



February 20, 2024

Eric Scott
Colorado Division of Reclamation, Mining, and Safety
1313 Sherman St, Rm. 215
Denver, CO, 80203

**M2003-001 Nissen TR3
Adequacy Response 1**

Mr. Scott,

This letter addresses all adequacy items from the February 2, 2024 Adequacy Review Letter 1. An updated application, bond calc, and maps are also attached.

Sincerely,

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

Devon Glosser
Land & Resource Supervisor
Burnco Colorado, LLC

2) Proposed updates to Reclamation Plan:

b. The second item proposed by TR3 is: to leave in place, topsoil, and revegetate any excess overburden and topsoil stockpiles that cannot be sold commercially, or utilized in the site reclamation, and leave them as a permanent feature on the site. DRMS cannot approve this modification to the reclamation plan at this time. Contrary to what is currently shown on the provided maps, the current FEMA National Flood Hazard map indicates that the majority of the site is within the regulatory floodway of the South Platte River. The remaining area of the site is within the 100yr floodplain. The site must be returned to approximate original grade (or below) during reclamation unless approval for modifications to the site topography are obtained from the appropriate floodplain regulatory authority (Weld County) and provided to DRMS through a technical revision. No stockpiles may remain on-site after reclamation until such TR is approved. Please acknowledge.

Removed language regarding stockpiles being left as permanent features. All stockpiles will be removed from the site.

3) Updates to Mining and Reclamation Maps:

a. All updated mining and reclamation plan maps must comply with the requirements for exhibits in Rule 6.2.1(2). Neither of the maps provided have a map scale, or signatures of the qualified person that prepared them. Please update as needed.

Added map scales and signatures to each map.

b. Both Mining and Reclamation Plan maps are required to show existing (mining) and proposed (reclamation) topography sufficient to show elevations, direction, and slopes of the affected land. Please add this information to the provided maps, or submit additional maps to show this data.

Added additional map including all existing mining contours and proposed reclamation contours.

c. Please update both maps to reflect the current FEMA flood hazard designations for the site.

Updated maps to reflect the current floodplain.

d. The current reclamation plan does not contemplate exposed groundwater or a permanent augmentation plan for the wetlands area currently shown on the updated mining and reclamation plan maps. The only water body will be the lined reservoir. The wetland area on the provided maps is shown where settling pond was originally planned, but is now under a large stockpile. Please remove the wetland area from the maps, or provide sufficient detail in the reclamation plan as to how the wetland will be created and how the resulting groundwater exposure permanently augmented to comply with SEO requirements.

Removed wetland area from maps.

e. The notes provided for the maps which contain the reclamation seed mixes denote four different seed mix types: upland, pond area, wetland, and upland for tree/shrub (210 shrubs and 20 trees). Please show on the reclamation map TR3 Adequacy Review 1 Nissan Farm Resource (Permit M2003-001) Page 3 of 3 the areas/acreages where these mixes will be used. You will also need to specify the numbers and size (1 gallon, 3 gallon etc.) of trees/shrubs of each type per acre to be planted and show approximate tree shrub planting areas on the reclamation plan map. Please note that planting trees/shrubs too close to a lined reservoir may jeopardize the integrity of the liner if it is impacted by root growth.

Removed pond area and wetland seeding from the tables. Upland area seed mix and planting requirements remain. Added notes to map showing area and acreage where seeding will take place and location of shrub planting. Shrub planting was originally all inside of the slurry walls on sections that are removed. Included new reduced shrub planting along the north edge of the property where space remains to protect the slurry wall.

f. What is the feature on the east side of both maps outlined with the “%” symbol? Please add this to the legend or remove from the maps as appropriate.

Removed % feature from maps.

4) Updates to Proposed Reclamation Bond Calculation:

DRMS will review the bond calculations as needed when the remaining adequacy issues are resolved. Please note that an accurate bond calculation will require the determination of how much excess stockpile material (if any) will need to be removed from the site to preserve pre-mining elevations as outlined in item 2b, as well as accurate responses to items 3d and 3e listed above.

Updated bond calc to include changes to reclamation seeding.



Technical Revision #3

Nissen Farm Resource

Permit M2003-001

S12-T5N-R65W (Parcel: 096112300016)
Weld County

BURNCO Colorado, LLC.

January February 20, 2024

BURNCO Colorado LLC (BURNCO) is submitting this Technical Revision (TR3) to propose changes to the Nissen Farm Resource Mine Plan Map, the Reclamation Plan Map, and to provide updated calculations for the reclamation cost estimate. The following changes are being proposed:

- *Mine Plan*
 - Gas Wells: The onsite gas wells within the DRMS permit boundary have been decommissioned. The wells have been cut and capped 1m below existing ground level. Mining is now proposed in these areas, and once excavation is complete, the wells will be cut and recapped no less than 1m below the then grade of the finished water storage pond. These onsite wells include:
 - Well 1 (Law 1-85); and
 - Well 2 (Merit 9-12).
 - Gas Lines and Facilities: As part of the decommissioning of the above noted wells, all remaining gas lines and facilities which had previously been located on site have been removed. As a result of these removals, mining is now proposed in these areas. These include:
 - Gas Line Valves;
 - Petroleum Development Tank Batteries;
 - Merit Energy Petroleum Facility;
 - Gas line running between former Phase 1 and former Phase 2b; and
 - Gas line running between former Phase 2a and former 2c.
 - Mine Phasing: The mine plan is being amended to include the above noted areas. Additionally, the phasing has been updated to reflect changes to the reclamation plan as will be discussed below. In general, the phasing plan now reflects that the area being used for processing and stockpiles, will continue as a plant/processing area for the duration of the project. This area will be the last area to be mined out as part of the project.
 - Overburden and topsoil stockpile locations have been identified along the perimeter of the mining area. These locations are ideal for temporary storage of excess overburden and topsoil from the project. All stockpiles will be removed from the site and returned to original grade before reclamation.
- *Reclamation Plan*
 - Water Storage: With onsite gas facilities no longer a constraint, the reclamation plan is being amended to reflect a single water storage cell. There will no longer be any interior slurry walls or separate water storage cells developed within the large slurry wall which is already constructed around the perimeter of the mining area.
- *Reclamation Cost Estimate*
 - Updated Reclamation Estimate: The reclamation cost estimate was last reviewed in 2018 and was calculated as \$402,016.90. An updated reclamation cost estimate has been provided as part of this technical revision and is calculated as \$326,694.09.

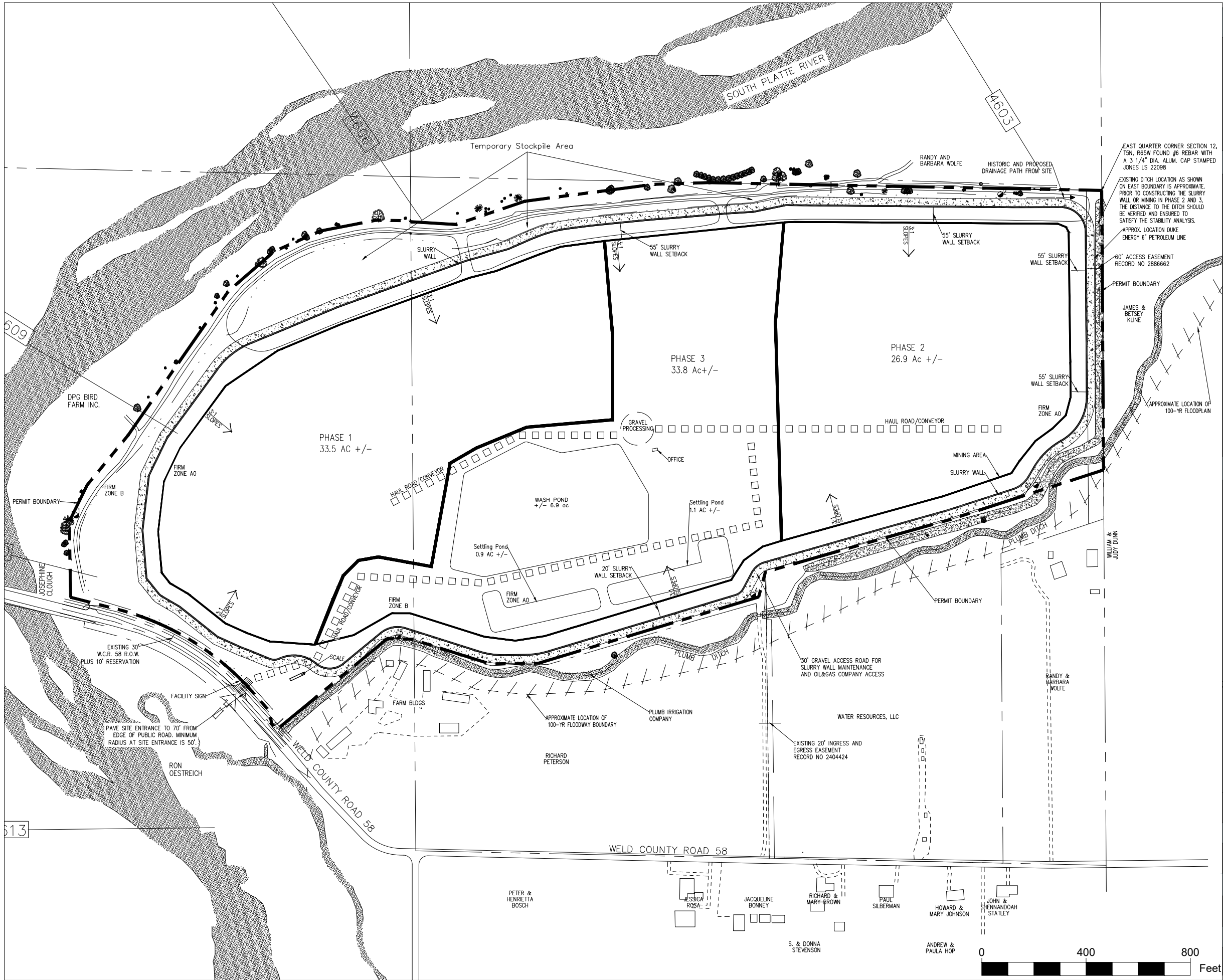
If you have any questions or concerns regarding this revision, please contact the undersigned at devon.glosser@burnco.com.

Sincerely,

A handwritten signature in black ink that reads "Devon Glosser". The signature is written in a cursive style with a large, stylized 'D' and 'G'.

Devon Glosser
Land and Resource Supervisor
BURNCO Colorado, LLC.

Nissen Farm Resource - Table for Reclamation/Bonding Cost Estimate (2024-02-16)				
M-2003-001				
Activity	Quantity	Units	Unit Costs	Cost
A. Shoreline (full project)				
Final grade and place 6" topsoil (perimeter of water storage)	35,574	CY	\$ 2.05	\$ 72,926.70
Seed and mulch (perimeter of water storage)	24.5	Acres	\$ 977.00	\$ 23,936.50
Scarify ground (perimeter of water storage)	24.5	Acres	\$ 150.00	\$ 3,675.00
Shrub Planting	100	Ea	\$ 100.00	\$ 10,000.00
			Subtotal	\$ 110,538.20
B. Processing Area				
Remove concrete pads for onsite scale and plant equipment	750.00	CY	\$ 50.00	\$ 37,500.00
Remove & haul off scale	1	LS	\$ 10,000.00	\$ 10,000.00
Remove & haul off plant	1	LS	\$ 30,000.00	\$ 30,000.00
			Subtotal	\$ 77,500.00
Total Disturbance Costs				\$ 188,038.20
Indirect Costs				
Overhead & Profit				
Performance Bond (2.02%) - Based on DRMS estimate				\$ 3,798.37
Performance Bond (3.07%) - Based on DRMS estimate				\$ 5,772.77
Job Superintendent (280 hours @ \$75/hr) - Based on DRMS estimate				\$ 21,000.00
Contractor Mob and DeMob (3%) - Based on DRMS estimate				\$ 5,641.15
Contractor Overhead and Profit (10%) - Based on DRMS estimate				\$ 18,803.82
			Subtotal	\$ 55,016.11
Contract Amount (direct + O & P)				\$ 243,054.31
Legal, Engineering & Project Management				
Financial warranty processing (legal/related costs) (\$500)				\$ 500.00
Engineering Work and/or contract/bid preparation (4.25%)				\$ 10,329.81
Reclamation management and/or administration (5%) - Based on DRMS estimate				\$ 12,152.72
Contingency (3%)				\$ 5,641.15
			Subtotal	\$ 28,623.67
Total Indirect Costs				\$ 83,639.78
Total Bond Amount				\$326,694.09
Notes:				
A. Reclamation costs do not include slurry wall or outflow structures (already built).				
B. Cost based on reclamation to demo existing infrastructure and return to leveled ground.				
Overhead and Profit includes admin costs based on DRMS and industry standard estimates.				
Indirect costs include further admin costs.				



BURNCO

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LEGEND

PERMIT BOUNDARY

MINING PHASE LINES

100 YR. FLOODPLAIN

EXISTING ROAD

EXISTING TREE

EXISTING STRUCTURES

PHASE 1

33 Ac +/-

MINING SEQUENCE

HAUL ROAD/CONVEYOR

MONITORING WELL

SLURRY WALL ALIGNMENT

SLURRY WALL ACCESS RD

KEY MAP

Nissen Resource

M2003001

Updated

Mining Plan

N

Drawn By:

Devon Glosser

SCALE

SHEET NUMBER

As Noted

PLOT DATE

02-20-24

FILE NAME

Nissen TR #3

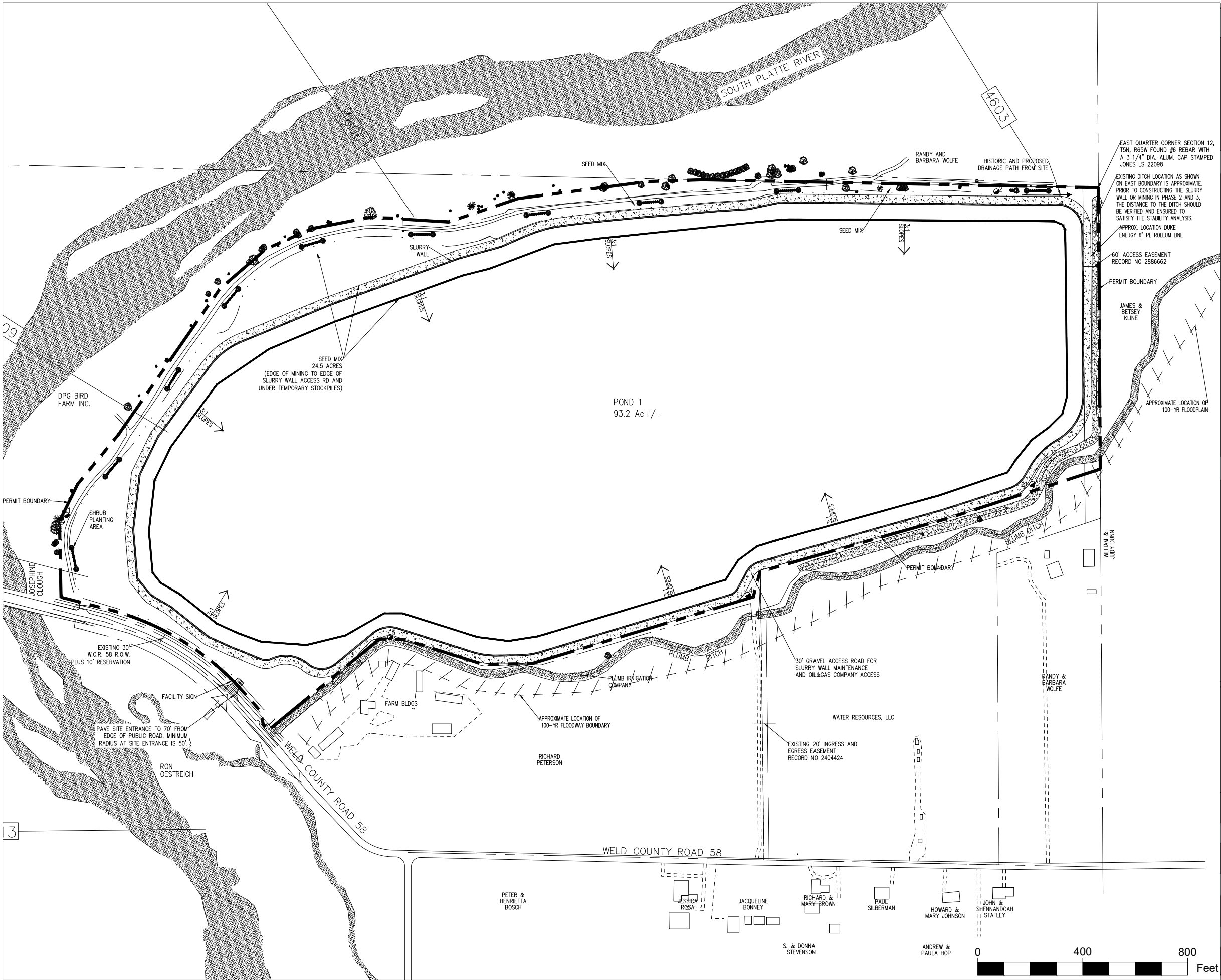
1

0

400

800

Feet



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LEGEND

PERMIT BOUNDARY

RECLAMATION AREA

100 YR. FLOODPLAIN

EXISTING ROAD

EXISTING TREE

EXISTING STRUCTURES

RECLAMATION POND

HAUL ROAD/CONVEYOR

MONITORING WELL

SLURRY WALL ALIGNMENT

SLURRY WALL ACCESS RD

SHRUB PLANTING AREAS

KEY MAP

Nissen Resource
M2003001

Updated
Reclamation
Plan

N

Drawn By: Devon Glosser

SCALE

As Noted

PLOT DATE

02-20-24

FILE NAME

Nissen TR #3

SHEET NUMBER

2

NOTES: MINING PLAN

1. AREAS NOT DISTURBED BY CURRENT MINING ACTIVITIES OR UNDER RECLAMATION WILL BE MAINTAINED AS FARMLAND, PASTURE OR OTHER SUITABLE COVER CROP UNTIL MINING BEGINS IN EACH PHASE.
2. PRIOR TO CONSTRUCTION ALL UTILITY, GAS WELL, OIL WELL, & WATER WELL LOCATIONS MUST BE VERIFIED.
3. INTERNAL MINING HAUL ROADS TO BE WATERED ON A REGULAR BASIS TO CONTROL DUST.
4. TEMPORARY STOCKPILES VARY IN LOCATION AND SIZE INSIDE EACH PHASE.
5. CONFIGURATION OF BATCH PLANTS AND PROCESSING AREA MAY CHANGE TO COMPLY WITH NOISE EMISSION REQUIREMENTS.
6. CONVEYOR/HAUL ROAD WILL EXTEND INTO EACH PHASE AS MINING PROGRESSES.
7. REFER TO EXISTING CONDITIONS MAP, SHEET 2, FOR STRUCTURE OWNERSHIP.
8. THE TOE OF THE MINE SLOPE IS DEFINED AS THE CONTACT OF THE MINE SLOPE WITH THE TOP OF WEATHERED BEDROCK.
9. MINE EXCAVATION LIMIT AND MAXIMUM MINE SLOPE TOE CAN NOT BE ENCROACHED BY EITHER EROSIONAL PROCESSES (SLOUGHING) OR MINING.
10. JURISDICTIONAL WETLANDS WILL NOT BE DREDGED OR FILLED PRIOR TO OBTAINING A 404 PERMIT FROM THE US ARMY CORPS OF ENGINEERS.

PROPOSED SEED MIXES:

COMMON NAME	SCIENTIFIC NAME	VARIETY	% OF MIX	PLS APPLICATION RATE (LBS/ACRE)
UPLAND AREAS				
WESTERN WHEATGRASS	PASCOPYRUM SMITHII	ARRIBA, BARTON	20%	3.00
GREEN NEEDLEGRASS	STIPA VIRIDULA	LODORM	15%	2.25
LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUM	NEZPAR, PALOMA	15%	2.25
INDIAN RICEGRASS	ACATHERUM HYMENOIDES		10%	1.50
SIDEOATS GRAMA	BOUTELOUA CURTIPENDULA	VAUGHN, BUTTE	10%	1.50
BIG BLUESTEM	ANDROPOGON GERARDI	KAW	10%	1.50
SAND BLUESTEM	ANDROPOGON HALLII		10%	1.50
PURPLE PRARIECLOVER	DALEA PURPUREA		5%	0.75
BLUE GRAMA	BOUTELOUA GRACILIS	LOVINGTON, HACHITA	5%	0.75
TOTAL LBS/ACRE				15.00

PLANTING REQUIREMENTS:

PLANTING WILL INCLUDE 100 SCHRUBS FROM THE LIST BELOW.

SPECIES	HYDROLOGIC REGIME	HEIGHT	AMOUNT	SIZE (GALLONS)
UPLAND AREAS				
WAX CURRANT (RIBES CEREUM)	MOIST TO DRY SOILS. INTERMEDIATE TOLERANCE TO DROUGHT - NEEDS PERIODIC IRRIGATION.	2-5'	20	1-GAL (8' SPACING)
SILVER BUFFALOBERRY (SHEPHERDIA ARGENTEA)	MOIST TO DRY SOILS. GOOD TOLERANCE TO DROUGHT.	4'-20'	20	5-GAL (20' SPACING)
THREELEAF SUMAC (RHUS TRILOBATA)	MOIST TO DRY SOILS. EXCELLET TOLERANCE TO DROUGHT.	2-8'	20	1-GAL (8' SPACING)
WESTERN SNOWBERRY (SYMPHORICARPOS OCCIDENTALIS)	MOIST TO DRY SOILS. GOOD TOLERANCE TO DROUGHT.	3'	20	1-GAL (8' SPACING)
WOODS ROSE (ROSA WOODSII)	SEASONAL MOISTURE. GOOD TOLERANCE TO DROUGHT.	2-8'	20	1-GAL (8' SPACING)

NOTES: RECLAMATION PLAN

1. ALL PLANT MATERIAL SHALL BE MONITORED FOR DISEASE AND INSECTS. THE CHOICE AND VARIETY OF PLANT MATERIAL SHALL MINIMIZE DISEASE, INSECT AND MAINTENANCE PROBLEMS. DROUGHT TOLERANT, NATIVE OR ADAPTIVE PLANT SPECIES SHALL BE USED TO REVEGETATE THE SITE. GRASSES FOR REVEGETATION ARE SPECIFIED IN THE GRASS SEED MIX LIST. WEEDS SHALL BE MONITORED AND A WEED MANAGEMENT PROGRAM SHALL BE IMPLEMENTED UNTIL VEGETATION IS ESTABLISHED. TEMPORARY IRRIGATION SHALL BE PROVIDED UNTIL THE VEGETATION IS ESTABLISHED. ALL PLANT MATERIAL AND LANDSCAPING SHALL BE INSTALLED ACCORDING TO THE GENERAL DESIGN STANDARDS, OF THE WELD COUNTY LAND USE CODE.
2. REFER THE "MLRB 112 PRE-MINUS MAP" FOR OIL AND GAS FACILITY OWNERSHIP INFORMATION.

BURNCO

BURNCO

LEGEND

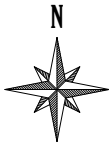
- PERMIT BOUNDARY
- RECLAMATION AREA
- 100 YR. FLOODPLAIN
- EXISTING ROAD
- EXISTING TREE
- EXISTING STRUCTURES
- POND 1
93 Ac +/-

RECLAMATION POND
- HAUL ROAD/CONVEYOR
- 4MONITORING WELL
- SLURRY WALL ALIGNMENT
- SLURRY WALL ACCESS RD

KEY MAP

Nissen Resource
M2003001

Notes



SCALE	SHEET NUMBER
As Noted	3
PLOT DATE	
02-20-24	
FILE NAME	
Nissen TR #3	



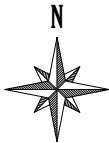
LEGEND

- PERMIT BOUNDARY
- MAJOR CONTOUR (10 FT)
- MINOR CONTOUR (5 FT)
- PHASE 1
35 Ac +/-
- MINING SEQUENCE
- CONTOUR LABEL
- SLOPE

KEY MAP

Nissen Resource
M2003001

Mining Contour



Drawn By: Devon Glosser

SCALE SHEET NUMBER

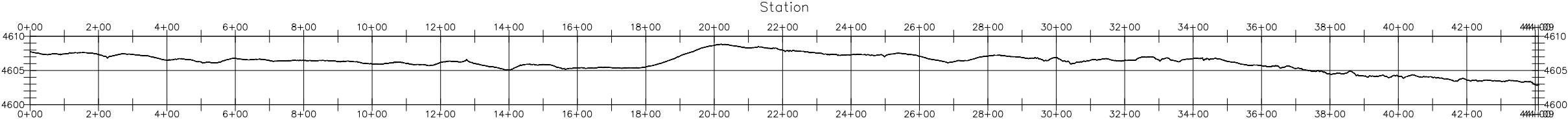
As Noted

PLOT DATE

02-20-24

FILE NAME

Nissen TR #3



PROPOSED RECLAMATION TOPOGRAPHY ACROSS SITE SLIGHTLY FALLS FROM WEST TO EAST FROM 4608 – 4603.



BURNCO

_____	MAJOR CONTOUR (10 FT)
-----	MINOR CONTOUR (5 FT)
POND 1	RECLAMATION POND
93 Ac +/-	
4610.00	CONTOUR LABEL

Nissen Resource
M2003001

Proposed Reclamation Contour



SCALE	SHEET NUMBER
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PLOT DATE

02-20-24

FILE NAME

Nissen TR #3

