

Project No. 5279.02
December 21, 2020

Rise Grass Valley, Inc.
Ben Mossman, President
333 Crown Point Circle, Suite 215
Grass Valley, California 95945

Reference: **Idaho-Maryland Mine Project – Brunswick Industrial Site**
SW Corner of Brunswick Road and East Bennett Road
APNs 006-441-003, 006-441-004, 006-441-005, 006-441-034, 009-630-037, 009-630-039
Grass Valley, California 95945

Subject: **Management Plan for Steep Slopes and High Erosion Potential**

Dear Mr. Mossman:

NV5 prepared this management plan to address potential development constraints related to areas of steep slopes and high erosion potential at the 119-acre Brunswick Industrial Site located at the southwest corner of Brunswick Road and East Bennett Road in Grass Valley, California.

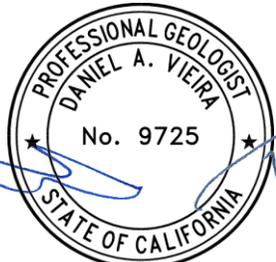
The purpose of this plan is to provide a professional site-specific inventory and analysis of steep slope and high erosion potential areas of the subject site, and to evaluate these constraints and recommend mitigation and/or managed alternatives to avoid or reduce the potential impacts to these areas.

This plan was prepared pursuant to the Nevada County Land Use and Development Code (LUDC), Chapter II, Division 4.3, which establishes site development resources standards that are intended to avoid the impact of development projects on sensitive environmental resources and natural site constraints. Pursuant to the LUDC, the inventory and analysis were performed for the entire Site including all areas of proposed disturbance.

Please contact us with comments or questions regarding this plan.

Sincerely,

NV5



Daniel A. Vieira, P.G. 9725
Project Geologist



Chuck Kull, G.E. 2359
Principal Engineer

Sent via email: PDF to Ben Mossman, ceo@risegoldcorp.com

Attached: Figure 1: Typical BMP Details for Steep Slopes
Sheet 1: Erosion and Sediment Control Plan

F:\1 Projects\5279 Idaho-Maryland Mine\02 Geotechnical\01 Brunswick Site\Steep Slope Management Plan\5279.02 Management Plan for Steep Slopes and High Erosion Potential, IMM Project, Brunswick Site.docx

1.0 INTRODUCTION

At the request of Ben Mossman of Rise Grass Valley, Inc., NV5 prepared this management plan to address potential development constraints related to steep slopes and high erosion potential at the 119-acre Brunswick Industrial Site (herein referred to as the “Site” or “subject site”) located at the southwest corner of Brunswick Road and East Bennett Road in Grass Valley, California.

1.1 PURPOSE

The purpose of this plan is to provide a professional site-specific inventory and analysis of steep slope and high erosion potential areas of the Site, and to evaluate these constraints and recommend mitigation and/or managed alternatives to avoid or reduce the impacts. The inventory and analysis are performed for the entire Site including all areas of proposed disturbance.

1.2 REGULATORY FRAMEWORK

Zoning regulations pertaining to steep slopes and high erosion potential are set forth in Chapter II of the Nevada County Land Use and Development Code (LUDC). Division 4.3 of this chapter establishes site development resources standards that are intended to avoid the impact of development projects on sensitive environmental resources and natural site constraints. LUDC Section L-II 4.3.1 states that where avoidance is not possible, development should minimize impacts in a reasonable fashion that strikes a balance between allowing development of the project site and protecting the resource or avoiding the constraint. LUDC Section L-II 4.3.3 establishes the following standards that are to be applied in the following order:

1. Avoiding the impact by designing or re-designing the project so that the resource or constraint is fully protected and not disturbed. Avoidance is the preferred standard unless the Planning Agency determines that implementation of this standard effectively removes the potential for the reasonable development of the parcel.
2. Minimizing the impact through preparation and implementation of a County-approved Management Plan prepared by an independent consultant approved by, or under the direction of, County staff, that limits the degree of impact to the maximum extent possible. Where the Planning Agency determines that avoidance is not acceptable or adversely affects another environmentally-sensitive resource, minimization shall be the preferred standard unless the County determines that the standard will not effectively protect the resource or avoid the constraint to an acceptable level.
3. Compensating for the impact by replacing or providing a substitute resource or environments. Compensation is appropriate where the Planning Agency determines that avoiding or minimizing the impact is not acceptable. Realistic and effective avoidance of impacts and then minimization of impacts must first precede the use of compensatory mitigation.

LUDC Section L-II 4.3.13 requires that management plans for steep slopes and high erosion potential areas include an Erosion and Sediment Control Plan prepared by a licensed geotechnical or civil engineer, engineering geologist, or certified soil erosion control specialist. The Erosion and Sediment Control Plan must comply with the erosion control standards of LUDC Chapter V. LUDC Section L-V 13.14. Plans are to be designed with long-term erosion and sediment control as a primary consideration.

Management plans for steep slopes and high erosion potential are to include an evaluation by a registered geotechnical engineer. If structures are to be constructed on steep slopes, fuel modification (vegetation removal) is required around the structures pursuant to the standards set forth in the LUDC.

1.3 REFERENCE DOCUMENTS

This management plan is based partially on the findings and recommendations presented in the Geotechnical Engineering Report, Idaho-Maryland Mine Project, Brunswick Industrial Site (NV5; November 18, 2019).

1.4 LIMITATIONS OF THE ASSESSMENT

NV5's professional services were performed consistent with the generally accepted geotechnical engineering principles and practices employed in northern California. No warranty, expressed or implied, is made or intended in connection with our work.

These services were performed consistent with NV5's agreement with our client. We are not responsible for the impacts of any changes in standards, practices, or regulations subsequent to performance of our services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report. This report is solely for the use of our client unless noted otherwise. Any reliance on this report by a third party is at the party's sole risk.

The recommendations presented herein will need to be modified to address specific phases of site development during the course of site development. If changes are made to the nature or design of the project as described in this report, then the conclusions and recommendations presented in this report should be considered invalid by all parties. Only our firm can determine the validity of the conclusions and recommendations presented in this report.

The findings of this report are valid as of the present date. Changes in the conditions of the property can occur with the passage of time. The changes may be due to natural processes or to the works of man, on the subject site or adjacent properties. Therefore, we should be allowed to review all project changes and prepare written responses with regards to their impacts on our conclusions and recommendations. The recommendations presented in this report should not be relied upon after a period of two years from the issue date without our review.

2.0 SITE DESCRIPTION

The 119-acre Site is comprised of six contiguous parcels located in unincorporated Nevada County, California, approximately ½ mile southeast of the city limits of Grass Valley. The Site is bordered by Brunswick Road to the east, East Bennett Road and one residential property to the north, low-density developed residential properties upslope to the south and southwest, and undeveloped, steeply-sloping, forested land to the west.

Elevations range from approximately 2900 feet above mean sea level (AMSL) in the southwest corner of the Site to approximately 2780 feet AMSL along the northeastern boundary. South Fork Wolf Creek flows through the Site from southeast to northwest. The creek is contained within an approximately 36-inch-diameter corrugated metal pipe culvert beneath the center of the Site and flows over the ground surface near the southeastern property boundary and in the northwestern portion of the property.

2.1 GEOLOGY

According to the Geologic Map of the Chico Quadrangle, California (California Department of Conservation, Division of Mines and Geology, 1992) the northern and central portion of the site is underlain by massive diabase, and the southeastern portion of the site is underlain by metavolcanic rocks. Both of these units are associated with the Mesozoic Lake Combie Complex. The south and southwestern portion of the site is mapped as Miocene to Pliocene volcanics, predominantly andesitic pyroclastic rocks. The Mesozoic era spans the period of time between 525 and 66 million years before

present and the Miocene to Pliocene epochs span the period of time between 23 and 2.6 million years before present.

2.2 SOIL CONDITIONS

As part of our study, we reviewed the Web Soil Survey (United States Department of Agriculture [USDA] Natural Resource Conservation Service [NRCS]; <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>). The soil survey maps four soil types at the Site location as described below.

1. The central-southwest and southeast portions of the Site and small isolated areas along Brunswick Road are mapped as Aiken loam. The soil survey describes the Aiken Loam as a well-drained soil that forms on the sides of andesitic flows. According to the survey, permeability of the Aiken Loam soil type is moderately slow, and weathered andesite is commonly encountered at about 64 inches below ground surface (bgs). The soil survey rates the Aiken Loam soil class as having moderate (9-15 percent slopes) to severe (15-50 percent slopes) erosion hazard potential.
2. The northern and southwest portions of the Site are mapped as Cohasset loam. The Cohasset series is described as well-drained soil that forms on the sides of andesitic flows. According to the survey, permeability of the Aiken Loam soil type is moderately slow, and weathered andesite is commonly encountered at about 96 inches bgs. The soil survey rates the Cohasset loam soil class as having slight (2-15 percent slopes) to moderate (3-50 percent slopes) erosion hazard potential.
3. Most of the central portion of the Site is mapped as Placer Diggings, which is described by the soil survey as “hydraulically-mined areas, placer-mined areas along stream channels, and areas of natural deposits along the stream channels.” The portions of the Site location incorrectly mapped as Placer Diggings by the soil survey are actually the result of the historical hardrock mining and lumber milling activities described below in the following section. Although these areas were historically disturbed and subject to erosion, they are presently vegetated or covered by pavement, and therefore are not considered to have a high erosion potential. The soil survey does not rate the Placer Diggings soil class for erosion hazard potential in off-road and off-trail areas.
4. The central-northwest and central-southeast portions of the Site are mapped as clayey alluvial land, which is described by the soil survey as a miscellaneous land type consisting of narrow areas of alluvial deposits. These soils are moderately well drained to poorly drained and permeability is moderately slow to very slow. The soil survey does not rate the clayey alluvial land soil class for erosion hazard potential in off-road and off-trail areas.

2.3 SITE HISTORY

Historical site activities have included gold mining and lumber milling. Mining activities (predominantly hardrock, or lode, gold mining) included the Union Hill Mine and the New Brunswick Mine.

The Union Hill Mine, located in the northern end of the Site away from the proposed mining operations, was established circa 1854 and was operated intermittently to a reported maximum depth of approximately 800 feet bgs until 1918. From 1914 to 1918, tungsten-containing scheelite was also mined, and equipment included a new hoist, air compressor, Cornish pump driven by a 12-foot Pelton wheel, and a 20-stamp mill. Following its closure, the mine was purchased by Idaho-Maryland Mines Company, and the 20-stamp mill was moved offsite to another mine. The Union Hill Mine was not reopened, but the subsurface workings were reportedly used by the operators of the New Brunswick Mine. Several small structures were historically associated with the Union Hill Mine operations.

The New Brunswick Mine was established circa 1909 near the existing reinforced-concrete silo that remains at the Site today. Equipment included a railroad spur, steel head frame, 20-stamp mill, and a cyanide plant. Several corrugated metal buildings were present at the mine, including an office, assay

office, hoist house, mill building, carpenter shop, drying furnace building, blacksmith and machine shop, garage, transformer house, powder magazine, and store house. The shaft was extended to 3,300 feet bgs, and was operated intermittently until 1956. Structures have been removed from the site since that time. In 1997 the remaining concrete foundations were removed except for one reinforced concrete silo (ore bin) and the shaft collar.

Lumber milling was performed at central and southeastern portions of the subject property in the late 1950s to the early 2000s. The facility was referred to as Grass Valley Saw Mill, Bohemia Saw Mill, and Sierra Pacific Mill. Features associated with the sawmill activities included a main sawmill building, two sorter buildings (one constructed in 1987), an office building, transformer, slot feeder, conveyors, timber racks and log storage areas. Recycle ponds were used to collect and recycle surface water runoff for irrigation of logs. Structures associated with the sawmill were reportedly demolished in approximately 2004.

3.0 IDENTIFICATION OF CONSTRAINTS

LUDC Section L-II 4.3.13 addresses constraints related to areas of steep slopes and high erosion potential. Steep slopes are defined as having a gradient equal to or greater than 30 percent. High erosion hazard areas are defined as areas determined to have highly-erodible soils based on soil surveys prepared by the United States Soil Conservation Service (SCS) and United States Forest Service (USFS).

3.1 STEEP SLOPES

Areas of steep slopes (having gradients of 30% or greater) are depicted on Sheet 1, which is based on a grading plan prepared by Nevada City Engineering, Inc. (NCE, 2019). As depicted on the Sheet 1, steep slope gradients are partially present in the following areas:

1. The Brunswick Road fill slope along the northeastern Site boundary,
2. Fill slopes associated with the historical New Brunswick mine area in the northern portion of the Site,
3. Cut and fill slopes associated with the historical lumber pond and dam in the northern portion of the Site,
4. Terraced cut slopes associated with the historical lumber decks in the central portion of the Site, and
5. Discontinuous areas of steep native slopes above and to the southwest and south of the historical lumber terraces.

NCE estimated that the steep slopes within the proposed area of disturbance comprise approximately 6.8 acres. The majority of this steep slope area is a result of cut and fill associated with Brunswick Road and the historical mining and lumber operations. Discontinuous pockets of native slope gradients 30% or greater are present within an area to receive mine rock fill on the southwestern edge of the proposed disturbance area. To NV5's knowledge, no significant rock outcroppings or threatened native plants have been identified on the native slope that is proposed to receive mine rock fill. The fill is to be constructed against these steep slopes, resulting in a relatively flat finished grades that extends to the southeast away from the native slope face, as depicted on Sheet 1. During construction, drainage improvements and erosion and sediment control measures are to be implemented as shown on Sheet 1.

3.2 HIGH EROSION POTENTIAL

As described in Section 2.2, the USDA NRCS soil survey maps the central-southwest and southeast portions of the Site and small isolated areas along Brunswick Road as Aiken loam, which is classified as having moderate (for 9-15 percent slopes) to severe (for 15-50 percent slopes) erosion hazard potential.

According to the survey, a rating of "severe" indicates that erosion is very likely in the case of soil disturbance without erosion control. For these areas, the Survey advises that erosion control measures are appropriate, including revegetation of bare areas.

Areas mapped by the NRCS as "Placer Diggings" (see Section 2.2) were the result of historical hardrock mining and lumber milling activities (see Section 2.3). Although these areas were historically disturbed and subject to erosion, they are presently vegetated or covered by pavement. Based on our findings, it is our opinion that these relatively flat-lying areas are not considered to have a high erosion potential.

4.0 DISCUSSION OF THE PROPOSED DESIGN

The Site is to be operated as a hardrock gold mine. Mine rock and tailings are to be placed as engineered fill over the former mining and lumber milling areas, and against a native northeast-facing slope, as depicted on Sheet 1. The proposed design is the preferred alternative, and the avoidance of fill placement against the discontinuous steep areas of the native slope would require the transport of mine waste from the site for placement at another location. Considering the topography of the Sierra Nevada foothills, it is unlikely that an alternative placement area within a reasonable trucking distance would be completely free of steep slopes.

Earthwork construction is to begin in the lower, relatively flat-lying central portion on the Site and will progress upslope into the discontinuous areas of steep slopes. Prior to placement of engineered fill against the steep slopes, and the slope surfaces will be prepared to receive the engineered fill. Grading recommendations are presented in the Geotechnical Engineering Report, Idaho-Maryland Mine Project, Brunswick Industrial Site (NV5; November 18, 2019).

5.0 DESCRIPTION OF THE MITIGATION

It is NV5's professional opinion that project development within the constraint areas described above is feasible from a geotechnical engineering standpoint, provided that the following mitigation measures and best management practices (BMPs) for erosion and sediment control are incorporated into the project plans and specifications:

1. Perform earthwork in accordance with the grading recommendations presented in the Geotechnical Engineering Report, Idaho-Maryland Mine Project, Brunswick Industrial Site (NV5; November 18, 2019). The report presents recommendations for clearing, fill placement, fill slope grading, drainage, erosion and sediment control, grading plan review and construction monitoring.
2. Incorporate the provisions of the Erosion and Sediment Control Plan into the project design:
 - a. The Erosion and Sediment Control Plan (Sheet 1) is based on a preliminary grading and drainage plan prepared by Nevada City Engineering, Inc. (Sheet B-1; NCE, 2019).
 - b. Hydraulic calculations associated with the drainage improvements are presented in a Preliminary Drainage Analysis (NCE, October 2019) submitted under separate cover.
 - c. Pursuant to LUDC Section L-V 13.14, the Erosion and Sediment Control Plan was prepared with long-term erosion and sediment control as a primary consideration. Sheet 1 depicts the long-term controls at final project development. The temporary BMPs added to the plan by NV5 are intended to provide short-term erosion and sediment controls until vegetation is established.
3. The attached Figure 1 presents typical temporary BMPs for placement of engineered fill against steep slopes as the project progresses. To reduce the possibility of erosion and sediment transport and the need for additional BMPs, the disturbance of steep slope areas should not extend beyond the area proposed to receive fill during that season (i.e., prior to the next anticipated storm

event). Figure 1 depicts a maximum recommended vertical distance of 20 feet for removal of vegetation above the elevation of the current fill surface.

4. Pursuant to the National Pollutant Discharge Elimination System (NPDES), coverage is required under the Construction General Permit (Order No. 2009-0009-DWQ) issued by the State Water Resources Control Board (SWRCB) to address discharges of storm water runoff.
 - a. A Notice of Intent (NOI) must be submitted and a permit fee must be paid.
 - b. A Storm Water Pollution Prevention Plan (SWPPP) must be prepared to address storm water BMPs for erosion control, sediment retention and waste management.
 - c. The SWPPP must be updated for each phase of the project and for each stage of project development.

5.1 TIME FRAME FOR IMPLEMENTATION

The project schedule includes:

- 18 months of facility construction (January 2021 through June 2022);
- Six years of placement, grading and compaction of engineered fill (June 2022 through December 2028);
- 80 years of underground mining; and
- Two to five years of reclamation (January 2082 to December 2087).

As noted above, the SWPPP must be updated for each phase of the project and for each stage of project development.

5.2 SUCCESS STANDARDS

As set forth in the Construction General Permit (Order No. 2009-0009-DWQ), conditions for termination of coverage include:

1. The Site will not pose any additional sediment discharge risk than it did prior to the commencement of construction activity;
2. There is no potential for construction-related storm water pollutants to be discharged into Site runoff;
3. Final stabilization has been reached;
4. Construction materials and wastes have been disposed of properly;
5. Compliance with the Post-Construction Standards in Section XIII of the Construction General Permit has been demonstrated;
6. Post-construction storm water management measures have been installed and a long-term maintenance plan has been established; and
7. All construction-related equipment, materials and any temporary BMPs no longer needed are removed from the Site.

The Construction General Permit requires that the permittee certify in writing that final stabilization conditions are satisfied.

5.3 MONITORING OF MITIGATION MEASURES

Monitoring requirements are set forth in the Construction General Permit (Order No. 2009-0009-DWQ) and are summarized below:

1. Narrative effluent standards:

- a. Storm water discharges and authorized non-storm water discharges regulated by the General Permit shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.
 - b. Dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve Best Available Technology Economically Achievable (BAT) for toxic and non-conventional pollutants and Best Conventional Pollution Control Technology BCT for conventional pollutants.
2. Numeric Action Levels:
- a. Dischargers are subject to a pH Numeric Action Level (NAL) of 6.5-8.5 and a turbidity NAL of 250 NTU.
3. Receiving Water Limitations
- a. The Construction General Permit requires all enrolled dischargers to determine the receiving waters potentially affected by their discharges and to comply with all applicable water quality standards, including any more stringent standards applicable to a water body.
4. Visual Monitoring Requirements for Qualifying Rain Events
- a. Visually observe storm water discharges at all discharge locations within two business days (48 hours) after each qualifying rain event.
 - b. Visually observe the discharge of stored or contained storm water that is derived from and discharged subsequent to a qualifying rain event producing precipitation of $\frac{1}{2}$ inch or more at the time of discharge. Stored or contained storm water that will likely discharge after operating hours due to anticipated precipitation shall be observed prior to the discharge during operating hours.
 - c. Record the time, date and rain gauge reading of all qualifying rain events.
 - d. Within 2 business days (48 hours) prior to each qualifying rain event, visually observe (1) All storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources. If needed, the discharger shall implement appropriate corrective actions.(2) All BMPs to identify whether they have been properly implemented. (3) Any storm water storage and containment areas to detect leaks and ensure maintenance of adequate freeboard.
 - e. Visually observe the presence or absence of floating and suspended materials, a sheen on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.
 - f. Conduct post rain event visual observations to (1) identify whether BMPs were adequately designed, implemented, and effective, and (2) identify additional BMPs and revise the SWPPP accordingly.
 - g. Maintain on-site records of all visual observations, personnel performing the observations, observation dates, weather conditions, locations observed, and corrective actions taken in response to the observations.
5. Water Quality Sampling and Analysis:
- a. Collect storm water grab samples from sampling locations, as defined in the Construction General Permit. The storm water grab sample(s) obtained shall be representative of the flow and characteristics of the discharge.
 - b. At minimum, collect 3 samples per day of the qualifying event.

- c. Ensure that the grab samples collected of stored or contained storm water are from discharges subsequent to a qualifying rain event (producing precipitation of ½ inch or more at the time of discharge).
 - d. Analyze their effluent samples for (1) pH and turbidity, and (2) Any additional parameters for which monitoring is required by the Regional Water Board.
6. Effluent Sampling Locations
- a. Perform sampling and analysis of storm water discharges to characterize discharges associated with construction activity from the entire project disturbed area.
 - b. Collect effluent samples at all discharge points where storm water is discharged off-site.
 - c. Ensure that storm water discharge collected and observed represent the effluent in each drainage area based on visual observation of the water and upstream conditions.
 - d. Monitor and report Site run-on from surrounding areas if there is reason to believe run-on may contribute to an exceedance.
7. Ensure that all sampling and sample preservation are in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association).
- a. All monitoring instruments and equipment (including a discharger's own field instruments for measuring pH and turbidity) should be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements.
 - b. Ensure that all laboratory analyses are conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in the Construction General Permit or by the Regional Water Board.
 - c. With the exception of field analysis conducted by the discharger for turbidity and pH, all analyses should be sent to and conducted at a laboratory certified for such analyses by the State Department of Health Services.

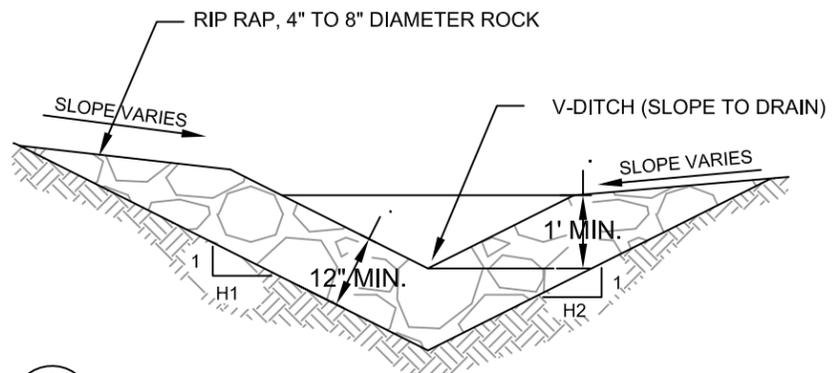
5.4 REMEDIATION MEASURES IN THE EVENT OF FAILURE OF MITIGATION

The Construction General Permit (Order No. 2009-0009-DWQ) establishes a pH Numeric Action Level (NAL) of 6.5 to 8.5, and a turbidity NAL of 250 NTU. The purpose of the NALs and associated monitoring requirements is to provide operational information regarding the performance of the measures used at the Site to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

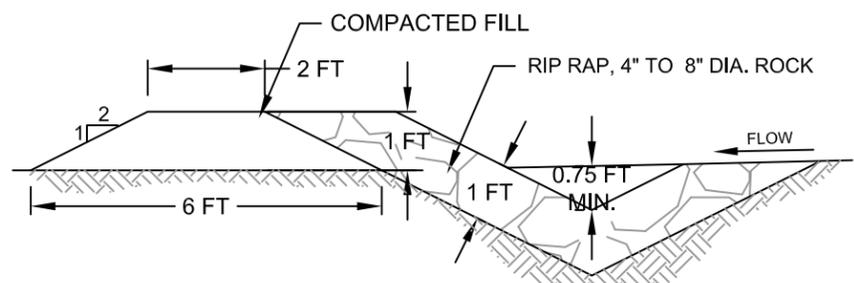
The Construction General Permit requires dischargers with NAL exceedances to immediately implement additional BMPs and revise their Storm Water Pollution Prevention Plan (SWPPP) accordingly to either prevent pollutants and authorized non-storm water discharges from contaminating storm water, or to substantially reduce the pollutants to levels consistently below the NALs. NAL exceedances are reported in the State Water Boards SMARTS system, and the discharger is required to provide an NAL Exceedance Report when requested by a Regional Water Board.

5.5 PERFORMANCE BOND

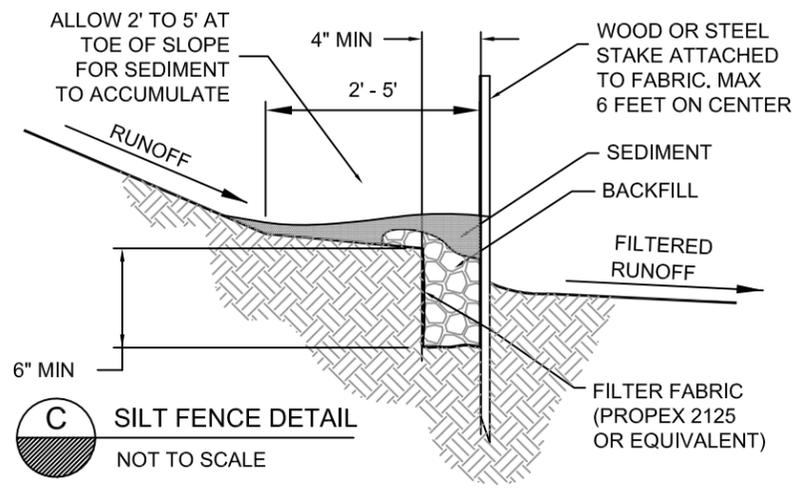
Pursuant to LUDC Section L-II 4.3.3, a monetary deposit may be required at the discretion of the Planning Agency. NV5 anticipates that the financial assurance required as part of the project's reclamation plan may also be considered a suitable mechanism to serve as a performance bond for LUDC Section L-II 4.3.3.



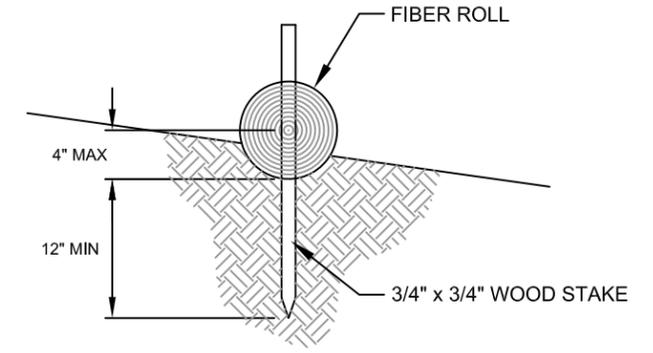
A V-DITCH DETAIL
NOT TO SCALE - SEE APPENDIX G FOR SIZING



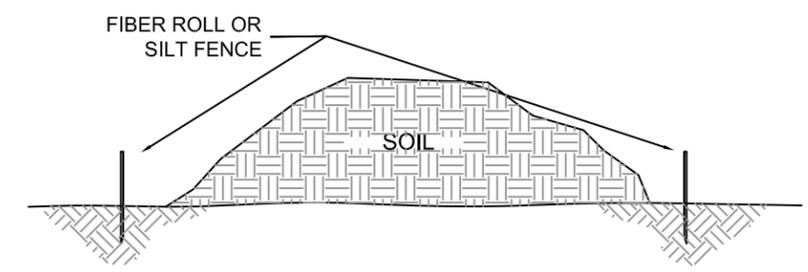
B SURFACE WATER DIVERSION BERM DETAIL
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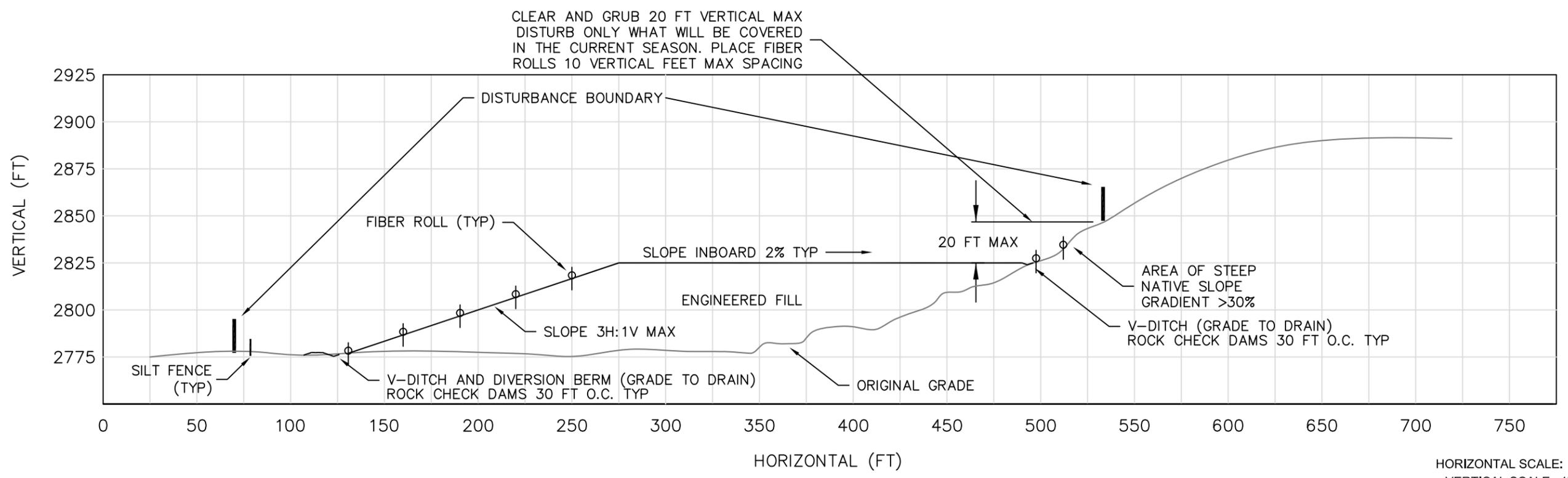
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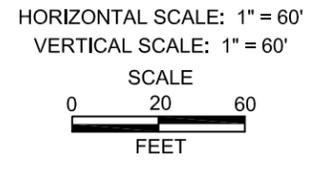
D FIBER ROLL DETAIL
NOT TO SCALE



E STOCKPILE EROSION CONTROL DETAIL
NOT TO SCALE



TYPICAL SECTION



DRAWING NO.:	FIGURE 1	
DESIGNED BY:	DAV	
DRAWN BY:	WAL	
H&K PROJECT:	5279.02	
DATE:	OCTOBER 2020	
NO.	REVISIONS	DATE

SEDIMENT AND EROSION CONTROL BEST MANAGEMENT PRACTICES
SLOPES OVER 30 PERCENT
TYPICAL DETAILS



PRELIMINARY
GRADING AND DRAINAGE PLAN
PREPARED BY NEVADA CITY
ENGINEERING, INC.

SEDIMENT AND EROSION
CONTROL NOTES ADDED BY
NV5 (DECEMBER 2020)

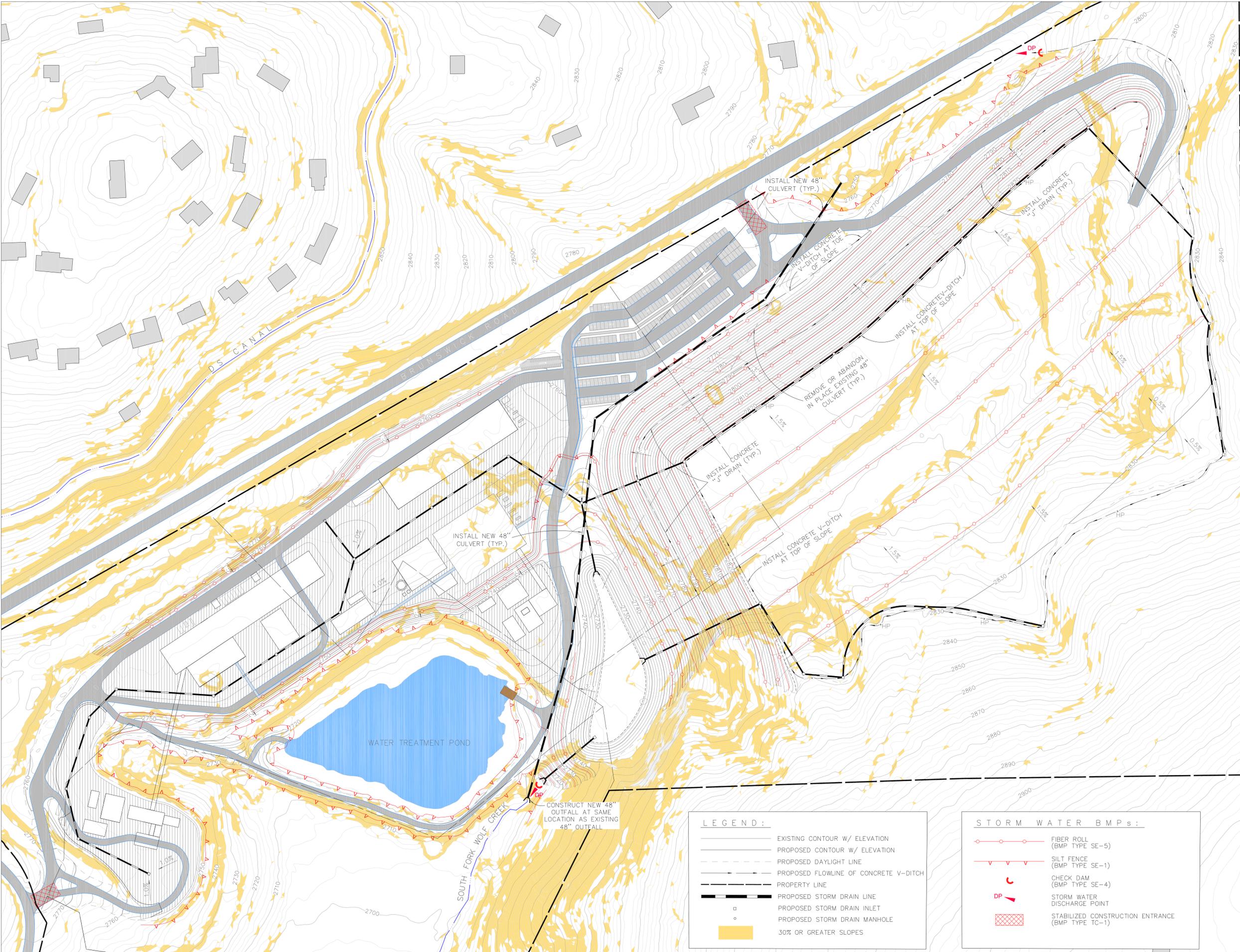


- NOTES**
- INSTALL PROTECTIVE FENCING TO PRESERVE EXISTING VEGETATION WHERE NO CONSTRUCTION ACTIVITY IS PLANNED FOR THE CURRENT SEASON.
 - PERFORM ALL EARTHWORK IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, GEOTECHNICAL ENGINEERING REPORT, LOCAL BUILDING ORDINANCE AND INDUSTRY STANDARDS.
 - APPLY SEED, FERTILIZER, MULCH AND SOIL BINDERS TO ALL DISTURBED SOIL AREAS PRIOR TO THE START OF THE STORM SEASON. SEED AND FERTILIZER COMPONENTS AND QUANTITIES MUST COMPLY WITH THE REQUIREMENTS OF THE SWPPP AND THE RECOMMENDATIONS OF THE LOCAL RESOURCE CONSERVATION DISTRICT.
 - APPLY MULCH, GEOTEXTILES AND MATS TO RETAIN SOIL IN DISTURBED AREAS WITH STEEP SLOPES.
 - PROTECT AND SECURE SOIL STOCKPILES FROM EXPOSURE TO WIND AND RAIN.
 - PERFORM BMP INSTALLATION, BMP MONITORING, WATER QUALITY MONITORING, RECORDKEEPING AND REPORTING PURSUANT TO A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED IN ACCORDANCE WITH THE GENERAL ORDER FOR CONSTRUCTION STORM WATER DISCHARGES.
 - UPDATE THE SWPPP AND ASSOCIATED WATER POLLUTION CONTROL DRAWINGS ROUTINELY AS NEEDED TO ADDRESS EACH STAGE OF CONSTRUCTION PURSUANT TO THE GENERAL ORDER FOR CONSTRUCTION STORM WATER DISCHARGES.

REVISION:	DATE:	DESCRIPTION:
BMPs	12/15/20	Preliminary BMP layout added by NV5 to support management plan.

BRUNSWICK SITE
RISE GRASS VALLEY INC.
SEC. 31, T.16N., R.9E., M.D.M.
NEVADA COUNTY, CALIFORNIA

**EROSION AND
SEDIMENT
CONTROL PLAN**



LEGEND:

- EXISTING CONTOUR W/ ELEVATION
- PROPOSED CONTOUR W/ ELEVATION
- PROPOSED DAYLIGHT LINE
- PROPOSED FLOWLINE OF CONCRETE V-DITCH
- PROPERTY LINE
- PROPOSED STORM DRAIN LINE
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN MANHOLE
- 30% OR GREATER SLOPES

STORM WATER BMPs:

- FIBER ROLL (BMP TYPE SE-5)
- SILT FENCE (BMP TYPE SE-1)
- CHECK DAM (BMP TYPE SE-4)
- STORM WATER DISCHARGE POINT
- STABILIZED CONSTRUCTION ENTRANCE (BMP TYPE TC-1)