




MINERALS PROGRAM INSPECTION REPORT

PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Jenkins Site	MINE/PROSPECTING ID#: M-1977-393	MINERAL: Sand and gravel	COUNTY: Boulder
INSPECTION TYPE: Monitoring	INSPECTOR(S): Amy Eschberger	INSP. DATE: October 29, 2020	INSP. TIME: 09:00
OPERATOR: City of Boulder	OPERATOR REPRESENTATIVE: Chris Lawlor	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$0.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: November 13, 2020	

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- <u>NA</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>N</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

OBSERVATIONS

This was a normal monitoring inspection of the Jenkins Site (Permit No. M-1977-393) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). The operator was represented by Chris Lawlor during the inspection. The site is located approximately 2.5 miles southwest of Superior, CO in Boulder County. The site is situated approximately 0.25 mile south of Marshall Lake. Access to the site is from the northeast off of S. 66th Street. The affected lands are owned by the operator. **Photos 1-14** taken during the inspection are included with this report.

This is a 112c operation permitted for 233.60 acres to mine sand, gravel, and clay (see enclosed Google Earth image of site showing permit area). The permit area is bisected by Coal Creek, an ephemeral creek which flows northeast when carrying water. The approved mining plan includes mining sand and gravel from the top of the mesa located north of the creek (north mining area), and mining clay in the flatter portion of the permit area located south of the creek (south mining area). The south mining area included approximately 15 acres of pre-law mining disturbance. The operation was approved for on-site material processing (e.g., screening, crushing), and for operating an asphalt and/or concrete batch plant in the north mining area, if needed. Any available overburden and topsoil was to be salvaged and stored separately on site for use in reclamation. On August 7, 2000, the Division accepted an inert backfill notice submitted by the operator in accordance with Rule 3.4.5(9) to import approximately 30,000 – 40,000 cubic yards of inert material from the City's Sombrero Marsh and other Open Space projects to use as reclamation backfill material at the site. This notice also included plans to import filter fines from the City's water treatment plant to the site for use as a topsoil amendment.

The approved post-mining land use for the site is rangeland. The approved reclamation plan includes grading all disturbed slopes to 3H:1V or flatter, replacing no less than 10 inches of growth medium (a combination of topsoil and non-clay overburden) over disturbed areas where heavy clay is exposed at the surface (mainly in the south mining area), replacing 6-10 inches of growth medium over disturbed areas where sufficient non-clay material already covers the heavy clays, and revegetating the site with a grass seed mixture consisting of Intermediate wheatgrass, Tall wheatgrass, Pubescent wheatgrass, Blue grama, and Smooth brome. All haul roads on site will be reclaimed except for the main access road. It should be noted, on May 15, 1997 (prior to taking over the permit in 2000), the City of Boulder requested a modification to the approved revegetation plan. Since the permit was held by Varra Companies, Inc. at that time, the Division was not able to accept the revision request. Due to the presence of a bald eagle nest on site (in a tree along the northern edge of the creek), the property is closed down November 1st through July 31st every year (since 2002) to protect nesting bald eagles. For this reason, the operator only has a 3-month window every year (from August 1st through October 31st) to conduct activities on site.

According to the permit file, reclamation of the south mining area was completed in 2000. The Division inspected this area during its November 5, 2019 inspection and found it to be reclaimed with slopes of 3H:1V or flatter, and an established vegetative cover consisting primarily of native grasses, with some mature trees growing in lower areas. At that time, the Division encouraged the operator to submit an Acreage Reduction request to release the south mining area from the permit area. The operator has chosen not to request a partial release at this time. Mr. Lawlor indicated their plans are to complete final reclamation of the north mining area then request release of the entire permit area. The Division did not inspect the south mining area during this inspection, as the primary purpose of this inspection was to assess reclamation completed in the north mining area.

The only portion of the permit area requiring reclamation is the pit area at the top of the mesa in the north mining area (approximately 8 acres in size; see enclosed Google Earth image of site with closer view of disturbed area). The pit is elongated roughly east-west and opens up to the east. The approved reclamation plan

does not require the operator to completely backfill the pit. However, during its last inspection of the site on November 5, 2019, the operator explained they were under the impression the pit had to be completely backfilled for reclamation. Therefore, they have been slowly backfilling the pit over the past several years from west to east in two primary lifts. Each lift is approximately 20 feet in height with side slopes of approximately 1.5H:1V. The eastern edge of the upper lift is approximately 400 feet from the eastern edge of the lower lift. According to the operator, active dumping occurs on site almost daily during the 3-month active period. During the inspection, the Division observed a haul truck dumping boulders at the eastern edge of the upper lift. Various small stockpiles of imported material were stored on top of the upper lift, including a few stockpiles of recycled asphalt. The operator committed to not using the asphalt material for reclamation.

The Division estimates remaining reclamation of the north mining area (in its current condition) to include grading the sides of the backfill lifts to 3H:1V or flatter (approximately 530 feet for the upper lift and approximately 260 feet for the lower lift), replacing 6-10 inches of growth medium on approximately 8 acres, and revegetating the land with the approved rangeland grass mixture. Considering the area is currently used for livestock grazing (cattle were seen grazing just west of the pit during the inspection), the operator will most likely need to install fencing to protect areas undergoing revegetation from livestock disturbance.

During its last inspection on November 5, 2019, the Division informed the operator that final reclamation of the site needed to be completed as soon as possible considering the amount of time that has passed since mining activities last occurred at the site. The Division strongly encouraged the operator to utilize the next construction period (August 1st through October 31st, 2020) to complete all reclamation earthwork and seeding. Since its last inspection, it appears the operator has only placed some additional backfill material along the eastern edge of the upper lift (which is not required under the approved reclamation plan), and has not completed any grading, retopsoiling, or revegetating of the disturbed area per the approved plan. The operator indicated their current plans are to complete final reclamation during the next construction period (in 2021). They are currently considering whether the work will be completed internally or through a contractor. Because no topsoil is present on site, the operator will need to import growth medium for reclamation.

During the inspection, the operator inquired about revising the approved seed mixture and growth medium for the site. The Division explained these revisions could be proposed through submittal of a Technical Revision (see enclosed form). There were also discussions about possibly revising the reclamation plan to allow the top of the upper lift to remain as an unvegetated parking/staging area for continued use by the City. The Division informed the operator such changes to the approved reclamation plan could be proposed through the same Technical Revision. The revision would need to include an updated Reclamation Plan Map specifying which areas will not be retopsoiled and revegetated for reclamation and indicating the anticipated post-mining land use for these areas.

The Division strongly recommends the operator utilize the next construction period (August 1st - October 31st, 2021) to complete final reclamation of the site, then request an inspection so the Division can assess the reclamation work completed.

This concludes the report.

Any questions or comments regarding this inspection report should be forwarded to Amy Eschberger at the Colorado Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, via telephone at 303-866-3567, ext. 8129, or via email at amy.eschberger@state.co.us.

PHOTOGRAPHS



Photo 1. View looking southwest from main access road at eastern edge of lower lift (indicated) placed inside pit in north mining area.



Photo 2. Closer view of eastern edge of lower lift placed inside pit in north mining area. Side slopes of this lift are at ~1.5H:1V.



Photo 3. View looking east across top of lower lift placed inside pit in north mining area.



Photo 4. View looking southeast across top of lower lift placed inside pit in north mining area.

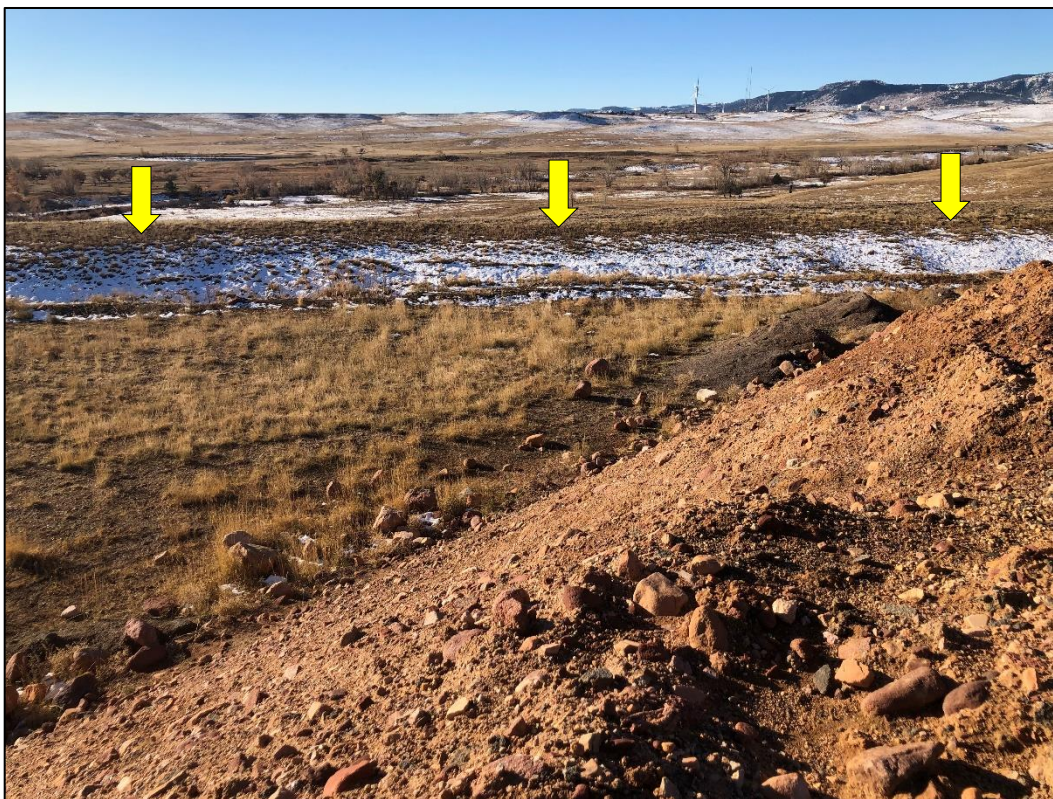


Photo 5. View looking south across top of lower lift placed inside pit in north mining area. Note side slope of upper lift (in foreground) at ~1.5H:1V. Also note southern rim of pit (indicated in background).



Photo 6. View looking northeast at boulders stockpiled at eastern edge of upper lift.



Photo 7. View looking northeast showing haul truck dumping additional boulders at eastern edge of upper lift during inspection.



Photo 8. View looking west at small stockpiles of imported material stored at southern edge of upper lift.



Photo 9. View looking northeast across top of upper lift placed inside pit in north mining area.

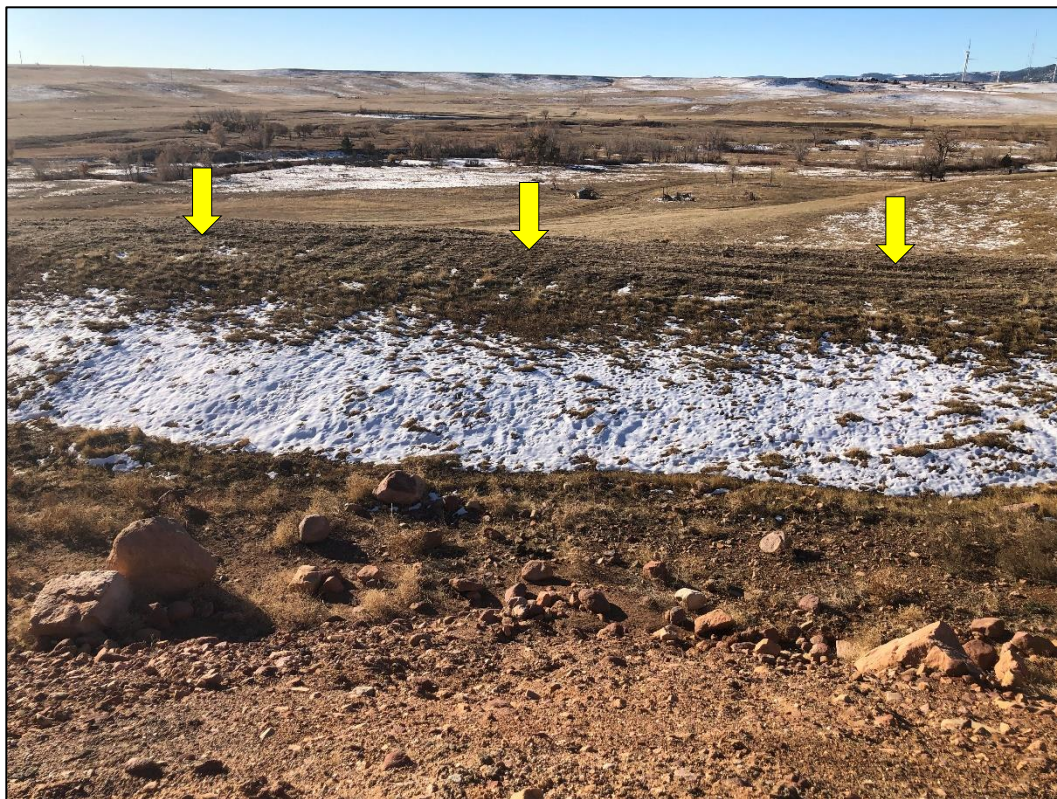


Photo 10. View looking south from top of upper lift placed inside pit in north mining area. Note southern rim of pit (indicated in background).



Photo 11. View looking southeast from top of upper lift placed inside pit in north mining area. Note side slope of upper lift (in foreground) at $\sim 1.5H:1V$. Also note southern rim of pit (indicated in background).

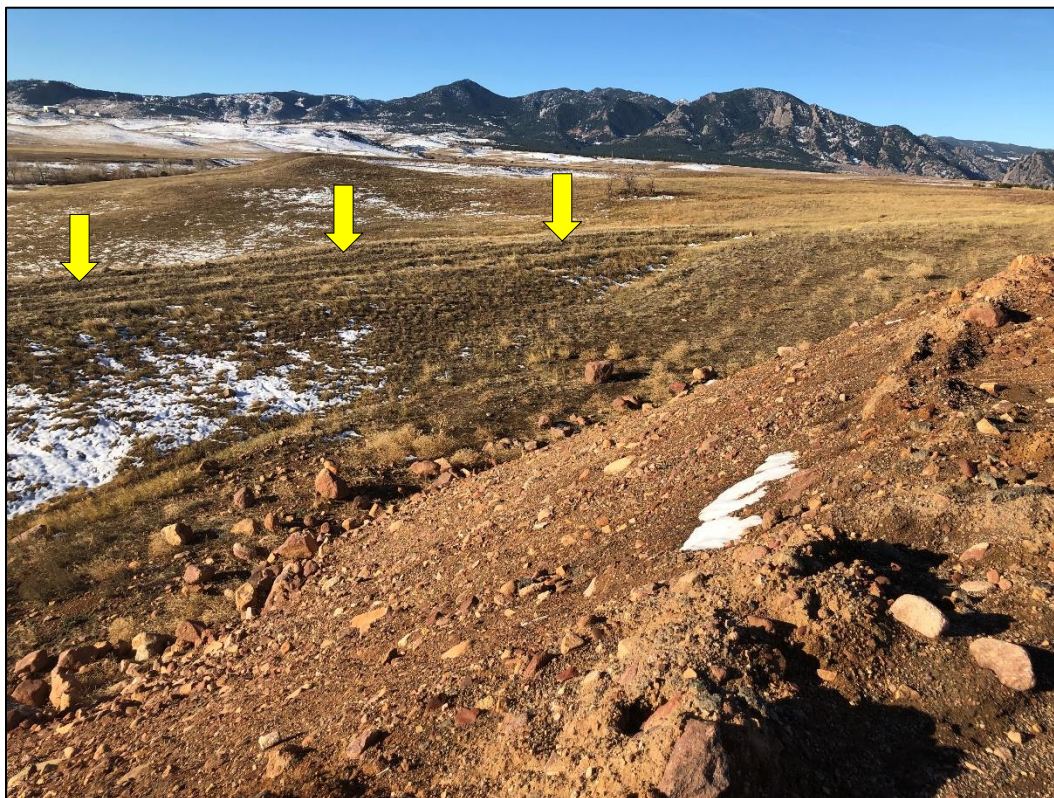


Photo 12. View looking west from top of upper lift placed inside pit in north mining area. Note side slope of upper lift (in foreground) at $\sim 1.5H:1V$. Also note southern rim of pit (indicated in background).



Photo 13. View looking west across reclaimed area located west of pit where cattle were grazing during inspection.



Photo 14. View looking south across permit area from top of upper lift. Coal Creek (lined by trees in background) bisects permit area.

Inspection Contact Address

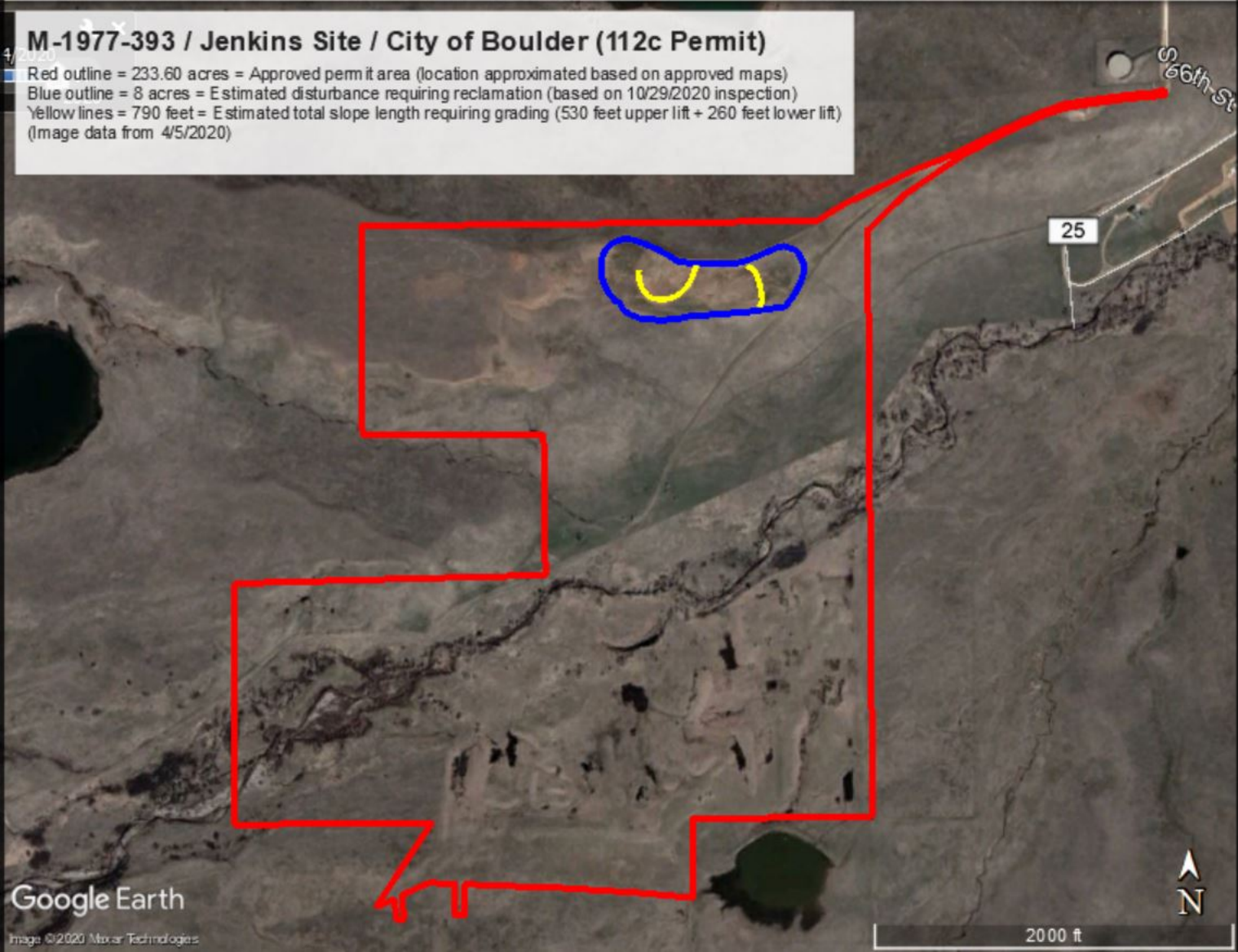
Chris Lawlor
City of Boulder
P.O. Box 791
Boulder, CO 80306

Encls: Google Earth image of site showing approved permit area
Google Earth image of site showing closer view of disturbed area
Technical Revision form

CC: Matt Ashley, City of Boulder
Michael Cunningham, DRMS

M-1977-393 / Jenkins Site / City of Boulder (112c Permit)

Red outline = 233.60 acres = Approved permit area (location approximated based on approved maps)
Blue outline = 8 acres = Estimated disturbance requiring reclamation (based on 10/29/2020 inspection)
Yellow lines = 790 feet = Estimated total slope length requiring grading (530 feet upper lift + 260 feet lower lift)
(Image data from 4/5/2020)



Google Earth

Image ©2020 Maxar Technologies

2000 ft

M-1977-393 / Jenkins Site / City of Boulder (112c Permit)

4/2020
2020
Closer view of disturbed area.

Red outline = 233.60 acres = Approved permit area (location approximated based on approved maps)
Blue outline = 8 acres = Estimated disturbance requiring reclamation (based on 10/29/2020 inspection)
Yellow lines = 790 feet = Estimated total slope length requiring grading (530 feet upper lift + 260 feet lower lift)
(Image data from 4/5/2020)





COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY

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

REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M- _____ Site Name: _____

County _____ TR# _____ (DRMS Use only)

Permittee: _____

Operator (If Other than Permittee): _____

Permittee Representative: _____

Please provide a brief description of the proposed revision: _____

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

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

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

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

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