



FUTURE FISHERIES IMPROVEMENT PROGRAM GRANT APPLICATION

All sections must be addressed, or the application will be considered invalid



I. APPLICANT INFORMATION

- A. Applicant Name: Clark Fork Coalition
- Mailing Address: 140 S. 4th St. W. #1
- City: Missoula State: MT Zip: 59801
- Telephone: 406-542--0359 ext. 203 E-mail: karen@clarkfork.org
- B. Contact Person (if different than applicant): Adam Switalski Clark Fork Coalition Project Mgr.
- Address: 140 S. 4th St. W. #1
- City: Missoula State: MT Zip: 59801
- Telephone: 406-396-1941 (cell) E-mail: adam@clarkfork.org
- C. Landowner and/or Lessee Name (if different than applicant): USDA Forest Service - Missoula Ranger District
- Mailing Address: 24 Fort Missoula Road
- City: Missoula State: MT Zip: 59804
- Telephone: 406-329-3814 E-mail: dustin.walters@usda.gov

II. PROJECT INFORMATION

- A. Project Name: Granite Creek Fish Passage Project
- River, stream, or lake: Granite Creek
- Location: Township: 11N Range: 24W Section: 11, 15, 22
- Latitude: 46.7236 Longitude: -114.5827 *Within project (decimal degrees)*
- County: Missoula
- B. Purpose of Project:

The purpose of this project is to increase the native fish populations in the Upper Lolo watershed, specifically on the Granite Creek sub-watershed. Granite Creek is an important tributary of Lolo Creek which includes designated Bull Trout Critical Habitat. These streams support high densities of Westslope Cutthroat Trout and remnant Bull Trout populations, providing important spawning and rearing habitat

We will work with the US Forest Service to improve fish passage in tributaries of Granite Creek, and reduce chronic stream sedimentation. The Granite Creek road (FS 9942) disconnects several fish-bearing tributaries and chronically delivers sediment to the stream. Upsizing these culverts would provide year-round stream connectivity for fish and other aquatic organisms and increase hydrologic capacity. This project is a collaborative project with the Clark Fork Coalition, the Missoula District of the Lolo National Forest, Montana Department of Environmental Quality and Montana Fish Wildlife and Parks.

C. Brief Project Description (attach additional information to end of application):

In 2009, the Lolo National Forest acquired more than 32 square miles of corporate timber lands in Upper Lolo Creek watershed as part of the larger 'Montana Legacy Project' in Western Montana. This land acquisition provide an opportunity for restoration and enhancement opportunities in the basin.

The proposed collaborative project would take place on Granite Creek – a tributary to main stem Lolo Creek. Lolo Creek and its tributaries historically supported a productive coldwater fishery consisting of native and introduced salmonids. Fisheries values are highlighted by high westslope cutthroat trout densities and Bull Trout Critical Habitat designation by the USFWS. Project reaches primarily represent spawning and rearing habitats for these and other coldwater species.

The proposed project builds upon long-term restoration efforts in the Lolo Creek watershed that have included removing undersized culverts (many fish passage barriers), reclaiming impactful forest roads, and installing large wood jams on the Montana Legacy Project lands. Since 2006, road decommissioning and other road treatments have reduced overall sediment inputs and hydrologic impacts at a large scale in the Lolo Creek headwaters. In total, more than 130 miles of forest roads have been treated (including 30 miles of high priority roads recontoured), dozens of stream crossings have been removed, ten culverts have been converted to bottomless arches or bridges for enhanced fish passage, and dozens of large wood jams have been installed.

For this project, treatments will involve upsizing 8 culverts on Granite Creek tributaries that are seasonal or total fish barriers. This would include upsizing mostly 24 in. corrugated culverts with 72 in. roughened bottom culverts (n=7). One additional culvert would be upsized to a 5 ft. culverts to reduce sediment delivery and the risk of failure. Project implementation is planned on USFS property during summer 2023. In tandem with this project, the entire Granite Creek Road (FS 9942) will have BMPs and gravel installed to further reduce sediment delivery to streams.

Public outreach will be conducted by the Clark Fork Coalition, including field trips for local community members and government agencies.

D. What was the cause of habitat degradation and how will the project correct the cause?

The construction of Granite Creek Road (FS 9942) disconnected several fish-bearing tributaries. Upsizing these culverts would provide year-round stream connectivity for fish and other aquatic organisms and increase hydrologic capacity.

- E. Length of stream or size of lake that will be treated (project extent): 5 miles alone Granite Creek
 Length/size of impact, if larger than project extent (e.g., stream miles opened): 4 miles stream opened up
- F. Project Budget Summary:
- | | |
|--|----------------------|
| Grant Request (Dollars): | \$ 85,000.00 |
| Matching Dollars: | \$ 168,000.00 |
| Matching In-Kind Services:* | \$ |
| <i>*salaries of government employees are not considered matching contributions</i> | |
| Other Contributions (not part of this app) | \$ 12,000.00 |
| Total Project Cost: | \$ 265,000.00 |
- G. Attach itemized (line item) budget – see *budget template*
- H. Attach project location map(s) that include:
- ☒ Extent of the project, including context (relation to major landmark or town)
 - ☒ Indication of public and private property
 - ☐ Riparian buffer locations and widths (if applicable) and grazing locations
- I. Attach project plans:
- ☒ Detailed sketches or plan views with the location and proposed restoration
 - ☒ Pre-project photographs (GPS location strongly recommended)
 - ☐ If water leasing or water salvage is involved, attach a supplemental questionnaire (<https://myfwp.mt.gov/getRepositoryFile?objectID=36110>)
- J. Attach letters or statements of support (e.g., landowner consent, community or public support, and fish biologist support). List any other project partners:
- This project is a collaborative project with the Clark Fork Coalition, the Missoula District of the Lolo National Forest, Montana Department of Environmental Quality, and Montana Fish Wildlife and Parks. We have included letter of support from the Forest Service and Montana Fish, Wildlife, and Parks.

III. MAINTENANCE AND MONITORING (attach additional information to end of application):

- A. A 20-year maintenance commitment is required*. Please confirm that you will ensure this protection and describe your approach. Attach any relevant maintenance plans. Yes ☒ No ☐
**If it is a water leasing project, describe the length of the agreement.*

The Clark Fork Coalition, public and private land managers, and project partners have been implementing and maintaining stream restoration projects since 2009. We are committed to our protection and restoration work and have staff dedicated to monitoring the effectiveness of these projects.

- B. Will grazing be part of or adjacent to the project? If so, describe or attach land management plans, including short term and long term grazing regimes. If the landowner is not the applicant, please describe their involvement in the project. *If you want assistance with grazing plan development, note your need.*

Grazing is not currently allowed or planned in this area.

- C. Will the project be monitored to determine if goals were met? If so, what are the short-term and long-term plans to assess benefits and lessons learned? Were pre-project data collected? Will monitoring information be shared with FWP?

The Forest Service has surveyed each of the proposed stream crossings for fish passage. All of the sites proposed for roughened bottom upgrades were found to be total or seasonal barriers to adult and juvenile passage. Several research studies have found that the removal or up-sizing of culverts has restored fish and other aquatic organism connectivity. While it is assumed that culvert upsizing will allow year-round fish passage, the Forest Service will install photo points before, as-built, and out-years to ensure that we are maintaining a roughened channel.

IV. PROJECT BENEFITS (attach additional information to end of application):

- A. What species of fish will benefit from this project?

The project will benefit the coldwater fish community in upper Lolo Creek. Westslope cutthroat trout are the predominant fish species, but the project will also enhance habitat for Threatened bull trout, brook trout, brown trout and other coldwater species.

- B. How will the project protect or enhance wild fish habitat?

Currently, fish habitat in Granite Creek tributaries is limited due to seasonal and full fish barriers. Additionally, sediment produced on Granite Creek Road is chronically delivering sediment at stream crossings. Culverts will be significantly up-sized and streambed simulation material will be filled into the bottom 1/3 of the culvert. This will allow for lower velocity, more roughness, and year-round fish and other aquatic organism passage. Ultimately, this will increase the amount of available spawning and rearing habitat in Granite Creek watershed. Additionally, up-sized culverts will reduce chronic sediment delivery associated with these road crossings and reduce the risk of catastrophic failure. Reducing stream sedimentation will improve the quality of spawning habitat.

- C. What is the expected improvement to fish populations, both short term and long term? How might the project translate to angler success?

By increasing the amount of spawning and rearing habitat in Granite Creek, it is expected to increase west-slope cutthroat and other trout species population densities. Additionally, it may help in the recovery of the relic Threatened bull trout population. With higher densities of fish, angler success is expected to increase. The entire project area is on public land and is open to angling. Wild fish populations downstream (i.e., Bitterroot River) are also expected to benefit through enhanced wild trout recruitment.

- D. Will the project increase public fishing opportunity for wild fish and, if so, how? Is public fishing allowed onsite? If not, describe how the public would access the project benefits.

The entire project area lies on accessible public land and is open to angling. Wild fish populations are expected to increase as a result of the project, leading to more opportunity for angling success. The proposed project, in combination with past restoration efforts (road decommissioning, stream crossing restoration, and large wood jam installation), will increase trout abundance, bull trout and westslope cutthroat trout conservation, and overall health, productivity and resiliency of upper Lolo Creek at a larger scale. These benefits will ultimately benefit public fishing opportunities in the lower Bitterroot River.

- E. Aside from angling, what local or large-scale public benefits will be realized from this project?

Overall public benefits from this project will include increased salmonid population resiliency and density and benefits to the Threatened bull trout. Most of these culverts are also at a risk of catastrophically failing and delivering large amounts of sediment into streams. Up-sizing them will minimize this risk, and maintain good water quality for downstream users.

- F. Will the project interfere with water or property rights of adjacent landowners? (explain):

The project will not interfere with the water or property rights of adjacent landowners. The entire project will take place on USFS property.

- G. Will the project result in the development of commercial recreational use on the site (including paid access)? Explain:

No, there is planned development of commercial recreational use at the site of the project.

- H. Is this project associated with the reclamation of past mining activity?

No, the project is not associated with mine reclamation.

Each approved project applicant must enter into a written agreement with Montana Fish, Wildlife & Parks specifying terms and duration of the project. The applicant must obtain all applicable permits prior to project construction. A competitive bid process must be followed when using State funds.

V. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature:  Digitally signed by Karen Knudsen
Date: 2022.11.15 11:00:46 -07'00' Date: 11/15/2022

Submittal: Applications must be signed and received on or before November 15 and May 15 to be considered for the subsequent funding period. Late or incomplete applications will be rejected.

Mail to: FWP Future Fisheries Fish Habitat Bureau PO Box 200701 Helena, MT 59620-0701	Email: Future Fisheries Coordinator FWPFFIP@mt.gov (electronic submissions must be signed) For files over 10MB, use https://transfer.mt.gov and send to mmcgree@mt.gov
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Granite Creek Fish Passage
BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

004-2023

Both tables must be completed or the application will be returned

PROJECT COSTS					CONTRIBUTIONS			
WORK ITEMS (Itemize by Category)	NUMBER OF UNITS	UNIT DESCRIPTION*	COST/UNIT	TOTAL COST	FUTURE FISHERIES REQUEST	MATCH (Cash or Services)**	OTHER (Not part of this application)	TOTAL
Personnel***								
Survey	24	hrs.		\$ -			1,200.00	\$ 1,200.00
Design	40	hrs.		\$ -			2,000.00	\$ 2,000.00
Engineering	8	hrs.		\$ -			400.00	\$ 400.00
Permitting	8	hrs.		\$ -			400.00	\$ 400.00
Oversight (CFC)	200	hrs.	\$45.00	\$ 9,000.00		9,000.00		\$ 9,000.00
Oversight (FS)	160	hrs.		\$ -			8,000.00	\$ 8,000.00
			Sub-Total	\$ 9,000.00	\$ -	\$ 9,000.00	\$ 12,000.00	\$ 21,000.00
Travel								
Mileage	2000	miles	\$0.63	\$ 1,250.00		1,250.00		\$ 1,250.00
Per diem				\$ -				\$ -
			Sub-Total	\$ 1,250.00	\$ -	\$ 1,250.00	\$ -	\$ 1,250.00
Construction Materials****								
72-inch culvert, 30 feet	2		\$10,096.00	\$ 20,192.00	20,192.00			\$ 20,192.00
72-inch culvert, 32 feet	2		\$10,769.00	\$ 21,538.00	21,538.00			\$ 21,538.00
72-inch culvert, 38 feet	1		\$12,789.00	\$ 12,789.00		12,789.00		\$ 12,789.00
72-inch culvert, 43 feet	1		\$14,471.00	\$ 14,471.00		14,471.00		\$ 14,471.00
72-inch culvert, 50 feet	1		\$16,827.00	\$ 16,827.00		16,827.00		\$ 16,827.00
48-inch culvert, 40 feet	1		\$6,693.00	\$ 6,693.00		6,693.00		\$ 6,693.00
				\$ -				\$ -
				\$ -				\$ -
			Sub-Total	\$ 92,510.00	\$ 41,730.00	\$ 50,780.00	\$ -	\$ 92,510.00
Equipment, Labor, and Mobilization								
Mobilization				\$ 10,748.00		10,748.00		\$ 10,748.00
Excavator	176	hrs.	\$146.00	\$ 25,696.00	10,000.00	15,696.00		\$ 25,696.00
Dump Truck	164	hrs.	\$118.00	\$ 19,352.00	10,000.00	9,352.00		\$ 19,352.00
Remove culvert	8		\$540.00	\$ 4,320.00		4,320.00		\$ 4,320.00
Install culverts		Lump sum		\$ 82,088.00	23,270.00	58,818.00		\$ 82,088.00
Construct sediment basin	4		\$586.00	\$ 2,344.00		2,344.00		\$ 2,344.00
Outslope road	14		\$241.00	\$ 3,374.00		3,374.00		\$ 3,374.00
Construct drain dip	2		\$241.00	\$ 482.00		482.00		\$ 482.00
Recondition ditch	100	linear feet	\$1.87	\$ 187.00		187.00		\$ 187.00
Slash filter windrow	400	linear feet	\$4.08	\$ 1,632.00		1,632.00		\$ 1,632.00
				\$ -				\$ -
				\$ -				\$ -
			Sub-Total	\$ 150,223.00	\$ 43,270.00	\$ 106,953.00	\$ -	\$ 150,223.00
TOTALS				\$ 252,983.00	\$ 85,000.00	\$ 167,983.00	\$ 12,000.00	\$ 264,983.00

OTHER REQUIREMENTS:

All of the columns in the budget table and the matching contribution table MUST be completed appropriately or the application will be invalid. Please see the example budget sheet for additional clarification.

*Units = feet, hours, inches, etc. Do not use lump sum unless there is no other way to describe the costs.

**Can include in-kind materials. Justification for in-kind labor (e.g. hourly rates used). Do not use government salaries as match. Describe here or in text.

***The Review Panel suggests that design and oversight costs associated with a proposed project not exceed 15% of the total project budget. If design and oversight costs are in excess of 15%, applications must include a justification or minimum of two competitive bids for the cost of undertaking the project.

****The Review Panel recommends a maximum fencing cost of \$1.50 per foot. Additional costs may be the responsibility of the applicant and/or partners.

Additional details:

APPLICATION MATCHING CONTRIBUTIONS				
(do not include requested funds or contributions not associated with the application)				
CONTRIBUTOR	IN-KIND	CASH	TOTAL	Secured? (Y/N)
USDA Forest Service	\$ -	\$ 80,000.00	\$ 80,000.00	Y
Montana Deptment of Environmental Quality	\$ -	\$ 80,000.00	\$ 80,000.00	Y
Westslope Chapter Trout Unlimited	\$ -	\$ 5,000.00	\$ 5,000.00	N
Clark Fork Coalition	\$ -	\$ 3,000.00	\$ 3,000.00	Y
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTALS	\$ -	\$ 168,000.00	\$ 168,000.00	

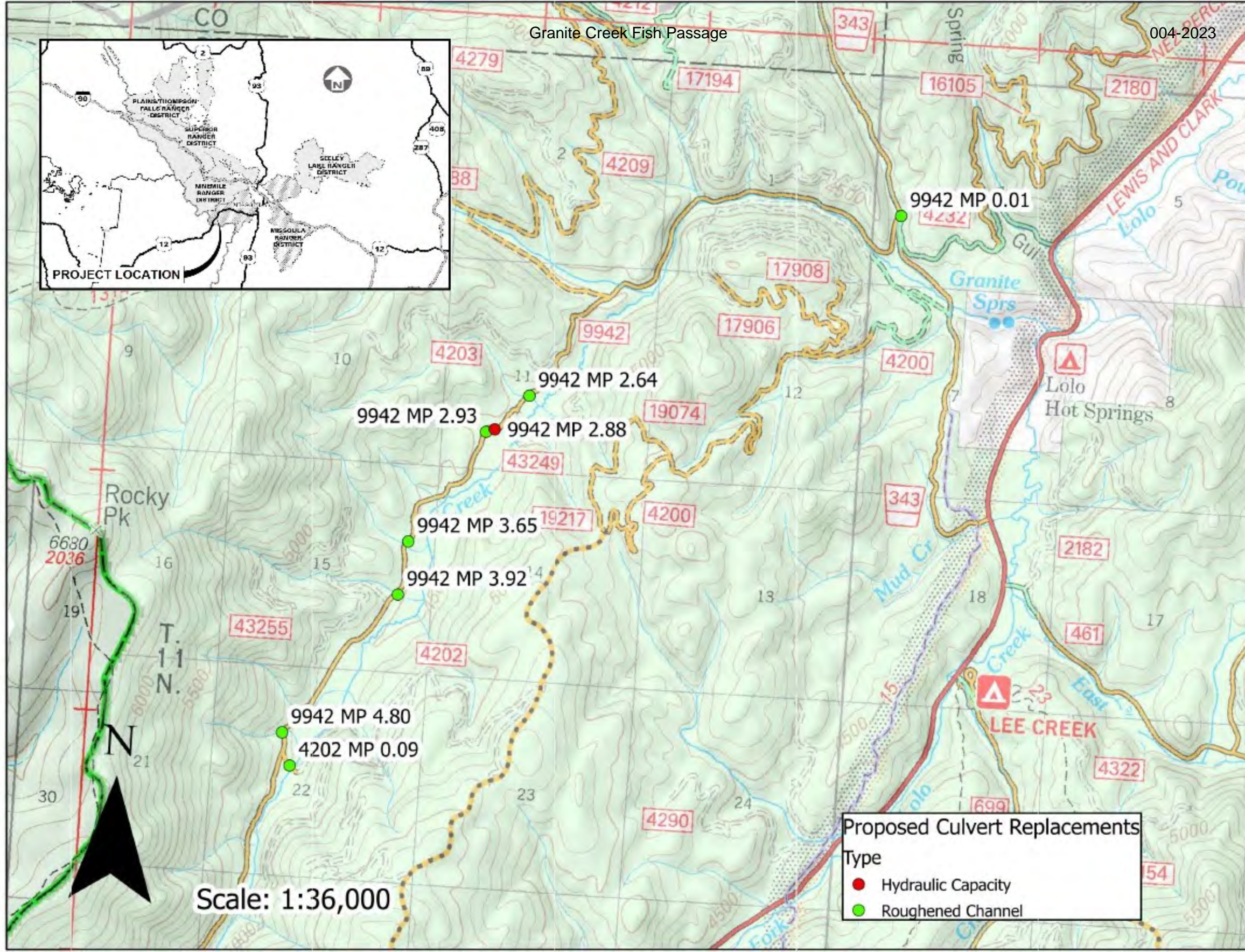
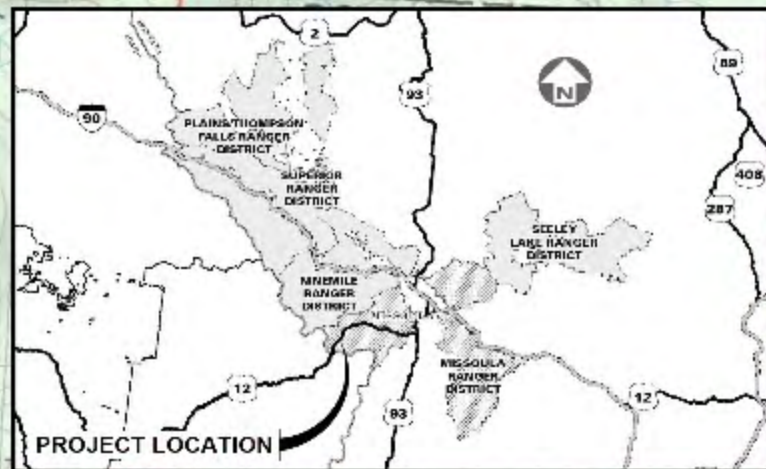
OTHER CONTRIBUTIONS				
(contributions not associated with the application)				
CONTRIBUTOR	IN-KIND	CASH	TOTAL	Secured? (Y/N)
USDA Forest Service	\$ 12,000.00	\$ -	\$ 12,000.00	Y
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTALS	\$ 12,000.00	\$ -	\$ 12,000.00	

Upper Lolo Creek Basin Culvert Improvement Project
Engineer's Estimate

ROAD NO.	M.P.	SITE ID	PAY ITEM	WORK DESCRIPTION	QTY	UNIT	UNIT COST	COST	MATERIALS COST	TIME & EQUIPMENT COST
ALL	-	-	15101	MOBILIZATION	1	EA	\$ 10,748.36	\$ 10,748.36	\$ -	\$ 10,748.36
ALL	-	-	15703	SLASH FILTER WINDROW	400	LF	\$ 4.08	\$ 1,631.36	\$ -	\$ 1,631.36
ALL	-	-	20301	REMOVE CULVERT, REMOVAL METHOD A	8	EA	\$ 540.24	\$ 4,321.92	\$ -	\$ 4,321.92
ALL	-	-	62201	EQUIPMENT RENTAL, HYDRAULIC EXCAVATOR	160	HR	\$ 145.67	\$ 23,307.20	\$ -	\$ 23,307.20
ALL	-	-	62202	EQUIPMENT RENTAL, DUMP TRUCK	160	HR	\$ 118.34	\$ 18,934.40	\$ -	\$ 18,934.40
9942	4.8	9942 M.P. 4.8	60201-R	72-INCH ROUGHENED BOTTOM CULVERT, CMP, 12 GAUGE, COMPACTION PLACEMENT METHOD 2 (ROLLER COMPACTION), STREAMBED SIMULATION MATERIAL BED CLASS 2, STREAMBED CHANNEL ROCK CLASS CR-1	30	LF	\$ 630.34	\$ 18,910.14	\$ 10,096.28	\$ 8,813.86
9942	4.8	9942 M.P. 4.8	20421A	CONSTRUCT TYPE II DRAIN DIP, COMPACTION METHOD 3, TOLERANCE CLASS (A), LOCATION AS DIRECTED BY USFS REPRESENTATIVE	1	EA	\$ 240.96	\$ 240.96	\$ -	\$ 240.96
9942	4.8	9942 M.P. 4.8	20421B	OUTSLOPE, 3%, 25LF, AT NATURAL SAG AS DIRECTED BY USFS REPRESENTATIVE	2	EA	\$ 240.96	\$ 481.92	\$ -	\$ 481.92
9942	4.8	9942 M.P. 4.8	20421C	CONSTRUCT SEDIMENT BASIN, RIPRAP CLASS 1, LOCATION AS DIRECTED BY USFS REPRESENTATIVE	1	EA	\$ 586.09	\$ 586.09	\$ 150.00	\$ 436.09
9942	3.92	9942 M.P. 3.92	60201-R	72-INCH ROUGHENED BOTTOM CULVERT, CMP, 12 GAUGE, COMPACTION PLACEMENT METHOD 2 (ROLLER COMPACTION), STREAMBED SIMULATION MATERIAL BED CLASS 2, STREAMBED CHANNEL ROCK CLASS CR-1	43	LF	\$ 630.34	\$ 27,104.53	\$ 14,471.33	\$ 12,633.19
9942	3.92	9942 M.P. 3.92	20421B	OUTSLOPE, 3%, 25LF, AT NATURAL SAG AS DIRECTED BY USFS	2	EA	\$ 240.96	\$ 481.92	\$ -	\$ 481.92
9942	3.92	9942 M.P. 3.92	62201	EQUIPMENT RENTAL, HYDRAULIC EXCAVATOR	3	HR	\$ 145.67	\$ 437.01	\$ -	\$ 437.01
9942	3.65	9942 M.P. 3.65	60201-R	72-INCH ROUGHENED BOTTOM CULVERT, CMP, 12 GAUGE, COMPACTION PLACEMENT METHOD 2 (ROLLER COMPACTION), STREAMBED SIMULATION MATERIAL BED CLASS 2, STREAMBED CHANNEL ROCK CLASS CR-1	32	LF	\$ 630.34	\$ 20,170.81	\$ 10,769.37	\$ 9,401.45
9942	3.65	9942 M.P. 3.65	20421B	OUTSLOPE, 3%, 25LF, AT NATURAL SAG AS DIRECTED BY USFS	2	EA	\$ 240.96	\$ 481.92	\$ -	\$ 481.92
9942	2.93	9942 M.P. 2.93	60201-R	72-INCH ROUGHENED BOTTOM CULVERT, CMP, 12 GAUGE, COMPACTION PLACEMENT METHOD 2 (ROLLER COMPACTION), STREAMBED SIMULATION MATERIAL BED CLASS 2, STREAMBED CHANNEL ROCK CLASS CR-1	32	LF	\$ 630.34	\$ 20,170.81	\$ 10,769.37	\$ 9,401.45
9942	2.93	9942 M.P. 2.93	20421B	OUTSLOPE, 3%, 25LF, AT NATURAL SAG AS DIRECTED BY USFS	2	EA	\$ 240.96	\$ 481.92	\$ -	\$ 481.92
9942	2.93	9942 M.P. 2.93	20421C	CONSTRUCT SEDIMENT BASIN, RIPRAP CLASS 1, LOCATION AS DIRECTED BY USFS REPRESENTATIVE	1	EA	\$ 586.09	\$ 586.09	\$ 150.00	\$ 436.09
9942	2.93	9942 M.P. 2.93	62201	EQUIPMENT RENTAL, HYDRAULIC EXCAVATOR	4	HR	\$ 145.67	\$ 582.68	\$ -	\$ 582.68
9942	2.88	9942 M.P. 2.88	60201-H1	48-INCH CULVERT, CMP, 14 GAUGE, COMPACTION PLACEMENT METHOD 2 (ROLLER COMPACTION)	40	LF	\$ 346.59	\$ 13,863.44	\$ 6,692.94	\$ 7,170.50
9942	2.88	9942 M.P. 2.88	20421C	CONSTRUCT SEDIMENT BASIN, RIPRAP CLASS 1, LOCATION AS DIRECTED BY USFS REPRESENTATIVE	1	EA	\$ 586.09	\$ 586.09	\$ 150.00	\$ 436.09
9942	2.88	9942 M.P. 2.88	30301	DITCH RECONDITIONING	100	LF	\$ 1.87	\$ 186.78	\$ -	\$ 186.78
9942	2.88	9942 M.P. 2.88	20421B	OUTSLOPE, 3%, 25LF, AT NATURAL SAG AS DIRECTED BY USFS REPRESENTATIVE	2	EA	\$ 240.96	\$ 481.92	\$ -	\$ 481.92
9942	2.64	9942 M.P. 2.64	60201-R	72-INCH ROUGHENED BOTTOM CULVERT, CMP, 12 GAUGE, COMPACTION	38	LF	\$ 630.34	\$ 23,952.84	\$ 12,788.62	\$ 11,164.22
9942	2.64	9942 M.P. 2.64	20421B	OUTSLOPE, 3%, 25LF, AT NATURAL SAG AS DIRECTED BY USFS	2	EA	\$ 240.96	\$ 481.92	\$ -	\$ 481.92
9942	2.64	9942 M.P. 2.64	62201	EQUIPMENT RENTAL, HYDRAULIC EXCAVATOR	3	HR	\$ 145.67	\$ 437.01	\$ -	\$ 437.01
9942	0.01	9942 M.P. 0.01	60201-R	72-INCH ROUGHENED BOTTOM CULVERT, CMP, 12 GAUGE, COMPACTION PLACEMENT METHOD 2 (ROLLER COMPACTION), STREAMBED SIMULATION MATERIAL BED CLASS 2, STREAMBED CHANNEL ROCK CLASS CR-1	50	LF	\$ 630.34	\$ 31,516.89	\$ 16,827.13	\$ 14,689.76
9942	0.01	9942 M.P. 0.01	20421A	CONSTRUCT TYPE II DRAIN DIP, COMPACTION METHOD 3, TOLERANCE CLASS (A), LOCATION AS DIRECTED BY USFS REPRESENTATIVE	1	EA	\$ 240.96	\$ 240.96	\$ -	\$ 240.96
9942	0.01	9942 M.P. 0.01	20421C	CONSTRUCT SEDIMENT BASIN, RIPRAP CLASS 1, LOCATION AS DIRECTED BY USFS REPRESENTATIVE	1	EA	\$ 586.09	\$ 586.09	\$ 150.00	\$ 436.09
4202	0.09	4202 M.P. 0.09	60201-R	72-INCH ROUGHENED BOTTOM CULVERT, CMP, 12 GAUGE, COMPACTION	30	LF	\$ 630.34	\$ 18,910.14	\$ 10,096.28	\$ 8,813.86
4202	0.09	4202 M.P. 0.09	20421B	OUTSLOPE, 3%, 25LF, AT NATURAL SAG AS DIRECTED BY USFS	2	EA	\$ 240.96	\$ 481.92	\$ -	\$ 481.92
4202	0.09	4202 M.P. 0.09	62201	EQUIPMENT RENTAL, HYDRAULIC EXCAVATOR	6	HR	\$ 145.67	\$ 874.02	\$ -	\$ 874.02
4202	0.09	4202 M.P. 0.09	62202	EQUIPMENT RENTAL, DUMP TRUCK	4	HR	\$ 118.34	\$ 473.36	\$ -	\$ 473.36
TOTAL =								\$ 242,733.42	\$ 93,111.32	\$ 149,622.10

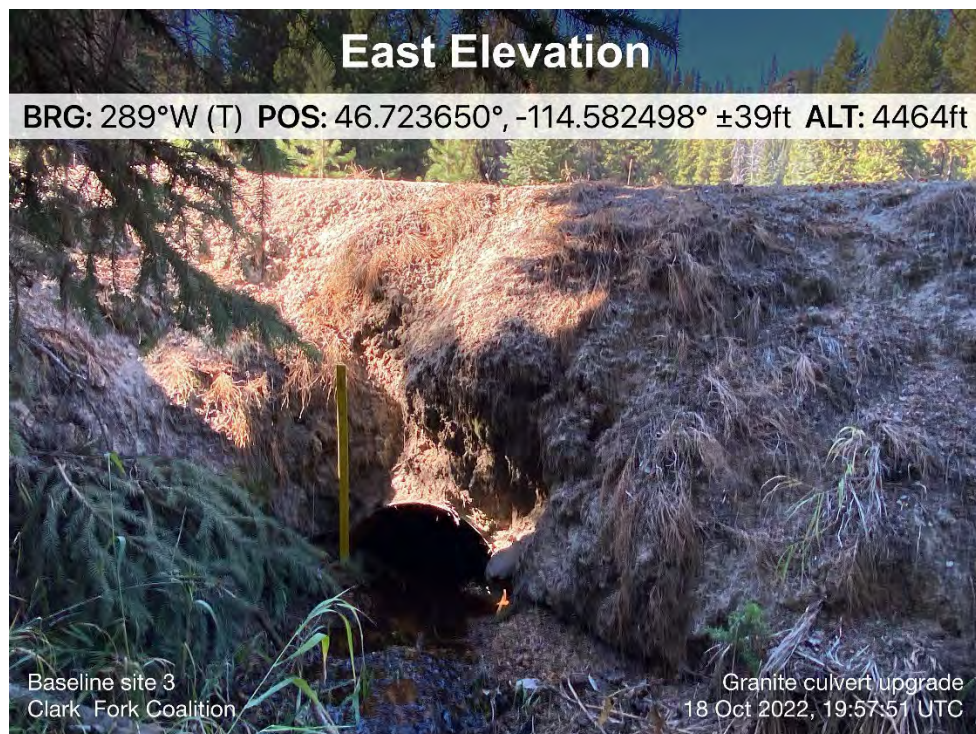
Granite Creek Fish Passage

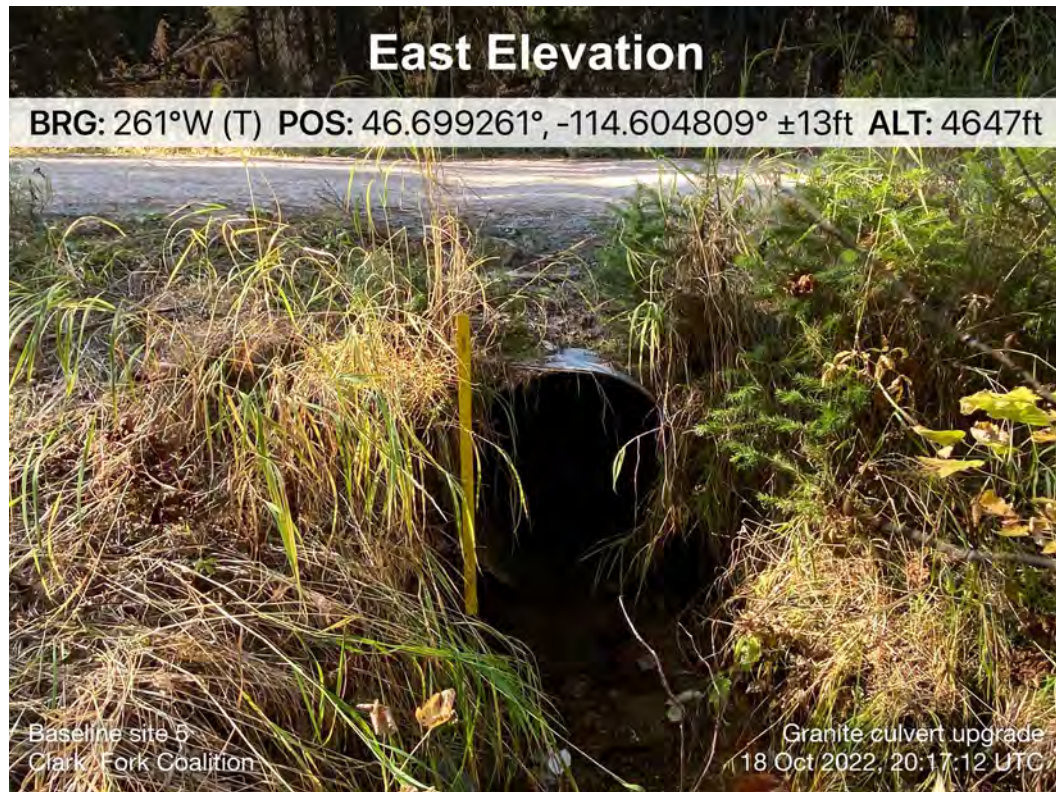
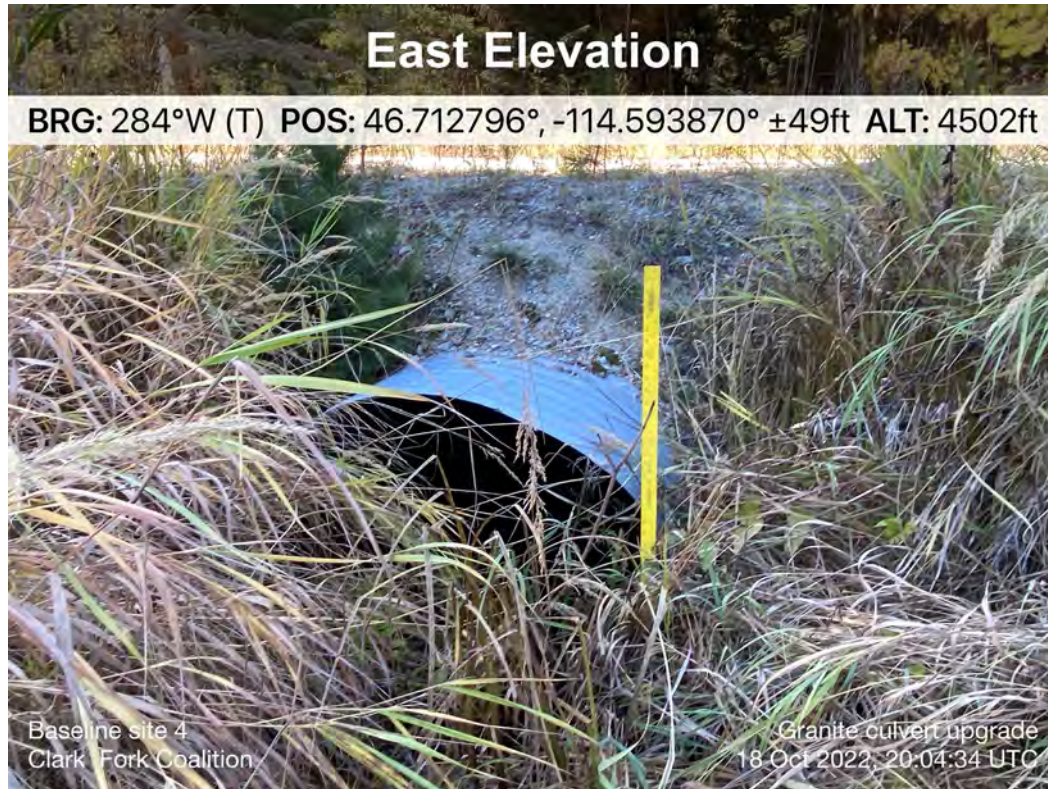
004-2023



Granite Creek Fish Passage Project – Photos

Examples of culverts proposed for upgrades:





Sheet List Table	
Sheet Number	Sheet Title
1	TITLE
2	MAPS
3	WORKLIST
4	ROUGHENED BOTTOM CULVERT DETAIL
5	HYDRAULIC CULVERT DETAIL
6	SEDIMENT BASIN DETAIL
7	GRADE CONTROL DETAILS
8	EXCAVATION AND ARMORING DETAILS



U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION ONE



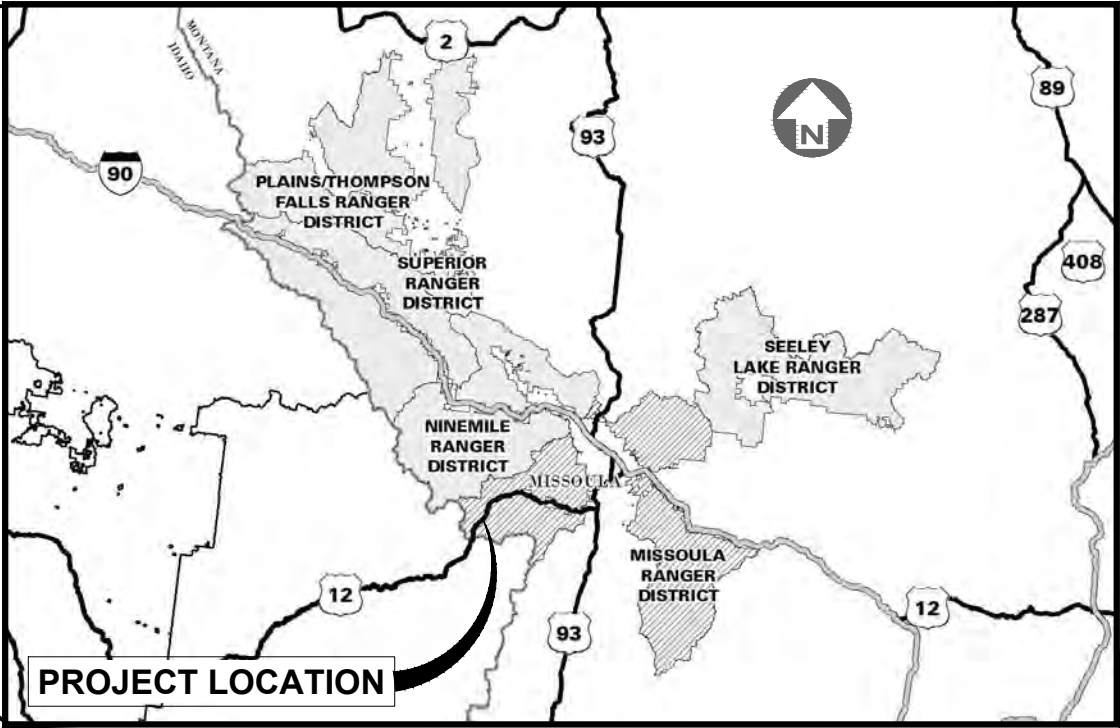
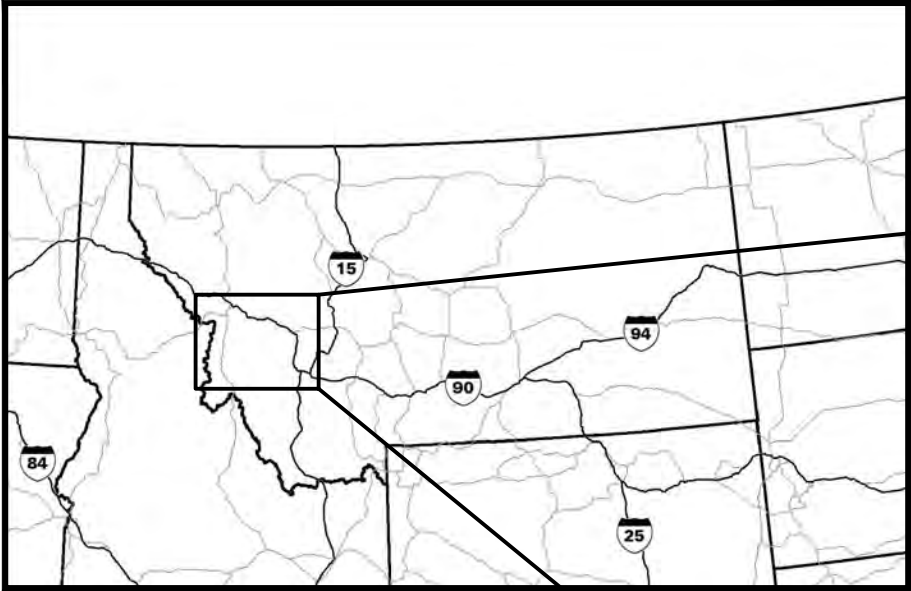
CONSTRUCTION/RECONSTRUCTION PLANS FOR SPECIFIED
ROADS

UPPER LOLO CREEK BASIN CULVERT
IMPROVEMENT PROJECT

LOLO NATIONAL FOREST
MISSOULA RANGER DISTRICT (D3)
MISSOULA COUNTY

MONTANA / IDAHO INDEX MAP

NOT TO SCALE



LOCATION MAP

NOT TO SCALE

DESIGNED BY:

HYDROLOGIST
LOLO NATIONAL FOREST

DATE

RECOMMENDED BY:

DISTRICT RANGER
LOLO NATIONAL FOREST

DATE

APPROVED BY:

FOREST HYDROLOGIST
LOLO NATIONAL FOREST

DATE

APPROVED BY:

FOREST ENGINEER
LOLO NATIONAL FOREST

DATE

APPROVED BY:

FOREST SUPERVISOR
LOLO NATIONAL FOREST

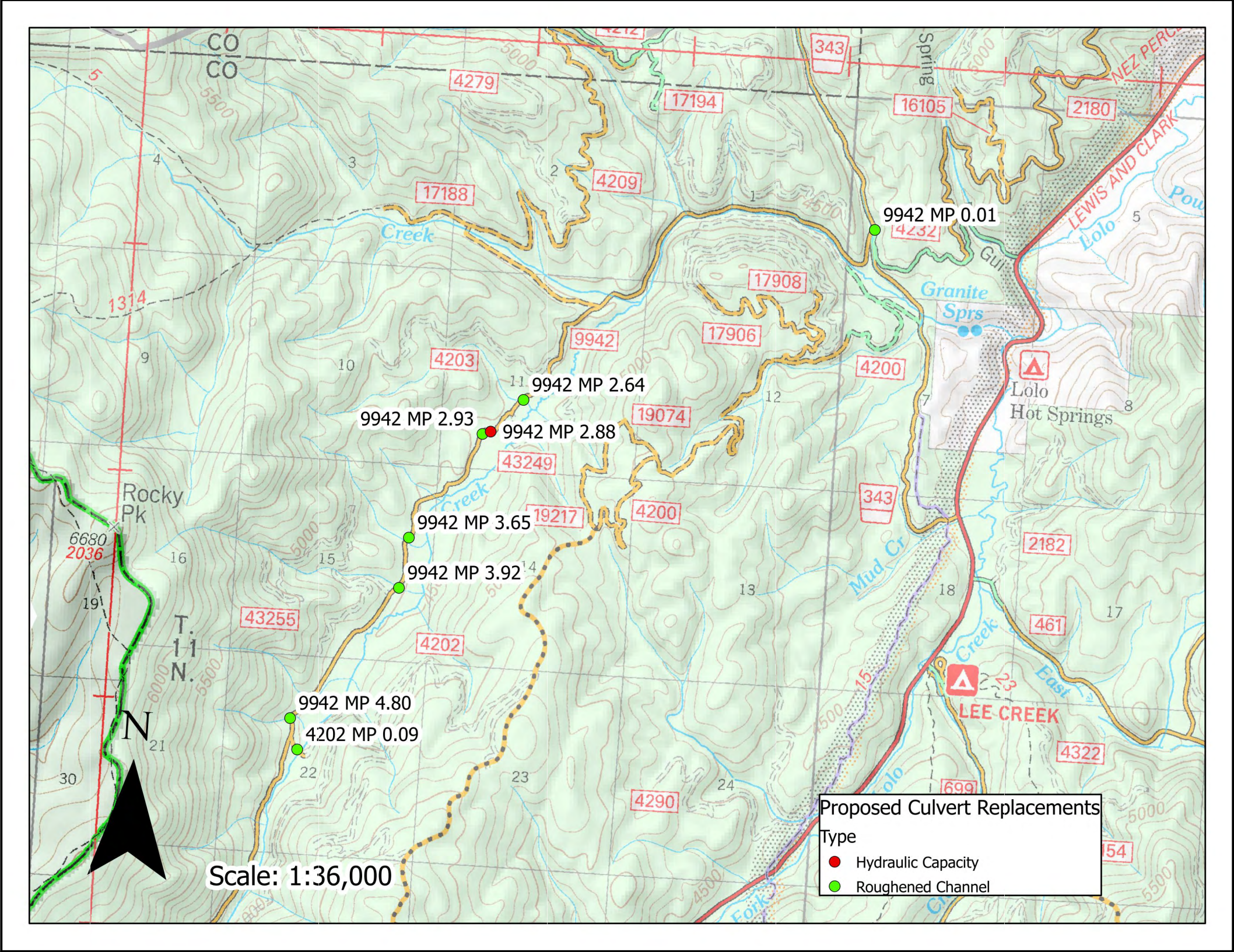
DATE

APPROVED BY:

DIRECTOR OF ENGINEERING
NORTHERN REGION

DATE

NO.	REVISION DESCRIPTION	BY	DATE	SET NO.
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01
NORTHERN REGION

PROJECT NAME
UPPER LOLO CREEK BASIN CULVERT IMPROVEMENT PROJECT

LOLO NATIONAL FOREST
MISSOULA RANGER DISTRICT (D3)

DRAWING TITLE

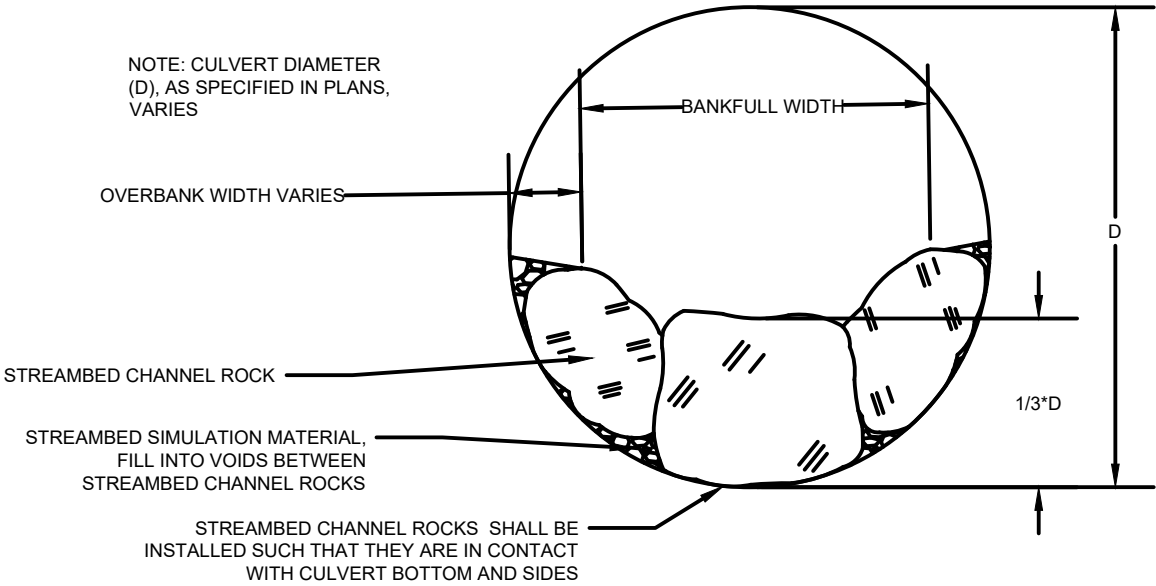
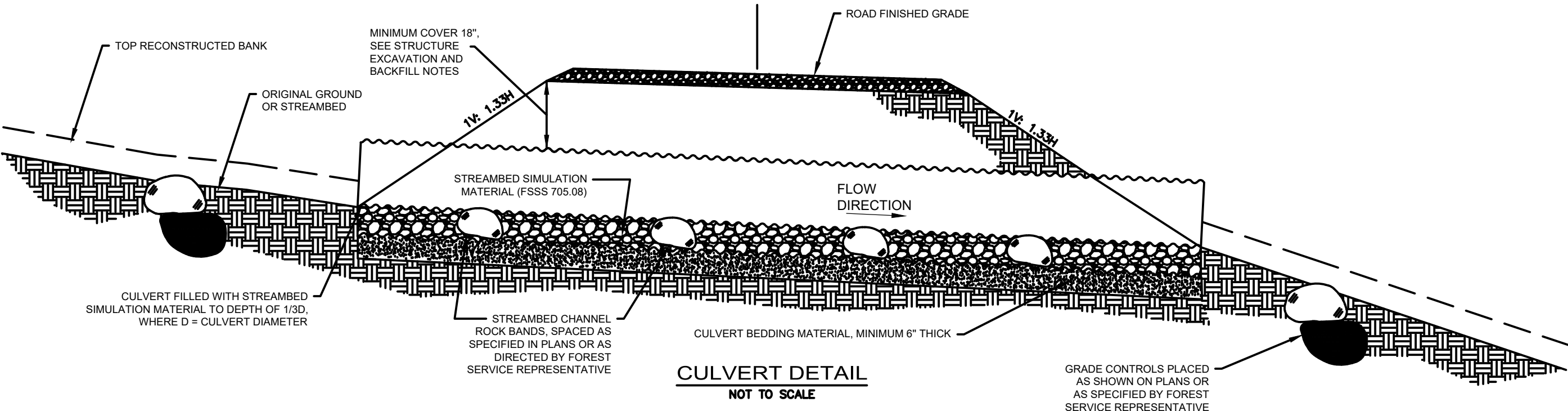
MAPS

DATE 11/9/2022		DESIGNER NPLATT	CHECKED DWALTERS
NO.	REVISION DESCRIPTION	BY	DATE
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DWG SHEET NO.
2

SHEET
2
OF
8

ROAD NO.	M.P.	SITE ID	PAY ITEM	WORK DESCRIPTION	QTY	UNIT
ALL	-	-	15101	MOBILIZATION	1	EA
ALL	-	-	15703	SLASH FILTER WINDROW	400	LF
ALL	-	-	20301	REMOVE CULVERT, REMOVAL METHOD A	8	EA
ALL	-	-	62201	EQUIPMENT RENTAL, HYDRAULIC EXCAVATOR	160	HR
ALL	-	-	62202	EQUIPMENT RENTAL, DUMP TRUCK	160	HR
9942	4.800	9942 M.P. 4.8	60201-R	72-INCH ROUGHENED BOTTOM CULVERT, CMP, 12 GAUGE, COMPACTION PLACEMENT METHOD 2 (ROLLER COMPACTION), STREAMBED SIMULATION MATERIAL BED CLASS 2, STREAMBED CHANNEL ROCK CLASS CR-1	30	LF
9942	4.800	9942 M.P. 4.8	20421A	CONSTRUCT TYPE II DRAIN DIP, COMPACTION METHOD 3, TOLERANCE CLASS (A), LOCATION AS DIRECTED BY USFS REPRESENTATIVE	1	EA
9942	4.800	9942 M.P. 4.8	20421B	OUTSLOPE, 3%, 25LF, AT NATURAL SAG AS DIRECTED BY USFS REPRESENTATIVE	2	EA
9942	4.800	9942 M.P. 4.8	20421C	CONSTRUCT SEDIMENT BASIN, RIPRAP CLASS 1, LOCATION AS DIRECTED BY USFS REPRESENTATIVE	1	EA
9942	3.920	9942 M.P. 3.92	60201-R	72-INCH ROUGHENED BOTTOM CULVERT, CMP, 12 GAUGE, COMPACTION PLACEMENT METHOD 2 (ROLLER COMPACTION), STREAMBED SIMULATION MATERIAL BED CLASS 2, STREAMBED CHANNEL ROCK CLASS CR-1	43	LF
9942	3.920	9942 M.P. 3.92	20421B	OUTSLOPE, 3%, 25LF, AT NATURAL SAG AS DIRECTED BY USFS REPRESENTATIVE	2	EA
9942	3.920	9942 M.P. 3.92	62201	EQUIPMENT RENTAL, HYDRAULIC EXCAVATOR	3	HR
9942	3.650	9942 M.P. 3.65	60201-R	72-INCH ROUGHENED BOTTOM CULVERT, CMP, 12 GAUGE, COMPACTION PLACEMENT METHOD 2 (ROLLER COMPACTION), STREAMBED SIMULATION MATERIAL BED CLASS 2, STREAMBED CHANNEL ROCK CLASS CR-1	32	LF
9942	3.650	9942 M.P. 3.65	20421B	OUTSLOPE, 3%, 25LF, AT NATURAL SAG AS DIRECTED BY USFS REPRESENTATIVE	2	EA
9942	2.930	9942 M.P. 2.93	60201-R	72-INCH ROUGHENED BOTTOM CULVERT, CMP, 12 GAUGE, COMPACTION PLACEMENT METHOD 2 (ROLLER COMPACTION), STREAMBED SIMULATION MATERIAL BED CLASS 2, STREAMBED CHANNEL ROCK CLASS CR-1	32	LF
9942	2.930	9942 M.P. 2.93	20421B	OUTSLOPE, 3%, 25LF, AT NATURAL SAG AS DIRECTED BY USFS REPRESENTATIVE	2	EA
9942	2.930	9942 M.P. 2.93	20421C	CONSTRUCT SEDIMENT BASIN, RIPRAP CLASS 1, LOCATION AS DIRECTED BY USFS REPRESENTATIVE	1	EA
9942	2.930	9942 M.P. 2.93	62201	EQUIPMENT RENTAL, HYDRAULIC EXCAVATOR	4	HR
9942	2.880	9942 M.P. 2.88	60201-H1	48-INCH CULVERT, CMP, 14 GAUGE, COMPACTION PLACEMENT METHOD 2 (ROLLER COMPACTION)	40	LF
9942	2.880	9942 M.P. 2.88	20421C	CONSTRUCT SEDIMENT BASIN, RIPRAP CLASS 1, LOCATION AS DIRECTED BY USFS REPRESENTATIVE	1	EA
9942	2.880	9942 M.P. 2.88	30301	DITCH RECONDITIONING	100	LF
9942	2.880	9942 M.P. 2.88	20421B	OUTSLOPE, 3%, 25LF, AT NATURAL SAG AS DIRECTED BY USFS REPRESENTATIVE	2	EA
9942	2.640	9942 M.P. 2.64	60201-R	72-INCH ROUGHENED BOTTOM CULVERT, CMP, 12 GAUGE, COMPACTION PLACEMENT METHOD 2 (ROLLER COMPACTION), STREAMBED SIMULATION MATERIAL BED CLASS 2, STREAMBED CHANNEL ROCK CLASS CR-1	38	LF
9942	2.640	9942 M.P. 2.64	20421B	OUTSLOPE, 3%, 25LF, AT NATURAL SAG AS DIRECTED BY USFS REPRESENTATIVE	2	EA
9942	2.640	9942 M.P. 2.64	62201	EQUIPMENT RENTAL, HYDRAULIC EXCAVATOR	3	HR
9942	0.010	9942 M.P. 0.01	60201-R	72-INCH ROUGHENED BOTTOM CULVERT, CMP, 12 GAUGE, COMPACTION PLACEMENT METHOD 2 (ROLLER COMPACTION), STREAMBED SIMULATION MATERIAL BED CLASS 2, STREAMBED CHANNEL ROCK CLASS CR-1	50	LF
9942	0.010	9942 M.P. 0.01	20421A	CONSTRUCT TYPE II DRAIN DIP, COMPACTION METHOD 3, TOLERANCE CLASS (A), LOCATION AS DIRECTED BY USFS REPRESENTATIVE	1	EA
9942	0.010	9942 M.P. 0.01	20421C	CONSTRUCT SEDIMENT BASIN, RIPRAP CLASS 1, LOCATION AS DIRECTED BY USFS REPRESENTATIVE	1	EA
4202	0.09	4202 M.P. 0.09	60201-R	72-INCH ROUGHENED BOTTOM CULVERT, CMP, 12 GAUGE, COMPACTION PLACEMENT METHOD 2 (ROLLER COMPACTION), STREAMBED SIMULATION MATERIAL BED CLASS 2, STREAMBED CHANNEL ROCK CLASS CR-1	30	LF
4202	0.09	4202 M.P. 0.09	20421B	OUTSLOPE, 3%, 25LF, AT NATURAL SAG AS DIRECTED BY USFS REPRESENTATIVE	2	EA
4202	0.09	4202 M.P. 0.09	62201	EQUIPMENT RENTAL, HYDRAULIC EXCAVATOR	6	HR
4202	0.09	4202 M.P. 0.09	62202	EQUIPMENT RENTAL, DUMP TRUCK	4	HR



- CULVERT NOTES:**
- CULVERT SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:
 - SHALL BE A ROUND CORRUGATED STEEL PIPE WITH 3"x1" OR 5"x1" CORRUGATIONS
 - SHALL BE 12 GAGE THICKNESS (0.109 INCHES)
- STREAMBED SIMULATION NOTES:**
- STREAMBED CHANNEL ROCK AND STREAMBED SIMULATION MATERIAL SHALL BE PLACED AS DIRECTED BY FOREST SERVICE REPRESENTATIVE
 - STREAMBED CHANNEL ROCK KEY PIECES SHALL BE INSTALLED SUCH THAT THE ROCK IS IN CONTACT WITH THE CULVERT WITH STREAMBED SIMULATION MATERIAL FILLED INTO THE VOID SPACES BETWEEN THE ROCKS
 - LARGEST STREAMBED CHANNEL ROCK IN A BAND SHALL BE PLACED AT THE CENTER OF THE CULVERT
 - LOW FLOW SECTION OF CHANNEL SHALL BE CENTERED IN THE CULVERT
 - STREAMBED CHANNEL ROCK AND SIMULATION MATERIAL SIZE PER FSSS 705.08
- STRUCTURE EXCAVATION AND BACKFILL NOTES:**
- STRUCTURE EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH FP-14 AND FSSS SECTIONS 208 AND 209
 - COMPACTION METHOD 2 (ROLLER COMPACTION) PER FSSS 209 ON ALL BACKFILL LIFTS
 - IT IS ANTICIPATED THAT SUITABLE BACKFILL MATERIAL WILL BE SALVAGED FROM ON-SITE, SOME MIXING AND SORTING MAY BE REQUIRED
 - BEDDING MATERIAL CONSISTS OF LOOSELY PLACED AGGREGATE SURFACE COARSE PER FP-14 703.05, OR EQUIVALENT APPROVED BY FOREST SERVICE REPRESENTATIVE
 - MINIMUM COVER DEPTH SHALL BE 18"
 - CONSERVE ALL TOPSOIL AND AND GRUBBED VEGETATION IN A MANNER THAT WILL ALLOW REPLANTING OR SCATTERING, AS DIRECTED BY FOREST SERVICE REPRESENTATIVE
- DEWATERING AND EROSION CONTROL NOTES:**
- PROTECT AGAINST SOIL EROSION AND SEDIMENTATION DURING CONSTRUCTION IN ACCORDANCE WITH FP-14 AND PROJECT PERMITS
 - DEWATERING PLAN SHALL BE SUBMITTED TO THE CO FOR APPROVAL 14 DAYS PRIOR TO CONSTRUCTION START DATE AND SHALL INCLUDE DRAWINGS THAT DEPICT HOW THE CONTRACTOR PLANS TO DIVERT/PUMP WATER THROUGH THE EXCAVATION SITE
 - CONTRACTOR SHOULD ANTICIPATE WATER INFILTRATION IN EXCAVATION AREAS AND PLAN ACCORDINGLY TO MEET SPECIFICATIONS



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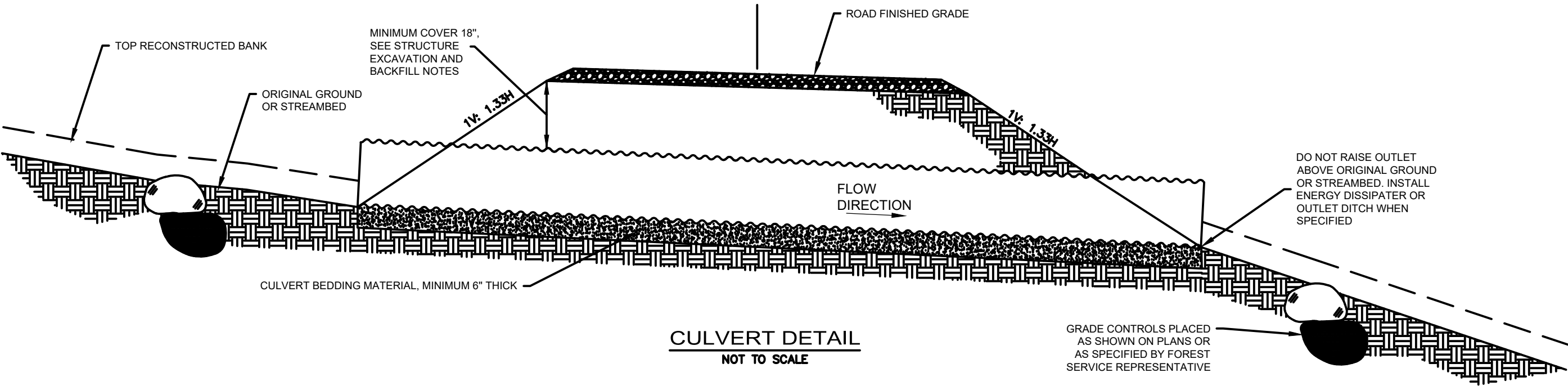
PROJECT NAME
UPPER LOLO CREEK BASIN CULVERT IMPROVEMENT PROJECT

LOLO NATIONAL FOREST
MISSOULA RANGER DISTRICT (D3)

DRAWING TITLE

ROUGHENED BOTTOM
CULVERT DETAIL

DATE 11/9/2022		DESIGNER NPLATT	CHECKED DWALTERS	DWG SHEET NO. 4	SHEET 4 OF 8
NO.	REVISION DESCRIPTION		BY	DATE	
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CULVERT NOTES:

- CULVERT SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:
- SHALL BE A ROUND CORRUGATED STEEL PIPE WITH 3"x1" OR 5"x1" CORRUGATIONS
- SHALL BE 12 GAGE THICKNESS (0.109 INCHES)

STRUCTURE EXCAVATION AND BACKFILL NOTES:

- STRUCTURE EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH FP-14 AND FSSS SECTIONS 208 AND 209
- COMPACTION METHOD 2 (ROLLER COMPACTION) PER FSSS 209 ON ALL BACKFILL LIFTS
- IT IS ANTICIPATED THAT SUITABLE BACKFILL MATERIAL WILL BE SALVAGED FROM ON-SITE, SOME MIXING AND SORTING MAY BE REQUIRED
- BEDDING MATERIAL CONSISTS OF LOOSELY PLACED AGGREGATE SURFACE COARSE PER FP-14 703.05, OR EQUIVALENT APPROVED BY FOREST SERVICE REPRESENTATIVE
- MINIMUM COVER DEPTH SHALL BE 18"
- CONSERVE ALL TOPSOIL AND AND GRUBBED VEGETATION IN A MANNER THAT WILL ALLOW REPLANTING OR SCATTERING, AS DIRECTED BY FOREST SERVICE REPRESENTATIVE

DEWATERING AND EROSION CONTROL NOTES:

- PROTECT AGAINST SOIL EROSION AND SEDIMENTATION DURING CONSTRUCTION IN ACCORDANCE WITH FP-14 AND PROJECT PERMITS
- DEWATERING PLAN SHALL BE SUBMITTED TO THE CO FOR APPROVAL 14 DAYS PRIOR TO CONSTRUCTION START DATE AND SHALL INCLUDE DRAWINGS THAT DEPICT HOW THE CONTRACTOR PLANS TO DIVERT/PUMP WATER THROUGH THE EXCAVATION SITE
- CONTRACTOR SHOULD ANTICIPATE WATER INFILTRATION IN EXCAVATION AREAS AND PLAN ACCORDINGLY TO MEET SPECIFICATIONS



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NORTHERN REGION

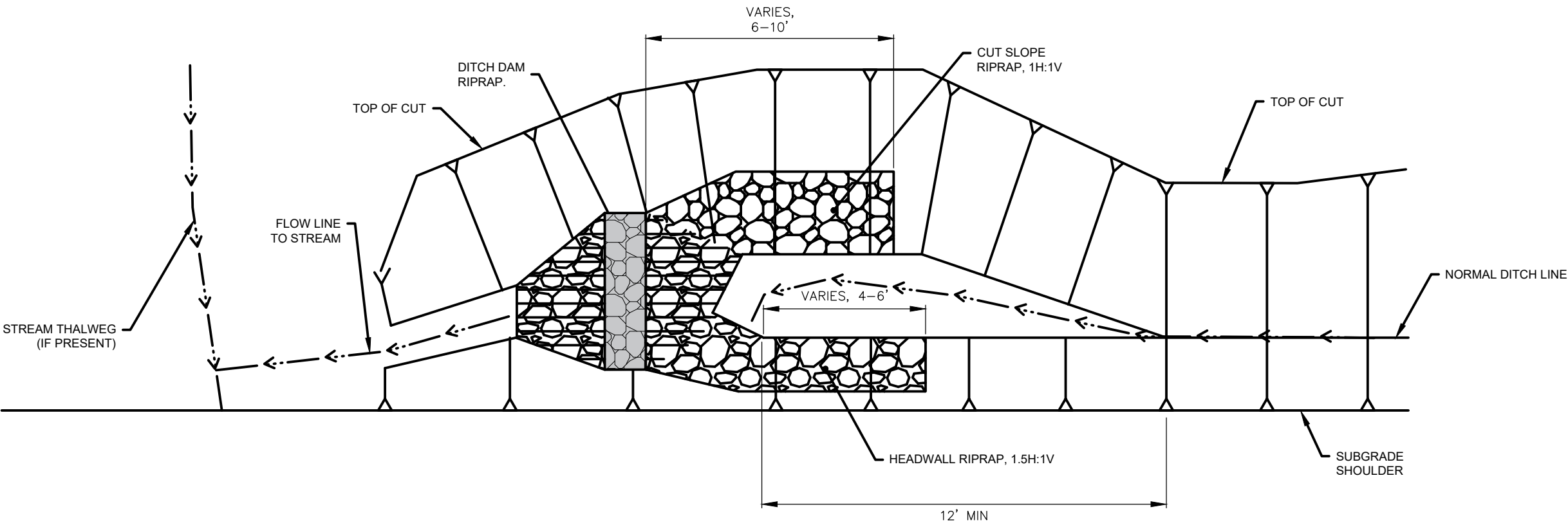
PROJECT NAME
UPPER LOLO CREEK BASIN CULVERT IMPROVEMENT PROJECT

LOLO NATIONAL FOREST
MISSOULA RANGER DISTRICT (D3)

DRAWING TITLE

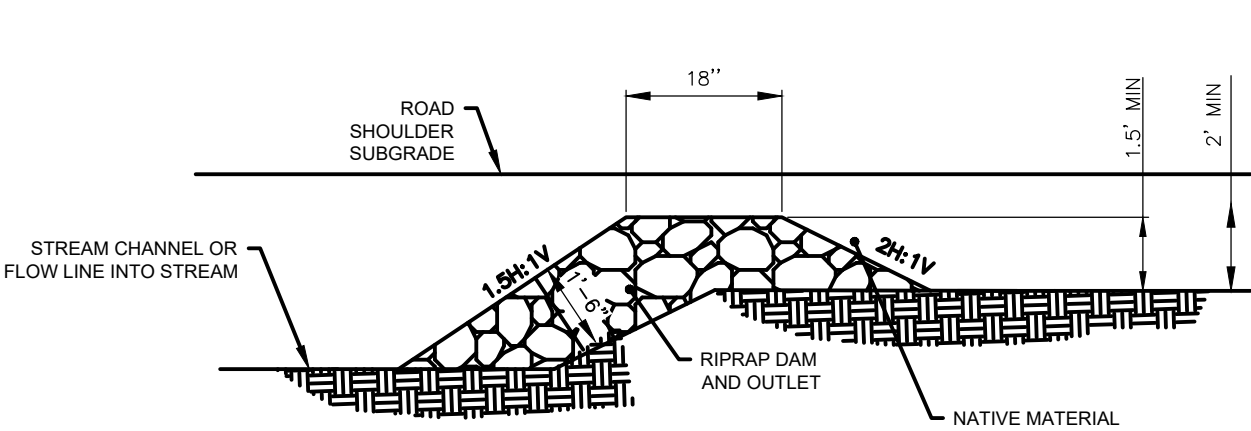
HYDRAULIC CULVERT
DETAIL

DATE 11/9/2022		DESIGNER NPLATT	CHECKED DWALTERS	DWG SHEET NO. 5	SHEET 5 OF 8
NO.	REVISION DESCRIPTION	BY	DATE		
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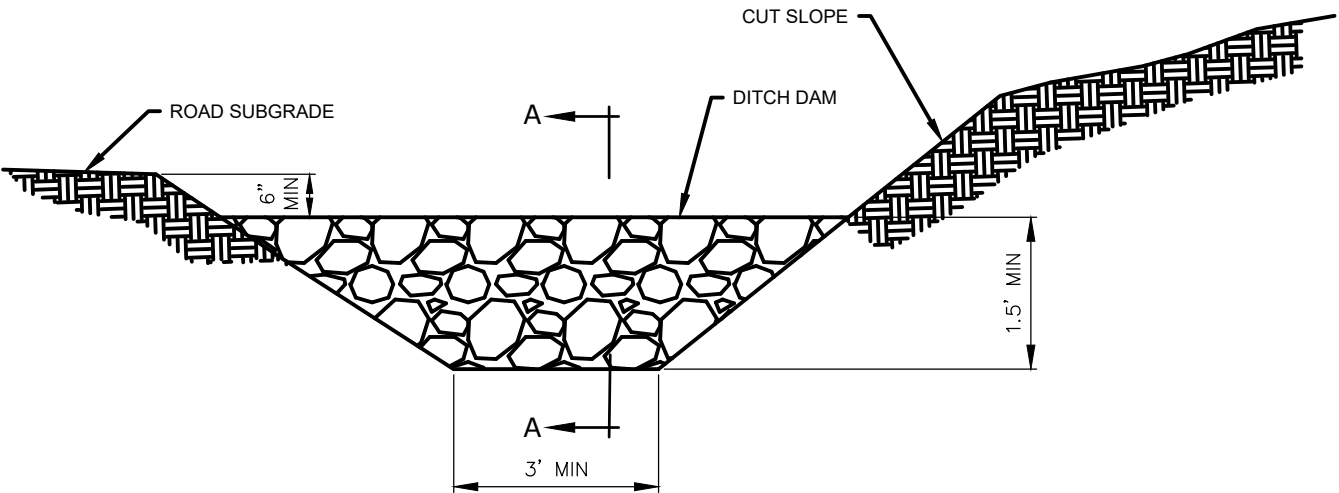


PLAN VIEW

CATCH BASIN DETAIL
NOT TO SCALE



SECTION A-A



CATCH BASIN ELEVATION



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NORTHERN REGION

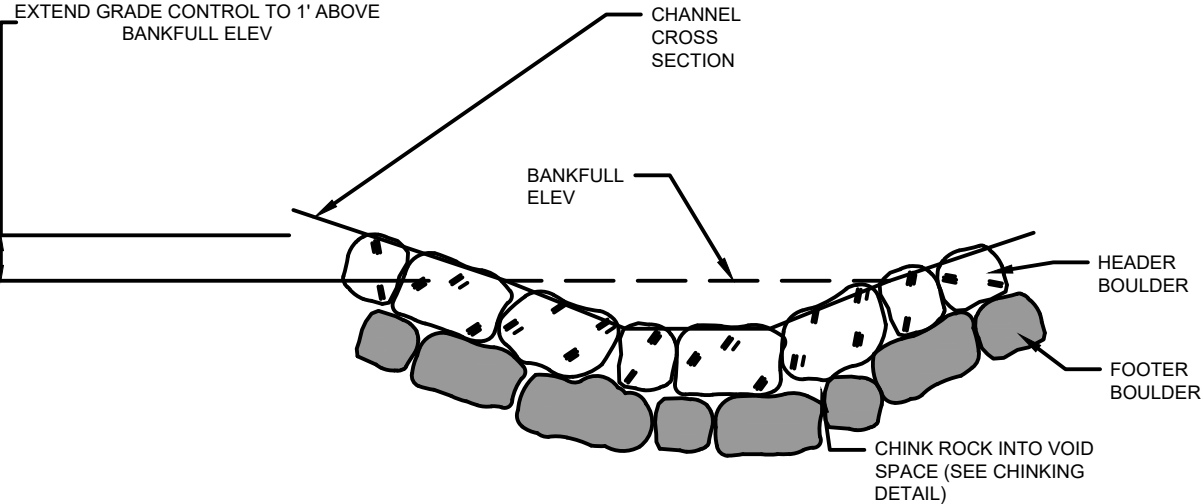
PROJECT NAME
UPPER LOLO CREEK BASIN CULVERT IMPROVEMENT PROJECT

LOLO NATIONAL FOREST
MISSOULA RANGER DISTRICT (D3)

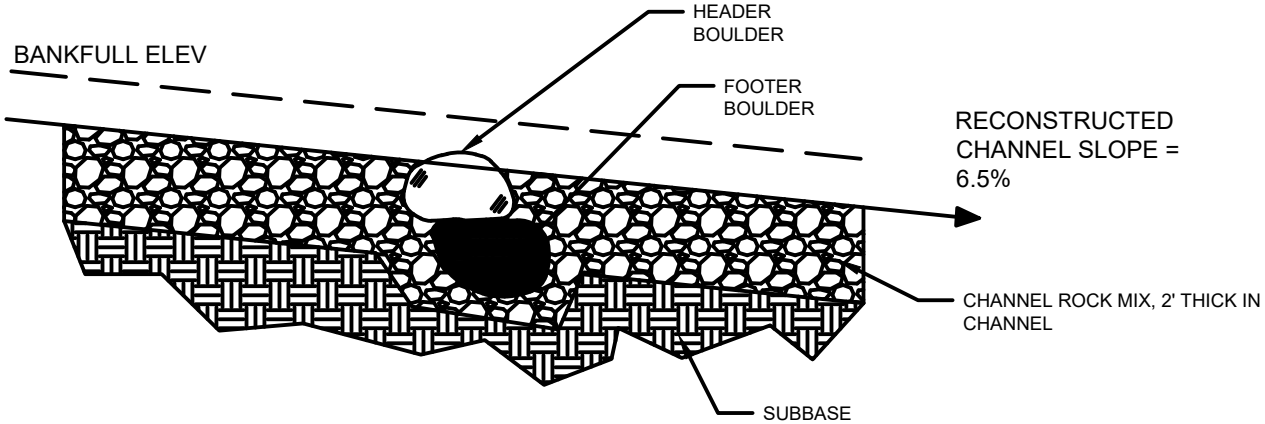
DRAWING TITLE

SEDIMENT BASIN
DETAIL

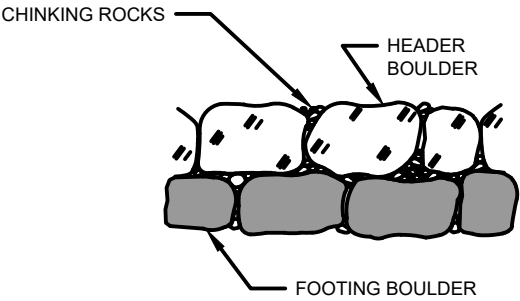
DATE 11/9/2022		DESIGNER NPLATT	CHECKED DWALTERS	DWG SHEET NO. 6	SHEET 6 OF 8
NO.	REVISION DESCRIPTION	BY	DATE		
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CROSS SECTION VIEW

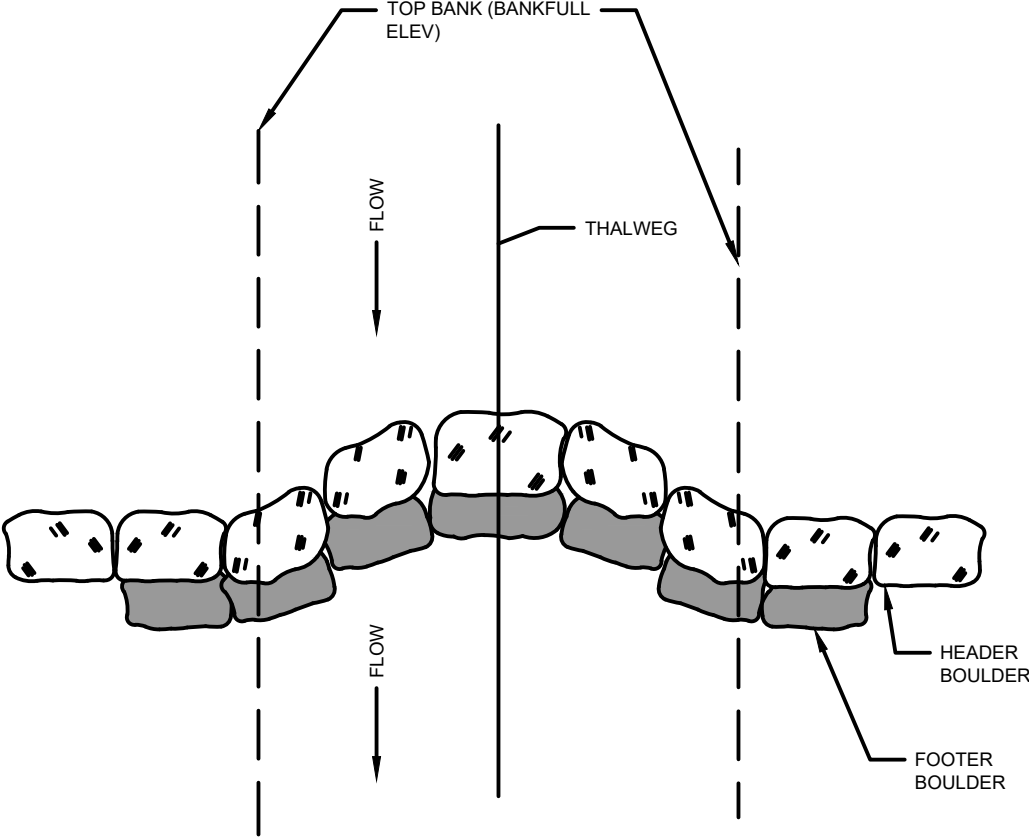


PROFILE VIEW



CHINKING DETAIL

- GRADE CONTROL NOTES:
- GRADE CONTROL BOULDERS TO BE CLASS CR-2 (SEE FSSS TABLE 705-5)
 - INSTALL BOULDERS SUCH THAT THEY PROTRUDE FROM FINIHSED GRADE A MAXIMUM OF 0.25'.
 - ASDF



PLAN VIEW



01
NORTHERN REGION

PROJECT NAME
UPPER LOLO CREEK BASIN CULVERT IMPROVEMENT PROJECT

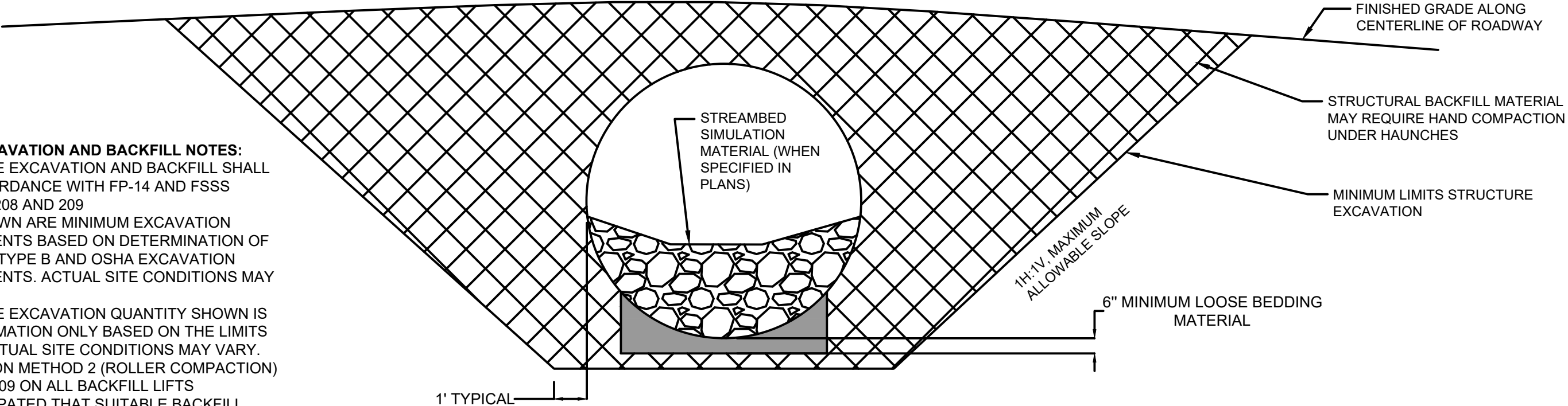
LOLO NATIONAL FOREST
MISSOULA RANGER DISTRICT (D3)

DRAWING TITLE

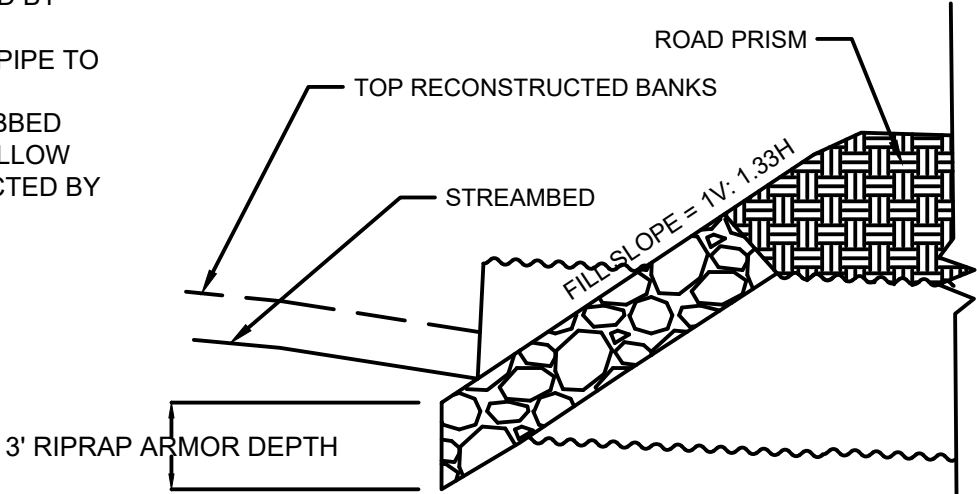
GRADE CONTROL
DETAILS

DATE 11/9/2022		DESIGNER NPLATT	CHECKED DWALTERS	DWG SHEET NO. 7	SHEET 7 OF 8
NO.	REVISION DESCRIPTION	BY	DATE		
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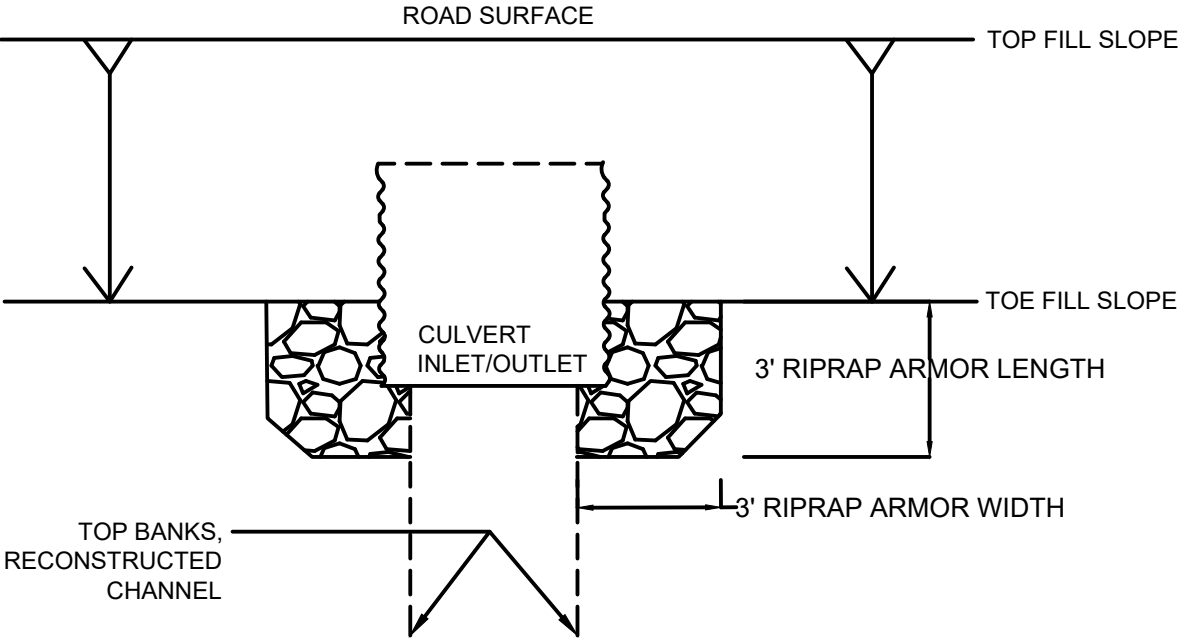
- STRUCTURE EXCAVATION AND BACKFILL NOTES:**
- STRUCTURE EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH FP-14 AND FSSS SECTIONS 208 AND 209
 - LIMITS SHOWN ARE MINIMUM EXCAVATION REQUIREMENTS BASED ON DETERMINATION OF OSHA SOIL TYPE B AND OSHA EXCAVATION REQUIREMENTS. ACTUAL SITE CONDITIONS MAY VARY.
 - STRUCTURE EXCAVATION QUANTITY SHOWN IS FOR INFORMATION ONLY BASED ON THE LIMITS SHOWN. ACTUAL SITE CONDITIONS MAY VARY.
 - COMPACTION METHOD 2 (ROLLER COMPACTION) PER FSSS 209 ON ALL BACKFILL LIFTS
 - IT IS ANTICIPATED THAT SUITABLE BACKFILL MATERIAL WILL BE SALVAGED FROM ON-SITE, SOME MIXING AND SORTING MAY BE REQUIRED
 - BEDDING MATERIAL CONSISTS OF LOOSELY PLACED AGGREGATE SURFACE COARSE PER FP-14 703.05, OR EQUIVALENT APPROVED BY FOREST SERVICE REPRESENTATIVE
 - MINIMUM COVER DEPTH, FROM TOP OF PIPE TO TOP OF SUBGRADE, SHALL BE 18"
 - CONSERVE ALL TOPSOIL AND AND GRUBBED VEGETATION IN A MANNER THAT WILL ALLOW REPLANTING OR SCATTERING, AS DIRECTED BY FOREST SERVICE REPRESENTATIVE



EXCAVATION AND BACKFILL: SECTION VIEW
NOT TO SCALE



INLET/OUTLET RIPRAP ARMOR: PROFILE VIEW
NOT TO SCALE



INLET/OUTLET RIPRAP ARMOR: PLAN VIEW
NOT TO SCALE



01
NORTHERN REGION

PROJECT NAME
UPPER LOLO CREEK BASIN CULVERT IMPROVEMENT PROJECT

LOLO NATIONAL FOREST
MISSOULA RANGER DISTRICT (D3)

DRAWING TITLE

EXCAVATION AND
ARMORING DETAILS

DATE 11/9/2022		DESIGNER NPLATT	CHECKED DWALTERS	DWG SHEET NO. 8	SHEET 8 OF 8
NO.	REVISION DESCRIPTION	BY	DATE		
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11/2/2022

Future Fisheries Improvement Program
C/O Michelle McGree
P.O Box 200701
1420 E. 6th Avenue
Helena, MT 59620

Dear Ms. McGree,

The Lolo National Forest supports the Clark Fork Coalition's grant application for the Granite Creek Tributaries Fish Passage Project. The Clark Fork Coalition is applying for grant funds from the Future Fisheries Improvement Program to work with the US Forest Service to improve fish passage in Granite Creek, an important remnant bull trout and westslope cutthroat trout fishery. The Granite Creek road (FS 9942) disconnects several fish-bearing tributaries. Upsizing culverts on this road would provide year-round stream connectivity for fish and other aquatic organisms and would increase hydrologic capacity.

The Clark Fork Coalition and the Lolo National Forest have been working on cooperative projects for several years, including installing large wood jams, decommissioning 30 miles of roads and stream crossings in the upper Lolo Creek watershed, establishing temperature monitoring stations, collecting stream discharge data for instream flow management, working to understand beaver habitat feasibility and reintroduction, and completing a climate change watershed vulnerability assessment.

The Lolo National Forest continues to provide funding to these efforts, when possible, including a contribution of \$80,000 towards this fish passage project. The Clark Fork Coalition and the Lolo National Forest have a track record of proven success and are now continuing the partnership with the Granite Creek Tributaries Fish Passage Project. Funds from the Future Fisheries Improvement Program are essential to completing on-the-ground reclamation projects.

Thank you for the funding opportunity and your continued work for conservation of natural resources. Please do not hesitate to contact me at crystal.s.stonesifer@usda.gov if you have any questions.

Sincerely,



Crystal Stonesifer
Missoula District Ranger

FWP.MT.GOVTHE **OUTSIDE** IS IN US ALL.

Region 2 Headquarters
3201 Spurgin Road
Missoula, MT 59804
Phone 406-542-5500

November 2, 2022

Future Fisheries Improvement Program
c/o Michelle McGree
Montana Fish, Wildlife & Parks
P.O. Box 200701
1420 E. 6th Avenue
Helena, MT 59620-0701

RE: Future Fisheries Funding Request for Continued Reclamation Work in Upper Lolo Creek

Dear Panel Members:

This letter is written in support of proposed stream enhancement work in Granite Creek (tributary of Lolo Creek and the Bitterroot River) proposed by the Clark Fork Coalition and the Lolo National Forest (LNF). The associated FFIP application primarily involves reclamation and improvement of headwater stream crossings that lie on former corporate timber company lands that have recently been acquired by the LNF, as well as some legacy crossings on traditional LNF lands.

Lolo Creek is the largest tributary system in the lower Bitterroot watershed and the proposed projects are planned in headwater reaches currently occupied by Westslope cutthroat trout and brook trout. These watersheds also historically supported viable populations of bull trout. Some reaches of main stem Lolo Creek provide a good trout fishery and this drainage is a primary source of trout recruitment for the lower Bitterroot River system and Clark Fork confluence area just downstream of Missoula.

The proposed projects are components of larger, watershed restoration level activities aimed at mitigating fish passage issues, water quality impairments, and hydrologic impacts associated with extensive road networks in Lolo Creek headwaters. Much of the planned work involves indirect benefits to the watershed through treatment and reclamation of culverts and larger road systems. Project proponents and site managers have a demonstrated track record of quality work on similar projects in Lolo Creek and other watersheds in Western Montana.

Direct and indirect benefits to native and wild trout fisheries in Lolo Creek associated with planned project work will be supported by this contribution from the Future Fisheries Improvement Program (FFIP). Funding from the program would leverage high levels of match funding from other sources and contribute to a significant amount of quality restoration work. In addition, the proposed work complements similar, recent work in other portions of Lolo Creek and irrigation system upgrades (diversion screening) that have also been funded by the FFIP Program.

Please feel free to contact our Fisheries Biologist, Ladd Knotek, if you have questions about anticipated project benefits, previous work, or aquatic values in the Lolo Creek watershed.

Ladd Knotek
(406) 542-5506
lknotek@mt.gov

Thank you for your consideration of Future Fisheries support for this project!

Sincerely,



Randy Arnold
Fish, Wildlife & Parks
Regional Supervisor, Region 2
rarnold@mt.gov
(406)542-5504