

# WASTELINE, INC.



**Conversion Application M1987-019**  
**Rio Grande County South Fork Pit**

Arial Photo (courtesy Google Earth) shows existing pit as of June 2016. Most recent photo has snow on ground (November 2022).

This page otherwise intentionally left blank for 2-sided printing purposes.



## TABLE OF CONTENTS

<b>AUTHORIZATION LETTER.....</b>	<b>3</b>
<b>DRMS Application.....</b>	<b>4</b>
<b>Exhibit A. LEGAL DESCRIPTION .....</b>	<b>12</b>
<b>Exhibit B. INDEX MAP (6.4.1.).....</b>	<b>13</b>
<b>Exhibit C. PRE-MINING AND MINING PLAN MAPS OF AFFECTED LANDS .....</b>	<b>15</b>
<b>Exhibit D. MINING PLAN (6.4.2.).....</b>	<b>18</b>
<b>Exhibit D.1 SITE DESCRIPTION AND PREVIOUS MINING HISTORY.....</b>	<b>18</b>
<b>Exhibit D.2 PROPOSED FUTURE MINING OPERATIONS.....</b>	<b>19</b>
<b>Exhibit E. RECLAMATION PLAN (6.3.4.).....</b>	<b>24</b>
<b>Exhibit F. RECLAMATION PLAN MAPS (6.4.3) .....</b>	<b>27</b>
<b>Exhibit G. WATER INFORMATION.....</b>	<b>30</b>
<b>Exhibit H. WILDLIFE INFORMATION).....</b>	<b>32</b>
<b>Exhibit I. SOILS INFORMATION).....</b>	<b>33</b>
<b>Exhibit J. VEGETATION INFORMATION) .....</b>	<b>34</b>
<b>Exhibit K. CLIMATE INFORMATION .....</b>	<b>35</b>
<b>Exhibit L. RECLAMATION COSTS .....</b>	<b>36</b>
<b>Exhibit M. OTHER PERMITS AND LICENSES .....</b>	<b>37</b>
<b>Exhibit N. SOURCE OF LEGAL RIGHT TO ENTER.....</b>	<b>40</b>
<b>Exhibit O. MUNICIPALITIES WITHIN A TWO-MILE RADIUS.....</b>	<b>40</b>
<b>Exhibit P. MUNICIPALITIES WITHIN A TWO-MILE RADIUS.....</b>	<b>40</b>
<b>Exhibit Q. PROOF OF FILING WITH COUNTY CLERK .....</b>	<b>40</b>
<b>Exhibit R. PROOF OF MAILING NOTICES .....</b>	<b>40</b>
<b>Exhibit S. RECLAMATION COSTS (6.4.12) .....</b>	<b>Error! Bookmark not defined.</b>
<b>Exhibit T. PERMANENT MAN-MADE STRUCTURES .....</b>	<b>41</b>
<b>Exhibit U. RULE 6.5 GEOTECHNICAL STABILITY .....</b>	<b>42</b>



AUTHORIZATION LETTER

MEMORANDUM: TO WHOM IT MAY CONCERN

SUBJECT: LETTER OF AUTHORIZATION M-1987-019 Rio Grande County South Fork Pit

Greetings:

This memorandum authorizes WASTELINE, Inc.; Deborah A. Barton, its Executive Officer; and Nathan A. Barton, its Comptroller and Engineering Manager to act on behalf of Rio Grande County Road and Bridge, the operator of the subject pit on CR-50 in Rio Grande County, in the matter of the conversion of M-1987-019 from a 110c to a 112c mining operation, and its expansion from 9.9 acres to approximately 44 acres.

This authorization includes coordination, submission of information, submission of applications, and related matters to federal, state, local, and tribal agencies and organizations as necessary to file and obtain approval of the required permits and registrations to operate the proposed sand and gravel operation and supporting infrastructure and activities. An electronic or photocopied version of this memorandum is valid.

Persons requiring additional information may contact either of the undersigned or WASTELINE, Inc. by Email at [WASTELINE.81321@gmail.com](mailto:WASTELINE.81321@gmail.com) or 970-564-1380.

Signed this 26th day of JUNE, AD 2024, by:

Patrick Sullivan  
Road & Bridge Supervisor  
Phone 719-852-4781  
Email [RGCRoadDept@riograndecounty.org](mailto:RGCRoadDept@riograndecounty.org)  
Address: 168 N Washington, Monte Vista CO 81147

STATE OF Colorado )

SEAL

)ss.

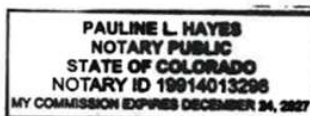
COUNTY OF Rio Grande )

The foregoing was acknowledged before me this 26<sup>th</sup> day of June, 2024, by

PATRICK SULLIVAN AS SUPERVISOR

Signature of Notarial Officer

My Commission Expires: 12/24/2027





DRMS Application

STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY  
Department of Natural Resources

1313 Sherman St., Room 215  
Denver, Colorado 80203  
Phone: (303) 866-3567  
FAX: (303) 832-8106



CONSTRUCTION MATERIALS  
REGULAR (112) OPERATION  
RECLAMATION PERMIT APPLICATION FORM

CHECK ONE: ☒ There is a File Number Already Assigned to this Operation

Permit # M1987 019 (Please reference the file number currently assigned to this operation)

☐ New Application (Rule 1.4.5) ☐ Amendment Application (Rule 1.10)  
☒ Conversion Application (Rule 1.11)

Permit # M1987 019 (provide for Amendments and Conversions of existing permits)

The application for a Construction Materials Regular 112 Operation Reclamation Permit contains three major parts: (1) the application form; (2) Exhibits A-S, Addendum 1, any sections of Exhibit 6.5 (Geotechnical Stability Exhibit; and (3) the application fee. When you submit your application, be sure to include one (1) complete signed and notarized ORIGINAL and one (1) copy of the completed application form, two (2) copies of Exhibits A-S, Addendum 1, appropriate sections of 6.5 (Geotechnical Stability Exhibit, and a check for the application fee described under Section (4) below. Exhibits should **NOT** be bound or in a 3-ring binder; maps should be folded to 8 1/2" X 11" or 8 1/2" X 14" size. To expedite processing, please provide the information in the format and order described in this form.

GENERAL OPERATION INFORMATION

Type or print clearly, in the space provided, ALL information requested below.

1. Applicant/operator or company name (name to be used on permit): Rio Grande County
  - 1.1 Type of organization (corporation, partnership, etc.): Local government road & bridge department
2. Operation name (pit, mine or site name): South Fork Pit
3. Permitted acreage (new or existing site): 9.9 permitted acres
  - 3.1 Change in acreage (+) +34.1 acres
  - 3.2 Total acreage in Permit area 44.0 acres
4. Fees:

4.1 New Application	<u>\$2,696.00</u>	application fee
4.2 New Quarry Application	<u>\$3,342.00</u>	quarry application
4.4 Amendment Fee	<u>\$2,229.00</u>	amendment fee
4.5 Conversion to 112 operation (set by statute)	<u>\$2,696.00</u>	conversion fee
5. Primary commodity(ies) to be mined: sand gravel
  - 5.1 Incidental commodity(ies) to be mined: 1. none lbs/Tons/yr 2.  lbs/Tons/yr  
3.  lbs/Tons/yr 4.  lbs/Tons/yr 5.  lbs/Tons/yr
  - 5.2 Anticipated end use of primary commodity(ies) to be mined: road construction and maintenance
  - 5.3 Anticipated end use of incidental commodity(ies) to be mined:





- 2 -

6. Name of owner of subsurface rights of affected land: State of Colorado  
If 2 or more owners, "refer to Exhibit O".
7. Name of owner of surface of affected land: State of Colorado

8. Type of mining operation: ☒ Surface ☐ Underground

9. Location Information: The center of the area where the majority of mining will occur:

COUNTY: Rio Grande

PRINCIPAL MERIDIAN (check one): ☐ 6th (Colorado) ☒ 10th (New Mexico) ☐ Ute

SECTION (write number): S 27

TOWNSHIP (write number and check direction): T 40 ☒ North ☐ South

RANGE (write number and check direction): R 4 ☒ East ☐ West

QUARTER SECTION (check one): ☐ NE ☒ NW ☐ SE ☐ SW

QUARTER/QUARTER SECTION (check one): ☐ NE ☐ NW ☐ SE ☒ SW

GENERAL DESCRIPTION: (the number of miles and direction from the nearest town and the approximate elevation): 10 miles W of Del Norte, on SH-160; take CR-50 north and across railroad tracks, elevation 8077 ft

10. Primary Mine Entrance Location (report in either Latitude/Longitude OR UTM):

Latitude/Longitude:

Example: (N) 39° 44' 12.98"  
(W) 104° 59' 3.87"

Latitude (N): deg 37 min 41 sec 02 94 (2 decimal places)  
Longitude (W): deg 106 min 31 sec 57 90 (2 decimal places)

OR

Example: (N) 39.73691°  
(W) -104.98449°

Latitude (N) 37 68415 (5 decimal places)  
Longitude (W) 106 53275 (5 decimal places)

OR

Universal Transverse Mercator (UTM)

Example: 201336.3 E NAD27 Zone 13  
4398351.2 N

UTM Datum (specify NAD27, NAD83 or WGS 84) Nad 83 Zone 13  
Easting 364849  
Northing 4171877



- 3 -

11. Correspondence Information:

APPLICANT/OPERATOR (name, address, and phone of name to be used on permit)

Contact's Name:	Patrick Sullivan	Title:	Supervisor
Company Name:	Rio Grande County - Road and Bridge Department		
Street/P.O. Box:	168 North Washington Street	P.O. Box:	
City:	Monte Vista		
State:	Colorado	Zip Code:	81144
Telephone Number:	(719) - 852-4781		
Fax Number:	(719) - 852-0305	Email:	rgcroaddept@riograndecounty.org

PERMITTING CONTACT (if different from applicant/operator above)

Contact's Name:	Nathan A Barton	Title:	Env. & Perm Engineer
Company Name:	WASTELINE, Inc.		
Street/P.O. Box:	4725 Croyle Court	P.O. Box:	3471
City:	Rapid City		
State:	South Dakota	Zip Code:	57709-3471
Telephone Number:	(970) - 564-1380 or 605-939-0650		
Fax Number:	( ) -	Email:	NABarton@WastelineInc.net

INSPECTION CONTACT

Contact's Name:	Patrick Sullivan	Title:	Supervisor
Company Name:	Rio Grande County Road and Bridge		
Street/P.O. Box:	168 N Washington Street	P.O. Box:	
City:	Monte Vista		
State:	Colorado	Zip Code:	81144
Telephone Number:	(719) - 852-4781		
Fax Number:	(719) - 852-0305	Email:	RGCRoadDept@riograndecounty.org

CC: STATE OR FEDERAL LANDOWNER (if any)

Agency:	Colorado State Land Board (Southwest District)		
Street:	918 4th Street, Suite B		
City:	Alamosa		
State:	Colorado	Zip Code:	81101
Telephone Number:	(719) - 589-2360	Email:	jerry.shawcroft@state.co.us

CC: STATE OR FEDERAL LANDOWNER (if any)

Agency:	No further		
Street:			
City:			
State:		Zip Code:	
Telephone Number:	( ) -		



- 4 -

12. Primary future (Post-mining) land use (check one):

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Cropland(CR)                  | <input type="checkbox"/> Pastureland(PL) | <input type="checkbox"/> General Agriculture(GA)   |
| <input checked="" type="checkbox"/> Rangeland(RL)      | <input type="checkbox"/> Forestry(FR)    | <input type="checkbox"/> Wildlife Habitat(WL)      |
| <input type="checkbox"/> Residential(RS)               | <input type="checkbox"/> Recreation(RC)  | <input type="checkbox"/> Industrial/Commercial(IC) |
| <input type="checkbox"/> Developed Water Resources(WR) |  | <input type="checkbox"/> Solid Waste Disposal(WD)  |

13. Primary present land use (check one):

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Cropland(CR)                  | <input type="checkbox"/> Pastureland(PL) | <input type="checkbox"/> General Agriculture(GA)   |
| <input checked="" type="checkbox"/> Rangeland(RL)      | <input type="checkbox"/> Forestry(FR)    | <input type="checkbox"/> Wildlife Habitat(WL)      |
| <input type="checkbox"/> Residential(RS)               | <input type="checkbox"/> Recreation(RC)  | <input type="checkbox"/> Industrial/Commercial(IC) |
| <input type="checkbox"/> Developed Water Resources(WR) |  |  |

14. Method of Mining: Briefly explain mining method (e.g. truck/shovel):

Surface: front-end loader (FEL) or track/wheeled backhoe

15. On Site Processing:



Crushing/Screening

13.1 Briefly explain mining method (e.g. truck/shovel):

Portable equipment will be brought to the site temporarily: fed by FEL, hauled by truck

List any designated chemicals or acid-producing materials to be used or stored within permit area:

Fuel and lubricants for equipment; none to be produced by mining.

16. Description of Amendment or Conversion:

If you are amending or converting an existing operation, provide a brief narrative describing the proposed change(s).

In the past 36 years, the current operation has mined approximately 6.2 acres of the 9.9 permitted acres, and has reached the limits of the buffer zones; the additional acreage and buffer zones outside the affected area but within the requested permit boundaries will allow for mining for another 3-5 decades extending the life of the operation. Expansion to the east and north on State Lands will minimize impact on other adjacent properties while protecting the environment and significant permanent manmade structures.





- 5 -

**Maps and Exhibits:**

Two (2) complete, unbound application packages must be submitted. One complete application package consists of a signed application form and the set of maps and exhibits referenced below as Exhibits A-S, Addendum 1, and the Geotechnical Stability Exhibit. Each exhibit within the application must be presented as a separate section. Begin each exhibit on a new page. Pages should be numbered consecutively for ease of reference. If separate documents are used as appendices, please reference these by name in the exhibit.

With each of the two (2) signed application forms, you must submit a corresponding set of the maps and exhibits as described in the following references to Rule 6.4, 6.5, and 1.6.2(1)(b):

EXHIBIT A	Legal Description
EXHIBIT B	Index Map
EXHIBIT C	Pre-Mining and Mining Plan Map(s) of Affected Lands
EXHIBIT D	Mining Plan
EXHIBIT E	Reclamation Plan
EXHIBIT F	Reclamation Plan Map
EXHIBIT G	Water Information
EXHIBIT H	Wildlife Information
EXHIBIT I	Soils Information
EXHIBIT J	Vegetation Information
EXHIBIT K	Climate Information
EXHIBIT L	Reclamation Costs
EXHIBIT M	Other Permits and Licenses
EXHIBIT N	Source of Legal Right-To-Enter
EXHIBIT O	Owners of Record of Affected Land (Surface Area) and Owners of Substance to be Mined
EXHIBIT P	Municipalities Within Two Miles
EXHIBIT Q	Proof of Mailing of Notices to County Commissioners and Conservation District
EXHIBIT R	Proof of Filing with County Clerk or Recorder
EXHIBIT S	Permanent Man-Made Structures
Rule 1.6.2(1)(b)	ADDENDUM 1 - Notice Requirements (sample enclosed)
Rule 6.5	Geotechnical Stability Exhibit (any required sections)

The instructions for preparing Exhibits A-S, Addendum 1, and Geotechnical Stability Exhibit are specified under Rule 6.4 and 6.5 and Rule 1.6.2(1)(b) of the Rules and Regulations. If you have any questions on preparing the Exhibits or content of the information required, or would like to schedule a pre-application meeting you may contact the Office at 303-866-3567.

**Responsibilities as a Permittee:**

Upon application approval and permit issuance, this application becomes a legally binding document. Therefore, there are a number of important requirements which you, as a permittee, should fully understand. These requirements are listed below. Please read and initial each requirement, in the space provided, to acknowledge that you understand your obligations. If you do not understand these obligations then please contact this Office for a full explanation.

MB

1. Your obligation to reclaim the site is not limited to the amount of the financial warranty. You assume legal liability for all reasonable expenses which the Board or the Office may incur to reclaim the affected lands associated with your mining operation in the event your permit is revoked and financial warranty is forfeited;



- 6 -

1AB

2. The Board may suspend or revoke this permit, or assess a civil penalty, upon a finding that the permittee violated the terms or conditions of this permit, the Act, the Mineral Rules and Regulations, or that information contained in the application or your permit misrepresent important material facts;

1AB

3. If your mining and reclamation operations affect areas beyond the boundaries of an approved permit boundary, substantial civil penalties, to you as permittee can result;

1AB

4. Any modification to the approved mining and reclamation plan from those described in your approved application requires you to submit a permit modification and obtain approval from the Board or Office;

1AB

5. It is your responsibility to notify the Office of any changes in your address or phone number;

1AB

6. Upon permit issuance and prior to beginning on-site mining activity, you must post a sign at the entrance of the mine site, which shall be clearly visible from the access road, with the following information (Rule 3.1.12):

- a. the name of the operator;
- b. a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board; and,
- c. the permit number.

1AB

7. The boundaries of the permit boundary area must be marked by monuments or other markers that are clearly visible and adequate to delineate such boundaries prior to site disturbance.

1AB

8. It is a provision of this permit that the operations will be conducted in accordance with the terms and conditions listed in your application, as well as with the provisions of the Act and the Construction Material Rules and Regulations in effect at the time the permit is issued.

1AB

9. Annually, on the anniversary date of permit issuance, you must submit an annual fee as specified by Statute, and an annual report which includes a map describing the acreage affected and the acreage reclaimed to date (if there are changes from the previous year), any monitoring required by the Reclamation Plan to be submitted annually on the anniversary date of the permit approval. Annual fees are for the previous year a permit is held. For example, a permit with the anniversary date of July 1, 1995, the annual fee is for the period of July 1, 1994 through June 30, 1995. Failure to submit your annual fee and report by the permit anniversary date may result in a civil penalty, revocation of your permit, and forfeiture of your financial warranty. It is your responsibility, as the permittee, to continue to pay your annual fee to the Office until the Board releases you from your total reclamation responsibility.

1AB

10. For joint venture/partnership operators: the signing representative is authorized to sign this document and a power of attorney (provided by the partner(s)) authorizing the signature of the representative is attached to this application.



- 7 -

**NOTE TO COMMENTORS/OBJECTORS:**

It is likely there will be additions, changes, and deletions to this document prior to final decision by the Office. Therefore, if you have any comments or concerns you must contact the applicant or the Office prior to the decision date so that you will know what changes may have been made to the application document.

The Office is not allowed to consider comments, unless they are written, and received prior to the end of the public comment period. You should contact the applicant for the final date of the public comment period.

If you have questions about the Mined Land Reclamation Board and Office's review and decision or appeals process, you may contact the Office at (303) 866-3567.





- 8 -

**Certification:**

As an authorized representative of the applicant, I hereby certify that the operation described has met the minimum requirements of the following terms and conditions:

1. To the best of my knowledge, all significant, valuable and permanent man-made structure(s) in existence at the time this application is filed, and located within 200 feet of the proposed affected area have been identified in this application (Section 34-32.5-115(4)(e), C.R.S.).
2. No mining operation will be located on lands where such operations are prohibited by law (Section 34-32.5-115(4)(f), C.R.S.;
3. As the applicant/operator, I do not have any extraction/exploration operations in the State of Colorado currently in violation of the provisions of the Colorado Land Reclamation Act for the Extraction of Construction Materials (Section 34-32.5-120, C.R.S.) as determined through a Board finding.
4. I understand that statements in the application are being made under penalty of perjury and that false statements made herein are punishable as a Class 1 misdemeanor pursuant to Section 18-8-503, C.R.S.

*This form has been approved by the Mined Land Reclamation Board pursuant to section 34-32.5-112, C.R.S., of the Colorado Land Reclamation Act for the Extraction of Construction Materials. Any alteration or modification of this form shall result in voiding any permit issued on the altered or modified form and subject the operator to cease and desist orders and civil penalties for operating without a permit pursuant to section 34-32.5-123, C.R.S.*

Signed and dated this 04th day of September, 2025

Nathan A. Barton, CE, PE, DEE  
Authorized Representative, County of Rio Grande

Applicant/Operator

If Corporation Attest (Seal)

Signed:

Signed:

Corporate Secretary or Equivalent

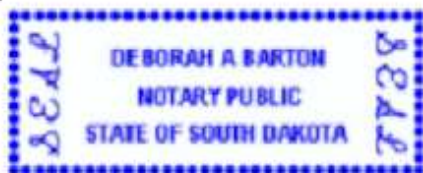
Town/City/County Clerk

Title: Authorized Representative

State of South Dakota

County of Pennington ss.

The foregoing instrument was acknowledged before me this 04th day of September, 2025  
by Nathan A. Barton as Authorized Representative of Rio Grande County



Notary Public

My Commission expires: 12 Dec 2025

**SIGNATURES MUST BE IN BLUE INK**

You must post sufficient Notices at the location of the proposed mine site to clearly identify the site as the location of a





### Exhibit A. LEGAL DESCRIPTION (6.4.1)

**Introductory remarks:** The original application, as reviewed online, did not have an actual legal description but had a map showing “original” dimensions. Various maps provided to the Division in the application process, satellite photos, measurements on the ground and reports since that time have been used to estimate the “actual” (current) legal description. The original application did NOT include the access road from the south edge of the permit area as shown to the original alignment of the unimproved county road, as the actual road and railroad crossing centerline is approximately 270 feet E of the west line of Section 27, not within 100 feet of that section line, but later this “tail” was included.

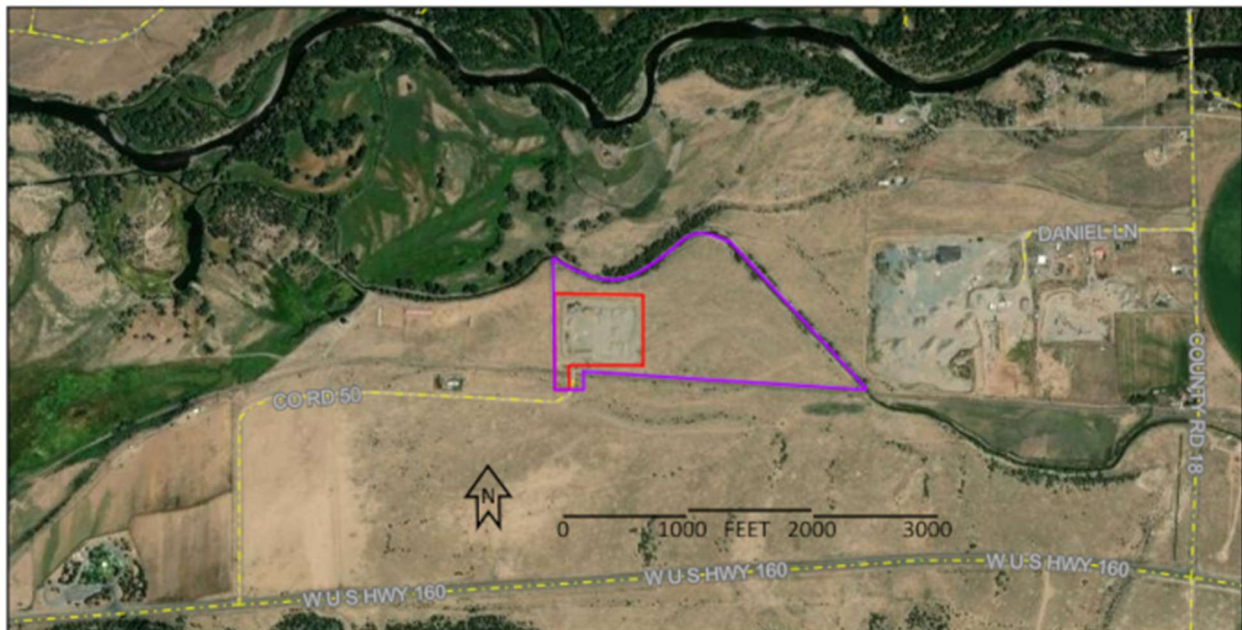
### LEGAL DESCRIPTION

**Original (Recreated):** Beginning the west quarter-corner of Section 27, T40N, R4E NM (10<sup>th</sup>) PM, Rio Grande County, Colorado, thence 100 feet E thence 250 feet N, thence 740 feet E thence 550 feet N thence 840 feet W, thence 800 feet S to the point of beginning, a total of 9.91 acres. (Bearings taken from the W section line of Sec 27, assumed to be true North. Original description appears to have been based on an assumption that both the railroad centerline is the E-W quarter-line of Section 27 with a bearing of N90°E.)

**Actual Current:** Beginning at a point 2,403 feet N of the SW corner of Section 27, T40N, R4E NM (10<sup>th</sup>) PM, Rio Grande County, Colorado (along the W line of Section 27 and 249 feet S of the center of the W section line of Section 27), thence 272 feet N87°E (along the E-W quarter line of Section 27) of the west quarter-corner of Section 27 thence 247 feet N thence 438 feet E, thence 550 feet N, thence 744 feet W, then 550 feet S thence 244 feet E thence 240 feet S to the point of beginning, a total of 9.66 acres more or less.

**Proposed:** Beginning at the W quarter-corner of Section 27, T40N, R4E, NM (10<sup>th</sup>) PM, Rio Grande County, thence 303 feet E thence 211 feet N to the north Railroad ROW fence, thence along that ROW fence a distance of 2,187 feet at a bearing of E3.0°S, to the centerline of the Minor Ditch, thence along that centerline 3,170 feet to the W-NW to the W sectionline of Section 27, thence S 887 feet to the north Railroad ROW fence, thence 235 feet S to the point of beginning, a total of 44.0 acres more or less.

Google Earth satellite photo October 2016. No significant change between 2016 and 2025.



Red boundary: existing 110c site. Magenta boundary: proposed 112c site.

This Google Earth 2016 photo here and in Exhibit C is used to show current status, as the 2023 photo was taken with snow on the ground. The only changes have been materials removed from stockpiles. Entrance: UTM NAD 1983 Zone 13, 364849E, 4171877N, access from SH-160 by CR-50.

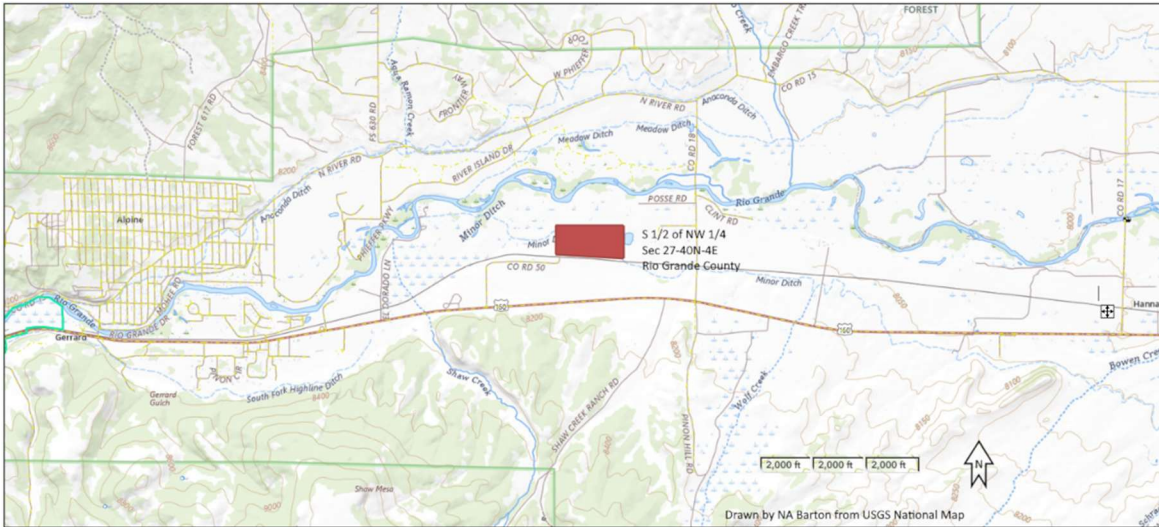


**Exhibit B. INDEX MAP (6.4.2.)**

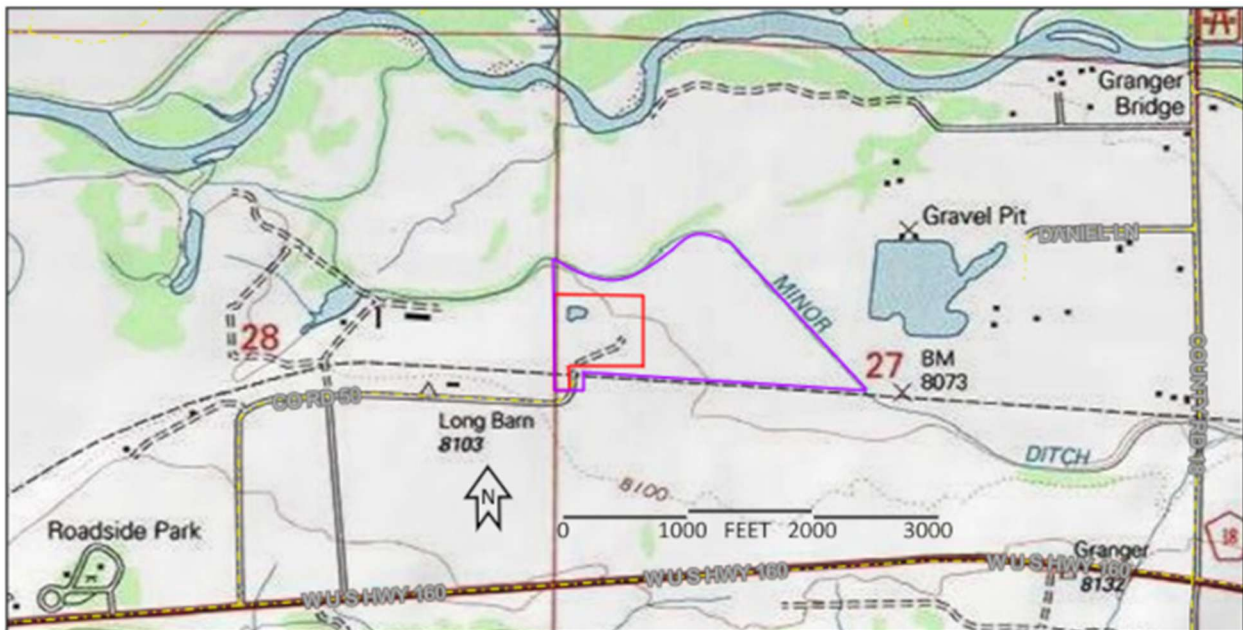
The Pit is located approximately 6 miles E of South Fork: Take SH-160 5.5 miles E to CR-50, turn left (N) and follow CR-50 N and parallel to RR east to turn left (N) and cross tracks.

Red line shows current 9.9-acre permit area; Magenta line shows proposed 44.0 acre 112c permit boundary (not proposed affected lands boundaries. (portion of A7.5-min South Fork East Quadrangle)

Map B-1. USGS National Map showing the boundaries of the State Land leased for the pit.



Map B-2. USGS 7.5-minute Topographic Quadrangle Map (South Fork East)

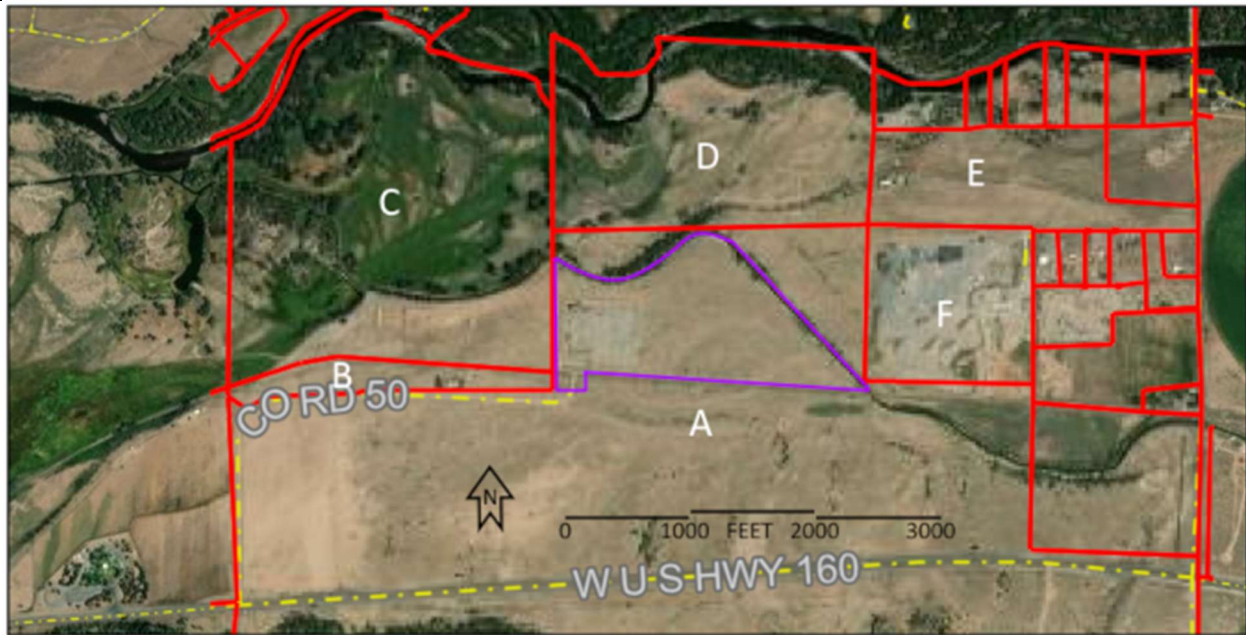


Red boundary: existing 110c site. Magenta boundary: proposed 112c site.





Map B-3. Adjacent landowners



Wetlands

- A. SITE and S: State of Colorado, portion in NW  $\frac{1}{4}$  of Section 27 leased to Rio Grande County for mining of sand and gravel (generally north of railroad): all State lands on map also leased for grazing.
- B. SW: Donald C Jansen Family Trust, site address 24585 W Hwy 160, mailing address 147 Cypress Ave, Cayucos, CA 93430-1105
- C. W: Salkantay LLC, site address 24587 W Hwy 160, mailing address 646 Long Point Road, Unit G6, Mount Pleasant, SC 29464-8286
- D. N: Richard L Snider, site address 495 Posse Road, mailing address 5217 Chapel Ct NW, Albuquerque, NM 87114-4605
- E. NE: Thomas G & Marshall Mathias, site address 627 CR-18, mailing 1252 N Farm Road, Monte Vista, CO 81144-9776
- F. E: Mathias Concrete, Inc., site address 150 Daniel Lane, mailing address PO Box 266, Monte Vista, CO 81144-0266

All site addresses are South Fork, CO 81154.

See Exhibit L for owners of permanent man-made structures.



### **Exhibit C. PRE-MINING AND MINING PLAN MAPS OF AFFECTED LANDS (6.4.3)**

MAP C-1 Previous mining and reclamation. (aerial photo base)

MAP C-2 Mining Plan, including adjacent landowners. (See Exhibits B-1, D-1 and S, also, for more details)  
This Google Earth 2016 photo is used to show current status, as the 2023 photo was taken with snow on the ground. The only changes have been materials removed from stockpiles.

Name and location of the following items within the area and within 200 feet of all boundaries (permit and affected) (items 6.4.3.(a) and 6.4.3 (g):

- All adjoining surface landowners of record
- Creeks and other bodies of water
- Significant, valuable, and permanent man-made structures including name of owner, location, and type of structure for: (See also Exhibit S.)
  - Roads and streets including bridges and related features: Note: box culvert under RR to SE of permit area is 204 feet from edge of affected area: 5-ft x 2-ft concrete, 20-ft long
  - Buildings: None
  - Other structures: railroad and cellular tower and elements in fenced compound
  - Oil and gas wells and lines: None
  - Power and communications lines, especially poles and boxes: West/South of permit area serving cellular tower.
  - Not specifically called out by MR&R but to be included: irrigation ditches and drainage control structures, retaining walls, and improved pathways: Minor Ditch. No other features noted.
- Existing topography of the area with direction and rate of slopes: 2% or less, sloping toward Minor Ditch.
- Present vegetation type: grassland "wet meadow" with scattered shrubs and trees along permit boundary (area not to be affected) and in existing pit. See Map C-1

Total area to be involved in the operation including:

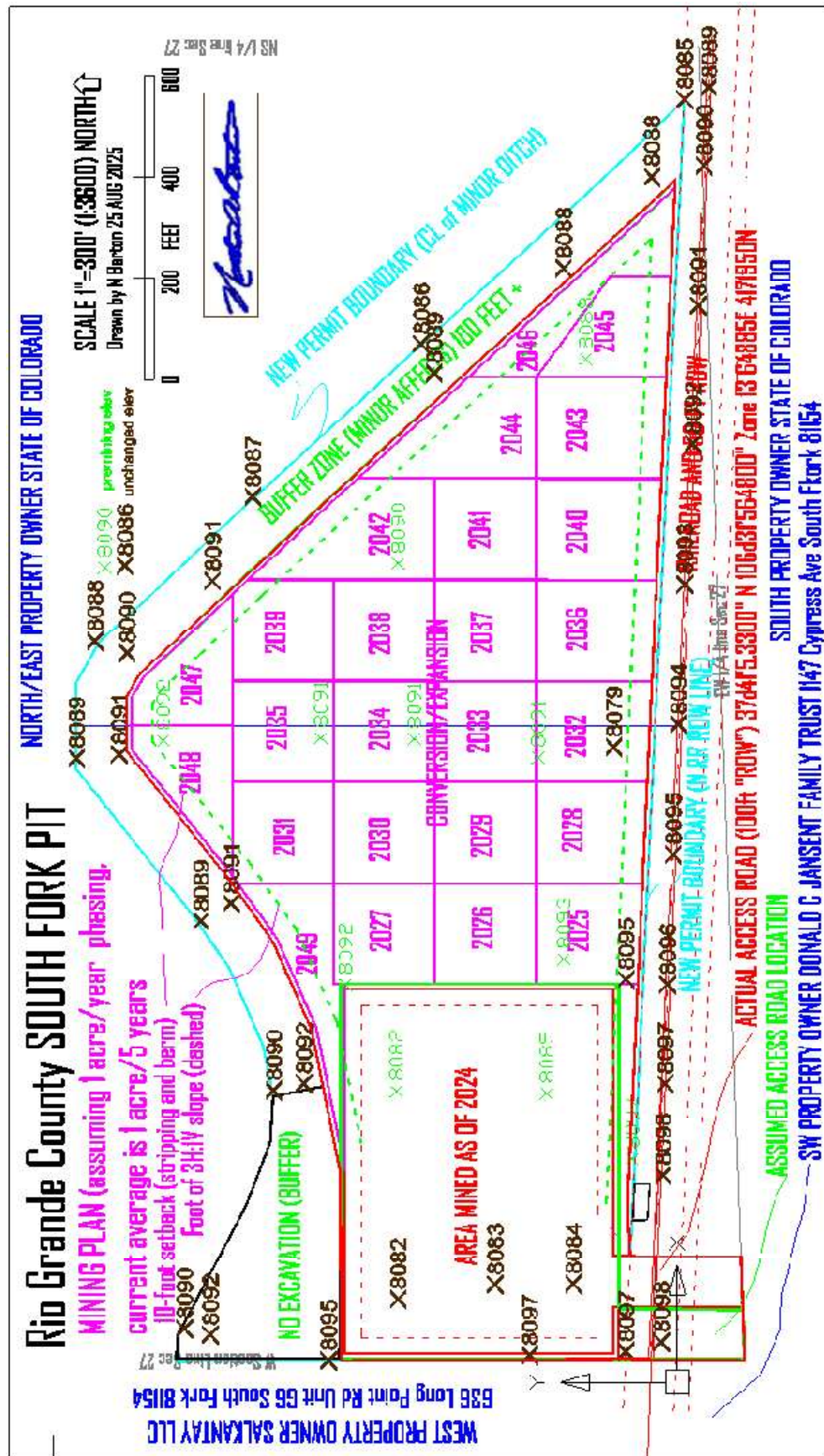
- Area to be mined (excavated) 34.5 acres
- Area of affected lands, including areas with minor or no planned excavation, stripping, or storage: 44.0 acres
  - Access roads: Existing 24-foot max width, gravel, including RR crossing
  - Stockpiles: outer perimeter of mined areas (10-ft or larger buffer zone): SE ¼ of current affected area.
  - Surface water control measures: primary: no exterior surface discharge (swales in buffer zone outside berms/piles). Infiltration/evaporation basin shown in Exhibit E for reclamation; temporary ones may be established as needed during mining.
  - Plant location(s): locations to change as mining progresses: no permanent plant to be used.
  - Aerial and satellite photography of the area including 200 feet outside area: provided at various scales.







MAP C-2







**Exhibit D. MINING PLAN (6.4.4.)**

**Exhibit D.1 SITE DESCRIPTION AND PREVIOUS MINING HISTORY**

The current pit and all proposed future mining is in the Rio Grande valley floor between the railroad and the Minor Ditch, both of which roughly parallel the Rio Grande at this point. The current area is approximately 1300 feet from the nearest bank of the Rio Grande and the proposed area to be mined is approximately 1000 feet from the nearest riverbank.

The mining of the current 110c began in 1987, and has continued since then, on an intermittent basis with frequent hauling of processed materials. PAST MINING OPERATIONS: History, uses, and methods used in the past, including approximate areas and volumes if known, previously reclaimed (whether released or not) areas (especially those which need to be disturbed due to the conversion/expansion), and previous technical revisions (TR), amendments, etc: Stripping and excavation: dozer, scraper, front-end loader. Crushing and screening using permitted portable plants powered by diesel-fired gensets. No areas for which full or partial reclamation has been requested. Technical revision TR-01 approved in 2014 for importation of clean material from offsite for reclamation use.

TOPOGRAPHY: This is a generally level area (current site has an elevation change of approximately 4 feet from the SW corner (highest point) to the NE corner (lowest point) with little relief (except as the result of this mining operation). There are no significant natural features on the site. Elevation of the expanded site varies from 8097 (SW corner) to 8087 (SE corner) and natural surface drainage into the Rio Grande is interrupted by the Minor Ditch. North of the Minor Ditch there is a gentle slope (12 feet in 1000 feet, or 1.2%) to the river. This area has very minor channels, and irrigation laterals and ponds or basins.

AIR QUALITY AND WEATHER/CLIMATE: Frost-free period 80-100 days. Temperatures range from 3F to 77F, precipitation averages 10.56 in/year, with average 42 inches of snowfall. Precipitation greatest in July-September. Average wind speed 5.5 mph, prevailing from the WNW.

VEGETATION: Including irrigation and farmland status (unique/exceptional/conservation easements): The entire site is classified as ecological site R051XY317CO Foothill Loam and consists of grasses and shrubs (grasses dominant) with virtually no woody species.

UNIQUE FEATURES: When irrigated, the site can be considered prime farmland. However, there are no water rights and irrigation would require pumping water from the Minor Ditch uphill or construction of a new ditch. There is no evidence of historic or prehistoric activities on the site.

CHARACTERIZATION OF SURROUNDING AREA (2 miles, ½ mile), upstream/downstream:

Upstream within 2 miles and ½-mile: farmland.

Downstream within two miles: farmland and limited rural housing. Within ½-mile: gravel mining and commercial/industrial activities

North: irrigated farmland and scattered rural housing.

East: subdivision (residential/commercial/industrial) and farmland

South: Railroad, grazing land, state highway (SH-160) and National Forest System lands.

West: Farmland.

PAST USE, CURRENT USE, AND ZONING: State land (since 1876), Grazing (leases), railroad since 1873, mining since 1987 (current leased use). Portion of parcel **1927300047. Zoning AF (Agricultural Forest).**

JURISDICTION(S): (Exhibit P) County of Rio Grande. Colorado State Land Board. Rio Grande Conservation District (natural resources). Rio Grande Water Conservation District. No municipalities or known special/metropolitan districts. Not in floodway, floodplain status unclear due to mapping limitations.



## **Exhibit D.2 PROPOSED FUTURE MINING OPERATIONS**

1. Purpose: To guide mining of the permit area for the duration of the operation.
2. General Concept (Task Statement): Do mining in several stages/phases, starting with access and site preparation, and then mining starting on the west edge and moving counterclockwise around the permit area.

Conditions: Given past and recent mining and partial reclamation, previous requirements, and new/revised requirements imposed by federal, state, and local governments and given:

- a. Existing fencing defines the current and extended permit boundaries on the W and S sides of the site (along railroad ROW and adjacent, private property).
- b. Existing Minor Ditch centerline defining the N and E sides of the site
- c. Planned setback of 100 feet from the Minor Ditch centerline for significant work affecting the land
- d. Existing location of access road and its permanent nature
- e. Lack of overburden

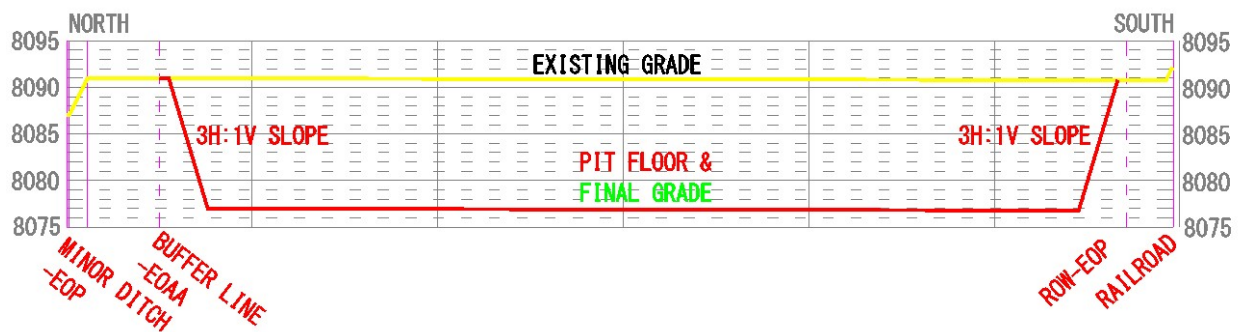
Standards: Comply with all requirements while protecting the safety and health of miners, visitors, and adjacent landowners and quality of the environment (including visual, sound, and socio-economic impacts), efficiently excavating and processing materials. This plan addresses methods of mining by stages (and associated surface disturbances), earthmoving, water diversions, sizes of areas to be worked at one time, timetable of mining (excavation) and processing, intermittent/seasonal status (as per CRS 34-32.5-103(11)(b) – including periods estimated, size and location of each phase, and sequence), maps (Exhibit E), depth/thickness of overburden and material being mined and nature of bedrock (stratum immediately under deposit).

3. Tasks: Prior to additional excavation/processing at the site, the operator will:
  - a. Mark the exterior boundaries of the affected area using T-posts and 4-inch diameter white PVC pipe (7 each).
  - b. Continue to use the existing access road, gate, and signage to access the site: see Exhibit D-1.
  - c. Designate and post signage for muster area (emergency assembly area) and escape routes.
  - d. Document condition of fencing if deemed needed by landowner, adjacent landowners/lessees.
  - e. Mark the boundaries of the “work area” (plant site) for storage/truck loading area and plants for future use (T-posts and 4-inch diameter white PVC: estimated 4 each).
  - f. For each phase, strip and store soil in outer N, E, and S berms, excavate and stockpile aggregate.
    - i. Strip immediately before excavating pitrun material, at least 10 feet behind the planned top of working face.
    - ii. Excavate only when processing equipment is on-site or will be immediately available.
    - iii. Process (crush and screen) material using fully permitted portable equipment brought on-site to process material on an intermittent basis.
    - iv. Stockpile processed materials and load trucks with construction materials as required for projects.
    - v. No scale is planned, but if required due to contract or other projects, locate a portable, licensed truck scale near the access road entry (railroad crossing).
    - vi. No permanent processing/handling equipment is proposed.
  - g. As much as possible, excavate pitrun and feed directly to the processing plant, and then convey to stockpiles for storage and shipment as needed.





- h. Ensure all drainage of affected areas and stockpiles remains in the affected area. Slope stockpiles, working areas, and pit floor to shallow swales and retention basins to direct and collect storm water (allowing it to evaporate or infiltrate).
- i. Store and protect stripped soil in stockpiles (see maps), including shaping, compacting, and seeding with annual rye and/or alfalfa.
- j. Begin extracting pitrun materials. Use loaders and/or trackhoes to move materials to stockpiles or directly to processing plant, following the general sequence as shown in Exhibit E. Although subject to change based on various factors, in general on average an area of 200 by 200 feet (~1 acre) will be stripped and mined to an estimated depth of 14 feet.
- k. Mine exterior of the permit area to a slope of 2H:1V to 3H:1V to reduce need to backfill). Excavate internal working faces up to vertically, with benching based on face stability.
- l. Provide shallow swale/retention basin in work areas (on pit floor) to collect runoff and exposed ground water from the affected area. Grade pit floor to a generally flat, gently sloped area for grazing (post-mining).



**Figure C.1 Cross-section along widest part of pit**

4. Identify scheduling and production (6.3.3.(a)): Continue mining in Fall of 2025 (anticipated).
  - a. Mine for approximately 25-50 years, depending on demand, to be completed by 2075. Average estimated at 44,000 tons/year or less (no significant rate increase over past operations).
  - b. Excavate and process (screen/crush) construction materials for an estimated 30-50 days no more than once a year using portable equipment.
  - c. Haul material to projects nine to ten months per year, depending on work, demand and weather.
  - d. STATEMENT OF INTERMITTENT OPERATION: Due to demand, weather and elevation the operator may not be able to operate at least one hundred eighty days per year, but anticipates resuming operations (excavation, processing, shipping) within one year of any temporary cessation of operations.
  - e. Leave some processed construction materials on the permit area at the end of mining, for the landowner's own use on the property (estimated 0.25 acres), as the landowner may request. This will be approved by landowner when submitting for final reclamation release. Location immediately east of the gate (north of railroad).



*Note 1. Of the total of 44 acres, approximately 9 acres has been mined and is at final grade. About 1 acre (eastern portion of existing site) will be disturbed again from what was originally planned as final grade. Approximately 9.9 acres in the permit area will not be excavated or have material stockpiled but may be affected by traffic and other activities. Of this number, 1.5 acres includes the old (assumed) access road, adjacent land, and the actual access road, which will remain as a permanent roadway for access to the railroad, State Land north of the railroad and to the Viero cell-phone tower. Therefore, approximately 25 acres will be newly disturbed. The primary work area (plant area and product stockpiles) will be in the south portion of the site just north and east of the railroad crossing/access road.*

5. Provide information to DRMS specified by 6.4.4:
  - a. Primary commodities and intended use. No secondary commodities to be extracted.
  - b. Intended use of any expected incidental products. Not applicable.
  - c. Statement on explosive use and impact on off-site areas/features. No explosives to be used.
  - d. Roads (6.3.3.(g)): Both the current and original alignment of CR-50 which provide access to the site, the railroad, and other features, will remain post-reclamation. Based on landowner request, approximately 1000 feet of road (not necessarily designated as a county road) through the site from the railroad crossing and access road may remain as part of reclamation, to or near the northern point of the site (near the Minor Ditch) for use by leases, Minor Ditch Company, and other purposes.
    - i. Dimensions: 20-24 feet in width, 2% crown
    - ii. Improvements: gravel including a flat turnaround area of 108 feet diameter for emergency responder use at or near north end of the road.
    - iii. Specifications: Per Rio Grande County road specifications.
    - iv. Exemptions to requirements: None anticipated.
    - v. Associated feature specifications (e.g., drainage structures): shallow bar ditches may be placed on both sides of roadway (up to 6 feet wide, 1 foot deep) if needed to keep roadway free of standing water. No other surface features are indicated based on basement rock and location.
6. General Notes:
  - a. Soil/Plant growth medium (6.3.3.(b)) tasks: 12-14 inches of soil will be stripped and stockpiled in berms, primarily at locations shown in Exhibit E map, or moved directly to previously affected and graded areas for reapplication. Due to screening out of oversized materials and slopes, soil replacement will be not less than 6 inches. (See Exhibit D.)
  - b. Salvage all surficial materials not suitable for construction materials. An estimated 1600 CY (in-place) soil from each acre, of which about 1500 CY will be available after screening and use for grading (backfill, road, etc.).
  - c. Construct perimeter stockpiles/berms with swales or silt fencing at the toe(s) to:
    - i. Control runoff, prevent wind and water erosion, and reduce visual impacts.
    - ii. Protect soil by compacting to not more than 70% modified Proctor density (using field estimation).
    - iii. Further protect soil by seeding immediately (for stabilization) after application of erosion control polymers (if any), usually within seven days of completion of a stockpile or section. Broadcast seeding rates for soil stockpiles:

San Luis slender wheatgrass	6.0 lb PLS/acre
Annual rye (nurse crop)	1.5 lb PLS/acre
  - d. Use standard agricultural weed control for the crop, coordinating with landowner and County.



- 
7. Overburden, waste rock, and deposit characteristics (6.3.3.(c) & (d)): No overburden is anticipated. Excavate all rock and use as pitrun or product: screen fines. Use fines not shipped from site as backfill and subgrade below soil for final slopes.
  8. Components not already addressed (6.3.3.(e)): use standard 3-strand barbed wire or electrical fencing to keep livestock out of pit, as required by landowner and surface leasee. Maintain entry gate at CR-50. Other than a possible scalehouse, install no temporary or permanent buildings, including no shop or maintenance buildings. Use trailers/containers and portable above-ground storage tanks with secondary containment for fuel, if needed for maintenance.
  9. Dimensions of disturbances (6.3.3.(f)): See on Exhibit E – map. The 100-foot buffer zone as measured from the centerline of the Minor Ditch will be maintained, and no mining will be done to the northwest of the existing operation.
  10. Water use (6.3.3.(h)): Use water for dust control (traffic areas, crushing and screening) as provided by usual county sources. Pitrun material is expected to be moist to wet when excavated and processed, due to alluvial aquifer. Water consumption is estimated at 10 gallons per ton of production, or about 1 acre-foot per year, including pitrun moisture content and no washing of product. This is equal to 0.1 acre-feet water per affected (and unreclaimed) acre per year (equal to 1.2 inches precipitation).
  11. Water source (6.3.3.(h)): Obtain water from existing County sources of water. No water rights, either on the Minor Ditch or other sources, are identified for this site.
  12. Groundwater (6.3.3.(i)): Except for water infiltrating from high river levels during exceptional spring runoff, we do not expect to encounter or expose groundwater in operations. If there is a potential to expose ground water, depth of mining will be reduced until water recedes. Collect and convey runoff which does not immediately infiltrate to infiltration/evaporation retention basins in work area to meet 72-hour rule. See Exhibit A (page 14) for well information (State Engineer's Office).
  13. Compliance with water law (6.3.3.(j)): Comply as discussed in items 11 and 12 above,
  14. Refuse/acid/toxic materials (6.3.3.(k)): No refuse, acid-producing, or hazardous chemicals/substances are expected to be exposed during mining operations. All fuel, lubricant, coolant, and similar materials used by equipment on the Pit shall be stored with secondary containment, and in accordance with a site spill prevention and response plan.
  15. Waste (6.3.3.(k)): Dispose of solid waste generated at a permitted facility. This includes any petroleum-contaminated soil from releases or leaks. This site may accept clean fill (earth, crushed Portland cement concrete, cured asphaltic cement concrete, and rock) to process for aggregates and/or use for beneficial fill to achieve final grade and wood waste to use as mulch/soil amendment in reclamation, as approved by Technical Revision TR-01, 29 JUL 2014.
  16. Hydrologic balance (6.3.3.(l)): Based on review of the terrain, water rights, irrigation, wells, and related information, the Pit is expected to have very minor impacts on the water balance in the immediate area or downstream on the Rio Grande.
  17. Prevention of off-site damage (6.3.3.(l)): See Exhibit L. The terrain, combined with the shallow nature of the proposed mining, impact of past mining, and setbacks from significant manmade structures and terrain features, there is no significant potential for off-site damage to infrastructure, buildings and other structures, or users of those features.
  18. Stability of terrain (6.3.3.(l)): As with item 17 above, slopes of 2H:1V or flatter are not expected to create problems with stability of the land within or outside the permit area.
  19. Processing on-site (6.4.4.(m)): Process materials (crushing, screening, and possibly washing) on-site using portable plants located and operating intermittently on-site, with no permanent structures. Use no chemicals. Permit plants in accordance with Colorado air quality and other regulations. The
-



site is not expected to host a hot-mix asphalt facility or ready-mixed concrete plant. If there is a need for such, separate applications for such temporary use will be submitted, along with formal notification of DRMS as a minor and temporary use not requiring a Technical Revision.

20. Primary products (6.3.3.(n)): Produce aggregates (sand and gravel) and borrow material (earth) for use as construction materials.
21. Secondary products (6.3.3.(n)): no secondary products are anticipated.
22. Incidental products (6.3.3.(o)): no incidental products are anticipated.
23. Explosives (drilling and blasting) (6.3.3.(p)): no drilling and blasting will be done at the pit.
24. Roads: Existing 24-foot-wide access road: no improvements planned. Road to gate north of railroad to remain after mining and reclamation.
25. Management of storm water (Surface water management plan, SWMP):
  - a. Objective: prevent surface discharge of runoff, including downstream sedimentation, from the site by retaining water in the pit, and using berms (soil stockpiles) to isolate from any 100-year+ flood events on the Rio Grande or Minor Ditch while maintaining floodplain capacity.
  - b. General concept: Management of storm water is integrated into the mining and reclamation plans. This section summarizes the surface water management plan.
  - c. The only potential runoff from upslope is from the railroad grade: other areas including that S of the railroad, and to the west, slope directly towards the river and not this site. Minor Ditch serves as a barrier to very high water levels.
  - d. Provide work areas with shallow swales and basins to allow infiltration and evaporation to ensure good trafficability and reduce tracking; fill and level as part of reclamation.
  - e. Install silt-fencing, swales, and use other best management practices (BMP) as control measures to spread runoff and thus prevent soil erosion off berms (soil stockpiles) and along working faces on the perimeter of the site.
  - f. Do not have outfalls: any water accumulating due to storms or snowmelt can flow through unmined alluvium towards the Rio Grande without human action.
  - g. Relocate BMP as mining progresses. Update map as required.
  - h. Carry out BMPs for inspection and maintenance, including good housekeeping, repair and maintenance, and conduct inspections (quarterly and following precipitation events).
  - i. See also tasks in Exhibit D (Reclamation) related to storm water and erosion control.
  - j. Provide annual training to all miners.
  - k. Follow spill prevention and response plan for site.
  - l. Document all actions and as necessary submit annual reports.

A separate surface water management plan is not included: elements required by CDPHE WQCD and Federal requirements for stormwater management plan (SWMP) are contained in this Exhibit, Exhibit E, and maps in Exhibits C and F.





**Exhibit E. RECLAMATION PLAN (6.4.5)**

1. Purpose: To describe the timing, procedures, criteria, and materials to reclaim the affected land for the proposed future land use.
2. General concept: Task: Reclaim the operation  
Conditions: both on an on-going basis and at the end of mining operations, and taking into account previous work and misunderstandings of actual locations, including change in the access road:  
Standards: Return the Pit to use as rangeland for livestock to match area. Establish the final grade following actual extraction of material within 12 months (except for the work (plant/stockpile) areas), and place soil and seed within 6-12 months of achieving final grade (based on season). Remove rock (stone, cobbles, etc.) from the stripped soils to improve the soil quality. Improve forage and the carrying capacity of the land, while aiding distribution/retention of irrigation water. Revegetate in cooperation with landowner (State) and Rio Grande Conservation District (SJCD).

3. Tasks: The operator will:
  - a. Establish final reclamation grade by grading, and whatever backfilling is needed:
    - i. Use reject material, and excess soil beyond that required for surface application
    - ii. Use clean fill (earth and other materials from off-site) ONLY after evaluating for and removing any trash, contaminated materials, or other undesirable items that would potentially create problems for reclamation and post-mining use in accordance with DRMS requirements and after approval of a Technical Revision by the Division.
    - iii. Use fines (from on-site screening) immediately before placing soil, to ensure that the desired depth of planting medium is obtained
    - iv. Establish grades averaging 3H:1V and with a goal of 6H:1V to improve soil retention and revegetation
    - v. As necessary, install very shallow swales or rills at right angles to slopes to limit slope lengths and improve erosion control
    - vi. Observe soil quality and use only poorer soil (sand or clay with little or no organic matter) for filling depressions or swales in the floor of the pit.
  - b. Replace soil:
    - i. On a schedule that allows reclaimed areas to be seeded at the preferred time of year as recommended by Rio Grande Conservation District/NRCS
    - ii. After screening to remove larger rock
    - iii. Move from new areas to be mined to reclaim areas mined and at final grade: 4-inch minimum and average 6-inch thick.
    - iv. Replace soil by using bermed stockpiles as near to their location as possible
    - v. Do not replace soil on access roads to remain as permanent post-mining roads

*NOTE: Screening and moving soil directly from new areas to be mined each year, rather than stockpiling, reduces costs and preserves soil quality, particularly of plant materials.*

- c. Maintain fencing to keep out livestock (and wildlife as much as possible) around areas being reclaimed, until the vegetation is established and with landowner and other leasee coordination and approval
- d. Mark off areas being or fully reclaimed to reduce potential traffic or stockpiling on those areas (delineators, posts/tape, and/or wire and boulders or logs
- e. Place fines from screening as backfill (subsoil) when final grading is done.
- f. Install best management practices (silt fences, straw bales, rills and swales) as necessary to control runoff, prevent erosion and manage sediment.



- 
4. General Information (6.4.5):
- a. May bring good quality soil, inert clean materials to site: use to provide final grade and rooting zone, with Division approval of Technical Revision or other process. Source: County projects.
  - b. Slopes greater than 3H:1V (b): None planned. This is acceptable to the landowner due to benefits achieved. The plan achieves compliance with Rule 3.1. Where backfill is done using waste materials (e.g. fines) is used, the final slope will be flatter to improve stability. (No ponds/basins to retain water are proposed, so 3.1.5.(7) not applicable.)
  - c. Revegetation measures (c):
    - i. Thickness of plant growth medium (soil): 6± inches. See 3.b. above.
    - ii. Schedule and methods of seeding/revegetation: Operator will:
      1. Follow future (current) NRCS and RGCD recommendations
      2. Place soil on excavated and final grade areas within one year of finishing excavation
      3. Place soil on operations areas within one year of no further need for plant/stockpiles
      4. Disc slopes prior to placement of soil to further binding of soil and subgrade and reduce compaction.
      5. Apply fertilizer as directed by the landowner immediately prior to seeding, with details to be reviewed/determined by the landowner consulting with RGCD and DRMS. Apply soil amendments such as sawdust, wood chips, compost, manure, or other clean materials only based on testing and recommendations of RGCD/NRCS. (1987 recommendation was to use 40 pounds each of nitrogen and phosphorus per acre unless a recent soil analysis indicates there are sufficient amounts present.)
    - iii. Plant grass in accordance with RGCD recommendations.
    - iv. Trees: no tree planting will be done. Little or no trees or brush are presently on-site.
  - d. Features remaining after reclamation (d): See Exhibit E.
    - i. Leave no buildings (none planned to be used).
    - ii. Leave permanent entry/access road (CR-50) for at least 108 feet north of railroad ROW (to allow for turnaround of emergency vehicles)
    - iii. On request and with approval of landowner of exact road alignment, construct non-county gravel road from end of CR-50 north approximately 1000 feet to northernmost point of permit area, 100 feet from Minor Ditch, to County standards, 20 feet wide, 2% crown, with bar ditches and 108-foot radius turning circle at end.
    - iv. Do not install culverts: none required due to terrain and soils.
    - v. Remove any fences installed to keep livestock out of areas being reclaimed.
    - vi. Leave gate at railroad in place.
  - e. Provide small quantities of processed construction materials for landowner in a portion of the work area, for their own use on the property and contiguous property. This is not expected to require more than 0.25 acres. Landowner will determine location/size when submitting for final reclamation release. For planning and evaluation purposes, to be located immediately north of cellphone tower and railroad (east of access road and gate).
  - f. Reclamation treatment of specific items (e):
    - i. Remove any temporary storm water controls (including sediment control items and swales) required during operation. Revegetate if needed.
    - ii. Use waste rock dumps from processing (fines, reject material (from on-site), and/or off-site clean fill for final grade (see above)
    - iii. No underground mine openings, buildings or other permanent features not listed
-



- iv. Provide for a stable configuration for wildlife use and passage and livestock pasture (grazing) by phased mining and reclamation and small size of the Pit, together with measures to protect/improve irrigation ditches, protect hydrologic balance, and prevent off-site damage.
- v. Ensure that road, entry, and associated features are stabilized.
- vi. Document all actions and locations.

#### Attachment E-1. Reclamation Seeding

The recommendation NRCS and the Rio Grande Conservation District made in 2014 for nearby similar sites is as follows. This varies from or adds to recommendations made in 1987:

- a. Temporary seeding of stockpiles of soil and overburden:
  - 1. Protect soil by compacting to not more than 70% modified Proctor density (using field estimation).
  - 2. Seed immediately (for stabilization) after application of erosion control polymers (if any), usually within seven days of completion of a stockpile or section. Seeding rates for temporary seeding are 1.50 lb PLS/acre of Annual rye and 6 lb PLS/acre of San Luis slender wheatgrass (if drilled: 12 lb if broadcast). (PLS – Pure live seed)
- b. Seed site: At the landowner's option the site may be planted in alfalfa and/or Timothy grass per standard agricultural practice for the western San Luis Valley using the NRCS/RGCD recommendations, and will be drilled:

Seed Types		
Seed Type	Variety	lbs. per Acre
Crested Wheat Grass	Ephraim or Fairway	1.5
Western Wheat Grass	Arriba	2.0
Indian Rice Grass	Nezpar	0.9
Russain Wild Rye	Bozolski	0.5

[This was the 2014 recommended mix for vicinity.]

- c. Placement of soil and revegetation
  - 1. Place soil on excavated areas within one year of finishing excavation unless area needed for continued operations.
  - 2. Place soil on operations areas within one year of no further need.
  - 3. Disc slopes prior to placement of soil.
  - 4. Apply fertilizer at direction of the landowner, with details to be reviewed and determined by the landowner in consultation with RGCD. Apply soil amendments such as sawdust, wood chips, compost, manure, or other clean materials only based on testing and recommendations/approval of RGCD/NRCS/DRMS.
    - ii. Plant grass in accordance with RGCD/NRCS recommendations (Item 3.c. above). Seed preferably between 01 and 31 July. (Change from 1987 recommendation of late fall.)
    - iii. Application method for grass: seed drill.
    - iv. Mulch: ½ ton per acre of clean straw mulch.
    - v. Trees: no tree planting will be done.
    - vi. If available, water after seeding/mulching for 2-3 days (sprinkler irrigation) within 30 days of seeding.

Note: this originally developed for O'Bannon Pit to the NE 1/2 mile. NRCS stated this is acceptable for this site due to location, elevation and soils.





## **Exhibit F. RECLAMATION PLAN MAPS (6.4.6)**

MAP F-1 Reclamation phases, based on anticipated needs for access, drainage, and related features. Subject to change and assumes 1 acre/year mining (although 5 acres/year more likely).

MAP F-2 Reclamation plan showing contours (1-foot interval)

Name and location of the following items within the area and within 200 feet of all boundaries (permit and affected) (items 6.4.3.(a) and 6.4.3 (g)):

- Creeks and other bodies of water: None
- Significant, valuable, and permanent man-made structures including name of owner, location, and type of structure for: (See also Exhibit L.)
  - Roads and streets including bridges and related features: Note: box culvert under RR to SE of permit area is 204 feet from edge of affected area: 5-ft x 2-ft concrete, 20-ft long. SLVREA nearest pole is 210 feet from affected area. RR within 200 feet (to be abandoned).
  - Buildings: None
  - Oil and gas wells and lines: None
  - Power and communications lines, especially poles and boxes: West/South of permit area. Cellphone tower within 200 feet at SW corner, near RR and access road.
  - Not specifically called out by MR&R but to be included: irrigation ditches and drainage control structures, retaining walls, and improved pathways: Minor Ditch 100 foot setback from affected area. No other features noted.

Existing topography of the area with direction and rate of slopes: 2% or less, sloping toward Minor Ditch.

Total area to be involved in the operation including:

- Area to be mined (excavated) 34.5 acres
- Area of affected lands, including areas with minor or no planned excavation, stripping, or storage: 44.0 acres
  - Access roads: Existing 24-foot max width, gravel, including RR crossing to be a PERMANENT feature.
  - Stockpiles: outer perimeter of mined areas (10-ft or larger buffer zone): SE ¼ of current affected area to be removed for reclamation. Note: Oval (about 2.0 acres) in SE corner of affected area is low point as planned to allow drainage of entire pit and infiltration/evaporation of all runoff.
  - Surface water control measures: primary: no exterior surface discharge (swales in buffer zone outside berms/piles). Infiltration/evaporation basin shown to meet State Engineer requirements (72-hr rule).
  - Plant location(s): locations to change as mining progresses: no permanent plant to be used.
  - Aerial and satellite photography of the area including 200 feet outside area

Spot Elevations (Feet) and contours (1-foot interval) shown for final post-mining configuration.

Refer to table for anticipated dates and areas of different Reclamation Areas (A-H2)

Precise final size of Areas H1 and H2 depends on schedule for processing of materials and stockpiles.

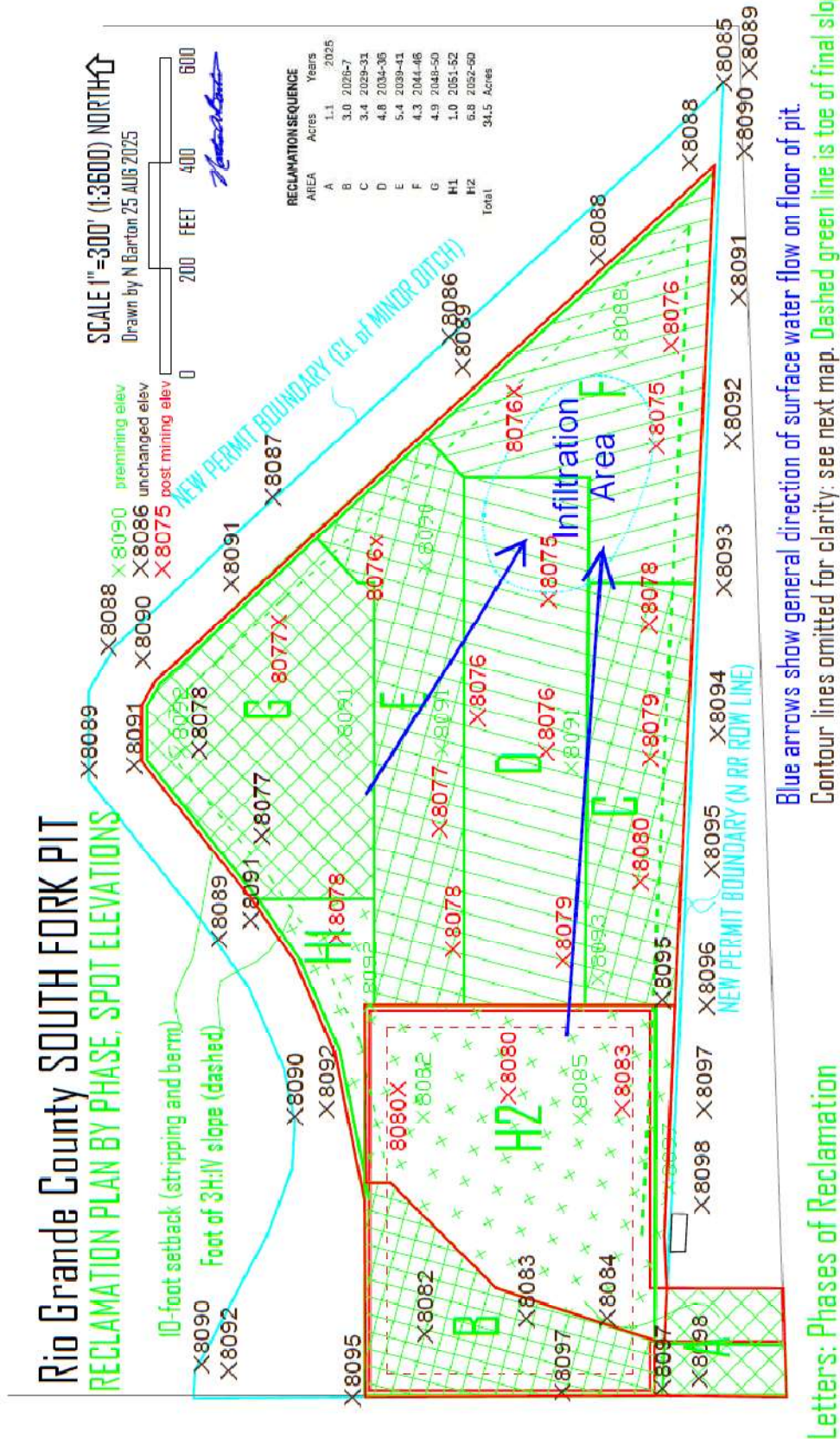
No surface discharge proposed or anticipated. No permanent water features to be left. All swales and berms to be removed. Sheet surface flow to infiltration area (oval) for post-mining/post-reclamation.

Exterior slopes into the pit are 3H:1V or flatter, approximately 45 feet wide and 15 feet high.

Access road. Railroad crossing and service road to northern point of permit area will remain as permanent post-mining features. Exact location of service road to be determined by landowner (State Land Office) at time of reclamation. Therefore, it is not shown.



MAP F-1









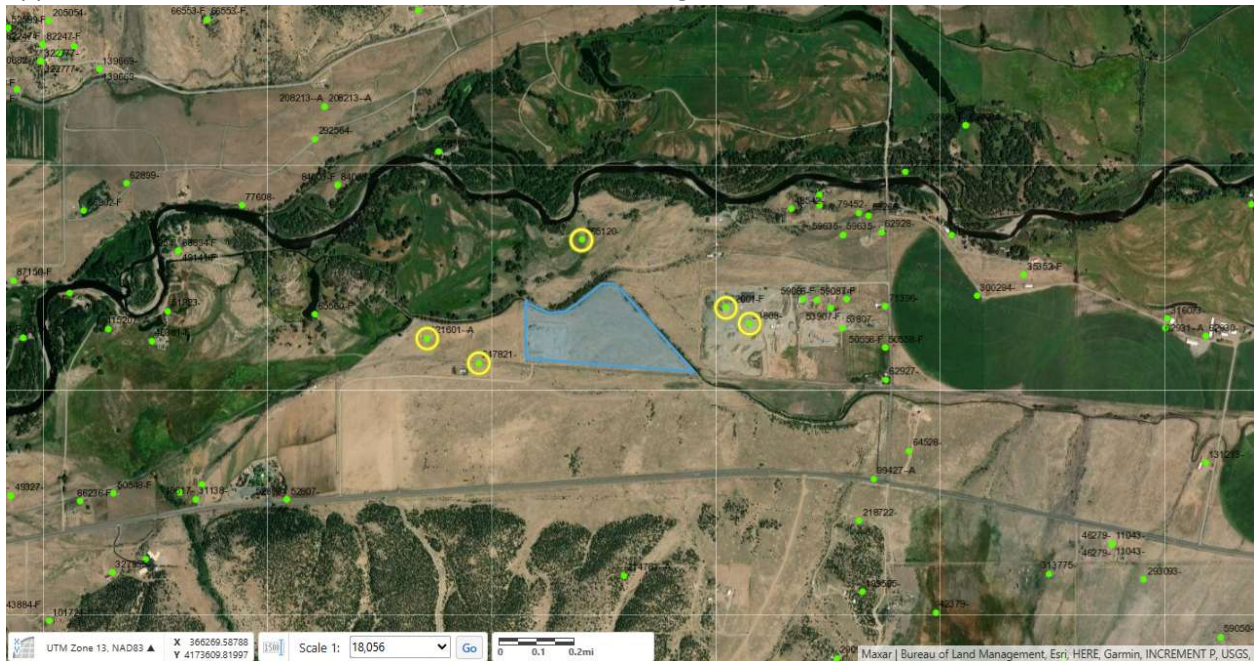
### **Exhibit G. WATER INFORMATION**

The operation is not expected to directly affect surface or groundwater systems.

**SURFACE:** Including flooding and wetlands There is little or no surface drainage into the site from the south due to the railroad bed which has no culverts. The Rio Grande's main channel varies in elevation (assumed Ordinary Highwater Mark) from 8087 feet N of the W edge of the site to 8075 feet N of the East corner of the site. The Minor Ditch diverts surface water from the Rio Grande approximately one mile W and carries irrigation water to fields approximately 1-1/2 miles to the E. This site has no water rights.

**GROUND:** The site appears to be on the fringe of the Rio Grande alluvial aquifer, although During periods of very high water on the Rio Grande (example: heavy spring snowmelt), an ephemeral pond has appeared in the lowest part of the pit, due either to a temporary rise in the water table or good precipitation and slow-draining materials in the floor of the pit.

**WELLS AND PONDS:** Within 1500 feet (0.3 miles) of the site, there are five recorded wells. two wells located WSW of the site are completed to a depth of 80 feet, one to the east completed to a depth of 40 feet, and the one well north of the pit within 1200 feet is completed to a depth of 410 feet. One pond (actually a gravel pit well) is located to the east but has mostly been filled in. A wetland or shallow pond is located 600 feet to the north of the proposed expansion but is fed by an irrigation ditch or lateral and appears to be a silted-in meander of the river. It is downgradient from the Minor Ditch.



**RIGHTS AND QUALITY, STATUS OF BASIN:** The Rio Grande basin is over appropriated for both ground and surface water. Neither the State nor Rio Grande County holds water rights for this land. Therefore, care must be taken to prevent surface water from being present longer than 72 hours or exposed by excavations, and any water needed for processing of material must be brought to the site.

SEE EXHIBIT D-2 item 10 for water requirements. No surface discharge from affected land proposed.

**WETLANDS, WATERS OF THE US, FLOODPLAINS:**

No significant issues observed or noted. Errors in data and records were noted.



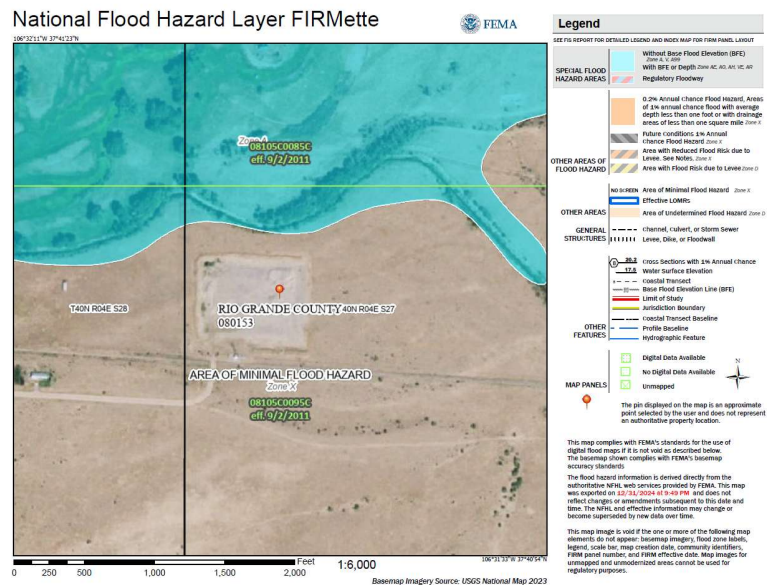
## WETLANDS MAP (from National Wetland Inventory)



From [National Wetland Inventory Map](#), accessed 15 July 2024.

Note: although the NWI shows an “intermittent Stream” wetland type (R4SBC) with a channel that contains flowing water only a portion of the year, no evidence of such a channel can be found on site, and there is not a culvert or bridge allowing water to flow under the railroad, which has been in place for 152 years. R5UBFx is the Minor Ditch itself, which will be approximately 100 feet away from areas which are proposed to be excavated. PUBFx to the NE, though identified as a “palustrine wetland,” was a pit pond (permitted with water rights by the Colorado State Engineer (32001-F)) which has been filled but authorized for use for commercial purposes.

## FLOODPLAIN (Flood Insurance Rate Map)



Although the FIRM shows portions of the site near the Miner Ditch as being in the 100-year floodplain of the Rio Grande, the map was not prepared using a rigorous analysis and therefore is in error (USGS maps and not reconned): The Miner Ditch flows from W to E and therefore, would be entirely in the floodplain (which is not shown on the map) but would have a base flood elevation within the ditch or immediately above its bank, not as shown. If the FIRM were accurate, the pit would increase the capacity (volume) of the floodplain but not impact the floodway.



---

**Exhibit H. WILDLIFE INFORMATION**

---

**WILDLIFE AND LIVESTOCK:**

CPW was contacted for comment and information. CPW referred the author to various websites with current data from CDNR, USFWS, and the Colorado Natural Heritage Program (CNHP at CSU).

Information was obtained from:

<https://www.arcgis.com/apps/instant/interactivelegend/index.html?appid=b3e1f4c17e98481c85f9683b02e91250>, [fws.gov/office/colorado-ecological-services-field-office/species](https://fws.gov/office/colorado-ecological-services-field-office/species) and <https://cnhp.colostate.edu/maps/codex/> (Accessed 25 August 2025).

The site presently supports little wildlife but both elk and deer are seen on the property and adjoining properties including State Trust Land to the S, and private land to both the E and W as well as along the river. The area is a known elk migration route and year-around habitat for elk, deer, and their predators, including potential winter concentration areas.

Site is also leased by State Land Board for grazing. However, grazing is limited to outside the fence of the railroad and to north of the Minor Ditch. Grazing of livestock is not done on the actual disturbed area on a regular basis but may be done immediately adjacent in land not actively being mined or reclaimed, including nearby irrigated areas supplied by the Minor Ditch. Migration paths of big game and other wildlife are not significantly hindered by the mining as proposed. Proposed mining and reclamation sequence will ensure passage across the valley is without significant impediment. Grazing deer and elk (and other species) are observed both around and in the present excavated area and stockpiles, including during periods of on-going operations. This is also the case in adjacent operations.

**MAJOR SPECIES:**

Elk – This site is located in elk overall range and winter range, and is part of winter concentration area and severe winter range. It is not within an identified migration corridor, though several routes and a migration corridor are identified to the east.

White-tail deer: This site is within overall white-tail deer range but not identified as being part of any concentration area or migration corridor. The range extends completely across the valley.

Mule deer: This site is located in summer and winter range, and there are identified migration patterns though it is not in a migration corridor. The area is severe winter range for mule deer and located just south of a concentration area (along the riverine woodlands) but not part of the concentration area.

Threatened and endangered species for the ecosystem: Colorado has 8 species of birds, 7 species of fish, 7 species of invertebrates, and 7 species of mammals identified by FWS, CPW, and CNHP (CSU). None are known to exist on this site or in Rio Grande County. The site is identified as being in the Gunnison's prairie range but there were no prairie dog colonies observed in or near the site.

WILDLIFE STATEMENT PREPARED BY: Nathan A. Barton, DEE, and Deborah A. Barton, certified wildlife assessor for Navajo Nation. Updated 03 SEP 2025.





## Exhibit I. SOILS INFORMATION

**SOIL:** Depth, type, and handling/preservation: the entire area mined and to be mined is identified as Jodero loam, with no inclusions. A typical profile is 0-24 inches of loam, with 24-60 inches of stratified fine sandy loam to clay loam, is well-drained, with more than 80 inches to a water table and no potential for flooding or ponding.

**OVERBURDEN:** Including materials to be separated from Pitrun, depth, type, and handling/preservation/use. Although up to 24 inches is loam, there is some usable materials in that thickness, and 10-14 inches of soil (loam) is expected to be removed and preserved either by placing in stockpiles (berms) or directly on other areas which have been excavated to the planned depth. If larger cobbles are found in this upper 10-14 inches, that may be screened out and used for construction materials. Otherwise, all material at depths >10-14 inches will be used as construction material.

**BEDROCK:** Type and depth to material to NOT be excavated and used for Pitrun: Santa Fe group volcanic deposits, including pre-ash-flow andesitic lavas, breccians, tuffs, and conglomerates. Estimated depth is 20 feet or more below original surface. *Depth of mining is limited by the requirement to keep at least 24 inches above the ordinary water table, and several feet of the native alluvial material will remain to be disked and graded, then have soil placed on it.*

WEB SOIL SURVEY MAP OMITTED – entire site is a single soil type (Jodero loam).

The Jodero series consists of deep, well drained soils that formed in thick, calcareous alluvium from rhyolite, andesite, dacite, basalt, tuff, or trachite. Jodero soils are on stream terraces, concave drainageways, fan skirts, fan remnants, and concave portions of alluvial fans with slopes of 0 to 15 percent. The mean annual precipitation is about 12 inches (305 mm) and the mean annual temperature is about 42 degrees F (5.6 degrees C).

**TAXONOMIC CLASS:** Fine-loamy, mixed, superactive, frigid Cumulic Haplustolls  
**TYPICAL PEDON:** Jodero loam - grassland. (Colors are for dry soil unless otherwise noted.)  
**A1**--0 to 8 inches (0 to 20 cm); brown (10YR 5/3) loam, dark brown (10YR 3/3) moist; strong medium granular structure; soft, very friable; 5 percent gravel; slightly alkaline (pH 7.6); gradual wavy boundary. (5 to 10 inches (13 to 25 cm thick)

**A2**--8 to 24 inches (20 to 61 cm); grayish brown (10YR 5/2) loam, very dark grayish brown (10YR 3/2) moist; moderate coarse subangular blocky structure parting to moderate medium granular; slightly hard, very friable; peds are hard; 5 percent gravel; slightly alkaline (pH 7.6); clear wavy boundary. (10 to 35 inches (25 to 89 cm) thick)

**A3**--24 to 60 inches (20 to 152 cm); grayish brown (10YR 5/2) loam stratified with thin lenses of fine sandy loam, very dark grayish brown (10YR 3/2) moist; moderate coarse subangular blocky structure; slightly hard, very friable; peds are very hard; few thin glossy patches on some faces of peds and in root channels; strongly effervescent; moderately alkaline (pH 8.2); gradual wavy boundary. (25 to 40 inches (64 to 102 cm) thick)  
**C**--60 to 70 inches (152 to 178 cm); light brownish gray (10YR 6/2) loam stratified with thin lenses of fine sandy loam, dark grayish brown (10YR 4/2) moist; massive; hard, friable; few medium prominent yellowish brown (10YR 5/6) masses of iron; 5 percent gravel; strongly effervescent; moderately alkaline (pH 8.2).

**Soil moisture:** These soils are usually moist in some part of the soil moisture control section in some part during the late winter and spring and sporadically throughout the summer and early fall due to convection storms. (Ustic soil moisture regime bordering aridic.)

**DRAINAGE AND PERMEABILITY:** Well-drained; medium runoff; moderate permeability; Ksat class is moderately high.

**USE AND VEGETATION:** These soils are used principally as native pastureland.



## Exhibit J. VEGETATION INFORMATION)

Vegetation (Ecological Site) NRCS R051XY315CO (Wet Meadow 6-10 PZ) (when undisturbed) The site is located on the extreme W edge of Ecoregion 22a.

Vegetation on-site: Principal native plants are rabbitbrush, blue grama, western wheatgrass, and snakeweed. The site is not irrigated using water from the Minor Ditch and surface flows are diverted by the railroad embankment. As the final floor of the pit is planned to be two feet above the ordinary groundwater table, subirrigation of the floor is likely to occur during some periods of the year.

Some portions of the existing mining operation have a limited number of cottonwood and other deciduous species, due to windborne volunteer seeding and excavation as discussed above. There are high and low shrubs and more forbs along the slopes of the Minor Ditch (in permit but outside affected area).

Threatened and endangered species: Colorado has 16 species of plants identified by FWS, CPW, and the Colorado Natural Heritage Program (CSU). None are known to exist on this site or in Rio Grande County, according to [fws.gov/office/colorado-ecological-services-field-office/species](https://fws.gov/office/colorado-ecological-services-field-office/species) and <https://cnhp.colostate.edu/maps/codex/> (Accessed 25 August 2025).

Proposed seeding for reclamation in 1987 included western wheatgrass as listed above, needle-and-thread, and Russian wildrye (as a nurse crop). The 2023-25 NRCS/RGCD recommendation changed this to as shown in the table below, with quantities per acre for drilled seed.

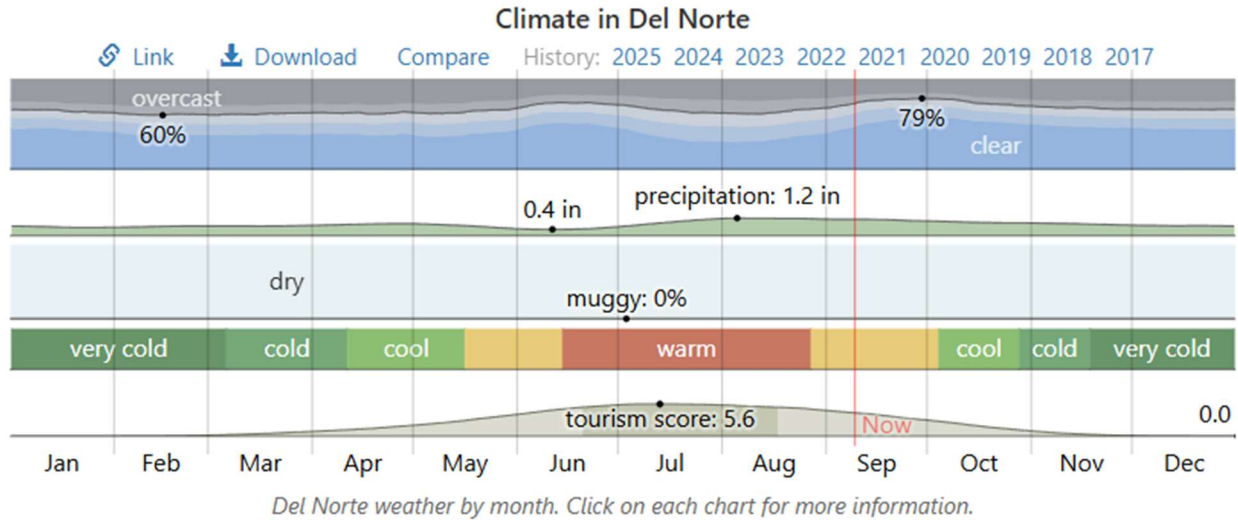
Seed Types		
Seed Type	Variety	lbs. per Acre
Crested Wheat Grass	Ephraim or Fairway	1.5
Western Wheat Grass	Arriba	2.0
Indian Rice Grass	Nezpar	0.9
Russain Wild Rye	Bozoiski	0.5

**22a** The **San Luis Shrublands and Hills** ecoregion includes the higher relief foothill edges and low mountain areas within the basin. It includes the San Luis Hills in the southwest, a rugged mass of hills and tilted mesas. The hills are composed of andesitic volcanic rock and are 500 to 1000 feet higher than the adjacent ecoregions of 22. Vegetation communities represent a transition from the grassland and desert communities of the lower basin to the woodland species found in the surrounding foothills of the Southern Rockies (21). Big sagebrush, rabbitbrush, and winterfat occur, as well as grasslands of western wheatgrass, green needlegrass, blue grama, and needle-and-thread. Areas of pinyon-juniper are found on the tops of the San Luis Hills.



### Exhibit K. CLIMATE INFORMATION

The South Fork Pit is located about 9 miles west of Del Norte and 6 miles east of South Fork, but the Del Norte Airport is the source of most climate data.



### South Fork Monthly Climate Averages

12 Month Climate Scroll

°F °C

Month	January	February	March	April	May	June
Avg. Temperatures	Hi 30°F Lo 6°F	Hi 32°F Lo 10°F	Hi 40°F Lo 18°F	Hi 48°F Lo 26°F	Hi 58°F Lo 35°F	Hi 72°F
Avg. Wind Speed	5 mph	6 mph	7 mph	7 mph	7 mph	6 mph
Avg. Precipitation	0.6 in	0.8 in	1.1 in	1.4 in	2.2 in	1.3 in
Average Humidity	81%	80%	72%	60%	52%	43%
Avg. Cloud Cover	32%	34%	30%	26%	26%	19%
Pressure Average	30.2 in	30.1 in	30.0 in	29.9 in	29.9 in	30.0 in
Average Dry Days	22	18	21	22	22	24
Avg. Precip. Days	5	6	5	5	8	6
Avg. Snow Days	3	4	5	3	1	0
Average Fog Days	0	0	0	0	0	0
Average UV Index	2	2	2	2	3	4
Avg. Hours of Sun	240	213	261	250	263	284

Averages are based on historical weather data from the past 10 years. [Click and drag this table...](#)

As obtained from the CDNR's CDSS Map Viewer, the precipitation average for the site is approximately 11 inches/year, and the shallow-pan evaporation for the site is approximately 42 inches/year.





## Exhibit L. RECLAMATION COSTS

1. As a County of the State of Colorado, Rio Grande County is not required to post a financial warranty.
2. Estimate of reclamation costs: Statement about local government unit Rio Grande County, as a governmental unit of the State of Colorado is not required to post a financial warranty for reclamation. This information is provided for budgeting purposes:
3. Point of maximum disturbance: This point is estimated to be approximately 2 years after approval of this conversion and excavation outside the present 110c permit boundary. The disturbance at this point (all dimensions in feet) will include:
  - a. Existing affected lands (as of 2024) 9.3 acres, including entry, loading/storage area, work area (plant site), soil stockpiles,
  - b. Areas to be mined 2025-2028 (Map E1) (Reclamation Area C) of 3.4 acres.
  - c. This totals 12.7 acres.
  - d. If reclamation release is approved for Reclamation Area A (1.5 acres S of the railroad(both undisturbed and permanent roadway)), this is reduced to 11.2 acres. This is proposed as soon as the conversion/expansion is approved.
  - e. If reclamation is completed (placement of soil and revegetation) and release approved for Reclamation Area B (3.0 acres), this is further reduced to 8.2 acres. This is proposed to be done at the same time as stripping and excavation is done in 2025.

### 4. Unit and total costs:

Action (incl. Labor)	Unit cost	Quantity	Units	Total Cost	Notes
Backfill and grade	\$0.60	2000	CY	\$1,200	
Grade to finish	\$240	8.2	Acre	\$1,968	Incl. ripping
Apply soil	\$3.50	6,615	CY	\$23,153	Incl. discing
Seed, etc.	\$1200	8.2	Acre	\$9,840	Incl. mulch, fertilizers
Mobilization	\$2000	1	L.S.	\$2,000	From Monte Vista
Total	--	--	--	\$38,161	2025 dollars
Mark-up (18.5%)	--	--	--	\$7,060	
DRMS costs (5%)	--	--	--	\$1,908	
Grand total	--	--	--	\$47,129	Financial Warranty Est.

These are based on calculations using recent DRMS estimates for similar work and assuming 2% per Annum inflation. This estimate will be replaced by the DRMS-reviewed and calculated estimate to be used for posting financial warranty with the State of Colorado. The financial warranty will be recalculated periodically based on site conditions and planned activities.



### **Exhibit M. OTHER PERMITS AND LICENSES**

Task: Obtain the following permits, licenses, and registrations,

Conditions: Given, a site of 44 acres total, with up to 3 acres actively being mined and work areas of up to 2 acres, producing about 44,000 tons per year of construction materials, on private property in Rio Grande County, including products processed on-site, and transported by truck off-site via County Road to a State highway,

Standards: In accordance with all legal requirements (county, state, federal), and good engineering practice, in order to comply with all governmental, insurance, and owner requirements.

Performance Standards:

EQ-01 General and Environmental Training – None identified. MSHA training for New Miners and Annual Refresher for experienced Miners and Site-Specific Hazard Awareness Training to be done.

EQ-02 Emergency Planning and Response – Firewise plan, MSHA-compliant Emergency Action Plan

EQ-03 Air Quality – APEN for mining <70 KT/year, emissions permit and relocation notice for any portable plant brought to the site

EQ-04 Ground Water including water rights – not required unless ground water is exposed for more than 72 hours (not expected)

EQ-05 Surface Water including storm water – CDPHE-WQCD NOI for storm water (no planned surface discharge); no water use from Minor Ditch anticipated.

EQ-06 Waste Water (Sanitary/Industrial) including septic systems – None identified (portable toilets)

EQ-07 Hazardous Materials including Hazardous Communication – Standard MSHA HazComm Plan; only HazMat on-site to be fuels and lubricants in mobile and portable equipment; only very minor maintenance to be done on-site.

EQ-08 Hazardous Wastes – None identified. While very small quantities of hazardous wastes may be generated by on-site maintenance and in case of response to spills, these are well under quantities which trigger registration or permit requirements and will be removed from the site quickly.

EQ-09 Solid Wastes and Recycling – None identified (solid waste and recyclables to be taken to County Shop to be disposed of by commercial haulers at licensed landfill). Authorization to use recycled materials for reclamation included in the previously-approved DRMS 110c permit.

EQ-10 Petroleum handling (Spill prevention, control and related) – None identified (portable equipment with fuel/lubricant storage will have its own (above-ground, portable) tanks and plans for handling and spills. Storage, dispensing, and use of petroleum products (POL) requested in the DRMS reclamation permit application. No permanent on-site storage planned.

EQ-11 Land Quality, including biological

This application and Reclamation Permit

County Planning and Permitting – Building/land use permit issued/grandfathered.



---

Cultural resources – None identified (State property) – DRMS and State Land Office will coordinate. Given vicinity and history, discovery of resources is unlikely. Entire quarter-quarter section was evaluated by State Historic Preservation Officer in 1986 as part of State Land lease.

Biological resources, including wildlife, threatened and endangered species – DRMS coordinating with CPW and US FWS. Site is located within migratory paths of large game species but adequate avenues are readily available.

EQ-12 Internal compliance – None identified

EQ-13 Public Information and Human Issues – None identified after coordination with County Commissioners, USFS, and nearby neighbors

EQ-14 Remediation and Reclamation – This application and reclamation permit

EQ-15 Safety, particularly related to environmental issues

- MSHA Mine ID registration – Pit will obtain a Mine ID number for excavation when plants are not present, as needed, and notify MSHA upon commencing and terminating activities
- Plant registration and notifications – Portable plants will have their own Mine ID number and notify MSHA upon relocation
- All miners will have MSHA training certification available for inspection
- Mine health and safety plan (HASP) will be in effect
- Access Permit – CR-50 to SH-160. Access permit #587009 issued in 1987 remains in effect.
- Railroad crossing – Private Way License C-27-1 for the 24-foot crossing at MP 292+4768 was issued by the D&RGWRR in 1997 and remains in effect. (See 19878 application

EQ-16 Financial issues – Performance warranty (bond) not required by County or DRMS for county-operated operation.

EQ-17 Property Transactions and NEPA – None required; no action triggering requirement. No direct Federal involvement or land transfers. Existing State Land lease includes entire site. Note: documentation for DRMS and County permits functionally addresses NEPA requirements.

EQ-18 Local regulatory requirements, including transportation, fire safety, and law enforcement

- County building permit, conditional/special use permit application for Rio Grande County already exists for site. See Exhibit M-1.
- County road access permit – already in effect (grandfathered: predates permits).
- Fire protection plan – part of land use permit process
- Law enforcement – part of land use permit process

EQ-19 Technical Analysis and Design Issues – No significant requirements for ground stability or related analysis: see Mining Plan Exhibit C.

EQ-20 Miscellaneous – None identified/required





Attachment M-1.

RESOLUTION OF

THE BOARD OF COUNTY COMMISSIONERS OF RIO GRANDE COUNTY

GRANTING A CONDITIONAL USE PERMIT

WHEREAS, Rio Grande County has received an application for a conditional use permit from RIO GRANDE COUNTY concerning property leased by the County from the State Board of Land Commissioners and described as a portion of S 1/2 NW 1/4 of Section 27, Township 40 North, Range 4 East, N.M.P.M., Rio Grande County, Colorado, which property is zoned Rural and which application for conditional use permit requests permission to use said property for a sand and gravel operation.

WHEREAS, the Board of County Commissioners has, at a meeting of said Board held on January 30, 1987, considered said application after mailing of a notice of said application to all owners of property within 1,500 feet of subject property, and;

WHEREAS, the Board of County Commissioners of Rio Grande County has found that granting the sand and gravel operation at the above location would be consistent with the objective and the purposes of the Rio Grande County Land Development Code, as declared in Article II, Part A.2 and Article V, Part A of said Regulations, and has found that the use for which the application is submitted would be compatible with surrounding land uses in the area of its location.

BE IT THEREFORE RESOLVED that the Board of County Commissioners of Rio Grande County hereby grants the conditional use permit requested by Rio Grande County for property described above, allowing said property to be used for a sand and gravel operation pursuant to Article II Part A.2.q.

The foregoing Resolution was offered by Commissioner Schaefer, seconded by Commissioner McMullen, and passed on vote of the Board of County Commissioners at a meeting of said Board on the 2nd day of February, 1987.

  
Vern Rominger, Chairman *yes* Vote

  
R. J. McMullen, Commissioner *yes* Vote

  
Robert A. Schaefer, Commissioner *yes* Vote



**Exhibit N. SOURCE OF LEGAL RIGHT TO ENTER**

The site is located on Colorado State Lands, and right to enter is in accordance with the State Board of Land Commissioners Sand & Gravel Lease No. GL 113404. This document is already on file with the CDNR in electronic form, as "SM\_113404\_Lease\_Rio Grande County\_20210519", and therefore the 16 pages are not included in this conversion application to conserve paper and avoid needless duplication.

For the information of reviewers, and to summarize:

The current lease is dated 19 May 2021, and the term of the lease is stated on page 2 (near middle of page, until 1200 Noon, 19 May 2031, with authorization for an additional 10-year Secondary Term to 19 May 2041).

The legal description is provided, with a map, in Exhibit B (page 15). This includes both the existing 110c permit area and all of the proposed expansion area, except that portion located S of the railroad as discussed in Exhibits A and B of this application. Other existing easements, right-of-ways [sic], and agreements for that land are listed in Exhibit B, again as discussed in Exhibits A, B, and L.

**Exhibit O. MUNICIPALITIES WITHIN A TWO-MILE RADIUS**

NONE.

**Exhibit P. OWNERS OF RECORD OF AFFECTED LAND AND SUBSTANCE TO BE MINED**

The State of Colorado.

**Exhibit Q. PROOF OF FILING WITH COUNTY CLERK**

TO BE PROVIDED WHEN SUBMITTED

**Exhibit R. PROOF OF MAILING NOTICES**

Board of Rio Grande County Commissioners

Board of Rio Grande Conservation District

TO BE PROVIDED WHEN SUBMITTED

Landowners within 200 feet of affected land: See list below Map B-3 above.

TO BE PROVIDED WHEN DELIVERED BY COUNTY PERSONNEL OR EMAILED.



---

**Exhibit S. PERMANENT MAN-MADE STRUCTURES**

---

1. The terrain, combined with the shallow nature of the proposed mining, impact of past mining, and setbacks from significant manmade structures and terrain features, there is no significant potential for off-site damage to infrastructure, buildings and other structures, or users of those features:
  - a. The railroad, built in 1872-1873, predates mining of 1987 to present, and there is no evidence of negative impacts. A previous owner/operator of the railroad issued a crossing permit ("Private Way License" in 1997 which remains in effect with the current RR owner/operator and includes language for indemnity of damage to the railroad by mining operations.  
Colorado Pacific Rio Grande Railroad LLC. Via: Email: David Trujillo  
[dtrujillo@coloradopacific.com](mailto:dtrujillo@coloradopacific.com)
  - b. The Minor Ditch, which receives water from the Rio Grande and conveys it to the E of the site, will be located within 100 feet of proposed excavation, but slopes mitigate impact and other operations in the area as close or closer provide no evidence of negative impacts.  
Minor Ditch Company c/o Richard T Davie (President) 316 CR 17, Del Norte, CO 81132.
  - c. The Viaero Wireless cell-phone tower was constructed in 2015, and new mining operations will be at the same or greater distance from the tower than operations 2015-2025.  
Cellular Phone Tower and associated structures and fences: easement held by Mountain Tower & Land, LLC, and tower owned by Industrial Tower West, LLC, on behalf of Viaero Wireless, 1224 W Platte Ave. and 2825 E Beaver Ave. Fort Morgan, CO 80701
  - d. San Luis Valley Rural Electric Association (SLVREA) owns and operates overhead powerlines more than 200 feet from current affected land on the W, and current and proposed affected land on the S. Service lines for the Viaero Wireless tower are considered Viaero/Industrial Tower West, LLC and therefore included in item c above. No agreement requested from SLVREA.

**Other property /significant structure and owners:**

1. NOTE: There is no formal ROW or easement for the railroad across State of Colorado lands, as the railroad predates the establishment of the State of Colorado. The State Land Commission recognizes the existence and de facto right-of-way of the railroad and a 100-foot wide easement.
2. County Road 50 owned and maintained by County (Applicant/Operator)  
NOTE: Although many maps show the alignment of CR-50 as completely across Section 27 south of the railroad, the State Land Board and Railroad allowed a spur to cross the tracks. The construction in 2015 and operation of the cellular phone tower since then, in the assumed railroad ROW in essence makes this a permanent road which will remain after mining and reclamation.



---

**Exhibit T. RULE 6.5 GEOTECHNICAL STABILITY**

---

**ENGINEERING EVALUATION (6.3.12)**

TASK: Identify Structures within 200 feet of affected lands:

- a. County Road 50
- b. Viaero Wireless tower and compound
- c. Minor Ditch (Irrigation)
- d. Colorado Pacific Rio Grande Railroad

TASK: Determine conditions of the Significant Permanent Manmade Structures and identify potential impacts of proposed mining operations:

Conditions (Observations and Analysis): Railroad not currently in operation and may be abandoned. Not currently maintained. County Road 50 maintained by Rio Grande Road and Bridge Department for access to the pit and will continue in operation; it also serves the Viaero Wireless tower and railroad. Miner Ditch is unlined, and has no laterals or control structures within 200 feet. Fencing along railroad and adjacent properties to the west and southwest are State owned and maintained cooperatively (3- and 4-wire) by County Road and State and private landowners.

Standards: Determine what is necessary to prevent damage to any significant manmade structure during mining, reclamation or after reclamation is complete. The railroad is no longer considered a significant manmade permanent structure. See Exhibit L.

TASK: Identify need for and attempt to obtain structure indemnity agreements with owners; at the same time, do engineering analysis to quantify any potential impacts and necessary mitigation measures, or to demonstrate to DRMS that there is no significant potential for damage.

Conditions: Ownership of structures as reported in Exhibit L. Other than road and railroad crossing (part of the road), the Railroad and the cellular tower are located adjacent to the mining operations as conducted since 1987 and show no signs of past or potential current/future negative impacts due to operations, including transportation of equipment and materials.

Standards: Request a signed and notarized indemnity (or structure) agreement or similar document acceptable to DRMS be executed by the applicant/operator and the owner(s) of significant manmade structures. As County Road 50 is maintained but not owned by the County (existing as an easement across State lands, the State Land Board lease addresses liability and covers the need , no indemnity agreement with the County is required by the construction materials rules and regulations. No excavation, processing, or stockpiling of materials is proposed within 200 feet of the cellular tower.

TASK: Conduct and memorialize an engineering assessment,

Conditions: Owners and agencies were contacted and no concern was shown, based on the operations within 200 feet of adjacent properties and significant permanent manmade structures done in the past (since 1987). The expansion area is not within 200 feet of any significant manmade structure except the Miner Ditch.

There are no structures which are utilities, except those providing service to the cellular tower.

As a licensed Professional Engineer in the State of Colorado;

Standards: Meet the requirement of the Construction Materials Rules and Regulations 6.3.12, and provide an appropriate engineering evaluation that demonstrates that such structures shall not be damaged by activities occurring at the mining operation.





---

Performance Measures:

1. Examine the geological conditions, soil, terrain (including slopes and erosion), and paths of sheet and channelized flow, infiltration, and ponding of water, to determine whether there is potential for land movement, increased water flow, erosion, or sedimentation as a result of mining operations.
2. As necessary, survey and calculate angles of repose, potential for movement of soil or rock which would constitute a geological hazard, volumes and velocities of water flow, and related information.
3. Report, in a signed and sealed report, findings and recommendations.

**INVESTIGATION:**

The undersigned professional engineer inspected the proposed location of mining operations and areas within 200 feet of the boundary of affected land, on two occasions in 2024 and 2025, during both frost-free and frozen conditions, and including inspection of existing cutbanks and excavations, as well as the manmade structures (as discussed above). The undersigned also reviewed literature available regarding the geology, soils, vegetation, and hydrology of the area, including recorded and known surface and ground water structures, including irrigation structures. The undersigned also inspected known locations in the vicinity with similar geology, soils and terrain, which have been mined and partially reclaimed in the past.

**FINDINGS AND RECOMMENDATIONS:**

The undersigned found:

That there were no existing elements or conditions which would constitute an actual or potential geological hazard;

That expanded mining and reclamation as proposed in the DRMS application for a reclamation permit can be done without significant potential of damage to permanent manmade structures either on or off the site, both within and beyond the statutory 200-foot distance.

That existing and proposed slopes, mining techniques, and materials to be used for interim and final reclamation of the site and related activities demonstrate that there are no structures which will be damaged by those operations.

That the requirement for the operator/applicant to indemnify owners of significant manmade structures appears to be met by existing documents including the Lease with the State Land Board for the site, which is a matter of State record.

That potential for changes to or damage to the Railroad, the Viaero tower, the Minor Ditch and any lateral or other irrigation ditch within 200 feet of the excavations is very low. This is both demonstrated by the past operations on site and operation of other sand and gravel mining and processing operations down-ditch from this site.

That mining operations have no potential for polluting surface or ground water or significantly reducing flows, including irrigation ditches, ephemeral streams, the Rio Grande, and wells in the vicinity of those operations, provided that storm and surface water management is conducted in a legally-required manner in accordance with good engineering practice.

These findings are based on:

- the types of soil, the terrain, the geology;
- existing erosion, sedimentation, paths of water flow, water basins, subgrade and drainage ditches and structures associated with Kleckner Lane and FSR-631, obvious and possible land movement, including any subsidence, damage to vegetation, and impacts due to traffic on roadbed, road surfaces and shoulders;
- past mining on the site and nearby locations;
- the planned manner, depth, and extent of mining, including no blasting;



- the locations of significant manmade structures preclude any significant potential for damage to them caused by subsidence or slope failure of the mining highwalls and working faces or pit floor; and
- slopes and grades of stripping, backfill and both temporary and permanent final grading and placement of soil, including surface water control measures.

**Therefore,** my professional opinion as a licensed Professional Engineer in the State of Colorado, with experience and training in sand and gravel operations, mining, reclamation, stabilization, construction, and related work, is that no known structures shall be damaged by the proposed mining activities.

**RECOMMENDATIONS:**

That conditions of all structures and the land and vegetation within 200 feet of the affected lands be documented by a joint inspection between the Operator and the State Land Board Southwest District supervisor, together with knowledgeable engineers, prior to beginning any expansion of mining operations;

That the inspection be documented in writing and by photography, including measurements of any erosion or other features;

That the inspection be repeated at the beginning and end of each processing season and each hauling season (probably Spring and late Fall each year), together with required stormwater inspections; and

That any conditions of concern identified during the inspections be repaired or mitigated as quickly as possible, as agreed between the Operator and the State Land Board, in accordance with the Lease Agreement and good engineering practice.

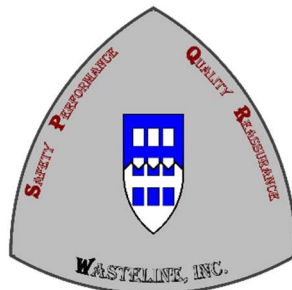


Prepared by Nathan A. Barton, CE, PE, DEE

SEAL

---

END PAGE  
THIS PAGE INTENTIONALLY LEFT BLANK



WASTELINE, INC

**Nathan Barton**

Please direct all questions to Nathan Barton, [NBarton@wastelineinc.net](mailto:NBarton@wastelineinc.net) (970) 564-1380.