



Community Planning & Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302 • Tel: 303.441.3930
Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 • www.bouldercounty.org

BOA Staff Report - Fredstrom Mine Appeal

BOA Hearing October 7, 2020 at 4:00 p.m.

PUBLIC HEARING

STAFF PLANNER:

Dale Case, Community Planning and Permitting, Director & Zoning Administrator

STAFF RECOMMENDATION RE:

Docket: AP-20-0001: Aggregate Appeal
Request: Appeal of the determination by the Director of the Boulder County Planning and Permitting Department (the "Director") that the special use approved by Boulder County Resolution 95-93 approving Dockets SU-94-0022, SU-94-0023 and SU-94-0024 (the "Resolution") has lapsed due to inactivity.
Appellant: Aggregate Industries, WCR
Agent: Holland & Hart LLP

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RECOMMENDATION

Uphold the Director’s determination that approval of Special Use Dockets SU-94-22, 23, and 24 has lapsed under Article 4-604.C. of the Boulder County Land Use Code.

STANDARD OF REVIEW

Article 4-1202.A.1. of the Boulder County Land Use Code (the “Code”) provides:

In hearing an appeal of an administrative decision or interpretation, the Board of Adjustment shall consider the following:

- a. the technical meaning of the provision being appealed;
- b. evidence as to the past interpretation of the provision;
- c. the principles of interpretation and rules of construction in Article 1 of this code; and
- d. the effect of the interpretation on the intent of this Code and the implementation of the Comprehensive Plan and any applicable intergovernmental agreement affecting land use or development.

The principles of interpretation and rules of construction set forth in Article 1 of the Code, include, as applicable here:

The provisions of this Code shall be regarded as the minimum requirements for the protection of the public health, safety, and general welfare. This Code shall therefore be regarded as remedial and shall be liberally construed to further its underlying purposes. Article 1-900.A.1.

This Code is not intended to interfere or conflict with, abrogate, or annul any other regulation, statute, or provision of law. Article 1-900.A.2.

Whenever a provision of this Code and a provision of any other law, ordinance, resolution, rule, or regulation of any kind, including another provision of this Code, contain any restrictions covering the same subject matter, the more restrictive shall govern. Article 1-900.A.3.

Words and phrases shall be read in context and construed according to the rules of grammar and common usage. Words and phrases that have acquired a technical or particular meaning, whether by legislative definition or otherwise, shall be construed accordingly. Article 1-1000.A.1.

The particular controls the general. Article 1-1000.A.2.

BACKGROUND

In 1995, the Boulder County Board of County Commissioners (BOCC) approved Resolution 95-93, which approved Special Use Dockets #SU-94-22 (Neighbors/Redmond Gravel Pit), #SU-94-23 (Fredstrom Gravel Pit), and #SU-94-24 (Hygiene Gravel Pit). This Resolution consolidated these Special Use Dockets and approved a multi-year plan for gravel mining on the three sites, which lie within the St. Vrain Creek corridor.

The appellant's master plan contemplated mining the three pits sequentially over the course of 25-30 years. Reclamation was to occur simultaneously with mining activity by the use of a pod system in order to minimize the amount of land disturbed at any one time. The 1998 Neighbors Permit Amendment Application explains that "a pod may range in size from 11 to 26 acres. Only one pod or portions of two pods (in addition to the processing site) may be disturbed during any phase of mining. In no case will additional pods be opened unless reclamation is complete on the first mined of the two open pods. Thus, large sections of the site will be reclaimed years before the last pod is mined." Exhibit A, pg 12.

Resolution 95-93 reflects this plan in condition of approval #16:

The maximum disturbed area at any given time be limited to only one mining pod at a time or no more than 50% of two pods (one under reclamation and one in beginning stages of dewatering and mining) except for the processing site at each mine and the final reclamation of the pods including the placement of topsoil and the landscaping.

Mining and reclamation have been completed on the Hygiene and Redmond/Neighbors sites since 2009. No mining activity has occurred on the Fredstrom site. The appellant now seeks to begin mining the Fredstrom site, which has prompted the Director to review Resolution 95-93 and issue the June 16, 2020 determination that the permit had lapsed. The appellant now appeals the Director's June 16, 2020 determination, arguing that the permit has not lapsed.

The issue of whether the permit has lapsed is now before the Board of Adjustment (BOA).

ANALYSIS

A. Special Use Permits

A special use permit authorizes a "special" or more intensive use of land than those uses which are allowed by right in a zoning district. Article 4-600 of the Code provides that "[a] land use designated as a special use in a zoning district is one that – because of its inherent nature, extent and external effects – may be allowed to establish if subject to Special Review to assure the use is located, designed, and operated in harmony with neighboring development and the surrounding area and does not adversely affect the public health, safety, and welfare."

B. Lapse of a Special Use Permit

Once approved, a special use must commence within five years of initial approval and must not remain inactive for a continuous period of five or more years, or the permit will lapse. Specifically, Article 4-604.C. provides that:

Any approved use by Special Review which commences operation or construction as required under Subsection 4-604.B., immediately above, shall lapse, and shall be of no further force and effect, if the use is inactive for any continuous five-year period or such shorter time as may be prescribed elsewhere in this Code or in a condition of a specific docket's approval. If this period of inactivity occurs, the use may not be recommenced without a new discretionary approval granted under this Code. An approved special use shall be deemed inactive under this Subsection 4-604.C. if there has been no activity under any portion of the special use permit for a continuous period of five years or more as a result of causes within the control of the special use permittee or agent.

By preventing a use from being reestablished after it has been abandoned for a period of at least five years, the intent of the lapse provision is to protect communities from uses that are no longer compatible with the surrounding area, or that present public health, safety, and welfare concerns. In order to effectuate this intent, the provision should not be interpreted in such a way as to render it meaningless.

For this same reason, passive compliance with the conditions of the special use approval generally will not prevent a permit lapse. For example, in this case, the appellant may have complied with condition of approval #17 requiring that “[s]igns be posted along perimeters of Neighbors/Redmond and Fredstrom sites stating that gravel mining will occur on site.” However, the continued presence of the signs on the site after posting is not “activity” under the permit that would prevent a lapse during a five-year period. If such passive compliance with some conditions of approval constituted activity under the permit, the lapse provision would be rendered meaningless because no permit would ever lapse.

In addition, and consistent with previous gravel mining operations, the Director has interpreted the term “activity” in Article 4-604.C. broadly to encompass not only actual gravel extraction, but also pre- and post-gravel mining activities including reclamation of the mined areas. In past determinations, minimal tasks or mere compliance with State law requirements have not been sufficient to demonstrate activity. More specifically, activity under the permit does not include general land management activities that a landowner would perform regardless of post-approval requirements in a special use permit.

Importantly, if a permit is deemed to have lapsed under Article 4-604.C., a new special use approval must be obtained before once again engaging in the special use.

With these considerations in mind, the Director analyzes the specific facts and circumstances surrounding each permit.

C. Lapse of Resolution 95-93

In this case, Resolution 95-93 (“the permit”) authorized open pit gravel mining. As outlined below, the Director has determined that no activity under the permit occurred from the time reclamation was completed on the Neighbors site in 2009 until at least 2015. As no purported activity occurred on the Hygiene site during this period, the Director’s analysis focuses on the Neighbors/Redmond and Fredstrom sites.

1. The Neighbors/Redmond Site

- a. Appellant and the State of Colorado Department of Reclamation, Mining, and Safety repeatedly state that reclamation was complete in 2009.*

The Neighbors site has been mined and reclaimed for over a decade. State of Colorado Department of Reclamation, Mining and Safety (DRMS) reports for 2011, 2015, and 2018, Exhibits B-D, clearly state that reclamation of the site was completed in 2009. *See* DRMS Inspection Report, 2 (Sept. 19, 2018) (“[r]eclamation of the area north of the river was completed in 2005” and “[r]eclamation of the area south of the river was completed in 2009.”); DRMS Inspection Report, 2 (Aug. 18, 2015) (“As noted in the previous inspection report dated April 26, 2011, the site has been reclaimed and no further mining will take place”); and DRMS Inspection Report, 2 (Apr. 26, 2011) (“According to the 2010 Annual Report, the site has been fully reclaimed since 2009”).

Importantly, the appellant stated in its 2009-2011 Annual Reports to DRMS for the Neighbors Site that reclamation was completed in 2009:

Appellant’s 2009 Annual Report to DRMS: “Mining of this site was completed during the permit year ended June 7, 2006 and the majority of plant equipment removed. During the permit year ended June 7, 2008, remaining material stockpiles and miscellaneous equipment were removed. The truck scale and scale house, which were the only mining related facilities remaining on site, were removed during the permit year ended June 7, 2009.

Reclamation of Cells 4 and 5, north of Saint Vrain Creek, was completed in 2005, as depicted on prior year annual report maps. This area has been maintained by mowing and is becoming well established.

Cell 1 wetland areas south of the St. Vrain were seeded November 16, 2007 and April 12, 2008. *All remaining reclamation activity south of the St. Vrain, including additional grading, sloping, installation of water conveyance features and seeding of upland areas was completed during the permit year ended June 7, 2009.* The southern portion of the site, including former scale house, plant site and areas undisturbed by mining have been returned to agricultural uses and upland areas to the north and around the ponds were planted to native grasses. *All site reclamation is*

completed and the site will continue to be managed for weeds while revegetated areas become established.” Exhibit E.

Appellant’s 2010 Annual Report to DRMS: *“The entire property has been mined and fully reclaimed as of permit year ended June 7, 2009 The site will continue to be managed for weeds while revegetated areas become established.” Exhibit F.*

Appellant’s 2011 Annual Report to DRMS: *“The entire property has been mined and fully reclaimed as of permit year ended June 7, 2009 and the site continues to be managed for weeds while revegetated areas become established.” Exhibit G.*

(emphasis added).

The Director relies on these reports to determine that reclamation of the Neighbors site was completed in 2009, and thus, the lapse period began in June of 2009 when reclamation was completed.

b. Repair and revegetation work after the 2013 flood does not constitute activity under Article 4-604.C of the Code.

All work done after the completion of reclamation in 2009, such as flood repairs and related revegetation, constituted ongoing land management work, and not “activity” under the special use permit. This is because the flood occurred after reclamation of the site was complete. The fact that DRMS continued to monitor the site because it continued to hold the reclamation bond does not change the Director’s determination.¹ The Director views the completion of reclamation in 2009 as the end of reclamation activity under the special use permit.

The flood did not constitute a circumstance beyond the control of the appellant which prevented it from engaging in the special use of gravel mining. The appellant has neither contended nor established that the flood prevented it from beginning mining on the Fredstrom property. Rather, the appellant argues that repairing the damaged land after the flood is considered reclamation of the Neighbors site. As stated above, because the Neighbors site was already reclaimed in 2009, the Director does not consider repair work related to the flood to be “activity” under the special use permit that would prevent a lapse from occurring. Instead, the flood repair work is general land management work that would have needed to occur regardless of whether the appellant had a special use permit for gravel mining.

¹ Although reclamation of the Neighbors site was completed in 2009, the appellant did not request release of its reclamation bond at that time. Thus, DRMS continued monitoring the site. Because of DRMS’s continued monitoring, when the 2013 flood occurred, DRMS oversaw the appellant’s repairs to the flood damaged areas of the Neighbors site.

- c. Appellant's submission of Technical Revisions does not qualify as activity under the permit.*

The appellant points to two Technical Revisions (TR-2 in 2011 and TR-3 in 2018) of the reclamation plan as potential activity under the permit. However, the Director has reviewed these revisions and notes that the revisions made in both TR-2 and TR-3 are essentially allowances for the appellant to obtain approval from DRMS for not complying with the reclamation plan. Stated differently, in the Technical Revisions, the appellant requests that the reclamation plan be amended to approve deviations from the plan such that the appellant does not have to do further work, as opposed to the plan being amended to require further work. For example, it appears that the appellant may have failed to plant the correct types of vegetation, and thus requested that the reclamation plan be amended to allow for the vegetation that had already been planted at the site. The mere fact that the appellant failed to plant the correct type of vegetation, though having ample time to do so, and then requesting a modification to the reclamation plan to accommodate this deviation cannot not constitute "activity" under Article 4-604.C of the Code.

Because the appellant is simply seeking approvals for past work that deviated from the plan, and not doing any further work, the technical revisions do not constitute activity under the permit. In applying for and receiving a technical revision, the appellant did not do any additional "activities," but simply received approval for work that had already been done.

- d. The 2013 Water Court Decree is not evidence of activity under the permit.*

The appellant also points to the issuance of a Water Court decree in 2013, and discussion with the Army Corps of Engineers in 2010 as evidence of activity under the permit. But again, the water court issuing the final decree in 2013 and discussions with the Corp, and subsequently certain deed restrictions being recorded, do not constitute activity on behalf of the appellant under the special use permit for gravel mining. While seeking legal rights, such as water rights, may in some circumstances constitute evidence of activity under the permit, this circumstance alone or combined with the other minimal level of activity asserted by the appellant, is not sufficient to prevent a finding of lapse. The appellant has not shown that it engaged in activity under the permit after 2009 on the Neighbors site, related to this or any other matter.

For all of these reasons, the Director has determined that reclamation of the Neighbors site was completed in June of 2009, and no activities under the permit occurred on that site during the lapse period.

2. The Fredstrom Site

No mining or reclamation activities have occurred on the Fredstrom site, though the appellant seeks to begin mining this site in the future. While the appellant obtained a reclamation permit for the Fredstrom site from DRMS in 2001 and has maintained it for almost 20 years, DRMS inspection reports demonstrate that the appellant did not know

when mining would commence in either 2010 or 2015. In particular, the 2010 DRMS Inspection Report for the Fredstrom site states that:

In November of 2009 Aggregate Industries submitted a request for reduction in the amount of financial warranty for the Fredstrom Resource permit to a \$1000.00 holding bond. The basis for the request is that no mining has occurred and *no mining activities are foreseen for some time*. This inspection was conducted to verify that no mine development or mining has occurred, and that verification was made. The site is being used for pasture.

Exhibit H, page 2 (emphasis added).

The 2015 DRMS Inspection Report similarly states that, “[t]he inspection was conducted as part of the Division’s regular monitoring program. Mining has not commenced at the Fredstrom Resource mine, the site is currently being used as pasture. *The Operator does not currently know when mining will commence at this site.*” Exhibit I, Page 2. Finally, the 2019 DRMS Inspection Report states, “Mining activities have not yet commenced at the site. *The operator does not currently know when operations will begin.*” Exhibit J, Page 2.

The appellant points to the following purported activities on the Fredstrom site during the relevant period of 2009 through 2015 to support its contention that the special use permit has not lapsed: (1) maintaining the DRMS permit; (2) considerations related to the Prebles Meadow Jumping Mouse (PMJM), which was trapped on or near the site in 2014; (3) groundwater monitoring; and (4) communications with Boulder County staff and the Army Corps of Engineers.

The Director reviewed these contentions and determines that they do not constitute activities under the permit that prevent a lapse from occurring.

- a. *Maintaining a reclamation permit is an administrative process and not activity under Article 4-604.C of the Code.*

Maintaining a reclamation permit and bond and filing yearly paperwork is similar to the sign posting example described above. While it may be a condition of approval and/or a state requirement, it is a primarily passive administrative process. In particular here, and as detailed above, the appellant specifically requested a reduction in the bond amount to \$1,000 due to inactivity on the site. This alone is not enough to keep the permit from lapsing.

- b. *Appellant’s actions related to the Preble’s Meadow Jumping Mouse occurred after the 2015 lapse period.*

PMJM were trapped on or near the Fredstrom site in 2014. However, the appellant did not initiate consultation with USFWS until 2015, which is after the lapse period. The Fredstrom PCN Nationwide Permit states, “Consultation with U.S. Fish and Wildlife Service (USFWS) began for this project in 2015, when Aggregate believed that there would not be impacts to

jurisdictional wetlands.” Appellant’s Record #94, page 11. Because this consultation falls outside of the lapse period, the Director need not determine whether it would constitute activity under the permit. The appellant has not established that the discovery of PMJM prevented it from moving ahead with mining preparation on the Fredstrom site during the lapse period.

- c. The groundwater monitoring that occurred on the Fredstrom site during the lapse period was too minimal to qualify as an activity under the permit.*

The Director considers the groundwater monitoring that occurred on the Fredstrom site, which the appellant asserts occurred from January 2001 through February 2010 and from April 2015 to date, to be too minimal of an action on its own to prevent lapse of the permit. The 2019 DRMS Inspection Report for the Fredstrom site states that DRMS approved a Technical Revision (TR-1) for the Fredstrom site in 2010 “to temporarily suspend the baseline groundwater level monitoring (while the site is inactive), and to resume monthly monitoring one year prior to commencement of mining.” Exhibit J. Due to this suspension, it appears that groundwater may only have been monitored once during the lapse period. While continuous groundwater monitoring could be part of a comprehensive set of actions constituting activity under a permit, the circumstances here and particularly the suspension of groundwater monitoring due to inactivity are not enough to change the Director’s determination that the permit has lapsed.

- d. Communications with Boulder County staff and the U.S. Army Corps of Engineers are administrative in nature and do not alone constitute activity under the permit.*

While the appellant had various conversations with Boulder County staff regarding the Fredstrom site, none of these communications resulted in actions occurring on site, nor do these communications alone constitute activity under the permit. Similarly, the appellant’s conversations with the Army Corps of Engineers in reference to wetland delineations and permitting are not sufficient actions in order to prevent lapse. Whether the appellant intended to abandon the use is not a factor for the BOA to consider when determining lapse.

For these reasons, the appellant has not established that gravel mining or pre- or post-gravel mining activities occurred on the Fredstrom site from 2009 to at least 2015.

3. Consistency with Past Decisions

In reviewing the Director’s determination, the BOA shall consider evidence of past interpretations of the Article 4-604.C lapse provision. In this case, both Resolution SU-96-18 and Resolution SU-88-12 are relevant to this analysis.

- a. Resolution SU-96-18*

The Director expects that his determination that Martin Marietta Materials Inc. Resolution SU-96-18 (“Marietta” or “SU-96-18”) had not lapsed, the appeal of which was reviewed by

the BOA in 2018, is relatively fresh in the minds of the BOA members. Similar to the permits at issue in the present matter, Resolution SU-96-18 approved the special use of gravel mining. Upon review of the activities conducted on site and with the aid of a third-party consultant, the Director determined that the permit had not lapsed. The matter is currently on appeal with the Colorado Court of Appeals.

As explained above, in making a lapse determination, the Director must review the specific facts and circumstances surrounding each special use permit. No two scenarios are exactly alike. In Marietta, the Director found that the mining operator engaged in reclamation activities, such as fertilizing and reseeding lakes, prairie dog control, noxious weed removal, preparation and filing applications for conditional water storage rights, wetland work, designing processing plant improvements, obtaining permits for future buildings, conveyor line building, surveying, yearly groundwater monitoring, and several other activities in preparation for additional mining operations during the purported lapse period. The Director relied on these activities—taken as whole and not individually—in finding that the permit had not lapsed.

Importantly, in Marietta, the Director did not make any broader determinations about when other permits would or would not lapse under the lapse provision. Neither the Director nor the BOA made a determination about whether any act to satisfy any of a permit’s conditions of approval at any point during a continuous five-year period would satisfy the requirements of the lapse provision.

The Director did not interpret the term activity so broadly as to include compliance with any condition of approval in the special use permit. As the Director stated at the BOA hearing, “each condition isn’t actually an activity” (July 25, 2018 BOA Hearing; 2:50), rather, it is up to county staff to determine which conditions constitute an activity and which do not. Work undertaken to comply with a condition approval may or may not be activity under a permit that prevents a lapse depending on how that work relates to the approved special use. Accordingly, the Director reviewed the specific activities that were undertaken on the site and made a decision based on the requirements of the approval and affirmative actions taken by Marietta.

Here, the Director does not find that mining or pre- or post-mining activity occurred on any of the sites during the lapse period from reclamation being completed in 2009 until at least 2015. This finding rests largely on the fact that reclamation was completed on the Neighbors site in June of 2009 and no actions were taken to prepare for or begin mining the Fredstrom site until at least after 2015, leaving a five-year period of lapse. These specific circumstances distinguish the present case from the Director’s determination in Marietta, while remaining consistent with the interpretation of Article 406.C. applied in that case.

b. Resolution SU-96-18

The Director’s determination is also consistent with the determination made in 2002 that special use permit SU-88-12 had not lapsed. In that decision, the Director determined that a special use permit to burn tires had not lapsed because activities under the permit had

continued through the relevant time period including that the tire burning plant remained operational throughout the purported lapse period, it retained its ability to burn tires and was used continuously to burn other fuels, and all state and federal permits had been maintained. As here, Director Billingsley interpreted the term activity to include more than just the special use, which was burning tires. However, the Director's interpretation was not so broad as to include compliance with every condition of approval under the permit. For example, the Director stated during the BOA hearing that a finding that all activity had ceased could have been made, "if the facility was constructed under this permit was altered so that it could not burn tires anymore, so that it was altered for just coal and gas... And then even though the facility was still there, we could argue that no part relevant to the special use-no portion of the special use existed." As here, Director Billingsley reviewed the specific facts and circumstances and made a determination that the sum total of actions taken by the operator constituted activity under the permit.

While these two permits involve very different facts and circumstances, the underlying interpretation of Article 406.C. is consistent.

4. Vested and Due Process Rights

The Director's determination that the permit has lapsed is supported by the facts of this case and is consistent with past interpretations. The lapse provision has been a part of the Land Use Code since 1996, and neither the appellant's vested rights, nor its due process rights were violated by the Director's finding of lapse due to at least five years of inactivity under the special use permit.

The Agreement to Make Gifts and the Option to Purchase are irrelevant to the lapse determination. These agreements were entered into between the owner of the Fredstrom property and the county in 1995 and 1996. Nothing in either of these Agreements bars application of the lapse provision or otherwise renders it invalid or inapplicable to the special use permit. To the contrary, both Agreements provide that in the event any term conflicts with the special use and related land use dockets, any decision by the Board of County Commissioners regarding the land use dockets shall control. Appellant's Record #1, ¶ 5; Appellant's Record #3, Option to Purchase, ¶ 4.1.

The Channel Agreement was entered into between the county, the City of Longmont, and Golden Land Company following the 2013 flood in order "to mitigate the impact of any potential future flooding and direct any future flood flows back to the St. Vrain River." Appellant's Record #62, Recitals, ¶ C. While the Agreement states that Golden may move the channel "in accordance with its mining permit" to accommodate mining activities, it in no way constitutes county approval of mining activities on the site, nor does any provision of the Agreement have any bearing on application of lapse provision.

Resolution 95-93 is the only controlling document reflecting the BOCC's conditional approval of gravel mining activities on the Fredstrom site. Ancillary agreements such as the Agreement to Make Gifts, Option to Purchase, or Channel Agreement cannot substantially change the conditions of approval in the Resolution, and as such, do not have an impact on

the lapse determination in this matter. Any modifications to the conditions in the resolution would need to come before the Community Planning & Permitting Department for review, and if deemed substantial modifications, before the BOCC for a public hearing and approval.

Here, the Director properly applied the lapse provision to the facts and circumstances of this matter. The Director's decision is based on competent evidence in the record including reports from both DRMS and the appellant itself. As such, the appellant cannot establish that its vested rights or due process rights were violated.

CONCLUSION

Because no activity under the permit occurred on any of the sites for at least a five-year period, the Director recommends that the BOA uphold his determination that approval of Special Use Dockets SU-94-22, 23, and 24 has lapsed under Article 4-604.C. of the Boulder County Land Use Code.

DIVISION OF MINERALS AND GEOLOGY
Department of Natural Resources
1313 Sherman St., Room 215
Denver, Colorado 80203
Phone: (303) 866-3567
FAX: (303) 832-8106



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DEPARTMENT OF NATURAL RESOURCES

Roy Romer
Governor
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Executive Director
Michael B. Long
Division Director

CONSTRUCTION MATERIALS Division of Minerals & Geology
REGULAR (112) OPERATION
RECLAMATION PERMIT APPLICATION FORM

CHECK ONE: [] New Application (Rule 1.4.5) [XX] Amendment Application (Rule 1.10)
[] Conversion Application (Rule 1.11)

Permit # M - 84 - 164 - (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 IVORY ORIGINAL and four (4) copies of the completed Ivory application form, five (5) 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): GOLDEN'S ANDESITE MINING COMPANY
1.1 Type of organization (corporation, partnership, etc.): CORPORATION
1.2 I.R.S. Tax I.D. No. or Social Security Number:
2. Operation name (pit, mine or site name): NEIGHBORS / REDMOND SITE
3. Permitted acreage (new or existing site): +/- 75 permitted acres
3.1 Change in acreage (+) +155 acres
3.2 Total acreage in Permit area +/- 230 acres
4. Fees:
4.1 New Application \$1,875.00 application fee
4.2 New Quarry Application \$2,325.00 quarry application
4.3 Milling Application (Non-DMO) \$3,100.00 milling application
4.4 Amendment Fee \$1,550.00 amendment fee
4.5 Conversion to 112 operation (set by statute) \$1,875.00 conversion fee
5. Primary commodity(ies) to be mined: SAND GRAVEL
5.1 Incidental commodity(ies) to be mined: 1. - lbs/Tons/vr
2. } lbs/Tons/vr 3. / lbs/Tons/vr
4. } lbs/Tons/vr 5. / lbs/Tons/vr
5.2 Anticipated end use of primary commodity(ies) to be mined: CONSTRUCTION MATERIAL
5.3 Anticipated end use of incidental commodity(ies) to be mined:

6. Name of owner of subsurface rights of affected land: REFER TO EXHIBIT 0
If 2 or more owners, "refer to Exhibit 0".

7. Name of owner of surface of affected land: REFER TO EXHIBIT 0

7.1 Names of the holders of any recorded easements on the affected land: _____

8. Type of mining operation: Surface Underground

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

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

SECTION (write number): S 5

TOWNSHIP (write number and check direction): T 2 North South

RANGE (write number and check direction): R 69 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. Primary future (Post-mining) land use (check one):

- Cropland(CR) Pastureland(PL) General Agriculture(GA)
- Rangeland(RL) Forestry(FR) Wildlife Habitat(WL)
- Residential(RS) Recreation(RC) Industrial/Commercial(IC)
- Developed Water Resources(WR) Solid Waste Disposal(WD)

11. Primary present land use (check one):

- Cropland(CR) Pastureland(PL) General Agriculture(GA)
- Rangeland(RL) Forestry(FR) Wildlife Habitat(WL)
- Residential(RS) Recreation(RC) Industrial/Commercial(IC)
- Developed Water Resources(WR)

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

Golden's will use a dry mining method and will convey all gravel materials to a central processing site by land conveyor.

13. On-Site Processing: Crushing/Screening

13.1 Briefly explain on-site processing:

crushing and washing plant capable of processing 400 tons per hour

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

14. Correspondence Information:

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

Contact's Name: Reginald v. Golden Title: President
 Company Name: Golden's Andesite Mining Company
 Street: 21 South Sunset Street
 City: Longmont
 State: Colorado Zip Code: 80501
 Telephone Number: (303) - 776-1003
 Fax Number: (303) - 665-0225

PERMITTING CONTACT (if different from applicant/operator above)

Contact's Name: Norm Roche Title: Vice President Operations
 Company Name: Golden's Andesite Mining Company
 Street: 21 South Sunset Street
 City: Longmont
 State: Colorado Zip Code: 80501
 Telephone Number: (303) - 776-1003
 Fax Number: (303) - 665-0225

INSPECTION CONTACT

Contact's Name: Norm Roche Title: Vice President Operations
 Company Name: Golden's Andesite Mining Company
 Street: 21 South Sunset Street
 City: Longmont
 State: Colorado Zip Code: 80501
 Telephone Number: (303) - 776-1003
 Fax Number: (303) - 665-0225

CC: STATE OR FEDERAL LANDOWNER (if any)

Agency: _____
 Street: _____
 City: _____
 State: _____ Zip Code: _____
 Telephone Number: (_____) - _____

CC: STATE OR FEDERAL LANDOWNER (if any)

Agency: _____
 Street: _____
 City: _____
 State: _____ Zip Code: _____
 Telephone Number: (_____) - _____

15. Description of Amendment or Conversion:

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

Golden's wishes to enlarge the mining boundary and update the reclamation plan.

Maps and Exhibits:

Five (5) 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 five (5) 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 to include the location of any recorded easements
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, to include holders of any recorded easements
EXHIBIT O	Owners of Record of Affected Land (Surface Area) and Owners of Substance to be Mined, to include holders of any recorded easements
EXHIBIT P	Municipalities Within Two Miles
EXHIBIT Q	Proof of Mailing of Notices to County Commissioners and Soil 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.


 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;

 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;


 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;

 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;

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

 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.

 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.

RR
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.

RR
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.

RR
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.

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.

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.

Signed and dated this 29 day of May, 1998.

Golden Andesite Mining Co. Inc.
Applicant/Operator or Company Name

If Corporation Attest (Seal)

Signed: [Signature]
Title: Pres

Signed: _____
Corporate Secretary or Equivalent
Town/City/County Clerk

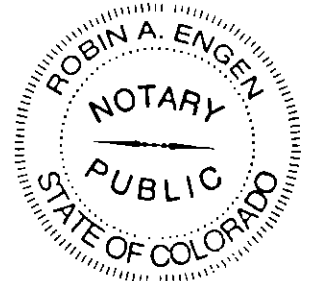
State of Colorado)
County of Boulder) ss

The foregoing instrument was acknowledged before me this 29 day of May, 1998,
by R.V. Golden as President of Golden's Andesite Mining Co.

Robin A. Engen
Notary Public

My Commission expires: 8/20/2000

SIGNATURES MUST BE IN BLUE INK



ROCKY MOUNTAIN CONSULTANTS, INC.



Premiere Building
825 Delaware Ave., Suite 500
Longmont, CO 80501
(303) 772-5282
Metro (303) 665-6283
FAX (303) 665-6959
E-mail rmclong@rmii.com

RECEIVED

JUN 04 1998

Division of Minerals & Geology

June 3, 1998

Ms. Barbara Chippone
Minerals Division Program Assistant
Division of Minerals and Geology
1313 Sherman Street, Room 215
Denver, CO 80203-2273

**RE: Amendment to MLRB 112 Permit M-84-164 - Golden's Andesite Mining Company,
Neighbor's Site**

Dear Barbara:

Attached please find the application materials and fee to amend MLRB 112 permit M-84-164 to expand the existing permit boundaries. We have included four bound copies and the set of unbound originals.

Please call me if you have any questions or need any additional information to complete your review.

Sincerely,

ROCKY MOUNTAIN CONSULTANTS, INC.

Danna Brand
Natural Resources Planner

Attachments

H:\0137_070\NEIGHBOR\COVERLTR.WPD

NEIGHBORS/REDMOND SITE

DMG REGULAR OPERATIONS (112) APPLICATION TO AMEND PERMIT: M-84-164

Located in Boulder County, Colorado

Prepared for Submittal to:

DIVISION OF MINERALS AND GEOLOGY
Department of Natural Resources
1313 Sherman, Room 215
Denver, Colorado 80203

On Behalf Of:

GOLDEN'S ANDESITE MINING COMPANY
21 South Sunset Street
Longmont, Colorado 80501

Prepared By:

ROCKY MOUNTAIN CONSULTANTS, INC.
825 Delaware Ave., Suite 500
Longmont, CO 80501

June 1998

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Appendix C – 404 Permit

Appendix D – Proof of Air Pollution Emission Notice (APEN) permit

Appendix E – Well Permit

PROJECT DESCRIPTION

Golden's Andesite Mining Company (Golden's) requests the Division of Mineral and Geology's approval to amend MLRB 112 permit # M-84-164 to expand the existing permit boundaries. Please refer to the Mining Plan Map (Exhibit C) for the existing and proposed permit boundaries. This would allow Golden's to mine and process approximately 2.5 million tons of sand and gravel within a 240-acre area. The proposed site is located south of 9th Avenue and east of Airport Road and extends east to Golden Ponds in Longmont, Colorado. Golden's proposes to begin mining this site August of 1998. It will take approximately six to eight years to mine and reclaim the property.

Golden's will mine and reclaim the parcel consistent with the guidelines established in *Golden's Comprehensive Mining Plan* (November 1994). The Comprehensive Plan sets forth an environmentally sensitive approach to aggregate extraction and site reclamation by requiring concurrent mining and reclamation and by enhancing habitat diversity through creative reclamation techniques. This approach includes:

- ▶ *Performing a comprehensive environmental inventory of the proposed mining area*
This inventory includes an evaluation of the project's impact on plant and wildlife habitat, surface and groundwater, neighboring properties and communities, cultural resources, view corridors, etc. It also assesses the potential for future open space, improving habitats, and future land development.
- ▶ *Minimizing area of impact and length of mining phase*
Golden's will mine the site in pods to minimize the amount of land disturbed at any one time. A pod may range in size from 11 to 26 acres. Only one pod or portions of two pods (in addition to the processing site) may be disturbed during any phase of mining. In no case will additional pods be opened unless reclamation is complete on the first mined of the two open pods. Thus, large sections of the site will be reclaimed years before the last pod is mined.
- ▶ *Preserving quality habitat and vegetation through setbacks and careful monitoring*
Golden's will preserve the "oxbow slough" ecosystems along St. Vrain Creek. These are remnant scars from historic river meanders and are important components of the riparian habitat on the St. Vrain. Golden's will monitor the trees in this area and irrigate them as necessary to ensure their health. Golden's is also preserving approximately 50 acres of agricultural land in the southwest corner of the parcel. Please see the Reclamation Plan Map (Exhibit F) for location of the preservation areas.
- ▶ *Create and enhance diverse, functional wetland communities*
Golden's will create wetlands using mining waste products. The wash basins which are used to settle out silts washed from the mined aggregate will be filled to an elevation slightly above the groundwater level. This will create a highly diverse and functional marsh/wet meadow/woody riparian ecosystem. Golden's will connect this silt basin system to the west bank of an existing off-site lake with little existing shoreline vegetation. This will enhance the habitat in the existing lake and make it more attractive.

▶ *Provide for appropriate public recreation opportunities*

This plan allows for the potential of City- or County-managed fishing ponds and a trail along St. Vrain Creek.

▶ *Provide a diversity of post-mining land uses*

Proposed post-mining land uses will include:

- St. Vrain Greenway
- agricultural land
- protected habitat area for wildlife
- wetland filtration basins.

EXHIBIT A - LEGAL DESCRIPTION

LEGAL DESCRIPTION:

PARCEL 1:

THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 5 AND THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, BOULDER COUNTY, COLORADO; EXCEPTING THEREFROM THAT PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 5 PREVIOUSLY CONVEYED TO THE DENVER, UTAH AND PACIFIC RAILROAD COMPANY, BY DEED RECORDED SEPTEMBER 4, 1882 IN BOOK 89, PAGE 237, AND ALSO EXCEPTING THOSE PORTIONS OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 6 AS PREVIOUSLY CONVEYED TO JANE H. NELSON AND KENT P. NELSON BY DEED RECORDED JANUARY 22, 1976 AS RECEPTION NO. 164643 AND AS TAKEN BY COURT ORDER RECORDED JUNE 4, 1987 AS RECEPTION NO. 853966.

PARCEL 2:

THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER AND THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 5, AND THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, BOULDER COUNTY, COLORADO EXCEPTING THEREFROM THAT PORTION AS PREVIOUSLY CONVEYED TO THE COUNTY OF BOULDER BY DEED RECORDED OCTOBER 4, 1988 AS RECEPTION NO. 945781.

PARCEL 3:

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, BOULDER COUNTY, COLORADO EXCEPTING THEREFROM THAT PORTION AS PREVIOUSLY CONVEYED TO THE COUNTY OF BOULDER, BY DEED RECORDED DECEMBER 4, 1988 AS RECEPTION NO. 945782.

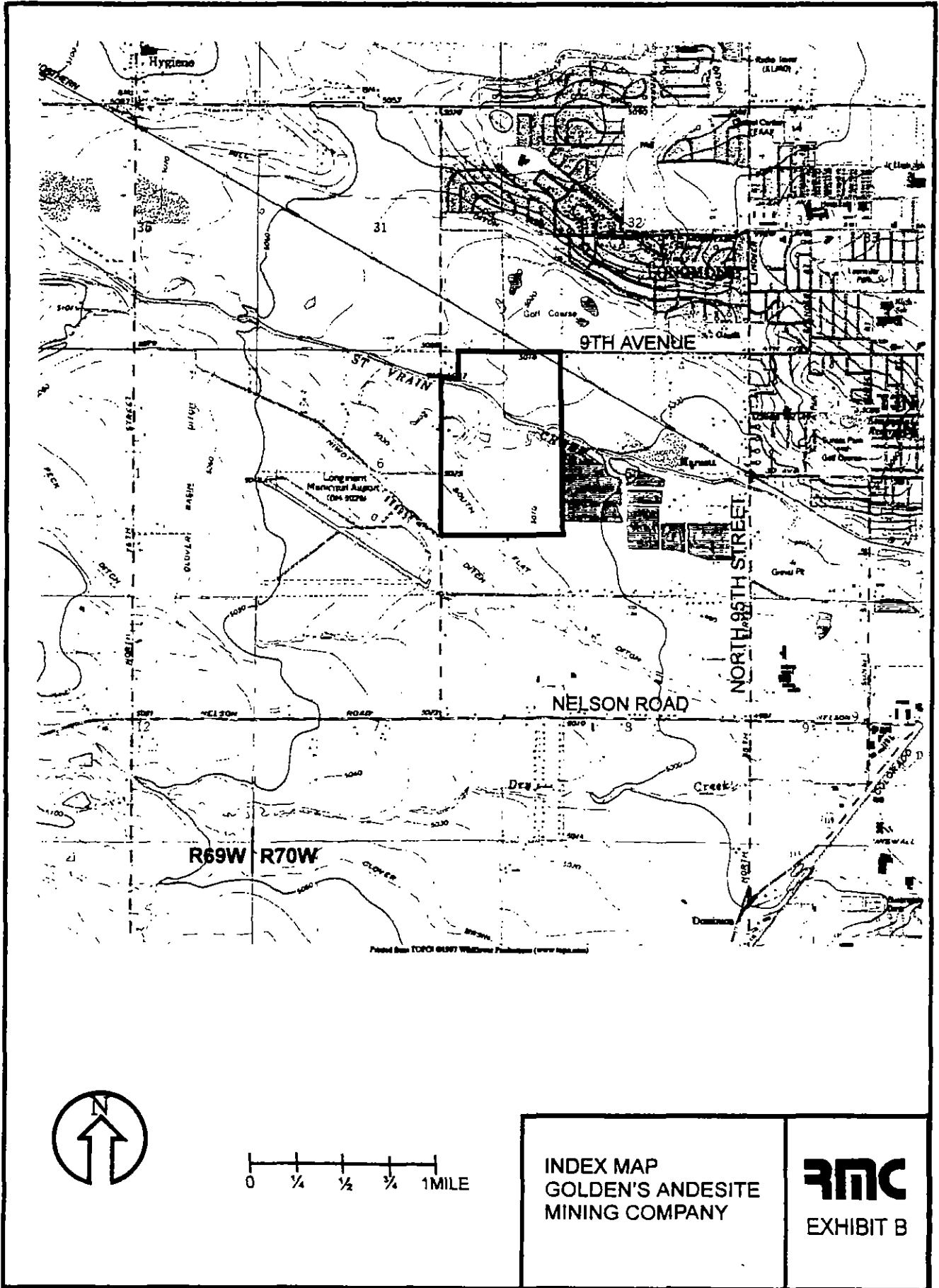


EXHIBIT D - MINING PLAN

This sections follows the requirements outlined in Section 6.4.5.

(a) Description of the methods of mining to be employed in each stage of the operation as related to any surface disturbance on affected lands

Golden's will mine the site in six sections or pods. The mining sequence will begin in Pod 1 and continue in order through Pod 6. Pod 1, which is about 20 acres in size, will establish the permanent production plant site for the entire parcel and the wash ponds.

Site Preparation

Initial disturbance of the property will include construction of perimeter screening berms and preparation for the processing site.

- ▶ Perimeter berms will be installed along the northeast and southwest corners of the site.
- ▶ The processing site will be elevated out of the 100-year floodplain to allow historic flood drainage to pass throughout the site without impacting the processing equipment.

Proposed Mining Process for Each Section

Before any mining commences, the operator will install a dewatering trench around the area to be mined. This water will be pumped into a settling pond. The applicant will obtain a discharge permit from the Colorado Department of Public Health and the Environment (CDPHE) prior to any discharge from the site and will comply with all CDPHE regulations including monitoring and reporting requirements for the life of the mine.

After the section is dewatered, scrapers will strip the topsoil and overburden and stockpile it along the perimeter of the area to be mined. The overburden will ultimately be used in reclaiming and sloping the shore. Next, sand and gravel will be excavated by front end loader and transported to the Pod 1 processing plant by a conveyor belt system. At the processing plant the material will be screened, crushed, washed and stockpiled to await transportation to its final destination. The stockpiles will be situated to reduce noise created during the operation. This will also reduce the visual distraction caused by moving equipment.

Concurrent reclamation will be occurring throughout the mining process. Subsequent pod stripping and dewatering activities will begin approximately 90 days prior to final removal of the gravel materials in the previous pod.

(b) Earthmoving

Sand and gravel will be excavated by front end loader and transported to the Pod 1 processing plant by a conveyor belt system. Gravel materials removed from the six pods will total approximately 2.5 million tons.

(c) All water diversions and impoundments

Wash water will be impounded in a small pond within the processing area and recycled through a settling pond. Water from the dewatering will be discharged into a settling pond consistent with a NPDES permit.

(d) The size of area to be worked at any one time

Golden's will mine the site in pods to minimize the amount of land disturbed at any one time. A pod may range in size from 11 to 26 acres. In addition to the processing site, only one pod or portions of two pods may be disturbed during any phase of mining. In no case will additional pods be opened unless reclamation is complete on the first mined of the two open pods. Thus, large sections of the site will be reclaimed years before the last pod is mined.

(e) An approximate timetable to describe the mining operation. The timetable is for the purpose of establishing the relationship between mining and reclamation during the different phases of a mining operation.

Please see the Mining Plan Map (Exhibit C) for the mining sequence. Please refer to Exhibit E – Reclamation Plan, section (e)(i) for timing information.

*(f) Use Mining Plan Map in conjunction with narrative to present:**(i) nature, depth and thickness of the deposit and thickness and type of overburden to be removed*

Soil profiles obtained from the site investigation by Commercial Testing Laboratories indicate a layer of silty topsoil from depths of 0 - 4'. This topsoil is underlain by layers of clean river gravel with thickness from 9' - 16'.

(ii) nature of the stratum immediately beneath the material to be mined in sedimentary deposits

The area underlying bedrock in this area is the Pierre shale which is approximately 3,000 feet thick at the location of this proposed mining activity.

Please also see Appendix 1 – Commercial Laboratories Geotechnical Report for test holes logs and a summary of test results.

(g) Identify the primary and secondary commodities to be mined/extracted and describe the intended use

The primary commodity to be mined/extracted is sand and gravel. The intended use is for construction materials.

(h) Name and describe the intended use of all expected incidental products to be mined/extracted by the proposed operation

There are no expected incidental products to be mined/extracted.

EXHIBIT E - RECLAMATION PLAN

This section follows the requirements outlined in Section 6.4.5. The proposed mining and reclamation plans focus on minimizing the ecological impacts of mining, minimizing the length of time of impact, and maximizing long-term benefits.

- (a) *A description of the type(s) of reclamation the Operator proposes to achieve in the reclamation of the affected land, why each was chosen, the amount of acreage accorded to each, and a general discussion of methods of reclamation as related to the mechanics of earthmoving;*

Golden's developed the reclamation plan in conjunction with the landowners, based on the depth and configuration of the gravel resource and the landowners' plans for the property. These proposed plans are founded on the idea that mining in the river floodplain actually affords a tremendous opportunity to restore and enhance river corridors through creative extraction, processing and reclamation techniques.

Golden's proposes to reclaim the property with a series of ponds and wetland areas. Please refer to the Reclamation Plan Map for pond and wetland acreages. Wetlands will be created by filling the wash basins used to settle out silts to an elevation slightly above groundwater level. This technique creates a highly diverse and functional marsh/wet meadow/woody riparian ecosystem. These wetlands will be connected to the west bank of an existing off-site lake with little existing shoreline vegetation. As a result, habitat in the existing lake will be greatly enhanced, and the linear shoreline will have a more aesthetically pleasing form.

All silt basin wetland creation will be done concurrently with commencement of mining in all phases and will exceed a 1:1 mitigation ratio. Golden's may request credits for additional wetlands from the United States Army Corps of Engineers and bank them for future use.

Protection of Valuable Habitat

Often, drainage ditches on agricultural lands mitigate pollution created by neighboring runoff by filtering it through wetland vegetation and into wetland basins prior to discharge into the river system. Most of the drainages on the Redmond/Neighbors parcel, however, do not perform this function. Golden's will maintain the outfalls that currently feed freshwater marsh wetlands throughout mining and reclamation and ensure that the marshes will not be impacted.

A few 'oxbow slough' ecosystems occur on these sites. These are remnant scars from historic river meanders and are important components of the riparian habitat along the St. Vrain. Impacts to these areas would constitute a significant loss, therefore these are designated preservation areas and will not be excavated. Although dewatering will occur in adjacent pits, the existing trees will be monitored closely. If they appear stressed by dewatering activity, supplemental irrigation water or groundwater pumped from the pits will be applied, and/or drainage ditches will be created on the upslope side to create a moat for maintaining the appropriate hydrology during mining.

(b) *A comparison of the proposed post-mining land use to other land uses in the vicinity and to adopted state and local land use plans and programs.*

This property is adjacent to Golden Ponds on the east which is very similar to this property's proposed post-mining use. The ultimate land use for this property will be consistent with the Longmont Area Comprehensive Plan.

(c) *A description of how the Reclamation Plan will be implemented to meet each applicable requirement of Section 3.1.*

- ▶ The Operator will carry all reclamation to completion with reasonable diligence, and each phase of reclamation shall be completed within five years from the date the Operator informs the Board or Office that such phase has commenced.
- ▶ Golden's will comply with all reclamation measures set forth in Section 3.1.5:
 - Grading will create a final topography that is appropriate for ponds and proposed wetlands.
 - All grading will be performed to help control erosion and siltation of the affected lands.
 - All backfilling and grading shall be completed as soon as feasible after the mining process.
 - ✕ - Any drill or auger holes that are part of the mining operation shall be plugged with non-combustible material, which shall prevent harmful or polluting drainage.
 - Maximum slopes and slope combinations will be compatible with the configuration of surrounding conditions and selected land use. All slopes will be compatible with specified MLRB standards.
 - All mined material to be disposed of within the affected area will be handled in such a manner so as to prevent any unauthorized release of pollutants to the surface drainage system.
- Golden's will comply with applicable Colorado water laws governing injury to existing water rights and with applicable state and federal water quality and dredge and fill laws and regulations.
- The Applicant will stabilize and protect all surface areas of the affected land, including spoil piles so as to effectively control erosion.
- Golden's will comply with all standards and conditions applicable to classified and unclassified groundwater.
- Golden's will protect the existing and "reasonably potential" future uses of groundwater. We are in process of applying for a well permit and required temporary substitute supply plan to augment evaporative loss from the ponds. A portion of the mining area is covered by an existing Augmentation Agreement with the St. Vrain Left Hand Water Conservancy District.
- ▶ All aspects of the mining and reclamation plans shall take into account the safety and protection of wildlife on the mine site, at processing sites, and along all access roads to the mine site with special attention given to critical periods in the life cycle of those species which require special consideration.
- ▶ Topsoil shall be removed and segregated from other spoil. Topsoil stockpiles shall be stored in places and configurations to minimize erosion and located in areas where disturbance by ongoing mining operations will be minimized. Once stockpiled, topsoil shall be rehandled as little as possible. The topsoil used for perimeter screening berms will be seeded to dryland grass or another appropriate cover crop to control weeds and prevent erosion.

- ▶ In those areas where revegetation is part of the reclamation plan, land shall be revegetated in a way as to establish a diverse, effective, and long-lasting vegetative cover that is capable of self-regeneration without continued dependence on irrigation or fertilizer and is at least equal in extent of cover to the natural vegetation of the surrounding area.
- ▶ Golden's will post appropriate signage at the entrance to the mine site. This site is currently posted per the Boulder County Special Use Permit conditions.

(d) Plans for topsoil segregation, preservation and replacement; for stabilization, compaction and grading of spoil; and for revegetation.

Topsoil shall be removed and segregated from other spoil. (Refer to the Mining Plan Map for specific locations of stockpiles.) For reclamation, topsoil will be replaced by a scraper and generally graded with a blade. All grading shall be done in a manner that controls erosion and siltation of the affected lands, to protect areas outside of the affected land from slides and other damage. In addition, all backfilling and grading shall be completed as soon as feasible after the mining process.

Topsoil will be replaced on all areas above the anticipated high water line. The minimum thickness shall be 12 inches above the surrounding finished grade. The topsoil shall be keyed to the underlying and surrounding material by the use of harrows, rollers or other equipment suitable for the purpose.

In an unaltered river system, periodic river flooding regenerates Cottonwood communities by scouring the bare mineral soils and simultaneous prolonged high water level at the time of Cottonwood seed dispersal. Golden's will scarify bare mineral soil along the shoreline wetland bench (below the highwater line) in late spring. This will help emulate the effects of flooding and stimulate the establishment of native trees. This method has been studied by the Colorado Division of Wildlife Research Team and has been highly successful on other projects.

Please see question (f)(ii) for a list of the preferred species to be planted. All grass seed shall be delivered in sealed bags showing weight, analysis and vendor's names. All seeding shall be installed by the drilling method.

- (e) A plan or schedule indicating how and when reclamation will be implemented. Include:
- (i) an estimate of the periods of time which will be required for the various stages or phases of reclamation;

Mining Schedule	
Section Being Mined	Timing Estimate
Pod #1 & Processing Site	8 months to mine last site to be reclaimed
Pod #2	14 months to mine 12 months to reclaim
Pod #3	15 months to mine 12 months to reclaim
Pod #4	12 months to mine 9 months to reclaim
Pod #5	17 months to mine 12 months to reclaim
Pod #6	18 months to mine 12 months to reclaim

- (ii) a description of the size and location of each area to be reclaimed during each phase; and
Please refer to the Reclamation Plan Map (Exhibit F).

- (iii) outlining the sequence in which each stage or phase of reclamation will be carried out.
Please refer to the Reclamation Plan Map for the reclamation sequence.

- (f) A description of:

- (i) final grading - maximum anticipated slope gradient or expected ranges thereof;

All disturbed areas shall be regraded and smoothed to a finished grade suitable for revegetation. 3:1 slope below high water line; 4:1 slope on pond banks.

(ii) *seeding - types, mixtures, quantities and expected times of seeding and planting;*

Seed Schedule

Scientific Name	Common Name	Variety	Anderson & Company Pounds PLS/Acre
GRASSES			
<i>Agropyron riparium</i>	Streambank Wheatgrass	Sodar	1.00
<i>Agropyron smithii</i>	Western Wheatgrass	Arriba	2.00
<i>Agropyron smithii</i>	Western Wheatgrass	Rosanna	2.00
<i>Andropogon gerardi</i>	Big Bluestem		2.00
<i>Boutelona gracillis</i>	Blue Grama	Lovington	1.00
<i>Buchloe dactyloides</i>	Buffalograss	Sharps Improved	0.50
<i>Festuca pratensis</i>	Meadow Fescue		1.00
<i>Panicum virgatum</i>	Switchgrass	Trailblazer	1.50
<i>Poa compressa</i>	Canada Bluegrass	Rubens	0.50
<i>Schizachyrium scoparium</i>	Little Bluestem	Cimarron	1.50
<i>Sporobolus cryptandrus</i>	Sand Drop Seed		.50
FORBS			
<i>Achillea millefolium</i>	Yarrow		0.10
<i>Gailiardia aristata</i>	Blanketflower		0.20
<i>Linum lewisii</i>	Blue Flax		0.20

The operator will seed during the appropriate season to assure adequate moisture for germination and control weed to ensure that grasses can establish. Additional plantings will be installed once the ponds are full of water.

(iii) *fertilization - types, mixtures, quantities and time of application;*

The type and application rate of fertilizer shall be determined based on a soil test at the time of final reclamation.

(iv) *revegetation - types of trees, shrubs, etc.*

Upon completion of the mining and shoreline reclamation, Golden's will work with the land owner to install additional plantings. These native and adapted trees and shrubs will enhance the wildlife habitat by providing food and cover for resident and migratory wildlife.

It is anticipated that the plant materials will be selected from the following list.

Common Name	Botanical Name
<p>TREES *</p> <p>Hackberry Succulent Hawthorn Plains Cottonwood (fertile) Native Plum Peachleaf Willow</p>	<p><i>Celtis occidentalis</i> <i>Crataegus macrantha occidentalis</i> <i>Populus sargentii</i> <i>Prunus americana</i> <i>Salix amygdaloides</i></p>
<p>SHRUBS *</p> <p>Chokecherry Three-leaf Sumac Sandbar Willow Common Snowberry</p> <p>* All plant materials shall be native and of Colorado accession. Hybrids will not be accepted.</p>	<p><i>Prunus virginiana</i> <i>Rhus trilobata</i> <i>Salix exigua</i> <i>Symphoricarpos albus</i></p>

(v) *topsoiling - anticipated minimum depth or range of depths for areas where topsoil will be replace.*

Topsoil will be uniformly placed and spread on all areas disturbed by the mining, above the anticipated high water line. The minimum thickness shall be to 12 inches above the surrounding finished grade.

EXHIBIT G - WATER INFORMATION

(a) Locate on the map (Exhibit C) tributary water courses, wells, springs, stock water ponds, reservoirs and ditches

This operation is expected to directly affect surface water systems. Please see Exhibit C for location of the:

- ▶ Saint Vrain Creek;
- ▶ Zweck and Turner Ditch, a lateral traverses the Redmond site and enters the Saint Vrain at a large marsh wetland in the river channel, (this lateral ends on the property and will therefore not affect any other water rights);
- ▶ James Mason Meadow Ditch, enters the Neighbors property from the west and only the tail end of the ditch will be affected by this permitted area (thus, no other water rights will be affected);
- ▶ South Flat Ditch, crosses the southwest corner of Neighbors;
- ▶ an unnamed tributary, which traverses the lower alluvial terrace in the Neighbors parcel and enters Saint Vrain Creek near the east boundary; and
- ▶ stockwater pond south of Saint Vrain Creek.

(b) Identify all known aquifers

The St. Vrain Creek alluvial aquifer and the Pierre-Niobrara-Benton bedrock aquifer are under this property.

There are three wells within 600 feet of the site:

- ▶ Walter Ehrlich owns a well south of the southeast corner of the site. This wells is labeled as well 1 on the attached map of the wells.
- ▶ Debra Schupp owns a well directly west of the upper west side of the site. It is labeled well 2 on the following map.
- ▶ Tom Zweck owns a well (well 3 on map) directly west of the northwest corner of the site, just north of Schupp's well.

Refer to Exhibit G-1 for a list of adjacent wells and well owners within 600' and a map of the wells.

- (c) *Show how water from dewatering operations or runoff from disturbed areas, piled material and operating surfaces will be managed to protect against pollution of either surface or groundwater both during and after the operation*

Water from dewatering operations and runoff from disturbed areas, piled material and operating surfaces will be diverted to wetland basins for detention and cleansing. The resulting outfall will flow into Saint Vrain Creek pursuant to a Colorado Department of Public Health and Environment discharge elimination permit. Please see Appendix B for a copy of the application.

- (d) *Estimate project water requirements including flow rates and annual volumes for the development, mining and reclamation phases of the project.*

The water requirements for this property are fairly complicated because:

- ▶ a portion of this property falls under an existing augmentation agreement with the St. Vrain Left Hand Water Conservancy District,
- ▶ the site is being mined in six phases and
- ▶ there are three ditches which have historically irrigated this property (Zweck and Turner Ditch, James Mason Meadow Ditch and South Flat Ditch).

The applicant is in the process of applying for a temporary substitute supply plan for the property that lies outside of the existing permit boundaries. Golden's will not mine outside of the existing permit boundary until the State Engineer's Office has approved the temporary substitute supply plan and issued a well permit. As noted above, Golden's has an approved augmentation agreement with the St. Vrain Left Hand Water Conservancy District. Golden's is in the process of reactivating a well permit to expose groundwater in the existing permit boundaries.

DEPLETIONS

1. Depletions During Mining

Water depletions during mining will include:

- evaporation from dewatering trenches
- evaporation from settling ponds
- evaporation from the wash pond (Pod 1)
- evaporation from ponds created by the mining process
- water lost through operations including washing and dust control
- water lost with the material hauled off-site.

a) Evaporative Losses

Evaporation losses are based on the NOAA Technical Report NWS 33, Evaporation Atlas for the Contiguous 48 United States. For this location, annual gross evaporation is approximately 40.0 inches. Monthly evaporation is calculated based on the percentages set forth by the Office of the State Engineer. Precipitation is from the Climatological Data published by NOAA at the Longmont 2ESE Station.

Golden's will mine the site in pods to minimize the amount of land disturbed at any one time. Before any mining begins, the operator will install a dewatering trench around the area to be mined to control groundwater. This water will be pumped into a settling pond. All settling ponds are located in the areas which are covered under the existing augmentation plan with St. Vrain Left Hand Water Conservancy District. Refer to the Mining Plan Map for specific settling pond locations. Approximately 90 days before a pod has been completely mined, the operator will begin installing a dewatering trench in the subsequent pod. After mining is complete on a pod, the operator will fill the dewatering trench with overburden and allow the pod to fill with groundwater. See attached Mining Plan Map for an illustration of the mining process.

The amount of exposed groundwater will vary, depending on what pod is being mined. Mining will occur on land historically irrigated by the South Flat, Zweck and Turner and Mason Meadow Ditches. Since the replacement water will be provided by the historic consumptive use under each ditch, the following table shows the evaporative losses during the mining of each pod, and the ditch from which replacements will be made.

Evaporative Losses During Mining		
Section Being Mined	Net Depletion not covered by SVLHWCD augmentation plan	Timing Estimate
Pod #1 and Processing Site	South Flat: 0.41 ac-ft	8 months to mine last site to be reclaimed
Pod #2	South Flat: 18.45 ac-ft	14 months to mine 12 months to reclaim
Pod #3	South Flat: 17.94 ac-ft Zweck & Turner: 10.68 ac-ft	15 months to mine 12 months to reclaim
Pod #4	South Flat: 17.94 ac-ft Zweck & Turner: 14.54 ac-ft Mason Meadow: 1.30 ac-ft	12 months to mine 9 months to reclaim
Pod #5	South Flat: 23.56 ac-ft Zweck & Turner: 14.54 ac-ft Mason Meadow: 33.40 ac-ft	17 months to mine 12 months to reclaim

Evaporative Losses During Mining		
Section Being Mined	Net Depletion not covered by SVLHWCD augmentation plan	Timing Estimate
Pod #6	South Flat: 39.61 ac-ft Zweck & Turner: 14.54 ac-ft Mason Meadow: 46.62 ac-ft	18 months to mine 12 months to reclaim

b) Water Lost Through Operations

Wash Pond Evaporation - Pod 1 will become the wash pond after it has been mined. Thus, evaporative losses are already included in each of the above calculations.

Dust Control - Golden's will apply water to haul roads and stockpiles as necessary to prevent fugitive dust. The amount of water used varies considerably, depending on weather conditions. However, the operator estimates that they will use one load from a 2,500 gallon water truck three times a day (Monday through Friday) in June, July and August for dust control. Golden's will likely not need to use the water truck during November through February. The remaining months (March through May, September and October) Golden's may use one and one-half loads per day. This results in a consumptive use of 2.53 acre-feet per year.

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Total
0.00	0.00	0.00	0.23	0.23	0.23	0.46	0.46	0.46	0.23	0.23	0.00	2.53

c) Water Lost with the Material Hauled Off-Site

Golden's estimates the site contains 2,500,000 tons of material. Of this, approximately 55 percent is outside of the St. Vrain Left Hand Augmentation Agreement. It is anticipated that mining will begin in September 1998 and will take up to 10 years to remove the material. However, annual production will depend on the demand for construction material and may impact the total life of the project. Based on these assumptions, water lost with the mined product will total 4.05 acre-feet per year, calculated as shown below:

$$(2,500,000 \text{ tons} \times 55\% = 1,375,000/10 \text{ years} = 137,500 \text{ tons/year} \times 2,000 \text{ lbs} = 275,000,000 \text{ lbs}$$

$$275,000,000 \times 4\% = 11,000,000 \text{ lbs}/62.4 \text{ lbs per cubic foot} = 176,282 \text{ cubic feet}/43,560 \text{ feet per acre} = 4.05 \text{ acre-feet per year})$$

Typically, Golden's will produce 10% of material during December, January and February with the balance split fairly evenly through the remainder of the year. Therefore, monthly water loss from transporting the material would be approximately:

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Total
.135	.135	.135	.405	.405	.405	.405	.405	.405	.405	.405	.405	4.05

d. Total Depletions During Mining

Total depletions during mining depend on what pod is being mined. Mining will begin on the land historically irrigated by the South Flat Ditch. Depletions from operations (dust control and water lost with the material) will remain fairly constant throughout the mining process at 6.58 acre-feet per year (2.53 acre-feet dust for dust control plus 4.05 acre-feet of water lost with material). Evaporative depletions will occur as each pod is mined and reclaimed. Operational depletions will be replaced by the South Flat Ditch for the duration of the mining since mining begins in the South Flat irrigation area. The attached table summarizes evaporative depletions under each ditch when the last pod is being mined plus operational losses (worst case scenario).

2. Depletions After Reclamation

The final reclamation plan includes five ponds (Pods 2 through 6) and a wetlands area (Pod 1). See Reclamation Plan Map for pond and wetland locations. The groundwater will be 12" to 18" below the surface in the wetland areas. It is estimated the wetland will consume approximately 1.7 acre-feet of water per acre similar to pasture grass, and that there will be 7.02 acres of wetlands outside the existing augmentation plan. Total consumptive use of 7.02 acres of wetland is estimated to be 11.88 acre-feet. Other depletions after mining will be from evaporation (88.24 acre-feet).

REPLACEMENT WATER

Replacement water will consist of shares from:

- South Flat Ditch
- Zweck and Turner Ditch
- James Mason (Mason Meadow) Ditch.

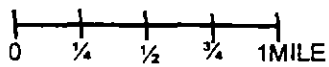
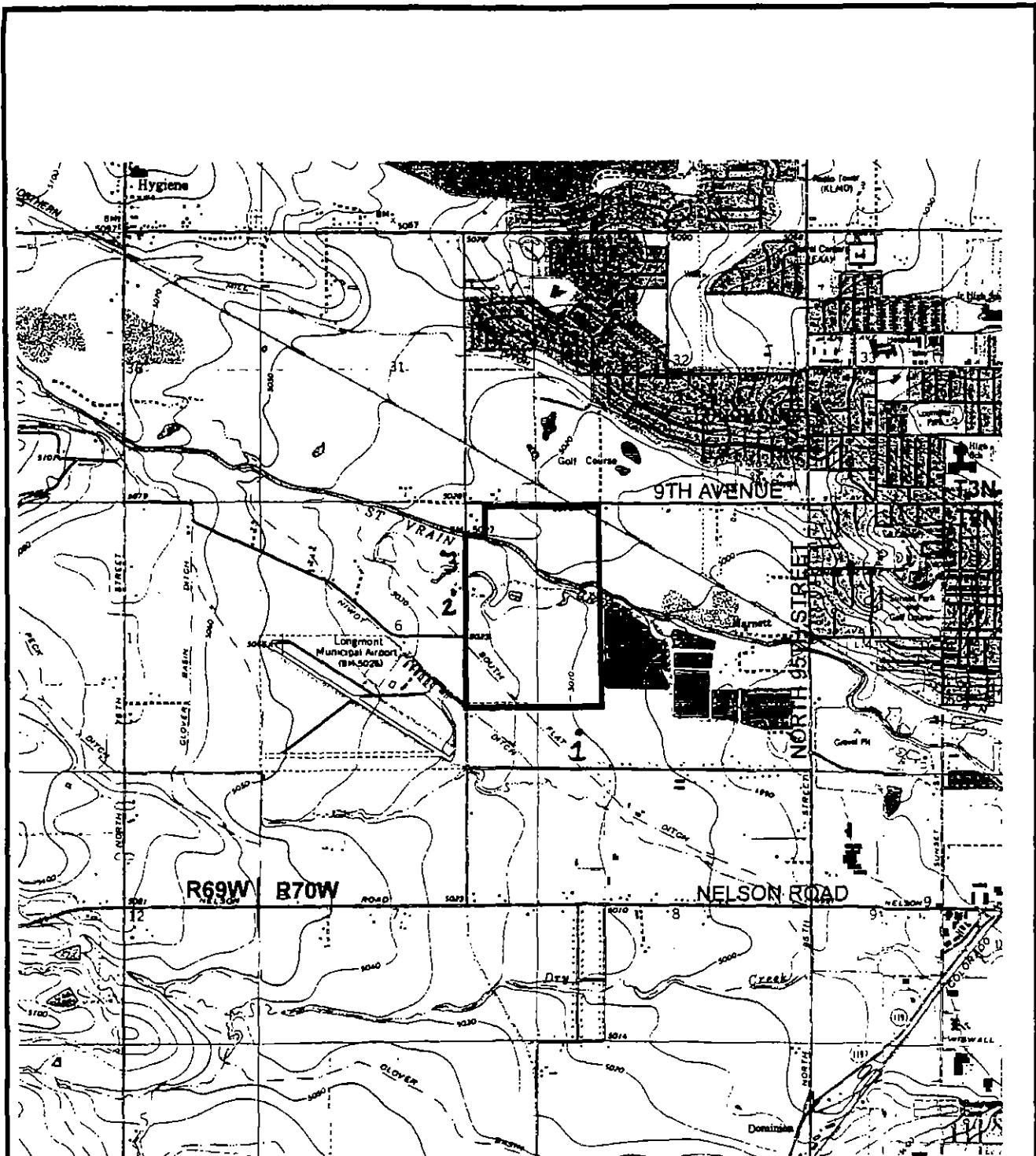
These shares are owned by the property owner. It is not anticipated that additional water will be needed for reclamation. The final landscape has been designed to survive on natural precipitation. If water is necessary, Golden's will use its own raw water and water rights historically associated with the irrigation of the property to establish vegetation.

- (e) Indicate the projected amounts from each of the water sources to supply project water requirements from the mining operation and reclamation.*

It is anticipated that all water for the operation of this site will be provided by water rights associated with the historic agricultural production on this site. As noted above, the applicant is in the process of preparing a temporary substitute supply plan that will address the source and amount of water from each water right associated with the property and how each of those rights will be used in the mining operation. Golden's will not mine outside of the existing permit boundaries until the State Engineer's Office has approved the temporary substitute supply plan and issued a well permit.

- (f) Affirmatively state that the Applicant has acquired or applied for a National Pollutant Discharge Elimination System permit from the Water Quality Control Division*

Golden's Andesite Mining Company has applied for a National Pollutant Discharge Elimination System (NPDES) permit from the Water Quality Control Division at the Colorado Department of Public Health and Environmental Services. See Appendix B.



WELLS LOCATED
NEAR GOLDEN'S
NEIGHBOR'S SITE



EXHIBIT A

REPORT DATE 05/27/98

COLORADO WELLS, APPLICATIONS, AND PERMITS
 COLORADO DIVISION OF WATER RESOURCES

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PERMIT D CO OWNER INFORMATION

ACTIVITY CD	STATUS DATE	1ST USED DATE	ANNUAL APROP	ACRES IRR	GEOL AQFR	WELL YIELD	WELL DEPTH	WATER LEVEL	SEC COORDINATES	LOCAT'N QTRS	TOWN SC	P RANGE
27313MH	1 7	GOLDEN COMPANIES	ROCKY MOUNTAIN CON	DURANGO, CO 81301								
MH 01/30/96		5	O M								SESW	4 2 N 69 W S
46954F	1 7	GOLDENS ANDESITE MINING CO	21 S SUNSET	LONGMONT, CO 80501								
NP 02/01/95		5	O G									5 2 N 69 W S
27552	A 1 7	SAUNDERS GARY	812 FORDHAM ST	LONGMONT, CO 80503	LOT 3	ELIZABETH ANN						
NP 04/24/91		5	8			2.00	160		8 0500N,1290E	NENE	5 2 N	69 W S
13665	1 7	FERGUSON DANIEL B	725 HOVER RD	LONGMONT, CO 80501								
		5	8	12/08/62		10.00	52	18		NENE	5 2 N	69 W S
17494	1 7	CIOCCHETTI NEIL	FREDERICK, CO	80530								
NP 09/19/63		5	8	09/21/63		20.00	25	5		NENE	5 2 N	69 W S
27552	1 7	SAUNDERS GARY G	812 FORDHAM ST	LONGMONT, CO 80503	LOT 3	ELIZABETH ANN						
		5	8	06/13/66		15.00	36		2 0004S,0045W	NENE	5 2 N	69 W S
17494	A 1 7	AHLBERG RODNEY A	850 FORDHAM ST	LONGMONT, CO 80503	LOT 1	ELIZABETH ANN						
NP 09/08/93 AR 01/10/94		5	8			1.00	100		3 0050N,0125E	NENE	5 2 N	69 W S
37576F	1 7	GOLDEN GRAVEL CO	21 S SUNSET BOX 328	LONGMONT, CO 80501		GRAVEL PIT						
NP 07/09/90 AR 07/19/90		5	O G									NWNE 5 2 N 69 W S
33692	1 7	HOERLE HAROLD	RT 3	LONGMONT, CO 80501								
		5	8	05/07/68		7.00	61	5		NWNE	5 2 N	69 W S
27584MH	1 7	GOLDENS ANDESITE MINING CO	ROCKY MOUNTAIN CONSULT	LONGMONT, CO 80501								
MH 03/14/96		5	O M									NWNW 5 2 N 69 W S
30169MH	1 7	GOLDEN CO/STUART GOLDEN	TERRACON ENVIRO INC	FT COLLINS, CO 80525								
MH 02/26/97		5	O M									NWNW 5 2 N 69 W S
27583MH	1 7	GOLDENS ANDESITE MINING CO	ROCKY MOUNTAIN CONSULT	LONGMONT, CO 80501								
MH 03/14/96		5	O M									SWNW 5 2 N 69 W S
30168MH	1 7	GOLDEN CO/STUART GOLDEN	TERRACON ENVIRO INC	FT COLLINS, CO 80525								
MH 02/26/97		5	O M									SWNW 5 2 N 69 W S
3792	1 7	WAGNER DAVE		LONGMONT, CO 80501								
		5	9	07/04/59		10.00	35	5		NESE	5 2 N	69 W S
195G	1 7	MARXMILLER HARRY	2526 SUNSET DR #102	LONGMONT, CO 80501								
NP 05/29/97		5	G					220	0450S,2200E	SWSE	5 2 N	69 W S
27582MH	1 7	GOLDENS ANDESITE MINING CO	ROCKY MOUNTAIN CONSULT	LONGMONT, CO 80501								
MH 03/14/96		5	O M									NWSW 5 2 N 69 W S
30167MH	1 7	GOLDEN CO/REGGIE GOLDEN	TERRACON ENVIRO INC	FT COLLINS, CO 80525								
MH 02/26/97		5	O M									NWSW 5 2 N 69 W S
*54479	1 7	EHRlich WALTER	8985 ROGERS RD	LONGMONT, CO 80501								
		5	8	04/17/72		15.00	50	7		SWSW	5 2 N	69 W S
27580MH	1 7	GOLDENS ANDESITE MINING CO	ROCKY MOUNTAIN CONSULT	LONGMONT, CO 80501								
MH 03/14/96		5	O M									NENE 6 2 N 69 W S
30172MH	1 7	GOLDEN CO/STUART GOLDEN	TERRACON ENVIRO INC	FT COLLINS, CO 80525								
MH 02/26/97		5	O M									NENE 6 2 N 69 W S
77416	1 7	ZWECK TOM G	10901 AIRPORT RD	LONGMONT, CO 80501								
NP 11/04/74 AB 03/20/93		5	8	12/30/75		1.00	GW	15.00	35	8 1050N,1450E	NWNE	6 2 N 69 W S
*77416	A 1 7	ZWECK TOM	10901 AIRPORT RD	LONGMONT, CO 80503								
NP 03/02/93		5	8			15.00	39	7	1050N,1460E	NWNE	6 2 N	69 W S
93038VE	1 7	ZWECK TOM	10901 AIRPORT RD	LONGMONT, CO 80503								
AV 03/08/93		5	8						1050N,1470E	NWNE	6 2 N	69 W S
27581MH	1 7	GOLDENS ANDESITE MINING CO	ROCKY MOUNTAIN CONSULT	LONGMONT, CO 80501								
MH 03/14/96		5	O M									SENE 6 2 N 69 W S

EXHIBIT A

REPORT DATE 05/27/98

COLORADO WELLS, APPLICATIONS, AND PERMITS

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COLORADO DIVISION OF WATER RESOURCES

PERMIT D CO OWNER INFORMATION

ACTIVITY	STATUS	1ST USED	ANNUAL	ACRES	GEOL	WELL	WELL	WATER	SEC	LOCAT'N	TOWN	P						
CD	DATE	CD	DATE	WD MD DB USE	DATE	APROP	IRR	AQFR	YIELD	DEPTH	LEVEL	COORDINATES	QTRS	SC	SHIP	RANGE	M	
30171MH	1	7	GOLDEN CO/STUART GOLDEN	10729 N 85TH	LONGMONT, CO 80503	1	7	TERRACON ENVIRO INC	FT COLLINS, CO 80525									
	MH	02/26/97		5	O M													
164861	1	7	SCHUPP DEBRA LANE	10729 N 85TH	LONGMONT, CO 80503	1	7											
	NP	04/30/92		5	8													
164861	A	1	SCHUPP DEBRA LANE	10729 N 85TH	LONGMONT, CO 80503	1	7											
* 2	NP	04/30/92		5	8													
24490MH	1	7	NORTHERN COLORADO WATER CONSERVANCY	C/O HARCO TECHNOLOGIES	FT COLLINS, CO 80524	1	7											
	MH	09/26/94		5	O M													
27578MH	1	7	GOLDENS ANDESITE MINING CO	ROCKY MOUNTAIN CONSULT	LONGMONT, CO 80501	1	7											
	MH	03/14/96		5	O M													
30161MH	1	7	GOLDEN CO/REGGIE GOLDEN	10729 N 85TH	LONGMONT, CO 80503	1	7	TERRACON ENVIRO INC	FT COLLINS, CO 80525									
	MH	02/26/97		5	O M													
27579MH	1	7	GOLDENS ANDESITE MINING CO	ROCKY MOUNTAIN CONSULT	LONGMONT, CO 80501	1	7											
	MH	03/14/96		5	O M													
30170MH	1	7	GOLDEN CO/STUART GOLDEN	10729 N 85TH	LONGMONT, CO 80503	1	7	TERRACON ENVIRO INC	FT COLLINS, CO 80525									
	MH	02/26/97		5	O M													
30162	1	7	SCHLAGEL JACOB P	RT 3 BOX 362	LONGMONT, CO 80501	1	7											
				5	8	03/27/67			30.00	43	11							
107121	1	7	RANDLEMAN EVERETT	BOX 424	ARVADA, CO 80001	1	7											
	NP	04/04/79	AR	05/29/79	5	8			8.00	100	7	2000N,0250W	SWNW	7	2	N	69	W
45587	A	1	SCHLAGEL L.	LONGMONT, CO 80501														
	NP	03/22/83	PI	5	8													
45587	1	7	JOHNSON CLARENCE E	8090 NELSON RD	LONGMONT, CO 80501	1	7											
				5	8	11/05/71			3.00	102	10	2100S,1220W	NWSW	7	2	N	69	W
41052F	1	7	LONGMONT CITY OF	BARBARA MCGRANE	1100 S SHERMAN ST	LONGMONT, CO 80501	1	7										
	NP	03/02/92	CA	12/24/92	5	0												

EXHIBIT H - WILDLIFE INFORMATION

(1) *Describe the game and non-game resources on and in the vicinity of the application area including:*

(a) *description of the significant wildlife resources on the affected land;*

Neither the Boulder County Comprehensive Plan nor the St. Vrain Greenway Master Plan identified any critical wildlife on this property. This site is a typical example of the effects of agricultural land uses near a river corridor. While this area preserves large tracts of attractive open space, grazing severely limits the value and function of wet meadow wetlands in the pasturelands. These wetlands are themselves likely created and sustained by irrigation practices. In addition, although livestock access to the river is limited, where ~~it~~ does occur vegetation and bank stabilization are also severely impacted by grazing and trampling.

A few "oxbow slough" ecosystems occur on these sites. These are remnant scars from historic river meanders and are important components of the riparian habitat along the St. Vrain. Impacts to these areas would constitute a significant loss, therefore these are designated preservation areas and will not be excavated. In addition, Golden's will monitor the trees in this area and irrigate them as necessary to ensure their health.

This reach of the St. Vrain Creek is classified as a Class I Warm Water Fishery. It is, however, depleted by two major irrigation diversions and is determined to be low quality aquatic habitat from approximately the Niwot ditch diversion to the west side of Redmond/Neighbors. Although the river flows are in no way impacted by mining activity or the post-reclamation land use, mining and reclamation will be used to enhance the aquatic habitat for the benefit of the environment and the community.

As a general rule, conveyors are considered to have far less impact on wildlife (particularly raptors) than trucks. Golden's will use conveyors to transport aggregate from the land north of St. Vrain Creek to the processing site.

(b) *seasonal use of the area;*

It is our understanding that the Colorado Department of Wildlife will perform a wildlife survey of the area after they receive this application from the DNR.

(c) *presence and estimated population of threatened or endangered species from federal and state lists;*

Peggy Anderson-Goguen, Principal of Anderson & Company performed a *Spiranthes diluvialis* site survey. No *Spiranthes diluvialis* occurred on this site.

(d) description of the general effect during and after the proposed operation on the existing wildlife of the area, including but not limited to temporary and permanent loss of food and habitat, interference with migratory routes, and the general effect on wildlife from increased human activity, including noise.

It is our understanding that the Colorado Department of Wildlife (CDOW) will evaluate the effects of this operation on wildlife. We will work with CDOW to minimize the impact on wildlife whenever possible.

EXHIBIT I - SOILS INFORMATION

(1) In consultation with the Soil Conservation Service or other qualified person, indicate on a map (in Exhibit C) or by a statement the general type, thickness and distribution of soil over the affected land.

The Existing Conditions Map (Exhibit C) indicates the soil types on the property. Commercial Laboratories' January 1970 site investigation indicates a layer of silty topsoil from depths of 0 - 4'. This topsoil is underlain by layers of clean river gravel with a thickness ranging from 9' - 16'. The area underlying bedrock in this area is the Pierre shale which is approximately 3,000 feet thick at the location of this proposed mining activity.

Please also see the attached logs of test holes, summary of test results and descriptions of soil types (Appendix A).

EXHIBIT J - VEGETATIVE INFORMATION

(a) Describe present vegetation types including quantitative estimates of cover and height for the principal species in each life-form represented (i.e. trees, tall shrubs, low shrubs, grasses, forbs);

The St. Vrain River and its 100-year floodplain are the major site features on this parcel. Dikes line both river banks. A remnant river meander characterized by a mature tree grove lies on the north side of the river near the west boundary. The Redmond site (north of St. Vrain Creek) consists of agricultural cropland. A Zweck and Turner lateral traverses Redmond and enters the St. Vrain at a large marsh wetland in the river channel. Wetland vegetation typical of wet meadows and ditches lines this lateral. Neither the lateral wetlands nor the wetlands in the river channel will be impacted by mining on the Redmond parcel.

The Neighbors site is primarily agricultural land. Specifically, grazing occurs in the lower alluvial terrace near the river, and croplands occupy the higher ground on the south and west ends of the site. An unnamed tributary also traverses this terrace and enters the St. Vrain River near the east boundary. The Meadowbrook Farm homestead is situated on the east boundary at Airport Road. The South Flat agricultural ditch flows through the southwest corner of the parcel. One pond with a large tree grove is situated in the northeast corner of Neighbors.

Riparian and freshwater marsh wetland areas occur outside of the mining limits along St. Vrain Creek. A meander scar south of the river has left a remnant Cottonwood grove with some wetland vegetation. This is also a protected area not scheduled for mining. The unnamed tributary exhibits wetlands in the channel bottom throughout its length. The historic channel has periodically shifted throughout this lower terrace and has left a few scattered areas of wetlands in the lowest depressions. These are likely sustained by pasture irrigation. A specific wetland delineation plan was submitted to the U.S. Army Corps of Engineers (USACE). See Appendix C for a copy of the 404 permit (application).

A pre-qualified surveyor surveyed the site for *Spiranthes diluvialis*, the rare and endangered Ute Ladies' Tresses orchid and found none on this parcel. The survey submitted a *Spiranthes* report to U.S. Fish and Wildlife in conjunction with the 404 permit application submitted to USACE.

(b) the relationship of present vegetation types to soils types (or may show on map);

Please refer to the Existing Conditions Map.

WEED MANAGEMENT PLAN

UNMINED AREAS

Continue irrigated, agricultural production and management and maintain access to irrigation ditches as long as possible. Gradually replace irrigated crop production with pasture grasses so that the grasses can be established prior to discontinuing irrigation on the property.

MINING AREAS

Short Term

- 1) Replace topsoil and allow weeds to grow.
- 2) Kill weeds with a contact herbicide. Use Tordon (must be applied by a certified applicator per manufacturer's instructions) as an initial chemical control in areas where there is no threat of contaminating a water supply. In areas within 6 feet of the water table, use aquatic 24D or Rodeo.
- 3) Seed with cover crop (such as sterile sorghum).
- 4) Mow weeds and cover crop during the spring and summer to prevent them from producing seed heads.
- 5) In the fall, kill the cover crop and weeds with an appropriate contact herbicide and drill permanent dryland grass mixture in stubble. (We anticipate that the cover crop will take the place of mulch.)

Long Term

Monitor and control noxious weeds as they appear. Watch weeds to determine proper time to mow. Mow property for first growing season. The first season may require 2 to 3 or more mowings to adequately control the weeds. After the grasses become established, chemicals may be used.

Contact Boulder County Weed Control Coordinator Cindy Cosley (678-6110) to determine what chemicals to use and to determine if there is any new or additional information available about long term weed control.

EXHIBIT K - CLIMATE INFORMATION

The Neighbors/Redmond site is in an semi-arid continental climate strongly influenced by the Rocky Mountains. The area is usually warm in the summer with frequent hot days. In winter, periods of very cold weather are caused by arctic air moving in from the north or northwest. Milder periods occur when westerly winds are warmed as they move downslope off the mountains to the west.

Weather monitoring data is not available from the site. The nearest weather monitoring station is in east/southeast Longmont. The Longmont 2ESE Station is at elevation 4950 feet and has been operated for over 87 years. Normal temperature and precipitation data have been established for this station. According to the National Oceanic and Atmospheric Administration's *Climatological Data Annual Summary, Colorado, 1996*, total precipitation around Longmont, Colorado, averages 13 inches. Most of the precipitation occurs as rainfall during the warmer part of the year with the heaviest rainfalls in the late spring and early summer. Winter snowfall is frequent but the snowcover usually melts quickly during the milder periods. The annual temperature for the area averages 49 degrees Fahrenheit.

	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	A N N U A L
AVERAGE TOTAL PRECIP (INCHES)	.4	.4	1.2	1.7	2.3	1.9	1.1	1.2	1.3	.9	.5	.6	13
AVERAGE TEMP (°F)	26	33	36	49	59	68	72	70	60	51	37	33	49

EXHIBIT L - RECLAMATION COST

We have selected the phase of the mining that includes the largest area that will be disturbed at one time to calculate the potential reclamation liability for the Division of Minerals and Geology. This will occur during the beginning of phase 5. The dewatering trench will be at its maximum size, the processing area, silt ponds (phase 1 mining area) and haul road will be disturbed, and shoreline reclamation will be in process for phase 4. It is anticipated that these disturbances will total approximately 61 acres. Concurrent reclamation will have taken place on the shoreline for phases 2 and 3 and a portion of phase 4. The ponds in phases 2 and 3 will be full and the ponds in phase 4 will begin to fill once dewatering has been stopped.

Activity	Quantity	Units	Unit Cost	Cost
A. Stripped overburden and topsoil- approximately 7 acres of disturbance				
1. Replace overburden	54,853	CY	\$.84	\$46,077
2. Replace 12" of topsoil	27,427	CY	\$.84	\$23,038
3. Seed and mulch	17	Acres	\$400	\$6,800
B. Dewatering trench				
1. Dozer soil into trench	24,200	CY	\$.84	\$20,328
2. Replace 12" topsoil	1,613	CY	\$.84	\$1,355
3. Seed and mulch	1	Acres	400	\$400
C Road - to remain for future access othe site				
C. Processing area - equipment is portable and would be removed by the operator				
1. Remove concrete base for scale	8	CY	\$65	\$520
2. Scarify ground	8	Acres	\$150	\$1,200
3. Spread 12" topsoil	12,907	CY	\$.84	\$10,842
4. Seed and mulch	8	Acres	\$400	\$3,200
E. Settling pond				
1. Place overburde 5' on 1 acre	8,067	CY	\$.84	\$6,776
2. Place topsoil 12" on 1 acre	1,613	CY	\$.84	\$1,355
3. Seed and mulch	1	Acres	\$400	\$400
G. Phase 4 lake shore final grade seed and mulch				
1. Finished Grading	7,400	CY	\$.84	\$6,216
1. Replace topsoil - 12" on 3 acres	6,453	CY	\$.84	\$5,421
2. Seed and mulch	2	Acres	\$400	\$800
H. Silt pond reclamation/wetland creation				
1. Seed to specified wetland mix.	20	Acres	\$400	\$16,000

Activity	Quantity	Units	Unit Cost	Cost
I. Plantings				
1. Plant trees and shrubs	1	LS	\$40,000	\$40,000
Disturbance Costs				\$190,728
Contractor Mobilization (10%)				\$19,073
Overhead (15%)				\$28,609
Administration (5%)				\$9,536
Total				\$247,946
Disturbed acreage - 61 acres				
Financial Warrantee per Acre				\$4,065

EXHIBIT M - OTHER PERMITS AND LICENSES

Golden's Andesite Mining Company holds or has applied for the following permits:

Colorado Department of Public Health and Environment

- ▶ Colorado Department of Health APEN (dust) permit
- ▶ Colorado Discharge Permit System (CDPS)

United States Army Corps of Engineers

- ▶ Disposal of Dredge and Fill Material (404) Permit

Boulder County

- ▶ Special Use Permit (County Land Use and Zoning Permit)
- ▶ Site-Specific Development Plan

Colorado State Engineer's Office

- ▶ Well Permit
- ▶ Temporary Substitute Supply Plan
- ▶ Augmentation Agreement (St. Vrain Left Hand Water Conservancy District)

EXHIBIT N - LEGAL RIGHT TO ENTER

Please see the attached letters.



May 27, 1998

Kent P. Nelson
1185 Twin Peaks Circle
Longmont, CO 80503


Dear Kent,

This letter is to confirm our understanding regarding the proposed gravel mining operation on the Neighbors-Redmond property. We have agreed in principal that Golden's Andesite Mining Company will mine the gravel from your property. It is our understanding that we have your permission to proceed with the necessary permits to mine the property and that we will not commence mining until we have executed an agreement that outlines respective costs and responsibilities.

Please acknowledge this understanding by signing below and return this letter to me at your earliest possible convenience. Thank you for your assistance.

Sincerely,

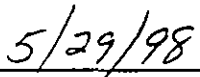
GOLDEN'S ANDESITE MINING COMPANY


R. V. (Reggie) Golden
President

Acknowledged:



Kent P. Nelson



Date

rac
neighbor.doc





May 27, 1998

Golden Farm Ltd.
P. O. Box 328
Longmont, CO 80501

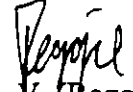
Dear Golden Farm Ltd.,

This letter is to confirm our understanding regarding the proposed gravel mining operation on the Neighbors-Redmond property. We have agreed in principal that Golden's Andesite Mining Company will mine the gravel from your property. It is our understanding that we have your permission to proceed with the necessary permits to mine the property and that we will not commence mining until we have executed an agreement that outlines respective costs and responsibilities.

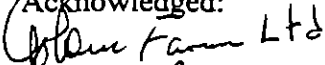

Please acknowledge this understanding by signing below and return this letter to me at your earliest possible convenience. Thank you for your assistance.

Sincerely,

GOLDEN'S ANDESITE MINING COMPANY


R. V. (Reggie) Golden
President

Acknowledged:



Golden Farm Ltd.

6-2-98
Date

ræ
neighbor.doc





May 27, 1998

Stewart and Sheron Golden
10734 North 85th
Longmont, CO 80503

Dear Stewart and Sheron,

This letter is to confirm our understanding regarding the proposed gravel mining operation on the Neighbors-Redmond property. We have agreed in principal that Golden's Andesite Mining Company will mine the gravel from your property. It is our understanding that we have your permission to proceed with the necessary permits to mine the property and that we will not commence mining until we have executed an agreement that outlines respective costs and responsibilities.

Please acknowledge this understanding by signing below and return this letter to me at your earliest possible convenience. Thank you for your assistance.

Sincerely,

GOLDEN'S ANDESITE MINING COMPANY

R. V. (Reggie) Golden
President

Acknowledged:

Stewart Golden

6-2-98

Date

Sheron Golden

6-2-98

Date

rac
neighbor.doc



**EXHIBIT O - OWNERS OF RECORD OF AFFECTED LAND (SURFACE AREA) AND
OWNERS OF SUBSTANCE TO BE MINED**

Owners of Surface Area and Substance to be Mined

Kent and David Nelson
1185 Twin Peaks Circle
Longmont, Colorado 80503

Golden Farm Ltd.
P.O. Box 328
Longmont, Colorado 80501

Stewart and Sheron Golden
10734 North 85th Street
Longmont, Colorado 80503

EXHIBIT P - MUNICIPALITIES WITHIN TWO MILES

The City of Longmont is the sole municipality within two miles of the site.

**EXHIBIT Q - PROOF OF MAILING OF NOTICES TO COUNTY COMMISSIONERS
AND SOIL CONSERVATION DISTRICT**

Copies of the return receipts for the certified mailings are attached.

Z 339 950 356



**Receipt for
Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

PS Form 3800, March 1993

Send to CO Commissioners	
Street and No.	
P O, State and ZIP Code	
Postage	\$1.93
Certified Fee	1.35
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	1.50
TOTAL Postage & Fees	4.78
Postmark or Date	3 JUN 1998 6-3-98 USPO

Z 339 950 357



**Receipt for
Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

PS Form 3800, March 1993

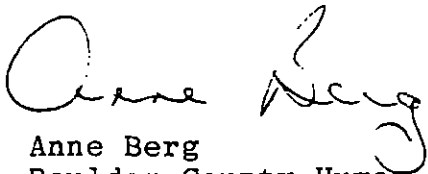
Send to Longmont Soil Cons. Dist.	
Street and No.	
P O, State and ZIP Code	
Postage	\$2.16
Certified Fee	1.35
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	1.50
TOTAL Postage & Fees	4.01
Postmark or Date	3 JUN 1998 6-3-98 USPO

EXHIBIT R - PROOF OF FILING WITH COUNTY CLERK AND RECORDER

Copies of the return receipt for the certified mailing to the County Clerk and Recorder are attached.

June 3, 1998

I received Application For An Amendment To MLRB 112 Permit M-84-164 Golden's Neighbors/Redmond Site on Wednesday, June 3, 1998.



Anne Berg
Boulder County Human Resources

EXHIBIT S - PERMANENT MAN-MADE STRUCTURES

Permanent man-made structure located within two hundred feet of the affected land include:

South Flat Ditch

South Flat Ditch Company

Zweck and Turner Ditch Company

Golden's is the primary owner

Mason Meadow Ditch

Golden's is the primary owner

The applicant is contacting the South Flat Ditch Company to develop an agreement for mining within 200 feet of the structure. This agreement will be provided to the Division prior to disturbance closer than 200 feet to the structure.

**APPENDIX A - COMMERCIAL LABORATORIES GEOTECHNICAL REPORT AND
SCS INFORMATION**

EXHIBIT A



COMMERCIAL TESTING LABORATORIES

22 LIPAN STREET DENVER, COLORADO 80223 825-3207

INVESTIGATION OF
SAND AND GRAVEL DEPOSITS
NEIGHBORS PROPERTY
SW $\frac{1}{4}$ and NE $\frac{1}{4}$ of
SEC. 5, T. 2 N., R. 69 W.,
BOULDER COUNTY, COLORADO

Prepared for
Mr. Doy Neighbors

Identification No. E-4955

January 19, 1970

FIGURES AND TABLES

Location of Test Holes	Figure No. 1
Logs of Test Holes	Figure No. 2
Logs of Test Holes	Figure No. 3
Logs of Test Holes	Figure No. 4
Gradation Analyses	Figure No. 5
Map of Mineable Gravel Thicknesses	Figure No. 6
Physical Properties of Aggregates	Table No. 1



TABLE NO. 1

PHYSICAL PROPERTIES OF AGGREGATES

Sodium Sulfate Soundness Tests - Coarse Aggregate (5 Cycles)

Sieve Size Passing	Sieve Size Retained	Grading of Sample For Cent	Weight of Test Fractions Before Test (g)	Loss Per Cent	Weighted Loss Per Cent
1-1/2 in	1 in	40	1100	3.80	1.82
1	3/4				
3/4	1/2	32	1000	5.80	1.86
1/2	3/8				
3/8	0 4	10	300	8.00	3.30
0 4		2			
TOTAL		100			6.98

Sodium Sulfate Soundness Tests - Fine Aggregate (5 Cycles)

Sieve Size Passing	Sieve Size Retained	Grading of Sample For Cent	Weight of Test Fractions Before Test (g)	Loss Per Cent	Weighted Loss Per Cent
3/8 in	0 4	2			
0 4	8	8	100	7.8	0.62
8	16	22	100	3.5	0.77
16	30	25	100	3.6	0.90
30	50	23	100	2.7	0.62
50		20			
TOTAL		100			2.91

Los Angeles Abrasion
Grading

1000 Revolutions

Percentage of Wear 43.46%

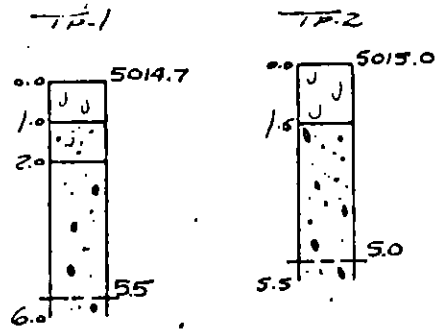
Potential Reactivity Test

Re = 24.8

Sc = 21.2

The aggregates are considered non-reactive according to the following criteria from ASTM C-35. If Re is less than 70, the aggregate is considered potentially reactive if Sc is greater than 35 - Re/2.

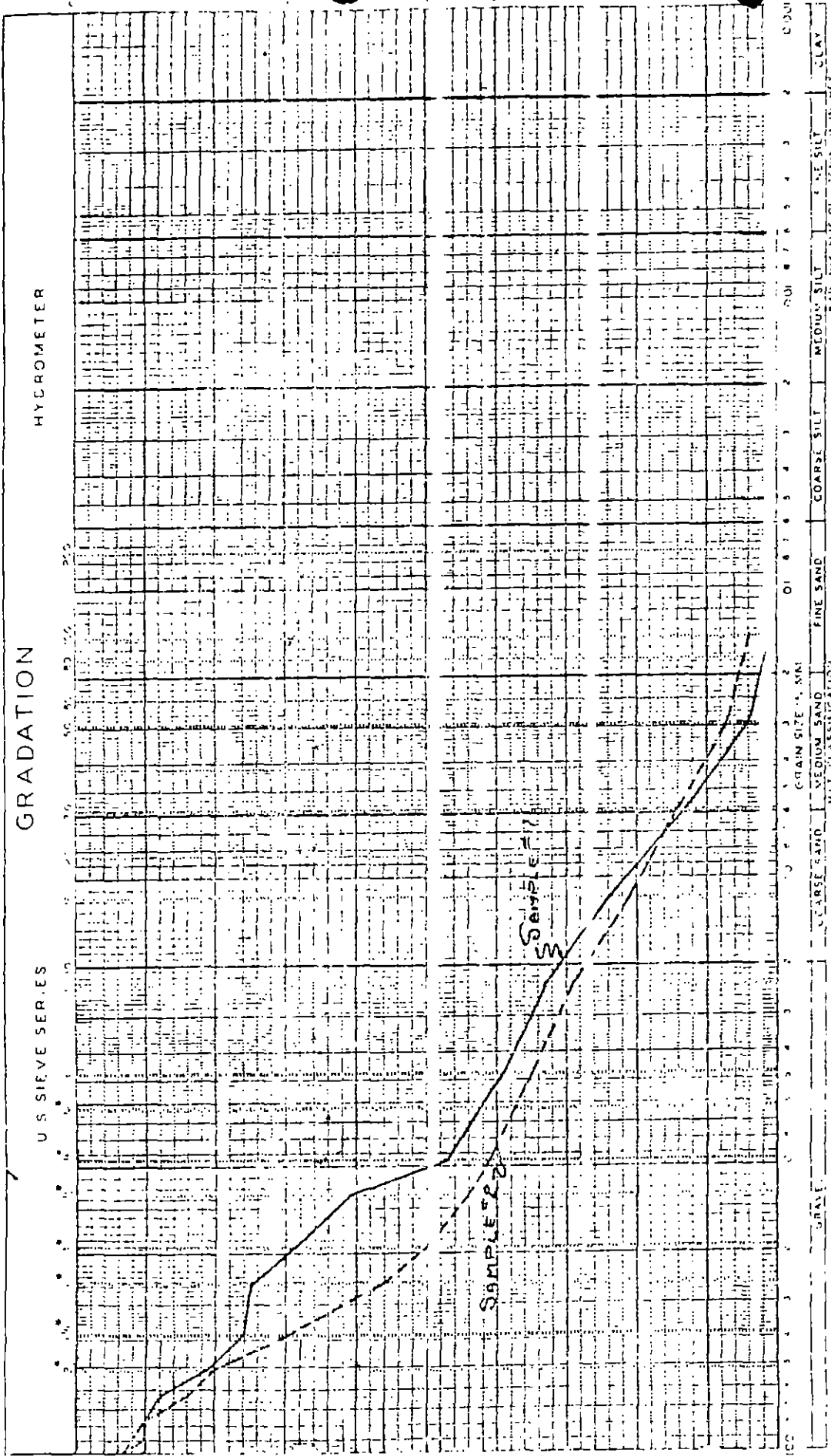




LOCUS OF TEST PITS

CH. IDENT. E-4955

FIG. No. 4



PROJECT Dev. Neighbors

LOCATION _____

STATION _____

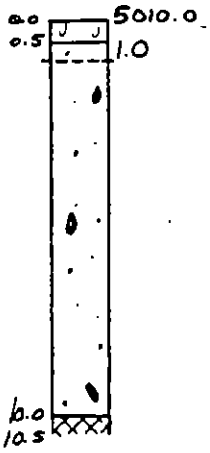
OFFSET STATION E-4955

HOLE NO. _____ TEST PIT _____

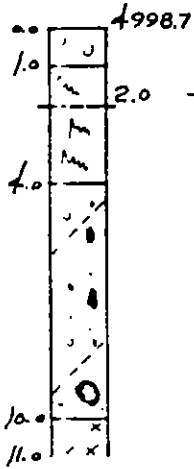
AUGER HOLE _____ UNDISTURBED SAMPLE _____

GRADATION OF PIT SAMPLES
NEIGHBORS PROPERTY
11-25-69
E-4955
Fig. No. 5

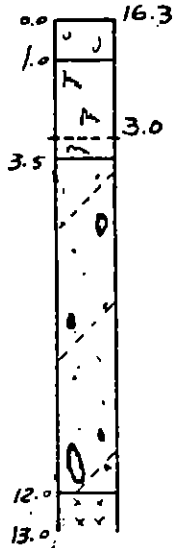
TR-10



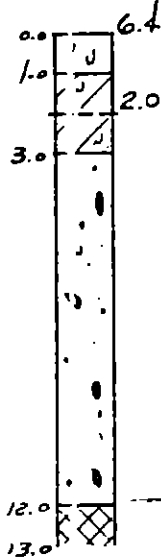
TR-11



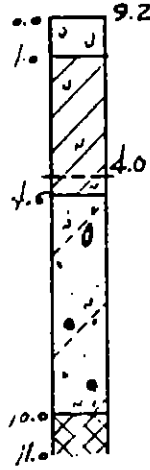
TR-12



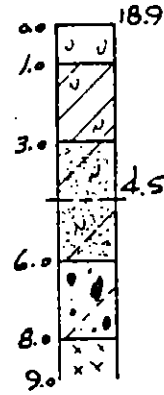
TR-13



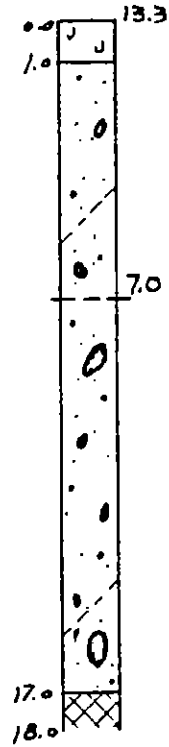
TR-14



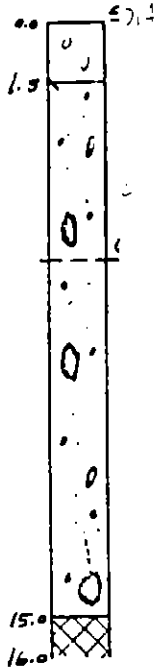
TR-15



TR-16

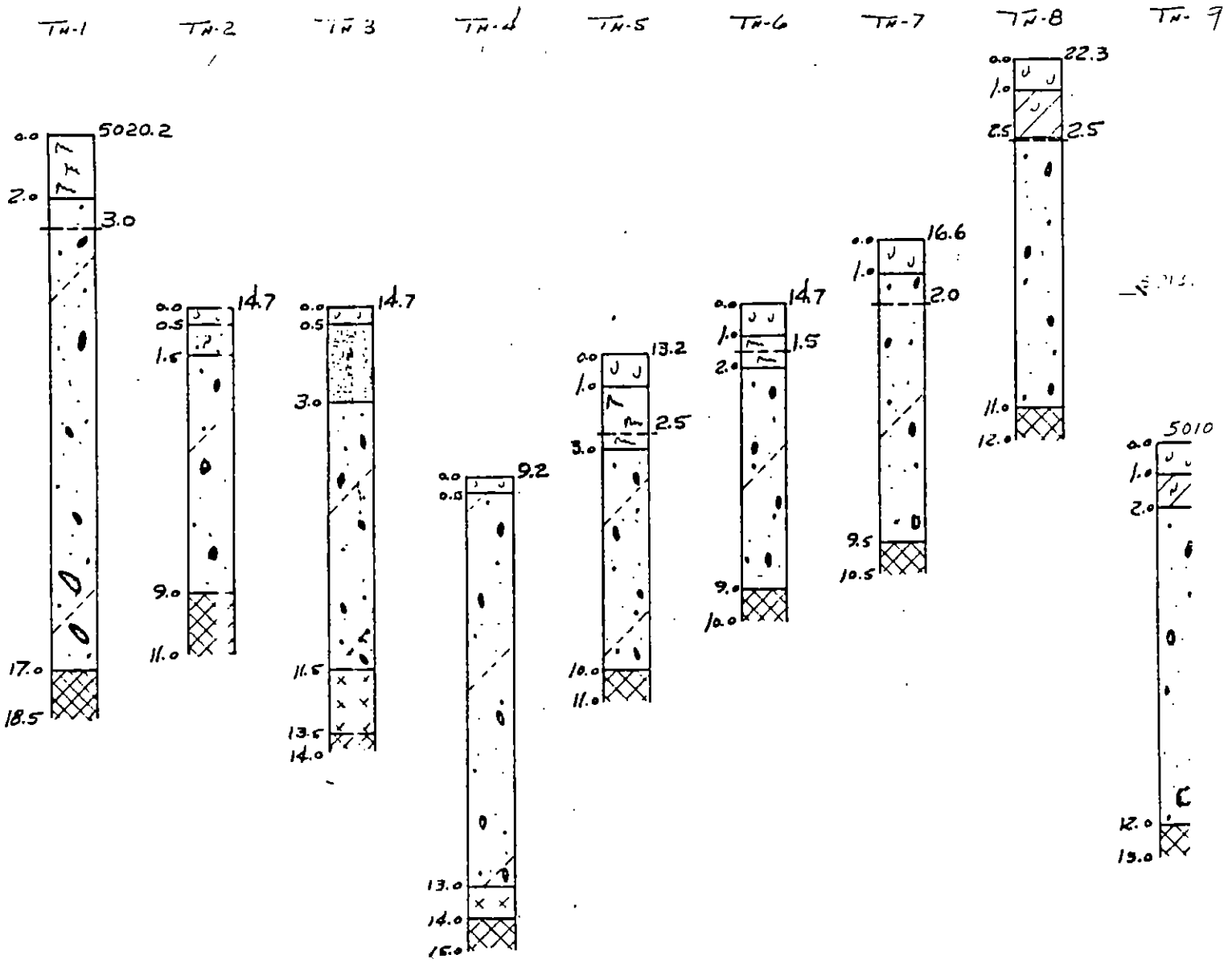


TR-17



LOGS OF TEST HOLES

CONTRACT E-4955



LOGS OF TEST HOLES

LEGEND:



LOAM, CLAY, VERY SANDY, GRAVELLY



SILT, BROWN, SANDY TO VERY SANDY, CLAYEY TO VERY CLAYEY



CLAY, BROWN, SILTY TO VERY SILTY, VERY FINE SANDY TO VERY SANDY



SAND, BROWN, FINE, SILTY TO VERY SILTY, VERY CLAYEY



SAND, BROWN, FINE TO COARSE, SILTY



SAND AND GRAVEL, FINE TO COARSE @ COBBLES, SLIGHTLY CLAYEY TO CLAYEY, SLIGHTLY SILTY TO SILTY



CLAY SHALE, GREEN-BROWN-BLUE-GRAY, FINE SANDY TO SLIGHTLY FINE SANDY, WEATHERED



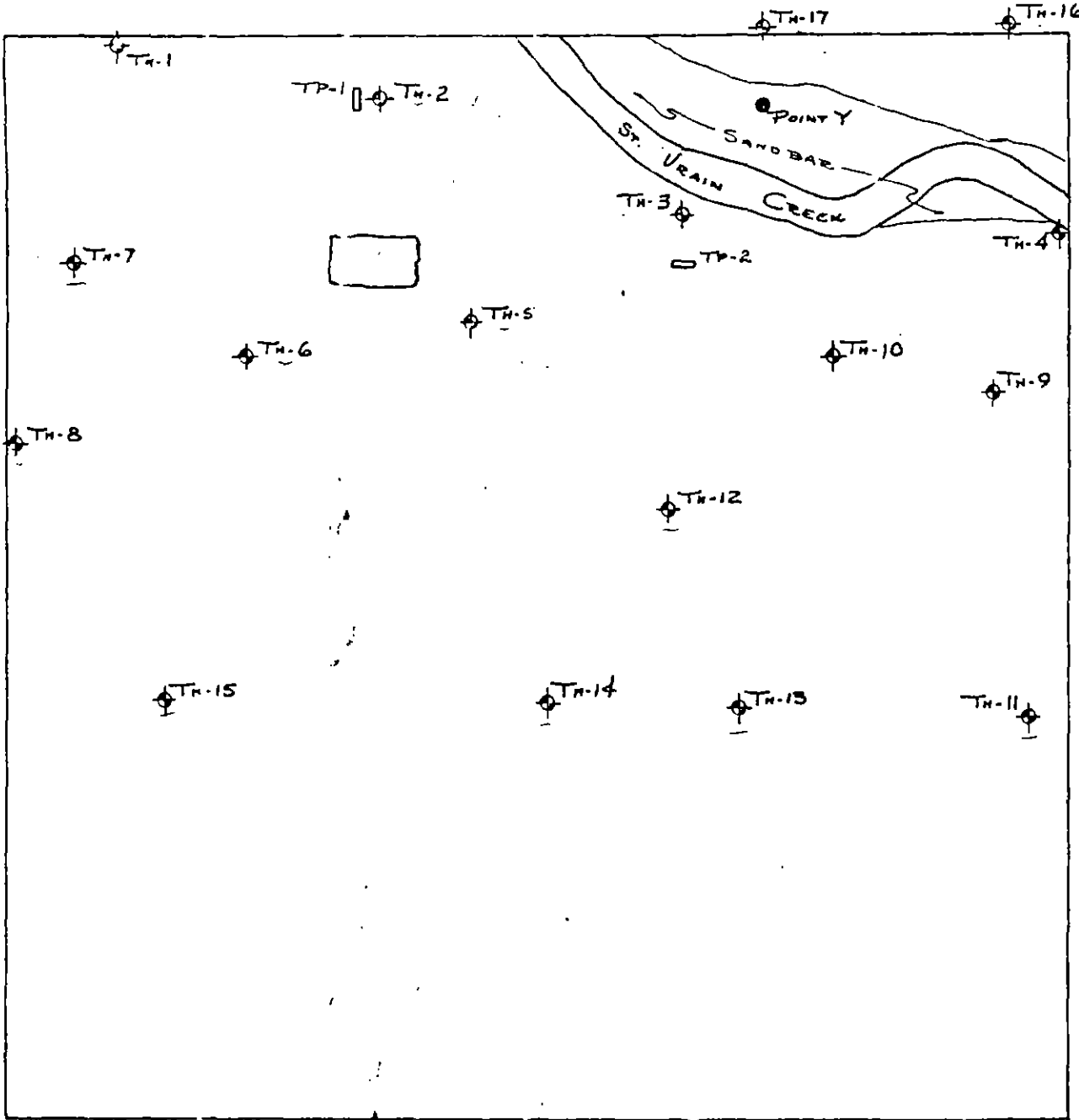
CLAY SHALE, GREEN-BROWN-BLUE-GRAY, FINE SANDY TO SLIGHTLY FINE SANDY, - BEDROCK

--- WATER

--- CAVED

LEGEND OF TEST HOLE LOGS

PL. IDENT. E-4955



SCALE:

LOCATION OF TEST HOLES.
GRAVEL INVESTIGATION
W. A. NEIGHBORS PROPERTY
LONGMONT, COLORADO

11-25-69 TSA2 Page A62 IDENT. E-4955

FIG. No. 1

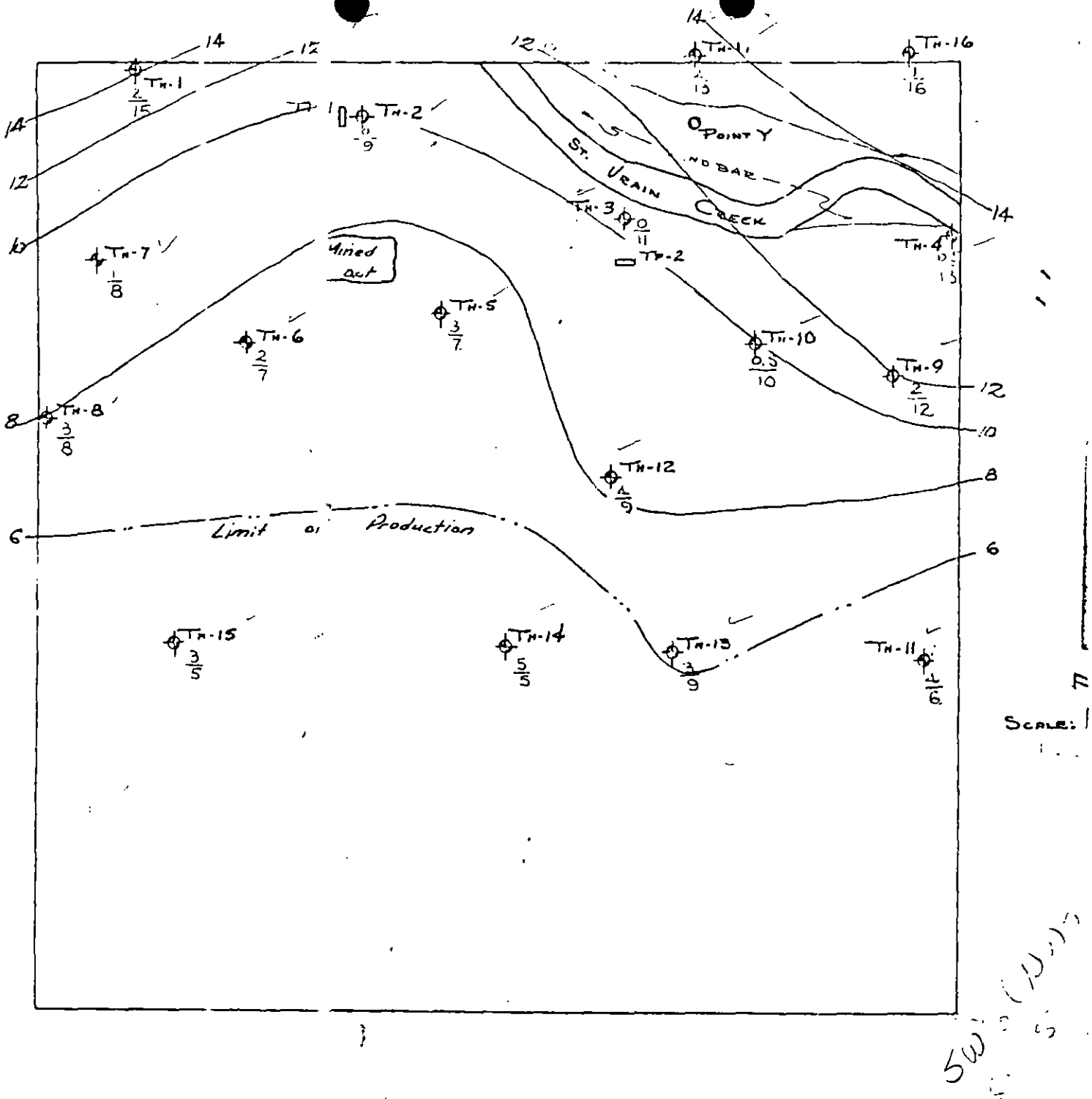
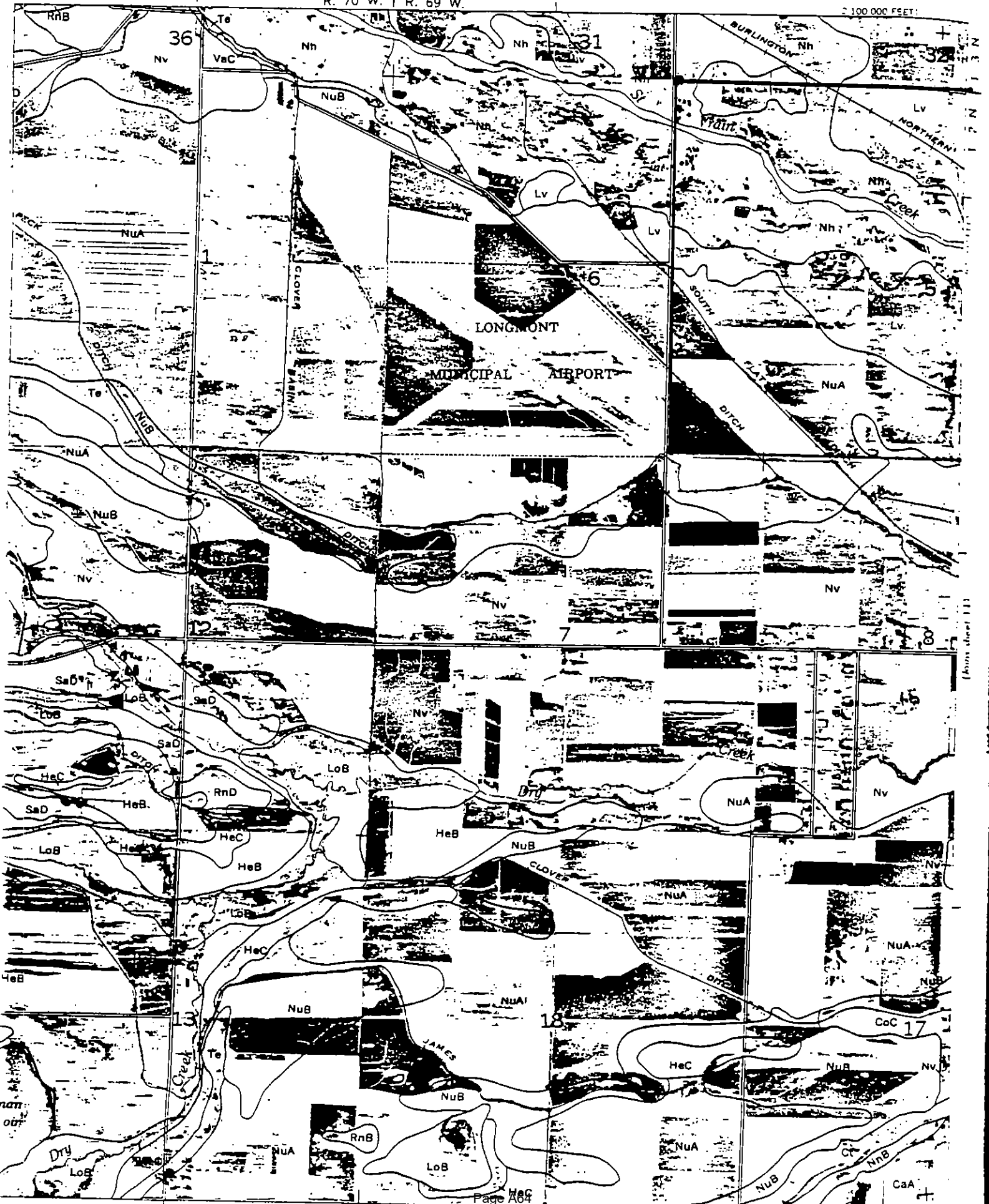


FIGURE NO. 6
 MAP OF MINEABLE GRAVEL THICKNESSES
 NEIGHBORS PROPERTY, BOULDER COUNTY, COLORADO

- Legend
- ◊ Test Hole Location
 - 2 Thickness of Overburden
 - 3 Thickness of Sand and Gravel Deposits
 - Contour of Gravel Thickness on 2' interval



Join sheet 11

These soils are used for pasture, homesites, and industrial sites.

Representative profile of Longmont clay, 0 to 3 percent slopes, located 500 feet north and 100 feet west of the south quarter of sec. 13, T. 2 N., R. 70 W.:

- A11—0 to 5 inches, light brownish-gray (2.5Y 6/2) clay, grayish brown (2.5Y 4/2) when moist; weak, medium, subangular blocky structure; hard, firm; calcareous; strongly alkaline; clear, smooth boundary.
- A12—5 to 21 inches, light olive-brown (2.5Y 5/3) clay, olive brown (2.5Y 4/3) when moist; weak, coarse, subangular blocky structure; extremely hard, very firm; calcareous; strongly alkaline; diffuse boundary.
- C1cscsca—21 to 31 inches, light olive-brown (2.5Y 5/3) clay with many, medium, distinct yellowish-brown (10YR 5/4) mottles, dark grayish brown (2.5Y 4/3) when moist; massive; extremely hard, very firm; calcareous; common, fine to medium clusters of gypsum crystals and few, fine to medium, hard lime concretions; strongly alkaline; gradual, diffuse boundary.
- C2cscag—31 to 60 inches, pale-olive (5Y 6/3) clay with common, medium, distinct olive (5Y 4/3) mottles, olive (5Y 5/3) when moist; massive; extremely hard, very firm; calcareous; common, fine to medium clusters of gypsum crystals and few to common, fine and medium, hard lime concretions; moderately alkaline.

The A1 horizon ranges from 12 to 24 inches in thickness and from clay loam to clay or silty clay in texture. The C horizon ranges from heavy clay loam to clay in texture. In most places shale is at a depth of more than 60 inches, but in a few areas it is between depths of 40 and 60 inches.

Longmont clay, 0 to 3 percent slopes (lo8).—This soil is in the eastern part of the Area. A few soil areas are somewhat concave. In most places this soil is in irregular areas more than 20 acres in size.

Included with this soil in mapping is a Longmont-like soil that has shale at a depth of less than 40 inches. Also included are small areas of Colby silty clay loam, wet, 1 to 3 percent slopes; and small areas of Heldt clay, 0 to 1 percent slopes. These included soils make up about 10 percent of each mapped area.

In most places runoff is slow, but some concave areas are ponded. The erosion hazard is slight. Drainage and removal of salt and alkali are difficult because this soil is lowly permeable.

Almost all of the acreage of this soil is in pasture, except for some areas that are urbanized. Efforts to establish better stands of grass have been partly successful. Capability unit VIw-1, nonirrigated; tree suitability group 6)

Loveland Series

The Loveland series is made up of deep, somewhat poorly drained soils. These soils formed on terraces and bottom lands in loamy alluvium that overlies gravelly and sandy materials. Slopes are 0 to 1 percent. Elevations are 4,900 to 5,500 feet. The native vegetation is mainly bluegrass and blue grama. Annual precipitation is 12 to 13 inches. Mean annual air temperature is 48° to 52° F., and the frost-free season is about 140 to 155 days.

In a representative profile the surface layer is calcareous, dark grayish-brown light clay loam about 20 inches thick. It is mottled in the lower part. The underlying material, about 10 inches thick, is strongly calcareous, grayish-brown light clay loam that is mottled. Underlying this to a depth of 60 inches or more is mottled, light

brownish-gray gravelly sand. In the surface layer and underlying material soil reaction is moderately alkaline, and in the substratum it is mildly alkaline. In most areas, gypsum crystals and soft lime segregations are present in some layers.

Loveland soils have moderate permeability. Available water capacity for the profile is moderate to high, depending upon the depth to very gravelly sand. Roots can penetrate to a depth of 60 inches or more, and the seasonal high water table is at a depth of 2 to 4 feet.

These soils are used for pasture and crops. In some areas they are a source of gravel for construction.

Representative profile of Loveland clay loam, 0 to 1 percent slopes, in an area of Loveland soils located 70 feet east and 2,310 feet south of the northwest corner of sec. 11, T. 2 N., R. 69 W.:

- A11—0 to 11 inches, dark grayish-brown (10YR 4/2) light clay loam, very dark brown (10YR 2/2) when moist; moderate, fine and medium, granular structure; soft, very friable; calcareous; moderately alkaline; clear, smooth boundary.
- A12—11 to 20 inches, dark grayish-brown (10YR 4/2) light clay loam with common, medium, distinct yellowish-brown (10YR 5/4) mottles, very dark brown (10YR 2/2) when moist; weak, medium, subangular blocky structure; hard, firm; calcareous; moderately alkaline; abrupt, smooth boundary.
- C1cscsca—20 to 30 inches, grayish-brown (10YR 5/2) light clay loam with common, medium, distinct yellowish-brown (10YR 5/4 and 6/6) mottles, dark grayish brown (10YR 4/2) when moist; massive; hard, friable; strongly calcareous; few to common, fine to medium clusters of gypsum crystals, and common, medium and coarse, soft white lime segregations; moderately alkaline; clear, wavy boundary.
- IC2—30 to 60 inches, light brownish-gray (10YR 6/2) very gravelly sand with many, medium, distinct, strong-brown (7.5YR 5/6) mottles, grayish brown (10YR 5/2) when moist; single grained; loose when dry and moist; mildly alkaline.

The A horizon ranges from 18 to 23 inches in thickness and from sandy clay loam to clay loam in texture. The C horizon ranges from loam to clay loam or sandy clay loam in texture. Depth to underlying sand or gravel ranges from 20 to 40 inches.

Loveland soils (0 to 1 percent slopes) (lv).—These soils are on stream terraces and bottoms in the eastern part of the Area. In most places they are in irregular areas more than 20 acres in size.

The profile of these soils is similar to the one described as representative for the series, but the texture of the surface layer ranges from sandy clay loam to clay loam.

Included with these soils in mapping is a Loveland-like soil that has a lighter colored surface layer. Also included are gravel bars less than 1 acre in size, small areas of McClave clay loam, and areas of Niwot soils. These included soils and gravel bars make up about 15 percent of each mapped area.

Runoff is slow on these soils. The erosion hazard is slight.

All of the acreage of these soils is used for irrigated crops or pasture. (Capability unit IIIw-1, irrigated; tree suitability group 5)

Made Land

Made land (Ma) is on nearly level areas along St. Vrain Creek near the eastern edge of the Area. This land is

Nunn Series

The Nunn series is made up of deep, well-drained soils. These soils formed on terraces and valley side slopes in loamy alluvium. Slopes are 0 to 9 percent. Elevations are 4,900 to 5,500 feet. The native vegetation is mainly short and mid grasses. Annual precipitation is 12 to 18 inches. Mean annual air temperature is 48° to 52° F., and the frost-free season is about 140 to 155 days.

In a representative profile the surface layer is grayish-brown clay loam about 10 inches thick. The subsoil, about 20 inches thick, is brown and very pale brown clay that grades to clay loam. It is noncalcareous in the upper part, but contains soft lime segregations in the lower part. The substratum is strongly calcareous, very pale brown clay loam extending to a depth of 60 inches or more. In the surface layer, soil reaction is neutral. In the upper part of the subsoil, it is mildly alkaline, and in the lower part of the subsoil and in the substratum it is moderately alkaline.

Nunn soils have slow and moderately slow permeability. Available water capacity for the profile is high. Roots can penetrate to a depth of 60 inches or more.

The acreage of these soils is used mainly for irrigated and dryland crops and for pasture.

Representative profile of Nunn clay loam, 0 to 1 percent slopes, located 1,320 feet east and 1,000 feet north of center of sec. 7, T. 2 N., R. 69 W.:

- Ap—0 to 10 inches, grayish-brown (10YR 5/2) clay loam, very dark grayish brown (10YR 3/2) when moist; weak, medium, subangular blocky structure that parts to weak, fine, granular; hard, firm; neutral; clear, smooth boundary.
- B21t—10 to 18 inches, brown (10YR 4/3) clay, dark brown (10YR 3/3) when moist; moderate, medium, prismatic structure that parts to strong, medium and fine, angular and subangular blocky; very hard, very firm; thin, continuous clay films on ped faces; mildly alkaline; clear, wavy boundary.
- B22tc—18 to 23 inches, brown (10YR 5/3) clay, brown (10YR 4/3) when moist; moderate, medium, prismatic structure that parts to moderate, medium, subangular blocky; very hard, very firm; thin, nearly continuous clay films on ped faces; strongly calcareous, with few, fine and medium, prominent, white (10YR 8/2) lime segregations; moderately alkaline; clear, wavy boundary.
- B3tc—23 to 30 inches, very pale brown (10YR 7/3) clay loam, brown (10YR 5/3) when moist; weak, coarse, prismatic structure that parts to moderate, medium, subangular blocky; hard, firm; few, patchy clay films on ped faces; strongly calcareous, with few, fine and medium, prominent, white (10YR 8/2) lime segregations; moderately alkaline; gradual, wavy boundary.
- Cca—30 to 60 inches, very pale brown (10YR 7/4) clay loam, yellowish brown (10YR 5/4) when moist; massive; slightly hard, friable; strongly calcareous; moderately alkaline.

The A horizon ranges from 6 to 14 inches in thickness and from sandy clay loam to clay loam in texture. The B2t horizon ranges from 4 to 15 inches in thickness and from heavy clay loam to clay in texture. Depth to calcium carbonate accumulation ranges from 14 to 30 inches. The C horizon ranges from heavy loam to clay loam in texture. Typically the sand and gravel substratum is below a depth of 60 inches, but in places it is between depths of 40 and 60 inches. As a result of excessive irrigation in some areas, a water table is present at a depth of between 3 and 5 feet.

Nunn sandy clay loam, 0 to 1 percent slopes (NnA).—This soil is throughout the eastern part of the Area. It

occurs as irregularly shaped areas more than 30 acres in size.

The profile of this soil is much like the one described as representative for the series, but the surface layer is about 10 inches of sandy clay loam. The subsoil is about 6 inches of clay underlain by about 22 inches of calcareous clay loam.

Included with this soil in mapping are small areas of Nunn clay loam, 0 to 1 percent slopes; Ascalon sandy clay loam, 0 to 1 percent slopes; and Kim soils. These included soils make up about 10 percent of each mapped area.

Runoff is slow on this soil. Permeability is moderately slow. Although the erosion hazard is slight, this soil should be protected from soil blowing during periods of strong winds.

Almost all of the acreage of this soil is used for irrigated crops. A few areas are used for irrigated pasture. (Capability unit I, irrigated; tree suitability group 3)

Nunn sandy clay loam, 1 to 3 percent slopes (NnB).—This soil is in the eastern part of the Area. In most places it occurs as irregularly shaped areas more than 20 acres in size.

The profile of this soil is much like the one described as representative for the series, but the surface layer is about 10 inches of sandy clay loam. The subsoil is about 4 inches of clay underlain by about 20 inches of calcareous clay loam.

Included with this soil in mapping are some small areas of Kim soils; Nunn clay loam, 1 to 3 percent slopes; Ascalon sandy loam, 1 to 3 percent slopes; and Weld fine sandy loam, 1 to 3 percent slopes. These included soils make up about 15 percent of each mapped area.

Runoff is medium on this soil. Permeability is moderately slow. The erosion hazard is moderate.

Almost all of the acreage of this soil is used for irrigated crops, but a few small areas are used for irrigated pastures. (Capability unit IIe-2, irrigated; tree suitability group 3)

Nunn clay loam, 0 to 1 percent slopes (NnA).—This soil is in the eastern part of the Area. In most places it is in irregular areas more than 20 acres in size. This soil has the profile described as representative for the series.

Included with this soil in mapping are small areas of Nunn sandy clay loam, 0 to 1 percent slopes; and Nunn clay loam, 1 to 3 percent slopes. Also included are a few small areas of Nunn clay loam, 0 to 1 percent slopes, that have a seasonal high water table. These included soils make up about 15 percent of each mapped area.

Runoff is slow on this soil. Permeability is slow. The erosion hazard is slight.

Almost all of the acreage of this soil is used for irrigated crops, but a few small areas are used for irrigated pasture. (Capability unit IIc-1, irrigated; tree suitability group 3)

Nunn clay loam, 1 to 3 percent slopes (NnB).—This soil is in the eastern part of the Area. In most places it occurs as irregularly shaped areas more than 40 acres in size.

Included with this soil in mapping are small areas of Kim soils; Nunn sandy clay loam, 1 to 3 percent slopes; Nunn clay loam, 0 to 1 percent slopes; and Valmont clay loam, 1 to 3 percent slopes. Also included near drainageways are small wet areas and a few areas

Representative profile of Nederland very cobbly sandy loam, 1 to 12 percent slopes, located 950 feet north of center of sec. 28, T. 1 S., R. 70 W.:

- A1—0 to 4 inches, brown (7.5YR 5/2) very cobbly sandy loam, dark brown (7.5YR 3/2) when moist; moderate, fine, granular structure; soft, very friable; 50 percent gravel and cobblestones; neutral; clear, smooth boundary.
- B1t—4 to 7 inches, brown (7.5YR 5/3) very cobbly heavy coarse sandy loam, dark brown (7.5YR 3/3) when moist; weak, medium, subangular blocky structure that parts to moderate, fine, granular; hard, friable; few thin clay films on the faces of peds and as coatings on gravel and cobblestones; 50 percent gravel and cobbles; neutral; clear, smooth boundary.
- B2t—7 to 15 inches, reddish-brown (5YR 5/3) very cobbly sandy clay loam, dark reddish brown (5YR 3/3) when moist; weak, medium, prismatic structure that parts to moderate, medium, subangular blocky; extremely hard, friable; many thin clay films on faces of peds, as coatings on sand and gravel fragments, and as bridges between sand grains; 50 percent gravel and cobblestones; neutral; gradual, wavy boundary.
- B3t—15 to 20 inches, reddish-brown (2.5YR 5/4) very cobbly light sandy clay loam, reddish brown (2.5YR 4/4) when moist; weak, medium, subangular blocky structure; extremely hard, very friable; few thin clay films on the vertical faces of peds, as coatings on sand grains, and as bridges between sand grains; 60 percent cobblestones and gravel; neutral; gradual, wavy boundary.
- C—20 to 60 inches, reddish-brown (2.5YR 5/4) very cobbly coarse sandy loam, reddish brown (2.5YR 4/4) when moist; massive; extremely hard, very friable; 60 percent cobbles and gravel; neutral.

The A horizon ranges from 3 to 6 inches in thickness. Content of rock fragments in the A and B horizons ranges from 50 to 70 percent. The C horizon ranges from light sandy clay loam to sandy loam in texture. Content of coarse fragments in the C horizon is more than 50 percent.

Nederland very cobbly sandy loam, 1 to 12 percent slopes (NcD).—This soil is on outwash fans and on the uplands in the central part of the Area. In most places it occurs as areas more than 50 acres in size. These areas have many stones and cobblestones on the surface.

Included with this soil in mapping are some soils that lack a sandy clay loam subsoil and that are very stony and cobbly sandy loam throughout the profile. Also included, near the eastern edge of outwash fans, are some small areas of Valmont cobbly clay loam, 1 to 5 percent slopes. The included soils make up about 20 percent of each mapped area.

Runoff is slow to medium on this soil. The erosion hazard is slight.

Most of the acreage of this soil is used for range or pasture. Many areas near Boulder are used as homesites. (Capability unit VII-1, nonirrigated; tree suitability group 6)

Niwot Series

The Niwot series is made up of deep, somewhat poorly drained soils that are shallow over gravelly sand. These soils formed on low terraces and bottom lands in loamy alluvium superimposed over sand and gravel. Slopes are 0 to 1 percent. Elevations are 4,900 to 5,500 feet. The native vegetation is mainly brome grass and water-tolerant grasses. Annual precipitation is 12 to 18 inches. Mean

annual air temperature is 48° to 52° F., and the frost-free season is about 140 to 155 days.

In a representative profile the surface layer is dark grayish-brown and grayish-brown clay loam and loam, about 14 inches thick, that is mottled in the lower part. The underlying material that extends to a depth of 60 inches or more is pale-brown gravelly sand that contains many mottles. In the surface layer, soil reaction is mildly alkaline, and below this, it is neutral.

Niwot soils have moderate permeability. Available water capacity for the profile is low to moderate. Roots can penetrate to a depth of 60 inches or more, and the seasonal high water table is at a depth of between 6 and 18 inches.

Most of this acreage is used for pasture. Some small areas are used for irrigated crops, and an increasing number of areas are used for sand and gravel pits.

Representative profile of Niwot clay loam in an area of Niwot soils that has slopes of 0 to 1 percent, located 2,100 feet south and 100 feet west of the center of sec. 10, T. 1 N., R. 69 W.:

- A11—0 to 6 inches, dark grayish-brown (10YR 4/2) clay loam, very dark brown (10YR 2/2) when moist; moderate, fine, granular structure; soft, very friable; mildly alkaline; clear, smooth boundary.
- A12—6 to 14 inches, grayish-brown (10YR 5/2) loam with common, medium, distinct, strong-brown (7.5YR 5/6) mottles, very dark grayish brown (10YR 3/2) when moist; weak, coarse, subangular blocky structure that parts to moderate, fine, granular; slightly hard, soft, very friable; mildly alkaline; gradual, wavy boundary.
- IIC—14 to 60 inches, pale-brown (10YR 6/3) gravelly sand with many, distinct, large, strong-brown (7.5YR 5/6) mottles, brown (10YR 5/3) when moist; single grain; loose dry or moist; neutral.

The A horizon ranges from 10 to 20 inches in thickness and from loam to sandy clay loam or clay loam in texture. Depth to underlying sand and gravel ranges from 10 to 20 inches.

Niwot soils (0 to 1 percent slopes) (Nh).—These soils are on stream terraces and bottoms in the eastern part of the Area. In most places they occur as irregularly shaped areas more than 30 acres in size.

The profile of these soils is much like the one described as representative for the series, but the surface layer is variable in texture. This layer ranges from sandy clay loam to light clay loam or loam.

Included with these soils in mapping are small, almost barren gravel bars and small areas of Lovelands soils. Also included are unnamed soils that are sandy. These included soils and gravel bars make up 15 percent of each mapped area.

Runoff is slow on these soils. The erosion hazard is slight except for back cutting near channels. Because of their position in the landscape, these soils are frequently flooded. They have a seasonal high water table.

Because of the high water table and the depth to sand or gravel, these soils are best suited for use as pasture or meadow. These soils are also suitable as a site for gravel pits. In some places a few small areas are used for irrigated crops. These are areas that are more convenient to farm than to plant to grass. (Capability units IVw-1, irrigated, and VIw-2, nonirrigated; tree suitability group 6)

APPENDIX B - COLORADO DISCHARGE PERMIT SYSTEM (CDPS)

EXHIBIT A

STATE OF COLORADO

Roy Romer, Governor
Patsi Shwayder, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S. Laboratory and Radiation Services Division
Denver, Colorado 80246-1530 8100 Lowry Blvd.
Phone (303) 692-2000 Denver CO 80220-6928
Located in Glendale, Colorado (303) 692-3090



Colorado Department
of Public Health
and Environment

<http://www.cdphe.state.co.us>

March 17, 1998

Golden's Andesite Mining Company
Norman F. Roche
21 South Sunset Street
Longmont, CO 80501

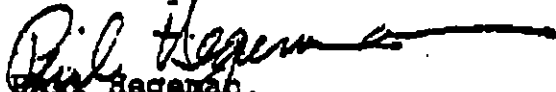
RE: Certification, Colorado Wastewater Discharge Permit System:
Permit Number: COG-500337, Golden's Andesite Mining Company,
Boulder County

Dear Mr. Roche:

Enclosed please find a copy of your certification which was issued under the Colorado Water Quality Control Act. You are legally obligated to comply with all terms and conditions of the permit and certifications.

Please read the permit and if you have any questions contact Marla Biberstine at 692-3597.

Sincerely


Paul Hegen,
Permits Unit Manager
Water Quality Protection Section
Water Quality Control Division

xc: Permit Team, Environmental Protection Agency
Regional Council of Government
Local County Health Department
District Engineer

Enclosure

APPENDIX C - 404 PERMIT

EXHIBIT A

DEPARTMENT OF THE ARMY PERMITPermittee Golden's Andesite Mining CompanyPermit No. 199580021Issuing Office Omaha District, Corps of Engineers

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

See page 4 for a Detailed Description of Authorized Work

Project Location: From Denver: I-25 N. to Hwy 119, East to Longmont, North on Hover Rd., West on 9th Ave., North Boundary is South of 9th Ave. between the Railroad Tracks and the Farmhouse at intersection of 9th and Airport Rd. in Sections 5 and 6, Township -2- North, Range -69- West, Boulder County, Colorado.

Permit Conditions:**General Conditions:**

1. The time limit for completing the work authorized ends on April 15, 2005. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

EXHIBIT A

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

See page 6 for a continuation of General Conditions and for a list of Special Conditions

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
- Section 404 of the Clean Water Act (33 U.S.C. 1344).
- Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

- a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
- b. This permit does not grant any property rights or exclusive privileges.
- c. This permit does not authorize any injury to the property or rights of others.
- d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.

EXHIBIT A

199580021
Redmond/Neighbors Gravel Mine
Wetlands

DETAILED DESCRIPTION OF AUTHORIZED WORK

In accordance with the terms and conditions of this Department of the Army permit, Golden's Andesite Mining Company is granted authorization by the Secretary of the Army to place fill in 2.6 acres of wetlands in conjunction with a sand and gravel mining operation.

The applicant's mining project will impact 147 of 240 acres along the St. Vrain River in Boulder County for the next seven to ten years with the aid of dozers, front-end loaders, scrapers, crushing and washing equipment, etc. The mine will consist of ten separate open pits and one processing plant. The excavation of approximately 3 million tons of aggregate will be conducted in six phases (pods) ranging from 11 to 26 acres each leaving three open ponds. The three ponds will be lined to prevent ground water from entering them. The area of disturbance will be mined in sequential order, one through six, and mining will be limited to either one individual pod or portions of two pods. In no case will additional pods be opened until reclamation is complete on the first mined of the two open pods. Pod 1 will establish the processing plant required for mining of the entire parcel. Here the material will be screened, crushed, washed and stockpiled to await transportation to its final destination. Three washbasins will also be constructed in Pod 1. The fines will be deposited in the washbasins and allowed to settle and create wetlands throughout each basin. Because 147 acres are divided by the St. Vrain River, a conveyor belt system will be constructed for transportation of the materials from Redmond to the processing plant in Neighbors. The conveyor system will require the construction of four caissons be located in the river channel for support. Upon completion of the mining project, that portion of the caissons which are exposed above the creek bed surface will be removed.

The sequence of mining each pod will entail: 1) identifying all boundaries, separating the mining area from the undisturbed area. This includes the wetlands, tributary and river which will not be impacted; 2) drilling groundwater monitoring wells; 3) removing and stockpiling all topsoil and overburden. These stockpiles will be placed to screen the mine from the public and to serve as noise barriers; 4) dewatering the perimeter of the pit; 5) subsequent pod stripping and dewatering will begin prior to final removal of the gravel materials in an active pod; 6) reclamation will begin upon the completion of mining in a pod, and congruently with commencement of the following pod.

EXHIBIT A

GENERAL CONDITIONS, CONTINUED

7. That all construction debris will be disposed of on land in such a manner that it cannot enter a waterway or wetland.

8. That equipment for handling and conveying materials during construction shall be operated to prevent dumping or spilling the materials into the water except as approved herein.

9. That measures will be employed to prevent or control spilled petroleum products, chemicals, or other deleterious materials from entering the water and the permittee will formulate a contingency plan to be effective in the event of a spill.

10. That all work in the waterway is performed in such a manner so as to minimize increases in suspended solids and turbidity which may degrade water quality and damage aquatic life outside the immediate area of operation.

11. That only clean riprap materials will be utilized in order to avoid the percolation of fines which would result in excessive local turbidity.

12. That the riprap shall be installed so as to generally conform to the existing bank line.

13. That all areas along the bank disturbed or newly created by the construction activity, which will not be riprapped, will be seeded with vegetation indigenous to the area for protection against subsequent erosion.

14. That the clearing of vegetation will be limited to that which is absolutely necessary for construction of the project.

15. That close coordination will be maintained by the contractor with downstream water users, advising them of any water quality changes to be caused by the construction.

16. That all dredged or excavated materials, with the exception of that authorized herein, will be placed on an upland site above the ordinary high water line in a confined area, not classified as a wetland, to prevent the return of such materials to the waterway.

17. That all earthwork operations on shore will be carried out in such a manner that sediment runoff and soil erosion to the water are controlled.

18. That the cross-sectional area of the channel is not reduced.

19. That concrete trucks will be washed at a site and in such a manner that washwater cannot enter the waterway.

EXHIBIT A

20. That when the District Engineer has been notified that a filling activity is adversely affecting fish or wildlife resources or the harvest thereof and the District Engineer subsequently directs remedial measures, the permittee will comply with such directions as may be received to suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect as required.

21. That fuel storage tanks above ground shall be diked or curbed or other suitable means provided to prevent the spread of liquids in case of leakage in the tanks or piping.

23. That the fill created by the discharge will be properly maintained to prevent erosion and other non-point source of pollution.

24. That all mechanical equipment be properly maintained to include replacing seals and gaskets. All leaks from hydraulic lines, oils, gasses, and greases be prevented from entering the waters of the United States to include wetlands.

SPECIAL CONDITIONS

A. That 2.6 acres of impacted wetlands will be mitigated by creating 11 acres of wetlands as described by the applicant in the application. Wetlands seeding will include, but not be limited to: Reed Canary grass, American Three-Square, Bulrush, Peachleaf willows, Nebraska sedge, and Redtop.

B. The mitigation wetlands will be monitored for a period of 5 years or until the Corps of Engineers has determined them to be viable and self sustaining.

C. Annual reports documenting the progress of the wetlands will be submitted to the Tri-Lakes Project office by 30 October of each year beginning in 1996.

D. The large cottonwood and willow stands located along and adjacent to the St. Vrain River will not be impacted in any way with the exception of the placement of four caissons to support the conveyor belt system. The caissons will be removed, a minimum of 3 feet below the surface bed of the river, at such time the caissons are no longer warranted.

E. A minimum of 3 inches of topsoil will be replaced on the disturbed areas.

EXHIBIT A

F. A legal description of the mitigation parcel will be prepared and deed restrictions placed on the property to prevent any man-induced activities which result in, or contribute to, the elimination of wetlands from the site.

F.

APPENDIX D - PROOF OF AIR POLLUTION EMISSION NOTICE (APEN) PERMIT

CDPHE APCD Stationary Sources Construction Permits Status

Updated: 05/27/98. Companies in alphabetic order.

G & K SERVICES INC - INDUSTRIAL LAUNDRY

Plant: G & K SERVICES INC - RACE, 5100 RACE CT, DENVER

Source: Facility-wide, FACILITY WIDE PERMIT - LAUNDRY
Permit: 96DE152 Service: Initial Application
Received: 02/23/96 Status: On Hold
Engineer: Tistic, Tom
(303)692-3188

G & S SERVICES CO

Plant: G & S DBA ARAPAHOE & BROADWAY CONOCO, 1201 ARAPAHOE RD,
BOULDER

Source: Service Station, 3 UST: GASOLINE
Permit: 98BO0067S Service: Initial Approval
Received: 02/02/98 Status: Final Approval Granted
Engineer: Burgett, Matt
Final Approval: 04/22/98

Plant: G & S DBA D.U. CONOCO FOOD STORE, 2001 S UNIVERSITY ST,
DENVER

Source: Service Station, 3 UST: GASOLINE
Permit: 94DE583S Service: FA Modification Request
Received: 02/02/98 Status: Final Approval Granted
Engineer: Fadeyi, Sunday
(303)692-3202 Final Approval: 04/22/98

Plant: G & S SERVICE DBA EAST COLFAX GAS & FOOD, 6395 E COLFAX
AVE, DENVER

Source: Service Station, 3 UST: GASOLINE
Permit: 96DE022S Service: FA Modification Request
Received: 02/02/98 Status: Final Approval Granted
Engineer: Fadeyi, Sunday
(303)692-3202 Final Approval: 04/22/98

Plant: G & S SERVICES dba FOSSIL CREEK CONOCO, 5900 S. COLLEGE
RD., FT. COLLINS

Source: Service Station, 3 UST: GASOLINE
Permit: 98LR0072S Service: Initial Application
Received: 01/29/98 Status: Exempt from Permit (XP)
Engineer: None Assigned

Plant: G & S SERVICES DBA 8TH & DOWNING CONOCO, 1200 E EIGHTH AVE,
DENVER

Source: Service Station, 3 UST: GASOLINE
Permit: 98DE0069S Service: Initial Approval
Received: 02/02/98 Status: Final Approval Granted
Engineer: Burgett, Matt
Final Approval: 04/22/98

Plant: G & S SERVICES DBA BEAR VALLEY CONOCO, 3097 S SHERIDAN BLVD,
DENVER

Plant: GOLDENS ANDESITE MINING - NEIGHBORS SITE, SE OF 9TH ST &
AIRPORT RD, SW OF LONGMONT

Source: Gravel Pit/sand, NEIGHBORS SITE GRAVEL PIT
Permit: 95B0290F Service: IA Modification Request
Received: 03/09/98 Status: Initial Approval Bill Sent
Engineer: Burgett, Matt

GOLDENS COMPANIES

Plant: GOLDEN GRAVEL CO (PORT CAT DIESEL GEN), HOMEBASE: 21 S.
SUNSET, LONGMONT

Source: Internal Comb E, CATERPILLAR DIESEL ENGINE, SN: 66B09025
Permit: 87B0180-1P Service: Final Approval & Mod
Received: 07/21/97 Status: Final Approval Granted
Engineer: Brindley, Vince
Final Approval: 12/26/97

Plant: GOLDEN GRAVEL CO (PORT CON-E-CO CBP), HOMEBASE: 21 S.
SUNSET, LONGMONT

Source: Cement Batch Pl, CON-E-CO LOW-PRO CONCRETE BATCH PLANT, SN:
Permit: 91AD251P Service: Final Approval & Mod
Received: 07/21/97 Status: Initial Approval Granted
Engineer: Brindley, Vince Initial Approval: 12/26/97

Plant: GOLDEN SAND & GRAVEL (PORT TELESMTIH CR), HOMEBASE: 21 S
SUNSET ST, LONGMONT

Source: Crusher, TELESMTIH A98885 JAW CRUSHER
Permit: 87B0267-1P Service: Final Approval & Mod
Received: 07/21/97 Status: Initial Approval Granted
Engineer: Brindley, Vince Initial Approval: 12/26/97

Plant: GOLDENS ANDESITE MINING (PORT CEDARAPIDS, HOMEBASE: 21 S.
SUNSET, LONGMONT

Source: Screen, CEDARAPIDS SCREEN, SN: 39803
Permit: 93B0198-2P Service: Final Approval & Mod
Received: 07/21/97 Status: Final Approval Granted
Engineer: Brindley, Vince
Final Approval: 12/26/97

Plant: GOLDENS ANDESITE MINING CO, 2 MILES SW OF LYONS ON RT 7,
LYONS

Source: Crusher, SYMONS 4 1/4' CONE CRUSHER, SN: 40770
Permit: 97B00746 Service: Final Approval & Mod
Received: 07/21/97 Status: Initial Approval Granted
Engineer: Brindley, Vince Initial Approval: 12/26/97

Plant: GOLDENS CONCRETE CO (PORT VINCE HAGEN), HOMEBASE: 21 S.
SUNSET, LONGMONT

Source: Cement Batch Pl, VINCE HAGEN HS-8250 1982 CONCRETE BATCH PL
Permit: 97P00745 Service: Final Approval & Mod
Received: 07/21/97 Status: Initial Approval Granted
Engineer: Brindley, Vince Initial Approval: 12/26/97

GOOD DECAL CO INC

Plant: GOOD DECAL CO INC, 1500 W THOMAS AVE, ENGLEWOOD

APPENDIX E - WELL PERMIT

Form No. EXHIBIT A
GWS-25

**OFFICE OF THE STATE ENGINEER
COLORADO DIVISION OF WATER RESOURCES**

818 Centennial Bldg., 1813 Sherman St., Denver, Colorado 80203
(303) 866-3581

LIC

WELL PERMIT NUMBER	<u>046954</u>	<u>F</u>
DIV. 1	CNTY. 7	WD 5 DES. BASIN MD

APPLICANT

Lot: Block: Filing: Subdiv:

GOLDENS ANDESITE MINING CO
21 S SUNSET
LONGMONT CO 80501-

(303)778-1003

APPROVED WELL LOCATION
BOULDER COUNTY

1/4 1/4 Section 5
Twp 2 N RANGE 69 W 6th P.M.

DISTANCES FROM SECTION LINES

Ft. from	Section Line
Ft. from	Section Line

PERMIT TO EXPOSE WATER IN A PIT

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT
CONDITIONS OF APPROVAL

- 1) This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of the permit does not assure the applicant that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.
- 2) The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.
- 3) Approved pursuant to CRS 37-90-137 (2) and (11)(a)(i) for the diversions of ground water tributary to the St. Vrain Creek and the South Platte River system. Ground water shall be diverted only pursuant to the water exchange contract between the owner and the Saint Vrain and Left Hand Water Conservancy District dated August 13, 1985 or a court approved plan for augmentation. All diversions must comply with the amended rules and regulations of the State Engineer for the South Platte River and its tributaries.
- 4) The average annual amount of ground water to be appropriated shall not exceed 100 acre-feet with the total surface area of the proposed ground water ponds limited to 50 acres, subject to provisions of item no. 3 of the agreement.
- 5) The owner shall mark the well (ponds) in a conspicuous place with well permit number(s) and court case number(s) as appropriate. The owner shall take necessary means and precautions to preserve these markings.
- 6) The boundaries of the gravel pit ponds shall be more than 600 feet from any existing well.
- 7) The use of ground water, in addition to evaporation, is limited to dust control and gravel washing. No other use of water is allowed unless a permit therefor is approved.
- 8) The provision of the Minimum Construction Standards in Rule 10 shall be waived for gravel pits except for Rules 10.1 and 10.2.1 regarding aquifer contaminants. The owner of the gravel pit shall take necessary means and precautions to prevent contaminants from entering the gravel pit well.
- 9) This well is subject to administration by the Division Engineer in accordance with applicable decrees, statutes, rules, and regulations.

7/30/98

APPROVED
MAS

Hal D. Simpson

State Engineer

Al Ebermann

by

Receipt No. 0380673

DATE ISSUED **JUL 30 1996**

EXPIRATION DATE **JUL 30 1997**

Shipper: RMC
355 D. Avenue
Longmont CO 80501

Signature: [Signature]
 Pickup Time: 12:15
 Date: 6-4-98

Kangaroo Express of Longmont

PICK UP & DELIVERY RECORD
 P.O. Box 40 • Dacono, CO 80514
 303-833-0850 • FAX 303-833-0824

32
 3097*

Consignee	Address	Pcs.	Wt.	Del. Time	* Declared Value	Insurance Charge	Base Charge	Excess Wt. Charge	Total Charge	C.O.D.	Signature / Print
[Faint]	[Faint]	1	ENV	25X							X.P. U.S. 1

- Shipper
- Consignee
- Cash
- Check
- Charge
- Sameday
- Overnight
- Hot Shot

* Liability Per Shipment \$0.00 unless otherwise indicated. \$.50 Surcharge per \$100.00 Declared Value.

DRIVER'S SIGNATURE _____




**COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
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: Neighbors Pit	MINE/PROSPECTING ID#: M-1984-164	MINERAL: Sand and gravel	COUNTY: Boulder
INSPECTION TYPE: Monitoring	INSPECTOR(S): Michael A. Cunningham	INSP. DATE: April 26, 2011	INSP. TIME: 12:30
OPERATOR: Aggregate Industries - WCR, Inc.	OPERATOR REPRESENTATIVE: Connie Davis, Barbara Brunk	TYPE OF OPERATION: 112c - Construction Regular Operation	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Partial Bond	BOND AMOUNT: \$255,150.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Cloudy	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: May 10, 2011

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

INSPECTION TOPIC: Hydrologic Balance

PROBLEM/POSSIBLE VIOLATION: Problem: The pond immediately to the east of the homestead site on Airport Rd. has been clay-lined. C.R.S. 34-32.5-116(4)(h) states disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area and to the quality and quantity of water in the surface and groundwater systems, both during and after the mining operation and during reclamation, shall be minimized. Furthermore, Construction Materials Rule 3.1.6(1)(a) requires compliance with Colorado water laws governing injury to existing water rights both during and after mining.

CORRECTIVE ACTIONS: The Operator shall submit documentation from the Division of Water Resources demonstrating the clay liner has met the applicable performance standards. The documentation shall be submitted on or before the corrective action date.

CORRECTIVE ACTION DUE DATE: 5/31/11

INSPECTION TOPIC: Reclamation Success

PROBLEM/POSSIBLE VIOLATION: Problem: Failure to follow approved reclamation plan, or current reclamation plan needs to be updated and clarified pursuant to C.R.S. 34-32.5-116 (1). The operator must follow approved reclamation plan or provide sufficient information to describe or identify how the operator intends to conduct reclamation.

CORRECTIVE ACTIONS: The operator shall submit a Technical Revision, with the required \$216 revision fee, to update and clarify the current approved reclamation plan to reflect existing and proposed activities by the corrective action date.

CORRECTIVE ACTION DUE DATE: 5/31/11

OBSERVATIONS

The inspection was conducted by Michael Cunningham of the Division of Reclamation, Mining and Safety (Division). Connie Davis of Aggregate Industries and Barbara Brunk of Resource Conservation Partners were also present for the inspection. The Neighbors Pit is located in Boulder County at the intersection of Airport Rd and 9th Ave. The site is permitted for 230 acres and the post-mining land use wildlife habitat.

The St. Vrain River flows through the site, dividing it into north and south halves. The site consists of 12 reclaimed ponds and 4 separate wetland areas. According to the 2010 Annual Report, the site has been fully reclaimed since 2009.

Backfilling and Grading:

The ponds slopes have all been reclaimed to 3H:1V or flatter as required by Construction Materials Rule 3.1.5(7).

Financial Warranty:

The Division currently holds a financial warranty in the amount of \$255,150.00, which is sufficient to complete reclamation at the site. However, the site will not be eligible for a financial warranty reduction or release until the water augmentation plan has been decreed.

Fish and Wildlife:

The post-mining land use for this site is wildlife habitat. Numerous bird species were observed throughout the site including: Mallards, Red-winged Blackbirds, Snowy Egrets, Great Blue Herons, and Red-tailed Hawks. Beavers are active along this stretch of the St. Vrain River; beaver dams and other evidence of their presence was observed.

Hydrologic Balance:

The Division has recently implemented a new groundwater policy which requires Operators to cover the liabilities associated with exposed groundwater. Operators can choose from one of four options outlined in the Mining Operations With Exposed Groundwater letter dated April 30, 2010.

The pond immediately to the east of the homestead site on Airport Rd. has been clay-lined. According to the Operator, the Division of Water Resources (DWR) has approved the liner. The financial warranty held by the Division does not include the cost to install a clay liner. Therefore, the Operator will need to submit documentation demonstrating that the pond has met the performance requirements of the DWR in order to be in compliance with the Division's groundwater policy. This matter has been cited as a problem and will require corrective action by the Operator.

The Operator submitted a letter on April 26, 2011 addressing the exposed groundwater on the site. The letter states the exposed groundwater on the site will be covered through an augmentation plan which is currently under review in Water Court under Case No. 08CW275. During the inspection the Operator indicated that a portion of the site may already be covered through an existing augmentation plan. The Operator should address this discrepancy through a separate letter which outlines which ponds are currently covered under an existing augmentation plan and which ponds will be covered under Case No. 08CW275.

Reclamation Success:

Several deviations from the approved Reclamation Plan were observed during the inspection and will require revisions to the Reclamation Permit. The following deviations have been cited as problems and will require corrective action by the Operator:

1) A large topsoil stockpile was observed on the north side of the entrance, parallel to Airport Rd. According to the Operator, the topsoil stockpile was not a part of the mining operation and was placed there by the landowner. The topsoil stockpile is not accounted for in the Reclamation Plan. Therefore, the Operator will need to remove the stockpile and seed the footprint per the requirements of the approved Reclamation Plan. Alternately, the Operator may revise the Reclamation Plan and the Reclamation Plan Map to allow the topsoil stockpile to remain in place. The revision would need to be accompanied by a signed and notarized letter from the landowner, demonstrating their approval of this revision.

2) The Operator has constructed graveled roads around the ponds in the southern half of the site. The Reclamation Plan Map does not depict the roads. According to the Operator, the roads will remain in place to access the various ponds. The roads will need to be depicted on an updated Reclamation Plan Map.

3) According to the approved Reclamation Plan, the ponds in the south half of the site are to be connected to one another via 15" overflow pipes. During the inspection it was noted that the northernmost pond, adjacent to the St. Vrain River was not isolated from the other ponds and did not contain a 15" overflow pipe. The Reclamation Plan and the Reclamation Plan Map will need to be updated.

4) The pond immediately east of the homestead on Airport Rd. has been sealed off from the surrounding alluvial aquifer via a clay liner. According to the permit file, all of the ponds were to be reclaimed as unlined groundwater ponds. The lining of this pond was not approved by the Division. In addition, this pond is not connected to the other ponds via a 15" overflow pipe as was approved in the Reclamation Plan. The pond is connected to an unnamed tributary of the St. Vrain River at the northwest corner and to the St. Vrain River through a separate pipe on the east side of the pond. The outfall is located on the southern bank of the St. Vrain River at the former low-river crossing. A pump and pump house have been installed on the east side of the pond, allowing the pond to be pumped if needed. According to the Operator, the pond was lined as a way to manage water in conjunction with the augmentation plan. The Division views lined ponds as developed water resources. As noted above, the approved post-mining land use for this site is wildlife habitat. Construction Materials Rule 1.1(6) defines an amendment as a change in the permit which increases the acreage of the affected land, or which has a significant effect upon the approved or proposed Reclamation Plan. The Division has determined the lining of the pond will not have a significant impact on the post-mining land use and therefore will not require the Operator to amend the permit. As stated above, the Operator has indicated the clay liner has been approved by the Division of Water Resources (DWR). The Reclamation Plan and Reclamation Plan Map will need to be revised to reflect these changes.

5) The area immediately to the south of the former settling ponds was to be reclaimed as an upland area. It has instead been reclaimed as a groundwater pond. The Reclamation Plan will need to be updated to reflect this change.

6) The former settling ponds have been reclaimed as wetlands. The wetlands are divided into four individual

cells and are connected by 15" culverts. The eastern wetland cell was the only one which contained a noticeable amount of water. The wetlands can be flooded with water from the groundwater ponds to the north via a pipe which connects to the western wetland cell. The connection between the groundwater ponds and the wetlands will need to be depicted on a revised Reclamation Plan Map.

7) Several groundwater monitoring wells were observed in the field west of the wetlands; they were installed in response to a fuel spill. The wells were to be removed once the Division approved the Operator's clean-up efforts. The Division determined that no further remediation would be required in a letter dated November 10, 2008. Therefore, the wells will need to be removed and reclaimed. The Operator indicated the landowner may want the wells to remain on the property. If the wells are to remain, then the Reclamation Plan and Reclamation Plan Map would need to be revised to reflect this change. The revision would need to be accompanied by a signed and notarized letter from the landowner demonstrating their approval of this revision.

The above listed problems will require revisions the Reclamation Permit. The problems may be addressed through a single Technical Revision. The Technical Revision will need to include a revised Reclamation Plan, a revised Reclamation Plan Map and the \$216.00 processing fee.

Revegetation:

According to the Operator the southern portion of the site was seeded in February of 2009. The grass in the south half of the site is beginning to establish around the ponds. In general the vegetation may require an additional growing season before it meets the reclamation performance standards outlined in Construction Materials Rule 3.1.10(1). The vegetation on the north side of the northern most pond in the south half of the site mostly consists of kochia and other annual weeds. This area will likely require an additional seed application before it is eligible for release. The vegetation in the wetland cells is thriving and is already serving as valuable wildlife habitat.

The grasses around the ponds in the north half of the site were planted prior to the seeding in the south half of the site. The grasses in this area are well established and are capable of self-regeneration without the continued dependence on irrigation, soil amendments or fertilizer.

The Reclamation Plan called for planting numerous forb, shrub, and tree species. The Operator indicated that the specified species have not been planted and were not planned to be planted in the future. The Division has a policy in place which does not allow Operators to downgrade their approved Reclamation Plans (copy enclosed). The site will not be eligible for release until the Operator plants the forb, shrub, and tree species which are included in the approved Reclamation Plan.

PHOTOGRAPHS



1. Pump house on east side of clay-lined pond.



2. Vegetation on north side of clay-lined pond.



3. Vegetation on north side of the northernmost pond in the south half of site.



4. Clay-lined pond outfall on St. Vrain River.



5. Designated upland area, reclaimed as groundwater pond, facing east.



6. Reclaimed low-river crossing, facing north.



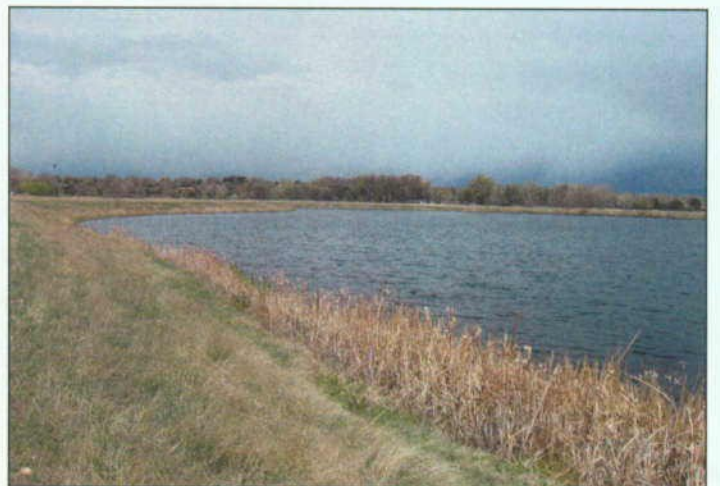
7. Inflow from groundwater pond to the wetlands.



8. East side of wetlands, facing west.



9. West side of wetlands, facing north.



10. Representative vegetation and shoreline of ponds in the north half of the site.

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>PB</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>NA</u>	(SF) PROCESSING FACILITIES----- <u>NA</u>	(TS) TOPSOIL----- <u>Y</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>N</u>	(SB) COMPLETE INSP---- <u>N</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>PB</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</u>	(OD) OFF-SITE DAMAGE----- <u>NA</u>	(ST) STIPULATIONS----- <u>NA</u>

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

Inspection Contact Address

Connie Davis
 Aggregate Industries - WCR, Inc.
 1707 Cole Blvd., Ste. 100
 Golden, CO 80401

Enclosure

CC: Barbara Brunk, Resource Conservation Partners



EXHIBIT C

**COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
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: Neighbors Pit	MINE/PROSPECTING ID#: M-1984-164	MINERAL: Sand and gravel	COUNTY: Boulder
INSPECTION TYPE: Monitoring	INSPECTOR(S): Michael A. Cunningham	INSP. DATE: August 18, 2015	INSP. TIME: 09:00
OPERATOR: Aggregate Industries - WCR, Inc.	OPERATOR REPRESENTATIVE: Connie Davis	TYPE OF OPERATION: 112c - Construction Regular Operation	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$255,150.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: October 5, 2015

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>Y</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>NA</u>	(SF) PROCESSING FACILITIES----- <u>NA</u>	(TS) TOPSOIL----- <u>Y</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>	(SW) STORM WATER MGT PLAN---- <u>Y</u>	(CI) COMPLETE INSP---- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>NA</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</u>	(OD) OFF-SITE DAMAGE----- <u>Y</u>	(ST) STIPULATIONS----- <u>NA</u>

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

OBSERVATIONS

The inspection was conducted by Michael Cunningham of the Division of Reclamation, Mining and Safety (Division). Connie Davis of Aggregate Industries and Barbara Brunk of Resource Conservation Partners were also present for the inspection. The Neighbors Pit is located in Boulder County at the intersection of Airport Rd and 9th Ave. The site is permitted for 230 acres and the post-mining land use wildlife habitat. The St. Vrain River flows through the site, dividing it into north and south halves. The site consists of 12 reclaimed ponds and 4 separate wetland areas.

As noted in the previous inspection report dated April 26, 2011, the site has been reclaimed and no further mining will take place. At the time of the last inspection the Operator had not yet received approval of an augmentation plan for the site. The Operator has indicated the augmentation plan has been approved; however, the Division has not yet received documentation from the Office of the State Engineer which demonstrates this. The site will not be eligible for release until such time as the Operator demonstrates the evaporative depletions associated with the exposed ground water ponds have been accounted for.

The site was impacted by local flooding in 2013. During the flood event the St. Vrain River flowed through the southern portion of the site and created a breach between the sediment pond and the eastern most pond on the site. The cut in the berm between the two ponds is approximately 12' deep and 60' wide. The Operator is currently determining whether the breach between the two ponds will be backfilled or if the two ponds will remain as one larger pond. The currently approved Reclamation Plan requires the Operator to backfill the berm and establish two separate ponds. However, if the Operator chooses to create a single larger pond, then a Technical Revision must be submitted to the Division in order to account for this change. It should be noted that additional grading and earth work would be required to stabilize the bank area between the two ponds even if the breach in the berm is not fully repaired.

In addition to the impacts describe above, the flood also caused a breach at the east side of the easternmost pond. This breach resulted in water flowing into the South Flat Reservoir which is located immediately to the east of the Neighbors Pit property. The Operator took measures to repair the breach and backfilled this area following the flood. However, the high water flows associated with this year's spring run-off resulted in additional erosion in this area. The Operator is aware that the pond slope on the east side of this pond must be fully repaired and brought back up to final grade. In addition to repairing the erosion around the ponds, the Operator will also need to reseed and establish vegetation in these areas.

Finally, the Operator should be aware of Rule 3.1.3 which requires all reclamation work to be completed within five years from the time mining ceases. The Division appreciates the difficulty in dealing with unforeseen events such as the flood which occurred in 2013. However, the Operator has a responsibility to complete all outstanding reclamation work which was described above. The Operator should remain diligent in completing this work. The Division will conduct a monitoring inspection in 2016 to ensure that all earthwork has been completed, with the understanding that it may take additional time to establish vegetation.

The Division currently holds a financial warranty in the amount of \$255,150.00, which has been determined to be adequate to complete reclamation.

This concluded the inspection.

PHOTOGRAPHS



1. Wetlands, facing north.



2. Reclaimed groundwater pond, facing north.



3. Breach between sediment pond and easternmost pond.



4. Sediment deposition in eastern pond.



5. Bank erosion of eastern pond.



6. Bank erosion of eastern pond.

Inspection Contact Address


Connie Davis
Aggregate Industries - WCR, Inc.
1707 Cole Blvd., Ste. 100
Golden, CO 80401

CC: Wally Erickson, DRMS



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: Neighbors Pit	MINE/PROSPECTING ID#: M-1984-164	MINERAL: Sand and gravel	COUNTY: Boulder
INSPECTION TYPE: Surety Release Inspection	INSPECTOR(S): Amy Eschberger	INSP. DATE: September 6, 2018	INSP. TIME: 10:00
OPERATOR: Aggregate Industries - WCR, Inc.	OPERATOR REPRESENTATIVE: Christine Felz	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Surety Release Requested	BOND CALCULATION TYPE: None	BOND AMOUNT: \$255,150.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: September 19, 2018	

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

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

OBSERVATIONS

This inspection of the Neighbors Pit (Permit No. M-1984-164) was conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division) in response to a Full Release request (Revision No. SL-1) that was filed by the Division on July 20, 2018. The Division received written comments on the release from the Division of Water Resources (DWR) and from the landowner, Reginald V. Golden (see enclosed comment letters). DWR's comments detail how the operation is in compliance with their office with regard to the amount of exposed groundwater at the site, and states that their office has no concerns regarding the release request. Mr. Golden's letter expresses concern regarding weeds at the site (particularly Kochia), and that some species from the approved revegetation plan were never planted. The permittee was represented by Christine Felz during the inspection. The landowner, Reginald V. Golden was also present for the inspection. The site is located directly west of Longmont, Colorado at the intersection of 9th Avenue and Airport Road.

This is a 112c operation permitted for 230 acres to mine sand and gravel. The permit area is bisected by the St. Vrain River, which flows east/southeast across the site. The area north of the river includes a small unlined pond that existed prior to the mine operation and was not redisturbed, and two larger unlined ponds which were created by the mine operation. The area south of the river includes a clay-lined pond (liner approved by DWR on December 18, 2008), eight unlined ponds of various sizes, and a wetland area, all created by the mine operation. The ponds located in the south area have been numbered 1-9 for better clarification in this report (see enclosed Google Earth image of site). For reference, the clay-lined pond is designated as pond 2. The southernmost portion of the permit area consisting of approximately 60 acres was not disturbed by the operation and is currently utilized as cropland (**Photo 1**).

The approved post-mining land use for the site is wildlife habitat. The approved reclamation plan for the site was last revised with Technical Revision No. 2 (TR-2) approved in 2011, which clarified the approved reclamation plan to reflect existing and proposed activities (see enclosed reclamation plan map approved with TR-2). The revisions made in TR-2 included allowing the topsoil stockpile/berm to remain near the mine entrance along Airport Road per the landowner's request, allowing one of the ponds located south of the river to remain as a clay-lined reservoir (rather than an unlined pond like the others), revised some of the flood control structures for the ponds, allowed for a wetland area to remain divided into four cells connected by swales, and allowed the two groundwater monitoring wells located on site to remain for use by the landowner. The revegetation plan for the site was last revised with Amendment No. 1 (AM-1) approved in 1998. This plan includes seeding all disturbed areas with a grass and forb mixture, then installing additional tree and shrub plantings around pond shorelines once the ponds were full of water (see enclosed revegetation plan approved with AM-1).

Reclamation of the area north of the river was completed in 2005. The Division observed the ponds located in this area to have slopes of 3H:1V or flatter, with vegetative cover consisting of native grasses, forbs, and some shrubs and trees (**Photos 2-6**). The disturbed land between the ponds had good grass cover (**Photos 7-13**). Some annual weeds are present in portions of this area, but they are not hindering the growth of desired vegetation. The berm separating the north area from the river appeared to be stable with good grass cover (**Photo 14**).

Reclamation of the area south of the river was completed in 2009. However, the area south of the river was impacted by the September 2013 flooding, during which the St. Vrain River flowed through the southern portion of the site, creating a breach between the two unlined ponds located north of the wetland area, and eroding portions of the previously reclaimed pond slopes. During the last inspection conducted of the site on August 18, 2015, the Division noted that additional grading and earthwork would be required to stabilize the bank area between the two ponds even if the operator chose to revise the reclamation plan to leave the ponds connected. The Division also reminded the operator that the re-disturbed areas would need to be retopsoiled and

revegetated in accordance with the approved reclamation plan. According to annual reports submitted by the operator, repairs of the pond breach area and shoreline erosion were completed in 2014/2015. Additional flooding in 2015 damaged a portion of those repairs, which were repaired again in 2016. The operator stated the re-disturbed areas along pond shorelines were retopsoiled and reseeded in 2016 after the last repair work was completed.

The Division observed all ponds located south of the river to have slopes of 3H:1V or flatter with vegetative cover consisting of native grasses, forbs, and some annual weeds in places (**Photos 15-40**). Most of the ponds also have some shrubs and trees (e.g., willows, cottonwoods) present along the shorelines. These shrubs and trees appear to be volunteer and not planted. The two eastern ponds impacted by flood events had good grass cover along the majority of their slopes, with more weeds present than the other ponds, particularly Kochia. All pond shorelines appeared to be stable with no erosion problems observed.

The Division observed the wetland area located south of the ponds. The vegetation in the wetland cells is thriving and is serving valuable wildlife habitat (**Photos 41 and 42**). Disturbed land between ponds was well vegetated with native grasses and forbs (**Photos 43-46**). Kochia was observed in several areas, particularly between the river and ponds 4 and 6 (**Photo 47**), and the area between ponds 3 and 4 and the previously flood damaged ponds 5 and 6 (**Photos 48-50**). Although Kochia is not a state-listed noxious weed species, it is considered a nuisance weed species especially during the early stages of establishing vegetative cover. The Division observed good grass growth underneath much of the areas covered by Kochia. The Division does not generally consider the presence of Kochia to be a reason to deny an operator's release request, as long as the approved plant species are established. To address the landowner's concerns, the operator has committed to having the Kochia mowed down within the next few weeks or so.

As mentioned above, the approved revegetation plan (from AM-1) includes seeding all disturbed areas with a native grass and forb mixture, then installing additional plantings along pond shorelines once the ponds are full of water. The additional plantings were to include a mixture of trees (Hackberry, Succulent Hawthorn, Plains Cottonwood, Native Plum, and Peachleaf Willow) and shrubs (Chokecherry, Three-leaf Sumac, Sandbar Willow, and Common Snowberry). While some of these species have volunteered across pond shorelines, not all species from the approved revegetation plan are present. Because of this, the Division is unable to approve a full release of the site until either the approved revegetation plan is fully implemented, or the revegetation plan is revised to reflect existing conditions.

To obtain Division approval of the Full Release request (SL-1) by the decision deadline of **October 6, 2018** [30 days from inspection to approve, pursuant to Rule 4.17.2(5)], the operator must submit and receive Division approval of a Technical Revision (form enclosed) that includes the following:

- A revised revegetation plan to reflect existing conditions
- Justification for why the approved revegetation plan cannot be fully implemented (e.g., disturbance to existing reclamation)
- Signed and notarized letter from the landowner demonstrating his acceptance of the proposed revision to the revegetation plan

If by October 6, 2018, the Division has not received the Technical Revision described above, the Full Release request (SL-1) will be denied.

PHOTOGRAPHS



Photo 1. View looking south across undisturbed southern portion of permit area currently utilized as cropland.



Photo 2. View of northeastern shoreline of west pond in area north of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 3. View of eastern shoreline of west pond in area north of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 4. View of southern shoreline of east pond in area north of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 5. View of eastern shoreline of east pond in area north of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 6. View of northeastern shoreline of east pond in area north of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 7. View of disturbed land north of west pond in area north of river, showing good grass cover.



Photo 8. View of disturbed land between the ponds in area north of river, showing good grass cover.



Photo 9. View of disturbed land between the ponds in area north of river, showing good grass cover.



Photo 10. View of disturbed land south of east pond in area north of river, showing good grass cover.



Photo 11. View of disturbed land southeast of east pond in area north of river, showing good grass cover.



Photo 12. View of disturbed land east of east pond in area north of river, showing good grass cover.



Photo 13. View of disturbed land north of east pond in area north of river, showing good grass cover.



Photo 14. View of berm separating ponds in north area from river, which appeared to be stable with good grass cover.



Photo 15. View of southern shoreline of pond 1 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 16. View of southeastern shoreline of pond 1 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 17. View of northeastern shoreline of pond 2 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 18. View of eastern shoreline of pond 2 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 19. View of northern shoreline of pond 2 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 20. View of eastern shoreline of pond 3 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 21. View of southern shoreline of pond 3 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 22. View of western shoreline of pond 3 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 23. View of northwestern shoreline of pond 4 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 24. View of southwestern shoreline of pond 4 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 25. View of southern shoreline of pond 4 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 26. View of eastern shoreline of pond 4 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 27. View of western shoreline of pond 5 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover. Kochia covers much of grasses along northern shoreline (foreground).



Photo 28. View of southern shoreline of pond 5 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover. Kochia covers much of grasses along northern shoreline (foreground).



Photo 29. View of eastern shoreline of pond 5 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover. Kochia covers much of grasses along northern shoreline (foreground).



Photo 30. View of southeastern shoreline of pond 6 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 31. View of southern shoreline of pond 6 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 32. View of southern shoreline of pond 6 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 33. View of northwestern shoreline of pond 6 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover (Kochia covering much of grasses along this section).



Photo 34. View of western shoreline of pond 6 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover (Kochia covering much of grasses along this section).



Photo 35. View of northeastern shoreline of pond 7 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 36. View of northern shoreline of pond 7 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 37. View of northern shoreline of pond 7 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 38. View of northwestern shoreline of pond 7 in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 39. View of pond 8 from northern shoreline in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 40. View of pond 9 from northern shoreline in area south of river. Pond slopes are at 3H:1V or flatter with good vegetative cover.



Photo 41. View of wetland area located south of ponds 5 and 6 in area south of river. The vegetation in the wetland cells is thriving and is serving valuable wildlife habitat



Photo 42. View of wetland area located south of ponds 5 and 6 in area south of river. The vegetation in the wetland cells is thriving and is serving valuable wildlife habitat



Photo 43. View of disturbed land between ponds 6 and 8 in area south of river, showing good grass cover.



Photo 44. View of disturbed land between pond 8 and wetlands in area south of river, showing good grass cover.



Photo 45. View of disturbed land between ponds 3 and 7 in area south of river, showing good grass cover.



Photo 46. View of disturbed land between ponds 2 and 7 in area south of river, showing good grass cover.



Photo 47. View of area between pond 6 and river, showing Kochia covering much of grasses in this area.



Photo 48. View of area between ponds 4 and 5, showing Kochia covering much of grasses in this area.



Photo 49. View of area between ponds 4 and 6, showing Kochia covering much of grasses in this area.



Photo 50. View of ground in area between ponds 4 and 5, showing established grasses present underneath Kochia. Kochia should be mowed down prior to it developing a seedhead.

Inspection Contact Address

Christine Felz
Aggregate Industries - WCR, Inc.
1687 Cole Blvd., Ste. 300
Golden, CO 80401

Enclosures: Comment letter from Division of Water Resources, received on July 31, 2018
Comment letter from Reginald V. Golden, received on August 9, 2018
Google Earth image of site
Reclamation plan map approved with Technical Revision No. 2 in 2011
Revegetation plan approved with Amendment No. 1 in 1998
Technical Revision form

cc: Reginald V. Golden
Golden Farm, LLLP
7899 St. Vrain Road
Longmont, CO 80503




Response to Reclamation Permit Release Request Consideration

DATE: July 31, 2018

TO: Amy Eschberger, Environmental Protection Specialist (amy.eschberger@state.co.us)

CC: Division 1 Office, District 5 Water Commissioner

FROM: Sarah Brucker, P.E. 

RE: Neighbors Pit, File No. M-1984-164 - SL01
 Applicant/Operator: Aggregate Industries - WCR, Inc.; (970) 396-5252
 Sections 5 & 6, Twp 2 North, Rng 69 West, 6th P.M., Boulder County

COMMENTS: The applicant has requested a full reclamation responsibility release for the Neighbors Pit. The permitted area is approximately 220 acres. Mining operations have ceased at the site and the site has been fully reclaimed. The permit area contains a total of fifteen (15) ponds/wetlands areas. Six of the ponds/wetland areas have further been split into two portions by the boundary of the Saint Vrain and Left Hand Water Conservancy District.

Ponds 1A, 1B, 1C, 1D, 5A, 6A, 6B, 7B, 8A, and 9A lie within the boundary of the Saint Vrain and Left Hand Water Conservancy District. Depletions from these ponds are currently covered under the *Agreement Regarding Sand and Gravel Mining and Augmentation Plan Pertaining Thereto* between Golden Gravel Company, South Flat Land Company, Golden Farm, Ltd., and The Saint Vrain & Left Hand Water Conservancy District signed on August 13, 1985 (hereinafter "Agreement"). The Agreement is a covenant that runs with the property. It is the understanding of this office that the current Agreement has been continually complied with, therefore pursuant to Section 37-90-137(11)(1)(a), C.R.S., no additional replacement water is required for Ponds 1A, 1B, 1C, 1D, 5A, 6A, 6B, 7B, 8A, and 9A so long as current agreement continues to be complied with, including that the amount of ground water exposed at the site does not exceed the originally agreed-upon 50 acres (24 acres south of the St. Vrain River and 26 acres north of the St. Vrain River).

Pond 4A has been lined with a compacted clay liner. The liner was approved by this office as having met the design standard in a letter dated December 18, 2008, and Pond 4A is now classified as a lined reservoir.

Ponds 1E, 1F, 1G, 1H, 4B, 5B, 5C, 6C, and 7A are included in the Diamond G. Gravel Company LLLP and Kent P. Nelson, David P. Nelson and Carol N. Coburn Augmentation Plan decreed in Division 1 Water Court case no. 2008CW0275. The augmentation plan covers evaporative depletions from a total water surface area of approximately 26.26 acres, and evapotranspiration from approximately 4.47 acres of wetlands.

All lagged depletions from past operations at the Neighbors Pit accrued to the river within 12 months and there are no ongoing unreplaced depletions associated with the site.

Based on the above, this office has no concerns regarding the requested full reclamation responsibility release. You or the applicant may contact the State Engineer's Office with any questions.



AME

EXHIBIT D

Golden Farm, LLLP
7899 St. Vrain Road
Longmont, CO 80503

RECEIVED

AUG 09 2018

**DIVISION OF RECLAMATION
MINING AND SAFETY**

August 1, 2018

SLP

Colorado Division of Reclamation
Mining and Safety
Attn: Amy Eschberger
1313 Sherman Street, Room 215
Denver, CO 80203

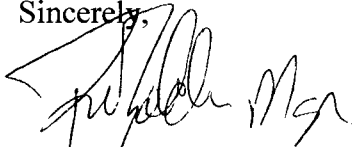
RE: Aggregate Industries – WCR, Inc., Neighbors Pit, Permit No. M-1984-164

Dear Amy:

As the landowner we would like to comment on the Reclamation Permit Release Request Consideration for Aggregate Industries – WCR, Inc. at Section 5, Township 2N, Range 69W, 6 Principal Meridian in Boulder County.

While Aggregate Industries has been a good partner in mining, we are not in agreement for a full reclamation release for the Neighbors Pit, Permit No. M-1984-164 due to all the weeds. There is a whole field of Kochia that Aggregate Industries has not been spraying as agreed upon. We have had to do the spraying. In addition, some of the planting on the reclamation plan have never been done.

Sincerely,



GOLDEN FARM, LLLP

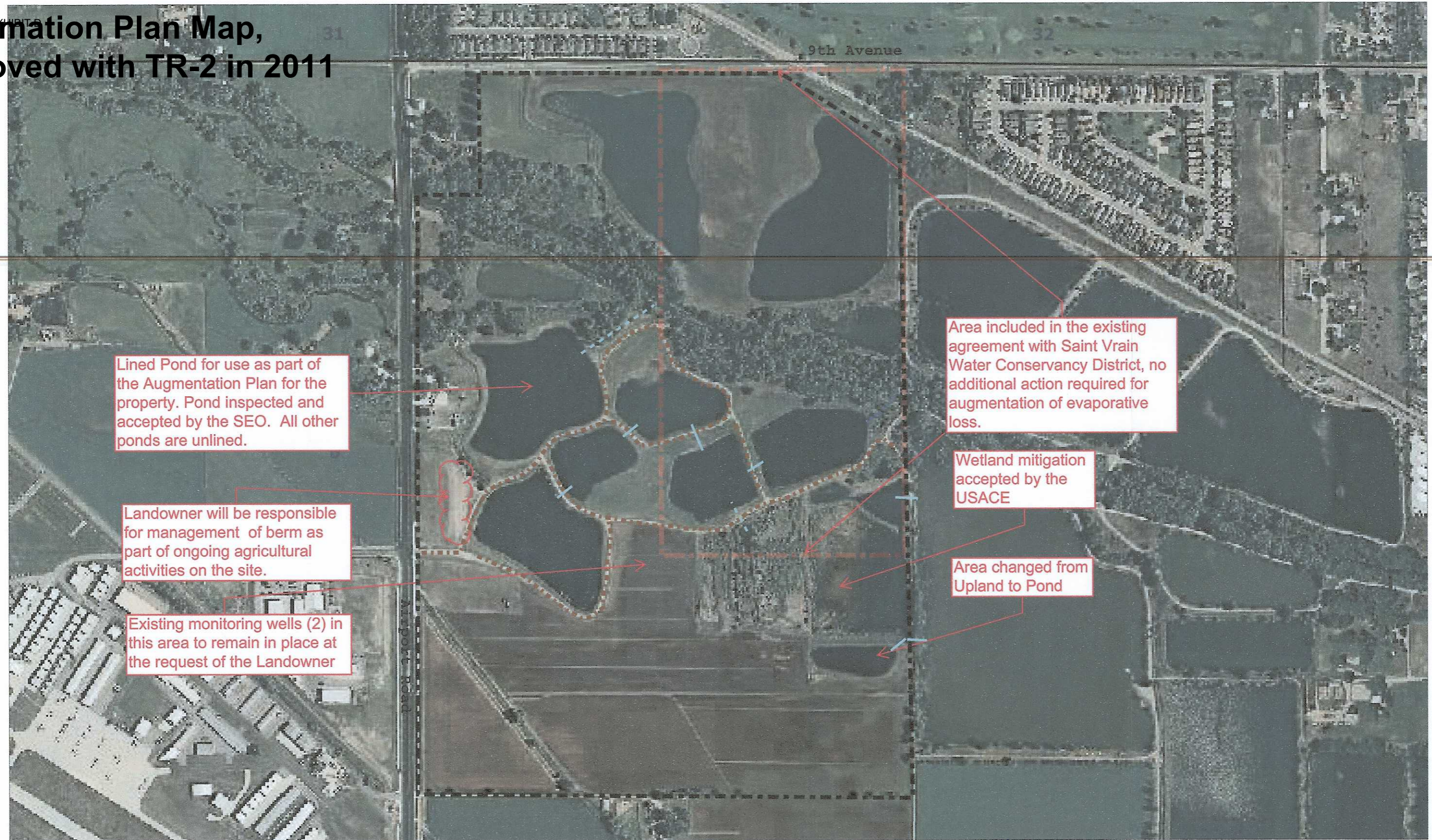
Reginald V. Golden,
Manager

M-1984-164 / Neighbors Pit / Aggregate Industries - WCR, Inc.

Red Outline = 230 acres = Approved Permit Area
(Image data from 6/9/2017)



Reclamation Plan Map, Approved with TR-2 in 2011



Lined Pond for use as part of the Augmentation Plan for the property. Pond inspected and accepted by the SEO. All other ponds are unlined.






Landowner will be responsible for management of berm as part of ongoing agricultural activities on the site.

Existing monitoring wells (2) in this area to remain in place at the request of the Landowner

Area included in the existing agreement with Saint Vrain Water Conservancy District, no additional action required for augmentation of evaporative loss.

Wetland mitigation accepted by the USACE

Area changed from Upland to Pond

-  Existing gravel roads to remain
-  Overflow connections for ponds
-  Gated release
-  Overflow to historic river discharge point
-  Existing Permit Boundary

Technical Revision Two
Aggregate Industries, WCR Inc.
Neighbors Mine
M-86-164
84
June 20, 2011



Revid - 6/28/11

Revegetation Plan,

Approved with AM-1 in 1998

(ii) seeding - types, mixtures, quantities and expected times of seeding and planting;

Seed Schedule

Scientific Name	Common Name	Variety	Anderson & Company Pounds PLS/Acre
GRASSES			
<i>Agropyron riparium</i>	Streambank Wheatgrass	Sodar	1.00
<i>Agropyron smithii</i>	Western Wheatgrass	Arriba	2.00
<i>Agropyron smithii</i>	Western Wheatgrass	Rosanna	2.00
<i>Andropogon gerardi</i>	Big Bluestem		2.00
<i>Boutelona gracillis</i>	Blue Grama	Lovington	1.00
<i>Buchloe dactyloides</i>	Buffalograss	Sharps Improved	0.50
<i>Festuca pratensis</i>	Meadow Fescue		1.00
<i>Panicum virgatum</i>	Switchgrass	Trailblazer	1.50
<i>Poa compressa</i>	Canada Bluegrass	Rubens	0.50
<i>Schizachyrium scoparium</i>	Little Bluestem	Cimarron	1.50
<i>Sporobolus cryptandrus</i>	Sand Drop Seed		.50
FORBS			
<i>Achillea millefolium</i>	Yarrow		0.10
<i>Gailiardia aristata</i>	Blanketflower		0.20
<i>Linum lewisii</i>	Blue Flax		0.20

The operator will seed during the appropriate season to assure adequate moisture for germination and control weed to ensure that grasses can establish. Additional plantings will be installed once the ponds are full of water.

(iii) fertilization - types, mixtures, quantities and time of application;

The type and application rate of fertilizer shall be determined based on a soil test at the time of final reclamation.

Revegetation Plan, Approved with AM-1 in 1998

(iv) *revegetation - types of trees, shrubs, etc.*

Upon completion of the mining and shoreline reclamation, Golden's will work with the land owner to install additional plantings. These native and adapted trees and shrubs will enhance the wildlife habitat by providing food and cover for resident and migratory wildlife.

It is anticipated that the plant materials will be selected from the following list.

Common Name	Botanical Name
TREES *	
Hackberry	<i>Celtis occidentalis</i>
Succulent Hawthorn	<i>Crataegus macrantha occidentalis</i>
Plains Cottonwood (fertile)	<i>Populus sargentii</i>
Native Plum	<i>Prunus americana</i>
Peachleaf Willow	<i>Salix amygdaloides</i>
SHRUBS *	
Chokecherry	<i>Prunus virginiana</i>
Three-leaf Sumac	<i>Rhus trilobata</i>
Sandbar Willow	<i>Salix exigua</i>
Common Snowberry	<i>Symphoricarpos albus</i>
* All plant materials shall be native and of Colorado accession. Hybrids will not be accepted.	

(v) *topsoiling - anticipated minimum depth or range of depths for areas where topsoil will be replace.*

Topsoil will be uniformly placed and spread on all areas disturbed by the mining, above the anticipated high water line. The minimum thickness shall be to 12 inches above the surrounding finished grade.



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"/>

CERTIFIED MAIL
RETURN RECEIPT NO. 7007 0220 0000 6705 6792

June 3, 2009

Mr. Jim Dupler
Division of Reclamation, Mining & Safety
1313 Sherman Street, Room 215
Denver, CO 80203



Re: Permit No. M-1984-164 – Neighbors Pit - Annual Report

Dear Jim:

Enclosed is the annual report form and map together with Check No. 347615 in the amount of \$791.00 for the annual fee for the above-referenced permit. Mining of this site was completed during the permit year ended June 7, 2006 and the majority of plant equipment removed. During the permit year ended June 7, 2008, remaining material stockpiles and miscellaneous equipment were removed. The truck scale and scale house, which were the only mining related facilities remaining on site, were removed during the permit year ended June 7, 2009.

Reclamation of Cells 4 and 5, north of Saint Vrain Creek, was completed in 2005, as depicted on prior year annual report maps. This area has been maintained by mowing and is becoming well established.

Cell 1 wetland areas south of the St. Vrain were seeded November 16, 2007 and April 12, 2008. All remaining reclamation activity south of the St. Vrain, including additional grading, sloping, installation of water conveyance features and seeding of upland areas was completed during the permit year ended June 7, 2009. The southern portion of the site, including former scale house, plant site and areas undisturbed by mining have been returned to agricultural uses and upland areas to the north and around the ponds were planted to native grasses. All site reclamation is completed and the site will continue to be managed for weeds while revegetated areas become established. The enclosed map depicts the final reclaimed condition of areas south of the St. Vrain.

Please contact me at (970) 336-6526 if you have questions or need additional information.

Very truly yours,

A handwritten signature in cursive script that reads "Connie N. Davis".

Connie Nickle Davis
Land Resources Assistant

Enclosures

cc: Aggregate Industries WCR, Inc. – File No. 14.04.01

Aggregate Industries
West Central Region, Inc.
1707 Cole Blvd., Suite 100
Golden, CO 80401

AGGREGATE INDUSTRIES MANAGEMENT
WEST CENTRAL REGION
7529 Standish Place, Suite 200
Rockville, MD 20855



Return Service Requested



000047 RKDK7TDA
DIVISION OF RECLAMATION, MINING & SAFETY
1313 SHERMAN ST Rm 215
215 Centennial Building
DENVER CO 80203

Check Date: 05/14/2009
Vendor Number: 29680

Invoice Number	Invoice Date	Voucher Number	P.O. Number	Reference	Gross Amount	Adjustment		Net Amount
						Amount	R	
M-1984-164	05/01/09	3302640	01146954		\$791.00			\$791.00
					\$791.00	\$0.00		\$791.00

SHADED AREA MUST GRADUALLY CHANGE FROM BLUE AT TOP TO GREEN AT BOTTOM

AGGREGATE INDUSTRIES MANAGEMENT
WEST CENTRAL REGION
7529 Standish Place, Suite 200
Rockville, MD 20855

AGGREGATE INDUSTRIES

69-7270/2560

347615

Void after 90 Days

Pay Exactly *****791* Dollars and * 00 * Cents

TO THE ORDER OF

DIVISION OF RECLAMATION, MINING & SAFETY
1313 SHERMAN ST Rm 215
215 Centennial Building
DENVER CO 80203

Date 05/14/2009

Net Amount USD \$*****791.00

WACHOVIA BANK, N.A.

Authorized Signature

Not to exceed 750,000
Protected by Positive Pay

ANNUAL FEE and REPORT REQUEST

PERMITTEE NAME: **Aggregate Industries - WCR, Inc.**
 PERMIT NO.: **M-1984-164**
 OPERATION NAME: **Neighbors Pit**
 ANNIVERSARY DATE: **June 7, 2009**
 ANNUAL FEE DUE: **\$\$791.00 (Due on or before your anniversary date)**
 COUNTY: **Boulder**

According to C.R.S. 34-32.5-116 or C.R.S. 34-32-116, each year, on the anniversary date of the permit, an operator shall submit the annual fee, a report and map showing the extent of current disturbances to affected land, reclamation accomplished to date and during the preceding year, new disturbances that are anticipated to occur during the upcoming year, reclamation that will be performed during the coming year, the dates for the beginning of active operations, and the date active operations ceased for the year, if any.

Please attach your revised written annual report and annual report map to this form. The Annual Report & Fee requirement is not met until we have received the following components: fee, report, and associated map. If no new disturbances or reclamation have occurred during the previous year and no new changes to the previous year's map are necessary, then no new map is required, provided that the Operator shall state this in the Annual Report. Please note that an adequately labeled map that clearly delineates and includes the above elements may suffice for a written report.

Division records indicate the following permittee contact information. Please verify and make any necessary changes:

Permittee Contact: **Connie N. Davis**

Permittee Name: **Aggregate Industries - WCR, Inc.** _____
 Address: **1707 Cole Blvd., Ste. 100** _____

Golden, CO 80401 _____
 Phone Number: **(970) 353-2005** _____
 Fax Number: **(970) 378-6856** _____

If you have additional comments and/or information that should be provided to the Division, please provide it below or attach it to this form along with your written report and map. Annual Report instructions are enclosed.

Connie N. Davis

Signature of Corporate Officer, Owner, or Designee _____

6-3-09

_____ Date

CERTIFIED MAIL
RETURN RECEIPT NO. 7009 2250 0001 0627 6368



June 9, 2010

Mr. Jim Dupler
Division of Reclamation, Mining & Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Permit No. M-1984-164 – Neighbors Pit - Annual Report

Dear Jim:

Enclosed is Check No. 398641 in the amount of \$791.00 for the annual fee together with the annual report form for the above-referenced permit. The entire property has been mined and fully reclaimed as of permit year ended June 7, 2009. The maps submitted with the 2008 and 2009 reports correctly reflect this information and there have been no new disturbances. The site will continue to be managed for weeds while revegetated areas become established.

Please contact me at (970) 336-6526 if you have questions or need additional information.

Very truly yours,

A handwritten signature in cursive script that reads "Connie N. Davis".

Connie N. Davis
Land Advisor

Enclosure

cc: Aggregate Industries WCR, Inc. – File No. 14.04.01

Aggregate Industries
West Central Region, Inc.
1707 Cole Blvd., Suite 100
Golden, CO 80401

ANNUAL FEE and REPORT REQUEST

PERMITTEE NAME: **Aggregate Industries - WCR, Inc.**
 PERMIT NO.: **M-1984-164**
 OPERATION NAME: **Neighbors Pit**
 ANNIVERSARY DATE: **June 7, 2010**
 ANNUAL FEE DUE: **\$\$791.00 (Due on or before your anniversary date)**
 COUNTY: **Boulder**

According to C.R.S. 34-32.5-116 or C.R.S. 34-32-116, each year, on the anniversary date of the permit, an operator shall submit the annual fee, a report and map showing the extent of current disturbances to affected land, reclamation accomplished to date and during the preceding year, new disturbances that are anticipated to occur during the upcoming year, reclamation that will be performed during the coming year, the dates for the beginning of active operations, and the date active operations ceased for the year, if any.

Please attach your revised written annual report and annual report map to this form. The Annual Report & Fee requirement is not met until we have received the following components: fee, report, and associated map. If no new disturbances or reclamation have occurred during the previous year and no new changes to the previous year's map are necessary, then no new map is required, provided that the Operator shall state this in the Annual Report. *Please note that an adequately labeled map that clearly delineates and includes the above elements may suffice for a written report.*

Division records indicate the following permittee contact information. Please verify and make any necessary changes:

Permittee Contact: **Connie N. Davis**

Permittee Name: **Aggregate Industries - WCR, Inc.** _____
 Address: **1707 Cole Blvd., Ste. 100** _____

Golden, CO 80401 _____
 Phone Number: **(970) 353-2005** _____
 Fax Number: **(970) 378-6856** _____

If you have additional comments and/or information that should be provided to the Division, please provide it below or attach it to this form along with your written report and map. Annual Report instructions are enclosed.

Connie N. Davis
 Signature of Corporate Officer, Owner, or Designee

6-9-10
 Date

**CERTIFIED MAIL
RETURN RECEIPT NO. 7010 0780 0001 2876 0966**

June 20, 2011



Mr. Jim Dupler
Division of Reclamation, Mining & Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Permit No. M-1984-164 – Neighbors Pit - Annual Report

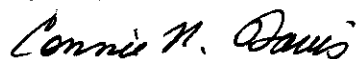
Dear Jim:

Enclosed is Check No. 518039 in the amount of \$791.00 for the annual fee together with the annual report form for the above-referenced permit. The entire property has been mined and fully reclaimed as of permit year ended June 7, 2009 and the site continues to be managed for weeds while revegetated areas become established.

The maps submitted with the 2008 and 2009 reports generally reflect the mined and reclaimed condition of the site; however, during a routine inspection of the site on April 26, 2011, the Division requested that Aggregate Industries submit a technical revision to update and clarify the current approved reclamation plan to more accurately reflect the final reclamation. The revised plan and map, together with the appropriate filing fee, are therefore being submitted under separate cover as required for a technical revision request.

Please contact me at (970) 336-6526 if you have questions or need additional information.

Very truly yours,



Connie N. Davis
Land Advisor

Enclosure

Aggregate Industries
West Central Region, Inc.
1707 Cole Blvd., Suite 100
Golden, CO 80401

EXHIBIT G

Remittance Date: 05/13/2011

Check #: 0000518039

Aggregate West Central
7529 Standish Place, Suite 200
Rockville, MD 20855



Description	Count	Dollars	Check number 0000518039 is attached. Use the information below to post your customer's account. Please notify your trading partner at the contact information listed above, if: (1) you are unable to post a payment. (2) any account information is incorrect. (3) your mailing address has changed or, (4) you want to receive the payments electronically.
ITEMS:	1		
GROSS AMT:		\$791.00	
ADJ AMT:		\$.00	
NET AMT:		\$791.00	

Invoice Number	Invoice Date	Reference	Gross Amt	Adj. Amt	Net Amt
2011LONGMONTWAN	05/02/11		791.00	.00	791.00

FOR SECURITY PURPOSES, THE BACK OF THIS DOCUMENT CONTAINS AN ARTIFICIAL WATERMARK

Aggregate West Central
7529 Standish Place, Suite 200
Rockville, MD 20855



HSBC Bank USA, NA
452 Fifth Avenue
New York, NY 10018

0000518039
VOID AFTER 90 DAYS
DATE: 05/13/2011

Not to exceed \$750,000

****791.00**

PAY: Seven Hundred Ninety One And No/100 Dollars

PAY
TO THE
ORDER OF

DIVISION OF RECLAMATION, MINING & SAFETY
1313 SHERMAN ST RM 215
215 CENTENNIAL BUILDING
DENVER, CO 80203

AS
Luchohund
AUTHORIZED SIGNATURE

ANNUAL FEE and REPORT REQUEST

PERMITTEE NAME: **Aggregate Industries - WCR, Inc.**
 PERMIT NO.: **M-1984-164**
 OPERATION NAME: **Neighbors Pit**
 ANNIVERSARY DATE: **June 7, 2011**
 ANNUAL FEE DUE: **\$\$791.00 (Due on or before your anniversary date)**
 COUNTY: **Boulder**

According to C.R.S. 34-32.5-116 or C.R.S. 34-32-116, each year, on the anniversary date of the permit, an operator shall submit the annual fee, a report and map showing the extent of current disturbances to affected land, reclamation accomplished to date and during the preceding year, new disturbances that are anticipated to occur during the upcoming year, reclamation that will be performed during the coming year, the dates for the beginning of active operations, and the date active operations ceased for the year, if any.

Please attach your revised written annual report and annual report map to this form. The Annual Report & Fee requirement is not met until we have received the following components: fee, report, and associated map. If no new disturbances or reclamation have occurred during the previous year and no new changes to the previous year's map are necessary, then no new map is required, provided that the Operator shall state this in the Annual Report. Please note that an adequately labeled map that clearly delineates and includes the above elements may suffice for a written report.

Division records indicate the following permittee contact information. Please verify and make any necessary changes:

Permittee Contact: **Connie N. Davis**

Permittee Name: **Aggregate Industries - WCR, Inc.** _____
 Address: **1707 Cole Blvd., Ste. 100** _____

Golden, CO 80401 _____
 Phone Number: ~~(970) 353-2005~~ **(303) 985-1070** _____
 Fax Number: ~~(970) 378-6856~~ **(303) 716-5346** _____

If you have additional comments and/or information that should be provided to the Division, please provide it below or attach it to this form along with your written report and map. Annual Report instructions are enclosed.

Connie N. Davis
 Signature of Corporate Officer, Owner, or Designee

6-20-11
 Date



COLORADO DIVISION OF RECLAMATION MINING AND SAFETY
MINERALS PROGRAM INSPECTION REPORT

PHONE: (303) 866-3567

The Division of Minerals and Geology has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance of the mining operation with the permit and the regulations of the Mined Land Reclamation Board. The report notes 1) Areas of successful compliance; 2) Problems and suggested corrective actions and/or 3) Possible violations to be considered for possible enforcement action by the Mined Land Reclamation Board. OPERATORS SHOULD READ THIS REPORT CAREFULLY BECAUSE IT MAY REQUIRE CORRECTIVE ACTION AND/OR RESPONSES TO THE DIVISION IN ORDER TO AVOID CONSIDERATION OF POSSIBLE ENFORCEMENT ACTION BY THE MINED LAND RECLAMATION BOARD.

MINE NAME: Fredstrom Resource Pit OPERATOR: Aggregate Industries - WCR, Inc.
COUNTY: Boulder MINERAL: SDG TYPE OF OPERATION: 112c, SR
INSPECTOR(S): Allen Sorenson MINE ID # OR PROSPECTING ID #: M-2001-016
INSPECTION DATE: 1-11-10 DATE OF COMPLAINT: NO
INSPECTOR'S INITIALS: ACS TIME OF DAY (MILITARY): 1515
INSPECTION TYPE CODE(1): SI POST INSP. CONTACTS(2): NO
JOINT INSP. AGENCY CODE(2): NO REASON FOR INSP. CODE(3): PY
WEATHER CODE(4): CR BOND CALCULATION TYPE(5): BC
OP. REP. PRESENT: Connie Davis

- 1. INSPECTION TYPE CODE - [CL-IN: IL=Illegal Operation, MI=Monitoring, MP=Mineral Prospect, SI=Surety-related, PR=Pre-operation]
2. POST INSPECTION CONTACTS AND JOINT INSPECTION AGENCY CODE - [CL-AG: NO=None, BL=BLM, CH=Colo. Dept. Health; CL=Land Board, CT=Citizen; CW=Wildlife, FS=Forest Service, HW=Hwy. Dept., LG=Local Government, SE=State Engr.]
3. REASON FOR INSPECTION CODE - [CL-RS: AG=Other Agency Request, CT=Citizen Complaint, IE=Normal I&E Program, HP=High Priority, PY=Priority]
4. WEATHER CODE - [CL-WE: CL=Cloudy, CR=Clear, IN=Inclement - prevented inspection, RN=Raining, SN=Snowing, WD=Windy]
5. BOND CALCULATION TYPE: - [BC=Complete Bond, BP=Partial Bond, NN=None]

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. IF PB OR PV IS INDICATED, YOU SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF YOUR PERMIT AND APPLICABLE RULES AND REGULATIONS. If PV is indicated, you will be notified under separate cover when the Mined Land reclamation Board will consider possible enforcement action.

GENERAL INSPECTION TOPICS

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

Y = Inspected and Found in Compliance PV = Inspected and Possible Violations Noted PB = Inspected and Problems Noted
N = Not Inspected NA = Not Applicable

ORIGINAL - PUBLIC FILE

MINE ID # OR PROSPECTING ID#: M-2001-016
INSPECTION DATE: 1-11-10

PAGE: 2
INSPECTOR'S INITIALS: ACS

OBSERVATIONS

In November of 2009 Aggregate Industries submitted a request for reduction in the amount of financial warranty for the Fredstrom Resource permit to a \$1000.00 holding bond. The basis for the request is that no mining has occurred and no mining activities are foreseen for some time.

This inspection was conducted to verify that no mine development or mining has occurred, and that verification was made. The site is being used for pasture. Therefore, the request to reduce the financial warranty can be approved. Notice of approval will be sent under separate cover.

The warranty reduction request states that Aggregate Industries will increase the bond back the current full amount (\$260,500.00) thirty days prior to any mining and reclamation activity. This proposal is not acceptable; the Division will require the following procedure be followed.

When the permittee is ready to commence operations, an application will be filed for a surety increase revision. That application will include an updated estimate of reclamation costs considering prevailing labor, equipment, materials, etc. costs at the time of the application. Once the Division has established the amount of financial warranty to be required, the surety increase revision will be approved and the warranty can be posted. Mining may commence only when the Division has notified the permittee in writing that the warranty has been accepted.

Inspection & Enforcement Contact Address


NAME Connie Davis
OPERATOR Aggregate Industries - WCR, Inc.
STREET 1707 Cole Blvd., Suite 100
CITY/STATE/ZIP Golden, CO 80401



**COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
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: Fredstrom Resource	MINE/PROSPECTING ID#: M-2001-016	MINERAL: Sand and gravel	COUNTY: Boulder
INSPECTION TYPE: Monitoring	INSPECTOR(S): Michael A. Cunningham	INSP. DATE: February 25, 2015	INSP. TIME: 11:15
OPERATOR: Aggregate Industries - WCR, Inc.	OPERATOR REPRESENTATIVE: Connie Davis	TYPE OF OPERATION: 112c - Construction Regular Operation	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$1,000.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: March 18, 2015

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

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

OBSERVATIONS

The inspection was conducted by Michael Cunningham of the Division of Reclamation, Mining and Safety (Division). Connie Davis of Aggregate Industries was also present for the inspection. The Fredstrom Resource site is located 2 miles west of Longmont, Colorado, immediately northwest of the Longmont Municipal Airport. The St. Vrain Creek runs through the center of the 266 acre permit area. The post-mining land use is wildlife habitat.

The inspection was conducted as part of the Division's regular monitoring program. Mining has not commenced at the Fredstrom Resource mine, the site is currently being used as pasture. The Operator does not currently know when mining will commence at this site.

Financial Warranty:

The Division holds a financial warranty in the amount of \$1,000.00. The Division approved a reduction of the financial warranty from \$260,500.00 to the current amount in 2010. Prior to initiating mining operations, the permittee shall notify the Division in writing and shall provide an updated financial warranty estimate to account for increased costs from the time the financial warranty was initially calculated (2001) until the time mining commences. Once the Division has established the amount of financial warranty to be submitted, the surety increase will be approved and the warranty can be posted. Mining may commence only when the Division has notified the permittee in writing that the warranty has been accepted.

Fish and Wildlife:

On September 18, 2014, Boulder County Parks and Open Space notified the Division that Preble's Meadow Jumping Mouse (Preble's) was trapped in the vicinity of Fredstrom Resource. The Fredstrom Resource site is considered to be occupied Preble's habitat. Preble's is a protected species under the Federal List of Endangered and Threatened Wildlife. According to the U.S. Fish and Wildlife Service, Preble's habitat is defined as 100 meters outside of the 100 year floodplain. Prior to initiating mining operations, the permittee will be required to submit a Technical Revision addressing the presence of Preble's. The Operator should consult with Boulder County and the U.S. Fish and Wildlife Service in developing a plan to protect this threatened and endangered species.

Permit Stipulations:

The Division would also like to remind the Operator that the approval of the Construction Materials 112 Reclamation Permit contained the following condition:

No mining activities, including excavation, road building, salvage and/or stockpiling of topsoil, salvage and/or stockpiling overburden, or plant site development may occur within the 100 year floodplain or within 400 feet of the top bank of St. Vrain Creek or whichever is farther, until the applicant has provided an approvable Flood Control/Mitigation Plan for the Fredstrom Resource.

This concluded the inspection.

Inspection Contact Address

Connie Davis
Aggregate Industries - WCR, Inc.
1707 Cole Blvd., Ste. 100
Golden, CO 80401



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: Fredstrom Resource	MINE/PROSPECTING ID#: M-2001-016	MINERAL: Sand and gravel	COUNTY: Boulder
INSPECTION TYPE: Monitoring	INSPECTOR(S): Amy Eschberger	INSP. DATE: November 5, 2019	INSP. TIME: 13:20
OPERATOR: Aggregate Industries - WCR, Inc.	OPERATOR REPRESENTATIVE: None	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$1,000.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: November 21, 2019	

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

Y = Inspected and found in compliance / 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 Fredstrom Resource site (Permit No. M-2001-016) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). The operator was contacted prior to the inspection but was unable to attend. The site is located approximately two miles west of Longmont, Colorado in Boulder County. Access to the site is from the west off N 75th Street.

The mine identification sign was posted at the gated entrance off N. 75th Street. Mining activities have not yet commenced at the site. The operator does not currently know when operations will begin. **Photos 1-6** taken during the inspection are included with this report.

This is a 112c operation permitted for 266 acres (see enclosed Google Earth image of site) to mine sand and gravel. The site is bisected by St. Vrain Creek, which flows eastward across the site. The operation will mine the site in six primary phases, beginning in the areas south of the creek (Phases 1-2), then moving into the areas north of the creek (Phases 3-6). The operation will mine the site in pods ranging in size from 13-33 acres (see enclosed mining plan map). No more than two pods will be mined at any time. A total of four pods will be developed south of the creek, and a total of five pods will be developed north of the creek. The maximum mining depth will be approximately 28 feet (0-5 feet overburden + 8-23 feet deposit). Areas to be mined will be dewatered prior to excavation, and the water ultimately discharged into the creek under a CDPHE discharge permit. The operator estimates 0.5 – 1.0 acre of groundwater will be exposed on site at any time (via dewatering trenches and settling ponds). Overburden and topsoil salvaged during operations will be stored separately along the perimeter of the active pit. Mined material will be transported via a conveyor system to an on-site processing plant located north of the creek. The processing plant will include mobile processing equipment, material stockpiles, a wash pond, and settling ponds.

The approved post-mining land use for the site is wildlife habitat. The approved reclamation plan includes leaving a series of ponds and wetlands for open space preservation. Wetlands will be created by allowing the wash basins to fill in with silts to an elevation slightly above the groundwater level, and by grading the edge of the ponds adjacent to the creek to create shoreline benches. The operation will scarify the bare mineral soil in late spring to help emulate the effects of flooding and stimulate the establishment of native trees. These wetlands will extend the riparian area along the creek corridor and enhance the wildlife habitat. The operation will preserve the majority of the existing riparian area. Topsoil will be replaced on disturbed land at a minimum depth of 12 inches, including on pond slopes above the anticipated high water line. All disturbed land will be graded to 3H:1V or flatter. Pond slopes will be graded to 4H:1V above and 3H:1V below the high water line. Disturbed land will be revegetated with an upland or wetland seed mixture.

The Division initially approved a required financial warranty for the site in the amount of \$260,500.00 for a proposed maximum disturbance of 66 acres. However, given the operator does not expect mining operations to commence at the site for some time, the Division approved a Surety Reduction (SR-1) in 2010 to reduce the required financial warranty to \$1,000.00 during this period of inactivity. A stipulation of SR-1 approval was that prior to commencing with operations, the operator must submit a Surety Increase request including an updated bond estimate for the site, and receive notification from the Division the new required financial warranty has been properly submitted and accepted.

The Division also approved a Technical Revision (TR-1) for the site in 2010 to temporarily suspend the baseline groundwater level monitoring (while the site is inactive), and to resume monthly monitoring one year prior to commencement of mining. According to the operator, over nine years of monitoring data had been collected from a total of 12 site wells at the time of TR-1 submittal.

The operator has obtained a SWSP for the site, which is valid for the period of June 6, 2019 through December 31, 2019. This plan indicates the operator had anticipated beginning mining operations in June of 2019, with a total of 1.0 acre of groundwater to be exposed by the dewatering trenches and settling ponds. The plan also indicates that dedicated water shares were accepted for the proposed groundwater exposure. According to the SWSP, a well permit application had been submitted to their office, but was still pending at the time of issuance.

It should be noted, on September 18, 2014, the Division received notification from Boulder County Parks and Open Space that Preble's Meadow Jumping Mouse (Preble's) was trapped in the vicinity of this site. The Fredstrom Resource site is considered to be occupied Preble's habitat. Preble's is a protected species under the Federal List of Endangered and Threatened Wildlife. According to the U.S. Fish and Wildlife Service (USFWS), Preble's habitat is defined as 100 meters outside of the 100 year floodplain. In its last inspection report (for February 25, 2015), the Division informed the operator that prior to initiating mining operations at the site, a Technical Revision would need to be submitted to address the presence of Preble's. The Division recommended the operator consult with Boulder County and the USFWS in developing a plan to protect this threatened and endangered species.

According to the approved permit, the following items must be addressed prior to commencement of operations:

- 1) At least one year prior to operations, continue the monthly groundwater level monitoring.
- 2) At least 60 days prior to operations, submit a Surety Increase request with an updated bond estimate for the proposed maximum disturbance.
- 3) At least 30 days prior to operations, submit a Technical Revision to address the presence of Preble's at the site (in consultation with the county and USFWS).
- 4) Prior to operations (including any disturbances and/or development) occurring within the 100 year floodplain or within 400 feet of the top bank of St. Vrain Creek, whichever is farther, submit an approvable Flood Control/Mitigation Plan for the site.
- 5) Prior to operations, provide evidence that a Disposal of Dredge and Fill Material (404) Permit has been obtained for the site.
- 6) Prior to operations, provide evidence that a valid well permit and SWSP is in place for the proposed groundwater exposure at the site.
- 7) Prior to relocating one of the existing ditches within the permit area, maintain a 200 foot setback from the ditch until a structure agreement has been reached with the ditch owner and a copy provided to the Division.

PHOTOGRAPHS



Photo 1. View of permit sign posted at main site entrance off N 75th Street.



Photo 2. View looking southeast across portion of permit area located north of St. Vrain Creek. Note operations have not commenced at this time.



Photo 3. View looking northeast across portion of permit area located north of St. Vrain Creek. Note operations have not commenced at this time.



Photo 4. View looking northwest across portion of permit area located south of St. Vrain Creek. Note operations have not commenced at this time.



Photo 5. View looking north across portion of permit area located south of St. Vrain Creek. Note operations have not commenced at this time. Also note existing house (background right) which is excluded from the permit area.



Photo 6. View looking west across existing pond located in far southeastern portion of permit area which will be dewatered and mined. Note operations have not commenced at this time.

Inspection Contact Address

Christine Felz
Aggregate Industries - WCR, Inc.
1687 Cole Blvd
Golden, CO 80401

Encls: Google Earth image of site
Approved Mining Plan Map

CC: Michael Cunningham, DRMS

M-2001-016 / Fredstrom Resource / Aggregate Industries - WCR, Inc. (112c)

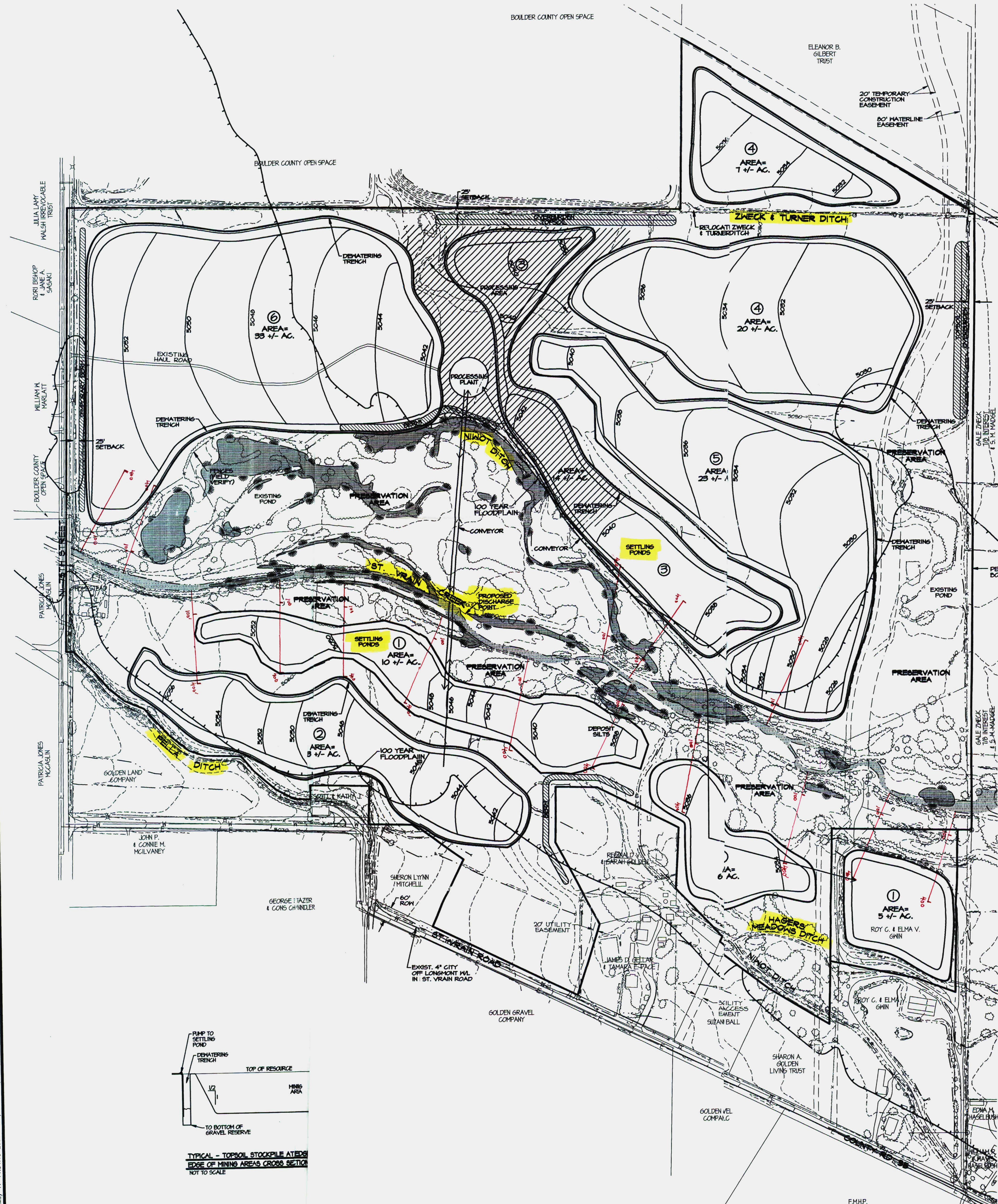
Red Outline = 266.0 acres = Approved Permit Area (location approximated based on approved permit maps)
(Image data from 5/31/2018)



N 75th St



FREDSTROM RESOURCE MINING PLAN

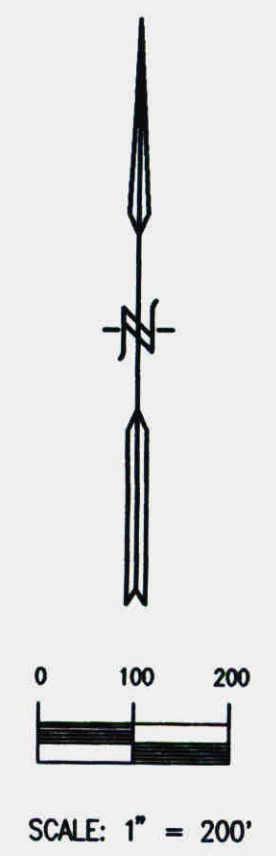


NOTES:

- 1) THE HOURS OF MINING OPERATION AT THE SITE WILL BE MONDAYS THROUGH FRIDAYS, 7:00 A.M. TO 3:00 P.M. (60 DAYLIGHT TO DARK (WHICHEVER IS MORE RESTRICTIVE). ONLY HAULING AND EQUIPMENT MAINTENANCE WILL BE ALLOWED ON SATURDAYS.
- 2) IF SUSTAINED WINDS EXCEED 30 MPH AT MINING SITES, OPERATIONS WILL CEASE UNTIL THE WIND SPEED DROPS BELOW 30 MPH.

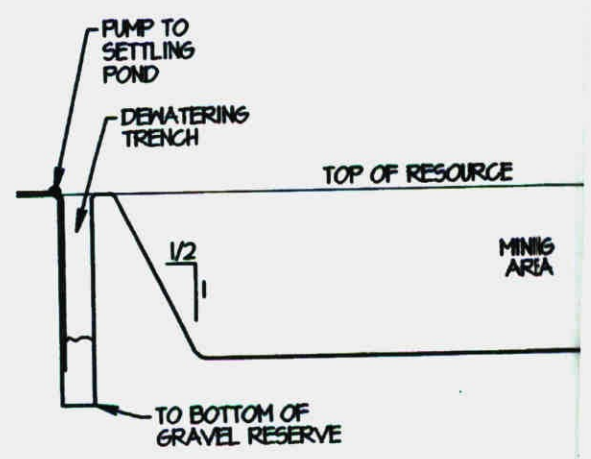
FLOOD HAZARD LEGEND:

FLOODPLAIN INFORMATION PER FIRM FLOOD INSURANCE RATE MAP NO. 08050270 F, DATED JUNE 2, 1995.



LEGEND:

- PROPOSED PERMIT BOUNDARY
- LIMITS OF MINING AREAS
- - - SECTION LINE
- 100 YR. FLOODPLAIN
- EXISTING TREES
- EXISTING WATER
- - - EXISTING 2' CONTOURS
- EXISTING STRUCTURES
- - - EXISTING FENCE
- - - EXISTING WATER LINE
- ⊙ MINING SEQUENCE
- HAIL ROAD
- ▨ TEMPORARY SCREENING BERM TO BE REMOVED UPON COMPLETION OF MINING
- CONVEYOR
- - - EXISTING ELECTRIC LINE APPROXIMATE LOCATION
- ⊗ EXISTING TELEPHONE PEDESTALS APPROXIMATE LOCATION



ENVIRONMENTAL DESIGN:
Anderson & Company
 420 sunset street
 longmont, colorado 80501
 phone: (303) 543-2910
 fax: (303) 543-2910

PLANNING & ENGINEERING:
ROCKY MOUNTAIN CONSULTANTS INC.
 825 DELAWARE AVENUE, SUITE 500
 LONGMONT, COLORADO 80501
 PHONE: (303) 772-5882

NO.	DESCRIPTION	DATE	BY
1	P.C.	2/19/01	BB
2	FINAL	5/2/01	BB
3	DWG	3/7/01	DB

MLRB 112 PERMIT - MINING PLAN
FREDSTROM RESOURCE
 AGGREGATE INDUSTRIES WEST CENTRAL REGION, INC.
 Longmont, Colorado

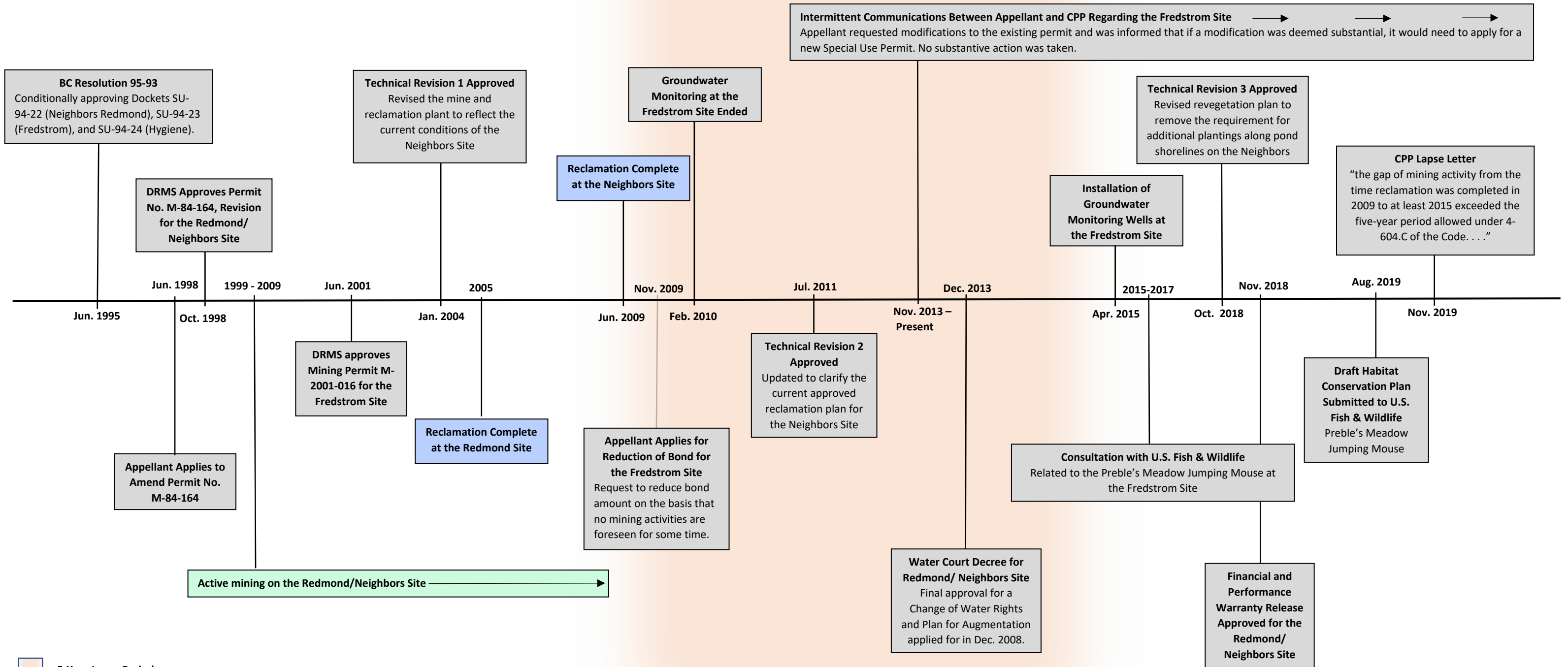
SCALE: 1" = 200'
 DATE: 3/1/01
 DESIGNED BY: BB/DB/BB
 DRAWN BY: KES/SR
 CHECKED BY: DB
 JOB NO.
 80-3919.003.00
 EXHIBIT C
 OF 3

Permit # M-2001-016 Confidential? _____
 Class: Agricultural Type-Seq: _____
 From: A. J. K. To: _____
 Doc Name: M-2001-016.mxd
 Doc Date (if no date stamp): _____

RECEIVED
 MAY 18 2001
 Division of Minerals and Geology

PLOTTED: Thu May 17 11:54:19 2001. R:\3919_003\MINING PLANS\Fredstrom_MLRB_R1.dwg

TIMELINE FOR RESOLUTION 95-93
Redmond/Neighbors and Fredstrom Sites



- 5-Year Lapse Period
- Active Mining and Reclamation Work
- Reclamation Complete