



COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

September 25, 2020

Steve Williams
Washington County Road and Bridge District 3
11920 CR CC
Anton, CO 80801

RE: Nelson Pit (Permit No. M-2020-040)
Incomplete Application

Dear Mr. Williams:

On August 6, 2020, the Division of Reclamation, Mining and Safety received your 112 Construction Materials Reclamation Application package for the Nelson Pit, File No. M-2020-040. The permit application submitted is for a 112c permit and the correct application fee was also submitted. However, the Exhibits submitted with the application follow the format for a 110c application. The following questions will address adequacy issues and any missing information that is need to complete the 112c application. This information needs to be addressed and/or received before the Division can approve the application:

Rule 6.4 - Specific Exhibit Requirements - 112 Reclamation Operation

6.4.1 EXHIBIT A - Legal Description - Adequate as submitted.

6.4.2 EXHIBIT B - Index Map – Adequate as submitted.

6.4.3 EXHIBIT C - Pre-mining & Mining Plan Map(s) of Affected Lands

1. Please submit a map showing the locations of the powerlines, barbed wire fences and the abandoned residence that were listed in Exhibit B of the application, Rule 6.4.3(g).

6.4.4 EXHIBIT D - Mining Plan

2. Please specify if explosives will be used in conjunction with the mining operations at this site, Rule 6.4.4(i).
3. The property owner to the west of the proposed mine site, Mr. Saadatkah, was unavailable to sign a structure agreement for the fenceline on his property. Washington County has committed to stay 50 feet lateral from his fence and have 4h:1v slope (Exhibit O) to prevent damage to the fence. The Division agrees that this is an adequate plan to protect the fence as long as the pit does not exceed the 15 foot depth proposed in Exhibit C and the western side of the pit is mined at a slope no greater than 4h:1v. Please commit to these conditions to protect Mr. Saadatkah's fence line.

6.4.5 EXHIBIT E - Reclamation Plan



4. Bullet #3 states that 6-12 inches of topsoil will be used to cover the slopes. In Exhibit C it states that approximately 7 inches of topsoil will be salvaged. Please clarify how much topsoil will be replaced.
5. Please clarify if topsoil is available in the bottom of the creek bed and if topsoil will be replaced on the creek bed during reclamation.
6. Bullet #4 states that cow manure will be used for fertilizer and spread at a rate of 20 tons per acre. The permit is 52 acres in size and this would mean a 1,040 tons of manure. The NRCS letter in the application calls for 800 lbs/acre of straw. Please clarify which amendment you will use for reclamation.
7. Bullet #5 lists a reclamation seed mix and a NRCS seed mix is also included on page 37. Please clarify which seed mix will be used for reclamation.

6.4.6 EXHIBIT F - Reclamation Plan Map - Adequate as submitted.

6.4.7 EXHIBIT G - Water Information

8. A statement needs to be included in the application if the operation will directly affect surface or groundwater systems, Rule 6.4.7(1). Surface water will be affected as described in Exhibit D and a commitment was made to not interfere with the natural flow of Vega Creek. A statement needs to be made if the operation is expected to encounter ground water.
9. Soils data was submitted showing the Depth of Water Table to be greater than 200 cm or about 6.5 feet. Mining is anticipated to be about 15 feet deep. Please provide evidence in greater detail of the anticipate depth of water table. Local, residential wells on the State Engineer's Office can be a source of information.
10. If ground water is encountered, please commit to leaving 24 inches of soil above the water table.

6.4.8 EXHIBIT H - Wildlife Information - Adequate as submitted.

6.4.9 EXHIBIT I - Soils Information - Adequate as submitted.

6.4.10 EXHIBIT J - Vegetation Information - Adequate as submitted.

6.4.11 EXHIBIT K - Climate

11. Exhibit K was not included with the application. Please submit a description of the significant climatological factors for the Nelson Pit, Rule 6.4.11.

6.4.12 EXHIBIT L - Reclamation Costs

12. The Nelson Pit will be operated by Washington County. A cost estimate is not required for a county operation.

6.4.13 EXHIBIT M - Other Permits and Licenses (Statement Req'd) - Adequate as submitted.

6.4.14 EXHIBIT N - Source of Legal Right to Enter - Adequate as submitted.

6.4.15 EXHIBIT O - Owner(s) of Record of Affected Land and Substance to be Mined - Adequate as submitted.

- 6.4.16 EXHIBIT P - Municipalities Within Two Miles - Adequate as submitted.
- 6.4.17 EXHIBIT Q - Proof of Mailing of Notices to Board of County - Adequate as submitted.
- 6.4.18 EXHIBIT R - Proof of Filing with County Clerk and Recorder - Adequate as submitted.
- 6.4.19 EXHIBIT S - Permanent Man-made Structures Adequate as submitted.

Please note that the decision date for this application is November 11, 2020. If you are unable to provide satisfactory responses to any inadequacies prior to this date, it will be your responsibility to request an extension of time to allow for continued review of this application. Also, the comment period for this application is still open and any comments or objections received may initiate new adequacy questions.

All corrected pages must also be provided to Washington County Clerk & Recorder.

If you have any questions, please contact me at (720) 774-0040 or brock.bowles@state.co.us.

Sincerely,



Brock Bowles
Environmental Protection Specialist

CC: Michael Cunningham, DRMS

Exhibit C – Mining Plan

The mining is expected to begin as soon as possible after a permit is obtained. This operation will provide material for road maintenance and construction in the area. Anticipated life of the pit is indefinite. The county will use material as needed when working to maintain roads in the area. The supply of material should last for a number of years. This pit should be classified as an intermittent pit.

The plan is to begin removing material at the south end of the permitted area, North of County Road 3. Mining will proceed northward as needed. There is approximately 7 inches of topsoil on the majority of the material as well as some overburden of varying depths. The topsoil will be stripped a separate pile. These piles will be seeded to prevent erosion. We will stay 50 feet to the east of the fence/property line on the west side of the pit area and do a 4 to 1 slope from there. This would be where the creek bottom comes close to the property line on the West edge of the property.

There does not appear to be any waste rock or material at this sight.

Mining is anticipated to a depth of about 15 feet. Mining depth will be kept above existing ground water level. No slopes will be greater than 3:1.

The pit will be accessed from the existing approach off of County Road 3. There will be no shop, plant or other facilities located at the pit. The machinery used to mine the gravel will be a dozer, front end loader and trucks. There will be some stockpiling of usable material. There will be internal haul roads within the pit boundaries. These will be reclaimed when the mine is closed.

There is an older small building that was used for livestock shelter in the past, inside the boundaries. It is not currently in use. It will not be used by the county in any way. It is not in an area that will be mined, or used for stockpiles. This building is the property of the landowner.

Nelson Pit

North

barbed wire fence

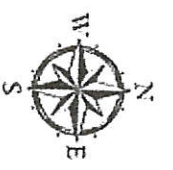
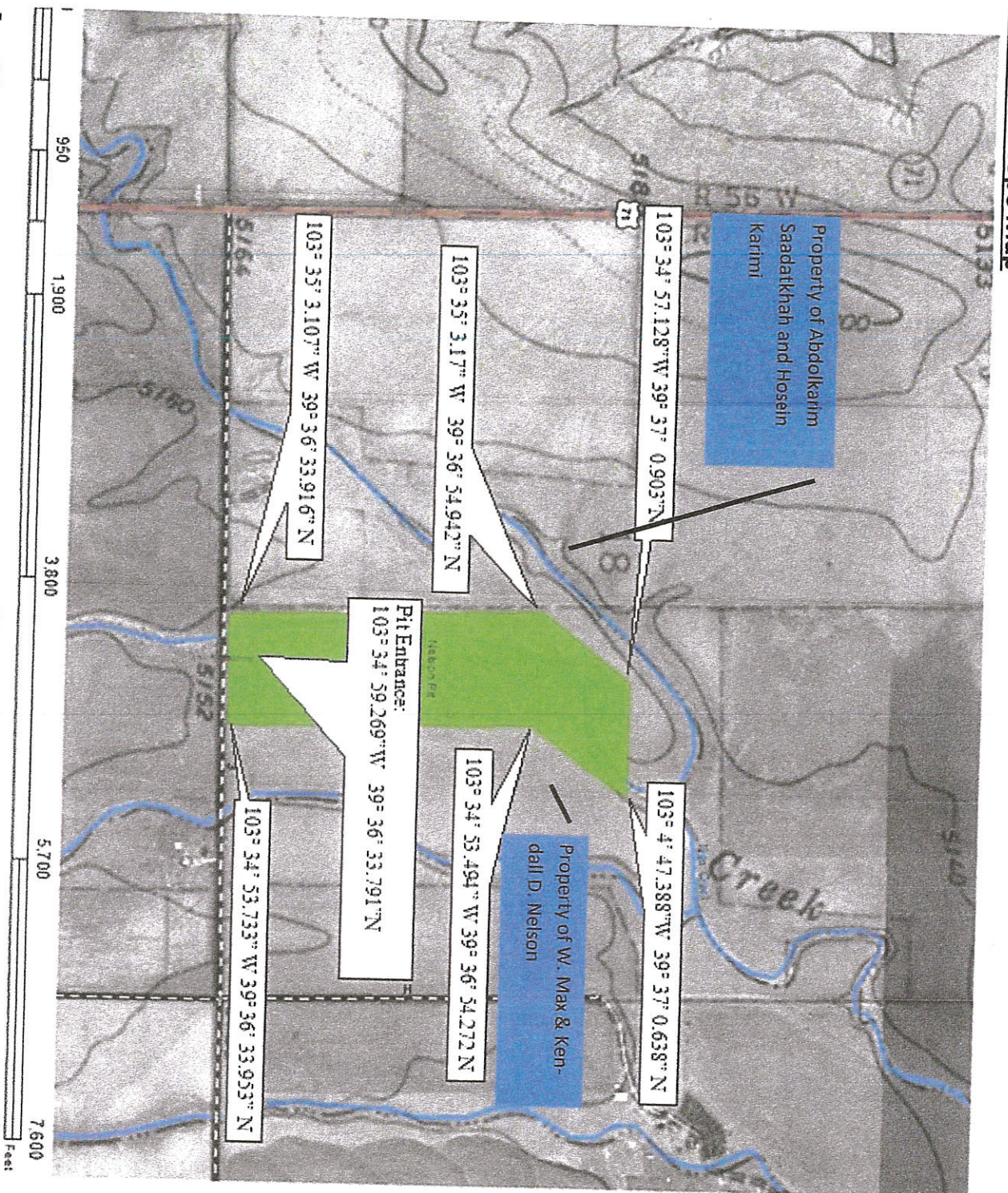
County Rd

abandoned residence

barbed wire fence

Power lines

County Rd 3



Nelson Pit

- Limited Access
- Highway
- Major Road
- Local Road
- Minor Road
- Other Road
- Ramp

NAIP Image

RGB

- Red: Band_1
- Green: Band_2
- Blue: Band_3
- Nelson Pit
- Pit Entrance

Legal Desc:

Section 18, Township 5S, Range 55W, of the 6th Prime Meridian In Washington County

Property Owner: W. Max & Kendall D. Nelson
Permittee Contact: Steve Williams 970-554-0680

Map Created by:
Robert Frick April 15, 2020

Washington County Road & Bridge Dist. 2

The only affected Land Owners are Abdolkarim Saadatkhah, Hosein Karimi and the Mountain View Electric Assoc. which owns the power lines along the southern border of the proposed pit. Mr. Saadatkhah is unreachable as he lives in Iran and does all business through his lawyer.

Exhibit D - Mining Plan

- 1.) The proposed affected area will be in/along the Vega Creek. Material will be mined from the creek bottom and along the East bank of the creek bank to approximately 200 feet east of the creek. Stockpiled material will be outside the creek banks so as to protect the natural flow of the Vega Creek.
- 2.) Topsoil will be stockpiled along the East side of the permitted area, outside of the creek bed itself. Material being mined for consumption will be stockpiled to the North within the affected area so as to allow trucks access into and out of the affected area. Please see map included.
- 3.) Some material will be removed from the Vega Creek, but not so much as to affect or change the flow of the creek.
- 4.) We will use vegetation to stabilize the stockpile. The stockpile already contains the seeds from the vegetation from the area. The natural vegetation from that area will grow over the stockpile.
- 5.) The current access point will be used to gain access from the South. All materials will be trucked out.
- 6.) No processing will be done at this site.
- 7.) The mining operation will maintain, at the minimum, a 3:1 slope from the creek banks east to top of pit wall, so as to allow precipitation to naturally run towards Vega Creek. In accordance with Colorado State Water restrictions, no structure will be used to divert precipitation from its natural flow.
- 8.) The Vega Creek will not be diverted during the mining operation, so as not to cause any problems with the natural flow of the creek.
- 9.) During mining operations, a minimum slope of 3H: 1V will be maintained by pushing material uphill and loading in a designated area.
- 10.) There will be no fuel storage tanks used in the proposed pit area. Fuel will be brought in daily for any machines being used in the pit area.

Exhibit D - Mining Plan

11.) There will be no explosives used in conjunction with the mining operations at this site.

Exhibit E - Reclamation Mining Plan

- 1.) Reclamation will be done by smoothing and leveling the creek bed. The slopes will be done at a minimum 3h: 1v slope. Where the fences and power lines are in close proximity to the mined area there will be a 50 foot minimum buffer area then a slope of 4h: 1v to the creek bed.
- 2.) There is no topsoil on the creek bed itself. There will be no topsoil placed there. Any area outside the creek bed will have approximately 7 inches of topsoil and some overburden. If disturbed, the topsoil and overburden will be removed and stored in separate piles. During reclamation the overburden will be reapplied and smoothed and then all of the topsoil will be reapplied to the surface area.
- 3.) The NRCS office recommendation is to apply 800 pounds of straw per acre before reseeding. We will apply the straw with a spreader as they suggest. The straw will be applied to all of the pit area that has been disturbed including the creek bed.
- 4.) We will follow the recipe supplied by NRCS for grass seeding. It will be drilled in the fall and or winter months as weather allows. Their recommendation is to drill prior to April 30. We will follow that recommendation also. All of the disturbed area will be seeded to the recommended seed mix.
- 5.) The NRCS grass seeding recipe is included with these documents.

United States Department of Agriculture Natural Resources Conservation Service		Grass Seeding Planned, Applied, and Cost Worksheet <small>ECS - 05-01</small>																	
Cooperator Washington County Road and Bridge Tract/Field No Soil Survey Area CO121 Contract No.		Date 3/2/2020 Acres 1.00 Map Unit (s) 64 CIN																	
Seeding dates Prior to April 30 Seedbed preparation No Till Drill type no-till grass Planting depth-Drill spacing (in) 7		Program CTA Seed rate Non-irrigated drilled (20 seeds/sq ft) Acres to be seeded 1.00																	
Planned fertilizer application (lb/ac) <div style="display: flex; justify-content: space-around;"> N P₂O₅ </div>		<p>A Nutrient Management Plan is <u>not</u> required for the establishment of vegetative conservation <u>unless</u> fertilizer is applied.</p> <p>Attach WIN-PST Soil-Pesticide Interaction Risk Report for all chemical suppression activities</p> <p><u>Plant Materials Technical Note 59</u></p>																	
Planned weed control activities <div style="display: flex; justify-content: space-between;"> <div> Description Chemical Date(s) </div> <div> Type Cereal grain straw Amount (lb/ac) 800 Application method Straw spreader/blower </div> </div>																			
Planned residue cover or mulch																			
<p>Changes to the recommendations require NRCS approval for payment.</p>																			
(PLS = Pure Live Seed)																			
Common name <small>(Native, Introduced) [Pollinators - Early, Late, Middle] [Pollinator Assisting Grass/Forb]</small>	N / I	Genus, species (Required)	Recommended Cultivar (Required)	% of seed mix (required)	Total PLS LBs	PLS Seed Rate (lbs/ac)	PLS Seeds /Sq-Ft												
1. Bluestem, Big PA	N	<i>Andropogon gerardii</i>	Bison, Champ, or Kaw	10.0 %	0.54	0.54	2.00												
2. Buffalograss (bur) PA	N	<i>Buchloe dactyloides</i>	Mesa, Sharps, or Texoka	3.0 %	0.24	0.24	0.60												
3. Grama, Blue PA	N	<i>Bouteloua gracilis</i>	Alma	7.0 %	0.08	0.08	1.40												
4. Wildrye, Canada PA	N	<i>Elymus canadensis</i>		3.0 %	0.23	0.23	0.60												
5. Green needlegrass PA	N	<i>Nassella viridula</i>	Lodorm	17.0 %	0.82	0.82	3.40												
6. Wheatgrass, Western PA	N	<i>Pascopyrum smithii</i>	Arriba	30.0 %	2.40	2.40	6.00												
7. Switchgrass PA	N	<i>Panicum virgatum</i>	Blackwell or Pathfinder	13.0 %	0.26	0.26	2.60												
8. Bluestem, Little PA	N	<i>Schizachyrium scoparium</i>	Pastura	4.0 %	0.14	0.14	0.80												
9. Goldenaster, hairy false M, L	N	<i>Heterotheca villosa</i>		2.0 %	0.05	0.05	0.40												
10. Coneflower, prairie E, M, L	N	<i>Ratibida columnifera</i>		2.0 %	0.02	0.02	0.40												
11. Prairie clover, purple E, M, L	N	<i>Dalea purpurea</i>		2.0 %	0.06	0.06	0.40												
12.																			
13.																			
14.																			
15.																			
16.																			
17.																			
18.																			
19.																			
20.																			
<small>Other Grass/forb species not in List INIT. <<< Initial that each unlisted species has been cleared with the State Office for this seed list</small>																			
21. Yellow indiagrass	N	<i>Sorghastrum nutans</i>	Cheyenne	7.0 %	0.35	0.35	1.40												
22.																			
23.																			
24.																			
25.																			
Shrubs (add shrub seed to grass - forb seed mix)																			
A																			
B																			
C																			
<small>Other Shrub species not in List INIT. <<< Initial that each unlisted species has been cleared with the State Office for this seed list</small>																			
D																			
E																			
Seeding Rate (seeds/sq ft) >>> 20				<div style="border: 1px solid black; padding: 2px; display: inline-block;">100.00%</div>															
<small>* Certified Seed is required for all NRCS cost share programs</small> <small>* Complete a Tree and Shrub Establishment 612 Job Sheet for bare-root shrub plantings</small>				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Grasses, Forbs</td> <td>5.19</td> <td>5.19</td> <td>20.00</td> </tr> <tr> <td>Shrubs</td> <td>0.00</td> <td>-</td> <td>0.00</td> </tr> <tr> <td>Total</td> <td>5.19</td> <td>5.19</td> <td>20.00</td> </tr> </table>				Grasses, Forbs	5.19	5.19	20.00	Shrubs	0.00	-	0.00	Total	5.19	5.19	20.00
Grasses, Forbs	5.19	5.19	20.00																
Shrubs	0.00	-	0.00																
Total	5.19	5.19	20.00																
Certified Planner _____			Date _____																

Exhibit E

Reclamation mining plan

- 1.) Using topsoil from the stockpiled overburden pile which was stockpiled along the East of the permitted area.
- 2.) Sides will be sloped towards the creek bed at a minimum of 3:1 horizontal to vertical slope.
- 3.) Topsoil will be used to cover the slope at a depth of no less than 6 inches up to 12 inches in depth.
- 4.) Seeding will be done during the fall. The seed bed will be drilled in. Cow Manure will be used for fertilizer, spread at the rate of at least 20 tons per acre.
- 5.) The seeding mixture will be:

<u>Seed</u>	<u>% mixture</u>	<u>Per Acre</u>	<u>Lbs. needed</u>	<u>±</u>
Sand Blue Stem	20	.2x8 lbs. pls=	1.6 pls	3.2 lbs.
Western Wheatgrass	20	.2x8 lbs. pls=	1.6 pls	3.2 lbs.
Prairie Sandbreed	20	.2x3.5 lbs. pls=	.7 pls	1.4 lbs.
Switch Grass	20	.2x2.5 lbs. pls=	.5 pls	1.0 lbs.
Blue Gamma	20	.2x1.5 lbs. pls=	.3 pls	.6 lbs.

± (This rate is doubled due to broadcast method of application)

- 6.) The bottom of the pit will remain the same level as the existing creek, however there may be natural erosion due to heavy rainfall even after pit is released.

09/29/2020

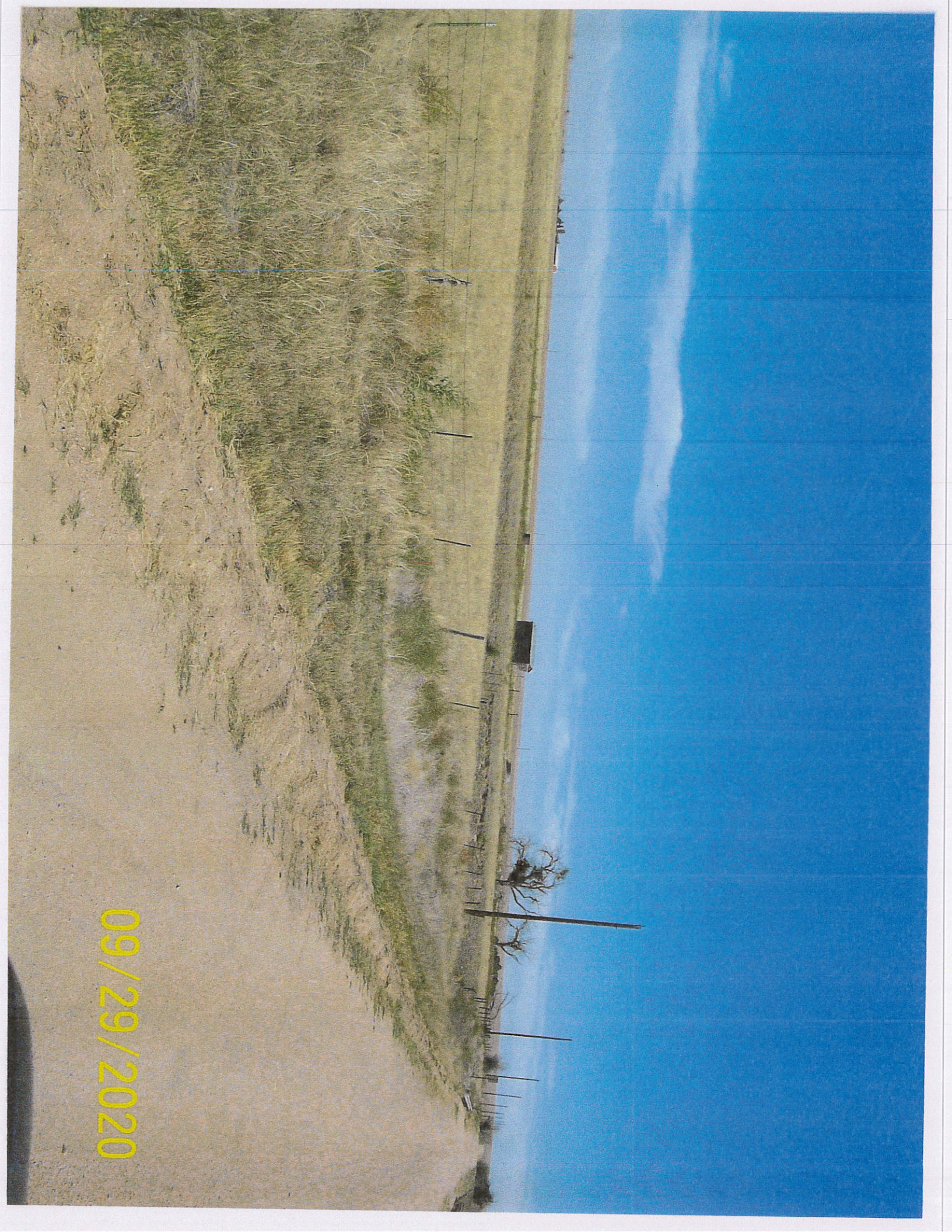


Exhibit G - Water information

This operation should not encounter ground water. We are going to limit our pit to a depth of 15 feet.

I have studied the information on the State Engineer's Office website concerning the depth of residential water wells in the surrounding area.

There is a consistent depth exceeding 60 feet to ground water in all directions surrounding our proposed pit. In places ground water is as much as 100 feet deep or more.

That said if we should encounter ground water at any time in the process of mining this area we will cover it with a minimum of 24 inches of soil and only work above that level.

Exhibit K - Climate

As part of the eastern plains of Colorado this area is semi arid. With clear skies, and abundant sun shine, temperatures vary from 100 degree highs in the summer, to -20 degrees in the winter. Precipitation comes, primarily, in the form of thunderstorms and snowstorms. Most of the moisture is received in the form of thunderstorms during spring and summer. Average yearly moisture amounts range in the 12 to 20 inch area. Winters tend to be dry and cold.

Severe weather can be experienced, such as blizzards in the winter and hailstorms in the summer. Tornadoes are also seen at times. Flash flooding does occur with heavy rain fall.