

# FORMER PANHANDLE SMELTING & REFINING SITE REMEDICATION AND LAKESHORE ENHANCEMENT

## 90% DESIGN PONDERAY IDAHO NOVEMBER 2023

**OWNER:**  
**CITY OF PONDERAY**  
288 FOURTH STREET  
PONDERAY, IDAHO 83852



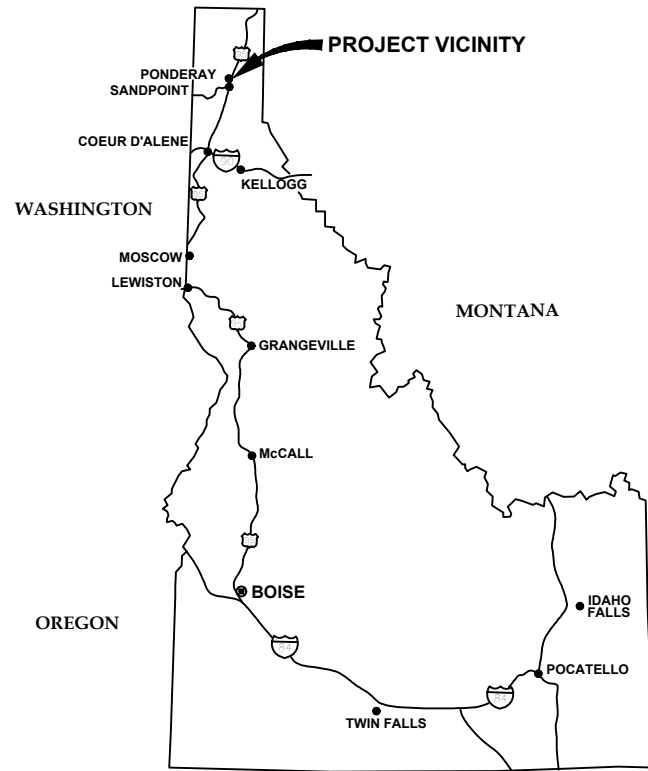
**PROJECT SPONSORS:**

**Idaho Department  
of Environmental Quality**  
1005 WEST MCKINLEY AVENUE  
KELLOGG, IDAHO 83837

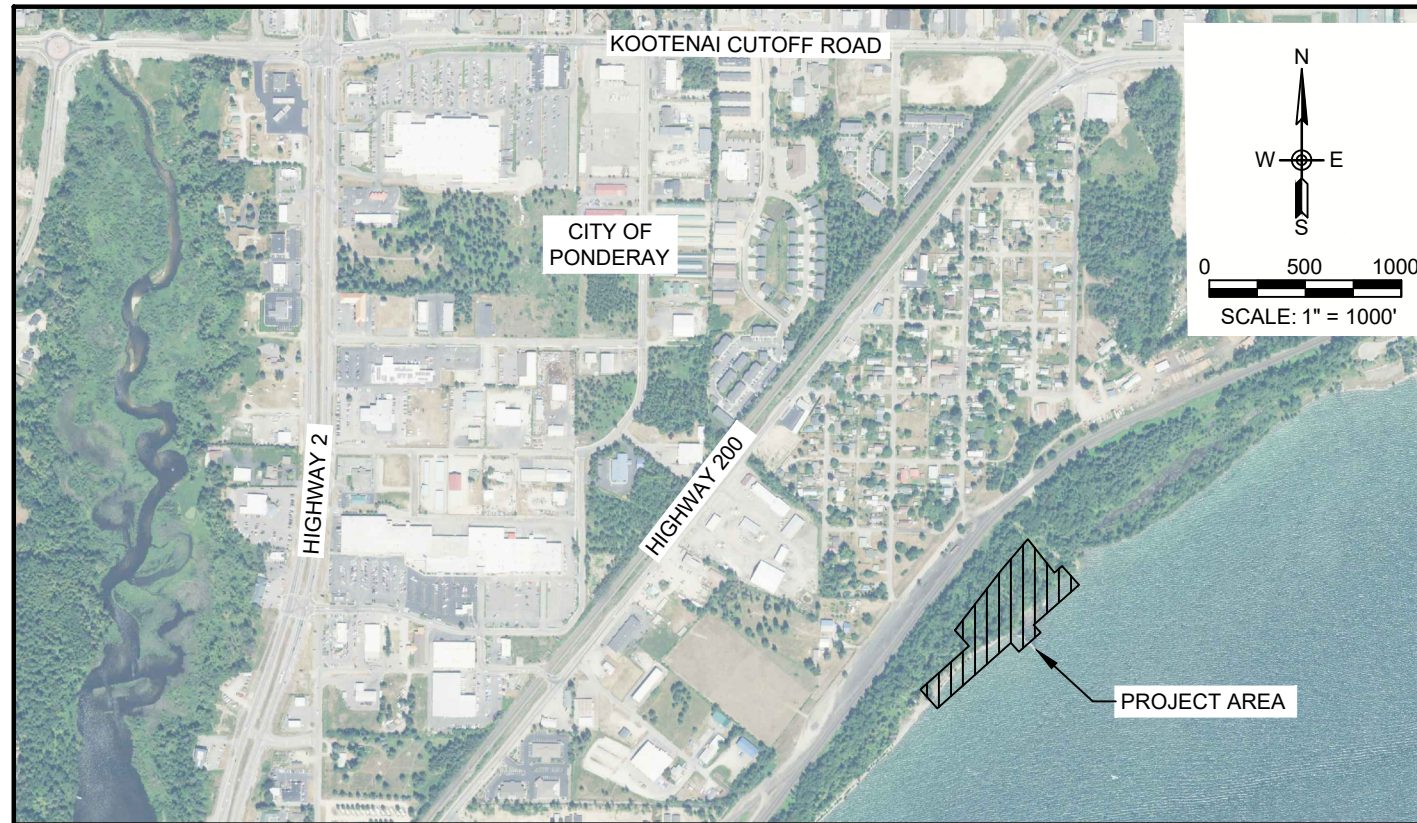
**USEPA Region 10**  
1200 6TH AVENUE  
SUITE 155  
SEATTLE, WASHINGTON 98101



**ENGINEER:**  
**ALTA SCIENCE & ENGINEERING, INC.**  
1220 BIG CREEK RD.  
KELLOGG, IDAHO 83837  
TELEPHONE: (208) 786-1206



**LOCATION MAP**  
SCALE: NTS

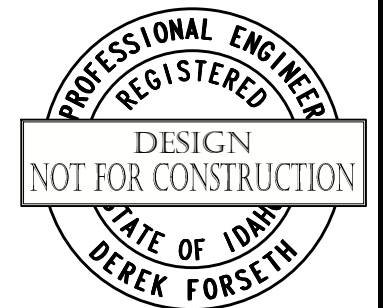


**LOCATION MAP**  
SCALE: 1" = 1000'

**COVER & GENERAL SHEETS**

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V:\Engineering\City of Ponderay\POBT\_Smelter-Beach Remediation\02\_CAD\DESIGN\_90\_PERC\_POBT\_20231115.dwg 11/27/2023

(A) XX/XX/XX	XXXX	XX	XX	DRAFTER: B. ROLLINS	COORDINATE SYSTEM: ISPW NAD83 (2011) US FT
				DESIGNER: C. MACPHERSON	SCALE: AS NOTED
				CHECKED: D. FORSETH	APPROVED: D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE: 11/20/2023



PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
  
BONNER COUNTY, ID

SHEET: CS  
DATE: 11/27/2023  
PROJECT NO.: 22148-50  
SHEET NO.: 1 OF 30

COVER SHEET

# GENERAL NOTES AND SPECIFICATIONS

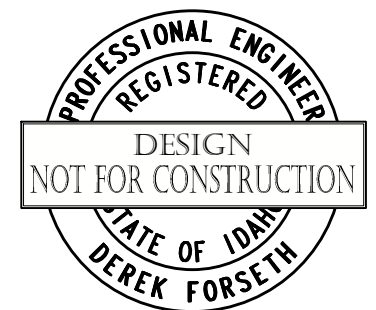
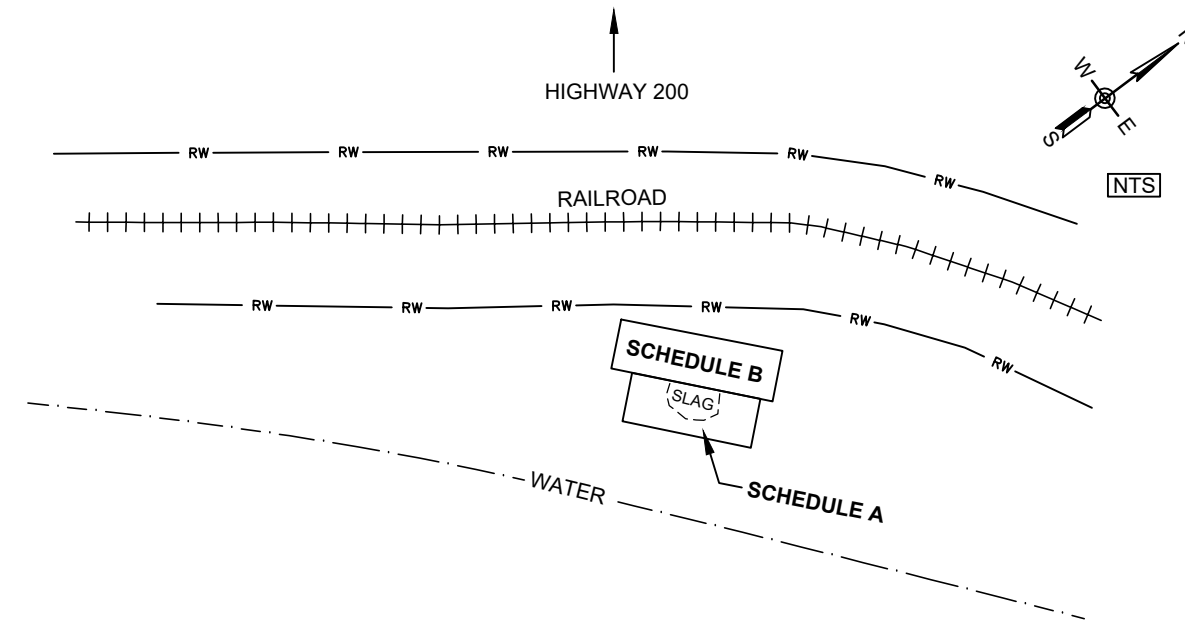
1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THIS CONTRACT, AND AS REVIEWED BY APPLICABLE LOCAL, STATE, AND NATIONAL REQUIREMENTS, UNLESS OTHERWISE NOTED.
2. A COPY OF THESE APPROVED PLANS MUST BE POSTED AT THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL BE FAMILIAR WITH AND COMPLY WITH ALL CONDITIONS OF THE PERMITS OBTAINED FOR THE PROJECT.
4. THE CONTRACTOR SHALL MEET OR EXCEED ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS FOR ALL WORK ASSOCIATED WITH THIS PROJECT AT ALL TIMES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH AND IMPLEMENT ALL CURRENT SAFETY REQUIREMENTS AND STANDARDS.
5. THE GENERAL NOTES AND SPECIFICATIONS ADDRESSED HEREIN ARE NOT INCLUSIVE TO THIS PROJECT. THE CONTRACTOR SHALL ALSO ABIDE BY THE PROJECT TECHNICAL SPECIFICATIONS IN THE CONTRACT DOCUMENTS (UNDER SEPARATE COVER).
6. SURVEY CONTROL POINTS ARE SHOWN ON SHEET G3. LOCATIONS AND ELEVATIONS ARE GROUND COORDINATES. ALL MONUMENTS MAY NOT BE SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND ANY OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKERS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF IDAHO OR AT CONTRACTOR'S EXPENSE.
7. LOCATIONS OF EXISTING SITE FEATURES ARE APPROXIMATE. CONTRACTOR SHALL FIELD-VERIFY THE EXACT LOCATION OF FEATURES AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. UNDERGROUND UTILITIES SHALL BE LOCATED AND MARKED PRIOR TO EXCAVATION. CALL THE ONE-CALL UTILITY LOCATE SERVICE AT (800) 398-3285 AT LEAST TWO (2) WORKING DAYS PRIOR TO START OF CONSTRUCTION.
8. CONTRACTOR SHALL LOCATE, PROTECT, AND IF DAMAGED DURING CONSTRUCTION, REPAIR ALL ABOVE GROUND AND BELOW GROUND UTILITIES INCLUDING GAS, ELECTRIC, SEPTIC, WATER, SANITARY, STORM, COMMUNICATION, SPRINKLERS, IRRIGATION, ETC.
9. CONTRACTOR SHALL PROTECT ADJACENT PROPERTIES AND RIGHTS-OF-WAY FROM DAMAGE AND DEBRIS DURING CONSTRUCTION.
10. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF THEY DISCOVER ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS ENCOUNTERED. ALLOW (48) HOURS FOR ENGINEER TO MODIFY THE DESIGN, IF NECESSARY, UNLESS OTHERWISE SPECIFIED.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SIZING OF EQUIPMENT USED DURING THE PROJECT AND FOR WEIGHT RESTRICTIONS ON EXISTING BRIDGES AND ROADS.
12. TRAFFIC CONTROL MEETING MUTCD STANDARDS SHALL BE IMPLEMENTED BY CONTRACTOR WHEN WORKING IN OR ADJACENT TO PUBLIC RIGHTS-OF-WAY. CONTRACTOR SHALL BE FAMILIAR WITH CURRENT MUTCD STANDARDS AND HAVE THE ABILITY TO EMPLOY CERTIFIED FLAGGERS AT THE JOB SITE WHEN NEEDED. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER ACTIONS NEEDED TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC AND PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACT.
13. MATERIALS HANDLING: STOCKPILE ALL IMPORTED MATERIALS IN AN APPROVED LOCATION. EXCAVATED MATERIAL THAT IS POTENTIALLY CONTAMINATED SHALL BE DIRECTLY LOADED ONTO TRUCKS FOR DISPOSAL UNLESS OTHERWISE NOTED OR DIRECTED BY ENGINEER.
14. EXCAVATED CONTAMINATED MATERIAL SHALL BE HAULED TO THE ON-SITE REPOSITORY FOR DISPOSAL. ALL NON-CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LOCATION SPECIFIED BY THE OWNER.
15. DECONTAMINATION OF EQUIPMENT AND PERSONNEL IS REQUIRED FOR ACTIVITIES THAT INVOLVE CONTACT WITH CONTAMINATED SOILS.
16. EROSION AND SEDIMENT CONTROL IS REQUIRED AND WILL BE EMPLOYED AT ALL TIMES TO ACHIEVE BEST MANAGEMENT PRACTICES FOR STORM WATER MANAGEMENT AND SEDIMENT CONTROL, INCLUDING MATERIAL TRACKING.

# CONTAMINATED SOILS

1. CONTRACTOR SHALL ASSUME ALL EXCAVATED MATERIALS ARE CONTAMINATED. ANY SOIL AND WATER ENCOUNTERED DURING EXCAVATION/REMOVAL ACTIVITIES SHALL BE TREATED AS CONTAMINATED MATERIAL.
2. CONTRACTOR SHALL PROVIDE ACCESS CONTROL, TEMPORARY BARRIERS, DUST CONTROL, AND EROSION AND SEDIMENT BMPs AS NECESSARY TO PREVENT PUBLIC EXPOSURE TO EXCAVATED SOILS. THERE SHALL BE NO TRACKING OR MIGRATION OF SEDIMENT AWAY FROM THE CONSTRUCTION SITE.
3. 40 HR. HAZWOPER TRAINING IS REQUIRED FOR ALL EMPLOYEES ENGAGED IN ANY WORK REGARDING CONTAMINATED SOILS/MATERIALS AND/OR REPOSITORY WORK.

# BID SCHEDULES

- A. SLAG DUMP AND SHORELINE PROTECTION
- B. REPOSITORY AND UPLAND REMEDIATION



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					DESIGNER:	C. MACPHERSON	SCALE:	N/A
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023



PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
  
BONNER COUNTY, ID

GENERAL PLAN SET  
INFORMATION & NOTES

SHEET:	G1
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	2 OF 30

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## ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	LF	LINEAR FEET
ALTA-SE	ALTA SCIENCE & ENGINEERING	MAX	MAXIMUM
APPROX.	APPROXIMATE	MIN	MINIMUM
BMPs	BEST MANAGEMENT PRACTICES	N	NORTHING
℄	CENTER LINE	NAD	NORTH AMERICAN DATUM
CMP	CORRUGATED METAL PIPE	NAVD	NORTH AMERICAN VERTICAL DATUM
CU YD	CUBIC YARD	NE	NORTHEAST
Ø OR DIA.	DIAMETER	NTS	NOT TO SCALE
E	EASTING	NO.	NUMBER
EQUIV.	EQUIVALENT	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
EX.	EXISTING	OC	ON CENTER
ELEV.	ELEVATION	±	PLUS OR MINUS
FIN.	FINISHED	ROW	RIGHT-OF-WAY
FT	FEET	STA	STATION
GPS	GLOBAL POSITIONING SYSTEM	SPEC	SPECIFICATION
H	HORIZONTAL	SQ FT	SQUARE FEET
ISPW	IDAHO STATE PLANE WEST	TYP	TYPICAL
ISPWC	IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION		
ITD	IDAHO TRANSPORTATION DEPARTMENT		

## EMERGENCY CONTACT AND UTILITY INFORMATION

### EMS (EMERGENCY MEDICAL SERVICES)

STATION #4  
60 MOODY LANE  
PONDERAY, ID 83852  
(208) 255-2194

### FIRE DEPARTMENT

NORTHSIDE FIRE DIST STA #1  
437 CEDAR ST.  
PONDERAY, ID 83852  
(208) 265-4114

### POLICE

PONDERAY POLICE DEPT  
476770 US-95  
PONDERAY, ID 83852  
(208) 265-4251

### CITY OF PONDERAY (CITY HALL)



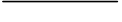




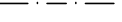
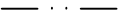
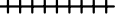







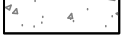
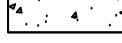



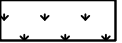

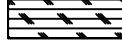
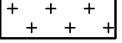
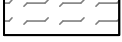

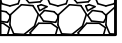
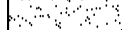
288 FOURTH STREET  
PONDERAY, ID 83852  
(208) 265-5468

**CALL BEFORE YOU DIG**  
**1-800-398-3285**


1. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THIS DESIGN ARE APPROXIMATE. DESIGN MAY NOT INCLUDE ALL OF THE UTILITIES PRESENT AT THE SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL ABOVE-GRADE AND BELOW-GRADE UTILITIES.
2. THE CONTRACTOR SHALL SCHEDULE ALL INSPECTIONS REQUIRED BY THE UTILITY COMPANIES WHILE WORKING AROUND UTILITIES.


## LEGEND AND SYMBOLS

## SECTION AND DETAIL DESIGNATION


	EXISTING MONUMENT/SURVEY PIN		EXISTING CONTOURS (1' & 5')		DESIGN CONTOURS (1' & 5')
	EXISTING OTHER SURVEY/CONTROL		EXISTING CONC		DESIGN SHORELINE PROTECTION FEATURE
			EXISTING GROUND		DESIGN DITCH (℄)
			EXISTING SEASONAL HIGH/LOW WATER LINE		DESIGN FIBER ROLL
	DESIGN MONUMENT (REPOSITORY DEFINITION)		EXISTING PROPERTY LINE		DESIGN FENCE
			EXISTING TRAIL		DESIGN REPOSITORY FOOTPRINT
			EXISTING HAUL TRAIL/ROAD		DESIGN TRAIL
	EXISTING CONCRETE		DESIGN CONCRETE		DESIGN 3/4" MINUS AGGREGATE (TYPE-1 GRAVEL)
	EXISTING COMPACTED SUB-GRADE		DESIGN DRAIN ROCK		DESIGN HYDROSEED
	EXISTING BLACK ROCK (SLAG)		DESIGN EROSION CONTROL BLANKET		DESIGN QUARRY SPALLS
	EXISTING CONTAMINATED SOIL		DESIGN EROSION CONTROL BLANKET WITH PLANTINGS		DESIGN RIP RAP
			DESIGN FINE GRAINED MATERIAL		


**POINT AT WHICH SECTION OR DETAIL IS TAKEN**

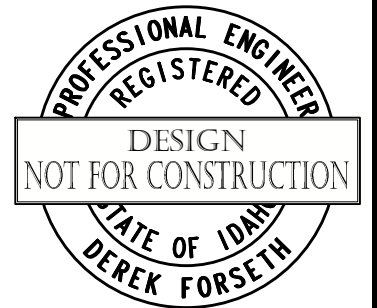
 NUMBER INDICATES DESIGNATION OF SECTION  
INDICATES SHEET WHERE SECTION IS SHOWN. A DASH (-) INDICATES SECTION IS SHOWN ON SAME SHEET AS TAKEN

 NUMBER INDICATES DESIGNATION OF DETAIL  
INDICATES SHEET WHERE DETAIL IS SHOWN. A DASH (-) INDICATES DETAIL IS SHOWN ON SAME SHEET AS TAKEN

**PAGE ON WHICH SECTION OR DETAIL IS SHOWN**

 NUMBER INDICATES DESIGNATION OF SECTION  
**SECTION SCALE**

 NUMBER INDICATES DESIGNATION OF DETAIL  
**DETAIL SCALE**



(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	N/A
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023



PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT

BONNER COUNTY, ID

GENERAL PLAN SET  
INFORMATION & NOTES

SHEET:	G2
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	3 OF 30

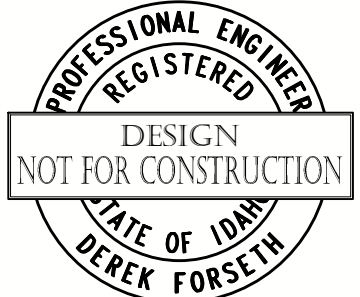
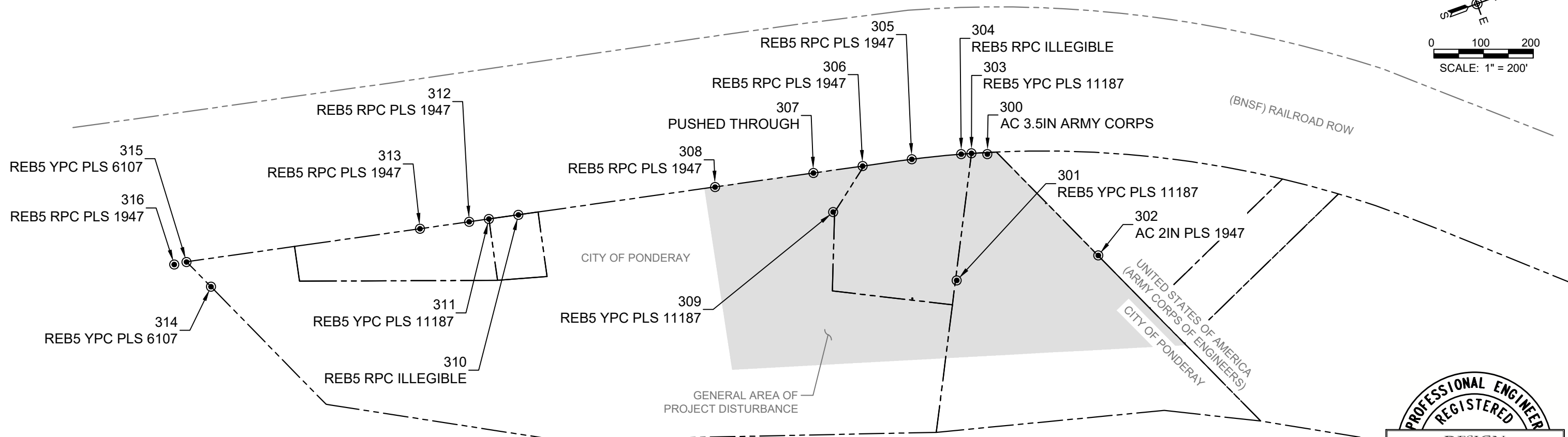
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Point No.	Easting	Northing	Elev.	Description
300	2434509.73	2420083.87	2116.11	AC 3.5IN ARMY CORPS
301	2434646.03	2419860.49	2076.31	REB5 YPC PLS 11187
302	2434811.93	2420097.52	2079.04	AC 2IN PLS 1947
303	2434486.14	2420062.33	2116.80	REB5 YPC PLS 11187
304	2434472.71	2420046.53	2116.64	REB5 RPC ILLEGIBLE
305	2434409.53	2419968.97	2116.46	REB5 RPC PLS 1947
306	2434349.32	2419889.19	2116.52	REB5 RPC PLS 1947
307	2434289.18	2419809.34	2116.62	REB5 RPC PUSHED THROUGH
308	2434168.98	2419649.40	2113.98	REB5 RPC PLS 1947
309	2434372.83	2419781.77	2115.25	REB5 YPC PLS 11187
310	2433928.78	2419329.92	2083.94	REB5 RPC ILLEGIBLE
311	2433892.57	2419281.95	2084.17	REB5 YPC PLS 11187
312	2433868.65	2419249.80	2083.32	REB5 RPC PLS 1947
313	2433808.55	2419169.92	2081.86	REB5 YPC PLS 1947
314	2433593.64	2418789.86	2068.69	REB5 YPC PLS 6107
315	2433523.51	2418790.41	2078.58	REB5 YPC PLS 6107
316	2433509.62	2418769.29	2077.33	REB5 RPC PLS 1947
317*	2432536.68	2417478.83	2064.02	REB5 YPC PLS 6107
318*	2432489.86	2417479.04	2073.94	AC 3.5IN LS 813
319*	2430927.95	2412213.04	2089.32	AC 3IN LS 813

**NOTES:**

- 1.) SURVEY DATA POINTS SHOWN BELOW WERE PROVIDED TO ALTA IN OCTOBER 2023 BY WELCH COMER (SUB-CONTRACTOR) IN IDAHO COORDINATE SYSTEM OF 1983 WEST ZONE (NAD83) 2011 ON GRID.
- 2.) THE SURVEY MONUMENT POSITIONS WERE BASED UPON GPS BASE POINT POSITIONS ESTABLISHED BY ANOTHER FIRM. WE UNDERSTAND THEIR DATA TO BE ON THE IDAHO COORDINATE SYSTEM OF 1983 WEST ZONE (NAD83) 2007 ON GRID. WE COMPARED THIS DATA TO ADJACENT PROJECT DATA OF OUR OWN AND FOUND IT TO MORE CLOSELY MATCH (NAD83) 2011 ON GRID. NO ADDITIONAL CONFIRMATION OR VERIFICATION WAS COMPLETED BY WELCH COMER.
- 3.) PARCEL LINE WORK SHOWN IS BASED UPON THE BONNER COUNTY GIS WEBSITE. FOR MORE INFORMATION, PLEASE CONTACT THE BONNER COUNTY ASSESSOR'S OFFICE. <https://www.bonnercountyid.gov/departments/gis>
- 4.) THE MONUMENTS SHOWN ON THIS SHEET WERE LOCATED IN ACCORDANCE WITH IDAHO STATUTE 55-1613. THIS SHEET SHOWS THE PHYSICAL EXISTENCE AND LOCATION OF THE MONUMENTS OF PROPERTY CONTROLLING CORNERS AND ACCESSORIES TO CORNERS, AS WELL AS BENCHMARKS ESTABLISHED AND POINTS SET IN CONTROL SURVEYS BY AGENCIES OF THE US GOVERNMENT OR THE STATE OF IDAHO, DETERMINED BY A FIELD SEARCH AND LOCATION SURVEY CONDUCTED BY OR UNDER THE DIRECTION OF A LICENSED PLS PRIOR TO THE TIME WHEN PROJECT CONSTRUCTION OR RELATED ACTIVITIES MAY DISTURB THEM. THERE IS NO GUARANTEE THAT ALL MONUMENTS ARE SHOWN OR THAT OTHER MONUMENTS MAY NOT BE DISCOVERED DURING CONSTRUCTION.
- 5.) CONTRACTOR SHALL SAVE AND PROTECT ALL MONUMENTS IN ACCORDANCE WITH C 55-1613 AND 54-1234. CONTRACTOR SHALL RE-ESTABLISH ALL MONUMENTS, ACCESSORIES TO CORNERS, BENCHMARKS AND POINTS SET IN CONTROL SURVEYS SHOWN ON THIS SHEET OR DISCOVERED DURING CONSTRUCTION THAT ARE LOST OR DISTURBED BY CONSTRUCTION. THE MONUMENTS SHALL BE RE-ESTABLISHED AND RE-MONUMENTED, AT THE EXPENSE OF THE CONTRACTOR, BY A LICENSED PLS. ANY MONUMENT SET SHALL CONFORM TO THE PROVISIONS OF IDAHO STATUTE 54-1227 AND REQUIRED RECORDS OF SURVEY AND CORNER PERPETUATION AND FILING (CP&F) RECORDS FILED WITH THE COUNTY RECORDS OFFICE PURSUANT TO IDAHO STATUTES 55-1904 AND 55-1604 RESPECTIVELY.

\*SOME SURVEY MONUMENTS ARE INCLUDED IN THE TABLE, BUT ARE LOCATED OUTSIDE OF THE MAP VIEW.



(A) XX/XX/XX	XXXX	XX	XX	DRAFTER: B. ROLLINS	COORDINATE SYSTEM: ISPW NAD83 (2011) US FT
				DESIGNER: C. MACPHERSON	SCALE: 1" = 200'
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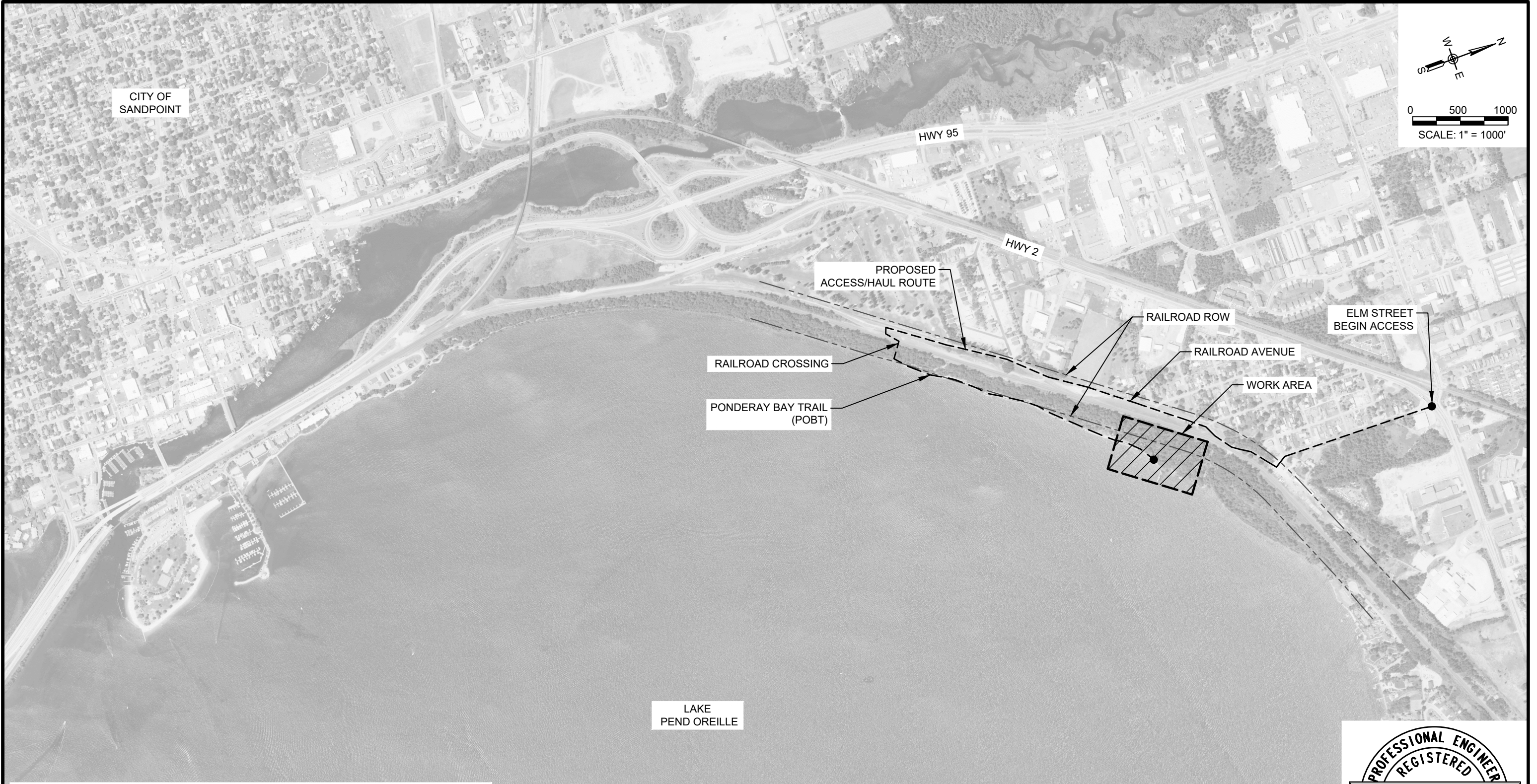


PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

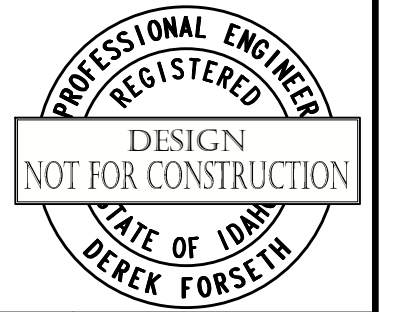
**SURVEY INFORMATION**

SHEET:	G3
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	4 OF 30

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- NOTES:**
- 1.) CLEAR AND GRUB THE ACCESS/HAUL ROUTE TO CREATE APPROPRIATE ACCESS FOR CONSTRUCTION VEHICLES. FOR REMOVAL OF TREES GREATER THAN 6" DIA. PRIOR AUTHORIZATION FROM OWNER IS REQUIRED.
  - 2.) REPAIR TRAIL IN AREAS WHERE CONSTRUCTION VEHICLES HAVE CAUSED RUTS, EROSION, CHANGE IN GRADE, OR HAVE CAUSED DAMAGE.



(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	1" = 1000'
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023



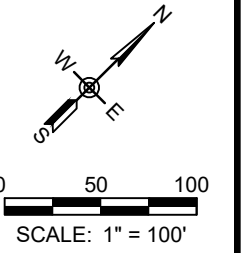
PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

ACCESS/HAUL ROUTE  
PLAN VIEW

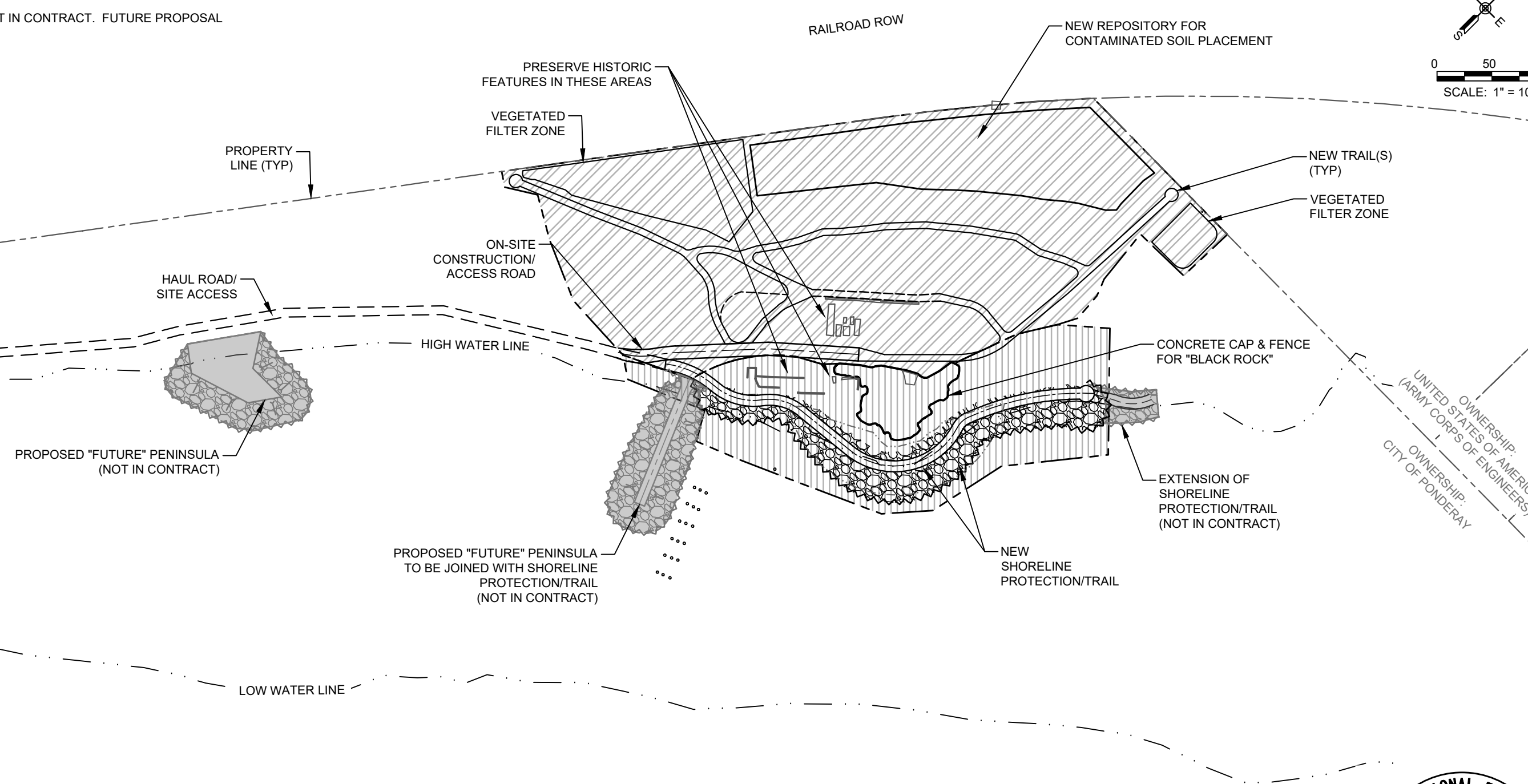
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DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	5 OF 30

**NOTES:**

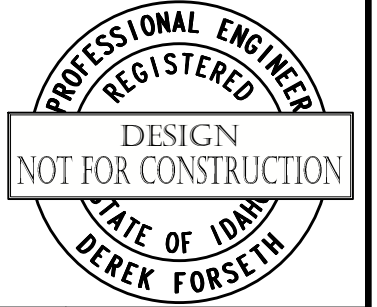
- OWNERSHIP OF PROPERTY/PARCEL(S) SHOWN ARE THE "CITY OF PONDERAY" UNLESS OTHERWISE NOTED.
- SCHEDULE C ITEMS NOT IN CONTRACT. FUTURE PROPOSAL DESIGN ONLY.



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- SCHEDULE A
- SCHEDULE B
- SCHEDULE C (NOT IN CONTRACT. FUTURE PROPOSED DESIGN ONLY.)



(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	1" = 100'
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023

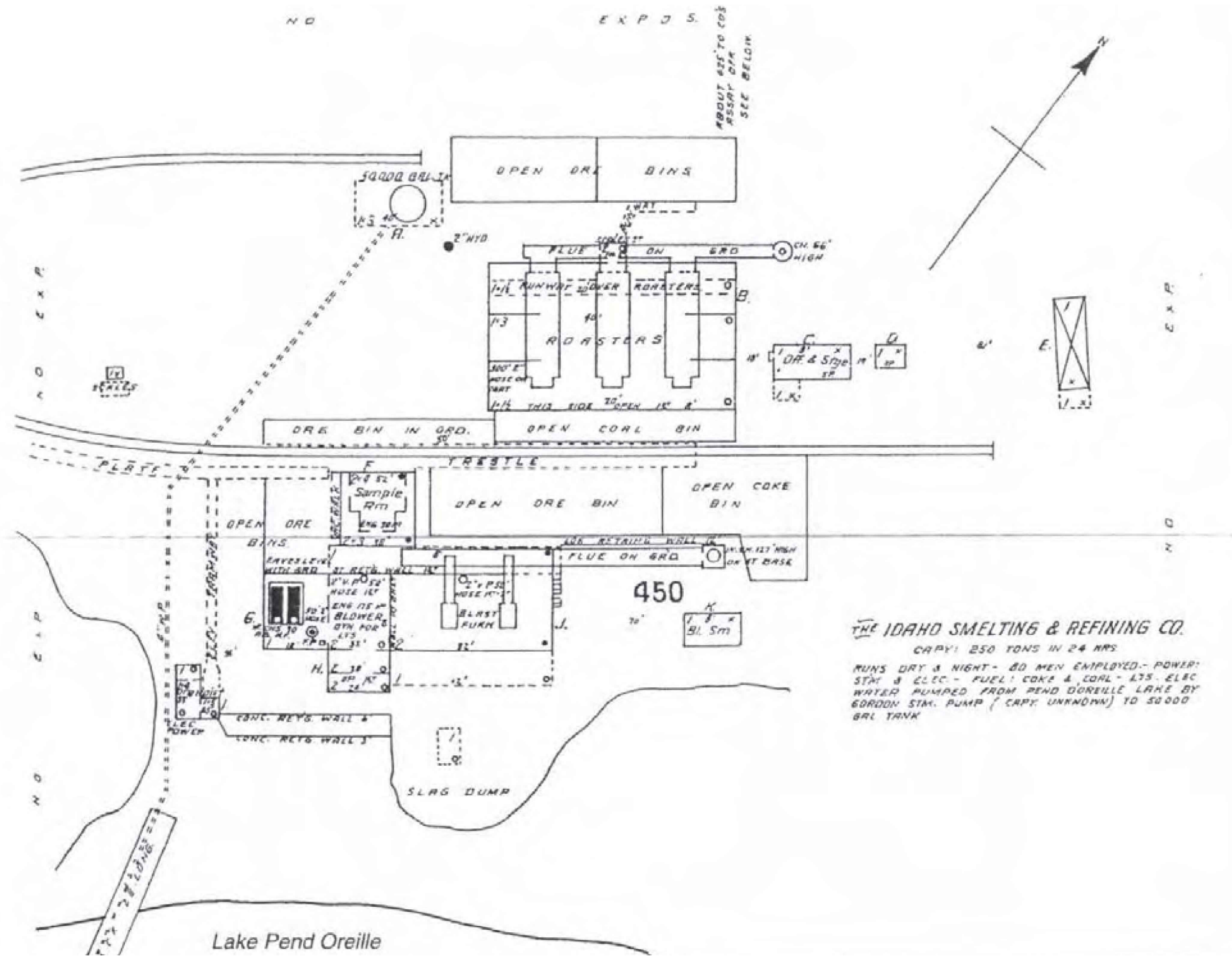


PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
  
BONNER COUNTY, ID

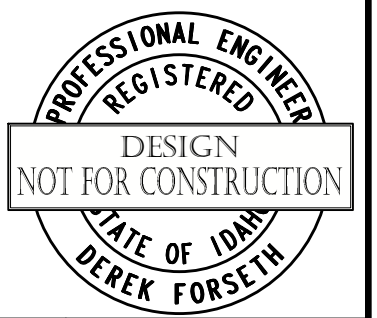
PROJECT OVERVIEW  
PLAN VIEW

SHEET:	O2
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	6 OF 30

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**THE IDAHO SMELTING & REFINING CO.**  
 CAPY: 250 TONS IN 24 HRS  
 RUNS DAY & NIGHT - 80 MEN EMPLOYED - POWER: STAM & ELEC. - FUEL: COKE & COAL - 175. ELEC WATER PUMPED FROM POND OREILLE LAKE BY GORDON STAM. PUMP (CAPY: UNKNOWN) TO 50000 GAL TANK



(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	NTS
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023

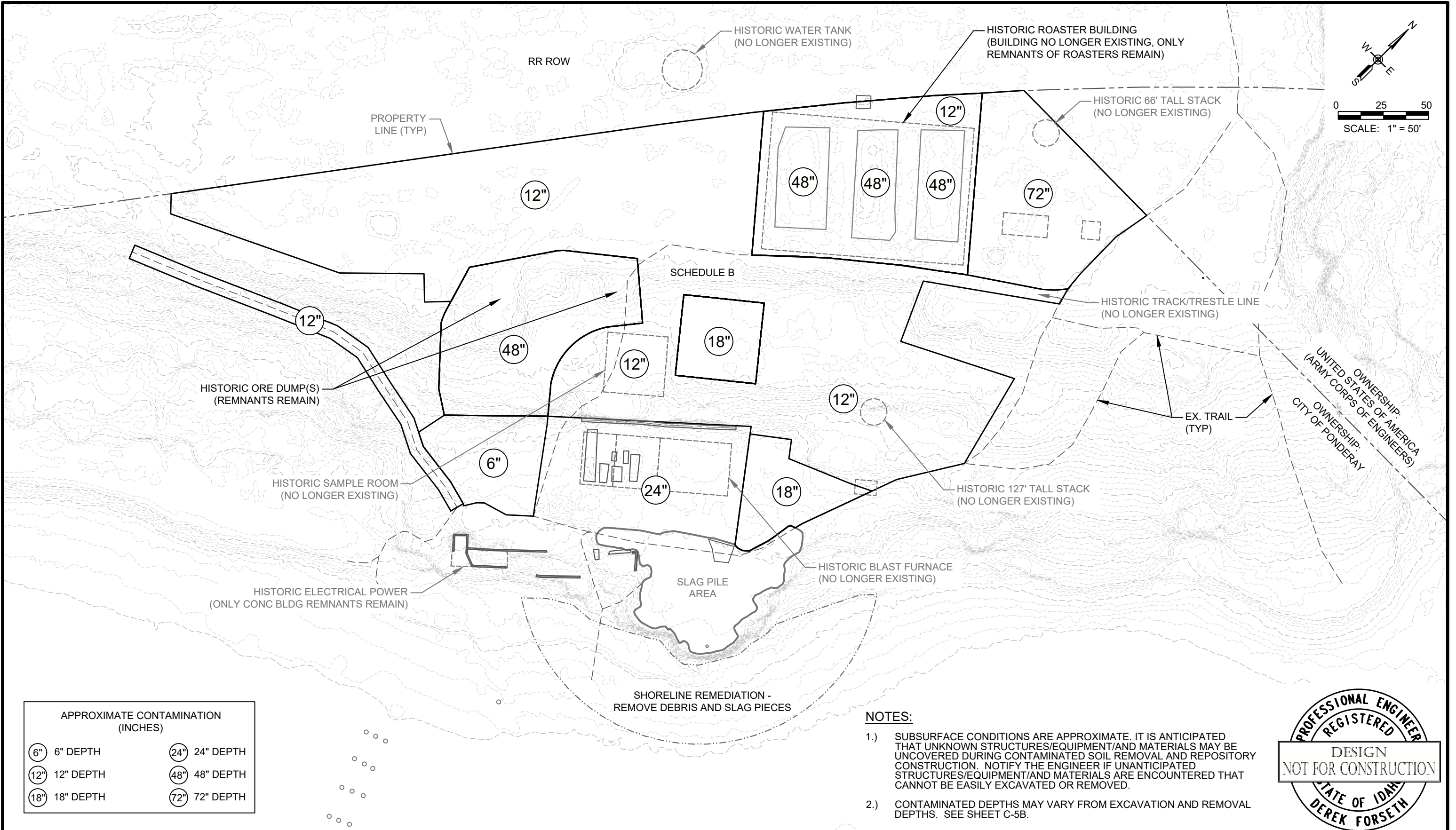


PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT  
 BONNER COUNTY, ID

HISTORIC SITE LAYOUT  
 PLAN VIEW

SHEET:	O3
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	7 OF 30

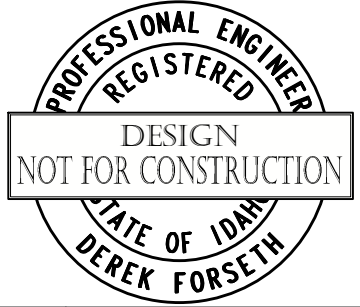
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APPROXIMATE CONTAMINATION (INCHES)	
6"	6" DEPTH
12"	12" DEPTH
18"	18" DEPTH
24"	24" DEPTH
48"	48" DEPTH
72"	72" DEPTH

**NOTES:**

- 1.) SUBSURFACE CONDITIONS ARE APPROXIMATE. IT IS ANTICIPATED THAT UNKNOWN STRUCTURES/EQUIPMENT/AND MATERIALS MAY BE UNCOVERED DURING CONTAMINATED SOIL REMOVAL AND REPOSITORY CONSTRUCTION. NOTIFY THE ENGINEER IF UNANTICIPATED STRUCTURES/EQUIPMENT/AND MATERIALS ARE ENCOUNTERED THAT CANNOT BE EASILY EXCAVATED OR REMOVED.
- 2.) CONTAMINATED DEPTHS MAY VARY FROM EXCAVATION AND REMOVAL DEPTHS. SEE SHEET C-5B.



NO.	DATE	REVISIONS	BY	CHK	DATE
(A)	XX/XX/XX	XXXX	XX	XX	

DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
DESIGNER:	C. MACPHERSON	SCALE:	1" = 50'
CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
DATE:	11/20/2023	DATE:	11/27/2023

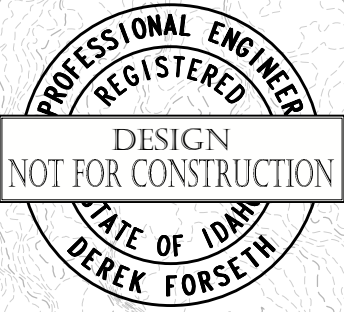
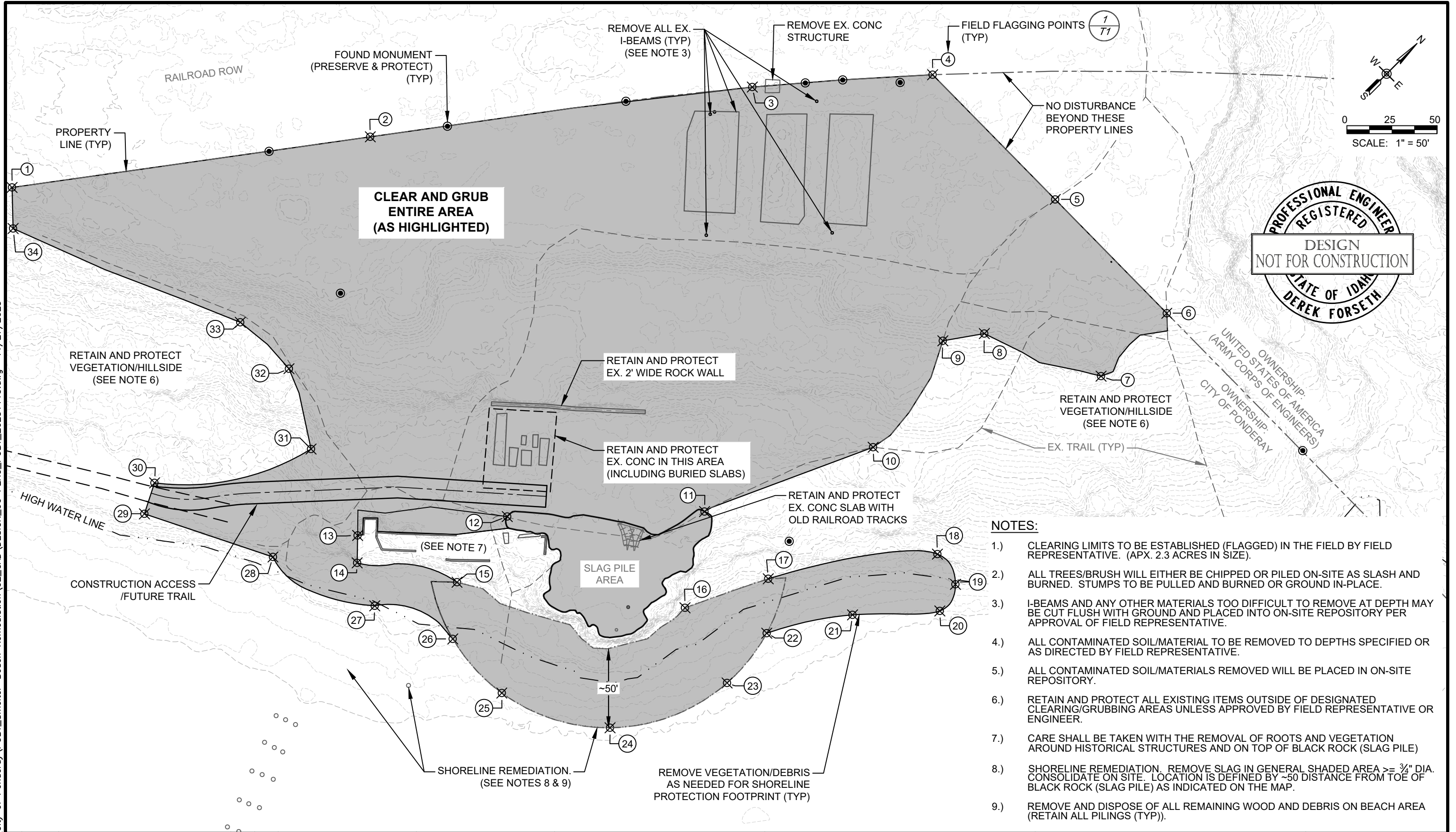


PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

CONTAMINATED SOIL DEPTHS & HISTORIC FEATURES OVERVIEW

SHEET:	O4
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	8 OF 30

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**NOTES:**

- 1.) CLEARING LIMITS TO BE ESTABLISHED (FLAGGED) IN THE FIELD BY FIELD REPRESENTATIVE. (APX. 2.3 ACRES IN SIZE).
- 2.) ALL TREES/BRUSH WILL EITHER BE CHIPPED OR PILED ON-SITE AS SLASH AND BURNED. STUMPS TO BE PULLED AND BURNED OR GROUND IN-PLACE.
- 3.) I-BEAMS AND ANY OTHER MATERIALS TOO DIFFICULT TO REMOVE AT DEPTH MAY BE CUT FLUSH WITH GROUND AND PLACED INTO ON-SITE REPOSITORY PER APPROVAL OF FIELD REPRESENTATIVE.
- 4.) ALL CONTAMINATED SOIL/MATERIAL TO BE REMOVED TO DEPTHS SPECIFIED OR AS DIRECTED BY FIELD REPRESENTATIVE.
- 5.) ALL CONTAMINATED SOIL/MATERIALS REMOVED WILL BE PLACED IN ON-SITE REPOSITORY.
- 6.) RETAIN AND PROTECT ALL EXISTING ITEMS OUTSIDE OF DESIGNATED CLEARING/GRUBBING AREAS UNLESS APPROVED BY FIELD REPRESENTATIVE OR ENGINEER.
- 7.) CARE SHALL BE TAKEN WITH THE REMOVAL OF ROOTS AND VEGETATION AROUND HISTORICAL STRUCTURES AND ON TOP OF BLACK ROCK (SLAG PILE)
- 8.) SHORELINE REMEDIATION. REMOVE SLAG IN GENERAL SHADED AREA  $\geq \frac{3}{4}$ " DIA. CONSOLIDATE ON SITE. LOCATION IS DEFINED BY ~50' DISTANCE FROM TOE OF BLACK ROCK (SLAG PILE) AS INDICATED ON THE MAP.
- 9.) REMOVE AND DISPOSE OF ALL REMAINING WOOD AND DEBRIS ON BEACH AREA (RETAIN ALL PILINGS (TYP)).

NO.	DATE	REVISIONS	BY	CHK
(A)	XX/XX/XX	XXXX	XX	XX

DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
DESIGNER:	C. MACPHERSON	SCALE:	1" = 50'
CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
DATE:	11/20/2023	DATE:	11/27/2023

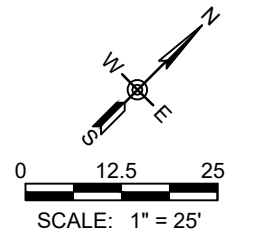
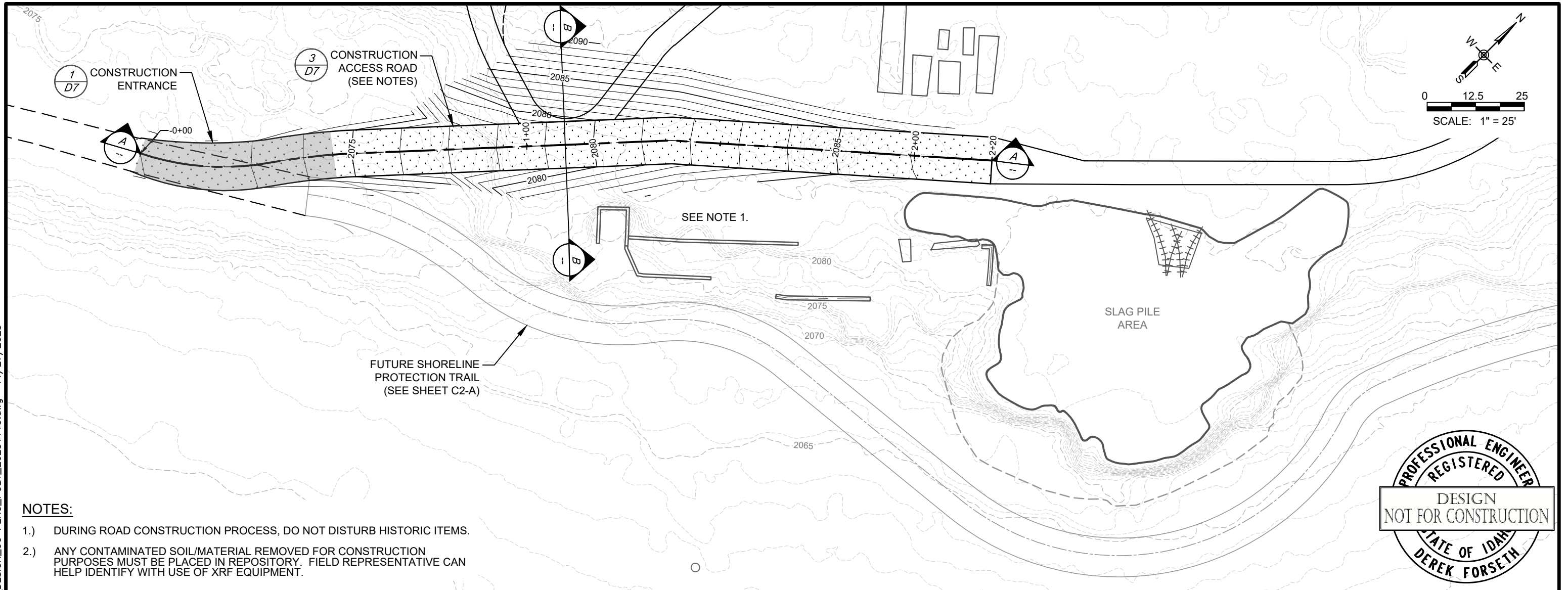


**PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT**  
BONNER COUNTY, ID

**SCHEDULES A & B  
CLEARING AND GRUBBING  
PLAN VIEW**

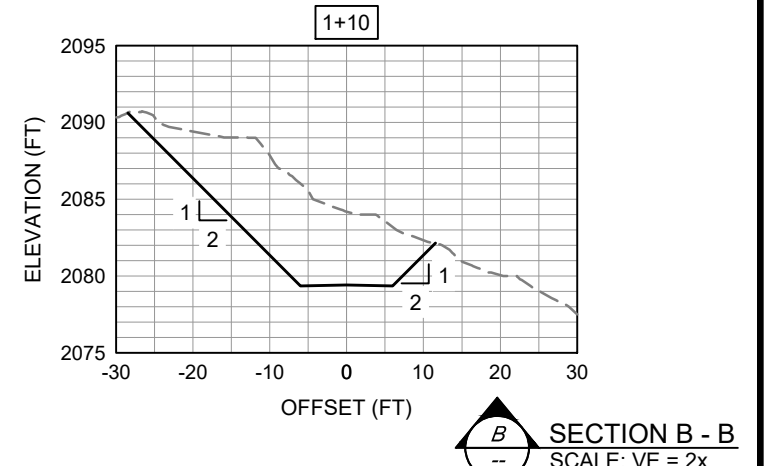
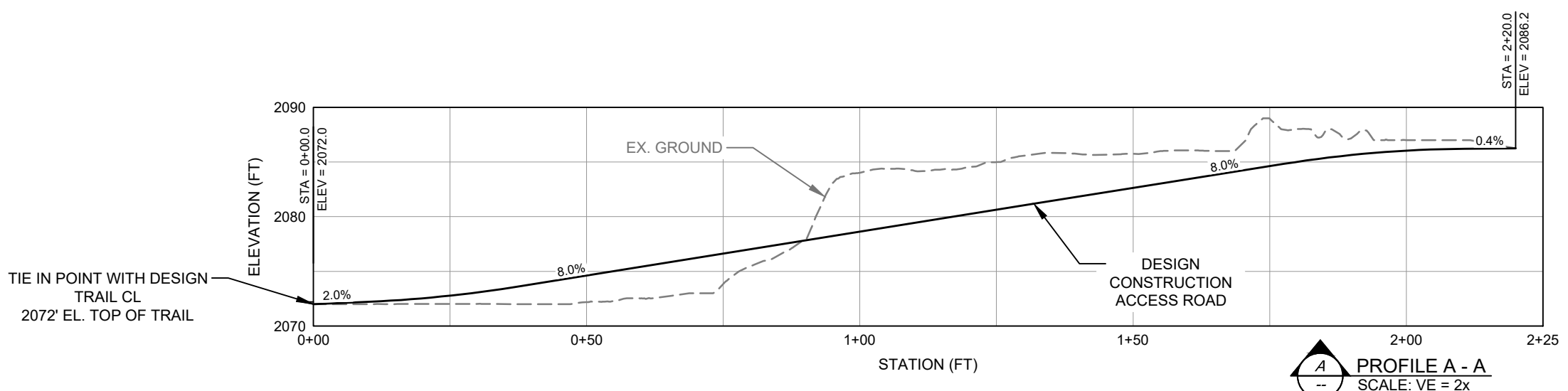
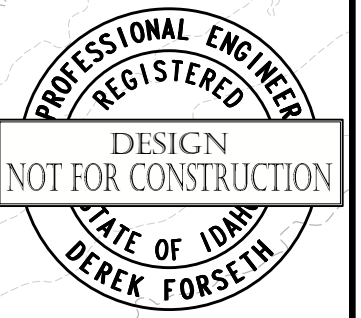
SHEET:	C1-A
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	9 OF 30

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**NOTES:**

- 1.) DURING ROAD CONSTRUCTION PROCESS, DO NOT DISTURB HISTORIC ITEMS.
- 2.) ANY CONTAMINATED SOIL/MATERIAL REMOVED FOR CONSTRUCTION PURPOSES MUST BE PLACED IN REPOSITORY. FIELD REPRESENTATIVE CAN HELP IDENTIFY WITH USE OF XRF EQUIPMENT.



(A) XX/XX/XX	XXXX	XX	XX	DRAFTER: B. ROLLINS	COORDINATE SYSTEM: ISPW NAD83 (2011) US FT
				DESIGNER: C. MACPHERSON	SCALE: 1" = 25'
				CHECKED: D. FORSETH	APPROVED: D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE: 11/20/2023
					DATE: 11/27/2023



PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT

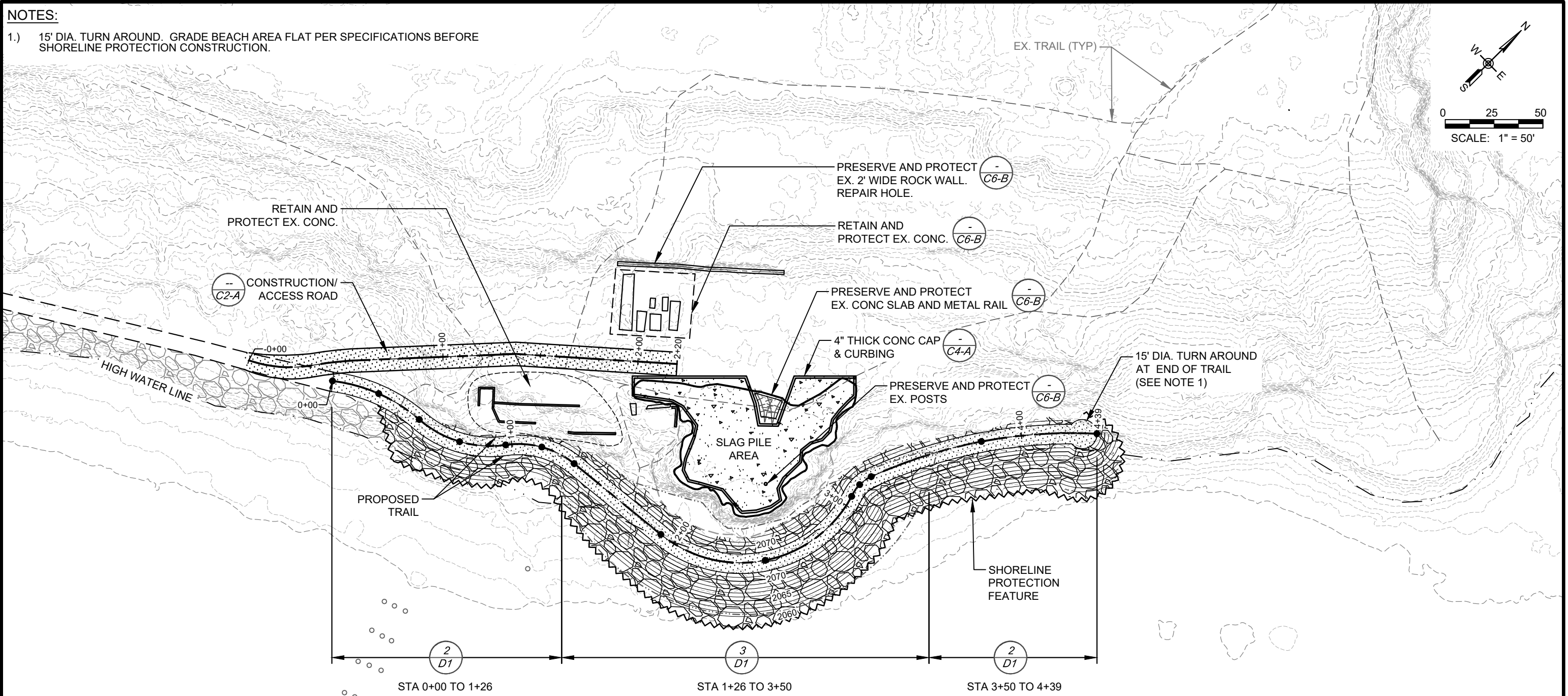
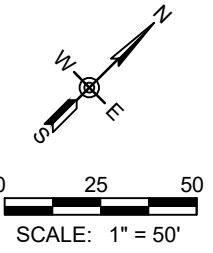
BONNER COUNTY, ID

SCHEDULE A  
CONSTRUCTION  
ACCESS/ROAD DESIGN

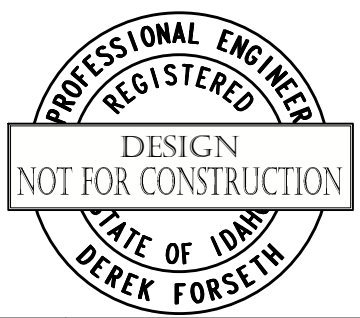
SHEET:	C2-A
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	10 OF 30

**NOTES:**

1.) 15' DIA. TURN AROUND. GRADE BEACH AREA FLAT PER SPECIFICATIONS BEFORE SHORELINE PROTECTION CONSTRUCTION.



Number	Start Station	End Station	Type	Radius (ft) /Direction	Arc/Line Length (ft)	Delta Angle (d)	Chord Length (ft)	Chord Direction	Start Point		Mid-Point		End Point		Degree of Curvature by Arc
									Easting	Northing	Easting	Northing	Easting	Northing	
1	0+00.00'	0+49.34'	Curve	82.32	49.34	34.34	48.61	N68° 57' 24.50"E	2,434,414.56	2,419,651.98	2,434,435.92	2,419,664.14	2,434,459.92	2,419,669.44	69.60
2	0+49.34'	0+96.93'	Curve	55.00	47.59	49.57	46.12	N61° 20' 27.26"E	2,434,459.92	2,419,669.44	2,434,482.59	2,419,676.05	2,434,500.39	2,419,691.56	104.17
3	0+96.93'	1+34.34'	Curve	45.00	37.41	47.63	36.34	N60° 22' 13.25"E	2,434,500.39	2,419,691.56	2,434,514.29	2,419,703.87	2,434,531.98	2,419,709.52	127.32
4	1+34.34'	1+91.61'	Line	N84° 11' 12.16"E	57.28				2,434,531.98	2,419,709.52	2,434,588.96	2,419,715.32	2,434,588.96	2,419,715.32	
5	1+91.61'	3+05.42'	Curve	64.62	113.81	100.91	99.66	N33° 43' 54.82"E	2,434,588.96	2,419,715.32	2,434,636.15	2,419,743.73	2,434,644.30	2,419,798.21	88.67
6	3+05.42'	3+19.94'	Curve	20.00	14.51	41.58	14.20	N0° 20' 13.22"W	2,434,644.30	2,419,798.21	2,434,642.96	2,419,805.30	2,434,644.22	2,419,812.40	286.48
7	3+19.94'	4+38.71'	Curve	246.81	118.78	27.57	117.63	N34° 14' 18.58"E	2,434,644.22	2,419,812.40	2,434,671.43	2,419,865.03	2,434,710.40	2,419,909.65	23.21



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(A) XX/XX/XX	XXXX	XX	XX	DRAFTER: B. ROLLINS	COORDINATE SYSTEM: ISPW NAD83 (2011) US FT
				DESIGNER: C. MACPHERSON	SCALE: 1" = 50'
				CHECKED: D. FORSETH	APPROVED: D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE: 11/20/2023



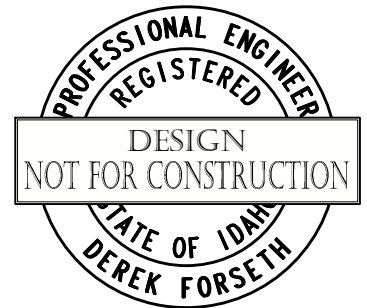
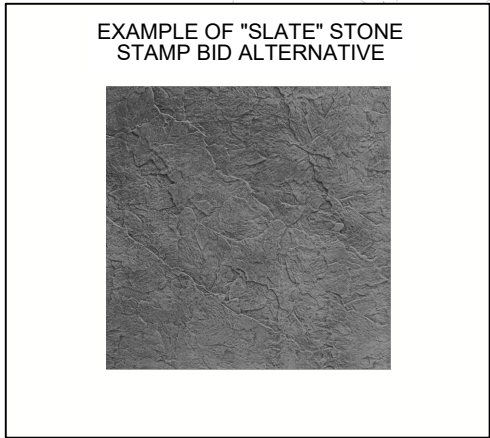
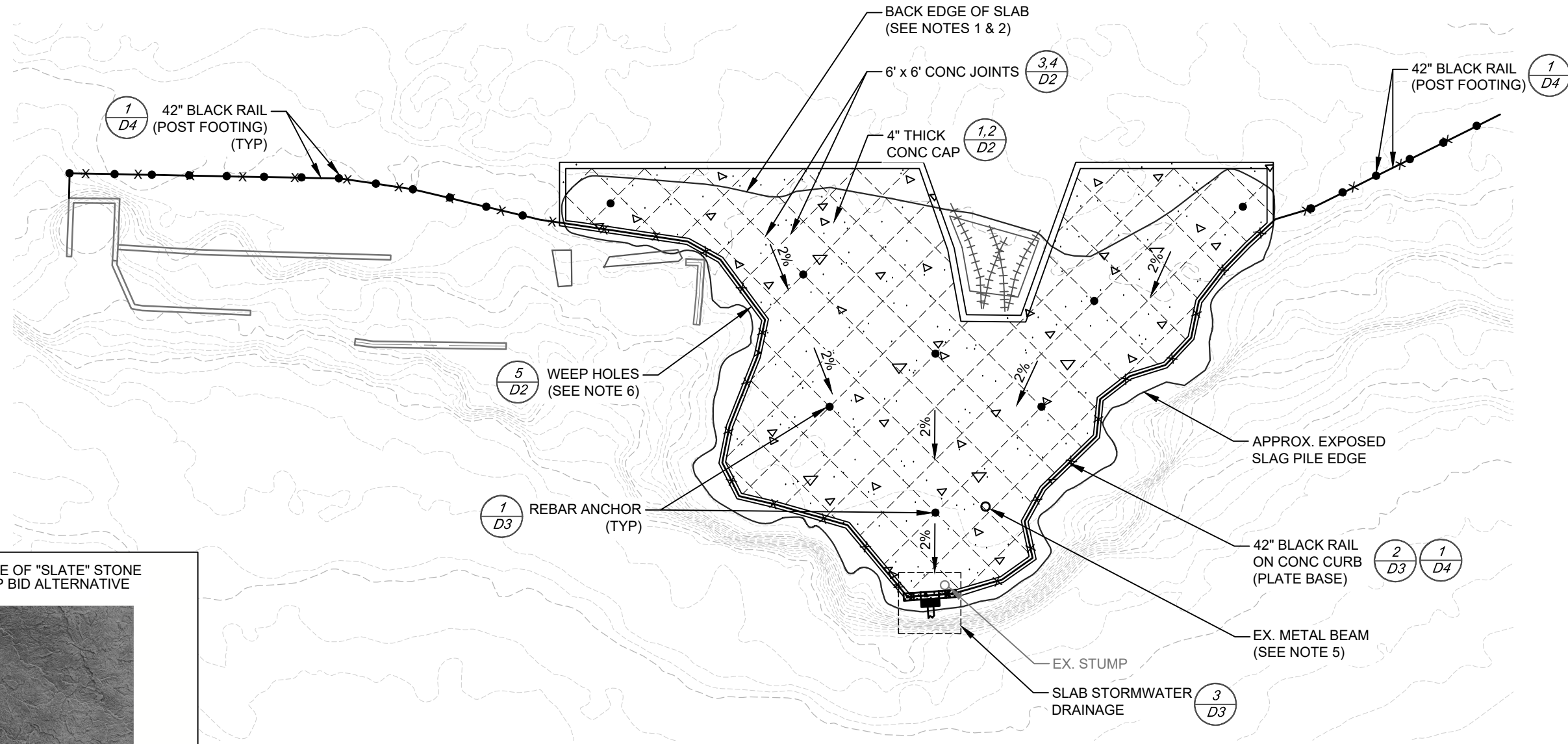
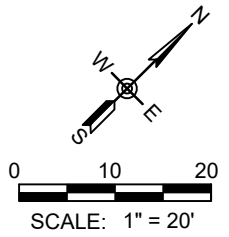
PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

SCHEDULE A  
SLAG AREA REMEDIATION

SHEET:	C3-A
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	11 OF 30

**NOTES:**

- 1.) CLEAR AND GRUB AREA IN PREPARATION FOR DESIGN CONC SLAB (SEE SHEET C1-A).
- 2.) EXCAVATE AND PREPARE SUBGRADE FOR BACK EDGE OF THE DESIGN CONC SLAB PER SPECIFICATIONS. IT IS UNKNOWN WHERE THE BACK (LAND SIDE) EDGE IS LOCATED. EXPLORATORY FIELD WORK WILL BE REQUIRED IN ORDER TO LOCATE GROUND SUITABLE FOR THE BACK EDGE OF THE DESIGN CONC SLAB.
- 3.) CONCRETE IS TO BE DYED BLACK USING IRON-OXIDE PIGMENT. REFERENCE SPECIFICATIONS FOR DETAILS.
- 4.) SLAB FINISH TO BE BROOMED OR STONE STAMPED. (SEE BID ALTERNATIVE DETAILS) TO BE DETERMINED BY OWNER AFTER BIDDING.
- 5.) EXISTING METAL BEAM IS TO BE RETAINED AND PROTECTED. FORM REBAR AND CAST CONCRETE AROUND METAL BEAM.
- 6.) WEEP HOLES ARE TO BE PLACED EVERY 6' ALONG CONC CURB ON CAP.



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(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	1" = 20'
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NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023



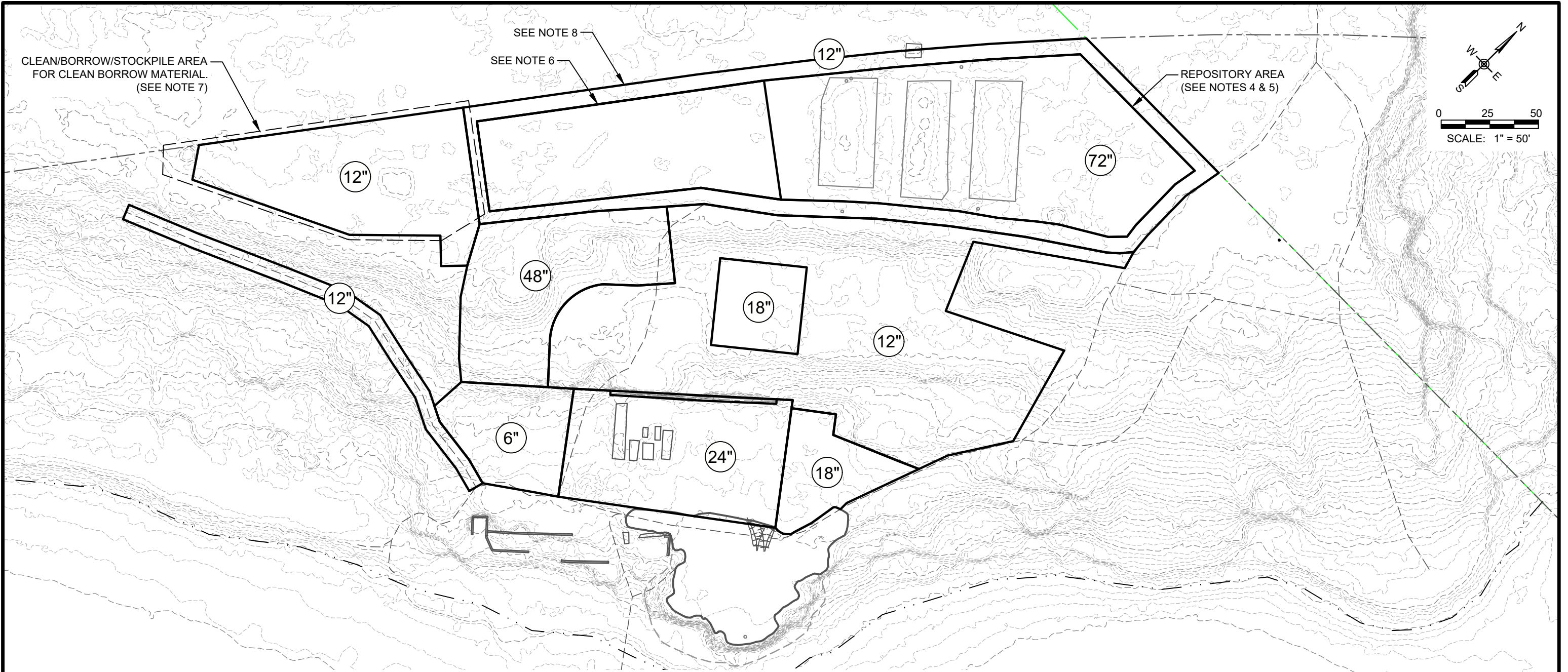
PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT

BONNER COUNTY, ID

SCHEDULE A  
SLAG CAP

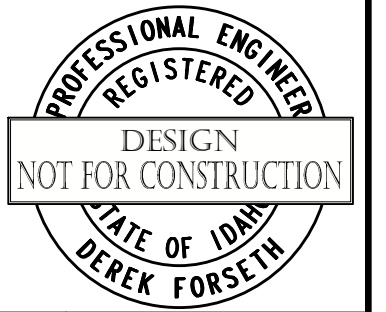
SHEET:	C4-A
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	12 OF 30

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**NOTES:**

- 1.) ALL CONTAMINATED SOIL/MATERIAL TO BE REMOVED TO DEPTHS SPECIFIED OR AS DIRECTED BY FIELD REPRESENTATIVE. CHASE MATERIAL AS DIRECTED BY FIELD REPRESENTATIVE AS NEEDED TO REMOVE ALL CONTAMINATION ALONG EDGES OF DESIGN REMOVAL AREAS.
- 2.) ALL CONTAMINATED SOIL/MATERIALS REMOVED WILL BE PLACED IN ON-SITE REPOSITORY.
- 3.) DO NOT REMOVE SOIL UNDERNEATH TEMPORARY PILE AREA UNTIL THE REPOSITORY HAS BEEN PREPARED TO ACCEPT CONTAMINATED SOIL.
- 4.) REMOVAL DEPTHS SHOWN UNDER THE REPOSITORY AREA ARE NOT APPLICABLE. SEE SHEET C7-B FOR GRADING PLAN.
- 5.) CONTAMINATED MATERIAL TO BE PILED IN THIS AREA. SEE C8-B FOR HEIGHT AND SLOPE OF CONTAMINATED MATERIAL PLACEMENT.
- 6.) THE FIRST 12" OF SOIL ARE ASSUMED CONTAMINATED. REMOVED TOP 12" OF SOIL AND PLACE NE AREA OF REPOSITORY. THE REMAINING SOIL, DOWN TO A DEPTH OF AN ADDITIONAL 7', SHALL BE REMOVED AND STOCKPILED AS CLEAN COVER TO BE USED ON-SITE. ACQUIRE APPROVAL FROM FIELD REPRESENTATIVE PRIOR TO USING SOIL AS CLEAN BORROW.
- 7.) THIS AREA MAY BE UTILIZED FOR CLEAN BORROW WITH APPROVAL FROM FIELD REPRESENTATIVE. REMOVE 12" OF CONTAMINATED MATERIAL, XRF AND SAMPLE SOIL UNDERNEATH BEFORE USING. THIS AREA MAY ALSO BE USED FOR STOCK PILING AND CLAN BORROW.
- 8.) REMOVE 12" DEPTH OF CONTAMINATED SOIL BETWEEN PROPERTY LINE AND REPOSITORY FOOTPRINT. PLACE CONTAMINATED SOIL INTO THE REPOSITORY. TOTAL EXCAVATION DEPTHS WILL VARY FOR DRAINAGE TRENCH CONSTRUCTION; EXCAVATE PER DETAILS ON SHEETS D5 AND D6. LEAVE A 2' BUFFER BETWEEN DRAINAGE TRENCH AND PROPERTY LINE.



(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	1" = 50'
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023



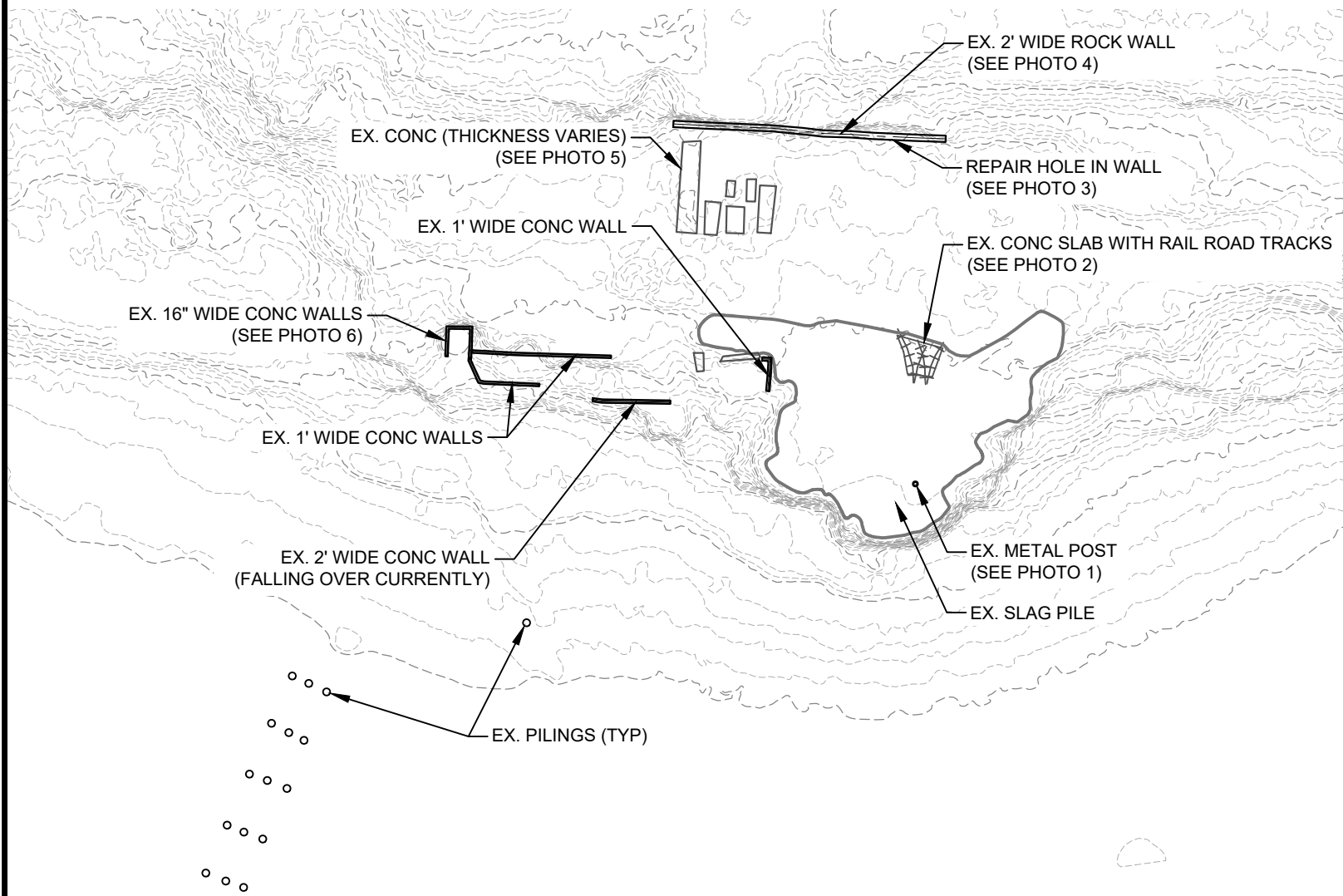
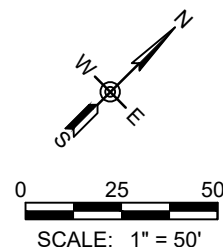
PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
  
BONNER COUNTY, ID

SCHEDULES A & B  
REMEDATION DESIGN  
REMOVAL DEPTHS  
PLAN VIEW

SHEET:	C5-B
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	13 OF 30

**GENERAL NOTES:**

- 1.) HAND DIG AROUND ALL WALLS, CONC, ANY OTHER PRESERVE AND PROTECT FEATURES.
- 2.) EX. CONC SLABS. EXCAVATE 24" OR TO THE TOP OF THE EX. CONC SLAB.



1.) PRESERVE AND PROTECT. FORM CONCRETE AROUND POSTS. SEE SHEET C3-A



2.) PRESERVE AND PROTECT. CLEAN OUT AND EXCAVATE SOIL AROUND THE EXISTING SLAB AND METAL RAIL IN PREPARATION FOR NEW BLACK ROCK CONC SLAB. FORM CONCRETE AROUND EX. SLAB AND RAILROAD TRACKS. SEE SHEET C3-A



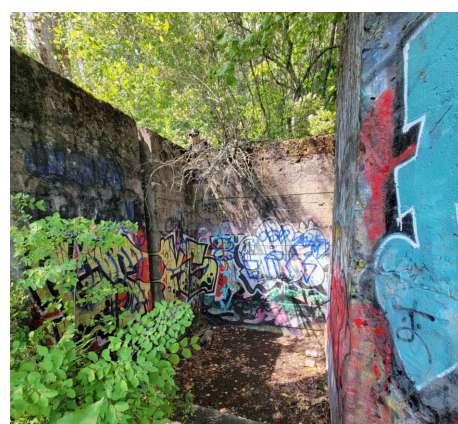
3.) REPAIR EXISTING HOLE IN 2' WIDE ROCK WALL. REMOVE LOOSE MATERIAL AND DIRT BEFORE REPAIRING. USE EXISTING ROCKS IN SITE AREA TO REPAIR WALL. USE TYPE "N" MORTAR.



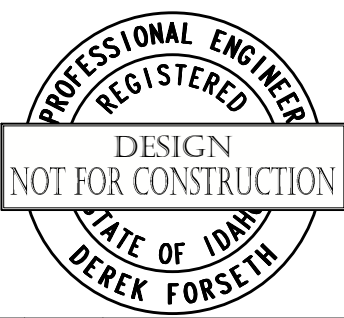
4.) CAREFULLY REMOVE VEGETATION GROWING ON AND AROUND ROCK WALL. EXCAVATE SOIL ON THE NW SIDE OF THE WALL UNTIL 42" OF THE LOWEST POINT ON THE WALL IS EXPOSED. SEE SHEET C8-B FOR GRADING PLAN. SEE SHEET D7 FOR TRAIL AND FRENCH MATTRESS DETAILS.



5.) CAREFULLY REMOVE VEGETATION GROWING ON AND AROUND EX. CONC STRUCTURES. REMOVE AS MUCH SOIL/MATERIAL AS POSSIBLE WITHOUT DISTURBING THE PHYSICAL STRUCTURES. POWER WASH CONC AFTER ALL EXCAVATION ACTIVITIES HAVE BEEN COMPLETED. SEE SHEET C5-B FOR EXCAVATION PLAN AND SHEET C6-B FOR GRADING PLAN.



6.) CAREFULLY REMOVE VEGETATION GROWING ON AND AROUND EX CONC WALLS. SEE SHEET C6-B FOR GRADING PLAN.



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(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	1" = 50'
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023

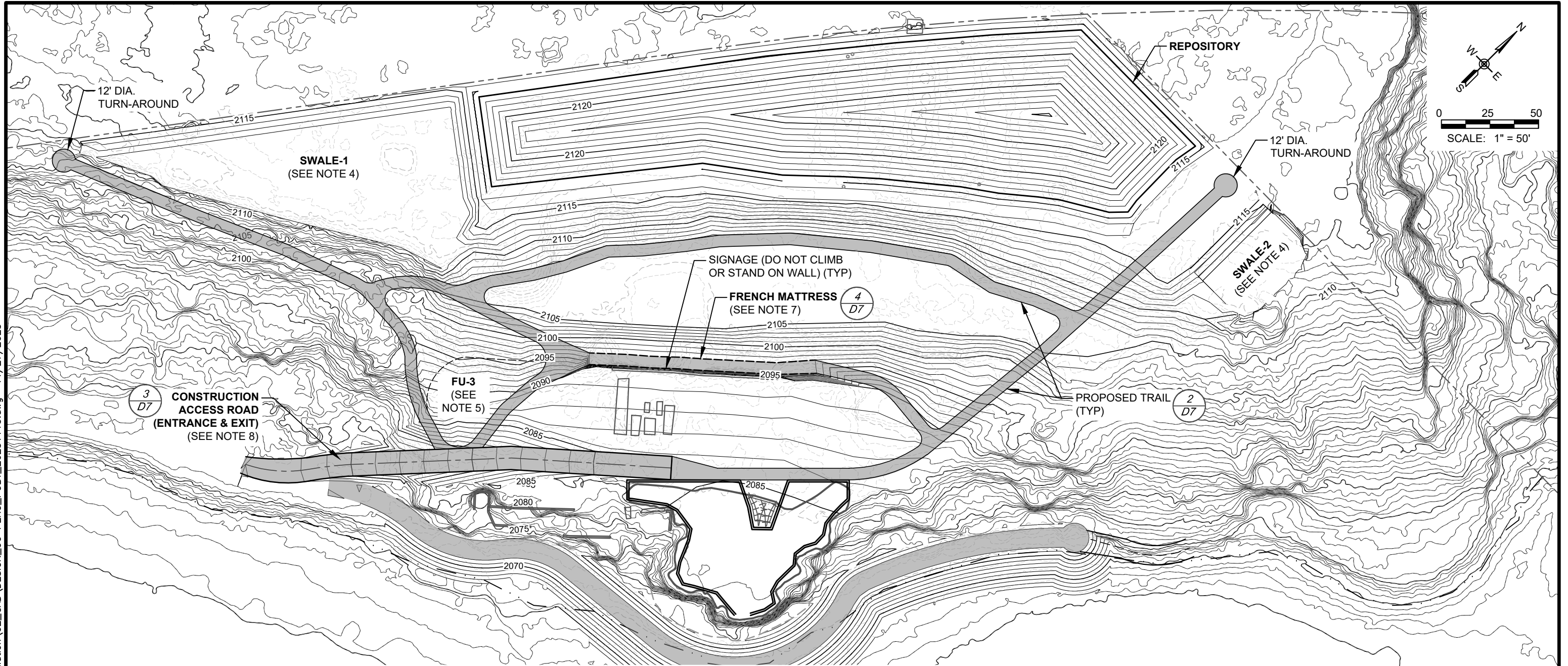


**PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT**  
**BONNER COUNTY, ID**

**SCHEDULES A AND B PRESERVE & PROTECT HISTORICAL ITEMS**

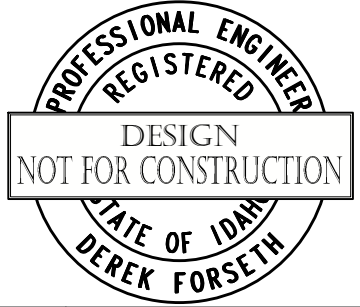
SHEET:	C6-B
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	14 OF 30

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**NOTES:**

- 1.) GRADING LIMITS SHOWN ARE APPROXIMATE AND MAY BE ADJUSTED IN THE FIELD.
- 2.) **SLOPES:** SLOPES VARY. GRADE AT A MAX 2:1 SLOPE.
- 3.) **GRADED AREAS:** PROVIDE AT LEAST 1' COVER AND GRADE/FLATTEN AREA TO TIE INTO SURROUNDING GRADES SMOOTHLY. ENSURE THAT THERE ARE NO AREAS IN WHICH STORM WATER CAN POOL.
- 4.) **SWALES:** FLATTEN AND GRADE AREA TO ELEVATION 2111.5' ON THE NW EDGE OF PROPERTY AND NE END OF REPOSITORY. GRADE 3:1 SLOPE UP TO ELEVATION 2115'. ENSURE THAT THERE ARE NO AREAS IN WHICH STORM WATER CAN POOL.
- 5.) **FU-3:** NO COVER REQUIRED. GRADE AND FLATTEN AREA TO TIE INTO SURROUNDING GRADES SMOOTHLY.
- 6.) **TRAIL (TYP):** ENSURE THAT TRAIL(S) SMOOTHLY TRANSITIONS TO SURROUNDING GRADES.
- 7.) **FRENCH MATTRESS:** DO NOT DISTURB EXISTING ROCK WALL WHILE INSTALLING MATERIALS.
- 8.) **CONSTRUCTION ENTRANCE/EXIT & ACCESS ROAD:** REFINISH WITH NEW GRAVEL AND TIE INTO NEW TRAIL SYSTEM AT END OF PROJECT.



(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	1" = 50'
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023

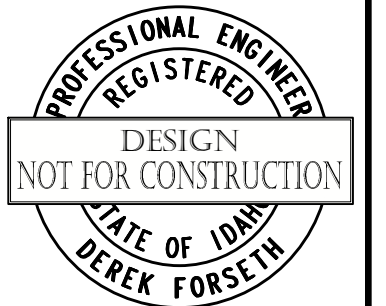
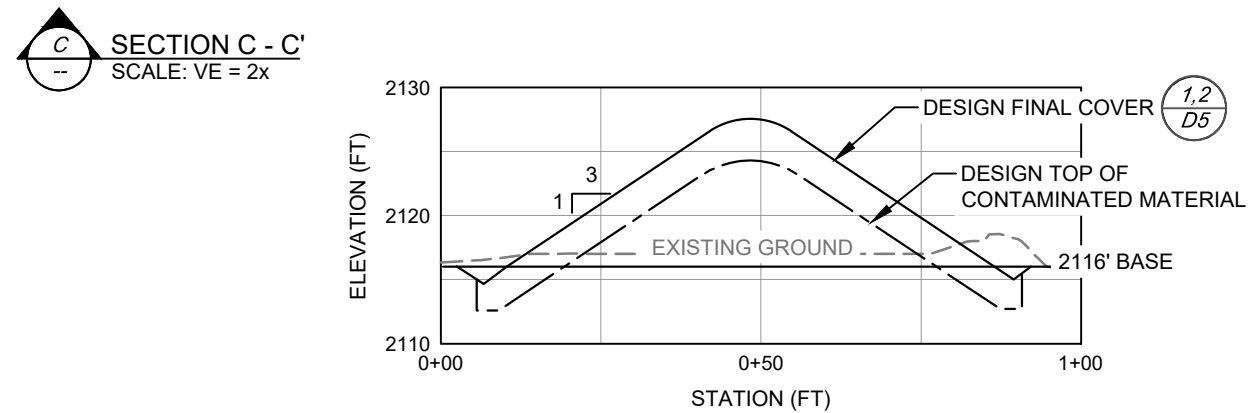
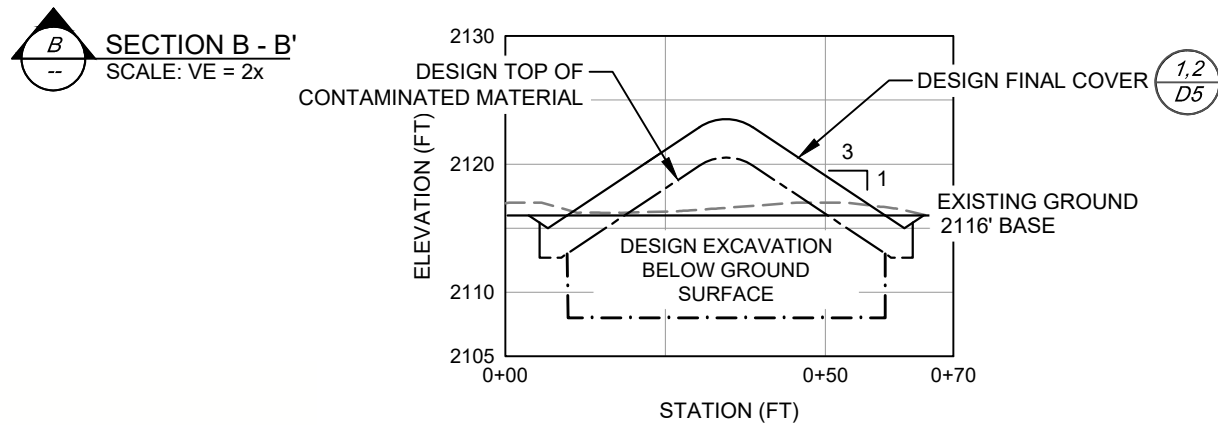
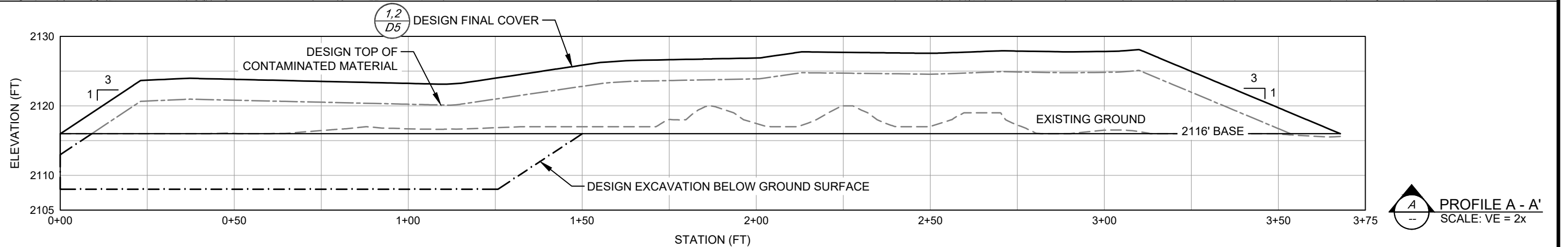
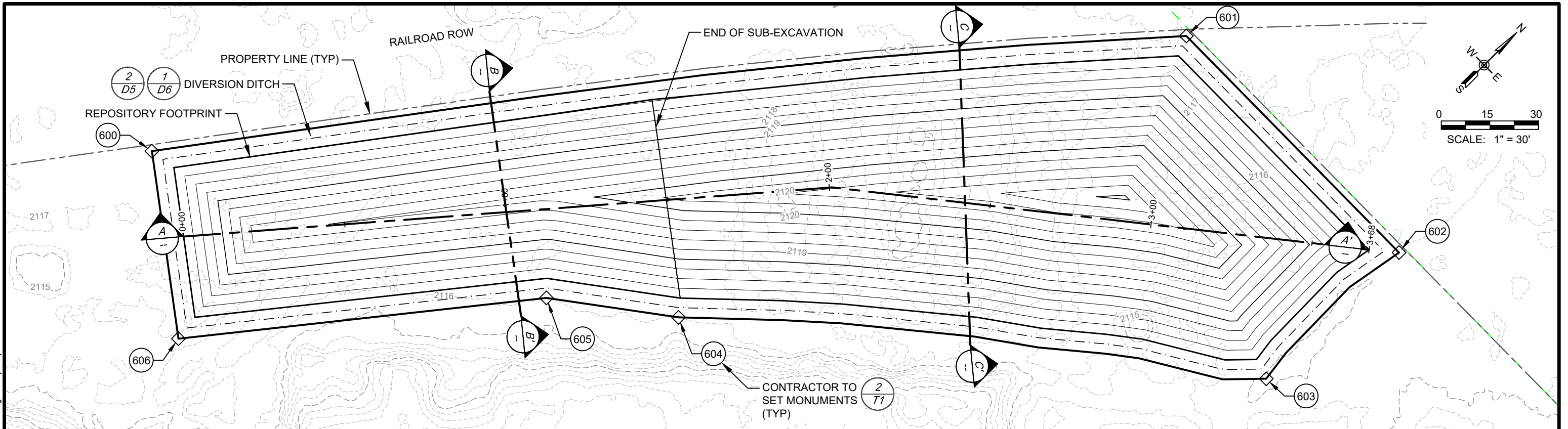


PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
  
BONNER COUNTY, ID

SCHEDULE B  
REMEDATION DESIGN  
GRADING INFORMATION  
PLAN VIEW

SHEET:	C7-B
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	15 OF 30

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(A) XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
				DESIGNER:	C. MACPHERSON	SCALE:	1" = 30'
				CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	DATE:	11/27/2023



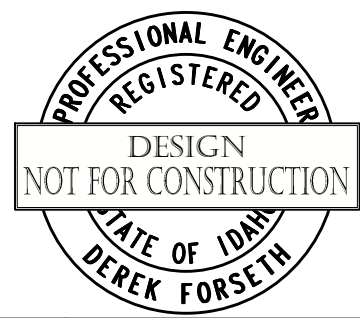
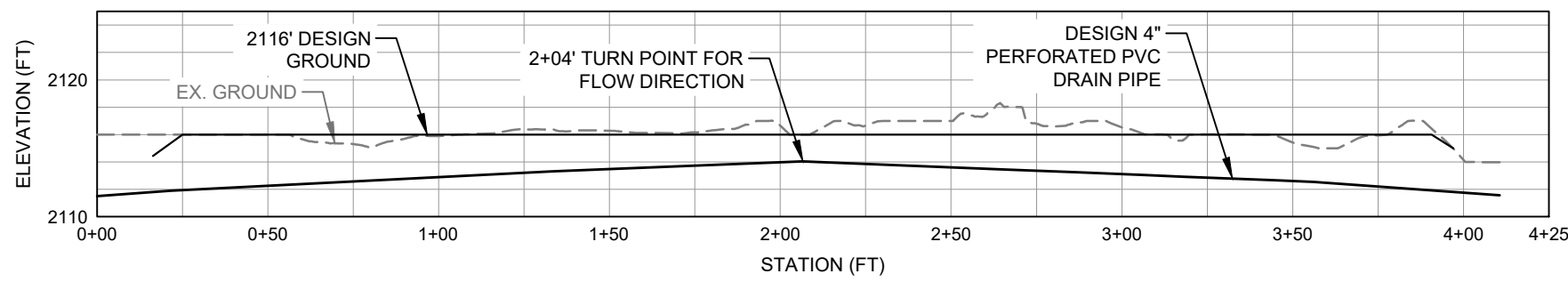
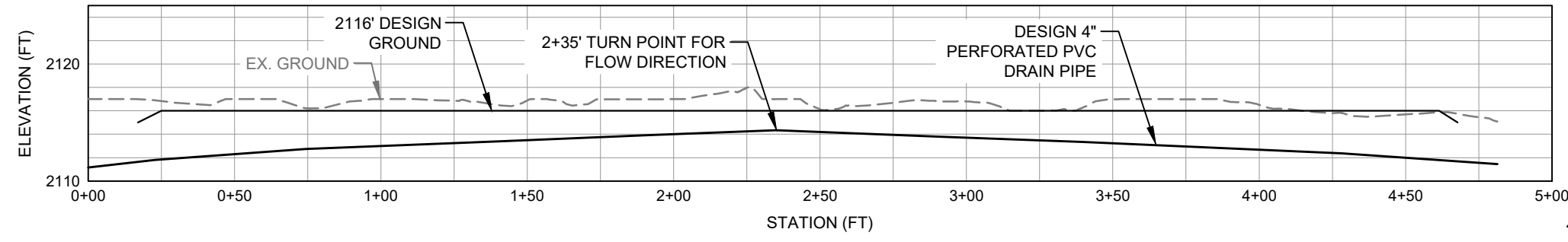
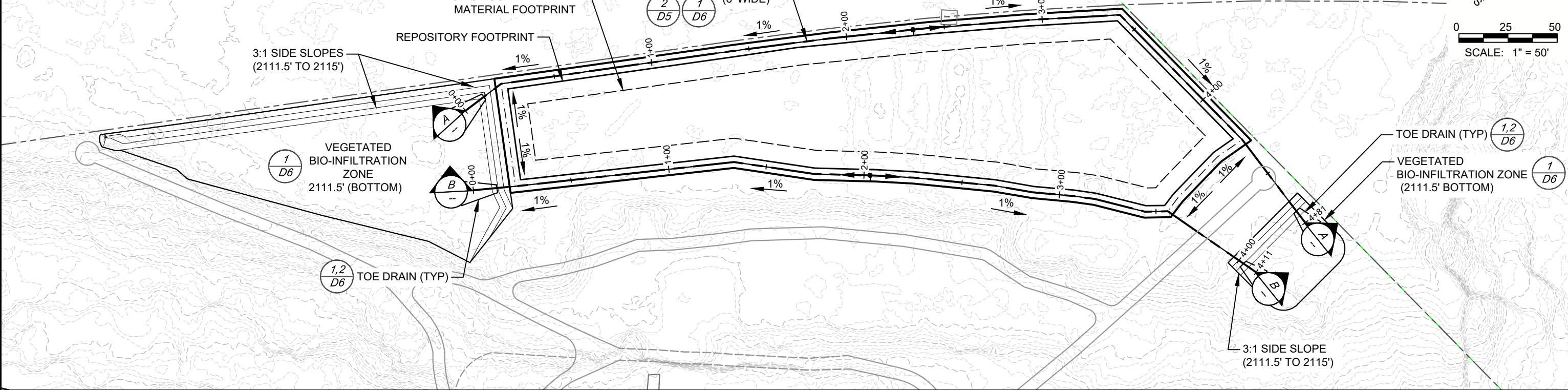
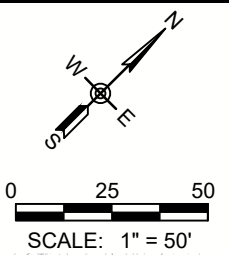
PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

SCHEDULE B  
REPOSITORY EXCAVATION,  
FILL, GRADING AND COVER  
PLAN VIEW

SHEET:	C8-B
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	16 OF 30

**NOTES:**

- SLOPE PERCENTAGES AND DIRECTIONAL ARROWS SHOWN REPRESENT THE UNDERGROUND FLOW & DIRECTION OF STORMWATER WATER IN 4" PVC DRAIN PIPE.



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(A) XX/XX/XX	XXXX	XX	XX	DRAFTER: B. ROLLINS	COORDINATE SYSTEM: ISPW NAD83 (2011) US FT
				DESIGNER: C. MACPHERSON	SCALE: 1" = 50'
				CHECKED: D. FORSETH	APPROVED: D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE: 11/20/2023
					DATE: 11/27/2023

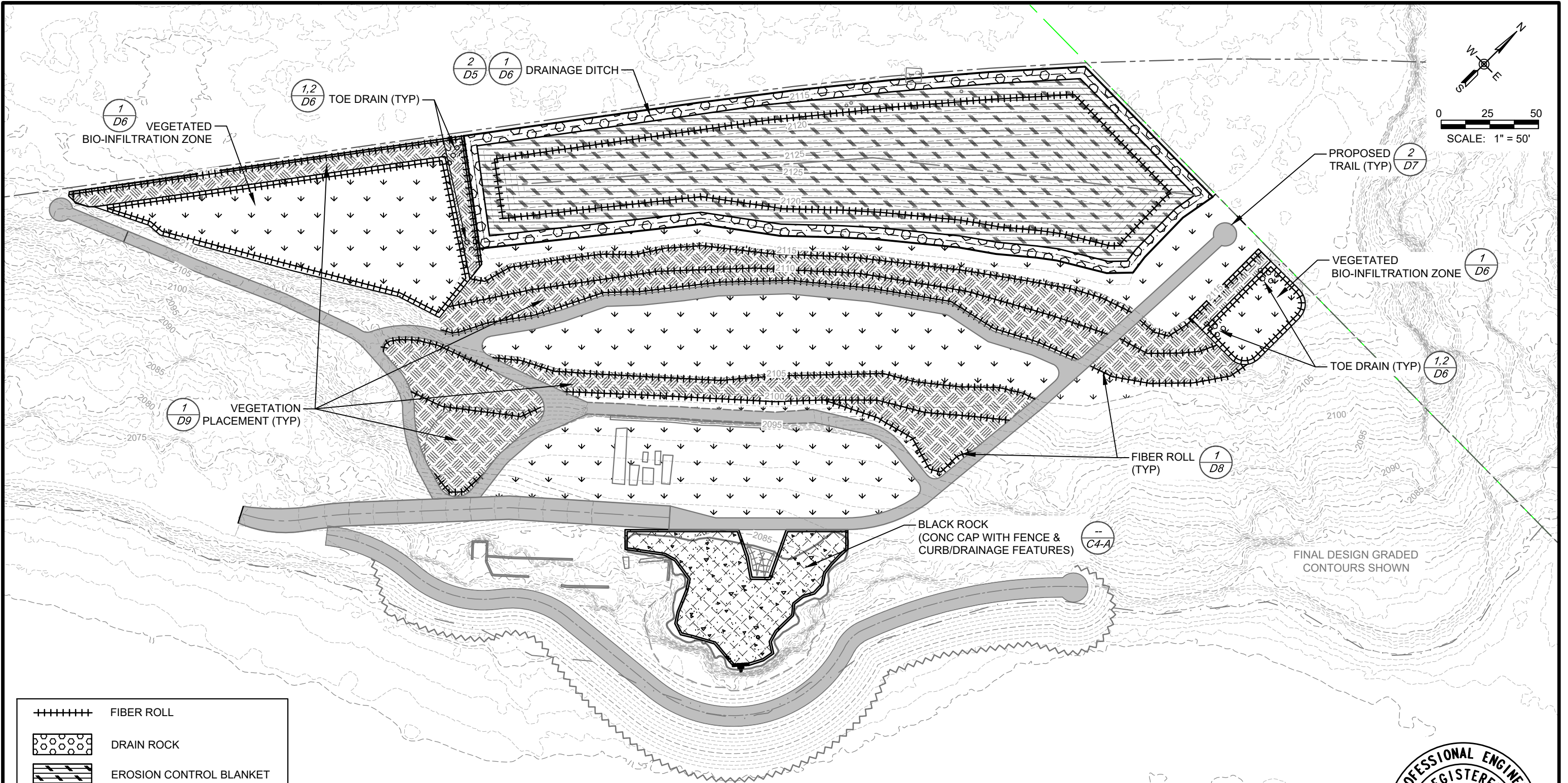


**PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT**  
**BONNER COUNTY, ID**

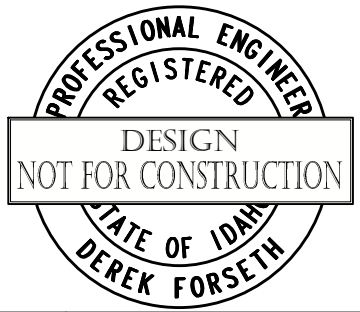
**SCHEDULE B  
REPOSITORY DRAINAGE  
SYSTEM**

SHEET:	C9-B
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	17 OF 30

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+++++	FIBER ROLL
○○○○	DRAIN ROCK
	EROSION CONTROL BLANKET
	EROSION CONTROL BLANKET W/ PLANTINGS
▽▽▽	HYDROSEED
■	TRAIL



NO.	DATE	REVISIONS	BY	CHK
(A)	XX/XX/XX	XXXX	XX	XX

DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
DESIGNER:	C. MACPHERSON	SCALE:	1" = 50'
CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
DATE:	11/20/2023	DATE:	11/27/2023

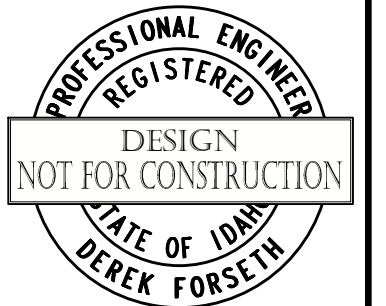
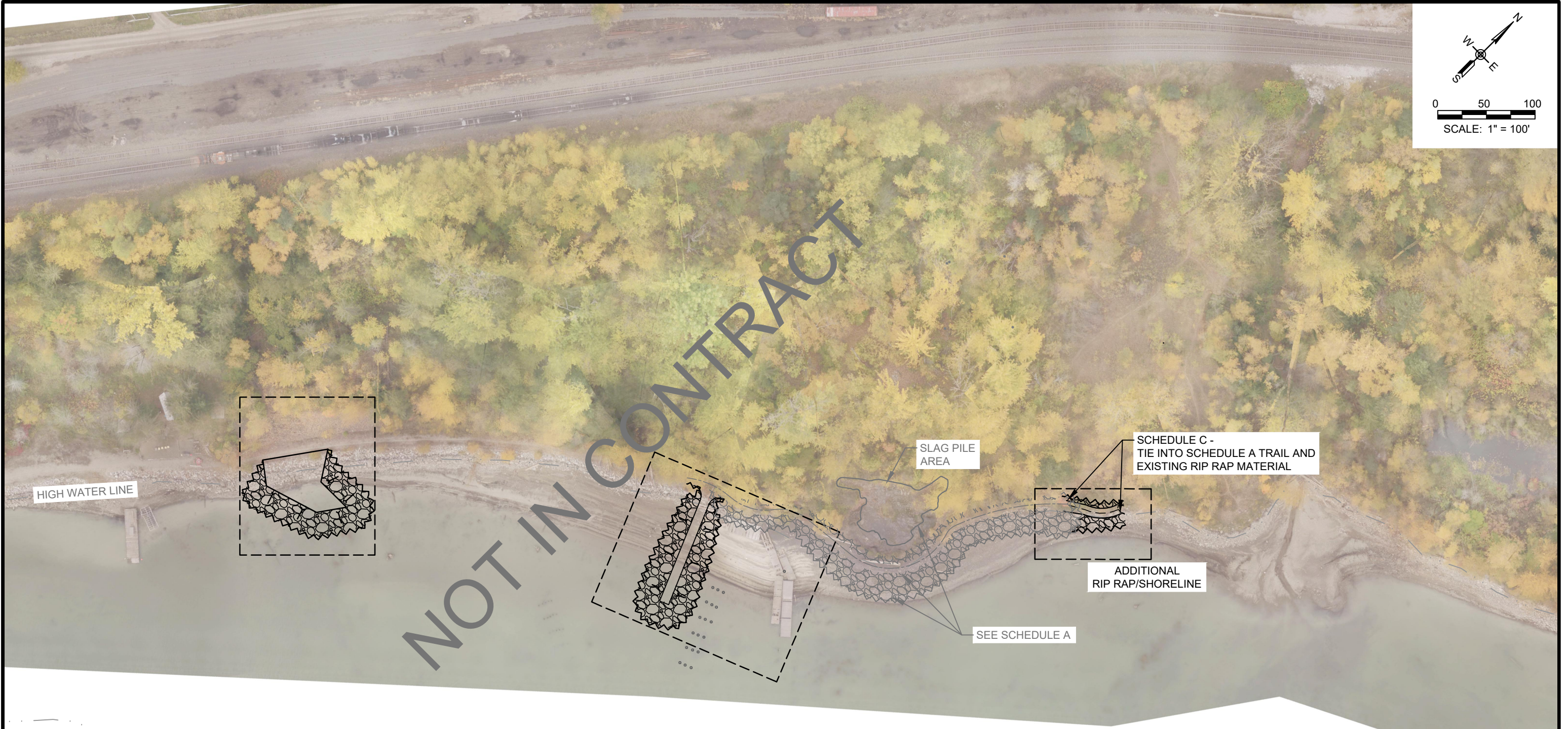


PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

SCHEDULES A & B  
EROSION CONTROL & RE-VEGETATION PLAN

SHEET:	C10-B
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	18 OF 30

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(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	1" = 100'
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023



PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT

BONNER COUNTY, ID

SCHEDULE C  
SHORELINE ENCROACHMENT

SHEET:	C11-C
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	19 OF 30

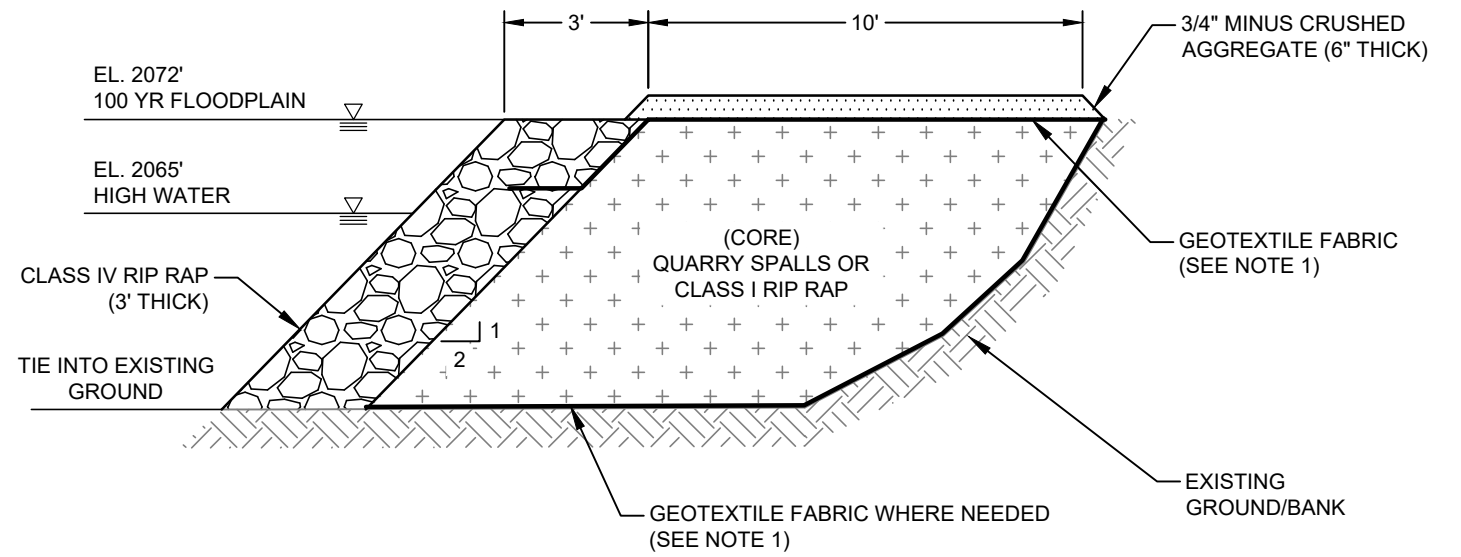
Class	I	IV
100% Smaller Than	150#	800#
50% Size	50#	300#
90% Larger Than	25#	150#
10%	25#	25-150#
Tolerance	+4"	+8"

1. ASSUMING W = 165 LB/FT<sup>3</sup>
2. ASSUMES 1:2 SLOPE.
3. ASSUMES THAT THE L/W RATIO OF THE ROCK IS NO GREATER THAN 3.

EXAMPLE CLASS 1: 90% OF STONES SHALL RANGE BETWEEN 25 AND 150 POUNDS. THE 50% SIZE OF THE GRADATION SHALL BE 50 POUNDS. 10% OF THE STONES MAY BE 25 POUNDS.

ALL ROCK SHALL BE SOUND, CLEAN, ANGULAR, DURABLE STONE. ROUNDED ROCKS ARE NOT ACCEPTABLE. ACCEPTABILITY OF STONES WILL BE DETERMINED BY VISUAL INSPECTION, LABORATORY TESTS, AND/OR GEOLOGIC INSPECTION.

1 RIP RAP GRADATION SPECS  
SCALE: NTS



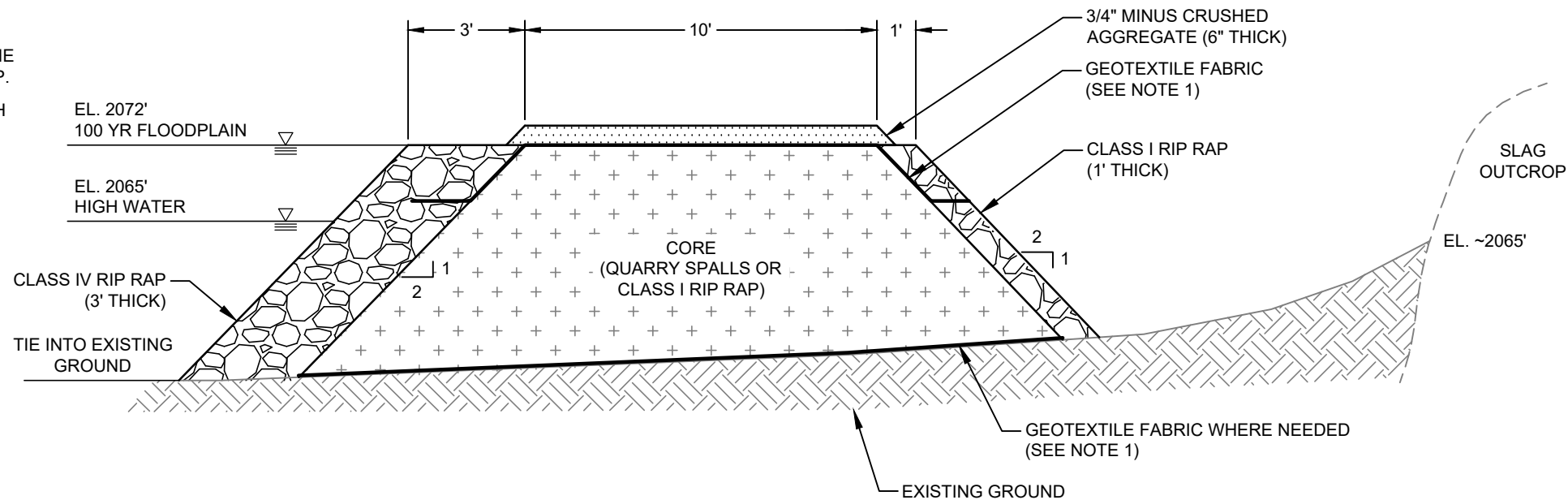
NOTES:

1. FILTER FABRIC TO BE USED WHERE SOFT SOIL NECESSITATES BETWEEN EX. GROUND AND STRUCTURE. PLACE FILTER FABRIC UNDERNEATH THE ENTIRE LENGTH OF TRAIL; ANCHOR BENEATH RIP RAP.
2. COMPACT CORE UNTIL REFUSAL FOR EVERY 1' OF ROCK PLACEMENT.
3. EXPECTED WINTER MIN. LAKE LEVEL = 2055'.

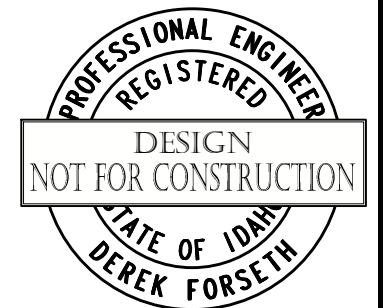
2 X-SECTION SHORELINE PROTECTION FEATURE (BEFORE/AFTER SLAG PILE)  
SCALE: NTS

NOTES:

1. FILTER FABRIC TO BE USED WHERE SOFT SOIL NECESSITATES BETWEEN EX. GROUND AND STRUCTURE. PLACE FILTER FABRIC UNDERNEATH THE ENTIRE LENGTH OF TRAIL; ANCHOR BENEATH RIP RAP.
2. COMPACT CORE UNTIL REFUSAL FOR EVERY 1' DEPTH OF ROCK PLACEMENT.
3. EXPECTED WINTER MIN. LAKE LEVEL = 2055'.



3 X-SECTION SHORELINE PROTECTION FEATURE (SURROUNDING SLAG PILE)  
SCALE: NTS



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(A) XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
				DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
				CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	DATE:	11/27/2023



PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

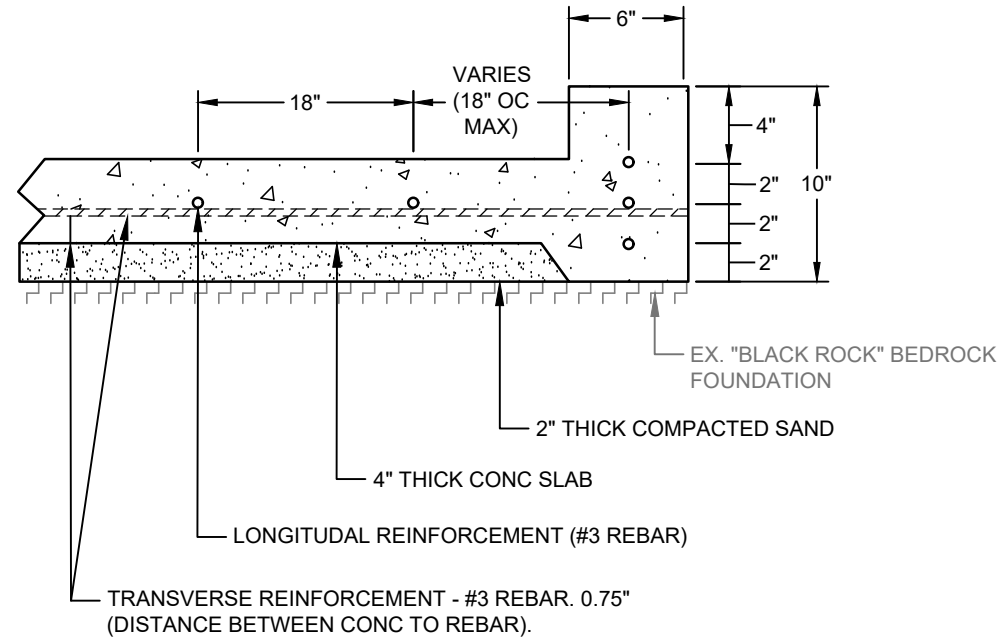
SCHEDULE A  
SHORELINE PROTECTION DETAILS

SHEET:	D1
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	20 OF 30

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**NOTES:**

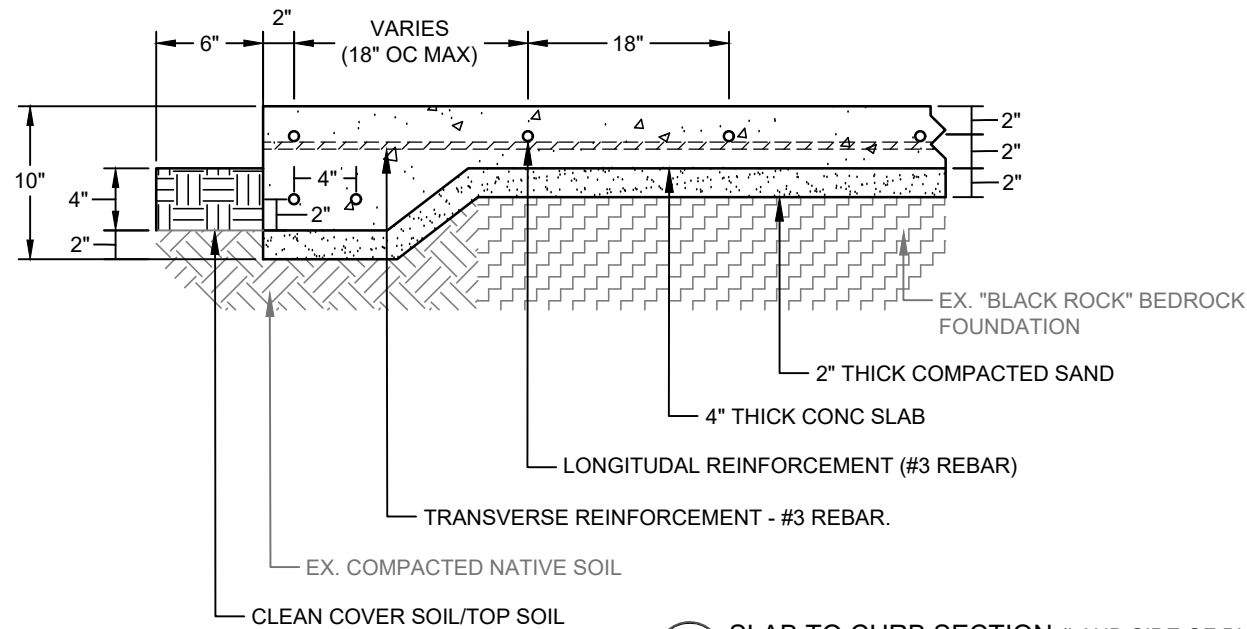
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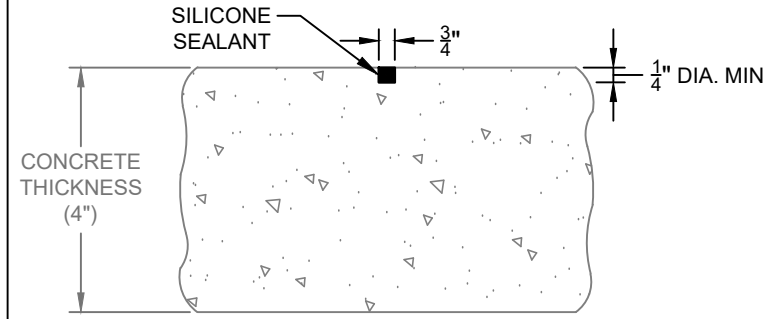
**1** SLAB TO CURB SECTION (WATER SIDE OF BLACK ROCK)  
SCALE: NTS

**NOTE:**

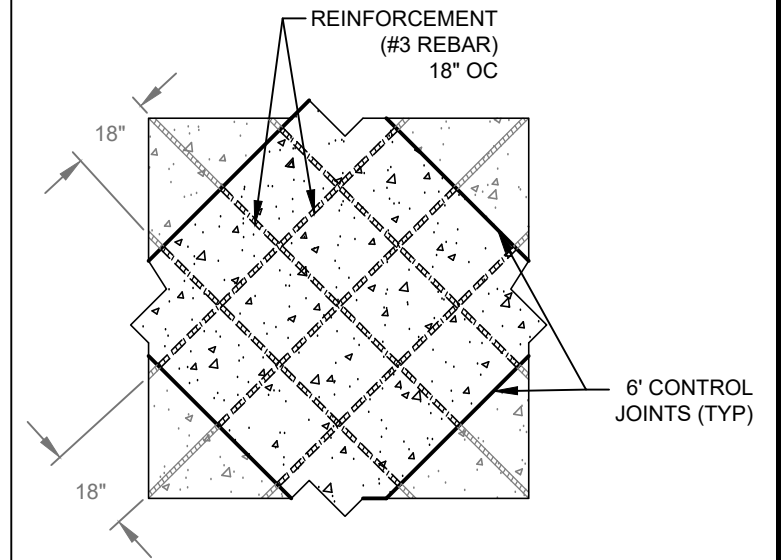
1. EXPLORATORY EXCAVATION WILL BE REQUIRED TO LOCATE THE EXTENT OF THE SLAG PILE BEFORE POURING THE LAND SIDE EDGE OF THE SLAB. THE SLAB TO CURB SECTION MUST REST ON COMPACTED SOIL UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR FIELD REPRESENTATIVE.



**2** SLAB TO CURB SECTION (LAND SIDE OF BLACK ROCK)  
SCALE: NTS



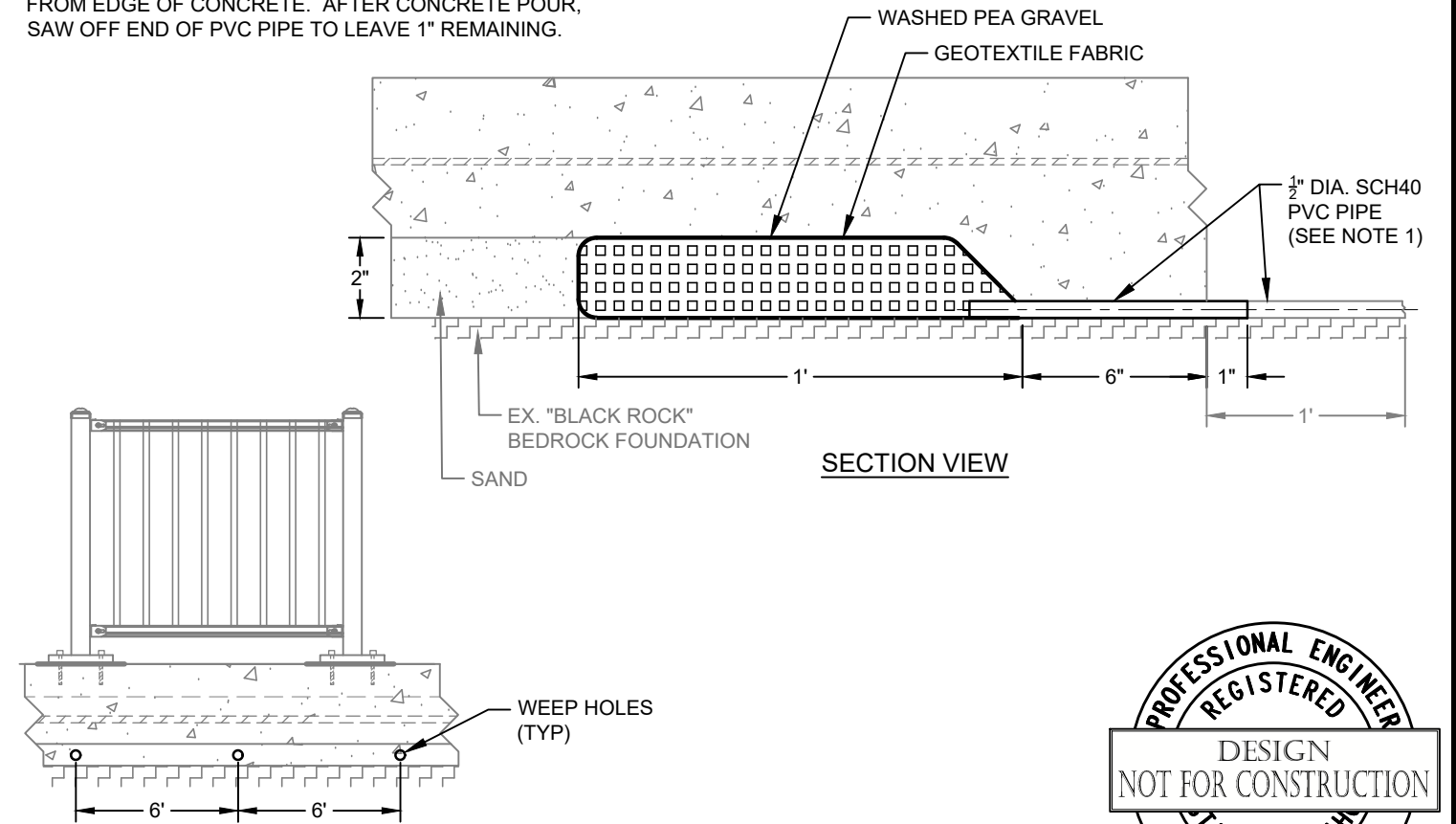
**3** CONTROL JOINT DETAIL  
NTS



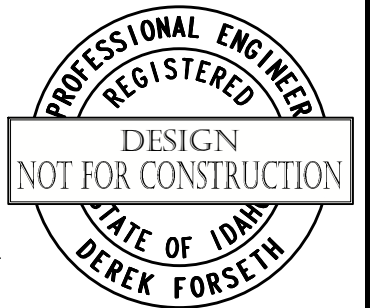
**4** SLAB REINFORCEMENT DETAIL  
NTS

**NOTES:**

1. INSTALL WEEP HOLE PIPE WITH EXTRA 1' LENGTH OUT FROM EDGE OF CONCRETE. AFTER CONCRETE POUR, SAW OFF END OF PVC PIPE TO LEAVE 1" REMAINING.



**5** WEEP HOLES/DRAINAGE DETAIL  
SCALE: NTS



(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023



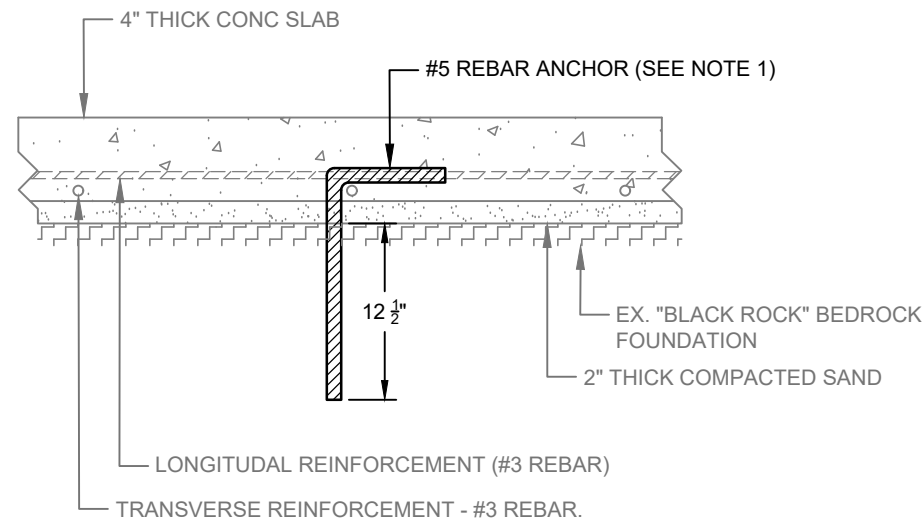
PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

SCHEDULE A  
SLAG CAP DETAILS

SHEET:	D2
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	21 OF 30

**NOTES:**

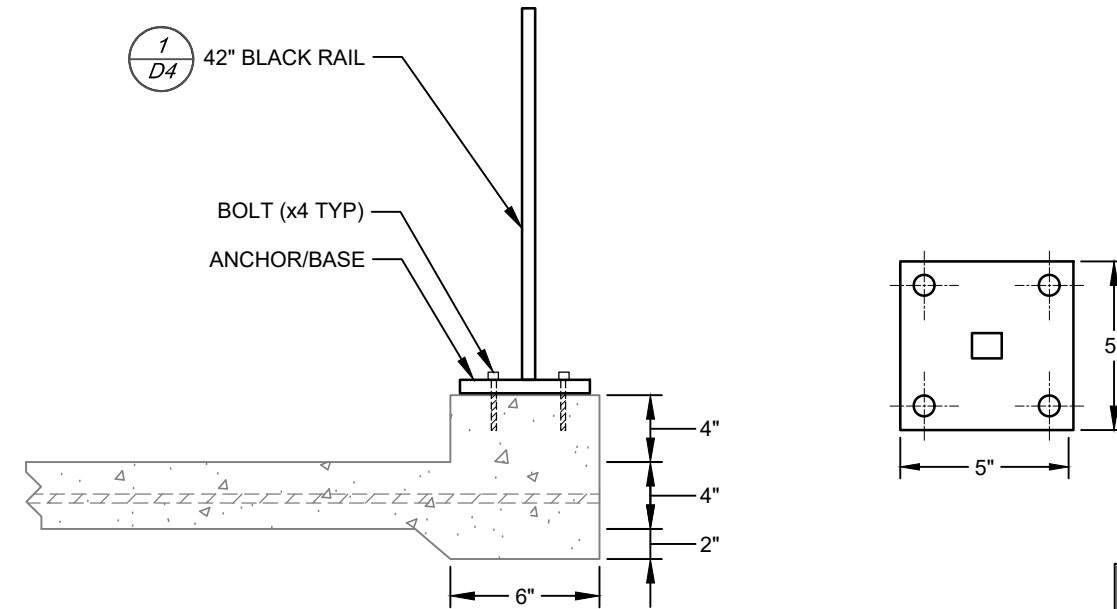
1. HILTI HIT-500 V3 EPOXY ANCHOR.



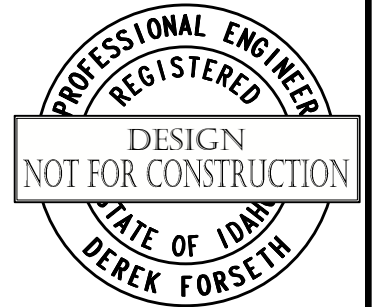
1 SLAB REBAR ANCHOR DETAIL  
SCALE: NTS

**NOTES:**

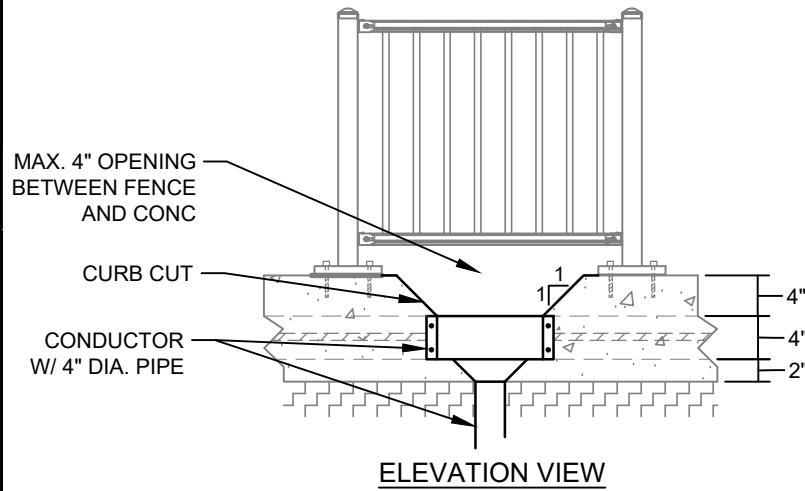
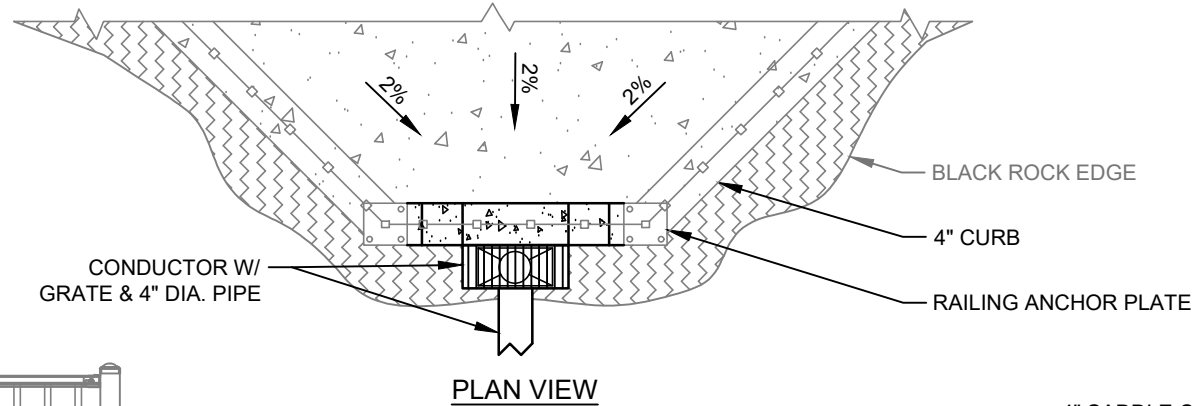
1. SEE SHEET D4 FOR MANUFACTURER SPECIFICATIONS.



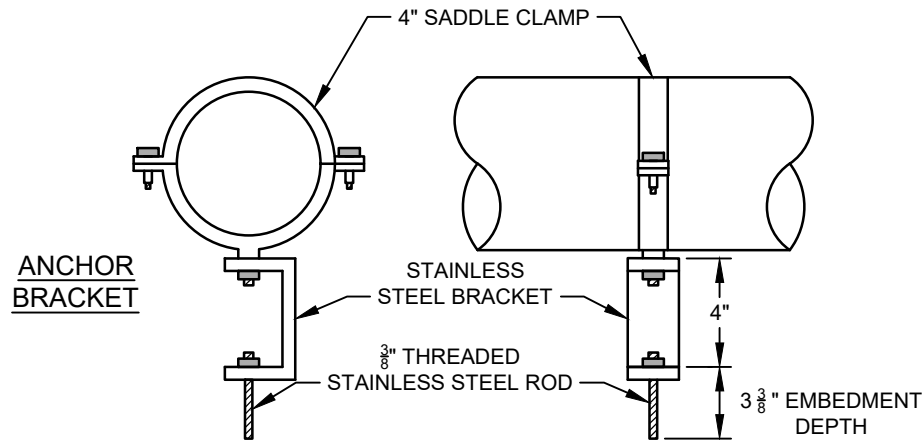
2 RAILING POST ATTACHMENT (TO CONC CURB)  
SCALE: NTS



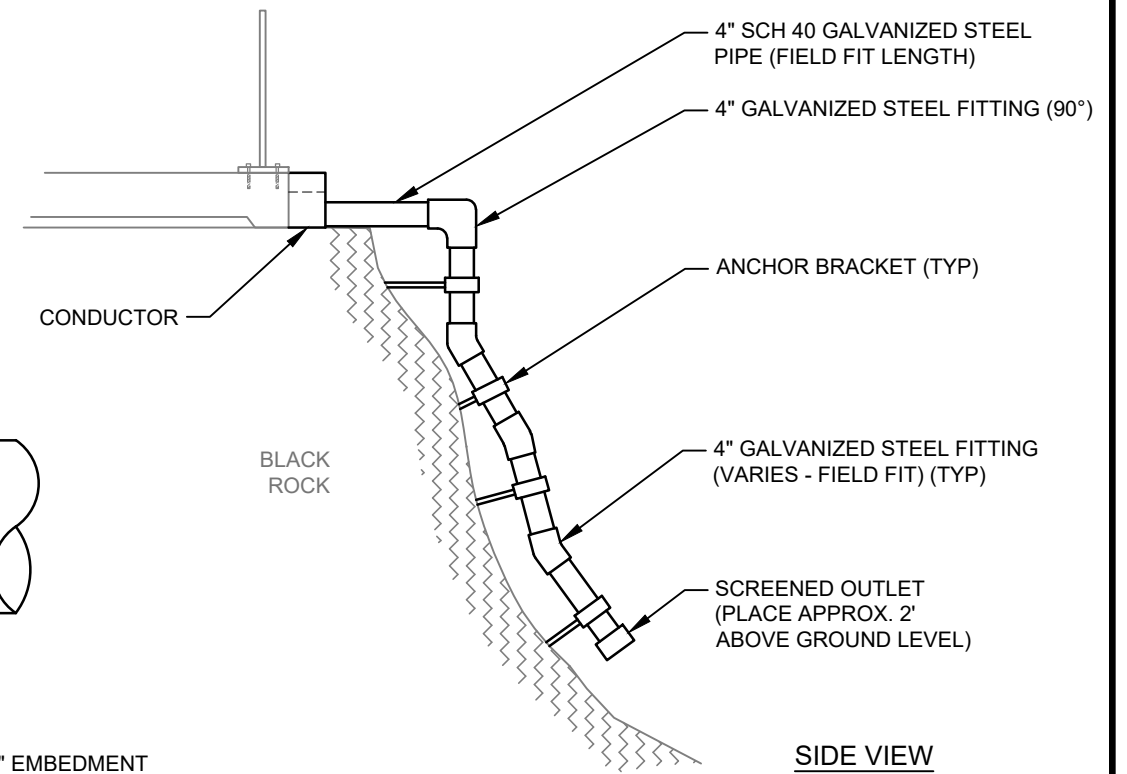
3 SLAB DRAINAGE DETAIL  
SCALE: NTS



ELEVATION VIEW



ANCHOR BRACKET



SIDE VIEW

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(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023



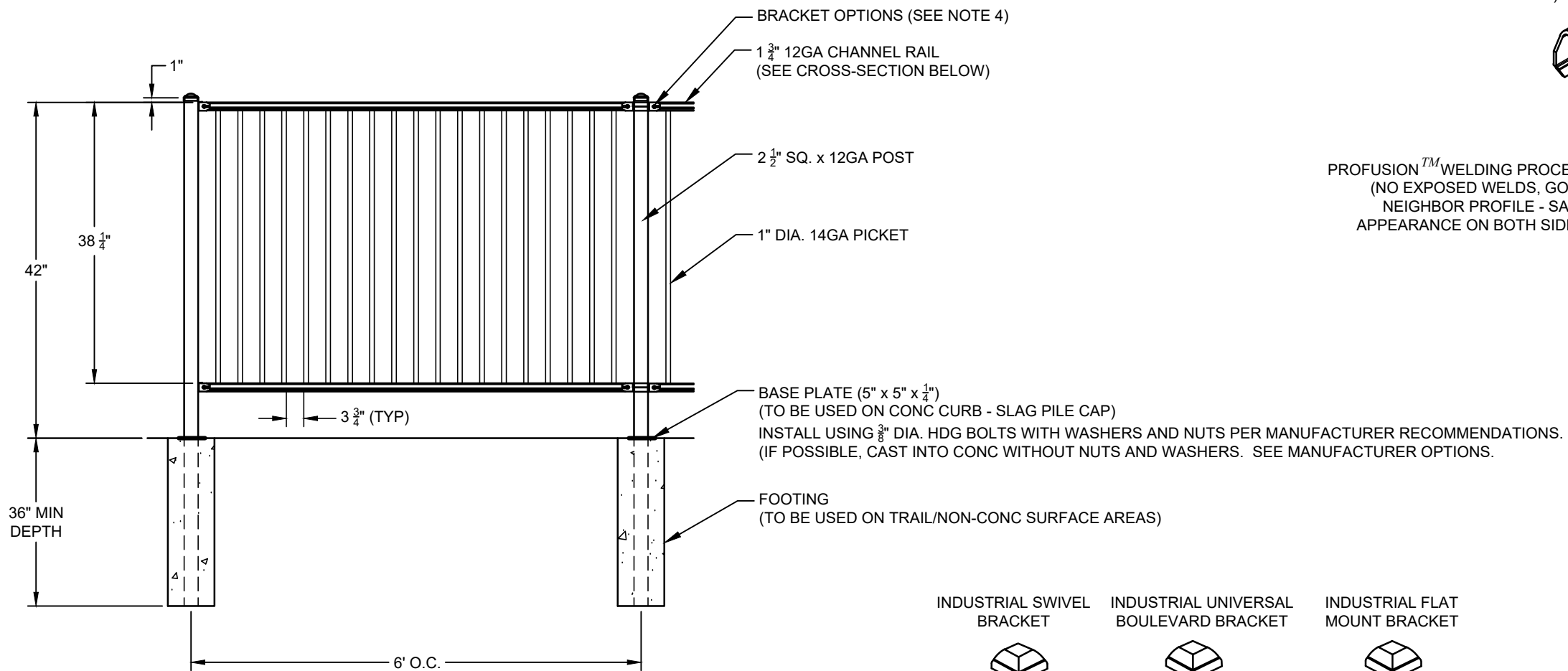
PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

SCHEDULE A  
SLAG CAP RE-SURFACE AND  
DRAINAGE DETAILS

SHEET:	D3
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	22 OF 30

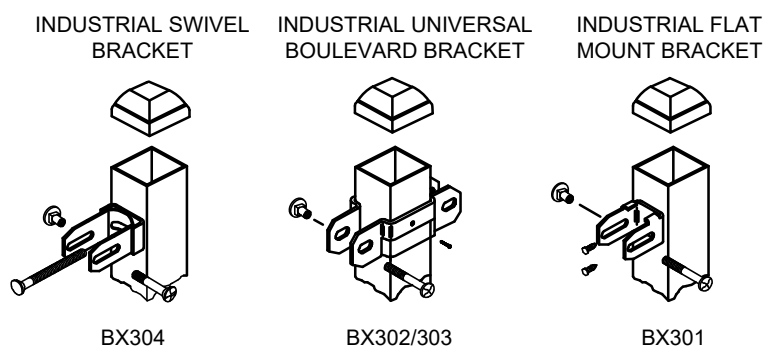
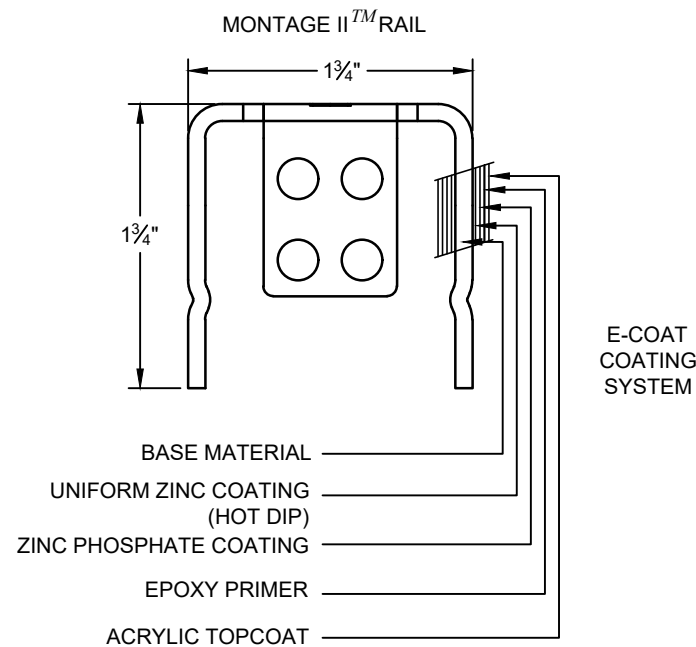
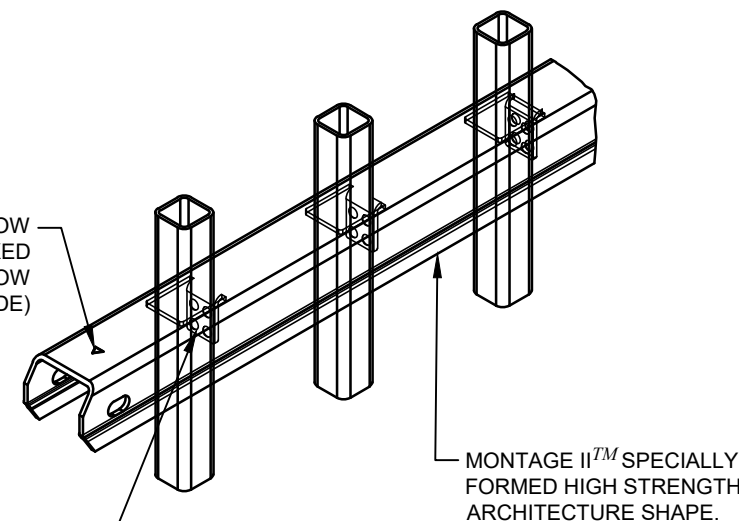
**NOTES:**

- 1.) POST SIZE DEPENDS ON FENCE HEIGHT AND WIND LOADS. SEE MONTAGE II™ SPECIFICATIONS FOR POST SIZING CHART AND DIMENSIONS.
- 2.) THIRD & FORTH RAIL OPTIONAL.
- 3.) AVAILABLE IN FLUSH BOTTOM.
- 4.) FLAT MOUNT BRACKETS MUST BE THRU-BOLTED THROUGH POST IN ORDER TO MEET LOADING REQUIREMENTS FOR IBC GUARD RAIL.



RAKING DIRECTIONAL ARROW (WELDED PANEL CAN BE RAKED 30° OVER 8" WITH ARROW POINTING DOWN GRADE)

PROFUSION™ WELDING PROCESS (NO EXPOSED WELDS, GOOD NEIGHBOR PROFILE - SAME APPEARANCE ON BOTH SIDES)



VALUES SHOWN ARE NOMINAL AND NOT TO BE USED FOR INSTALLATION PURPOSES. SEE PRODUCT SPECIFICATION FOR INSTALLATION REQUIREMENTS.

1 MONTAGE II™ RAIL  
-- SCALE: NTS

**MONTAGE II MAJESTIC 2/3/4-RAIL** 2HMISO



1555 N. Mingo  
Tulsa, OK 74116  
1-888-333-3422  
www.ameristarfence.com



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(A) XX/XX/XX	XXXX	XX	XX	DRAFTER: B. ROLLINS	COORDINATE SYSTEM: ISPW NAD83 (2011) US FT
				DESIGNER: C. MACPHERSON	SCALE: NTS
				CHECKED: D. FORSETH	APPROVED: D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE: 11/20/2023
					DATE: 11/27/2023



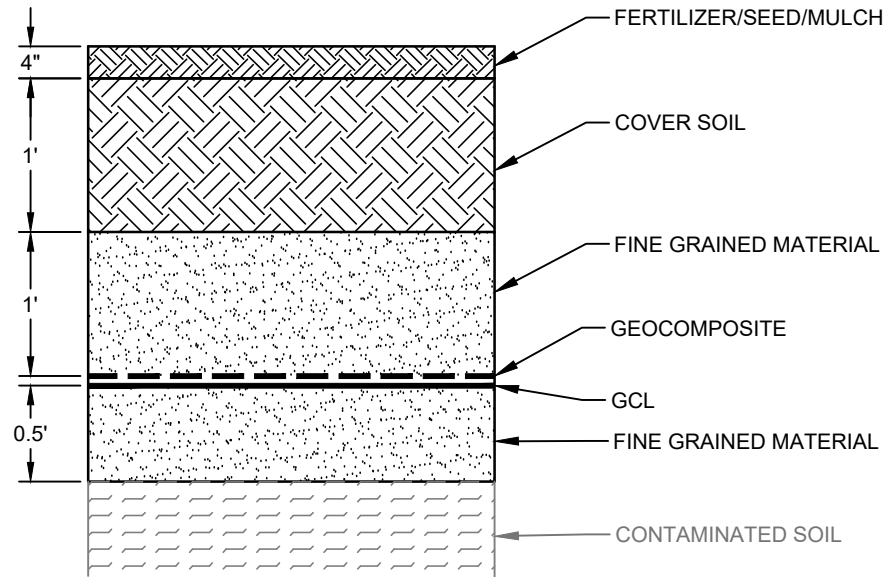
PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT

BONNER COUNTY, ID

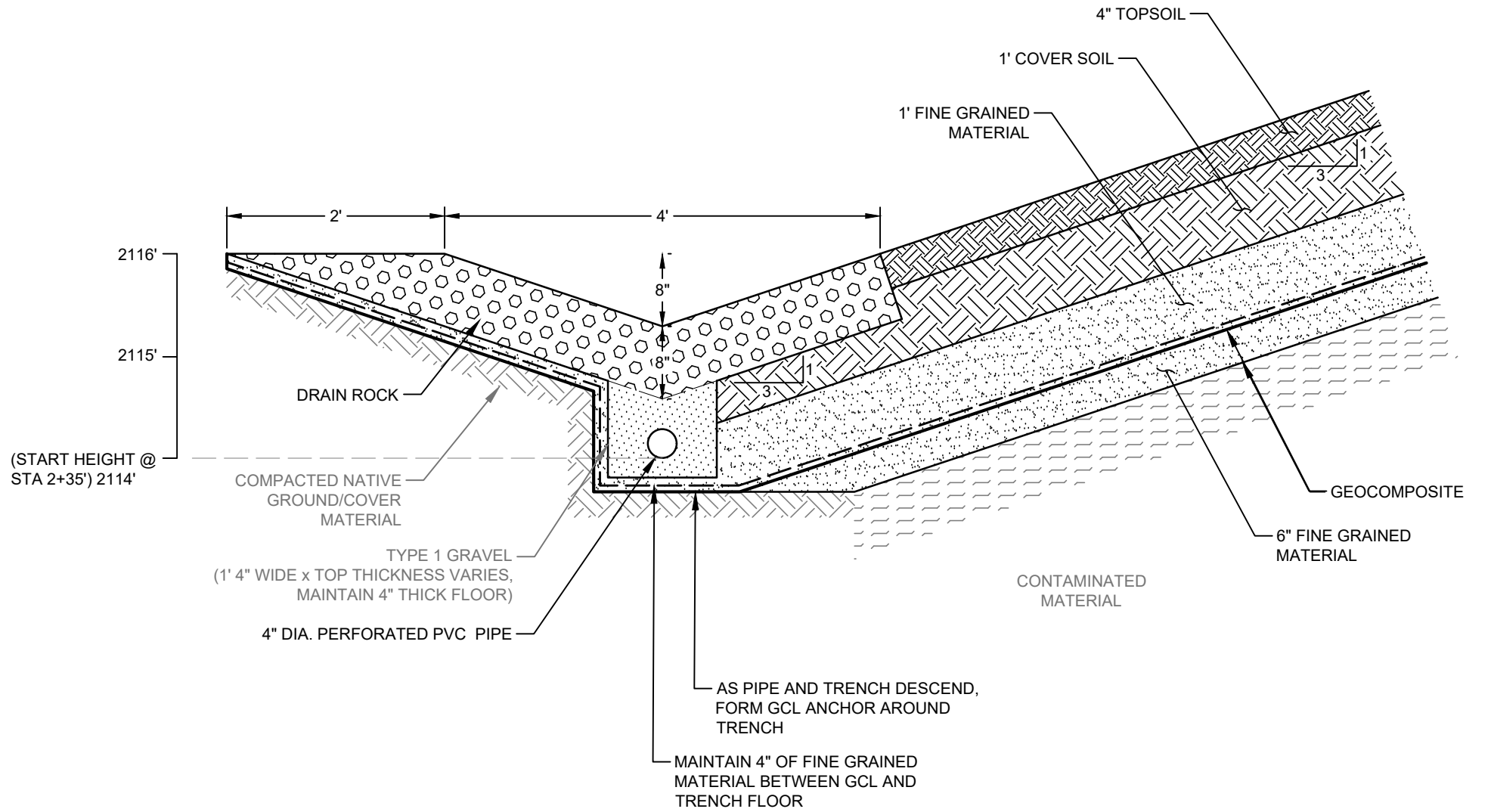
BLACK RAIL FENCING DETAILS

SHEET:	D4
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	23 OF 30

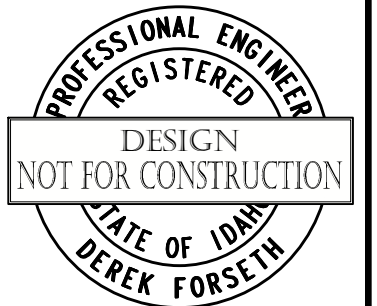
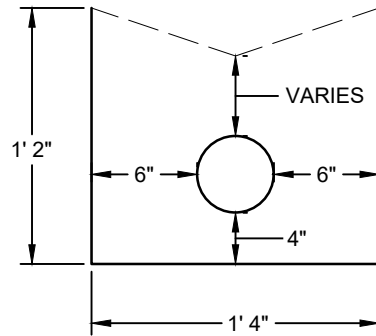
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1 PERMANENT COVER SECTION  
SCALE: NTS



2 COVER/DRAINAGE SECTION  
SCALE: NTS



(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
					DATE:	11/20/2023	DATE:	11/27/2023
NO.	DATE	REVISIONS	BY	CHK				



PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT

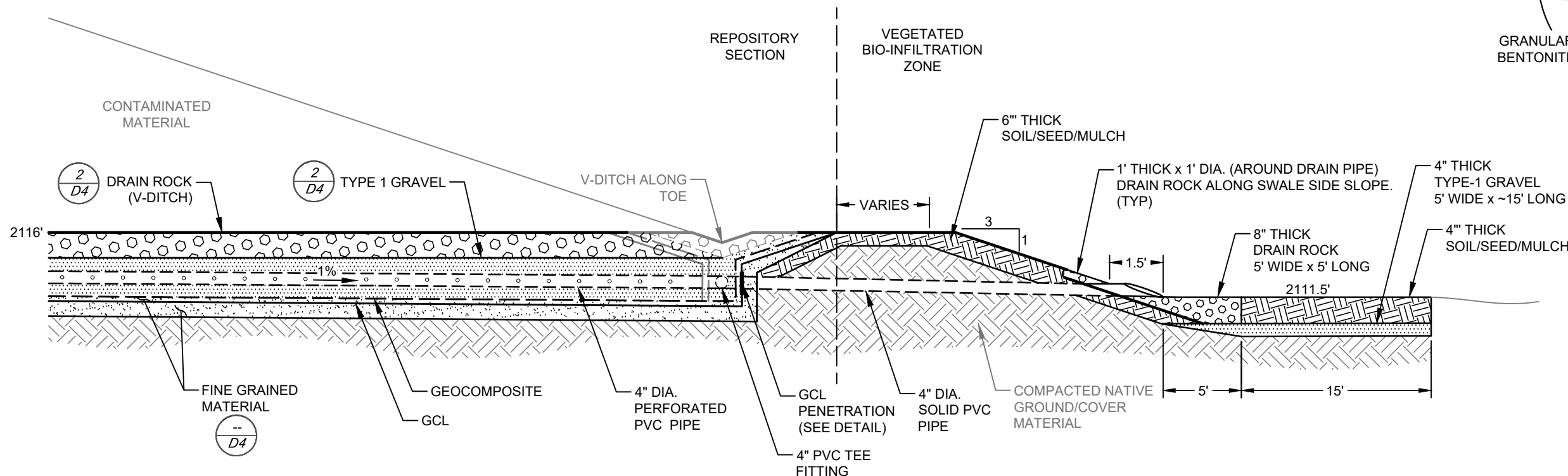
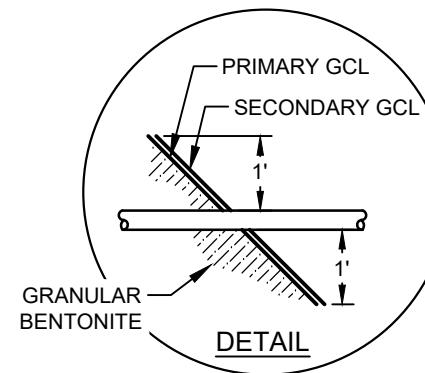
BONNER COUNTY, ID

REPOSITORY DETAILS

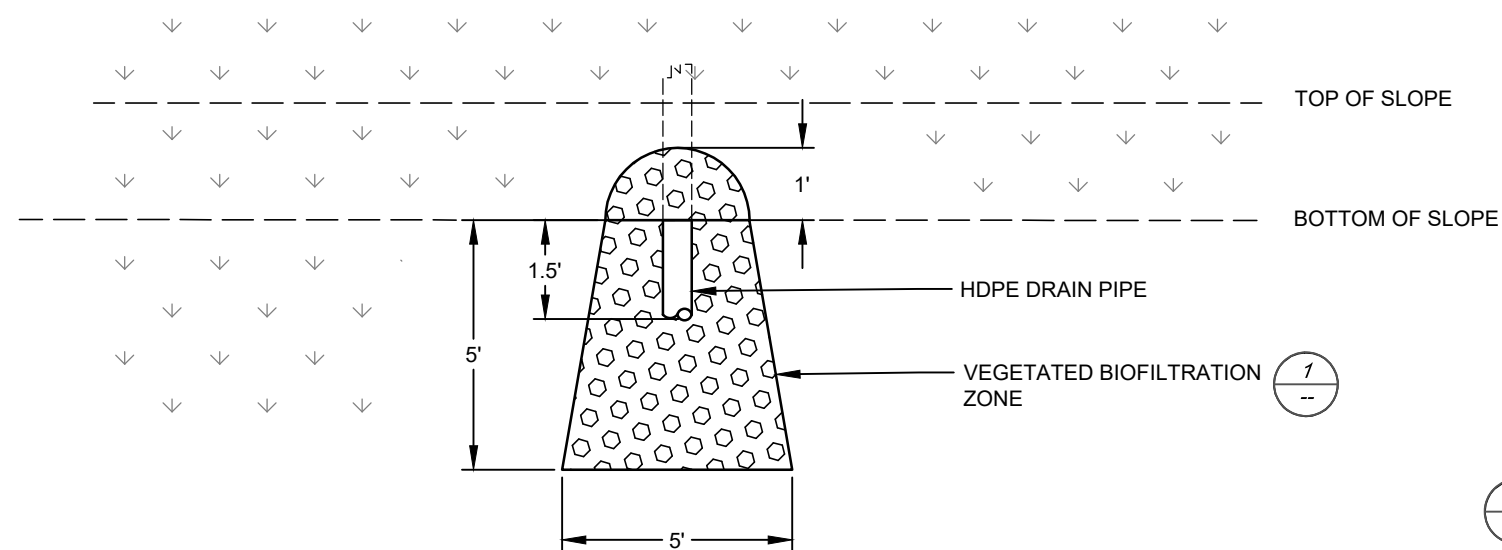
SHEET:	D5
DATE:	11/27/2023
PROJECT NO.:	22148-50
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**NOTES:**

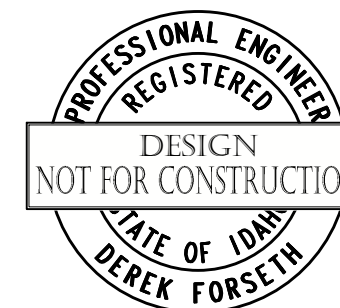
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1 REPOSITORY DRAINAGE/TOE SECTION  
SCALE: NTS



2 TOE DRAIN OUTLET  
SCALE: NTS



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(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023

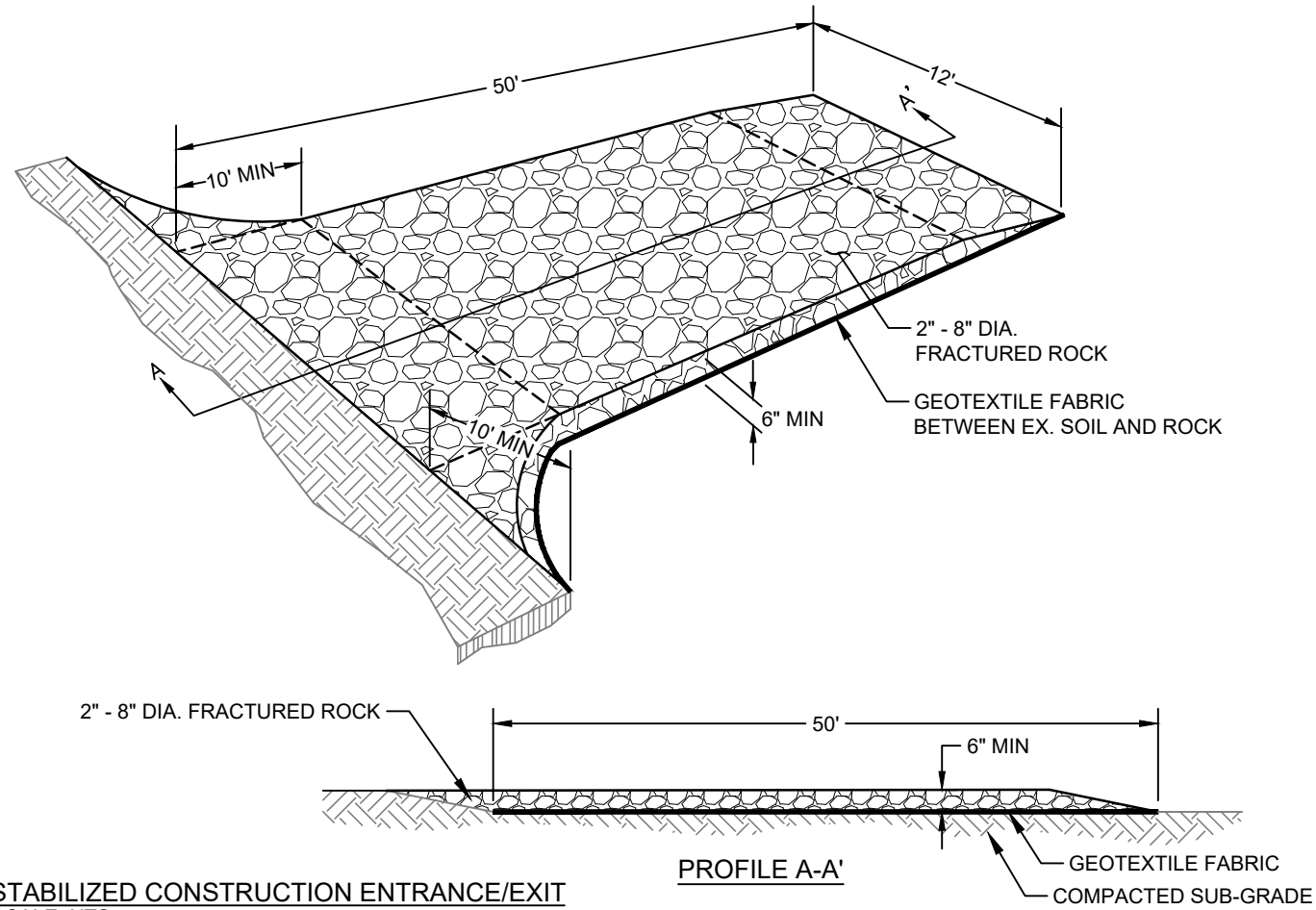


PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

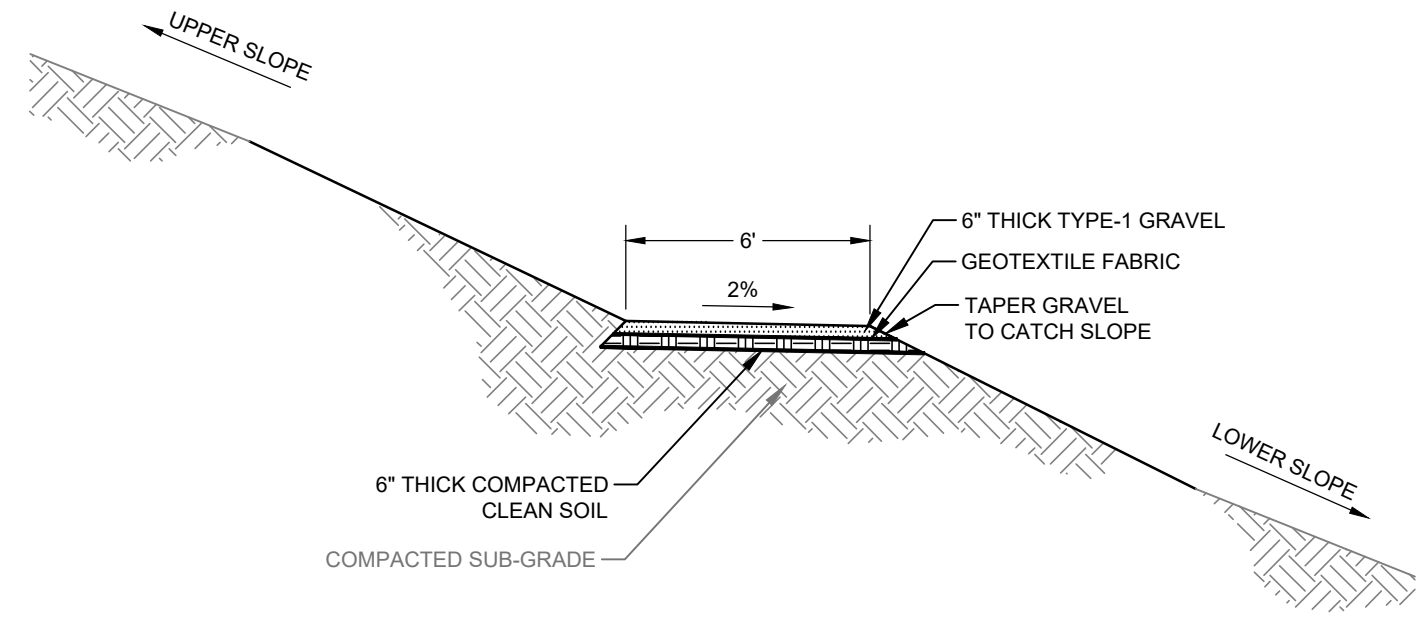
REPOSITORY DETAILS

SHEET:	D6
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	25 OF 30

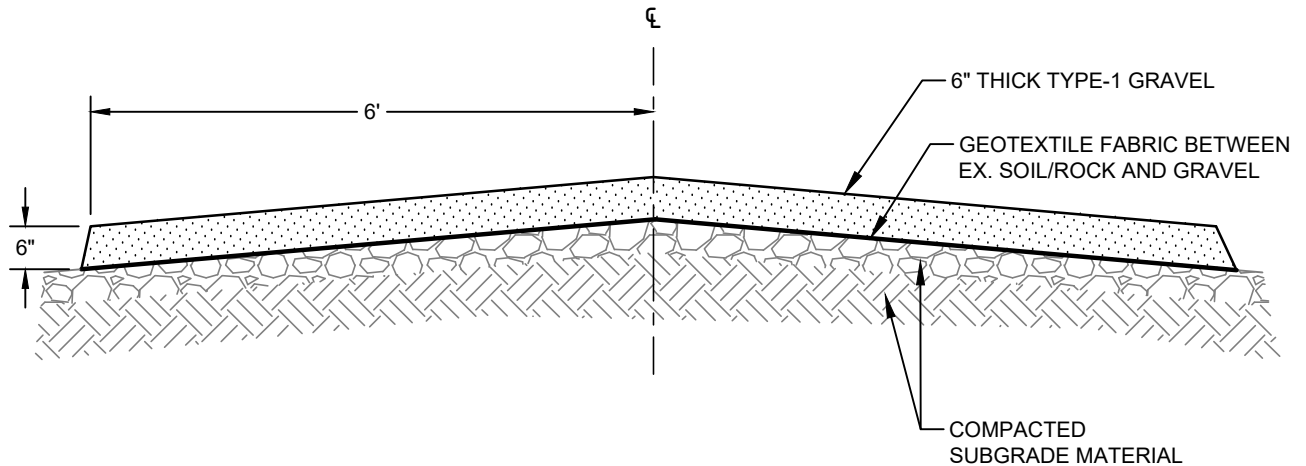
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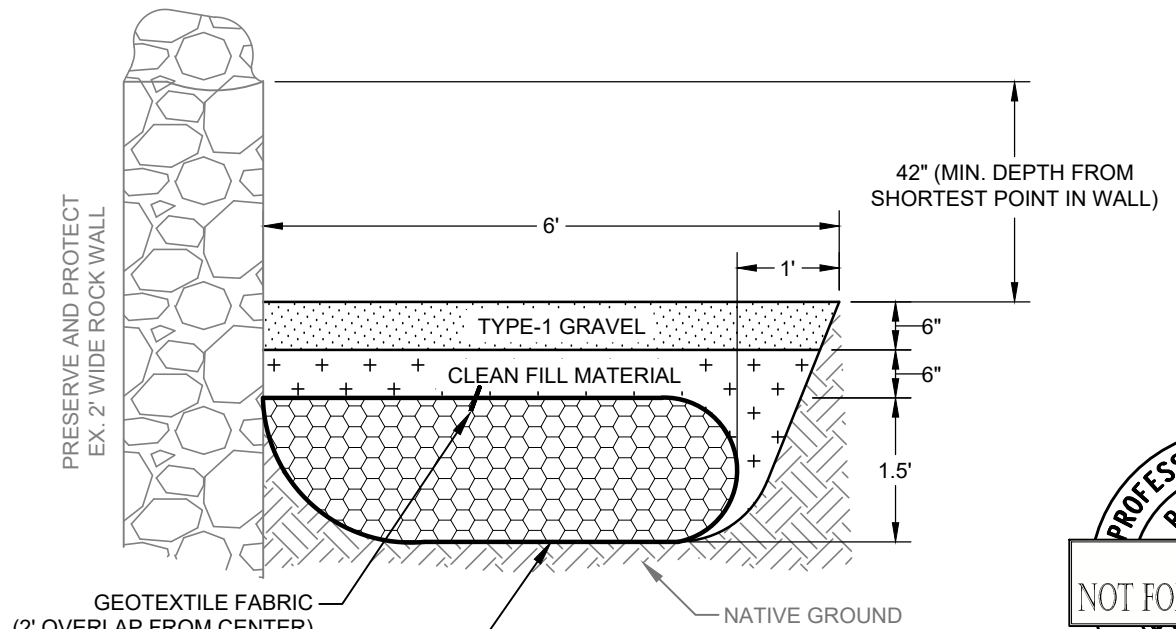
1 STABILIZED CONSTRUCTION ENTRANCE/EXIT  
SCALE: NTS



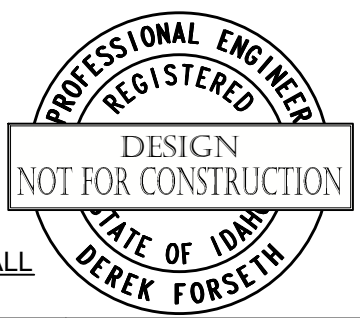
2 TYPICAL GRAVEL TRAIL CROSS-SECTION  
SCALE: NTS



3 CONSTRUCTION ACCESS PATH/NEW TRAIL SECTION  
SCALE: NTS



4 FRENCH MATTRESS - 2' ROCK WALL  
SCALE: NTS



(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
					DATE:	11/20/2023	DATE:	11/27/2023
NO.	DATE	REVISIONS	BY	CHK				



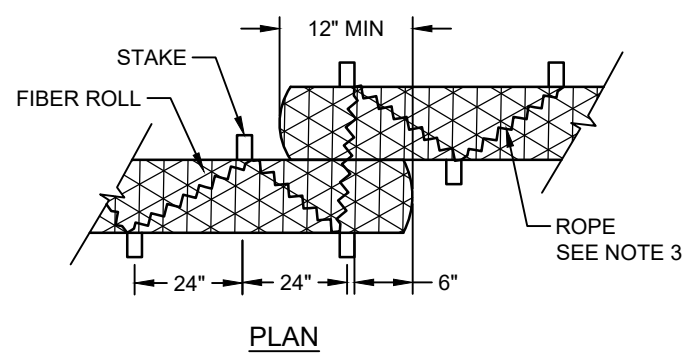
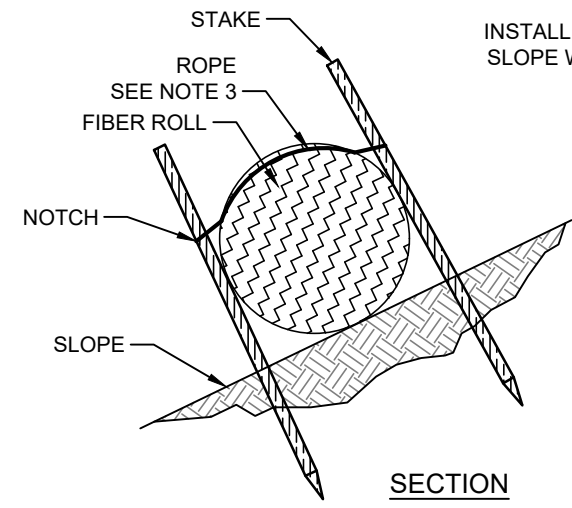
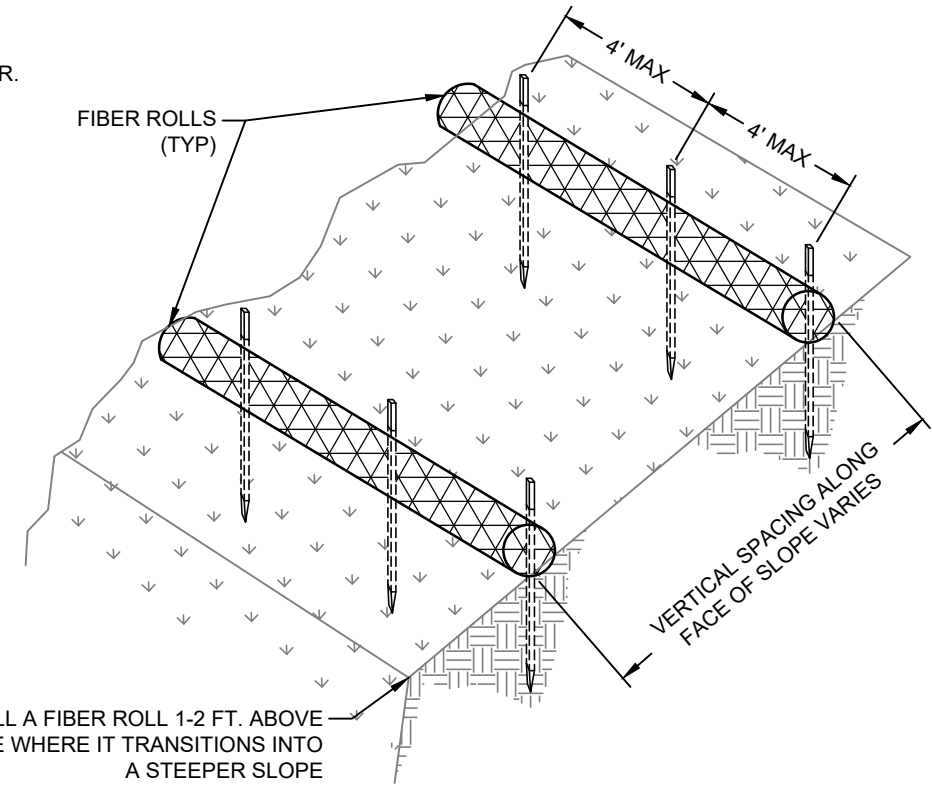
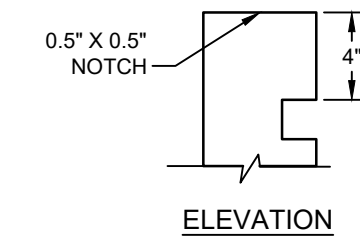
PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

CONSTRUCTION SITE ACCESS  
DETAILS

SHEET:	D7
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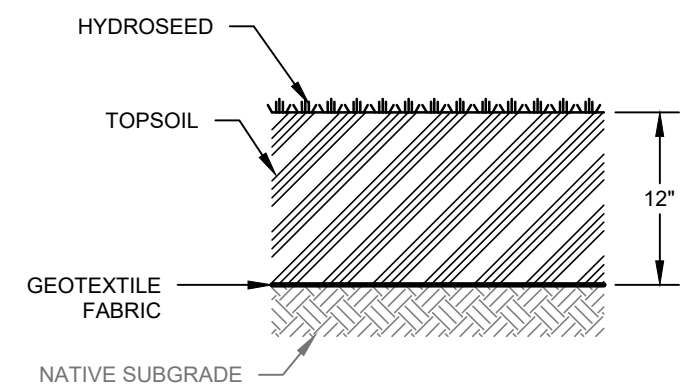
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- NOTES:**
1. INSTALL FIBER ROLL ALONG A LEVEL CONTOUR.
  2. TEMPORARY FIBER ROLL SPACING VARIES DEPENDING UPON SLOPE INCLINATION.
  3. ROPE SHALL BE A MINIMUM OF 1/4" THICK.

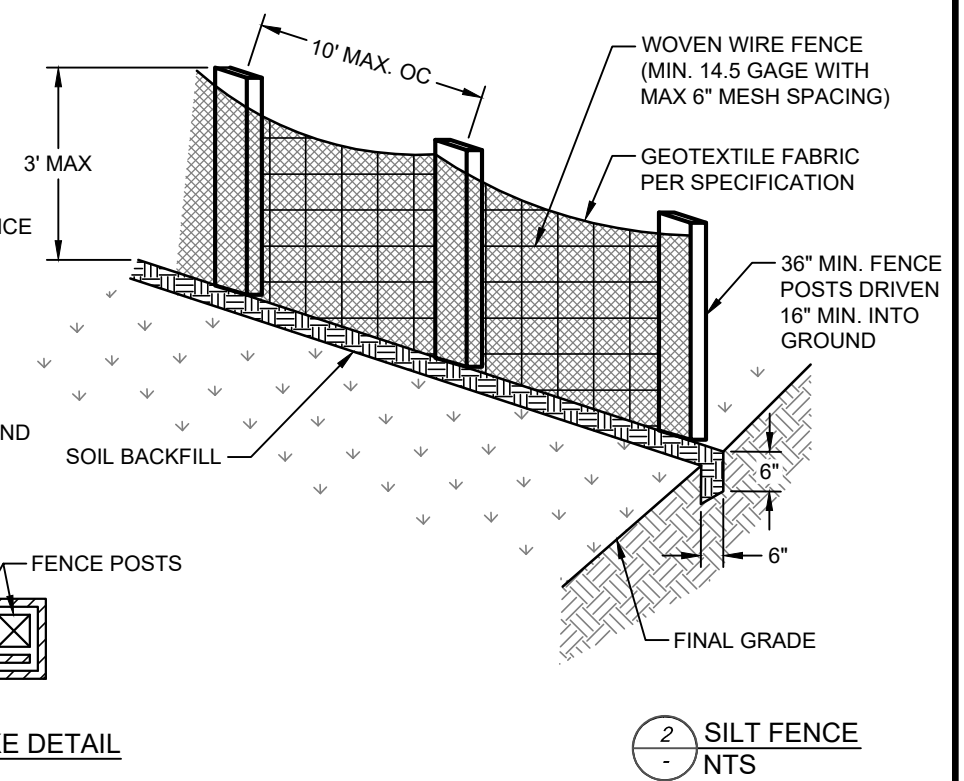
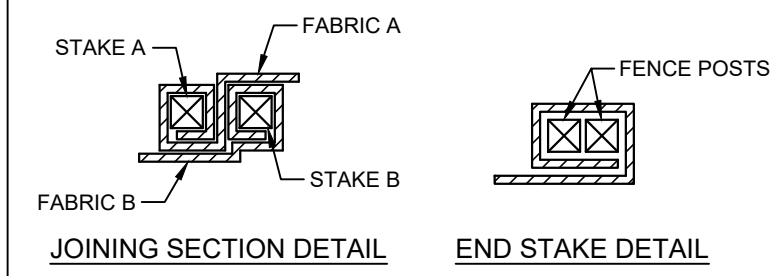


**1** TYPICAL FIBER ROLL INSTALLATION  
NTS

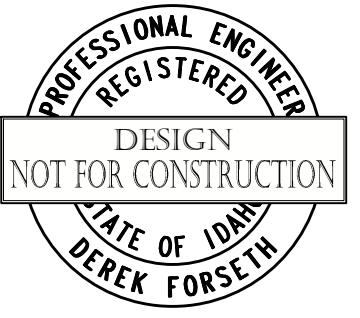
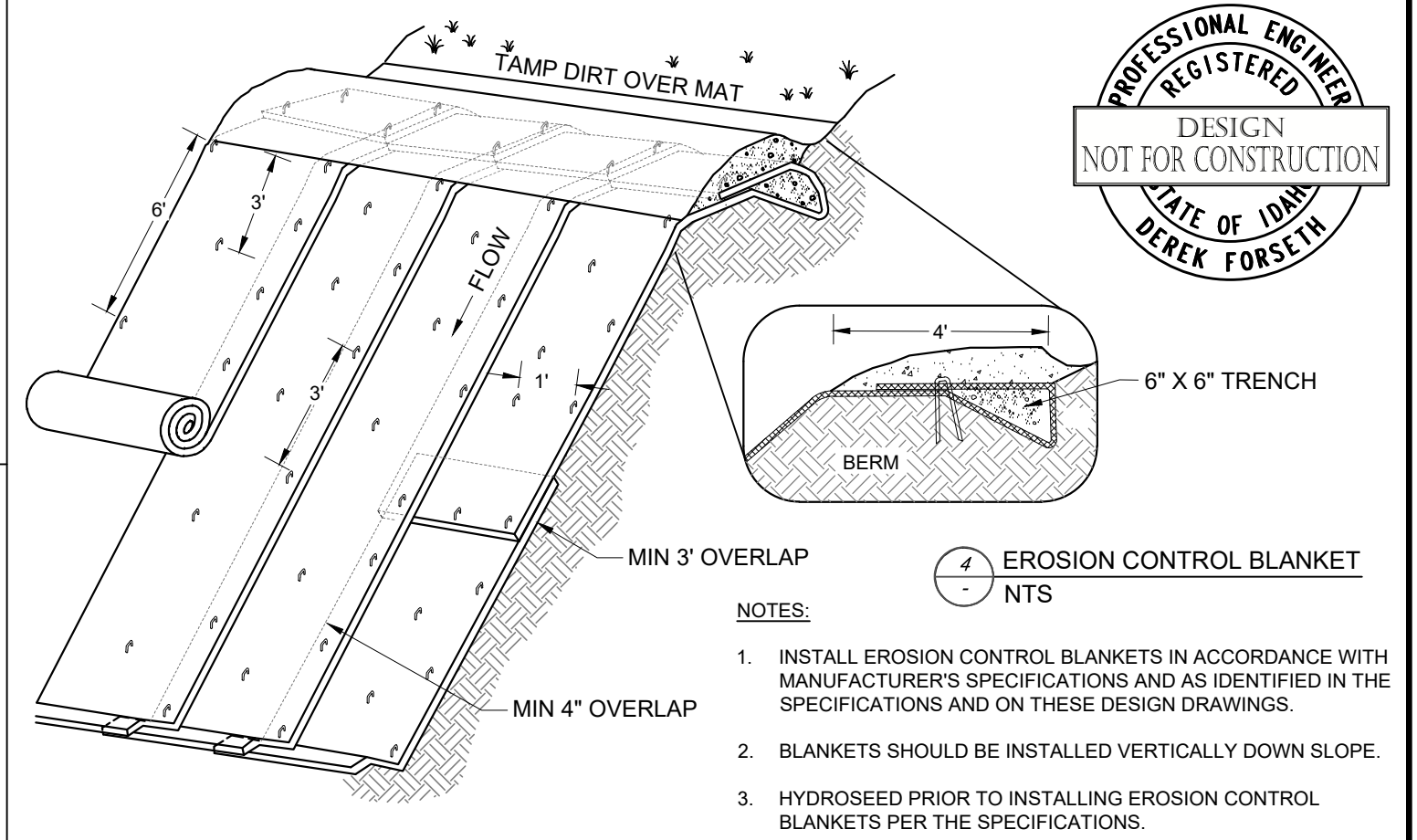
**3** SOIL COVER DETAIL  
NTS



- NOTES:**
1. WIRE MESH BACKING IS NOT REQUIRED FOR PREFABRICATED FENCING WHICH INCLUDES AN INTERNAL REINFORCING MESH.
  2. FABRIC TO LAY IN BOTTOM OF TRENCH AND PARTIALLY UP OTHER SIDE.
  3. FASTEN WOVEN WIRE FENCE SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
  4. GEOTEXTILE FABRIC SHALL BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID-SECTION.
  5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED 6" AND FOLDED.



**2** SILT FENCE  
NTS



**4** EROSION CONTROL BLANKET  
NTS

- NOTES:**
1. INSTALL EROSION CONTROL BLANKETS IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND AS IDENTIFIED IN THE SPECIFICATIONS AND ON THESE DESIGN DRAWINGS.
  2. BLANKETS SHOULD BE INSTALLED VERTICALLY DOWN SLOPE.
  3. HYDROSEED PRIOR TO INSTALLING EROSION CONTROL BLANKETS PER THE SPECIFICATIONS.

(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023



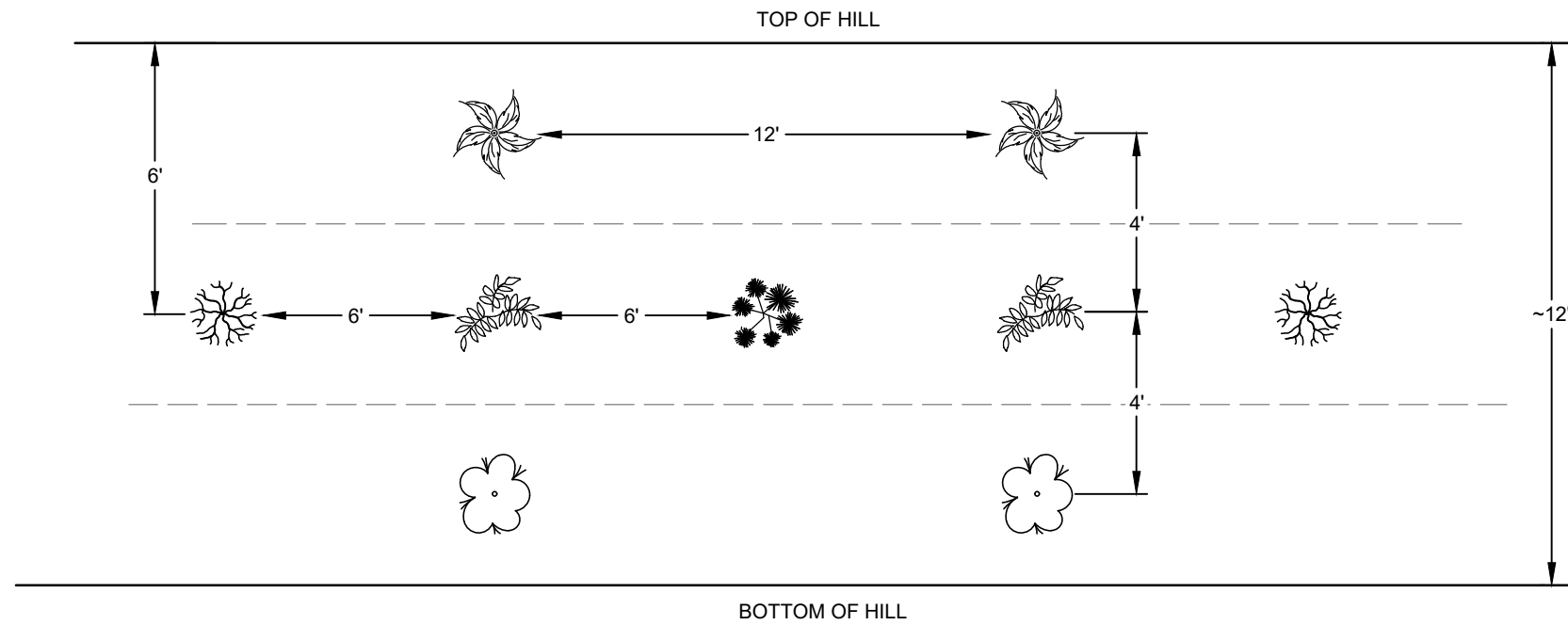
PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID






BMP DETAILS

SHEET:	D8
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	27 OF 30

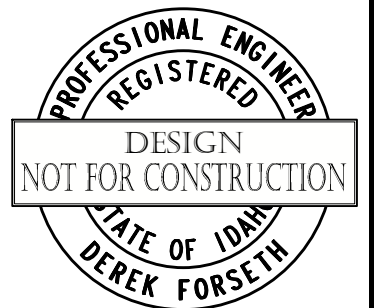
NOTES:

1. CUT APPROXIMATELY SIZED HOLES IN EROSION CONTROL BLANKETS BEFORE PLANTING.
2. SEE SEEDING AND PLANTING SPECIFICATIONS FOR BED PREPARATION AND PLANTING INSTRUCTIONS.
3. ENSURE THAT PLANTINGS HAVE ADEQUATE SPACE FROM FIBER ROLLS AND TRAILS.
4. ALTERNATE RED OSIER DOGWOOD AND RED TWINBERRY BUSHES AS SHOWN.



-  MALLOW NINEBARK BUSH (4' OC)
-  RED OSIER DOGWOOD BUSH (6' OC)
-  CRANBERRY HIGH BUSH (4' OC)
-  RED TWINBERRY BUSH (6' OC)
-  CINQUEFOIL BUSH (4' OC)

1 VEGETATION PLANTING  
SCALE: NTS



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(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023



PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

SEEDING/RE-VEGETATION  
DETAILS

SHEET:	D9
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	28 OF 30

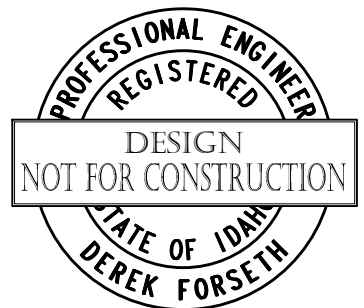
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POINT NO.	EASTING	NORTHING	DESCRIPTION
1	2,434,202.55	2,419,694.40	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
2	2,434,323.16	2,419,854.79	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
3	2,434,453.51	2,420,024.11	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
4	2,434,519.35	2,420,099.67	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
5	2,434,616.31	2,420,098.83	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
6	2,434,704.69	2,420,097.99	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
7	2,434,703.60	2,420,047.55	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
8	2,434,641.13	2,420,018.44	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
9	2,434,627.66	2,419,999.35	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
10	2,434,642.03	2,419,930.26	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
11	2,434,601.12	2,419,838.97	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
12	2,434,525.73	2,419,759.64	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
13	2,434,474.43	2,419,693.53	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
14	2,434,485.03	2,419,682.64	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
15	2,434,531.77	2,419,714.18	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
16	2,434,631.22	2,419,793.56	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
17	2,434,652.50	2,419,837.57	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
18	2,434,709.17	2,419,913.58	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
19	2,434,728.05	2,419,908.82	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
20	2,434,732.38	2,419,892.33	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
21	2,434,699.72	2,419,856.50	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
22	2,434,673.22	2,419,815.68	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
23	2,434,677.17	2,419,780.64	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
24	2,434,648.83	2,419,717.17	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
25	2,434,592.75	2,419,688.33	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
26	2,434,552.31	2,419,690.33	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
27	2,434,508.76	2,419,672.69	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
28	2,434,449.71	2,419,651.88	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
29	2,434,382.38	2,419,618.42	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
30	2,434,374.20	2,419,634.51	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
31	2,434,422.29	2,419,709.17	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
32	2,434,382.17	2,419,731.99	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
33	2,434,344.89	2,419,731.09	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY
34	2,434,219.05	2,419,678.72	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY

1 CLEARING AND GRUBBING BOUNDARY POINTS  
SCALE: NTS

POINT NO.	EASTING	NORTHING	DESCRIPTION
600	2,434,319.58	2,419,846.70	OUTER REPOSITORY BOUNDARY MARKER
601	2,434,520.23	2,420,097.66	OUTER REPOSITORY BOUNDARY MARKER
602	2,434,613.96	2,420,096.82	OUTER REPOSITORY BOUNDARY MARKER
603	2,434,612.55	2,420,040.27	OUTER REPOSITORY BOUNDARY MARKER
604	2,434,470.83	2,419,925.36	OUTER REPOSITORY BOUNDARY MARKER
605	2,434,437.74	2,419,900.80	OUTER REPOSITORY BOUNDARY MARKER
606	2,434,366.32	2,419,811.56	OUTER REPOSITORY BOUNDARY MARKER

2 REPOSITORY BOUNDARY POINTS  
SCALE: NTS



(A)	XX/XX/XX	XXXX	XX	XX	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	11/20/2023	DATE:	11/27/2023



PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
  
BONNER COUNTY, ID

CLEARING & GRUBBING  
BOUNDARY POINTS

SHEET:	T1
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	29 OF 30

NOTES:

1. QUANTITIES SHOWN ARE APPROXIMATE. REFER TO CONTRACT SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN THE QUANTITIES SHOWN ON THIS SHEET AND THE BID FORM, THE BID FORM SHALL PREVAIL. MEASUREMENT AND PAYMENT SHALL BE PER THE CONTRACT DOCUMENTS.

SCH.	CLEARING AND GRUBBING	UNIT	QTY
A	ACCESS ROAD	ACRES	0.1
A	CONSTRUCTION ENTRANCE/EXIT + UPPER BENCHES	ACRES	3.1
<b>A</b>	<b>TOTAL</b>	<b>ACRES</b>	<b>3.2</b>

SCH.	EXCAVATION	UNIT	QTY
A	CONSTRUCTION ENTRANCE/ACCESS	BCY	296
B	CONTAMINATED SOIL	BCY	3494
B	AVAILABLE BORROW FOR COVER	BCY	2974
<b>A</b>	<b>TOTAL</b>	<b>BCY</b>	<b>296</b>
<b>B</b>	<b>TOTAL</b>	<b>BCY</b>	<b>6469</b>

SCH.	GEOTEXTILE (8 OZ NON-WOVEN)	UNIT	QTY
A	SHORELINE PROTECTION (TOP/TRAIL)	SY	782
A	SHORELINE PROTECTION (BOTTOM/GROUND)	SY	2249
A	CONSTRUCTION ENTRANCE/ACCESS	SY	293
A	CONCRETE SLAB TOE	SY	54
B	REPOSITORY	SY	5055
B	VEGETATED BIOINFILTRATION ZONES	SY	44
B	TRAILS	SY	754
B	FRENCH MATRESS	SY	130
<b>A</b>	<b>TOTAL</b>	<b>SY</b>	<b>3031</b>
<b>B</b>	<b>TOTAL</b>	<b>SY</b>	<b>5984</b>

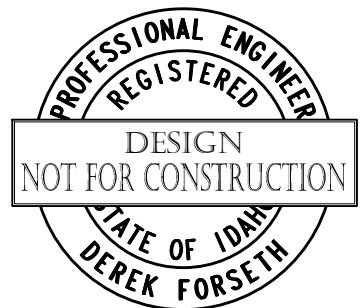
SCH.	CLEAN SOIL (NOT FROM SITE BORROW)	UNIT	QTY
B	CLEAN SOIL	LCY	650

SCH.	3/4" MINUS GRAVEL	UNIT	QTY
A	CONCRETE CAP TOE DRAIN	CY	1
A	SHORELINE PROTECTION	CY	81
A	CONSTRUCTION ENTRANCE/EXIT ROAD	CY	49
B	RE-GRAVEL ACCESS ROAD (POBT)	CY	489
B	FUTURE TRAIL (FORMER CONSTRUCTION ENTRANCE/EXIT)	CY	49
B	NEW TRAILS	CY	138
B	REPOSITORY UNDERDRAINS	CY	121
B	REPOSITORY BIO-INFILTRATION ZONES	CY	7
<b>A</b>	<b>TOTAL</b>	<b>CY</b>	<b>132</b>
<b>B</b>	<b>TOTAL</b>	<b>CY</b>	<b>805</b>

SCH.	8" DRAIN ROCK	UNIT	QTY
B	RUN-ON DITCH	CY	124
B	FRENCH MATRESS	CY	20
<b>B</b>	<b>TOTAL</b>	<b>BCY</b>	<b>144</b>

SCH.	RIPRAP	UNIT	QTY
A	SHORELINE PROTECTION (LAKE SIDE)	CY	914
A	SHORELINE PROTECTION (LAND SIDE)	CY	56
<b>A</b>	<b>TOTAL</b>	<b>CY</b>	<b>971</b>

SCH.	QUARRY SPALL	UNIT	QTY
A	SHORELINE PROTECTION	CY	2010
<b>A</b>	<b>TOTAL</b>	<b>CY</b>	<b>2010</b>



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(A) XX/XX/XX	XXXX	XX	XX	DRAFTER: B. ROLLINS	COORDINATE SYSTEM: ISPW NAD83 (2011) US FT
				DESIGNER: C. MACPHERSON	SCALE: AS NOTED
				CHECKED: D. FORSETH	APPROVED: D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE: 11/20/2023
					DATE: 11/27/2023



PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

APPROXIMATE QUANTITIES

SHEET:	T2
DATE:	11/27/2023
PROJECT NO.:	22148-50
SHEET NO.:	30 OF 30