



MEETING OF THE BOARD OF COUNTY COMMISSIONERS
BOULDER COUNTY
AGENDA

Thursday, April 18, 2024, 9:00 a.m.

Third Floor Hearing Room

County Court House

1325 Pearl Street, Boulder

This agenda is subject to change. Please call ahead to confirm an item of interest (303-441-3500). In-person meetings are held in the Third Floor Hearing Room, County Courthouse, 1325 Pearl Street, Boulder. Public comments are taken at meetings designated as Public Hearings. Meetings and hearings on this agenda are open to the public.

For special assistance, contact our ADA Coordinator (303-441-3525) at least 72 hours in advance.

To view a two-week forecast agenda of the commissioners' schedule, visit the Commissioners' [Advance Agenda](#).

All commissioners' public hearings and meetings will now be offered in a hybrid format where attendees can join through Zoom or in-person at the Boulder County Courthouse, 3rd Floor, 1325 Pearl Street, Boulder. To sign up for in-person public comment, please use the link in this agenda for each respective hearing. There will also be a kiosk located in the lobby of the 3rd Floor to sign up for in-person public comment. For questions regarding in-person hearings call 303-441-3500.

Pages

1. Call to Order

2. 9 a.m. Public Hearing

- [Virtual Attendee Link](#)
- Registration Required
- Call-in information: 1-833-568-8864, Webinar ID: 161 331 3230
- [In-Person Comment Registration Link](#)

2.a [Community Planning & Permitting - Docket LU-24-0001: Boulder County Parks & Open Space Department Sherwood Creek Restoration](#)

Limited Impact Special Use Review to permit 8,843 cubic yards of non-foundational earthwork for restoration of the Sherwood Creek stream channel.

3

The application is submitted by Boulder County, c/o David Hirt (applicant). The subject property is in the Forestry (F) zoning district at 1600 County Road 126J and 735 County Road 128W, at the dead end of County Road 126J, accessed via County Road 126 approximately .5 miles west of the intersection of County Road 126 and SH72 on a 92 acre and 79-acre parcel in Section 11, Township 1S, Range 73W.

- **Action Requested:** Decision
- **Staff Contact(s):** Sam Walker
- **Location:** Hybrid (Hearing Room and Zoom Webinar)

Opportunity for live in-person and virtual public comment will be available, and written comments can be emailed to [the planners' email](#). Information regarding how to participate will be available on [the Sherwood Creek Restoration docket webpage](#).



Community Planning and Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302 • Tel: 303.441.3930 • Fax: 303.441.4856
Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 • www.bouldercounty.gov

BOULDER COUNTY BOARD OF COUNTY COMMISSIONERS PUBLIC HEARING

April 18, 2024 at 09:00 a.m.

All Commissioners' public hearings and meetings will be offered in a hybrid format where attendees can join **through Zoom** or **in-person** at the Boulder County Courthouse, 3rd Floor, 1325 Pearl Street, Boulder.

PUBLIC HEARING

STAFF PLANNER: Sam Walker

Docket LU-24-0001: BCPOS Sherwood Creek Restoration

Proposal: Limited Impact Special Use Review to permit 8,843 cubic yards of non-foundational earthwork for restoration of the Sherwood Creek stream channel
Location: 1600 County Road 126J and 735 County Road 128W, at the dead end of County Road 126J, accessed via County Road 126 approximately .5 miles west of the intersection of County Road 126 and SH72
Zoning: Forestry (F) Zoning District
Applicant: Boulder County Parks & Open Space (BCPOS)
Agent: David Hirt

STAFF RECOMMENDATION:

Staff recommends that the Board of County Commissioners conditionally approve docket LU-24-0001 BCPOS Sherwood Creek Restoration.

PACKET CONTENTS:

Item	Pages
o Staff Recommendation	1 – 13
o Application Materials (Attachment A)	A1 – A56
o Referral Responses (Attachment B)	B1 – B14

SUMMARY AND RECOMMENDATION:

This application for Limited Impact Special Review proposes approximately 8,843 cubic yards of non-foundational earthwork to restore the Sherwood Creek stream channel and construct a section of hiking trail. Limited Impact Special Use Review is required for the proposed earthwork, and it is therefore analyzed pursuant to the Special Use Standards outlined in Boulder County Land Use Code (the Code) Art. 4-601.

Staff recommends conditional approval of the proposal because, as conditioned, staff finds the proposed earthwork can meet the Limited Impact Special Review Criteria described in the Boulder County Land Use Code (the Code).

DISCUSSION:

The proposed earthwork will take place primarily on the parcel identified as 1600 County Road 126J, with some additional restoration work taking place on an adjacent parcel addressed as 735 County Road 128W. Site access will take place via County Road 126J, which branches off of the west side of County Road 126 approximately .3 miles east of the parcel boundary. County Road 126J continues through the property for approximately .2 miles further west before dead-ending at a large graded area associated with the historic Conger Mine. This large area (visible in Figures 2 and 3, below) encompasses most of the proposed project area.

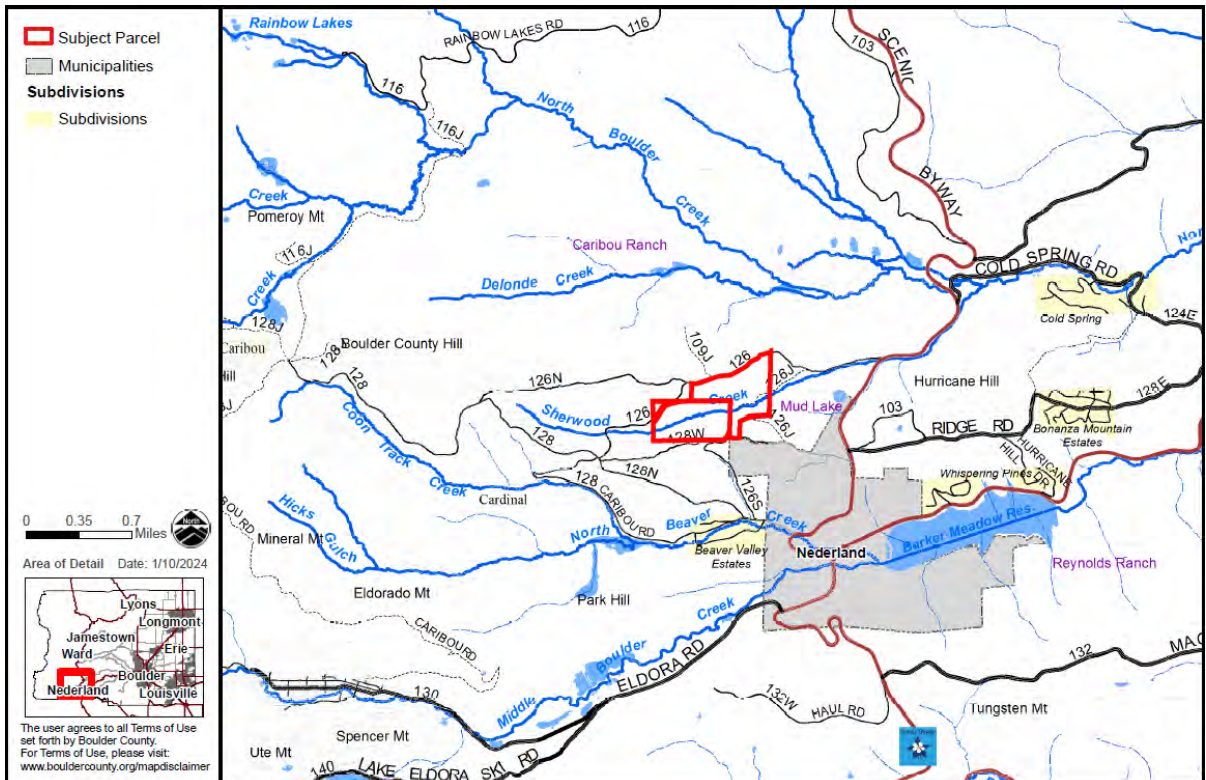


Figure 1: Vicinity Map showing location of the subject parcel

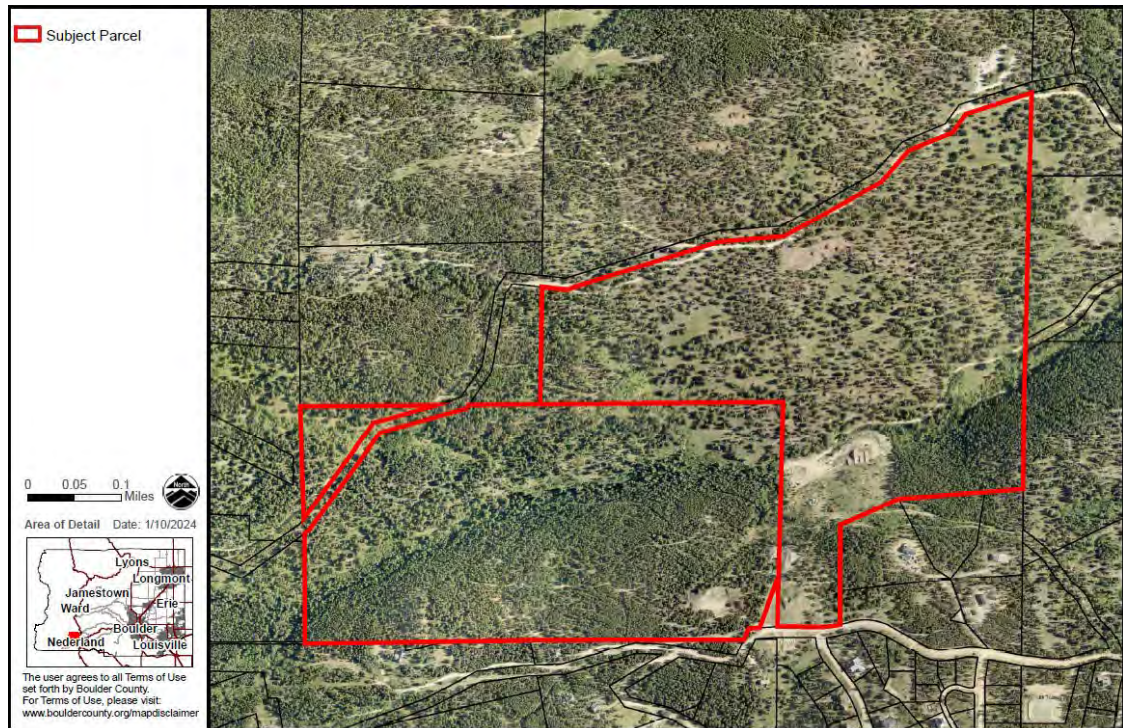


Figure 2: Aerial photo of the subject parcels.



Figure 3: Aerial detail view of primary project area

Currently, both parcels are largely undeveloped other than the mine site and several trails throughout. The graded area shown in Figure 3 was created with deposits of waste rock from the Conger Mine, a tungsten mine that operated off and on throughout the early 1900's. Waste rock was deposited across the path of Sherwood Creek, a perennial stream that flows through the area before entering Boulder Creek further east.

When the stream is flowing it forms a pond on the west side of the waste pile, before flowing underneath the pile and eventually daylighting again several hundred feet to the east. Small seeps have also formed along the north side of the section of County Road 126J that runs north of the waste pile. These seeps flow across the roadway and coalesce with the daylighted section of the creek, which continues to flow east along the northern boundary of the waste pile.

The project proposes earthwork to remove the sections of waste pile that currently block the run of the creek before revegetating the area and depositing the removed waste at the base of the slope located south of the creek path. The project also proposes to shift a section of the stream further to the north of the eastern section of the waste pile into the County Road 126J right-of-way, decommissioning a section of the roadway and leaving only a small bench trail for continued use by hikers that currently walk along the roadway. Figure 4, below, illustrates the proposed earthwork and daylighting of the stream, and is visible in more detail on page A40 of Attachment A. Also visible in Figure 4 are the locations of several artificial beaver dams which will be installed west of the earthwork area on a section of 735 County Road 128W.



Figure 4: Applicant's site plan

As shown in Figure 5, below, the Boulder County Comprehensive Plan ("the Plan") identifies many resources of note on both parcels, including a Riparian Area and Wetlands both associated with Sherwood Creek, Rare Plant Area, Significant Natural Communities, and Critical Wildlife Habitat. Both parcels are also located entirely within the Indian Peaks Environmental Conservation Area. Potential impacts to these identified resources are discussed under Special Use criteria three below.

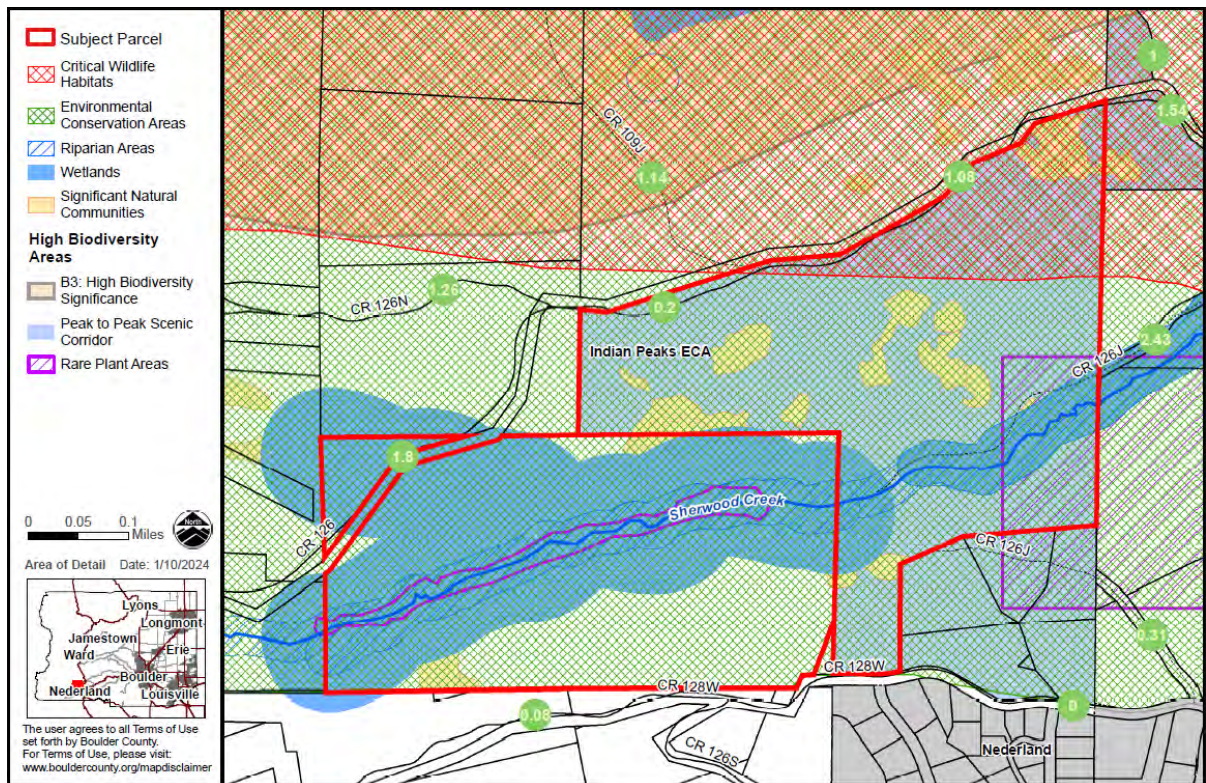


Figure 5: Boulder County Comprehensive Plan layers located on the Subject Parcel.

Significant earthwork is required to restore and rehabilitate the stream channel, and staff finds that the proposed earthwork can meet the applicable standards and criteria for approval as described in the Land Use Code.

REFERRALS:

This application was referred to the typical agencies, departments, and nearby property owners. All responses received are attached and summarized below.

Boulder County Building Safety and Inspection Services Team: Boulder County Building Safety and Inspection Services reviewed the proposal and expressed no conflicts. A grading permit, plan review, and inspection approvals are required for the proposed grading. Observation Reports by a qualified design professional are also required during construction.

Boulder County Development Review Team – Access & Engineering: Boulder County Development Review Team – Access & Engineering (DRT A&E) reviewed the proposal and found that legal access to the project area was demonstrated. DRT A&E also noted that any maintenance to County Road 126J would require the approval of the County Engineer, that a Stormwater Quality Permit (SWQP) would be required, and recommended several plan changes and conditions of approval.

Colorado Department of Natural Resources Division of Water Resources: The Colorado Department of Natural Resources Division of Water Resources (DNR DWR) referral response recommended that the applicant coordinate with the District 6 Water Commissioner to ensure that the proposal does not injure downstream water rights or alter streamflows, but ultimately expressed no concerns with the proposal as submitted.

Boulder County Parks & Open Space Natural Resource Planner: the BCPOS Natural Resource Planner's referral response was submitted one day prior to the publication of the staff recommendation, and was therefore not reviewed in detail. The response noted strong support for the

proposal, but also raised several issues with details in the plan set and recommended that the waste rock berm south of the stream be removed as part of the proposal rather than at a later date (as proposed in the application materials).

Adjacent Property Owners: 57 application notices were mailed to nearby property owners, and CPP staff did not receive any comments in response.

Agencies that responded with no conflicts: Nederland Fire Protection District, Boulder County Conservation Easement Team, Boulder County Public Health, Boulder County Historic Preservation Team, Xcel Energy.

Agencies that did not respond include: Boulder County Long Range Planning, Boulder County Wildfire Mitigation Team, Boulder County Assessor, Boulder County Attorney Office, Boulder County Parks & Open Space Real Estate Team, Boulder County Sheriff, Boulder County Treasurer, Boulder County Public Works Stormwater Quality Team, Boulder Watershed Collective, Town of Nederland Building, Planning, and Zoning, Boulder Valley & Longmont Conservation Districts, History Colorado, Colorado Division of Reclamation, Mining, & Safety, Colorado Water Conservation Board, Colorado Parks & Wildlife, US Bureau of Reclamation, US Fish & Wildlife Service, US Forest Service.

LIMITED IMPACT SPECIAL REVIEW SUMMARY:

CPP staff reviewed the conditions and standards for approval of a Limited Impact Special Review as they apply to the proposed non-foundational earthwork per Article 4-601 of the Code and finds the following:

- (1) ***Complies with the minimum zoning requirements of the zoning district in which the use is to be established, and will also comply with all other applicable requirements;***

The subject parcels are within the Forestry zoning district and are both legal building lots. Non-foundational earthwork in excess of 500 cubic yards can be permitted as an accessory use in the Forestry zoning district (Article 4-101), pending approval of a Limited Impact Special Review and subject to the additional provisions outlined in Article 4-516.Q.5 of the Code. There are no specific Use Categories in the Code that describe public hiking trails, but Forestry zoning district allows a variety of day-use recreational facilities by right and the proposed non-foundational earthwork is considered an accessory use to the recreational use of the proposed trail.

Staff recommend a condition of approval requiring the necessary grading permit be obtained for the proposed non-foundational earthwork. With the required permits and as conditioned, staff finds that this criterion can be met.

Additional Provisions for grading of more than 50 cubic yards under Article 4-516.Q.5 include the following:

- a. ***While it may be exempt from these provisions, grading which impacts a floodplain is not exempt from applying for and receiving a Floodplain Development Permit.***

No part of the proposed project area is located within the Floodplain Overlay district, and no Floodplain Development Permit is required for the proposal.

Therefore, this criterion is not applicable.

- b. Normal agricultural grading that is exempt from the definition of this use includes but is not limited to: tilling fields, creating or altering irrigation ditch laterals, field leveling, field access roads for agricultural purposes, and other activities associated with farming and agricultural operations. Agricultural grading does not include terraforming for aesthetic purposes, landscaping ponds, altering wetlands, or other nonessential grading.***

The proposed non-foundational earthwork will not support an agricultural use and is therefore not exempt from the use definition described in Art. 4-516.Q.1, and will alter an area identified as wetlands by the Plan. However, the proposed earthwork will restore the location and function of the identified wetland, and is allowed through the Limited Impact Special Review process as noted above.

Therefore, staff have no concerns regarding this criterion.

- c. Ponds to be constructed at a depth of more than 24 inches must obtain a grading permit prior to construction. Ponds used to store/hold water for agricultural purposes (stock ponds, irrigation ponds) shall be exempt from the Site Plan Review or Limited Impact Special Review process unless they require an Individual Floodplain Development Permit.***

The subject proposal will not result in the creation of a pond.

Therefore, this criterion is not applicable.

- (2) Will be compatible with the surrounding area. In determining compatibility, the Board should consider the location of structures and other improvements on the site; the size, height and massing of the structures; the number and arrangement of structures; the design of structures and other site features; the proposed removal or addition of vegetation; the extent of site disturbance, including, but not limited to, any grading and changes to natural topography; and the nature and intensity of the activities that will take place on the site. In determining the surrounding area, the Board should consider the unique location and environment of the proposed use; assess the relevant area that the use is expected to impact; and take note of important features in the area including, but not limited to, scenic vistas, historic townsites and rural communities, mountainous terrain, agricultural lands and activities, sensitive environmental areas, and the characteristics of nearby development and neighborhoods;***

For purposes of this review, staff considers the area within 1,500 feet of the subject parcel as the applicable surrounding area, which is consistent with the Site Plan Review definition of a neighborhood. The area south of the subject parcels has been developed with single-family housing on smaller lots, some of which are unincorporated while others are within the Town of Nederland municipal boundary. Areas east, north, and west of the subject parcels are almost entirely public lands held under County, City of Boulder, or federal ownership (see Figure 6, below).

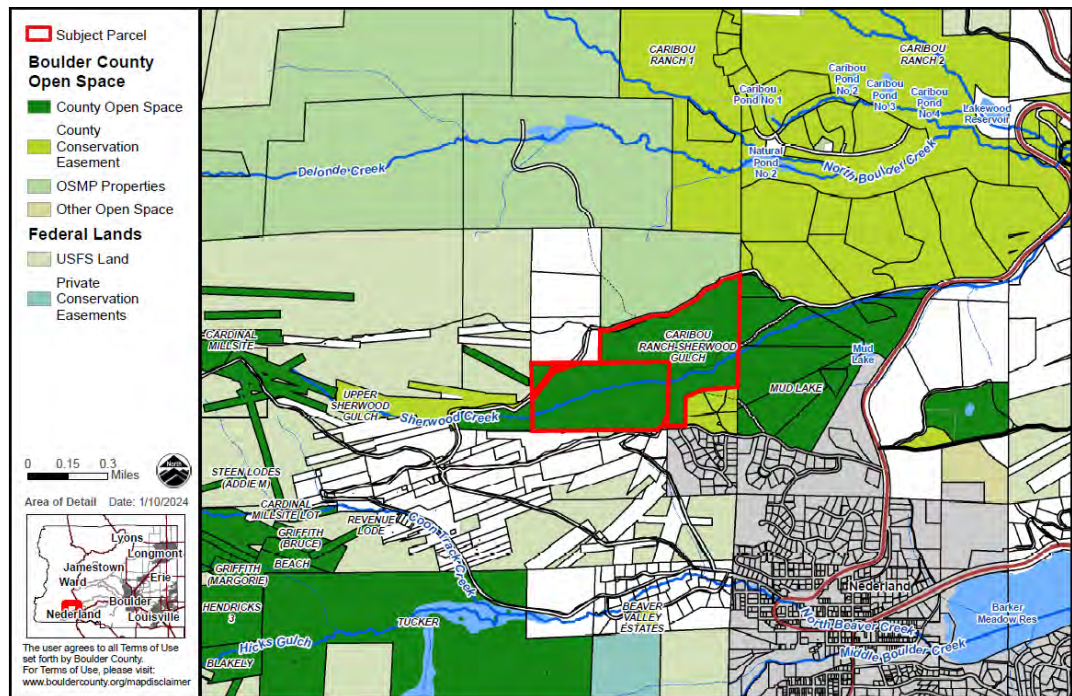


Figure 6: Public Lands map

Staff find that the proposed earthwork will be compatible with the surrounding area. Rehabilitation of the stream path will remove an existing blight on the landscape, and restore the natural character of the land that existed before the establishment of the Conger Mine. The proposal will also bring additional vegetation to the project area and improve the flow of Sherwood Creek.

Therefore, staff finds that this criterion is met.

(3) ***The use will be in accordance with the Comprehensive Plan;***

Staff find that the proposed non-foundational earthwork supports the following Goals, Policies, and Objectives of the Comprehensive Plan:

- Goal 1. Conserve & Preserve
- Goal 3. Promote Viability & Integrity
- ER 1.01 Regulations
- ER 1.04 Scenic Vistas
- ER 1.07 Open Space Program
- ER 3.03 Development Inside ECAs

As described above, the proposal is intended to restore the wetland and riparian area associated with Sherwood Creek, with additional upstream work intended to regulate the creek flow. Staff therefore do not have concerns that the proposal will negatively impact the resources on the subject properties identified by the Comprehensive Plan, including but not limited to Riparian Area, Wetland, or the Indian Peaks Environmental Conservation Area.

As discussed under Special Use criteria nine below, staff have limited concerns relating to the impacts of the proposed development on the view protection corridors associated with various County Roads in the area or the Peak to Peak Scenic Corridor.

Therefore, staff finds that this criterion is met.

- (4) ***Will not result in an over-intensive use of land or excessive depletion of natural resources. In evaluating the intensity of the use, the Board should consider the extent of the proposed development in relation to parcel size and the natural landscape/topography; the area of impermeable surface; the amount of blasting, grading or other alteration of the natural topography; the elimination or disruption of agricultural lands; the effect on significant natural areas and environmental resources; the disturbance of plant and animal habitat, and wildlife migration corridors; the relationship of the proposed development to natural hazards; and available mitigation measures such as the preservation of open lands, the addition or restoration of natural features and screening, the reduction or arrangement of structures and land disturbance, and the use of sustainable construction techniques, resource use, and transportation management.***

Although the project will involve significant earthwork, staff are not concerned that the proposal will constitute an over-intensive use of land. On the contrary, the proposed earthwork will be limited to an existing area of disturbance and is intended to restore a portion of that disturbed area to its previous natural character.

Therefore, staff finds that this criterion is met.

- (5) ***The use will not have a material adverse effect on community capital improvement programs;***

Staff have not identified any material adverse effects of the proposal on community capital improvement programs, and no referral agency responded with such a concern.

Therefore, staff finds that this criterion is met.

- (6) ***The use will not require a level of community facilities and services greater than that which is available;***

Staff are not concerned that the proposal will require a level of community facilities or services greater than that which is currently available, and no referral agency responded with such a concern.

Therefore, staff finds that this criterion is met.

- (7) ***Will support a multimodal transportation system and not result in significant negative impacts to the transportation system or traffic hazards;***

1600 County Road 126 and the project area are accessed by County Road 126 (CR126), a gravel Boulder County owned and maintained right-of-way (ROW), with a functional classification of Local via CR126 J, a Boulder County owned but not maintained function classified Jeep road. 785 County Road 128W is accessed via County Road 128W. Legal access to both properties is demonstrated via adjacency to these public ROWs.

The referral response from DRT A&E notes that any future maintenance to County Road 126J must be approved by the County Engineer, but does not directly discuss the part of the project that proposes to shift a section of Sherwood Creek into the County Road 126J ROW, decommission that section of road, and leave only a small shelf trail for use by hikers. However, discussion between Development Review Team staff, DRT A&E staff, and the County Engineer indicate that there are no concerns over the decommissioning of a section of

the roadway. Currently County Road 126J is gated and only accessible by County vehicles (although members of the public often walk the road) and is only used to access the mine site. Decommissioning the western end of County Road 126J will not inhibit the current public use of the road.

The referral response from the Nederland Fire Protection District expressed no concerns regarding the proposal.

DRT A&E referral response included a recommended condition of approval designed to mitigate potential impacts to the transportation system during site grading. Staff therefore recommend a condition of approval requiring that the plans submitted for grading permit application include a parking plan indicating that worker vehicles will not block the travelway.

Therefore, as conditioned, staff finds this criterion can be met.

(8) *Will not cause significant air, odor, water, or noise pollution;*

There is no indication that the proposal will cause significant air, odor, water, or noise pollution. However, the proposal involves more than one acre of site disturbance as well as the crossing of a watercourse, triggering the requirement for a Boulder County Stormwater Quality Permit (SWQP).

The applicant has committed to working with the Public Works Department to develop and implement a Stormwater Management Plan (SWMP). The SWMP will include, but not be limited to, erosion and sediment control measures, stockpile and staging management practices, and general pollution prevention practices. Staff recommend conditions of approval requiring the submittal of the SWQP and SWMP along with the grading permit to reflect these requirements.

The DRT A&E referral response also included a recommended condition of approval designed to avoid contamination of the stream from fuel spillage during construction. Staff therefore recommend a condition of approval requiring the documentation of fueling practices and locations as part of the grading permit submittal.

The application materials included an extensive revegetation plan for the restored stream bank. Staff recommend that this plan be approved as proposed.

Therefore, as conditioned, staff finds this criterion can be met.

(9) *Will be adequately buffered or screened to mitigate any undue visual impacts of the use;*

The Plan identifies View Protection Scores that range from 0 to 2.43 along various roads near the project area (including CR 126J, CR 126N, CR 128W, and CR 109J). 1600 County Road 126J is also located within the Peak to Peak Scenic Corridor. However staff are not concerned that the proposed earthwork will result in the creation of any undue visual impacts. The project site is located in a valley that is not visible from any of the roads listed above. Several trails cross the area around the project site and hikers can view the site from those trails. The proposal is intended to restore the visual character of Sherwood Creek and rehabilitate the entire waste pile with revegetation that will mitigate its blighted appearance.

Therefore, staff finds this criterion is met.

- (10) ***The use will not otherwise be detrimental to the health, safety, or welfare of the present or future inhabitants of Boulder County;***

There is no indication that the proposed earthwork will be detrimental to the health, safety, or welfare of the present or future inhabitants of the county, and no referral agency responded with such a concern.

Therefore, staff finds this criterion can be met.

- (11) ***The use will establish an appropriate balance between current and future economic, environmental, and societal needs by minimizing the consumption and inefficient use of energy, materials, minerals, water, land, and other finite resources;***

Staff finds that the proposed earthwork strikes an appropriate balance by addressing the environmental needs of the site while rehabilitating the landscape such that it is healthier and maintains its public benefit.

Therefore, staff finds this criterion can be met.

- (12) ***The use will not result in unreasonable risk of harm to people or property – both onsite and in the surrounding area – from natural hazards. Development or activity associated with the use must avoid natural hazards, including those on the subject property and those originating off-site with a reasonable likelihood of affecting the subject property. Natural hazards include, without limitation, expansive soils or claystone, subsiding soils, soil creep areas, or questionable soils where the safe-sustaining power of the soils is in doubt; landslides, mudslides, mudfalls, debris fans, unstable slopes, and rockfalls; flash flooding corridors, alluvial fans, floodways, floodplains, and flood-prone areas; and avalanche corridors; all as identified in the Comprehensive Plan Geologic Hazard and Constraint Areas Map or through the Special Review or Limited Impact Special Review process using the best available information. Best available information includes, without limitation, updated topographic or geologic data, Colorado Geologic Survey landslide or earth/debris flow data, interim floodplain mapping data, and creek planning studies.***

The Comprehensive Plan identifies a small area of Debris Flow Susceptibility along the eastern boundary of 735 County Road 128W which intersects with Sherwood Creek and the approximate location where water currently pools on the west end of the waste pile. However, staff are not concerned that the proposed earthwork will result in increased risk to people or property relative to this identified hazard. The proposed earthwork will not take place in the hazard area, and both existing and proposed trail routes do not appear to intersect with the hazard area.

Therefore, staff finds that this criterion is met.

- (13) ***The proposed use shall not alter historic drainage patterns and/or flow rates unless the associated development includes acceptable mitigation measures to compensate for anticipated drainage impacts. The best available information should be used to evaluate these impacts, including without limitation the Boulder County Storm Drainage Criteria Manual, hydrologic evaluations to determine peak flows, floodplain mapping studies, updated topographic data, Colorado Geologic Survey landslide, earth/debris flow data, and creek planning studies, all as applicable given the context of the subject property and the application.***

Staff find that the proposed earthwork will alter the historic drainage pattern of the site, but will include acceptable mitigation measures. Primarily, the alteration will be in the portion of the creek that will be shifted north into what's currently the County Road 126J right-of-way. However, this shift will not change the overall pattern of drainage or flow rates of the stream. The remainder of the proposal is an attempt to restore the true historic flow of Sherwood Creek by removing mine waste that currently blocks the stream path and staff have no concerns that the proposal will negatively impact site drainage.

However, referral responses submitted to staff included several recommended conditions designed to limit negative impacts to drainages and ensure that flow rates are preserved. Staff therefore recommend several conditions of approval requiring the demonstration of coverage under a USACE or Individual 404 Permit, and consultation with the District 6 Water Commissioner.

Therefore, as conditioned, staff finds that this criterion is met.

RECOMMENDATION:

Staff has determined that, as conditioned, the proposal can meet all the applicable criteria of the Boulder County Land Use Code for Limited Impact Special Review. Therefore, staff recommend that the Board of County Commissioners **CONDITIONALLY APPROVE** Docket *LU-24-0001: BCPOS Sherwood Creek Restoration*, subject to the following conditions:

1. The development is subject to the requirements of the Boulder County Building Safety and Inspection Services Team and adopted County Building Codes, as outlined in the referral comments, including, but not limited to required grading permit, observation reports, and plan review.
2. The workers' vehicles must be parked in designated approved areas that are outside of the road traveled way which do not conflict with the project work. Parking plans shall be shown on the site plans for approval.
3. *At grading permit*, the Stormwater Quality Permit application must be submitted and obtained prior to any work beginning on the project. A drainage report and Stormwater Management Plan must be submitted with the SWQP application materials.
4. The applicant must document the fueling practices that will be used during construction. If employing temporary above-ground storage tanks, a spill containment plan will be required at building permit and plans must identify sizes and locations of the tanks. If refueling from mobile trucks, spill kits must be kept in vehicles or on site. Maintain a distance of at least 50 between fueling areas and drainage ways.

At grading permit, provide documentation of the fueling practices and locations.

5. *Prior to grading permit issuance*, the proposed development must meet all local, state, and federal regulations. The applicant must demonstrate coverage under a USACE Nationwide or Individual 404 permit.
6. *Prior to any earth movement*, the applicant and/or their construction company shall contact the District 6 Water Commissioner for project coordination.
7. The revegetation plan included with the submitted application materials is approved as proposed.

8. The Applicants are subject to the terms, conditions, and commitments of record and in the file for Docket LU-24-0001 BCPOS Sherwood Creek Restoration.



Boulder County Land Use Department

Courthouse Annex Building
2045 13th Street • PO Box 471 • Boulder, Colorado 80302
Phone: 303-441-3930
Email: planner@bouldercounty.org
Web: www.bouldercounty.org/lu
Office Hours: Mon., Wed., Thurs., Fri. 8 a.m. to 4:30 p.m.
Tuesday 10 a.m. to 4:30 p.m.

Shaded Areas for Staff Use Only

Intake Stamp

Planning Application Form

The Land Use Department maintains a submittal schedule for accepting applications. Planning applications are accepted on Mondays, by appointment only. Please call 303-441-3930 to schedule a submittal appointment.

Project Number		Project Name	
<input type="checkbox"/> Appeal <input type="checkbox"/> Correction Plat <input type="checkbox"/> Exemption Plat <input type="checkbox"/> Final Plat <input checked="" type="checkbox"/> Limited Impact Special Use <input type="checkbox"/> Limited Impact Special Use Waiver <input type="checkbox"/> Location and Extent	<input type="checkbox"/> Modification of Site Plan Review <input type="checkbox"/> Modification of Special Use <input type="checkbox"/> Preliminary Plan <input type="checkbox"/> Resubdivision (Replat) <input type="checkbox"/> Rezoning	<input type="checkbox"/> Road Name Change <input type="checkbox"/> Road/Easement Vacation <input type="checkbox"/> Site Plan Review <input type="checkbox"/> Site Plan Review Waiver <input type="checkbox"/> Sketch Plan <input type="checkbox"/> Special Use/SSDP	<input type="checkbox"/> Special Use (Oil & Gas development) <input type="checkbox"/> State Interest Review (1041) <input type="checkbox"/> Subdivision Exemption <input type="checkbox"/> Variance <input type="checkbox"/> Other:
Location(s)/Street Address(es) 1600 County Road 126			
Unincorporated Boulder County			
Subdivision Name TR, NBR 901 Nederland Area			
Lot(s) NA	Block(s) NA	Section(s) 11	Township(s) 1S
Area in Acres 91.55	Existing Zoning Forestry	Existing Use of Property Open Space	Range(s) 73
Proposed Water Supply NA	Proposed Sewage Disposal Method NA		
Number of Proposed Lots NA			

Applicants:

Applicant/Property Owner County of Boulder		Email	
Mailing Address 5201 St. Vrain Road			
City Longmont	State CO	Zip Code 80503	Phone 303-678-6200
Applicant/Property Owner/Agent/Consultant David Hirt		Email dhirt@bouldercounty.gov	
Mailing Address 5201 St. Vrain Road			
City Longmont	State CO	Zip Code 80503	Phone 303-678-6218
Agent/Consultant		Email	
Mailing Address			
City	State	Zip Code	Phone

Certification (Please refer to the Regulations and Application Submittal Package for complete application requirements.)

I certify that I am signing this Application Form as an owner of record of the property included in the Application. I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge. I understand that all materials required by Boulder County must be submitted prior to having this matter processed. I understand that public hearings or meetings may be required. I understand that I must sign an Agreement of Payment for Application processing fees, and that additional fees or materials may be required as a result of considerations which may arise in the processing of this docket. I understand that the road, school, and park dedications may be required as a condition of approval. I understand that I am consenting to allow the County Staff involved in this application or their designees to enter onto and inspect the subject property at any reasonable time, without obtaining any prior consent.

All landowners are required to sign application. If additional space is needed, attach additional sheet signed and dated.

Signature of Property Owner <i>Therese Glowacki</i>	Printed Name Therese Glowacki	Date December 21, 2023
Signature of Property Owner	Printed Name	Date

The Land Use Director may waive the landowner signature requirement for good cause, under the applicable provisions of the Land Use Code.



Community Planning & Permitting

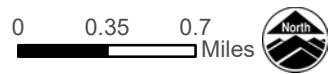
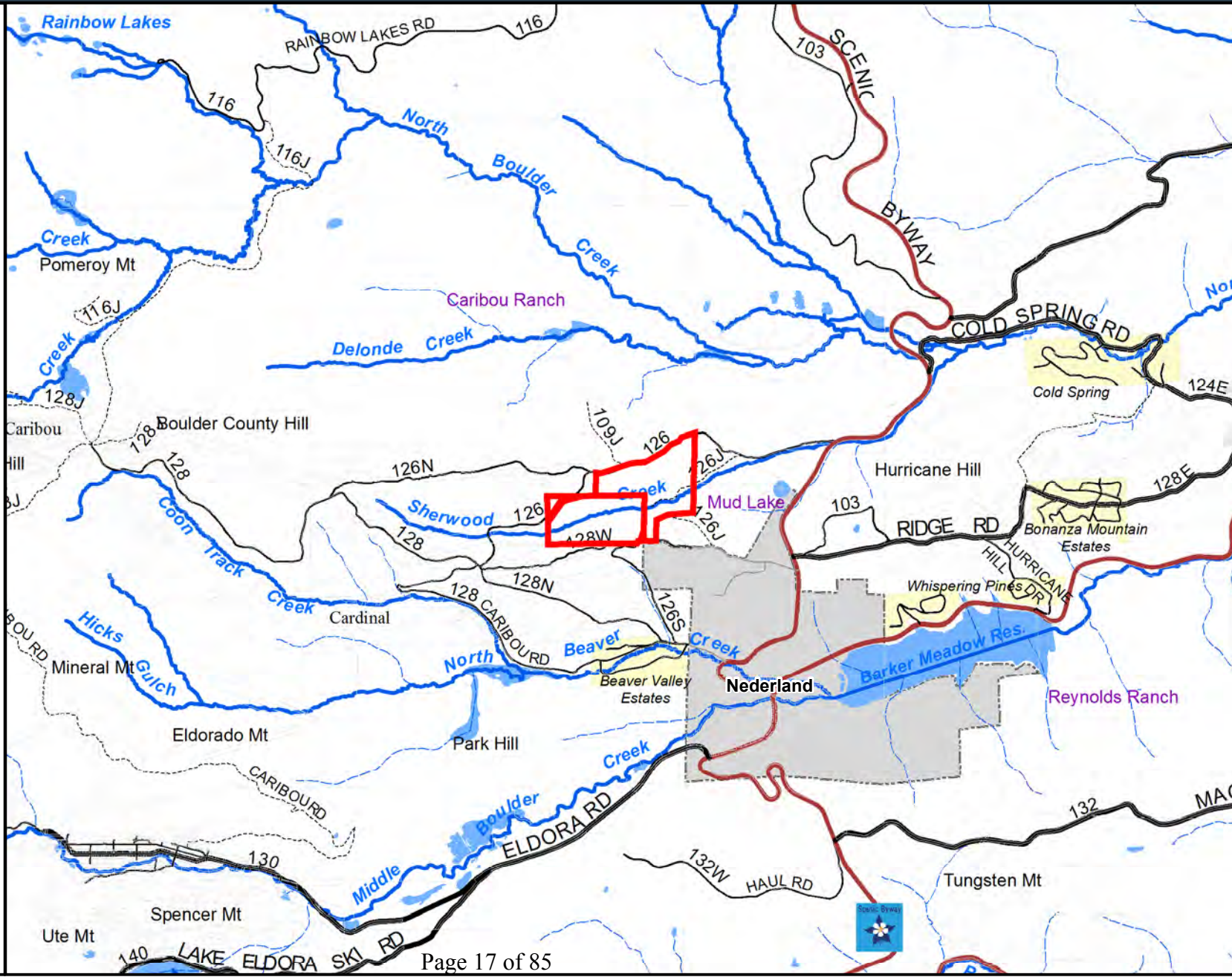
2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

Vicinity

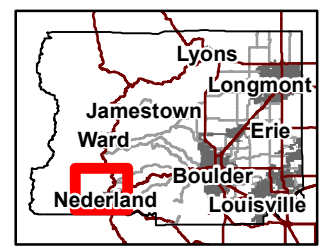
735 COUNTY ROAD 128W, 1600 COUNTY

ROAD 126J

- Subject Parcel
- Municipalities
- Subdivisions**
- Subdivisions



Area of Detail Date: 1/10/2024



The user agrees to all Terms of Use set forth by Boulder County. For Terms of Use, please visit: www.bouldercounty.org/mapdisclaimer



Community Planning & Permitting

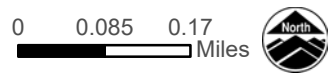
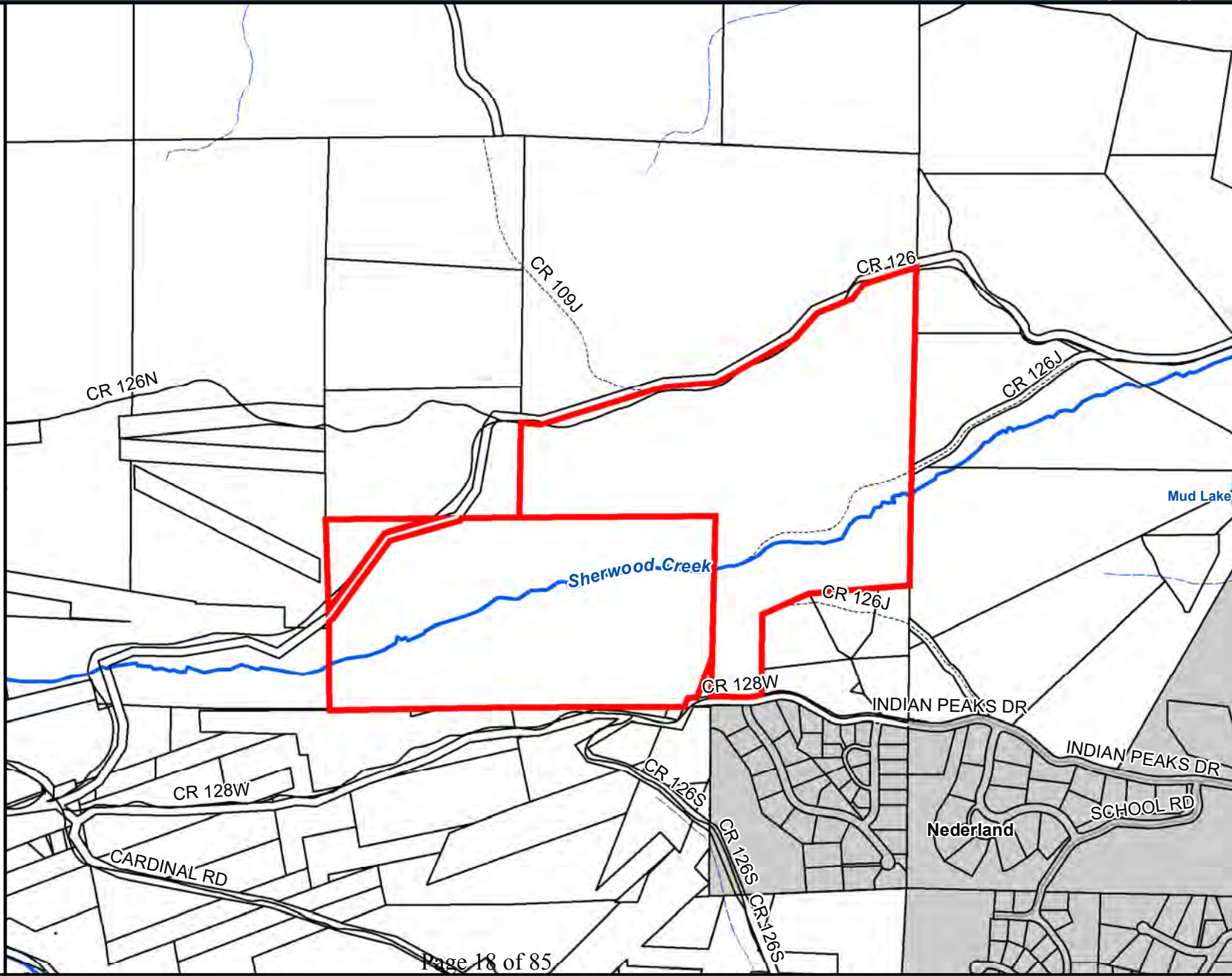
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Location

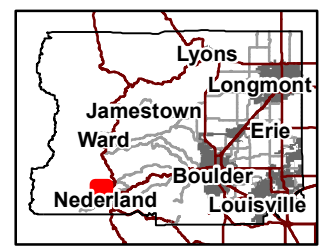
735 COUNTY ROAD 128W, 1600 COUNTY

ROAD 126J

 Subject Parcel



Area of Detail Date: 1/10/2024



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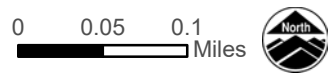
2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

Aerial

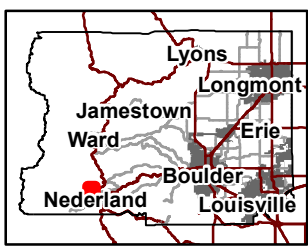
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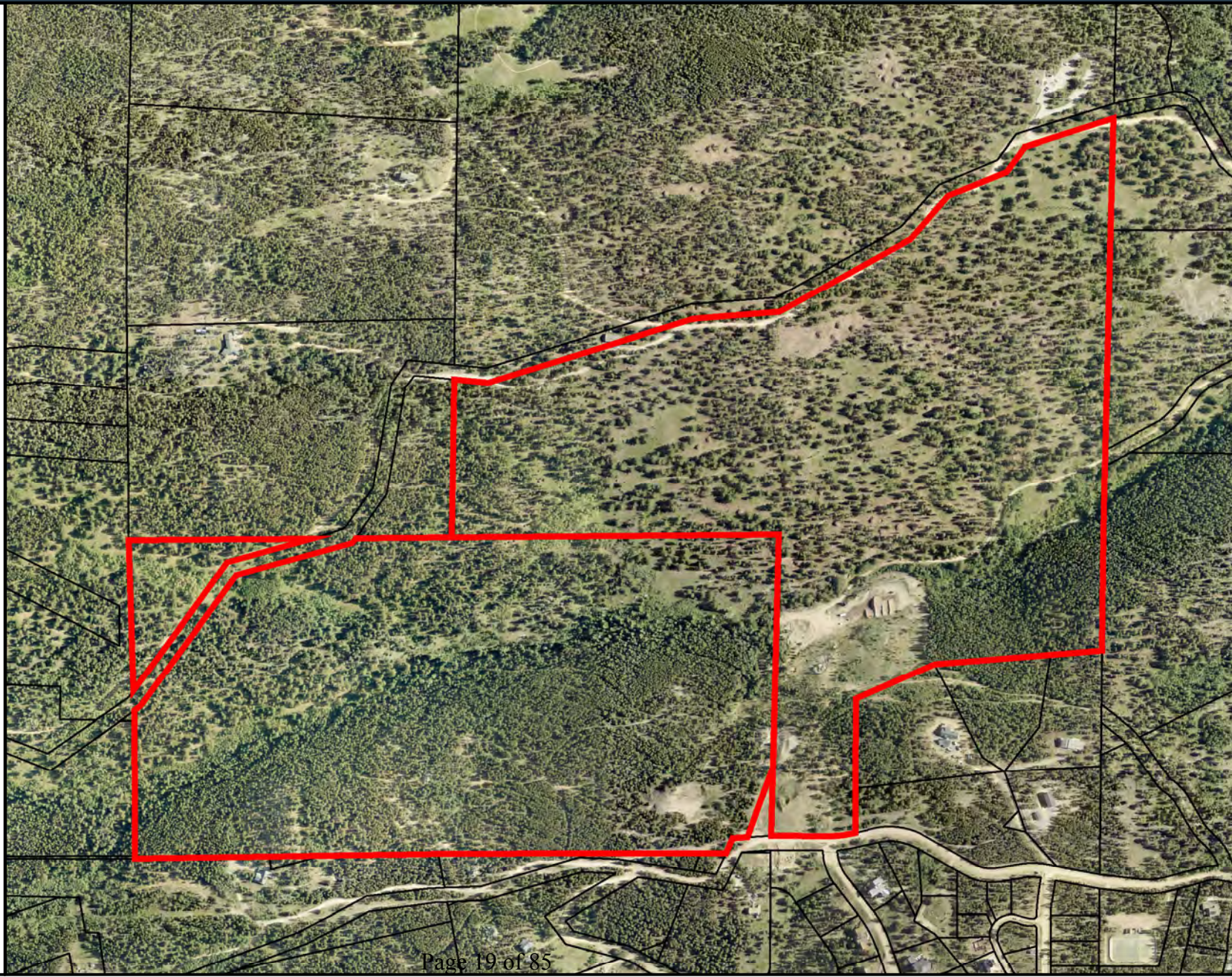
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Aerial

735 COUNTY ROAD 128W, 1600 COUNTY

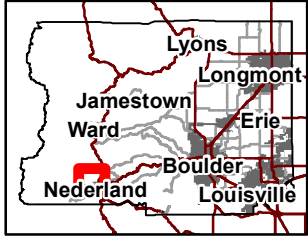
ROAD 126J

 Subject Parcel

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Miles



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Comprehensive Plan

735 COUNTY ROAD 128W, 1600 COUNTY

ROAD 126J

- Subject Parcel
- Critical Wildlife Habitats
- Environmental Conservation Areas
- Riparian Areas
- Wetlands
- Significant Natural Communities

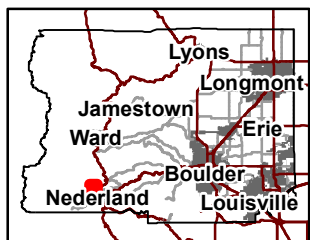
High Biodiversity Areas

- B3: High Biodiversity Significance
- Peak to Peak Scenic Corridor
- Rare Plant Areas

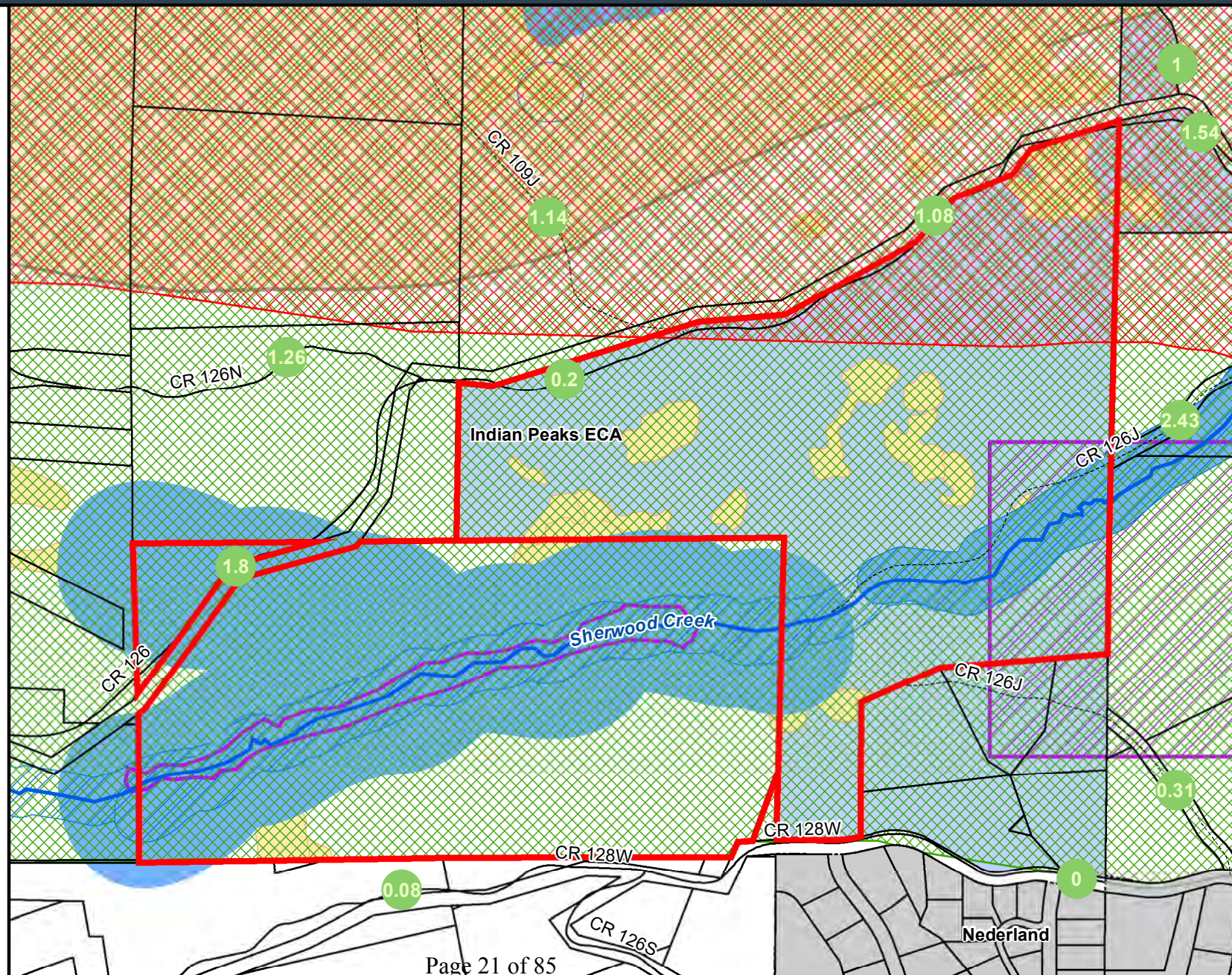
0 0.05 0.1 Miles



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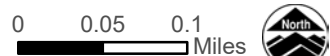
2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

Elevation Contours

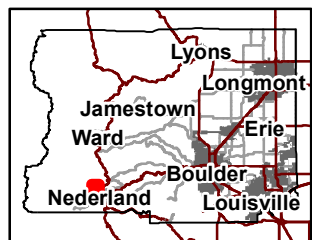
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ROAD 126J

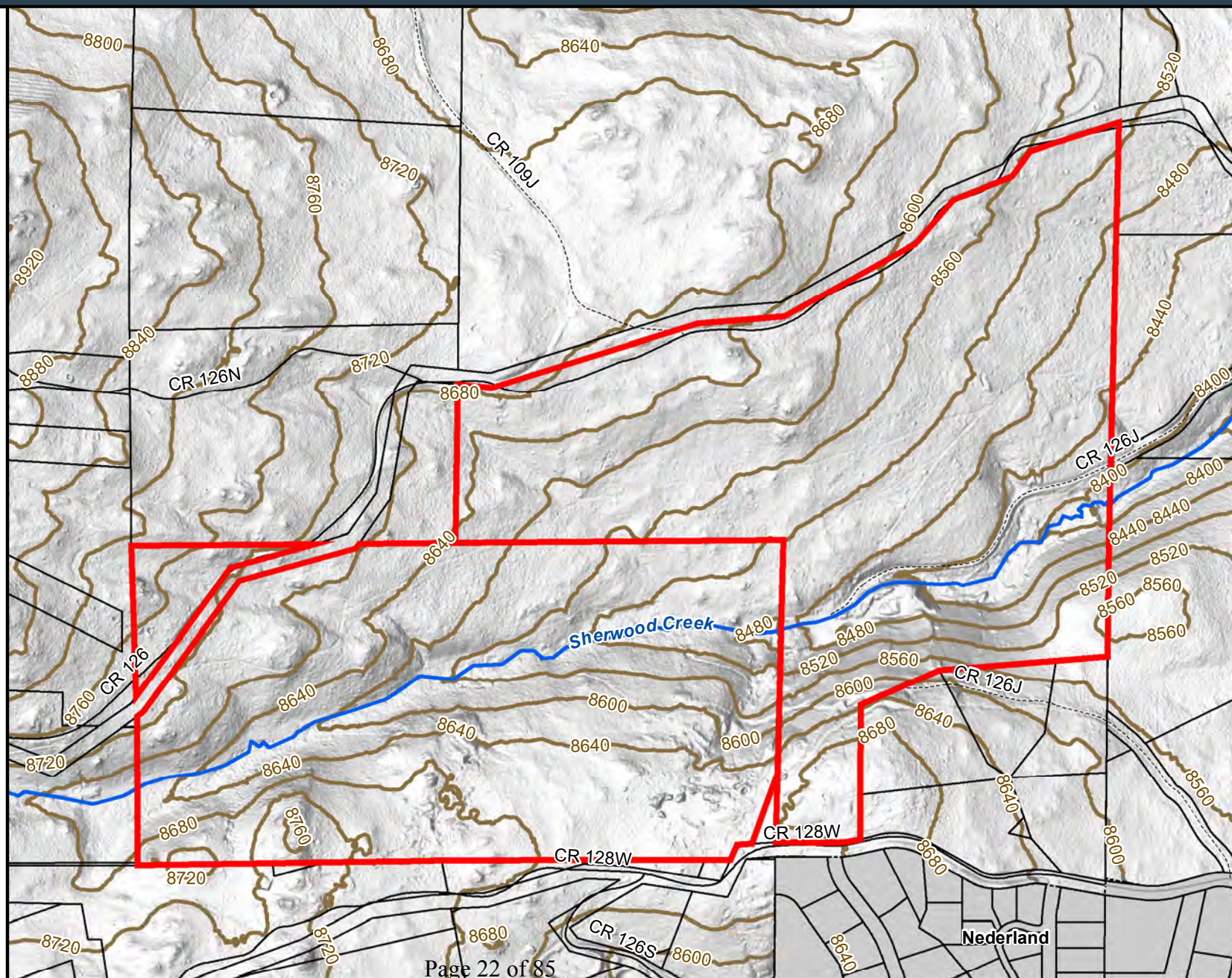
- ▭ Subject Parcel
- Contours 40'



Area of Detail Date: 1/10/2024



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Geologic Hazards

735 COUNTY ROAD 128W, 1600 COUNTY

ROAD 126J

Subject Parcel

Geologic Hazard & Constraint Areas Geology Element

Slope Stability

- Debris flow susceptibility area
- Rockfall susceptibility area
- Landslide susceptibility area
- Landslide Inventory

Heaving Bedrock

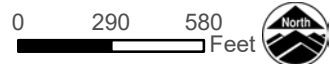
- Steeply Dipping, Heaving Bedrock

Boulder Coal Field

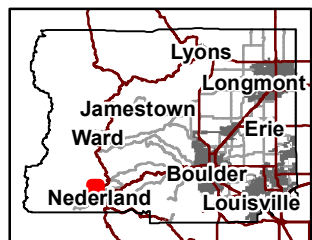
- Extent of Abandoned Coal Mines

Soil and Bedrock Swell Potential

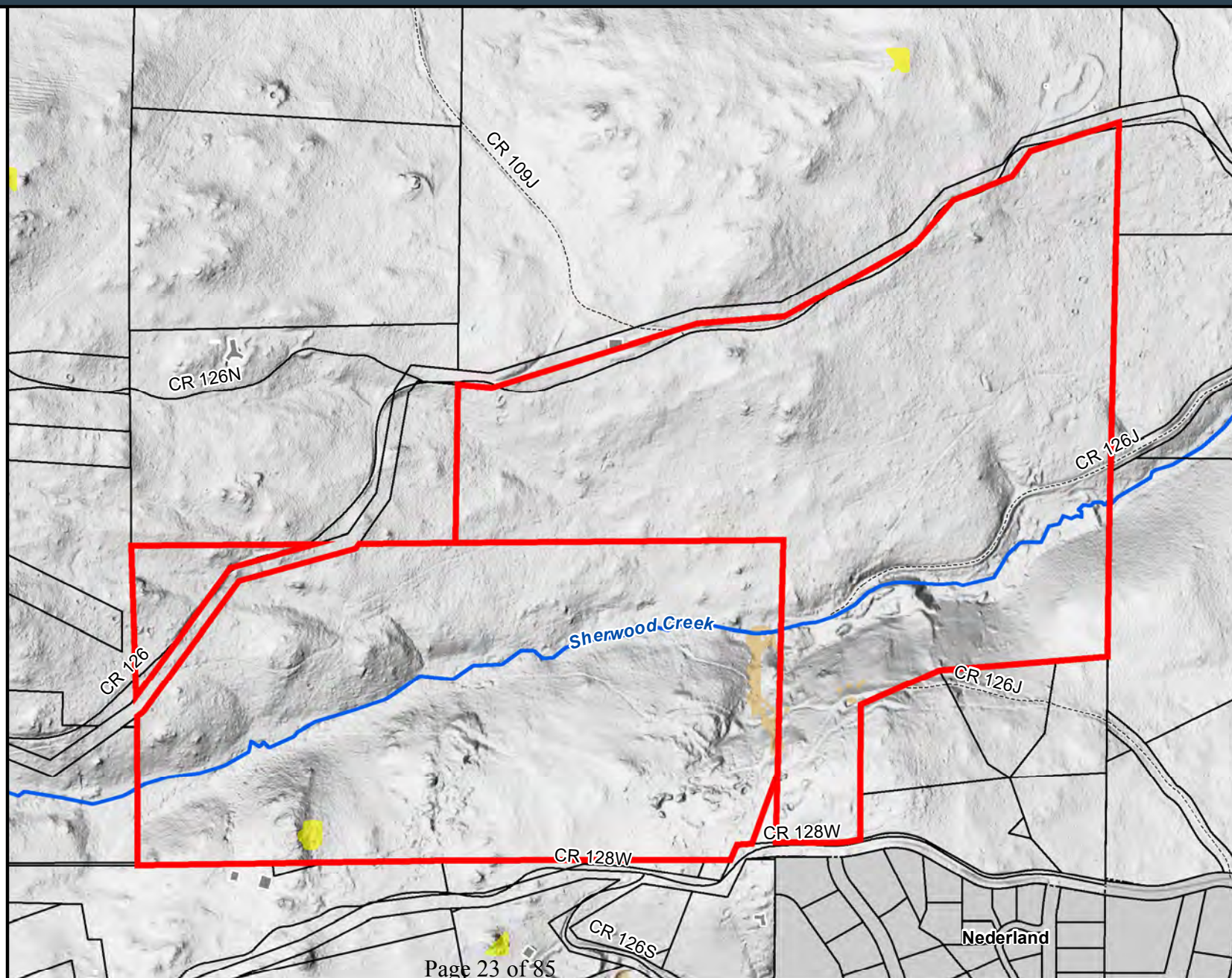
- Very High
- High
- Moderate



Area of Detail Date: 1/10/2024



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Planning Areas

735 COUNTY ROAD 128W, 1600 COUNTY

ROAD 126J

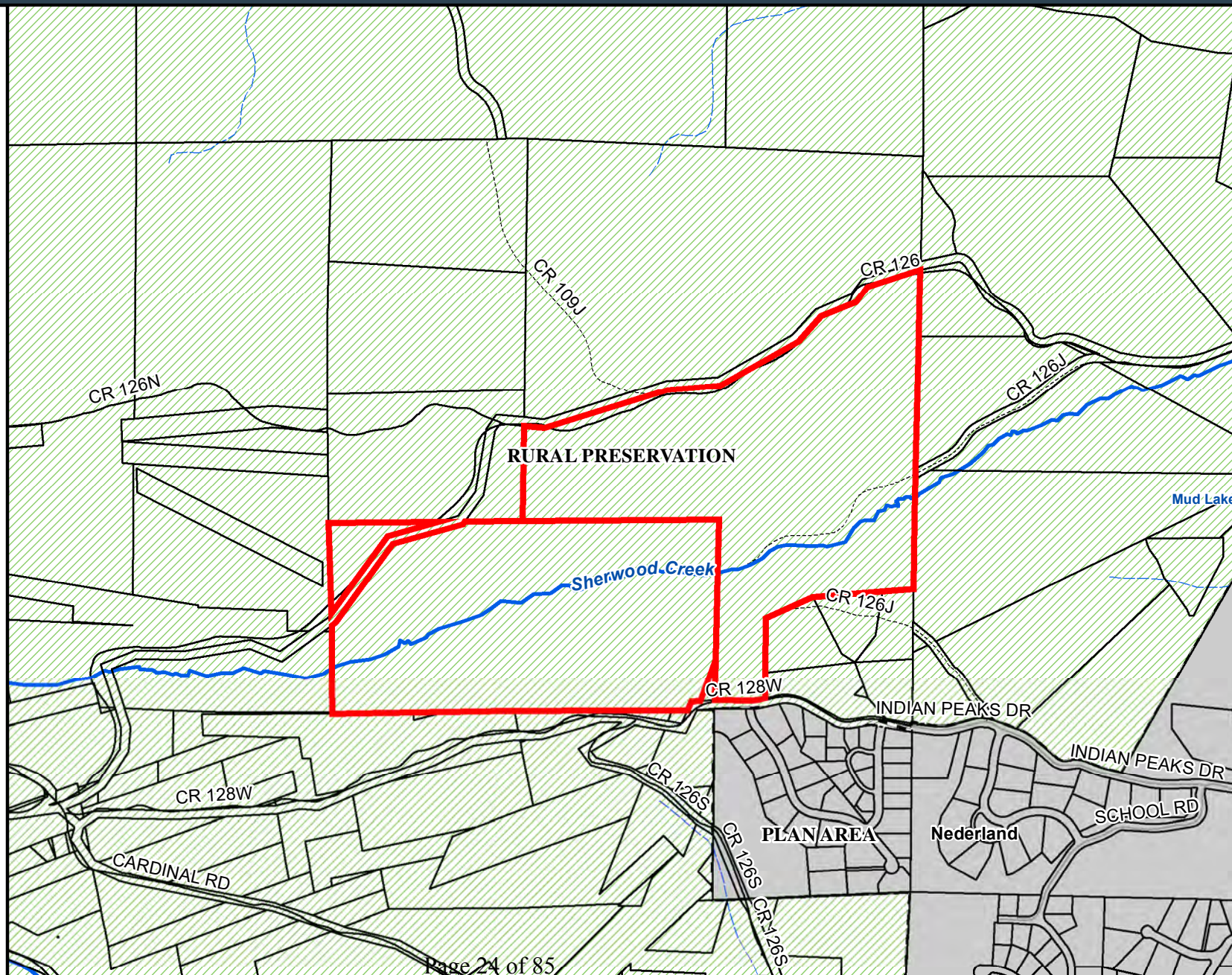
Subject Parcel

Active IGA
Boundary

Active IGA Designation

RURAL
PRESERVATION

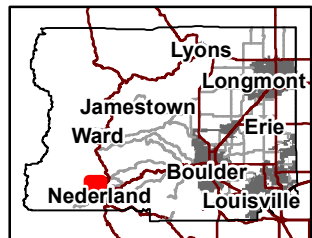
PLAN AREA



0 0.085 0.17
Miles



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Public Lands & CEs

735 COUNTY ROAD 128W, 1600 COUNTY

ROAD 126J

Subject Parcel

Boulder County Open Space

- County Open Space
- County Conservation Easement
- OSMP Properties
- Other Open Space

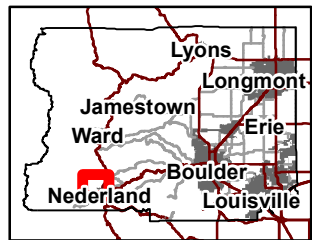
Federal Lands

- USFS Land
- Private
- Conservation Easements

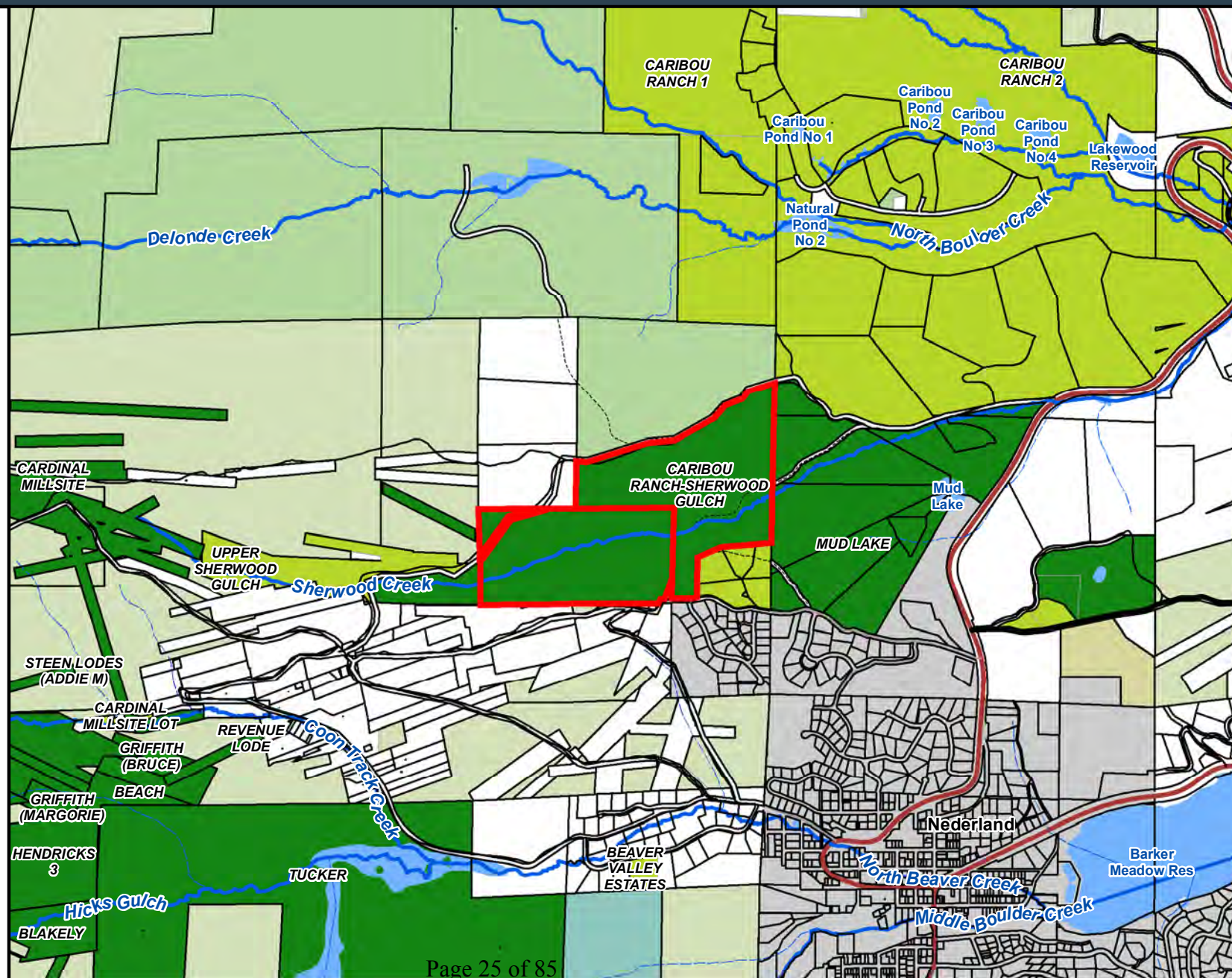
0 0.15 0.3 Miles



Area of Detail Date: 1/10/2024



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735 COUNTY ROAD 128W, 1600 COUNTY

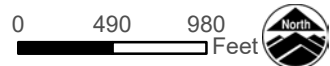
ROAD 126J



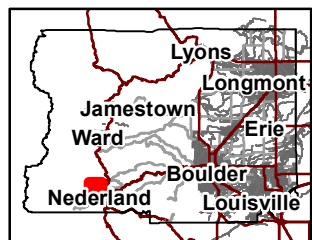
Zoning Districts

■ Forestry

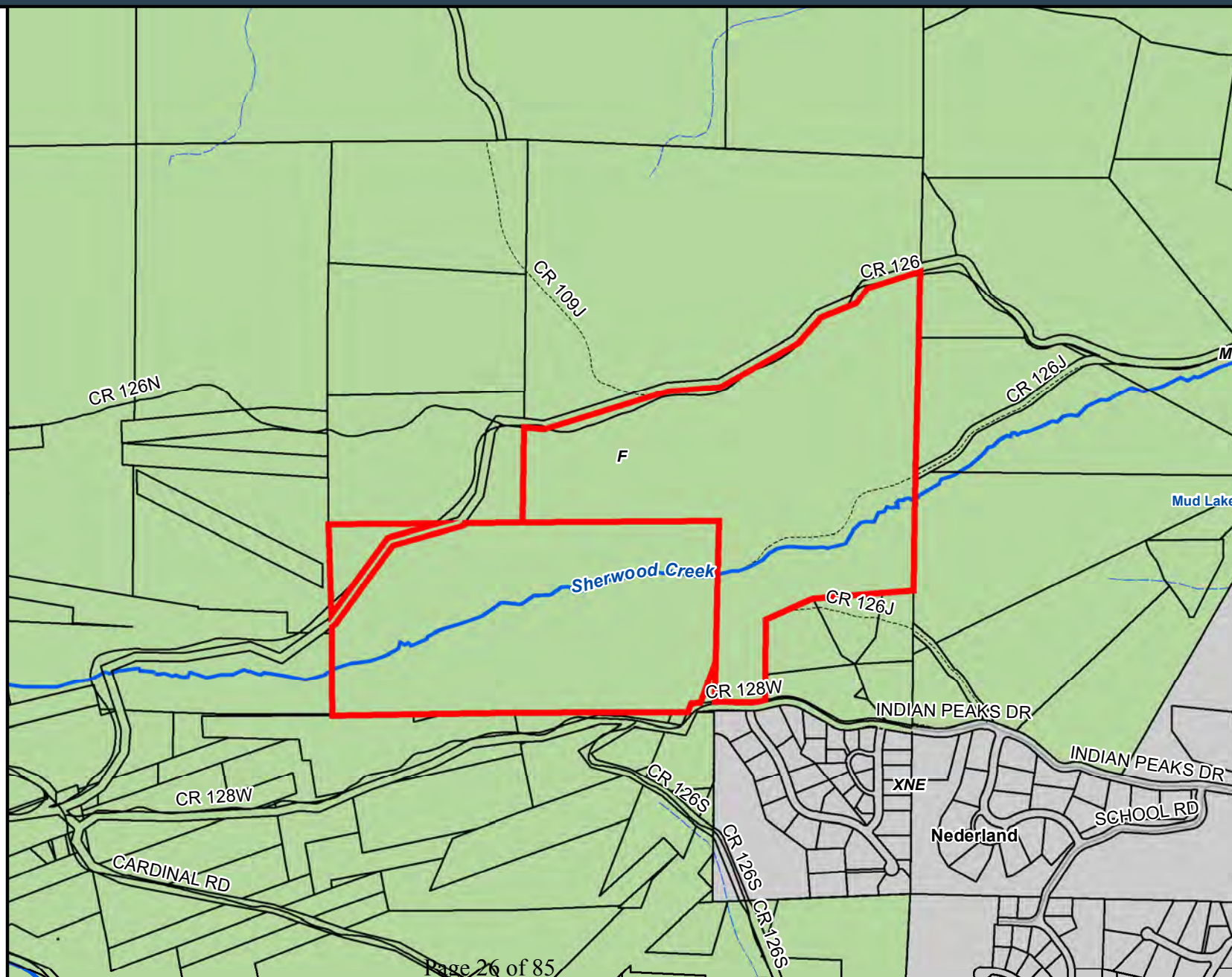
 Mountain
Institutional



Area of Detail **Date:** 1/10/2024



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Limited Impact Special Use Review Fact Sheet

Project Identification

Project Name: Sherwood Creek Restoration
Property Address/Location: 0 County Road 126, Unincorporated
Current Owner: County of Boulder
Size of Property in Acres: 91.55

The applicant(s) is/are required to complete each section of this Limited Impact Special Use Review Fact Sheet even if the information is duplicated elsewhere in the application. Completed Fact Sheets reduce the application review time which helps expediate the Director's Determination. Please make duplicates of this Limited Impact Special Use Review Fact Sheet if the project involves more than two structures.

Determining Floor Area

If an existing wall(s) and/or roof(s) are removed and a new wall(s)/roof(s) are constructed, the associated floor area due to the new wall(s)/roof(s) are considered new construction and must be included in the calculation of floor area for the Limited Impact Special Use Review and shown on this Fact Sheet.

Structure #1 Information

Type of Structure: (e.g. residence, studio, barn, etc.)			Not applicable	
Total Existing Floor Area: (Finished + Unfinished square feet including garage if attached.)			sq. ft.	
Deconstruction:			sq. ft.	
Are new floor areas being proposed where demolition will occur? <input type="checkbox"/> Yes (include the new floor area square footage in the table below) <input type="checkbox"/> No				
Proposed Floor Area (New Construction Only)				
	Finished	Unfinished	Total	
Basement:	sq. ft.	sq. ft.	sq. ft.	Height (above existing grade)
First Floor:	sq. ft.	sq. ft.	sq. ft.	Exterior Wall Material
Second Floor:	sq. ft.	sq. ft.	sq. ft.	Exterior Wall Color
Garage: <input type="checkbox"/> Detached <input type="checkbox"/> Attached	sq. ft.	sq. ft.	sq. ft.	Roofing Material
Covered Deck:	sq. ft.	sq. ft.	sq. ft.	Roofing Color
Total:	sq. ft.	sq. ft.	sq. ft.	Total Bedrooms

Structure #2 Information

Type of Structure: (e.g. residence, studio, barn, etc.)			Not applicable	
Total Existing Floor Area: (Finished + Unfinished square feet including garage if attached.)			sq. ft.	
Deconstruction:			sq. ft.	
Are new floor areas being proposed where demolition will occur? <input type="checkbox"/> Yes (include the new floor area square footage in the table below) <input type="checkbox"/> No				
Proposed Floor Area (New Construction Only)				
	Finished	Unfinished	Total	
Basement:	sq. ft.	sq. ft.	sq. ft.	Height (above existing grade)
First Floor:	sq. ft.	sq. ft.	sq. ft.	Exterior Wall Material
Second Floor:	sq. ft.	sq. ft.	sq. ft.	Exterior Wall Color
Garage: <input type="checkbox"/> Detached <input type="checkbox"/> Attached	sq. ft.	sq. ft.	sq. ft.	Roofing Material
Covered Deck:	sq. ft.	sq. ft.	sq. ft.	Roofing Color
Total:	sq. ft.	sq. ft.	sq. ft.	Total Bedrooms

Grading Calculation

Cut and fill calculations are necessary to evaluate the disturbance of a project and to verify whether or not a Limited Impact Special Use Review (LISR) is required. A Limited Impact Special Use Review is required when grading for a project involves more than 500 cubic yards (minus normal cut/fill and backfill contained within the foundation footprint).
If grading totals are close to the 500 yard trigger, additional information may be required, such as a grading plan stamped by a Colorado Registered Professional Engineer.

Earth Work and Grading

This worksheet is to help you accurately determine the amount of grading for the property in accordance with the Boulder County Land Use Code. Please fill in all applicable boxes.

Note: Applicant(s) must fill in the shaded boxes even though foundation work does not contribute toward the 500 cubic yard trigger requiring Limited Impact Special Use Review. Also, all areas of earthwork must be represented on the site plan.

Earth Work and Grading Worksheet:

	Cut	Fill	Subtotal
Driveway and Parking Areas			
Berm(s)			
Other Grading	4,217	4,626	8,843
Subtotal	4,217	4,626	8,843
* If the total in Box 1 is greater than 500 cubic yards, then a Limited Impact Special Review is required.			
	Cut	Fill	Total
Foundation			
Material cut from foundation excavation that will be removed from the property			

Excess Material will be Transported to the Following Location:

Excess Materials Transport Location: All material disposed of on site. No off-site disposal needed.
Additional fill quantity of 409 CY is from import of boulders and riprap material.
416 CY of compost not included in fill calculations

Is Your Property Gated and Locked?

Note: If county personnel cannot access the property, it could cause delays in reviewing your application.

Project site is behind locked Boulder County gate with standard 2872 lock and key. From gate it is an approximate 1/2 mile walk in one way to site. Please contact applicant to discuss site visit needs.

Certification

I certify that the information submitted is complete and correct. I agree to clearly identify the property (if not already addressed) and stake the location of the improvements on the site within four days of submitting this application. I understand that the intent of the Site Plan Review process is to address the impacts of location and type of structures, and that modifications may be required. Site work will not be done prior to issuance of a Grading or Building Permit.

Signature David Hirt	Date January 8, 2024
-------------------------	-------------------------

Sherwood Creek Restoration Project

Development Narrative for LISU Review

January 8, 2023

PROJECT PROPONENTS

Boulder County Parks & Open Space (BCPOS) (land owner)
 Colorado Division of Reclamation, Mining, and Safety (DRMS)
 Colorado Water Conservation Board (CWCB)

PROJECT OVERVIEW

The Conger mine, founded in 1900, was the largest producing Tungsten Mine in the history of Colorado. Tungsten was used as an additive to harden steel and demand for the metal was high during World War I. Demand continued until the end of the war and the outbreak of influenza in 1917. The mine closed in 1918 and was re-opened briefly in 1938 before permanently closing in 1945. The Conger mine shaft was 991 feet deep making it the deepest shaft in the district. Along with the shaft, the mine included over five miles of horizontal underground workings and a large waste pile. The site also contained a custom mill that processed tungsten ores from mines throughout the state. The site is in the Boulder Creek watershed adjacent to Sherwood Creek. Sherwood Creek is an ephemeral stream with peak flow occurring towards the end of May. Boulder Creek serves as a drinking water source to the Cities of Boulder, Nederland, and thousands of other downstream water users. The majority of the flow in Sherwood is from snow melt and several small seasonal springs and seeps. The Sherwood Creek watershed basin above the mine is relatively small (.86 sq. miles) and the flows fairly minor. A 2 year event is calculated at 9.33 cfs., a 10 year event at 17.9 cfs., and the 100 year at 31.9 cfs.

Presently, a portion of the channel of Sherwood Creek is completely blocked by material related to historic mining activities at the Conger Mine. The impoundment is approximately one- and one-half miles from the headwaters of Sherwood Creek. In the spring, water from the creek pools behind the material and infiltrates through it for approximately 300 to 400 feet before some of it emerges in springs and seeps atop and alongside the access road (see photos in Appendix A). More of the flow emerges 700 feet below the impoundment into the existing stream channel (Figure 1).

There is no viable creek channel or riparian vegetation for the first 300 feet, where the channel is buried. In addition, the lower 400 feet typically lacks above ground flows during much of the year and consists of a very narrow ribbon of riparian vegetation, sandwiched between an access road and the mine waste rock.

DRMS, Boulder County and RESPEC Engineering began a collaborative design process for restoration of Sherwood Creek, with funding provided by both the State of Colorado, Boulder County Parks and Open Space, as well as a \$300,000 grant from the Colorado Water Conservation Board. The overall project goal is to daylight Sherwood Creek by removing the some of the overburden and to establish a new

creek channel alignment and restore the riparian corridor in the portion of Upper Sherwood Creek presently impacted by the Conger site. Due to the sheer volume of material on site and the limited funds, we do not plan to remove the very large existing pile of waste rock on the site, only the material impacting the creek.

Site infrastructure includes a historic ore bin remnant, the existing access road and staging area, and local recreational trails. The overall design will increase the health of the riparian area by improving flood bench connectivity, increasing groundwater recharge, and improving water quality. In addition, establishing a viable riparian ecosystem could reduce the impacts of post-wildfire hazards such as erosion, debris flows, sedimentation and flooding on community values such as water supplies, life and property, and ecosystems in the Sherwood Creek/Boulder Creek Watersheds.

The design team looked at multiple alternatives to construct a new creek alignment while also maintaining the current access road and staging area. This area has been utilized in the past for various work activities by BCPOS, including staging and chipping of materials from adjacent forest thinning operations. After surveys and additional site visits, however, it became apparent that we could not accommodate both the existing access road and a viable creek channel within the constraints of the large tailings pile, historic ore bin, and the undisturbed hillslope to the north, that also exhibits some seeps from past mining activities that we did not want to impact.

Two options that were looked at included swapping the current road alignment with the dry stream channel. This would place some distance between the newly formed creek and the waste pile but would also impact the existing vegetation and still constrain the creek into a narrower channel than desirable.

Another option examined the feasibility of angling the road up to the staging area at a point downstream of the current alignment. This alternative was removed because of steep grades, and the amount of fill to keep the new road stable, with 3:1 slopes on either side of it, that again would impact most of the existing vegetation on site. Additionally, this alternative would still not leave any room for a new creek alignment.

In the end, the team decided to move forward with closing the access road entirely, though leaving a small bench for trail access, and the current road area for the new creek alignment, providing some additional space between the creek and the waste rock pile. The project work will include excavating material that was placed over the original creek bed and excavating a channel and overbank to restore ecological function to the area covered by, and adjacent to, the mine.

Following completion of the removal of the material and restoration of the channel, the area will be seeded and revegetated with native plants. Engineering designs for the project are slated to be completed by early 2024 with construction beginning in August or September of 2024 when flows in the creek are dry. The construction, including revegetation and reporting, should be completed by November of 2024, though there may be additional plantings and seeding into the future as part of the adaptive management of the site.

The primary components of this project, which are discussed in further detail below, include:

- Removing overburden and forming new creek channel with step pools

- Protecting toe of existing waste rock pile with riprap
- Grading of cut material as fill on existing staging area
- Installing grade control structures in Sherwood Creek both upstream and downstream of project
- Maintaining a trail access along creek, utilizing part of current road alignment
- Revegetation and stabilization of the site and any construction impacts

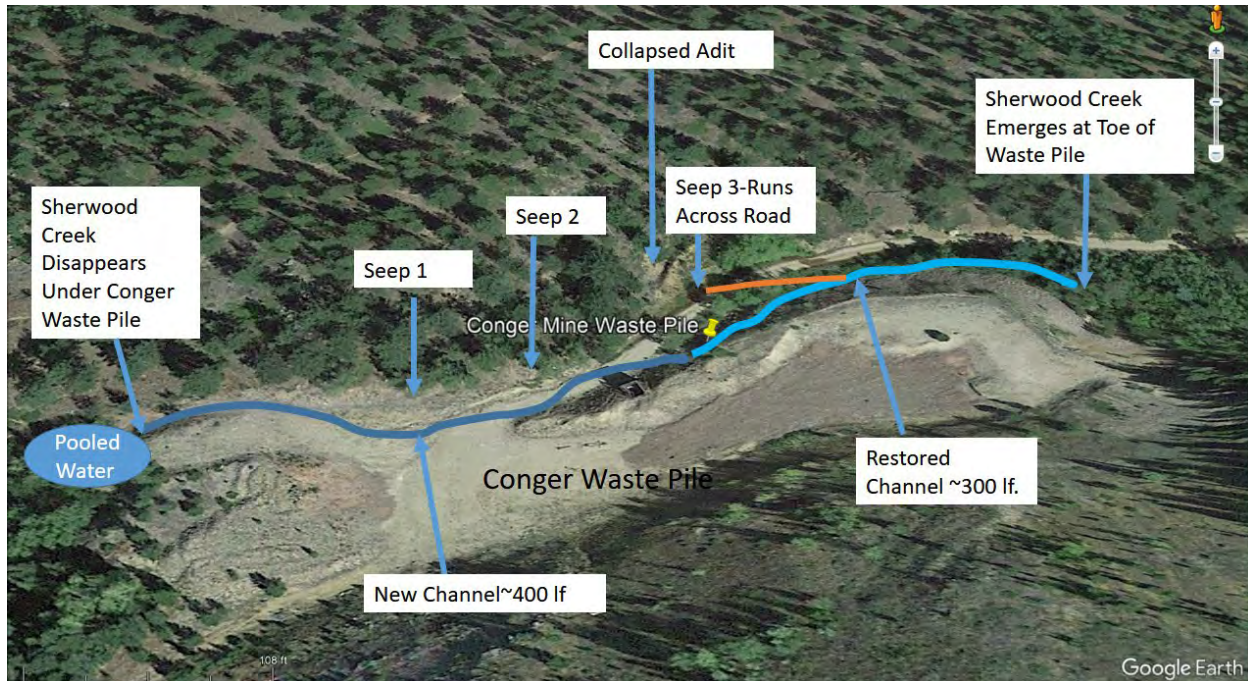


Figure 1. Current conditions of project site with proposed length of stream improvements.

PROJECT LOCATION

The Caribou Ranch - Sherwood Gulch (Sherwood) property was purchased by Boulder County as Open Space in 2013 and lies directly west of the Mud Lake Open Space and south of Caribou Ranch Open Space. It is situated 2.5 miles north of Nederland at an elevation of 8,559 feet. The property serves as a recreational link between these two properties. The vast majority of work will occur on Parcel # 158311000031. The installation of four low tech brush structures will occur just upstream to the west on parcel #158311000006 (Figures 2 and 3).

The project site itself is at the end of County Road 126J which forks off County Road 126 and is behind a locked BCPOS gate. The address is listed as 0 County Road 126. The section of road beyond the gate has no public vehicle access and only serves as an access for BCPOS staff. Additionally, the public utilizes the road as an informal trail through a portion of the area, especially west of where the Caribou Link Trail intersects the road between the Mud Lake and Caribou Ranch Open Space properties.

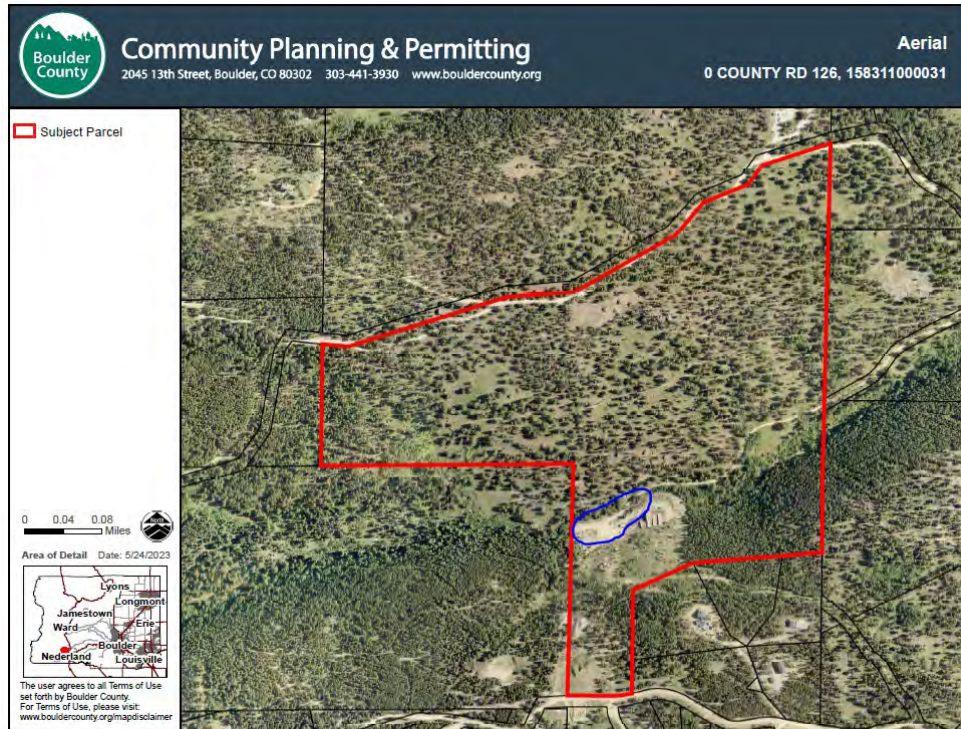


Figure 2. Sherwood Creek Restoration Project location (in blue) within subject parcel.

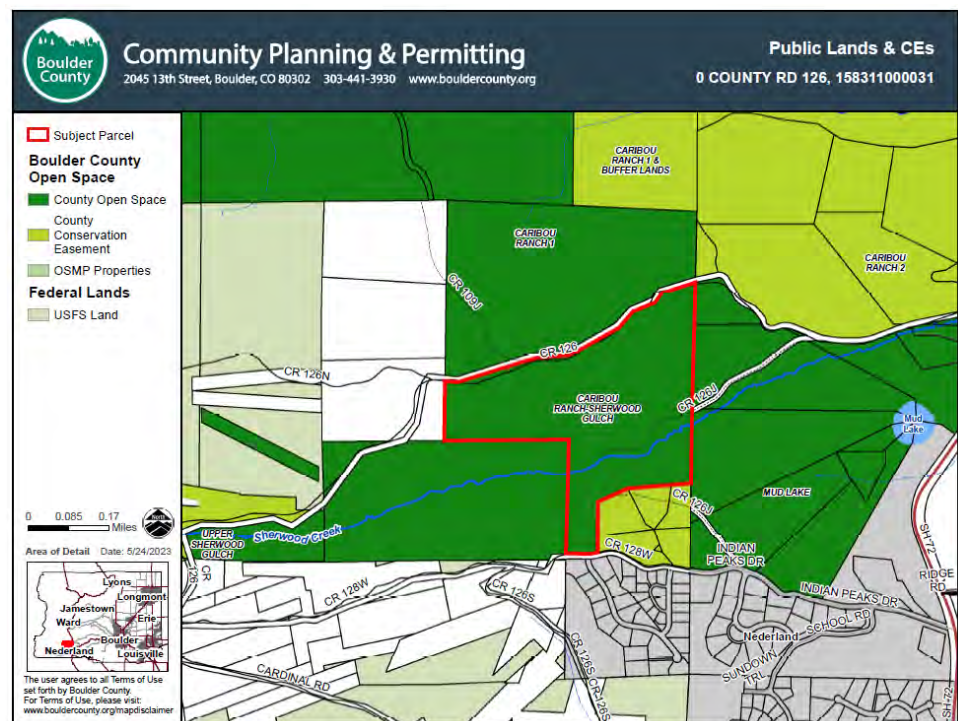


Figure 3. Ownership map of Caribou Ranch/Sherwood Gulch property and surrounding parcels.

PROJECT GOALS

The overall project goal is to daylight Sherwood Creek by removing mining waste rock and restore the riparian corridor in the portion of Upper Sherwood Creek presently impacted by the Conger Mine site. The design will remove the current impoundment of the creek, reduce residency time the water is in contact with the waste rock, and increase the size and health of the riparian area. Establishing a viable riparian ecosystem could also reduce the impacts of post-wildfire hazards such as erosion, debris flows, sedimentation and flooding on community values such as water supplies, life and property, and ecosystems in the Sherwood Creek/Boulder Creek Watersheds.

To meet these goals, DRMS and BCPOS will design and implement a restoration project of mining impacted areas on Sherwood Creek. The following objectives are complimentary and part of the overarching goal to proactively address legacy mine issues that are impacting the user experience and natural resources on the site.

1. Reduce heavy metal contamination and sediment load from the Conger site by widening and improving a degraded riparian corridor and increasing its resilience to rain and flood events.
2. Restore the natural riparian corridor of Sherwood Creek by re-establishing 700 linear feet of stream channel.
3. Restore stream and riparian features that support terrestrial and aquatic life in Sherwood Creek.
4. Reduce the sediment load from the impacted area of Sherwood Creek within the Conger site
5. Provide opportunities for the community to learn about a world-renowned historic mining area, the impacts of mining and the value of restoration activities.

PROJECT DESCRIPTION

Project Components

- REMOVAL OF OVERBURDEN:
 - The project will remove approximately 4,217 cubic yards of overburden that is currently atop the historic creek channel, and in a large pile at the head of the impoundment. At its greatest height, this will require 16 feet of cut (Plan and Profile C-3; Sheet 5 of plan set). All material will be kept on site, and spread within the marked disposal areas, graded to match existing contours, and reseeded with the “Upland” seed mix. A small amount of finer, graded native material will be used to fill the existing swale along the toe of the waste rock pile and below the access road, leaving the mature native trees and willows intact.
 - The only imported material, and accounted for as additional fill, will be riprap for protecting the toe of the existing waste rock pile and various size boulders for constructing step-pools within the new creek channel.

- EXCAVATION OF NEW CREEK CHANNEL ALIGNMENT AND RIP RAP TOE:
 - Most of the new creek channel alignment will be on the footprint of the existing access road. The new channel section will be quite small, consistent with current conditions upstream and downstream of the project site, with an approximate width of 4 feet, and a depth of 12-15". This design can accommodate the calculated 100-year flow event. A floodplain bench, varying in width from 1-15 feet will be constructed on either side of the channel and field fit on site.
 - The current swale along the toe of the waste pile will be filled up to 18 inches in depth of on-site, screened material, which will still allow for the existing willows and cottonwoods to survive, and the toe of the waste rock pile will be armored with 12" riprap up to a height of 3 feet, that will be imported to the site, unless a sufficient quantity is found on site during excavation. Currently, the assumption is that the proper material will not be found on site, and that quantity of import is accounted for in the grading calculations.
 - Because the stream channel will be fairly steep, with grades between 6.5 and 8.5%, we will construct a series of step-pools, placed every thirty to fifty feet along the alignment, to reduce stream velocities and mimic a typical, steeper montane stream. Refer to detail (D-2) in the 30% plan set, Sheet 14. Further iterations of the design will include a table with individual measurements for construction of each step pool; which again, will be quite small to match the overall channel dimensions discussed above.

- INSTALLATION OF GRADE CONTROL STRUCTURES:
 - To further stabilize this section of Sherwood Creek, the design team identified two locations to install grade control structures: one upstream of the project and one downstream. Both are located at knickpoints in the creek, where further downcutting and incision of the creek channel could compromise the integrity of the creek itself over time. Current plans call for the four upstream structures to be built of small diameter 4" vertical wood posts and intertwined brush, similar to other Low-Tech Process Based Restoration techniques that mimic beaver structures. The final design will be dependent on approval through the new Senate Bill 270 process that allows for State approval of minor stream restoration components such as this. These structures could be built by hand and would not require any equipment access.
 - The lower structure would be constructed with 12" rip rap, which would not be very visible due to the location and depth of channel in this location. Access would likely require a few trips with a small skidsteer to move the rock to the channel, utilizing a previously determined path off the existing access road. Due to the minimal impact, it is not anticipated this access route would require any revegetation.

- PUBLIC TRAIL ACCESS:
 - There are two single track public use trails along the hillside just north of Sherwood Creek: the Sherwood Forest Trail and the Chickadee Trail. Neither of these will be

impacted by the construction. The public also currently uses the access road as an informal social trail, especially west of where the Caribou Link Trail intersects the access road. These routes connect the Mud Lake Open Space to the Sherwood Creek Parcel and on to USFS lands and County Roads and private property west, beyond the project site (Figure 4). This section of trail is currently not recognized as a formal trail by BCPOS nor maintained by trails staff. However, due to the historic and consistent use, the trail will be re-established after restoration is complete. Current plans show the trail crossing the new stream channel to avoid seeps on the north bank of the current access road. However, the exact final trail alignment will be determined at a later date, with further consultation with BCPOS Trails staff.

- While the project will close the road to motor vehicles beyond the new turn around point, the design will maintain approximately six feet of the current road to accommodate pedestrian traffic, and if necessary, OHV use by BCPOS and the Boulder County Sheriff's Fire Team. The trail tread will be native soil, consistent with existing conditions. This bench will be reseeded after construction but will likely see immediate trail use that may impact plant establishment, at least along a narrow strip of it.

CONSTRUCTION RELATED REQUIREMENTS

Site Access

The project site can be accessed from County Road 126, off the Peak to Peak Highway, north of Nederland. Just past the entrance to the Mud Lake Open Space, the road forks, heading right up the hill to the Caribou Ranch trailhead, and left behind a locked gate to the Conger Mine and project site. This road is a well graded road, easily accessible by construction equipment and vehicles of all types. No additional improvements to the road are being considered at this time.

Trail Use

Approximately 1,153 feet of the access road is cojoined with the Sherwood Forest Trail from where it meets the Caribou Link Trail west, until it turns north upslope. This then forks into the Chickadee Trail, where both continue to parallel the access road further up slope on the north side of the valley, until they once again intersect County Road 126 to the west (Figure 4). While nearly all cyclists and most other users use the formal trail, the public does occasionally continue to walk up the access road to the Conger Mine site, before joining the Sherwood Forest Trail at that location, or heading southwest to Indian Peaks Drive on social trails.

During construction, public use of the access road beyond Sherwood Forest Trail will be prohibited for safety concerns and signs will be posted alerting the public to that. Users will still be able to utilize all formal trails, including the Caribou Link Trail, the Sherwood Forest, and Chickadee Trails. This information has already been communicated to user groups such as the Boulder Mountainbike Alliance. For the ¼ mile of Sherwood Forest Trail that shares the access road, it is not anticipated there will be any closures for daily vehicle traffic or equipment deliveries, much like there are not closures now for day-to-day park operations. Site lines are good, and traffic speeds are quite low on this unimproved road. If

there is a need to import materials that would necessitate an increased pace of truck traffic, we may assign a flagger at the trail intersection to alert truck traffic to users on the road for that specific day. Otherwise, the trail would remain open along that stretch of road.

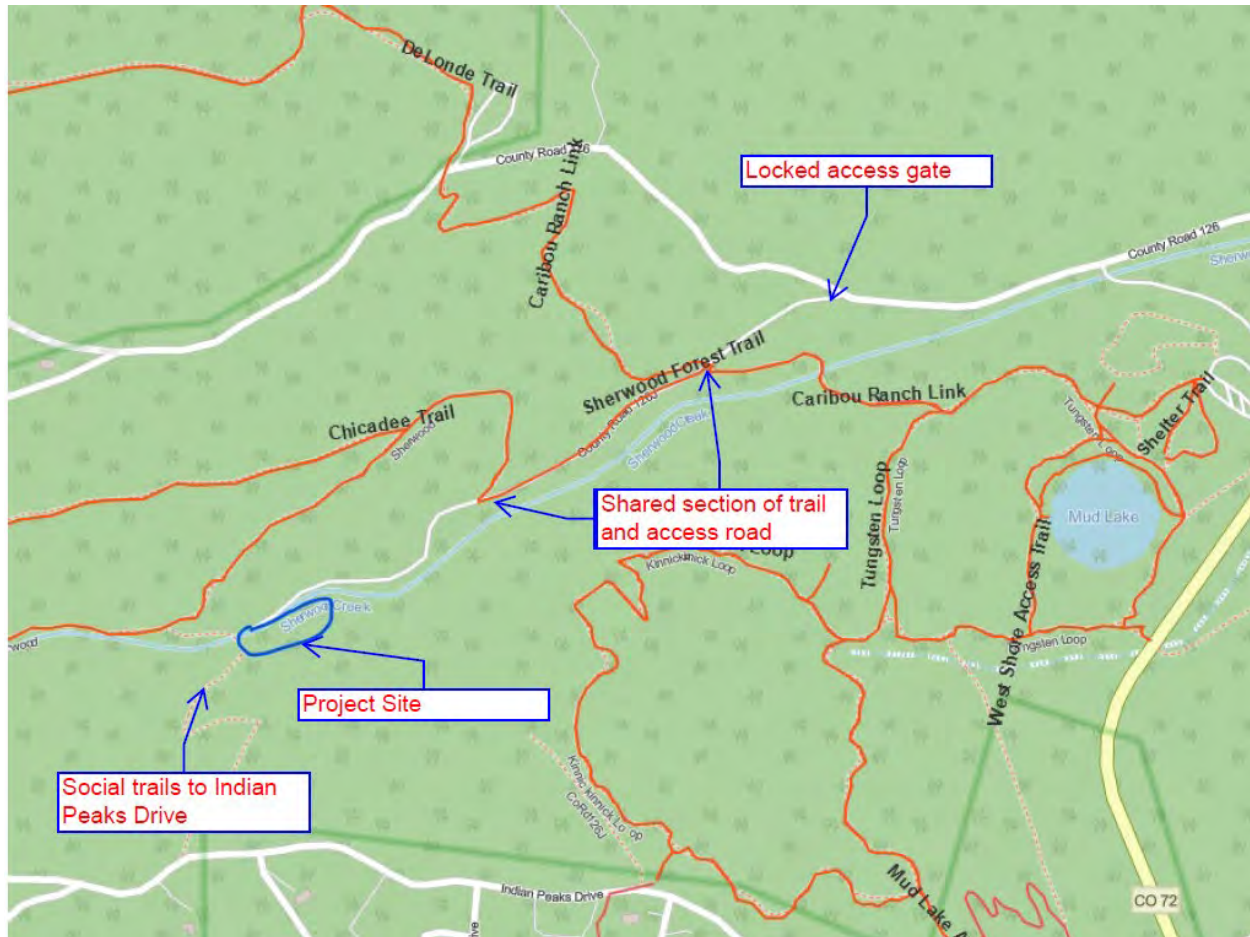


Figure 4. County trail system in orange, with project site highlighted in blue. There will be no impacts to existing formal trails on the property. However, ¼ mile of the access road is used as a portion of the Sherwood Forest Trail, and used as an informal trail above that point where it again connects with the trail system just northwest of the project site.

Earthwork and Grading

Earthwork is summarized in **Table 1**. In total, an estimated 4,217 CY of material will be cut to remove the current impoundment and create the new stream channel. Approximately 110 CY of that appropriate clean material will be utilized as fill along the new stream alignment, primarily to fill in a low existing swale at the toe of the existing waste rock pile. The remainder of the cut material will be disposed of on site, atop the large flat landing. That material will be blended in to match the existing grades of the north-facing hillside.

Table 1. Earthwork summary

Cut, cubic yards	Fill, cubic yards	Imported Fill (Rock)	Total Cut and Fill Quantities
4,217	4,217	409	8,843 CY

Imported Materials, Staging, Refueling, and Hauling Routes

There is an anticipated need for approximately 356 CY of imported 6" to 24" boulders to create step pools within the stream, and to protect the toe of the existing waste rock pile. There is the chance that some of this rock may be found on site, during excavation, however, for the purposes of this plan, we are assuming to import it as necessary. Additionally, 416 CY of compost will be imported to amend the poor soils as part of the revegetation process. That quantity of compost is not included in the cut and fill grading calculations but is included here for the purpose of information related to hauling needs. Typically, this material comes from the closest quarry with suitable rock, which is either in Morrison or Idaho Springs.

All equipment access, daily construction activities, and material hauling will utilize State Highway 72 (Peak to Peak Highway) onto County Road 126, up to the gate, where it will then follow the internal access road to the project site and staging area.

The current, large, flat landing will be the primary staging area for equipment, materials, and daily vehicle traffic and crew parking. This area is completely disturbed and has been historically used for various activities, including a commercial firewood operation, and BCPOS Forestry log storage and chipping. This site will also be the refueling area, which would either be via pickup truck fuel tanks, or an on-site fuel dispenser, with an appropriate spill containment unit, and placed in the far south edge of the mine landing, furthest from the current creek channel. As the project proceeds, eventually access to the existing landing will be cut off with the construction of the new creek channel. At that point a secondary staging area has been identified further east on the access road where a small pull off exists for parking and turning vehicles around. This area will be left as a future turn around for BCPOS staff.

Erosion Control

Erosion control will follow the final Stormwater Management Plan and include Best Management Practices such as biodegradable erosion control logs at the downhill limits of disturbance to prevent soil migration into waterways including around areas of ground disturbance, materials staging, and equipment staging. Two temporary sediment traps will be constructed within the stream channel; the sediment cleared out and rock removed at the end of construction and prior to revegetation.

All disturbed areas will be seeded with hydrologically appropriate native seed mixes and either covered with hydromulch or erosion control fabric depending on slopes and erosive potential. Erosion control

plans will be finalized in coordination with the construction contractor and County at the time of the grading permit and stormwater permit applications.

Revegetation

All areas disturbed during construction will be revegetated with a native seed mix for each appropriate location (L-3 Sheet 13 of plan set). The BCPOS Senior Plant Ecologist designed appropriate mixes for both riparian and upland portions of the project. In addition, areas of the current landing, outside the limits of disturbance, will also be seeded since this area will not see any future vehicle access or use. Hydromulch will be placed in revegetation areas with slopes less than 3H:1V, and erosion control blanket will be placed in revegetation areas with slopes steeper than 3H:1V. A planting plan has been created, and staff is already working with multiple native plant nurseries to secure plant materials for the project. Additionally, BCPOS staff has collected seed, willow cuttings, and has salvaged some plant materials from the site that may be lost during construction efforts, to maintain some site-specific species unavailable in the commercial market and to assist with the ecological function and success of the project.

Construction Timing

It is anticipated that active construction will have a duration of approximately 6-8 weeks. Ideally, construction will occur when the soils on site are typically at their driest and flows in the creek non-existent. Assuming all permits can be secured, construction is slated to occur in the late summer and fall of 2024.

ADDITIONAL CONSIDERATIONS/REVIEW CRITERIA

The entire Sherwood parcel, including the Project area, are within an Environmental Conservation Area per the Boulder County Comprehensive Plan. The project site also intersects areas designated as Riparian Areas and Wetlands. The following discussion outlines the designations and the compatibility of the project with those designations.

Riparian Area/Wetlands

The current state of the riparian area/wetlands in the project site is negatively impacted by past disturbances. The overall goal of this project is to enhance all the values associated with these designations by daylighting a stream previously damaged by human modification and restoring it to a more natural, and historic representation. This should dramatically improve the hydrology, water quality, and plant diversity of the Project area and ensure the continued viability to the larger existing riparian and wetland vegetation surrounding the immediate footprint of the project. The construction footprint will be minimized to avoid damage to any sensitive resources outside the currently impacted areas.

STATUS OF PERMITS

The project team is coordinating with multiple state and federal agencies to obtain appropriate permits.

- **US Army Corps of Engineers (USACE)** – USACE has made a site visit and is supportive of the project. Work will likely be completed under a Nationwide 27 permit (Stream Restoration).
- **Colorado State Historic Preservation Act (SHIPO)** - A cultural resource assessment and survey has been completed and documentation provided for compliance with section 106 of the National Historic Preservation Act, in concurrence with the Colorado State Historic Preservation Act.
- **Stormwater Management Permit, Boulder County** - A Stormwater Management Plan will be organized for submitting a Boulder County SWMP. We will work with County staff to coordinate monitoring of stormwater management measures, as access to the site can be difficult.
- **Boulder County Permits** – A Boulder County grading permit and other related construction permits, as required, will be acquired prior to construction.
- **Colorado Department of Public Health and Environment (CDPHE)** - CDPHE Stormwater General Permit for Construction Activities will be acquired prior to construction. We do not anticipate a dewatering permit will be needed, due to very low to no flow during the anticipated construction window.

Appendix A: SITE PHOTOS



Figure 5. Historic photo of Conger Mill above creek, circa 1938-1945.



Figure 6. Historic ore bin, to be protected and preserved in place.



Figure 7. Sherwood Creek ponded behind impoundment of mine overburden, visible in background, May 18, 2023.



Figure 8. Expression of Sherwood Creek below impoundment at high spring flows, May 18, 2023.



Figure 9. Sherwood Creek percolating through overburden along road. New alignment would follow existing road. Waste rock piles and historic ore bin in background. May 18, 2023.



Figure 10. Sherwood Creek and additional north slope seepage running on access road before entering impacted historic creek channel.



Figures 11, 12. Dry portions of Sherwood Creek along base of tailing pile, May 18, 2023. This low swale will receive some on-site fill, while maintaining the existing woody vegetation. The new stream alignment will be to the left of the current depression, on a portion of the existing access road.



Figure 13. Sherwood Creek exiting waste rock pile at downstream end of impacted stream channel, May 18, 2023.



Figure 14. View from top of waste rock pile, looking down to dewatered stretch of Sherwood Creek.



Figure 15. Landing area above creek. Note piles and ore bin on left. Logs will be removed from site in late fall of 2023. Spoils from excavation will be distributed across toe of slope on right.



EXTERNAL MEMORANDUM

To: David Hirt
Senior Plant Ecologist/Restoration Ecologist
Boulder County Parks & Open Space
5201 St Vrain Rd
Longmont, CO 80503

cc: Julie Annear, Colorado Division of Reclamation, Mining and Safety (DRMS)

From: Jessica Nolle, PE, CFM
Senior Project Manager
RESPEC Company, LLC
720 South Colorado Blvd., Suite 410 S
Denver, CO 80246

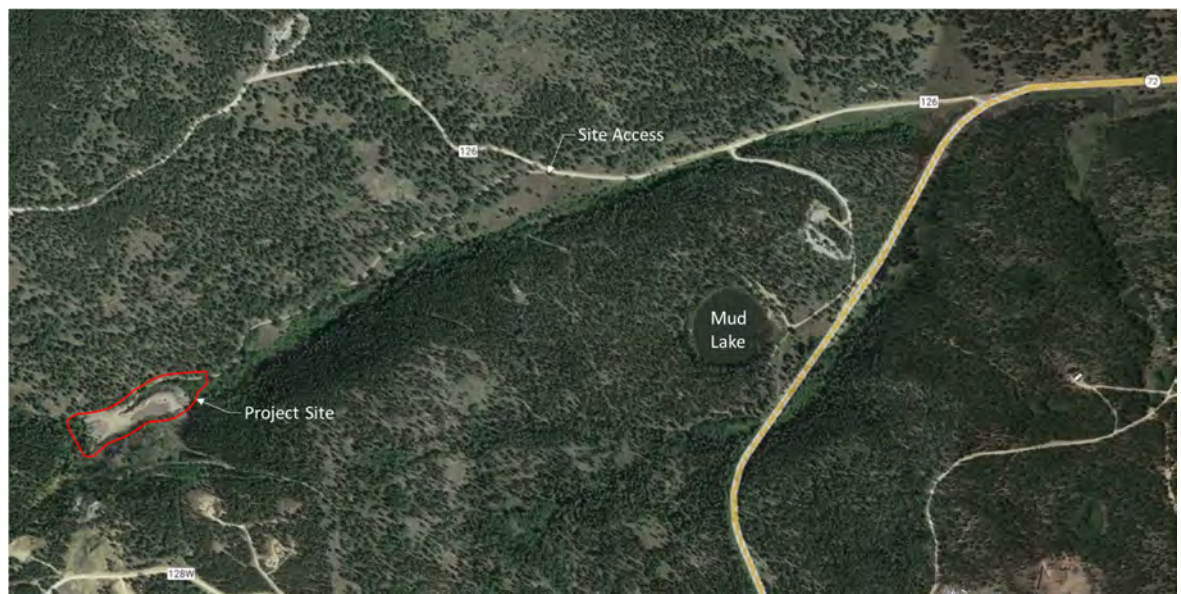
Date: January 5, 2024

Subject: Conger Mine – Sherwood Creek Restoration Design Memo

RESPEC was contracted by DRMS to provide professional engineering services for the design of the Sherwood Creek restoration project. The project includes excavating the large pile of material that was placed over the original thalweg of the creek and constructing a restored channel and overbank. The design will balance site constraints with stream function and pedestrian access. This memo discusses the site constraints, the hydrologic and hydraulic evaluation, and design parameters.

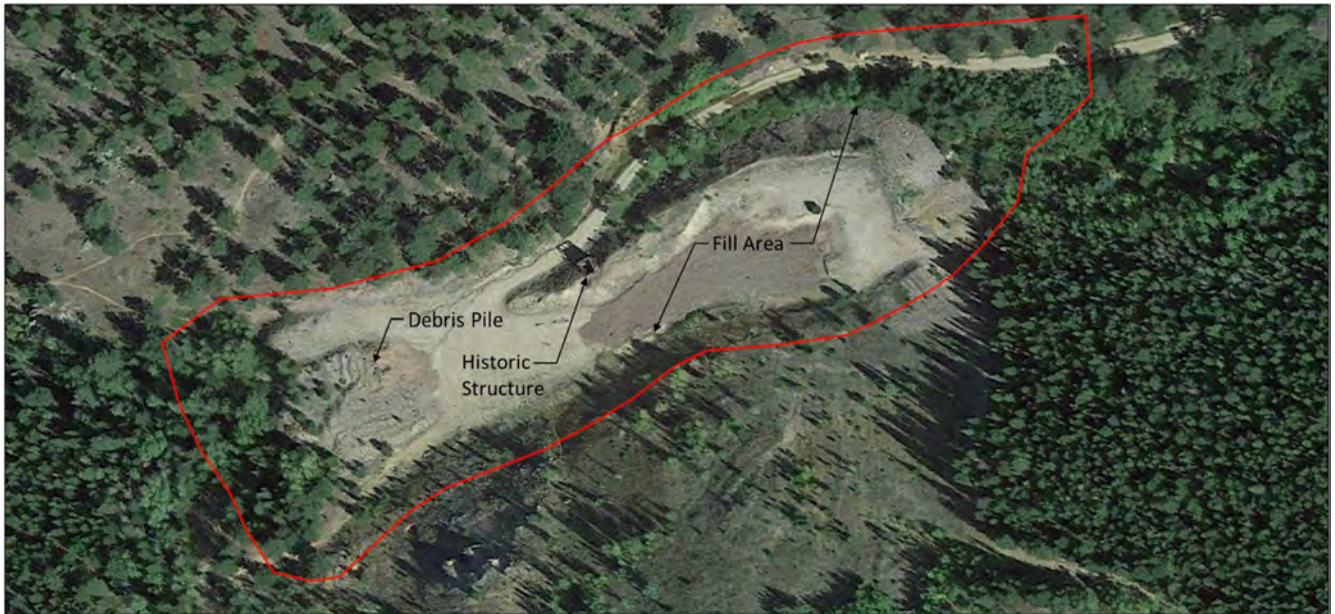
SITE LOCATION

The project is near the historic Conger Mine in Nederland, Colorado. More specifically, the general site location is indicated in the larger-scale figure below.



720 SOUTH COLORADO BLVD.
SUITE 410 S
DENVER, CO 80246
303.757.3655

A more detailed project site view is below. The red boundary is for general information only. Some localized work may be performed outside this boundary. See the plans for details of the proposed work.



HYDROLOGY

A hydrological evaluation of the area tributary to the project site was performed using both StreamStats and HEC-HMS, as indicated by the Boulder County Storm Drainage Criteria Manual. StreamStats was used to delineate the area tributary to the site as a detailed site survey was not possible. StreamStats delineates drainage basins using contours available from the US Geological Survey (USGS). The area tributary to the site is approximately 531 acres.

StreamStats does not require additional variables to calculate peak runoff to a design location as it uses basin characteristics available from the USGS and regression equations specific to the area. HEC-HMS does require additional basin characteristics to be entered. These included basin area, curve number, flow length, and time of concentration, all of which were taken from StreamStats. HEC-HMS uses the SCS method that takes into account initial abstraction and lag time, which can be determined using curve number and time of concentration. Rainfall data used in HEC-HMS is from NOAA Atlas 14. The table below shows the peak runoff calculated for Sherwood Creek at the project site using both StreamStats and HEC-HMS.

Hydrologic Calculation Comparisons		
Design Storm Return Period	StreamStats Peak Flow (CFS)	HEC-HMS Peak Flow (CFS)
1-Year	0	0
2-Year	9.7	0.09
5-Year	14.9	1.43
10-Year	18.5	3.96
50-Year	29.0	22.57
100-Year	33.1	38.64

The 100-year peak flow calculated by HEC-HMS, bolded in the table, was used to complete the hydraulic design of the restored channel.

HYDRAULIC DESIGN

The hydraulic design of the restored channel corridor was an iterative process that sought to balance the dimensions of the channel proper, the width and slope of the overbank, corridor side slope steepness, site access, and the site



constraints. Site constraints included a large fill area comprised of mine waste, shown in the second figure above, that is currently used for staging logging operations. This fill area is too big to be removed and does not allow for an ideal channel corridor width downstream of the debris pile. A historic structure is also present that must be protected. It was determined that site access could be limited to pedestrian access with the capacity for an ATV, as opposed to a large truck, to provide a more optimal channel corridor. The prevailing slope of the area ranges from 2% upstream of the debris pile where there is extensive tree cover to slightly over 8% as the corridor approaches the east end of the fill area. These are steep slopes that will require step pools, similar to those found naturally in mountainous areas, to convey the flow in Sherwood Creek through the site without causing channel erosion. Step pools that provide a localized change in grade from 1 to 2 feet will be provided at increments of 15 to 30 horizontal feet. The step pools include a boulder crest, a small plunge pool, and a localized adverse glide slope out of the plunge pool to mitigate these forces.

The channel bottom width was established at 4 feet. The channel depth is 14 inches. Channel overbanks widths vary from 2 to 14 feet depending on the location. Using a Manning's n of 0.035, this channel cross section will convey the 100-year event upon completion of construction. Ideally, a natural channel is not designed to convey the 100-year event; rather, it is designed to convey a lesser flow so that larger flows will expand into the overbank so that shear stresses will be limited within the channel. However, it is anticipated that there will be some channel aggradation during the first few years after construction as the site reaches dynamic equilibrium. Additionally, a void-filled riprap material will be used in the channel bottom that will resist any hydraulic forces present before the channel reaches dynamic equilibrium. The details of this design are expected to be refined as the design progresses.

CONGER MINE-SHERWOOD CREEK RESTORATION

PREPARED FOR:
STATE OF COLORADO
DIVISION OF RECLAMATION, MINING AND SAFETY
JANUARY 8, 2024

Earthwork Summary Table	
Volumes	Total Earthwork ¹
Total Cut (CY)	4,217
Total Fill (CY)	5,042
Total Grading (CY)	9,259
Total Export (CY) ²	0

1. INCLUDES MASS GRADING, OVEREXCAVATION, AND ROCK WORK
2. ALL CUT MATERIAL SHALL BE DEPOSITED ON-SITE AS BACKFILL



PROJECT LOCATION MAP
SCALE: 1" = 500'



COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

SURVEY CONTROL INFORMATION:

VERTICAL DATUM:
BENCHMARK: AT THE SOUTHERLY SIDE OF SITE, BEING A SET #5 REBAR WITH 1-1/2" ALUMINUM CAP STAMPED "CP 100" WITH AN ELEVATION OF 8474.72 FEET (NAVD 88). NGS POINT M-328, BEING A 3-1/4" BRASS DISK LOCATED APPROXIMATELY 0.8 MILES NORTHEAST OF SITE, WITH A PUBLISHED ELEVATION OF 8263.10 FEET. WAS CHECKED INTO WITH AN AS-MEASURED ELEVATION OF 8262.96 FEET. NO DIFFERENTIAL LEVELING WAS PERFORMED TO ESTABLISH THE ELEVATION OF THE ON-SITE BENCHMARK.

HORIZONTAL DATUM:
COLORADO NORTH STATE PLANE COORDINATES NAD 83(2011) DATUM.
HORIZONTAL CONTROL BASED UPON TRIMBLE VRS NETWORK.

THIS DRAWING USES TRUE COLORADO NORTH STATE PLANE COORDINATES.

REVIEWED BY
(PLACEHOLDER)

BY: _____ DATE: _____

(PLACEHOLDER)

BY: _____ DATE: _____

(PLACEHOLDER)

BY: _____ DATE: _____

(PLACEHOLDER)

BY: _____ DATE: _____

(PLACEHOLDER)

BY: _____ DATE: _____

(PLACEHOLDER)

BY: _____ DATE: _____

(PLACEHOLDER)

SHEET INDEX

SHEET # DRAWING # DESCRIPTION

1	G-1	COVER
2	G-2	NOTES & LEGEND
3	C-1	OVERALL SITE PLAN
4	C-2	SHERWOOD CREEK HORIZONTAL CONTROL PLAN
5	C-3	PLAN & PROFILE 1 OF 2
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7	C-5	TYPICAL SECTIONS
8	C-6	CHANNEL SECTIONS 1 OF 3
9	C-7	CHANNEL SECTIONS 2 OF 3
10	C-8	CHANNEL SECTIONS 3 OF 3
11	L-1	REVEGETATION PLAN
12	L-2	REVEGETATION SECTIONS
13	L-3	REVEGETATION ADDITIONAL NOTES
14	D-1	LOW TECH PROCESS BASED RESTORATION DETAILS
15	D-2	STEP POOL DETAILS
16	S-1	INITIAL STORMWATER MANAGEMENT PLAN
17	S-2	INTERIM STORMWATER MANAGEMENT PLAN
18	S-3	FINAL STORMWATER MANAGEMENT PLAN
19	S-4	STORMWATER MANAGEMENT DETAILS
20	S-5	STORMWATER MANAGEMENT DETAILS

REVISION			
DESIGNED	JMR		
DRAWN	JMR		
CHECKED	JHN		
DATE	01/08/2024		

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STATE OF COLORADO
DIVISION OF RECLAMATION,
MINING AND SAFETY
1313 SHERMAN ST., ROOM 215
DENVER, CO 80203
303-801-7644

CONGER MINE -
SHERWOOD CREEK
RECLAMATION

COVER

DRAWING NUMBER:

G-1

SHEET 1

[illegible]



NOTES:

1. EXCAVATE THE UPPER 10' OF THE WASTE PILE IMMEDIATELY SOUTH OF THE CHANNEL RESTORATION TO EL 8487.33 & PLACE & COMPACT THE EXCAVATED MATERIALS IN THE CONSOLIDATION AREA.
2. EXCESS CHANNEL EXCAVATION SHALL ALSO BE PLACED & COMPACTED IN THE CONSOLIDATION AREA.
3. WASTE PILE CONSOLIDATION AREA & TRAILER TURNAROUND TO BE FIELD FIT BY CONTRACTOR AND BOULDER COUNTY.
4. LOCATIONS OF LOW TECH PROCESS BASED RESTORATION & HEAD CUT ARE APPROXIMATE AND SHALL BE FIELD FIT BY CONTRACTOR, ENGINEER, AND BOULDER COUNTY. ACCESS PATH TO HEAD CUT SHALL BE FOR SMALL EQUIPMENT AND FIELD FIT BY CONTRACTOR AND BOULDER COUNTY.
5. WASTE PILE BERM SHALL BE GRADED DOWN IN THIS AREA AT A LATER DATE AT THE ADVISEMENT OF BOULDER COUNTY.

REVISION			
DESIGNED	JMR		
DRAWN	JMR		
CHECKED	JHN		
DATE	01/08/2024		

RESPEC
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SUITE 410S
DENVER, CO 80246
PHONE (303) 757-3655



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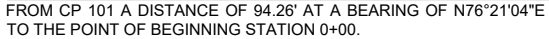
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SHERWOOD CREEK
RECLAMATION

OVERALL SITE PLAN

DRAWING NUMBER:

C-1

SHEET 3



CURVE #	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH	DELTA ANGLE
C1	4.68	10.00	N74°55'00"W	4.64	026°49'37"
C2	37.21	100.00	N50°50'35"W	37.00	021°19'13"
C3	2.12	10.00	N46°14'59"W	2.11	012°08'01"
C4	12.48	17.85	N72°20'59"W	12.23	040°04'00"
C5	19.29	75.00	N85°12'20"W	19.23	014°44'01"
C6	19.56	75.00	N85°18'37"W	19.50	014°56'34"
C7	14.13	75.00	N87°23'04"W	14.11	010°47'40"
C8	18.74	40.00	S84°35'27"W	18.57	026°50'38"
C9	17.73	75.00	S77°56'29"W	17.69	013°32'42"
C10	17.59	75.00	S77°59'43"W	17.55	013°26'13"
C11	17.77	50.00	S61°05'44"W	17.67	020°21'45"
C12	17.65	75.00	S57°39'24"W	17.61	013°29'05"
C13	18.35	75.00	S57°23'26"W	18.30	014°01'02"
C14	34.01	200.00	S45°30'35"W	33.97	009°44'40"
C15	137.81	266.22	S55°28'01"W	136.27	029°39'32"
C16	32.90	355.42	S65°53'41"W	32.89	005°18'12"
C17	91.80	200.00	S76°23'31"W	90.99	026°17'52"
C18	79.77	216.30	S78°58'34"W	79.32	021°07'46"
C19	10.66	10.00	N81°38'02"W	10.17	061°06'03"
C20	8.78	10.00	N76°13'40"W	8.50	050°17'20"
C21	3.95	10.00	S63°33'07"W	3.93	022°39'05"

SURVEY CONTROL INFORMATION:


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HORIZONTAL DATUM:
COLORADO NORTH STATE PLANE COORDINATES NAD 83(2011) DATUM.
HORIZONTAL CONTROL BASED UPON TRIMBLE VRS NETWORK.

THIS DRAWING USES TRUE COLORADO NORTH STATE PLANE COORDINATES.

NOTES:

1. WASTE PILE CONSOLIDATION AREA TO BE FIELD FIT BY CONTRACTOR AND BOULDER COUNTY.
2. SEE SHEET 7 FOR TYPICAL SECTIONS OF CHANNEL AND NATIVE MATERIAL PEDESTRIAN TRAIL.
3. SEE SHEETS 8-10 FOR CUT SECTIONS OF THE SAME.
4. NATIVE MATERIAL PEDESTRIAN TRAIL WILL BE FINALIZED WITH A LATER SUBMITTAL IN COLLABORATION WITH BOULDER COUNTY PARKS AND OPEN SPACE. FIELD FITTING MAY BE REQUIRED BY CONTRACTOR AT THE BEHEST OF BOULDER COUNTY OR THE PROJECT MANAGER ONCE CONSTRUCTION BEGINS.

	RESPEC	DESIGNED	JMR
	720 S COLORADO BLVD	DRAWN	JMR
	SUITE 410S	CHECKED	JHN
	DENVER, CO 80246 PHONE (303) 757-3655	DATE	01/08/2024
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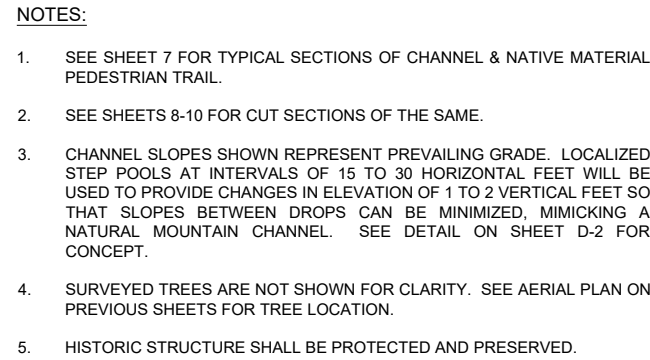
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CONGER MINE -
SHERWOOD CREEK
RECLAMATION

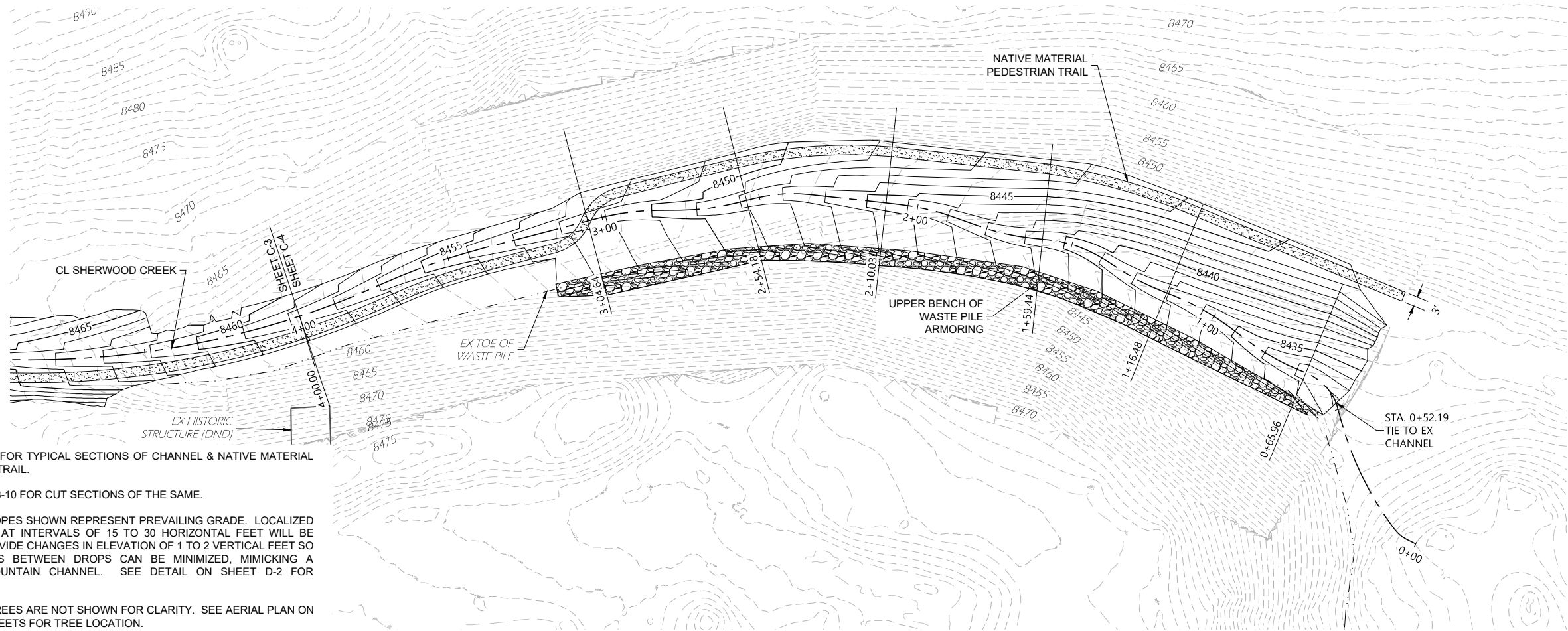
SHERWOOD CREEK HORIZONTAL CONTROL PLAN

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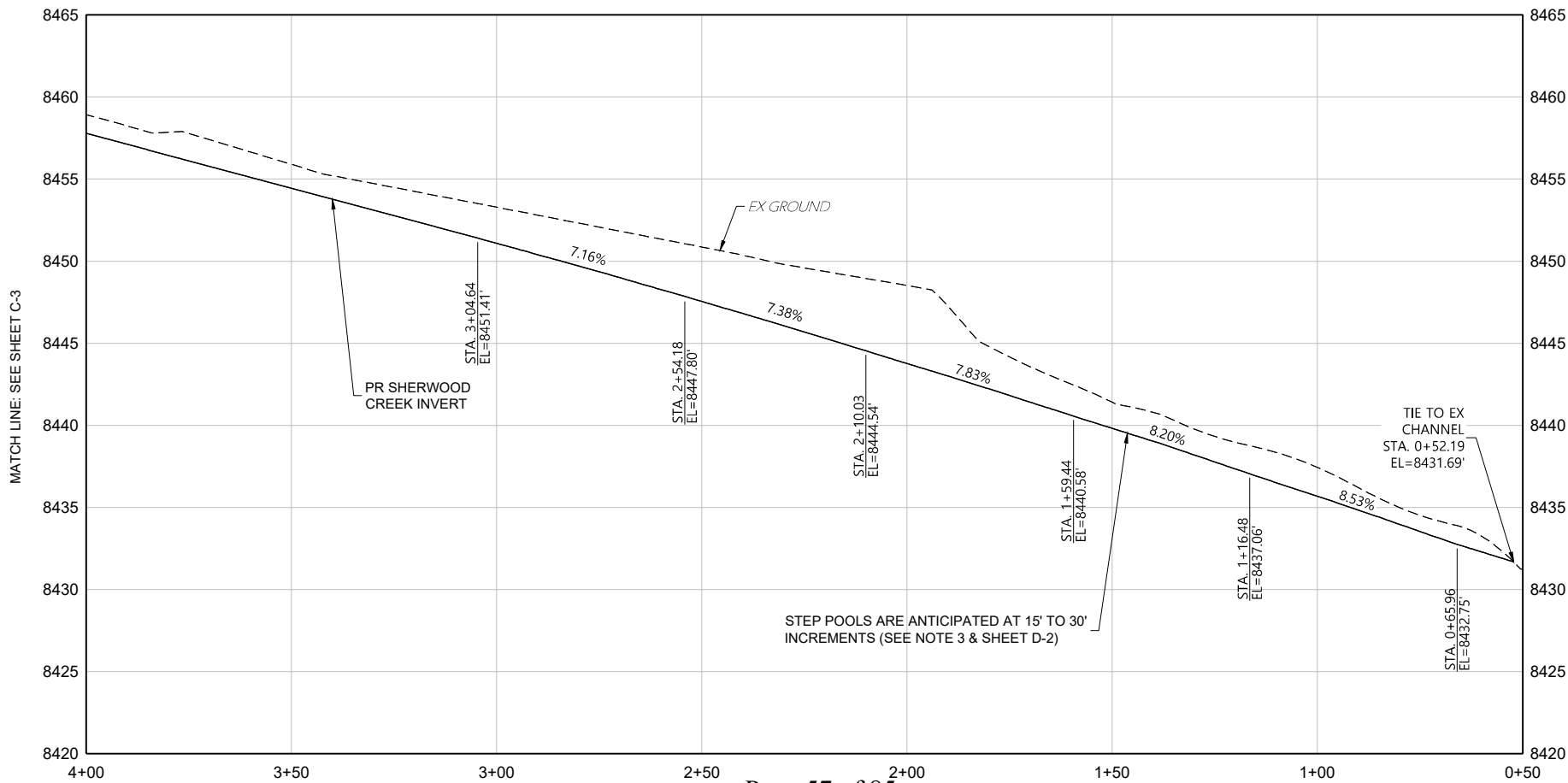
C-2
SHEET 4



DRAWING NUMBER:	C-3
	SHEET 5
PLAN & PROFILE 1 OF 2	
CONGER MINE - SHERWOOD CREEK RECLAMATION	
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- NOTES:**
- SEE SHEET 7 FOR TYPICAL SECTIONS OF CHANNEL & NATIVE MATERIAL PEDESTRIAN TRAIL.
 - SEE SHEETS 8-10 FOR CUT SECTIONS OF THE SAME.
 - CHANNEL SLOPES SHOWN REPRESENT PREVAILING GRADE. LOCALIZED STEP POOLS AT INTERVALS OF 15 TO 30 HORIZONTAL FEET WILL BE USED TO PROVIDE CHANGES IN ELEVATION OF 1 TO 2 VERTICAL FEET SO THAT SLOPES BETWEEN DROPS CAN BE MINIMIZED, MIMICKING A NATURAL MOUNTAIN CHANNEL. SEE DETAIL ON SHEET D-2 FOR CONCEPT.
 - SURVEYED TREES ARE NOT SHOWN FOR CLARITY. SEE AERIAL PLAN ON PREVIOUS SHEETS FOR TREE LOCATION.
 - HISTORIC STRUCTURE SHALL BE PROTECTED AND PRESERVED.

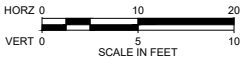
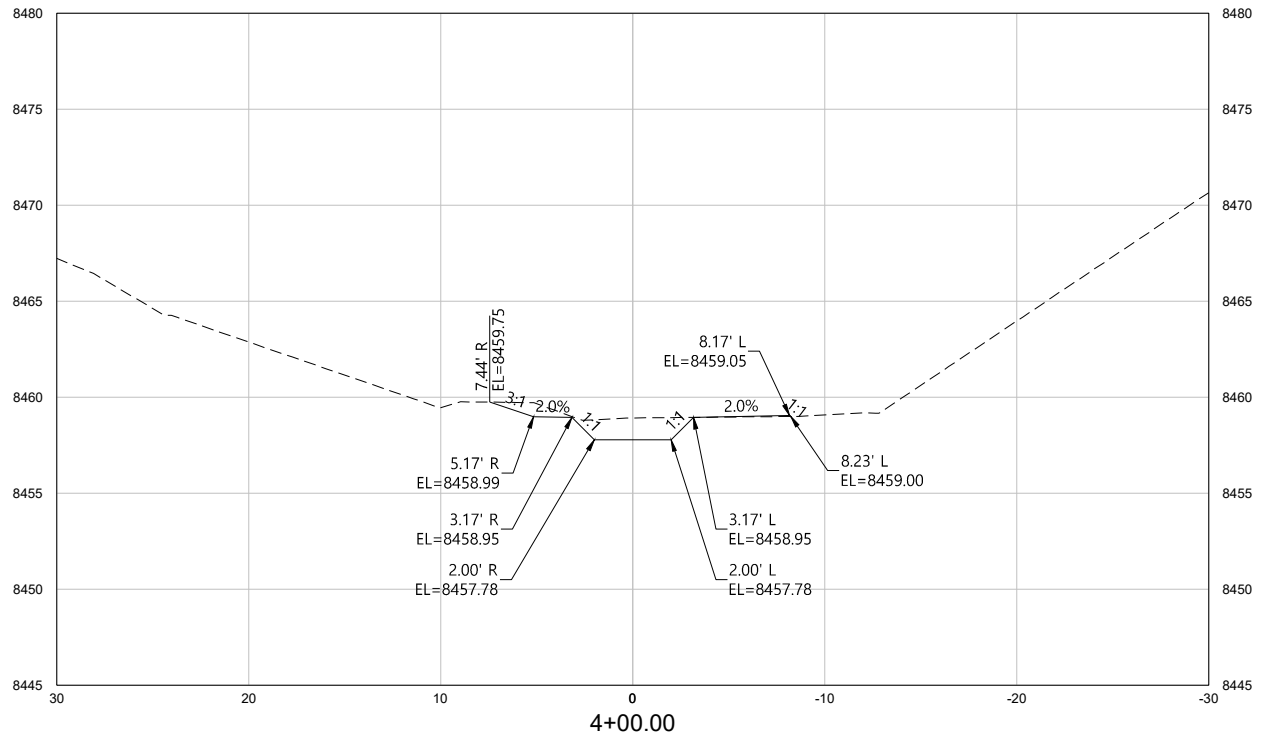
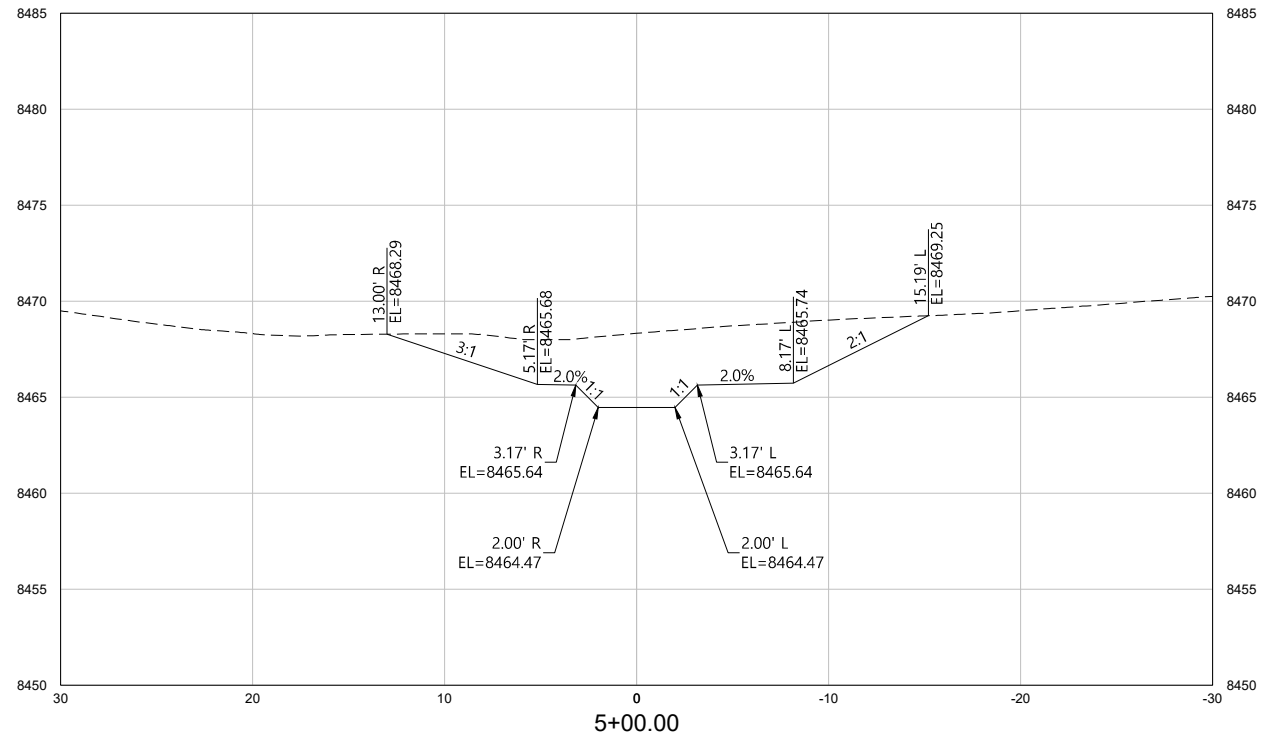
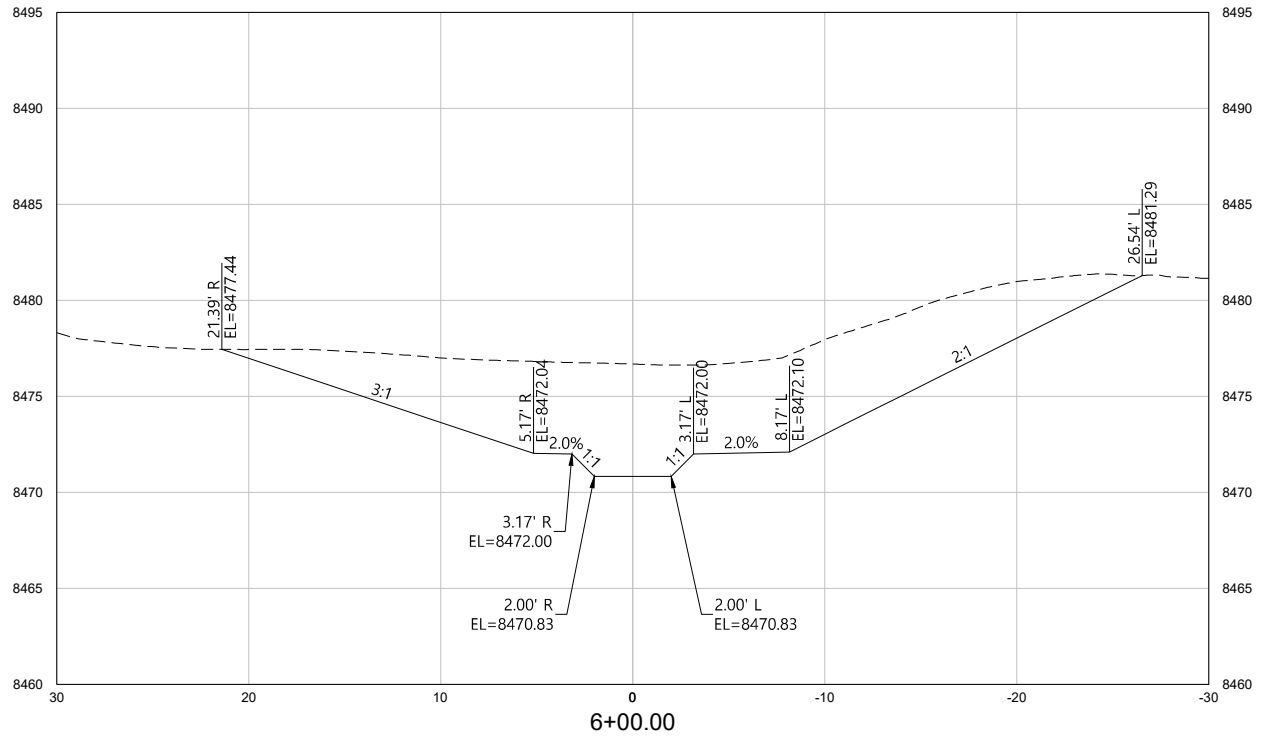
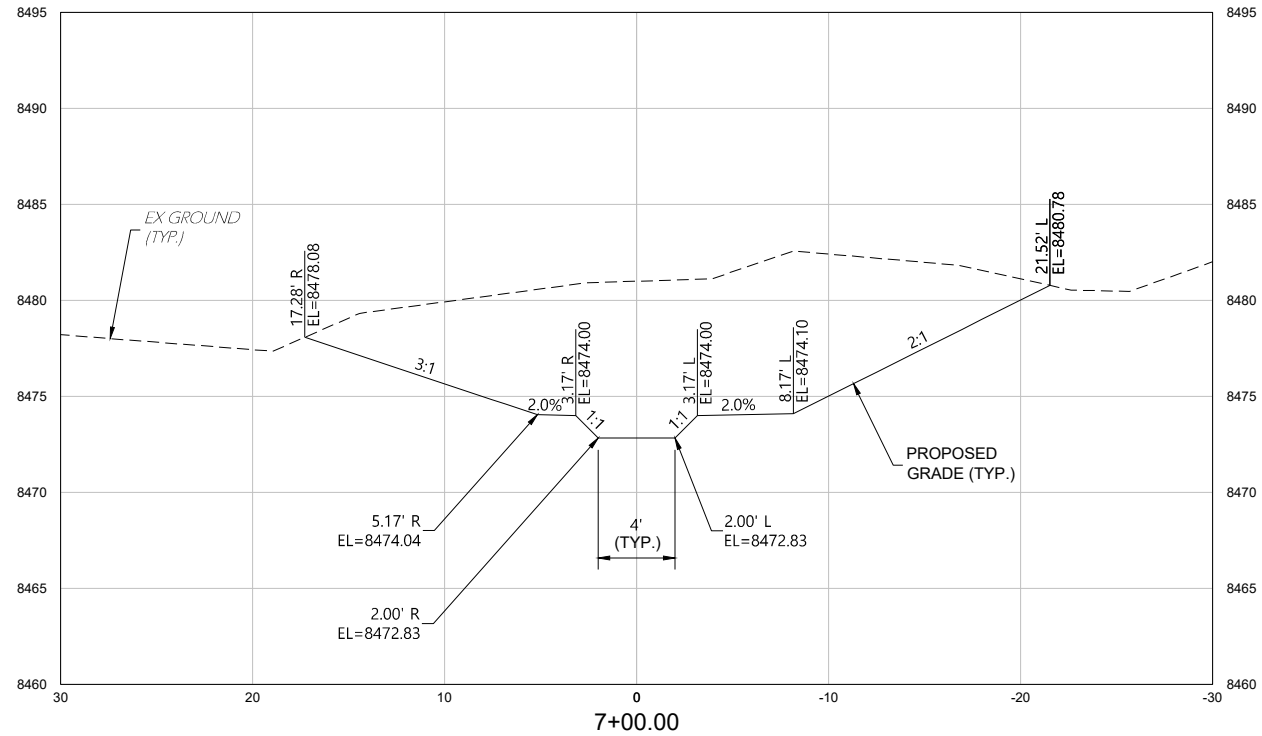


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CONGER MINE - SHERWOOD CREEK RECLAMATION			
PLAN & PROFILE 2 OF 2			
DRAWING NUMBER: C-4			
SHEET 6			



1. THE CHANNEL HAS BEEN DESIGNED TO INITIALLY CONVEY THE 100-YEAR EVENT WITHIN THE BANKFULL CHANNEL IN ANTICIPATION THAT SIGNIFICANT AGGRADATION IS PROBABLE IN THE FIRST 2-3 YEARS POST CONSTRUCTION..
2. IT IS ANTICIPATED THAT A MORE NATURAL FLOODPLAIN CONNECTIVITY WILL OCCUR ONCE THE CHANNEL ACHIEVES DYNAMIC EQUILIBRIUM.

[illegible]



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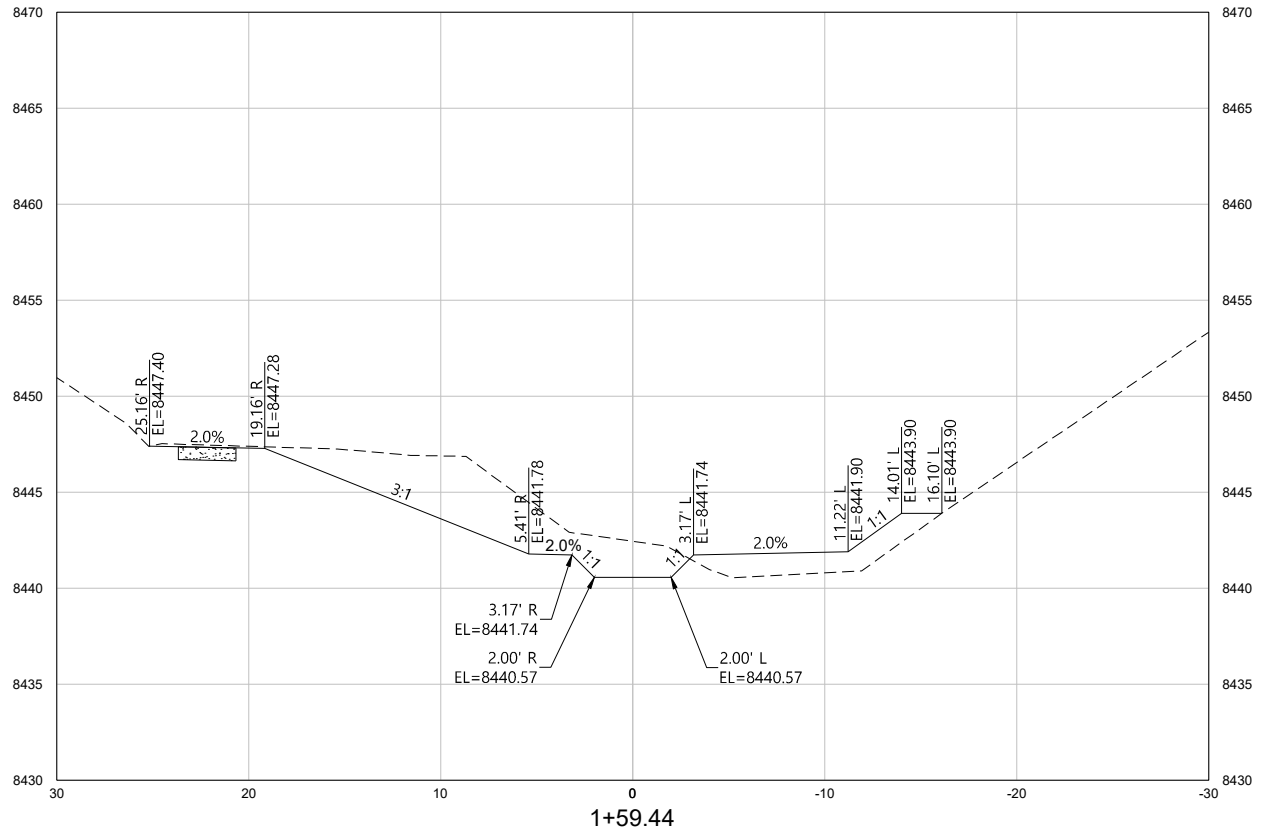
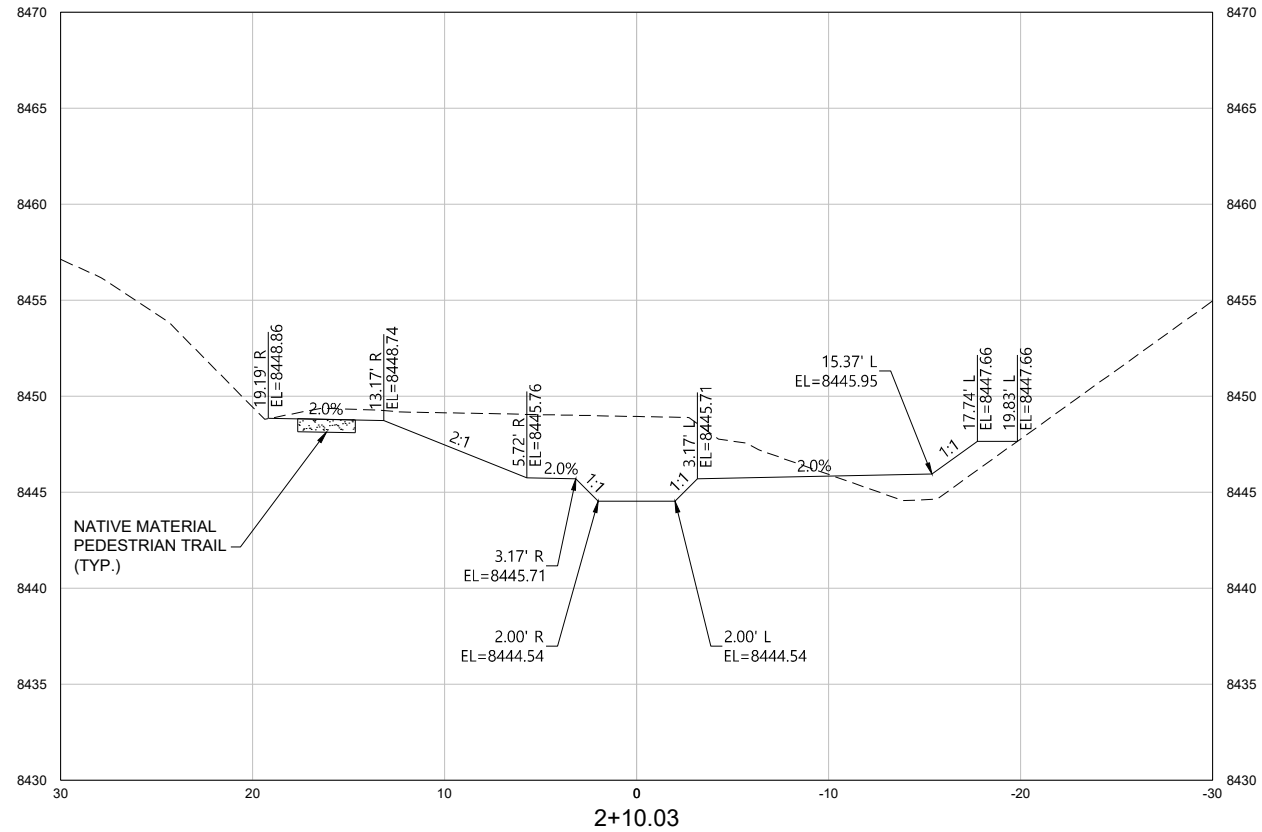
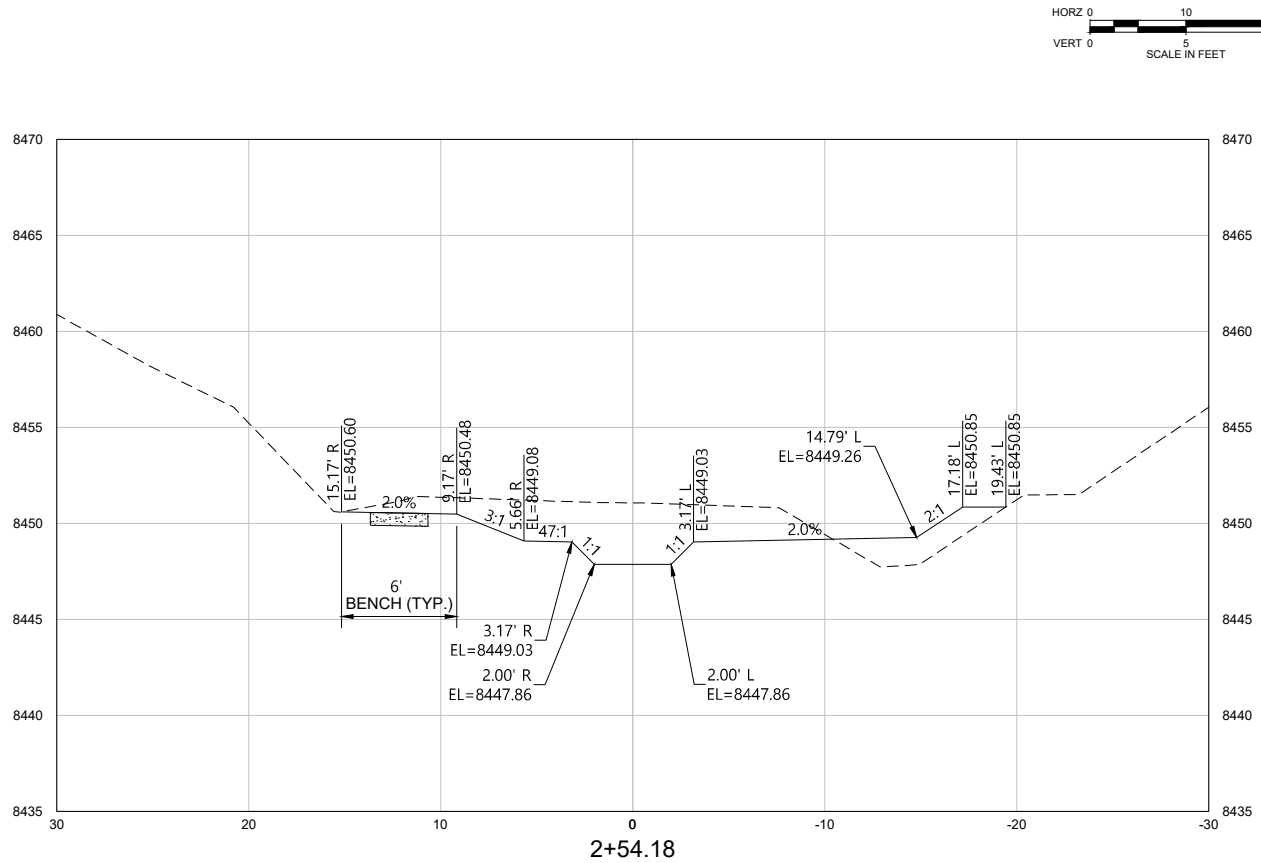
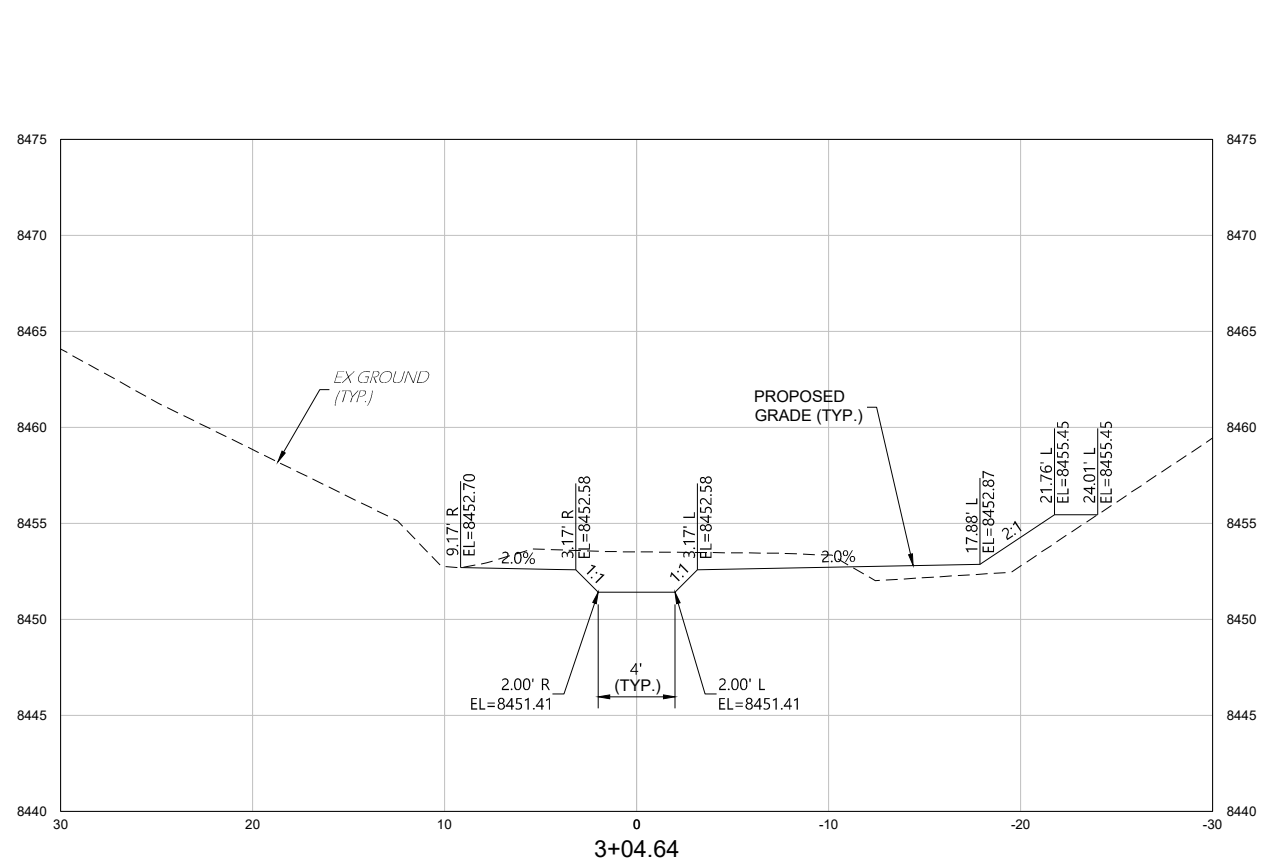
CONGER MINE -
SHERWOOD CREEK
RECLAMATION

CHANNEL SECTIONS 1
OF 3

DRAWING NUMBER:

C-6

SHEET 8



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CONGER MINE - SHERWOOD CREEK RECLAMATION			
CHANNEL SECTIONS 2 OF 3			
DRAWING NUMBER: C-7 SHEET 9			



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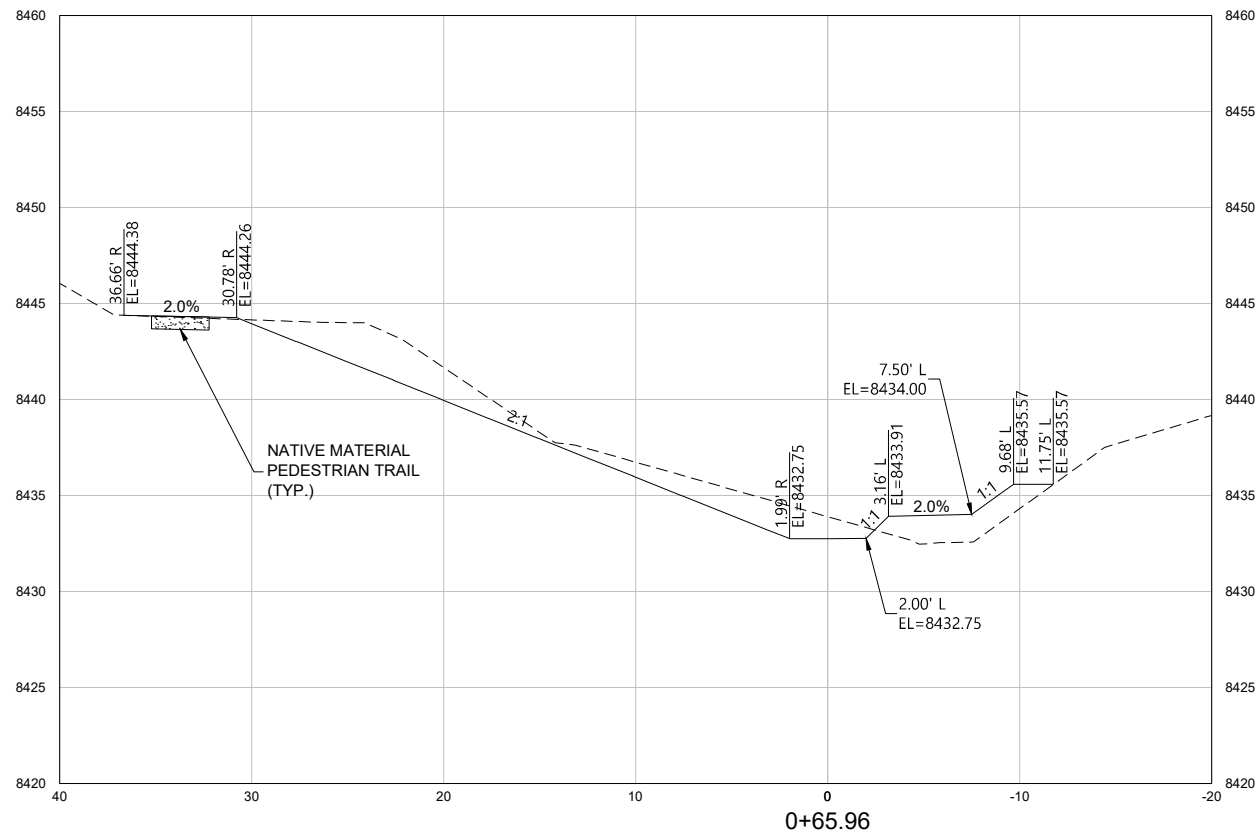
CONGER MINE -
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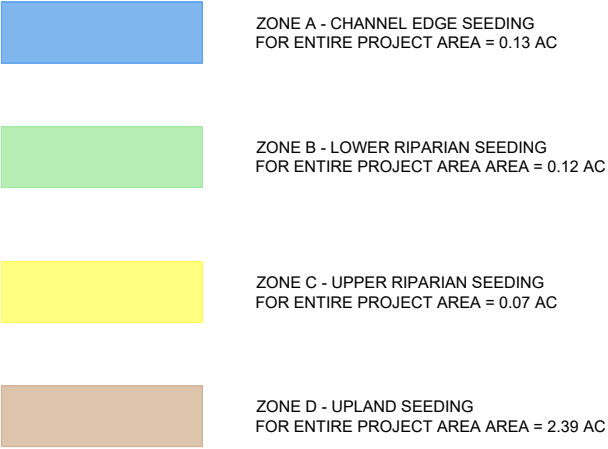
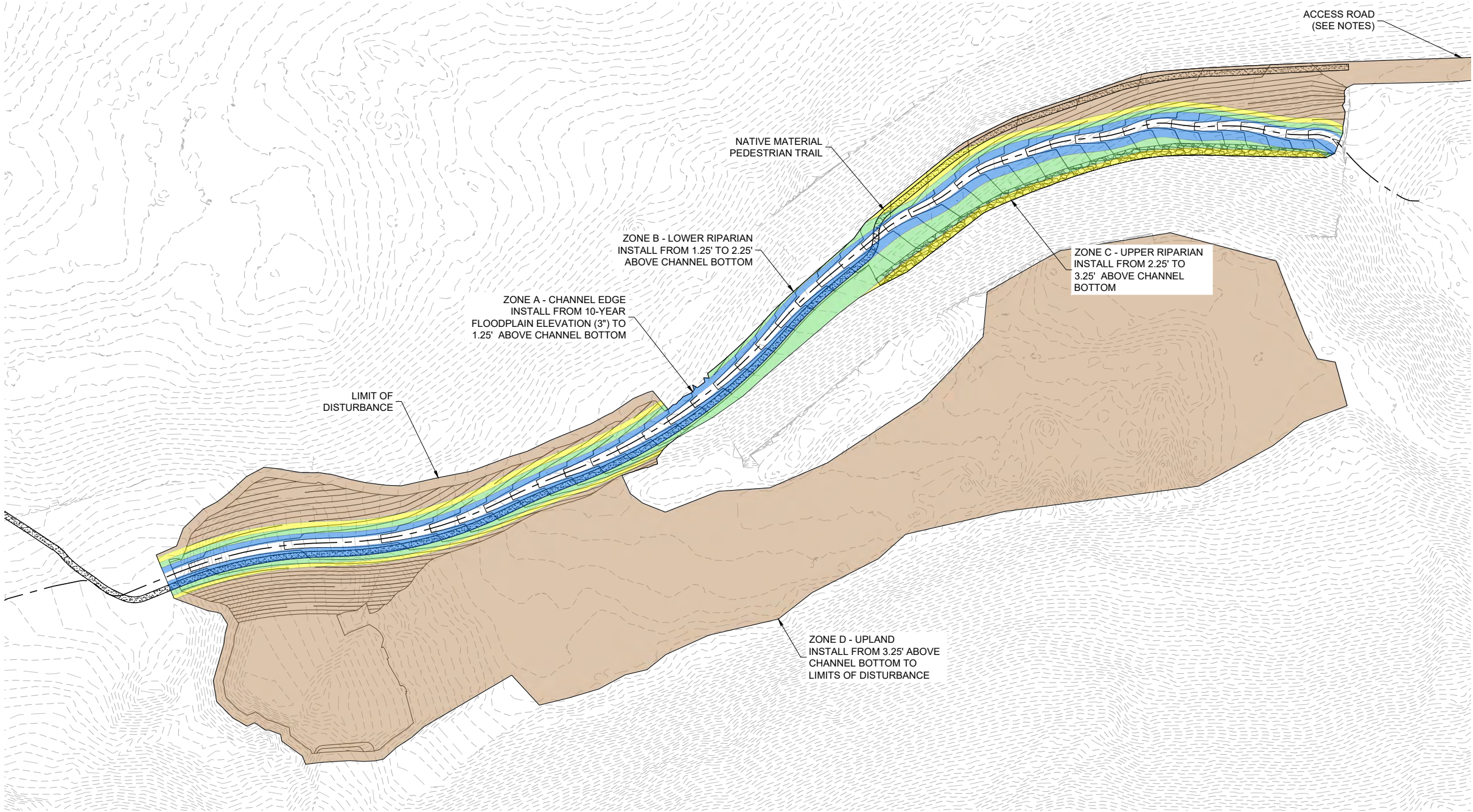
CHANNEL SECTIONS 3
OF 3

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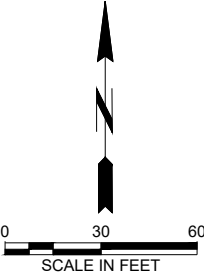
C-8
SHEET 10

NAME: N:\PROJECTS\M0317-DR\SM0317-23001 CONGER MINE\CAD\SHEETS\23001-S-SECTIONS.DWG
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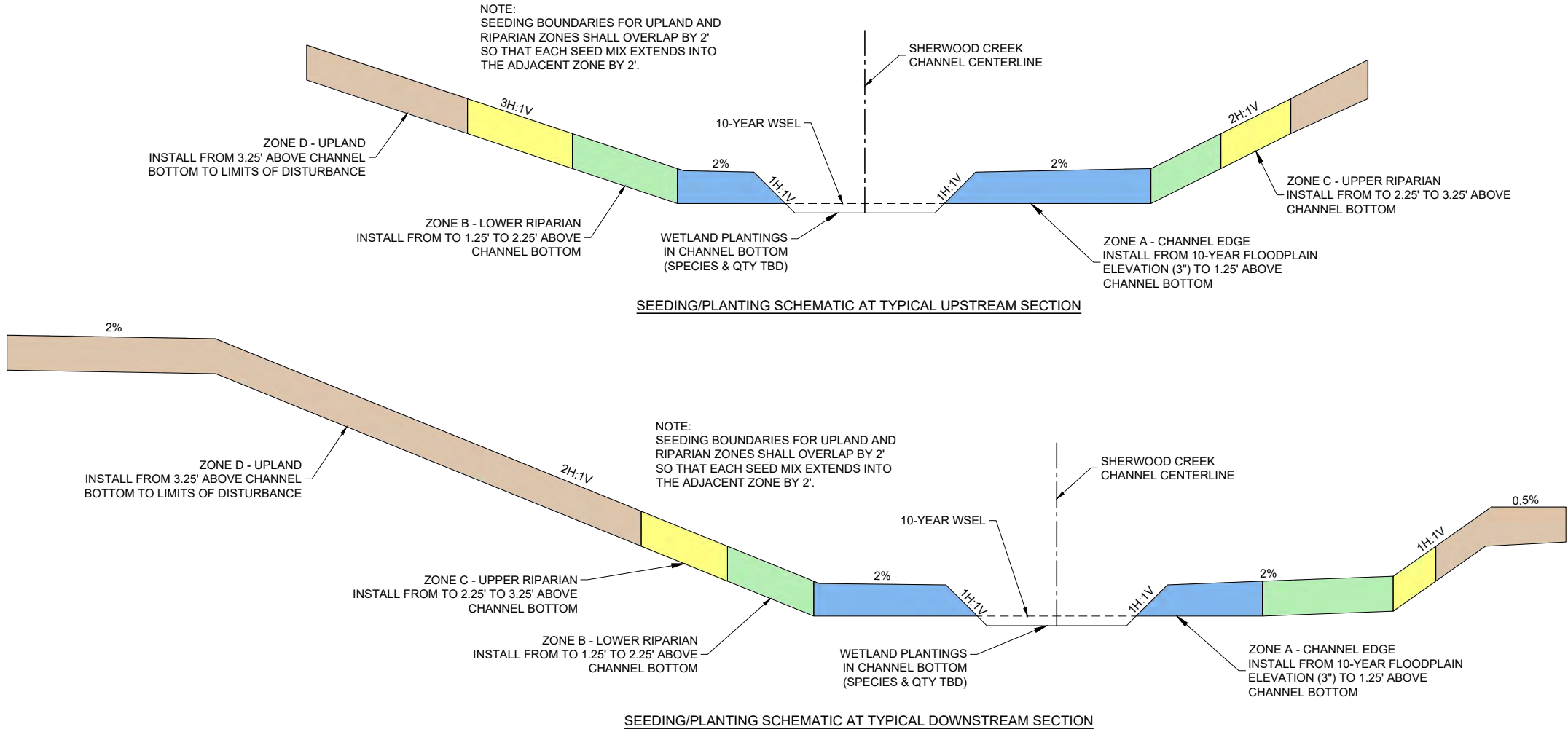
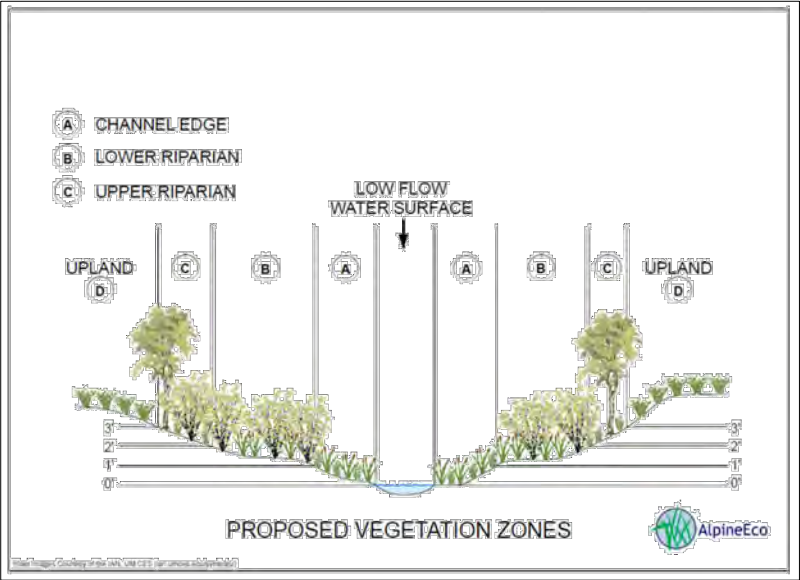


- NOTES:**
1. UPLAND SEEDING TO CONTINUE ALONG ENTIRETY OF ACCESS ROAD & TURNAROUND SITE. AREA IS INCLUDED IN ACREAGE CALCULATIONS.
 2. SEEDING BOUNDARIES FOR EACH ZONE SHALL OVERLAP BY 2' SO THAT EACH SEED MIX EXTENDS INTO THE ADJACENT ZONE BY 2'.



REVISION			
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<div> <div>RESPEC</div> <div>720 S COLORADO BLVD</div> <div>SUITE 410S</div> <div>DENVER, CO 80246</div> <div>PHONE (303) 757-3655</div> </div>			
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<div> <div>CONGER MINE -</div> <div>SHERWOOD CREEK</div> <div>RECLAMATION</div> </div>			
<div> <div>REVEGETATION PLAN</div> </div>			
<div> <div>DRAWING NUMBER:</div> <div>L-1</div> </div>			
<div> <div>SHEET</div> <div>11</div> </div>			

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NOTES:

1. THE CHANNEL HAS BEEN DESIGNED TO INITIALLY CONVEY THE 100-YEAR EVENT WITHIN THE BANKFULL CHANNEL IN ANTICIPATION THAT SIGNIFICANT AGGRADATION IS PROBABLE IN THE FIRST 2-3 YEARS POST CONSTRUCTION..
2. IT IS ANTICIPATED THAT A MORE NATURAL FLOODPLAIN CONNECTIVITY WILL OCCUR ONCE THE CHANNEL ACHIEVES DYNAMIC EQUILIBRIUM.

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CONGER MINE -
SHERWOOD CREEK
RECLAMATION

REVEGETATION
SECTIONS

DRAWING NUMBER:
L-2
SHEET 12

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Table 1: Plants Needed for Restoration

Common Name	Scientific Name	Plant Size/Type	Planting Scheme	Plants Per Acre	Acres	Total Plants Needed
Zone A - Channel Edge (.16 Acres)						
Water Sedge	Carex aquatilis	10 ci	Individually on 3' centers or as directed	490	0.13	64
Woolly Sedge	Carex pellita	10 ci		686	0.13	89
Northwest Territory Sedge	Carex utriculata	10 ci		490	0.13	64
Common Spikerush	Eleocharis palustris	10 ci		686	0.13	89
Large-leaf Avens	Geum macrophyllum	10 ci		882	0.13	115
Baltic Rush	Juncus balticus	10 ci		882	0.13	115
Daggerleaf Rush	Juncus ensifolius	10 ci		882	0.13	115
Red-tinge Bulrush	Scirpus microcarpus	10 ci		490	0.13	64
			Total	5488		713
Zone B - Lower Riparian (.09 Acres)						
Red Osier	Cornus alba	40 ci	Individually on 10' centers or as directed	100	0.12	12
Speckled Alder	Alnus incana	40 ci		100	0.12	12
Water Birch	Betula occidentalis	40 ci		100	0.12	12
Narrowleaf Cottonwood	Populus angustifolia	40 ci		100	0.12	12
Narrowleaf Willow	Salix exigua	40 ci		50	0.12	6
Drummond's Willow	Salix drummondiana	40 ci		50	0.12	6
Pacific Willow	Salix lasioandra	40 ci		50	0.12	6
Park Willow	Salix monticola	40 ci		50	0.12	6
Mixed montane willow ²	(see footnote 2)	30-inch cuttings	30" Cuttings	1,400	0.12	168
			Total	2,000		240
Zone C - Upper Riparian (.06 Acres)						
Golden-Hardhack	Dasiphora fruticosa	60 ci	Individually on 10' centers or as directed	50	0.07	4
Blue Spruce	Picea pungens	60 ci	Individually, widely scattered	10	0.07	3
Narrowleaf Cottonwood	Populus angustifolia	60 ci	Individually on 10' centers or as directed	50	0.07	4
Chokecherry	Prunus virginiana (aka P. virginiana var. melanocarpa)	60 ci	Groups of three in a 4' diameter circle, with the groups planted as directed	150	0.07	11
Douglas Fir	Pseudotsuga menziesii	60 ci	Individually on 10' centers or as directed	10	0.07	3
Woods' Rose	Rosa woodsii	60 ci	Groups of three of the same species in a 4' diameter circle, with the groups planted as directed	150	0.07	11
Roundleaf Snowberry	Symphoricarpos rotundifolius	60 ci		150	0.07	11
			Total	570		45
Installed with In-Channel Log or Rock Structures						
Mixed montane willow ²	(see footnote 2)	60-inch cuttings	As directed			150
Narrow-Leaf Cottonwood	Populus angustifolia	60-inch cuttings	As directed			50
					Total	200
Installed with PALS						
Mixed montane willow	(see footnote 2)	60-inch cuttings	Weaved between posts along lower 1'(V) of channel (25 per structure)			100
Mixed montane willow	(see footnote 2)	30-inch cuttings	Installed into the channel banks on both sides of structure (30-40 per structure)			150
			Total			250

Table 2: Riparian Seed Mix (Zones A, B, and C)

Sherwood Creek Riparian Seed Mix				
Common Name	Latin name	Variety	% of mix	PLS/Acre
Fringed Brome	Bromus ciliatus	VNS	8	2.49
Blue-joint Reedgrass	Calamagrostis canadensis	VNS	11	0.21
Popcorn Sedge	Carex microptera	VNS	3	0.15
Tufted Hairgrass	Deschampsia caespitosa	VNS or Nortran	8	0.23
Canada Wild Rye*	Elymus canadensis	BCPOS	12	4.55
Thickspike Wheatgrass	Elymus lanceolatus	Critana	6	1.70
Slender Wheatgrass	Elymus trachycaulus	San Luis	6	1.64
Rocky Mountain Fescue	Festuca saximontana	VNS	5	0.17
Thurber's Fescue*	Festuca thurberi	BCPOS	5	0.22
Fowl Mannagrass	Glyceria elata	VNS	10	2.42
Baltic Rush	Juncus balticus	VNS	5	0.03
Swordleaf Rush	Juncus ensifolius	VNS	3	0.05
Fowl Bluegrass	Poa palustris	VNS	6	0.08
Spike Trisetum	Trisetum spicatum var. montanum	VNS	5	0.09
Yellow Avens	Geum aleppicum	VNS	3	0.54
Cow Parsnip	Heracleum maximum	VNS	1	0.57
Tall Coneflower	Rudbeckia lanciniata ampla	VNS	3	0.54
Totals			100.00	15.68
VNS = Variety Not Stated				
Rates are for broadcast seeding. (100 seeds/sf). If drill seeding use half of total amount.				
* Denotes ecotypic seed provided by BCPOS				

¹Seed mix information provided by Boulder County Parks and Open Space

Table 3: Upland Seed Mix (Zone D)

Sherwood Creek Upland Seed Mix				
Common Name	Latin name	Variety	% of mix	PLS/Acre
Ticklegrass*	Agrostis scabra	BCPOS	6	0.03
Fringed Brome	Bromus ciliatus	VNS	7	1.74
Mountain Brome	Bromus marginatus	UP Cold Spring	10	3.87
Canada Wild Rye*	Elymus canadensis	BCPOS	10	3.03
Squirrel Tail*	Elymus elymoides	BCPOS	8	1.82
Thickspike Wheatgrass	Elymus lanceolatus	Critana	10	2.26
Slender Wheatgrass	Elymus trachycaulus	San Luis	8	1.75
Rocky Mountain Fescue	Festuca saximontana	VNS	7	0.19
Thurber's Fescue*	Festuca thurberi	BCPOS	3	0.11
Junegrass*	Koeleria macrantha	BCPOS	6	0.15
Mountain Muhly*	Muhlenbergia montana	BCPOS	8	0.19
Spike Trisetum	Trisetum spicatum var. montanum	VNS	5	0.07
Yarrow*	Achillea lanulosa	BCPOS	2	0.02
Louisiana Sage	Artemesia ludoviciana	VNS	3	0.02
Sulphur Flower*	Eriogonum umbellatum	BCPOS	3	0.42
Showy Goldeneye	Heliomeris multiflora	UP Ron Bell	3	0.09
Hairy Golden Aster*	Heterotheca villosa	BCPOS	3	0.12
Blue Mist Penstemon*	Penstemon virens	BCPOS	2	0.05
Goldenrod	Solidago simplex	BCPOS	2	0.09
Totals			100.00	15.99
VNS = Variety Not Stated				
Rates are for broadcast seeding (80 seeds/sf). If drill seeding use half of total amount.				
* Denotes ecotypic seed provided by BCPOS				

¹Seed mix information provided by Boulder County Parks and Open Space

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CONGER MINE -
SHERWOOD CREEK
RECLAMATION

REVEGETATION
ADDITIONAL NOTES

DRAWING NUMBER:
L-3
SHEET 13

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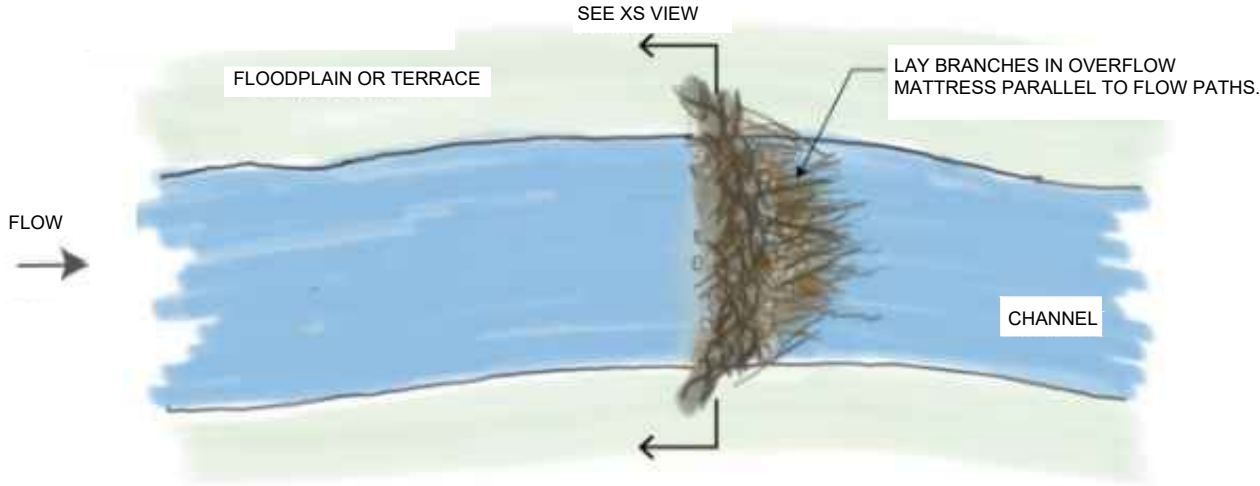
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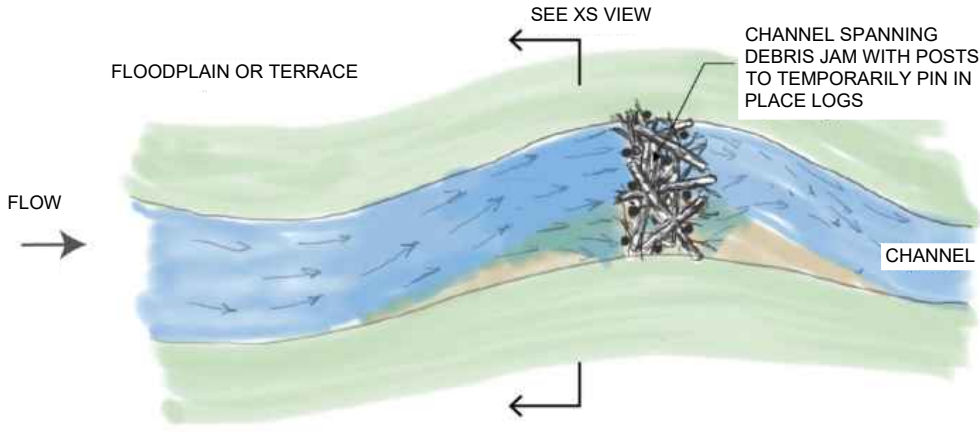
CONGER MINE -
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LOW TECH PROCESS
BASED RESTORATION
DETAILS

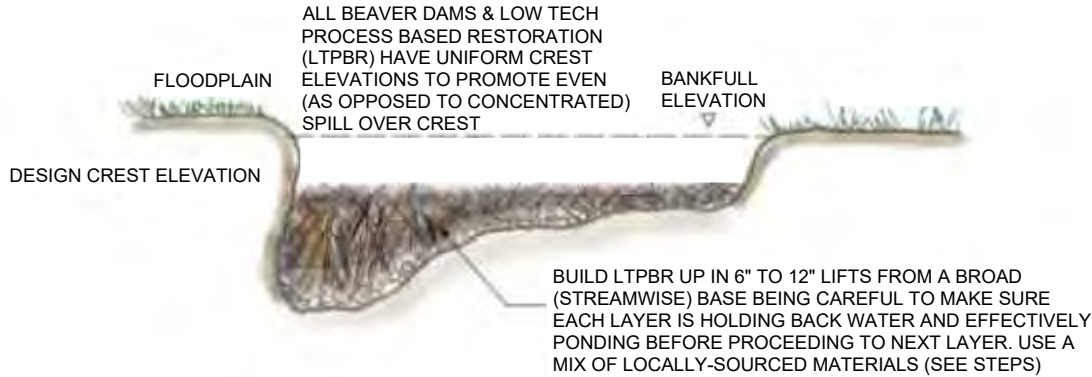
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D-1
SHEET 14



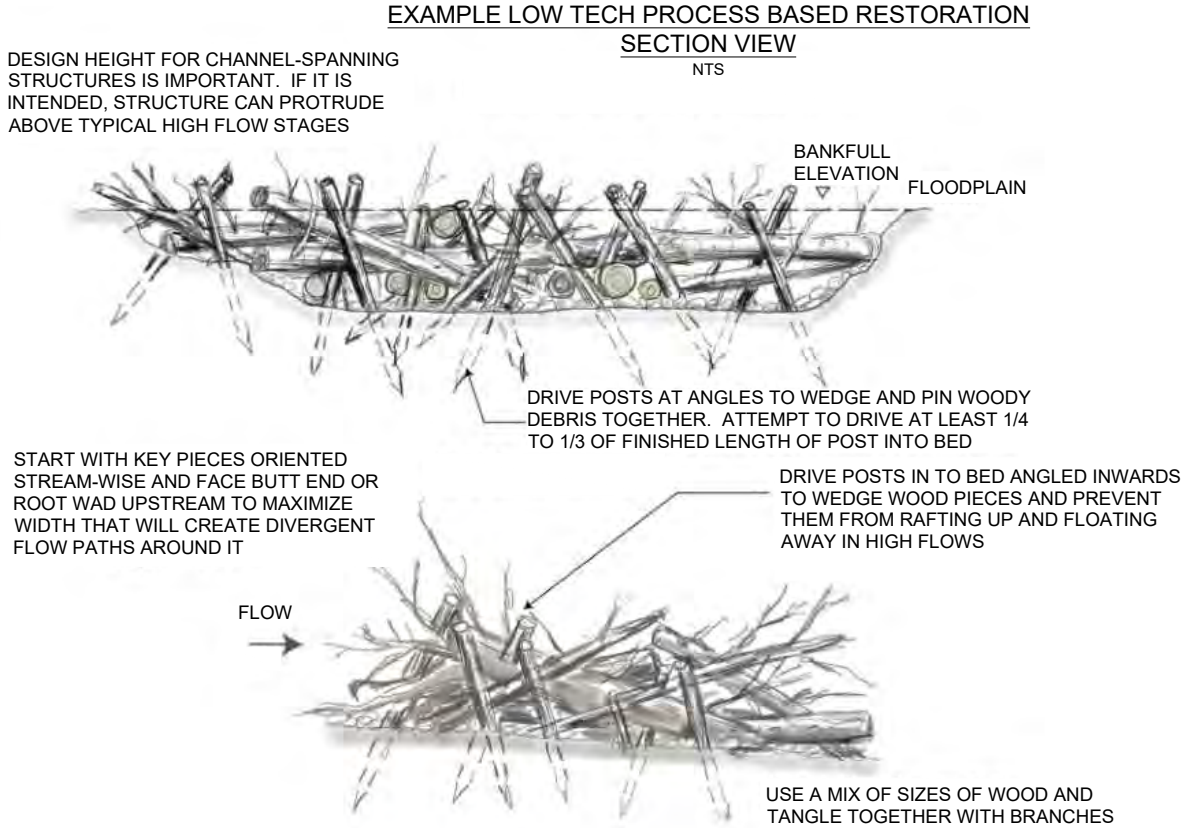
EXAMPLE LOW TECH PROCESS BASED RESTORATION
PLAN VIEW
NTS



EXAMPLE LOW TECH PROCESS BASED RESTORATION
PLAN VIEW
NTS



EXAMPLE LOW TECH PROCESS BASED RESTORATION
SECTION VIEW
NTS



EXAMPLE LOW TECH PROCESS BASED RESTORATION
PROFILE VIEW
NTS

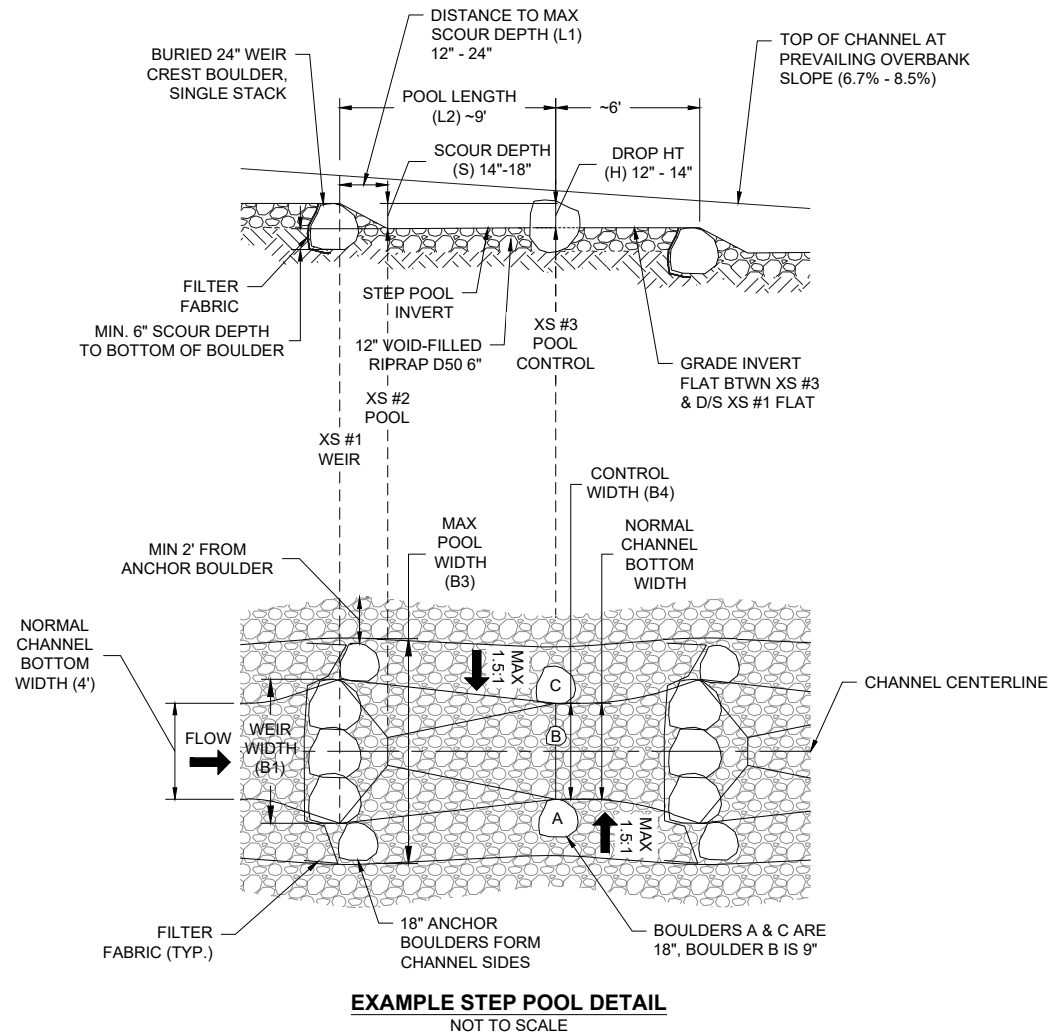


EXAMPLE LOW TECH PROCESS BASED RESTORATION
PROFILE VIEW
NTS

- NOTES:
1. LOW TECH PROCESS BASED RESTORATION (LTPBR) ARE BUILT TO INITIALLY MIMIC A NATURAL BEAVER DAM (I.E., BACKWATER UPSTREAM, SUCH THAT A POND IS CREATED), BUT MOST LTPBRS ARE INTENDED TO PROMOTE BEAVER DAM ACTIVITY AT SOME POINT THEREAFTER.
 2. MANY OF THE BENEFITS OF NATURAL BEAVER DAMS, COME FROM THEIR EPHEMERAL NATURE, AND WHETHER DAMS ARE ACTIVELY MAINTAINED, BLOWN-OUT, BREACHED, FILLED IN AND/OR ABANDONED.
 3. POSTLESS LTPBR DESIGN ARE INSPIRED BY HOW BEAVERS BUILD DAMS; WITHOUT FENCE POSTS, A HYDRAULIC POST POUNDER OR HEAVY EQUIPMENT. LIKE NATURAL BEAVER DAMS, THE POSTLESS LTPRB IS APPROPRIATE IN AREAS THAT CAN ALREADY SUPPORT BEAVER DAMS.
 4. THE CREST ELEVATION IS A CRITICAL CONSIDERATION. IN GENERAL, PRIMARY DAMS ARE TALLER THAN SECONDARY DAMS, AND USUALLY WIDER (EITHER EXTENDING ONTO BARS, INSET BENCHES OR FLOODPLAINS, AS TO LOWER UNIT STREAM POWER). SECONDARY DAMS TEND TO JUST BE TALL ENOUGH TO BACKWATER UP TO THE BASE OF THE NEXT UPSTREAM DAM. SECONDARY DAMS CAN BE BUILT HIGHER TO LOWER THE HEAD (ELEVATION) DROP OF AN UPSTREAM DAM.

FINAL STRUCTURE TO BE
DETERMINED BY SENATE BILL 270
(SB-270) REQUIREMENTS

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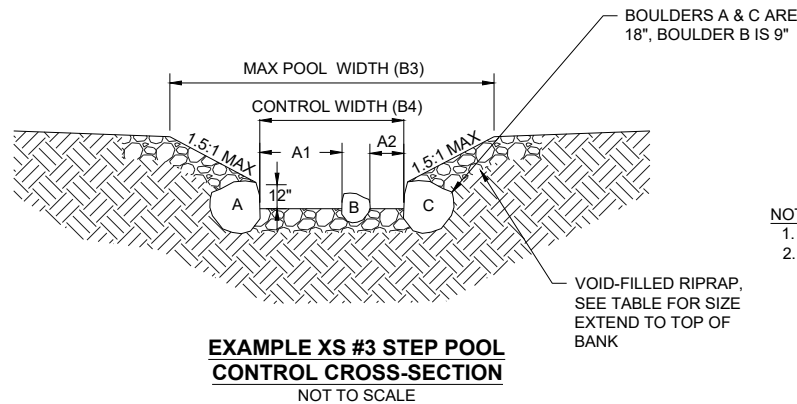
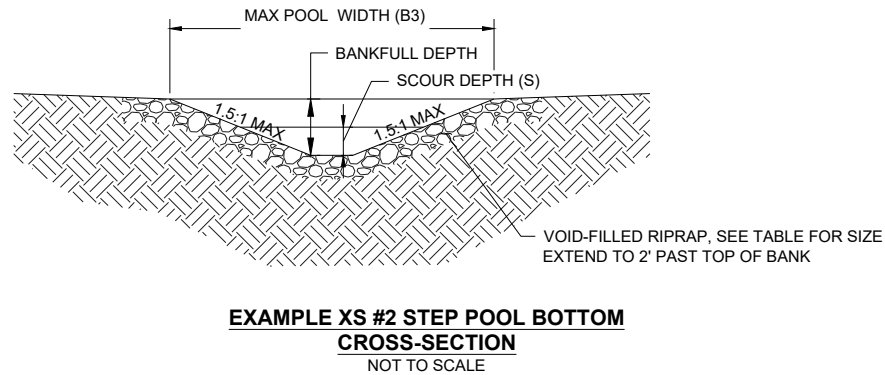
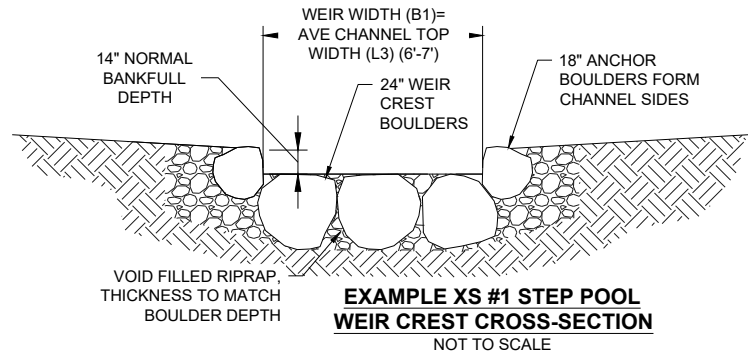


STEP POOL DETAIL NOTES:

1. A TABLE OF DIMENSIONS FOR EACH STEP POOL WILL BE ADDED AT A LATER SUBMITTAL.
2. CONTRACTOR TO CONSTRUCT WEIR CREST WITH 36" OR 48" BOULDERS. BOULDERS ARE TO BE BURIED TO 50% OF THEIR DIAMETER.
3. GAPS BETWEEN BOULDERS TO BE MINIMIZED BY FITTING BOULDERS TIGHTLY TOGETHER & PLUGGING W/ SELECT MATERIAL OR CHINKING STONE APPROVED BY ENGINEER, & LINING W/ FILTER FABRIC. ALL MATERIALS TO BE APPROVED BY ENGINEER.
4. PLACE FILTER FABRIC ON THE U/S SIDE OF THE STRUCTURE TO A DEPTH OF 3' BELOW WEIR CREST EL TO PREVENT WASHOUT OF SEDIMENT THROUGH BOULDER GAPS. FILTER FABRIC SHALL EXTEND FROM THE BOTTOM OF THE FOOTER BOULDER TO THE FINISHED GRADE ELEVATION & SHALL BE PLACED THE ENTIRE SECTION WIDTH.
5. BURY 36" ANCHOR BOULDERS A MIN OF 9" BELOW D/S GROUND ELEVATION.
6. VOID-FILLED RIPRAP TO BEGIN 3' BEFORE WEIR CREST & EXTEND 2' BEYOND L2. LATERAL LIMITS OF TYPE VL RIPRAP WILL EXTEND THE FULL BANKFULL SECTION.
7. REFERENCE STEP POOL STRUCTURE SIZE & CONSTRUCT STEP POOLS PER THE DIMENSIONS SPECIFIED IN THE STEP POOL STRUCTURE TABLES.

STEP POOL CONTROL CROSS-SECTION NOTES:

1. BOULDERS A, B, & C ARE TO BE BURIED TO 50% OF THEIR DIAMETER.
2. SPACE BOULDERS A & C TO MEET THE CONTROL WIDTH, B4. BOULDERS A & C ARE TO BE INSTALLED PARTIALLY IN THE BANKFULL EMBANKMENT. PLACE BOULDER B IN BETWEEN BOULDERS A & C SUCH THAT THE TWO GAPS, A1 & A2, MEET THE EFFECTIVE WIDTH, B5. (A1+A2=B5).
3. PLACE BOULDERS IRREGULARLY FROM STRUCTURE TO STRUCTURE. NON-UNIFORM PLACEMENT IS DESIRED TO MIMIC NATURAL POOLS W/ APPROVAL BY ENGINEER.

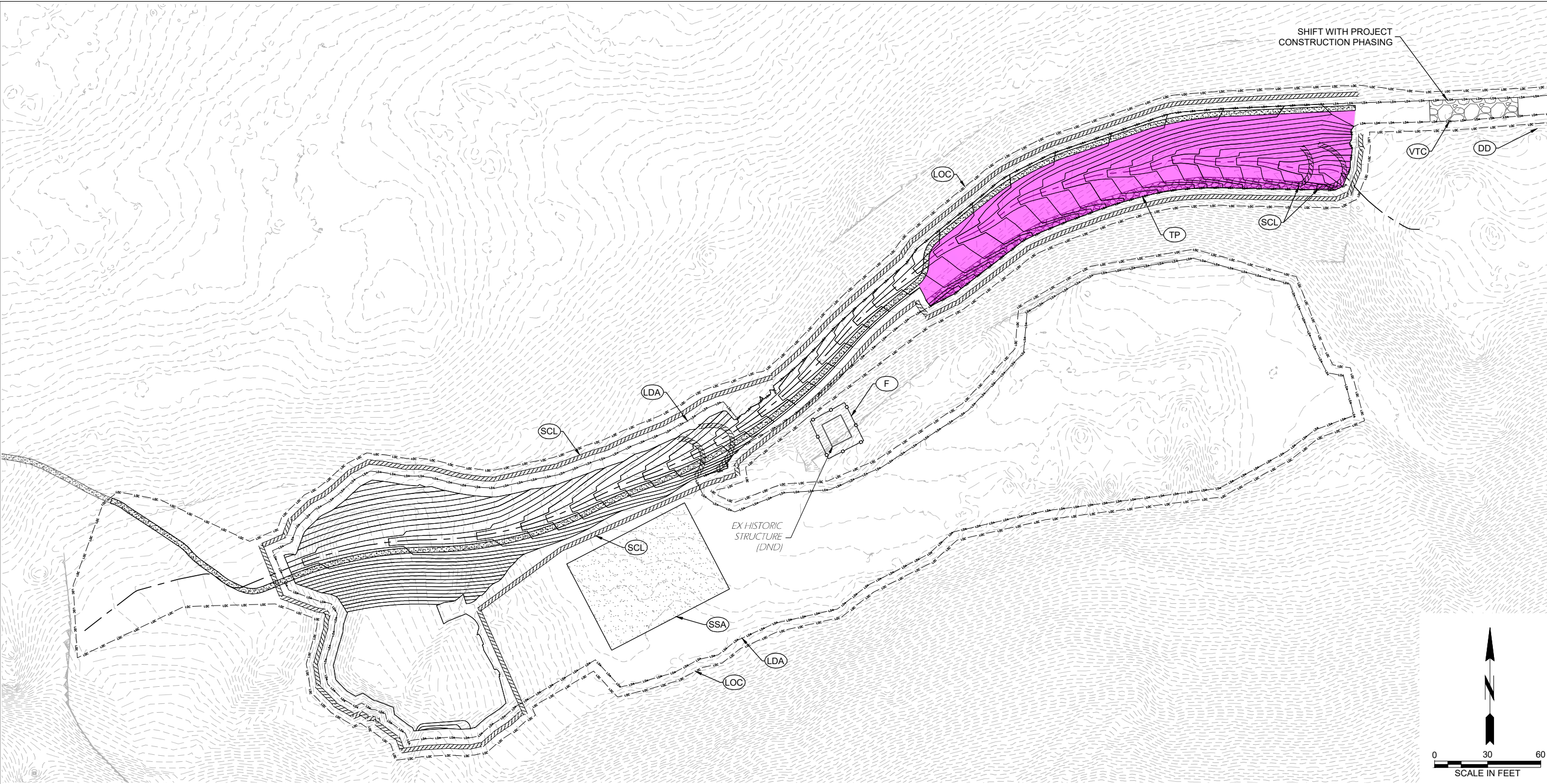


NOTES:

1. A1 + A2 = B5
2. MAKE OVERBANK SLOPES AS FLAT AS POSSIBLE.

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STEP POOL DETAILS			
DRAWING NUMBER:			
D-2			
SHEET 15			

NAME: N:\PROJECTS\M0317-DRMS\M0317-23001 CONGER MINE\CAD\SHEETS\23001-S-STORMWATER MANAGEMENT.DWG
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LEGEND & ABBREVIATIONS

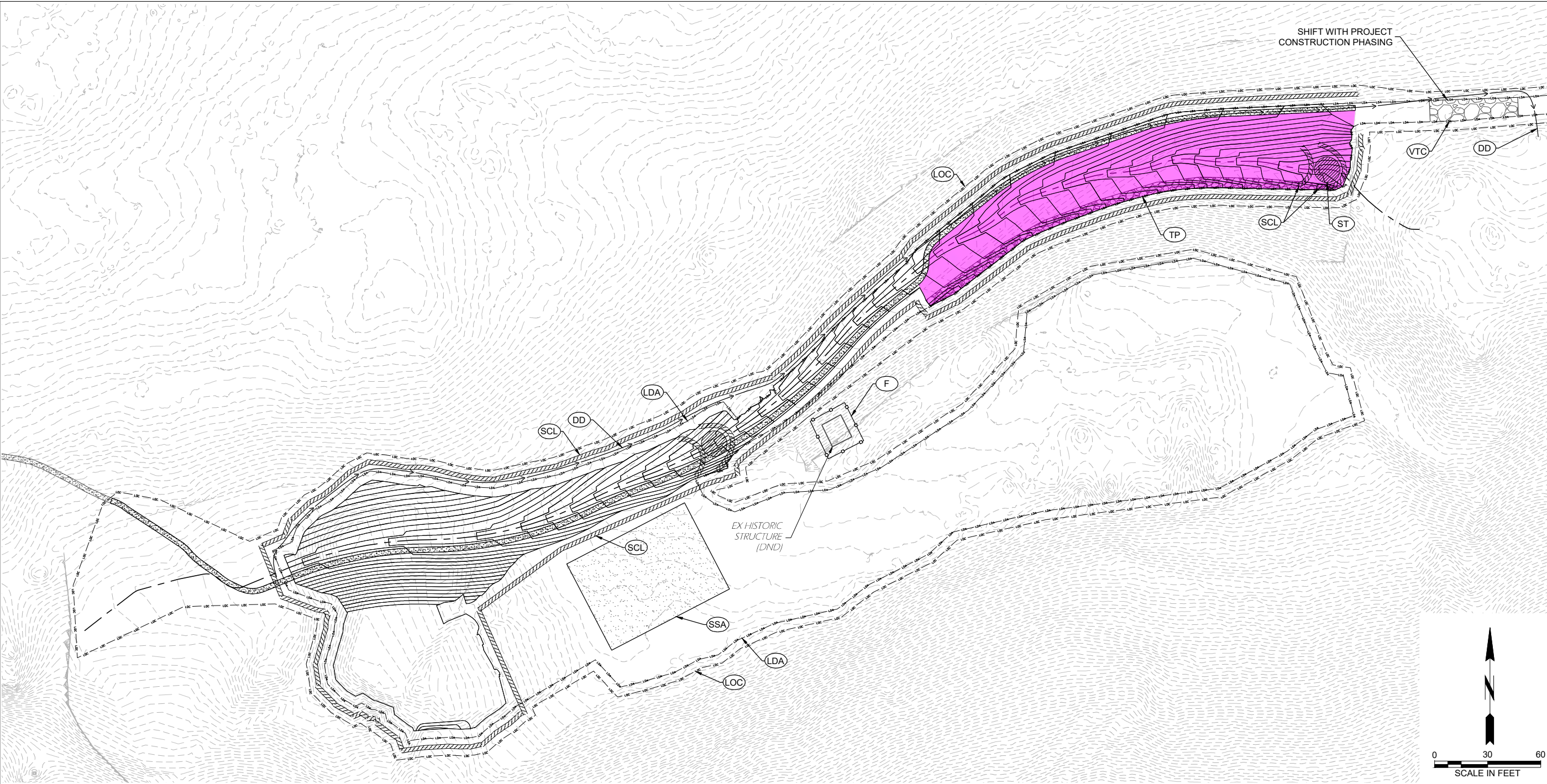
- FENCE - (F)
- TREE PROTECTION - (TP)
- LIMITS OF DISTURBED AREA - (LDA)
2.77 ACRES
- LIMITS OF CONSTRUCTION - (LOC)
3.97 ACRES
- SEDIMENT CONTROL LOG - (SCL)
- VEHICLE TRACKING CONTROL - (VTC)
- STABILIZED STAGING AREA - (SSA)

NOTES:

- LDA AND LOC TO CONTINUE ALONG ENTIRETY OF ACCESS ROAD & TURNAROUND SITE. AREA IS INCLUDED IN ACREAGE CALCULATIONS.
- CONTRACTOR TO DETERMINE MEANS & METHODS OF DIVERSION.
- CONTRACTOR SHALL APPLY TEMPORARY STABILIZATION IN THE FORM OF SURFACE ROUGHENING, VERTICAL TRACKING, OR A COMBINATION THEREOF, AS NEEDED AT THE END OF EACH WORK DAY. OTHER STABILIZATION MEASURES MAY BE IMPLEMENTED, AS APPROVED.

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CONGER MINE - SHERWOOD CREEK RECLAMATION			
INITIAL STORMWATER MANAGEMENT PLAN			
DRAWING NUMBER: S-1			
SHEET 16			

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LEGEND & ABBREVIATIONS

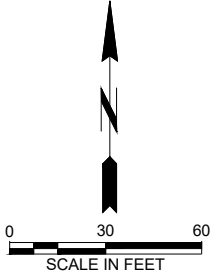
- FENCE - (F)
- TREE PROTECTION - (TP)
- LIMITS OF DISTURBED AREA - (LDA)
2.77 ACRES
- LIMITS OF CONSTRUCTION - (LOC)
3.97 ACRES
- SEDIMENT CONTROL LOG - (SCL)
- VEHICLE TRACKING CONTROL - (VTC)
- STABILIZED STAGING AREA - (SSA)
- DIVERSION DITCH - 1 - (DD-1)
- SEDIMENT TRAP - (ST)

NOTES:

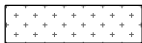
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- CONTRACTOR TO DETERMINE MEANS & METHODS OF DIVERSION.
- CONTRACTOR SHALL APPLY TEMPORARY STABILIZATION IN THE FORM OF SURFACE ROUGHENING, VERTICAL TRACKING, OR A COMBINATION THEREOF, AS NEEDED AT THE END OF EACH WORK DAY. OTHER STABILIZATION MEASURES MAY BE IMPLEMENTED, AS APPROVED.

DESIGNED JMR	DRAWN JMR	CHECKED JHN	DATE 01/08/2024	REVISION
RESPEC 720 S COLORADO BLVD SUITE 410S DENVER, CO 80246 PHONE (303) 757-3655				
STAMP				
STATE OF COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY 1313 SHERMAN ST., ROOM 215 DENVER, CO 80203 303-801-7644				
CONGER MINE - SHERWOOD CREEK RECLAMATION				
INTERIM STORMWATER MANAGEMENT PLAN				
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NOTES:

1. LDA AND LOC TO CONTINUE ALONG ENTIRETY OF ACCESS ROAD & TURNAROUND SITE. AREA IS INCLUDED IN ACREAGE CALCULATIONS.
2. CONTRACTOR TO DETERMINE MEANS & METHODS OF DIVERSION.

RESPEC
720 S COLORADO BLVD
SUITE 410S
DENVER, CO 80246
PHONE (303) 757-3655

DESIGNED	JMR
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now what's below.
Call before you dig.

STATE OF COLORADO
DIVISION OF RECLAMATION,
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DENVER, CO 80203
303-801-7644

CONGER MINE -
SHERWOOD CREEK
RECLAMATION

FINAL STORMWATER MANAGEMENT PLAN

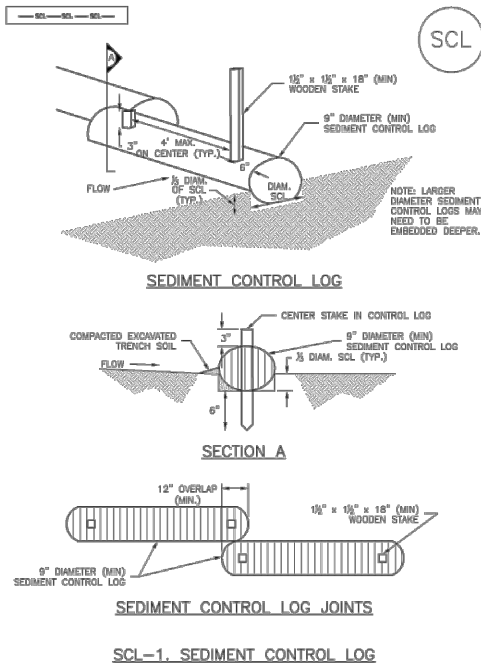
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S-3

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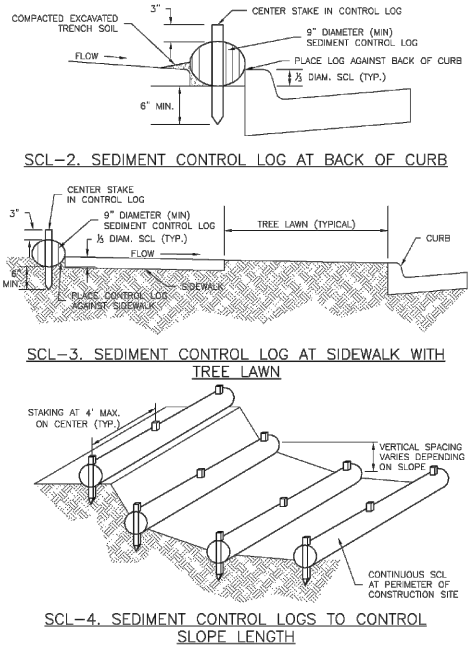
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Sediment Control Log (SCL) SC-2



November 2010 Urban Drainage and Flood Control District SC-3
Urban Storm Drainage Criteria Manual Volume 3

SC-2 Sediment Control Log (SCL)



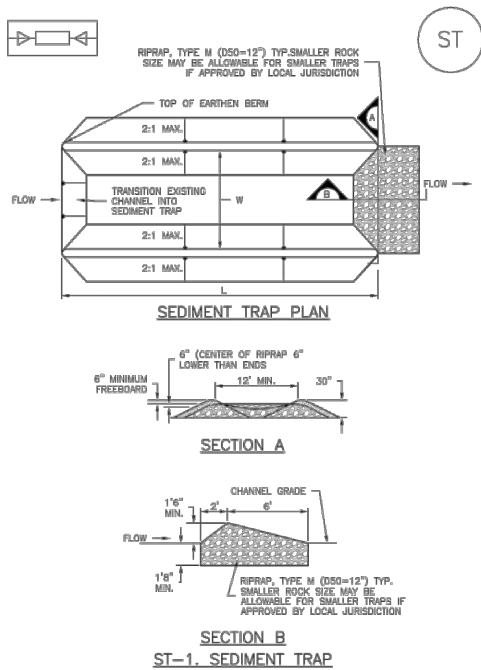
SCL-4 Urban Drainage and Flood Control District November 2010
Urban Storm Drainage Criteria Manual Volume 3

Sediment Control Log (SCL) SC-2

- SEDIMENT CONTROL LOG INSTALLATION NOTES**
1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.
 2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADE LAND-DISTURBING ACTIVITIES.
 3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELISOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.
 4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS OR HIGH VELOCITY DRAINAGE WAYS.
 5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY 1/2 OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING.
 6. THE UPWIND SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER.
 7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED.
- SEDIMENT CONTROL LOG MAINTENANCE NOTES**
1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.
 5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.
- (DETAILS ADAPTED FROM TOWN OF PUEBLO, COLORADO, JEFFERSON COUNTY, COLORADO, DOUGLAS COUNTY, COLORADO, AND CITY OF AURORA, COLORADO. NOT AVAILABLE IN AUTOCAD)
- NOTE:** MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

November 2010 Urban Drainage and Flood Control District SC-5
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SC-8 Sediment Trap (ST)



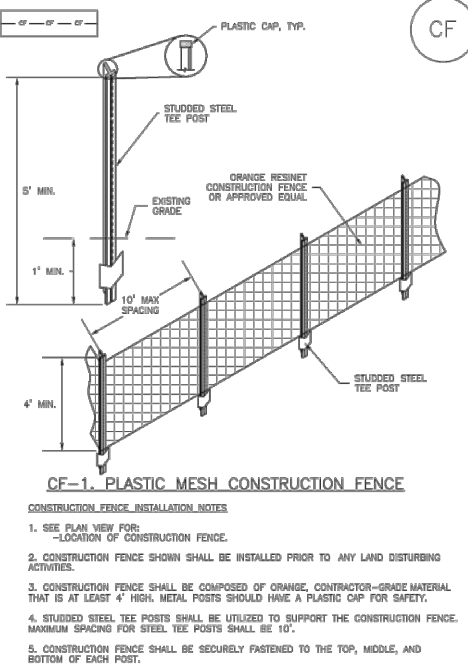
ST-2 Urban Drainage and Flood Control District November 2010
Urban Storm Drainage Criteria Manual Volume 3

Sediment Trap (ST) SC-8

- SEDIMENT TRAP INSTALLATION NOTES**
1. SEE PLAN VIEW FOR: -LOCATION, LENGTH AND WIDTH OF SEDIMENT TRAP.
 2. ONLY USE FOR DRAINAGE AREAS LESS THAN 1 ACRE.
 3. SEDIMENT TRAPS SHALL BE INSTALLED PRIOR TO ANY UPGRADE LAND-DISTURBING ACTIVITIES.
 4. SEDIMENT TRAP BERM SHALL BE CONSTRUCTED FROM MATERIAL FROM EXCAVATION. THE BERM SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
 5. SEDIMENT TRAP OUTLET TO BE CONSTRUCTED OF RIPRAP, TYPE II (D50=12") TYP. SMALLER ROCK SIZE MAY BE ALLOWABLE FOR SMALLER TRAPS IF APPROVED BY LOCAL JURISDICTION.
 6. THE TOP OF THE EARTHEN BERM SHALL BE A MINIMUM OF 6" HIGHER THAN THE TOP OF THE RIPRAP OUTLET STRUCTURE.
 7. THE ENDS OF THE RIPRAP OUTLET STRUCTURE SHALL BE A MINIMUM OF 6" HIGHER THAN THE CENTER OF THE OUTLET STRUCTURE.
- SEDIMENT TRAP MAINTENANCE NOTES**
1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 4. REMOVE SEDIMENT ACCUMULATED IN TRAP AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN THE SEDIMENT DEPTH REACHES 1/2 THE HEIGHT OF THE RIPRAP OUTLET.
 5. SEDIMENT TRAPS SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
 6. WHEN SEDIMENT TRAPS ARE REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.
- (DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)
- NOTE:** MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

November 2010 Urban Drainage and Flood Control District ST-3
Urban Storm Drainage Criteria Manual Volume 3

SM-3 Construction Fence (CF)



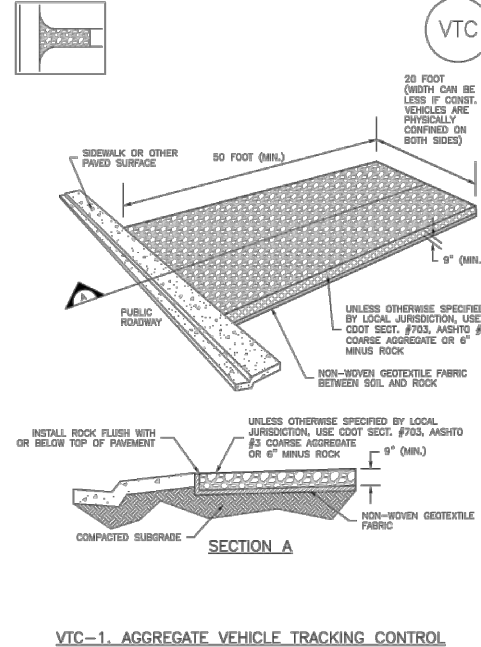
CF-2 Urban Drainage and Flood Control District November 2010
Urban Storm Drainage Criteria Manual Volume 3

Construction Fence (CF) SM-3

- CONSTRUCTION FENCE MAINTENANCE NOTES**
1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 4. CONSTRUCTION FENCE SHALL BE REPAIRED OR REPLACED WHEN THERE ARE SIGNS OF DAMAGE SUCH AS RIPS OR BAGS. CONSTRUCTION FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
 5. WHEN CONSTRUCTION FENCES ARE REMOVED, ALL DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE FENCE SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.
- NOTE:** MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.
- (DETAILS ADAPTED FROM TOWN OF PUEBLO, COLORADO, NOT AVAILABLE IN AUTOCAD)

November 2010 Urban Drainage and Flood Control District CF-3
Urban Storm Drainage Criteria Manual Volume 3

Vehicle Tracking Control (VTC) SM-4



November 2010 Urban Drainage and Flood Control District VTC-3
Urban Storm Drainage Criteria Manual Volume 3

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RESPEC	720 S COLORADO BLVD	SUITE 410S	DENVER, CO 80246
PHONE (303) 757-3655			

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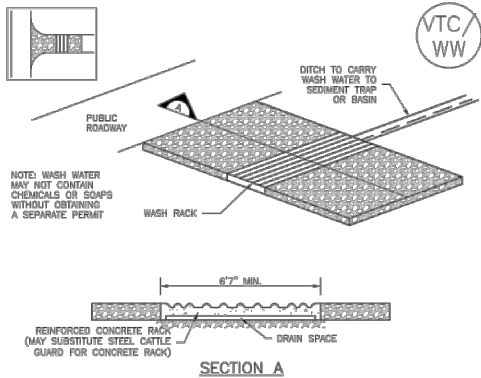
STATE OF COLORADO
DIVISION OF RECLAMATION,
MINING AND SAFETY
1313 SHERMAN ST., ROOM 215
DENVER, CO 80203
303-801-7644

CONGER MINE -
SHERWOOD CREEK
RECLAMATION

STORMWATER
MANAGEMENT DETAILS

DRAWING NUMBER:
S-4
SHEET 19

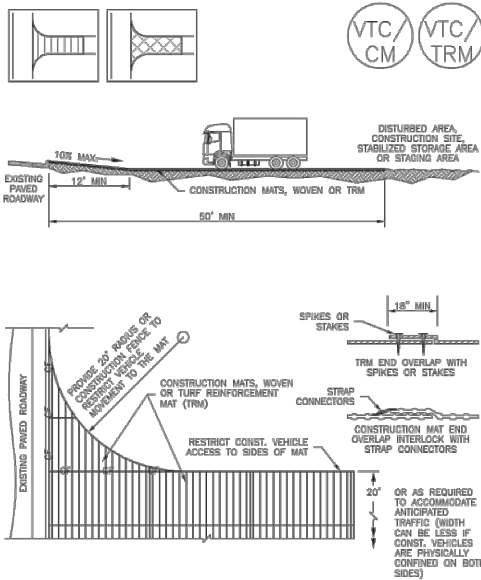
SM-4 Vehicle Tracking Control (VTC)



VTC-2. AGGREGATE VEHICLE TRACKING CONTROL WITH WASH RACK

VTC-4 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3 November 2010

Vehicle Tracking Control (VTC) SM-4



VTC-3. VEHICLE TRACKING CONTROL W/ CONSTRUCTION MAT OR TURF REINFORCEMENT MAT (TRM)

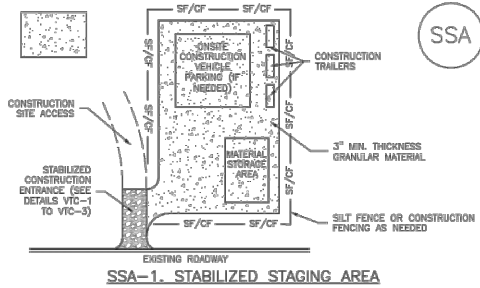
November 2010 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3 VTC-5

SM-4 Vehicle Tracking Control (VTC)

- STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES**
1. SEE PLAN VIEW FOR
-LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
-TYPE OF CONSTRUCTION ENTRANCE(S)/EXIT(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).
 2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.
 3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS.
 4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
 5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.
 6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.
- STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES**
1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.
 5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.
- (DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

VTC-6 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3 November 2010

Stabilized Staging Area (SSA) SM-6



SSA-1. STABILIZED STAGING AREA

- STABILIZED STAGING AREA INSTALLATION NOTES**
1. SEE PLAN VIEW FOR
-LOCATION OF STAGING AREA(S).
-CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
 2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.
 3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
 4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
 5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.
 6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.
- STABILIZED STAGING AREA MAINTENANCE NOTES**
1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

November 2010 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3 SSA-3

SM-6 Stabilized Staging Area (SSA)

- STABILIZED STAGING AREA MAINTENANCE NOTES**
5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.
 6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE. AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.
- NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.
- (DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

SSA-4 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3 November 2010

SM-8 Temporary Diversion Methods (TDM)

in accordance with the Major Drainage chapter in Volume 1.

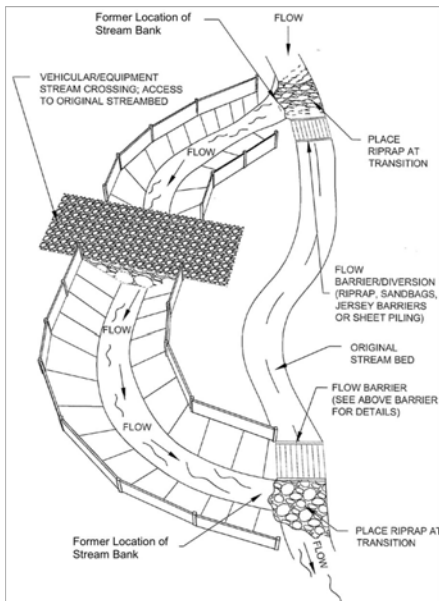
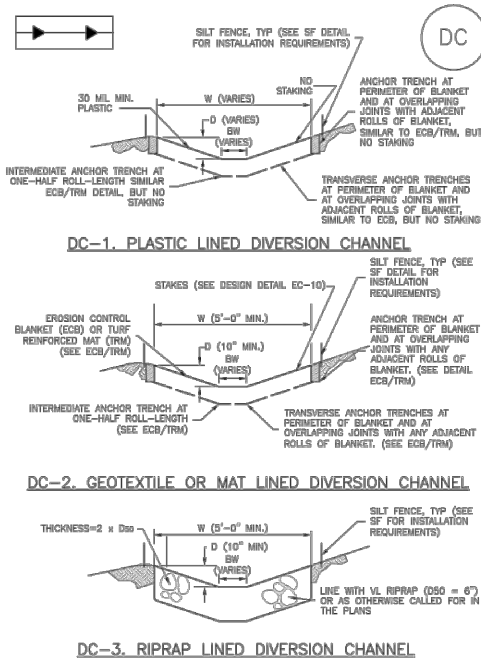


Figure TDM-1. Typical Temporary Diversion Channel

TDM-10 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3 June 2012

SM-8 Temporary Diversion Methods (TDM)



TDM-12 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3 June 2012

Temporary Diversion Methods (TDM) SM-8

- CHANNEL DIVERSION INSTALLATION NOTES**
1. SEE PLAN VIEW FOR:
-LOCATION OF DIVERSION CHANNEL.
-TYPE OF CHANNEL (UNLINED, GEOTEXTILE OR MAT LINED, PLASTIC LINE, OR RIPRAP LINED).
-LENGTH OF EACH TYPE OF CHANNEL.
-DEPTH, D, WIDTH, W, AND BOTTOM WIDTH, BW.
-FOR RIPRAP LINED CHANNEL, SIZE OF RIPRAP, DSD, SHALL BE SHOWN ON PLANS.
 2. SEE DRAINAGE PLANS FOR DETAILS OF PERMANENT CONVEYANCE FACILITIES.
 3. DIVERSION CHANNELS INDICATED ON THE SWMP PLAN SHALL BE INSTALLED PRIOR TO WORK IN DOWNGRADIENT AREAS OR NATURAL CHANNELS.
 4. FOR GEOTEXTILE OR MAT LINED CHANNELS, INSTALLATION OF GEOTEXTILE OR MAT SHALL CONFORM TO THE REQUIREMENTS OF DETAIL ECB. FOR PLASTIC LINED CHANNELS, INSTALLATION OF ANCHOR TRENCHES SHALL CONFORM TO THE REQUIREMENTS OF DETAIL ECB.
 5. WHERE CONSTRUCTION TRAFFIC MUST CROSS A DIVERSION CHANNEL, THE PERMITTEE SHALL INSTALL A TEMPORARY STREAM CROSSING CONFORMING TO THE REQUIREMENTS OF DETAIL TSC.
- DIVERSION CHANNEL MAINTENANCE NOTES**
1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 4. DIVERSION CHANNELS ARE TO REMAIN IN PLACE UNTIL WORK IN THE DOWNGRADIENT AREA OR NATURAL CHANNEL IS NO LONGER REQUIRED. IF APPROVED BY LOCAL JURISDICTION DIVERSION CHANNEL MAY BE LEFT IN PLACE.
 5. IF DIVERSION CHANNELS ARE REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.
- (DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

June 2012 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3 TDM-13

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RESPEC 720 S COLORADO BLVD SUITE 410S DENVER, CO 80246 PHONE (303) 757-3655				
STAMP				
STATE OF COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY 1313 SHERMAN ST., ROOM 215 DENVER, CO 80203 303-801-7644				
CONGRER MINE - SHERWOOD CREEK RECLAMATION				
STORMWATER MANAGEMENT DETAILS				
DRAWING NUMBER: S-5				
SHEET 20				

Walker, Samuel

From: Northrup, Elizabeth (Liz)
Sent: Friday, March 8, 2024 4:03 PM
To: Walker, Samuel
Cc: Carden, Timothy
Subject: RE: Referral Packet for Docket LU-24-0001: BCPOS Sherwood Creek Restoration at 1600 County Road 126J and 735 County Road 128W

Hi Sam,

I reviewed the referral packet for LU-24-0001. As proposed, this stream restoration project should not affect the nearby conservation easement property or the adjacent deed restriction properties. Thank you for the opportunity to review and comment on this docket.

Best,
 Liz

Liz Northrup | Conservation Easement Program Supervisor
 she/her/hers
 Boulder County Parks & Open Space
 5201 St. Vrain Road
 Longmont, CO 80503
 303-678-6253 (office)
enorthrup@bouldercounty.gov
[Boulder County Open Space Website](#)



*New: Boulder County has a new website: [BoulderCounty.gov](https://bouldercounty.gov)! Bookmark it today. Email addresses will transition at a later date.
 Nuevo: ¡El condado de Boulder tiene un nuevo sitio web: [BoulderCounty.gov](https://bouldercounty.gov)! Márcalo hoy. Los correos electrónicos harán la transición en una fecha posterior.*

From: Morgan, Heather <hmorgan@bouldercounty.gov>
Sent: Wednesday, March 6, 2024 10:02 AM
To: Atherton-Wood, Justin <jatherton-wood@bouldercounty.gov>; Moline, Jeffrey <jmoline@bouldercounty.gov>; !LongRange <longrange@bouldercounty.gov>; Historic <historic@bouldercounty.gov>; #WildfireMitigation <WildfireMitigation@bouldercounty.org>; #AssessorReferral <AssessorReferral@bouldercounty.org>; #CAREfferral <CAREfferral@bouldercounty.gov>; #CEreferral <CEreferral@bouldercounty.gov>; Oehlkers, Jason <joehlkers@bouldercounty.gov>; Allshouse, Alycia <aallshouse@bouldercounty.gov>; Kelly, Allison <akelly@bouldercounty.gov>; Maya@boulderwatershedcollective.org; BDRCO@xcelenergy.com; Donna.L.George@xcelenergy.com; planner@nederlandco.org; townadmin <townadmin@nederlandco.org>; Vanessa McCracken <bldrvalleyandlongmontcds@gmail.com>; hc_filesearch@state.co.us; terri.fead@state.co.us; drms_info@state.co.us; sarah.brucker@state.co.us; DNR_Area2_Landuse@state.co.us; tyler.asnicar@state.co.us; coloradoes@fws.gov; lauren.kryszczuk@usda.gov; Inspections@NFPD.org; Flax, Ron <rflax@bouldercounty.gov>; Frederick, Summer <sfriderick@bouldercounty.gov>; HealthWaterQuality-EnvironmentalBP LU <HealthWQ-

EnvironBPLU@bouldercounty.gov>; Huebner, Michelle <mhuebner@bouldercounty.gov>; Milner, Anna <amilner@bouldercounty.gov>; Sanchez, Kimberly <ksanchez@bouldercounty.gov>; Skufca, Erika <eskufca@bouldercounty.gov>; Transportation Development Review <TransDevReview@bouldercounty.gov>; West, Ron <rowest@bouldercounty.gov>
Cc: Walker, Samuel <swalker@bouldercounty.gov>; Bowers, James <jbowers@bouldercounty.gov>
Subject: Referral Packet for Docket LU-24-0001: BCPOS Sherwood Creek Restoration at 1600 County Road 126J and 735 County Road 128W

Please see attached for the public notice and [click here](#) for the referral packet for Docket **LU-24-0001: BCPOS Sherwood Creek Restoration** at **1600 County Road 126J and 735 County Road 128W**.

Please return responses and direct any questions to [Sam Walker](#) by **March, 21 2024**. (Boulder County internal departments and agencies: Please attach the referral comments in Accela.)



Heather Morgan | Lead Administrative Technician
Planning Division | Boulder County Community Planning & Permitting
 P.O. Box 471, Boulder, CO 80306 | Courthouse Annex—2045 13th St., Boulder, CO 80302
hmorgan@bouldercounty.gov | (720) 864-6510 | www.boco.org/cpp
My usual working hours are Monday-Friday, 7:30 a.m.-4:00 p.m.

*Boulder County has migrated all email to the .gov domain. Please update your contact lists to reflect the change from hmorgan@bouldercounty.org to hmorgan@bouldercounty.gov. **Emails sent to both .org and .gov addresses will continue to work.** This work is part of the migration to the .gov domain that began in July 2022 when the Boulder County website moved to www.bouldercounty.gov. This move to the .gov domain provides a higher level of cybersecurity protection.*



Community Planning & Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302 • Tel: 303.441.3930 • Fax: 303.441.4856
 Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 • www.bouldercounty.gov

Building Safety & Inspection Services Team

MEMO

TO: Sam Walker, Planner II
 FROM: Michelle Huebner, Plans Examiner Supervisor
 DATE: March 7, 2024

RE: Referral Response, LU-24-0001: BCPOS Sherwood Creek Restoration. Limited Impact Special Use Review to permit 8,843 cubic yards of non-foundational earthwork for restoration of the Sherwood Creek stream channel.

Location: 1600 County Road 126J and 735 County Road 128W, at the dead end of County Road 126J, accessed via County Road 126 approximately .5 miles west of the intersection of County Road 126 and SH72 on a 92 acre and 79 acre parcel in Section 11, Township 1S, Range 73W.

Thank you for the referral. We have the following comments for the applicants:

1. **Building Permit.** A grading permit, plan review, and inspection approvals are required for the grading. The construction documents must be Stamped, signed and sealed by the Colorado design.

Please refer to the county's adopted 2015 editions of the International Codes and code amendments, which can be found via the internet under the link:

2015 Building Code Adoption & Amendments, at the following URL:

<https://assets.bouldercounty.org/wp-content/uploads/2017/03/building-code-2015.pdf>

2. **Grading Permit.** A separate grading permit and plan review and inspections approvals are required for the proposed non-foundational grading. Please refer to the county's adopted 2015 editions of the International Codes and code amendments, including IBC Appendix Chapter J for grading.
3. **Observation Reports.** The design professional responsible for the design or a similarly qualified Colorado-licensed design professional is to observe the grading and submit a stamped report to Building Safety & Inspection Services for review and approval. The final report is to state that the work has been completed in substantial conformance with the approved engineered plans.

4. **Plan Review.** The items listed above are a general summary of some of the county's building code requirements. A much more detailed plan review will be performed at the time of grading permit application.

If the applicants should have questions or need additional information, we'd be happy to work with them toward solutions that meet minimum building code requirements. Please call (720) 564-2640 or contact us via e-mail at building@bouldercounty.org



COLORADO
Division of Water Resources
 Department of Natural Resources

March 22, 2024

Sam Walker, Planner II
 Boulder County Community Planning & Permitting
 Transmission via email: swalker@bouldercounty.gov

Re: LU-24-0001 BCPOS Sherwood Creek Restoration
 1600 County Road 126J and 735 County Road 128W
 Section 13, Township 1 South, Range 73 West, 6th P.M.
 Water Division 1, Water District 6

Dear Mr. Walker:

We have reviewed the above-referenced Limited Impact Special Review for earthwork related to stream restoration work at the Caribou Ranch - Sherwood Gulch property. The submitted material does not qualify as a “subdivision” as defined in section 30-28-101(10)(a), C.R.S. Therefore, pursuant to the State Engineer’s March 4, 2005 and March 11, 2011 memorandums to county planning directors, this office will only perform a cursory review of the referral information and provide comments. Our comments are restricted to the potential impacts this project has to water resources and the protection of other vested water rights, and will not state an opinion on the ability of the project to satisfy any County regulations or requirements.

The Sherwood Creek Restoration Project seeks to establish a new channel alignment and restore the riparian corridor in the portion of Sherwood Creek impacted by historical mining activities at the Conger Mine. Material related to historical mining operations at the site currently block a portion of the channel of Sherwood Creek, creating an impoundment approximately 1.5 miles from the headwaters of Sherwood Creek. The streamflow infiltrates for approximately 300-400 feet. The flow emerges in springs and seeps, with additional flow daylighting into the existing stream channel approximately 700 feet below the impoundment.

The primary components of the restoration project include closing the nearby access road entirely and using the current road area for a new creek alignment. Material that was placed over the original creek bed will be excavated and a channel and overbank will be excavated to restore the area. Should temporary dewatering be required as a part of this project, the applicant will need to submit a notice of intent to construct dewatering wells to this office.

There is no statutory requirement for stream and/or wetland restoration/mitigation project proponents to obtain input or approval from the Colorado Division of Water Resources (DWR) prior to commencing such a project. Nevertheless, project proponents should consider if their project could result in an order from the State or Division Engineers due to injury to vested water rights. The types of orders that may be relevant to the subject restoration project are:

1. discontinue a diversion that is causing material injury;



2. release any water that has been illegally or improperly stored; or
3. clear streams of unnecessary dams and obstructions that restrict or impede the flow of water (refer to sections 37-92-501 and 502, Colorado Revised Statutes, for information about DWR's authority to administer water and issue orders).

Activities that result in the storage or diversion of streamflow or stormwater, that restrict the flow of water, or that expose groundwater have the potential to impact vested water rights, and could be subject to orders if not included in a water court approved plan for augmentation, or a substitute water supply plan approved by the State Engineer. Additional information about DWR's position on restoration/mitigation projects is available on our website at:

dwr.colorado.gov/services/water-administration/pond-management-restoration-projects

The applicant and/or their construction company will need to coordinate with the District 6 Water Commissioner (William Horan, 970-518-2229, william.horan@state.co.us) when and if any work is being done in Sherwood Creek that could alter flows or impact downstream water users. Such communication is also required in order to assist with conveying information to the applicant and construction company about potential high flows in Sherwood Creek. Provided this project proceeds on the basis that the proposed activities will not result in the exposure of groundwater, storage or diversion of streamflow or stormwater, or restrict the flow of water, the proposed actions to be undertaken for this project would appear to be outside the administrative authority of DWR, and DWR would not object to the proposed project, though the applicant and/or their construction company will still need to coordinate with the District 6 Water Commissioner for work being done in Sherwood Creek as described above.

As described above, these comments are provided for information purposes only. The comments should not be considered official approval or denial of this project because DWR does not have permitting authority over such projects. Although DWR may not object to this project based on the understanding stated in this letter, this does not protect this project from a claim of injury by the owner of a senior vested water right.

Should you or the applicant have any questions regarding this matter, please feel free to contact me at kathleen.fuller@state.co.us or 303-866-3581 ext. 8245.

Sincerely,



Kate Fuller, P.E.
Water Resources Engineer

Cc: Referral file no. 31255
William Horan, Water Commissioner, District 6



Community Planning & Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302
 Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 •
 Tel: 303-441-3930 • www.BoulderCounty.gov

March 18, 2024

TO: Samuel Walker, Planner II; Community Planning & Permitting, Development Review Team – Zoning

FROM: Brian P. Kelly, Planner II; Community Planning & Permitting, Development Review Team – Access & Engineering

SUBJECT: Docket # LU-24-0001: BCPOS Sherwood Creek Restoration – 1600 County Road 126J and 735 County Road 128W

The Development Review Team – Access & Engineering staff has reviewed the above referenced docket and has the following comments:

1. The subject property is accessed by County Road 126 (CR126), a gravel Boulder County owned and maintained right-of-way (ROW), with a functional classification of Local via CR126 J, a Boulder County owned but not maintained function classified Jeep road. Legal access is demonstrated via adjacency to this public ROW.
2. Any future maintenance to CR126J must be first approved by the County Engineer in a Roadway Maintenance Agreement through the Public Works Department.
3. The proposal involves more than one acre of site disturbance as well as the crossing of a watercourse, triggering the requirement for a Boulder County Stormwater Quality Permit (SWQP). Please visit the county's stormwater website <https://bouldercounty.gov/transportation/permits/stormwater-quality-permit/> or contact tdstormwater@bouldercounty.org for more information.

The applicant has committed to working with the Public Works Department to develop and implement a Stormwater Management Plan (SWMP). The SWMP will include, but not be limited to, erosion and sediment control measures, stockpile and staging management practices, and general pollution prevention practices.

At grading permit, the SWQP application must be submitted and obtained prior to any work beginning on the project. A drainage report must be submitted with the SWQP application materials.

4. The proposed vehicle tracking control (VTC) located downstream of existing seeps (Shown on Sheet 17, Drawing Number S-1 dated 01/08/2024) does not demonstrate connection to the stabilized staging areas (SSA).

At grading permit, provide updated plans indicating all temporary construction access routes, as well as construction staging areas.

5. The applicant must restore Sherwood Creek at the temporary crossing site once construction has been completed.

6. The applicant must verify the fueling practices that will be used during construction. If employing temporary above-ground storage tanks, a spill containment plan will be required at building permit and plans must identify sizes and locations of the tanks. If refueling from mobile trucks, spill kits must be kept in vehicles or on site. Maintain a distance of at least 50 between fueling areas and drainage ways.

At grading permit, provide documentation of the fueling practices and locations.

7. ***Prior to grading permit issuance***, the proposed development must meet all local, state, and federal regulations. The applicant must demonstrate coverage under a USACE Nationwide or Individual 404 permit.
8. Workers' vehicles must be parked in designated approved areas that are outside of the road traveled way which do not conflict with the project work. Parking plans shall be shown on the site plans for approval.

This concludes our comments at this time.



Parks & Open Space

5201 St. Vrain Road • Longmont, CO 80503
303-678-6200 • POSinfo@bouldercounty.org
www.BoulderCountyOpenSpace.org

TO: Sam Walker, Community Planning & Permitting Department
FROM: Ron West, Natural Resource Planner
DATE: April 10, 2023
SUBJECT: Docket LU-24-0001, BCPOS Sherwood Creek, 1600 County Road 126J

Site Conditions

I have reviewed the submitted materials, and have visited the area in the past. The proposed construction area has been severely altered by tungsten mining, as described in the application. A section of natural creek was simply buried, under large amounts of waste rock from mining activity.

County Comprehensive Plan Designations

The parcel has the following designations in the Boulder County Comprehensive Plan, or from other resource inventories.

- Environmental Conservation Area (ECA) – Indian Peaks
- Riparian Area
- Wetland Area

Discussion

Staff strongly supports the proposal. It would drastically improve ecological conditions on about 700 linear feet of Sherwood Creek. The following comments are offered.

Under “Installation of Grade Control Structures,” it is stated that one structure would be completed in the downstream section. Is this the “4’ head cut” and access path on Sheet C-1?

Under “Imported Materials...,” 416 cubic yards of compost would be imported. This is unusual, but staff understands the bare-rock nature of the site. Where would this be sourced and how would any weed seeds be controlled?

Drawings

Sheet C-1, Note 5 – “Waste rock berm shall be graded down in this area at a later date at the advisement of Boulder County.” Staff does not agree. The entire site would be revegetated under this project, and doing the berm “later” would re-disturb a large area. Also, there would be no access to the site for equipment, unless a small skid steer that could negotiate the trail would be sufficient. This would be a huge effort for such a small machine. Staff strongly recommends that the removal of the berm be incorporated into the current project.

The “turnaround” area, at the new end of CR 126J, should avoid the large montane meadow

on the south side of the road.

Sheet C-5 – Staff notes that the riprap at the toe of the existing waste pile would be void-filled. This is important, so vegetation could eventually grow on the riprap. Where would this (fine) fill material be sourced?

Sheet D-1 – Staff notes that which of the two structure designs would be used will occur later, subject to the new law.

Sheet L-1 – All native species proposed for use are appropriate.

Sheet S-1 and S-2 – Much of the sediment control logs shown on these drawings are on uphill gradients to the construction areas, and are not necessary. This appears to be the case on the western and northern sides. If these are to demarcate the extent of disturbance/equipment use, construction fencing should be used instead.

A “stabilized” staging area is shown; how would this be stabilized?

“Tree protection” is included where the riprap would be placed.

Note 2 mentions “diversion,” yet the stream should not be running during construction. Sheet S-5 shows diversion details – SM-8.

Recommendations

- The above comments should be considered and/or resolved.



Community Planning & Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302
Mailing Address: P.O. Box 471 • Boulder, Colorado 80306
303-441-3930 • www.BoulderCounty.gov

MEMO TO: Agencies and Adjacent Property Owners
FROM: Sam Walker, Planner II
DATE: March 6, 2024
RE: Docket **LU-24-0001**

Docket LU-24-0001: BCPOS Sherwood Creek Restoration

Request: Limited Impact Special Use Review to permit 8,843 cubic yards of non-foundational earthwork for restoration of the Sherwood Creek stream channel.

Location: 1600 County Road 126J and 735 County Road 128W, at the dead end of County Road 126J, accessed via County Road 126 approximately .5 miles west of the intersection of County Road 126 and SH72 on a 92 acre and 79 acre parcel in Section 11, Township 1S, Range 73W.

Zoning: Forestry (F) Zoning District

Applicant: Boulder County, c/o David Hirt

Limited Impact Special Review is required of proposed uses that may have greater impacts on services, neighborhoods, or the environment than those allowed by right under the Boulder County Land Use Code. This process will review conformance of the proposed use with the Boulder County Comprehensive Plan and the Land Use Code.

This process includes a public hearing before the Board of County Commissioners. Adjacent property owners and holders of liens, mortgages, easements or other rights in the subject property are notified of this hearing.

The Community Planning & Permitting staff and County Commissioners value comments from individuals and referral agencies. Please check the appropriate response below or send a letter to the Community Planning & Permitting Department at P.O. Box 471, Boulder, Colorado 80306 or via email to planner@bouldercounty.gov. All comments will be made part of the public record and given to the applicant. Only a portion of the submitted documents may have been enclosed; you are welcome to call the Community Planning & Permitting Department at 303-441-3930 or email planner@bouldercounty.gov to request more information. If you have any questions regarding this application, please contact me at 720-564-2738 or swalker@bouldercounty.gov.

Please return responses by **March 21, 2024.**

☒ We have reviewed the proposal and have no conflicts.
☐ Letter is enclosed.

Signed  PRINTED Name Jessica Fasick

Agency or Address CP&P Historic Review

Claire Levy County Commissioner Marta Loachamin County Commissioner Ashley Stolzmann County Commissioner

Date 3/27/24

Walker, Samuel

From: Andrew Joslin <ajoslin@nederlandfire.org>
Sent: Wednesday, March 6, 2024 10:25 AM
To: Walker, Samuel
Subject: [EXTERNAL] Docket LU-24-0001

No concerns from Nederland Fire,

Thank you

**Andrew Joslin**

Fire Marshal
Nederland Fire Protection District
firemarshal@nederlandfire.org
650 Lower W 4th St
Nederland, CO 80466
Office: 303-258-9111, ext. 104
Cell: 303-809-9687

Under the Colorado Open Records Act (CORA), all messages sent by or to me on this district-owned email account may be subject to public disclosure.

**Right of Way & Permits**

1123 West 3rd Avenue
Denver, Colorado 80223
Telephone: **303.571.3306**
Facsimile: 303.571.3284
Donna.L.George@xcelenergy.com

March 30, 2024

Boulder County Community Planning and Permitting
PO Box 471
Boulder, CO 80306

Attn: Sam Walker

Re: BCPOS Sherwood Creek Restoration, Case # LU-24-0001

Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the limited impact special use for **BCPOS Sherwood Creek Restoration** and currently has **no apparent conflict** with the proposed activities at the specific project site at Sherwood Creek

Please note that PSCo owns and operates existing natural gas and electric distribution facilities in the northerly and southerly areas of the subject properties.

As a safety precaution, PSCo would like to remind the developer to call the Utility Notification Center by dialing 811 for utility locates prior to construction.

Donna George
Right of Way and Permits
Public Service Company of Colorado dba Xcel Energy
Office: 303-571-3306 – Email: donna.l.george@xcelenergy.com