



## COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY

1313 Sherman Street, Room 215, Denver, Colorado 80203 ph(303) 866-3567

### REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M- \_\_\_\_\_ Site Name: \_\_\_\_\_

County \_\_\_\_\_ TR# \_\_\_\_\_ (DRMS Use only)

Permittee: \_\_\_\_\_

Operator (If Other than Permittee): \_\_\_\_\_

Permittee Representative: \_\_\_\_\_

Please provide a brief description of the proposed revision: \_\_\_\_\_

As defined by the Minerals Rules, a Technical Revision (TR) is: “a change in the permit or application which does not have more than a minor effect upon the approved or proposed Reclamation or Environmental Protection Plan.” The Division is charged with determining if the revision as submitted meets this definition. If the Division determines that the proposed revision is beyond the scope of a TR, the Division may require the submittal of a permit amendment to make the required or desired changes to the permit.

The request for a TR is not considered “filed for review” until the appropriate fee is received by the Division (as listed below by permit type). Please submit the appropriate fee with your request to expedite the review process. After the TR is submitted with the appropriate fee, the Division will determine if it is approvable within 30 days. If the Division requires additional information to approve a TR, you will be notified of specific deficiencies that will need to be addressed. If at the end of the 30 day review period there are still outstanding deficiencies, the Division must deny the TR unless the permittee requests additional time, in writing, to provide the required information.

There is no pre-defined format for the submittal of a TR; however, it is up to the permittee to provide sufficient information to the Division to approve the TR request, including updated mining and reclamation plan maps that accurately depict the changes proposed in the requested TR.

Required Fees for Technical Revision by Permit Type - Please mark the correct fee and submit it with your request for a Technical Revision.

<u>Permit Type</u>	<u>Required TR Fee</u>	<u>Submitted</u> (mark only one)
110c, 111, 112 construction materials, and 112 quarries	\$216	<input type="checkbox"/>
112 hard rock (not DMO)	\$175	<input type="checkbox"/>
110d, 112d(1, 2 or 3)	\$1006	<input type="checkbox"/>



# Technical Revision #3

## Nissen Farm Resource

*Permit M2003-001*

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

**BURNCO Colorado, LLC.**

**January 19, 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 both temporary and permanent storage of excess overburden and topsoil from the project.

- 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.
- Overburden and topsoil stockpiles which cannot be sold commercially and are in excess of volumes needed for reclamation throughout the remainder of the site will be left in place as a permanent feature. Any overburden stockpiles to be left of site will be capped with topsoil. All permanent piles will see vegetation established in accordance with the vegetation established on the shorelines of the water storage cell.

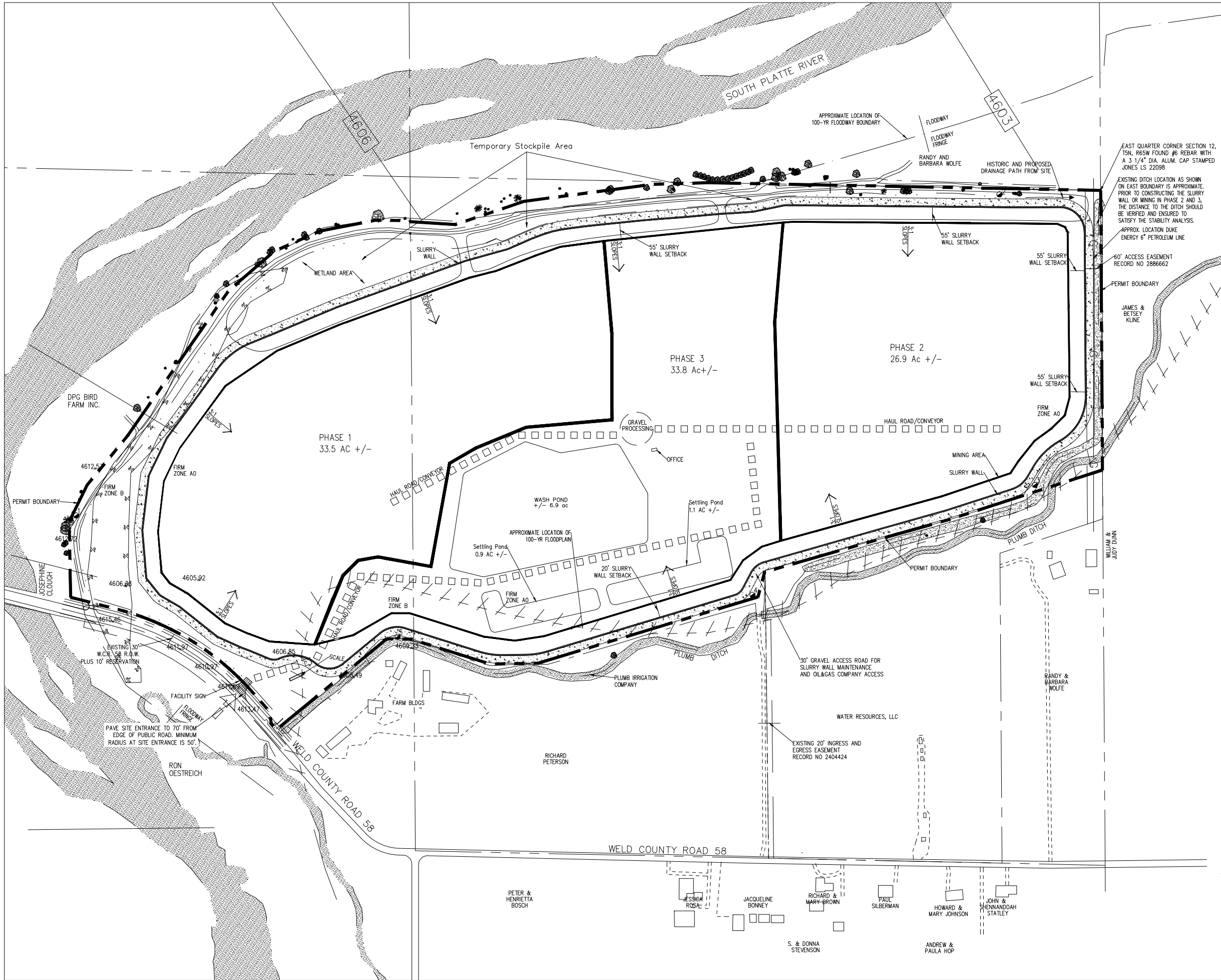
- Reclamation Cost Estimate
  - Updated Reclamation Estimate: The reclamation cost estimate was last reviewed in 2018 and was calculated as \$402,016.90. An updated reclamation cost estimate has been provided as part of this technical revision and is calculated as \$350,710.62.

If you have any questions or concerns regarding this revision, please contact the undersigned at [devon.glosser@burnco.com](mailto:devon.glosser@burnco.com).

Sincerely,

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

Devon Glosser  
Land and Resource Supervisor  
BURNCO Colorado, LLC.



BURNCO

**BURNCO**

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

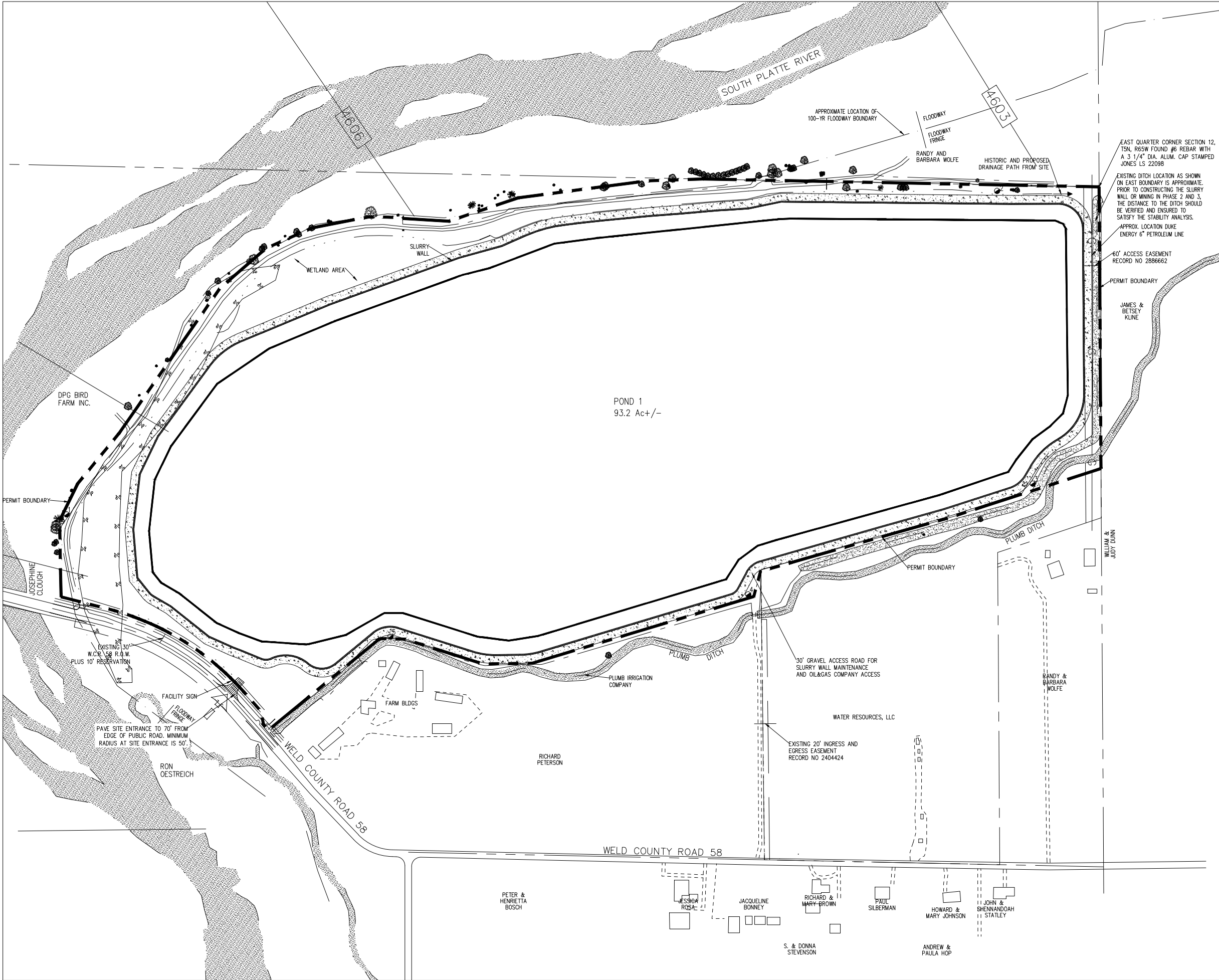
Updated

Mining Plan

N

SCALE	SHEET NUMBER
As Noted	1
PLOT DATE	
01-09-24	
FILE NAME	Nissen TR #3





BURNCO

**BURNCO**

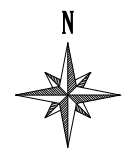
**LEGEND**

- 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

**KEY MAP**

Nissen Resource  
M2003001

Updated  
Reclamation  
Plan



SCALE	SHEET NUMBER
As Noted	2
PLOT DATE	
01-09-24	
FILE NAME	Nissen TR #3

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
POND AREAS				
PRARIE CORDGRASS	SPARTINA PECTINATA	NATIVE	25%	4.0
WESTERN WHEATGRASS	PASCOPYRUM SMITHII	ARRIBA, BARTON	20%	3.2
FOWL BLUEGRASS	POA PALUSTRIS		15%	2.4
MANNAGRASS	GLYCERIA STRIATA		10%	1.6
ALKALI SACATON	SPOROBOLUS AIROIDES		10%	1.6
AMERICAN SLOUGHGRASS	BECKMANNIA SYZIGACHNE		10%	1.6
BLUE VERVAIN	VERBENA HASTATA		5%	0.8
MARSH SUNFLOWER	HELIANTHUS NUTTALLII		5%	0.7
TOTAL LBS/ACRE				15.9

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. THE WETLANDS CREATED ARE PLANNED FOR THE ESTABLISHMENT OF A WETLAND MITIGATION BANK.
3. REFER THE "MLRB 112 PRE-MINUS MAP" FOR OIL AND GAS FACILITY OWNERSHIP INFORMATION.

PLANTING REQUIREMENTS:

PLANTING WILL INCLUDE 210 SCHRUBS AND 20 TREES SELECTED FROM THE LIST BELOW.

SPECIES	HYDROLOGIC REGIME	HEIGHT
WETLAND		
AMERICAN MANNAGRASS (GLYCERIA GRANDIS)	CAN WITHSTAND SEASONAL FLOODING TO SHALLOW STANDING WATER. INTERMEDIATE TO MARGINAL TOLERANCE TO DROUGHT.	24-36"
PRARIE CORDGRASS (SPARTINA PECTINATA)	CAN WITHSTAND SEASONAL FLOODING TO SATURATED SOILS. GOOD TOLERANCE TO DROUGHT.	36-60"
FOWL BLUEGRASS (POA PALUSTRIS)	GROWS IN SATURATED SOIL CONDITIONS. WILL TOLERATE DRY PERIODS BUT NEEDS PERIODIC IRRIGATION.	12-18"
WILD IRIS (IRIS MISSOURIENSIS)	PREFERS SITES THAT HAVE SUMMER DRY PERIOD WITH TEMPORARY FLOODING FLOODING. INTERMEDIATE TOLERANCE TO DROUGHT.	18-24"
SANDBAR/COYOTE WILLOW (SALIX EXIGUA)	REQUIRES IRREGULAR FLOODING. GOOD TOLERANCE TO DROUGHT.	15'
PEACHLEAF WILLOW (SALIX AMYGDALOIDES)	REQUIRES SEASONAL FLOODING. INTERMEDIATE TOLERANCE TO DROUGHT.	30'
WHIPLASH WILLOW (SALIX LUCIDA)	REQUIRES SEASONAL FLOODING. MARGINAL TOLERANCE TO DROUGHT.	45'
PLAINS COTTONWOOD (POPULUS DELTOIDES)	REQUIRES SEASONAL FLOODING. GOOD TOLERANCE TO DROUGHT.	80'
NARROW-LEAF COTTONWOOD (POPULUS ANGUSTIFOLIA)	REQUIRES SEASONAL FLOODING. INTERMEDIATE TOLERANCE TO DROUGHT.	50'
COMMON CHOKECHERRY (PRUNUS VIGINIANA)	MOIST SOILS. GOOD TOLERANCE TO DROUGHT.	30-50'
RED-OSIER DOGWOOD (CORNUS SERICEA)	MOIST SOILS. INTERMEDIATE TOLERANCE TO DROUGHT.	10'
GOLDEN CURRANT (RIBES AUREUM)	SEASONAL SATURATION. INTERMEDIATE TOLERANCE TO DROUGHT.	5'
INDIGO BUSH (AMORPHA FRUTICOSA)	IRREGULAR FLOODING. GOOD TOLERANCE TO DROUGHT.	5'
UPLAND AREA		
AMERICAN PLUM (PRUNUS AMERICANA)	DRY TO MOIST SOILS. GOOD TOLERANCE TO DROUGHT.	12'
WAX CURRANT (RIBES CEREUM)	MOIST TO DRY SOILS. INTERMEDIATE TOLERANCE TO DROUGHT - NEEDS PERIODIC IRRIGATION.	2-5'
SILVER BUFFALOBERRY (SHEPHERDIA ARGENTEA)	MOIST TO DRY SOILS. GOOD TOLERANCE TO DROUGHT.	4-20'
THREELEAF SUMAC (RHUS TRILOBATA)	MOIST TO DRY SOILS. EXCELLET TOLERANCE TO DROUGHT.	2-8'
WESTERN SNOWBERRY (SYMPHORICARPOS OCCIDENTALIS)	MOIST TO DRY SOILS. GOOD TOLERANCE TO DROUGHT.	3'
COMMON SNOWBERRY (SYMPHORICARPOS ALBUS)	MOIST TO DRY SOILS. GOOD TOLERANCE TO DROUGHT.	3'
WESTERN SAND CHERRY (PRUNUS BESSEYI)	DRY TO MOIST SOILS. EXCELLENT TOLERANCE TO DROUGHT.	4-6'
WOODS ROSE (ROSA WOODSII)	SEASONAL MOISTURE. GOOD TOLERANCE TO DROUGHT.	2-8'

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
- 4

MONITORING WELL
- SLURRY WALL ALIGNMENT
- SLURRY WALL ACCESS RD

KEY MAP

Nissen Resource  
M2003001

Notes



SCALE	SHEET NUMBER
As Noted	3
PLOT DATE	
01-09-24	
FILE NAME	
Nissen TR #3	

**Nissen Farm Resource - Table for Reclamation/Bonding Cost Estimate (2024-1-11)**

**M-2003-001**

Activity	Quantity	Units	Unit Costs	Cost
<b>A. Shoreline (full project)</b>				
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	210	Ea	\$ 100.00	\$ 21,000.00
Tree Planting	20	Ea	\$ 250.00	\$ 5,000.00
			Subtotal	\$ 126,538.20
<b>B. Processing Area</b>				
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
<b>Total Disturbance Costs</b>				\$ 204,038.20
<b>Indirect Costs</b>				
<b>Overhead &amp; Profit</b>				
Performance Bond (2.02%) - Based on DRMS estimate				\$ 4,121.57
Performance Bond (3.07%) - Based on DRMS estimate				\$ 6,263.97
Job Superintendent (280 hours @ \$75/hr) - Based on DRMS estimate				\$ 21,000.00
Contractor Mob and DeMob (3%) - Based on DRMS estimate				\$ 6,121.15
Contractor Overhead and Profit (10%) - Based on DRMS estimate				\$ 20,403.82
			Subtotal	\$ 57,910.51
<b>Contract Amount (direct + O &amp; P)</b>				<b>\$ 261,948.71</b>
<b>Legal, Engineering &amp; Project Management</b>				
Financial warranty processing (legal/related costs) (\$500)				\$ 500.00
Engineering Work and/or contract/bid preparation (4.25%)				\$ 11,132.82
Reclamation management and/or administration (5%) - Based on DRMS estimate				\$ 13,097.44
Contingency (3%)				\$ 6,121.15
			Subtotal	\$ 30,851.40
<b>Total Indirect Costs</b>				<b>\$ 88,761.91</b>
<b>Total Bond Amount</b>				<b>\$350,710.62</b>

**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.