



## 2024 319 Application Form - On-the-Ground Projects

### General Information

Project Name	Dry Creek Restoration Phase 3- Additional Funding		
Applicant Name	Trout Unlimited, Inc.		
Registered with the Secretary of State?	<input checked="" type="checkbox"/>	Registered with SAM?	<input type="checkbox"/>
UEI #	051698132		
Does your organization have liability insurance?	<input type="checkbox"/>		
Primary Contact	Connor Parrish		
Signatory	Casey Hackathorn		
Title	Project Manager		
Title	Montana State Director		
Address	321 E. Main St, Suite 401		
Address	312 N. Higgins Ave, Suite 200		
City	Bozeman	State	MT
City	Missoula	State	MT
Zip Code	59715	Zip Code	59802
Phone Number	(406) 223-9331		
Phone Number	(406) 546-5680		
Email Address	connor.parrish@tu.org		
Email Address	casey.hackathorn@tu.org		
Signature	Connor Parrish <small>Digitally signed by Connor Parrish Date: 2023.10.04 14:22:53 -08'00'</small>		
Signature	Casey Hackathorn <small>Digitally signed by Casey Hackathorn Date: 2023.10.05 17:25:45 -08'00'</small>		

**Technical and Administrative Qualifications - Describe the technical and administrative skills your organization will use to effectively and efficiently complete your proposed project(s).**

Trout Unlimited's Bozeman-based staff Connor Parrish and Pat Byorth will lead this project with support from partners. Connor Parrish is a project manager with TU and has 12-years of experience working in the field of fisheries including 5.5 years managing aquatic restoration projects. Pat Byorth has managed wild trout fisheries and aquatic restoration in southwestern Montana for 32 years while working various positions for Montana Fish Wildlife and Parks and Trout Unlimited. Currently, Pat is TU's Montana Water Director. Jeff Dunn with WGM Group has 19 years of experience designing and implementing aquatic restoration projects. Briana Schultz with Sundog Ecological has 16 years of experience with wetland delineation and revegetation. TU has worked with both Jeff and Briana on several projects including multiple phases of restoration on Dry Creek funded through DEQ's 319 program.

## Budget Summary

	319 Funding Request	Non-Federal Match	Other Funding	Total Cost
Education and Outreach Project Administration				
<b>Project 1 Name</b>				
Project Planning				
Landowner Agreements				
Project Implementation				
Project Effectiveness Monitoring				
<b>Total</b>				
<b>Project 2 Name</b>				
Project Planning				
Landowner Agreements				
Project Implementation Project				
Effectiveness Monitoring				
<b>Total</b>				
<b>Project 3 Name</b>				
Project Planning				
Landowner Agreements				
Project Implementation Project				
Effectiveness Monitoring				
<b>Total</b>				
<b>Project 4 Name</b>				
Project Planning				
Landowner Agreements				
Project Implementation Project				
Effectiveness Monitoring				
<b>Total</b>				
<b>Grand Total</b>				

## Education and Outreach

Developing good projects often requires a considerable amount of time and effort up front to build relationships and trust with individual landowners and stakeholder groups. It also requires adequate training for project sponsor staff (e.g., technical training, project management, public procurement, technical writing, etc). To promote the development of future projects, DEQ is encouraging project sponsors to use up to \$5,000 in 319 funding for education and outreach to develop and capitalize on critical relationships and to improve organizational capacity. DEQ also encourages applicants to incorporate on-the-ground projects into education and outreach efforts through on-site demonstrations and project tours. 319 funding may not be used to pay for food and beverages, or for honorariums and gifts.

Activity 1 (method of delivery)

Target Audience

Goals

Effectiveness Evaluation

Activity 2 (optional)

Target Audience

Goals

Effectiveness Evaluation

### Activity 3 (optional)

Target Audience

Goals

Effectiveness Evaluation

319 Funding Request	Non-Federal Match	Other Funding*	Total
_____	_____	_____	
Match Source _____			Secured
Match Source _____			Secured
Match Source _____			Secured

*\*Use this space to record any funding that will be used to support creation of the task deliverables, but will not be reported as match. The purpose of this information is to give application reviewers a clearer understanding of the total amount of funding required to complete a task.*



## Project Administration

319 funding applied to project administration must not exceed 10% of the total amount of 319 funding requested, or \$12,000, **whichever is lower**. Project administration includes normal business expenses associated with completion of the project, regular communication with DEQ, and completion of the following reporting:

- Mid-Year Reports: Due June 15th of each year the Contract is in effect.
- Annual Reports: Due December 15th of each year the Contract is in effect.
- Interim Reports: Due whenever reimbursement is requested outside of the normal Mid-Year, Annual and Final reporting periods while the Contract is in effect.
- Draft Final Report: Due for DEQ review and comment at least 15 days prior to the contract expiration date. The Final Report is a standalone document describing all contract activities and containing copies of all contract deliverables (even if the deliverables were previously submitted).
- Final Report: Due on or before the contract expiration date; must address all DEQ comments from previous drafts.
- Billing Statements: Submitted with each Mid-Year, Interim, Annual, or Final Report.
- Exception to the Reporting Schedule: The Final Report and associated Billing Statement will replace the last required Mid-Year or Annual Report.

319 Funding Request	Non-Federal Match	Other Funding*	Total Cost
<hr/>	<hr/>	<hr/>	<hr/>
Match Source	<hr/>		Secured
Match Source	<hr/>		Secured

*\*Use this space to record any funding that will be used to support creation of the task deliverables, but will not be reported as match. The purpose of this information is to give application reviewers a clearer understanding of the total amount of funding required to complete a task.*

## Project 1 Name

Select the watershed restoration plan (WRP) or tribal nonpoint source plan that your project will help implement (please type in if missing from list).

Letter of support from author entity attached? *(If no, explain why below.)*

## Problem Description

Waterbody name from the 2020 List of Impaired Waters

Probable causes of impairment to be addressed

Waterbody name from the 2020 List of Impaired Waters

Probable causes of impairment to be addressed

**HEALTHY WATERSHEDS:** In most instances, on-the-ground projects must address identified impairments. However, in some instances, EPA allows 319 funding to be used for projects that protect watersheds that are currently healthy.

Name of healthy waterbody to be protected

Description of identified threat to non-impairment status

Name of healthy waterbody to be protected

Description of identified threat to non-impairment status

**Describe the types, sources, and root causes of the pollution problem you're trying to address.** *Identify the specific types and sources of pollution (e.g., sediment from excessive streambank erosion, nitrogen from livestock, loss of riparian habitat due to stream channel straightening). Identify the root causes of the pollution (e.g., streambank erosion caused by lack of riparian vegetation as a result of a historic road that was built next to the stream, a feedlot straddling the stream, stream channel was straightened to accommodate historic placer mining).*

**Describe any previous or ongoing efforts to address the problem.** *Identify previous or ongoing efforts to garner support for addressing the problem. Identify previous on-the-ground or management changes implemented to address the problem.*

## Possible Solutions and Preferred (*proposed*) Alternative

Most nonpoint source pollution problems have multiple possible solutions, including doing nothing and waiting for natural processes to correct the problem. Please use the spaces provided below to describe reasonably possible solutions. Start with the "no action" alternative, and end with a more detailed description of the preferred alternative (the one for which you are seeking funding).

Name: No Action Alternative

---

Pros:

Cons:

Following implementation, how long will it take to achieve the desired nonpoint source pollution prevention benefits?

Immediately

5 years

10 years

20+ years

Never

Name:

---

Briefly describe the alternative.

Pros:

Cons:

Following implementation, how long will it take to achieve the desired nonpoint source pollution prevention benefits?

Immediately

5 years

10 years

20+ years

Never

**Name:** Preferred (*proposed*) Alternative

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## Project Location

Upstream End	Latitude	Longitude
Downstream End	Latitude	Longitude
Centerpoint	Latitude	Longitude
Upstream End	Latitude	Longitude
Downstream End	Latitude	Longitude
Centerpoint	Latitude	Longitude
Upstream End	Latitude	Longitude
Downstream End	Latitude	Longitude
Centerpoint	Latitude	Longitude

List the 12-digit Hydrologic Unit Code(s) (HUCs) in which the project area is located.

**Detailed Project site map(s)** Attach a map or set of maps showing the location and size of proposed activity. The map scale must be between 1:1,000 and 1:12,500. The map(s) must have an aerial photo background (e.g., USDA NAIP photography, Google Earth imagery, etc.). The map(s) must show the latitude, longitude, site name, and landowner for the activity site. The map(s) should also identify waterbodies affected by the pollution that the activity is designed to address.

**Elevator Speech Summary** In one short paragraph, summarize your proposed solution and why it's important.

## **Detailed Solution Description**

Provide a detailed description of the solution you are proposing to implement to address the nonpoint source pollution problem. Describe the practices you intend to design and/or implement to solve the problem (what, where, when, how much or how many). Describe the anticipated maintenance needs (what, where, who, how long)

Project Planning

Identify the status of the following project planning tasks, where applicable.

	Completed?	Copy Attached?	To Be Completed Pre-Contract (Aug 2024)?	To Be Completed as Contract Deliverable?
*Draft Project Designs .....				
*Final Project Designs .....				
Consultation With Potential Regulators .....				
Necessary Permits .....				
Endangered Species Act Consultation .....				
Cultural Resources Inventory (may be relevant) .....				
Other:				
Other:				
Other:				

\*See Call for Applications for minimum design standards.

**Project Coordination and Planning Task** This task would include completion of all applicable planning tasks from the list above, as well as coordination and oversight of the efforts of all project partners. Please provide a detailed budget below.

Detailed Budget Item	319 Funding Request	Non-Federal Match	Other Funding**	Total Cost
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TOTAL

Match Source:		Secured
Match Source:		Secured
Match Source:		Secured

\*\*Use this space to record any funding that will be used to support creation of the task deliverables, but will not be reported as match.

## Landowner Agreements

Identify the status of the following landowner agreement tasks, where applicable.

		To Be Completed Pre-Contract (Aug 2024)?	To Be Completed as Contract Deliverable?
nent tasks,			
Completed?	Copy Attached?		

\*Draft Landowner Agreement(s) .....

\*Final Landowner Agreement(s) .....

Grazing Management Plan .....

Other:

Other:

*\*See Call for Applications for a description of what each landowner agreement must contain.*

**Landowner Agreement Task** This includes costs for developing and managing landowner agreements, and developing grazing management plans where applicable. Please provide a detailed budget below.

Detailed Budget Item	319 Funding Request	Non-Federal Match	Other Funding**	Total Cost
----------------------	---------------------	-------------------	-----------------	------------

***TOTAL***

Match Source: Secured

Match Source: Secured

Match Source: Secured

**\*\*Use this space to record any funding that will be used to support creation of the task deliverables, but will not be reported as match. The purpose of this information is to give application reviewers a clearer understanding of the total amount of funding required to complete a task.**



## Project Implementation

This includes costs for all materials, labor, equipment, construction oversight, and as-built surveys associated with implementing the plans developed under the Project Coordination and Planning task. *If you are requesting funding for design only, leave this task blank.*

**Project Implementation Task** Please provide a detailed budget below. Be as specific as you have information available, using estimates where necessary.

Detailed Budget Item	319 Funding Request	Non-Federal Match	Other Funding*	Total Cost
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**Project Implementation** Match Sources

Match Source	Secured
Match Source	Secured
Match Source	Secured
Match Source	Secured

**Project Effectiveness Monitoring**

*(If you are requesting funding for design only, you may choose to leave this task blank. Alternatively, you may use this task to request funding to develop a monitoring plan and conduct pre-project monitoring in anticipation of future implementation of your designs.)*

Identify the status of the following project effectiveness monitoring tasks.		To Be Completed Pre-Contract (Aug 2024)?	To Be Completed as Contract Deliverable?
	Completed?	Copy Attached?	
*Monitoring Plan .....			
**Pre-project estimate of nitrogen, phosphorus, and/or sediment loading from project site .....			
Pre-project photo-point monitoring .....			
Other:			
Other:			

*\*See Call for Applications for a description of what a monitoring plan must contain.*

*\*\*Only applicable to on-the-ground projects designed to reduce nitrogen, phosphorus, or sediment pollution.*

**Project Effectiveness Monitoring Task** This task includes costs for developing and implementing a reasonable method of evaluating extent to which the preferred alternative resolves the nonpoint source pollution problems you described previously in your application. Please provide a detailed budget below. Include any items from the above list that have not yet been completed, additional monitoring you would like to do, implementation of the monitoring plan, and preparation and submittal of a written monitoring report. If planting vegetation will be part of your project, include vegetation mortality monitoring as a line item.

Detailed Budget Item	319 Funding Request	Non-Federal Match	Other Funding	Total Cost
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***TOTAL***

## Project Effectiveness Monitoring Match Sources

Match Source:	<hr/>	Secured
Match Source:	<hr/>	Secured
Match Source:	<hr/>	Secured

## Project Goals and Benefits

**Nonpoint Source Goals** List the specific, measurable nonpoint source goals for your project.

**Other Important Benefits** Describe the benefits the preferred alternative is likely to have on the topics below.

Local Community

Local Ecosystem

## **Other Important Benefits** *(continued . . . .)*

Downstream  
Communities

Downstream  
Ecosystems

Drinking Water  
*(for humans)*

Economic or Socially  
Disadvantaged  
Communities

Climate Change/  
Climate Resiliency

Public Access to a  
Clean and Healthy  
Environment

## Project Partners

Identify each of the project partners and describe their contribution to the project. Include landowners, land managers, project designers, funders, and your own organization. Indicate whether each partner, other than your organization, has provided a letter of support. (*Note: each landowner must provide a letter of support.*)

Landowner

## Contributions to Project

Letter of  
Support  
Attached?

## Project Partner

## Contributions to Project

Letter of  
Support  
Attached?

# Project 1 - Project Timeline

Task Description	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
	2024	2024	2025	2025	2025	2025	2026	2026	2026	2026	2027	2027

**Other Attachments** - Please list any additional documents you will be submitting with your application.

Additional documents are not required, but may be submitted to provide more specific details about a project or to demonstrate adequate planning and preparation. However, be respectful of the amount of time it will take an application reviewer to read through your application. **If a reviewer is running short on time, they will be permitted to focus solely on the application form and the attachments specifically identified in the previous pages.**

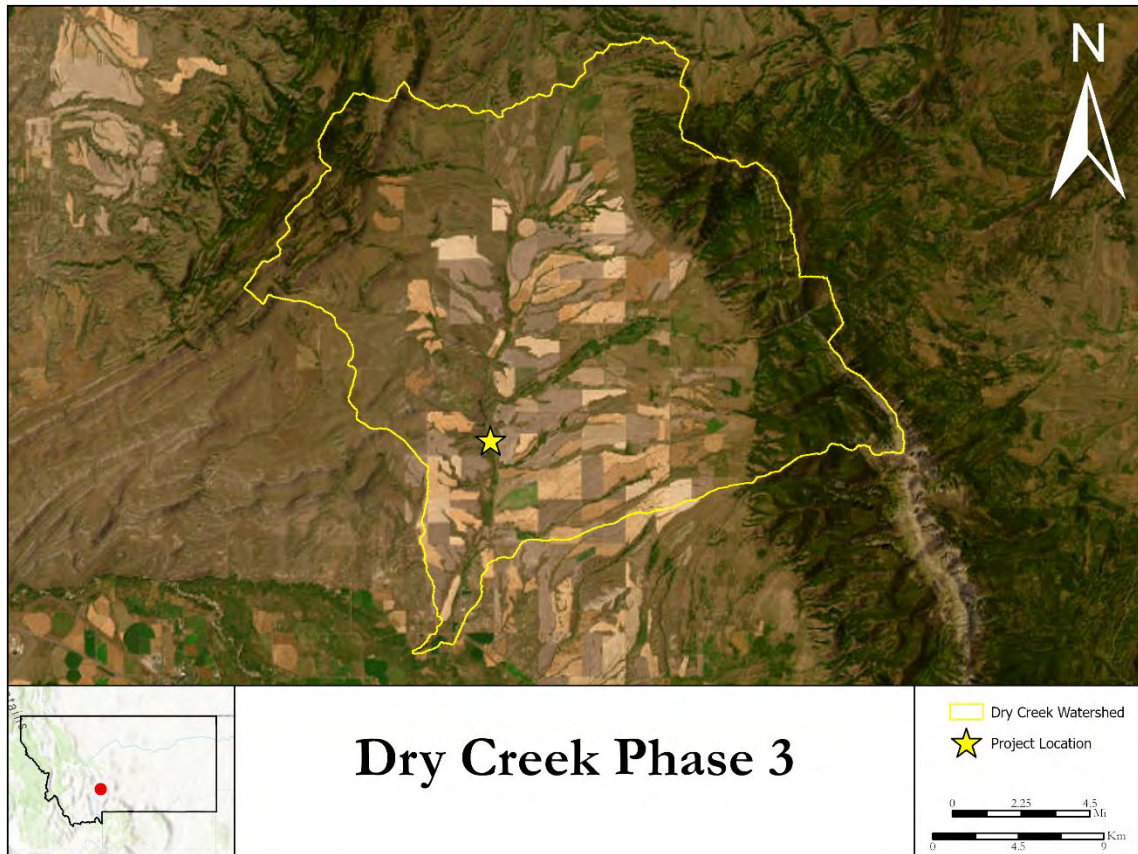
**Final Thoughts** - Use the space below to share any additional information that might be useful in helping someone to better understand your project.

**Make sure the Primary Contact and the Signatory for your organization  
have both signed and dated the application.**



# **MAPS/ DESIGNS**

## Maps





## Dry Creek Restoration Phases 3

### Legend

— Eroding Banks

0 0.05 0.1 Mi

0 0.13 0.25 Km



## Photos



Four of the 14 large eroding streambanks that are proposed for treatment under Dry Creek Phase 3



# GALLATIN COUNTY, MONTANA



PROJECT LOCATION  
DRY CREEK, MT

—BOZEMAN, MT

PREPARED FOR:



*GALLATIN COUNTY*

## SHEET LIST

Sheet Title	Sheet Description
C1.0	COVER SHEET
C1.1	PROJECT OVERVIEW & NOTES
C2.0	EXISTING CONDITIONS
C3.0	RESTORATION PLAN – STREAMBANKS 1–2
C3.1	RESTORATION PLAN – STREAMBANKS 3–6
C3.2	RESTORATION PLAN – STREAMBANKS 7–9
C3.3	RESTORATION PLAN – STREAMBANKS 10–12
C3.4	PROPOSED THALWEG PLAN
C3.5	RESTORATION PLAN – STREAMBANKS 13–14
C4.0	CROSS SECTIONS
C4.1	CROSS SECTIONS & PHOTOS
C4.2	CROSS SECTION PHOTOS
C5.0	WILLOW SEDGE RESTORATION DETAILS
C5.1	RIFFLE AGGRADATION DETAILS
C5.2	POST-ASSISTED LOG STRUCTURE DETAILS



**CALL 2-BUSINESS DAYS  
IN ADVANCE BEFORE YOU  
DIG, GRADE, OR  
EXCAVATE FOR THE  
MARKING OF  
UNDERGROUND MEMBER  
UTILITIES.**

WGM GROUP, INC. ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS (HORIZONTAL AND VERTICAL). THE EXISTING UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.



PROJECT LOCATION

AERIAL VICINITY MAP W/ZONING

SCALE 1"=8000

PROJECT PERSONNEL:

PROJECT MANAGER: JEFF DUNN  
PROJECT ENGINEER: LUKE STEIN, PE



*AERIAL VIEW*



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SHEET 1 OF 15

## PERMIT SET

PLOTTED: 7/27/23  
SAVED: 7/27/23

COVER SHEET

DRY CREEK RESTORATION - PHASE 3  
GALLATIN COUNTY, MONTANA

[illegible]

PROJECT: 22-06-20  
LAYOUT: C1.0  
SURVEYED: ---  
DESIGN: JWD/LRS  
DRAFT: LRS  
APPROVE: JWD  
DATE:

7/27/2023

SHEET

# C1.0

FILE: W:\Projects\220620\20 Data\CAD\01 Design\Phase 3 Conceptual Design\220620 STREAM PLAN.dwg





GENERAL NOTES:

- 1) CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND DETERMINE LOCATION OF ALL UNDERGROUND UTILITIES BEFORE COMMENCING WORK. CALL 811 (OR ONE CALL UTILITY LOCATE: 1-800-424-5555) A MINIMUM OF 72-HOURS BEFORE WORK IS PLANNED. CONTRACTOR IS RESPONSIBLE FOR PROTECTING AND PROPERLY REPAIRING ANY AND ALL DAMAGED UTILITIES.
- 2) ANY UTILITY LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. ALL UTILITY LOCATIONS ARE SUBJECT TO THE ACCURACY OF THE LOCATION METHOD AND SUBJECT TO RELOCATION FROM THE TIME THAT THESE DRAWINGS WERE PREPARED.
- 3) THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, AND A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB, ON-SITE AT ALL TIMES.
- 4) THE CONTRACTOR IS RESPONSIBLE FOR THE SAFETY OF ALL PERSONNEL, ALL SITE VISITORS, AND THE GENERAL PUBLIC WHO MAY BE AFFECTED BY THE CONSTRUCTION. THIS INCLUDES BUT IS NOT LIMITED TO GENERAL AND CHANNEL EXCAVATION, SHORING, TRAFFIC CONTROL, AND SECURITY.
- 5) CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONFLICTS FOUND BETWEEN THE CONSTRUCTION PLANS AND CONDITIONS ENCOUNTERED IN THE FIELD.
- 6) CONTRACTOR SHALL, UNLESS OTHERWISE DIRECTED, REPLACE ALL SIGNS, FENCES, CABLES, APPROACH DELINEATORS, OR OTHER FEATURES THAT MAY BE REMOVED TO ACCESS THE CONSTRUCTION AREA. CONTRACTOR SHALL VERIFY THE NATURE AND EXTENT OF ANY OF THESE FEATURES PRIOR TO BIDDING THE WORK. COST OF THIS WORK SHALL BE INCIDENTAL TO THE PROJECT UNLESS OTHERWISE STATED IN THE CONTRACT DOCUMENTS.
- 7) CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS AND RESTRICTIONS FOUND IN REGULATORY PERMITS OBTAINED BY THE ENGINEER.
- 8) LEGAL LOAD LIMIT REQUIREMENTS SHALL BE ADHERED TO ON ALL STATE HIGHWAYS, COUNTY ROADS, AND CITY STREETS.
- 9) THE CONTRACTOR IS TO PROVIDE HIS OWN WATER FOR COMPACTION AND DUST ABATEMENT.
- 10) CONSTRUCTION SHALL COMPLY WITH THESE PLANS IN ADDITION TO THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
- 11) ALL EQUIPMENT USED ONSITE WILL BE CLEAN, WASHED PRIOR TO ARRIVAL TO THE PROJECT AREAS.
- 12) EMERGENCY SPILL KITS WILL BE MAINTAINED ON EACH PIECE OF EQUIPMENT, OR IN AREAS THAT CAN RAPIDLY BE REACHED.
- 13) FOR INSTALLATION OF STREAMBANK TREATMENTS, ALL WORK WILL BE DONE DURING LOW FLOWS.
- 14) STRUCTURAL BMPS, SUCH AS SILT FENCE, STRAW BALES OR WATTLES MAY BE USED TO ISOLATE CONSTRUCTION ALONG THE ACTIVE CHANNEL AS NECESSARY.
- 15) ALL EXPOSED SOILS WILL BE STABILIZED ONCE CONSTRUCTION IS COMPLETED; SOILS WILL BE STABILIZED USING VARIOUS TECHNIQUES AS DESCRIBED IN THIS PLAN INCLUDING SEEDING AND PLANTING.

OVERALL QUANTITIES:

MATERIAL	QUANTITY	UNIT
TOTAL CUT [STREAMBANKS]	4,192	CY
COBBLE BASE [STREAMBANKS]	414	CY
WILLOW BRUSH	207	CY
SEDGE MAT	207	CY
LOGS	63	EA
COBBLE BASE [LOG STRUCTURES]	84	CY
HOLD DOWN POSTS	168	EA
COBBLE BASE [RIFFLE AGG]	180	CY
TOTAL CUT [BERMS]	375	CY

- 26) THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAVING AND PROTECTING ALL EXISTING TREES AND VEGETATION WHERE REMOVAL FOR CONSTRUCTION IS NOT MANDATORY.
- 17) IF WOUNDING OF SAVED TREES OCCUR, A NON-TOXIC WOUND DRESSING MUST BE APPLIED IMMEDIATELY. EXCAVATORS MUST HAVE A NON-TOXIC TREE WOUND DRESSING WITH THEM ON CONSTRUCTION SITES.
- 18) ALL EXCAVATED MATERIAL FROM STREAMBANKS WILL BE PLACED IN AN AREA APPROVED BY THE ENGINEER.
- 19) ALL REMOVED ITEMS SHALL BECOME THE CONTRACTOR’S PROPERTY TO BE DISPOSED OF IN AN APPROVED MANNER IN ACCORDANCE WITH REGULATION AT NO ADDITIONAL EXPENSE TO THE OWNER, UNLESS SPECIFIED WITHIN THE PLANS. NO CONCRETE, RUBBLE, OR EXTRA MATERIALS SHALL BE BACKFILLED ON SITE.
- 20) MATERIAL STOCKPILE AREAS, ACCESS ROUTES, AND EQUIPMENT STORAGE AREAS WILL BE IDENTIFIED PRIOR TO THE ARRIVAL OF CONTRACTOR HEAVY EQUIPMENT.
- 21) MATERIALS STORED ON THE SITE WHICH MIGHT CONTRIBUTE POLLUTANTS TO RUNOFF SHALL BE LOCATED IN AN ENCLOSED, COVERED, AND LOCKABLE CONTAINER. THESE MATERIALS ARE EXPECTED TO CONSIST MAINLY OF FERTILIZERS, FUELS, AND MACHINERY LUBRICANTS.
- 22) ALL EXISTING AND PROPOSED CONTOURS ARE LABELED IN FEET AND REFERENCE THE 1988 VERTICAL DATUM. ALL SLOPES ARE SHOWN AS DIAGRAMMATIC AND SHALL BE ROUNDED AT THE TOP AND BOTTOM.
- 23) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP OF THE PROJECT SITE AND SURROUNDING AREAS ON A DAILY BASIS OF ANY TRASH OR MUD AS A RESULT OF CONSTRUCTION.
- 24) THE CONTRACTOR SHALL RESTORE ALL STAGING AND STOCKPILING AREAS TO THEIR ORIGINAL CONDITION OR BETTER UPON COMPLETION OF THE PROJECT. THE COST TO RESTORE THESE AREAS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE WORK.
- 25) THE CONTRACTOR SHALL MAINTAIN ALL HAUL ROUTES AND RESTORE THEM TO THEIR ORIGINAL CONDITION OR BETTER UPON COMPLETION OF USE AT NO EXPENSE TO THE OWNER.
- 26) ALL PAVED HAUL ROUTES SHALL BE MAINTAINED FREE OF MUD AND DEBRIS RESULTING FROM CONSTRUCTION OPERATIONS.
- 27) CONTRACTOR IS RESPONSIBLE FOR REPAIRING/REPLACING ALL DAMAGED INFRASTRUCTURE.
- 28) THE CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM ENGINEER. THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
- 29) ALL ESTIMATES OF QUANTITIES SHALL BE VERIFIED BY THE CONTRACTOR/SUBCONTRACTOR, WHO SHALL BE RESPONSIBLE FOR DETERMINING ALL QUANTITIES AND PROVIDING THE WORK AND MATERIALS AS SHOWN ON THE PLANS.
- 30) THIS PROJECT UTILIZES PROCESS-BASED RESTORATION TECHNIQUES INTENDED TO SET THE STAGE FOR DYNAMIC NATURAL CHANNEL PROCESSES. ACTUAL STREAM CHANNEL AND WETLAND FEATURE LOCATIONS AND CONDITION MAY VARY FROM DEPICTED DESIGN POST-IMPLEMENTATION DEPENDING ON THE NATURAL VARIABILITY OF FUTURE HYDROLOGIC EVENTS.

PROJECT OVERVIEW & NOTES

DRY CREEK RESTORATION - PHASE 3

GALLATIN COUNTY, MONTANA



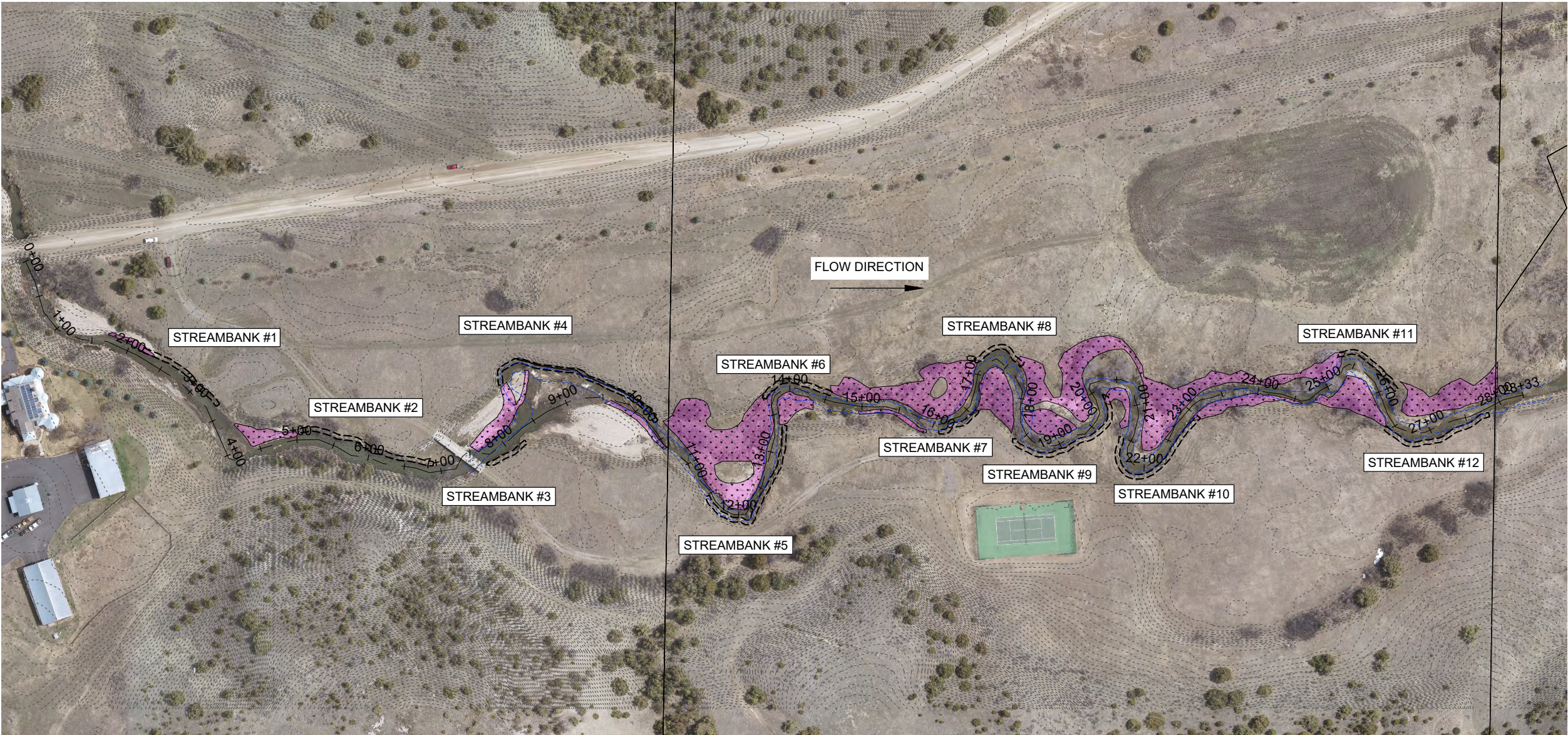


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SHEET 3 OF 15

PERMIT SET

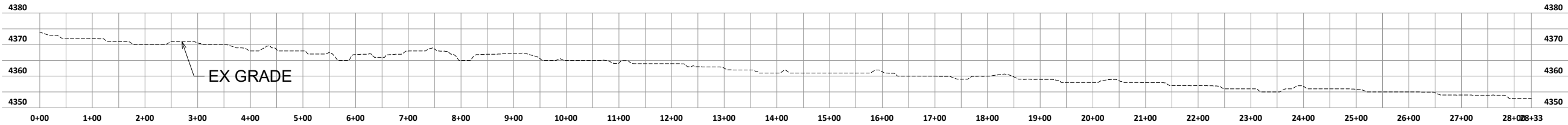
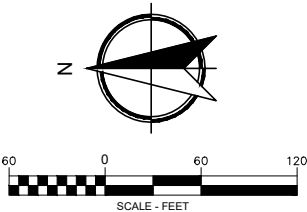
PLOTTED: 7/27/23  
SAVED: 7/27/23



EXISTING CONDITIONS  
SCALE 1"=60'

LEGEND-EXISTING

- ERODING STREAMBANK
- BANKFULL W.S.L.
- EXISTING WETLAND



EXISTING THALWEG PROFILE

EXISTING CONDITIONS  
DRY CREEK RESTORATION - PHASE 3  
GALLATIN COUNTY, MONTANA

REVISIONS:		
NO.	DESCRIPTION	DATE

PROJECT: 22-06-20  
LAYOUT: C2.0  
SURVEYED: ---  
DESIGN: JWD/LRS  
DRAFT: LRS  
APPROVE: JWD  
DATE: 7/27/2023

7/27/2023

C2.0

SHEET





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SHEET 4 OF 15

PERMIT SET

PLOTTED: 7/27/23  
SAVED: 7/27/23

RESTORATION PLAN - STREAMBANKS 1-2  
DRY CREEK RESTORATION - PHASE 3  
GALLATIN COUNTY, MONTANA

REVISIONS:  
NO. DESCRIPTION DATE


PROJECT: 22-06-20  
LAYOUT: C3.0  
SURVEYED: ---  
DESIGN: JWD/LRS  
DRAFT: LRS  
APPROVE: JWD  
DATE:

7/27/2023

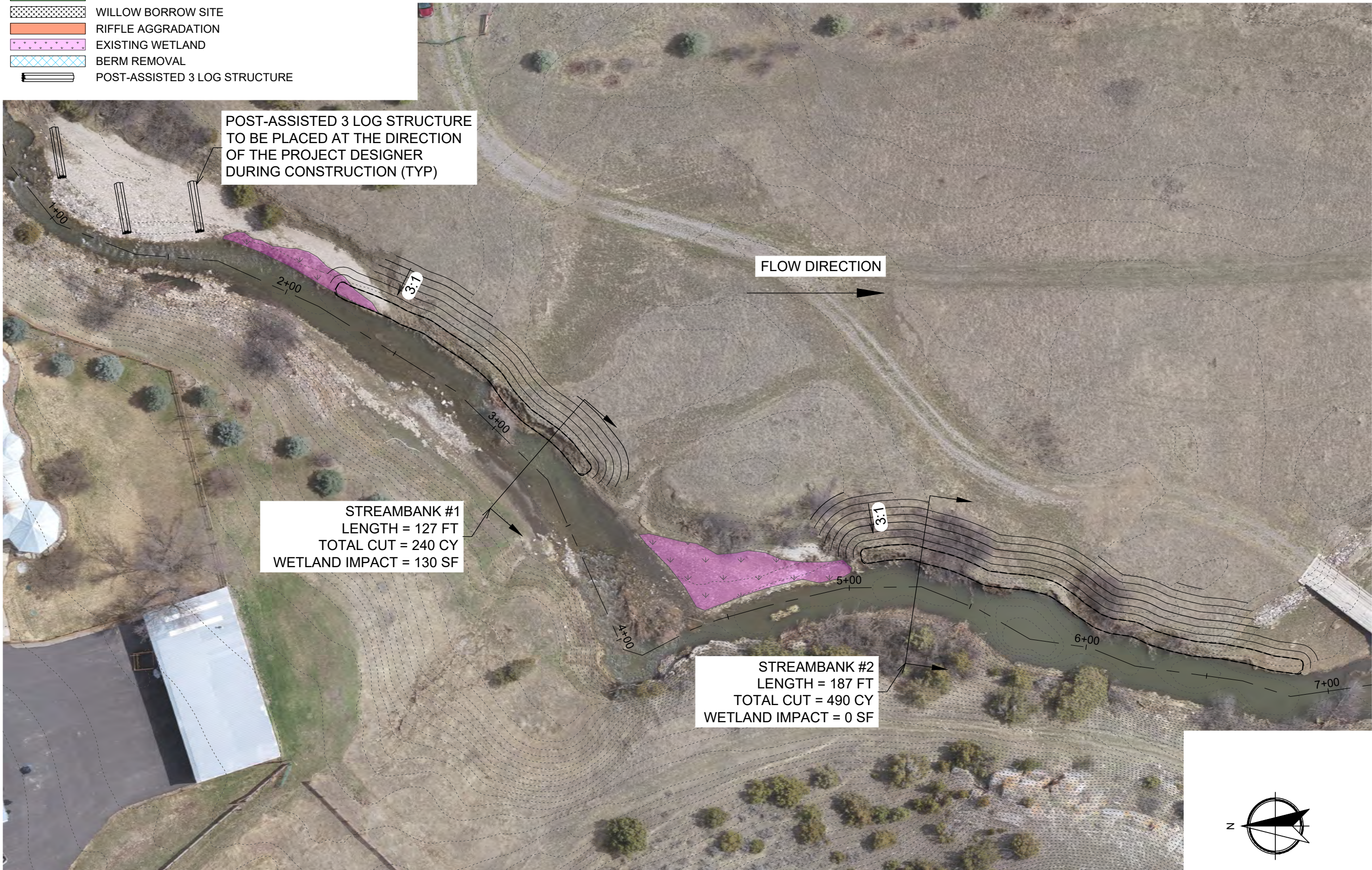
SHEET

C3.0

FILE: W:\Projects\220620\20 Data\CAD\01 Design Phase 3 Conceptual Design\220620 STREAM PLAN.dwg

LEGEND-PROPOSED

- PROPOSED FILL SITE
- ERODING STREAMBANK
- BANKFULL W.S.L.
- SEDGE BORROW SITE
- WILLOW BORROW SITE
- RIFFLE AGGRADATION
- EXISTING WETLAND
- BERM REMOVAL
- POST-ASSISTED 3 LOG STRUCTURE



RESTORATION PLAN - STREAMBANKS 1-2  
SCALE 1"=20'





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SHEET 5 OF 15

PERMIT SET

PLOTTED: 7/27/23

SAVED: 7/27/23

RESTORATION PLAN - STREAMBANKS 3-6

DRY CREEK RESTORATION - PHASE 3

GALLATIN COUNTY, MONTANA

REVISIONS:  
NO. DESCRIPTION DATE

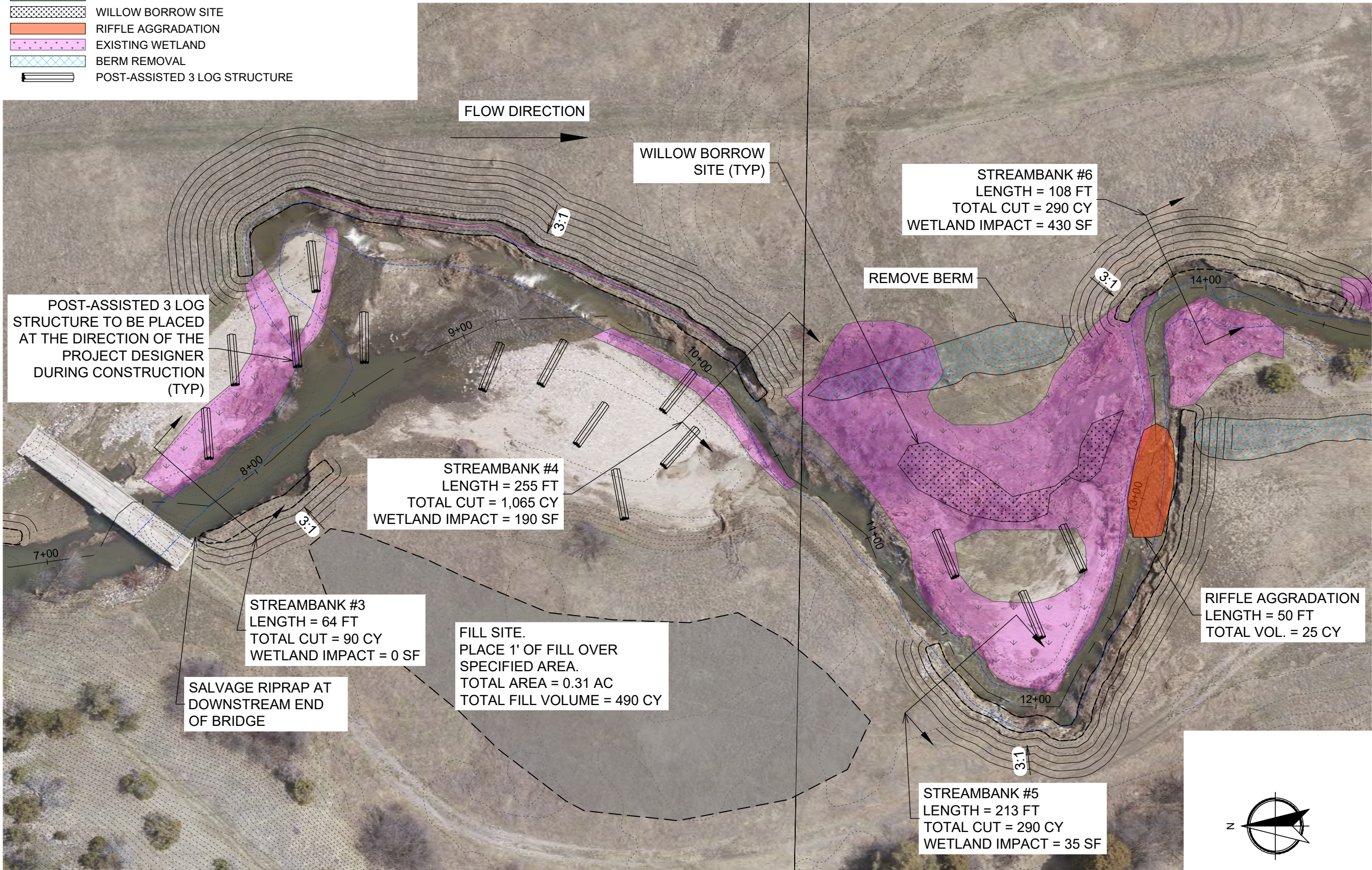

PROJECT: 22-06-20  
LAYOUT: C3.1  
SURVEYED: ---  
DESIGN: JWD/LRS  
DRAFT: LRS  
APPROVE: JWD  
DATE: 7/27/2023

C3.1

SHEET

FILE: W:\Projects\220620\20 Data\CAD\01 Design Phase 3 Conceptual Design\220620 STREAM PLAN.dwg

- LEGEND-PROPOSED
- PROPOSED FILL SITE
  - ERODING STREAMBANK
  - BANKFULL W.S.L.
  - SEDGE BORROW SITE
  - WILLOW BORROW SITE
  - RIFFLE AGGRADATION
  - EXISTING WETLAND
  - BERM REMOVAL
  - POST-ASSISTED 3 LOG STRUCTURE



RESTORATION PLAN - STREAMBANKS 3-6  
SCALE 1"=20'





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SHEET 6 OF 15

PERMIT SET

PLOTTED: 7/27/23

SAVED: 7/27/23

RESTORATION PLAN - STREAMBANKS 7-9

DRY CREEK RESTORATION - PHASE 3

GALLATIN COUNTY, MONTANA

REVISIONS:		
NO.	DESCRIPTION	DATE

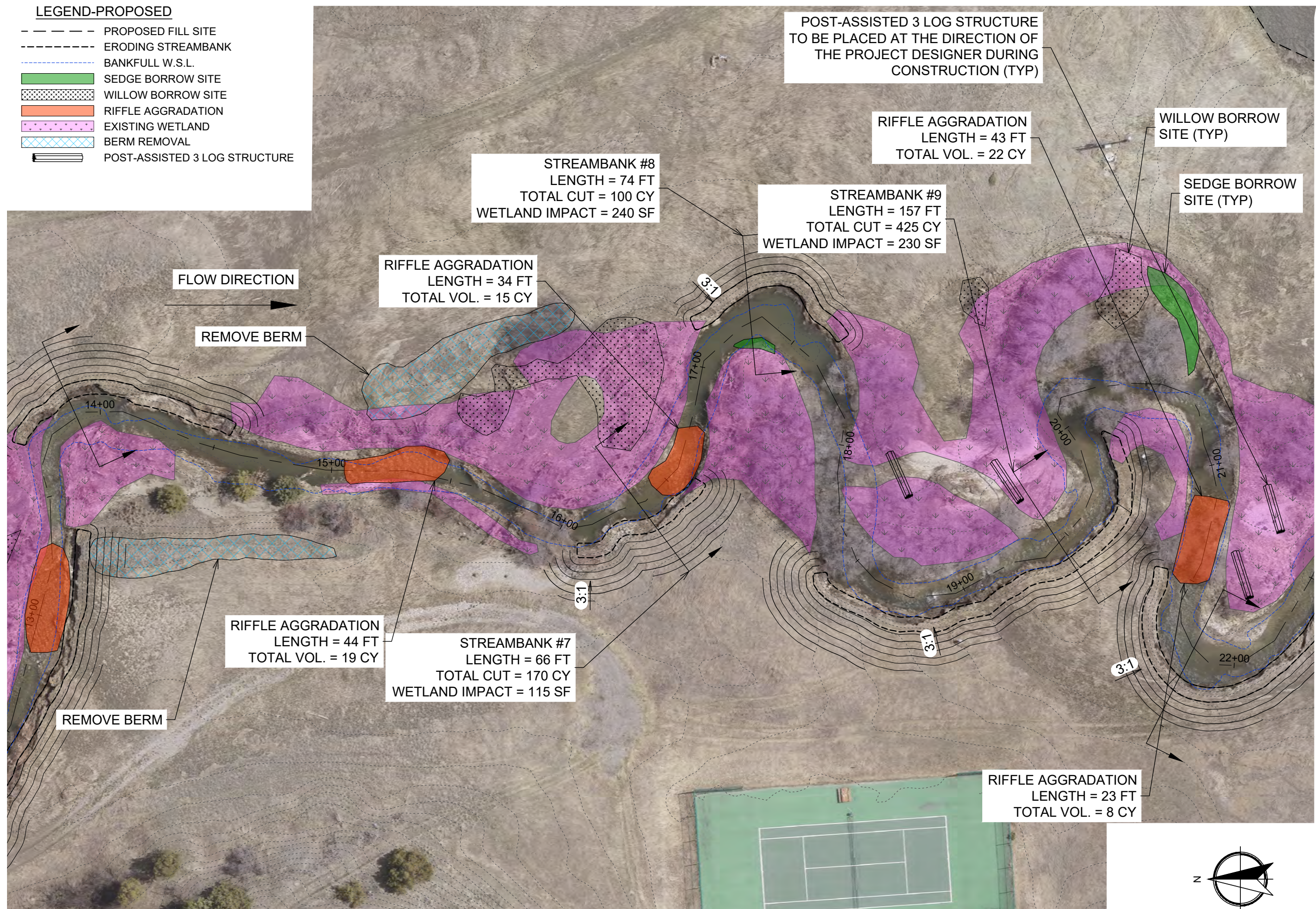
PROJECT: 22-06-20  
LAYOUT: C3.2  
SURVEYED: ---  
DESIGN: JWD/LRS  
DRAFT: LRS  
APPROVE: JWD  
DATE:

7/27/2023

C3.2

SHEET

FILE: W:\Projects\220620\20 Data\CAD\01 Design Phase 3 Conceptual Design\220620 STREAM PLAN.dwg



RESTORATION PLAN - STREAMBANKS 7-9  
SCALE 1"=20'





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SHEET 7 OF 15

PERMIT SET

PLOTTED: 7/27/23  
SAVED: 7/27/23

RESTORATION PLAN - STREAMBANKS 10-12

DRY CREEK RESTORATION - PHASE 3

GALLATIN COUNTY, MONTANA

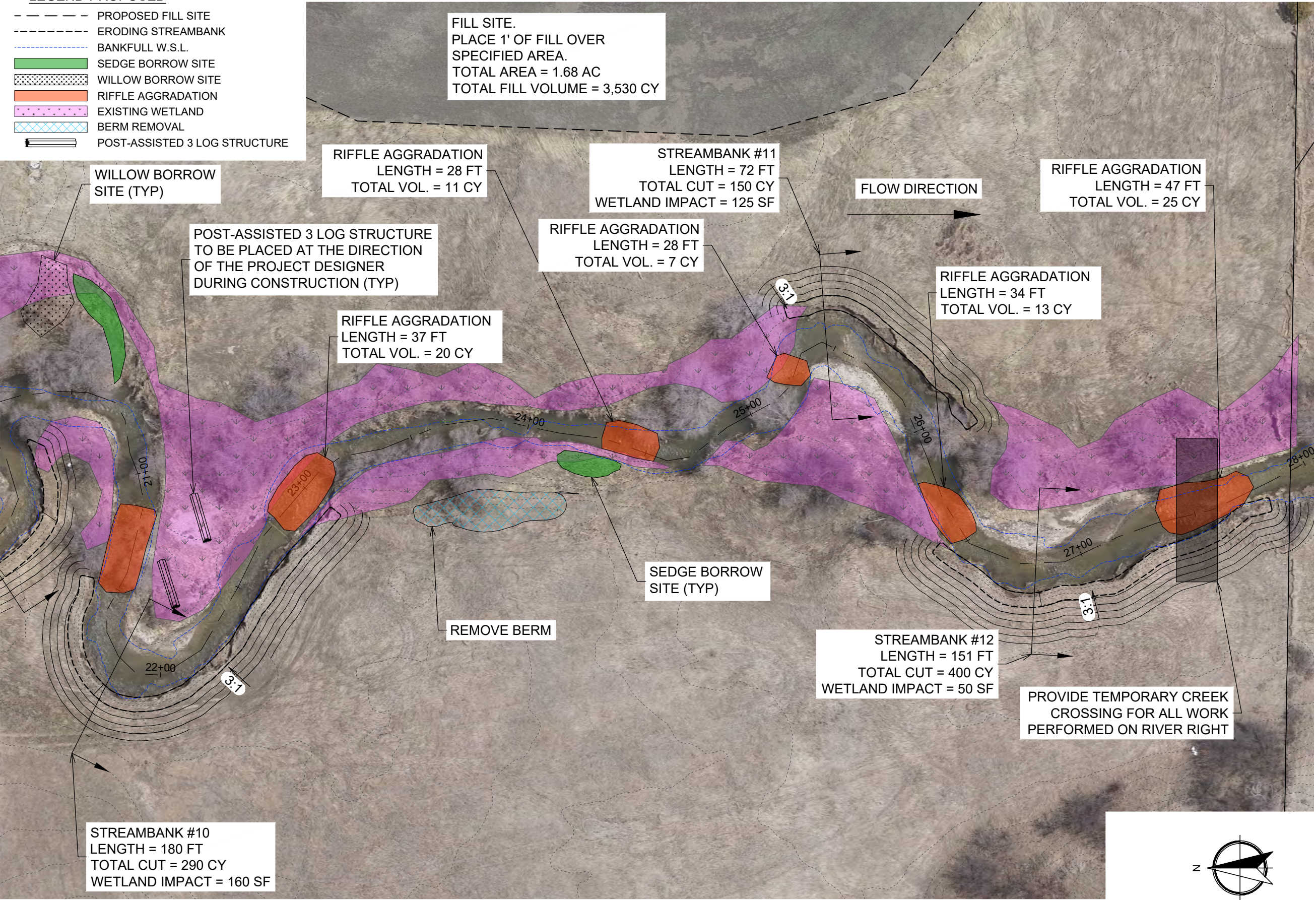
REVISIONS:		
NO.	DESCRIPTION	DATE

PROJECT: 22-06-20  
LAYOUT: C3.3  
SURVEYED: ---  
DESIGN: JWD/LRS  
DRAFT: LRS  
APPROVE: JWD  
DATE: 7/27/2023

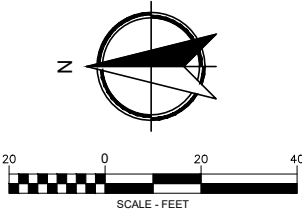
C3.3

SHEET

- LEGEND-PROPOSED**
- PROPOSED FILL SITE
  - ERODING STREAMBANK
  - BANKFULL W.S.L.
  - SEDGE BORROW SITE
  - WILLOW BORROW SITE
  - RIFFLE AGGRADATION
  - EXISTING WETLAND
  - BERM REMOVAL
  - POST-ASSISTED 3 LOG STRUCTURE



RESTORATION PLAN - STREAMBANKS 10-12  
SCALE 1"=20'





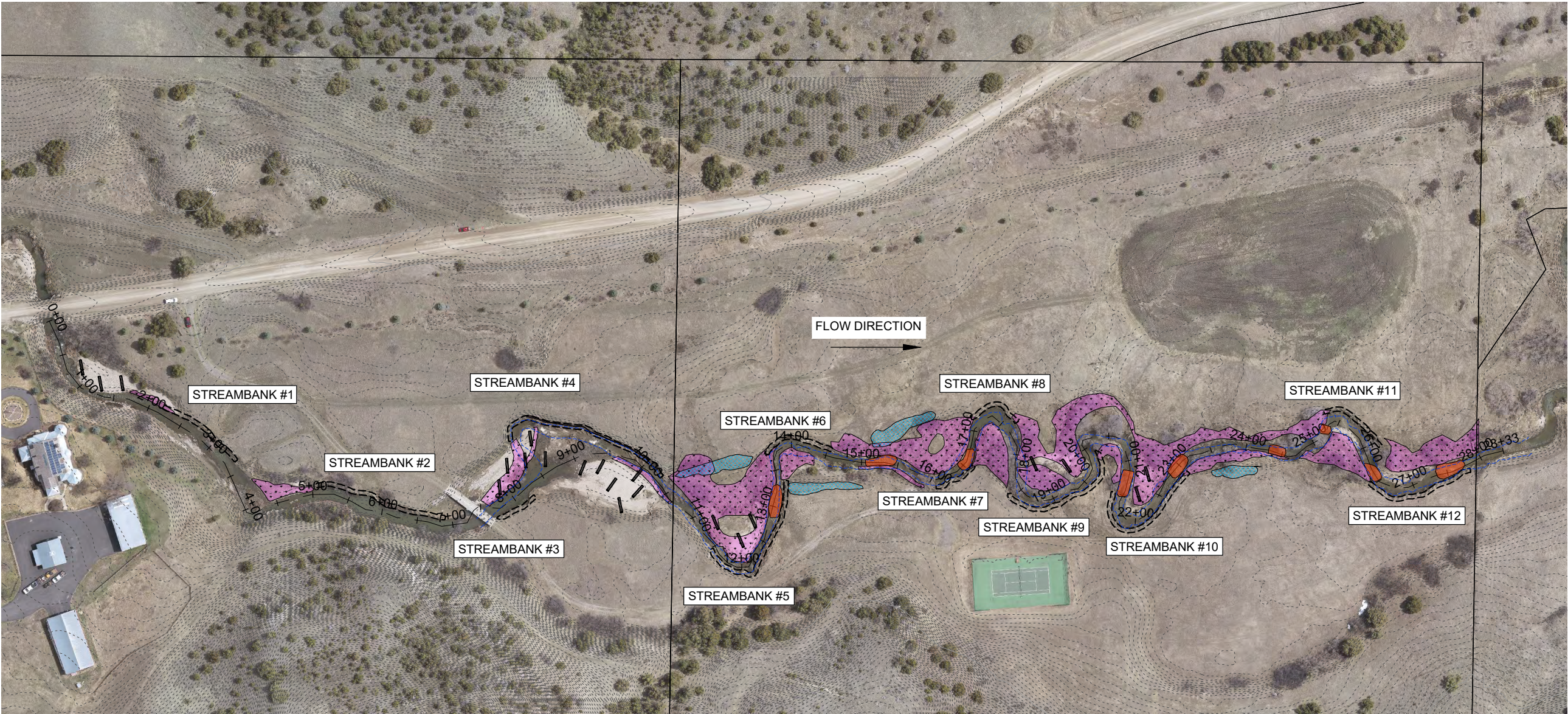


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WWW.WMGROUP.COM

SHEET 8 OF 15

PERMIT SET

PLOTTED: 7/27/23  
SAVED: 7/27/23



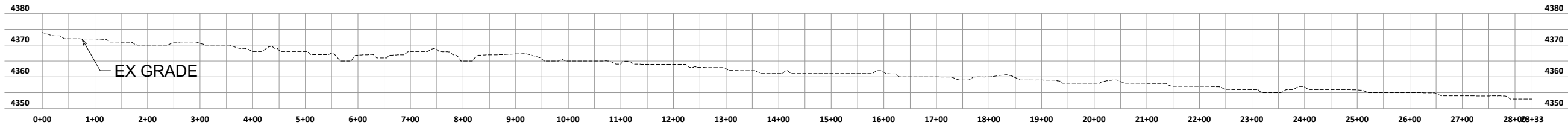
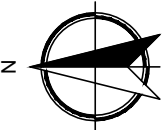
PROPOSED THALWEG PLAN  
SCALE 1"=60'

LEGEND-EXISTING

- ERODING STREAMBANK
- BANKFULL W.S.L.
- EXISTING WETLAND

LEGEND-PROPOSED

- RIFFLE AGGRADATION



PROPOSED THALWEG PROFILE

PROPOSED THALWEG PLAN  
DRY CREEK RESTORATION - PHASE 3  
GALLATIN COUNTY, MONTANA

REVISIONS:		
NO.	DESCRIPTION	DATE

PROJECT: 22-06-20  
LAYOUT: C3.4  
SURVEYED: ---  
DESIGN: JWD/LRS  
DRAFT: LRS  
APPROVE: JWD  
DATE:

7/27/2023

SHEET

C3.4

FILE: W:\Projects\220620\20 Data\CAD\01 Design\Phase 3 Conceptual Design\220620 STREAM PLAN.dwg



LEGEND-PROPOSED

- PROPOSED FILL SITE
- ERODING STREAMBANK
- BANKFULL W.S.L.
- SEDGE BORROW SITE
- WILLOW BORROW SITE
- RIFFLE AGGRADATION
- EXISTING WETLAND
- BERM REMOVAL
- POST-ASSISTED 3 LOG STRUCTURE



RESTORATION PLAN - STREAMBANKS 13-14  
SCALE 1"=20'



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SHEET 9 OF 15

PERMIT SET

PLOTTED: 7/27/23  
SAVED: 7/27/23

RESTORATION PLAN - STREAMBANKS 13-14  
DRY CREEK RESTORATION - PHASE 3  
GALLATIN COUNTY, MONTANA

REVISIONS:  
NO. DESCRIPTION DATE

PROJECT: 22-06-20  
LAYOUT: C3.5  
SURVEYED: ---  
DESIGN: JWD/LRS  
DRAFT: LRS  
APPROVE: JWD  
DATE:

7/27/2023

SHEET  
C3.5

FILE: W:\Projects\220620\20 Data\CAD\01 Design Phase 3 Conceptual Design\220620 STREAM PLAN.dwg



## PERMIT SET

PLOTTED: 7/27/23  
SAVED: 7/27/23

CROSS SECTIONS  
 DRY CREEK RESTORATION - PHASE 3  
 GALLATIN COUNTY, MONTANA

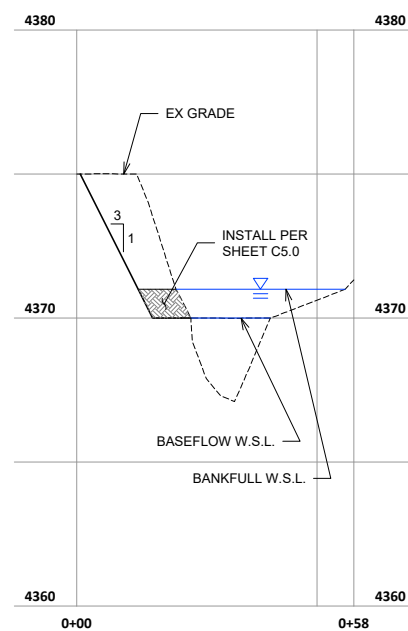
REVISIONS:		
NO.	DESCRIPTION	DATE

PROJECT: 22-06-20  
LAYOUT: C4.0  
SURVEYED: ---  
DESIGN: JWD/LRS  
DRAFT: LRS  
APPROVE: JWD  
DATE:

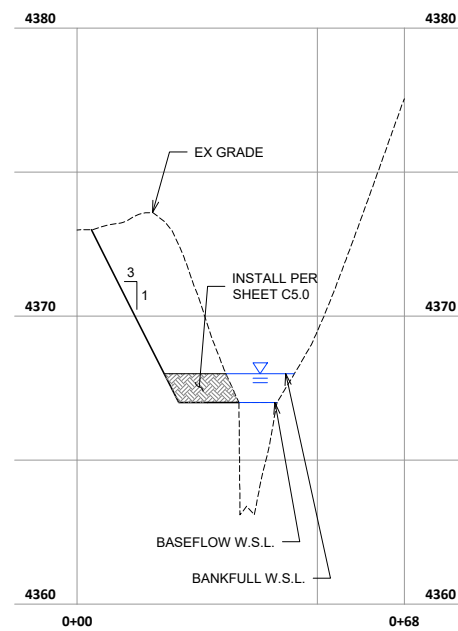
7/27/2023

SHEET

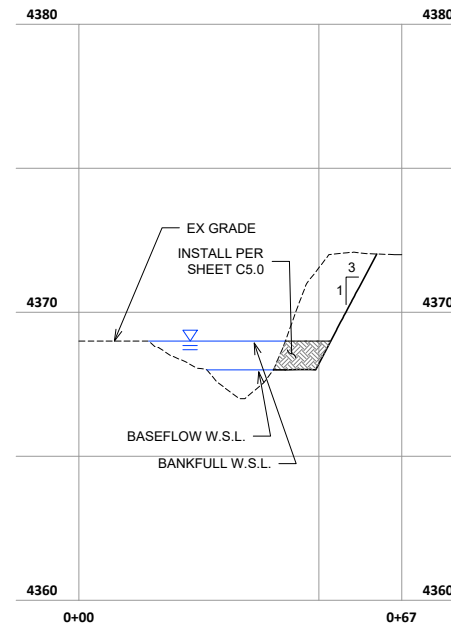
## C4.0



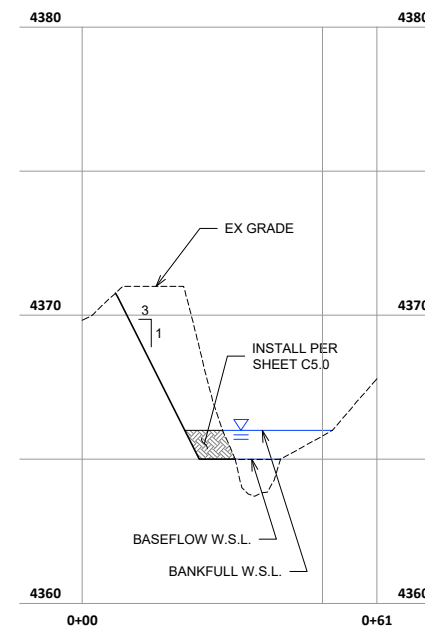
**STREAMBANK #1**  
SCALE: VERT - 1"=3.33'  
HORIZ - 1"=20'  
(RIVER LEFT)



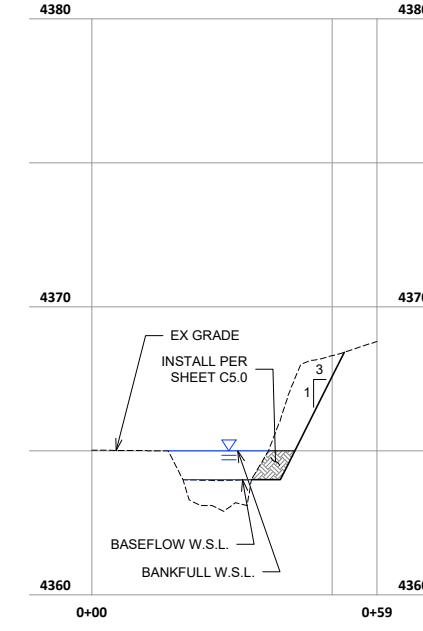
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SCALE: VERT - 1"=3.33'  
HORIZ - 1"=20'  
(RIVER LEFT)



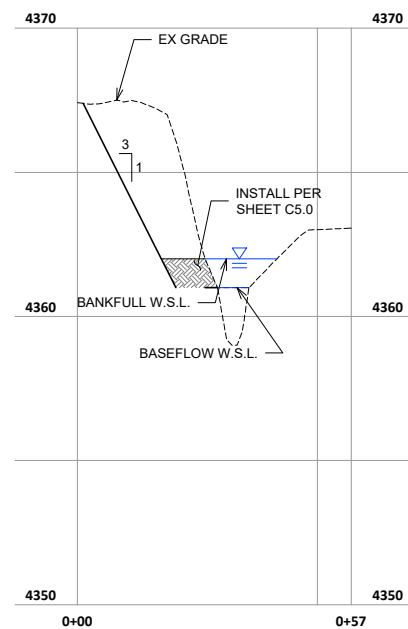
**STREAMBANK #3**  
SCALE: VERT - 1"=3.33'  
HORIZ - 1"=20'  
(RIVER RIGHT)



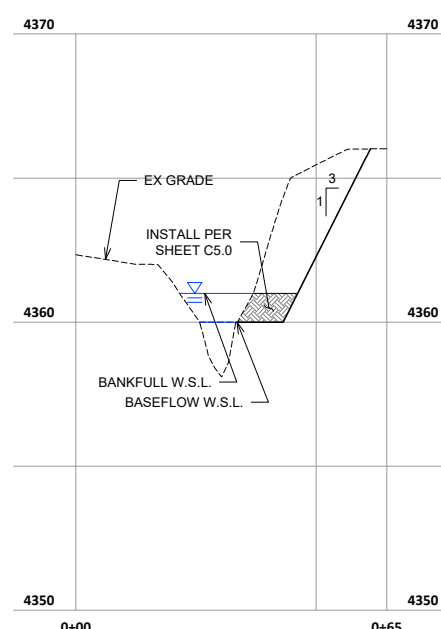
**STREAMBANK #4**  
SCALE: VERT - 1"=3.33'  
HORIZ - 1"=20'  
(RIVER LEFT)



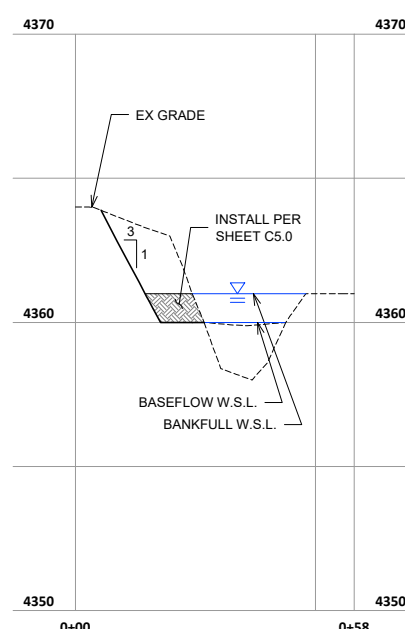
**STREAMBANK #5**  
SCALE: VERT - 1"=3.33'  
HORIZ - 1"-20'  
**(RIVER RIGHT)**



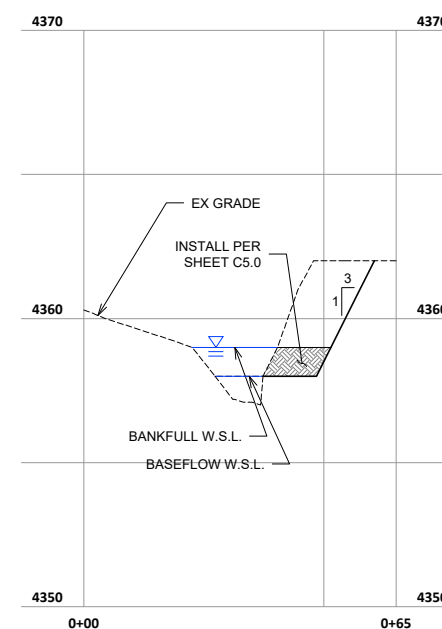
**STREAMBANK #6**  
SCALE: VERT - 1"=3.33'  
HORIZ - 1"-20'  
(RIVER LEFT)



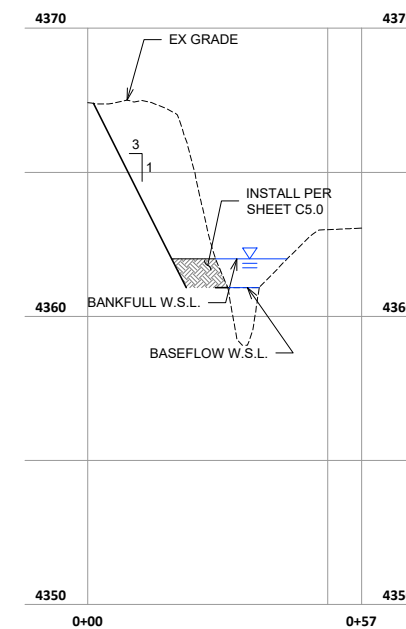
**STREAMBANK #7**  
SCALE: VERT - 1"=3.33'  
HORIZ - 1"=20'  
(RIVER RIGHT)



**STREAMBANK #8**  
SCALE: VERT - 1"=3.33'  
HORIZ - 1"=20'  
(RIVER LEFT)



**STREAMBANK #9**  
SCALE: VERT - 1"=3.33'  
HORIZ - 1"-20'  
**(RIVER RIGHT)**



**STREAMBANK #10**  
SCALE: VERT - 1"=3.33'  
HORIZ - 1"=20'  
**(RIVER LEFT)**

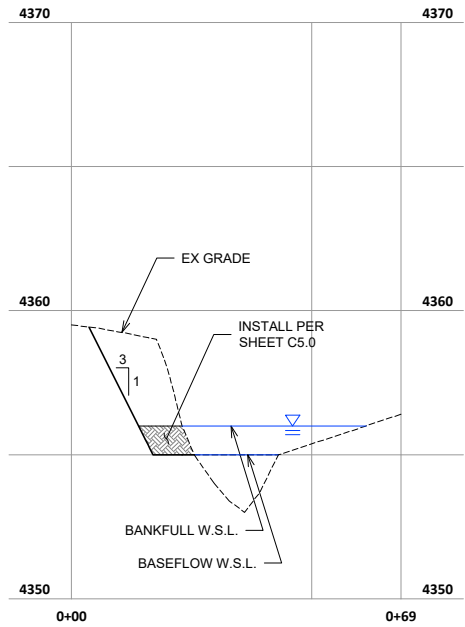
PERMIT SET

PLOTTED: 7/27/23  
SAVED: 7/27/23

CROSS SECTIONS & PHOTOS

DRY CREEK RESTORATION - PHASE 3

GALLATIN COUNTY, MONTANA

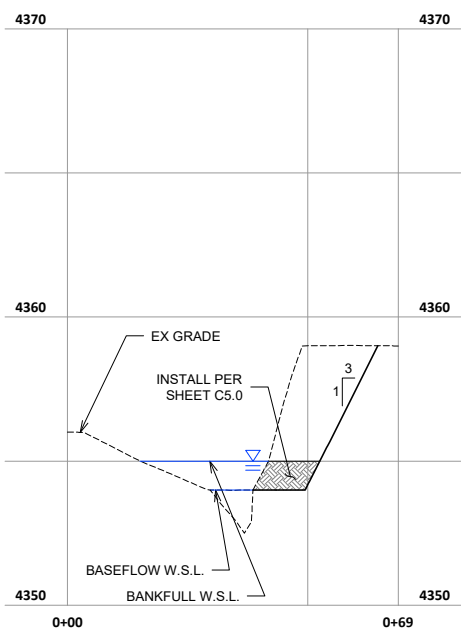


STREAMBANK #11

SCALE: VERT - 1"=3.33'

HORIZ - 1"=20'

(RIVER LEFT)

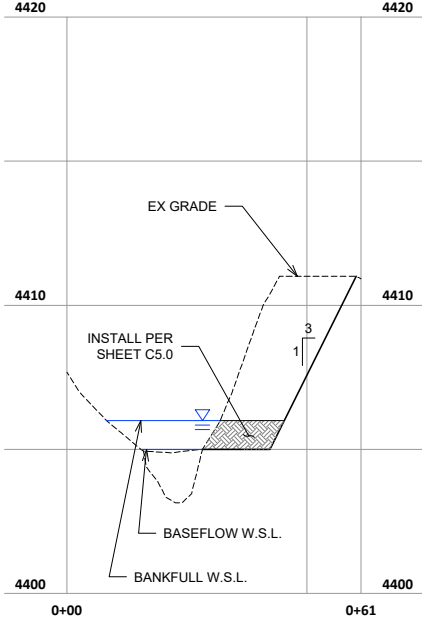


STREAMBANK #12

SCALE: VERT - 1"=3.33'

HORIZ - 1"=20'

(RIVER RIGHT)

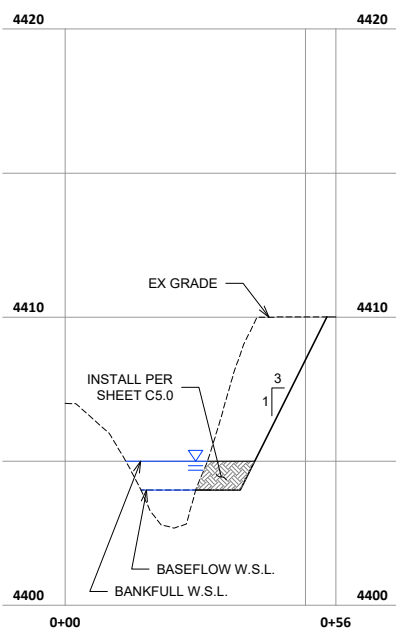


STREAMBANK #13

SCALE: VERT - 1"=3.33'

HORIZ - 1"=20'

(RIVER RIGHT)



STREAMBANK #14

SCALE: VERT - 1"=3.33'

HORIZ - 1"=20'

(RIVER RIGHT)



EXISTING STREAMBANK #1



EXISTING STREAMBANK #2



EXISTING STREAMBANK #3

REVISIONS:		
NO.	DESCRIPTION	DATE

PROJECT:	22-06-20
LAYOUT:	C4.1
SURVEYED:	---
DESIGN:	JWD/LRS
DRAFT:	LRS
APPROVE:	JWD
DATE:	7/27/2023





EXISTING STREAMBANK #4



EXISTING STREAMBANK #5



EXISTING STREAMBANK #6



EXISTING STREAMBANK #7



EXISTING STREAMBANK #8



EXISTING STREAMBANK #9



EXISTING STREAMBANK #10



EXISTING STREAMBANK #11



EXISTING STREAMBANK #12

CROSS SECTION PHOTOS  
DRY CREEK RESTORATION - PHASE 3  
GALLATIN COUNTY, MONTANA

REVISIONS:		
NO.	DESCRIPTION	DATE
PROJECT: 22-06-20		
LAYOUT: C4.2		
SURVEYED: ---		
DESIGN: JWD/LRS		
DRAFT: LRS		
APPROVE: JWD		
DATE: 7/27/2023		
SHEET C4.2		



PERMIT SET

PLOTTED: 7/27/23  
SAVED: 7/27/23

WILLOW SEDGE RESTORATION DETAILS  
DRY CREEK RESTORATION - PHASE 3  
GALLATIN COUNTY, MONTANA

REVISIONS:		
NO.	DESCRIPTION	DATE

PROJECT: 22-06-20  
LAYOUT: C5.0  
SURVEYED: ---  
DESIGN: JWD/LRS  
DRAFT: LRS  
APPROVE: JWD  
DATE:

7/27/2023

SHEET

C5.0

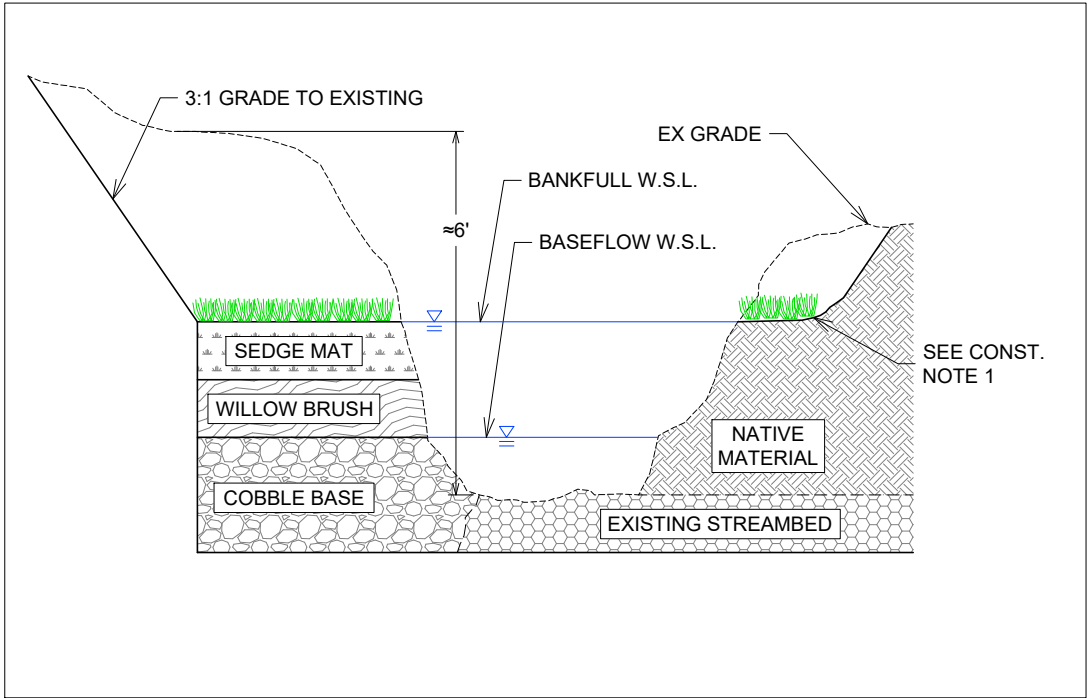
FILE: W:\Projects\220620\20 Data\CAD\01 Design Phase 3 Conceptual Design\220620 STREAM PLAN.dwg

WILLOW & WETLAND SEDGE HARVEST NOTES

1. HARVEST WILLOWS AND WETLAND SEDGE MATS FROM BORROW SOURCES IDENTIFIED IN THE DESIGN PLANS USING A CHECKERBOARD PATTERN.
2. HARVEST WILLOWS WHEN DORMANT AND INCLUDE ROOTS AND STEMS.
3. WETLAND SEDGE MATS SHOULD BE 6-8 INCHES THICK AND CONTAIN A SUBSTANTIAL AMOUNT OF ROOT MASS.

STREAMBANK QUANTITIES

STREAMBANK	TOTAL CUT [CY]	COBBLE BASE [CY]	WILLOW BRUSH [CY]	SEUGE MAT [CY]
1	240	28	14	14
2	490	42	21	21
3	90	14	7	7
4	1065	57	28	28
5	290	47	24	24
6	290	24	12	12
7	170	15	7	7
8	100	16	8	8
9	157	35	17	17
10	290	40	20	20
11	150	16	8	8
12	400	34	17	17
13 & 14	460	47	23	23
TOTAL	4,192	414	207	207



WILLOW SEDGE STREAMBANK CROSS SECTION

SCALE: NTS

STREAMBANK CONSTRUCTION NOTES

1. REMOVE NARROW BAND OF WETLAND VEGETATION AND SHRUBS FROM OPPOSITE BANKLINE ON INSIDE OF MEANDER AND GRADE TO POINT BAR.
2. EXCAVATE ERODING BANK DOWN TO BASEFLOW WATER ELEVATION.
3. INSTALL COBBLE TOE MATERIAL.
4. INSTALL WILLOW BRUSH MATRIX HARVESTED FROM ADJACENT AREAS MIXED WITH NATIVE MATERIAL EXCAVATED FROM STREAMBANK.
5. INSTALL WETLAND SEDGE MAT HARVESTED FROM ADJACENT AREAS MIXED WITH NATIVE MATERIAL EXCAVATED FROM STREAMBANK.
6. GRADE STREAMBANK BACK TO EXISTING GROUND AT 3H:1V SLOPE.



PRE-CONSTRUCTION BANK



STEP 1 - TYPICAL GRAVEL BASE LAYER



STEP 2 - TYPICAL WILLOW BRUSH LAYER



STEP 3 - TYPICAL SEDGE MAT LAYER





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SHEET 14 OF 15

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PLOTTED: 7/27/23  
SAVED: 7/27/23

RIFFLE AGGRADATION DETAILS  
DRY CREEK RESTORATION - PHASE 3  
GALLATIN COUNTY, MONTANA

REVISIONS:		
NO.	DESCRIPTION	DATE

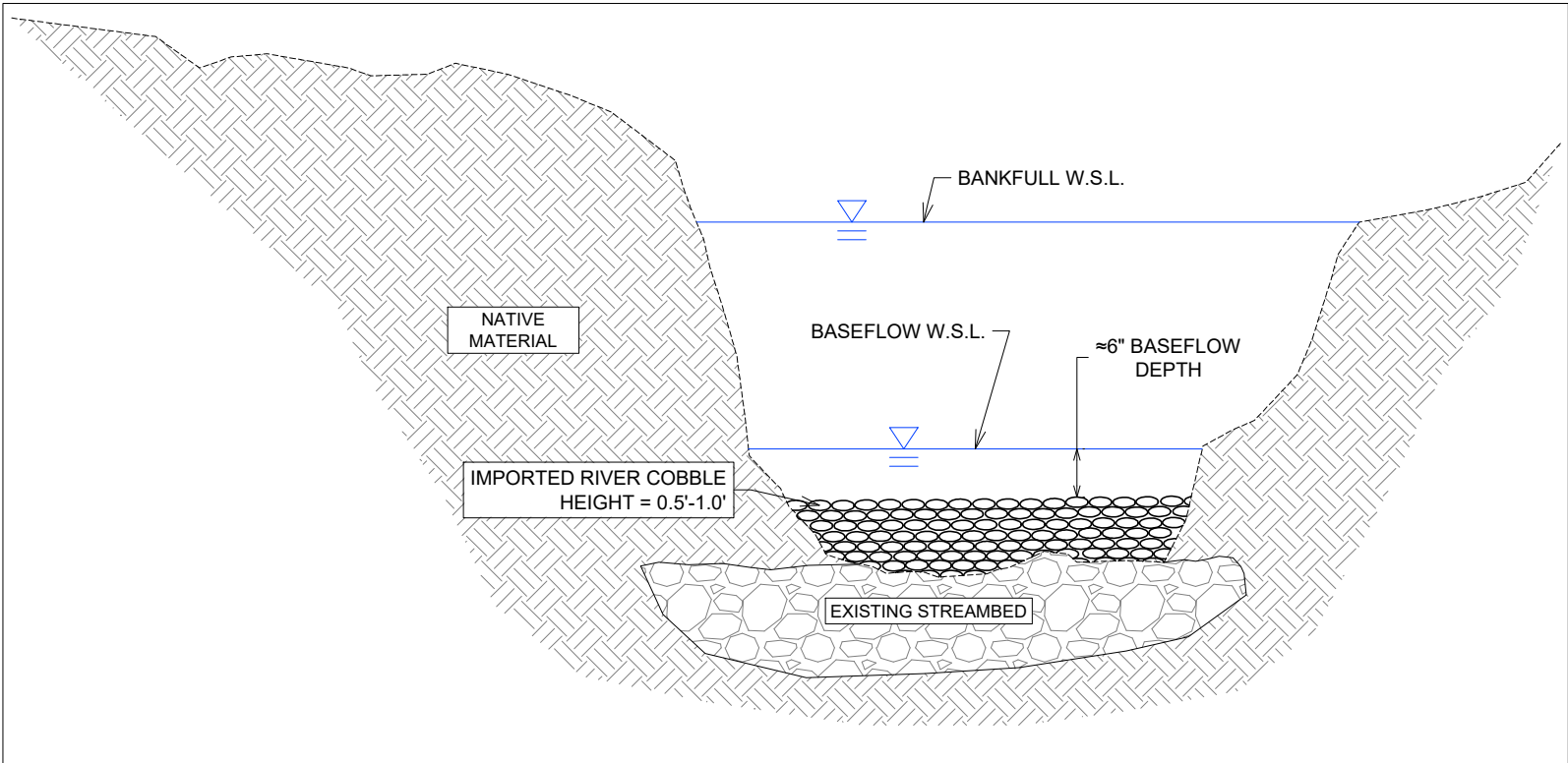
PROJECT: 22-06-20  
LAYOUT: C5.1  
SURVEYED: ---  
DESIGN: JWD/LRS  
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APPROVE: JWD  
DATE:

7/27/2023

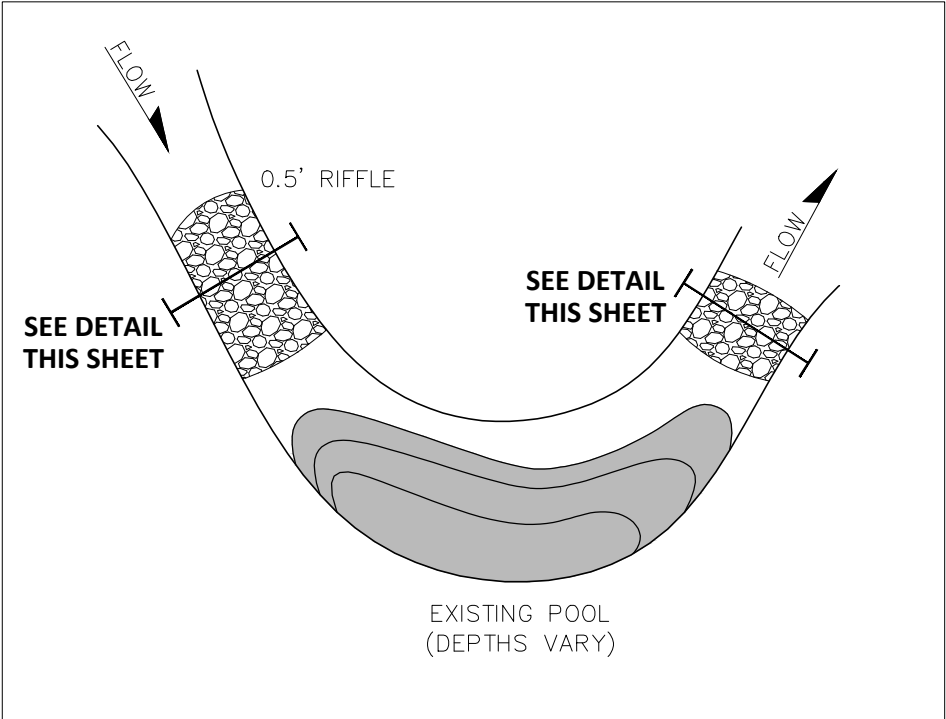
C5.1

SHEET

FILE: W:\Projects\220620\20 Data\CAD\01 Design Phase 3 Conceptual Design\220620 STREAM PLAN.dwg



TYPICAL RIFFLE AGGRADATION CROSS SECTION  
SCALE: NTS



TYPICAL RIFFLE AGGRADATION PLAN VIEW  
SCALE: NTS

RIFFLE AGGRADATION NOTES

1. ENHANCE EXISTING RIFFLES BY ADDING 0.5' TO 1' LAYER OF COBBLES.
2. DESIRED BASE FLOW DEPTH IS APPROX. 0.5'.



TYP. RIFFLE AGGRADATION LOCATION (STREAMBANK #6)



RIFFLE AGGRADATION



RIFFLE AGGRADATION



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SHEET 15 OF 15

PERMIT SET

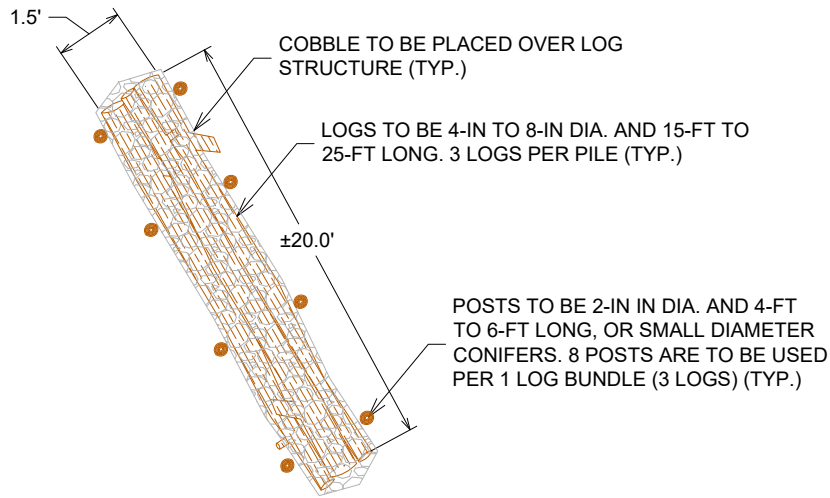
PLOTTED: 7/27/23

SAVED: 7/27/23

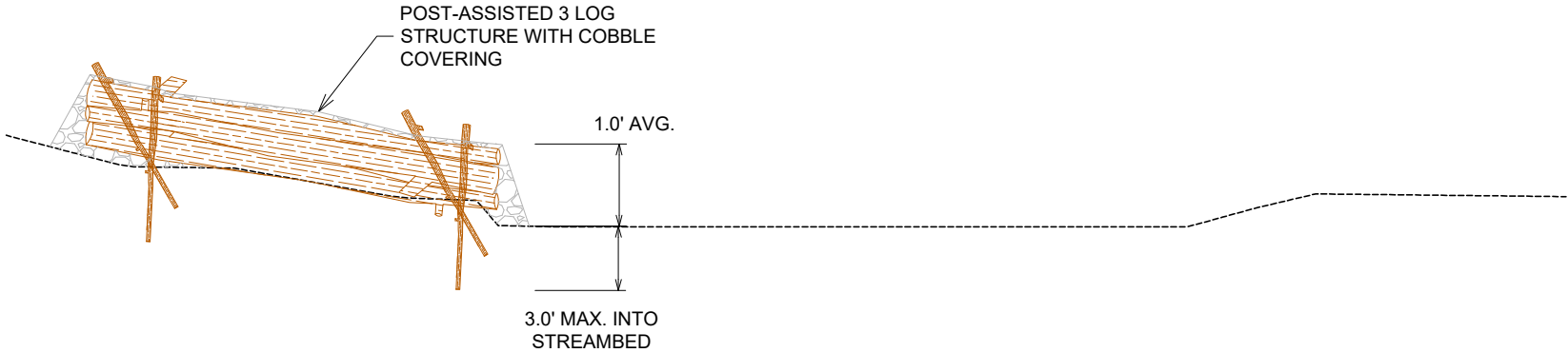
POST-ASSISTED LOG STRUCTURE DETAILS

DRY CREEK RESTORATION - PHASE 3

GALLATIN COUNTY, MONTANA



POST-ASSISTED 3 LOG STRUCTURE (PLAN VIEW)  
SCALE: NTS



POST-ASSISTED 3 LOG STRUCTURE (SECTION VIEW)  
SCALE: NTS

POST-ASSISTED 3 LOG STRUCTURE NOTES

1. 3-LOG STRUCTURES TO BE CONSTRUCTED WITH 15-25 FOOT LONG 4"-8" DIAMTER LOGS.
2. SECURE WITH 2" UNTREATED WOODEN POSTS.
3. PLACE COBBLES ON TOP OF 3-LOG STRUCTURES.
4. LOCATION OF LOG STRUCTURES TO BE DETERMINED IN THE FIELD.

REVISIONS:		
NO.	DESCRIPTION	DATE

PROJECT: 22-06-20  
LAYOUT: C5.2  
SURVEYED: ---  
DESIGN: JWD/LRS  
DRAFT: LRS  
APPROVE: JWD  
DATE:

7/27/2023

SHEET

C5.2

FILE: W:\Projects\220620\20 Data\CAD\01 Design\Phase 3 Conceptual Design\220620 STREAM PLAN.dwg

# LETTERS OF SUPPORT



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October 29, 2021

Watershed Protection Section  
Montana Department of Environmental Quality  
Attn: Mark Ockey  
1520 E. Sixth Avenue  
Helena, MT 59620

Dear Mr. Ockey,

The Gallatin Watershed Council welcomes the opportunity to provide our support for Trout Unlimited's (TU's) proposal to improve water quality in the Lower Gallatin Watershed with support from the 319 Grant Program. Having been a partner on the Dry Creek Restoration Project over the past several years, GWC has seen the commitment and dedication of the landowners and project stakeholders toward cooperatively improving water quality, restoring hydrologic connectivity and improving instream flows. The Phase III proposal will extend work both up and downstream of Dry Creek Phases I and II. It would treat twenty-three streambanks totaling approximately 2,032 feet of bankline over an approximately 5,064-foot project reach.

GWC developed the Watershed Restoration Plan for the Lower Gallatin Watershed, in conjunction with other community stakeholders and collaborating entities. Trout Unlimited's project goals are in alignment with the goals and direction of our watershed's WRP. GWC has supported riparian planting efforts for other phases of the Dry Creek Restoration Project by providing financial assistance and helping to coordinate volunteer planting days. We look forward to identifying ways to bring project support to this phase as well.

We value TU's experience and knowledge in watershed conservation and commend their leadership on this important project. The Dry Creek Project serves as a model for future cooperative projects in the area and we urge your full support.

Respectfully,

A handwritten signature in black ink that reads "Holly Hill".

Holly Hill  
Executive Director  
Gallatin Watershed Council



*Actively working to conserve, protect and restore  
southwest Montana's coldwater fisheries and their watersheds since 1968.*



October 25, 2021

Mr. Mark Okey  
Watershed Protection Section  
Department of Environmental Quality  
PO Box 200901  
Helena, MT 59620-0901

Re: Dry Creek Restoration Project Phase III

Dear Mr. Oakey,

The Madison-Gallatin Chapter of Trout Unlimited (MGU) is proud to be a partner in the ongoing efforts to restore Dry Creek - a critical headwater tributary feeding the East Gallatin River. In support of this effort, MGU provided volunteers for willow harvest and planting in Phase I, and \$25,000 in financial contributions for the recently completed Phase II. MGU pledges additional volunteer support for Phase III of the Dry Creek Restoration Project, which builds upon the successful completion of Phases I and II. Reducing sediment inputs from large eroding banks on Dry Creek has directly benefited the restored reach and a reduction in fine sediment on the streambed is clearly visible. In addition, this reduction in sediment loading will offer a stream environment that is healthier for recruitment and spawning. Sediment reduction loading also benefits the East Gallatin River, which is a cherished local fishery. Phase III aims to further reduce sediment inputs from the large eroding streambanks using native materials to restore riparian vegetation and reconnect the floodplain, which will further reduce sediment inputs to the stream, along with providing enhanced streamside shading. We support this project, and we hope you will too!

Thank you considering Trout Unlimited's grant application for Phase III of the Dry Creek Restoration Project.

Sincerely,

A handwritten signature in black ink that reads "Sarah Clark". The signature is written in a cursive, flowing style.

Sarah Clark, Board President  
Madison-Gallatin Trout Unlimited

# WARRIORS & QUIET WATERS FOUNDATION

October 22, 2021

Mr. Mark Oakey  
Watershed Protection Section  
Department of Environmental Quality  
P.O. Box 200901  
Helena, MT 59620-0901

**Subject: Trout Unlimited's Dry Creek Restoration Project Phase III Proposal**

Mr. Oakey,

This past summer, Warriors & Quiet Waters Foundation conducted a Conservation Fishing Experience (FX) at Dry Creek in support of Phase II restoration efforts. The Conservation FX is an integral part of our programming to provide post-9/11 combat veterans a renewed connection to the WQW community, extend their community to include a connection with a like-minded Conservation Partner, educate them on key land / water / fishery / wildlife conservation issues, and provide them a sense of accomplishment through the completion of a meaningful conservation project. We are steadfast in our continued support of Trout Unlimited's proposal and understand the benefit it has for both the Gallatin River and its fisheries, as well as for participants in our Conservation FXs. It is a "win-win" for everyone involved, including the citizens of our great state.

The continued restoration efforts on Dry Creek will play off the efforts our organization, in partnership with Trout Unlimited, completed this past summer. These efforts consisted of cleaning out sediment and vegetation along a spring creek to establish spawning grounds for brown trout and cleaning up decades old trash piles from the stream beds.

Warriors & Quiet Waters Foundation wholeheartedly supports the funding of Phase III of this project, which will regrade eroding streambanks, revegetate areas with native plants, and install Beaver Dam Analogs. Our organization is also looking forward to collaborating on another Trout Unlimited project!

Thank you for your consideration.



Brian Gilman  
Colonel, USMC (Ret.)  
Chief Executive Officer

351 Evergreen Dr. Suite A | Bozeman, MT 59715  
wqwf.org | [info@wqwf.org](mailto:info@wqwf.org) | (406) 585-9793  
501(c)(3) Nonprofit | EIN 20-8837637



October 24, 2021

Mr. Mark Oakey  
Watershed Protection Section  
Department of Environmental Quality  
P.O. Box 200901  
Helena, MT 59620-0901

Re: Dry Creek Restoration Project Phase III

Dear Mr. Oakey,

SIMMS supports Trout Unlimited's proposal to continue their restoration efforts on Dry Creek, which is a primary tributary to the lower East Gallatin and is critical to the long-term resilience of the Gallatin River system. Phase III of the Dry Creek Restoration Project builds upon the successful completion of Phases I and II and aims to further reduce sediment inputs from large eroding streambanks using native materials to restore riparian vegetation and connection with the floodplain.



The leadership team at SIMMS has committed to a 3-year project with Trout Unlimited, Gallatin Home Rivers Initiative, wrapping up the first year at the end of 2021. We have made this commitment because we feel the Gallatin is a rare treasure for those who get to know it; but a history of intense use has left the Gallatin in a compromised condition. It will require hard work to restore the Gallatin to its full potential.

We believe that this project directly benefits the cold-water fisheries of this headwater stream in the Gallatin River watershed and offer our full support.

Thank you for considering this request for funding.

Sincerely,

Diane Bristol  
Sr. Director, Employee & Community Engagement





October 27, 2021

Mr. Mark Ockey

Watershed Protection Section  
Department of Environmental Quality  
P.O. Box 200901  
Helena, MT 59620-0901

Re: East Gallatin Process Based Restoration Planning

Dear Mr. Ockey,

The Bonneville Environmental Fund (BEF) is proud to be a partner in the ongoing efforts to restore Dry Creek. In support of this effort, BEF has provided \$25,000 in financial contributions for restoration of Dry Creek. This funding will be used to implement restoration work that will restore stream function and improve water quality by reducing fine sediment inputs to Dry Creek.

BEF supports the Trout Unlimited's submission of the Dry Creek Phase III to DEQ's 319 grant program. This proposal would treat eroding streambanks and restore natural processes that support stream health and improved water quality. The project would treat twenty-three streambanks totaling approximately 2,032 feet of bankline over an approximately 5,064-foot project reach resulting in an estimated reduction of 139 tons of sediment per year.

Thank you for considering the Trout Unlimited's Dry Creek Phase III application.

Sincerely,

A handwritten signature in blue ink, appearing to read "Scott McCaulou", is positioned below the "Sincerely," text.

Scott McCaulou  
Director, Water Stewardship Project Portfolio  
Bonneville Environmental Foundation

**MSRH, LLC**  
**POST OFFICE BOX 1797**  
**BOZEMAN, MONTANA 59771**  
**DIRECT DIAL: 952.454.5690**  
**EMAIL: [SBC@SAGEHORNLLC.COM](mailto:SBC@SAGEHORNLLC.COM)**

5 November 2020

Water Protection Bureau  
Attention: Mark Oakey  
Dept. of Environmental Quality  
PO Box 20091  
Helena, MT 59620

**Re: Dry Creek Restoration Project Phase III**

On behalf of Miller and Sons Ranch Holdings, LLC, I want to offer our financial support to the ongoing restoration efforts that are being guided by Trout Unlimited in the Dry Creek watershed located in Gallatin County, Montana.

With Phase I and II completed, we would like to participate in Phase III. We consider the projects to be tremendously successful and a benefit to all stakeholders.

Thank you for consideration of the merits of our application submittal.

Sincerely,

Stephen Carlson  
Member  
Miller and Sons Ranch Holdings, LLC

November 11, 2020

Mr. Mark Oakey  
Watershed Protection Section  
Department of Environmental Quality  
P.O. Box 200901  
Helena, MT 59620-0901

Re: Dry Creek Restoration Project Phase III

Dear Mr. Oakey,

As a landowner along the proposed Phase 3 reach of the Dry Creek Restoration Project, I want to express my support for Trout Unlimited's project. My property is located upstream of Phases I & II and I appreciate the work the downstream landowner has completed with assistance from the Montana Department of Environmental Quality. I can attest that the completed restoration work in Phases I and II has greatly improved conditions within Dry Creek and I would like to see this great work continue along my property and throughout the Dry Creek watershed.

Thank you for considering this grant request.

Sincerely,

A handwritten signature in black ink, appearing to be "K B L" followed by a long horizontal flourish.

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# OTHER ATTACHMENTS

**310 PERMIT**

STREAMBED AND LAND PRESERVATION ACE (310 Law) Supervisors' Decision

Decision Date

Application Number

8/17/2023

GD -23

**Note:** Landowner permission, easements or other federal, state, or local permits, licenses, special use permits, or authorizations may be required before construction of the project. It is the duty of the holder of this permit to determine which are necessary and obtain them prior to construction of the project

Name of Applicant

Connor Parrish

Business Name

Trout Unlimited

Address

13285 Dry Creek Rd.

City

Belgrade

State

MT

Zip

59714

Name of Perennial Stream

Dry Creek

Section

11

Township

2N

Range

4E

Supervisor's Decision

Approval as proposed

## Proposed Activity

3rd phase of this project. Currently, according to MT DEQ, Dry Creek is not fully supporting aquatic life and primary contact recreation beneficial uses due to historic and current land-use practices. Historic channel realignment, reduced riparian vegetation, and streambank failure association with agriculture have resulted in entrenched channel conditions and large eroding streambanks along much of Dry Creek, which provide a nearly continuous source of fine sediment loading to the stream. Will be lowering 14 large eroding streambanks and creating floodplain benches.

Work may not commence on a project for 15 days after receipt of this decision unless district has checked the waiver box.

True

Waiver of 15-day Waiting Period

False

Recurrent Permit

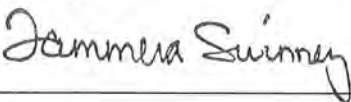
Permit Expiration Date

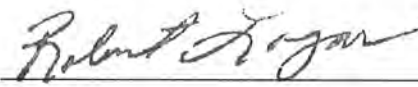
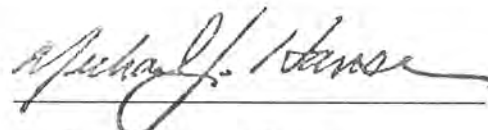
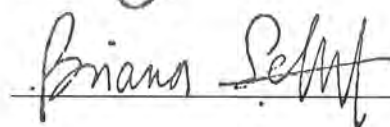
8/17/2024

Permit Transmittal Date

8/21/2023

SUPERVISORS' SIGNATURES:



✂ ..... (cut here) .....

**The applicant must agree to abide by the conditions of this permit by checking the appropriate box, signing below, and returning this form to the district office within 15 days. GD 42-23**

- ☐ I hereby agree to proceed with the project in accordance with the approved application and will allow follow-up inspection.
- ☐ I understand the project as proposed has been denied, and I may resubmit my application with modifications.
- ☐ I hereby agree to proceed with the project in accordance with the modifications contained herein, and will allow follow-up inspection.

If the applicant disagrees with the supervisors' decision and wishes to formally resolve the dispute, the applicant must check the box below, sign, and return this form to the district within 5 working days.

- ☐ I disagree with the supervisors' decision and hereby request arbitration.

Signature of Applicant: \_\_\_\_\_ Date: \_\_\_\_\_