



March 2, 2022
Colorado Division of Reclamation, Mining and Safety
1313 Sherman St. Rm. 215
Denver, CO 80203

Re: Additional Information regarding MW-1 water levels

Mr. Patrick Lennberg,

Brannan Sand and Gravel has investigated the items detailed in your letter dated January 31, 2022. Please see our responses to DRMS's concerns below.

1. Please submit an updated map depicting the slurry wall locations, monitoring well locations, the location of the french drain and the permit boundary.

Please see the attached map showing the slurry wall locations, monitoring well locations and the location of the French drain and permit boundary.

2. During the response to adequacy review for AM-2, dated April 7, 2015, the Operator committed, in item #7, to performing a TV survey of the french drain system once every 5 years to determine if it needed to be cleaned out, has the Operator performed a survey yet? If not when will the survey be completed?

Brannan Sand and Gravel has contracted an inspector to perform a TV survey during the week of February 28, 2022.

3. There has been a gradual rise in groundwater level at MW-1 along the east side of the permit boundary since 2018. In February 2018 the depth to groundwater was 23.9 feet in February 2021 it was 17.54 feet and in August 2021 the shallowest depth to water on record was measured at 14.9 feet. The Division is currently working with the Operator (E-470 Public Highway Authority) of the Henderson Development, M1980-110, immediately to the east of MW-1 on a groundwater ponding issue at the site. Please address the potential disturbance of the hydrologic balance along the east side of Pit 29 permit boundary causing offsite impacts to an adjacent permit holder. Pursuant to Rule 3.1.6 an Operator is required to minimize disturbances of the hydrologic balance both during and after mining and during reclamation.

The Sandy Acres (M1980-110) sand and gravel mine was not filled from the time that mining was complete until 2015-2016, when Brannan Sand and Gravel was contracted by E-470 Public Highway Authority to fill the pit to mitigate the exposed groundwater. The pit was filled to cover groundwater but was not filled entirely. As shown in AM-1 for Pit 29 (M1980-183), the USGS topo maps show that the Sandy Acres pit had exposed groundwater at that time. There has been little time since initial mining of the property that there has been no exposed groundwater at the Sandy Acres site.



The groundwater levels in MW-1 appear to have risen, but leveled off at around 15 feet bgs during the summer, when Fulton Ditch is operating and contributing groundwater. The last several years of data show that MW-1 has seasonally fluctuated at 15 feet bgs, well below the ground surface. Both MW-1 and MW-2 show significant seasonal fluctuation, when Fulton Ditch is running. There are no known offsite impacts to the rise in groundwater levels in MW-1, with the exception of exposed groundwater at the Sandy Acres pit. The Sandy Acres pit has never been fully filled or reclaimed and remains a depression. Our position is that Sandy Acres M1980-110 is responsible for the exposed groundwater in their pit.

Furthermore, when Sandy Acres was filled, the fill material was clayey, therefore the pit at Sandy Acres is likely not draining precipitation.

E-470 has proposed to implement a French drain to mitigate the exposed groundwater on the Sandy Acres site. Therefore, Brannan proposes to continue monitoring according to our plan, and reassess the local groundwater situation, once E-470's French drain is complete.

Sincerely,

A handwritten signature in black ink that reads "Josh Oliver".

Joshua Oliver
Environmental Manager
Brannan Sand and Gravel Company, L.L.C.
(303) 472-1736
joliver@brannan1.com

cc: Drew Damiano, United Water District
Fred Marvel, P.E., Brannan Sand and Gravel

Attachments:
MW-1 Depth to GW graph
Revised Site Plan

FIGURE C-4 MINING PLAN

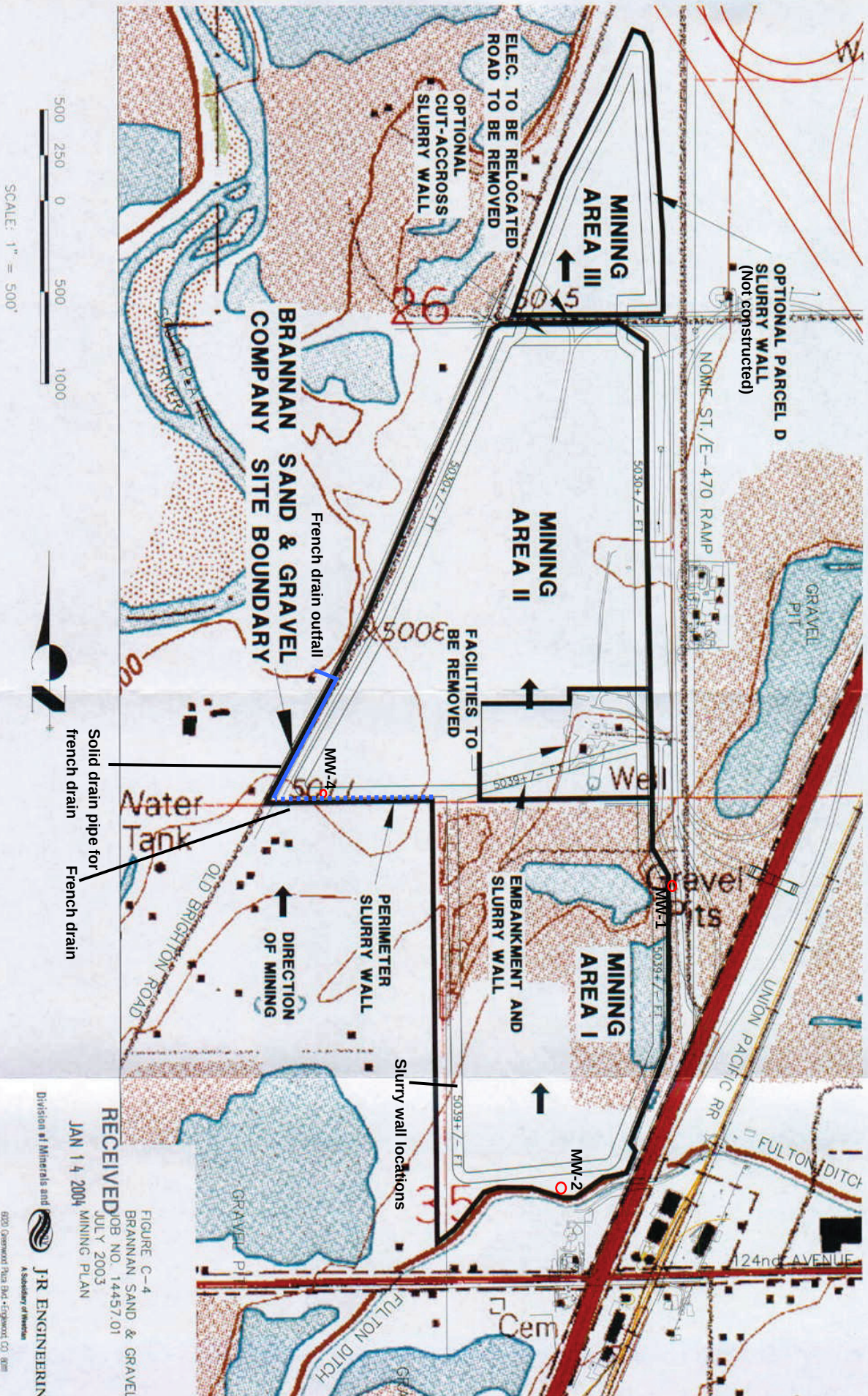


FIGURE C-4
BRANNAN SAND & GRAVEL
JOB NO. 14457.01
JULY 2003
MINING PLAN
JAN 14 2004

Division of Minerals and
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