construction Limit Fence | LF | 1,000 | | |
| 7 | Fiber Rolls, As Directed | LF | 1,200 | | |
| 8 | Dewatering/Diversion | LS | 1 | | |
| 9 | Clearing and Grubbing | SF | 60,000 | | |
| 10 | Salvage Sod, Stage and Maintain | SF | 1,000 | | |
| 11 | Tree Removal and Stockpile | EA | 62 | | |
| 12 | Remove Existing Culvert Apron, Headwall, and Wingwall | LS | 1 | | |
| 13 | Remove Existing Manmade In-Channel Structures | LS | 1 | | |
| 14 | Earthwork | BCY | 3,950 | | |
| 15 | Wetland Mat Channel | LF | 1,130 | | |
| 16 | Sod Block Channel | LF | 150 | | |

| Item No. | Item Description | | Quantity | Unit Cost | Total Cost |
|---|---|---|---|---|---|
| 17 | Boulder Step Pool - Main Fork Marlette | LS | 1 | | |
| 18 | Boulder Step Pool - South Fork Marlette | LS | 1 | | |
| 19 | Ford Crossing | LS | 1 | | |
| 20 | As-Directed Log Placement for Enhanced Floodplain Roughness | LF | 800 | | |
| 21 | RCB Culvert Structure | LS | 1 | | |
| 22 | Road Grade Decommission | SF | 10,500 | | |
| 23 | Willow Transplant | EA | 25 | | |
| 24 | Revegetation - Channel Treatment | SF | 4,500 | | |
| 25 | Revegetation - Floodplain Treatment | SF | 23,000 | | |
| 26 | Revegetation - Upland Treatment | SF | 35,800 | | |

**Base Bid Schedule Price (Items 1 through 26): $_____.**

**Base Bid Schedule Price (in words):** _____

_____

_____

**The amount of each of the above Bid line items must be filled in and completed.**

Bid prices shall include everything necessary for the completion of the Work stipulated in the Contract Documents, including but not limited to providing the materials, equipment, tools, plant and other facilities, and the management, superintendence, labor and services. Bid prices shall include all federal, state and local taxes.

The Bidder shall set forth for each unit basis item of work a unit price and a total for the item, and for each lump sum item total for the item, all in clearly legible figures in the respective spaces provided for that purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the "Unit Price" multiplied by the "Estimated Quantity" for the item.

In case of discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except that if the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price.

If both the unit price and the item total are unreadable or otherwise unclear, or are omitted, the Bid may be deemed irregular. Likewise, if the item total for a lump sum item is unreadable or otherwise unclear, or is omitted, the Bid may be deemed irregular unless the Project being bid has only a single item and a clear, readable total bid is provided.

In case of discrepancy between the "Base Bid Schedule Price" listed and the actual sum of all item total prices, the individual item totals will prevail and the "Base Bid Schedule Price" will be revised to reflect the appropriate total based on the unit prices.

Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cents symbols also have no significance in establishing any unit price or item total since all figures are assumed to be expressed in dollars and/or decimal fractions of a dollar. Bids on lump sum items shall be item totals only; if any unit price for a lump sum item is included in a bid and it differs from the item total, the item total shall prevail.

The foregoing provisions for the resolution of specific irregularities cannot be so comprehensive as to cover every omission, inconsistency, error, or other irregularity which may occur in a Bid. Any situation not specifically provided for will be determined in the discretion of Nevada Tahoe Conservation District, and that discretion will be exercised in the manner deemed by Nevada Tahoe Conservation District to best protect the public interest in the prompt and economical completion of the Work. The decision of the Nevada Tahoe Conservation District respecting the amount of a Bid, or the existence or treatment of an irregularity in a Bid, shall be final.

# 00 31 14 BID BOND

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER *(Name and Address)*:

SURETY *(Name, and Address of Principal Place of Business)*:

OWNER *(Name and Address)*:

BID

Bid Due Date:
Description *(Project Name— Include Location)*:

BOND

Bond Number:
Date:
Penal sum _____ $ _____
(Words) (Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

| **BIDDER** | **SURETY** |
|---|---|
| _____ (Seal) | _____ (Seal) |
| Bidder's Name and Corporate Seal | Surety's Name and Corporate Seal |
| By: _____ | By: _____ |
| Signature | Signature (Attach Power of Attorney) |
| _____ | _____ |
| Print Name | Print Name |
| _____ | _____ |
| Title | Title |
| Attest: _____ | Attest: _____ |
| Signature | Signature |
| Title | Title |

*Note: Addresses are to be used for giving any required notice.*
*Provide execution by any additional parties, such as joint venturers, if necessary.*

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.

2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.

3. This obligation shall be null and void if:

3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or

3.2 All Bids are rejected by Owner, or

3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).

4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.

5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.

6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after the Bid due date.

7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.

8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.

9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.

10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

# 00 31 16 BIDDERS QUALIFICATION STATEMENT

**QUALIFICATION OF BIDDER CERTIFICATE**

The undersigned bidder, proposed contractor or subcontractor certifies, that they are qualified to do the Marlette Creek Restoration and SR28 Crossing Improvement Project as described in Section 102 CONTRACTOR QUALIFICATIONS of the Special Technical Provisions and submitted all qualification as stated in 102.01 Description together with the bid document.

Contractor Qualifications _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Name of Bidder, Proposed Contractor or Subcontractor

_____

Name and Title of Authorized Representative

_____ _____

Signature Date

# 00 31 19 BIDDER CERTIFICATIONS

**CERTIFICATION OF BIDDER, PROPOSED CONTRACTOR OR SUBCONTRACTOR REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY OR VOLUNTARY EXCLUSION**

The undersigned bidder, proposed contractor or subcontractor certifies, to the best of his knowledge and belief, that:

1. Neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this contract by any Federal department, agency or program.

2. Neither it nor its principles are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in public works contracts by the Nevada Labor Commissioner.

3. Where either the bidder or subcontractor is unable to certify to any of the above statements, the bidder or subcontractor shall attach an explanation as to why a certification cannot be submitted.

_____

Name of Bidder, Proposed Contractor or Subcontractor

_____

Name and Title of Authorized Representative

_____ _____

Signature Date

**CERTIFICATION OF BIDDER REGARDING PENALTIES FOR NONCOMPLIANCE WITH NEVADA PREVAILING WAGE REQUIREMENTS**

The undersigned bidder, proposed contractor or subcontractor certifies that:

1. This contract is for a public work as set forth in Nevada Revised Statutes Chapter 338.

2. A contractor engaged on public works shall forfeit, as a penalty to the public body on behalf of which the contract has been made and awarded to the contractor, not less than $20 nor more than $50 for each calendar day or portion thereof that each workman employed on the public work:

   a) Is paid less than the designated rate for any work done under the contract, by the contractor or any subcontractor under him;

   b) Is not reported accurately to the public body awarding the contract as required pursuant to NRS 338.070.

3. If a penalty is imposed pursuant to this section, the costs of the proceeding, including investigative costs and attorney's fees, may be recovered by the Labor Commissioner.

_____
Name of Bidder

_____
Name and Title of Authorized Representative

_____ _____
Signature Date

**CERTIFICATION OF BIDDER REGARDING LOBBYING FOR CONTRACTS, GRANTS, LOANS, AND COOPERATIVE AGREEMENTS**

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, or the extension, continuation, renewal, amendment, or modification of any Federal contract grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure of Lobbying Activities" in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 21, U.S. Code. Any Person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Name of Organization_____

Address _____

City_____

State_____

Zip Code _____

_____ _____
Signature of Authorized Official Date

_____
Title

**00 31 22**

# 00 31 22 LIST OF PROPOSED SUBCONTRACTORS (SUBMITTED WITH BID)

List below the name, address and contractor's license number for each company by trade who will provide labor or a portion of the work on this project (Attach additional sheets if necessary.)

| Trade (type of work) | Name/Address | License No. |
|---|---|---|
| 1. _____ | _____ | _____ |
| | _____ | |
| | _____ | |
| 2. _____ | _____ | _____ |
| | _____ | |
| | _____ | |
| 3. _____ | _____ | _____ |
| | _____ | |
| | _____ | |
| 4. _____ | _____ | _____ |
| | _____ | |
| | _____ | |
| 5. _____ | _____ | _____ |
| | _____ | |
| | _____ | |
| 6. _____ | _____ | _____ |
| | _____ | |
| | _____ | |

## 00 31 023

# 00 31 23 LIST OF PROPOSED SUBCONTRACTORS (SUBMITTED WITHIN 2 HOURS OF BID)

List below the name, address and contractor's license number for each company by trade who will provide labor or a portion of the work on this project (Attach additional sheets if necessary.)

| Trade (type of work) | Name/Address | License No. |
|---|---|---|
| 1. _____ | _____ | _____ |
| | _____ | |
| | _____ | |
| 2. _____ | _____ | _____ |
| | _____ | |
| | _____ | |
| 3. _____ | _____ | _____ |
| | _____ | |
| | _____ | |
| 4. _____ | _____ | _____ |
| | _____ | |
| | _____ | |
| 5. _____ | _____ | _____ |
| | _____ | |
| | _____ | |
| 6. _____ | _____ | _____ |
| | _____ | |
| | _____ | |

# 00 31 24 LIST OF MAJOR EQUIPMENT MANUFACTURERS

List below the type of equipment, manufacturer, and year below.

| Type of Equipment | Manufacturer | Year or Date Acquired |
|---|---|---|
| | | |
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# 00 41 01 AGREEMENT

## AGREEMENT FORM

THIS AGREEMENT, made and entered into this _____ day of _____, 2025, by and between the NEVADA TAHOE CONSERVATION DISTRICT, a political subdivision of the State of Nevada, acting through its Board of Supervisors, hereinafter called the "NTCD" and _____

_____

General Contractor, Nevada State License No. _____, hereinafter called the "Contractor".

W I T N E S E T H :

That the NTCD and the Contractor, for the consideration hereinafter named, agree as follows:

Article 1. Work.
The Contractor shall furnish all of the materials and perform all of the work described in the Plans and Specifications entitled **"MARLETTE CREEK RESTORATION AND SR28 CROSSING IMPROVEMENT PROJECT"**, prepared by the Nevada Tahoe Conservation District, and shall do everything required by this Agreement and the Specifications.

Article 2. The Project.
The Project, of which the Work under the Contract Documents is a part, is generally described as follows: **MARLETTE CREEK RESTORATION AND SR28 CROSSING IMPROVEMENT PROJECT**.

Article 3. Contract Times.
All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

*Contract Times: Day and Dates*.
The work required to complete the project will be substantially completed on or before June 15, 2026 and completed and ready for final payment on or before June 30, 2026.

*Liquidated Damages*.
Contractor and NTCD recognize that time is of the essence and that NTCD will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by NTCD if the Work is not completed on time. Accordingly, instead of requiring any such proof, NTCD and Contractor agree that as liquidated damages for delay (but not as a penalty):

Substantial Completion: Contractor shall pay NTCD $1,000 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above, for Substantial Completion until the Work is substantially complete.

Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay NTCD $1,500 for each day that expires after such time until the Work is completed and ready for final payment.

Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently. Similarly, Liquidated damages for failing to attain Substantial Completion are not additive and will not be imposed concurrently, however to the extent the damages overlap, the higher of the overlapping damages will apply.

*Contract Time Extensions*.
All claims for extensions of time shall be made in writing to the Engineer within seven (7) calendar days after the beginning of the delay; otherwise, they will be disallowed.

If the Contractor is delayed at any time in the progress of the work by any act or neglect of the NTCD or the Engineer, or by any employee of either, or by any separate contractor disputes, fire, unusual weather conditions, unusual delay in transportation, or by unavoidable casualties, the contract time may be extended by change order for such reasonable time as the NTCD may determine.

It is further expressly understood and agreed that the Contractor shall not be entitled to any damages or compensation, or be reimbursed for any losses, on account of any delay resulting from any of the aforesaid causes or any other cause regardless of whether the delay is foreseeable or not, except that the NTCD agrees to compensate the Contractor for any damage resulting from any affirmative, willful act in bad faith performed by the NTCD or its employees which unreasonably interferes with the Contractor's ability to perform the work.

An extension of contract time for a delay will be allowed only in the case that a normal working day is lost. A normal working day is defined as any day, except weekends and holidays, during which the Contractor can work for at least four hours. Delays will not be allowed for non-working days (e.g., weekends and holidays). Claims by the Contractor for delays will not be allowed on account of failure to furnish information, until 14 days after a request for information is submitted by the Contractor, and then not unless such claim is reasonable.

Extensions of contract time shall not be allowed for the following types of delays:

1. Delays which could have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor.
2. Delays in the execution of parts of the work, which may in themselves be unavoidable, but do not prevent or delay prosecution of other parts of the work, or the completion of the whole work within the time specified.
3. Delays arising from interruptions occurring during the prosecution of the work on account of reasonable interference of other contractors employed by the NTCD, which do not prevent the completion of the whole work within the contract time.

Article 4. Contract Price.
Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:
For all Work, a total sum not to exceed _____
($_____), at the prices stated in the Contractor's Bid.

All work for the base bid will be performed for a total sum not to exceed $_____.

For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of unit price work times the actual quantity of that item.

The bid prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. Estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.

Article 5. Payment Procedures.

NTCD shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the 25th day of each month during performance of the Work as provided in Paragraph 6.02.B below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.

Progress payments will be made as follows:

1. Until fifty percent (50%) of the Work required by this Agreement has been performed, progress payments will be paid in an amount equal to ninety-five percent (95%) of each invoice. The remaining five percent (5%) will be withheld as retainage.
2. After fifty percent (50%) of the Work required by this Agreement has been performed, if requested by the Contractor, NTCD may pay to the Contractor any of the remaining progress payments without withholding additional retainage if, in the Engineer's opinion, satisfactory progress is being made on the Services in accordance with NRS 338.515.
3. If, after fifty percent (50%) of the Work required by this Agreement has been performed, the Engineer determines that satisfactory progress is being made, NTCD may pay any amount of retainage withheld from progress payments made during the Contractor's completion of the first fifty percent (50%) of Work required by this Agreement on the condition that if a subcontractor performed a portion of the Work, the Engineer determined that such Work was in compliance with this Agreement, the subcontractor submits to the Contractor a release of a mechanics lien for the portion of Work so completed, and a release of any applicable mechanics lien from each of the subcontractor's subcontractors and suppliers, and the amount of retainage NTCD pays is in proportion to the Work which the subcontractor performed. If the Contractor is paid for any retainage for Work completed by its subcontractors, the Contractor must pay to the subcontractor any retainage it held pursuant to NRS 338.555.
4. If the Engineer determines that satisfactory progress is being made on the Work and does not withhold any amount pursuant to NRS 338.525, NTCD may pay ninety-seven and one-half percent (97.5%) of the amount of each invoice after completion of the first fifty percent (50%) of the Work and will release to the Contractor fifty percent (50%) of the retainage withheld from invoices received for the first fifty percent (50%) of Work completed. If the Engineer determines that satisfactory progress is not being made on the Work and does withhold an amount pursuant to NRS 338.525, the Owner may pay ninety-five percent (95%) of the amount of each invoice after completion of the first fifty percent (50%) of the Services and will continue to withhold the retainage withheld from invoices received for the first fifty percent (50%) of Services completed. The final audit shall be performed after the release of the retainage and may cause an adjustment of payments to NTCD or to the Contractor.
5. Except as otherwise provided in NRS 338.525, the NTCD will pay the Contractor the actual cost of the supplies, materials and equipment, that are identified in Contract; have been delivered and stored at the location; and in the time and manner specified in the Contract by the Contractor or subcontractor or supplier for use in the Work; and are in short supply or were specially made project.

*Final Payment*

As soon as practical, following the completion of the work, the Contractor shall make a request by letter to the NTCD for a final inspection and acceptance of the work; if, in the NTCD's opinion, all provisions of the Construction Specifications and Agreement have been satisfied, the NTCD will cause a Notice of Completion to be filed with the Washoe County Recorder.

At the expiration of thirty (30) days following the filing of the Notice of Completion or use or occupancy of the public work by the NTCD, final payment shall be made as follows:

After deducting all previous payments from the total value of the work, the remaining balance shall be paid unless any of the following conditions exist to allow withholding of payment: (a) claims, liens or outstanding debt have been filed against the Contractor or against the work because of Contractor or its agents; (b) claims or demands by NTCD including those involving: disputes about the Contract, Contractor or subcontractor compliance with applicable codes and laws, the work, time or liquidated damages; (c) amounts required by law to be retained by the NTCD. Contractor shall submit proof satisfactory to the NTCD that all payrolls, materials, bills, and other indebtedness relating to the work performed, have been paid before final payment is made.

Article 6. Interest.

All amounts not paid when due shall bear interest, payable at the end of each quarter, at the rate equal to the rate quoted by at least three insured banks, credit unions or savings and loan associations in this State as the highest rate paid on a certificate of deposit whose duration is approximately 90 days on the first day of the quarter. If the amount due to the Contractor at the end of the quarter is less than $500, Owner may hold the interest in accordance with NRS 338.515.

Article 7. Contractor's Representations.

In order to induce NTCD to enter into this Contract, Contractor makes the following representations:

1. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
2. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
3. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
4. If applicable, Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
5. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and, if applicable, the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.
6. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
7. Contractor is aware of the general nature of work to be performed by NTCD and others at the Site that relates to the Work as indicated in the Contract Documents.

8. Contractor has given NTCD written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
9. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
10. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

Article 8. Performance and Payment Bonds. The Contractor agrees that he will, before this contract becomes effective, furnish the NTCD a Performance and Completion Bond and a Labor and Material Payment Bond, furnished by a company or companies acceptable to the NTCD, each in an amount equal to one hundred percent (100%) of the total contract sum. The Performance and Completion Bond shall be conditioned upon the Contractor's full and faithful performance of the contract in accordance with the plans, specifications and conditions of the contract in accordance with the Contract Documents and this Agreement and further conditioned upon the guarantee of said work for a period of one (1) year from the date the work is completed and accepted by NTCD. The Labor and Material Payment Bond is solely for the protection of claimants supplying labor or materials to the contractor to whom the contract was awarded and shall be conditioned upon the Contractor's obligation to pay for all materials and labor provided on the work. (See NRS 339.025)

Article 9. The Contract Documents. The following is an enumeration of all of the Contract Documents making up the Agreement (also herein and throughout the Contract Documents referred to as Contract), which are by this reference hereby incorporated into this Agreement and they are as fully a part of the Agreement as if hereto attached or herein repeated:

- This Agreement
- Advertisement for Bids
- Instructions to Bidders
- Bid Form
- Bid Schedule
- Bid Summary
- Bid Bond
- Bidders Qualification Statement
- Certification of Bidder
- List of Proposed Subcontractors
- List of Major Equipment Manufacturers
- Labor & Material Payment Bond
- Performance and Completion Bond
- Project Plans for **Marlette Creek Restoration and SR28 Crossing Improvement Project**
- Special Technical Provisions for **Marlette Creek Restoration and SR28 Crossing Improvement Project**
- Standard Specifications for Road and Bridge Construction – NDOT "Silver Book", current edition
- Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP-24)," current edition
- Appendix A – Federal Regulations
- Appendix B – Insurance Requirements
- Appendix C – Non-Discrimination Statutes and Authorities
- Appendix F – Project Permits
- Addenda

- Change Orders
- Construction Change Directives
- Any amendments made hereto

In the event of any conflict between any of the Contract Documents, this contract shall be governed in accordance with the following order:

a) This Agreement
b) Special Technical Provisions
c) Standard Specifications
d) Project Plans
e) General Provisions

Article 10. Non-discrimination.

1. In connection with the performance of work under this Contract, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation, gender identity or expression, or age, including, without limitation, with regard to employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including, without limitation, apprenticeship.
2. The Contractor further agrees to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.
3. Any violation of such provision by the Contractor constitutes a material breach of Contract.
4. If applicable, The Contractor further agrees to comply with the preferential employment requirements set forth in NRS 338.130. If the provisions of NRS 338.130 are not complied with, said non-compliance will render the Agreement void.

Article 11. Veteran's Preference. As provided in NRS 338.130, Contractor agrees as follows:

1. When persons are employed in the performance of this contract or in the construction of this public work, employment preference will be given, the qualifications of the applicants otherwise being equal:

(a) First: To persons who:

(1) Have been honorably discharged from the Army, Navy, Air Force, Marine Corps or Coast Guard of the United States, a reserve component thereof or the National Guard; and
(2) Are citizens of the State of Nevada.

(b) Second: To other citizens of the State of Nevada.

NOTICE TO CONTRACTORS:

If the provisions of NRS 338.130 (dealing with Preferential Employment in Construction of Public Works) are not complied with by the contractor engaged on the public work, THE CONTRACT IS VOID, and any failure or refusal to comply with any of the provisions of this section renders any such contract void. All boards, commissions, officers, agents and employees having the power to enter into contracts for the expenditure of public money on public works such as this contract shall file in the Office of the Labor Commissioner the names and addresses of all contractors holding contracts with the public body, and upon the letting of new contracts, the names and addresses of such new contractors must likewise be filed with the Labor Commissioner. Upon the demand of the Labor Commissioner, contractor shall furnish a list of the names and addresses of all subcontractors employed by the contractor engaged on a public work. Subject to the exceptions contained in NRS 338.130, no money may be paid out of the treasury of NTCD to any person employed on any work mentioned in this section unless there has been compliance

with the provisions of this section. Any contractor engaged on a public work or any other person who violates any of the provisions of this section is guilty of a misdemeanor**.**

Article 12. Prevailing Wage Rates. Contractor agrees that it shall pay the prevailing wage rates in effect at the time of the bid to the persons who are entitled to such wages as determined by the regulations of the U.S. Department of Labor.

Article 13. Indemnification/Insurance. NTCD has established specific indemnification and insurance requirements for agreements/contracts with contractors to help assure that reasonable insurance coverage is maintained. Indemnification and hold harmless clauses are intended to assure that contractors accept and are able to pay for the loss of liability related to their activities. Appendix B, pages 1-5, is included by reference. All conditions and requirements identified in this exhibit shall apply to any work completed under this Agreement.

Article 14. Alternative Dispute Resolution. NRS 338.150 requires that a method of alternate dispute resolution be utilized to resolve any disputes that arise between the public body and the contractor engaged on a public work before initiation of a judicial action. The parties agree to submit any dispute that arises under this contract to a mutually agreeable alternative dispute resolution method prior to the initiation of a judicial proceeding. In addition, it is further agreed that neither party is entitled to an award of attorney's fees from the opposing party as a result of the outcome of an alternative dispute resolution method or a judicial proceeding even if the party is considered to be a prevailing party.

Article 15. Termination. In addition to the other provisions of this Agreement, NTCD has the right to terminate the Agreement without cause at any time upon giving the Contractor seven (7) days notice in writing. In the event the Agreement is terminated by NTCD in accordance with this provision, NTCD agrees to pay Contractor for all work satisfactorily completed and for materials installed prior to the date of termination.

Article 16. Force Majeure. The Contractor shall be entitled to a reasonable extension of time from NTCD for the delays caused by damage to Contractor's and/or NTCD's property caused by fire, lightning, earthquakes, tornadoes, floods and other extreme weather conditions or acts of nature, power failures, riots, acts of civil or military authorities of competent jurisdiction, strikes, lockouts, and any other industrial, civil or public disturbances beyond the control of the Contractor and its subcontractors causing the inability to perform the requirements of this Contract. Any delay other than ones mentioned above shall constitute a breach of Contractor's contractual obligations.

Article 17. Non-Appropriation. All payments under this contract are contingent upon the availability to NTCD of the necessary funds. In accordance with NRS 354.626 and any other applicable provision of law, the financial obligations under this contract between the parties shall not exceed those monies appropriated and approved by NTCD for this contract for the then current fiscal year under the Local Government Budget Act. This contract shall terminate and NTCD's obligations under it shall be extinguished if NTCD fails to appropriate monies.

Nothing in this contract shall be construed to provide Contractor with a right of payment over any other entity. Any funds obligated by NTCD under this contract that are not paid to Contractor shall automatically revert to NTCD's discretionary control upon the completion, termination, or cancellation of the agreement. The NTCD shall not have any obligation to re-award or to provide, in any manner, the unexpended funds to Contractor. Contractor shall have no claim of any sort to the unexpended funds.

Article 18. Laws and Compliance with Laws. This Contract is governed by and shall be interpreted under the laws of the State of Nevada. The Contractor and his agents including subcontractors, employees and persons who provide labor, equipment, materials, supplies or services for the work shall comply with the

requirements of all applicable state and local laws, including, without limitation, any applicable licensing requirements and the requirements for the payment of sales and use taxes on equipment, materials and supplies provided for the work. In addition, the parties to this contract agree and stipulate that the venue for any dispute arising under this Agreement will be in a court of competent jurisdiction in Douglas County, Nevada. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

Article 19. Contractor's Certifications.

Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.
This Agreement will be effective on _____ (which is the Effective Date of the Contract).

| OWNER: | CONTRACTOR: |
|---|---|
| _____ | _____ |
| By: _____ | By: _____ |
| Title: _____ | Title: _____ |
| Attest: _____ | Attest: _____ |
| Title: _____ | Title: _____ |
| Address for giving notices: | Address for giving notices: |
| Nevada Tahoe Conservation District | _____ |

PO Box 915

Zephyr Cove, NV 89448

License No.:

# 00 42 01 PERFORMANCE AND COMPLETION BOND

**FOR PUBLIC WORKS REQUIRED PURSUANT TO NRS CHAPTER 339**

KNOW ALL MEN BY THESE PRESENTS: That _____

_____

(Name and Address [or legal description] of Contractor)

As Principal, hereinafter called "Principal", and _____

_____

(Legal Designation and Address of Surety)

authorized to do business of surety in the State of Nevada, as Surety, hereinafter called "Surety", are held and firmly bound unto the NEVADA TAHOE CONSERVATION DISTRICT, a political subdivision of the State of Nevada, as Obligee, hereinafter called "NTCD", in the amount of _____ Dollars ($_____) said sum being 100% of the contract amount payable by the NTCD under the terms of the Contract referred to below, for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____, entered into contract with NTCD for **"MARLETTE CREEK RESTORATION AND SR28 CROSSING IMPROVEMENT PROJECT"** which contract and its plans and specifications are attached hereto and by reference made a part hereof, as if fully and completely set out in full herein, and is hereinafter referred to as the "Contract"; and

WHEREAS, said Principal is required by the Nevada Revised Statutes 339.025, and all acts amendatory thereof and supplemental thereto, to furnish a bond in connection with said Contract guaranteeing the faithful performance thereof; and

WHEREAS, the Principal under the terms of the Contract agrees to replace and/or repair without cost to the NTCD any damage or imperfections due to faulty labor or materials incorporated in said work, including the landscaping, for a period of one (1) year, from and after the date of completion and acceptance by NTCD of the work contracted to be performed.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH that, if Principal shall well and truly perform and complete in all its parts of the work described in said Contact within the time and in the manner therein specified and shall, for a period of one (1) year from the date of the work contracted to be performed is completed and accepted by NTCD, replace and repair any and all defects arising in said work, whether resulting from defective material or workmanship, and shall also observe, perform, fulfill, and keep all and every covenant and agreement in said Contract on the part of the Principal to be kept, performed and complied with within the time and manner therein specified and shall truly and fully comply with all guarantees required in said Contract, then this obligation shall become null and void, otherwise it shall remain in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees, if requested to do so by the NTCD, to perform and fully complete the work mentioned and described in said Contract, pursuant to the terms, conditions and covenants thereof, if for any cause, said Principal fails or neglects to so perform and fully complete said work; the said Surety further agrees to commence said work to full completion within twenty (20) days after notice thereof from the NTCD, and to fully complete the same with all due diligence and in accordance with the plans and specifications.

Further, Surety for value received, hereby stipulates and agrees that no prepayment or delay in payment and no change, extension, addition or alteration of the work or any provision of the Contract or in the plans, profiles, detailed drawings, specifications, and no extension of time and no forbearance on the part of the NTCD shall operate to release or exonerate the Surety upon this bond, and consent thereto without notice to or consent by Surety is hereby given, and Surety hereby waives provisions of any law relating thereto. It is expressly agreed and understood that this bond is made and executed contemporaneously with the Contract above mentioned, and in consideration of the covenants and agreements therein made and entered into on the part of the NTCD; and that the due execution and delivery hereof is condition precedent to liability on the part of the NTCD, on said above mentioned Contract. It is further understood and agreed that this bond is made in compliance with NRS 339.025 and all acts amendatory thereof and supplemental thereto; and that all benefits therein set forth inure to the benefits of the NTCD.

IN WITNESS WHEREOF, the above bounden Principal and the above bounden Surety have hereunto set their hands and seal, this _____ day of _____, _____.

PRINCIPAL:_____

By:_____
(Note: Signature to be Notarized)

Type:_____

Title:_____

State of Nevada Contractor's License #

_____

Subscribed and sworn to before me this

_____day of _____

_____
Notary Public

Surety:

_____
Name of Surety

By:_____

(Note: Signature to be Notarized)

Type:_____
Attorney-in-Fact

Amount of Bond Premium (to be filled in by the Surety Company):

$_____

Subscribed and sworn before me this _____day of _____, _____.

_____
Notary Public

Surety's Licensed Nevada Agent:

_____

Company Name

_____

_____

Address

_____

Telephone

By:_____

(Note: Signature to be Notarized)

Type:_____

Bond No._____

Subscribed and sworn to before me this _____ day of _____, ____.

_____

Notary Public

# 00 41 04 LABOR AND MATERIALS BOND

## LABOR AND MATERIAL PAYMENT BOND
## FOR PUBLIC WORKS REQUIRED PURSUANT TO NRS CHAPTER 339

KNOW ALL MEN BY THESE PRESENTS: That _____
(Name and Address [or legal description] of Contractor)
as Principal, hereinafter called "Principal", and _____

_____
(Legal Designation and Address of Surety)
authorized to do business of surety in the State of Nevada, as Surety, hereinafter called "Surety", are held and firmly bound unto the NEVADA TAHOE CONSERVATION DISTRICT, a political subdivision of the State of Nevada, as Obligee, hereinafter called "NTCD", for the use and benefit of claimants supplying labor or materials to the Principal or to any of the Principal's subcontractors in the prosecution of the work provided for in the Contract referred to below in the amount of _____
_____Dollars ($_____) said sum being 100% of the contract amount payable by the NTCD under the terms of the Contract referred to below, for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____, entered into contract with NTCD for **"MARLETTE CREEK RESTORATION AND SR28 CROSSING IMPROVEMENT PROJECT"** which contract and its plans and specifications are attached hereto and by reference made a part hereof, as if fully and completely set out in full herein, and is hereinafter referred to as the "Contract".

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH that, if Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, and shall save and hold harmless and indemnify NTCD from and against any and all claims and demands of liens for work performed and materials supplied, then this obligation shall be void; otherwise it shall remain in full force and effect.

THIS BOND is executed for the purpose of complying with the laws of the State of Nevada as contained in Chapter 339 of Nevada Revised Statutes and all acts amendatory thereof and supplemental thereto, and this Bond shall inure to the benefit of any and all persons who perform labor upon or furnish materials to be used in or furnish appliances, teams or power contributing to the work described in said contract, in accordance with provisions of Chapter 339 of Nevada Revised Statutes.

Any suit or action brought on this bond shall be maintained in accordance with provisions as set forth in Chapter 339 of NRS, and all acts amendatory thereof and supplemental to.

IN WITNESS WHEREOF, the above bounden Principal and the above bounden Surety have hereunto set their hands and seal, this _____ day of _____, ____.

PRINCIPAL:_____

By:_____
(Note: Signature to be notarized)

Type:_____

Title:_____

State of Nevada Contractor's License # this

_____

Subscribed and sworn to before me

_____day of _____, ____.

_____
Notary Public

Surety:

_____
Name of Surety

By:_____
(Note: Signature to be Notarized)

Type:_____
Attorney-in-Fact

Amount of Bond Premium (to be filled in by the Surety Company):

$_____

Subscribed and sworn before me this _____day of _____, ____.

_____
Notary Public

Surety's Licensed Nevada Agent:

_____
Company Name

_____

_____
Address

_____
Telephone

By:_____
(Note: Signature to be Notarized)

Type:_____

Bond No._____

Subscribed and sworn to before me this _____ day of _____, ____.

_____
Notary Public

# 00 43 01 WAGE DETERMINATION

Because this project has federal funding, Davis-Bacon Wage Determinations apply. General Wage Determinations apply for highway construction. The determination can be found here https://sam.gov/content/wage-determinations based on February 14, 2025 General Decision Number NV20250026. The determination is attached. Additional information can be found at https://www.dol.gov/agencies/whd/government-contracts/prevailing-wage-resource-book/db-wage-determinations#PHYSICAL-WD

"General Decision Number: NV20250026 02/14/2025

Superseded General Decision Number: NV20240026

State: Nevada

Construction Type: Heavy
HEAVY CONSTRUCTION PROJECTS (including sewer/water construction).

County: Washoe County in Nevada.

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

| | |
|---|---|
| If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022: | . Executive Order 14026 generally applies to the contract.<br>. The contractor must pay all covered workers at least $17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025. |
| If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022: | . Executive Order 13658 generally applies to the contract.<br>. The contractor must pay all covered workers at least $13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025. |

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

| Modification Number | Publication Date |
|---|---|
| 0 | 01/03/2025 |
| 1 | 01/24/2025 |
| 2 | 02/14/2025 |

CARP0971-013 07/01/2024

| | Rates | Fringes |
|---|---|---|
| CARPENTER (Includes Form Work) | $ 44.06 | 17.36 |

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ELEC0401-011 01/01/2025

| | Rates | Fringes |
|---|---|---|
| ELECTRICIAN | $ 48.50 | 23.04 |

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ENGI0003-015 07/01/2024

| | Rates | Fringes |
|---|---|---|
| POWER EQUIPMENT OPERATOR | | |
| GROUP 08 | $ 49.61 | 30.38 |
| GROUP 10 | $ 50.28 | 30.38 |
| GROUP 10A | $ 42.72 | 24.50 |
| GROUP 11 | $ 50.71 | 30.38 |
| GROUP 11A | $ 52.35 | 30.38 |

GROUP 8: Sheepsfoot

GROUP 10: Grade Setter

GROUP 10A: Power Shovels (up to and including one [1] cu. yd.)

GROUP 11: Power Shovels (over one [1] cu. yd. and up to and including seven [7) cu. yds. m.r.c.)

GROUP 11A: Power Shovels (over seven (7] cu. yds. m.r.c.)

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ENGI0003-030 07/01/2024

| | Rates | Fringes |
|---|---|---|
| POWER EQUIPMENT OPERATOR | | |
| (09) Mechanic and Backhoe Loader Combo | $ 49.93 | 30.38 |

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* ENGI0012-014 10/01/2024

| | Rates | Fringes |
|---|---|---|
| POWER EQUIPMENT OPERATOR | | |
| (Crane) | | |
| GROUP 12 | $ 62.59 | 33.85 |
| GROUP 16 | $ 64.01 | 33.85 |
| GROUP 17 | $ 64.51 | 33.85 |
| GROUP 19 | $ 66.54 | 33.85 |
| GROUP 20 | $ 67.15 | 33.85 |
| GROUP 21 | $ 67.76 | 33.85 |
| GROUP 22 | $ 68.52 | 33.85 |
| GROUP 23 | $ 68.98 | 33.85 |

GROUP 12: Crane Operator (up to including 40 ton capacity)

GROUP 16: Crane Operator (over 40 tons up to and including 79 tons)

GROUP 17: Crane Operator (Including 80 tons up to and including 150 tons)

GROUP 19: Crane Operator (over 150 tons up to and including 200 tons)

GROUP 20: Crane Operator (over 200 tons up to and including 250 tons)

GROUP 21: Crane Operator (over 250 tons up to and including 300 tons)

GROUP 22: Crane Operator (over 300 tons up to and including 350 tons)

GROUP 23: Crane Operator (over 350 tons)

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* ENGI0012-021 10/01/2024

| | Rates | Fringes |
|---|---|---|
| POWER EQUIPMENT OPERATOR | | |
| GROUP 1 | $ 57.44 | 33.85 |
| GROUP 4 | $ 60.17 | 33.85 |
| GROUP 8 | $ 60.50 | 33.85 |
| GROUP 12 | $ 60.79 | 33.85 |

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

Group 1: Oiler

Group 4: Screed Operator (Asphalt or Concrete); Rock Wheel Saw/Trencher

Group 8: Compactor (self-propelled); Drilling Machine Operator

Group 12: Vermeer Rock Trencher (or similar type).

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* IRON0416-002 01/01/2025

| | Rates | Fringes |
|---|---|---|
| IRONWORKER, REINFORCING | $ 50.70 | 35.15 |

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IRON0433-002 01/01/2023

| | Rates | Fringes |
|---|---|---|
| IRONWORKER, STRUCTURAL | $ 46.20 | 34.30 |

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* LABO0169-003 10/01/2024

| | Rates | Fringes |
|---|---|---|
| LABORER | | |
| (1) Common or General; Cones/ Barricades/ Barrels-Setter/Mover/Sweeper | $ 33.95 | 16.30 |
| (1A) Flagger | $ 32.08 | 16.30 |
| (3) Asphalt Shoveler, Spreader and Distributor; Concrete Saw (Hand | | |

Held/Walk Behind); Mason
Tender - Cement/Concrete;...$ 34.20 16.30
(4) Asphalt Raker;
Pipelayer.....$ 34.45 16.30

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PLAS0797-009 10/01/2024

| | Rates | Fringes |
|---|---|---|
| CEMENT MASON/CONCRETE FINISHER | $ 40.61 | 13.64 |

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SUNV2014-026 09/08/2016

| | Rates | Fringes |
|---|---|---|
| OPERATOR: Backhoe/Excavator/Trackhoe | $ 32.26 | 17.65 |
| OPERATOR: Bobcat/Skid Steer/Skid Loader | $ 34.97 | 0.00 |
| OPERATOR: Broom/Sweeper | $ 36.66 | 12.22 |
| OPERATOR: Grader/Blade | $ 26.49 | 7.78 |
| OPERATOR: Loader | $ 33.53 | 17.10 |
| OPERATOR: Paver (Asphalt, Aggregate, and Concrete) | $ 29.57 | 0.00 |
| OPERATOR: Roller | $ 33.69 | 12.22 |
| TRUCK DRIVER: Dump Truck | $ 22.28 | 0.00 |

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

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The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates
in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

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WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor

200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION"

**APPENDIX A**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations**: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. **Non-discrimination**: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment**: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. **Information and Reports**: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance**: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

    a. withholding payments to the contractor under the contract until the contractor complies; and/or
    b. cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions**: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or

the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

**APPENDIX B**

**CONSTRUCTION/INDEMNIFICATION AND INSURANCE SPECIFICATIONS FOR KAHLE DRIVE COMPLETE STREET PROJECT, STATELINE, DOUGLAS COUNTY, NEVADA**

## INTRODUCTION

NTCD has established specific indemnification, insurance, and safety requirements for public works construction contracts to help assure that reasonable insurance coverage is purchased and safe working conditions are maintained. Indemnification and hold harmless clauses are intended to assure that CONTRACTOR accepts and is able to pay for the loss or liability related to its activities.

BIDDERS' ATTENTION IS DIRECTED TO THE INSURANCE REQUIREMENTS BELOW. IT IS HIGHLY RECOMMENDED THAT BIDDERS CONFER WITH THEIR RESPECTIVE INSURANCE CARRIERS OR BROKERS TO DETERMINE IN ADVANCE OF BID SUBMISSION THE AVAILABILITY OF INSURANCE CERTIFICATES AND ENDORSEMENTS AS PRESCRIBED AND PROVIDED HEREIN. IF ANY APPARENT LOW BIDDER FAILS TO COMPLY STRICTLY WITH THE INSURANCE REQUIREMENTS, THAT BIDDER MAY BE DISQUALIFIED FROM AWARD OF THE CONTRACT.

## INDEMNIFICATION AGREEMENT

CONTRACTOR agrees to hold harmless, indemnify, and defend NTCD, its officers, agents, employees, and volunteers from any loss or liability, financial or otherwise resulting from any claim, demand, suit, action, or cause of action based on bodily injury including death or property damage, including damage to CONTRACTOR'S property or injury to CONTRACTOR'S employee, caused by any action, either direct or passive, the omission, failure to act, or negligence on the part of CONTRACTOR, its employees, agents, representatives, or Subcontractors arising out of the performance of work under this Agreement by CONTRACTOR, or by others under the direction or supervision of CONTRACTOR.

CONTRACTOR must either defend NTCD or, upon determination that the work performed by CONTRACTOR was negligent in any manner or that CONTRACTOR failed to perform any duty set forth in this Agreement, pay NTCD'S costs related to the investigation and defense of any claim, demand, action, or cause of action.

If NTCD's personnel are involved in defending such actions, CONTRACTOR shall reimburse NTCD for the time spent by such personnel at the actual cost incurred by NTCD for such services.

In determining the nature of the claim against NTCD, the incident underlying the claim shall determine the nature of the claim, notwithstanding the form of the allegations against NTCD.

## GENERAL REQUIREMENTS

CONTRACTOR shall purchase Industrial Insurance, General Liability, Automobile Liability, Property Insurance and Professional Insurance as described below. The cost of such insurance shall be included in the CONTRACTOR'S bid.

## INDUSTRIAL INSURANCE

It is understood and agreed that there shall be no Industrial Insurance coverage provided for CONTRACTOR or any Subcontractor by NTCD. CONTRACTOR agrees, as a precondition to the performance of any work under

this Agreement and as a precondition to any obligation of the NTCD to make any payment under this Agreement to provide NTCD with a certificate issued by an insurer in accordance with NRS 616B.627 and with certificates of an insurer showing coverage pursuant to NRS 617.210 for CONTRACTOR and all subcontractors.

If CONTRACTOR or Subcontractor is unlicensed and is a sole proprietor, coverage for the sole proprietor must be purchased and evidence of coverage must appear on the Certificate of Insurance. Such requirement may be waived for a sole proprietor who does not use the services of any employees, subcontractors, or independent contractors and completes an Affirmation of Compliance pursuant to NRS 616B.627(2).

It is further understood and agreed by and between NTCD and CONTRACTOR that CONTRACTOR shall procure, pay for, and maintain the above mentioned industrial insurance coverage at CONTRACTOR'S sole cost and expense.

Should CONTRACTOR be self-funded for Industrial Insurance, CONTRACTOR shall so notify NTCD in writing prior to the signing of this Agreement. NTCD reserves the right to approve said retentions, and may request additional documentation, financial or otherwise, for review prior to the signing of this Agreement.

**MINIMUM LIMITS OF INSURANCE**

CONTRACTOR shall maintain limits no less than:

1. General Liability: $1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, the general aggregate limit shall be increased to equal twice the required occurrence limit or revised to apply separately to each project or location.

2. Automobile Liability: $1,000,000 combined single limit per accident for bodily injury and property damage covering “Any Auto”. No aggregate limits may apply.

3. Professional Errors and Omissions as required by Risk Manager, $0.

The General Contractor shall provide, at its sole cost and expense, maintaining during the entire term of this Agreement, a policy of commercial general liability insurance naming DOUGLAS COUNTY and NEVADA TAHOE CONSERVATION DISTRICT as an additional insured covering the premises (including the land, equipment, controls and other facilities) insuring against the risks of death, bodily injury, property damage and personal injury liability arising out of or in connection with the use of the roads on the Premises, including roads used for traffic diversion purposes in connection with the Project, for the purposes authorized by this Agreement. Such insurance shall provide not less than the following limits: One Million Dollars ($1,000,000.00) with respect to bodily injury or death to any one person; Two Million Dollars ($2,000,000.00) with respect to bodily injury or death arising out of any one (1) occurrence; and One Million Dollars ($1,000,000.00) with respect to property damage or other loss arising out of any one (1) occurrence. The insurance required under this Agreement shall (a) be issued by insurance companies authorized to do business in the State of Nevada, with classification of at least A and a financial rating of XI or better as rated in the most current issue of "Best's Key Rating Guide," and (b) contain an endorsement requiring thirty (30) days' written notice from the insurance company to all additional insureds before cancellation or change in the coverage, scope, or amount of the policy.

**DEDUCTIBLES AND SELF-INSURED RETENTIONS**

Any deductibles or self-insured retentions must be declared to and approved by the NTCD. NTCD reserves the right to request additional documentation, financial or otherwise, prior to giving its approval of the deductibles and self-insured retention and prior to executing the underlying agreement. Any changes to the deductibles or self-insured retentions made during the term of this Agreement or during the term of any policy, must be approved by the NTCD prior to the change taking effect.

**OTHER INSURANCE PROVISIONS**

The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverages

    a. NTCD, its officers, agents, employees, and volunteers are to be included as insureds as respects damages and defense arising from: activities performed by or on behalf of CONTRACTOR, including the insured's general supervision of CONTRACTOR; products and completed operations of CONTRACTOR; premises owned, occupied, or used by CONTRACTOR; or automobiles owned, leased, hired, or borrowed by the CONTRACTOR. The coverage shall contain no special limitations on the scope of protection afforded to the additional insureds nor shall the rights of the additional insureds be affected by the insured's duties after an accident or loss.

    b. CONTRACTOR'S insurance coverage shall be primary insurance as respects NTCD, its officers, agents, employees, and volunteers. Any insurance or self-insurance maintained by NTCD, its officers, employees, or volunteers shall be excess of CONTRACTOR'S insurance and shall not contribute with it in any way.

    c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to NTCD, its officers, agents, employees, or volunteers.

    d. CONTRACTOR'S insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

    e. CONTRACTOR'S insurance shall issue a Waiver of Subrogation endorsement.

2. Property Coverages

    CONTRACTOR shall provide builders risk insurance on an "All Risk" basis on a policy form satisfactory to NTCD. The limit of coverage will be the amount necessary to cover the bid value of any structures in the Contract or other value determined by NTCD. CONTRACTOR shall provide boiler and machinery insurance coverage or other forms of property insurance as appropriate for the project. If the project is in a flood plain, NTCD reserves the right to require flood coverage at CONTRACTOR'S expense. Losses paid under any property insurance policy or policies shall be paid directly to NTCD by the insurer(s).

3. All Coverages

    Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled, or non-renewed by either CONTRACTOR or by the insurer, reduced in

coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to NTCD except for nonpayment of premium.

**ACCEPTABILITY OF INSURERS**

Insurance is to be placed with insurers with a Best's rating of no less than A-: VII. NTCD, with the approval of the Risk Manager, may accept coverage with carriers having lower Best's ratings upon review of financial information concerning CONTRACTOR and insurance carrier. NTCD reserves the right to require that CONTRACTOR'S insurer be a licensed and admitted insurer in the State of Nevada, or on the Insurance Commissioner's approved but not admitted list.

**VERIFICATION OF COVERAGE**

CONTRACTOR shall furnish NTCD with certificates of insurance and with original endorsements affecting coverage required by this exhibit. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. ***All certificates and endorsements are to be addressed to the NTCD and be received and approved by NTCD before work commences.*** NTCD reserves the right to require complete certified copies of all required insurance policies at any time.

**SUBCONTRACTORS**

CONTRACTOR shall include all Subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each Subcontractor. All coverages for Subcontractors shall be subject to all of the requirements stated herein.

**MISCELLANEOUS CONDITIONS**

1. CONTRACTOR shall be responsible for and remedy all damage or loss to any property, including property of NTCD, caused in whole or in part by CONTRACTOR, any Subcontractor, or anyone employed, directed, or supervised by CONTRACTOR.

2. Nothing herein contained shall be construed as limiting in any way the extent to which CONTRACTOR may be held responsible for payment of damages to persons or property resulting from its operations or the operations of any Subcontractors under it.

3. In addition to any other remedies NTCD may have if CONTRACTOR fails to provide or maintain any insurance policies or policy endorsements to the extent and within the time herein required, NTCD may, at its sole option:

    a. Purchase such insurance to cover any risk for which NTCD may be liable through the operations of CONTRACTOR under this Agreement and deduct or retain the amount of the premiums for such insurance from any sums due under the Agreement;

    b. Order CONTRACTOR to stop work under this Agreement and/or withhold any payments which become due CONTRACTOR here under until CONTRACTOR demonstrates compliance with the requirements hereof; or,

    c. Terminate the Agreement.

**SAFETY PROGRAM**

CONTRACTOR shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work.

CONTRACTOR shall take all necessary precautions for the safety of, and shall provide all necessary protection to prevent damage, injury, or loss to:

1. All employees on the work site and all other persons who may be affected thereby.

2. All the work, materials, and equipment to be incorporated therein, whether in storage on or off the site.

3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

CONTRACTOR shall comply with all applicable laws, ordinances, rules, regulations, and others of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss. He shall erect and maintain, as required by existing conditions and progress on the work, all necessary safeguards for safety and protection, including posting danger signs, other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent utilities. CONTRACTOR shall comply with OSHA'S Hazard Communication Standards.
CONTRACTOR shall designate a responsible member of its organization at the site whose duty shall be the prevention of accidents. This person shall be CONTRACTOR'S superintendent unless otherwise designated in writing by CONTRACTOR to the Owner and the Engineer.

## APPENDIX C

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

**Pertinent Non-Discrimination Authorities**:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

# APPENDIX D

# SPECIAL TECHNICAL PROVISIONS

# SPECIAL TECHNICAL PROVISIONS

## FOR

## MARLETTE CREEK RESTORATION AND SR28 CROSSING IMPROVEMENT PROJECT

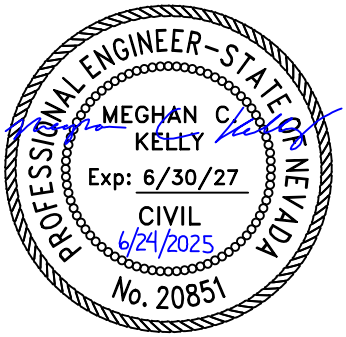
## NEVADA TAHOE CONSERVATION DISTRICT

## WASHOE COUNTY, NEVADA

**FOR USE WITH:**

**Standard Specifications, as referred to in these Special Technical Provisions, are the Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP-24)," current edition. NDOT Standard Specifications for Road and Bridge Construction, current edition (NDOT Standard Specifications). These Special Technical Provisions are supplemental to the Standard Specifications.**

**PREPARED BY:**




**Nevada Tahoe Conservation District**
**400 Dorla Court**
**Box 915**
**Zephyr Cove, NV 89448**

**Meghan Kelly, P.E.**
**NV P.E. #: 20851**

**Date: July 2025**

## Contents

## SECTION 100 – GENERAL

**101.01 Description**
The work described herein shall conform to the Contract Documents, Project Plans, Standard Specifications, these Special Technical Provisions, and Project Permits. Standard Specifications, as referred to in these Special Technical Provisions, are the Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP-24) https://highways.dot.gov/federal-lands/specs/fp-24.pdf .

Where applicable in the Nevada Department of Transportation (NDOT) right of way, the NDOT Standard Specifications for Road and Bridge Construction, current edition (NDOT Standard Specifications) https://www.dot.nv.gov/home/showpublisheddocument/6916/636257041112930000.

These Special Technical Provisions are supplemental to the Standard Specifications. In case of conflict between the Standard Specifications and these Special Technical Provisions, the Special Technical Provisions shall govern, take precedence over, and be used in lieu of such conflicting portions.

## SECTION 102 – CONTRACTOR QUALIFICATIONS

**102.01 Description**
In addition to any bidder qualifications noted elsewhere in the Contract Documents, Project Plans, Standard Specifications, and these Special Technical Provisions, each bidder shall attach sufficient documentation to the bid forms to clearly demonstrate his/her ability to meet the minimum experience qualifications stated in this section. The following items shall be included in the bid submittal:

1. Project descriptions of similar projects to the Marlette Creek Restoration Project including:
    a. Location of projects
    b. Dates project was initiated and completed by the Contractor
    c. Description of size of restoration
    d. Total contract costs
    e. Client/agency contact in responsible charge (owner of the work)
2. Other references demonstrating Contractor qualifications on similar projects. These references shall only include regulatory, funding and/or local agency representatives or licensed Professional Engineers working on similar projects within the Lake Tahoe Basin.
3. Contractor's license number, classification, & status.

The above items shall clearly demonstrate the Contractor's qualifications to perform the work associated with the Marlette Creek Restoration Project and past similar experience on other projects. The experience to be demonstrated above is required to meet the following minimum requirements:

A. The Contractor and his/her designated Foreman is required to have successfully performed a minimum of two (2) projects, within the past ten (10) years, which included work components of a similar scope and nature (within a US Army Corps of Engineer regulated wetland area or a TRPA Stream Environment Zone) as to that which is indicated herein consisting of minimum project total costs of $750,000 and contract times exceeding 15 days.

B. The Contractor is required to have successfully performed and completed a minimum of one (1) project, within the past five (5) years, which required dewatering or diversion components similar in scope and nature as to that which is indicated herein.

Failure of the Contractor to submit the information required or to demonstrate experience as required in this section shall warrant the Contractor's bid submittal incomplete. The determination of whether the Contractor meets the qualifications is at the sole discretion of the Nevada Tahoe Conservation District.

**102.02 Measurement and Payment**
There will be no compensation for providing the required bid documents and support materials for a complete bid package for this project. Incomplete bid packages or bid packages received after the submittal deadline will not be considered.

## SECTION 110 – ORDER OF WORK

**110.01 Description**
The construction of this project shall conform to the Contract Documents, Plans, Standard Specifications, and these Special Technical Provisions. Prior to commencing work, the Contractor shall submit to the Engineer a sequence and schedule of work for review and acceptance in accordance with the Standard Specifications and these Special Technical Provisions. The schedule shall include all work necessary for a full and complete project as shown on the Bid Set Design Plans and described in these Special Technical Provisions. The majority of the project should be completed in 2025 prior to the TRPA grading deadline of October 15th, however, if obtaining the culvert extension is not possible, a portion of the project could be completed in 2026. Marlette Creek is expected to have low flows for the remainder of 2025 and 2026 due to construction at the Marlette Lake Dam. Information on creek flow can be found at https://waterdata.usgs.gov/monitoring-location/USGS-10336715/#dataTypeId=continuous-00060-0&period=P7D

The project requires coordination with several different public entities US Forest Service Lake Tahoe Basin Management Unit (USFS), Nevada Department of Transportation (NDOT), the Nevada Division of Environmental Protection (NDEP), the US Army Corps of Engineers (USACE), the Nevada Tahoe Conservation District, and the Tahoe Regional Planning Agency). The Nevada Tahoe Conservation District will assist the contractor in coordinating with all entities. Project permits from NDEP and the USACE are not expected to be received until August 15, 2025 and therefore the project cannot start until August 18, 2025. The Contractor shall be solely responsible for coordinating with all contractors working in the area whether listed in these Special Technical Provisions or not. Pertinent contacts will be provided by NTCD prior to construction.

The order of work shall be as follows:

1. Verification of all underground utilities within the project area.
2. Installation of Temporary Traffic Control Measures.
3. Coordination with NTCD for wildlife surveys and tree removal.
4. Coordination with NTCD and USFS for fish rescue and fish exclusion net installation.
5. Construction of all temporary erosion control measures as shown on the project plans and as approved by the Engineer and NDEP. If tree removal is done in the vicinity
6. Site clearing and grubbing.
7. Installation of all dewatering elements as necessary.

8. Construction of project as shown on the project plans and as described in these Special Technical Provisions. Contractor may select sequence for construction.
9. Restoration of entire project site:
    a. Restoration/revegetation of all disturbed areas.
    b. Removal of all dewatering equipment.
    c. Road sweeping.
    d. Restoration of staging, access, and dewatering areas as needed.
    e. Removal of temporary BMPs with approval of Engineer.
10. Pre-Final site walk with the Engineer, Contractor, US Forest Service, NDOT, TRPA, and NDEP.
    a. Development of project punchlist (by Engineer).
11. Completion of punchlist items.
12. Final site walk with Engineer and Contractor.

The Contractor may submit a revised order of work to the Engineer for review and approval. In the event the Engineer does not accept the Contractor's proposed order of work, the above order of work shall hold for the contract.

The Contractor will be responsible for meeting all the requirements of all the regulations and requirements set forth by the US Forest Service, NDEP, USACE, and TRPA. In the event fines are levied by any of these agencies, the Contractor shall be solely responsible for all costs associated with these fines. In the event the project receives a stop work order by any entity, the Contractor will not be granted any additional working days. The working days during which no work is performed will be counted as contract working days, even though the Contractor is unable to work due to the stop work order.

The Contractor shall submit a construction schedule in accordance with the provisions of this section, these Special Technical Provisions and the Standard Specifications for review and approval by the Engineer. Critical path items in this construction schedule are items that involve coordination with the US Forest Service, including wildlife surveys and fish salvage. The schedule must dictate the exact timing so that these resource protection measures can be implemented.

**110.02 Measurement and Payment**
Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for all work associated with all work involved in provisions of this section, complete in place as shown on the Plans, as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, shall be considered as included in prices paid for the various contract items of work involved; no additional compensation will be allowed.

## SECTION 120 – PROJECT PERMITS

**120.01 Description**
This project is located within Washoe County, Nevada and the Lake Tahoe Basin and is on US Forest Service, LTBMU lands and Nevada Department of Transportation Right-of-Way and is regulated by the US Forest Service, NDOT, the Tahoe Regional Planning Agency (TRPA), and the Nevada Department of Environmental Protection (NDEP). Furthermore, the project is constructing improvements in a US Army Corps of Engineers jurisdictional wetland, which requires the issuance of a nationwide permit from the US Army Corps of Engineers (USACE) as well as 404/401 certification from the USACE and NDEP and a Temporary Working in Waterways Permit from NDEP.

All project permits have not been received for the project at the time of Bid, however, the plans and specifications outline the expected permit requirements as their development occurred under agency review. Project permits are expected to be received no later than August 15, 2025. The contractor will be responsible for all permit requirements upon receipt of the permits for the project and no additional compensation shall be allowed for. The project permit(s) will have specific requirements covering work to be performed under this contract. The Contractor shall meet the permit(s) requirements for grading season restrictions, stormwater discharges, Best Management Practices (BMPs), selection of staging and storage areas, dewatering and diversion practices, revegetation and restoration requirements, and all other agency approval conditions. The Contractor shall note that the project is located in sensitive lands (TRPA Stream Environment Zone and US Army Corp of Engineers Wetlands) and thus require special care during construction. The contractor shall also take special note of the US Forest Service Resource Protection Measures document located in Appendix C of these Special Technical Provisions.

The Contractor shall maintain a copy of all permit(s) at the construction site and shall make the permit(s) available to operating personnel during construction activities; also upon request these permit(s) must be made available for public inspection. NTCD will provide the permits to the Contractor.

The Contractor shall maintain a set of stamped plans and special provisions at the construction site and shall make them available to operating personnel during construction activities; upon request, plans and special provisions must be made available for public inspection.

It shall be the Contractor's responsibility to completely inform him or herself of the conditions of all Project Permit(s) and conduct construction operations accordingly. Any requested change to an agency's permit conditions of approval, proposed by the Contractor, shall be submitted to the Engineer for transmittal to USACE, NDEP, NDOT or USFS, or other agency for their approval. The Contractor shall be responsible for adhering to the requirements of the project permits relating to this project. Should conflicts arise between the Standard Specifications and the project permits, the project permits shall take precedence over the Standard Specifications.

The **Contractor is responsible for coordinating the pre-construction meeting with NTCD, USFS, TRPA, and NDEP** to allow for review of the project site and determination of the adequacy of temporary erosion control measures and BMPs deployed by the Contractor. The Contractor shall follow the requests of the reviewing environmental agencies as necessary to bring the construction site temporary erosion control devices and BMPs into compliance with the permit(s) requirements, regulations, and other provisions of these Special Technical Provisions, and the Project Permits. The Contractor shall maintain all temporary erosion control devices and BMPs until all work is complete and the project site is stabilized per acceptance of the Engineer and all relevant agencies in review of the project site at the "Final Walk Through". The Contractor can remove temporary erosion control devices and BMPs only upon approval by the Engineer, NDEP, and the USFS to do such. Attention is directed to the revegetation requirements found elsewhere in these Special Technical Provisions.

The Contractor shall comply with all noxious weed requirements per the United States Forest Service (USFS) and other regulatory agencies. These requirements include but are not limited to the following:

- All tools, equipment and vehicles used for project implementation are required to be weed-free.
- All tools, equipment and vehicles will be cleaned of all attached mud, dirt, and plant parts. This will be done at a vehicle washing station or steam cleaning facility (power or high pressure cleaning) before the equipment and vehicles enter the project area, and before vehicles enter the Lake Tahoe Basin (if they originate from outside the Basin).

- All soil, fill, gravel, rock, mulch, seed, organic matter or other imported materials are required to be weed-free. Use onsite soils, gravel, rock, or organic matter when possible. Otherwise, obtain materials from pits, quarries, nurseries, and other sources that are certified or have been determined to be weed-free by the noxious weed coordinator of the USFS Lake Tahoe Basin Management Unit.
- Minimize the amount of ground and vegetation disturbance in the construction areas. Reestablish vegetation on all disturbed bare ground to minimize weed establishment and infestation.
- Use weed-free mulches, and seed sources. Salvage topsoil from project area for use in onsite revegetation, unless contaminated with noxious weeds. All activates that require seeding or planting must utilize locally collected native seed sources when possible. Plant and seed material should be collected from or near the project area, from within the same watershed, and at a similar elevation when possible. Persistent non-native such as Phleum pretense (cultivated timothy), Dactylis glomerata (orchard grass), or Lolium spp. (ryegrass) will not be used. This requirement is consistent with the USFS Region 5 policy that directs the use of native plant material for revegetation and restoration for maintaining "the overall national goal of conserving the biodiversity, health, productivity, and sustainable use of forest, rangeland, and aquatic ecosystems." Seed mixes should be accepted by the Revegetation Specialist.
- Staging areas for equipment, materials, or crews shall not be sited in weed infested areas.

The project is located within a sensitive land capability class area (1a SEZ and LC 2) as classified by the TRPA. The Contractor will be required to use extreme caution in all activities associated with the project. The Contractor will be required to meet all of the requirements shown on the Plans, as described in the Project Permit(s) and these Special Technical Provisions. The Contractor is restricted from parking equipment, and storing materials within the Project limits, except as shown on the Plans or as directed by the Engineer. Soil and other materials shall not be stored, stockpiled, or otherwise placed within areas or on a surface that is not designated for such treatment on the drawings. Refueling of equipment will not be allowed within the floodplain project work areas or other SEZ areas.

The Contractor is further required to only use "low impact equipment" for this project. No equipment having a ground pressure that will disturb and/or compact the ground (generally ground pressures less than 25 psi) will be allowed off of paved areas, or designated temporary truck haul routes under any circumstance. All equipment on the project site, (off paved areas or designated truck haul routes), shall meet this low pressure requirement. TRPA prefers the use of "rubber track" equipment as low impact equipment and the Contractor is encouraged to use "rubber track" equipment in sensitive land capability areas. The Contractor shall provide detailed information, (manufacture's data brochure, or other product specific materials), to the Engineer for review and acceptance prior to any equipment being mobilized to the project site and placed in the work.

The Contractor shall meet all of the requirements of the project permits as issued by the following permitting agencies, and any provisions for rights-of-entries issued by the US Forest Service:

- US Army Corp of Engineers – *NWP#27*
- US Army Corp of Engineers – 404
- Nevada Department of Environmental Protection – 401
- Categorical Exclusion from US Forest Service and associated Resource Protection Measures
- Tahoe Regional Planning Agency Environmental Improvement Project

**120.02 Measurement and Payment**
Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for all work associated with performing all the work involved in provisions of this section, complete in place as shown on the Project Plans, as specified in the Contract Documents, Project Permits(s), Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, shall be considered as included in prices paid for the various contract items of work involved; and no additional compensation will be allowed for.

## SECTION 130 – MOBILIZATION & DEMOBILIZATION

**130.01 Mobilization**
This item shall consist of mobilization of the Contractor's forces which shall include obtaining all bonds, insurance, and permits; purchasing, transportation, setup, staging and storage of equipment and materials; establishing a field office at the project site; plus furnishing all labor, materials, tools, equipment, and incidentals required for performance and completion of the work as shown on the Project Plans, and specified in the Contract Documents, Project Permit(s), Standard Specifications, these Special Technical Provisions, and as directed by the Engineer. Mobilization shall also include but not be limited to the following items:

- Provide on-site sanitary facilities;
- Post all Occupational Safety and Health Administration (OSHA) required notices;
- Post all prevailing wage requirements;
- Prepare and transmit all submittals as noted on the Plans, and as specified in the Contract Documents, Standard Specifications, and these Special Technical Provisions;
- Wash and clean all tools and equipment prior bringing on site, as specified in the Project Permits, Contract Documents, Standard Specifications, these Special Technical Provisions, and as required by TRPA and the US Forest Service.

**130.02 Demobilization**
Demobilization shall consist of the removal of all materials, equipment, signage, temporary pollution control materials, trash, debris, and all other items imported to or generated on-site as a result of the work completed by the Contractor and his/her operations. Furthermore, demobilization shall include cleaning the existing drainage inlets, sediment caps, pipes, and culverts within the project boundary. Furthermore, demobilization shall include repairing all pavements, walkways, infrastructure, signage, landscape, roads, trails, or other public or private facilities damaged by construction activities to their pre-construction conditions using comparable materials as accepted and directed by the Engineer. All disturbed areas shall be returned, as nearly as possible, to the lines and grades which existed prior to construction except where modified as part of the work so designated on the Plans. Attention is directed to Appendix C Resource Protection Measures.

At the conclusion of work, final acceptance of the Project improvements must be in the form of a written “Notice of Completion.”

**130.03 Project Sign**
Mobilization shall include erection of one project sign to be provided by NTCD. The project sign shall be constructed in accordance with details provided within the Project Plans and located as directed by the

Engineer. The project sign shall be erected within five (5) working days of initial mobilization. Maintenance of the project sign is the Contractor's responsibility until the sign is removed by the Contractor at the end of the construction contract. For this project, one (1) project sign will be erected.

**130.04 Record Drawings**

The Contractor shall keep accurate records on a set of project black line prints (22 inches x 34 inches) of all deviations from the Project plans including additions, deletions to the work, all changes in location, elevation, and character of the work not otherwise shown or noted on the Project Plans. NTCD will furnish up to six (6) sets of full size black line prints for use at no cost to the Contractor.

Record drawings plans shall be provided to the Engineer for acceptance within one (1) calendar month after project completion as defined by the Engineer. Release of retention monies will not occur prior to submittal and acceptance of the final record drawings, which shall be a comprehensive set of Record Drawings detailing all aspects of the Project. One (1) set of full sized (22x34) hard copy record drawing shall be provided with changes to the original Contract work shown in red color, including revision clouds. All redline changes and details to be shown on the record drawings shall include, but not be limited to, difference in quantities of the original plans vs. actual installation (as appropriate), modifications to the location and elevations of public utility and storm drainage facilities, any utility relocations, any signage or traffic control devices, and any other modifications, additions or adjustments to any other facilities not shown or as modified on the Project Plans.

Record drawings plans shall be signed and dated by the Contractor or the sub-contractor that actually constructed the facility. In addition, company names of the Contractor and sub-contractors shall be added to the Title Sheet of the record drawings. Should the Contractor not provide this information to the Engineer in the time specified in this section, or to the acceptance of the Engineer (record drawings do not note all changes to the project) the Engineer will not accept the record drawings, retention shall not be released on the project, the record plans will be returned to the Contractor and the Contractor shall resubmit the record drawings to meet the requirements of this section to the acceptance of the Engineer.

**130.05 Measurement and Payment**

**"Mobilization and Demobilization"**, as described above shall be considered one bid item and paid for on a **lump sum** basis. Project Sign, as described above shall be considered as included with Mobilization and Demobilization and no additional compensation shall be allowed for. Record Drawings, as described above shall be considered as included with **"Mobilization and Demobilization"** and no additional compensation shall be allowed for. **"Mobilization and Demobilization"** shall be measured on a lump sum basis, completed and accepted by the Engineer as conforming to all the requirements in the complete work.

The contract price paid for **"Mobilization and Demobilization"** shall include full compensation for mobilizing the Contractor's forces which shall include but not be limited to: bonds, insurance, permits, record drawings, purchasing, transporting equipment, setup, temporary power source and installation, project signs, establishment of a field office, sanitation facilities, and furnishing all labor, materials, tools, equipment, and incidentals required for performance and completion of the work; including full compensation for operations required to demobilize the Contractor's forces which shall include but not be limited to: the removal of all equipment, materials, debris, project signs, field office, sanitation

facilities, temporary BMPs, tree protection fencing, and project clean-up; for the contract lump sum price bid, as shown on the Plans, in accordance with the Contract Documents, Standard Specifications, these Special Technical Provisions, project permit(s), and to the satisfaction of the Engineer.

Partial payments paid for **"Mobilization and Demobilization"** shall be made as follows:

- When 5% of the total original contract amount is earned from other bid items, 50% of the amount bid for mobilization/demobilization will be paid.
- When 10% of the total original contract amount is earned from other bid items, 100% of the amount bid for mobilization will be paid.

Full compensation for conforming to the provisions of this Section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

## SECTION 140 – STAGING AND STORAGE

**140.01 Staging and Storage Areas**

The staging and storage areas as identified on the Project Plans are allowed for use by the Contractor in accordance with the Contract Documents, Project Permit(s), Standard Specifications, and these Special Technical Provisions. These staging/storage areas are owned by the US Forest Service and are considered public lands and shall be maintained at all times in a clean and safe environment, including any provisions for rights-of-entries issued by the US Forest Service or US Department of Agriculture. The Contractors use of the designated staging/storage areas shall be limited to and/or controlled by the restrictions as noted on the Project Plans, Project Permits, and elsewhere in these Special Technical Provisions.

If the Contractor wishes to make use of additional areas, for staging/storage activities, not identified on the Plans, it will be the Contractor's sole responsibility to secure use of these areas with agreements with the individual property owners; and file a copy of said authorization with the Engineer. The Contractor shall further be responsible for establishing all necessary and required temporary erosion control protections. The Contractor will be responsible for bearing all costs with securing these areas, and all efforts associated with the approvals, setup, maintenance, decommissioning and restoration, with no additional compensation allowed for. The Contractor shall be responsible for appropriate security and safety measures at all staging/storage areas to protect property and the public.

Set-up, use, and restoration of all staging/storage areas requires the Contractor to protect all existing facilities, equipment, vegetation, and surface features (such as, but not limited to, fences, posts, signs, boulders, landscaping, slopes, etc.) in place. Special care will need to be given to some cultural sites that will be flagged in the field prior to construction. Should the Contractor's operations damage any of these items the Contractor shall replace, in kind, the damaged or destroyed item. The damage or destruction of any item will be determined by the Engineer during the course of construction or at the final punchlist development. In the event the Contractor needs to relocate any item (boulder, fence, etc.) the Contractor shall replace the item to its original location. If the relocated item is damaged, as determined by the Engineer, the Contractor will be required to replace the damaged item with an in-kind replacement. No additional compensation will be allowed for any relocation, or replacement of damaged items, this will be at the sole cost to the Contractor.

The Contractor shall not proceed with any construction until truck haul routes and temporary haul roads have been identified and accepted to the satisfaction of the Engineer, NTCD and the US Forest Service. **The Contractor shall submit a electronic and hard copy of a proposed truck haul route plan, along with the proposed project construction schedule and traffic control plan, to the Engineer for review and acceptance at least seven (7) calendar days prior to the scheduled Pre-Construction Meeting.** Any days lost due to the lack of an accepted truck haul plan will be charged against the Contractor's allowable work days. The Contractor's truck haul route plan shall include, but not be limited to, the following:

- Proposed construction zone;
- Proposed storage areas;
- Location of flaggers (to control truck access, where applicable);
- Construction phasing (including phasing of intersection construction and detours, if any); and,
- Proposed truck route (including the location of other construction projects which impact, or may be impacted by, the proposed haul route.)

All staging/storage areas shall comply with the US Forest Service's and TRPA's requirements for BMPs while storing or stockpiling materials. The Contractor shall be responsible for locating staging/storage areas and will need to install all temporary erosion controls and BMPs and maintain them at all times during construction and until project closeout. The limits of the staging/storage areas shall be reviewed and accepted by the Engineer, NTCD, and the US Forest Service prior to use.

At the completion of the work or when no longer required for use, all construction staging/storage areas shall be cleared of all equipment, tools, materials, trash, debris, etc to produce a clean area and returned, as nearly as possible, to the lines and grades which existed prior to construction.

The restored staging/storage areas, if areas exist as an unpaved condition, shall be treated with the final Revegetation Treatment Type as shown on the Plans (if any areas for Staging/Storage are used and not shown on the Revegetation Plans, the Contractor shall treat the area with Revegetation Treatment Type as directed by the Engineer) and as described in these Special Technical Provisions. For storage and staging areas in paved areas, the areas shall be swept clean and returned to the existing condition, prior to use. The Engineer will inspect the paved areas, and if damage has occurred, whether by fault of the contractor's operations or not, the contractor will be required to make remedial action, including complete pavement restoration. No additional compensation shall be allowed for any remedial restoration work of paved areas, including complete replacement of the pavement areas.

**140.02 Measurement and Payment**

**"Staging and Storage"** shall be measured on a **lump sum** basis, accepted by the Engineer as conforming to all the requirements in the complete work. The contract price paid for "**Staging and Storage"** shall include set-up of all **"Staging and Storage"** areas and installation of any applicable temporary erosion control measures and BMPs (except where otherwise paid for) and furnishing all labor, materials, tools, equipment, and incidentals required for performance and completion of the work; including full compensation for operations required to remove and dispose of all materials, clean-up, and restore the site to its pre-construction condition; for the contract lump sum price bid, as shown on the Plans, in accordance with the Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and to the satisfaction of the Engineer.

The schedule for payment for **"Staging and Storage"** shall be in direct proportion to the percentage of work completed; i.e. if 20% of the project is completed, the Contractor may request payment for 20% of the lump sum total of the bid item for **"Staging and Storage"** . Measurement of the percentage of work completed shall be based on the percentage of work billed by the Contractor based on the total dollar amount of the contract bid price. Increases in the total contract price for any reason do not justify an increase in the lump sum price paid for the **"Staging and Storage"** bid item.

Full compensation for conforming to the provisions of this Section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

## SECTION 145 – SUBMITTALS

**145.01 General**

Where required by the Contract Documents, project permit(s), Project Plans, Standard Specifications, elsewhere in these Special Technical Provisions, and/or as indicted herein, the Contractor shall provide submittals, and furnish shop drawings and material certifications to the Engineer for review and acceptance. The required number of submittals, shop drawings and certificates shall be delivered within the specified time frames, including a transmittal letter in conformance with the Contract Documents, Standard Specifications, and these Special Technical Provisions. The transmittal letter at a minimum shall include the following information:

A. Submittal number and item description
B. Scheduled date of submittal
C. Specification section/item number
D. Supplier and/or manufacturer, plus contact information
E. Contractor or sub-contractor name and point of contact information

Submittals may be submitted electronically or as a hard copy. Electronic submittals are preferred.

**145.02 Submittals Required**

The following items require a submittal, shop drawing, and/or material certification for review and acceptance by the Engineer (this list may not be complete; it is the Contractors responsibility to review and be knowledgeable with all portions of the project permits, Plans, Contract Documents, Standard Specifications, and these Special Technical Provisions for any additional requirements):

- Construction Schedule
    - Critical path items that must be accurate in schedule for coordination include construction start, tree removal, temporary erosion control, dewatering, grading, channel construction, right-of-way work, and revegetation.
- Traffic Control Plan, and Truck Haul Routes
- Equipment list for all equipment to be used, including the following minimum information:
    - Manufacturer and Model
    - Ground pressure rating (in psi)
    - Certification for washing/steam cleaning, including date
- Filter fence, sediment coir logs, and other BMP materials
- Construction limit fence
- Engineered fabrics

- Aggregates used in the work
- Cobble, boulders, gravel, and sand used in the work
- Aggregate base (AB), imported fill, engineered fill, and bedding materials
- Material testing reports and other data necessary to provide the Engineer with established laboratory values for optimum moisture and maximum dry density, for use of any native soils, imported soils and aggregates requiring density testing
- Weed-free certification certificates for any imported materials to be used in the project
- Asphalt mix design and other bituminous materials used in the work (if applicable, see section 140 of these Special Provisions).
- Concrete mix design
- Loose aggregate samples as specified in Section 200 "Gravel, Cobble, Rock, Boulder & Other Aggregates" for color, size, and shape inspection
- Revegetation items as specified in Section 260 "Revegetation"
- Shop drawings
- Record Drawings

**145.03 Measurement and Payment**
Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for all work associated with performing all the work involved in provisions of this section, complete in place as shown on the Project Plans, as specified in the Contract Documents, Project Permit(s), Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, shall be considered as included in prices paid for the various contract items of work involved; and no additional compensation will be allowed for.

## SECTION 150 – TRAFFIC CONTROL

**150.01 Traffic Control Plan**
Work under this item shall consist of furnishing all labor, tools, materials, and equipment necessary to complete and maintain all traffic control provisions in accordance with the Plans, Contract Documents, Standard Specifications and these Special Technical Provisions, and as directed by the Engineer during the life of the Contract. All traffic control devices and plans shall conform to the latest editions of the Manual on Uniform Traffic Control Devices (MUTCD) and the Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP-14).
**The Contractor shall submit the proposed traffic control plan, along with the proposed project construction schedule and truck haul route plan, to the Engineer for review and comments at least seven (7) calendar days prior to the scheduled Pre-Construction Meeting.**

- The Contractor's traffic control plans shall include, but not be limited to, the following:
- Designated construction site Traffic Control Supervisor (TCS) name and contact information
- Proposed construction zone and existing speed limits
- All construction signing
- Location of flaggers
- Types and location of traffic control devices
- Construction phasing (including phasing of intersection construction and detours, if any)
- Lane crossovers between construction phases
- Special events scheduling

- Detours
- Accommodations for pedestrians and bicycles
- Intersection Control Strategy

The Engineer, US Forest Service personnel, and NDOT will provide written comments and/or corrections to the Traffic Control Plans. If necessary, the Contractor and Engineer will meet to consider the comments and/or corrections to the plan prior to the preconstruction conference to resolve any issue relative to the traffic control plans. Upon resolution of all issues or acceptance of the traffic control plans as submitted, the Engineer shall accept the plans in writing.

Acceptance by the Engineer of the submitted traffic control plans shall in no way relieve the Contractor of the responsibility for safety requirements. Acceptance of the traffic control plans by the Engineer indicates that the plans generally appear to conform to the contract requirements. Such acceptance shall in no way be construed as confirmation of the technical accuracy or adequacy of the contents of the plans and shall not relieve the Contractor of the obligation to institute traffic control measures in full compliance with contract requirements, and which function safely and correctly, and are in conformance with applicable statutes, ordinances, and regulations. If during construction, revisions to the accepted plans are necessary for safety or accommodation to traffic, the Engineer may require such revisions.

Any request by the Contractor to change the traffic control plans shall be submitted in writing at least five (5) working days prior to implementation. Such requests must be accepted in writing by the Engineer prior to implementation. Traffic control plans shall be maintained and must be current with the applicable phase of the work.

**150.02 Traffic Control Notification**
Upon acceptance of the traffic control plans, and at least five (5) working days prior to beginning construction, the Contractor shall notify and submit a copy of the accepted traffic control plans to the Engineer, NDOT and appropriate police and fire departments, REMSA, and any other emergency service as directed by the Engineer.

**150.03 Existing Signs**
If existing traffic control device regulatory signage (i.e. stop, yield, speed limit, etc) is removed or damaged due to the Contractor's operations, the Contractor shall notify the appropriate jurisdiction maintenance department and immediately install temporary signs of the same designation as close as possible to the original location.

All existing traffic control devices removed to facilitate construction of the project improvements, shall be salvaged and replaced to its original condition as part of the work. Any materials that are damaged or lost shall be replaced in like kind. All traffic control devices require acceptance of the Engineer.

**150.05 Measurement and Payment**
**"Traffic Control"** shall be measured on a **lump sum** basis, completed and accepted by the Engineer as conforming to all the requirements in the complete work.

The contract price paid for **"Traffic Control"** shall include full compensation for preparation and submittal of a traffic control plan, and for furnishing all labor, materials, tools, equipment, and incidentals to perform all the work involved in provisions of this section, including but not limited to

temporary construction signs and traffic control devices, flagging, flasher units, barricades, lights, electrical power, resetting of traffic signs and delineators, and all incidentals and materials necessary to provide these items for the duration of construction.

The schedule for payment for **"Traffic Control"** shall be in direct proportion to the percentage of work completed; i.e. if 20% of the project is completed, the Contractor may request payment for 20% of the lump sum total of the bid item for traffic control. Measurement of the percentage of work completed per each phase shall be based on the percentage of work billed by the Contractor based on the total dollar amount of the contract bid price. Increases in the total contract price for any reason do not justify an increase in the lump sum price paid for any of the traffic control bid items. The Engineer reserves the right to adjust the partial payment amounts of these said bid items based on any adjustments made to other pay items on the payment request by the Engineer.

Full compensation for conforming to the provisions of this Section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

## SECTION 155 – CONSTRUCTION STAKING

**155.01 Description**
Work under this item shall consist of furnishing all labor, tools, materials, and equipment necessary to complete construction staking in accordance with the Standard Plans and Specifications and these Special Technical Provisions.

NTCD shall furnish one set of stakes and/or marks to establish lines and grades required for the completion of the work as shown on the Plans and as specified in the Standard Specifications and these Special Technical Provisions. The Contractor is responsible for notifying the Engineer at least seven (7) days in advance of when staking is needed. The Contractor will be responsible for any and all additional construction staking necessary for the full and complete construction of the Project. The Contractor shall be solely responsible for maintenance and protection of the survey stakes or marks. Contractor's construction staking will be verified by the Engineer, at the Engineer's discretion.

NTCD shall furnish labor and surveying equipment necessary for staking the Project including the following:

- Control points,
- Limits of grading and grade breaks,
- Stream alignments and offsets, and
- In stream structure locations and offsets.
- Culvert wingwall locations, elevations, and offsets.

The contractor shall provide any survey in excess of the aforementioned items.

All stakes and survey markers will be conspicuously marked with flagging tape or paint. The Contractor shall inform the Subcontractors of the importance of the preservation of all survey markers. The Contractor shall be responsible for protecting and maintaining all stakes from destruction. In the event that one or more of the stakes are damaged or destroyed, the Contractor will replace the stakes at the expense of the Contractor.

The Contractor's surveyor will be provided with the northing, easting, and elevation of the control points existing in the field as shown on the Project Plans. Additionally, the Contractor's surveyor will be provided with an electronic copy (ASCI Format) of the control points depicted on the Project Plans to develop the construction staking as stated in these Special Technical Provisions.

If the Contractor's surveyor wishes to develop a different work plan it shall be the Contractor's responsibility to develop such a work plan and present to the Project Engineer for approval.

**155.02 Measurement and Payment**
Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for all work associated with all work involved in provisions of this section, complete in place as shown on the Plans, as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, should be incidental to the other construction items; no additional compensation will be allowed.

## SECTION 160 – TEMPORARY EROSION CONTROL

**160.01 General**
This work shall consist of temporary erosion control measures, devices, and BMPs that may be shown on the Project Plans, and as specified in the Contract Documents, Project Permit(s), Standard Specifications, these Special Technical Provisions, or as directed by the Engineer during the life of the contract. Temporary erosion control measures will also be required at staging/storage areas utilized during project construction. Said work is intended to provide prevention, control, and abatement of water and air pollution within the limits of the project and to minimize damage to the work, adjacent properties and Lake Tahoe, streams, or other bodies of water.

**The Contractor shall submit any proposed revisions to the applicable Project Plan sheets for Temporary Erosion Control and the Dewatering and/or Diversion operations**. No work shall be started until applicable plan sheets, schedules and methods of operation for temporary pollution control are reviewed and accepted by the Engineer, TRPA, NTCD, USFS, and NDEP. The Contractor is reminded that the project is located within the Lake Tahoe Basin and all pollution control measures and clean-up procedures must satisfy the requirements of TRPA, USFS, NDEP and the permit(s) issued for the project. During the course of project construction, the Contractor shall cooperate with the Engineer, USFS, NDEP, TRPA, and other regulatory officials and take immediate action as directed to protect water bodies and sensitive areas and provide for erosion or other pollution control.

Installation and maintenance of temporary erosion control measures, devices and BMPs shall conform to the requirements as stated within this section and the National Best Management Practices for Water Quality Management on National Forest System Lands (Volume 1, National Core BMP Technical Guide FS-990a, 2012).

*As-Directed Placement*
Due to the nature of the project and expected field direction from the Engineer, USFS, and permitting agencies, the Contractor shall make provisions to furnish all labor, tools, materials, and equipment as necessary to furnish and place additional temporary erosion control devices in the work (i.e. beyond or in addition to what is designated on the Project Plans) as-directed by the Engineer, in conformance with the Contract Documents, Project Permits, Standard Specifications, and these Special Technical

Provisions. Installation, maintenance, removal, and disposal of any additional as-directed temporary erosion control device shall be considered as included in the applicable "as directed" bid item unit price, and no additional compensation will be allowed. The installation and location of any as-directed temporary erosion control device shall only occur as determined and marked in the field by the Engineer.

The intent of the as-directed temporary erosion control device bid items, is to provide the Engineer and Contractor with a means and allowance for additional temporary erosion control devices to be incorporated in the work where modifications to the construction sequence, changing field conditions, temporary stockpiles, and other potential minor unknowns can be adequately addressed in order to maintain compliance with the Project permits.

The Contractor will not be compensated for the installation of any additional "as-directed" temporary erosion control devices without prior direction and acceptance of the Engineer.

*Temporary Soil Stabilization*
The Contractor shall install temporary soil stabilization materials for water pollution control in all disturbed work areas that are considered inactive (i.e. excess of 14 days) or before forecast storm events. Should any temporary erosion control of this nature be required elsewhere as directed by the Engineer and/or regulatory agencies, the Contractor shall install within 48 hours of notification. Where applicable and upon acceptance of the Engineer, the Contractor shall furnish and apply/install temporary mulch, temporary hydraulic mulch, temporary erosion control blankets, or temporary covers in conformance with the Standard Specifications and these Special Provisions. Materials and construction methods shall comply with the Standard Specifications and these Special Provisions.
The Contractor shall maintain a temporary cover on all stockpiles at all times. Whenever a temporary cover is removed to perform other work, the temporary cover shall be replaced and secured within one (1) hour of stopping work.

Compensation for the requirements of this section, not otherwise provided for in a specified bid item, shall be considered included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

**160.02 Gravel Construction Access**
Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary to install, maintain, remove, and dispose of this temporary erosion control measure as required by the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and TRPA Best Management Practices.

Work under this item shall consist of clearing and grubbing, excavation, furnishing and placing reinforcement mat, furnishing and placing rock at each entrance/exit access road, maintenance (i.e. removal of large quantities of captured sediment, and/or placement of additional rock during course of construction), removal, disposal of excess materials, and restoration of disturbed area.

Fabric to be used for the reinforcement mat shall be manufactured from polyester, nylon, or polypropylene material, or any combination thereof. Fabric shall be manufactured from virgin, or recycled or a combination of virgin and recycled, polymer materials. No virgin or recycled materials shall contain biodegradable filler materials that can degrade the physical or chemical characteristics of the

finished fabric. The fabric shall be a non-woven, needle-punched fabric. The fabric shall be permeable, not act as a wicking agent, and shall conform to the following:

| **Test** | **Test Method** | **Requirement** |
|---|---|---|
| Weight, grams per square meter | D 3776 | 135 min. |
| Grab Tensile Strength, Newton, (25 millimeter grip, in each direction) | D 4623 | 0.40 min. |
| Elongation at Break, percent | D 4632 | 30 min. |
| Toughness, kilonewtons<br>(percent elongation x grab tensile strength) | | 26 min. |
| Permittivity, 1/sec. | D 4491 | 0.5 min. |
| Ultraviolet Resistance, percent strength retention | D 4355 | 70 min. |

Rocks shall be angular to sub-angular in shape and shall conform to the material quality requirements in Section 200.07, Riprap, of the Standard Specifications for resistance to wear, absorption, apparent specific gravity, and durability. Rocks used for the gravel construction entrance/exit shall conform to the following sizes:

| Square Screen Size | Percent Passing |
|---|---|
| 6 inches | 100 |
| 3 inches | 0-20 |

Each gravel construction entrance/exit shall be of adequate size to prevent the tracking of sediment and materials onto any paved public right-of-way. At a minimum the size of each gravel construction entrance/exit shall be as shown on the Project Plans.

While the gravel construction entrance/exit is in use, pavement shall be cleaned and sediment removed at least once a day and as often as necessary when directed by the Engineer. Soil and sediment or other extraneous material tracked onto existing pavement shall not be allowed to enter any existing or proposed drainage facilities.

In the event the Contractor's operations are causing excessive tracking of materials the Engineer may direct the Contractor to replace the gravel construction entrance/exit, expand the size (area – length and/or width) of the gravel construction entrance/exit, and/or expand the depth of the gravel construction entrance/exit. In the event this is required, the Contractor will not be entitled to any additional payment.

When no longer required as shown on the Project Plans or as determined by the Engineer, each gravel construction entrance/exit shall become the property of the Contractor and be removed and disposed of in conformance with the Contract Documents, Standard Specifications, and these Special Technical Provisions. Under no circumstance shall any of the materials used for gravel construction entrance/exit be re-used on the project. All areas disturbed by the placement and use of each gravel construction entrance/exit shall be graded and restored to its pre-existing condition, including any provisions for revegetation found elsewhere in these Special Technical Provisions.

Gravel construction entrance/exit is considered a temporary erosion control measure or BMP. A fine of $100 per day will be levied against the Contractor for each day the Contractor delays in responding to the Engineer's request to install new temporary erosion control devices and/or maintain existing

temporary erosion control devices, in addition to any other fines levied by any other regulatory agency with no additional compensation allowed for.

**160.03 Construction Limit Fence.** Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary to install, maintain, remove, and dispose of this BMP as required by the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and TRPA Best Management Practices.

The Contractor shall perform all construction activities that are outside the road right-of-way within the construction limits (and/or grading limits) as shown on the Project Plans and staked by the Contractor's surveyor, and as delineated with construction limit fence installed by the Contractor. Where directed by the Engineer and/or shown on the plans, construction limit fence shall be placed around individual trees or groups of trees that are to remain, in accordance with the Tree Protection and Construction Limit Fence depicted on the project plans.

The area within which the Contractor will be allowed to conduct his/her construction operations will be the area within the limits of the construction limit fencing and/or grading limits as shown on the Project Plans. Where located within the immediate vicinity of any trees (or dripline), the width of the work area will be reduced in order to protect the trees. The Contractor shall review each such location to determine what equipment can be used to install the improvements at these locations or if hand work will be necessary. The costs associated with working within these reduced widths shall be included in the unit price bid for the applicable item of work with no additional compensation therefore.

Contractor's attention is directed to the applicable bid item descriptions in these Special Technical Provisions regarding the type of equipment that can be used in construction on sensitive land areas. Where tree protection fencing cannot be placed at the dripline of the tree, as determined by the Engineer in coordination with TRPA, wood batten (as shown on the Project Plans) with bottom set approximately 3 feet above ground surface shall be strapped to the tree trunk (space between wood batten shall be no more than 6"). The unit price bid for construction limit and tree protection fence shall also apply to this condition (i.e. linear foot measurement of tree circumference where wood batten is attached). Construction limit and tree protection fencing shall be inspected daily and repaired, secured, and/or replaced as necessary to maintain and preserve its intended purpose. All construction limit and tree protection fencing shall remain in place during any construction activities unless directed by the Engineer. Tree protection and construction limit fencing is considered a temporary erosion control measure or BMP.

A fine of $100 per day will be levied against the Contractor for each day the Contractor delays in responding to the Engineer's request to install new temporary erosion control devices and/or maintain existing temporary erosion control devices, in addition to any other fines levied by any other regulatory agency with no additional compensation allowed for.

**160.04 Filter Fence.** Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary to install, maintain, remove, and dispose of this temporary erosion control measure as required by the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and TRPA Best Management Practices.

Filter (silt) fence shall be manufactured from polyester or polypropylene material. The fabric shall be woven and shall conform to the following:

| Test | Test Method | Requirement |
|---|---|---|
| Grab Tensile Strength, Newton, (25 millimeter grip, in each direction) | 4623 | 400 min. |
| Elongation at Break, percent | 4632 | 20 min. |
| Apparent Opening Size, Micrometers (um) | D 4751 | 850 min. |
| Coefficient of Permeability, cm/sec. | D 4491 | 0.01 min. |
| Ultraviolet Resistance, percent strength retention | D 4355 | 90 min. |

- Filter fence fabric shall be handled and placed in accordance with the manufacturer's recommendations. The fabric shall be aligned and placed in a wrinkle-free manner.
- When joints are necessary, filter fence fabric shall be spliced together only at a support post, with a minimum twelve (12) inches overlap and securely sealed or stitched. See manufacturer's recommendations. Should the filter fence fabric be damaged, the torn or punctured section shall be repaired by placing a piece of fabric that is large enough to cover the damaged area and to meet the overlap requirement.
- Posts shall be spaced a maximum of ten (10) feet apart at the barrier location or as recommended by the manufacturer if less than ten (10) feet and driven securely into the ground (minimum of 1 foot). The posts and fence shall be angled ten (10) degrees off vertical up-slope for stability.
- A trench shall be excavated approximately four (4) inches wide and six (6) inches deep along the line of posts and upslope from the barrier in accordance with manufacturer's recommendations.
- A wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least one (1) inch long, tie wires or hog rings. The wire mesh shall extend into the trench a minimum of two (2) inches and shall not extend more than three (3) feet above the original ground surface.
- The filter fence fabric shall be installed on the upslope side of the wire mesh fence and shall be stapled, wired, or tied to the wire fence and eight (8) inches of the fabric shall be extended into the trench. The fabric shall not extend more than three (3) feet above the original ground surface.
- Filter fence fabric shall not be stapled to existing trees.
- The trench shall be backfilled and the soil compacted over the filter fence fabric.
- For installations on slopes less than 20%, slope lengths of 200 feet or less and around drainage inlets, the Contractor has the option to use fiber rolls in lieu of filter fence.
- Should the filter fence fabric decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly.

Filter fence shall remain in place for the complete duration of the project (all Phases of work) as necessary to conform to the Project Permit(s). All filter fence shall be routinely inspected and maintained at all times and on a continual basis for the duration of the Project, and is expected to be in good condition at the time the Notice of Completion is issued. Repair and or replacement of any damaged filter fence, upon discovery or as directed by the Engineer, shall be considered as included in the prices paid for this bid item of work, and no additional compensation will be allowed. At the conclusion of the project or as directed by the Engineer, TRPA and NDEP, all filter fence shall become the property of the Contractor and be completely removed from the project site and disposed of in conformance with the Contract Documents, Standard Specifications, and these Special Technical Provisions.

Fiber log (sediment roll) shall not be used in place of filter fence without prior acceptance and written consent of the Engineer. Filter fencing is considered a temporary erosion control measure or BMP. A fine of $100 per day will be levied against the Contractor for each day the Contractor delays in responding to the Engineer's request to install new temporary erosion control devices and/or maintain existing temporary erosion control devices, in addition to any other fines levied by any other regulatory agency with no additional compensation allowed for.

**160.05 Fiber Rolls (Sediment Roll).** Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary to install, maintain, remove, and dispose of this temporary erosion control measure as required by the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and TRPA and USFS Best Management Practices. **The Contractor shall submit a material specification for the fiber roll, for acceptance of the Engineer, prior to placement in the work.**

Fiber rolls will be certified weed free logs that consist of drainage filter made of curled aspen wood excelsior or coir and rolled into a cylindrical shape with a consistent width of fibers evenly distributed throughout the cylinder. Logs will be encased in 100% natural fiber biodegradable netting (no photodegradable or plastic materials). Weed free certification must be provided.

Fiber rolls with a diameter of 8 to 10 inches shall have a density of at least 1.1 lb/ft, and sediment logs with a diameter of 12-inches shall have a density of at least 3 lb/ft. Its basic purpose is to provide a flexible, lightweight, porous sediment control device demonstrating the ability to conform to terrain details, dissipate water velocity, and capture loose sediment. All fiber rolls shall be properly staked in place, except where its use is intended to be short term (daily operations) or reposition of the fiber roll will occur on a regular basis (i.e. active construction areas, trenching operations and windrows, temporary or active stockpiles, active areas for soil processing/screening operations, spill containment devices, etc.) as determined by the Engineer. In such instances where a fiber roll is not staked, it shall be weighted or secured in place using a sufficient number of gravel bags to control the flow of storm water and capture sediment.

The Contractor shall furnish, install, maintain, and remove when no longer required, all fiber rolls per the Manufacturer's directions, as shown on the Project Plans and as directed by the Engineer (where applicable to each Phase of the work), including but not limited to the following general requirements:

- Prior to fiber roll installation; the Contractor shall excavate a concave trench along the contour line, three (3) inches to five (5) inches deep. Soil excavated from the trench shall be placed on the uphill or flow side of the roll to prevent water from undercutting the roll.
- The Contractor shall place the fiber roll in the trench and stake on both sides of the fiber roll within eight (8) inches of each end and then at a maximum spacing of four (4) feet, using one (1) by two (2) inch stakes.
- When more than one fiber roll is placed in a row or check dam, the fiber rolls shall be overlapped in a horizontal configuration to provide a tight joint.

Fiber roll shall remain in place, where directed by the Engineer, for the complete duration of the project (all Phases of work) as necessary to conform to the Project Permit(s). All sediment logs shall be routinely inspected and maintained at all times and on a continual basis for the duration of the Project. Repair and or replacement of any damaged sediment log, upon discovery or as directed by the Engineer, shall

be considered as included in the prices paid for this bid item of work, and no additional compensation will be allowed. At the conclusion of the revegetation "maintenance and bonding period" or where accepted to occur at an earlier date as directed by the Engineer, TRPA and NDEP, all sediment log shall become the property of the Contractor and be completely removed from the project site and disposed of in conformance with the Contract Documents, Standard Specifications, and these Special Technical Provisions.

Any sediment logs required or used in the work on a short term basis that are not permanently staked in place or are anticipated to be moved on a daily or routine basis (such as areas immediately adjacent to trench excavations, temporary stockpiles, active areas for soil processing/screening operations, spill containment devices, etc.) shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

Fiber rolls are considered a temporary erosion control measure or BMP. A fine of $100 per day will be levied against the Contractor for each day the Contractor delays in responding to the Engineer's request to install new temporary erosion control devices and/or maintain existing temporary erosion control devices, in addition to any other fines levied by any other regulatory agency with no additional compensation allowed for.

**160.06 Watering/Dust Control**

Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary to provide construction water for the control of dust generated by the Contractors activities as required by the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and USFS and TRPA Best Management Practices.

The Contractor shall be responsible for dust control throughout all phases of construction. All federal, state, regional and local ordinances regarding dust control shall be complied with. The responsibility of obtaining the regulations and requirements and full compliance with such ordinances is solely that of the Contractor.

No chemical additives shall be permitted for any watering/dust controls operations.

If the Contractor desires to use water from Marlette Creek during construction, water must be pumped and used in accordance with any rules, regulations, and procedures as established by the US Forest Service. Water drafting sites should be located in areas that will avoid adverse effects to stream flows and depletion of pool habitat. If instream flows or water drafting sites are not sufficient due to a lack of water, water would be obtained from local municipal water hydrants. Water drafting sites will be reviewed by a hydrologist or fisheries biologist every two weeks during low flow periods and determinations made regarding adequate minimum flows. If flows are not adequate for instream needs, drafting will be discontinued. Use screening devices for water drafting pumps (Fire suppression activities are exempt during initial attack). Use pumps with low entry velocity to minimize removal of aquatic species, including juvenile fish, amphibian egg masses and tadpoles, from aquatic habitats. The following criteria should be used to avoid impacts:

- Drafting operations should be restricted to one hour after sunrise to one hour before sunset to avoid the use of lights that attract fish.
- Pumping rate shall not exceed 350 gallons per minute.
- The pumping rate shall not exceed ten percent of stream flow (estimated by pump operators) to ensure adequate downstream flow to support aquatic species.

- Drafting should occur in streams and pools with deep and flowing water; not streams with low flows and isolated pools.
- Pumping operations shall not result in obvious upstream or downstream pools.
- Each pumping operation shall use screens. The screen face should be oriented parallel to flow for best screening performance.

**160.07 Sweeping**

Work under this item shall consist of furnishing all labor, tools, materials, and equipment necessary to sweep all paved areas within the project site, and streets adjacent to the project site, and dispose of the swept materials in accordance with the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and USFS and TRPA Best Management Practices. Tracking of sediment onto public streets shall be minimized by a combination of road sweeping and use of gravel construction entrance/exit areas designated on the Plans during soil hauling operations, during equipment transporting from one work area to another, and as necessary to keep the streets and other paved areas clear of soil and debris. Tracking control applies to streets within the project area as well streets adjacent to the project area that have the potential to be impacted by tracking from the Contractor's operations.

Affected streets shall be swept a minimum of three times daily (e.g. mid-morning, mid-afternoon, and at the end of the day) during soil hauling operations, during equipment transporting from one work area to another, and as necessary to keep the streets clear of soil and debris. The swept material shall be disposed of in accordance with the standard specifications, project permits and these Special Technical Provisions.

Sweeping is considered a temporary erosion control measure or BMP. A fine of $100 per day will be levied against the Contractor for each day the Contractor delays in responding to the Engineer's request to install new temporary erosion control devices and/or maintain existing temporary erosion control devices, in addition to any other fines levied by any other regulatory agency with no additional compensation allowed for.

**160.08 Maintenance**

The Contractor shall maintain all temporary erosion control measures, devices, and/or BMPs placed in the work, for the duration of the project. Maintenance includes all Manufacture's recommendations, and includes but is not limited to the following:

- Damage to any temporary erosion control devices and/or BMPs during the course of the project shall be repaired by the Contractor immediately upon discovery and at his expense.
- Temporary erosion control devices and/or BMPs shall be inspected routinely and immediately after each rainfall event and at least daily during prolonged rainfall events. Any required repairs shall be made immediately.
- Construction limit and tree protection fencing shall be inspected daily and repaired, secured, and/or replaced as necessary to maintain and preserve its intended purpose.
- All signage as required for the project shall be routinely inspected and repaired or replaced upon discovery of damage, vandalism, and/or missing parts.
- Should the filter fence fabric decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly.
- Should a sediment log decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the sediment log shall be replaced promptly.

- Any single or group of gravel bag(s) shall be replaced when the bag material is ruptured or when the yarn has failed, allowing the bag contents to spill out.
- Any stakes and/or rope used to secure a sediment log in place shall be routinely inspected and repaired as necessary if found to be loose or ineffective.
- Sediment deposits and other debris shall be removed when they reach approximately one-half the height of the sediment barrier (or as recommended by the Manufacture) and disposed of in a manner acceptable to the Engineer, USFS, NDEP, and TRPA.
- Any sediment deposits remaining in place after the temporary erosion control measure and/or BMPs is no longer required shall be removed and disposed of in a manner acceptable to the Engineer, USFS, NDEP, and TRPA.

**160.09 Measurement and Payment.**
**"Filter Fence"** shall be measured on a **per linear foot** basis along the top of the fence line, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The linear foot price for "**Filter Fence"** shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in installing the filter fence, including but not limited to, excavation, staking, burying, maintenance, and off-haul and disposal of excess materials, for a complete job in place to the lines and dimensions as shown on the Project Plans, and specified in the Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, and no additional compensation will be allowed.

**"Construction Limit Fence"** shall be measured on a **per linear foot** basis along the top of the fence line, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The linear foot price for **"Construction Limit Fence"** shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in installing the construction limit fence, including but not limited to, installing stakes and fence, maintenance, and off-haul and disposal of excess materials, for a complete job in place to the lines and dimensions as shown on the Project Plans, and specified in the Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, and no additional compensation will be allowed.

**"Fiber Roll, As Directed"** shall only be installed at the direction of the Engineer and shall be measured on a **per linear foot** basis along fiber rolls, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The linear foot price for **"Fiber Roll, As Directed"** shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in installing the fiber rolls, including but not limited to, communication with the Engineer, excavation of trench, installing stakes and rolls, maintenance, and off-haul and disposal of excess materials, for a complete job in place to the lines and dimensions as shown on the Project Plans, and specified in the Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, and no additional compensation will be allowed.

**"Gravel Construction Access"** shall be measured on a **per each** basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The per each price for **"Gravel Construction Access"** shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in installing the gravel construction access, including but not limited to, installing stakes and fence, maintenance, and off-haul and disposal of excess materials, for a complete job in place to the lines and dimensions as shown on the Project Plans, and specified in the Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, and no additional compensation will be allowed.

Full compensation for conforming to the provisions of this Section, not otherwise provided for, such as sweeping and dust control, shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

## SECTION 165 – DEWATERING AND/OR DIVERSION

**165.01 General**
Work under this item shall consist of furnishing all labor, tools, equipment, and materials as necessary to dewater, divert and/or bypass any groundwater or surface waters and to maintain a reasonably dry excavation or general work area for the proper installation, construction, curing, grow-in, maintenance, and completion of any improvements and utility relocates, including revegetation/restoration activities, for a complete job in place as shown on the Project Plans, described in the Special Technical Provisions, the Appendix A "Dewatering and Diversion Plan, and Standard Specifications, or as directed by the Engineer.

Dewatering and/or Diversion operations as stated herein, or as directed by the Engineer, are required to be performed at any time and on a continual basis, for the duration of the project and any ensuing maintenance period, as necessary to install, construct, complete and maintain all project improvements.

In general, the Contractor should expect/anticipate that groundwater may be encountered at any time the existing ground is disturbed within the project area, as a majority of the project site is located within a TRPA land capability 2.

The Contractors attention is directed to the "Dewatering and Diversion Plan" (Appendix A). All dewatering and/or diversion operations and activities shall be in complete compliance with the Project Plans, Project Permits, the Standard Specifications, these Special Technical Provisions, and other applicable regulatory agency requirements.

The Contractor shall be responsible for the final design, installation, operation, maintenance and removal of any dewatering and/or diversion systems as required for completion of the contract work. The Project Plan sheets and Dewatering and Diversion Plan as provided as part of the Contract Documents provide a basis for, show, and describe dewatering scenarios and minimum requirements. **The Contractor shall accept the provided Preliminary Dewatering and Diversion Plan provided in the Plans and Appendix A or submit their own detailed Dewatering and Diversion Plan (including all necessary diagrams/ exhibits) to the Engineer for review and acceptance (by the Engineer, USFS, and NDEP) prior to commencement of any construction activities that may require dewatering and/or diversion operations.** The proposed Dewatering and Diversion Plan shall be prepared by a licensed Engineer in the state of Nevada, or qualified licensed Contractor (at discretion of the Engineer) that specializes in dewatering, filtration, pumping, and liquid handling operations. Information required to be submitted shall included but is not limited to the following:

- Any Sub-Contractor information and proof of experience
- Qualified operator of the system and equipment
- Access routes, pads, spill containment devices, and locations for equipment
- Sources for power supply and pump operation
- Dewatering/diversion system design performance measures for volume and pumping rates

- Pump equipment description, performance measures and manufacture's data sheets
- Intake and discharge locations, methods, and materials
- Disposal methods and any proposed treatment practices
- Provisions to provide back-up equipment and/or stage on-site
- Emergency plan to accommodate high flow flood events

If the Contractor plans to conduct any dewatering and/or diversion operations, he/she shall contact the Engineer for authorization, prior to starting the work at a given location. In the event the Contractor initiates dewatering and/or diversion operations without prior authorization of the Engineer, no payment for that work will be made.

**165.02 Dewatering and/or Diversion for Channel Construction**
Dewatering and/or diversion operations as necessary for, including but not limited to, the construction of the proposed creek channels, the culvert extension, construction of the ford crossing, and floodplain grading and other grading operations shall be as shown on the accepted Contractor's Dewatering and Diversion Plan, and in conformance with the Project Plans, and these Special Technical Provisions. Discharge of all captured and/or diverted waters shall be in conformance with all project permit regulations.

The excavation and general work area shall be sufficiently dry to allow for the proper construction of the channel, floodplain, pond, and associated structures, as shown on the Project Plans and described in these Special Technical Provisions. The location and depth of sumps and/or well points for pumping of ground water or surface water is at the discretion of the Contractor, but shall be reviewed and accepted by the Engineer prior to initiating the work involved. The dewatering operations shall also be sufficient to produce a stable sub-grade within the excavation or general work area as necessary for access of equipment and personnel to complete the work.

The Dewatering and Diversion operations shall adequately protect the work area(s) from creek flows, prevent erosion and discharge of sediment or pollutants, and divert "bypass" creek flows to designated stable discharge points downstream. Fish screens shall be installed as indicated on the Project Plans and described in the Dewatering and Diversion Plan. In the event there is a storm event which increases the flow of the creek beyond what can be handled by the Contractor's established creek diversion "by-pass" operations, the Contractor shall make provisions for and have equipment (i.e. pumps, piping, gravel bags, plastic sheeting, temporary dams, etc.) on standby to either provide additional pumping capacity to handle the additional flow, or provide for a complete gravity flow by-pass system. In addition, the Contractor shall make all provisions to provide adequate protection of the active work area(s), avoid flooding and inundation of excavation(s), divert runoff to stabilized downstream areas away from any active work site(s), and reduce and/or prevent erosion and discharge of sediment or other pollutants.

**165.03 Dirt Bag Device.** Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary to install, maintain, remove, and dispose of this temporary erosion control measure as required by the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and TRPA Best Management Practices. **The Contractor shall submit a material specification for the 'Dirtbag' device, for acceptance of the Engineer, prior to placement in the work.**

Use of any 'Dirtbag' or other similar sediment control filter bag device used in coordination with pumping of sediment laden waters for discharge shall be as shown on the Project Plans and details and

conform to the provisions of the Project Permits. The 'Dirtbag' shall be a commercially manufactured nonwoven geotextile fabric bag (polypropylene or equivalent) intended for such use, with a minimum grab tensile strength of 200 psi in any principal direction (ASTM D4632), and permittivity of 0.05 sec (ASTM D4491). For project area soils (source of sediment in waters) with more than 15% by weight passing a No. 200 sieve the fabric shall have an apparent opening size between 50 and 140, and for project area soils (source of sediment in waters) with less than 15% by weight passing a No. 200 sieve the fabric shall have an apparent opening size between 20 and 50. The geotextile fabric material shall contain ultraviolet ray inhibitors and stabilizers to provide an expected usable life comparable to the anticipated construction period; ultraviolet stability shall exceed 70% after 500 hours of exposure (ASTM D4355). The 'Dirtbag' device shall have a fill spout large enough to accommodate a pump four (4) inch discharge hose and attachment straps to secure the hose in place. The Dirtbag' device shall be sized to accommodate the applicable flow rates and prohibit release of the target effluent. Location of any 'Dirtbag' device requires acceptance of the Engineer, equipment access for removal and off-site disposal, and the area shall be stable to prevent erosion. Placement of drain rock, fabric, or other suitable substance to create a stable discharge site is the responsibility of the Contractor. Any 'Dirtbag' device shall be fitted with straps strong enough for lifting and the device removed from the Project site and properly disposed of; **cutting open the device and leaving the captured sediment/fines in place is prohibited**. Removal and off-site disposal may be facilitated by placing the 'Dirtbag' device on pallets, crates, trailer, or some other small mobile device to dismiss the need for lifting the 'Dirtbag' device by straps.

**165.04 Measurement and Payment**

The **"Dewatering/Diversion"** bid item shall be measured on a **lump sum** basis, completed and accepted by the Engineer as conforming to all the requirements in the complete work. Payment for **"Dewatering/ Diversion"** shall be made at the lump sum price bid, with no additional compensation therefore. The **"Dewatering/Diversion"** bid item shall be paid in full if any dewatering operations are required and performed as part of the project work, as directed and accepted by the Engineer. No additional compensation will be allowed for if excess ground water or higher than expected creek flows are encountered and dewatering operations beyond what was anticipated by the Contractor is required for proper construction of the project improvements. All dewatering necessary for the proper installation, construction, and maintenance of the project improvements, including revegetation/restoration activities shall be included in this bid item(s).

Full compensation for conforming to the provisions of this Section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

## SECTION 170 – CLEARING AND GRUBBING AND TREE REMOVAL

**170.01 Description**

This section covers the construction methods involved in all clearing and grubbing, and tree removal operations as shown on the Project Plans, described in the Standard Specifications, these Special Technical Provisions, and/or as directed by the Engineer. Work under this item shall consist of furnishing all labor, tools, equipment, and materials as necessary to perform operations, including but not limited to, clearing and grubbing, topsoil salvage, tree removal, stump removal, and disposal of waste and other miscellaneous debris in accordance with the Project Plans, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer.

**170.02 Clearing and Grubbing**

Clearing and grubbing shall consist of removing all objectionable and unacceptable natural or artificial materials from within the construction area project limits, and disposal of said material off the job site, in order to construct the project in a proper manner, in accordance with the Project Plans, Project Permits, Standard Specifications, these Special Technical Provisions, as directed by the Engineer, and other applicable Local, Regional, State, and Federal requirements. This work includes but is not limited to any earthen material, organic growth, willow and alder clumps, trees (less than 6-inches diameter at breast height – DBH will be measured at 4.5-ft above the existing ground surface on uphill side of tree), stumps, downed logs and trees, man-made deposits, industrial waste, sludge or landfill, and other materials as designated by the Engineer. Existing structures, to be preserved, shall be protected and restored upon completion of the work.

Clearing and grubbing shall extend to the outer limits of excavation and fill slope lines and along temporary access roads, except where slopes are to be rounded in which case the areas shall extend to the outside limits of slope rounding. Within the limits of clearing, all stumps and roots 1-1/2 inches in diameter or larger, buried logs, and all other objectionable material shall be removed up to three (3) feet below the existing ground surface or subgrade, whichever is deeper. All existing vegetation, outside the areas to be cleared and grubbed, shall be protected from injury or damage resulting from the Contractor's operations. For typical protection of trees and other vegetation, see the Project Plans.

No live trees (equal to or greater than 6-inches diameter) shall be removed from the project site that are not identified and marked by the Engineer. In the event the Contractor removes any live trees (equal to or greater than 6-inches diameter) not marked by the Engineer, the Contractor shall be solely responsible for any and all fines and/or penalties levied to the Contractor, Engineer, or USFS in association with the removal. The Contractor should make note of the existing conditions on the site where access roads are blocked by downed trees and vegetation. Downed trees not shown on the plans should be considered part of clearning and grubbing. The contractor may temporarily remove downed trees and wood from access roads and then use the material to decommission the access roads after use.

**For the purposes of this Project, willow and alder clump vegetation shall not be considered singular trees as part of the tree removal bid item work.** Any willow/alder material shall be removed and disposed of within the project limits/areas of disturbance (clearing and grubbing limits as shown on the Project Plans), unless specifically directed to be protected in place of as part of the work. Any removal and disposal of existing willow/alder vegetation shall be considered as part of the clearing and grubbing efforts, and no additional compensation shall be allowed for. Additionally, dead or downed logs or trees shall not be considered singular trees and should be considered part of the clearing and grubbing costs.

*Topsoil, Sod, and Organic Materials*

During clearing and grubbing, the Contractor shall salvage and stockpile topsoil and sod for reuse in the project area in accordance with Section 260, “Revegetation,” of these Special Technical Provisions.

Harvest sod from the footprint of the restoration area as shown on the plans and as staked in the field. Do not stockpile more than 30 calendar days.

Use a low weight bearing equipment ASV-POSI TRACK SKID STEER with a front-end bucket (front end loader or tractor with bucket) to salvage and transport sod and minimize damage to native vegetation remaining in place along temporary maintenance access road.

Salvaged sod shall consist of cohesive, contiguous material of sedges *(Carex spp*.) and Baltic rush (*Juncus balticus*), and other wetland and mesic meadow species, as shown on the plans and as staked in the field by the Engineer. Remove in as large a unit as practicable, resulting in clean, vertical edges. Sod shall be scalped from the original ground surface to a depth of no less than eight (8) inches, as measured from the root crown. Do not stack. If stored, sod shall be placed with roots down and edges snugly adjoining adjacent sections in a shaded facility for a maximum time of one month; minimize storage and handling. Maintain as a viable growth media and do not let material dry out during handling and storage (water a minimum of two times per day). Re-plant concurrent with channel construction to the greatest extent possible and as directed by the Engineer.

Material that cannot be moved in a contiguous manner shall be salvaged, stockpiled, and re-applied as organic matter as directed by the Engineer.

Topsoil shall not be stockpiled for a period greater than two (2) weeks or greater than three (3) feet in height unless accepted by the Engineer. Topsoil shall be re-applied within the project area in accordance with Section 260, "Revegetation," of these Special Technical Provisions. All suitable organic materials removed during the clearing and grubbing operation including, but not limited to, pine needles, leaves, duff, trees smaller than six (6) inches DBH, stumps, and suitable roots shall be stockpiled and used for revegetation/restoration treatments. The Contractor shall make allowances for chipping larger organic materials such as trees, suitable roots, branches, and stumps so that these materials can be used for project revegetation/restoration efforts.

The Contractor shall not stockpile any vegetation or other debris generated as a result of the clearing and grubbing or tree removal operations that is not suitable for use in revegetation efforts. All unsuitable vegetation or other debris shall be removed from the job site by the end of each working day.

**170.03 Tree Removal**

Work under these bid items shall consist of furnishing all labor, tools, equipment and materials necessary for the removal of trees equal to or larger than 6-inches in diameter, measured at an elevation of 4.5-feet above the prevailing existing ground surface on uphill side of tree (a.k.a diameter at breast height - DBH). Trees equal to or larger than 6-inches DBH to be removed are schematically shown on the Project Plans and will be conspicuously marked in the field by the Engineer and FS forester (**no tree shall be removed unless marked in the field**). Tree removal shall include the removal of associated stumps and roots necessary for a complete removal of the tree and its appurtenances, and backfilling the remaining hole with native material, as directed by the Engineer.

The quantity (contract value) of trees to be removed, as shown on the Project Plans, may be more or less than the contract amount, as determined by the Engineer. Final quantities may fluctuate based on field conditions and actual construction staking, layout, and grading limits at the time of construction. All trees necessary for removal, as determined by the Engineer and TRPA staff forester, will be identified and conspicuously marked in the field for removal.

Prior to timber removal operations all associated temporary erosion control measures and BMPs, and traffic control must be in place, in accordance with the Project Permit(s), Standard Specifications and these Special Technical Specifications.

Trees shall be felled to minimize disturbance to surrounding facilities, structures, vegetation and traffic flow on roadways. The Contractor shall make all efforts to minimize any damage to trees and/or root

The Contractor shall set aside specific materials (trees, stumps, slash, etc.) onsite for use and placement in the work and/or revegetation treatments. All such materials, and quantities, will be clearly identified and marked by the Engineer prior to the start of clearing and grubbing, and tree removal operations. Contractor is responsible for complete site cleanup, including slash disposal. No slash may be stored or burned on site. All wood products must be removed from the site prior to resale.

No trees (equal to or greater than 6-inches diameter) shall be removed from the project site that are not identified and marked by the Engineer. In the event the Contractor removes any trees (equal to or greater than 6-inches diameter) not marked by the Engineer, the Contractor shall be solely responsible for any and all fines and/or penalties levied to the Contractor, Engineer, or the US Forest Service in association with the removal.

**170.04 Stump Removal**
Work under this item shall be considered part of the clearing and grubbing work and shall consist of furnishing all labor, tools, equipment and materials necessary for the removal and disposal of stumps depicted on the project plans, or as directed by the Engineer. Stump removal as described herein will only consist of stumps to be removed that are not directly associated with the removal of a tree (as defined herein - tree removal bid items and prices include the cost of removing the associated stump).

Trees and stumps designated for removal shall be removed to at least two (2) feet below finished grade. Ground trees and stumps intended for use as wood chip mulch shall conform to the requirements of these Special Technical Provisions. Trees and stumps not suited as wood chip mulch or for use in project improvements shall be removed and appropriately disposed of outside the project limits. The Engineer and Revegetation Specialist will determine which trees and stumps are suited for use as wood chip mulch and for use in project improvements. The Contractor shall schedule an inspection of stumps and trees with the Engineer, at least 10 days prior to the Contractor scheduling wood chipping operations, for a determination of what can be used as mulch.

Compensation for the removal of trees and stumps less than six (6) inch diameter and stumps greater than six (6) inch diameter, as necessary for construction of the various items of work as staked by the Engineer, shall be included in the clearing and grubbing bid item and no additional compensation shall be made therefore.

**170.05 Work Outside of Stated Limits**
The Contractor shall not, and no payment will be made to the Contractor, for clearing and grubbing outside the stated limits as shown on the Project Plans, or as described in these Special Technical Provisions, unless such work is authorized by the Engineer.

**170.06 Protection of Plants**
Trees and plants that are not to be removed shall be fully protected from injury by the Contractor at his/her expense. Trees shall be removed in such a manner as not to injure standing trees, plants, and improvements which are to be preserved. The Contractor shall remove tree branches under the direction of the Engineer, in such a manner that the tree will present a balanced appearance.

Scars resulting from the removal of branches shall be treated with a heavy coat of a tree sealant accepted by the Engineer and Revegetation Specialist. Construction limit fence shall be installed around all trees to be protected near excavation limits at the dripline of the tree as shown on the Project Plans.

If large roots of protected trees are encountered during excavation activities, work shall cease in this area and the Engineer shall be notified. Work shall commence as directed by the Engineer.

**170.07 Removal and Disposal of Materials**
All materials scheduled or specified for removal and disposal shall be removed and hauled from the site at the Contractor's expense, unless otherwise specified, and disposed of outside of the Lake Tahoe Basin in accordance with TRPA ordinances. The construction area shall be left with a neat and finished appearance.

**170.08 Measurement and Payment**
**"Clearing and Grubbing"** (including trees under 6-inch DBH) shall be measured on a **per square foot** basis, completed and accepted by the Engineer as conforming to all the requirements in the complete work. The per square foot price for **"Clearing and Grubbing"** shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in the clearing and grubbing of the project site as shown on the plans and as specified in the Project Plans, Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer including the removal and disposal of all the resulting materials from the Tahoe Basin. The per square foot area is based on the disturbance area shown on the plans. If the Contractor disturbs additional area without the approval of the Engineer, no additional payment is allowable for this bid item.

**"Tree Removal and Stockpile"** shall be measured on a **per each** basis, completed and accepted by the Engineer as conforming to all the requirements in the complete work. The per each price for **"Tree Removal and Stockpile"** shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in removing all trees as marked and stockpiling the trees as necessary for the construction of in stream structures shown on the plans and as specified in the Project Plans, Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, including the removal and disposal of all the materials not to be used in the project from the Tahoe Basin.

**"Salvage Sod, Stage, and Maintain"** shall be measured on a **per square foot**, completed and accepted by the Engineer as conforming to all the requirements in the complete work. The per each price for **"Salvage Sod, Stage, and Maintain"** shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in removing the sod as marked by the Engineer and stockpiling and maintaining the sod per Section 260 of these Special Technical Provisions and as necessary for use in the Water's edge revegetation treatment and as specified in the Project Plans, Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer.

Full compensation for conforming to the provisions of this Section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

## SECTION 175 – REMOVAL OF EXISTING MICELLANEOUS ITEMS

**175.01 General.** Work under this section shall conform to the project permits, Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, and USFS Best Management Practices

**175.02 Remove Existing Culvert Apron, Headwall, and Wingwall**
Work under this section shall include the removal of the culvert apron, headwall, and wingwall as required to properly construct the design, as shown on the Project Plans, described in the Standard Specifications, these Special Technical Provisions, and/or as directed by the Engineer. The existing wingwall, headwall, and apron dimensions are not field verified, but the footing/cutoff wall depth should be assumed to match the NDOT Standard Detail for RCB Culvets.

Any materials removed in conformance with this provision shall become the property of the Contractor and shall be removed and disposed of by the Contractor in conformance with the Standard Specifications and these Special Technical Provisions.

**175.02 Remove Existing Manmade In-Channel Structures**
Work under this section shall include removal and disposal of manmade in-channel structures as called out and shown on the Project Plans but not including the section of concrete box culvert for the culvert extension or the corrugated metal pipe at the **"Ford Crossing"**. Manmade in-channel structures include tires, rock gabions, pipes, and a metal flume. Any materials removed in conformance with this provision shall become the property of the Contractor and shall be removed and disposed of by the Contractor in conformance with the Standard Specifications and these Special Technical Provisions.

**175.03 Measurement and Payment**
Payment for **"Remove Existing Culvert Apron, Headwall, and Wingwall"** shall be measured on **a lump sum** basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The contract lump sum price for **"Remove Existing Culvert Apron, Headwall, and Wingwall"** shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work including but not limited to removing subsurface concrete footings and at surface concrete for a complete job in place as shown on the Project Plans, and specified in the Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, and no additional compensation will be allowed.

Payment for **"Remove Existing Manmade In-Channel Structures"** shall be measured on a **lump sum** basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The contract lump sum price for **"Remove Manmade In-Channel Structures"** shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work including but not limited to removing debris, water quality control measures, and off-haul and disposal of excess materials, for a complete job in place as shown on the Project Plans, and specified in the Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, and no additional compensation will be allowed.

## SECTION 200 – GRAVEL, COBBLE, ROCK, BOULDER & OTHER AGGREGATES

**200.01 General.** Work under this item shall consist of furnishing all labor, tools, materials, and equipment necessary to furnish and place gravel, cobble, rock, sand aggregate, and other aggregates in the work, including but not limited to, channel bed material, boulder step pools, aggregate base courses, bedding and backfill, and general rip-rap as indicated on the Project Plans, described in these Special Technical Provisions, and directed by the Engineer, in conformance with the Contract Documents, Project Permits, Standard Specifications, and these Special Technical Provisions.

The limits of loose aggregate and aggregate base course placement as indicated on the Project Plans are approximate, and the exact limits of placement shall be determined in the field by the Engineer. All aggregates used in the work for aggregate base courses, bedding and backfill, and general rip-rap shall be in strict conformance with the Standard Specifications, and other applicable provisions found elsewhere in these Special Technical Provisions.

All gravel, cobble, rock, sand aggregate, and other loose aggregate used in the work for proposed creek channel, boulder step pools, and all other areas requiring said materials shall be in conformance with these Special Technical Provisions, and other applicable provisions of the Standard Specifications. **All gravel, cobble, rock, sand aggregate, and other loose aggregate used in the work for proposed creek channel and in boulder step pools, including imported and reused rock, shall be thoroughly washed outside of the confines of the proposed stream, pond, and floodplain in a location approved by the engineer so that each material runs clear when water is applied.**

All stone, aggregate materials, and soils imported to the site shall be from a certified "Weed Free" source approved by the US Forest Service - LTBMU. Certified Weed Free Sources can be provided by the Engineer upon request.

All loading, transport, temporary stockpiling, on-site hauling, excavation, preparation of sub-grade, placement, embedment, backfill, compaction, clean-up, and off-haul and disposal of excess materials needed to install all gravel, cobble, rock, boulder, sand aggregate, and other aggregates where incorporated in the work shall be considered as included in the applicable bid item unit price, and no additional compensation will be allowed.

All aggregate materials generated on-site and meeting the quality requirements as stated in Section 200, "Gravel, Cobble, Rock, Boulder & Other Aggregates" of these Special Technical Provisions may be incorporated in the work upon acceptance of the Engineer prior to placement; any such material that is rejected for placement in the work shall be removed and disposed of in conformance with the provisions found elsewhere in these Special Technical Provisions, and the Standard Specifications. Use of said aggregate material in the work shall be considered as included in prices paid for the various contract items of work involved; and no additional compensation will be allowed for.

**200.02 Submittals**

The Contractor shall submit certificate(s) and other material testing data as necessary to validate the source of the gravel, cobble, rock , sand aggregate, and other aggregate materials and its conformance with the Standard Specifications and these Special Technical Provisions. Include all applicable test results for specific gravity, resistance to degradation, absorption, durability index, and soundness (as described elsewhere in these Special Technical Provisions). Samples of loose stone aggregates shall be submitted to the Engineer a minimum of ten (10) working days prior to large-scale delivery to the project site or placement in the work, for review and acceptance of color and material.

All aggregate materials generated on site shall be reviewed and accepted by the Engineer, prior to placement in the work. Visual evaluation of the source, samples, suitable certificates and material testing data sheets, and service records may be used to determine the acceptability of any aggregate materials imported or generated on-site. The Engineer reserves the right to reject said materials.

**200.03 Quality Requirements for Loose Stone Aggregates.**

The Contractor shall use stone (i.e. gravel, cobble, rock, etc.) that is sound and durable against disintegration under conditions to be met in handling and placing, and is hard and tenacious and otherwise of a suitable quality to ensure permanency in the specified kind of work. All applicable stone materials shall meet the requirements stated herein and conform to the following test requirements.

| | Requirement | Test Method |
|---|---|---|
| Apparent specific gravity, minimum | 2.5 | ASTM C-127-59 |
| Abrasion, maximum percent | 45 | ASTM C-535-65 |
| Freeze-thaw loss, maximum percent After 12 cycles | 10 | AASHTO 103 Procedure A |

Stone shall be of such shape to form a stable protection structure for the required section or feature. Flat or elongated shapes will not be accepted unless the thickness of the individual pieces is at least 1/3 of the length. Stones shall be sound, durable, hard, resistant to abrasion and free from laminations, weak cleavage planes, and the undesirable effects of weathering. It shall be of such character that it will not readily disintegrate from the action of air, water, or the typical conditions experienced during handling and placing. All aggregate material shall be clean and free from deleterious impurities, including alkali, earth, clay, refuse, and adherent coatings.

Stone materials shall be of a native nature to the Tahoe Basin (i.e. of similar color and texture to that generally found within the Tahoe Basin and in particular the project area Stateline, Nevada and vicinity). All gravel, cobbles, and boulders used in the proposed stream channel shall be smooth and rounded in shape as noted above and of a natural earth tone color/hue that blends with the surrounding environment (or generally described as “round and brown”).

**200.04 Sand Requirements and Standards**

Sand shall be medium to coarse sand and shall be free of organic debris and other deleterious substances. The sand shall have a minimum specific gravity of 2.5 and shall be sub-rounded to rounded. Volcanic cinder material shall not be acceptable. Samples of the proposed sand shall be submitted to the Engineer for approval 10 days prior to placement. No sand finer than 75µm is allowable. The mineral materials required for the “sand” as designated on the Project Plans for inclusion in the proposed creek channel work shall generally meet the following gradation requirements (per ASTM C136):

| **Sieve Size** | **Percent passing by weight** |
|---|---|
| 3/8” | 100 |
| #4 (4.75mm) | 75.0 (max) |
| #8 (2.36mm) | 50.0 (max) |
| #30 (0.6mm) | 5.0 (max) |
| #100 (0.15mm) | 2.5 (max) |
| #200 (75µm) | 2.0 (max) |

**200.05 Well Graded Gravel Mixture Requirements and Standards**

Well Graded Gravel Mixture shall be “round and brown” as described in Section 200.03 and conform to the gradation requirements below:

| **Size** | **Percent finer than by Weight** |
|---|---|
| 3” | 100 |

| | |
|---|---|
| 2” | 70-90 |
| 3/8” | 35-70 |
| 0.15 inches | 0-35 |

Where identified on the Project Plans, the well graded gravel mixture shall be a well graded blend of the sizes as indicated, uniformly and evenly distributed by weight. Material shall be washed and it is recommended that gradation and washing is completed off site.

**200.06 Channel Bed Material**
Channel Bed Material shall be a mix of 50 percent of the Well Graded Gravel Mixture in Section 200.05 and 50 percent of the Sand in Section 200.04.

**200.07 Cobble Bed Material and Ford Rock**
Cobble Bed Material and Ford Rock shall be smooth and round in nature and within 1 inch of the size specified on the plans in each direction. Cobble and Ford Rock may be placed with 25 percent mix of Well Graded Gravel Mixture in Section 200.05.

**200.08 Boulders and Ford Stepping Stones**
Boulders shall be within 3 inches of the size specified on the plans in each direction. Boulders placed within floodplains or channels should be smooth and round in nature. Ford stepping stones may be flat on 1 or 2 sides and may also be elongated as long as they can be placed to create a stable stepping surface for foot traffic.

**200.09 Placement**
The placement of any sand, well graded gravel mixture, or rock strictly by dumping shall not be permitted. Hand and/or mechanical adjustments/placement of the stone materials are expected in order to meet the requirements stated herein.

All stone products shall be placed to follow the lines and grades shown on the Project Plans. Prevent the contamination of stone features, channel bed material, and other designated
rock fills by soil and other earthen materials during excavation, placement, and/or backfill. All stone features shall be blended with adjacent rock areas and grades, by tapering margins, mixing rock color, and keying into and around existing bedrock, rock, soils, and vegetation. The Engineer will direct the Contractor in placement of well graded gravel mixture for construction of designated stone features and proposed creek channel and filled pond, to attain a natural appearance and complete job in place as shown on the Project Plans and described in these Special Technical Provisions. Exact elevations and horizontal locations of the stone materials and features as shown on the Project Plans may be slightly adjusted in the field by the Engineer, with no additional compensation allowed for.

All channel and pond bed material shall be placed in the locations as shown on the Project Plans in such a manner to produce a relatively uniform graded mass. Place material to thicknesses shown on the Project Plans and uniformly distribute stone and sand materials to produce the required gradation of rock and wheel-roll into place (or compact by other methods) to create a firm and stable structure, and meet finished grade as shown on the Project Plans. Placement of channel and pond bed material shall be conducted in a manner as not to produce a downstream turbidity or other pollutant discharge in violation of the project permit(s) or other water quality standards.

The segregation of mixed stone materials may occur during transport, dumping, on-site hauling, etc. The Contractor shall distribute all stone materials to produce the required gradation of rock. Routine control of gradation will be by visual inspection.

**200.10 RipRap**. In addition to the requirements of Section 705 of the Standard Specifications, riprap stone shall be of such shape to form a stable protection structure for the required section. Stones shall be sound, durable, hard, resistant to abrasion and free from laminations, weak cleavage planes, and the undesirable effects of weathering. It shall be of such character that it will not disintegrate from the action of air, water, or the conditions experienced during handling and placing. Stone shall additionally be of native nature to the Tahoe Basin, of similar color and texture to that found within the Tahoe Basin and in particular the project area, and samples shall be provided to the Engineer for review and approval for use, prior to placement of any stone. All material shall be clean and free from deleterious impurities, including alkali, earth, clay, refuse, and adherent coatings. Visual evaluation of the source, suitable tests and service records may be used to determine the acceptability of the stone. Routine control of gradation will be by visual inspection.

**200.11 Measurement and Payment.** Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for the materials in this section, complete in place as shown on the Plans, as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, should be incidental to the other construction items; no additional compensation will be allowed.

## SECTION 205 –EARTHWORK

**205.01 General**

Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary for stream and floodplain excavations and fills, culvert extension, temporary access road construction and decommissioning, local borrow native soils, import of fill material, salvage topsoil, imported topsoil, existing sub-grade scarification and preparation, rough grading, compaction, finish grading, loading, transport, onsite hauling, off-site hauling, temporary stockpile, off-site stockpile, processing/conditioning, screening, placement, and disposal/salvage of unsuitable or surplus materials, for all the contract work items involved or delineated as excavation, earthwork, or grading as shown on the Project Plans, and as described in the Standard Specifications and these Special Technical Provisions. All excavations, fill, earthwork, and associated grading shall be made true to the lines and grades as shown on the Project Plans, staked by the Engineer, and verified by the Engineer, and shall be so constructed as to avoid removing or loosening any material outside the required slopes and grading limits.

Attention is directed to Section 204, “Unclassified Borrow”, of the Standard Specifications.

Because of the nature of the project, careful excavation, backfill, and grading are mandatory. The proposed contours, representative cross sections, and applicable typical cross section as shown on the Project Plans represent the intended shape of the land but the Contractor shall take into account that the proposed channels, proposed fills, floodplain grading areas, slopes, grade breaks, etc., shall be constructed and graded to natural shapes that transition smoothly to adjacent features and grades. As part of the scope of this item of work, the Contractor shall work under the direction of the Engineer to create a natural-looking finished grade surface. The Contractor may be directed in the field to make minor modifications to the depth of cuts, heights of fills, angle of slopes, and other contour grading to

achieve a natural appearance, and the desired functioning of the system and proposed improvements. Additionally, the Contractor may be field directed, by the Engineer, to slightly modify the alignment or elevation of the proposed improvements to account for variations in substrate or topography, and true field conditions present at the time of construction. Compensation for these potential directives and minor field modifications, as noted above, shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

All finished areas with cut and/or fill slopes shall be graded as indicated on the Project Plans, staked in the field, and directed by the Engineer. The Contractor shall employ excavation and/or placement methods that does not disturb or damage other work. Areas that are shown to not have any excavation or grading shall be protected and remain undisturbed to protect the existing soil profile and vegetation cover.

Cobbles and boulders may be encountered during grading and could be incorporated in the project f needed. If these oversize particles conform to the description of Rock or Channel Bed Materials as described in Section 200 of these Special Technical Provisions, they should be set aside for other applications on the project site as accepted and allowed per direction of the Engineer.

During the course of the project (all phases) any damage to previously installed and accepted work including but not limited to any creek channel, culverts, decommissioned roads, and floodplain areas shall be repaired/replaced at the Contractor's expense. Furthermore, the Contractor shall protect all previously installed revegetation treatments and irrigation equipment; and repair/replace all areas that are damaged as a result of the Contractors operations. The Contractor shall reshape, grade, and re-compact (where applicable) any areas subjected to displacement from vehicular traffic. The Contractor is responsible to locate, identify, and protect all existing utilities from damage.

**205.02 Miscellaneous and Temporary Grading and Excavation**
Work under this item shall consist of providing all labor, tools, materials, and equipment necessary to perform minor excavation, temporary excavation and finish grading as directed by the Engineer. Miscellaneous and temporary excavation and grading includes excavation, grading, fill, compaction, and disposal of excess materials as necessary to construct the project improvements, maintain prevailing grades, and create drainage swales to ensure correct flow paths and positive drainage is maintained within the finished project site. In addition, miscellaneous grading and excavation shall include finish/contour grading within the project area to create natural shapes that transition smoothly to adjacent features, grades and slopes and generally provide for a natural appearance, in accordance with the Project Plans, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer. All such miscellaneous excavation and grading, including detailed finish grading as directed by the Engineer in the field to produce a natural finish, shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

Construction of temporary construction access roads as shown on the plans consists of establishing routes to adequately construct the project. Temporary access road alignments and grades as shown on the plans are suggestions for the contractor. However, the contractor can submit alternative routes for approval by the Engineer. Quantities shown on the plans for constructing temporary access roads are for bidding purposes and actual quantities may vary depending on the final routes established. To establish the access roads as shown on the plans it is estimated that a total of 300 BCY (cut and fill) is required to establish the grades as shown for 10,500 SF of temporary access roads.

**205.03 Creek and Floodplain Grading**
Clearing and grubbing, excavation, sub-grade scarification and preparation, rough grading, fill, compaction, finish grading, and disposal/salvage of unsuitable or surplus materials within the designated areas of the stream and floodplain shall produce a finished surface to the lines and grades as shown on the Project Plans, and all work shall be in conformance with the applicable sections of these Special Technical Provisions.

The Contractor is only permitted to use "low impact equipment" within the floodplain/SEZ areas for completion of this work. The Contractor's attention is directed to Section 120, "Project Permits."

Any fill materials used in the work shall be in conformance with the Standard Specifications, these Special Technical Provisions, and at a minimum shall not exceed optimum moisture content, and be free of stones or lumps exceeding 3 inches in greatest dimension, organic matter, or other unsatisfactory material that may restrict compaction requirements.

Following completion of the excavation and rough grading work within the floodplain grading areas, and prior to placement of any topsoil, the Engineer will inspect the work site subgrade (using a soil probe or penetrometer) for any areas of excessive compaction. Upon discovery the Engineer will mark the limits of all areas, and the Contractor shall loosen/decompact the areas in accordance with the applicable provisions of Section 260, "Revegetation" of these Special Technical Provisions.

Placement of topsoil and revegetation treatments shall be as specified elsewhere in these Special Technical Provisions, or as directed by the Engineer.

**205.04 Local Borrow (Native Fill)**
Selected material and other local borrow native earthen material encountered and/or generated on-site in excavation within the project limits may be used as backfill where shown on the Plans for fill slopes or as specified in the Special Technical Provisions, the Standard Specifications, or as directed by the Engineer.

All fill materials used in the work shall be in conformance with the Standard Specifications, these Special Technical Specifications, and at a minimum shall not exceed optimum moisture content and be free of stones or lumps exceeding 3 inches in greatest dimension, organic matter, or other unsatisfactory material that may restrict compaction requirements. **Any native, local borrow, or imported borrow soils used for backfill shall be accepted by the Engineer prior to placement**. Any screening operations and processing of soils as required for conformance with this section shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed. Stockpiling of soils and screening operations should occur at a staging area with appropriate BMPs installed.

Local borrow (topsoil, and underlying native earthen soils) generated on-site in excavation within the project limits may be placed in the fill only in locations as specified on the Project Plans and described in these Special Technical Provisions. Topsoil excavated and properly salvaged within the grading limits may be considered as a select material or local borrow only for the purpose of placement in areas to be planted or revegetated as specified elsewhere in these Special Technical Provisions, or as directed by the Engineer.

The Contractor shall perform and/or submit all material testing reports and other data as necessary to provide the Engineer with established laboratory values for optimum moisture and maximum dry density, for any local borrow native fill requiring density testing. The Contractor is hereby advised that some of the on-site soils may be saturated and will require drying prior to placement in order to achieve the specified degree of compaction.

**205.05 Import**

Importing of earthwork fill material, if necessary or required to meet the grades and elevations shown on the plans, shall be considered included in the Contractor's bid for the various items of work involved and no additional compensation will be made, therefore. The Contractor shall notify the Engineer of the borrow site location at least 72 hours in advance and provide an adequate sample size (~ 0.5 cubic foot) so the Engineer can verify the suitability of the material. All imported materials shall be proposed by the Contractor in writing in accordance with the submittal requirements of these Special Provisions and the Standard Specifications. The Contractor shall perform and/or submit all material testing reports and other data as necessary to provide the Engineer with established laboratory values for optimum moisture and maximum dry density, for any imported material requiring density testing. Furthermore all imported materials must come from certified weed free sources.

**205.06 Fill Slopes**

Earthen materials used for native fill and import fill shall be in conformance with the requirements stated herein. Placement, layering, compaction, and locations of the fill materials to create a distinct soil profile to produce a finished grade surface shall be as shown on the Project Plans, described herein, and as directed by the Engineer.

*Execution of Work*

Prior to the placement of fill materials the exposed sub-grade should be cleared of excessively loose or disturbed soil and stone materials, large woody debris, vegetation, organic matter, and other waste materials (i.e. clearing and grubbing). No fill should be placed on frozen ground; and placement of fill on or in standing water will not be allowed. If soft, wet, or pumping subgrade soils are present, the required minimum level of compaction for the initial fill lift shall be eighty-five percent (85%) of the soil's maximum dry density as determined in accordance with ASTM D 1557. Construction traffic on soft, wet, or pumping subgrade soils shall be reduced to a minimum. The intent of the reduction is to limit the amount of construction traffic that could lead to further deterioration and destabilization of the exposed subgrade and to build a more stable pad upon which to place subsequent fill lifts.

Fills shall be placed in loose lifts not to exceed eight (8) inches and shall be compacted to not less than ninety percent (90%) of the soil's maximum dry density as determined in accordance with ASTM D 1557. Pumping or deflection within fill lifts is acceptable as long as the required level of compaction is being met and does not preclude achieving adequate density in subsequent lifts. No frozen fill should be placed. Placement and compaction of the channel fills should be accomplished under full-time observation from the Engineer. Testing of compaction will be conducted throughout the process. Fill shall be benched into existing slopes where sidewall slopes exceed 4:1 (V:H).

*Materials*

Soils used as Native Fill should consist of native materials generated during construction operations following associated clearing and grubbing and sod or topsoil salvage. Native fill generated on site should be relatively free (i.e. less than 5 percent) of organics. Import fill, if required or desired for use,

shall be free of organics and other perishable material and meet the requirements as noted below. For placement in the work, all native fill or import shall be free of construction debris and shall meet the following requirements:

| Channel Fill Requirements | |
|---|---|
| **Sieve Size** | **Percent Passing (by dry weight)** |
| 6” | 100 |
| 4” | 90 - 100 |
| ¾” | 70-100 |
| No. 40 | 10-85 |
| No. 200 | 8-45 |
| Liquid Limit | 60 max. |
| Plasticity Index | 30 max. |

The Contractor shall perform and submit material testing reports and other data as necessary to validate the source and makeup of import fill selected for placement in the work, and to provide the Engineer with established laboratory values for optimum moisture and maximum dry density, for any fill material requiring density testing. Any proposed import fill that deviates from the criteria stated herein, shall have written acceptance from the Engineer prior to import or placement in the work. All import fill must be certified weed free.

**205.07 Topsoil Placement**

Placement of salvaged topsoil to the required thickness, including any associated finish grading and compaction, shall produce a finished surface to the lines and grades as shown on the Project Plans, and all work shall be in conformance with the applicable sections of these Special Technical Provisions. The salvaged topsoil shall be placed to blend with the adjacent project improvements and floodplain/slope areas to create a generally smooth, natural appearance (including minor variations) as directed by the Engineer; and to create a stable area to receive all proposed revegetation treatments as specified elsewhere in these Special Technical Provisions.

Prior to any topsoil placement the underlying subgrade shall be left rough as directed by the Engineer. Topsoil shall be placed to uniform depths as indicated on the Project Plans.

Following completion of excavations, fill, grading, compaction, placement of aggregates, and construction of all proposed improvements as shown on the Project Plans as required prior to placement of any topsoil, the Contractor shall schedule for a site inspection by the Engineer (minimum of 4 working days notice required) in order to inspect the subject work area for conformance with the contract documents, plans, and specifications. **Placement of topsoil shall not commence until the Engineer has inspected and accepted the subject work area**. In addition, the base soils will be inspected (using a soil probe or penetrometer) for any areas of excessive compaction. Upon discovery the Engineer will mark all areas/items required for corrective measures and mark the limits of areas where soils shall be loosened/decompacted in order to commence placement of topsoil and subsequent

installation of the revegetation treatments in accordance with the applicable provisions of Section 260, "Revegetation" of these Special Technical Provisions.

Salvaged topsoil shall only be generated from the project site (within the limits of grading) as specified in Sections 170 "Clearing and Grubbing and Tree Removal" and 260 "Revegetation" of these Special Technical Provisions.

**205.08 Unsuitable Soils, Surplus Earthen Material, and Stockpiles**
Unsuitable soils, surplus soils, and other excess earthen materials shall be removed and disposed of in accordance with all local, state, and federal regulations from the project site as a part of this item of work. No unsuitable or surplus material may be disposed of within the rights-of-way or project limits. The Contractor shall make all arrangements for disposal of the materials at off-site locations (including disposal outside of Tahoe basin) and at the Contractor's expense.

All surplus materials generated from the project site during construction operations, including but not limited to, clearing and grubbing, topsoil salvage, sod salvage, channel and pond bed material, earthwork, and other operations, shall be off-hauled and salvaged/disposed of outside the project limits and Tahoe basin (unless a specific off-site area is authorized for use by the Engineer and applicable regulatory agencies). Any shortage of material caused by premature disposal of the surplus or salvaged materials, by the Contractor, shall be replaced by him/her and no additional compensation will be allowed for such replacement.

**205.09 Measurement and Payment. "Earthwork"** shall be measured on a **per bank cubic yard** basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The contractor shall bid based on the cut, fill, and net quantities provided on the Project Plans. If the contractor disputes the quantities provided on the plans, the contractor shall pay for and provide a survey, at his/her own expense, and prepare the necessary figures and calculations to support the claim. Excess quantities will be paid for per cubic yard. Any associated contour grading and other general earthwork movement as required to complete the work shall be considered as included in the per cubic yard price.

The per **bank cubic yard** price paid for **"Earthwork"** shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the earthwork involved, including but not limited to, excavation, loading, transport, onsite hauling, local borrow, import, screening, conditioning, backfill, rough grading, scarifying, compacting, finish grading, disposal of unsuitable or surplus materials, and otherwise manipulating the existing ground surface and soils, and placing additional local borrow or import soils as required for the grading and construction of the designated creek and floodplain areas, constructing and restoring temporary construction access roads for a complete job in place to the lines and grades as shown on the Project Plans, and specified in the Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, and no additional compensation will be allowed.

Full compensation for conforming to the provisions of this Section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

## SECTION 210 – RCB CULVERT STRUCTURE

**210.01 General**

Work covered under this specification consists of furnishing all of the labor, materials, tools, and equipment necessary for the design, furnishing, and construction of a reinforced concrete box (RCB) culvert structure extension complete with headwalls, wing-walls, and interior culvert weirs in accordance with the Contract Documents, Standard Specifications, and these Special Technical Provisions, and in conformity with the lines, grades, dimensions, and general design parameters as shown on the Project Plans, and as established and directed by the Engineer. Where used in these Special Technical Provisions 'RCB culvert structure' shall mean to include all components necessary to provide for a complete and fully functional RCB culvert with headwalls, wing-walls and interior culvert weirs as shown on the Project Plans. In situations where two or more specifications or standards apply to this work, the most stringent requirements shall govern.

In addition to these Special Technical Provisions all work for the design, furnishing, and construction of the RCB culvert structure shall conform to the applicable portions of the State of Nevada Department of Transportation (NDOT) Standard Specifications and Plans for Road and Bridge Construction (current version). Attention is directed to the NDOT Standard Plans included as details in the Project Plans, and Sections 502 "Concrete Structures" and 502.03.24 "Precast Concrete Box Culverts" of the NDOT Standard Specifications. In addition, the RCB culvert structure shall conform to the following applicable criteria:

- ACI 304 and 318
- CRSI Manual of Standard Practice
- AASHTO M259
- ASTM C1433, C1577
- Current/applicable AASHTO and ASTM standard(s)
- Current Building Codes for Washoe County
- AASHTO HS20-44 / HL-93 LRFD traffic loading (whichever is more stringent)

Any trench shoring/protective systems as necessary for protection of existing utilities and/or to facilitate complete of the work for the RCB culvert structure is the sole responsibility of the Contractor, including engineering design, and shall be considered as included in the prices paid for construction of the RCB culvert structure.

All engineering design, submittals, furnishing and construction of a RCB culvert structure, transport, excavation, shoring, sub-base preparation, bedding materials, engineering fabrics, joint materials, seals, mortar, grout, structure backfill materials, pervious material, aggregate base, compaction, grading, disposal and other appurtenances as necessary for a complete structure in place including all work and equipment associated with the installation of the RCB culvert structure shall be included in the cost of this item, and no additional compensation shall be allowed for.

The submittals provided from the Contractor's precast manufacture at a minimum shall include the following:

- Concrete mix design and other material specifications
- Sizes and dimensions for each segment, headwall, and wing-wall
- Reinforcement (including size, splice type, and location)
- Joint details and connections including gaskets, seals, etc
- Cast-in components and appurtenances

- Anchors, lift devices, and accessories
- Lifting and transport requirements
- Installation/construction methods and assembly requirements
- Mortar and grout materials and other finishing requirements
- Manufacture specifications and applicable design standards (precast elements)
- Source Quality Control Testing/Inspection certifications (precast elements)
- Certificate of Compliance from manufacturer's QC for each shipment (precast elements)

**210.02 Joints**
All joints and connections for the RCB culvert structure shall be joined and sealed in a watertight fashion. At a minimum, an exterior joint wrap/seal conforming to ASTM C877 (such as ConSeal CS-212 or accepted equal) shall be used to ensure a watertight system.

**210.03 Interior Culvert Weirs**
All interior concrete culvert weirs shall be constructed as part of the RCB culvert structure to the locations and dimensions as shown on the Project Plans, and as directed by the Engineer. The construction approach, tools, and materials to be used for construction and installation/anchoring of the culvert weirs to the RCB culvert structure shall be submitted to the Engineer for review and acceptance prior to performance of the work. The Contractor shall clearly indicate the proposed method and materials to be used to securely anchor/attach the interior culvert weirs to the RCB culvert structure. In addition all interior culvert weirs shall be sealed to the interior RCB culvert walls and floor with a polyurethane construction sealant rated for use below the waterline (such as SikaFlex-1a, or accepted equal) or other equivalent method in accordance with the Contractor's structural design engineer and/or precast manufacturer's recommendations, as necessary to meet the anticipated hydrostatic forces.

**210.04 Installation**
All materials and construction methods shall conform to the applicable provisions of these Special Technical Provisions and NDOT Standard Plans and Specifications. Refer to Appendix B for Installation Instructions for the Culvert Extension. Any precast units shall not be shipped until concrete has attained a minimum flexural strength of 4000 psi and/or have cured at least five (5) days following fabrication.

The RCB culvert structure shall be laid to the lines and grade shown on the Plans. The Contractor shall clean the interior of the RCB culvert structure as work progresses, and the RCB culvert structure shall be clear and free of all debris and sediment before acceptance by the Engineer and the introduction of channel flow to the proposed channel and culvert.

The bottom of the trench shall be graded and prepared so as to provide a firm and uniform bearing for the RCB culvert structure along its entire length (or applicable segment for portion of the work) and prepared as indicated in the submitted and accepted installation specifications. Where the trench bottom is unsuitable (i.e. soft muck/refuse or bedrock/unyielding material unable to provide long-term support), the Contractor shall excavate to a depth required by the Engineer and replace with suitable material as specified or directed by the Engineer and geotechnical engineer. Sub-base and/or bedding materials shall be placed so as to provide a firm and uniform foundation and bedding for the RCB culvert structure along its entire length, well consolidated and compacted in conformance with the submitted and accepted installation specifications (bedding material shall be of no less quality and thickness as designated on the Plans). Structural backfill shall be as shown on the Plans and conform to Section 207 "Backfill" of these NDOT Standard Specifications.

All lift holes, etc shall be filled with expansive mortar or tapered precast mortar plugs to provide a permanent watertight section, and shall be finished flush on the inside face of the RCB culvert structure. Seal with an exterior joint wrap material that is similar in characteristics and function as that which is stated above and used for any precast RCB culvert joints.

**210.05 Repairs and Rejection**
Cast-in place or precast elements may be repaired, if necessary, because of imperfections in manufacture/construction or handling damage and will be acceptable if, in the opinion of the Engineer, the repairs are sound, properly finished and cured, and the repaired section conforms to the requirements of this specification and any manufacturer's requirements.

Cast-in-place or precast elements shall be subject to rejection on account of failure to meet any of the specification requirements. Elements which show defects due to handling may be rejected at the site of installation regardless of prior acceptance. In addition any individual elements may be rejected, including but not limited to, any of the following:

- Fractures or cracks passing through the wall, except for a single end crack that does not exceed one half the thickness of the wall.
- Defects that indicates proportioning, mixing, and molding not in compliance with the specifications.
- Spalled, checked, honeycombed or open texture defects which are not purely surface in nature.
- Damaged ends, where such damage would prevent making a satisfactory joint.

Prior to acceptance of the RCB culvert structure any damage, defects, and/or associated repairs are subject to structural review by a licensed structural engineer (as selected by the Owner) and applicable precast manufacturer; and any associated costs shall be the responsibility of the Contractor, and no additional compensation shall be allowed for.

**210.06 Marking for Precast Elements**
Each section of the RCB culvert structure shall be clearly marked by waterproof paint of other means such that the date, manufacturer, plant location, material type, strength designation (design cover and loading) and nominal span and rise can be readily identified.

**210.07 Measurement and Payment**
**"RCB Culvert Structure"** shall be measured on a **lump sum** basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The contract unit price paid for "RCB CULVERT STRUCTURE" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved in constructing the RCB culvert structure, complete in place, including but not limited to excavation, shoring, sub-grade preparation, bedding, concrete, reinforcement steel, forms, curing, finishing, precast elements, mortar, grout, joint sealants, fabrics, structural backfill, compaction, transport, and disposal of excess materials and waste debris as shown on the Plans, as specified in these Special Technical Provisions and NDOT Standard Plans and Specifications, and as directed by the Engineer; and no additional compensation will be allowed.

## SECTION 220 – FORD CROSSING

**220.01 General**

Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary to construct the proposed ford crossing to the limits shown and in accordance with the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and as directed by the Engineer.

The alignment, elevations, grades, slopes, dimensions, etc. of the proposed ford crossing is shown on the Project Plans to provide a basis for construction and bidding purposes. The Engineer is expected to make minor revisions and provide direction in the field to fit any varying field conditions. The Contractor shall include all costs for working under the direction of the Engineer in his/her bid for this work, as no additional compensation will be allow therefore. The Ford Crossing area must be dewatered prior to construction. Once coffer dams are in place and the water is diverted, the existing corrugated metal pipe shall be removed. Any road surface to be removed shall be stockpiled for later use on the surface. The ford crossing elements shall be placed with care to the grades shown on the plans. All exposed boulders shall be stable after placement. Voids shall be chinked as directed by the engineer and the area shall be jetted with water until voids are filled.

**220.02 Measurement and Payment**
**"Ford Crossing"** shall be measured on a **lump sum** basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The contract unit price paid for **"Ford Crossing"** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved in constructing the **"Ford Crossing"**, complete in place, including but not limited to removal and disposal of existing corrugated metal culvert, excavation, sub-grade preparation, rock placement, compaction, transport, and disposal of excess materials and waste debris as shown on the Plans, as specified in these Special Technical Provisions and the Standard Specifications, and as directed by the Engineer; and no additional compensation will be allowed.

## SECTION 230 – PROPOSED CREEK CHANNEL

**230.01 General**
Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary to construct the proposed creek channel to the limits shown and in accordance with the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and as directed by the Engineer.

The alignment, elevations, grades, slopes, dimensions, etc. of the proposed creek channel is shown on the Project Plans to provide a basis for construction and bidding purposes. The Engineer is expected to make minor revisions and provide direction in the field to fit any varying field conditions. The Contractor shall include all costs for working under the direction of the Engineer in his/her bid for this work, as no additional compensation will be allow therefore. Removal and disposal of all excess materials and waste debris shall be as specified elsewhere in these Special Technical Provisions.

**230.02 Wetland Mat Channel**
The designated area shall be cleared and grubbed, and excavated/filled to the lines and grades as shown on the Project Plans. The floodplain and proposed channel shall be graded to the lines and grades shown on the Project Plans less the expected height of the wetland mat. After the subgrade is completed, the Contractor shall request approval from the Engineer. Upon acceptance of the sub-grade by the Engineer the Contractor shall place the wetland mat as shown on the Plans taking care to follow overlap and staking guidelines. Once the wetland mat is secure, the contractor shall place channel bed material to

the lines, grades, and dimensions as shown on the Project Plans without disturbing the wetland mat, and as directed by the Engineer (in accordance with Section 200, "Gravel, Cobble, Rock, Boulder & Other Aggregates," of these Special Technical Provisions). The bed materials shall be filled and compacted using a shovel or mcleod around all edges of sod and any structures to leave minimal voids. The Contractor shall hose down the channel to fill any voids with additional bed material as needed.

**230.03 Sod Block Channel**

The designated area shall be cleared and grubbed, and excavated/filled to the lines and grades as shown on the Project Plans. The floodplain and channel shall be graded to the lines and grades shown on the Project Plans less the expected height of the salvaged sod. After the subgrade is completed, the Contractor shall request approval from the Engineer. Upon acceptance of the sub-grade by the Engineer the Contractor shall place the sod blocks as shown on the Plans followed by the channel bed material section to the lines, grades, and dimensions as shown on the Project Plans, and as directed by the Engineer (in accordance with Section 200, "Gravel, Cobble, Rock, Boulder & Other Aggregates," of these Special Technical Provisions). Stakes shall then be installed. The bed materials shall be filled and compacted using a shovel or mcleod around all edges of sod and any structures to leave minimal voids. The Contractor shall hose down the channel to fill any voids with additional bed material as needed.

**230.04 Boulder Step Pools**

The designated area shall be cleared and grubbed, and excavated/fill to the lines and grades as shown on the Project Plans. The sub-grade shall be prepared and compacted as shown on the Plans, and channel bed material and well graded gravel mixture for chinking shall be placed to the lines, grades, and dimensions as shown on the Project Plans, and as directed by the Engineer (in accordance with Section 200, "Cobble, Rock, Boulder & Other Aggregates", of these Special Technical Provisions). Following the placement of the channel bed cobble and well graded gravel mixture materials, the Contractor shall properly place the boulders as shown on the Project Plans and as directed by the Engineer. Following the placement of boulders and necessary chinking material, the Contractor shall then properly place and compact all designated fill (as specified on the plans) to create the banks of the proposed creek channel and floodplain areas in order to produce a firm and stable creek channel and floodplain to the lines, grades, and dimensions as shown on the Project Plans and as directed by the Engineer. All fill including topsoil shall be placed to the required thickness, and finish graded to blend with the adjacent floodplain areas to create a smooth, natural appearance as directed by the Engineer; and to create a stable area to receive all proposed revegetation treatments as specified elsewhere in these Special Technical Provisions. If directed by the Engineer, the Contractor shall place additional "Chinking Material" and/or Channel Bed Material to fill additional voids in both the channel bed and structure. Any willow stakes shall be incorporated with the work as necessary in order to meet the revegetation treatment requirements (see Section 260, "Revegetation").

**230.05 Measurement and Payment**

**"Wetland Mat Channel"** shall be measured on a **per linear foot** basis along the centerline of the facility (i.e. alignments as shown on the Project Plans), complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The linear foot price for **"Wetland Mat Channel"** shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in constructing the channel section, including but not limited to, excavation, sub-grade preparation, grading, stone materials, backfill, local borrow, import, compaction, and off-haul and disposal of excess materials, for a complete job in place to the lines, grades, and dimensions as shown on the Project Plans, and specified in the Contract Documents, Project Permits, Standard Specifications,

these Special Technical Provisions, and as directed by the Engineer, and no additional compensation will be allowed.

**"Sod Block Channel"** shall be measured on a **per linear foot** basis along the centerline of the facility (i.e. alignments as shown on the Project Plans), complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The linear foot price for **"Wetland Mat Channel"** shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in constructing the channel section, including but not limited to, excavation, sub-grade preparation, grading, stone materials, backfill, local borrow, import, compaction, and off-haul and disposal of excess materials, for a complete job in place to the lines, grades, and dimensions as shown on the Project Plans, and specified in the Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, and no additional compensation will be allowed.

**"Boulder Step Pools – South Fork Marlette"** shall be measured on a **lump sum** basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The lump sum price for **"Boulder Step Pools – South Fork Marlette"** shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in constructing the boulder step pool channel section, including but not limited to, excavation, sub-grade preparation, grading, stone materials, backfill, local borrow, import, compaction, and off-haul and disposal of excess materials, for a complete job in place to the lines, grades, and dimensions as shown on the Project Plans, and specified in the Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, and no additional compensation will be allowed.

**"Boulder Step Pools – Main Fork Marlette"** shall be measured on a **lump sum** basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The lump sum price for **"Boulder Step Pools – Main Fork Marlette"** shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in constructing the boulder step pool channel section, including but not limited to, excavation, sub-grade preparation, grading, stone materials, backfill, local borrow, import, compaction, and off-haul and disposal of excess materials, for a complete job in place to the lines, grades, and dimensions as shown on the Project Plans, and specified in the Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, and no additional compensation will be allowed.

## SECTION 235 – LOGS AND TIMBER

### 235.01 General

All logs shall be sized as indicated in the Plans. All logs are to be harvested from the trees marked for removal on site by the Contractor and cost of salvaging and storing these logs shall be included in other bid items. If logs are damaged by the contractor during removal, it is the sole responsibility of the Contractor to find a suitable replacement and import the logs into the site. Only logs from coniferous trees native to the Tahoe basin will be acceptable. All logs to be incorporated into the project must be tight grain sound wood with no rot. The Engineer has the right to refuse unsatisfactory logs prior to placement in the project.

### 235.02 Measurement and Payment.

**"As-Directed Log Placement for Enhanced Floodplain Roughness"** shall be measured on a **per liner foot** basis along the length of the log, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The contract price paid for **"As-Directed Log Placement for Enhanced Floodplain Roughness"** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved in placing the cut logs above finished grade as directed by the Engineer, complete in place, as shown on the Plans, as specified in these Special Technical Provisions and as directed by the Engineer; and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for the materials in this section, complete in place as shown on the Plans, as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, should be incidental to the other construction items; no additional compensation will be allowed.

## SECTION 240 – ROAD DECOMMISSION

**240.01 General**
Existing disturbed roads and constructed dirt road grades shall be decommissioned after use for construction access. Earthwork required for decommissioning constructed dirt access roads is included in the "Earthwork" bid item. Revegetation of the decommissioned road is included in the revegetation bid item for the appropriate treatment type. This item encompasses the surface treatment for the decommissioned dirt roads. Decommissioning the dirt roads will involve ripping the soil to 6 inches depth and then adding revegetation seed mix as directed by engineer. After seed mix is applied, mulch must also be applied per the Section 260 of these specifications. Finally, cut trees and branches should be scatted to create a rough surface that is not easily traversable by foot or vehicle. Work required for restoration of existing dirt roads that are to remain and are disturbed during construction is included in Mobilization and Demobilization.

**240.02 Measurement and Payment.**

**"Road Grade Decommission"** shall be measured on a **per square foot** basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The contract price paid for **"Road Grade Decommission"** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved in relocating the decommissioning the dirt road, complete in place, as shown on the Plans, as specified in these Special Technical Provisions and as directed by the Engineer; and no additional compensation will be allowed.

## SECTION 260 – REVEGETATION

**260.01 General.** The Contractor shall perform all revegetation work as specified herein and in accordance with the provisions of these Special Technical Provisions, the Project Plans, and the Standard Specifications. The revegetation work shall consist of all site preparations associated with the revegetation treatments and shall include seeding, mulching, installation of erosion control blankets, installation of willow stakes and installation of wetland sod mats. The revegetation work may include sod and plant salvage. Maintenance and record keeping are required in accordance with the Project Plans, and as directed by the Engineer. Areas to receive revegetation treatments shall include all areas disturbed during construction and all areas indicated on the plans and as directed by the Engineer.

Revegetation work shall be conducted during non-windy conditions. Windy conditions are defined as a sustained wind of 10 mph or more; gusts where the difference between the ambient and the increased velocity is more than 4 mph; or any conditions that may make the dispersal of revegetation and erosion control material difficult or inaccurate. The Contractor is responsible for providing certified instruments or data from certified instruments in case of a claim or conflict. There shall be no pay item, payment or claim for instruments or data from measuring instruments.

All revegetated areas shall be maintained for one year following completion of work to ensure proper establishment of vegetation. Supplemental treatments may be required if revegetation efforts are unsatisfactory following completion of work as determined by the Engineer. This re-treatment may include re-application of the seed mix, willow stakes, containerized plants, mulch, weed abatement, and other items as necessary to achieve the performance measures below. The cost of this bonding shall be included in the Revegetation bid item. The Contractor must achieve 70% vegetative cover of native species and <2% cover of non-native species for areas receiving seed mix application.

The Contractor shall notify the Engineer no less than five (5) working days in advance of revegetation work and shall not begin work until prepared revegetation treatment areas have been accepted by the Engineer. The Contractor shall request that treatment types and boundaries are located by the Engineer prior to progressing with the work.

No substitutions or alterations to these Special Technical Provisions shall be accepted without the prior written approval of the Engineer. No further disturbance of any treatment area shall be allowed once seeding or installation of cuttings and plant materials has been initiated.

**260.02 Soil Disturbance**
Soil disturbance shall be minimized and limited to those areas that require treatment. All existing vegetation within the project limits not designated for removal shall be protected. Delineate project boundaries with fencing per the requirements in Construction Limit Fencing and in these Special Technical Provisions. Traffic outside of the project area is prohibited. Any existing or previously installed vegetation damaged shall be replaced by the Contractor. Areas to receive revegetation treatments shall include all areas disturbed during construction, as indicated on the Project Plans and as directed by the Engineer.

**260.03 Submittals.** Within ten (10) calendar days following the Notice to Proceed for the contract, the Contractor shall submit to the Engineer statements proving that orders for erosion control blanket and stakes have been received and accepted by the supplier(s). The statement(s) shall include product specifications and quantity of product(s) to be delivered and the estimated date(s) of delivery. Additionally, the Contractor shall submit plans, labels or material samples for the following items:

- Revegetation Schedule and Order of Work

Proposed substitutions must be submitted in writing for approval by the Engineer.

**260.04 Materials**
*Seed*
All Seed Mix shall be supplied by the NTCD to the Contractor 3 days prior to seeding. NTCD will supply the Contractor with enough seed for applying to disturbed areas plus an additional 20%. Contractor will

supply at their expense any additional seed necessary to adequately seed the revegetation areas. Seed mix will include shallow-rooted annual and perennial grasses and forbs native to the Lake Tahoe Basin and sourced from the Sierra Nevada as listed on the Project Plans.

*Wetland Sod Mats*

Wetland sod mats will be provided by NTCD to the Contractor. The Contractor will notify NTCD five (5) working days prior to requiring the wetland sod mat to allow for coordination with the vegetation contractor supplying the wetland sod mats. Wetland sod mats will be either rolled or on pallets and be delivered to the staging area for installation. Wetland sod mats will include sedges (*Carex spp*.), rushes (*Juncus spp*.) and other wetland species grown and knit into a coir blanket. Exact sizing of mats will be determined by the vegetation contractor in accordance with best installation practices. Vegetation contractor will deliver the mats to the staging area and meet with the Contractor to advise on installation.

*Containerized Wetland Plugs*

If used, all containerized plugs shall be supplied by NTCD to the Contractor 3 days prior to planting. All material not deemed acceptable by the Contractor and/or the Engineer shall be replaced by NTCD. Upon acceptance of material by the Contractor, the Contractor shall assume responsibility for plant health and survival. Plants shall be supplied on site by NTCD at no additional cost to the Contractor.

*Salvaged Sod and Wetland Plugs*

A small amount of sod could be harvested from the project site near the upstream portion of Marlette Creek's main fork. NTCD will mark sod to be salvaged prior to construction in this area and relay this information to the Contractor. If, during construction, there is determined to be an area with sufficient plant material to salvage, but not sufficient to use as sod blocks without modification by the vegetation contractor, the Contractor will postpone construction in this area for 24 hours to arrange for the vegetation contractor to be on site for the collection of this material during excavation. Salvaged plant material that cannot produce cohesive sod blocks will be transported off-site to the vegetation contractor's property for production of plugs or introduction into the wetland sod mats grown for the project area. Material that cannot be salvaged will be stockpiled, and re-applied as organic matter as directed by the Engineer.

Any potential sod harvested from the footprint of the restoration area will not be stockpiled for more than 30 calendar days. Low-weight bearing equipment (ASV-POSI TRACK SKID STEER with a front-end bucket (front-end loader or tractor with bucket) will be used to salvage and transport sod and minimize damage to native vegetation remaining in place along temporary maintenance access road. Sod is to be removed in as large a unit as practicable, resulting in clean, vertical edges. Sod shall be scalped from the original ground surface to a depth of no less than eight (8) inches, as measured from the root crown. Stored sod shall be placed with roots down and edges snugly adjoining adjacent sections in a shaded facility for a maximum time of one month; minimize storage and handling. Sod shall be watered twice a day at a minimum and not be allowed to dry out during handling and storage. Sod shall be re-planted concurrent with channel and floodplain construction to the greatest extent possible and as directed by the Engineer.

*Willow Stakes*

All materials shall be cut from healthy, live branches of willow and shall be taken from suitable plants within the project area as identified by the Engineer. Exclusively cutting poles from one plant will not be allowed. Stakes may vary in length, depending on source material and application, but shall be a

minimum of two (2) feet in length and a minimum of one (1) inch diameter and a maximum of two (2) inch diameter. Material shall not be cut more than seven days prior to installation. Stakes shall be straight, with all leaves removed from the stems. All cuts shall be clean without frayed ends. Cut bottoms will be at a forty-five-degree angle. The materials' cut bottoms will be kept in a water-filled bucket in a shaded environment or submerged in a shaded stream pool.

*Salvaged Willow Root Wads*

Throughout the project area, native willows clumps shall be salvaged from the restoration area. Willows will be pruned prior to removal so that branches include two to three nodes, but do not exceed six (6) inches in length. Cuts shall be clean, leave no frayed bark, and be made ½ inch above the node.

Plants will be carefully removed by excavating around the root zone with a backhoe bucket, or other approved equipment. As much of the root ball as feasible shall be removed intact and damaged roots shall be pruned. Burlap may be used to wrap and protect the root zone during transport. Root wads shall be stored in pre-excavated, pre-watered trenches and maintained well-watered and healthy until moved to the permanent planting sites. Engineer will indicate planting locations that will coincide with enhanced floodplain roughness and other areas.

*Mulch*

Mulch shall be wood chips generated on site or pine needles. Mulch shall contain no more than 5% impurities by volume such as pinecones, twigs, rocks or other material. Garbage shall represent no more than 0.5% of the total volume. Mulch shall contain no more than 2% by volume mineral soil and no more than 10% by volume decomposed organic matter.

*Erosion Control Blanket, Wattles, and Stakes*

Where indicated on the plans, on floodplains and upland slopes greater than or equal to 3H:1V, a single layer of erosion control blankets that are composed of certified weed-free coir or excelsior, with an all-natural fibers netting (no plastic, straw, or jute) will be installed such as North American Green SC150BN, or equivalent as approved by the Engineer. Any 3H:1V slopes greater than 20 feet in length shall also have wattles/fiber logs installed. Wattles will be composed of certified weed-free coir or excelsior with all-natural netting. No plastic or straw-based materials are allowable in blankets or wattles. Each roll or bail of blanket and wattles shall be identified with a tag or label securely affixed to the outside of the roll on one end. The label shall include the manufacturer or supplier, the style number, and the roll and lot numbers.

Stakes shall be 12 inches in length, manufactured from a wood (North American Green Eco-STAKE or equivalent), or as approved by the Engineer. No plastic is allowable.

**260.05 Installation of Treatments**

The Contractor shall notify the Engineer no less than three working days in advance of revegetation work and shall not begin the work until prepared treatment areas have been approved. The Engineer shall verify labeling of erosion control blankets and stakes upon delivery to the site and prior to application.

*Re-planting Salvaged Sod*

If sod was salvaged from the project area, the Engineer shall approve the planting dates and final locations. Thoroughly water all sod blocks before re-planting. Sod shall be transported from its storage location to planting location within 10 minutes. Re-plant salvaged wetland sod adjacent to the stream

channel working away in the floodplain in areas identified by the Engineer. Immediately water sod after completion of re-planting.

*Installing Wetland Sod Mats*

Wetland sod mats shall be placed at the stream's edge over leveled ground. Installation shall ensure that mats are in direct contact with the soil so that no space between the bottom of the mat and the ground could prevent good root-to-soil contact. Wetland sod mats shall be staked in each corner and every one foot (1) feet along the mat's bottom and upstream edges. Staking along the uphill and downstream edges shall be no more three feet apart. Stakes shall be 12 inches to 16 inches, manufactured from a wood (North American Green Eco-STAKE or equivalent), or as approved by the Engineer. No plastic is allowable. Hay hooks may be used to help place and adjust the mats into the correct position.

*Preparing Seed Beds*

All bare soils in the project area, and those in areas outside the project area that were disturbed by the Contractor, shall be loosened as needed to a depth of 6 inches unless otherwise specified on the Project Plans or directed by the Engineer. Soils shall be loosened with hand tools, an agricultural disc, rippers, or other equipment approved by the Engineer. Soils shall be loosened so that no soil clods are larger than an average of 1 inch in diameter. Care will be taken around existing trees and shrubs to prevent root damage during soil conditioning, grading and excavation activities. No mechanical loosening of soil shall take place within the dripline of mature trees or shrubs. Final surfaces shall be left rough unless erosion control blankets are specified, in which case soils shall be raked smooth. No wheeled or other mechanical equipment shall be permitted to travel on the prepared seedbed. Seed bed shall be prepared when soils are dry.

*Seeding*

Seed shall be uniformly broadcast with hand-held seeders to achieve desired application rate. The areas will be divided into ½ to ¼ acre areas before seeding to ensure appropriate application rate. Seed shall be incorporated by raking or harrowing to a depth of ¼ inch to ½ inch. Seed shall not be left uncovered more than 24 hours. Seeding shall not occur under conditions that would allow the seed to become windborne (winds greater than 5 mph) or to wash away.

*Mulching*

Material shall be evenly applied to a depth of approximately 1 inch, for 100% cover over revegetation areas (except for areas to receive the erosion control blanket—which shall not receive mulch). Average mulch depth shall be approximately 0.5 inches with a max depth of less than 2 inches over no greater than 1 square foot.

*Installing Erosion Control Blankets and Wattles*

Erosion control blanket shall be installed where shown on the Project Plans. Erosion control blanket shall be installed in accordance with the Project Plans. Stakes shall be securely anchored at an approximate minimum rate of three (3) feet on center. Blanket shall be keyed into a six (6) by six (6) inch deep trench at the top of slopes and be anchored into the bottom of the trenches with stakes on one-foot centers. Trenches shall be backfilled with compacted soil, and blanket shall be folded over the trench and secured with stakes on one-foot centers. Blankets shall be overlapped by a twelve (12) inches minimum and staked together.

Wattles shall be placed along a level contour at 20-foot spacing. The wattles shall be keyed into the ground 4 inches and staked every 2 feet on both sides of the log. There shall be a minimum overlap of 12 inches between each wattle.

*Planting Containerized Wetland Plugs*

The Engineer shall approve the planting dates and final locations. Plants shall be stored in a shady location and preferably in shallow water until 1 hour before planting. The Contractor shall schedule the planting three working days in advance of the proposed planting time with the Engineer. Plants shall be thoroughly watered before planting.

Plugs shall be planted using this method: Cut an 'X' through the erosion control blanket the width of the required hole (diameter of pot minimum). Remove and mulch to expose soil. If soil is not moist, thoroughly water holes prior to planting and plant immediately. Dig hole 2 times the diameter and 1.5 times the length of the plug. Loosen soils in the bottom and along the sides of the hole. Place the plant in the hole and backfill with the excavated moist soil so that the crown is at grade. Tamp soil firmly into place. Replace any displaced mulch and/or blanket. Immediately water plants after completion of planting.

*Installing Willow Stakes*

Willow stakes shall be installed per the project plans. Stakes shall be pushed into a hole slightly larger than the diameter of the pole, prepared using a 4' bucket stinger, power auger, Waterjet Stinger, round steel concrete form stakes or other approved methodology. The bottom of the willow stake shall be at an elevation below the bankfull water elevation of the adjacent creek. Insert the stake in the excavated hole to the proper depth, backfill the hole with the excavated material and firmly tamp the soil around the poles to eliminate air pockets and hold the poles in place.

*Installing Salvaged Willow Root Wads*

Native willows clumps will be salvaged from the restoration area as shown on the plans and as staked in the field as directed by the Engineer. Willows shall be removed and replanted with construction as much as practicable. Engineer will indicate planting locations.

**260.06 Revegetation Treatment Types**

*Channel Treatment*

Complete stream channel and floodplain subgrade. According to Project Plans, install wetland sod mats to construct a sod blanket channel. Starting at channel banks or edge of disturbance area and working downstream to achieve full coverage of the restored channel bank and 1 foot of the floodplain width. Water mat immediately after planting using creek water. Willow stakes shall be installed according to Project Plans. Engineer will mark locations of wetland sod mats, and willow staking. Up to 8,000 square feet of wetland sod mat, 2,500 square feet of erosion control blanket, and 500 containerized wetland plugs will be installed in this treatment area.

*Floodplain Treatment*

Prior to floodplain revegetation treatment, the Contractor shall verify with Engineer that there are no areas of excessive compaction. Loosen any compacted soil identified as necessary to 6" depth and rake smooth. Broadcast Riparian seed mix per seed mix and Engineer instructions. Rake if necessary to achieve even broadcast. Install a single layer of erosion control blanket over seed within 24 hours on all areas as shown on plans. Areas within 10 feet of the water's edge may also be planted with containerized wetland plugs into the erosion control blanket if less than 8,000 square feet of wetland sod mat is installed. Areas not covered with erosion control blanket will be seeded with Riparian Seed Mix and then covered with 1 inch layer of mulch. A maximum of 19,000 square feet of erosion control blanket will be installed in the floodplain area.

*Upland Treatment*
Prior to upland revegetation treatment, the Contractor shall verify with Engineer approval that there are no areas of excessive compaction. De-compact as necessary to 6" depth and rake smooth. Seed with Upland Seed Mix. Install a single layer of straw coconut erosion control blanket on slopes 3V:1H or greater. No more than 12,500 square feet of erosion control blanket will be installed on 3:1 slopes. Wattles will be placed on any 3V:1H slope that is greater than 20 feet in length. Mulch remaining areas with 1 inch layer of mulch.

*Willow Transplant*
Salvaged willows shall be relocated and transplanted according to the Project Plans and as directed by the Engineer.

**260.08 Performance Standard and Acceptance**
The Contractor shall guarantee revegetation in accordance with these Special Technical Provisions. Revegetated areas will be inspected by the Engineer at completion of installation and accepted subject to compliance with specified materials and installation requirements.

Following one full growing season after treatment, the Contractor must achieve 70% native vegetative cover for areas receiving seed mix application and 90% mulch coverage. Non-native plant cover should be less than 2%. Cover assessment shall be assessed by the point-intercept method. If specified coverage is not achieved, the Contractor may be required to re-seed, and/or re-mulch, and manually remove weeds. The Contractor will provide the Engineer notification at least ten working days before the requested inspection date.

A revegetation security of 25 percent of the total cost of all revegetation work shall remain in effect until maintenance and survival guarantee criteria have been met as defined herein and accepted in writing by the Engineer. The acceptance for releasing the security will occur following the end of the first growing season if the success criteria is met. This guarantee period constitutes the warranty period strictly associated with the revegetation work described herein.

Acceptance of other work and/or filing of a Notice of Completion shall not constitute acceptance, waiver and/or modification of the revegetation, revegetation maintenance, and survival guarantee portion of the project.

**260.10 Measurement and payment**

**"Revegetation - Channel Treatment**" shall be measured on a **square foot** basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The contract unit price paid for **"Revegetation - Channel Treatment**" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved in completing the revegetation of this area including the required maintenance and security, complete in place, as shown on the Plans, as specified in these Special Technical Provisions and as directed by the Engineer; and no additional compensation will be allowed.

**"Revegetation - Floodplain Treatment"** shall be measured on a **square foot** basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. Additional unauthorized disturbance outside those areas shown on the Project Plans shall be at the expense of the

Contractor and not part of the square footage measured for payment. The contract price paid for **"Revegetation - Floodplain Treatment"** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved in completing the revegetation of this area including the required erosion control blanket, soil preparation, seed installation, maintenance and bonding, complete in place, as shown on the Plans, as specified in these Special Technical Provisions and as directed by the Engineer; and no additional compensation will be allowed.

**"Revegetation - Upland Treatment"** shall be measured on a **square foot** basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. Additional unauthorized disturbance outside those areas shown on the Project Plans shall be at the expense of the Contractor and not part of the square footage measured for payment. The contract price paid for **"Revegetation - Upland Treatment"** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved in completing the revegetation of this area including the required erosion control blanket, soil preparation, seed installation, maintenance and bonding, complete in place, as shown on the Plans, as specified in these Special Technical Provisions and as directed by the Engineer; and no additional compensation will be allowed.

**"Willow Transplant"** shall be measured on a **per each** basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The contract price paid for **"Willow Transplant"** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved in salvaging and installing the root wad as directed by the Engineer, complete in place, as shown on the Plans, as specified in these Special Technical Provisions and as directed by the Engineer; and no additional compensation will be allowed.

# Appendix A: Preliminary Dewatering and Diversion Plan and Draft Stormwater Pollution Prevention Plan

# PRELIMINARY DEWATERING AND DIVERSION PLAN

# Marlette Creek SR28 Crossing Realignment and Water Quality Improvement Project

Prepared For:

Prepared By:

**July 2024**

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# 1.0 BACKGROUND AND OBJECTIVES

The Marlette Creek SR28 Crossing Realignment and Water Quality Improvement Project (Project) is located in Washoe County, Nevada , adjacent to State Route 28 in the vicinity of the Chimney Beach Parking Area. The majority of Project activities will occur on land managed by the US Forest Service (USFS) Lake Tahoe Basin Management Unit (LTBMU), with a smaller proportion in the right-of-way managed by the Nevada Department of Transportation (NDOT). The Project is being designed and managed by the Nevada Tahoe Conservation District (NTCD) under a participating agreement with the LTBMU and NDOT.

The Project will restore and enhance Marlette Creek and the South Fork of Marlette Creek in the vicinity of State Route 28. The restoration will include the following major components:

**Main Fork of Marlette Creek**

- Install coffer dams and diversion pipe to dewater active work areas for all components described above.
- Realign and restore a 250 linear foot section of the main fork of Marlette Creek upstream of SR28 using excavation and appropriate natural grade controls made of wood or rock and native vegetation to reconnect the creek with an inset floodplain.
- Create riffle-pool fish habitat downstream of the SR 28 culvert outlet on Marlette Creek for 125 linear feet using large rock and stream bed material consisting of sands, gravels, and cobbles.
- Modify and extend the existing box culvert at SR 28 for up to 15 feet upstream to reduce road embankment erosion and allow for juvenile trout passage.

**South Fork of Marlette Creek**

- Install coffer dams and diversion pipe to dewater active work areas for up to 1,300 linear feet of the South Fork of Marlette Creek.
- Realign and restore up to 900 linear feet of the South Fork of Marlette Creek using excavation and appropriate natural grade controls made of wood or rock and native vegetation to stabilize the eroding bed and banks and reconnect the creek with an inset floodplain, where possible.
- Remove an existing corrugated metal culvert crossing Mine Shaft Road and construct a new ford using rock to improve future vehicle access.

Construction activities for the project are anticipated to primarily take place between July 1 and October 15, 2025. The project is classified as an Environmental Improvement Project (EIP) by the Tahoe Regional Planning Agency with EIP number 01.01.01.0177.

The purpose of this Dewatering and Diversion Plan (DDP) is to detail the control of intercepted creek flows, groundwater flows, and seepage flows during the construction of proposed improvements described above. Dewatering and discharge processes and monitoring described in the following sections will allow the system to operate at an acceptable level while protecting water quality until construction is completed.

The Contractor shall submit a detailed Dewatering and Diversion Plan to the Engineer for distribution to Nevada Division of Environmental Protection (NDEP) and the Lake Tahoe Basin Management Unit (LTBMU) prior to the initiation of construction activities, and in accordance with the project plans, standard specifications, the special

technical specifications, the Stormwater Pollution Protection Plan (SWPPP), the Forest Service Resource Protection Measures, and this plan. These entities will review and comment on the Plan within fifteen (15) working days and provide comments to the Engineer who will then provide the comments to the Contractor. The Contractor will update the plan based on the comments, if needed, and re-submit to the Engineer for review and acceptance. No work on the Project will be allowed to be performed until an accepted plan has been provided and certified.

The detailed dewatering plan shall include the Contractor's approach for dewatering including but not limited to: the dewatering location(s), number and size of pumping units (if applicable), power source for pumping units (if applicable), size and materials for pipes, materials for damming, piping discharge point(s), fuel storage location (if applicable), location of emergency or back up detention system, settling basin (if applicable), gravel bags, baker tank (if applicable), dirt bag filter (s) and location of dewatering infiltration area. The Contractor shall include the manufacturer's specifications where applicable.

The detailed diversion plan shall include the Contractors approach for diverting the natural flow of Marlette Creek during construction of in-channel work including but not limited to: diversion method and materials, number and size of pumping units, power source for pumping units, piping discharge point(s), access and installation methodologies, protection methods for discharge point(s), fuel storage (if applicable), design flow rates, and final method for gradually introducing natural flow into the newly constructed channel while concurrently meeting all applicable regulatory water quality standards for discharge. The Contractor shall include the manufacturer's specifications where applicable.

Alternatively, the Contractor may adopt this plan and list the following information: diversion method and materials, number and size of pumping units, power source for pumping units, piping discharge point(s), access and installation methodologies, protection methods for discharge point(s), fuel storage (if applicable), and design flow rates.

# 2.0 REGULATORY REQUIREMENTS

## 2.1 Effluent Requirements

The diversion and dewatering operations as well as the introduction of flow into the newly constructed channel are required to meet the permit requirements of Nevada Division of Environment Protection (NDEP), and the Tahoe Regional Planning Agency (TRPA). The NDEP standards for tributaries in the Lake Tahoe Basin reference the Nevada Administrative Code - Chapter 445A – NAC 445A.1628. The TRPA standards are specified in Chapter 81 – Water Quality Control of the TRPA Code of Ordinances. The more stringent NDEP standard for turbidity governs. NDEP Standards for discharge to tributaries of Lake Tahoe are in Appendix C.

Operations will be required to fully accommodate all in-channel flows and intercepted groundwater for the entire duration of the Project to assure Project success and to protect the downstream reaches of Marlette Creek and Lake Tahoe from any discharge exceeding 10 NTUs, or the baseline turbidity value established prior to construction, whichever is higher. Per NDEP NAC445A.1628, single value turbidity cannot exceed 10 NTU in more

than 10 percent of samples taken. Samples must be taken daily at Marlette Creek and Lake Tahoe. See Section 3.3 for additional information on introduction of water to newly restored areas.

### 2.1 Aquatic Species Requirements

Prior to any dewatering or diversion activities, salvage/recovery of aquatic species will be conducted by LTBMU Fisheries Staff within anticipated construction dewatering or diversion zones operations by electro-shocking or other suitable means as developed through consultation with the LTBMU fisheries staff. Aquatic species will be moved approximately 500 -700 feet upstream or downstream of project activities, as determined by USFS fisheries staff. Block nets will be installed to ensure fish do not move back into the Action Area. Nets will be cleaned one to two times daily to ensure the nets are functioning by LTBMU Staff or the Nevada Tahoe Conservation Staff.

## 3.0 DIVERSION REQUIREMENTS

### 3.1 Summary

The project area is at the downstream end of the Marlette Creek watershed, approximately ½ mile upstream from its outlet at Lake Tahoe and includes the State Route 28 crossing. Dewatering and diversion of the flows of Marlette Creek and the South Fork of Marlette Creek will be required as part of this project. As well, it is anticipated that groundwater will be encountered during grading activities which will also necessitate pumped dewatering. Various sub-elements of this project will be constructed at different times from August-October. See Appendix A for project dewatering phasing requirements. Exact project timetables may be adjusted by the engineer based on permitting, precipitation, and hydrologic conditions in Marlette and South Fork Marlette Creeks.

### 3.2 Installing Diversion

Installation of each diversion dam shall only be initiated after approval from NTCD and the LTBMU. The diversion dam shall be built with sandbags no larger than 14” x 26.” This will enable the transport of bags by hand in wet or sensitive areas. Plastic-lined diversion must be lined in 6 mil (min) tear resistant plastic. See plans and specifications for additional information on installing the diversion. The diversion dam shall be installed in a manner as to not create turbidity and shall be done all by hand (no use of equipment).

### 3.3 Channel and Pond Flushing and Diversion Decommissioning

Flushing of newly constructed restoration improvements must occur before any diversions are decommissioned. For flushing of new Marlette and South Fork Marlette Creek channel sections, the diversion and associated coffer dams shall remain in place while the contractor pumps no more than 50 gallons per minute into the new channel, taking care to wash and spray sections of loose dirt and sediment if possible. A pump shall be present upstream of the downstream coffer dam to pump flushing flows to upland at least 50 feet away from any active

flow paths. NTCD will sample these flushing flows and notify the contractor when water quality standards have been met and additional flows can be directed into the new channel. Additional flow may be directed using a pump or the partial lowering of the diversion dam after one iteration of flushing flows have been completed. Lowering of the diversion dam shall remove no more than one sandbag at a time with testing and water quality standards being met between each sandbag removal at a minimum. Flushing flows for the channel could take up to two full days to meet water quality standards. Once flushing is completed and meets water quality standards, the upstream coffer dam can be fully removed. After this removal, testing shall occur upstream of the downstream coffer dam to ensure that standards are still being met. When standards are met, the downstream coffer dam can be removed.

Decommissioning of each diversion dam shall only be initiated after acceptance of the completion of grading by the Engineer, NTCD, NDEP, and LTBMU. The decommissioning shall start with the shutdown of the diversion pump, if required, and then proceed with the slow and careful removal of portion(s) of the diversion dam. The portion(s) of the diversion dam to be removed shall only be the top layers of the dam in order to minimize the downstream forces of the water on the new grading. The maximum allowable sandbag size for the diversion within Marlette Creek and South Fork Marlette Creek is 14" x 26" to better control the decommissioning of the diversion. The diversion dam shall be removed in a manner as to not create turbidity and shall be done all by hand (no use of equipment). Once the diversion dam has been removed, the diversion area will be restored or regraded per Engineer with appropriate water quality protection measures in place.

## 3.4 Diversion Flow Rates

Groundwater flows are expected to be encountered due to the project's proximity to creeks. Marlette Creek is a dam controlled system where summer time flows are expected to be lower than 0.25 cfs. Gaging is available at USGS station 10336715. South Fork Marlette Creek does not have gaging available but NTCD took flow measurements in 2023 at three separate times during May and June. The results are available in Table 2.

*Table 2: 2023 Flows Measured using Marsh McBirney Flow Mate in 2023. 2023 was one of the largest winter on record since recording began nearby in 1880.*

| Date | XS1 (cfs) | XS2 (cfs) | Average for Date (cfs) |
|---|---|---|---|
| 5/24/23 | 3.30 | 4.07 | 3.69 |
| 6/22/23 | 1.00 | 1.00 | 1.00 |
| 6/29/23 | 1.34 | 1.32 | 1.33 |

The USFS also took flow measurements on the SF of Marlette Creek between 2002-2006 shown in Table 3 below.

*Table 3: USFS flow measurements did not exceed 3.66 cfs and average flow was less than 1 cfs most years.*

| | | Above Dam | | | Below Dam | | |
|---|---|---|---|---|---|---|---|
| | | **Flow** cfs | **Turbidity** NTU | **TSS** mg/L | **Flow** cfs | **Turbidity** NTU | **TSS** mg/L |
| **2002** | Min | 0.04 | 0.43 | 1.48 | 0.05 | 0.53 | 0.00 |
| | Max | 0.43 | 3.47 | 7.20 | 0.49 | 2.99 | 40.68 |
| | median | 0.21 | 0.96 | 3.03 | 0.29 | 1.52 | 2.49 |
| | mean | 0.22 | 1.21 | 3.37 | 0.27 | 1.54 | 4.55 |
| | std err | 0.03 | 0.21 | 0.34 | 0.03 | 0.13 | 2.15 |
| **2003** | Min | 0.03 | 0.34 | 0.21 | 0.15 | 1.13 | 2.50 |
| | Max | 0.43 | 7.20 | 3.47 | 0.38 | 2.39 | 6.70 |
| | median | 0.21 | 3.03 | 0.96 | 0.25 | 1.21 | 3.65 |
| | mean | 0.19 | 3.08 | 1.26 | 0.25 | 1.63 | 4.00 |
| | std err | 0.07 | 1.16 | 0.58 | 0.03 | 0.29 | 0.70 |
| **2005** | Min | 0.25 | 0.73 | 1.80 | 0.21 | 0.68 | 1.80 |
| | Max | 1.75 | 57.60 | 162.00 | 2.08 | 91.20 | 71.67 |
| | median | 0.55 | 10.39 | 14.20 | 0.71 | 12.30 | 5.40 |
| | mean | 0.76 | 12.52 | 27.73 | 0.88 | 18.45 | 15.83 |
| | std err | 0.12 | 3.29 | 23.82 | 0.15 | 6.30 | 6.57 |
| **2006** | Min | 0.11 | 0.37 | 0.62 | 0.17 | 0.36 | 1.20 |
| | Max | 3.49 | 22.70 | 49.02 | 3.66 | 36.30 | 130.00 |
| | median | 0.73 | 1.67 | 3.00 | 0.69 | 1.85 | 2.60 |
| | mean | 1.14 | 3.51 | 7.53 | 1.20 | 6.56 | 17.99 |
| | std err | 0.21 | 1.11 | 2.55 | 0.23 | 2.40 | 7.79 |

We expect peak flows at both forks of Marlette Creek to not exceed 1.5 cfs between August and October and this is what the diversion will be designed to.

# 4.0 DEWATERING REQUIREMENTS

## 4.1 Summary

In addition to the flow from Marlette and SF Marlette Creeks being routed downstream of the construction area as described in Section 3.0, planned excavation for the new channel construction and other improvements may introduce additional flow from groundwater into the system. Groundwater and seepage flows will be removed from construction and excavation areas as necessary and discharged to land at a location at least 50 feet from Marlette Creek. It is assumed that the Contractor will use flexible hoses to carry the sediment-laden water from portable sump pumps to sprinklers, a dirtbag, or a natural depression to prevent surface flow to Marlette Creek and soil erosion. A check valve should be placed on this line to assure no backflow into the construction area. The effluent may be reused for construction purposes as described in section 4.3. Coffer dams will be installed upstream and downstream of all dewatered areas prior to pumping. It is anticipated that standard coffer dams for dewatering Marlette Creek will require 14” x 26” sandbags. Examples of sandbags will be submitted by the contractor to the engineer for approval.

## 4.2 Dewatering Flow Rates

Flow from groundwater and seepage into the construction area for in-channel work, culvert placement, and grading may be encountered. No direct aquifer testing has been completed to accurately estimate the maximum rate of groundwater flow which will need to be pumped in order maintain a dewatered construction area during construction of the new channel.

The Contractor is responsible for appropriately dewatering the construction site in order to construct the Project improvements as described in this plan, the SWPPP and the Special Technical Specifications.

Therefore, to convey streamflows and groundwater with an added safety factor, pumps shall be present on site in size and quantity to convey a minimum of 1.5 CFS (~680 GPM). Contractors will be required to submit pump specifications to the project engineer for approval. At least one 3” pump must be on site at all times. Additional pumps may be of 1” and 2” size.

## 4.3 Discharge and Treatment Options

Treatment options may include the use of dirt bag filters or use of existing water quality infrastructure such as the water quality basins on SR28. The effluent that discharges from any dirt bag filter on the Project site will meet groundwater quality discharge standards before being allowed to infiltrate into the soil in a location that can appropriately accommodate it. The groundwater discharge standard used will be the TRPA Standard of 200 NTU since NDEP Standards only require best management practices and daily monitoring for erosion. TRPA Standards

are listed in Appendix D. Discharge locations shall be accepted by the Engineer prior to placement and use by the Contractor. NTCD will take the discharge samples as daily grab samples.

If the treated decant is unable to meet requirements for direct release to the creek downstream of the work area (equal to or less than 10 NTU Turbidity), then it may be applied to the vegetation within a location at least 50 feet from Marlette and South Fork Creeks for infiltration or pumped to a water truck and used as applied dust control. All discharged effluent water used for irrigation will occur at least 50 feet away from Marlette Creek and will be immediately discontinued upon evidence of runoff. The effluent shall not be discharged into sanitary sewers. The contractor shall have hoses of 600 LF in length to enable adequate pumping distance from project areas and Marlette Creek. No overnight pumping without construction personnel on site is allowed.

If the treated water is unable to meet quality requirements and the volume of water is too large to be consumed by use for construction purposes, a sedimentation tank may be necessary to treat the water. If necessary, a sedimentation tank would be used to bring the water to effluent standards (equal or less than 10 NTU Turbidity) before being discharged to Marlette Creek.

### 4.4 Contractor Requirements

Contractors for this project are required to follow all guidelines in this plan and may not deviate from the plan without approval from the engineer. A fine for work done without engineer's approval of up to $2500 per violation will pertain to any failure to follow the guidelines in this dewatering plan. As well the contractor will be subject to an hourly fine of $250 for turbidity violations.

## 5.0 OPERATIONS AND MAINTENANCE

All temporary sumps and pumping systems necessary for dewatering activities shall be designed, operated, and maintained to avoid pumping of fine sediments from the subsurface. Monitoring of sumps and pump systems shall be conducted by the contractor at a minimum of every two hours to ensure that subsurface fine sediments are not being removed by the dewatering operation. Dewatering fluids and debris shall be disposed of in a suitable manner in compliance with the requirements of the SWPPP. Sedimentation tanks used on the project site, if required, shall only be flushed and cleaned outside of the project area at an approved facility. Disposal of material shall meet all federal, state, and local requirements. No runoff waters or stormwater shall be allowed to drain into excavated areas, except where specifically identified in the project plans.

Routine monitoring of all diversion and dewatering systems will be conducted daily by the Contractor during active construction. If it is discovered that any portion of the system is not functioning properly, the Contractor shall shut down operations until the problem is evaluated and the necessary repairs to the system are made.

# 6.0 MONITORING

## 6.1 Water Quality Monitoring

When discharging construction water to the creek, the discharge effluent water quality must not exceed the upstream turbidity by 10 NTU at a location 200' downstream from the discharge point. See Appendices C and D for discharge requirements. Discharge effluent water quality will be measured for turbidity at a location 200' downstream from active construction utilizing daily grab samples by NTCD. When diversions, dewatering, or rewatering operations are occurring within 200 feet of Lake Tahoe, hourly turbidity grab samples will occur. Decommissioning diversions and rewatering new sections of channel shall not proceed to the next phase until turbidity standards are met in the previous phase. Additionally, visual inspection data will be collected at any diversion or dewatering discharge points on a daily basis. If turbidity levels fall outside the limits in Appendix C or if the discharge exhibits any odors, discoloration or oily sheen, the Contractor shall shut down operations until the problem is evaluated and the necessary repairs to the system are made.

## 6.2 Visual Inspections

When functioning, the Contractor will perform a visual inspection of the entire dewatering and diversion systems from intake to discharge point and note any problems or deficiencies in the system at least every two hours. Any deficiencies shall be corrected immediately and reported to the Engineer for inspection. If there is an issue with the fish screens or fish within the dewatering areas, the Contractor shall report this to the Engineer or LTBMU Fisheries crew immediately.

## 6.3 Recorded Data

Water Quality data will be collected by NTCD and the data shall include the following:

- Date and time
- Location
- Distance from Active Work Site
- Upstream Turbidity in NTU
- Downstream Turbidity in NTU
- Weather conditions
- Presence of waterfowl or aquatic wildlife
- Color and clarity of discharge effluent
- Erosion or ponding downstream of discharge site
- Photographs taken

# APPENDIX A:

# DEWATERING SUMMARY TABLE

**Marlette Creek Restoration Project - Dewatering Action Summary**

| Action | Year | Anticipated Start Month | Anticipated End Month | Activity | Anticipated Hydrology Concerns | Dewatering/Mitigation measures | Diversion Length (ft) | Diversion Description | Pumps required on-site | Min. Hose Length (LF) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2025 | May | September | Remove existing CMP culvert and replace with low flow ford crossing, realign south fork segment 1 and regrade floodplain. | Creek Flows | Dewater exsintg Marlette south fork channel segment around proposed improvements using gravity flow diversion. | 650 | Construct coffer dam at upstream end and divert flows thorugh 10" HDPE pipe. Construct coffer dam at downstream end and armoured outlet | 1 | 50 |
| 2 | 2025 | May | September | Realign south fork segment 2, regrade floodplain, construct step pools at upstream end of SR28 crossing. | Creek Flows | Dewater exsintg Marlette south fork channel segment around proposed improvements using gravity flow diversion. | 475 | Construct coffer dam at upstream end and divert flows thorugh 10" HDPE pipe. Construct coffer dam at downstream end and armoured outlet | 1 | 50 |
| 3 | 2025 | May | September | Realign upstream Marlette main fork | Located adjacent to existing Marlette Creek main fork | Maintain existing channel alignemt flows during proposed alignment construction. Leave unexcavted channel plugs in place at the intersections of the proposed channel and existing channel. Once proposed channel is complete remove plugs at channel intersections, install coffer dams in existing channel to divert flows into proposed channel and backfill existing channel | NA | Construct coffer dams in existing channel at channel intersections | 1 | 50 |
| 4 | 2025 | May | September | SR28 culvert extension | Creek flows | Pump creek flows over SR28 to bypass culvert during extension installation | 105 | Pump from existing pool at culvert entrance. Min 4" pump capable of 1300 GPM at 100 ft TDH. | 2 | 105 |
| 5 | 2025 | May | September | Main fork downstream step pool construction | Creek flows | Install coffer dam in existing culvert outlet, gravity flow around construction area. | 120 | Gravity flow pipe diversion from culvert outlet around construction area. Min 15 inch HDPE pipe | 2 | 120 |

*Rev 10/2024*

# APPENDIX B:

# EXAMPLE DEWATERING AND DIVERSION DAILY INSPECTION FORM

| ***SWPPP INSPECTION REPORT*** | Approx. Temperature: _____ | Storm Start: _____ (date) |
|---|---|---|
| Project: _____ | PPT: Y / N | Storm Duration: _____ |
| *Inspector:* _____ | PPT Amount at time of inspection: _____ in. | Time since last storm: _____ |

| DATE: _____ TIME: _____ | DAY: | M | T | W | TH | F | SA | SU |
|---|---|---|---|---|---|---|---|---|

**Construction Stage:** _____

**Area of site exposed to storm water runoff:** _____

**Construction Activities:** _____

_____

Inspection Type

Daily ☐ Prior to Predicted Rain ☐ Following Rain Event ☐

Weekly ☐ During Rain Event ☐

**Blank=No Inspection NC=Needs Correction, See Observations OK or Check Mark=Meets Standards NA=Not Applicable**

| | | |
|---|---|---|
| 1) | Damage to containment dikes or erosion control fencing? | |
| 2) | Improperly installed or ineffective erosion control fencing? | |
| 3) | Unauthorized vehicle access, vehicles accessing designated non-construction areas not subject to disturbance? | |
| 4) | Boundary fence damage or removal? | |
| 5) | Disturbed areas with inadequate erosion prevention and sediment control protection? | |
| 6) | Evidence of any sediment leakage through erosion control fencing or containment dikes? | |
| 7) | Soil piles and other earthen materials which are unprotected or located in a drainage way? | |
| 8) | Spilled and improperly stored chemicals, paint, fuel, oil, solvents, sealants, etc.? | |
| 9) | Upstream runoff diversion structures (are in place and operational)? | |
| 10) | Any evidence of sediment tracking from construction equipment? | |
| 11) | Any signs of soil erosion or deposition down gradient from runoff discharges? | |
| 12) | Sediment accumulation within onsite storm water drainage control facilities, and facilities in need of maintenance? | |
| 13) | Any evidence of non-storm water discharges from the project site? Authorized, illicit, BMP condition? | |
| 14) | Does SWPPP or WPCP require revisions? | |
| 15) | Notable observation at relevant discharge points and downstream locations of the receiving water? | |
| 16) | Observed impacts to the receiving water? | |
| 17) | Photographs taken? | |

**Date = Defeciency to be addressed O = Observation**

| Date added | Observation/Inspection | WPCD # | Photo | Date Completed |
|---|---|---|---|---|
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**SIGNATURE:** _____ **TITLE:** _____

# APPENDIX C:

# NDEP WATER QUALITY STANDARDS FOR LAKE TAHOE TRIBUTARIES

# STANDARDS OF WATER QUALITY

## Lake Tahoe Tributaries

| PARAMETER | REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY | WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES | Beneficial Uses[a] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Livestock | Irrigation | Aquatic | Contact | Noncontact | Municipal | Industrial | Wildlife | Aesthetic | Enhance | Marsh |
| Beneficial Uses | | | X | X | X | X | X | X | X | X | | X | |
| Aquatic Life Species of Concern | | | Cold-water fishery. | | | | | | | | | | |
| Temperature - °C | | S.V. Oct-May ≤ 10.0<br>S.V. Jun-Sep ≤ 20.0 | | | * | | | | | | | | |
| pH - SU | | S.V. 6.5 - 9.0 | | | * | | | | | | | | |
| Dissolved Oxygen - mg/L | | S.V. ≥ 6.0 | | | * | | | | | | | | |
| Total Phosphorus (as P) - mg/L | | A-Avg. ≤ 0.05 | | | * | * | | | | | | | |
| Nitrate (as N) - mg/L | | S.V. ≤ 10.0 | | | | | | * | | | | | |
| Nitrite (as N) - mg/L | | S.V. ≤ 0.06 | | | * | | | | | | | | |
| Unionized Ammonia - mg/L | | S.V. ≤ 0.004 | | | * | | | | | | | | |
| Total Suspended Solids - mg/L | | S.V. ≤ 25.0 | | | * | | | | | | | | |
| Turbidity - NTU | | S.V. ≤ 10.0 | | | * | | | | | | | | |
| Color - PCU | | S.V. ≤ 75.0 | | | | | | * | | | | | |
| Total Dissolved Solids - mg/L | | A-Avg. ≤ 500.0 | | | | | | * | | | | | |
| Chloride - mg/L | | S.V. ≤ 250.0 | | | | | | * | | | | | |
| Sulfate - mg/L | | S.V. ≤ 250.0 | | | | | | * | | | | | |
| Sodium - SAR | | A-Avg. ≤ 8.0 | | * | | | | | | | | | |
| E. coli - cfu/100 mL[b] | | S.V. ≤ 126.0 | | | | * | | | | | | | |
| Toxic Materials | | [c] | | | | | | | | | | | |

* = The most restrictive beneficial use.

X = Beneficial use.

[a] Refer to NAC 445A.122 and 445A.1622 for beneficial use terminology.

[b] The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

# APPENDIX D:

# TRPA STANDARDS FOR SURFACE DISCHARGE

**Table 3.10-2 TRPA Discharge Limits for Surface Runoff and Discharge to Groundwater**

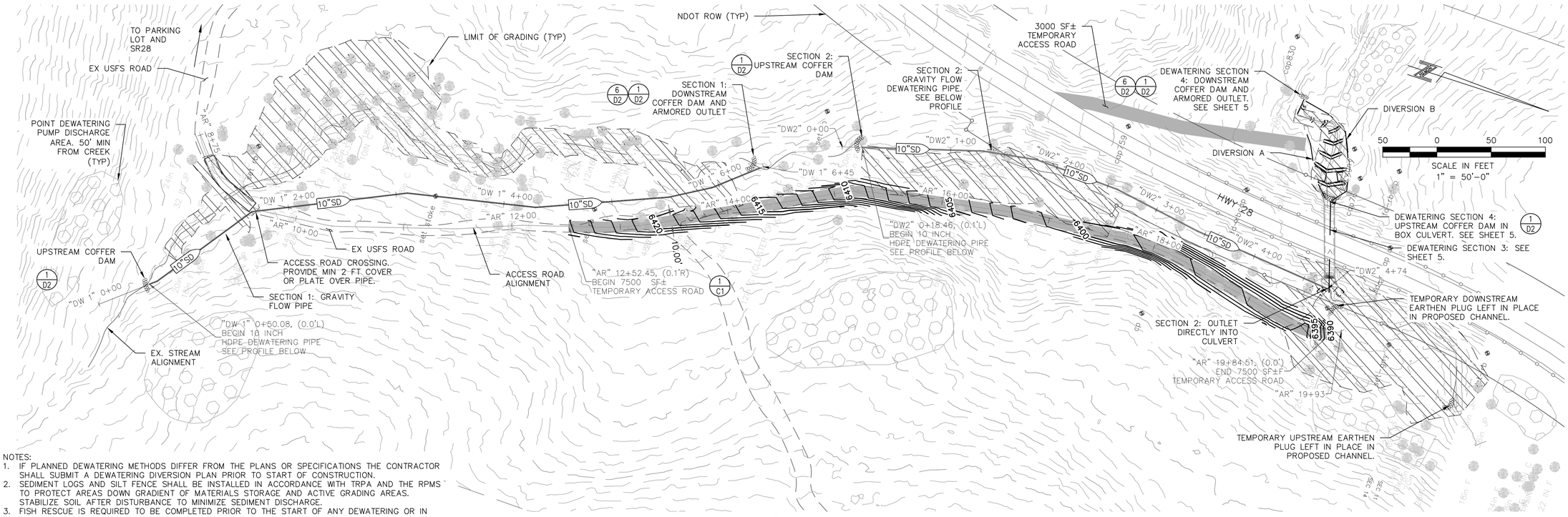
| Constituent | Maximum Concentration |
|---|---|
| **Surface Runoff** | |
| Dissolved Inorganic Nitrogen as N | 0.5 mg/l |
| Dissolved Phosphorus as P | 0.1 mg/l |
| Dissolved Iron as Fe | 0.5 mg/l |
| Grease and Oil | 2.0 mg/l |
| Suspended Sediment | 250 mg/l |
| **Discharge to Groundwater** | |
| Total Nitrogen as N | 5 mg/l |
| Total Phosphate as P | 1 mg/l |
| Iron as FE | 4 mg/l |
| Turbidity | 200 NTU[1] |
| Grease and Oil | 40 mg/l |

**Source: TRPA 2012a**

[1] **NTU = Nephelomteric Turbidity Unit**

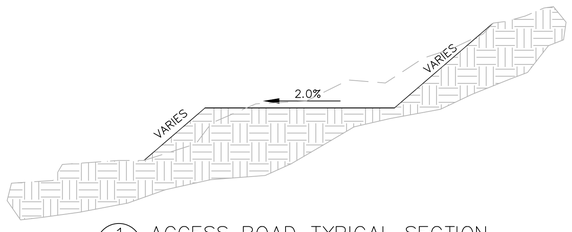
# APPENDIX E:

# DEWATERING PLAN SHEETS



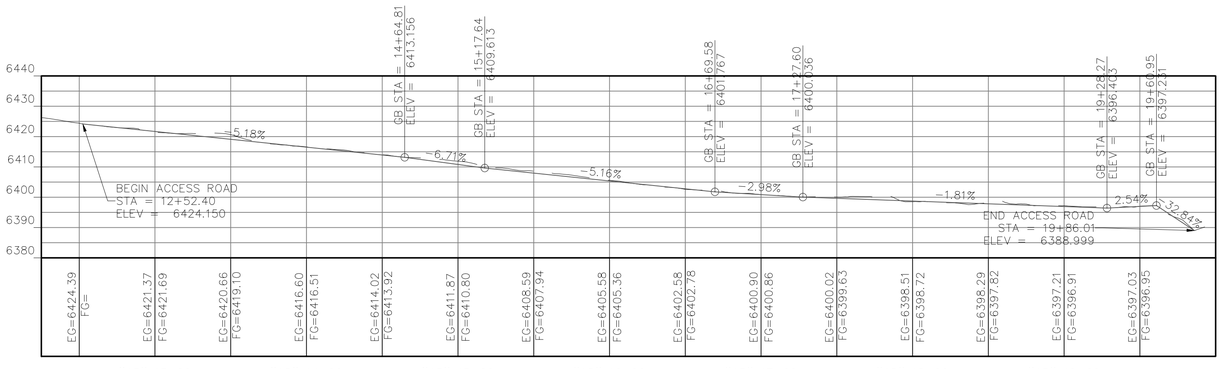

PLAN

NOTES:
1. IF PLANNED DEWATERING METHODS DIFFER FROM THE PLANS OR SPECIFICATIONS THE CONTRACTOR SHALL SUBMIT A DEWATERING DIVERSION PLAN PRIOR TO START OF CONSTRUCTION.
2. SEDIMENT LOGS AND SILT FENCE SHALL BE INSTALLED IN ACCORDANCE WITH TRPA AND THE RPMS TO PROTECT AREAS DOWN GRADIENT OF MATERIALS STORAGE AND ACTIVE GRADING AREAS. STABILIZE SOIL AFTER DISTURBANCE TO MINIMIZE SEDIMENT DISCHARGE.
3. FISH RESCUE IS REQUIRED TO BE COMPLETED PRIOR TO THE START OF ANY DEWATERING OR IN CHANNEL WORK. THE CONTRACTOR SHALL COORDINATE WORK WITH NTCD AND FISH RESCUE SUBCONSULTANT NTCD EMPLOYS.

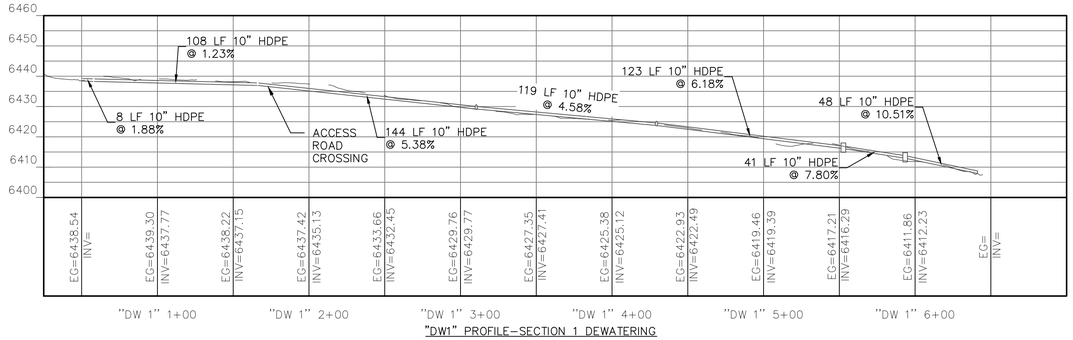



1 / C1 ACCESS ROAD TYPICAL SECTION
1"=1.5'

NOTES:
1. ROAD SECTION IS A SUGGESTED TYPICAL DETAIL, CONTRACTOR CAN DETERMINE AT THEIR DISCRETION NECESSARY ACCESS ROAD IMPROVEMENTS AND EXTENTS. ACCESS ROAD IMPROVEMENT LIMITS SHOWN ARE AN ESTIMATE BASED ON THE TYPICAL SECTION ABOVE AND ACCESS ROAD PROFILE.
2. CONTRACTOR SHALL RESTORE ALL EXISTING DISTURBED DIRT ROADS AND CONSTRUCTED TEMPORARY ACCESS ROADS TO THE ORIGINAL GRADES AND CONDITION PRIOR TO FINAL COMPLETION.

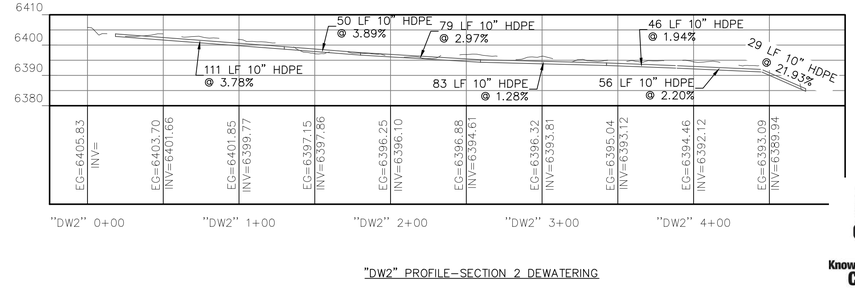



"AR" PROFILE–ACCESS ROAD




"DW1" PROFILE–SECTION 1 DEWATERING

SCALE:
HORIZONTAL: 1"=50'
VERTICAL: 1" = 25'




"DW2" PROFILE–SECTION 2 DEWATERING

Know what's below. Call before you dig.

Nevada Tahoe Conservation District

DEWATERING AND ACCESS 1

MARLETTE CREEK RESTORATION PROJECT

PROFESSIONAL ENGINEER – STATE OF NEVADA
MEGHAN C. KELLY
Exp: 6/30/25
CIVIL
4/8/2025
No. 20851

BID SET

| | |
|---|---|
| DESIGNED/DRAWN | EK |
| CHECKED | MK |
| DATE | 4/2025 |
| SCALE | AS SHOWN |
| PROJECT | MARLETTE CREEK RESTORATION |
| SHEET | C1 |

4 OF 25

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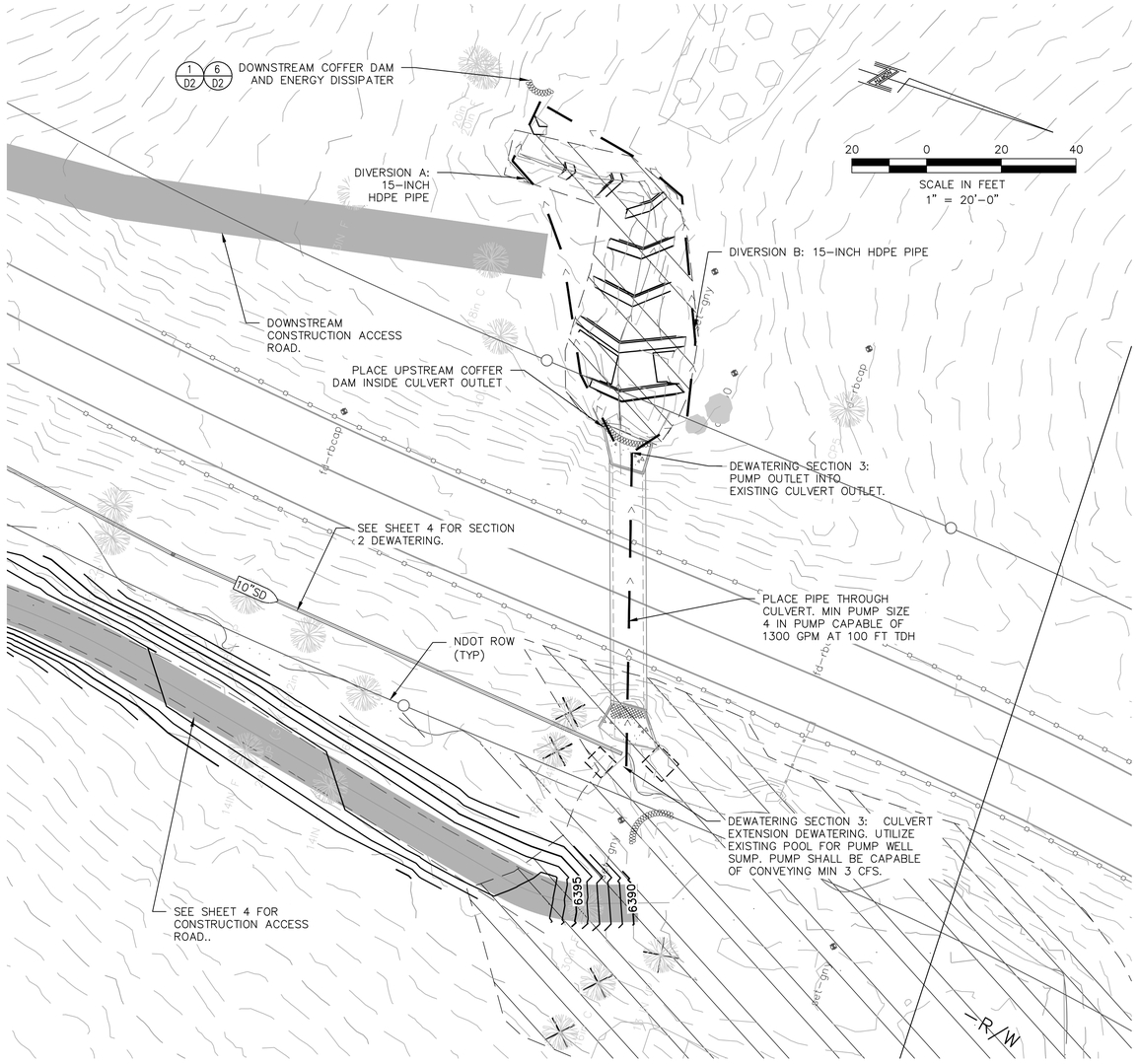


PLAN

NOTES: .

1. DEWATERING DURING THE DOWNSTREAM CHANNEL IMPROVEMENTS MAY REQUIRE RELOCATING DEWATERING PIPES TO THE OPPOSITE SIDE OF THE CHANNEL (DEWATERING A AND B) TO GAIN UNOBSTRUCTED ACCESS TO EACH SIDE. CONTRACTOR SHALL FINALIZE IMPROVEMENTS ON ONE SIDE PRIOR TO RELOCATING DEWATERING PIPES.
2. THE CONTRACTOR MAY PROPOSE ALTERNATIVE DEWATERING METHODS, ALL DEWATERING METHODS SHALL BE APPROVED BY THE ENGINEER PRIOR TO START OF CONSTRUCTION.
3. SEDIMENT LOGS AND SILT FENCE SHALL BE INSTALLED IN ACCORDANCE WITH TRPA AND THE RPMS TO PROTECT AREAS DOWN GRADIENT OF MATERIALS STORAGE AND ACTIVE GRADING AREAS. STABILIZE SOIL AFTER DISTURBANCE TO MINIMIZE SEDIMENT DISCHARGE.
4. FISH RESCUE IS REQUIRED TO BE COMPLETED PRIOR TO THE START OF ANY DEWATERING OR IN CHANNEL WORK. THE CONTRACTOR SHALL COORDINATE WORK WITH NTCD AND FISH RESCUE SUBCONSULTANT NTCD EMPLOYS.

Know what's below. Call before you dig.

Nevada Tahoe Conservation District

DEWATERING AND ACCESS 2

MARLETTE CREEK RESTORATION PROJECT

PROFESSIONAL ENGINEER–STATE OF NEVADA
MEGHAN C. KELLY
Exp: 6/30/25
CIVIL
No. 20851

BID SET

| | |
|---|---|
| DESIGNED/DRAWN | EK |
| CHECKED | MK |
| DATE | 4/2025 |
| SCALE | AS SHOWN |
| PROJECT | MARLETTE CREEK RESTORATION |
| SHEET | C2 |

5 OF 25

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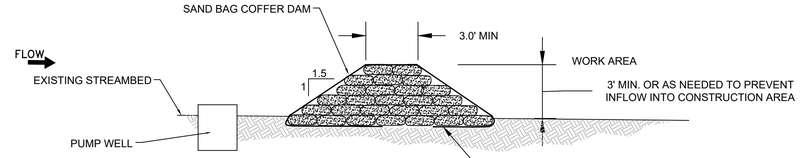
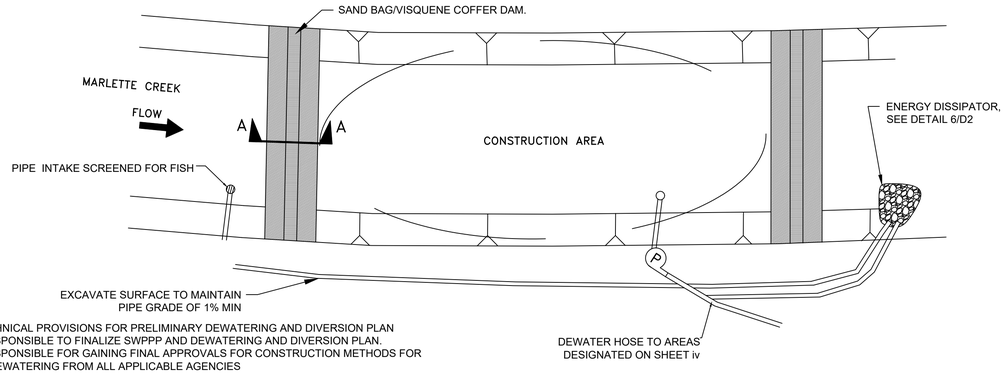
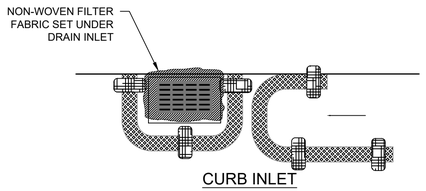



SECTION A–A

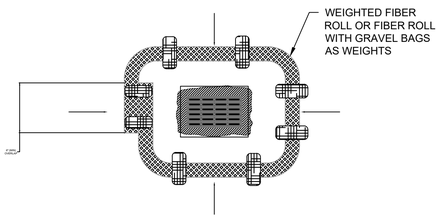



DIVERSION NOTES:
1. SEE SPECIAL TECHNICAL PROVISIONS FOR PRELIMINARY DEWATERING AND DIVERSION PLAN
2. CONTRACTOR RESPONSIBLE TO FINALIZE SWPPP AND DEWATERING AND DIVERSION PLAN. CONTRACTOR RESPONSIBLE FOR GAINING FINAL APPROVALS FOR CONSTRUCTION METHODS FOR DIVERSION AND DEWATERING FROM ALL APPLICABLE AGENCIES

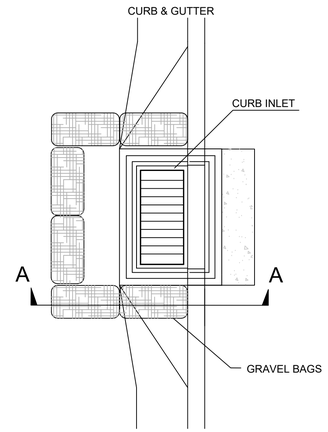
## 1 D2 DEWATERING DIVERSION
NTS



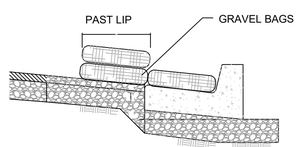

CURB INLET




SHEET FLOW INLET



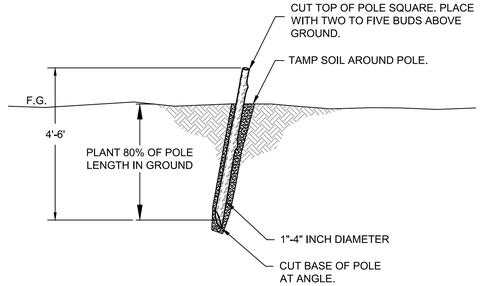

ALTERNATE CURB INLET




SECTION A-A

DI PROTECTION NOTES:
1. FIBER ROLLS SHALL NOT BE MADE FROM STRAW. WITH THE EXCEPTION OF WEED-FREE RICE STRAW. FIBER ROLLS SHALL HAVE A MINIMUM WEIGHT OF 2.5 LBS PER LINEAR FOOT. FIBER ROLLS SHALL BE REMOVED AT THE END OF CONSTRUCTION AS DIRECTED BY THE ENGINEER.
2. GRAVEL BAGS SHALL BE FILLED WITH ¾" DIA, CLEANED, WASHED GRAVEL. SAND BAGS ARE NOT AN ACCEPTABLE SUBSTITUTE.
3. INSPECT AND REPAIR FIBER ROLLS EACH DAY AND AFTER EACH STORM EVENT. REMOVE SEDIMENT WHEN ONE THIRD OF THE FILTER DEPTH HAS BEEN FILLED. REMOVED SEDIMENT SHALL BE DISPOSED OF PROPERLY.
4. SEDIMENT AND GRAVEL DEPOSITED ON ROADWAYS SHALL BE IMMEDIATELY REMOVED.
5. IN HIGH TRAFFIC AREAS, MARK DRAIN INLET PROTECTION WITH VISIBLE BARRIERS SUCH AS SAFETY CONES.
6. REMOVE DRAIN INLET PROTECTION AFTER THE SURROUNDING AREA HAS BEEN STABILIZED.
7. ADDITIONAL OR OVERLAPPING GRAVEL BAGS MAY BE NECESSARY AS DIRECTED BY ENGINEER FOR PROPER FUNCTIONING OF BMP.

## 4 D2 DRAINAGE INLET PROTECTION
NTS

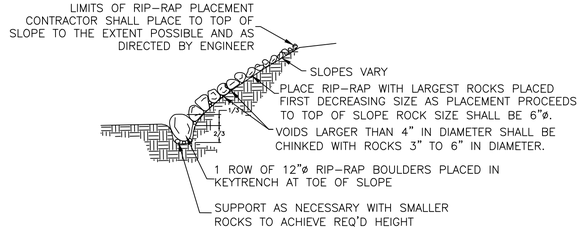



LIVE POLE NOTES
REVEGETATION AND REPLACEMENT PLANTINGS SHALL CONSIST OF LOCALLY-OBTAINED, NATIVE SPECIES, PER SPECIFICATIONS.

WILLOW PREPARATION
1. POLE CUTTINGS SHALL BE TAKEN WITH SHARP PRUNING SHEARS OR WITH A SHARP SAW BLADE, WITHOUT CAUSING INJURY TO THE BARK OR SPLITTING OF THE ENDS. THE BUTT END OF THE CUTTING SHALL BE ANGLED AND THE TOP END SHALL BE SQUARE.
2. POLES SHALL BE FROM 4 TO 6 FOOT IN LENGTH AND 1 TO 4 INCHES IN DIAMETER. POLES SHALL BE CUT SO THAT A TERMINAL BUD SCAR IS WITHIN 1 TO 4 INCHES OF THE TOP, AT LEAST 2 BUDS AND/OR BUD SCARS SHALL BE ABOVE THE GROUND AFTER PLANTING. SIDE BRANCHES SHALL BE CUT WITH SHARP PRUNING SHEARS, FLUSH WITH POLE, WITHOUT CAUSING INJURY TO BUDS.

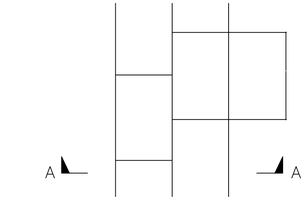
INSTALLATION
1. LIVE POLES SHALL BE INSTALLED ON THE SAME DAY AS CUT OR SOAKED FOR 24 HOURS, MIN. PRIOR TO INSTALLATION.
2. THE POLE SHALL BE INSTALLED AS DEEP AS POSSIBLE INTO THE SOIL, PREFERABLY WITH 80% OF ITS LENGTH IN CONTACT WITH NATIVE SOIL. USE OF A PILOT BAR MAY HELP WITH INSTALLATION.
3. SPECIAL CARE SHALL BE TAKEN TO NOT DAMAGE THE BUDS, SPLIT POLE ENDS, OR STRIP THE BARK DURING INSTALLATION.

## 2 D2 LIVE POLE STAKE
NTS

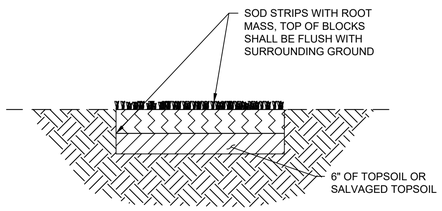



## 3 D2 ROCK SLOPE PROTECTION
NTS

NOTES:
1. RIP–RAP SIZING MAY BE ALTERED BASED ON ROCK AVAILABLE ON SITE.



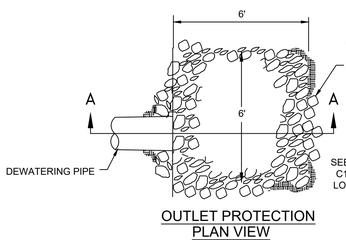

SOD STRIP LAYOUT PLAN



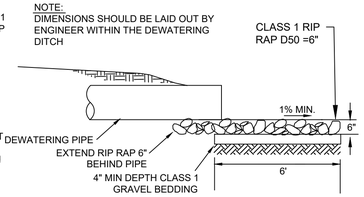

SECTION A-A

SOD STRIP NOTES:
REVEGETATION AND REPLACEMENT PLANTINGS SHALL CONSIST OF LOCALLY-OBTAINED, NATIVE SPECIES, PER SPECIFICATIONS.

## 5 D2 SALVAGE SOD
NTS




OUTLET PROTECTION PLAN VIEW




SECTION A-A

## 6 D2 DEWATERING OUTLET PROTECTION
NTS

Nevada Tahoe Conservation District

DETAILS 2

MARLETTE CREEK RESTORATION PROJECT

PROFESSIONAL ENGINEER – STATE OF NEVADA
MEGHAN C. KEETON
Exp: 6/30/25
CIVIL
4/8/2025
No. 20851

BID SET

| | |
|---|---|
| DESIGNED/DRAWN | EK |
| CHECKED | MK |
| DATE | 4/2025 |
| SCALE | AS SHOWN |
| PROJECT | MARLETTE CREEK RESTORATION |
| SHEET | D2 |

17 OF 25

811 Know what's below. Call before you dig.

File Path: c:\Users\ekerl.desktop-gnu4d7n\nevada tahoe conservation district\nevada tahoe conservation district - documents\Projects\Marlette\CAD\Sheets\Detail D1-Dx.dwg 4/8/2025 2:30 PM

# Stormwater Pollution Prevention Plan (SWPPP)

# Table of Contents

## Site / Owner / Operator

Provide site, owner, and operator information.

| **Site** | |
|---|---|
| ID Number | CSW- |
| Name | Marlette Creek Restoration and SR28 Crossing Improvement Project |
| Address Line 1 | Area between Chimney Beach parking lot and Geo Whittell Rd |
| Address Line 2 | |
| City | |
| State | NV |
| Zip Code | |
| Contact Name | |
| Phone Number | |
| Email Address | |

| **Owner** | |
|---|---|
| Name | Nevada Tahoe Conservation District (NTCD) |
| Address Line 1 | 400 Dorla Ct |
| Address Line 2 | PO Box 915 |
| City | Zephyr Cove |
| State | NV |
| Zip Code | 89449-0915 |
| Contact Name | Meghan Kelly |
| Phone Number | 775-586-1610x30 |
| Email Address | mkelly@ntcd.org |

| **Operator 1** | |
|---|---|
| Name | Nevada Tahoe Conservation District (NTCD) |
| Address Line 1 | 400 Dorla Ct |
| Address Line 2 | PO Box 915 |
| City | Zephyr Cove |
| State | NV |
| Zip Code | 89449-0915 |
| Contact Name | Meghan Kelly |
| Title | Resident Engineer |
| Phone Number | 775-586-1610x30 |
| Email Address | mkelly@ntcd.org |
| If there is more than one operator, identify the areas and phases over which Operator 1 has control. | |

| **Operator 2** | |
|---|---|
| Name | |
| Address Line 1 | |
| Address Line 2 | |
| City | |
| State | |
| Zip Code | |
| Contact Name | |
| Title | |
| Phone Number | |
| Email Address | |
| Identify the areas and phases over which Operator 2 has control. | |

| **Operator 3** | |
|---|---|
| Name | |
| Address Line 1 | |
| Address Line 2 | |
| City | |
| State | |
| Zip Code | |
| Contact Name | |
| Title | |
| Phone Number | |
| Email Address | |
| Identify the areas and phases over which Operator 3 has control. | |

## Stormwater Team

List the name, title, and individual responsibilities for each member of the stormwater team. The stormwater team is responsible for overseeing the development of the SWPPP, any modifications to the SWPPP, and compliance with the requirements of the *Construction Stormwater General Permit NVR100000* (hereinafter referred to as the "Permit"). The team may include members who are not employed by the operator (such as third party consultants).

| **Stormwater Team Member 1** | |
|---|---|
| Name | Meghan Kelly |
| Title | Resident Engineer |
| Responsibilities | Daily inspection of BMPs, monitoring of weather forcast, monitoring of dewatering and diversion actions, water quality monitoring |

| **Stormwater Team Member 2** | |
|---|---|
| Name | |
| Title | |
| Responsibilities | |

| **Stormwater Team Member 3** | |
|---|---|
| Name | |
| Title | |
| Responsibilities | |

| **Stormwater Team Member 4** | |
|---|---|
| Name | |
| Title | |
| Responsibilities | |

| **Stormwater Team Member 5** | |
|---|---|
| Name | |
| Title | |
| Responsibilities | |

## Nature of Construction Activities

Describe the nature of the construction activities, including the size of the property and the total area expected to be disturbed by construction activities, construction support activity areas covered by the Permit, and the maximum area expected to be disturbed at any one time.

| **Nature of Construction Activities** | | |
|---|---|---|
| What is the size of the property? | 42 | acres |
| What is the total area expected to be disturbed by construction activities? | 1.3 | acres |
| What is the maximum area expected to be disturbed at any one time? | .5 | acres |

Describe the construction support activity areas covered by the Permit. Construction support activities covered by the Permit are described in Permit section *1.2.1.2* and defined on page 40 of the Permit.

Main Fork of Marlette Creek

• Install coffer dams and diversion pipe to dewater active work areas for components described within the Main Fork of Marlette Creek.

• Realign and restore a 250 linear foot section of the main fork of Marlette Creek upstream of SR 28 using excavation and appropriate natural grade controls made of wood or rock and native vegetation to reconnect the creek with an inset floodplain.

South Fork of Marlette Creek

• Install coffer dams and diversion pipe to dewater active work areas for up to 1,300 linear feet of the South Fork of Marlette Creek.

• Realign and restore up to 900 linear feet of the South Fork of Marlette Creek using excavation and appropriate natural grade controls made of wood or rock. Utilize native vegetation to stabilize the eroding bed and banks to reconnect the creek with an inset floodplain.

• Remove an existing corrugated metal culvert crossing Mine Shaft Road and construct a new ford using rock to improve hydraulic connectivity.

Culvert and Downstream Reach

• Install coffer dams and diversion pipe to dewater active work areas for components described here.

• Create step pool fish habitat downstream of the SR 28 culvert outlet on Marlette Creek for 125 linear feet using large rock and stream bed material consisting of sands, gravels, and cobbles.

• Restore fish passage at culvert outlet by raising base level and creating plunge pool at culvert outlet in accordance with Aquatic Organism Passage (Natural Resources Conservation Service, Conservation Practice Standard, USDA NRCS 2022) and Guidelines for Salmonid Passage at Stream Crossings (NMFS 2023). Fish passage is designed for adult Lahontan cutthroat trout during spring months when flows are expected to be highest.

• Modify and extend the existing box culvert at SR 28 for up to 15 feet upstream to reduce road embankment erosion and allow for juvenile trout passage.

## Emergency-Related Construction Activities

For earth-disturbing activities in response to a public emergency, document the cause of the public emergency, provide information substantiating its occurrence, and describe the construction necessary to reestablish affected public services.

| **Cause of the Public Emergency** |
| --- |
| Describe the cause of the public emergency (e.g., natural disaster, extreme flooding conditions, etc.). |
| N/A |

| **Substantiating Information** |
| --- |
| Provide information substantiating the occurrence of the public emergency (such as a state disaster declaration or similar state or local declaration). Attach supporting documentation to the end of the SWPPP. |
| N/A |

| **Necessary Construction** |
| --- |
| Describe the construction necessary to reestablish affected public services. |
| N/A |

## Sequence and Estimated Dates of Construction Activities

Provide a schedule of the estimated start dates and the duration of the activity for installation of stormwater control measures, construction activities, cessation of construction activities, and stabilization of areas of exposed soil.

| **Installation of Stormwater Control Measures** | |
|---|---|
| What is the estimated start date for the installation of stormwater control measures? | 8 / 11 / 2025 |
| What is the estimated duration of the installation of stormwater control measures? | as necessary for the duration of construction activities approximately 66 calendar days |

When will the stormwater control measures be made operational?

Prior to the start of construction activities

Explain the sequence and schedule for installation of stormwater control measures.

No construction activities will occur without adequate storm water control measures in place.

| **Construction Activities** | |
|---|---|
| What is the estimated start date of construction activities? | 8 / 11 / 2025 |
| What is the estimated duration of construction activities? | 66 calendar days |

Describe the intended sequence of construction activities. Construction activities include clearing and grubbing, grading, site preparation (i.e., excavating, cutting, and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization.

The order of work shall be as follows:
1. Verification of all underground utilities within the project area.
2. Installation of Temporary Traffic Control Measures.
3. Coordination with NTCD for wildlife surveys and tree removal.
4. Coordination with NTCD and USFS for fish rescue and fish exclusion net installation.
5. Construction of all temporary erosion control measures as shown on the project plans and as approved by the Engineer and NDEP. If tree removal is done in the vicinity
6. Site clearing and grubbing.
7. Installation of all dewatering elements as necessary.
8. Construction of project as shown on the project plans and as described in these Special Technical Provisions. Contractor may select sequence for construction.
9. Restoration of entire project site:
a. Restoration/revegetation of all disturbed areas.
b. Removal of all dewatering equipment.
c. Road sweeping.
d. Restoration of staging, access, and dewatering areas as needed.
e. Removal of temporary BMPs with approval of Engineer.
10. Pre-Final site walk with the Engineer, Contractor, US Forest Service, NDOT, TRPA, and NDEP.
a. Development of project punchlist (by Engineer).
11. Completion of punchlist items.
12. Final site walk with Engineer and Contractor.

| Cessation of Construction Activities | | |
|---|---|---|
| What is the estimated start date for the cessation of construction activities? | 10 / 15 / 2025 | |
| Will the cessation of construction activities be temporary or permanent? | ○ Temporary | ◉ Permanent |
| If the cessation of construction activities will be temporary, provide the estimated duration of the cessation of construction activities. | N/A | |
| Will the cessation of construction activities occur on the entire site (100%) or in designated portions of the site? | ○ 100% | ◉ Designated Portions |

If the cessation of construction activities will occur in designated portions of the site, identify the designated portions of the site where the cessation of construction activities will occur.

It is estimated that all grading will cease October 15th, 2024. However, some construction activities such as revegetation and project site restoration may occur throughout the site and as indicated on the project plans.

| Stabilization of Areas of Exposed Soil | |
|---|---|
| What is the estimated start date for the *temporary* stabilization of areas of exposed soil? | 9 / 10 / 2025 |
| What is the estimated duration of the *temporary* stabilization of areas of exposed soil? | 14 days for various areas throughout the duration of construction |
| What is the estimated start date for the *final* stabilization of areas of exposed soil? | 10 / 6 / 2025 |
| What is the estimated duration of the *final* stabilization of areas of exposed soil? | Final stabilization shall occur as the new channel is constructed. Approximately 35 calendar days. |

Note: The dates for stabilization shall reflect the applicable deadlines in Permit section *3.6 Site Stabilization Requirements, Schedules, and Deadlines*.

**Departures from Initial Projections**

If departures from initial projections for any of the activities on pages 6 and 7 of this SWPPP are necessary, identify and describe such departures. Alternatively, documentation describing such departures may be attached to the end of the SWPPP.

## Site Description

Provide the following construction site information.

| Site Description | |
|---|---|
| Project Name | Marlette Creek Restoration and SR28 Crossing Improvement Project |
| Project Address | Area between Chimney Beach parking lot and Geo Whittell Rd |
| Project City | |
| Project County | Washoe |
| Project APN | APNs 130-360-18, 130-360-15 |

Describe the site and its intended use after the Notice of Termination is filed (e.g., low density residential, shopping mall, highway, etc.)

Current site includes creek, meadow/floodplain, parking lot, and recreational trails. Intended use is open space (creek and floodplain), parking lot, and recreation trails.

| | | |
|---|---|---|
| What is the total area of the site? | 42 | acres |
| What is the estimated total area of the site expected to be disturbed by construction activities, including off-site supporting activities, borrow and fill areas, and staging and equipment storage areas? | 1.3 | acres |
| What percentage of the site is impervious before and after construction? | Before: 6 | % |
| | After: 6 | % |

Describe the soils at the site, including the potential for erosion.

Soils in the Marlette watershed are composed primarily of well drained gravelly loamy coarse sand with rocky outcropping. The major soil unit is the Cassenai gravelly loamy coarse sand making up 54% of the soil in the area, a well drained layer ranging in elevation from 6230 ft to 7920 ft.The secondary soil unit in the watershed is Cagwin-Rock outcrop complex making up 45% of the project area. The rock outcrop complex is primarily in the steeper portions of the project area upstream of the construction activiteis ranging in elevation from 6230 ft to 8460 ft. It is primarily composed of granite stones, cobbles and boulders.

For areas where it is infeasible to maintain a 50-foot buffer in accordance with Permit section *3.5.1*, provide the reasons why the 50-foot buffer cannot be maintained, identify and describe the alternative additional erosion and sediment controls that were selected for the site, document the natural buffer width retained on the property, and attach any relevant documentation to the end of the SWPPP.

Because the construction project will realign and restore Marlette Creek, a 50 foot buffer will not be feasible. A Dewatering and Diversion Plan has been established. See attachments.

Identify and describe all on-site and off-site material storage areas, including overburden, stockpiles of dirt, borrow areas, etc.

No offsite staging is proposed. On-site staging will occur within the project area at two identified locations shown on the construction staging and clearing plan sheet. See attached.

Attach a general location map to the end of the SWPPP. The map should contain enough detail to identify the following items:

- the location of the construction site and one-mile radius
- the waters of the State of Nevada, including tributaries, within a one-mile radius of the site

## Site Map(s)

Attach a site map or series of maps to the end of the SWPPP.

| Site Map(s) | |
|---|---|
| Attach, to the end of the SWPPP, a legible site map or series of maps completed to scale. The map(s) should show the entire site and identify all of the items listed below. Check the box next to each item to confirm that the item is identified on the map(s). | |
| ☑ | Topography of the site, existing types of cover (e.g., forest, pasture, pavement, structures), and drainage pattern(s) of flow onto, over, and from the site both before and after major grading activities Fig 2 |
| ☑ | Areas of soil disturbance and areas that will not be disturbed Civil Sheets and Fig 3 |
| ☑ | Boundaries of the property Fig 1 and Civil Sheets |
| ☑ | Locations where construction activities will occur, noting any phasing Civil Sheets and Fig 2 |
| ☑ | Locations where sediment or soil will be stockpiled Fig 2 and Civil Sheets |
| ☑ | Locations of any crossings of surface waters Fig 3 |
| ☑ | Designated points on the site where vehicles will exit onto paved road Design Plans |
| ☑ | Locations of construction support activity areas covered by the Permit Civil Sheets |
| ☑ | Locations of temporary and permanent stormwater control measures identified in this SWPPP Attached dewatering plan, construction plans sheets |
| ☑ | Locations where stabilization control measures are expected to occur Civil Sheets |
| ☑ | Areas protected by buffers (i.e., either the 50-foot buffer or other buffer areas retained on site when within 50 feet of perennial water) consistent with Permit section *3.5.1*, as well as the boundary line of all such buffers NA |
| ☑ | Locations of on-site material, waste, borrow areas or equipment storage areas, and other supporting activities (per Permit section 1.2.1.2) Construction plan sheets |
| ☑ | Locations of all potential pollutant-generating activities identified on pages 14-15 of this SWPPP Fig 3 |
| ☑ | Locations of all surface waters and any impaired waters within ¼ mile of the site Fig 1 |
| ☑ | Stormwater discharge locations, using arrows to indicate discharge directions, including:<br>• locations where stormwater and/or allowable non-stormwater discharges are discharged to a Water of the U.S.<br>• locations of any discharges to municipal separate storm sewer systems (MS4s) from the construction site Fig 2 |
| ☑ | Areas where final stabilization has been accomplished and no further construction permit requirements apply NA |
| ☑ | Location of trees and boundaries of environmentally sensitive areas and buffer zones to be preserved Civil Sheets |

## Receiving Waters

Identify the receiving waters.

| Receiving Waters |
| --- |
| Identify the name of the receiving water(s) and the areal extent and description of wetland or other special aquatic sites at or near the site which will be disturbed or which will receive discharges from disturbed areas of the construction site. |
| The receiving water for the project area is Marlette Creek, a tributary of Lake Tahoe. |

| Impaired Water | | |
| --- | --- | --- |
| Is any discharge point from the construction site within ¼ mile of impaired water? | ○ Yes | ◉ No |
| If any discharge point from the construction site is within ¼ mile of impaired water, identify any common construction-related pollutants, such as sediment, sediment-related parameters, and nutrients (including nitrogen and phosphorous), listed on the 303(d) list that may potentially be discharged from the construction site and describe additional or enhanced control measures to minimize discharges of these pollutants. The 303(d) list can be found on the Nevada Division of Environmental Protection (NDEP), Bureau of Water Quality Planning (BWQP) website (http://ndep.nv.gov/bwqp/303dlist2012.htm). | | |
| N/A | | |

## Stormwater Control Measures

Describe the stormwater control measures that will be used during construction activity.

| **Stormwater Control Measures** |
| --- |
| Identify and describe all control measures as required by Permit section *3.0* that will be implemented and maintained as part of the construction project to reduce and control pollutants in stormwater discharges from the construction site. Include control measures used at support activity areas. |
| **Control Measure 1** |
| Erosion and Sediment Control - will include filter fence, sediment rolls, perimeter control through construction limit fencing, temporary gravel construction entrances, daily sweeping, dust control via watering truck, and properly stored spoil piles. |
| **Control Measure 2** |
| Site Stabilization Temporary stabilization will be achieved by above described erosion and sediment control measures, activity sequencing, and utilizing site topography. Permanent stabilization will include sod and log placement in the new channel and erosion control blanket and revegetation using both seed and containerized plants in the floodplain. The project site will be considered stabilized upon the completion of construction activities |
| **Control Measure 3** |
| Pollution Prevention- The staging and storage area will be the only designated area for any hazardous waste, fueling, a concrete washout facility, and materials storage. All materials shall be stored in accordance with local, state, and federal regulations as well as the NDEP 2015 Construction Stormwater General Permit |
| **Control Measure 4** |
| Dewatering and Diversion - see attached DDP and plan sheets C1 and C2. |
| **Control Measure 5** |
| |
| **Control Measure 6** |
| |

**Stormwater Control Measures for Major Construction Activities**

For each major construction activity at the site, describe the appropriate control measures and the general timing (or sequence) during the construction process that the measure will be implemented and identify the operator responsible for implementation of the control measures. Fill out one table for each major construction activity.

**Construction Activity 1**

Identify the type of construction activity.

Staging and Storage

Describe the control measure(s) used for this activity.

Pollution Prevention &Erosion and Sediment Control - The staging and storage area will be the only designated area for any fueling, a concrete washout facility, and materials storage. All materials shall be stored in accordance with local, state, and federal regulations as well as the NDEP 2015 Construction Stormwater General Permit. Access to staging area will be via Chimney Beach parking lot and SR28. BMPs such as perimeter fencing and silt fencing will be installed in staging area as shown in figures to prevent run-off.

Describe the general timing/sequence during the construction process that the measure(s) will be implemented.

Throughout construction activities

Which operator is responsible for implementation of this control measure?

NTCD

**Construction Activity 2**

Identify the type of construction activity.

Grading and Channel Construction

Describe the control measure(s) used for this activity.

Site Stabilization & Erosion and Sediment Control. Grading will occur while segments of the creek are dewatered and off-line from the existing creek. Coffers dams will be in place to prevent backwatering at the downstream end of dewatering segments as well as the upstream end. Erosion control measures such as filter fence will be used for temporary controls. Permanent measures include revegetation. The project requires net cut, off haul will be conducted immediately to minimize the need for spoil pile storage.

Describe the general timing/sequence during the construction process that the measure(s) will be implemented.

During all grading activities, excavation and fill placement.

Which operator is responsible for implementation of this control measure?

NTCD

**Construction Activity 3**

Identify the type of construction activity.

Culvert Extension

Describe the control measure(s) used for this activity.

Pollution Prevention- The staging and storage area will be the only designated area for any waste, fueling, a concrete washout facility, and materials storage. All materials shall be stored in accordance with local, state, and federal regulations as well as the NDEP 2015 Construction Stormwater General Permit. Dewatering and diversion

Describe the general timing/sequence during the construction process that the measure(s) will be implemented.

measures will be implemented during cast in place concrete placement and pre-cast segment installation. Installation will not occur during storm events or inclement weather.

Which operator is responsible for implementation of this control measure?

NTCD

| **Construction Activity 4** |
|---|
| Identify the type of construction activity.<br>Dewatering and Diversion |
| Describe the control measure(s) used for this activity.<br>See attached Dewatering and Diversion Plan |
| Describe the general timing/sequence during the construction process that the measure(s) will be implemented.<br>As necessary during grading activities |
| Which operator is responsible for implementation of this control measure?<br>NTCD |

| **Construction Activity 5** |
|---|
| Identify the type of construction activity.<br>Step Pool Construction |
| Describe the control measure(s) used for this activity.<br>Step pool construction will occur while segments of the creek are dewatered and off-line from the existing creek. Coffers dams will be in place to prevent backwatering at the downstream end of dewatering segments as well as the upstream end. Erosion control measures such as filter fence and pumping turbid water through dirt bags will be used for temporary controls. |
| Describe the general timing/sequence during the construction process that the measure(s) will be implemented.<br>During all grading activities, excavation and fill placement. uced. |
| Which operator is responsible for implementation of this control measure?<br>NTCD |

| **Construction Activity 6** |
|---|
| Identify the type of construction activity. |
| Describe the control measure(s) used for this activity. |
| Describe the general timing/sequence during the construction process that the measure(s) will be implemented. |
| Which operator is responsible for implementation of this control measure? |

## Potential Pollutant Sources

Identify and describe any pollutant sources expected to be associated with the project.

| Potential Pollutant Sources |
| --- |
| Identify all potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the construction site. Also identify the location of and describe any pollutant sources, including any non-stormwater discharges expected to be associated with the project, from areas other than construction (i.e., support activities including stormwater discharges from dedicated asphalt or concrete plants and any other non-construction pollutant sources such as fueling and maintenance operations, materials stored on-site, waste piles, equipment staging yards, etc.). |

| Potential Pollutant Source 1 |
| --- |
| What is the location of the potential pollutant source? |
| Stormwater discharges from grading areas as show on the plans. |
| Describe the potential pollutant source. |
| Sediment could run off in stormwater discharges from temporarily unstable grading areas. Dust could be propagated and sediment could be tracked from temporarily unstable grading areas |

| Potential Pollutant Source 2 |
| --- |
| What is the location of the potential pollutant source? |
| Staging and storage area at Chimney Beach parking lot and on Forest Service land. |
| Describe the potential pollutant source. |
| stormwater and non-stormwater discharges from materials storage, fuel, concrete and paving materials |

| Potential Pollutant Source 3 |
| --- |
| What is the location of the potential pollutant source? |
| Marlette Creek Diversion and groundwater dewatering |
| Describe the potential pollutant source. |
| See Dewatering and Diversion Plan |

| **Potential Pollutant Source 4** |
| --- |
| What is the location of the potential pollutant source?<br>Culvert extension |
| Describe the potential pollutant source.<br>Concrete spills and storm water discharge into dewatered sections of Marlette Creek. |

| **Potential Pollutant Source 5** |
| --- |
| What is the location of the potential pollutant source? |
| Describe the potential pollutant source. |

| **Potential Pollutant Source 6** |
| --- |
| What is the location of the potential pollutant source? |
| Describe the potential pollutant source. |

| **Potential Pollutant Source 7** |
| --- |
| What is the location of the potential pollutant source? |
| Describe the potential pollutant source. |

## Spill Prevention & Response

Describe procedures to prevent and respond to spills, leaks, and other releases. Other existing spill prevention plans, such as the Spill Prevention Control and Countermeasure (SPCC) plans developed for the construction activity under Part 311 of the Clean Water Act (CWA), or spill control programs otherwise required by NDEP permits for the construction activity, may be referenced provided that a copy of that other plan is kept onsite with the SWPPP. Attach a copy of any referenced plan(s) to the end of the SWPPP.

### Container Labeling

Describe procedures for plainly labeling containers (e.g., "Used Oil", "Pesticides", etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response as spills or leaks occur.

Containers will be clearly labeled before arriving on site. Temporary containers will be labeled before use. Material safety data sheets (MSDS) will be kept on site for all necessary materials.

### Preventive Measures

Describe preventive measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.

Construction equipment shall be stored at the designated staging area at the end of each work day. The Contractor will divert concentrated stormwater runoff around equipment, vehicles, and materials staging areas. Tracking control devices will be maintained to and from all work areas to paved areas (e.g. stabilized gravel entrance and rumble strips). All vehicular access from work areas to paved areas will utilize the tracking controls. A concrete washout facility will be maintained within the staging area. All fueling will occur in the designated staging area. The Contractor shall maintain all construction equipment, to prevent oil and fluid leaks. The Contractor shall regularly inspect all equipment and vehicles for fluid leaks. Pallets and secondary containment areas shall be provided for chemicals, drums, or bagged materials that require special controls.

## Spill/Leak Stoppage, Containment, and Cleaning

Describe procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases.

All staging areas must a have an appropriate spill response and cleanup kit available and visible at these locations. Should materials spills occur; materials and/or contaminants will be promptly cleaned from the Project site and recycled or disposed of to the satisfaction of NDEP. All on-site construction personnel shall be trained in spill prevention practices and provided visibly available spill containment kits at all staging areas. All Contractors are responsible for instructing their personnel on how to effectively deploy and properly use the spill containment kits.

The Contractor shall store an adequate amount of extra BMP materials such as silt fence, fiber rolls, and gravel bags on site for use during major storm events or accidental water and sewer line utility breaks. In the event of any accidental water and sewer line utility breaks the Contractor shall immediately contact NTCD, who will provide immediate notice to TRPA, NDEP, Douglas County, USFS, and the appropriate utility provider

Identify the name or position of the employee(s) responsible for detecting and responding to spills or leaks.

Meghan Kelly, Nevada Tahoe Conservation District

## Spill/Leak Notification

Describe procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under 40 Code of Federal Regulations (CFR) Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period. Contact information shall be in locations that are readily accessible and available.

### Facility Personnel

Meghan Kelly, Nevada Tahoe Conservation District 775-901-9251

### Emergency Response Agencies

NDEP (775) 687-9485
Tahoe Douglas Fire Protection District 775.588.3591
911

### Regulatory Agencies

Tahoe Regional Planning Agency 775-588-4547
Nevada Division of Environmental Protection (775) 687-9485

## Waste Management

Describe procedures for handling and disposing of all wastes generated at the site.

**Waste Management Procedures**

Describe procedures for handling and disposing of all wastes generated at the site, including, but not limited to, clearing and demolition debris, sediment removed from the site, construction and domestic waste, hazardous or toxic waste, and sanitary waste.

The amount of construction materials stored on site shall be minimized. Soil materials shall not be stockpiled on site over a weekend (Saturday, Sunday and Holidays) unless they are completely covered (in accordance with TRPA and NDEP standards, regulations and permits) and tacked down or secured with a 12 inch diameter fiber roll installed around the entire perimeter.

Solid waste dumpsters, if used, shall be covered during storm events and locked at the end of each work day. The dumpster cover will be carefully secured to withstand weather conditions and animal intrusion. The Contractor shall separate wastes and recycle or dispose of them off-site in compliance with local, regional and/or state regulation.

The Project requires the use of heavy mechanical equipment, machinery and materials which have the potential to generate solid and liquid wastes that requires proper disposal. All construction related material waste such as, excess sediment/soil, aggregate, decomposed granite, excess pipe, etc., will be disposed of at a site approved by NTCD, NDEP and TRPA.

The Contractor shall place liquid wastes (i.e. grease, oil, oil filters, antifreeze, cleaning solutions, batteries, hydraulic fluids, transmission fluids, etc.) in proper sealed containers, store the containers in designated storage areas, and ultimately properly dispose or recycle the materials off-site.

## Documentation Requirements

Provide the following information.

| Notice of Intent (NOI) |
| --- |
| Attach, to the end of the SWPPP, a copy of the signed electronic NOI certification page submitted to the NDEP. |

| Approval Letter |
| --- |
| Attach, to the end of the SWPPP, a copy of the approval letter received from the NDEP. |

| Permit |
| --- |
| Attach a copy of the Permit to the end of the SWPPP. |

| Significant Spills/Leaks/Releases |
| --- |
| Describe any incidences of significant spills, leaks, or other releases that resulted in discharges of pollutants in stormwater to a regulated MS4 or waters of the State of Nevada that meet the definition of Waters of the U.S. Include the date of occurrence, the circumstances leading to the release, actions taken in response to the release, and measures taken to prevent recurrence of such releases. |
| |

| Structural Control Measure Repairs |
| --- |
| Attach, to the end of the SWPPP, documentation of repairs made to structural control measures. Such documentation shall include the date(s) of discovery of areas in need of repair/replacement, date(s) that the structural control measure(s) returned to full function, and the justification for any extended repair schedules. |

| Inspection Reports |
| --- |
| Attach, to the end of the SWPPP, all inspection reports including post-storm event inspections. |

| Corrective Action |
|---|
| Describe any corrective action taken at the site. Include events and dates when problems were discovered and modification occurred. |
| |

| Buffer Documentation |
|---|
| If the site's disturbance area is located within 50 feet of perennial water, attach buffer documentation to the end of the SWPPP. |

| Employee Training Records |
|---|
| Attach records of employee training to the end of the SWPPP. Records should include the date training was received. |

| Plans Required By Other Agencies |
|---|
| The SWPPP may incorporate by reference the appropriate elements of plans required by other agencies. Attach, to the end of the SWPPP, a copy of the requirements incorporated by reference. |

| DeMinimis Discharges |
|---|
| For DeMinimis discharges, describe the discharge, provide the beginning and end dates of the discharge, and attach a copy of the sampling analysis report to the end of the SWPPP. |

| DeMinimis Discharge 1 | |
|---|---|
| **Start Date** | **Description** |
| _____/_____/_____ | |
| **End Date** | |
| _____/_____/_____ | |

| DeMinimis Discharge 2 | |
|---|---|
| **Start Date** | **Description** |
| _____/_____/_____ | |
| **End Date** | |
| _____/_____/_____ | |

| DeMinimis Discharge 3 | |
|---|---|
| **Start Date** | **Description** |
| _____/_____/_____ | |
| **End Date** | |
| _____/_____/_____ | |

| Post-Construction Stormwater Management |
|---|
| Describe the stormwater management control measures that will be installed during the construction process to control pollutants in stormwater discharges after construction has been completed. |
| The project will install logs, erosion control blankets, coir logs, container plants and seed revegetation as permanent erosion control measures for the stream and floodplain work. |

## Inspection, Maintenance, and Corrective Action

Describe the procedures operators will follow for maintaining their stormwater control measures, conducting site inspections, and, where necessary, taking corrective actions, in accordance with Permit sections *3.0 Effluent Limitations Applicable to All Discharges from Construction Sites*, *4.0 Effluent Limitations Applicable to Sites Using Constructed Stormwater Conveyance Channels or Sediment Basins* , and *5.0 Inspections*.

### Inspection Procedures

Describe the procedures operators will follow for conducting site inspections.

All areas of disturbed and bare soil, areas used for storage of materials and equipment that are exposed to precipitation, on-site vehicle entrance and exit locations and all on-site erosion and sediment control BMPs shall be routinely inspected. Dewatering and diversion equipment shall be inspected daily at a minimum or as necessary to ensure functioning. Inspectors shall keep record daily construction activities and BMP conditions. Inspection the entire project area will occur prior to storm events and the engineer or NTCD inspector will direct the Contractor to take the appropriate corrective actions.

Identify the personnel responsible for conducting inspections.

Meghan Kelly

Provide the inspection schedule that will be followed based on whether the site is subject to Permit section *5.2 Routine Site Inspection Procedures*, or whether the site qualifies for the reduced inspection frequency in Permit section *5.3 Reduced Inspection Schedule*. If the site qualifies for a reduced inspection schedule in accordance with Permit section *5.3 Reduced Inspection Schedule*, include the beginning and ending dates of the reduced inspection period.

Inspection shall comply with section 5.2 Routine Site Inspection Procedures for the duration of construction activities.

### Routine Facility Inspection Documentation

Attach all documented findings of each routine site inspection to the end of the SWPPP. Routine facility inspection documentation requirements are outlined in Permit section *5.4 Routine Facility Inspection Documentation*.

### Inspection Results

Attach, to the end of the SWPPP, records of actions taken based on inspection results in accordance with Permit section *5.5 Inspection Results*.

| Inspection or Maintenance Checklists |
| --- |
| Attach any inspection or maintenance checklists or other forms that will be used to the end of the SWPPP. |

| Maintenance Procedures |
| --- |
| Describe the procedures operators will follow for maintaining their stormwater control measures. |
| Daily checks of fencing. hourly inspections of any pumping outlets, daily checks of water quality, end of week covering of any bare soil piles. |

| Corrective Action Procedures |
| --- |
| Describe the procedures operators will follow for taking any necessary corrective actions. |
| Inform foreman who will direct Contractor's staff to immediately correct. |

## Additional Information

Provide the following additional information.

| Discharges To Water Quality Impaired Waters | | |
|---|---|---|
| Does the facility discharge to a surface water contained in the current 303(d) *Impaired Water Body* listing issued by the NDEP BWQP that is impaired for (1) sediment or a sediment-related parameter, such as total suspended solids (TSS) or turbidity, and/or (2) nutrients, including impairments for nitrogen and/or phosphorous? | ○ Yes | ◉ No |

If yes, make one of the following demonstrations (check the appropriate box to indicate which one has been selected) and attach such data and technical information to the end of the SWPPP:

| | |
|---|---|
| ☐ | That the site will employ measures to prevent the discharge of stormwater pollutant(s) for which the waterbody is impaired; or |
| ☐ | That the discharge from the site has no potential to contain the pollutants causing impairment; or |
| ☐ | That the discharge is not expected to cause or contribute to an exceedance of an applicable water quality standard. |

**Control Measure Addition/Repair/Modification**

If it is determined, based on an inspection of control measures performed in accordance with the inspection requirements of Permit section *5.0 Inspections*, that installation of additional control measures, or significant repair or modification of existing control measures, is necessary, and implementation before the next storm event is impracticable, document the reason(s) for the delay in the area below.

Identify and describe the modifications made to control measures.

| **Permit Requirement Waiver** |
| --- |
| If the project is waived from complying with a specific requirement in Permit section *3.0 Effluent Limitations Applicable to All Discharges from Construction Sites* in accordance with Permit section 3.1.1, document this fact in the area below. |
| |

| **Departures from Design Specifications** |
| --- |
| Explain any departures from design specifications for the installation of all stormwater control measures. |
| |

| **Culvert Stabilization** |
| --- |
| If culverts are present on the site, describe the measures implemented to sufficiently minimize the threat of erosion at culvert locations to prevent the formation of rills and gullies during construction. |
| There are two culverts on site, one is being removed and replaced with a ford. The second culvert, crossing SR28 is to be extended as part of the project. The culvert is a 6'x8' concrete box culvert with cutoff walls and and pool at the entrance. Water is to be pumped through the existing culvert during construction of the culvert extension. Filter fence and coffer dams will be installed to reduce erosion potential. |

| **Unique Construction Disturbances** |
| --- |
| If the project involves construction approved under a CWA Section 404 permit or construction of a water-dependent structure or water access area (e.g., pier, boat ramp, trail), document this fact in the area below and on the site map. |
| this is construction under a 404 permit and NWP 27 for restoration |

| **Linear Construction Projects** |
| --- |
| For linear construction projects where it is infeasible to comply with the requirements of Permit section *3.5.1.2*, document the rationale for why it is infeasible to do so, and describe any buffer width retained and/or supplemental erosion and sediment controls installed. |
| For linear projects with rights-of-way that restrict or prevent the use of perimeter controls required by Permit section *3.5.2 Install Perimeter Controls*, identify the areas where it is impracticable to maximize the use of perimeter controls and explain why it is impracticable to do so. |

| **Track-Out** |
| --- |
| If site conditions make it infeasible to install structural controls to prevent track-out (e.g., linear project along a paved right-of-way), explain why such controls cannot be installed and describe the alternative measures that will be used to prevent, monitor, and remove track-out sediment from paved roadways. |
| |

| **Sediment or Soil Stockpiles** |
| --- |
| If it is infeasible to place sediment or soil stockpiles away from stormwater conveyances, such as curb and gutter systems, and streets leading to such conveyances, explain why it is infeasible to do so. |
| |

| Non-Vegetative Stabilization Methods |
| --- |
| Describe all non-vegetative methods of stabilization employed at the site. |
| wood chips, logs, and erosion control blanket will all be used as non-vegetative methods of soil stabilization |

| Discharges to Impaired Waterbodies Without Established Total Maximum Daily Loads |
| --- |
| If the site discharges to a water quality-impaired water (contained in the current 303(d) impaired water body listing) for which a Total Maximum Daily Load has not been established, describe the condition for which the water has been listed and include a demonstration that the Best Management Practices that are selected for implementation will be sufficient to ensure that the discharges will not cause or contribute to an exceedance of an applicable State water quality standard. |
| |

| Sediment Basin Discharges |
| --- |
| If the use of outlet structures that withdraw water from the surface of the sediment basin in order to minimize the discharge of pollutants is determined to be infeasible, explain why it is infeasible and attach any supporting documentation to the end of the SWPPP. |
| |

| Additional Discharge Requirements |
| --- |
| Where NDEP determines it is necessary to impose additional requirements on the discharge, attach a copy of any correspondence describing such requirements to the end of the SWPPP, and describe the stormwater control measures that will be used to meet such requirements. |
| |

## Signature Requirements

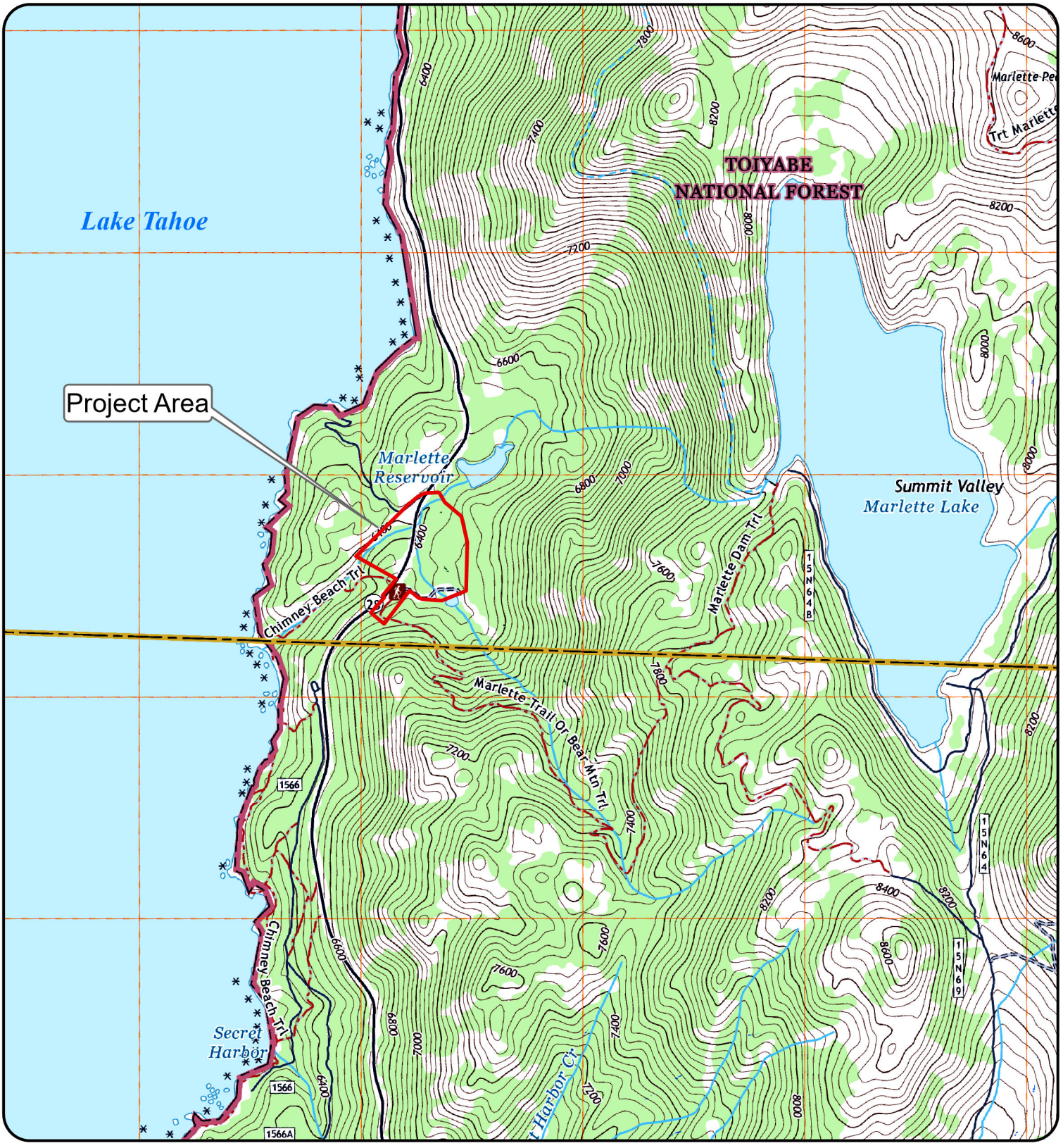
Print out the completed SWPPP and sign and date below in accordance with Permit section *7.23 Signature Requirements*. All operators shall also sign and certify the SWPPP in accordance with the Permit signature requirements. Digital signatures are not accepted.

| **Adherence Statement** | |
|---|---|
| "I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." | |
| **Name (print)** | **Title** |
| Meghan Kelly | Principal Engineer |
| **Signature** | **Date** |
| | 05 / 08 / 2025 |

| **Operator 1** | |
|---|---|
| **Name (print)** | **Title** |
| | |
| **Signature** | **Date** |
| | / / |

| **Operator 2** | |
|---|---|
| **Name (print)** | **Title** |
| | |
| **Signature** | **Date** |
| | / / |

| Operator 3 | |
|---|---|
| **Name (print)** | **Title** |
| | |
| **Signature** | **Date** |
| | _____/_____/_____ |




**Legend**

Project Area

Basemap is USGS 7.5 minute quadrangle sheet for Marlette Lake, NV 2014

# Fig 1: Project Location

**Marlette Creek Restoration and State Route 28 Crossing Improvement Project**
**Washoe County, NV**

0 1,000 2,000 3,000 4,000 Feet

Scale - 1:24,000

N

| | | |
|---|---|---|
| UTM Zone 11 N | Horiz: NAD 83, Vert:NAVD88 | Prepared/Revised: 5/8/2025 |
| Prepared by: P. Johnson, NTCD | Nevada Tahoe Conservation District | Page 1 of 1 |

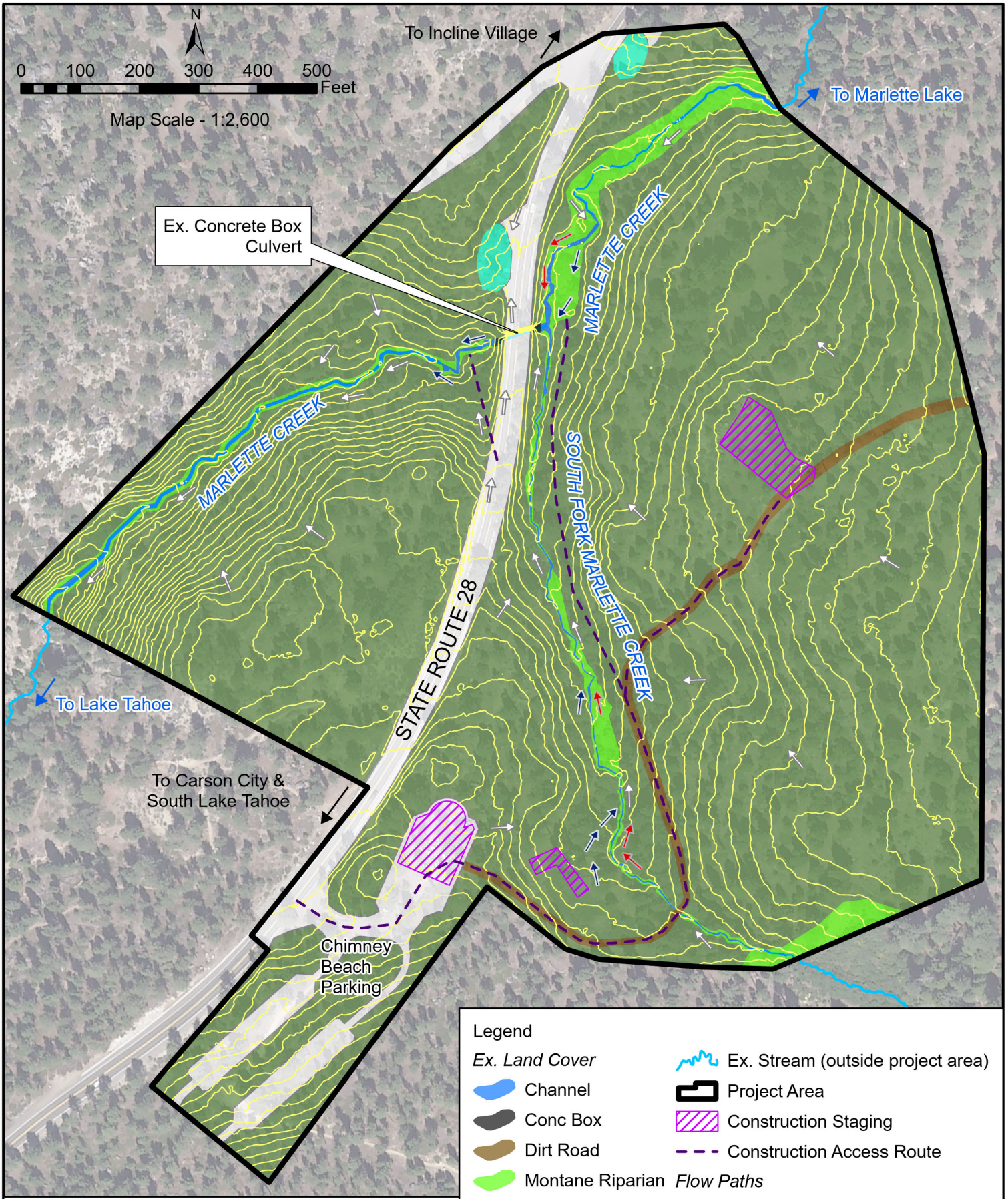
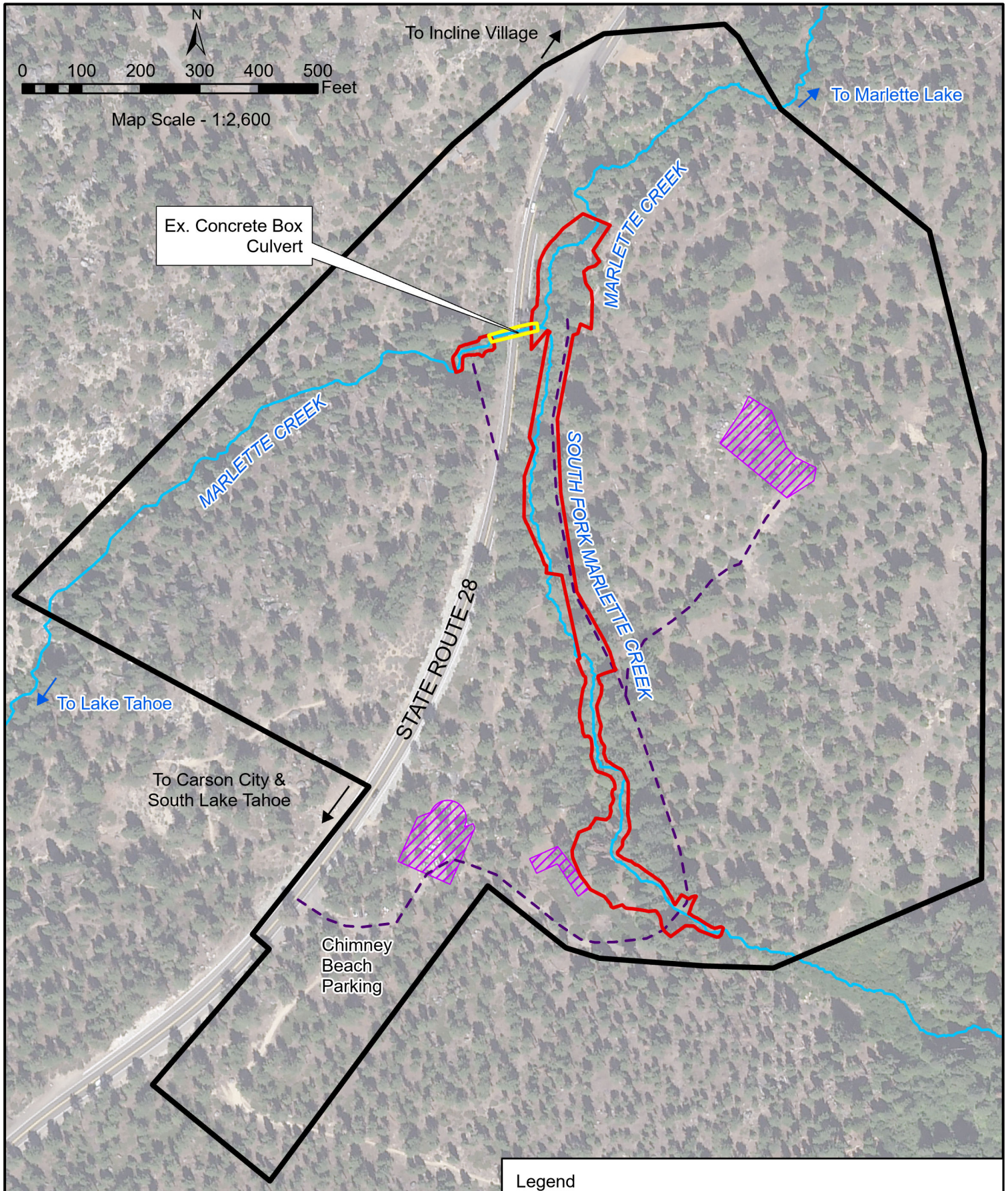



**Fig. 2: Land Cover and Topography**
**Marlette Creek Restoration and State Route 28 Crossing Improvement Project**
**Washoe County, NV**

Map Updated: 5/8/2025

Nevada Tahoe Conservation District

# FIGURES




# Fig. 3: Pollutant Sources

**Marlette Creek Restoration and State Route 28 Crossing Improvement Project**
**Washoe County, NV**

Map Updated: 5/8/2025

Nevada Tahoe Conservation District

# APPENDIX A:

# EXAMPLE DEWATERING AND DIVERSION DAILY INSPECTION FORM

| ***SWPPP INSPECTION REPORT*** | Approx. Temperature: _____ | Storm Start: _____ (date) |
|---|---|---|
| Project: _____ | PPT: ____Y / N____ | Storm Duration: _____ |
| *Inspector:* _____ | PPT Amount at time of inspection: _____ in. | Time since last storm: _____ |

| DATE: _____ TIME: _____ | DAY: | M | T | W | TH | F | SA | SU |
|---|---|---|---|---|---|---|---|---|

**Construction Stage:** _____

**Area of site exposed to storm water runoff:** _____

**Construction Activities:** _____

_____

Inspection Type

Daily ☐ Prior to Predicted Rain ☐ Following Rain Event ☐

Weekly ☐ During Rain Event ☐

**Blank=No Inspection NC=Needs Correction, See Observations OK or Check Mark=Meets Standards NA=Not Applicable**

| | | |
|---|---|---|
| 1) | Damage to containment dikes or erosion control fencing? | |
| 2) | Improperly installed or ineffective erosion control fencing? | |
| 3) | Unauthorized vehicle access, vehicles accessing designated non-construction areas not subject to disturbance? | |
| 4) | Boundary fence damage or removal? | |
| 5) | Disturbed areas with inadequate erosion prevention and sediment control protection? | |
| 6) | Evidence of any sediment leakage through erosion control fencing or containment dikes? | |
| 7) | Soil piles and other earthen materials which are unprotected or located in a drainage way? | |
| 8) | Spilled and improperly stored chemicals, paint, fuel, oil, solvents, sealants, etc.? | |
| 9) | Upstream runoff diversion structures (are in place and operational)? | |
| 10) | Any evidence of sediment tracking from construction equipment? | |
| 11) | Any signs of soil erosion or deposition down gradient from runoff discharges? | |
| 12) | Sediment accumulation within onsite storm water drainage control facilities, and facilities in need of maintenance? | |
| 13) | Any evidence of non-storm water discharges from the project site? Authorized, illicit, BMP condition? | |
| 14) | Does SWPPP or WPCP require revisions? | |
| 15) | Notable observation at relevant discharge points and downstream locations of the receiving water? | |
| 16) | Observed impacts to the receiving water? | |
| 17) | Photographs taken? | |

**Date = Defeciency to be addressed O = Observation**

| Date added | Observation/Inspection | WPCD # | Photo | Date Completed |
|---|---|---|---|---|
| | | | | |
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| | | | | |

**SIGNATURE:** _____ **TITLE:** _____

# Appendix B: Jensen Culvert Extension Installation Instructions

# BOX CULVERT

# Segmental Type 1

# Recommended Installation Requirements

Corporate Engineering Office
9895 Double R Blvd
Reno, Nevada 89521
Phone 775-352-2700

**MANUFACTURER OF PRECAST CONCRETE PRODUCTS**

# Type 1 Segmental Box Culvert Installation Recommendations

Jensen Precast has provided this document to guide specifiers, municipalities and our customers involved in the specifying, purchasing and installing of underground precast box culvert. These instructions are a guide and shall not supersede those of the project specifications. The Installer shall be solely responsible for, and have control over, construction means, methods, techniques, sequence and procedures, and for coordinating all portions of the work under his contract. Other Jensen Precast company policies, including shipping, terms and conditions, ordering instructions, and others also apply. Contact Jensen Precast for complete information.

The Installer (installation contractor) shall be solely responsible for compliance with all Federal, State, and local laws and regulations including, but not limited to, job site safety, health and environmental requirements.

Delivery

It is important to be prepared for the delivery of every box. The proper machinery should be available to handle the unloading and placing of each section. It is the responsibility of the contractor to make certain no damage has occurred during transit. An overall inspection should be performed upon arrival of the boxes. Before unloading, the delivered box should be checked against the order invoice to ensure accurate delivery of all items.

The installation contractor should contact Jensen Precast prior to planning the installation to obtain a copy of the layout drawing, section weights, lifting instructions and transportation requirements in order to prevent unnecessary delays.

Bedding & Excavation

The successful installation of Jensen Segmental Box Culvert is highly dependent on proper preparation and grading of the sub-grade and base materials. Appropriate dewatering and maintenance of all water levels below the sub-grade elevation until the excavation is backfilled is required to assure that grades are maintained and the sub-grade and base material is not compromised.

Sub-grade materials shall be improved by compaction or replacement as directed by the project geotechnical engineer. A minimum of 4” thick base material shall be placed and compacted to 90 percent ASTM D1557 density or as required by the project geotechnical engineer. The base material shall be fine graded to within ¼” of required grade prior to culvert placement. The attached drawings detail the minimum base requirements.

Excavation and shoring shall be performed in accordance with all applicable Federal and State specific regulations and requirements. If Jensen personnel are assisting or performing installation services, the Jensen supervisor/competent person will perform an inspection of trenches and excavations prior to allowing Jensen personnel to

proceed. To avoid jobsite delays, please ensure compliance prior to scheduling installation.

Rigging and Lifting

Appropriately sized rigging and lifting equipment shall be selected and utilized to lift and place the culvert sections. Rigging should be designed by an experienced professional. Consult Jensen Precast regarding lifting weights and lifting connection equipment required specific to your project. Moving, tugging or sliding by exerting force on the box section with excavating equipment is prohibited.

Alignment and Placement

Alignment of the box culvert can best be controlled with a laser instrument. Set each section on internal centerline at the invert of each section. Check alignment, grade and run length as often as needed to keep the run on track. Unless otherwise specified on layout drawings provided by Jensen Precast, allowances for ½" joint gaps exist. Run length should be checked often enough to accommodate any adjustments.

Review the project specific layout drawings prior to culvert placement to determine the appropriate starting end, direction of lay, and design joint gap to avoid having to pull, push or "come along" sections together. Unless specified when the purchase order is issued, box culvert runs are designed to be placed downstream to upstream (upslope) with a ½" joint gap. The segmental box culvert sections are designed to be placed in a direction such that the tongue of the incoming bottom section seats in the groove of the previously placed bottom section and the groove of the incoming top section is placed down over the tongue of the previously placed top section. Attempting to place the culvert in the opposite direction will result in additional labor requirements as well as potentially disrupting the bedding material creating joint sealing issues. The attached drawings detail the proper placement sequence.

Joint Sealant

To facilitate proper sealing of the sections, it is imperative that two bottom sections are placed prior to the placement of the first top section and during the progression of the placement one bottom section always extends beyond the top section currently being placed. The attached drawings detail the proper placement sequence.

1" size joint sealant to seal the joint's annular space conforming to the requirements of ASTM C990 should be utilized. The joints of the box sections shall be clean, dry, and free from deleterious material before placing sealant. Follow sealant manufacturer's instructions. Jensen Precast can supply the joint materials if included in the quotation and specified on the purchase order. After installation, if the interior joints are larger than that specified in the project specifications, the joint shall be grouted with non-shrink grout. Unless specifically included in the quotation, Jensen Precast is not responsible for any required joint grouting.

Backfill

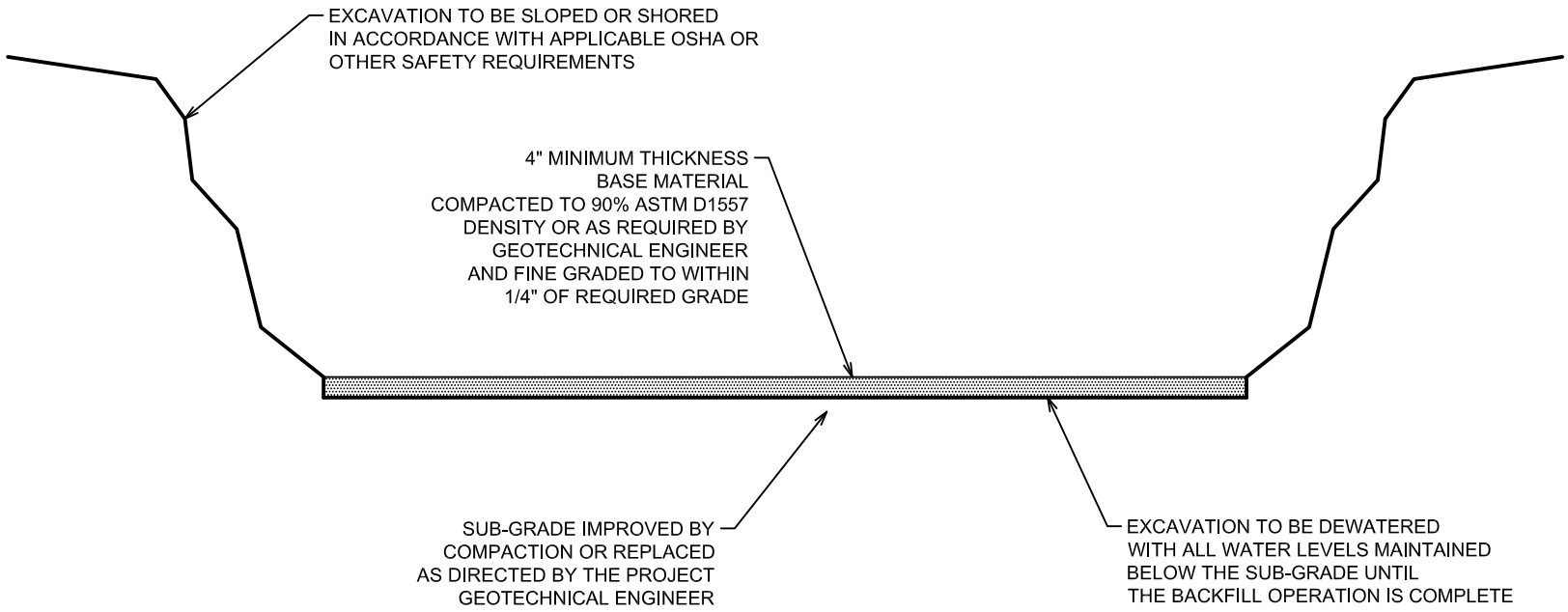
Backfill materials shall be placed uniformly on each side of the culvert run to avoid potential sliding of the culvert alignment during compaction. Backfill materials, compaction, depth of layers, and methods shall be as directed by the project geotechnical engineer.

Construction equipment loads transferred to a box section before, during or after back fill placement, either directly or through the fill, shall not be greater than loads specified in the constructions specifications.

Multiple Barrel Runs

If the culvert run is multi-barrel a 3” space shall be left between the parallel culverts. This gap shall be filled with grout or 1 ½ sack mix per cubic yard cement sand slurry and allowed to cure prior to backfilling the excavation to assure that all horizontal forces are uniformly transferred from outer sidewall to outer sidewall. Failure to do so can cause inner wall failure due to point loading the structure. The attached drawings detail the proper placement sequence.

FILE NO. EXCAVATION-BASE




# BOX CULVERT EXCAVATION AND BASE

DATE:

CHECKED BY:

Rev B

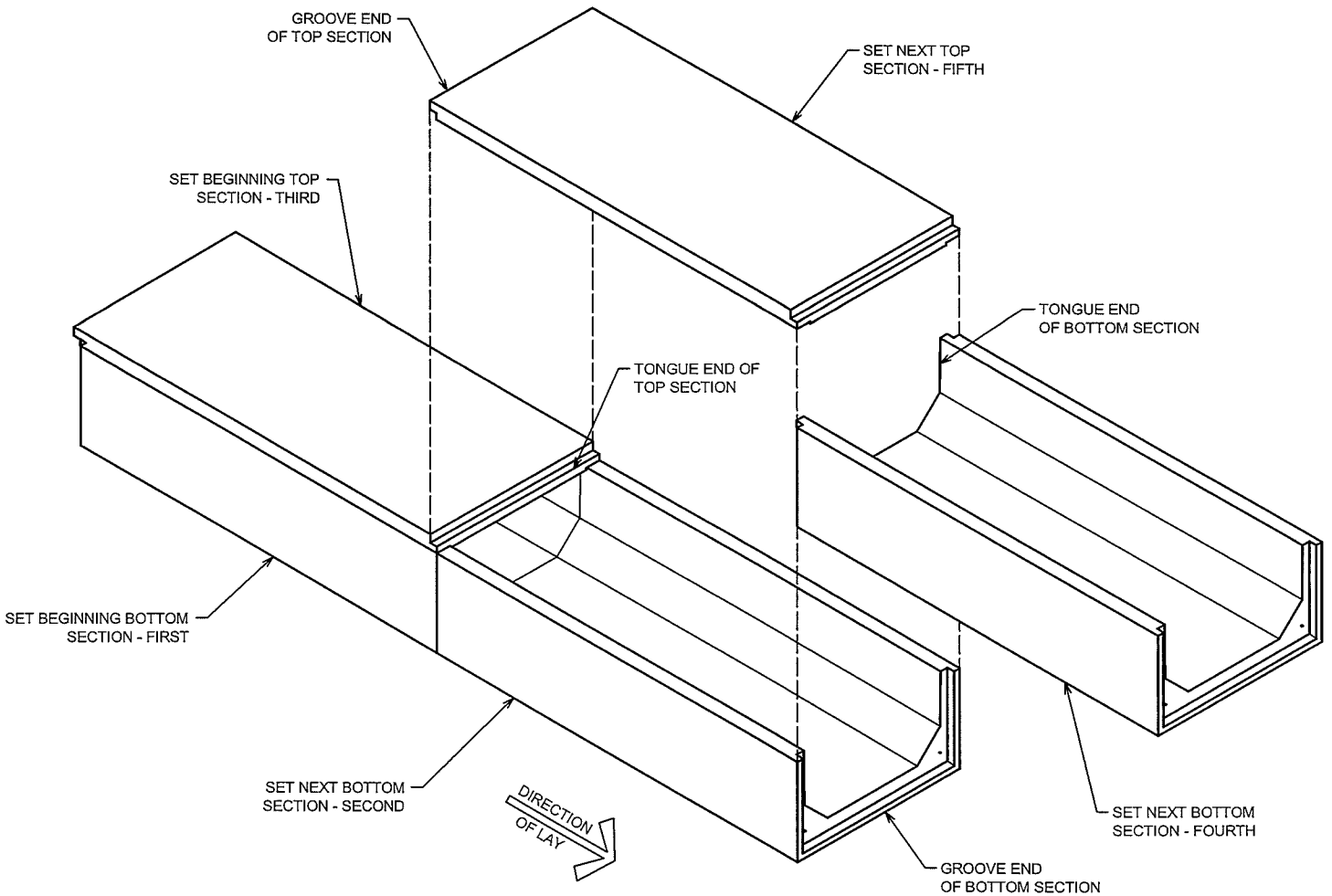
5

MONOLITHIC
BOX CULVERT
INSTALLATION
JENSEN PRECAST

| REV. | DATE | DESCRIPTION |
|---|---|---|
| 3 | | |
| 2 | | |
| 1 | 01-10-11 | GENERAL REVISION |
| 0 | 10-21-10 | NEW DRAWING |

JENSEN PRECAST®

FILE NO. INSTALL-SEQUENCE




TYPE 1
SPLIT BOX CULVERT
INSTALLATION SEQUENCE
JENSEN PRECAST

| REV. | DATE | DESCRIPTION |
|---|---|---|
| 3 | | |
| 2 | | |
| 1 | 01-10-11 | GENERAL REVISION |
| 0 | 06-21-06 | NEW DRAWING |

JENSEN PRECAST ®

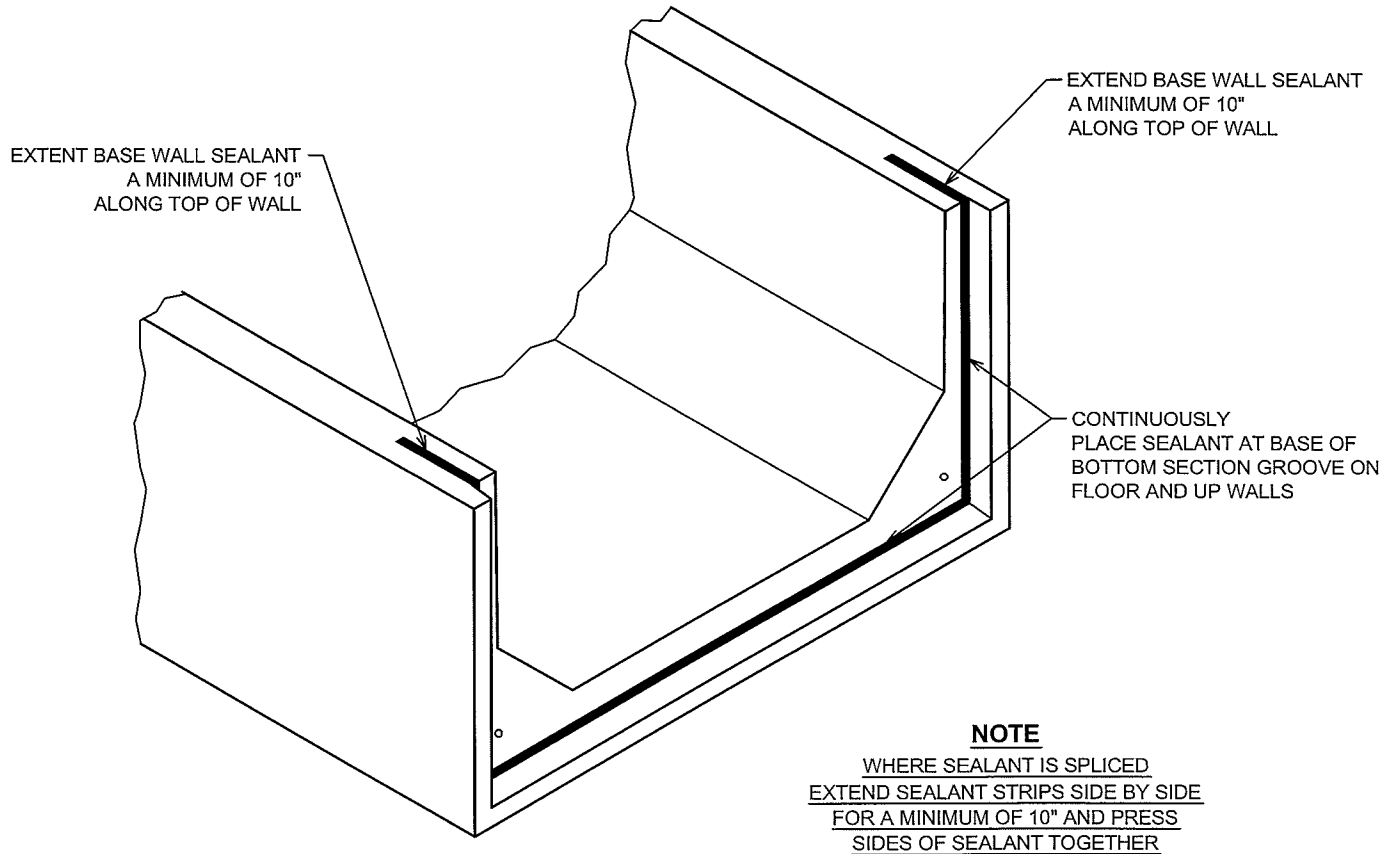


Rev B

DATE:

CHECKED BY:

FILE NO. SEALANT-PLACEMENT-01




**NOTE**

WHERE SEALANT IS SPLICED
EXTEND SEALANT STRIPS SIDE BY SIDE
FOR A MINIMUM OF 10" AND PRESS
SIDES OF SEALANT TOGETHER

STEP 1 - BOTTOM WALL AND FLOOR SEALANT

TYPE 1
SPLIT BOX CULVERT
SEALANT PLACEMENT
JENSEN PRECAST

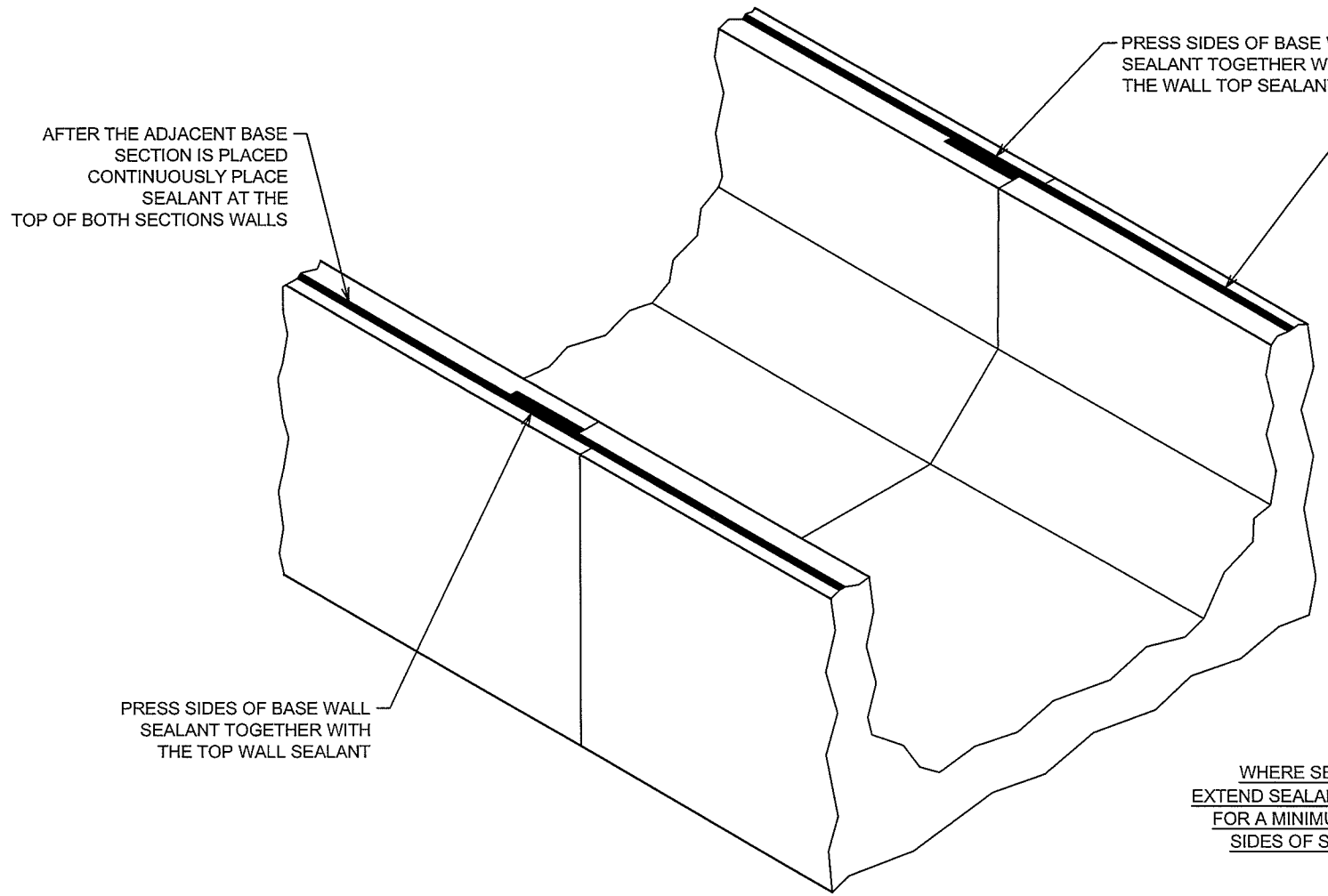
| REV. | DATE | DESCRIPTION |
|---|---|---|
| 3 | | |
| 2 | | |
| 1 | 01-10-11 | GENERAL REVISION |
| 0 | 06-21-06 | NEW DRAWING |

JENSEN PRECAST ©



CHECKED BY: _____ DATE: _____

Rev B




**NOTE**

WHERE SEALANT IS SPLICED EXTEND SEALANT STRIPS SIDE BY SIDE FOR A MINIMUM OF 10" AND PRESS SIDES OF SEALANT TOGETHER

STEP 2 - WALL TOP SEALANT PLACEMENT

FILE NO. SEALANT-PLACEMENT-02

Rev B

DATE:

CHECKED BY:

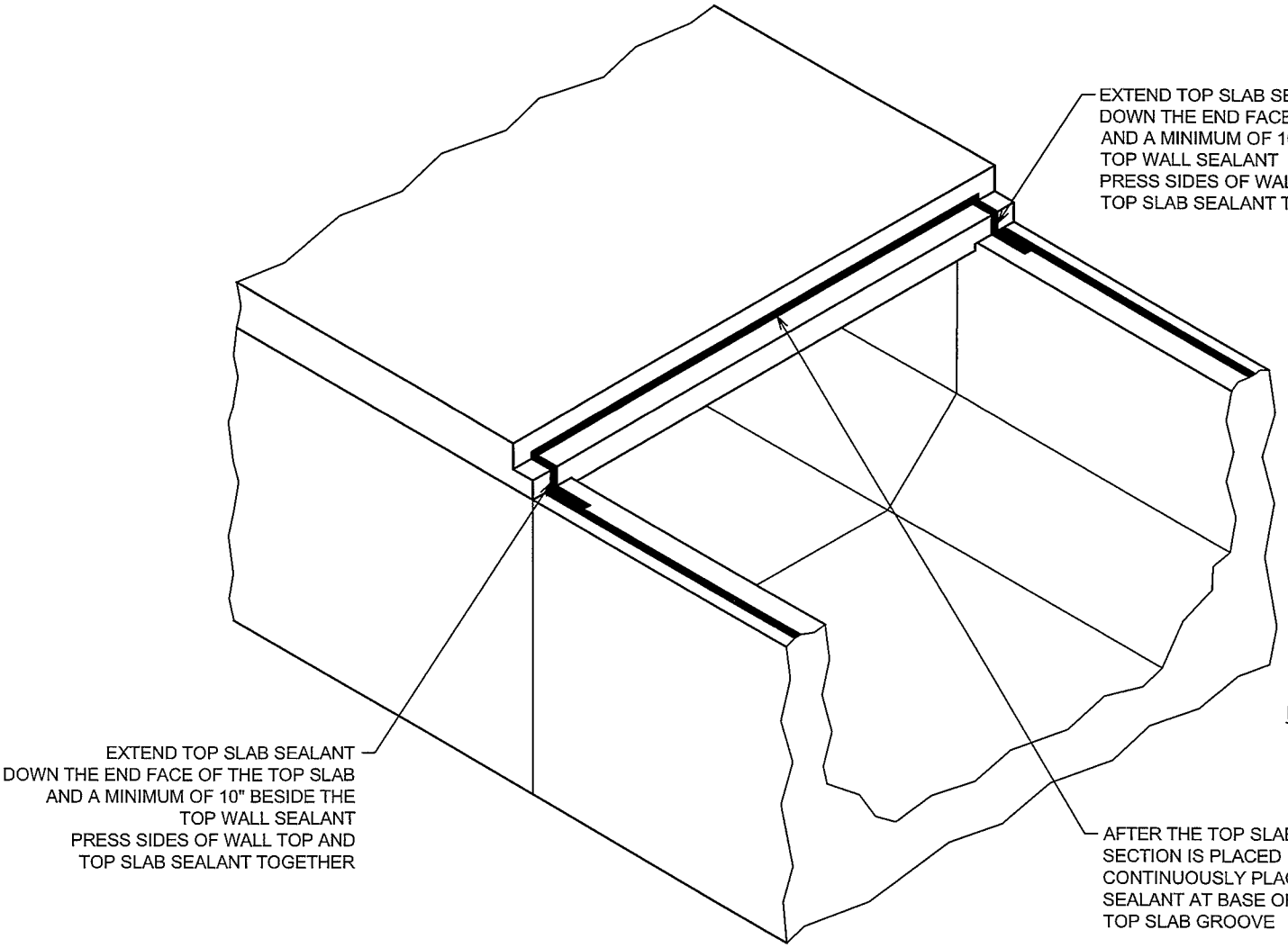
8

TYPE 1
SPLIT BOX CULVERT
SEALANT PLACEMENT
JENSEN PRECAST

| REV. | DATE | DESCRIPTION |
|---|---|---|
| 3 | | |
| 2 | | |
| 1 | 01-10-11 | GENERAL REVISION |
| 0 | 06-21-06 | NEW DRAWING |

JENSEN PRECAST ®

FILE NO. SEALANT-PLACEMENT-03




**NOTE**

WHERE SEALANT IS SPLICED
EXTEND SEALANT STRIPS SIDE BY SIDE
FOR A MINIMUM OF 10" AND PRESS
SIDES OF SEALANT TOGETHER

STEP 3 - TOP SLAB END SEALANT PLACEMENT

DATE:

CHECKED BY:

Rev B

9

TYPE 1
SPLIT BOX CULVERT
SEALANT PLACEMENT
JENSEN PRECAST

| REV. | DATE | DESCRIPTION |
|---|---|---|
| 3 | | |
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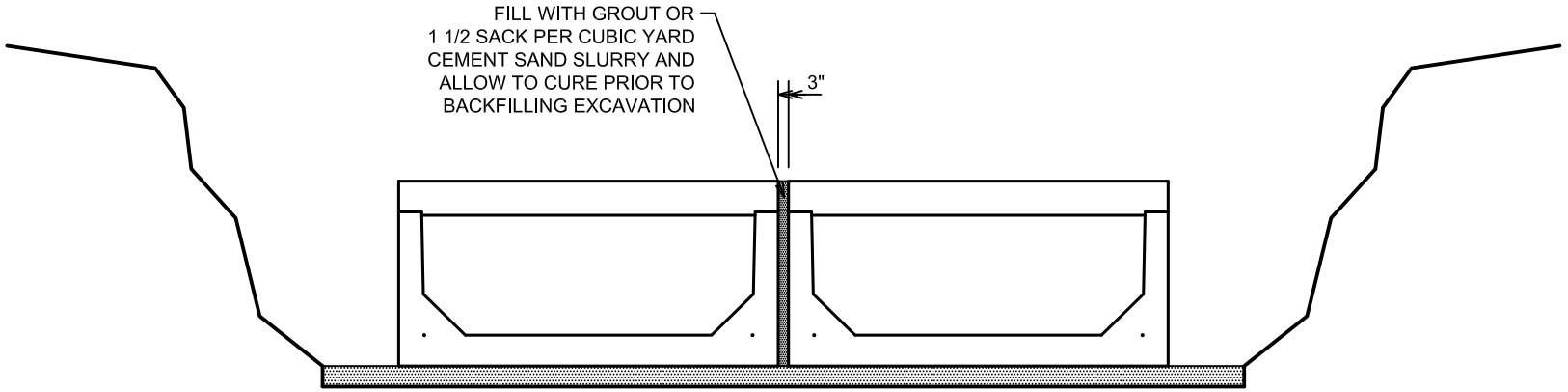
JENSEN PRECAST

FILE NO. MULTI-BARREL-INSTALL




## MULTI BARREL INSTALLATION

DATE:

CHECKED BY:

TYPE 1 SEGMENTAL
BOX CULVERT
INSTALLATION
JENSEN PRECAST

| REV. | DATE | DESCRIPTION |
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# Appendix C: US Forest Service Resource Protection Measures

**Background**
The Marlette Creek Restoration and State Route (SR)28 Crossing Improvement Project (Project) is located in Washoe County, Nevada, adjacent to SR 28 approximately 5 miles north of the junction with US Highway 50 and approximately 7 miles south of Incline Village, Nevada (**Figure 1 Project Location and Vicinity**). The Area of Potential Effect (APE) is 42 acres and includes the Main and South Forks of Marlette Creek and the Chimney Beach Parking Area on the east side of SR 28, the SR 28 right-of-way and existing culvert, a section of the Main Fork on the west side of SR 28, including a newly installed infiltration basin, existing roads, and staging areas. The Project is located at an elevation of 6,400 feet within the USGS Marlette Lake Quadrangle in T15N R 18E Sec 14.

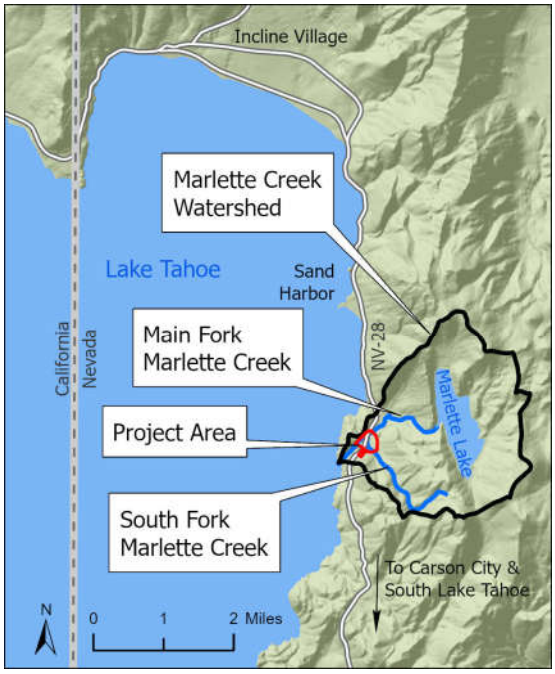

**Figure 1. Project Location and Vicinity with Project Area (in red)**

**Project Need**
Marlette Creek and its South Fork have been impacted by uses such as logging, water diversions and dams, and construction of roads over the past 150 years, resulting in channel incision and narrow riparian widths. Additionally, the Main Fork of Marlette Creek is crossed by a large road and associated fill prism at SR 28. Upstream of the culvert, the creek is eroding the road embankment, resulting in degraded water quality and jeopardizing essential infrastructure. At the downstream end of the culvert, there is a 4.5-foot drop impeding aquatic organism passage. On the South Fork of Marlette Creek, a dirt road crossing restricts streamflow into a 40" corrugated metal pipe which also restricts aquatic organism passage. Restoration of these reaches of Marlette Creek is needed to improve in-channel aquatic habitat, provide additional habitat access, expand riparian areas, reduce degradation of nearby infrastructure, and improve water quality.

**Project Description**

The Project will restore and enhance Marlette Creek and the South Fork of Marlette Creek in the vicinity of SR28. The restoration includes the following major components as shown in **Figure 2 Project Overview.**

**<u>Main Fork of Marlette Creek</u>**

- Install coffer dams and diversion pipe to dewater active work areas for components described within the Main Fork of Marlette Creek.
- Realign and restore a 250 linear foot section of the main fork of Marlette Creek upstream of SR 28 using excavation and appropriate natural grade controls made of wood or rock and native vegetation to reconnect the creek with an inset floodplain.

**South Fork of Marlette Creek**

- Install coffer dams and diversion pipe to dewater active work areas for up to 1,300 linear feet of the South Fork of Marlette Creek.
- Realign and restore up to 900 linear feet of the South Fork of Marlette Creek using excavation and appropriate natural grade controls made of wood or rock. Utilize native vegetation to stabilize the eroding bed and banks to reconnect the creek with an inset floodplain.
- Remove an existing corrugated metal culvert crossing Mine Shaft Road and construct a new ford using rock to improve hydraulic connectivity.

**Culvert and Downstream Reach**

- Install coffer dams and diversion pipe to dewater active work areas for components described here.
- Create riffle-pool fish habitat downstream of the SR 28 culvert outlet on Marlette Creek for 125 linear feet using large rock and stream bed material consisting of sands, gravels, and cobbles.
- Restore fish passage at culvert outlet by raising base level and creating plunge pool at culvert outlet in accordance with Aquatic Organism Passage (Natural Resources Conservation Service, Conservation Practice Standard, USDA NRCS 2022) and Guidelines for Salmonid Passage at Stream Crossings (NMFS 2023). Fish passage is designed for adult Lahontan cutthroat trout during spring months when flows are expected to be highest.
- Modify and extend the existing box culvert at SR 28 for up to 15 feet upstream to reduce road embankment erosion and allow for juvenile trout passage.

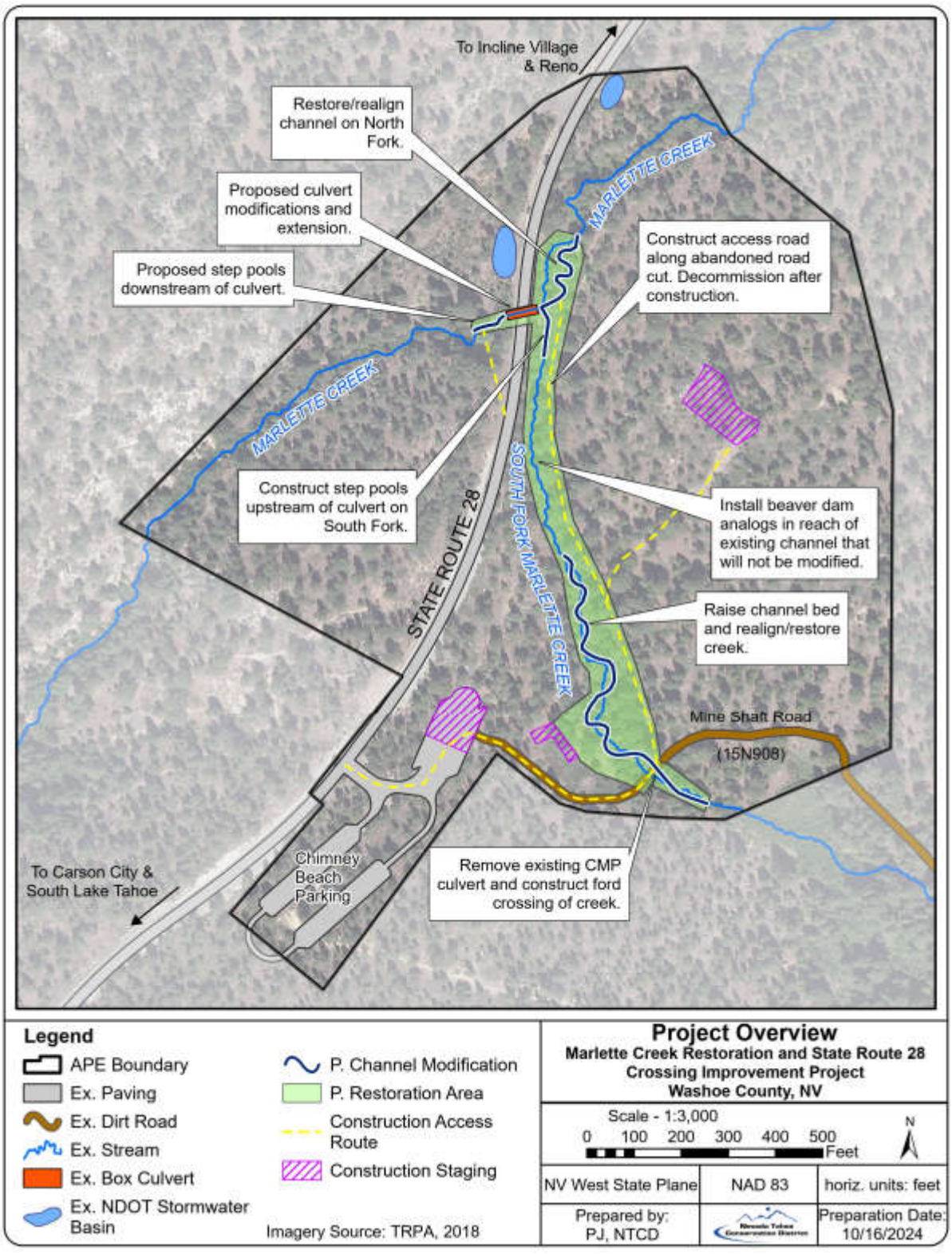


**Figure 2. Project Overview**

**Project Components**

- Remove up to 70 pines, firs, and cedars < 12" DBH and 35 pines, firs, and cedars >12" DBH within the riparian zone. Store the cut trees for creation of in-stream woody structures and floodplain roughness.
- Re-establish up to 750 feet of an existing unnamed dirt road for construction access to the site.
- Install coffer dams and diversions to dewater up to 1,300 linear feet of the South Fork of Marlette Creek prior to construction.
- Remove remnant piping and gabions on the South Fork of Marlette Creek.
- Restore approximately 900 linear feet of the South Fork of Marlette Creek channel that is severely incised to stabilize the eroding bed and banks, encourage riparian vegetation, and reconnect the creek with an inset floodplain. This could entail channel realignment using excavation of adjacent areas and filling eroded sections with coarse sand, gravels, cobbles, wood, and sod to repair head cuts and create new channel and floodplain areas.
- Install coffer dams and diversions to dewater up to 125 linear feet of the Main Fork of Marlette Creek prior to construction.
- Construct a new 250 linear foot section of the Main Fork of Marlette Creek adjacent to the existing channel using excavation, native vegetation, coarse sand, cobble, rock, and wood.
- Excavated soil from the new channel construction could be stored in an on-site staging area to backfill the old alignment.
- Install coffer dams and diversions to dewater both the Main Fork and South Fork of Marlette Creek prior to construction of box culvert work and downstream step pools. Dewatering will occur either by diversion of water over SR 28 with a pipe and associated speed bump or bore pipe through the road embankment.
- Extend the existing box culvert under SR 28 for up to 15 feet upstream to reduce road embankment erosion and modify the inside using cobble, boulders, and concrete to allow for juvenile trout passage.
- Establish riffle-pool fish habitat on the Main Fork of Marlette Creek for 125 linear feet downstream of the SR 28 culvert outlet using large rock and stream bed material consisting of sands, gravels, and cobbles in a dewatered stream channel. This will eliminate the passage barrier at downstream end of culvert and will create an appropriately-sized plunge pool with sufficient depth and distance below the culvert (as outlined in NMFS 2023) to allow for passage of adult Lahontan cutthroat trout and sufficient fish jumping/burst speed (Kondratieff and Myrick 2006).
- Remove earthen plugs on the new Main Fork channel left in place during Phase 1 to divert water from the old channel. Remove diversion pipe utilized for dewatering and restore area.
- Backfill up to 250 linear feet of the old Main Fork alignment with native fill from Phase 1 and revegetate with native seed, shrubs, and trees.
- Decommission all access roads and staging areas using re-contouring, native plants, and log scatter at the end of the project construction.
- Remove an existing corrugated metal culvert on the South Fork channel at Mine Shaft Road and construct a ford using rock to improve future vehicle access while ensuring fish passage is not impaired/restricted.
- Electrofishing surveys will be performed pre-construction and post-construction to determine success of fish passage.

**Project Schedule**

Construction is proposed to begin as early as July 2025 and implemented over one construction season, with anticipated completion by October 2025.

Construction will begin with a nesting bird survey one week prior to planned tree removal in July 2025. Approximately 105 trees throughout the project site will be removed to reduce conifer encroachment and restore natural topography. If any trees are found to have nesting birds and are identified for removal, they will be preserved or removed after nesting season. Trees will be stored for use within the project. Some select trees will be left partially cut, to be knocked down with root wads intact and used in the channel restoration.

Restoration activities will begin with the installation of temporary best management practices and the reestablishment of the access road along the South Fork of Marlette Creek accessing the Main Fork. The new alignment of the Main Fork just upstream of the culvert will be constructed, and earthen plugs left in place at both ends to allow for some channel seasoning and vegetation establishment. This work outside of a wetted area is being completed first to allow for vegetation growth while other aspects of the Project are completed. The earthen plugs will be removed later in the construction sequence to activate the new channel. Soil excavated for the construction of the realignment will be stored on site to backfill the old alignment.

Restoration activities on the South Fork channel will begin in July or August, when water levels are lowest. All imported materials will be certified weed-free and double-washed to remove fines prior to arriving at the project site.

Once channel work at the South Fork is completed, restoration actions will shift back to the Main Fork of Marlette Creek. Subsequently, modifications to the existing box culvert at SR 28 will occur. Activation of the new section of the Main Fork will occur through plug removal and backfill of the old Main Fork channel. The road that was constructed for access to these areas will be removed once work on the Main Fork is completed.

Once work is largely completed upstream of the SR 28 culvert, construction will move to the downstream end of the culvert where a series of pools will be constructed for approximately 125 linear feet to eliminate the current 5-foot drop, replacing it with a series of one-foot drops that allows for the passage of juvenile Lahontan Cutthroat trout (12” jumping height). The eroded embankment will be repaired and the pools constructed with natural channel bank materials.

Finally, an existing CMP culvert will be removed within the South Fork of Marlette Creek and replaced with a ford crossing. Construction of the ford crossing is planned to be one of the final steps in construction so that the existing abandoned forest service road can be utilized for construction access with minimal water quality effects.

**Construction Access**

Access to the various sites upstream of the SR 28 culvert will be via Mine Shaft Road (15N09A), an abandoned Forest Service road paralleling the South Fork. Mine Shaft Road splits after the existing CMP culvert crossing and an abandoned no name road continues to parallel the South Fork. The abandoned road cut narrows and becomes less defined as it approaches the confluence. All construction access to the east side of SR 28 will be from the abandoned road, the road will need to be widened and cleared to gain access to the Main Fork and small tree and brush removal will be required to access the SR 28 culvert. Short access points from the abandoned road will be established to gain direct access to the channel and additional clearing and grubbing will be required to remove brush and small diameter (<14” DBH) conifers. Areas disturbed by construction access routes will be restored and revegetated at the end of the project. Temporary construction roads used in both phases will be winterized at the end of phase 1 and the abandoned Forest Service road will be decommissioned, up to the intersection with Mine Shaft Road, at the end of the project.

Access to the Main Fork downstream of the SR 28 culvert will be from a low sloping access point along the southwest side of the SR 28 embankment. A location has been identified, approximate location shown on Figure 2, that provides direct access to the project boundary and the downstream section of the SR 28 culvert. Areas disturbed will be restored and revegetated at the end of the project. This access allows avoidance of an unverified heritage site.

**Construction Staging**

Staging areas will be needed for construction equipment and machinery, downed trees, and excavated earthwork. Three staging areas have been identified; however, it will be left to the contractor to decide which sites will be used. The first site is located just beyond the Forest Service gate at the Chimney Beach parking lot, the next is located in a clearing on the north side of Mine Shaft Road, and the third site is located towards the end of Mine Shaft Road. Construction BMPs such as sediment logs or filter fencing will be installed and maintained around all staging areas. Any disturbance in staging areas will be restored prior to the end of construction using soil decompaction methods and native seeding.

**Resource protection measures (RPMs)**

Prior to construction, all contractor, and subcontractor project personnel will receive training from qualified resource specialists (Nevada Tahoe Conservation District Personnel) regarding the appropriate work practices necessary to effectively implement these Resource Protection Measures included herein including appropriate resource avoidance measures; impact minimization procedures; the importance of sensitive resources, and the purpose and methods for protecting such resources. Nevada Tahoe Conservation District (NTCD) will coordinate with the contractor on a daily basis to ensure RPMs are being implemented properly. If it is determined if RPMs are not being followed, NTCD will report to USFS staff.

The following resource protection measures relevant to terrestrial and aquatic wildlife species/habitat, vegetation, water quality and cultural resources will be incorporated into the design and implementation of the project:

- WL- 1: Nesting Bird Surveys
  Nesting bird surveys will be conducted (NTCD/Contractor) no more than 14 days prior to construction activities if work is scheduled to occur during the breeding season—April through August. If a nest is found, exclusionary avoidance zones (to be determined based on species-specific needs) will be created surrounding any active nests within or adjacent to the project.
- WL– 2 Marten Den Surveys
  Conduct (NTCD/Contractor) pre-implementation camera surveys where project activities would occur within suitable marten denning habitat plus a 50-meter buffer. Conduct surveys the same season as implementation. If marten are detected, follow-up with pedestrian den surveys no more than three weeks before project initiation and regardless of season. Possible dens will be further monitored by remote camera in order to determine if they are being actively used by marten. Based upon the results, the Responsible Official may implement a Limited Operation Period (LOP) and/or adapt construction timelines or facility locations as determined necessary to provide adequate protection. If dens of other species are located during the surveys it would be up to the discretion of the project biologist to conduct camera surveys and/or protect the den.
- WL– 3 American Goshawk
  The Marlette Creek protected activity center (PAC) shall be surveyed prior to commencement of

construction. If the project is proposed to begin prior to June 1, dawn acoustical surveys together with a stand search will be performed. If the project begins after June 1, broadcast surveys will be performed to cover the PAC. A minimum of two surveys will be completed prior to project implementation for each year of the project. If an active nest is found at any point during the survey effort, A Limited Operating Period would be implemented (see WL-9)

- WL– 4 Bat Surveys
  If tree removal occurs May 1 – August 31, surveys for possible bat roosts will be conducted within 30 days of the start of tree removal activities (NTCD/Contractor). Possible roost structures include snags, complex trees, trees with sloughing bark, and/or large diameter trees. If tree removal activities take more than 30 days and/or if there is a gap of 30 days between tree removal activities, surveys shall be repeated. All potential roosting sites will be surveyed by a qualified biologist to determine usage. Specific survey methodologies will be determined in coordination with the USFS. If an active roost is identified, the Responsible Official may implement an LOP and/or adapt construction and/or tree removal timelines as necessary to provide adequate protection to the individuals in the roost.

- WL– 5 Wildlife Egress
  Measures shall be taken to allow for exit of trapped wildlife within the project area when excavations are left open overnight. Excavations shall be fitted with ramps and/or suitable egress for small mammals, amphibians and reptiles that may be contained within the excavated area. Construction monitors shall inspect all excavations and areas of active construction for trapped wildlife. Wildlife found in active construction areas will be allowed to passively leave the site. If necessary, wildlife may be relocated by a qualified biologist. The construction foreman will notify the environmental monitor immediately if any wildlife enters or becomes trapped in the work area.
- WL- 6: General Wildlife Protections
  - If FS Sensitive or ESA listed species are found during implementation notify the project biologist immediately.
  - All trash and food will be removed from the site at the end of each workday to avoid attracting wildlife to the site.
  - No harm, harassment, or collection of plant and wildlife species will be allowed with the exception of those permitted by USFWS and Nevada Department of Wildlife Scientific Collection Permit. Feeding of wildlife is prohibited.
- WL- 7: Implement Limited Operating Periods to protect nests/dens/roosts, and habitat as needed, based on most recent survey data:
  (1) Peregrine falcon and golden eagle: April 1 through July 31
  (2) Pacific marten: May 1 through July 31
  (3) Willow Flycatcher: June 1 through August 31
  (4) Bat roosts: May 1 through August 31
  (5) American goshawk: February 15 through September 15
  (6) California spotted owl: March 1 through July 9 for activities that only generate noise or smoke; March 1 through August 31 for habitat manipulating activities
  (7) Bald eagle: March 1 through August 31
  (8) Osprey: March 1 through August 15
  (9) Sandhill Crane: April 1 through August 31
  (10) Sierra Nevada red fox: January 1 through June 30

- AQ– 1 Dewatering and Drafting
  Dewatering and drafting shall use screening devices for water pumps. Use pumps with low entry velocity to minimize removal of aquatic species, including juvenile fish, amphibian egg masses and tadpoles, from aquatic habitats. The following criteria shall be used to avoid impacts:
    - Before conducting water pumping activities, decontaminate all external and internal surfaces of pumps and draft hoses. Either 1) power wash with hot water (140°F, allow spray to contact surfaces for 2 minutes) using a hot pressure washer (e.g., a 'Hotsy'), or 2) dry the equipment in the sun until completely dry to the touch.
    - Screens shall be designed to ensure aquatic species are not captured by pumps using small mesh such as burlap sacks or other screening material. Intake screens shall be kept in good repair and present a sealed, positive barrier. The screen face should be oriented parallel to flow for best screening performance.
    - The screen shall be cleaned as often as necessary to prevent approach velocity from exceeding 0.33 feet per second. Operators shall withdraw the screen and clean it after each use, or as often as necessary to keep screen face free of debris. Pumping shall stop for screen cleaning when approximately fifteen percent or more of the screen area is occluded by debris. A suitable brush shall be stowed by pumps for this cleaning operation.
    - Dewatering:
      - Implement and follow the Dewatering and Diversion Plan as outlined in Appendix C.
    - Drafting:
      - Drafting operations are restricted to one hour after sunrise to one hour before sunset to avoid the use of lights that attract fish.
      - Drafting shall occur in streams and pools with deep and flowing water; not streams with low flows and isolated pools. Intakes shall be at least 6 inches above the bottom of the channel and away from submerged vegetation, where practicable. Where not practicable, utilize other means to limit intake of substrate and aquatic species.
      - The pumping rate shall not exceed ten percent of stream flow or 350 gallons per minute (whichever is less) to ensure adequate downstream flow to support aquatic species.
      - Pumping operations shall not result in obvious draw-down of upstream or downstream pools.
- AQ– 2 Aquatic Species Salvage
    - Salvage and recovery of aquatic species will be conducted by the contractor within dewatering areas prior to any in-stream work. Salvage and recovery will be conducted by electrofishing or other suitable means as permitted by and in accordance with a Nevada Department of Wildlife Scientific Collection Permit.
    - Block nets will be installed and maintained by the contractor to ensure fish do not move back into the project area. Nets will be cleaned as often as needed to ensure the nets are functioning and maintaining an intact seam. At a minimum, nets should be checked when first arriving on site in the morning and when leaving the site for the day.
    - Field staff shall make all efforts to minimize impacts to aquatic wildlife during dewatering and associated fish salvage. Field staff will be trained in handling aquatic wildlife and observing animals for signs of stress and shown how to adjust electrofishing equipment to minimize that stress. All field staff involved in electrofishing shall be trained by qualified personnel to be familiar with equipment, handling, settings, maintenance, and safety. Only DC units shall be used, and the equipment shall be regularly maintained to ensure proper operating condition. Voltage, pulse width, and rate

shall be kept at minimum levels, and water conductivity shall be tested before electrofishing starts so minimum levels can be determined. Due to the low settings, shocked fish normally revive instantaneously. Fish requiring revivification shall receive immediate, adequate care. Aquatic species will be moved upstream or downstream of project activities, or to other suitable habitat within the project area.

- If FS Sensitive or ESA listed species are encountered during electrofishing efforts, stop all efforts and immediately contact LTBMU fisheries staff.

- AQ– 5 Field Gear Disinfection
  Field gear (waders, boots, gloves, nets, buckets, block nets, etc.) will be cleaned, decontaminated, and/or fully dried prior to entering or moving between aquatic habitats per the *Batrachochytrium dendrobatidis* (Bd) Disinfection Protocol (Appendix D).
- AQ-6 Large Equipment Disinfection
  Equipment that enters the water must follow appropriate disinfection procedures before arriving on site. Equipment must be cleaned and disinfected to ensure that the equipment is free of soil, seeds, vegetative material, or other debris or water that could contain or hold seeds of non-native aquatic species. Either 1) power wash with hot water (140°F, allow spray to contact surfaces for 2 minutes) using a hot pressure washer (e.g., a 'Hotsy'), or 2) dry the equipment in the sun until completely dry to the touch. Equipment will be considered clean when visual inspection does not reveal soil, seeds, plant material, standing water, or other such debris.
- AQ– 7 Downed Wood
  Retain/add downed wood in open areas with limited downed wood, where feasible for native amphibian species. Density should be approximately three logs >30 cm diameter at midpoint per 0.4 ha.

- AQ– 8 Aquatic Invasive Species Surveys
  Surveys for aquatic invasive species will be performed prior to any ground disturbance or in-water activities. Removal of aquatic invasive plant species shall be performed prior to dewatering, filling or disturbance. Methods of removal may vary and shall be determined on a case-by-case basis (e.g., hand pulling, suction dredging, placement of benthic barriers, etc.)
- WQ-1: The project shall follow the water quality and erosion control best management practices (BMP) plan as included in the final plan set approved by both USFS LTBMU and the Tahoe Regional Planning agency. Implementation of the BMP plan and associated Stormwater Pollution Prevention Plan will decrease impacts to water quality and freshwater aquatic habitats.

- WQ-2: Locate refueling areas away from waterbodies. Prohibit fuel storage within 10 feet of a waterbodies and outside stream environment zones. Refuel pumps in areas a safe distance (minimum 10 ft) from stream channels and stream environment zones. Place fuel absorbent mats or leak free tray under pump while refueling.
- WQ-3: Spill prevention and clean-up of hazardous materials would be implemented in accordance with the Lake Tahoe Basin Management Unit Spill Notification and Response Plan (for emergency spills).
- WQ-4: Prior to the start of construction, all equipment will be inspected for leaks and regularly inspected thereafter until removed from the project site.
- WQ-5: When dewatering and constructing/removal of coffer dams:

  Design pump intakes and outlets to minimize turbidity and the potential to wash contaminants into adjacent creeks or wetlands. Use an energy dissipater to prevent erosion at the outlet.

Implement a dewatering plan for construction activities that are within the low water or bankfull channel. Localized pumping may be used to clear the construction area of turbid standing water resulting from the excavation of saturated soils and intercepted groundwater. Dewatering activities would be monitored closely to ensure that surface flow and surface saturation is avoided.

To collect and divert the river flow around in-channel construction areas, sandbag coffer dams sealed with 6-millimeter plastic or equivalent will be used upstream to pond water for pumping. The sandbags and plastic sheeting will be keyed into the existing channel bed and banks to minimize leakage. Exact dimensions of coffer dams will depend on size of stream channels and flows.

Locate coffer dams to minimize bed and bank disturbance and the need to remove/prune riparian vegetation.

Turbid water would be discharged to upland areas and return flow to stream would be prevented using detention ponds or other means.

- WQ-6: Leave existing downed trees and coarse woody debris (CWD) that are in perennial or intermittent stream channels in place unless removal is needed to maintain channel stability, as determined by an agency watershed specialist.
- WQ-7: Maintain stream shade and bank stabilizing vegetation along bank of perennial or intermittent streams and lakes. Consult a watershed specialist as needed.
- WQ-8: Use directional falling to keep felled trees out of intermittent and perennial streams, except when LWD is desired in channel to improve stream habitat, in consultation with a LTBMU Aquatic Biologist and/or Hydrologist. When practicable and desirable, use tipping techniques to directionally fell trees with root-ball intact into streams.
- WQ-9: Limit depth of masticated or chipped slash to average 4 inches no more than 6 inches. Prohibit masticated or chipped material in the SEZ, except at crossings and unless necessary for erosion control.
- WQ-10: Where it is necessary to cross an SEZ area with inoperable soil moisture conditions, equipment would operate over a slash mat, or other protective material to minimize soil compaction. If slash is used, it would be removed when operations in the area are concluded.
- WQ-11: Limit mechanical equipment operations in SEZs to operations using equipment that has low ground pressure like rubber-tired equipment, equipment that operates on a bed of slash, or other innovative technologies that reduce impacts to soils.
- WQ-12: Machinery use that disturbs the ground surface within 25 ft of a perennial or intermittent stream channel or other water body (e.g. lakes, ponds) must not result in soil compaction, rutting, or erosion.
- WQ-13: Design permanent stream crossings for hydraulic performance and structural integrity at the bankfull and 100-year peak flow events.
- WQ-14: Best Management Practices (BMPs) would be used in all construction areas to reduce or eliminate the discharge of soil, surface water runoff, and pollutants during ground disturbing activities. Erosion control measures may include but would not be limited to silt fences, straw wattles, coir logs, mulching, gravel/sandbags, construction limit fencing, and revegetation.
- WQ-15: Earthwork would be confined to areas of construction activities described in the design details and permit documents. The construction sequencing for each channel restoration reach would allow for winterization and close-out of certain construction areas as work in those areas is completed.

- WQ-16: Any earthwork within the river channel would take place in the drier months of July, August, and September. All project activities that involve the need for water diversions or new ground disturbance would be planned to be completed by October 1st each year.
- WQ-17: All disturbed areas for floodplain creation, haul roads, and staging areas would be revegetated or stabilized to recover to pre-construction conditions.
- WQ-18: Excavated and fill slopes would be graded to a stable angle and protected against erosion by track walking and seeding/mulching bare areas.
- WQ-19: Each stream restoration site would be stabilized at the end of each construction season. BMPs used for stabilization may include, but not limited to coir logs adjacent to access roads and providing ground cover over bare soil areas.
- WQ-20: To reduce erosion and failure of stream banks, portions of the new channel banks would be stabilized where necessary using measures such as placement of rocks at the toe of banks, grading to create more stable bank slopes, and/or placement of wood jams to direct flows away from banks. Riparian vegetation would also be planted to stabilize the banks. Irrigation and revegetation efforts would continue until revegetation success is determined adequate to prevent water quality degradation and sediment delivery. The first flushes of new channel segments would be monitored to look for any erosion or bank failure issues. These areas would be stabilized, as appropriate.
- WQ-21: New channel segments would be flushed with water several times before being connected to the river flows. This would allow for loose sediments to be flushed downstream, and collected and pumped to designated dewatering sites, or to be embedded into the new channel substrate to minimize the amount of sediment released during flow connection.
- WQ-22: Construction vehicles would be serviced in specified upland areas or stabilized areas to prevent accidental spills of fluids, oils, and lubricants from reaching unprotected soils or surface water.
- WQ-23: Construction equipment shall be cleaned to remove any loose dirt or sediment prior to exiting the site. Access roads would be watered regularly throughout active construction to prevent fugitive dust, and stockpile area entrances would be armored to prevent tracking of sediments onto paved roadways. Earth or other material that has been transported onto paved roadways by trucks, construction equipment, erosion, or other project-related activity would be promptly removed.
- WQ-24: Construction materials would be stored at designated staging areas. Staging areas would be delineated with construction limit fencing. Staging areas will not be in wet meadows, lakes, ponds, or any waterway. Stockpiled material and material transported by vehicles off site would be covered and/or kept visibly moist to control fugitive dust emissions and wind erosion. In addition, each stockpile would be covered during winter periods (if applicable), and silt fencing or coir
- WQ-25: Temporary roads would be out-sloped to ensure that effective drainage is maintained. BMPs (e.g., lead-off ditches, water bars, rolling dips, etc.) would be installed to ensure that temporary roads are hydrologically disconnected from intermittent and perennial stream channels.
- VEG-1: If sensitive species are observed within the Project Area during Project implementation, ground disturbing activities in that area will stop until the LTBMU Forest Botanist is notified and appropriate avoidance or mitigation actions are agreed on. If feasible, identified occurrences would be avoided with a protective buffer from restoration activities and protected *in situ*.
- VEG 2: The Forest Service Manual (FSM 2070) and the LTBMU Land and Resource Management Plan provides direction on active revegetation after land has been assessed and determined as disturbed and is at risk of nonnative plant invasion. Revegetation plans must be submitted to a

USFS botanist with a map of the planned revegetation areas and should be consistent with the following guidelines:

- *Site Preparation*-All compacted areas are to be tilled to a depth of 12" where soil depth allows. De-compaction should occur within a week of reseeding and will not occur when soils are muddy or frozen/covered with snow.
- *Recommended Seed Mix*- Seed mixes will be approved by the Forest Botanist prior to application. Seed must be native and sourced from the Sierra Nevada EPA Level II Ecoregion 5 and within 1,000 feet elevation of the project site. Downslope sources are preferred to upslope.
- *Seed Application*-Seed should be broadcast by hand throughout the site and lightly raked into soil for optimum soil contact. Seed application should occur between Oct 1 – Nov 15, ideally immediately before snow fall to protect seed from predation.
- *Mulch*- Mulch should be applied over the seeded area and must provide over 85% soil cover. If native (on-site) materials such as pine needle mulch or wood chip native material is not available, wood fiber hydromulch composed of non-toxic and biodegradable plant materials may be utilized. All hydromulch mixing shall be performed in a clean tank and no fertilizers, mycorrhizae, or other amendments shall be added to the hydromulch slurry. Hydromulch shall be applied at a rate sufficient to provide visible evidence of uniform application.
- *Erosion Control Materials*-Erosion control wattles, jute mesh blankets, or sediment logs will be certified weed free. No straw, hay, compost, fertilizers will be permitted. or plastic-based materials will be approved. Weed free certification will be provided.

- VEG 3: Project area must be monitored for weed emergence and spread for 2-3 years (FS will need to assume responsibility due to the NTCD grant expiring in 2026. Newly introduced species or medium to high management priority species must be treated using EDRR (Early Detection Rapid Response) methods to meet weed cover performance measures.
- VEG 4: Existing infestations of low management priority species must be managed to meet the following native plant cover performance measures but are exempt from weed cover performance measures.
  - Year 1: >20% cover natives, <3% cover weeds
  - Year 2: >50% cover natives, <1% cover weeds
  - Year 3: >70% cover natives, 0% cover weeds
- VEG 5 – Salvaged Sod
  Sod will be harvested and salvaged in disturbance areas (except where weeds are present), watered until re-planted, and used for revegetation of disturbed surfaces during implementation.
- VEG 6: Invasive Plant Protection Measures:
  - **Inventory—**
    - *As part of site-specific planning, project areas and adjacent areas (particularly access roads) will be inventoried for invasive plants.*
    - *Any additional infestation discovered prior to or during project implementation should be flagged and avoided, then reported to the Forest Botanist or their designated appointee for prioritization and assessment for treatment.*
  - ***Equipment Cleaning—***
    - *All equipment and vehicles (Forest Service and contracted) used for project implementation must be free of invasive plant material before moving into the project area. Equipment will be considered clean when visual inspection does not reveal soil, seeds, plant material or other such debris. Cleaning shall occur at a vehicle washing station or steam-cleaning facility before the equipment and vehicles enter the project area.*

    - *When working in known invasive plant infestations or designated weed units, equipment shall be cleaned before moving to other National Forest Service system lands. These areas will be identified on project maps.*
- ***Staging areas—****Do not stage equipment, materials, or crews in invasive plant-infested areas.*
- ***Control Areas—****Where feasible, invasive plant infestations will be designated as Control Areas—areas where equipment traffic and soil-disturbing project activities would be excluded. If Control Areas are designated, they will be identified on project maps and delineated in the field with flagging.*
- ***Project-related disturbance—****Minimize the amount of ground and vegetation disturbance in staging and construction areas. Where feasible, reestablish vegetation on disturbed bare ground to reduce invasive species establishment; revegetation is especially important in staging areas.*
- ***Early Detection****—Any additional infestation discovered prior to or during project implementation should be reported to the Forest Botanist or their designated appointee for prioritization and assessment for treatment.*
- ***Post Project Monitoring–****After the project is completed the Forest Botanist should be notified so that (as funding allows) the project area can be monitored for invasive plants subsequent to project implementation.*
- ***Gravel, fill, and other materials—****All gravel, fill, or other materials are required to be weed-free. Use onsite sand, gravel, rock, or organic matter when possible. Otherwise, obtain weed-free materials from sources that have been certified as weed-free. If an LTBMU inspector is not available to inspect material source, then the project proponent will provide a weed-free certificate for its material source.*
- ***Mulch and topsoil—****Use weed-free mulches and topsoil. Salvage topsoil from project area for use in onsite revegetation, unless contaminated with invasive species. Do not use material (or soil) from areas contaminated by cheatgrass.*

The Forest has determined that the Project will be implemented under the provisions of the *Programmatic Agreement Among the U.S.D.A. Forest Service, Pacific Southwest Region (Region 5), California State Historic Preservation Officer, Nevada State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Processes for Compliance with Section 106 of the National Historic Preservation Act for Management of Historic Properties by the National Forests of the Pacific Southwest Region* (2018) (R5 PA). The following resource protection measures relevant to cultural resources will be incorporated into the design and implementation of the Project, in accordance with the Approved Standard Protection Measures in Appendix E, Stipulation 1 of the R5 PA:

- CUL 1: There are known historic properties within the proposed project area. All historic properties will be flagged and avoided.
- CUL 2: In the event of an unanticipated effect to a historic property during implementation, all project activities that could result in further damage to the historic property will halt, and the Forest will notify SHPO and any affected tribe concerning proposed actions to mitigate adverse effects.

**Best Management Practices (BMPs)**

NEPA analysis provides a conceptual description of the BMPs to be applied during project implementation. The conceptual description of BMPs is provided in a US Forest Service Guidance document, the National Core BMP Technical Guide. The guide is found on the Forest Service National Best Management Practices website.

The Region 5 Water Quality Management Handbook was superseded by this National guidance document in recent years, and the National BMP Technical Guide is now used nationwide for better consistency among forests.

Many of BMPs identified below provide guidance for developing project specific language and maps to be incorporated into project contracts and implementation plans prior to project implementation.

The BMPs comply with Section 208 and 319 of the Clean Water Act.

**Table 1. National BMPs applicable during project activities.**

**Table 1**
**National BMPs Applicable During Project Activities.**

| **USFS BMP Identifier** | **Title/*Objective*** | **Project specific details added for NEPA analysis** |
|---|---|---|
| (N) AqEco-2 | Operations in Aquatic Ecosystems/*Avoid, minimize, or mitigate adverse impacts to water quality when working in aquatic ecosystems.* | Leave existing downed trees and CWD that are in perennial or intermittent stream channels in place unless removal is needed to maintain channel stability, as determined by a Forest Service watershed specialist or fish biologist. To avoid removing or altering bank stabilizing vegetation, trees may be marked for removal (live or dead) within 5 ft. of the bank edge of perennial or intermittent streams and lakes, as approved by the fisheries biologist and watershed specialist, only where fuel loads or stand densities exceed desired conditions and where CWD is at or above desired levels or where trees are a hazard to safe operations. Use directional falling to keep felled trees out of intermittent and perennial streams unless the channel reach is identified as deficient in coarse woody debris or such trees are needed for stability or stream shade. |
| (N) Veg-1 | Vegetation Management Planning/*Use the applicable of vegetation management planning processes to develop measures to avoid, minimize, or mitigate adverse effects to soil, water quality, and riparian resources during mechanical vegetation treatment activities.* | Do not use ground-based equipment operations on slopes greater than 30%, and use mechanical equipment buffers surrounding waterbodies (see Veg-3). Limit mechanical equipment operations in SEZs to CTL operations or operations using equipment that has low ground pressure like rubber-tired equipment, equipment that operates on a bed of slash, or other innovative technologies that reduce impacts to soils. |

| | | |
|---|---|---|
| (N) Veg-2 | Erosion Prevention and Control/*Avoid, minimize, or mitigate adverse effects to soil, water quality, and riparian resources by implementing measures to control surface erosion, gully formation, mass slope failure, and resulting sediment movement before, during and after mechanical vegetation treatments.* | To minimize compaction, gullying, and rutting, ground-based and cable equipment operations would be conducted only when soils are operable at the 4–8-inch depth. Where implementation monitoring finds potential for sediment delivery, contractor would rake in the berms from ruts created by end-lining or cable yarding. |
| (N) Veg-3 | Aquatic Management Zones/*Avoid, minimize, or mitigate adverse effects to soil, water quality, and riparian resources when conducting mechanical vegetation treatment activities in the AMZ.* | In Region 5 also known as Riparian Conservation Areas, and in Lake Tahoe known as SEZs. Flag and avoid equipment use in and adjacent to special aquatic features (springs, seeps, fens, marshes); use hand treatments in these areas. For CTL operations, use a minimum 25-foot equipment exclusion buffer adjacent to perennial and intermittent streams, lakes and ponds. Leave existing downed trees and coarse woody debris (CWD) that are in perennial or intermittent stream channels in place. |
| (N) Veg-6 | Landings/*Avoid minimize adverse effects to soil, water quality, and riparian resources from the construction and use of log landings.* | Locate landings and refueling areas outside SEZs where operationally feasible. Prohibit landings, fuel storage, and refueling in SEZs. Proper drainage from landings would be provided during use; ditching, sloping, and water bars or other BMP's may be used where needed to disconnect runoff from surface water features.<br>Restore landings after operations are complete using the following methods, as determined by the LTBMU watershed specialist: a) Providing ground cover, such as slash, wood chips or masticated material; b) Ditching, sloping, and water bars may be used where needed; c) Landings would be ripped to approximately a 12-inch depth after ground cover has been spread. |
| (N) Road-4 | Road Operations and Maintenance/*Avoid, minimize, or mitigate adverse effects to soil, water quality, and riparian resources by controlling road use and operations and providing adequate and appropriate maintenance to minimize* | If a native surface road becomes rutted, the road would be closed. If it is determined that stabilization of the road way can be accomplished by spot-rocking or other mitigation of rutted areas, road use may continue. |

| | | |
|---|---|---|
| | *sediment production and other pollutants during the useful life of the road.* | |
| (N) Road-5 | Temporary Roads/ *Avoid, minimize, or mitigate adverse effects to soil, water quality, and riparian resources from the construction and use of temporary roads.* | Temporary roads would be out-sloped to ensure that effective drainage is maintained. BMPs would be installed as recommended by watershed or transportation specialist to ensure that temporary roads are hydrologically disconnected from intermittent and perennial stream channels. These BMP's could include lead-off ditches, water bars, rolling dips, etc. |
| (N) Road-10 | Equipment Refueling and Servicing/*Avoid or minimize adverse effects to soil, water quality, and riparian resources from fuels, lubricants, cleaners, and other harmful materials discharging into nearby surface waters or infiltrating through soils to contaminate groundwater resources during equipment refueling and servicing activities.* | Locate landings and refueling areas outside SEZs where operationally feasible. Prohibit fuel storage and refueling in SEZs. Spill prevention control measures for hazardous materials of any amount are included in project contract clauses. |
| WatUses-4 | Water Diversions and Conveyances/ *Avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources from construction, operation, and maintenance of water diversion and conveyance strutures.* | If temporary diversion are needed, locate intake and outflow structures to minimize streambank and streambed damage. Screen intake to minimize impact to aquatic species. No diversions would be created in a Lahontan cutthroat trout-occupied stream. |

(N) - Guidance provided in USDA Forest Service National Best Management Practices for Water Quality Management on National Forest Lands, Volume 1: National Core BMP Technical Guide, FS-990a. April 2012.

**References:**

National Marine Fisheries Service. 2023. Guidelines for Salmonid Passage at Stream Crossings - *For Applications in California at Engineered Stream Crossings to Facilitate Passage of Anadromous Salmonids*. 17pp.

United States Department of Agriculture. 2022. Natural Resources Conservation Service, Conservation Practice Standard, Aquatic Organism Passage, Code 396, 6pp. https://www.nrcs.usda.gov/sites/default/files/2022-09/396_NHCP_CPS_Aquatic_Organism_Passage_2021_0.pdf

# APPENDIX E

# PROJECT PLANS

# APPENDIX F

# PROJECT PERMITS

TAHOE REGIONAL PLANNING AGENCY

**Mail**
PO Box 5310
Stateline, NV 89449-5310

**Location**
128 Market Street
Stateline, NV 89449

**Contact**
Phone: 775-588-4547
Fax: 775-588-4527
www.trpa.gov

# ATTACHMENT Q
# STANDARD CONDITIONS OF APPROVAL FOR GRADING PROJECTS

For any questions regarding information within this packet, please call 775-589-5333 or email TRPA@trpa.gov to speak with a permitting technician.

This handout on the standard conditions that must be met in all projects involving grading is divided into the following three sections:

I. Pre-Grading Conditions (Pre-activity, where applicable)
II. Construction/Grading Conditions
III. General Conditions/Design Standards

Please read all of the conditions carefully to avoid any delays in construction of your project. Your plans have been reviewed and approved as required under Tahoe Regional Planning Agency (TRPA) Rules, Regulations and Ordinances only. TRPA has not reviewed and shall not be responsible for any elements contained in your plans, i.e., structural, electrical, mechanical, etc., which are not required for review under said Rules, Regulations and Ordinances.

## I. PRE-GRADING AND PRE-ACTIVITY CONDITIONS

The following conditions must be completely complied with prior to any site disturbance or commencement of activity.

**A. Final Construction Plans:** Final construction plans must be submitted to and reviewed by TRPA to determine conformance with the approval. Said plans shall clearly depict the following:

1. Slope stabilization methods to stabilize all existing and proposed cut and fill slopes.
2. Areas to be revegetated, including complete specifications for such revegetation.
3. Fencing for vegetation protection.
4. Temporary and permanent erosion control devices.
5. Utility trenches.
6. Dust control measures.

7. All water quality improvements (BMPs) required in the conditional approval. Drainage facilities shall be designed to be capable of retaining runoff water for a two (2) year, six (6) hour storm.

8. The final plans shall contain equipment specifications necessary to establish compliance with Standard Conditions III. A-F.

**B. Securities:** A security shall be posted with the TRPA to ensure compliance with all permit conditions. The security shall include an amount equal to 110% of the cost of the BMPs and other erosion control and water quality improvements required. For further information on the acceptable types of securities, see Attachment J.

**C. Mitigation Fees:** All required air quality, water quality, and excess coverage and offsite coverage mitigation fees shall be paid to TRPA.

**D. Temporary BMPs:** The following temporary BMPs are required to be installed onsite prior to any grading activity occurring:

1. Installation of temporary erosion controls.

2. Installation of vegetation protection measures.

3. Installation of construction site boundary fencing.

**E. Required Inspection:** An onsite inspection by TRPA staff is required prior to any construction or grading activity occurring. TRPA staff shall determine if the onsite improvements required by Condition II (1), above, have been properly installed. No grading or construction shall be undertaken by the permittee until receipt of TRPA notification that the pre-grading/pre-activity conditions of approval have been satisfied.

**F. Required Notices:** The following notices to the TRPA are required prior to any grading or construction occurring on the project site:

1. Notice for Pre-Grading Inspection: The permittee shall notify the TRPA when all onsite improvements required under Condition II(1), above, have been installed so that the required pre-grading inspection may be scheduled.

2. Notice of Commencement of Construction: The permittee shall notify the TRPA at least 48 hours prior to commencement of construction or grading on the project site. Said notice shall include the date when construction will commence.

## II. CONSTRUCTION AND GRADING CONDITIONS

The following conditions shall be complied with during the grading and construction phase of the project.

A. All construction shall be accomplished in strict compliance with the plans approved by TRPA.

B. The TRPA permit and the final construction drawings bearing the TRPA stamp of approval shall be present on the construction site from the time construction commences to final TRPA site inspection. The permit and plans shall be available for inspection upon request by any TRPA employee. Failure to present the TRPA permit and approved plans may result in the issuance of a Cease and Desist Order by the TRPA.

C. Whenever possible, utilities shall occupy common trenches to minimize site disturbance.

D. There shall be no grading or land disturbance performed with respect to the project between October 15 and May 1, except as follows:

1. The grading or land disturbance is for excavation and backfilling for a volume not in excess of three cubic yards.

2. The activity is completed within a 48-hour period.

3. The excavation site is stabilized to prevent erosion.

4. The pregrade inspection is performed by TRPA staff, and the activity passes the inspection.

5. The grading/project does not represent or involve a series of excavations, which, when viewed as a whole, would exceed the provisions of this Standard Condition of Approval, and Subsection 2.3 of the TRPA Code of Ordinances.

**Grading is prohibited any time of the year during periods of precipitation and for the resulting period of time when the site is covered with snow, or is in a saturated, muddy, or unstable condition (pursuant to Subsection 33.3.1.A of the TRPA Code of Ordinances.)**

E. All material obtained from any excavation work that is not contained within foundations, retaining walls, or by other methods approved by TRPA shall be removed form the subject parcel and disposed of at a site approved by TRPA.

F. Replanting of all exposed surfaces, in accordance with the revegetation and slope stabilization plan, shall be accomplished within the first growing season following disturbance, unless an approved construction/inspection schedule establishes otherwise.

G. All trees and natural vegetation to remain on the site shall be fenced for protection. Scarring of trees shall be avoided and, if scarred, damaged areas shall be repaired with tree seal.

1. Fencing specified shall be at least 48 inches high and shall be constructed of metal posts and either orange construction fencing or metal mesh fencing also at least 48 inches high (Section 33.6.1). Job sites with violations of the fencing standards will be required to re-fence the job site with a high gauge metal fencing.

2. No material or equipment shall enter or be placed in the areas protected by fencing or outside the construction areas without prior approval from TRPA. Fences shall not be moved without prior approval (Section 33.6).

3. To reduce soil disturbance and damage to vegetation, the area of disturbance during the construction of a structure shall be limited to the area between the footprint of the building and the public road. For the remainder of the site the disturbance areas shall not exceed 12 feet from the footprint of the structure, parking area or cut/fill slope. The approved plans should show the fencing and approved exceptions (Section 36.2).

H. Soil and construction material shall not be tracked off the construction site. Grading operations shall cease in the event that a danger of violating this condition exists. The site shall be cleaned up and road right-of-way swept clean when necessary.

I. During grading and construction, environmental protection devices such as erosion control devices, dust control, and vegetation protection barriers shall be maintained.

J. Loose soil mounds or surfaces shall be protected from wind or water erosion by being appropriately covered when construction is not in active progress or when required by TRPA.

K. Excavated material shall be stored upgrade from the excavated areas to the extent possible. No material shall be stored in any stream zone or wet areas.

L. Only equipment of a size and type that, under prevailing site conditions, and considering the nature of the work to be performed, will do the least amount of damage to the environment shall be used.

M. Limit idling time for diesel powered vehicles exceeding 10,000 GVW and self-propelled equipment exceeding 25 hp to no more than 15 minutes in Nevada and 5 minutes in California, or as otherwise required by state or local permits.

N. Utilize existing power sources (e.g. power poles) or clean-fuel generators rather than temporary diesel power generators wherever feasible.

O. No washing of vehicles or construction equipment, including cement mixers, shall be permitted anywhere on the subject property unless authorized by TRPA in writing.

P. No vehicles or heavy equipment shall be allowed in any stream environment zone or wet areas, except as authorized by TRPA.

Q. Locate construction staging areas as far as feasible from sensitive air pollution receptors (e.g. schools or hospitals).

R. All construction sites shall be winterized by October 15 to reduce the water quality impacts associated with winter weather as follows:

1. For the sites that will be inactive between October 15 and May 1:

   (a) Temporary erosion controls shall be installed;

   (b) Temporary vegetation protection fencing shall be installed;

   (c) Disturbed areas shall be stabilized;

   (d) Onsite construction slash and debris shall be cleaned up and removed;

   (e) Where feasible, mechanical stabilization and drainage improvements shall be installed; and,

   (f) Spoil piles shall be removed from the site.

2. For sites that will be active between October 15 and May 1, in addition to the above requirements:

   (a) Permanent mechanical erosion control devices shall be installed, including paving of driveway and parking areas; and

   (b) Parking of vehicles and storage of building materials shall be restricted to paved areas.

## III. GENERAL CONDITIONS AND DESIGN STANDARDS

A. Projects approved by TRPA shall be subject to inspections by TRPA at any reasonable time. The permittee shall be responsible for making the project area accessible for inspection purposes. TRPA shall not be liable for any expense incurred by the permittee as a result of TRPA inspections.

B. Construction shall be completed in accordance with an approved construction schedule. An extension of a completion schedule for a project may be granted provided the request is made in writing prior to the expiration of the completion schedule, a security is posted to ensure completion or abatement of the project, and TRPA makes either of the following findings:

   1. The project was diligently pursued, as defined in Subparagraph 2.2.4.C of the Code of Ordinances, during each building season (May 1 - October 15) since commencement of construction.

   2. That events beyond the control of the permittee, which may include engineering problems, labor disputes, natural disasters, or weather problems, have prevented diligent pursuit of the project.

C. Water conservation appliances and fixtures shall be installed in all new facilities or, when replaced, in existing facilities: low flow flush toilets; low flow showerheads (3 gpm rated maximum flow); faucet aerators; and water-efficient appliances (e.g., washing machines and dishwaters).

D. Water heaters shall not emit nitrogen oxides greater than 40 nanograms of nitrogen oxide (NO2) per joule of heat output.

E. Space heaters shall not emit greater than 40 nanograms of nitrogen oxides (as NO2) per joule of useful heat delivered to the heated space.

F. Wood heaters to be installed in the Region shall meet the safety regulations established by applicable city, county, and state codes. Coal shall not be used as a fuel source.

   1. Emission Standards: Wood heaters installed in the Region shall not cause emissions of more than 7.5 grams of particulates per hour for noncatalytic wood heaters or 4.1 grams per hour for catalytically equipped wood heaters.

   2. Limitations: Wood heaters shall be sized appropriately for the space they are designed to serve. Multi-residential projects of five or more units, tourist accommodations, commercial, recreation and public service projects shall be limited to one wood heater per project area.

   3. List of Approved Heaters: TRPA shall maintain a list of wood heaters which may be installed in the Region. The list shall include the brand names, model number, description of the model and the name and address of the manufacturer. Wood heaters certified for use in either Colorado or Oregon shall be considered in compliance with 6(a), above.

G. Construction materials shall be secured to prevent them from rolling, washing, or blowing off the project site. Rehabilitation and clean-up of the site following construction must include removal of all construction waste and debris.

H. Plant species on the TRPA Recommended Native and Adapted Plant List shall be used for lawns and landscaping.

I. The following sizes and spacing shall be required for woody plant materials at time of planting:

   1. Trees shall be a minimum six feet tall or 1-1/2 inch caliper size or diameter at breast height;

   2. Shrubs shall be a minimum three gallon pot size where upright shrubs have a minimum height of 18 inches and a minimum spread of 18 inches; and spreading shrubs have a minimum spread of 18-24 inches.

   3. Groundcovers shall be a minimum four inch pot size or one gallon container and shall be maximum 24 inches on center spacing.

J. Plant species not found on the TRPA Recommended Native and Adapted Plant List may be used for landscaping as accent plantings but shall be limited to borders, entryways, flower-beds, and other similar locations to provide accent to the overall native or adapted landscape design.

K. The following exterior lighting standards shall apply:

1. Exterior lights shall not blink, flash or change intensity. String lights, building or roofline tube lighting, reflective or luminescent wall surfaces are prohibited.

2. Exterior lighting shall not be attached to trees except for Christmas season.

3. Parking lot, walkway, and building lights shall be directed downward.

4. Fixture mounting height shall be appropriate to the purpose. The height shall not exceed the limitations set forth in Chapter 37 of the Code.

5. Outdoor lighting shall be used for purposes of illumination only, and shall not be designed for, or used as, an advertising display. Illumination for aesthetic or dramatic purposes of any building or surrounding landscape utilizing exterior light fixtures projected above the horizontal is prohibited.

6. The commercial operation of searchlights for advertising or any other purpose is prohibited. Seasonal lighting displays and lighting for special events which conflict with other provisions of this section may be permitted on a temporary basis.

L. Any normal construction activities creating noise in excess of the TRPA noise standards shall be considered exempt from said standards provided all such work is conducted between the hours of 8:00 a.m. and 6:30 p.m.

M. Engine doors shall remain closed during periods of operation except during necessary engine maintenance.

N. Stationary equipment (e.g. generators or pumps) shall be located as far as feasible from noise sensitive receptors and residential areas. Stationary equipment near sensitive noise receptors or residential areas shall be equipped with temporary sound barriers.

O. Sonic pile driving shall be utilized instead of impact pile driving, wherever feasible. Pile driving holes shall be predrilled to the extent feasible subject to design engineer's approval.

P. Fertilizer use on this property shall be managed to include the appropriate type of fertilizer, rate, and frequency of application to avoid release of excess nutrients and minimize use of fertilizer.

Q. No trees shall be removed or trimmed without prior TRPA written approval unless otherwise specifically exempted under Chapter 2 of the Code of Ordinances.

R. The architectural design of this project shall include elements that screen from public view all external mechanical equipment, including refuse enclosures, satellite receiving disks, communication equipment, and utility hardware on roofs, buildings or the ground. Roofs, including mechanical equipment and skylights, shall be constructed of nonglare finishes that minimize reflectivity.

S. The permittee is responsible for insuring that the project, as built, does not exceed the approved land coverage figures shown on the site plan. The approved land coverage figures shall supersede scaled drawings when discrepancies occur.

T. The adequacy of all required BMPs as shown on the final construction plans shall be confirmed at the time of the TRPA pre-grading inspection. Any required modifications, as determined by TPRA, shall be incorporated into the project permit at that time.

U. It is the permittee's obligation to locate all subsurface facilities and/or utilities prior to any grading, dredging or other subsurface activity. The permittee is responsible for contacting the Northern Underground Service Alert (USA, usually known as USA DIGS 1-800-227-2600) prior to commencement of any activity on the site.

V. This approval is based on the permittee's representation that all plans and information contained in the subject application are true and correct. Should any information or representation submitted in connection with the project application be incorrect or untrue, TRPA may rescind this approval or take other appropriate action.

# TEMPORARY OCCUPANCY PERMIT

| |
|---|
| District 2 Permit No.: **T-218-25** |
| Applicant: **Nevada Tahoe Conservation District** |
| Route: **US 50, SR 28, SR 431** |
| Milepost: **DO & WA, Various** |
| Type of Activity: **Traffic Control** |
| FOR DEPARTMENT USE ONLY |

PERMIT FOR TEMPORARY OCCUPANCY OF NEVADA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY
(Under the Provisions of NRS 408.423 and 408.210)

1. Location where the event and/or occupancy is proposed:

| | |
|---|---|
| **US 50, SR 28, SR 431** | **US50/Kahle Drive, 5000 Hwy 28, and as needed** |
| Local name of highway | Street address or nearest cross street |
| **US50: between DO 0.8 and DO 0.9** | **SR28: between WA 0.4 and WA 0.5, & as needed** |
| between Milepost | and Milepost |

2. Describe the event in detail, including the proposed route, the proposed date, and time of the event. Please attach plan sheets and/or drawings and traffic control plans for the proposed event.

**For NDOT Agreement Number 212-23-019:**

**On US 50, SR 28, SR 431 in the Tahoe Basin, temporary traffic control will be provided as appropriate for shoulder or single lane closures.**

**NDOT Hydraulics Division Contacts: Tyler Thew (775-888-7574) and Sue McReavy (775-888-7604)**

EVENT DATE(s): **May 2025** To: **December 2025**

3. THE PERMIT SHALL BE SIGNED AND RETURNED TO THE DISTRICT OFFICE.

| | |
|---|---|
| **Nevada Tahoe Conservation District** | **Meghan Kelly - District Manager** |
| *Name of **PERMITTEE*** | *Name and Title (Please print)* |
| **P.O. Box 915** | DocuSigned by: Meghan Kelly EE00926A0F054CA... 06/18/2025 |
| *Address* | ***Signature*** |
| **Zephyr Cove, NV 89448** | **775-586-1610 Ext. 30** |
| *City, State, Zip* | *Telephone* |
| **05/16/2025** | **mkelly@ntcd.org** |
| *Date of Application* | *Email* |
| *Permittee Representative* | *Permittee Representative Email* |

4. This temporary permit is valid for **ONE YEAR** from date of issuance or expires upon completion of the event.

5. The temporary Right-of-Way Occupancy Permit, or a conformed copy, shall be kept at the site of the event and must be shown to any representative of the Department of Transportation or any law enforcement officer on demand.
**THE EVENT SHALL BE SUSPENDED IF THIS PERMIT IS NOT LOCATED ON SITE.**

6. The **PERMITTEE**, in addition to obtaining the temporary Right-of-Way Occupancy Permit must also obtain any and all other permits required by State law or local ordinances.

7. The **PERMITTEE** agrees to indemnify and save harmless the State of Nevada and its officers, agents, and employees against any and all liability, loss, damage, cost and expense which it or they may incur, suffer, or be required to pay by reason of death, disease, or bodily injury to any person or persons, or injury to, destruction of, or loss of use of any property, including property belonging to the State of Nevada, arising out of or incident to activities contemplated by this permit, and proximately caused, in whole or in part, by any act or omission of the **PERMITTEE**, or its contractors, agents, or the employees of any one or all of them **OR BY THE OFFICERS, AGENTS, OR EMPLOYEES OF THE STATE OF NEVADA,** unless it is established by the **PERMITTEE** that the proximate cause was the willful misconduct or gross negligence of the officers, agents, or employees of the State of Nevada.

*** SEE ADDITIONAL TERMS AND CONDITIONS STARTING ON PAGE 3. ***

Prepared By: DS KM _____ Initial

Inspector: DS SC _____ Initial

Supervisor: DS EJW _____ Initial

Reviewed By: Signed by: Kelly Gaworski 0B63A74DA2BE4A9... _____
District 2 Engineering Services Manager

06/18/2025
Date

This temporary Right-of-Way Occupancy permit is granted to the PERMITTEE in accordance with the provisions of Chapter 408 NRS, and subject to the terms and conditions stipulated to perform the activity described.

STATE OF NEVADA, DEPARTMENT OF TRANSPORTATION

Approved By: DocuSigned by: Andrew Lawrence FA91D2F0EB4C49A... _____
Director or District Engineer

06/18/2025
Date

NDOT District 2 Permit Office
310 Galletti Way, Sparks, NV 89431
v 01/17/2024

# ADDITIONAL TERMS AND CONDITIONS

8. Unless specified in Condition 2, this permit does not grant approval for any construction activities within the NDOT right-of-way.

9. PERMITTEE shall contact the District 2 Permit Office a minimum of five (5) days prior to the anticipated date of work. Contact the District 2 Permit Office, by email at d2permitinspection@dot.nv.gov or by phone at 775-834-8330, option 2.

10. PERMITTEE shall coordinate all traffic control and work activities with the following agencies. Reference your permit number indicated above when providing work notification.

    - NDOT C911 Resident Engineer, Jeff Freeman by email at jfreeman@dot.nv.gov
    - South Shore Transportation Management Association, Steve Teshara by email at steveteshara@gmail.com

11. The hours of work shall be from 7:00 AM to 3:30 PM, daily, Monday through Friday, provided all through lanes of traffic are unrestricted by activity in progress. If traffic is restricted by activity in progress, hours of work shall be from 9:00 PM to 5:30 AM, nightly, Sunday night through Friday morning. Any change in work hours must receive prior written approval from NDOT. To obtain approval, submit a formal written request to the District 2 Permit Office. The request letter shall be addressed to the District Engineer, signed by the PERMITTEE, and submitted at least five (5) working days prior to the day you wish to work adjusted hours.

12. No work shall be allowed in the NDOT right-of-way from 5:00 AM the working day before a holiday through 7:00 PM the working day after a holiday, unless prior written approval has been given by NDOT. To obtain approval, submit a formal written request to the District 2 Permit Office. The request letter shall be addressed to the District Engineer, signed by the PERMITTEE and submitted at least five (5) working days prior to the day requested.

    NDOT recognized holidays are as follows:
    - January 1, New Year's Day
    - Third Monday in January, Martin Luther King Day
    - Third Monday in February, President's Day
    - Last Monday in May, Memorial Day
    - June 19, Juneteenth National Independence Day
    - July 4, Independence Day
    - First Monday in September, Labor Day
    - Last Friday in October, Nevada Day
    - November 11, Veteran's Day
    - Fourth Thursday in November, Thanksgiving Day
    - Fourth Friday in November, Family Day
    - December 25, Christmas Day



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13. No work shall be allowed the working day before, during, and the working day after scheduled special events. It is the PERMITTEE's responsibility to become aware of local or special events scheduled in the area of construction.

14. No pavement shall be cut.

## TRAFFIC CONTROL

15. Traffic control shall be set up as shown on the attached plans, unless otherwise noted herein or directed by the District 2 Permit Inspector. Any deviation from the attached plans will require prior approval from the District 2 Permit Office.

16. All persons working in the NDOT right-of-way shall wear OSHA approved reflective clothes, not limited to hats and vests. All vehicles occupying the public Right-of-Way shall be equipped with reflective markings and an overhead strobe light. Survey staff shall use all possible caution while performing facility or topographic surveys.

17. PERMITTEE shall set up traffic control to accommodate for the needs of pedestrians and bicyclists.

18. The work of setting up and tearing down traffic control devices, as required, shall be completed each day, within the hours specified on the permit and/or on the approved traffic control plan. All traffic control devices shall be completely removed from the roadway and sidewalk at the end of the permitted activity period.

19. PERMITTEE shall only use legalized interstate exits as turnarounds. PERMITTEE shall not use emergency vehicle turnarounds or highway center medians as a means of travel or use for U-turns.

20. Per MUTCD PERMITTEE shall ensure the buffer space be extended so that the two-way traffic taper is placed before a horizontal (or crest vertical) curve to provide adequate sight distance for the flagger and a queue of stopped traffic.

21. All traffic control shall conform to the current *Manual on Uniform Traffic Control Devices*, "Chapter 6," and *The Nevada Department of Transportation Standard Plans for Bridge and Road Construction,* 2022 Edition.

22. Regardless of traffic control operations, do not stop public traffic for more than a 20-minute duration and do not delay it for more than 30 minutes total, regardless of the number of work zones. Any proposed traffic control plan must meet the duration of delay restrictions (20 minutes stopped, 30 minutes total delay). Should these delay restrictions be exceeded, work will be immediately suspended. If work is suspended, submit a written revised construction plan which addresses the delay problem. Upon approval of the plan the construction operations may resume.

23. All Category 1 & 2 Traffic Control Devices used on NDOT maintained roadways must be National Cooperative Highway Research Program *Report 350* compliant. The PERMITTEE and/or the contractor shall have the manufacturer's certificates of compliance available upon request.



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## SITE MAINTENANCE

24. PERMITTEE shall be responsible for maintaining the integrity of the roadway surface. Dust, dirt, mud, gravel, etc. carried onto the roadway surface shall be removed on a regular basis (at least once a day or as requested by NDOT personnel). Failure to comply may result in NDOT having the roadway cleaned and the cost for the clean-up billed to the PERMITTEE.

25. PERMITTEE shall not disturb signs, object markers, milepost panels, marker posts and guideposts.

26. PERMITTEE shall re-install signs, object markers, milepost panels, marker posts and guideposts disturbed during construction by the end of the working day.

27. The NDOT right-of-way shall be returned to the original condition. Road travel way shall remain clean and free of debris at all times. Removal of trash and debris will be the responsibility of the PERMITTEE.

28. PERMITTEE shall not use the NDOT right-of-way for parking or staging. All activities shall be accomplished outside of the NDOT right-of-way.

## EMERGENCY

29. During business hours, emergency work on permitted facilities must be authorized by the District 2 Permit Inspector.

30. During non-business hours, notify the NDOT District 2 Utilities 24/7 Hotline of any emergency at (775) 834-8344. Provide the NDOT Road Operations Center the following information:

- PERMITTEE's contact information for the emergency. NDOT Road Operations Center may need to call back to follow up.
- Temporary occupancy permit number
- Location of the emergency
- Description of emergency
- Description of the traffic impact (shoulder closure, lane closure, etc.)
- Give an estimated time duration to mitigate the incident.

31. After an emergency event, the PERMITTEE shall follow up with the District 2 Permit Office and submit a new Temporary Occupancy Permit application summarizing the emergency event. Contact your District 2 Permit Inspector for any questions and comments.



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