Anaconda – Deer Lodge County Planning Board Agenda
Monday, March 23rd, 2020 @ 6 p.m.
3rd Floor Conference Room, ALDC Building

Please turn off or silence all cell phones and electronic devices.
Everyone is respectfully asked to follow these few Board Rules of Procedure:

- To address the Board, please approach the podium and state your name & address for the record.
- Please speak loud enough for the entire room to hear your comments.
- Please address all comments to the Board as you are not in a debate with other presenters or members of the audience.
- Please be respectful to other speakers, presenters and members of the audience.
- No sidebar conversations will be allowed. Private conversations and whispering in the audience during the meeting is very disruptive so please step out of the room for any such conversations.

I Call to Order
Chairman, Art Villasenor

II Approval of Minutes from Last Meeting *(PAGES 3 - 21)*
November 18th, 2019

III Public Hearing *(PAGES 22 - 188)*

PUBLIC HEARING on an application by Butana Sand and Gravel, for approval of a Major Development Permit (MDP 20-001) for the expansion of a sand and gravel pit; expansion area proposed is north of current operations. The subject property is located on Crackerville Road. The entire proposed permit area is legally described as S26, T04N, R10 W, Acres 10, NE4, TR SE4 (MDP 18-01) and S26, T04N, R10W, Acres 255.51, NE4, TR IN SE4. Area is within the East Valley Development District (EVDD).

Staff Report: Gayla Hess, Planner 1

Applicant Report: Stephen Frazee, Butana Sand and Gravel

Public Comment

Discussion and/or action if necessary

IV. Elections of Chairperson and Vice-Chairperson for the Year 2020

V Old Business
Appointment by the Board of a conservation district representative to serve as the 9th member of the ADLC Planning Board *(PAGES 189 - 191)*

VI New Business
Review of Resolution 17-35 which is a Resolution Reaffirming the ADLC Charter and the ADLC Administrative Code regarding Public Hearings before the Board of Commissioners and/or any ADLC Boards and Committees – Rose Nyman *(PAGES 192 – 194)*

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VII Miscellaneous
- Matters from the Staff
- Matters from the Board

VIII Public Comment
This is the time for members of the public to comment on items not on the agenda that fall within the Planning Board's jurisdiction

IX Next Meeting
TBD

X Adjournment

MINUTES
NOVEMBER 18TH, 2019

Anaconda-Deer Lodge County

PLANNING BOARD MINUTES

Monday, November 18th, 2019 ADLC County Courthouse Courtroom

Meeting called by	Rose Nyman, Vice-Chair
Type of meeting	Monthly Meeting
Minutes taken by	Carlye Hansen

Members Present: Rose Nyman, Vice-Chair; Frank Fitzpatrick; Mary Kae Massey (arrived at 6:07 pm); Bob Wren; Craig Sweet; John Lombardi; Annette Smith

Excused Absence: Art Villasenor, Chairman

Staff: Chas Ariss, P.E., Planning and Public Works Director; Gayla Hess, Planner I; Carlye Hansen, Planning Department Secretary

AGENDA TOPICS

Call to Order

Meeting was called to order at 6 pm by Rose Nyman, Vice-Chair. Roll call was done.

Approval of Minutes

Motion was made by Bob Wren to approve the minutes from July 8th, 2019, with corrections as noted by Frank Fitzpatrick; seconded by Frank Fitzpatrick. Motion passes 6-0.

Old Business

None

New Business

Red Sands Arbiter Parcel – Joel Heppler

Joel Heppler stated that his proposal to the Planning Board is to build a commercial garage space (4500 sq. ft.) with three separate garage doors and possibly lease several of those out and use the existing space for his own facility. He is planning on opening an automobile towing company and the state requires that you have storage and secured garage space to impound cars. Joel has been in the car towing business for 21 years. This is just something else they are doing to generate more income and if there is a need for more rental spaces, then they would move forward, in additional phases, towards the project which would entail more buildings to be available to the public. They have already discussed the infrastructure with the fire department and licensed

contractors, so the project end line right now is to get the property purchased, get the fencing up, the road completed, and then proceed with the remaining infrastructure, the building package, and the foundation. He has talked to Jordan Contracting who will be a surrounding neighbor, as well as Anaconda Local Development, about the project and about the greenway that will be installed, the buffering of the trees, and the infrastructure issues and design have been discussed extensively. Today, he also has provided a letter from the commercial officer at the bank that states that he is financially capable and will be approved on funds for this development project.

Chas Ariss, PE, Planning Director, stated that there is still a list of conditions that will need to be met and it is articulated in the staff report. There is basically a process for doing the water and sewer connections, entrance to the site, with the construction, the obtaining of a storm water permit through the State of Montana. Mr. Heppler is aware of all of these requirements. The areas for connections to the municipal services seems to be compatible. Mr. Heppler is aware of the restrictive covenant that is on the property as a result of this being placed in the Red Sands Area.

Bob Wren asked that if on the recommendation of approval, should there be an acknowledgement somewhere in regards to the Red Sands Area. Mr. Ariss stated that Mr. Heppler has been provided with the covenant, but they can articulate this as a condition, and the information has already been provided to Mr. Heppler.

Gayla Hess, Planner I, stated that there is an extensive list of information, as Mr. Ariss had mentioned, that will be required from Mr. Heppler, however, she would like to remind everyone that this is a unique situation in that Mr. Heppler does not own the property and he has submitted his proposal, he has filled out the subdivision application towards his goal, but that this proposal will need to go through the advertising process. However, it was noted that the Planning Board be aware of this potential project down the road. There is information missing and Mr. Heppler has been to the office multiple times to try and work towards satisfying his requirements.

Mr. Ariss stated that the action that would be taken tonight is that of understanding the type of development that Mr. Heppler is trying to accomplish, which in the Planning Department's opinion is compatible with our Growth Policy and existing land uses in that area, along Arbiter Road, and based on that, the recommendation of the Planning Department is to support the project and will remand this to the Commission to determine whether or not they want to do the land transfer. Once the land transfer is done, then Mr. Heppler can continue with the subdivision application, in which he thinks they have a lot of the information generated and Mr. Heppler knows what he needs to provide in writing and he will becoming before you once again for the review of the subdivision application prior to this going to the Commission for final subdivision approval, and then of course, the project would be subject to building permits and all of the other requirements to actually build the site out.

Rose Nyman stated that she needs to stay objective as the Vice-Chair, but said that she was contacted the evening prior with a concern of how this project will look from the highway. She is just passing this along as it was brought to her attention. Mr. Heppler stated that with the program they have set forth for the future, there should be buffered trees through this area. At any rate, they are going to be building a dimensional type of building with a one-sided roof, so this will be not standard, and this will look really nice. They are planning on doing a store front on the face of this building. At this time, he also took a minute to note that he has also paid for a survey to have this property surveyed.

Craig Sweet asked if from time to time, there will be vehicles stored there that have been towed, that may be inoperable, something that would eventually go to a car crusher and asked if Mr. Heppler saw this in the future as having a dozen cars, 100 cars, etc. Mr. Heppler stated that no, he is not into the automobile junk business and nor does he want to be. Once he starts to have too many vehicles there, he would call someone like Mr. Zimmerman to come and get them. He does not want any sort of junk yard there whatsoever. He only wants a storage facility and a commercial rental facility.

Frank Fitzpatrick asked if there would be slats in the fence so that the vehicles could not be seen by the highway. Mr. Heppler stated that if this is required, they would do whatever it takes. Mr. Ariss stated that the requirement would be for privacy fencing. This was a requirement for all of the development along Arbiter Road, but with the past administration, it was never enforced. At this time, a grant was recently given to the Tree Board to have a green fence, an actual vegetation fence along Arbiter Road, so there should not be visibility of any of the activities on Arbiter Road.

Mr. Wren asked if any part of the historic trail is near this property and is there any storm drainage for the lot itself. Mr. Ariss stated that Mr. Heppler will be required to retain his storm water on site. There is no current subservice disposal system or anything. He will tie into municipal sewer and municipal water. None of this will cause any problem with the cap that is already present on this property.

Motion is made by Craig Sweet that the Planning Board recommend to the Commission that they approve the land transfer of the Red Sands, NW ¼ Section1, T 4N, R 10W, COS 98D, portion of Parcel D, to Mr. Joel Heppler. This was seconded by Bob Wren. Motion passes 7-0.

Anaconda-Deer Lodge County

Request for Removal of the Rural Special Improvement District (RSID) fee from property in the Pintler Overlook Subdivision – Randy O'Leary

Randy O'Leary stated that he purchased his property and he found out recently that Shoot the Moon Lane has been decommissioned or has been removed, so he now has no access to the Elk Meadows RSID, and he has to go back out to the highway to get to this piece of property. He also has been charged for RSID's on his taxes for a few years now and states that if he cannot drive from this spot, then he feels that he should not have to pay these fees.

Chas Ariss, PE, Planning Director, stated that what Mr. O'Leary has stated is accurate, but he feels that the overriding issue is that the property that Mr. O'Leary purchased is actually the dedicated open space park land for the subdivision where the property resides. For some reason, the Homeowner's Association for this area had not been paying the taxes on the property and the County was only aware of the existing CCNRs for the subdivision which set aside that property to not be developed and to be kept as open space and park land. Mr. O'Leary purchased the property on back taxes and the County and Mr. O'Leary are in an odd position here where even though it would normally be a piece of property that the other homeowner's in the subdivision would pay a proportional share of the taxes for and now that has not happened due to how the County managed this from a tax standpoint and this came back up on the tax rolls. Now we have the situation where the CCNRs are still valid and the property is not able to be developed. Mr. Ariss posed this to Mr. O'Leary as how did this purchase come about from his perspective, and what does he plan to do with the property in the future.

Mr. O'Leary stated that the Homeowner's Association refused to pay the taxes after 2011. Mr. O'Leary paid the second half of 2011 and have paid them up through current. When he went through the tax deed process, he first notified the Homeowner's Association at the addresses that were listed as they had a GEO code and tax I.D. code. He sent them letters in regards to this and they refused to pay them. He had sent a total of 27 certified letters to all the homeowners at the time and none of them redeemed the letters. Chas asked that from the point of managing the county lands as we do, it is an obligation that those homeowners should have paid and for it to come up on tax rolls for Mr. O'Leary to purchase, Chas asked if he understood that he would not be able to develop the property in any way? Mr. O'Leary stated that there is a process to go through to quiet title the property. Chas said the he could purchase the property, but due to the restrictive covenant and the CCNRs that are on this because of the subdivision standpoint... Mr. O'Leary interrupted that with them failing to make payment and that with it not being brought up to county standards, that they failed to maintain the covenant and CCNR's. However, Chas states that this does not void the CCNRs. He states that really there should be a tax lien on each one of the individual homeowners who were failing to pay on that lot. Mr. O'Leary stated that they refused bring this up to County standards. Chas stated that this is a very unusual situation.

Craig Sweet stated that after hearing all of this, he thinks this is some sort of a legal issue that Mr. O'Leary has to deal with himself and he doesn't see the Planning Department removing the Special Improvement District or anything until this is resolved between Mr. O'Leary and whoever put the restrictive covenant on his property. Mr. O'Leary again stated that he bought this property through the County and went through the tax process.

Gayla Hess, Planner I, feels that there are two separate issues here. First, is the RSID and then there is also the potential to leave this as a park space or, as Mr. O'Leary would like to do, develop the lot itself. As far as the RSID, we are not consistent as a County in how we charge the park and open spaces, even with the neighboring subdivisions. The Elk Meadows Subdivision to the north, their open park space is not charged the RSID, whereas other owners within the subdivision are charged. To the west, that subdivision does pay the RSID for road improvement in addition to each parcel. She stated that if we are going to be discussing the RSID, she just asked the Board to consider that we don't always consistently tax them, but additionally, the buildable part is a separate issue. Chas stated that she is correct and that there were numerous issues in how our predecessors handled these sort of issues, so in general the Planning Department's position is for the immediate purposes of Mr. O'Leary's request, we don't see that there is a benefit to the county to retain that fee, as we are not maintaining any of the roads that he uses to access that property. From that standpoint, he would support giving him relief from that fee. The bigger question is what can he do with the property going forward and unfortunately, based on the CCNR's for the subdivision and the requirements that were placed on that subdivision at the time the subdivision was approved, that land currently cannot be developed and Mr. O'Leary would have to apply for a variance in order to move forward to do anything with that property from this point forward.

Mr. O'Leary noted another point that the lot has been described as several different lots over the years. He said the surveys have been done several times due to errors by a land company. This lot has been approved in several subdivisions. Chas states that he understands and reiterated that he understands that Mr. O'Leary is not getting the benefit of any county services to maintain the road access to the property and therefore, he is paying a fee for no services, but you own the property, you are paying the balance of the taxes on the property, and he has the ownership aspect of ths, but he doesn't have an ability to develop this based on the CCNR and the County conditions.

Mr. Sweet asked if the RSID fee would be applied if he did develop this area and if this would be maintained by the County. Chas said that the property would need to be reassessed after development and the tax assessor would make determination at that time based on how the approach would be off of that. Mr. O'Leary stated that all of the surrounding lots except one of them aren't on the RSIDs.

Mr. Wren verified that he accesses the property from Sun Child Lane right now and that this is not maintained and that the only road that is maintained is Elk Meadows Road. He also asked that if the HOA is not paying the taxes on this parcel, are they paying the taxes on the road, and if they are not, doesn't the County take that over after three years. Mr. O'Leary stated that the lots currently overlap the roads, so there is no real dedicated road, just easements. Chas said there has been no consistent treatment of the private roads in that fashion either.

Mr. O'Leary did state that he talked to Chad Lanes, County Sanitarian, about a water well and he said that as this was involved with all of the other subdivisions that were approved before, that he would give a permit when the time comes, and then he talked to Myrna Green, with the Department of Revenue, and she stated that if he got a permit from Chad, they would remove the non-buildable quotation on Montana Cadastral. Chas again reiterated that there will need to be a variance applied for to remove the non-buildable quotation.

PUBLIC COMMENT:
Marilyn Hagen-Smith, for Charlene Hagen, 1708 Copper Road, Anaconda
Mrs. Hagen-Smith just wanted to ask where the location of the property owned by Mr. O'Leary is located and Chas stated that this property is located in the Pintler Overlook Subdivision, out west of town, north of the Brown Derby.

> *Motion is made by Bob Wren that the Planning Board recommend to the Commission that they remove the RSID fee from his property in the Pintler Overlook Subdivision as access is from Sun Child Lane. This was seconded by Rose Nyman. Motion passes 7-0.*

Review of the "Stumptown Addition to the rarity Mountain Wildlife Management Area (Draft Environmental Assessment)"

This was a discussion about a handout that was sent to the Planning Department and the Planning Director. We have not heard anything personally in regards to this. This is apparently just a Draft Environmental Assessment and Carlye included it in the packet.

Chas Ariss states that the property is on the west end of Stumptown Road and Highway 1. This is a large area that sits north of Stumptown Road and south of Highway 1, from the last developed property east to the last developed property on the west. This has come available for purchase and Fish, Wildlife, and Parks wants to obtain this so they have some good bottomland to augment the Garrity Wildlife Management Area. They are just wanting to maintain more open space within that corridor.

Gayla Hess wanted to point out one error on the report, it states that the property is adjacent to County Government Land in the report, but in actuality the land is actually adjacent to land owned by Butte-Silver Bow.

Bob Wren asked about how long the wait would be for them to get the funding. He states that it looks like they have right around $100,000.00 to get the project started. He is wondering when the purchase would happen. Chas clarified this is the first information that he has received and that it does not state this in this packet. Mr. Wren thinks they are looking at about $3000.00 per acre. Chas states that this seems to be the going rate unless you get into the higher elevations.

Miscellaneous

Matters from the Staff

1. Gayla Hess wanted to follow-up on a project that was brought forward to the Planning Board in February of 2019, there was a variance request in Opportunity where owners were sharing a septic system. She has since heard back from the owners. They have redrawn the lines and are proposing a split now where each parcel can have their own septic system. This variance request will be going before the Board of Adjustment on December 5th, 2019.

2. In follow-up on the West Barker Creek Subdivision, the final plat is being routed for signatures so that we can present it to the Commission for their approval, so that is still in the works.

3. A new item that Gayla would like to share is that the Historic Resources Board has been working for some time to get Heffner's Dam on the National Register of Historic Places and this individual nomination has been accepted as a draft by the State Historic Preservation Office, so that will go before the State Review Board in January. That will be up for public comment and public input in the near future.

Matters from the Board

1. Frank Fitzpatrick asked if Chas got together with the County Attorney about getting the fire prevention plan on the plats. Chas state that there is an endorsement on the Barker Creek Subdivision Plat and it has been signed by the Georgetown Lake Fire Chief. He stated that the subdivision regulations will not need to be changed.

Public Comment

None

Next Meeting Date

December 9th, 2019

Anaconda-Deer Lodge County

Adjournment

Meeting was adjourned at 6:40 p.m.

Respectfully submitted,

Carlye Hansen

Carlye Hansen, Planning Department Secretary

ANACOND-DEER LODGE COUNTY PLANNING DEPARTMENT
FIRST MINOR SUBDIVISION
18 NOVEMBER 2019

The Planning Board had recommended approval for the proposal submitted by Mr. Joel Heppler at the 08 July 2019 meeting. As a condition of approval, the applicant is required to apply to subdivide the property in the Red Sands and obtain final plat approval.

BACKGROUND

Applicant: Joel Heppler
Advanced Mobile Transport & Construction Svc.
2200 Elk Haven Drive
Anaconda, MT 59711

Location: Red Sands
NW ¼ SECTION 1, T.4N., R. 10W.
C.O.S. 98D, portion of Parcel D[1]

A. Project Description

Applicant proposes to create a first minor one lot subdivision and amend the Red Sands Arbiter parcel. The newly created parcel would be the location for a business facility within the Light Industrial Development District (LIDD).

[1] "Purpose of Survey (98D-2): PARCEL 'D': THIS SURVEY IS FILED WITH THE INTENT TO QUALIFY FOR THE EXEMPTION FOUND IN: TO CREATE IRREGULAR TRACTS LARGER THAN ONE HUNDRED SIXTY (160) ACRES IN SIZE, AND THE SUBJECT PARCEL MUST BE SURVEYED PURSUANT TO SECITON 76-3-401, MCA."

Section 76-3-401 is Survey requirements for lands other than subdivisions

B. Location

Geocode: 30-1285-01-1-03-01-0000

Assessor's Code: 0000525020

Legal: S01, T04 N, R11 W, C.O.S. 98D, PARCEL D, REMAINDER PARCEL D, RED SANDS ARBITER PARCEL COS98D POR IN SEC 4-4-11 & 6-4-10

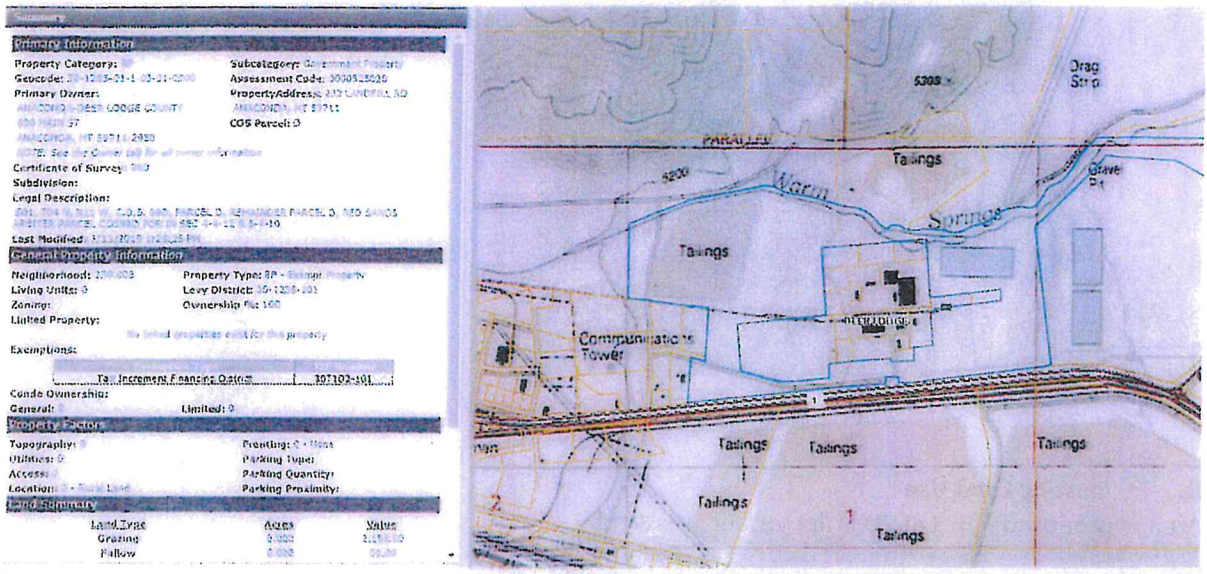


Figure 1: Topo from MT Cadastral (all Parcel D outlined in blue)

Figure 2: Aerial view of area from Google Maps

C. Size

Property is part of Parcel D in the Red Sands/Arbiter Parcel (Conveyance Property: Book 183, Page 615). Applicant proposes to create a 7.15-acre parcel; amended plat depicting parcel attached.

Subject area is within a qualified Opportunity Zone.

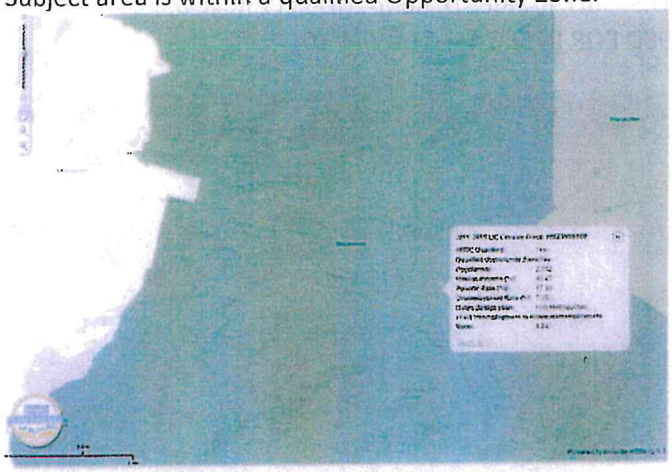


Figure 3: cims.cdfifund.gov map depicting Opportunity Zones

D. Existing Land Use

Area of proposed new Lot 7D is flat vacant grassland.

Figure 4: Photo of proposed lot (facing north)

Atlantic Richfield maintains area to prevent the growth and spread of noxious weeds.
Quit Claim Deed (Document #145006, Book 96, Page 230) Restrictive Covenants apply.

E. Proposed Land Use

Applicant would like to establish a business facility which would include a building, connections to municipal utilities, a gravel parking area[2], and fencing in accordance with Sec. 24-145(2)[3]. The fence plan includes screening and green fencing.

Uses within the LIDD "shall not pose hazards of glare, fumes, dust, odor, explosion, or excessive noise" per Sec.24-145(1). Applicant plans to offer business space for towing and storage, auto detailing, and similar. Applicant anticipates business hours between 6AM and 6PM.

Restrictive Covenants section E.2.h. requires the property owner to be solely responsible for any additional remediation for future property development. Applicant will be required to apply for an Administrative Development Permit and to follow any Institutional Work Controls Program for soils handling and routing.

[2] Area is relatively flat; grades would not exceed 8%

[3] Open storage of materials or supplies must be effectively screened from view by a sight obscuring fence or Landscaping

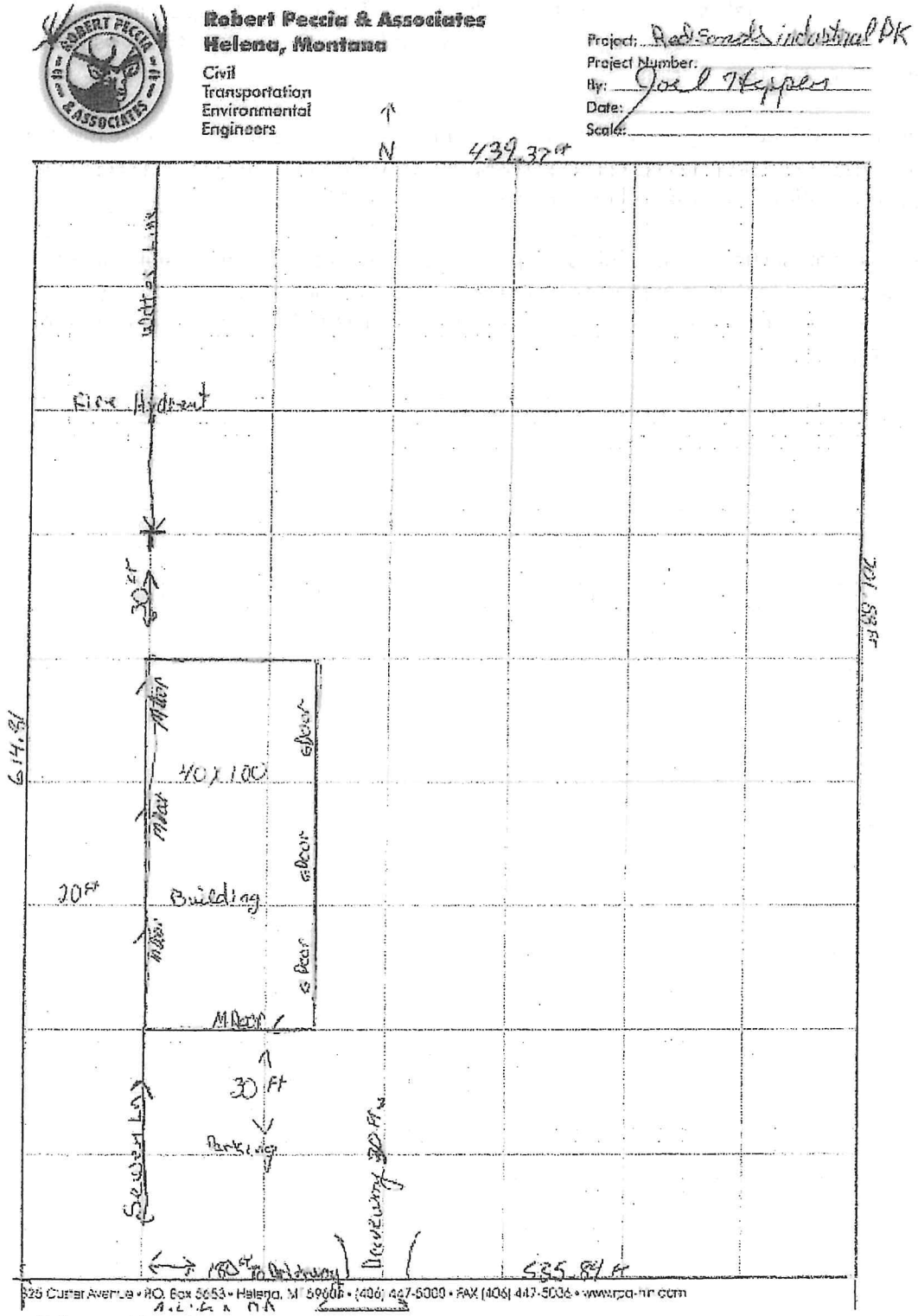


Figure 5: Proposed layout

F. Adjacent Land Use

Adjacent properties:

East: Jordan Contracting (Lot 5F) and the Arbiter Minor Subdivision
West: Storage unit facility;
North: open space and walking trail- ADLC
South: vacant

Table 1: Names & Addresses of Neighboring Property Owners

Geocode	Address	Owner	Business
30128501201020000	89 Arbiter Plant Rd	Jason & Ross Roylance	Anaconda Mini Storage
30128501201010000	236 Town Pump Rd	Tucker Transportation	
30128501303030000	74 Town Pump Rd	Harold Dean McDowell	
30128501303020000	120 Arbiter Plant Rd	Springhill Enterprises Inc	Mike's Sales
30128501103010000		ADLC	(vacant to the north and south)
30128501103050000	373 Arbiter Plant Rd	Jordan Family LLC	Jordan Contracting

G. Utilities

1. Municipal water- main located within area
2. Municipal sewer- connections available
3. Solid waste capacity exists.
4. Storm water management is responsibility of the applicant.
5. Fire protection requires the installation of a fire hydrant. Area is within the Anaconda Fire District.

Figure 6:Screenshot of Planning Map with approximate locations of utilities

REVIEW

Compliance with Anaconda-Deer Lodge County Zoning Regulations

Subject property is within the Light Industrial Development District. Proposed uses are Permitted Uses in LIDD. As applicant intends to rent building bays out to other business, these businesses must comply Sec. 24-142- Permitted Uses and must have or apply for an Anaconda-Deer Lodge County business license per Sec.8-19.

Conformance with the Growth Policy

Remediation within area to levels suitable for industrial use[4]. The 2008 Reuse Guideline recommendation for business park type development has not occurred- area primarily industrial use development.[5]

Effects on Public Health and Safety

Easements and Access

Property is to be accessed via Arbiter Road, a maintained county road. Applicant would be required to apply for a driveway approach permit for access and improvements to the entrance of the newly created lot.

Local Services

No comments were received from Police Department, Dispatch, Tri-County Sanitarian, Road Department, Water Department, Weed Department or Treasurer in response to notice of subdivision application (09/05/19).

Flooding

Subject area is not within a flood zone.

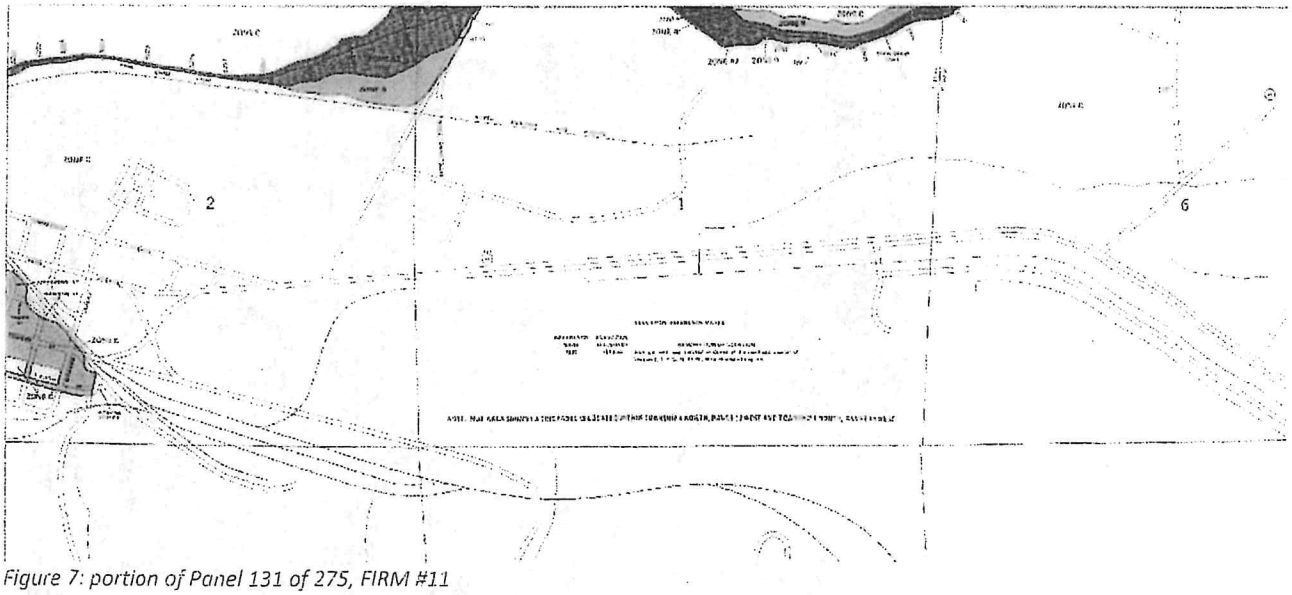
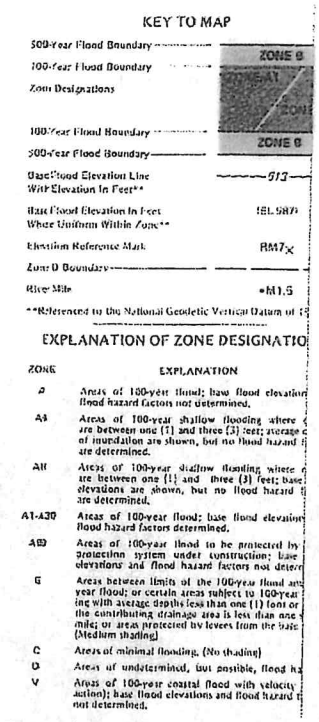


Figure 7: portion of Panel 131 of 275, FIRM #11

[4] Growth Policy 2019, Page 4-1

[5] Growth Policy 2019, Page 4-16 information summarized


KEY TO MAP

500-Year Flood Boundary

100-Year Flood Boundary

Zone Designations

100-Year Flood Boundary

500-Year Flood Boundary

Base Flood Elevation Line With Elevation In Feet**

Base Flood Elevation In Feet Where Uniform Within Zone**

Elevation Reference Mark

Zone D Boundary

River Mile

**Referenced to the National Geodetic Vertical Datum of 1

EXPLANATION OF ZONE DESIGNATIO

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevation flood hazard factors not determined.
AE	Areas of 100-year shallow flooding where are between one (1) and three (3) feet; average of inundation are shown, but no flood hazard are determined.
AH	Areas of 100-year shallow flooding where are between one (1) and three (3) feet; base elevations are shown, but no flood hazard are determined.
A1-A30	Areas of 100-year flood; base flood elevation flood hazard factors determined.
AE	Areas of 100-year flood to be protected by protection system under construction; base elevations and flood hazard factors not deter
B	Areas between limits of the 100-year flood an year flood; or certain areas subject to 100-year ing with average depths less than one (1) foot or the contributing drainage area is less than one mile; or areas protected by levees from the base (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood ha
V	Areas of 100-year coastal flood with velocity action); base flood elevations and flood hazard not determined.

Figure 8: KEY to map

Applicant will be responsible for storm water management, including developing a Stormwater Pollution Prevention Plan (SWPP) and obtaining a Construction General Permit.

Effects on Wildlife & Wildlife Habitat
Business perimeter will be gated and screened.

Effects on Agricultural and Agricultural Water User Facilities
N/A

Additional Information Requested from the Applicant:

1. Grading and Drainage plan
2. Storm water management details
3. Overall development plan and timeline
4. Financial plan/capacity
5. Lienholders' acknowledgement of subdivision, if applicable
6. Weed management & revegetation plan

Recommended Conditions of Approval:

1. All additional information requested must be provided to the Planning Department
2. Exterior lighting requirements (facing downward, etc.)
3. Screening required for outdoor vehicle storage
4. Required permits, including any signage

Attachments:

(1) Quit Claim Deed, doc #145006
(2) Subdivision Application

ANACONDA-DEER LODGE COUNTY PLANNING DEPARTMENT
FEE REMOVAL REQUEST

Resident has requested the removal the Rural Special Improvement District (RSID) fee from his property in the Pintler Overlook Subdivision as access is from Sun Child Lane.

Applicant: Randy O'Leary
2435 Yale Ave.
Butte, MT 59701

Location: PINTLER OVERLOOK SUB, ACRES 2.778, 380B PARK & OPEN SPACE

Figure 1: Aerial photo from MT Cadastral (O'Leary property outlined in blue)

Background:

Elk Meadows Lane

RSID for Elk Meadows Subdivision (located to north of Pintler Outlook Subdivision) was established for "maintenance to include grading, snow removal, and other work necessary to allow personal and emergency vehicle access to all public roads in the Elk Meadow, Phase I Subdivision and adjoining public assess south to U.S. Highway 10-A, in Anaconda [sic] Deer Lodge County, Montana." Resolution No. 06-30.

Whispering Pine Lane

Whispering Pine Lane RSID proposed in the Pintler Overlook Subdivision Declaration of Covenants and Restrictions, and per 2007 Commission Meeting notes was considered part of the existing RSID by the Road Foreman.

Shoot the Moon Lane

"The upper road exists as a private easement only, it is not a subdivision road," Note 10 relates to the 40-foot existing access easement as shown on 380-B.

Sun Child Lane

Sun Child Road is a 40-foot access with easement for subject property on COS 309-A.

Attachments:

(1) Written request from property owner
(2) COS 380-B
(3) Email from Road Foreman
(4) 10/02/07 minutes
(5) Pintler Overlook Subdivision Covenants

MDP 20-001
BUTANA SAND AND GRAVEL

ANACONDA-DEER LODGE COUNTY PLANNING DEPARTMENT
STAFF REPORT
MAJOR DEVELOPMENT PERMIT
20-01
BUTANA SAND AND GRAVEL
March 23, 2020

A report to the Anaconda-Deer Lodge County (ADLC) Planning Board regarding a request by Butana Sand and Gravel for a Major Development Permit (MDP) to amend the current gravel pit operations; MDP 18-01 and DEQ Opencut Mining Permit #3025.

Expansion includes changes for excavation depth, total permitted acreage, use of an existing alternative access road, overall amount of soil to be removed, and reclamation date.

Public hearing is scheduled for March 23, 2020 at 6PM in the 3rd floor conference room of the Community Service Center (118 E. 7th Street).

BACKGROUND INFORMATION

A. Applicant:

Butana Sand & Gravel
PO Box 269
Belgrade, MT 59714

B. Size and Location:

Butana Sand and Gravel is the operator at the DK Jan site, currently permitted for 22.6 acres, located on two parcels with the following legal descriptions:

- S26, T04 N, R10 W, ACRES 255.51, NE4, TR IN SE4
- S26, T04 N, R10 W, ACRES 10, TR SE4

ADLC Emergency Services map shows addresses 3465, 3765, 3767 and 3769 Crackerville Road on the subject properties.

Area is within the East Valley Development District (EVDD) and the Opportunity Rural Fire District (RFD).

C. Nature of Request:

Applicant is proposing to expand to a total of 96.9 acres, including entire area permitted by Opencut Permit #1114, with mining beginning at the existing disturbance at the south end of the permit area and will progress south to north[1].

[1] Page 14 of DEQ opencut mining application

Figure 1: portion of Figure 1
Opencut Mining Permit 3025 (MDP 18-01)

Figure 2: portion of Figure 1 Opencut Application 2020

Proposed mining depth is 10-16[2] feet below the ground surface for the gravel pit with an estimated 800,000 cubic yards of mine material to be excavated and removed from the entire permit area. Reclamation date listed is for December 2040 with the area reclaimed as one large wetland/pond area.

See attached MDP 18-01 Staff Report for sections D.- G.

H. Evaluation of Request: (only changes listed, please see past report for other items)

1.b. Access
Second road (existing) is now shown as alternative access to the site. The primary site access will remain the road on the west side of the property.

Per phone call, MDT (Joe Walsh 3/12/2020) had no concerns with the two existing roads off Crackerville used as access to the gravel site.

1.c. Environmental Constraints
Smelter Hill NPL has had remediation. Phase 1 of JAN DENG KUI- complete for areas outside of the active mining area. Remediation status email attached.

No comment was received from the local Fish, Wildlife, and Parks office by 03/18/2020.

COMMENTS FROM NEARBY PROPERTY OWNERS

Phone call received 03/12/2020 from Doug Butori of Spangler Ranch:
Mr. Butori stated that he had no specific problem with expansion but wanted to ensure that this operation is held to same standards as other pits in the area. Mr. Butori also noted concerns about the Hollow Construction pit and its appearance (very little reclamation done, steep slopes on the sides, and water within the pit.)

[2] MDP application, page 2; listed as 10-12 feet on MDP 18-01

SUMMARY OF FINDINGS

a. The proposed expansion is within compliance with the Growth Policy
b. The site is suitable in terms of size, location, access and environmental constraints
c. Superfund and reclamation are addressed
d. Impacts to air and water quality, forest resources, wildlife and other natural resources are minimized or mitigated
e. Potentially adverse impacts to the surrounding neighborhood such as noise, vibration, dust, smoke, glare and odors are avoided or effectively mitigated
f. Vehicular circulation and access are adequate
g. Public services and facilities are adequate; expansion not to increase demand on local services

PROPOSED CONDITIONS OF APPROVAL

1. Dust control for access roads
2. Update/amend weed control plan for noxious weeds with ADLC Weed Program, as required
3. Update project property addresses
4. If cultural materials be inadvertently discovered during project, SHPO and ADLC Planning Department to be contacted and site investigated.

Attachments:

(1) MDP 18-01 Staff Report
(2) Cadastral Property Record Cards
(3) Email to departments dated 03/11/2020
(4) Superfund email response dated 03/13/2020
(5) MDP APPLICATION
(6) DEQ OPENCUT PERMIT APPLICATION

Anaconda-Deer Lodge County Planning Board

Additions to Meeting Packet dated 05/09/2018

Meeting Date: Monday, June 11th, 2018 @ 6 p.m.

ADLC Courthouse Courtroom

Butana Sand and Gravel

1. **Please replace Pages 131 thru 134 of original meeting packet with these documents**

ANACONDA-DEER LODGE COUNTY PLANNING DEPARTMENT
STAFF REPORT
MAJOR DEVELOPMENT PERMIT - 18-01
BUTANA SAND AND GRAVEL
May 25, 2018

A report to the Anaconda-Deer Lodge County (ADLC) Planning Board regarding a request by Butana Sand & Gravel for a Major Development Permit (MDP) to Amend the current Opencut Mining Permit #1920 to: Change Reclamation Date, Change Postmining Land Use, Change Mining Depth, Add Acreage and Change Landowner(s) – From: Deng Kui Jan (Operator Name: Riverside Contracting, Inc.) – To: Butana Sand & Gravel (John Jeffery, Owner). The proposed site is located within the East Valley Development District (EVDD). This report is submitted in preparation for a public hearing and review before the Planning board, which is scheduled for June 11, 2018 beginning at 6:00 P.M., in the 3rd floor Court Room of the Courthouse at 800 Main St, Anaconda, MT 59711.

BACKGROUND INFORMATION

A. Applicant:

Butana Sand & Gravel
P.O. Box 269
Belgrade, MT 59714

B. Size and Location:

The lot size is 10 acres (435,600 s.f.) and is legally described as: A Tract of land situated in the SE1/4 of Section 26, Township 4N, Range 10W. Located North of the Crackerville Road and Highway 441 intersection.

C. Nature of Request:

The Developer is proposing to Amend Opencut Mining Permit #1920, to extend the operation onto adjoining property owned by Butana Sand & Gravel, along with changing the reclamation date, postmining land use, mining depth and landowner(s). Mining operations will start on the North side and progress across the site over time from North to South. The Amendment application is being submitted concurrently with an assignment application. The assignment application seeks to assign the permit to Butana Sand & Gravel (landowner). Butana also has future plans to combine this permit with Permit #1114. This will enable the entire site to be reclaimed as one large wetland area.

An application has been made to the Department of Environmental Quality, including dust mitigation and a reclamation plan. Reclamation is expected to take place when the operation ceases around 2030.

D. Existing Land Use and Zoning:

The existing land use and zoning for the potential addition of acreage is currently - Improved Property-Rural (a.k.a. Residential Rural). The proposed site is located within the East Valley Development District (EVDD) and requires a Major Development Permit for this project under Special Uses.

E. Surrounding Land Uses:

Surrounding property and uses are Existing Opencut Mine, Vacant/Farm Land & Residential.

North: Existing Opencut Mine

East: Existing Opencut Mine

South: Vacant Land & Residential

West: Vacant/Farm Land & Residential

F. Growth Policy Designation:

This site lies within the East Valley Planning area of the Anaconda Growth Policy on Page 4-37. Suggested "strategies and actions" in this part of the Growth Policy include: Any highway commercial services should be related to existing commercial/industrial activities such as agriculture and gravel extraction.

G. Utilities/Services:

Sewer service:	Septic
Water service:	Well
Solid Waste:	Anaconda Disposal
Electric:	Northwestern Energy
Gas:	Propane
Phone:	CenturyLink
Police:	Anaconda Deer-Lodge County Police Department
Fire:	Opportunity Volunteer Fire Department

H. Evaluation of the Request:

1. Site Suitability:

a. Adequate Useable Space: The site plan indicates adequate useable space for the gravel pit extension.

b. Adequate Access: Access to the site will continue to be taken from an established driveway approach off Crackerville Road.

c. Environmental Constraints: This property is located within the Superfund Overlay and is slated for remediation in the near future. Remediation efforts will likely involve soil sampling after the topsoil and overburden have been stripped and stockpiled. Sampling results will dictate the required remediation effort. Groundwater levels will continue to be monitored so that the final reclamation plan (wetlands) will be adjusted accordingly to accommodate for the groundwater conditions.

At the time of this report, we have not received comment from Fish Wildlife and Parks.

2. Appropriate Design:

a. Parking Scheme: The proposed site plan indicates adequate parking.

b. Off-street Loading Areas: No off-street loading is being requested in this application.

c. Traffic Circulation: The applicant is not requesting any improvements to the site that would trigger a need to reassess site circulation. Staff believes that the existing site access and circulation is sufficient.

d. Pedestrian Safety: The site operator shall provide traffic control signage to alert the public of heavy equipment or trucks entering or leaving the site. Such signage shall conform to Montana Department of Transportation standards.

e. Open Space: No open space is required for a project of this nature.

f. Fencing and Screening: No fencing or screening is being requested with this application.

g. Landscaping & Buffering: As shown on the site plan, Top Soil will be stockpiled along the boundaries of the pit area. This will act as a temporary buffer until the site is reclaimed.

h. Signage: No specific signs are proposed in the MDP application. Any future signage must be reviewed under the current Anaconda-Deer Lodge County Sign Ordinance prior to the issuance of a sign permit.

i. Lighting: Outdoor lighting may be a necessity for a project of this nature, but no specific lighting plans are discussed in the application. All proposed lighting must be shielded and directed downward to mitigate potential off-site impacts.

j. Hours of Operation: Permitted hours and activities are as follows: Mon-Fri 6AM-10PM, all activities, Sat 6AM-10PM, all activities. Saturday operations will only be periodic. For most weeks, activities will only occur Monday-Friday. Most common hours of operation will be 7AM-5PM, but some projects may require 6AM-10PM operations.

3. Availability of Public Services/Facilities:

Water:
Sewer:
Storm Water Drainage:
Schools:
Parks and Recreation:
Fire Protection:
Police Protection:
Streets:
Medical Services:
Ambulance:

The staff did not find that this project require any additional public services beyond what is already available and should not create any new or significant impacts on the public services listed above.

4. Immediate Neighborhood Impact:

a. Excessive traffic generation: The proposed facility is not anticipated to generate traffic beyond the existing road capacity.

b. Noise or Vibration: This potential impact is the case with all gravel extraction and processing operations. Hours of operation are anticipated to occur during daylight hours. Method being used to mitigate impacts of the processing equipment from the neighboring properties will be top-soil

berms along the boundaries. Equipment currently used onsite: Portable Asphalt Plant, Crusher, Screen & Grizzly.

c. Dust, glare, or heat: The application states that water will be used to mitigate dust. The operation shall not direct excessive light, glare or heat beyond its permitted boundary.

d. Smoke, fumes, gas, or odors: There is potential impacts to neighbors or surrounding property with this type of operation. Impacts will be effectively mitigated according to the DEQ reclamation strategy.

e. Inappropriate hours of operation: The developer has indicted that the facility will generally operate Monday - Friday from 7AM-5PM.

COMMENTS FROM NEARBY PROPERTY OWNERS

Notices of public hearing were mailed to property owners within 150 feet, exclusive of rights-of-way, of the subject property approximately 15-days prior to the scheduled public hearing. A few comments have been received by neighboring owners concerned about the air quality around residential units in the area.

SUMMARY OF FINDINGS

With the imposition of conditions, staff makes the following findings:

a. The proposed Development or use is within compliance with the County's Plan.
b. The proposed Development or use meets with the purpose and intent of the Development District in which it is located.
c. The site is suitable for the proposed Development or use in terms of size, location, access and environmental constraints such as floodplain or steep slopes.
d. The proposed Development, if located within the Superfund Overlay, has or will receive Response Actions in accordance with Superfund if required.
e. The proposed Development or use is consistent with the Scale, Character and prevailing design of the surrounding neighborhood.
f. Impacts to air and water quality, forest resources, wildlife and other natural resources are minimized or mitigated.
g. Potentially adverse impacts to the surrounding neighborhood such as noise, vibration, dust, smoke, glare and odors are avoided or effectively mitigated.
h. Pedestrian and vehicular circulation and access are adequate and safe for the proposed use and that traffic impacts associated with the proposed Development will not be detrimental to the surrounding neighborhood or the community at large.
i. All necessary public services and facilities are adequate for the proposed Development and that the Development will not place an inordinate demand on local services and facilities. Local services include, but are not necessarily limited to water, sewer, storm drainage, schools, parks and recreation, fire protection, law enforcement, EMS and local medical services.
j. All screening, buffering, Landscaping, parking, loading, lighting and other ordinance requirements are met.

PROPOSED CONDITIONS OF APPROVAL

1.

STAFF RECOMMENDATION

Staff recommends that the Planning Board adopt this report as findings of fact and recommend to the Board of County Commissioners that the proposed MDP be approved subject to the above conditions.

Anaconda-Deer Lodge County Planning Board

Additions to Meeting Packet dated 05/09/2018

Meeting Date: Monday, June 11th, 2018 @ 6 p.m.

ADLC Courthouse Courtroom

Butana Sand and Gravel

1. **Please attach after page 228 of original meeting packet with these documents**

Charles Ariss

From: Skrukrud, Dori <dskrukrud@bsb.mt.gov>
Sent: Friday, May 11, 2018 11:01 AM
To: Joel Gerhart (jgerhart@pioneer-technical.com); Colette LeMieux; Charles Ariss
Cc: Brian Holland (Brian Holland)
Subject: Jeffrey/Leipheimer Potential Easement Requirement of Gravel Pit Permit
Attachments: Atomic Lode Easement DEQ-GSD.pdf

Joel and Collette,

Pursuant to discussion at the Board meeting regarding ADL requiring an easement on the remediated/restored floodplain portion of the Jeffrey/Leipheimer property as part of the DPS, I would like to provide Chas a "map" of the subject area.

That being, could the original GT swap map be revised to highlight just the "SSTOU" area – namely the floodplain...that approx. 125 acres on the east side of the property.

Attached if the the DEQ easement for the Atomic Lode. By the way, Chaz, this was one of the parcels ARCO conveyed to the State as part of the Settlement Agreement. It seems to be a good example – It has all the bells and whistle regarding management and maintenance...probably could be trimmed down. I have included Brian into this conversation, also, regarding the easement language. I will look for the WORD version.

Thanks, everyone, for all your work.

Dori

Dori Skrukrud, Community Development Coordinator
The City-County of Butte-Silver Bow
Community Development
155 W. Granite Street, Room 115
Butte, MT 59701
Telephone : 406.497.6469
Cell : 406.498.7671
dskrukrud@bsb.mt.gov

Roll 269 Card 26

SILVER BOW CREEK GREENWAY
EASEMENT AGREEMENT – ATOMIC LODE

This Silver Bow Creek Greenway Easement Agreement – Atomic Lode ("Easement Agreement") is made and entered into this 30th day of December, 2004, by the Montana Department of Environmental Quality, ("Grantor"), whose address is P.O. Box 200901, Helena, Montana 59620, and the Greenway Service District, a Montana multi-jurisdictional service district created pursuant to Section 7-11-1101, *et seq.*, Montana Code Annotated ("Grantee"), whose address for purposes of this Easement Agreement is Office of Community Development, Room 111, Butte-Silver Bow Courthouse, 155 West Granite Street, Butte, Montana 59701.

RECITALS

A. Grantor is the owner of real property located near or adjacent to Silver Bow Creek in Silver Bow County, Montana, which property was conveyed to Grantor by ARCO Environmental Remediation, L.L.C. by quitclaim deed dated October 15, 2001 (recording reference – Roll 225, Card 169). Such property is referred to herein as "Grantor's Property," and its legal description is as follows:

In Section 22, Township 3 North, Range 8 West, P.M.M.
All of Government Lots Numbered 5, 6, 14 and 15
Also referenced as Atomic Lode (unpatented mining claim)
Snow Storm Lode (unpatented mining claim)
Reference Deeds: Roll 89 Card 514 and Roll 90 Card 575

Tax Parcel ID No. 1693220

B. Grantee is a Montana multi-jurisdictional service district created by the City and County of Butte-Silver Bow and City-County of Anaconda-Deer Lodge pursuant to Section 7-11-1101, *et seq.*, Montana Code Annotated. Consistent with the November 1995 Record of Decision ("ROD") for the Streamside Tailings Operable Unit ("SSTOU") of the Butte Area/Silver Bow Creek National Priorities List Site, Grantee is developing the Silver Bow Creek Greenway, a passive recreational corridor, including a trail system and restored aquatic and riparian resources along Silver Bow Creek, which corridor will cross a portion of Grantor's Property. It is the purpose of this Easement Agreement to make the Easement Area (as defined below) available for the Silver Bow Creek Greenway, to benefit the public and be used for the public to enter upon and use the Easement Area for non-motorized passive recreation activities such as walking, jogging, bicycling, roller-blading, bird and nature-watching, horseback riding, and other similar recreational uses. Another purpose of this Easement Agreement and function of the Silver Bow Creek Greenway is to ensure that the institutional controls and other measures required for protection of the remedial action being conducted on the SSTOU pursuant to the ROD are appropriately maintained.

In consideration of the terms, covenants and conditions contained herein, it is agreed as follows:

AGREEMENT

1. Grant of Easement. Grantor hereby grants and conveys to Grantee an easement consisting of the area designated as such on the attached Exhibit A over and across a portion of Grantor's Property. As used herein, the term "Easement Area" refers to the property subject to such easement.

Consistent with the purposes of this Easement Agreement described above, the Easement Area may be used for the following purposes:

(a) Construction, operation, maintenance, repair and replacement of a trail (the "Trail," which as currently approved by Grantor is depicted on Exhibit A) as a part of the trail system to be operated by the Grantee along Silver Bow Creek;

(b) Construction, maintenance, repair and replacement of benches, signage, markers, fences, and other improvements associated with the Trail;

(c) Upon completion of the Trail, pedestrian and bicycle travel, and horseback riding; however, specifically prohibiting motorized vehicle use except as provided herein;

(d) Maintenance of vegetation and other improvements funded through the Grantee; and

(e) Other purposes reasonably necessary or incident to the foregoing purposes.

A fundamental purpose and intent of this Easement Agreement is to ensure that the use of the Easement Area by the Grantee and the public fully protects the remedial, response, and restoration actions undertaken at the SSTOU. Management of the Easement Area by Grantee shall limit use of the property to those activities that can be conducted without adversely affecting the remediated or restored area.

2. Reserved Rights of Grantor. Grantor reserves all right, title, and interest in and to Grantor's Property except as expressly provided herein. Grantor and its agents, employees, representatives, contractors and designees, shall have full right and authority to enter upon, access, and use the Easement Area for the purpose of conducting (i) any investigation, monitoring or sampling activities with respect to Grantor's Property, (ii) any remedial, response, or restoration action that Grantor or the United States Environmental Protection Agency deems necessary or advisable to address environmental conditions of Grantor's Property, and (iii) any other actions that may be reasonably necessary or advisable to address conditions on or related to Grantor's Property and/or to implement, operate or maintain any remedial, response, restoration actions undertaken on or with respect to Grantor's Property or the SSTOU; (iv) any other use of Grantor's Property that does not prevent Grantee's use as provided for in this Easement Agreement.

3. Construction, Operation and Maintenance of Easement Area. As between Grantor and Grantee, Grantee shall bear all costs and liabilities of any kind related to the construction, ownership, use, operation, repair, and maintenance of the Trail, the associated improvements, and all permitted services including, without limitation, trash collection and removal; provided, however, that Grantor and Grantee may enter into a separate agreement(s) addressing the operation and maintenance activities for the SSTOU remedy, including an agreement(s) for the funding of such activities. Grantee shall keep Grantor's Property free of any liens arising out of any work performed for, materials furnished to, or obligations incurred by Grantee. Grantee shall take reasonable measures to ensure that the Trail shall be used, operated and maintained in accordance with applicable laws, and that the use of the Easement Area by Grantee and the public under this Easement Agreement does not adversely affect or interfere with the maintenance of remediated or restored areas. Grantee shall prohibit all motorized vehicles in the Easement Area except for (a) construction, operation and maintenance vehicles owned or operated by Grantee, its contractors or designees, (b) vehicles owned or operated by Grantor, its contractors or designees pursuant to Grantor's reserved rights under Section 2 above, (c) emergency response vehicles, or (d) motorized wheelchairs or comparable equipment used by persons with disabilities. Until Grantor notifies Grantee in writing that the vegetation performance standards have been met in a particular area within the SSTOU (in no event less than five years from the planting of the vegetation), Grantee will limit public access within that area to the Trail, and Grantee will take reasonable measures, including, without limitation, posting signs, to limit such access. Once Grantor has verified that vegetation performance standards have been met in an area, Grantee may allow use of the Easement Area for picnicking, fishing, and recreation in that area in a manner that does not substantially affect the integrity of the vegetative cover or the bed and banks of the stream. Grantee shall maintain general liability and property damage insurance reasonably satisfactory to Grantor providing coverage for Grantee's responsibilities, liabilities and obligations under this Easement Agreement; to the extent feasible, Grantor shall be named as an additional insured under such insurance policy(ies).

4. Default. If Grantee fails to maintain or repair the Trail as provided in this Easement Agreement, or fails to abide by any other terms of this Easement Agreement, Grantor may give written notice to Grantee specifying the purported default. Grantee shall have thirty (30) days to cure the specified default. If Grantee fails to cure the default within the time required, Grantor may correct the deficiency and recover its reasonable costs for that maintenance or repair from Grantee. If, after Grantee has been given such notice but has failed to cure the purported default, Grantor determines, in its discretion, that any such uncured default by Grantee, including a default involving use by the public, threatens or impairs the SSTOU remedy or Grantor's ability to maintain any remediated or restored area or is otherwise incompatible with the nature of this Easement Agreement, Grantor may terminate this Easement Agreement, at Grantor's election, by filing a "Notice of Termination" with the Butte-Silver Bow County Clerk and Recorder referencing this Easement Agreement.

5. Indemnity by Grantee. Grantee assumes the risk of injury to persons and damage to property arising out of Grantee's operations under this Easement Agreement, and shall hold harmless, indemnify and defend Grantor and its employees, agents and contractors from against all liabilities, penalties, costs, losses, damages, expenses (including reasonable attorneys' fees

and court costs incurred enforcing this indemnity obligation or defending a third party claim) causes of action, claims, demands, or judgments ("Liabilities"), arising from Grantee's use of the Easement Area or use by the public of the Easement Area, except to the extent any such Liabilities are caused or contributed to by the negligence, willful misconduct, or breach of other legal duty by Grantor or its agents, employees or contractors.

6. Recordation. Grantee shall record this instrument or an abstract of it in a timely fashion in the official records of Silver Bow County, Montana, and may re-record it at any time as may be required to preserve its rights in this Easement Agreement.

7. Controlling Law. The interpretation and performance of this Easement Agreement is governed by the laws of the State of Montana.

8. No Warranty. Grantee further acknowledges and agrees that, to the maximum extent permitted by law, the conveyance of the Easement Agreement as provided herein is "with all faults" and without warranty of any kind, express or implied.

9. Notices. Any notice, request, or demand provided for in this Easement Agreement shall be confirmed in writing, unless otherwise noted, and shall be made as specified below: a notice sent by facsimile transmission shall be deemed received by the close of the business day on which such notice was transmitted or such earlier time as confirmed by the receiving party and notice by overnight mail or courier shall be deemed to have been received two (2) business days after it was sent or such earlier time as is confirmed by the receiving party.

Grantor:

SSTOU Project Officer
Remediation Division
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Grantee:

Greenway Service District
Office of Community Development
Room 111
Butte-Silver Bow Courthouse
155 W. Granite Street
Butte, MT 59701

10. Successors. This Easement Agreement shall be binding upon, and inure to the benefit of, the parties, their successors and assigns, and shall continue as a servitude running in perpetuity with Grantor's Property; provided, however, that this provision does not affect Grantor's right to terminate this Easement Agreement pursuant to paragraph 4 above.

11. Amendment. This Easement Agreement may only be amended by a written instrument signed by both parties and recorded in the official records of Silver Bow County, Montana; provided, however, that this provision does not affect Grantor's right to terminate this Easement Agreement pursuant to paragraph 4 above.

12. Entire Agreement. This instrument sets forth the entire agreement of the parties with respect to the Easement Agreement and supersedes all prior discussions, negotiations,

understandings, or agreements relating to the Easement Agreement, all of which are merged into this Easement Agreement.

IN WITNESS WHEREOF, Grantor and Grantee have set their hands on the day and year first above written.

GRANTOR:

DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ)

By: _____
Jan P. Sensibaugh, Director

DEQ Legal Review by: _____ Date: 12-30-04

GRANTEE:

GREENWAY SERVICE DISTRICT

By: _____
James M. Manning, Chairman

STATE OF MONTANA)
) ss.
COUNTY OF LEWIS AND CLARK)

The foregoing instrument was acknowledged before me this 30th day of December, 2004 by Jan P. Sensibaugh, Director of DEQ, for and on behalf of DEQ.

_____
[Signature of Notary]
Elois M. Johnson
[Printed Name of Notary]

ELOIS M. JOHNSON NOTARIAL SEAL STATE OF MONTANA

Notary Public for the State of Montana
Residing at Helena, Montana
[City of Residence]
My commission expires: November 26 2005
[Month Day Year]

26

STATE OF MONTANA)
) ss.
COUNTY OF SILVER BOW)

The foregoing instrument was acknowledged before me the 4th day of January, 2005 by James M. Manning, as Chairman of the Greenway Service District, for and on behalf of the Greenway Service District.

Sherri Kennedy
[Signature of Notary]
Sherri Kennedy
[Printed Name of Notary]

Notary Public for the State of Montana
Residing at Butte
[City of Residence]
My commission expires: Dec. 20, 2006
[Month Day Year]

SHERRI KENNEDY NOTARIAL SEAL STATE OF MONTANA

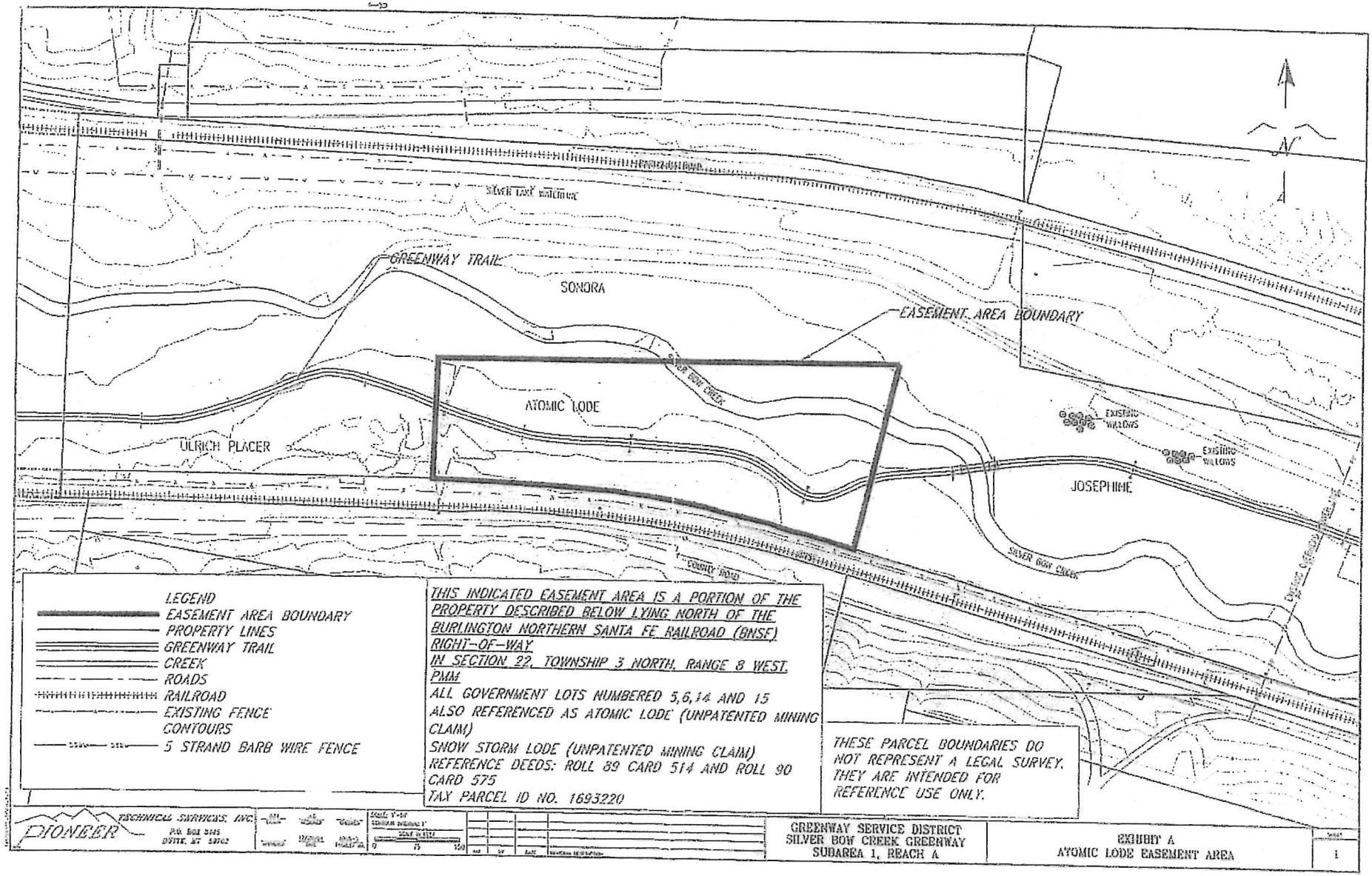
591089

STATE OF MONTANA } ss
COUNTY OF SILVER BOW }

I hereby certify that the within instrument was filed for record in my office on the 4th day of January A.D. 2005 at 51 min. past 12 o'clock P M and recorded on Card 26 on Roll 269 of microfilm records of Silver Bow County, Montana. Attest my hand and seal of said County.

Mary M. McHaffie
Clerk & Recorder
by Pam Walsh Deputy
Fee: N/C

Penn Fee


GREENWAY TRAIL
SONORA
EASEMENT AREA BOUNDARY
SILVER BOW CREEK
ATOMIC LODE
ULRICH PLACER
EXISTING WILLOWS
EXISTING WILLOWS
JOSEPHINE
SILVER BOW CREEK
COUNTY ROAD
N
LEGEND
EASEMENT AREA BOUNDARY
PROPERTY LINES
GREENWAY TRAIL
CREEK
ROADS
RAILROAD
EXISTING FENCE
CONTOURS
5 STRAND BARB WIRE FENCE
THIS INDICATED EASEMENT AREA IS A PORTION OF THE PROPERTY DESCRIBED BELOW LYING NORTH OF THE BURLINGTON NORTHERN SANTA FE RAILROAD (BNSE) RIGHT-OF-WAY
IN SECTION 22, TOWNSHIP 3 NORTH, RANGE 8 WEST, PMM
ALL GOVERNMENT LOTS NUMBERED 5,6,14 AND 15
ALSO REFERENCED AS ATOMIC LODE (UNPATENTED MINING CLAIM)
SNOW STORM LODE (UNPATENTED MINING CLAIM)
REFERENCE DEEDS: ROLL 89 CARD 514 AND ROLL 90 CARD 575
TAX PARCEL ID NO. 1693220
THESE PARCEL BOUNDARIES DO NOT REPRESENT A LEGAL SURVEY. THEY ARE INTENDED FOR REFERENCE USE ONLY.
PIONEER TECHNICAL SERVICES, INC.
GREENWAY SERVICE DISTRICT
SILVER BOW CREEK GREENWAY
SUBAREA 1, REACH A
EXHIBIT A
ATOMIC LODE EASEMENT AREA
1

STATE OF MONTANA
DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Number: 76G 12882-00 STATEMENT OF CLAIM
Version: 2 -- CHANGE AUTHORIZATION
Version Status: ACTIVE

THIS AUTHORIZATION IS LIMITED TO THE AMOUNT OF THE HISTORIC USE RECOGNIZED BY THE DEPARTMENT IN THIS PROCEEDING AS SUBJECT TO CHANGE, AND WILL THEREAFTER NOT EXCEED THAT AMOUNT. IF THE HISTORIC USE IS REDUCED UNDER ADJUDICATION PROCEEDINGS PURSUANT TO TITLE 85, CHAPTER 2, PART 2, MCA, THIS AUTHORIZATION WILL BE LIMITED TO A LESSER AMOUNT.

Owners: SPANGLER RANCH LLC
% DOUG BUTORI
PO BOX 110
RAMSAY, MT 59748-0110

Priority Date: JUNE 22, 1955

Enforceable Priority Date: JUNE 22, 1955

Purpose (use): IRRIGATION

Irrigation Type: SPRINKLER/FLOOD

Maximum Flow Rate: 10.00 CFS

Historical Flow Rate: 10.00 CFS

Maximum Volume: 1,877.80 AC-FT

Climatic Area: 5 - LOW

Historical Diverted Volume: 1,877.80 AC-FT

Historical Consumptive Volume: 144.43 AC-FT

Maximum Acres: 456.00

Source Name: GERMAN GULCH

Source Type: SURFACE WATER

Source Name: GROUNDWATER

Source Type: GROUNDWATER

Point of Diversion and Means of Diversion:

ID	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1		SESESW	12	3N	10W	SILVER BOW

Period of Diversion: APRIL 15 TO OCTOBER 19
Source Name: GERMAN GULCH
Diversion Means: HEADGATE

ID	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
2		NWNWSE	25	4N	10W	DEER LODGE

Period of Diversion: APRIL 15 TO OCTOBER 19
Source Name: GROUNDWATER
Diversion Means: WELL
Well Depth: 296.00 FEET
Static Water Level: 52.00 FEET
Casing Diameter: 6.00 INCHES

ID	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
3		NWNWSE	25	4N	10W	DEER LODGE

Period of Diversion: APRIL 15 TO OCTOBER 19
Source Name: GROUNDWATER
Diversion Means: WELL
Well Depth: 265.00 FEET
Static Water Level: 57.00 FEET
Casing Diameter: 8.00 INCHES

Period of Use: APRIL 15 to OCTOBER 19

Place of Use:

ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1	112.00		SWSW	30	4N	9W	SILVER BOW
2	84.00		W2	31	4N	9W	SILVER BOW
3	80.00		E2SE	25	4N	10W	DEER LODGE
4	180.00		E2	36	4N	10W	DEER LODGE
Total:	456.00						

Geocodes/Valid: 01-1288-30-2-01-01-0000 - Y
01-1288-31-1-01-10-0000 - Y
30-1286-25-1-03-01-0000 - Y
30-1286-36-1-02-11-0000 - Y
30-1286-36-4-01-01-0000 - Y

Remarks:

THE WATER RIGHTS FOLLOWING THIS STATEMENT ARE SUPPLEMENTAL WHICH MEANS THE RIGHTS HAVE OVERLAPPING PLACES OF USE. THE RIGHTS CAN BE COMBINED TO IRRIGATE ONLY OVERLAPPING PARCELS. EACH RIGHT IS LIMITED TO THE FLOW RATE AND PLACE OF USE OF THAT INDIVIDUAL RIGHT. THE SUM TOTAL VOLUME OF THESE WATER RIGHTS SHALL NOT EXCEED THE AMOUNT PUT TO HISTORICAL AND BENEFICIAL USE.

12882-00 12883-00 91849-00 91850-00 91851-00 91852-00 91853-00
91854-00 91855-00

STARTING IN 2008, PERIOD OF DIVERSION WAS ADDED TO MOST CLAIM ABSTRACTS, INCLUDING THIS ONE.

MAXIMUM CUMULATIVE APPROPRIATION FOR IRRIGATION - THE APPLICANT SHALL AT NO TIME DIVERT MORE THAN THE FOLLOWING FLOW RATES AND VOLUMES AT THE GIVEN POINTS OF DIVERSION:
1. 9.0 CFS AND 3297 AF OF GERMAN GULCH FOR IRRIGATION USE AT THE SPANGLER DIVERSION, LOCATED IN THE SESESW SEC 12, T3N, R10W, SILVER BOW COUNTY;
2. 1.2 CFS AND 214 AF OF GROUNDWATER FOR IRRIGATION USE AT THE WELLS LOCATED IN THE NWNWSE SEC 25, T4N, R10W, DEER LODGE COUNTY.
THE MAXIMUM CUMULATIVE FLOW RATE DIVERTED FROM ALL POINTS OF DIVERSION SHALL NOT EXCEED THE INSTANTANEOUS FLOW RATE PHYSICALLY AVAILABLE IN GERMAN GULCH AT THE HISTORIC POINT OF DIVERSION.

DIVERSIONARY BYPASS CONDITION - THE NET RESULT OF THIS CONDITION IS TO REQUIRE A MINIMUM FLOW RATE OF 1.5 CFS BYPASSING THE GERMAN GULCH DIVERSION WHENEVER THE NEW GROUNDWATER POINTS OF DIVERSION ARE IN OPERATION.

RECLAMATION AND USE OF PORTIONS OF HISTORIC PLACE OF USE - THE PLACE OF USE AUTHORIZED FOR THE PURPOSE OF IRRIGATION IS 456 ACRES LOCATED IN SECTIONS 30 AND 31, T4N, R9W, SILVER BOW COUNTY AND SECTIONS 25 AND 36, T4N, R10W, DEER LODGE COUNTY. FUTURE RECLAMATION AND USE OF CONTAMINATED ACREAGE IN THE HISTORIC PLACE OF USE, OUTSIDE OF THE AFORE-MENTIONED PLACE OF USE AUTHORIZED BY THIS CHANGE, WILL RESULT IN THE IMMEDIATE REVOCATION OF THIS CHANGE AUTHORIZATION.

NOTICE OF WATER RIGHT TRANSFER RECEIVED 01/30/89.

NOTICE OF WATER RIGHT TRANSFER RECEIVED 12/02/87.

THE APPLICANT SHALL NOT CUMULATIVELY APPROPRIATE MORE WATER FROM SURFACE AND GROUNDWATER SOURCES FOR IRRIGATION THAN IS PHYSICALLY AVAILABLE IN GERMAN GULCH IMMEDIATELY ABOVE THE SPANGLER POINT OF DIVERSION. TROUT UNLIMITED OR ITS DESIGNEE SHALL TAKE FLOW MEASUREMENTS USING A DEPARTMENT APPROVED MEASURING DEVICE AT THE FOLLOWING LOCATIONS:
1. THE SPANGLER DITCH IMMEDIATELY BELOW THE SPANGLER DITCH DIVERSION WORKS, LOCATED IN THE SESESW SEC 12, T3N, R10W, SILVER BOW COUNTY;
2. GERMAN GULCH IMMEDIATELY BELOW THE SPANGLER DITCH DIVERSION WORKS, LOCATED IN THE SESESW SEC 12, T3N, R10W, SILVER BOW COUNTY;
3. THE GROUNDWATER DIVERSIONS BY INSTALLING A FLOW METER BETWEEN THE GROUNDWATER DIVERSIONS AND THE IRRIGATION PLACE OF USE, LOCATED IN THE NWNWSE SEC 25, T4N, R10W, DEER LODGE COUNTY.
MONTHLY MEASUREMENTS WILL BE TAKEN FROM APRIL 1 TO JULY 31. MEASUREMENTS WILL BE TAKEN SEMIMONTHLY (TWICE A MONTH) FROM AUGUST 1 TO OCTOBER 19. ALL MEASUREMENTS WILL BE REPORTED TO THE DNRC HELENA REGIONAL OFFICE ON AN ANNUAL BASIS. MEASUREMENTS BEGINNING ON APRIL 1 AND LASTING UNTIL OCTOBER 19 EACH YEAR CORRESPOND TO THE DATES OF THE PERIOD OF DIVERSION AND USE.

Water Right Number:
76G 12882 00NULL

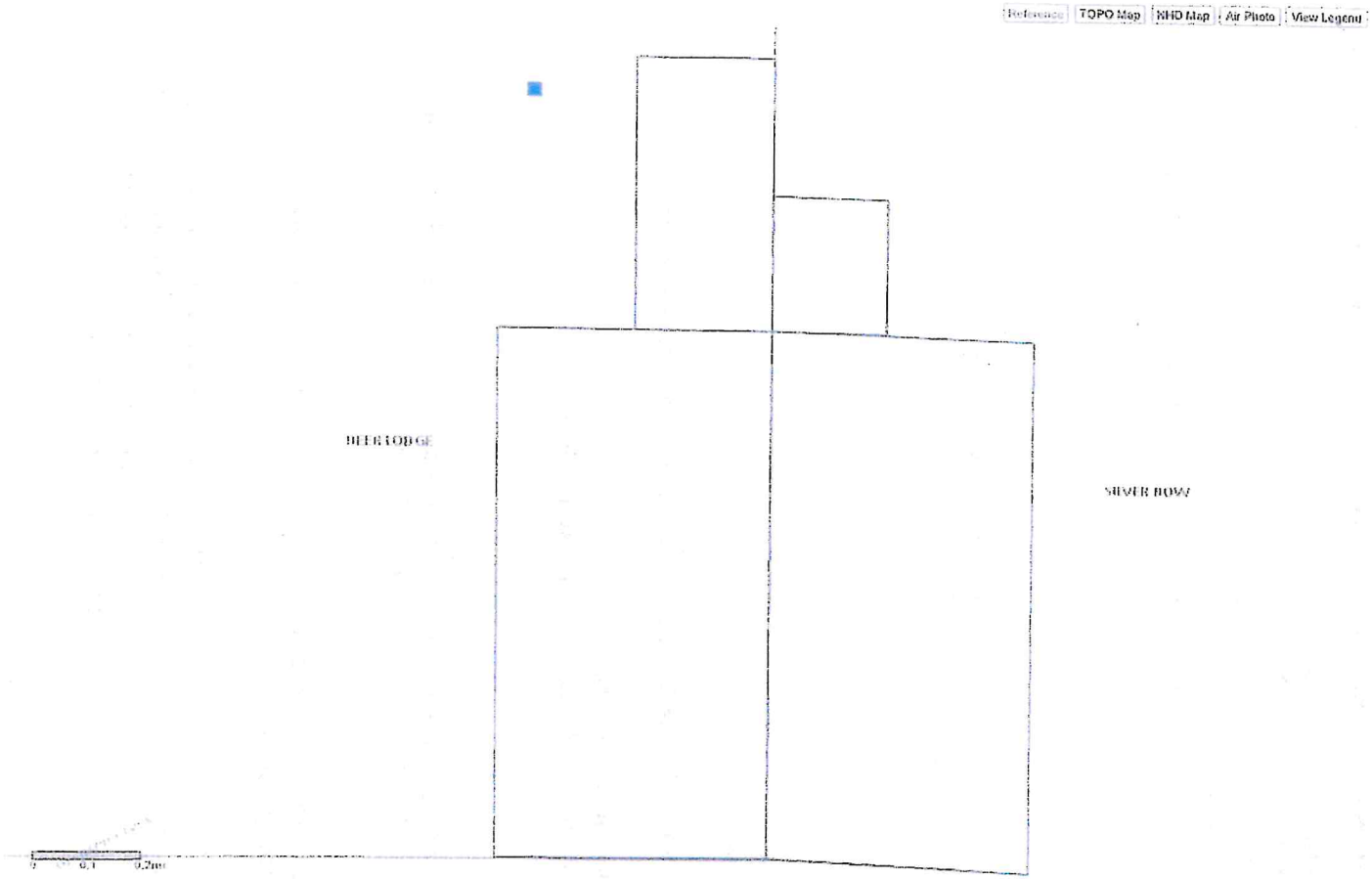
Print Map

Legend

- Diversion Count:
  - Surface water diversion.
  - Ground water diversion.
- Adjacent Diversions
  - Surface water diversion.
  - Ground water diversion.
- Place of Use Legal Land Descriptions
- Adjacent POUs
- Cadastral
- PLSS Detail

Note:
Contact DNRC if you have any questions or if the mapped information appears incorrect.

The points of diversion (PODs) and places of use (POUs) are derived from water right legal land descriptions. PODs are placed at the center of their legal land description, not at their true geographic location. POUs are drawn as polygons of the entire legal land description.



Charles Ariss

From: Colette LeMieux <clemieux@pioneer-technical.com>
Sent: Monday, May 14, 2018 5:22 PM
To: Skrukrud, Dori; Joel Gerhart; Charles Ariss
Cc: Brian Holland (Brian Holland)
Subject: RE: Jeffrey/Leipheimer Potential Easement Requirement of Gravel Pit Permit

Hi Dori,

Here's a draft easement map to review for the Jeffrey/Leipheimer easement:
https://pioneertechnicalservices-my.sharepoint.com/:b:/g/personal/clemieux_pioneer-technical_com/ETCedyP4wb5Dg0FmL7XUwRYBS0uOFTQHIZVD5qShbdamaA?e=pcN6oM

Thanks
Colette

From: Skrukrud, Dori <dskrukrud@bsb.mt.gov>
Sent: Friday, May 11, 2018 11:01 AM
To: Joel Gerhart <jgerhart@pioneer-technical.com>; Colette LeMieux <clemieux@pioneer-technical.com>; Chas Ariss (cariss@adlc.us) <cariss@adlc.us>
Cc: Brian Holland (Brian Holland) <bholland@crowleylaw.com>
Subject: Jeffrey/Leipheimer Potential Easement Requirement of Gravel Pit Permit

Joel and Collette,

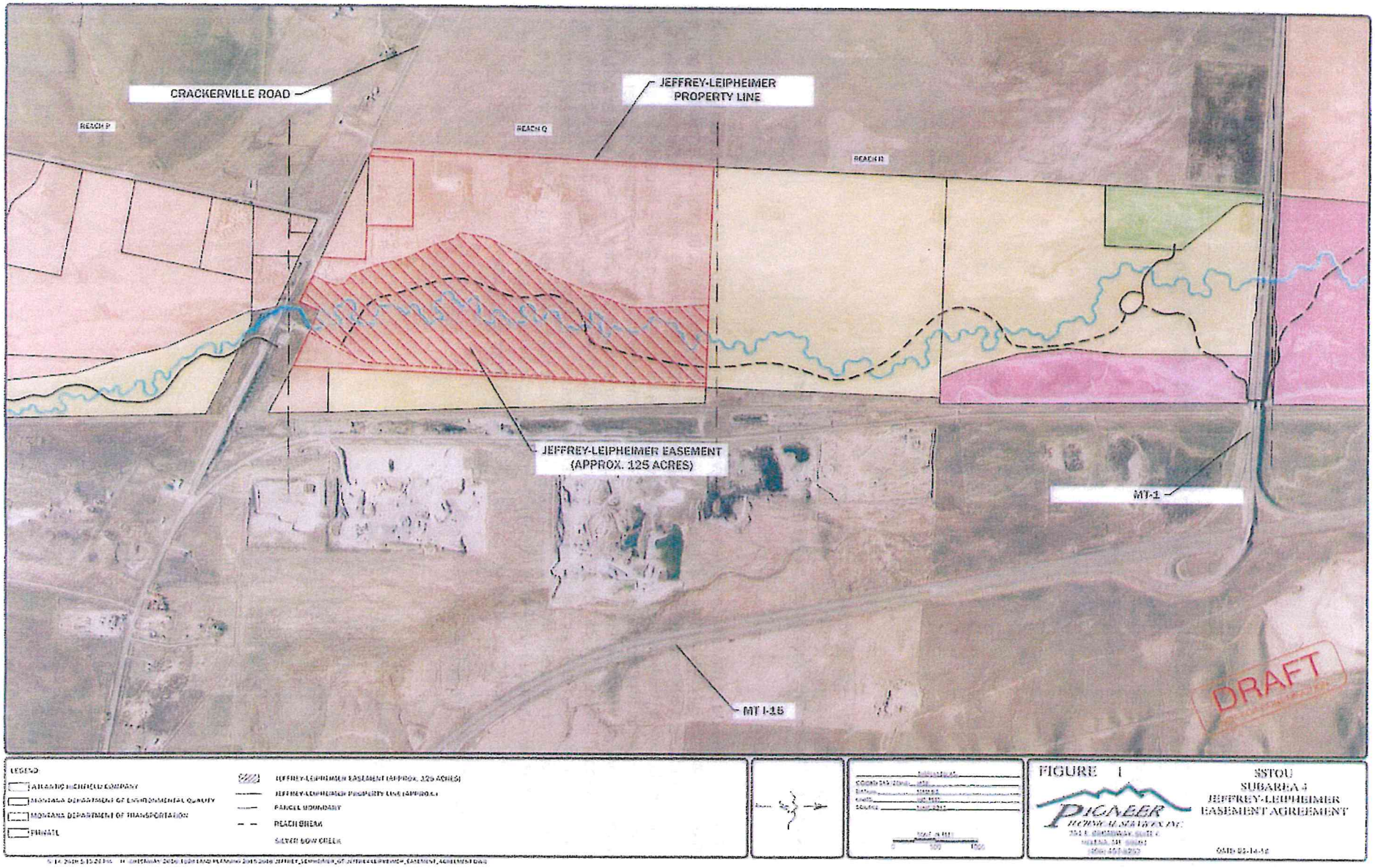
Pursuant to discussion at the Board meeting regarding ADL requiring an easement on the remediated/restored floodplain portion of the Jeffrey/Leipheimer property as part of the DPS, I would like to provide Chas a "map" of the subject area.

That being, could the original GT swap map be revised to highlight just the "SSTOU" area – namely the floodplain...that approx. 125 acres on the east side of the property.

Attached if the the DEQ easement for the Atomic Lode. By the way, Chaz, this was one of the parcels ARCO conveyed to the State as part of the Settlement Agreement. It seems to be a good example – It has all the bells and whistle regarding management and maintenance...probably could be trimmed down. I have included Brian into this conversation, also, regarding the easement language. I will look for the WORD version.

Thanks, everyone, for all your work.

Dori


CRACKERVILLE ROAD
JEFFREY-LEIPHEIMER PROPERTY LINE
REACH P
REACH Q
REACH R
JEFFREY-LEIPHEIMER EASEMENT (APPROX. 125 ACRES)
MT-1
MT I-15
DRAFT
LEGEND
ATLANTIC RICHFIELD COMPANY
MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTANA DEPARTMENT OF TRANSPORTATION
PRIVATE
JEFFREY-LEIPHEIMER EASEMENT (APPROX. 125 ACRES)
JEFFREY-LEIPHEIMER PROPERTY LINE (APPROX.)
PARCEL BOUNDARY
REACH BREAK
SILVER BOW CREEK
FIGURE 1
PIONEER
SSTOU
SUBAREA 4
JEFFREY-LEIPHEIMER
EASEMENT AGREEMENT

Gmail Troy Jenrich <troylojenny@gmail.com>

FW: Crackerville Road gravel and sand pit development

Cari <carijen74@gmail.com> Sun, Apr 29, 2018 at 11:01 AM
To: troylojenny <troylojenny@gmail.com>

Sent from Mail for Windows 10

From: Cari
Sent: Sunday, April 29, 2018 9:37 AM
To: chansen@adic.us
Subject: Crackerville Road gravel and sand pit development

This is in response to the certified letter we received on Saturday April 28th, 2018 . Our property is located at 3446 Crackerville Road within 150 feet of the proposed mine operation. Our home is a new build and we chose the location because of the beautiful mountain views and the tranquil peaceful feeling of heaven on earth. Right now it is a breath of fresh air. Can you assure us that the air quality will remain the same and can you assure us that the noise pollution won't drive us out of our home? One hundred fifty feet sounds to close for comfort. How can the EPA approve this operation so close to homes? There is a pit in the bottom of my stomach because of my concerns for the quality of life changes that will be made. My husband has COPD. Would we have bought and built on the property knowing a large sand and gravel development would be 150 feet from our property? Of course not. Our son lives on the property and takes care of our home for us. My husband and I plan to be at the meeting to learn more about what to expect. Thank you for the notice of the meeting on Monday, May 14th, 2018. God Bless everyone.

Bernhard and Caryle Jenrich, homeowners

Sent from Mail for Windows 10

Jenna Schafer

From: Nelsonfamily <nelsonfamily@pullman.com>
Sent: Friday, May 11, 2018 1:52 PM
To: Jenna Schafer
Subject: Re: Butana Sand & Gravel

Hello,

Thank you for the information. Please when considering the extension of the gravel pit take into concern the impact on the neighborhoods surrounding the gravel pit of potential additional dust, pollutants, noise and traffic by moving the operation closer to Highway 141.

Regards,

BJ Nelson

From: Jenna Schafer
Sent: Friday, May 11, 2018 8:51 AM
To: nelsonfamily@pullman.com
Subject: Butana Sand & Gravel

Good Morning,

They are proposing extending their gravel pit to the South for future extractions. The proposed lot is 10 acres in size and is located in the center of the map I'm sending you.

Please let me know if you have further questions and send me any comments you may have on this project.

Thank you for your time.

Jenna Schafer
Planner I
Anaconda Deer Lodge County
800 Main St
Anaconda, MT 59711
(406) 563-4012 Office
(406) 479-4710 Cell
(406) 563-4076 Fax
(406) 563-4010 Planning Dept. Main #
jschafer@adlc.us

Jenna Schafer

From: Charles Ariss
Sent: Monday, May 21, 2018 11:52 AM
To: Jenna Schafer; Carlye Hansen
Subject: FW: Planning Board Meeting

Jenna:

Feedback from the public on the cancelled Planning Board meeting.

Carlye:

Please be sure to include this information in the Planning Board packet for the next meeting.

Thanks, Chas

Chas Ariss, PE
Public Works & Planning Director – County Engineer (MT PEL-PE-LIC-53062)
Anaconda-Deer Lodge County
Courthouse – 800 Main Street
Anaconda, MT 59711
406.563.4015 Office - Direct
406.479.4941 Cell
406.563.4076 Fax
406.563.4010 Planning Department Main #
cariss@adlc.us

From: Carlye Hansen
Sent: Monday, May 21, 2018 10:06 AM
To: Charles Ariss <CAriss@adlc.us>; Aspholm, Audrey <agrumpyjon@bresnan.net>; Fitzpatrick, Frank <frankfitz@q.com>; Labbe, Vince <vincent.labbe@northwestern.com>; Lombardi, John <jplombar@earthlink.net>; Smith, Annette <sannettet@gmail.com>; Strommen, Dale <strommen72@msn.com>; Villasenor, Art <frenchyslocknkey@gmail.com>
Subject: FW: Planning Board Meeting

Just forwarding this as per the Jenrich's request.

Thank you!!!

Carlye Hansen
Secretary, Planning Department
Phone: (406) 563-4010
Fax: (406) 563-4076

From: Cari [mailto:carijen74@gmail.com]
Sent: Saturday, May 19, 2018 10:56 AM
To: Carlye Hansen <chansen@adlc.us>
Subject: RE: Planning Board Meeting

Carlye it was very disappointing for us to drive 250 miles to make the scheduled meeting for 6 P.M. on Monday May 14th and have it cancelled . We have questions and we wanted answers. We hope the council will take their job seriously and know that we as citizens do take their jobs seriously. They represent the county. The few questions we have pertain to air and noise quality. Our property line is 150 feet from the proposed sand and gravel pit property line. We want to suggest that the road entering the site will be located a distance away from the road into our property. We would like a buffer next to the Crackerville Road to minimize noise and air pollution. The gentlemen who represented the company asking for a permit for the sand and gravel pit were at the meeting and spoke to us in the hall after the council meeting was cancelled . It sounds like they want to be good stewards of the land. We are so close to this pit it's almost unbelievable and seems like it is in our backyard. We hope they will be good neighbors. Will you please share this information with all the council members?
Thank you,
Bernhard and Caryle Jenrich
3446 Crackerville Rd.
Anaconda, Mt. 59711

Sent from Mail for Windows 10

From: Carlye Hansen
Sent: Tuesday, May 15, 2018 11:31 AM
To: Troylojenny@gmail.com; tinyspirit2@gmail.com; staciepesanti@hotmail.com; sfrazee@waterenvtech.com; jefferycontracting@gmail.com; derickson@waterenvtech.com; rexleipheimer@hotmail.com; TonySmith.6622@gmail.com; carijen74@gmail.com; jsalle2@dowl.com; patrickreordan77@gmail.com
Subject: Planning Board Meeting

Good Morning....

First off, my deepest apologies for the very unorganized and unprepared meeting that took place last night. After looking into a few things today, by Open Meeting Laws, we now will need to renotice this meeting in which we will need to have at a minimum of two weeks. That would bring us to June 4th at the earliest meeting, but our Planner will be out of the office that particular day. As of now, we have rescheduled this meeting for Monday, June 11th, 2018, at 6:00 p.m. at the Courthouse. I am hoping that you will all please consider attending this meeting again at that time, and please, if you are unable to attend, feel free to get in touch with us, and we will gladly discuss your issues with you.

Again my apologies.

Carlye

ARTICLE XXV. - EAST VALLEY DEVELOPMENT DISTRICT (EVDD)

Sec. 24-281. - Purpose and Intent.

The primary purpose of the East Valley Development District (EVDD) is to implement the *Plan* through limiting substantial *Development* in areas without services and to preserve open spaces, a quality rural living environment, and *Family*-owned working *Agriculture*.

Sec. 24-282. - Permitted Uses.

The following are *Permitted Uses* in the EVDD subject to an *ADP*, unless otherwise noted.

(1) Residential *Single-family Dwelling Units* (one per *Lot* of record), including *Class A Manufactured Homes* and *Class B Manufactured Homes*.

(2) Typical and customary agricultural activities including but not necessarily limited to pasturing, crops, and the raising and caring for livestock. Such activities are exempt from *ADP* requirements pursuant to Section 24-22(1)(b) of these *DPS Regulations*.

(3) *Tourist Homes* which are limited to one *Dwelling Unit* or one portion thereof.

(4) *Bed and Breakfast Establishments*.

(5) One guest house or guest quarters per primary residence.

(6) *Home Occupations*.

(7) *Day Care Homes*.

(8) Equine boarding and boarding facilities.

Sec. 24-283. - Special Uses.

All land uses not listed in Section 24-282 above are considered *Special Uses* and are subject to *MDPs*.

Sec. 24-284. - Accessory Uses and Structures.

(1)

All uses and *Structures* that are customary and incidental to a primary *Residential Use* are allowed, including but not limited to garages, workshops for a legal *Home-based Business* or avocation, sheds for the storage of residential items such as firewood, tools, lawn and garden equipment, etc. Most *Accessory Structures* are subject to an *ADP*.

(2) Use of *Recreational Vehicles* is allowed pursuant to Appendix A, Division 6 of these *DPS Regulations*.

(3) Barns, storage *Buildings* for vehicles and equipment, well houses, and similar *Accessory Structures* supporting a primary agricultural use.

Sec. 24-285. - Site Development Standards.

The following standards apply to any new or expanded *Principal Structures* and *Accessory Structures* within the EVDD. In some cases, *Setbacks* may be superseded by environmental standards:

(1) Structural *Setbacks*:

(a) *Front Lot Line*: 35 feet.

(b) *Side Lot Lines*: 10 feet.

(c) *Rear Lot Line*: 10 feet.

(2) Maximum *Structural Height*: 28 feet.

(3) Maximum *Lot Coverage* by *Principal Structures* and *Accessory Structures*: N/A.

(4) Maximum *Floor Area Ratio (FAR)*: N/A.

(5) Minimum *Lot* size: 5 acres.

Sec. 24-286. - Keeping of Animals.

Enclosures such as pens and corrals for the confinement and concentration of animals are not permitted within 100 feet of any lake, stream, or wetland as set forth in Appendix C, Sec. J.8 of these *DPS Regulations*. Standards for the keeping of animals on residential property are set forth in Appendix A, Division 5.E.

Secs. 24-287—24-290. - Reserved.

Property Record Card

Summary

Primary Information

Property Category: RP
Subcategory: Mixed Use - Res & Comm
Geocode: 30-1286-26-4-01-03-0000
Assessment Code: 0000309600
Primary Owner:
PropertyAddress:
BUTANA SAND & GRAVEL LLC
PO BOX 269
COS Parcel:
BELGRADE, MT 59714-0269
NOTE: See the Owner tab for all owner information
Certificate of Survey:
Subdivision:
Legal Description:
S26, T04 N, R10 W, ACRES 255.51, NE4, TR IN SE4
Last Modified: 12/20/2019 2:04:06 PM

General Property Information

Neighborhood: 230.008.D
Property Type: IMP_R - Improved Property - Rural
Living Units: 1
Levy District: 30-7236-910
Zoning:
Ownership %: 100
Linked Property:

No linked properties exist for this property

Exemptions:

No exemptions exist for this property

Condo Ownership:
General: 0
Limited: 0

Property Factors

Topography: 1
Fronting: 8 - Frontage Road
Utilities: 7, 8
Parking Type:
Access: 1
Parking Quantity:
Location: 0 - Rural Land
Parking Proximity:

Land Summary

Land Type	Acres	Value
Grazing	250.510	3,159.00
Fallow	0.000	00.00
Irrigated	0.000	00.00
Continuous Crop	0.000	00.00
Wild Hay	0.000	00.00
Farmsite	0.000	00.00
ROW	0.000	00.00
NonQual Land	0.000	00.00
Total Ag Land	250.510	3,159.00
Total Forest Land	0.000	00.00
Total Market Land	5.000	35,925.00

Deed Information

Deed Date	Book	Page	Recorded Date	Document Number	Document Type
1/9/2018 12/21/1990	353 79	524 584	1/12/2018	201518	Warranty Deed

Owners

Party #1

Default Information:	BUTANA SAND & GRAVEL LLC
	PO BOX 269
Ownership %:	100
Primary Owner:	"Yes"
Interest Type:	Conversion
Last Modified:	5/21/2018 12:28:47 PM

Other Names

Name	Type

Other Addresses

Appraisals

Appraisal History

Tax Year	Land Value	Building Value	Total Value	Method
2019	39084	79510	118594	COST
2018	41285	79170	120455	COST

Market Land

Market Land Item #1

Method: Acre	Type: Primary Site
Width:	Depth:
Square Feet: 00	Acres: 5

Valuation

Class Code: 2107	Value: 35925

Dwellings

Existing Dwellings

Dwelling Type	Style	Year Built
MH	Double Wide	1974

Dwelling Information

Residential Type: MH	Style: Double Wide
Year Built: 1974	Roof Material: 10 - Asphalt Shingle
Effective Year: 0	Roof Type: 3 - Gable
Story Height: 1.0	Attic Type: 0
Grade: A	Exterior Walls:
Class Code: 3301	Exterior Wall Finish: 5 - Maintenance Free Aluminum/Vinyl/Steel
Year Remodeled: 0	Degree Remodeled:

Mobile Home Detail

Manufacturer: UNKNOWN	Serial #:	Width: 24
Model: UNKNOWN		Length: 60

Basement/Foundation

Foundation: 2 - Concrete	Finished Area: 0	Daylight: N
Basement Type: 0 - None	Quality:	

Heating/Air Conditioning

Type: Central	System Type: 5 - Forced Air
Fuel Type: 3 - Gas	Heated Area: 0

Living Area Breakdown

Bedrooms: 2	Full Baths: 2	Addl Fixtures: 2
Family Rooms: 0	Half Baths: 0	

Fireplaces:

Stacks: 0
Openings: 0
Cost & Design: 0
Description:

Stories:
Prefab/Stove: 1
Flat Add: 0
Description:

Garage Capacity: 0
% Complete: 0

View:

Access:

Basement: 0
First Floor: 1440
Second Floor: 0

Additional Floors: 0
Half Story: 0

Attic: 0
Unfinished Area: 0
SFLA: 1440

CDU:
Desirability:

Physical Condition: Average (7)
Property: Average (7)
Location: Average (7)

Utility: Average (7)

Age: 44

Pct Good: 0.21

RCNLD: 18800

Additions

Lower	First	Second	Third	Area	Year	Cost
	11 - Porch, Frame, Open			240	0	5155

There are no other features for this dwelling

Other Buildings/Improvements

No other buildings or yard improvements exist for this parcel

Commercial

Building Number	Building Name	Structure Type	Units/Bldg	YearBuilt	
1		398 - Warehouse	1	1973	View

Building Number: 1
Units/Building: 1
Grade: A
Class Code: 3307

Building Name:
Identical Units: 1
Year Built: 1973
Effective Year: 0

Structure Type: 398 - Warehouse

Year Remodeled: 0
Percent Complete: 0

Level From: 01

Level To: 01

Use Type: 045 - Warehouse

Area: 3,500
Perimeter: 310

Use SK Area: 0
Wall Height: 12

Exterior Wall Desc: 08 - Metal, sandwich

Construction: 1-Wood Frame/Joist/Beam

Economic Life: 40

% Interior Finished: 100

Partitions: 1-Below Normal

Heat Type: 3-Unit or Space Heaters

AC Type: 0-None

Plumbing: 0-None

Physical Condition: 2-Fair

Functional Utility: 2-Fair

No other features exist for this interior/exterior detail

No elevators or escalators exist for this building

Ag/Forest Land

Ag/Forest Land Item #1

Acre Type: G - Grazing
Class Code: 1601
Irrigation Type:
Timber Zone:

Productivity

Quantity: 0.043
Units: AUM/Acre
Commodity: Grazing Fee

Valuation

Acres: 223.277
Value: 2372
Per Acre Value: 10.63

Ag/Forest Land Item #2

Acre Type: G - Grazing
Class Code: 1601
Irrigation Type:
Timber Zone:

Productivity

Quantity: 0.118
Units: AUM/Acre
Commodity: Grazing Fee

Valuation

Acres: 27.233
Value: 787
Per Acre Value: 28.91

Property Record Card

Summary

Primary Information

Property Category: RP
Subcategory: Residential Property
Geocode: 30-1286-26-4-01-02-0001
Assessment Code: 0000311900
Primary Owner:
PropertyAddress:
BUTANA SAND & GRAVEL LLC
PO BOX 269
COS Parcel:
BELGRADE, MT 59714-0269
NOTE: See the Owner tab for all owner information
Certificate of Survey:
Subdivision:
Legal Description:
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Ownership %: 100
Linked Property:

No linked properties exist for this property

Exemptions:

No exemptions exist for this property

Condo Ownership:
General: 0
Limited: 0

Property Factors

Topography: 1
Fronting: 4 - Residential Street
Utilities: 7, 8
Parking Type:
Access: 3
Parking Quantity:
Location: 0 - Rural Land
Parking Proximity:

Land Summary

Land Type	Acres	Value
Grazing	0.000	00.00
Fallow	0.000	00.00
Irrigated	0.000	00.00
Continuous Crop	0.000	00.00
Wild Hay	0.000	00.00
Farmsite	0.000	00.00
ROW	0.000	00.00
NonQual Land	0.000	00.00
Total Ag Land	0.000	00.00
Total Forest Land	0.000	00.00
Total Market Land	10.000	47,699.00

Deed Information

Deed Date	Book	Page	Recorded Date	Document Number	Document Type
1/9/2018	353	524	1/12/2018	201518	Warranty Deed
6/1/1992	85	154			

Owners

Party #1

Default Information: BUTANA SAND & GRAVEL LLC
PO BOX 269
Ownership %: 100
Primary Owner: "Yes"
Interest Type: Conversion
Last Modified: 5/21/2018 12:33:00 PM

Other Names

Name	Type

Other Addresses

Appraisals

Appraisal History

Tax Year	Land Value	Building Value	Total Value	Method
2019	47699	103440	151139	COST
2018	53122	82180	135302	COST

Market Land

Market Land Item #1

Method: Acre
Width:
Square Feet: 00

Type: Primary Site
Depth:
Acres: 10

Valuation

Class Code: 2101

Value: 47699

Dwellings

Existing Dwellings

Dwelling Type	Style	Year Built
SFR	10 - Old Style	1910

Dwelling Information

Residential Type: SFR
Year Built: 1910
Effective Year: 1960
Story Height: 1.0
Grade: 4
Class Code: 3301
Year Remodeled: 0

Style: 10 - Old Style
Roof Material: 7 - Composition Roll
Roof Type: 3 - Gable
Attic Type: 0
Exterior Walls: 1 - Frame
Exterior Wall Finish: 6 - Wood Siding or Sheathing
Degree Remodeled:

Manufactured Dwelling

Manufacturer:
Model:

Serial #:

Width: 0
Length: 0

Basement / Foundation

Foundation: 2 - Concrete
Basement Type: 2 - Part

Finished Area: 0
Quality:

Daylight: N

Heating / Cooling Information

Type: Central
Fuel Type: 1 - Coal

System Type: 5 - Forced Air
Heated Area: 0

Building Room Summary

Bedrooms: 2
Family Rooms: 0

Full Baths: 2
Half Baths: 0

Addl Fixtures: 2

Fireplaces:

Stacks: 1
Openings: 1
Cost & Design: 0
Description:

Stories: 1.0
Prefab/Stove: 0
Flat Add: 0
Description:

Garage Capacity: 0
% Complete: 0

View:

Access:

Basement: 470
First Floor: 1496
Second Floor: 0

Additional Floors: 0
Half Story: 0

Attic: 0
Unfinished Area: 0
SFLA: 1496

CDU:
Desirability:

Physical Condition: Average (7)
Property: Average (7)
Location: Good (8)

Utility: Average (7)

Age: 58

Pct Good: 0.61

RCNLD: 103440

Additions

Lower	First	Second	Third	Area	Year	Cost
	11 - Porch, Frame, Open			176	0	3780
	30 - Carport, Frame, Finished			160	0	3090
	14 - Porch, Frame, Enclosed			100	0	4683

There are no other features for this dwelling

Other Buildings/Improvements

No other buildings or yard improvements exist for this parcel

Commercial

No commercial buildings exist for this parcel

Ag/Forest Land

No ag/forest land exists for this parcel

Gayla Hess

From: Gayla Hess
Sent: Wednesday, March 11, 2020 3:57 PM
To: jwalsh@mt.gov; Bill Everett
Subject: FW: MDP 20-01 Butana Sand & Gravel expansion
Attachments: BSG maps.pdf; Butana Opencut Application 2020 - MDP Attachment.pdf

From: Gayla Hess
Sent: Wednesday, March 11, 2020 10:07 AM
To: Tim Barkell <tbarkell@adlc.us>; Wayne Wendt <wwendt@adlc.us>; anacondafirechief@gmail.com; District 4 Commissioner <PSmith@adlc.us>; Michael Marker <mmarker@adlc.us>
Cc: Carl Nyman <cnyman@adlc.us>; Chad Lanes <clanes@adlc.us>; Paul Puccinelli <ppuccinelli@adlc.us>; JGolla@mt.gov
Subject: MDP 20-01 Butana Sand & Gravel expansion

All:

Butana Sand and Gravel, located off Crackerville Rd, has submitted an application for an amended Major Development Permit (MDP) for a planned expansion to the north of current operations; previously issued as MDP 18-01 & DEQ Opencut Permit #3025. Opencut mining operations are proposed to expand from 22.6 acres to 96.9 acres; expansion includes Centennial DEQ Opencut Permit #1114 area (14.5 acres of this area has been reclaimed as wetland/pond).

The entire proposed permit area is legally described as S26, T04N, R10 W, Acres 10, NE4, TR SE4 (MDP 18-01) and S26, T04N, R10W, Acres 255.51, NE4, TR IN SE4. Area is within the East Valley Development District (EVDD) and Opportunity Fire District. Please see the attached maps- Page 1 and 2 pertain to areas approved in 2018 and pages 3 and 4 show expanded permit areas and an alternate site access.
DEQ opencut mining application is also attached.

Planning Board meeting and public hearing is scheduled for March 23 at 6PM in the 3rd floor conference room of the Community Service Center (118 E. 7th Street).
Please submit any comments by EOB 3/17 for inclusion in the staff report- I would also be happy to discuss or to provide hardcopies of material if you call/stop by the Planning Office.
Thank you!

Respectfully,

Gayla Hess
Planning Department
Anaconda-Deer Lodge County
Office: (406)563-4012
Mobile(406)479-4710
ghess@adlc.us

Gayla Hess

From: Shane Ellingson <sellingson@waterenvtech.com>
Sent: Friday, March 13, 2020 12:15 PM
To: Gayla Hess
Cc: Carl Nyman
Subject: RE: MDP 20-01 Butana Sand & Gravel expansion
Attachments: Figure1_Aerial.pdf

Hi Gayla,

We had to provide the current remedy status to DEQ in order for them to approve the expansion. Below is the remedy status provided to us by Woodard and Curran (Trec). The map the explanation is referencing is also attached for reference.

Email from Garret Craig of Trec:
"I reviewed the map of the proposed Butana pit expansion. The remedy for the approximately 70 acre parcel illustrated on the map owned by Butana Sand and Gravel was initiated in Summer 2019, and is anticipated to be completed in Spring 2020. The South end of the proposed permit expansion (South of Butana's current pit) was tilled to a depth of 12 inches, amended with lime, and revegetated in October 2019. The North end of the proposed permit expansion consists of approximately 35 acres of tillage to 12 inches, lime amendment, and revegetation completed in November 2019. There are approximately 12 acres of stripping of impacted soils to a depth of 12 inches located in the Northeast corner of the proposed expansion area. These soils were consolidated off-site, with partial backfill of this area completed using clean stockpiled topsoil located on-site. This work is substantially completed, but there will be isolated in-situ treatment and revegetation of this area in Spring of this year. There hasn't been any remedial work in any of the active mining operations, nor is any future work planned in these areas.

All the top soil piles around Butana's current gravel operations were sampled in the summer of 2019. All stockpile results indicated adequate pH and low levels of metals, and therefore none of them required treatment.

After final tillage, lime amendment, and revegetation activities in Spring of 2020, no further remedial action activities are anticipated in this area.

If you need any further maps, tables, or supporting data for this area, please don't hesitate to reach out."

Please let me know if you have any questions.

Thanks,
Shane

Water & Environmental Technologies
Shane Ellingson
Superfund ICP Administrator
P: (406) 563-7476
C: (406) 491-4246
waterenvtech.com

Major

ANACONDA-DEER LODGE COUNTY

~~ADMINISTRATIVE~~ DEVELOPMENT APPLICATION (~~ADP~~: MDP

(Please Fill Out Entire Application)

ABSOLUTELY DO NOT BEGIN PROJECT UNTIL ALL PAPERWORK IS FINALIZED AND PHYSICAL PERMIT HAS BEEN OBTAINED

Date of Application: 2/3/20

Major ~~Admin.~~ Development Permit #: 20-001

Permit Received By: cmh

Date of Receipt: ~~'20 FEB 6 AM 10:52~~

PROPERTY OWNER CONTACT INFORMATION

Property Owner: Butana Sand & Gravel

Mailing Address: PO Box 269 City: Belgrade State: MT Zip: 59714

Phone/Mobile #: 406-494-2867 E-Mail: jefferycontracting@gmail.com

Physical Address of Project Property: 2919 Crackerville Rd Anaconda, MT 59711

CONTRACTOR/DEVELOPER/PERSON DOING THE WORK CONTACT INFORMATION

CONTRACTOR MUST HAVE AN ACTIVE BUSINESS LICENSES IN ANACONDA-DEER LODGE COUNTY

DOES CONTRACTOR HAVE A BUSINESS LICENSE IN ADLC: Yes: X No: ____

Year License Last Renewed: 2020 ***License #:*** 1842

Contractor: Butana Sand & Gravel Self: ____

Mailing Address: PO Box 269 City: Belgrade State: MT Zip: 59714

Phone/Mobile #: 406-494-2867 E-Mail: jefferycontracting@gmail.com

General Project Description: Expanding existing gravel pit to the north within the same parcel.

Refer to the DEQ Opencut Amendment Application for additional information.

More Than One (1) Cu Yd. of Soil Disturbed: Yes X No ____

More than Five (5) Cu Yds of Soil Disturbed: Yes X No ____

Anticipated Start Date: June 1, 2020 **Anticipated Completion Date:** December 2040

I do hereby acknowledge that all information on this application and on the attached plans is true and correct, and that the activity or development permitted will be conducted in full compliance with all ordinances of Anaconda-Deer Lodge County, as well as all state and federal laws. The activity or development will be in full compliance with any and all conditions imposed on the approval of this permit and that the permit and conditions imposed are binding on future owners of the subject property and on future building permits issued for this site.

X _____ 2-5-20

Property Owner **Date**

ANACONDA-DEER LODGE COUNTY
ADMINISTRATIVE DEVELOPMENT APPLICATION (ADP)
(Please Fill Out Entire Application)
ABSOLUTELY DO NOT BEGIN PROJECT UNTIL ALL PAPERWORK IS FINALIZED AND PHYSICAL PERMIT HAS BEEN OBTAINED

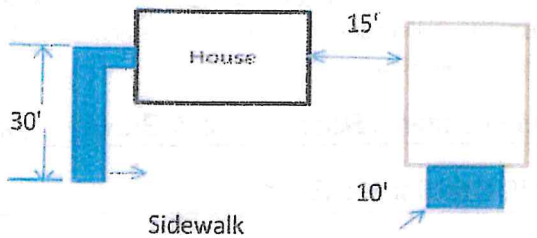
PROJECT DESCRIPTION CHECKLIST

DESCRIPTION	YES	NO	ADDITIONAL COMMENTS/REMARKS
Demolition			
Buildings		N	
Infrastructure (Driveways, Sidewalks, Etc.)		N	
Trees/Shrubs	Y		Some shrubs/small trees will be grubbed in gravel pit.
Excavation			
Footings		N	
Foundation		N	
Posts/Poles		N	
Install/Repair Water Line		N	
Install/Repair Well		N	
Install/Repair Sewer		N	
Install/Repair Septic System		N	
Install/Repair Electric Service		N	
Install/Repair Gas Line		N	
Install/Repair Telephone Line (Land Line)		N	
Other: Gravel Pit	Y		Excavation to approximately 10-16 feet below ground
Grading			
Access Road	Y		Existing access road will be used, periodic re-grading
Driveway		N	
Sidewalks		N	
Parking Lot		N	
Landscaping			
Revegetation	Y		Reclamation plan (Figure 4) will establish wetlands/ponds.
Sod		N	
Trees/Shrubs		N	
Garden for Food		N	
Irrigation System		N	
Fencing			
Removed/Installed/Both		N	
Ground Signs			
Removed/Installed/Both		N	
Soils			
Will Soil Be Removed From Site?	Y		Topsoil/overburden will remain onsite. Gravel Product will be hauled off site for commerical use
If So, Where Will This Be Discarded?			Gravel products will be hauled to various construction sites and industrial facilities based on client demand.
How Much Soil Will Be Removed?			Approximately 800,000 cubic yards over the life of the pit.
Will Soil Be Brought To Site?		N	
If So, Where Will This Be Obtained?			
How Much Soil Will Be Brought In?			
Additional Comments: Please refer to the DEQ Opencut Amendment Application for more detailed info about the proposed operations. The ADLC MDP is required and must be attached to the DEQ Application.			
Once the MDP is obtained, the application will be submitted to DEQ for their review. The approved MDP and DEQ Opencut Permit are both required before expansion activities can begin.			

ANACONDA-DEER LODGE COUNTY
ADMINISTRATIVE DEVELOPMENT APPLICATION (ADP)
(Please Fill Out Entire Application)
ABSOLUTELY DO NOT BEGIN PROJECT UNTIL ALL PAPERWORK IS FINALIZED AND PHYSICAL PERMIT HAS BEEN OBTAINED

SITE PLAN DRAWING
DIMENSIONS MUST BE PROVIDED
IF BUILDING PERMIT IS NEEDED, ENGINEERED DRAWINGS WOULD BE ACCEPTED

SAMPLE



Refer to Figures 1-4 in DEQ Application

N

1 square = _____

ANACONDA-DEER LODGE COUNTY
ADMINISTRATIVE DEVELOPMENT APPLICATION (ADP)
(Please Fill Out Entire Application)
ABSOLUTELY DO NOT BEGIN PROJECT UNTIL ALL PAPERWORK IS FINALIZED AND PHYSICAL PERMIT HAS BEEN OBTAINED

CONSENT FOR ACCESS TO PROPERTY FOR THE PURPOSE OF ENVIRONMENTAL SAMPLING

In support of Anaconda-Deer Lodge County's (ADLC) Interim Institutional Controls Program, ADLC would like your consent to collect samples on your property. Pease fill out the information below and return with your Administrative Permit Application.

I, John Jeffery (Butana Sand & Gravel) (printed name), property owner of the property located at 2919 Crackerville Road, Anaconda, MT 59711, give my consent for employees and/or representatives of ADLC to access my property for the purpose of collection of soil samples. **I understand that these actions are undertaken by EPA pursuant to its responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601 et seq (also known as Superfund).**

X _____ 2-25-20
Property Owner Date

ANACONDA-DEER LODGE COUNTY
ADMINISTRATIVE DEVELOPMENT APPLICATION (ADP)
(Please Fill Out Entire Application)
ABSOLUTELY DO NOT BEGIN PROJECT UNTIL ALL PAPERWORK IS FINALIZED AND PHYSICAL PERMIT HAS BEEN OBTAINED

ADMINISTRATIVE REVIEW (Staff Use Only)

Legal Description of Property: 526, T04N, R10W, Acres 255.51, NE4, TR in SE4 and 526, T04N, R10W, Acres 10, TR SE4

Geocode: _____

Assessor: _____

This permit will also require:

Building Permit: _____

Demo Permit: _____

Driveway Approach Permit: _____

Well Permit: _____

Septic Permit: _____

Fee Paid: $100.00 **Receipt and/or Check #:** 21291 **Payment Taken By:** cmh

Major Development Permit Fee $100.00

DEQ OPENCUT MINING SECTION • PO BOX 200901 • HELENA MT 59620-0901 • PHONE: 406-444-4970 • FAX: 406-444-4988 • Email: DEQOpencut@mt.gov

For Office Use Only			
Payor _____	Payment No. _____	Payment Amt $_____	Date _____

OPENCUT MINING PLAN OF OPERATION AND APPLICATION

Operator Name: Butana Sand & Gravel

Site Name: DK Jan

INSTRUCTIONS - How to submit a complete and accurate Plan & Application:

1. Before completing this form, **verify you are using the most recent version** and read the help information available on the Opencut Mining Section's website at http://deq.mt.gov/Mining/opencut.
2. Fill in all blanks and provide a detailed answer for each question. Write "None" if that is the correct answer.
3. This form includes automated calculations that require Microsoft Word 2010 or newer. As data is entered into this form, auto calculate fields will auto populate (tab out of each field to ensure they auto calculate). Autocalculate fields contain red text. If an autocalculate field is blank, either: a) the required information was not entered, or b) the blank field does not pertain to your application.
4. Opencut Mining Permits are "living" documents, meaning that whenever a permit is amended, the updated information replaces the outdated information. As a result, this form must be filled in completely for a **Permit** or an **Amendment**.
5. The Department of Environmental Quality (DEQ) strongly recommends completing this application form in electronic format. Doing so will make applying for a future amendment much easier. Operators should keep the original electronic files and backup copies.
6. Operator is required to submit all **Required Support Documents**, unless the exception box is appropriately checked. If the **Existing Approved Form Attached** box is checked, the Operator is required to submit a copy of the previously approved form with the amendment application. If permitted after 2010, the previously approved documents can be found on the Opencut website at http://deq.mt.gov/Mining/opencut (click on the "Search Opencut Permits" tab).
7. Ensure all additional support documents submitted have the same name or title shown in the "Support Documents" section. Include a Cover Letter with the application materials that lists the names of all "Other" support documents submitted.
8. Sign and date the certification in Section G.
9. Submit all required application materials to the Opencut Mining Section in Helena as one package.

ID	SUPPORT DOCUMENTS	
	Required	**REQUIRED SUPPORT DOCUMENTS**
a	☒	☐ **$1,500 Non-Refundable Fee for a Permit application or for an Amendment application if the application date is >10 years from the date of the last permit/amendment approval; or** ☒ **$750 Non-Refundable Fee for an Amendment application if the application date is < 10-years from the date of the last permit/amendment approval.** Make checks payable to Montana Department of Environmental Quality ☐ **This application was submitted electronically and the check is in the mail.**
b	☐	**Consultation with DNRC on Sage Grouse** *Exception*: ☒ Opencut site not located in Core, General Habitat, or Interconnectivity Sage Grouse Areas: https://sagegrouse.mt.gov *Exception*: ☐ Amendment is not changing the existing permit boundary; therefore, no new sage grouse consultation is needed.
c	☒	☒ **SHPO Consultation (no Class III required) or** ☐ **SHPO Concurrence Attached**
d	☒	**Well Logs** *Exception*: ☐ No Wells within 1,000 feet of permit area
e	☒	**Soil Photos** *Exception*: ☐ Amendment with no new acreage being added.
f	☒	**Site Map**
g	☒	**Area Map**
h	☒	**Reclamation Map**
i	☒	**Location Map**
j	☒	**Boundary Coordinate Table** *Exception*: ☐ Amendment is not changing the existing permitted boundaries.
k	☒	**Weed Board Notification of Opencut Operation**
l	☒	**Reclamation Bond Spreadsheet** *Exception*: ☐ Government Operator
m	☒	**Landowner Consultation (ARM 17.24.206)** **Existing approved forms** are acceptable for **an** Amendment not adding acreage, an asphalt or concrete plant, not changing the postmining land use, and not extending the reclamation date.

n	☒	**Zoning Compliance (ARM 17.24.223)** **Existing approved forms** are acceptable for an Amendment not adding acreage, not changing the postmining land use, and not adding an asphalt or concrete plant. *Exception*: ☐ Not required for applications mining bentonite, clay, scoria, peat, or soil only.
o	☒	**Surface Landowners List (MCA 82-4-432(2)(e) & (6)(b))** *Exception*: ☐ Not required for amendment adding less than 50% of the permitted acreage.
p	☒	**Fuel Guideline for Spill Prevention & Management Worksheet** *Exception*: ☐ Not required if no on-site fuel storage and/or no mobile fueling on-site.
q	☒	**Determining Depth to Groundwater Worksheet** *Exception:* ☐ **Amendment not adding acreage or increasing mine depth** *Exception:* ☐ **Not required if no water feature would remain for final reclamation and there is no chance of a public meeting** (Opencut reserves the right to require this form if water could be encountered, or if Opencut disagrees with the high and low water table levels identified in Section C1 of this application).
r	☒	**Bond (MCA 82-4-433)** **(Original Paper Bond must be Received by Opencut before permit can be issued.)** *Exception*: ☐ Government Operator *Exception*: ☐ The submitted Reclamation Bond Spreadsheet does not require a higher bond.

	ADDITIONAL SUPPORT DOCUMENTS (as required)	
	Included	
s	☐	**Additional Well Data**
t	☐	**Dewatering Data and Analysis**
u	☐	**Easement/Setback Documentation**
v	☐	**Groundwater Monitoring Plan**
w	☒	**Pond/Wetland Cross-Sections** and/or **Contour Map**
x	☒	**Pond & Wetland Design Worksheet**
y	☒	**Seed Mix Guideline**
z	☐	**Slope Stability Analysis**
aa	☐	**Stream/Waterway Worksheet**
bb	☐	**Wash Plant Settling Pond Guideline**
cc	☒	**Water Resources Assessment/Hydrogeologic Assessment**
dd	☐	Other:
ee	☐	Other:
ff	☐	Other:
gg	☐	Other:
hh	☐	Other:
ii	☐	Other:

Additional support documents must be clearly named or titled to be consistent with the names or titles above.

SECTION A – APPLICATION INFORMATION

A1. General Information *[MCA 82-4-432 & 82-4-403(6)] & [ARM 17.24.218]*

1. Indicate which of the following is being requested (check one):
   ☐ **Permit** ☒ **Amendment** ☐ **Convert Limited Opencut Operation to a Permit**
   ☐ **Reclamation Only** (No further Opencut activities would occur, except reclamation): Complete Sections A1-1 through A1-8, A1-12, , A2, Section E, and provide a Reclamation Map and a Boundary Coordinate Table. The Department may also require the Operator to provide detailed site-specific conditions and reclamation plans, including but not limited to information for sections C2, C3 and D6.

   For a **Permit** or to **Convert Limited Opencut Operation to a Permit**, skip to A1-3 and complete the remainder of this document. For an **Amendment**, proceed below:

2. For an **Amendment**:
   a. Update all the information in this document.
   b. The existing Opencut number is: 3025
   c. Identify all the purposes of the amendment:
      ☒ **Change Reclamation Date**
      ☒ **Change Postmining Land Use**
      ☐ **Change Site Name** – Former Site Name was: **Note: If site name is changed, all forms must be revised accordingly (i.e. zoning, landowner, etc.)**

☐ Change Seed Mix
☒ Change Mining Depth
☐ Add Fuel Storage
☒ Add Acreage
☐ Add the following processing equipment:
☒ None ☐ Asphalt Plant (answer D7-1a) ☐ Concrete Plant ☐ Overland Conveyor ☐ Crushing Equipment
☐ Pug Mill ☐ Screen ☐ Wash Plant ☐ Other:
☐ Change the Hours of Operation
☐ Change Landowner(s) – Previous Landowner's Name:
☐ Other:

3. **Operator Name:** Butana Sand & Gravel

Site Name: DK Jan

Final Reclamation Date auto-populated from Section E1-1: December 2040

Operator Address: PO Box 269
City: Belgrade State: MT Zip Code: 59714
Office Phone # 406-494-2867 Cell # 406-494-2867 Operator/Business Email: jefferycontracting@gmail.com

4. Site Contact Name: John Jeffery Site Contact Email: jefferycontracting@gmail.com Cell # 406-491-2271
Note: All official correspondence will be sent to the Business email. The site contact name would be copied on emails.

5. Butana Sand & Gravel requests that correspondence also be emailed to the consultant for this application (if not applicable proceed to #6).
Consultant Name: Water & Environmental Technologies Consultant Email: sfrazee@waterenvtech.com

6. Landowner 1 Name: Butana Sand & Gravel
Address: PO Box 269
City: Belgrade State: MT Zip Code: 59714
Phone #: 406-494-2867 Optional Additional Contact Information (e.g. email, other phone #): _____
If there is an additional landowner, provide contact information below; otherwise leave blank.
Landowner 2 Name: _____
Address: _____
City: _____ State: _____ Zip Code: _____
Phone #: _____ Optional Additional Contact Information (e.g. email, other phone #): _____

Additional Landowners (if applicable, use the space provided and use same format as above):

7. County where the proposed site is located: Deer Lodge

8. Legal Description (Includes Permit Area, Access Roads, and Non-Bonded Areas):
Section(s) __ & 26 **Township** 4 ☒ North or ☐ South **Range** 10 ☐ East or ☒ West
Section(s) __ & __ **Township** __ ☐ North or ☐ South **Range** __ ☐ East or ☐ West
Additional Sections, Township & Range (if applicable use same format as above): _____

9. What type of materials will be mined from the permit area?
☐ Bentonite ☐ Clay ☒ Gravel ☐ Peat ☒ Sand ☐ Scoria ☐ Soil
☒ Mixtures including any of the above substances (i.e. borrow material)
☐ Additional Information:

10. What processing equipment could be used in the permit area?
☐ None ☒ Asphalt Plant (answer D7-1a) ☐ Concrete Plant (answer D7-1b) ☒ Conveyor
☒ Crushing Equipment ☐ Pug Mill ☒ Screen ☐ Wash Plant (answer D7-1c)
☐ Other:

11. Estimated quantity of mine material to be excavated and removed from the entire permit area:
800,000 **cubic yards**

12. **Total Permit Acreage Breakdown** ***(acreages must be entered to the nearest TENTH of an acre, and must match the acreages created by the Boundary Coordinate Table).***

	Existing or New Permit Acres	Amendment Acres (if any)	Total Permitted Acres
a. Bonded Acres*	15.2	31.2	46.4
b. Non-Bonded Acres**	7.4	43.1	50.5
c. Bonded Access Road Acres***			0.0
Totals	22.6	74.3	96.9

Note: To ensure that the "Totals" display, use the Tab key after entering each acreage amount.

a. *Although Government Operators do not "bond," they would fill in this row to display entire permitted acreage.
b. **Government Operators cannot have non-bonded acres and would not fill in this row.
c. ***Complete only if Landowner Consultation form states an access road would be permitted.

13. **Private Operators Proposing to Permit Non-Bonded Area:**
If Non-Bonded acreage is proposed, the Operator agrees not to disturb any Non-Bonded acreage for any Opencut purpose until: **a)** the Operator submits a *Request to Modify Bonded Acreage* form with appropriate attachments and a reclamation bond, and **b)** the DEQ provides **written approval** of the request.

A2. ADDITIONAL INFORMATION *[MCA 82-4-432(1) & 82-4-434(2)] & [ARM 17.24.222]*

1. If applicable, provide additional application information not addressed above.
Answer: This amendment application is being submitted concurrently with a Phase II release request for the entirety of Permit #1114. This will allow for the release/closure of the #1114 Permit. The proposed amendment boundary includes all of the #1114 boundary. Approximately 14.5 acres of this area has been reclaimed and currently exists as wetland/pond. This amendment proposes to include that area as non-bonded acreage. The remainder of the #1114 area will be further mined and is included as bonded area.

SECTION B – PRE-MINE INFORMATION

Note: If a Pre-Application Meeting was conducted by the DEQ, information from the Inspection Report can typically be used to complete portions of Section B.

B1. DIRECTIONS TO SITE *[ARM 17.24.221(6)]*

1. Describe in detail how to get from the nearest town or public road intersection to the permit area. Provide directions that can be interpreted and followed by anyone viewing the Location Map for the site, both now and in the future (e.g. identify roads, mileposts, landmarks, and distances; include information on how to obtain keys or combinations for locks). Label the nearest town of public road intersection on the Location Map.
Answer: From Butte, head west on I-90. Take exit 211 toward Fairmont Hot Springs. After crossing over the interstate overpass, take a right on Crackerville Rd and follow for 2.7 miles. Take the first right after passing the intersection with Fairmont Rd.

B2. TOPOGRAPHY *[MCA 82-4-403(11)(b)]*

1. Describe in detail the terrain in and within 1,000 feet of the permit area (e.g. hills, valleys, ridges, drainages, cliffs, and benches).
Answer: The permit area and the surrounding areas are generally flat. The topography gently slopes to the northeast towards Silver Bow Creek. The land directly north of the permit area has been previously mined below the ground water table.

B3. LAND USES *[MCA 82-4-403(11)(b)]*

1. Indicate current land uses within the permit area.
☐ Cropland/Hayland ☐ Forest/Timberland ☐ Industrial/Commercial ☐ Oil/Gas
☒ Opencut Operation ☒ Pasture/Rangeland ☐ Residential ☒ Other: **A portion of the proposed permit area includes part of a previous Small Miner's Exclusion Permit through the DEQ Hard Rock program.**

2. Indicate current land uses within 1,000 feet of the permit area.
☐ Cropland/Hayland ☐ Forest/Timberland ☒ Industrial/Commercial ☐ Oil/Gas
☒ Opencut Operation ☒ Pasture/Rangeland ☒ Residential ☐ Other:

B4. STRUCTURES, FACILITIES, & SURFACE DISTURBANCES *[MCA 82-4-434(2)(n)] & [ARM 17.24.218(1)]*

1. Identify the manmade structures, facilities, or surface disturbances within the permit area.
☐ None ☐ Construction Project ☐ Farming ☐ Fences ☐ Industrial/Commercial

☐Oil/Gas Structures or Pipelines ☒Opencut Operation ☐Overhead Power Lines or Facilities
☐Residential ☐Roads ☐Underground Utilities (e.g. electrical, fiber optic, water, sewer, phone, etc.)
☒Other: The southeast portion of the proposed permit area is currently acting as a storage area/laydown yard for supplies/equipment, but this will be moved prior to opencut activities commencing in this area.
Note: See additional requirements in Section D4 for utilities and infrastructure.

2. Identify the manmade structures, facilities, or surface disturbances within 1,000 feet of the permit area.
☐None ☐Construction Project ☐Farming ☐Fences ☒Industrial/Commercial
☐Oil/Gas Structures or Pipelines ☒Opencut Operation ☒Overhead Power Lines or Facilities
☒Residential ☐Railroad ☒Roads ☐Underground Utilities (e.g. electrical, fiber optic, water, sewer, phone, etc.)
☒Other: Salvage Yard

B5. SURFACE WATER FEATURES *[ARM 17.24.218(1) & 17.24.221]*

1. Identify any surface water features within the permit area.
Note: This includes features that may contain water at any time, including seasonal ponds, ephemeral drainages, runoff channels, ditches, floodways, etc. See Section D4 for additional Plan requirements for water features.

☐None ☐Ephemeral Drainage ☐Irrigation Ditch/Canal ☒Lake/Pond ☐River– Name:
☐Spring ☐Stream/Creek – name: ☐Wetlands ☐Other:

2. Identify any surface water features within 1,000 feet of the permit area.
Note: This includes features that may contain water at any time, including seasonal ponds, ephemeral drainages, runoff channels, ditches, floodways, etc.

☐None ☐Ephemeral Drainage ☐Irrigation Ditch/Canal ☒Lake/Pond ☐River– Name:
☐Spring ☒Stream/Creek – name: Silver Bow Creek ☒Wetlands ☐Other:

B6. VEGETATION *[ARM 17.24.219(h) & 17.24.222]*

1. Provide a list of the dominant grasses, forbs, shrubs and trees located within the permit area. If the species are not indicated in the check boxes below, check the "Other" box and list them.
☐Basin Wildrye ☐Big Bluestem ☒Bluebunch Wheatgrass ☐Blue Grama ☒Canada Wildrye
☒Cheatgrass ☐Conifer ☐Cottonwood ☐Creeping Juniper ☒Crested Wheatgrass ☐Crop
☐Curlycup Gumweed ☐Green Needlegrass ☐Idaho Fescue ☐Indian Ricegrass
☒Intermediate Wheatgrass ☒Juniper ☒Kentucky Bluegrass ☐Needle & Thread Grass
☐Prairie Junegrass ☐Prarie Sandreed ☐Rough Fescue ☒Rubber Rabbitbrush ☐Sagebrush
☐Sedges/Rushes ☐Sideoats Grama ☒Slender Wheatgrass ☒Smooth Brome ☐Sweetclover
☐Thickspike Wheatgrass ☒Willow ☒Western Wheatgrass ☐Other: _____

2. Identify the Noxious Weeds present within the permit area.
If the species are not indicated in the check boxes below, check the "Other" box and list them.
☐None ☐Canada Thistle ☐Dalmatian Toadflax ☐Field Bindweed ☐Houndstongue ☒ Knapweed
☐Leafy Spurge ☐Tansy Ragwort ☐Whitetop ☐Sulfur Cinquefoil ☐Tamarisk (Salt Cedar)
☐Other:

B7. WILDLIFE *[MCA 82-4-402(2) & 82-4-403(13) & 82-4-434(2)] & [ARM 17.24.219 & 17.24.222]*

1. Indicate the fish and wildlife species in and within 1,000 feet of the permit area.
☒Antelope ☐Black Bear ☒Coyotes ☒Deer ☒Elk ☐Fish ☒Fox ☐Grizzly Bear ☐Moose
☒Raptors ☒Rodents ☐Sage Grouse ☒Song Birds ☒Upland Birds ☒Waterfowl ☐Wolves
☐Other:

2. **Sage Grouse Consultation** - If sage grouse was checked above and the proposed permit boundary is in core area, general habitat, or connectivity habitat, the area is regulated by the Montana Sage Grouse Habitat Conservation Program. To determine whether this site is located in sage grouse habitat, click on the below link to visit the Montana Sage Grouse Habitat Conservation Program https://sagegrouse.mt.gov.

   a. The permit boundary is located:
   ☒Outside of Sage Grouse Habitat (If "Outside of Sage Grouse Habitat" or permitted prior to Sage Grouse Executive order, skip to B8)
   ☐Within Core Area ☐Within General Habitat ☐Within Connectivity Habitat

Recommendations from the Sage Grouse Program must be addressed in the proper sections of this application (i.e. hours of operation, seed mix, etc.).
☐Additional Information: NONE

B8. WELLS (water, oil, gas, etc.) *[ARM 17.24.218(1)(g) & 17.24.221]*

1. In the table below, list the required information for wells in and within 1,000 feet of the permit area.
   - Information and well logs can be obtained from the Ground Water Information Center (GWIC) at http://mbmggwic.mtech.edu or by using the "Mapping DEQ's Data" found at http://deq.mt.gov/Mining/opencut (click on the "Mapping DEQ's Data" tab).
   - The DEQ recommends obtaining well information from the Montana Department of Natural Resources and Conservation (DNRC), and Board of Oil and Gas websites to determine the location of any oil and gas wells in the vicinity of the permit area.
   - Additional information may be available from landowners or by conducting field measurements.
   - Provide depths and static water levels in feet below the ground surface for all attached water wells.
   - Well locations must be reasonably accurate. In cases where well locations are unavailable or appear inaccurate, field confirmation may be required.
   - Locations of existing and proposed wells in and within 1,000 feet of the permit area must be shown and labeled on the Area Map or if more appropriate a separate Well Location Map.
   - Well logs in excess of 1,000 feet from the proposed permit boundary can be submitted and shown below if they provide relevant information. If provided, well locations must be shown on the appropriate map.
   - If there are no wells in and within 1,000 feet of the permit area, write "**None**" in the table below and skip to B8-3.

   * Use these codes to fill in the "Use" Column below: D = Domestic, Ind = Industrial, I = Irrigation, L = Lawn & Garden M = Monitoring, P = Public, S = Stock, O = Other

Well Information Table

Well I.D. on Map	GWIC ID#	Well Owner	Distance & Direction from Permit Boundary	Total Well Depth (feet)	Static Water Level (feet)	*Use	Comments
W1	255400	Butana Sand & Gravel	775ft southeast	82	56	D	
W2	255402	Emily Russ	700ft west/southwest	61	28	D	
W3	278056	Troy Jenrich	517ft southwest	160	32	D	
W4	87416	Butana Sand & Gravel	inside	160	45	Ind	to be abandoned
W5	51299	Butana Sand & Gravel	1000ft west	25	9	I	
W6	253115	Butana Sand & Gravel	20ft south	101	35	D	
W7							
W8							
W9							
W10							

Note: If there are additional wells check the appropriate box on page 2 and attach the Opencut Mining Section's *Additional Well Data* form. Start the form with "W11" under the "Well I.D. on Map" column. The form is found here: http://deq.mt.gov/Mining/opencut (click on the "Forms" tab).

2. Attach the above identified Well Logs to this application and check the appropriate box on page 1.
3. Are there Public Water Supply wells located within 100 feet of the permit area that are used for public water supply?
   ☐ Yes ☒ No
   If Yes, contact the DEQ Source Water Protection Program at 406-444-5546 to determine setbacks and restrictions and incorporate those into this application. **Further Information (if applicable):**

B9. ADDITIONAL INFORMATION *[MCA 82-4-432(1) & 82-4-434(2)] & [ARM 17.24.222]*

1. If applicable, provide additional pre-mine site characteristics or circumstances not addressed above.

Answer: The permit area and surrounding areas have been impacted through decades of mining and smelting related activities. The permit area is within the Smelter Hill NPL Superfund site and has experienced smelter related aerial emission deposition in the top several inches of soil. An email from Carl Nyman (ADLC) is attached to this application confirming the remediation plans for the site. At this point, much of the site (outside of current mining areas) has been tilled and the topsoil amended as necessary. Existing topsoil piles were tested and if the results were above threshold values, the topsoil piles were mixed/amended to meet Superfund standards.

SECTION C – SITE PREPARATION AND PLANNING

C1. WATER TABLE LEVELS *[ARM 17.24.218(1)(g)]*

Complete and attach the *Determining Depth to Groundwater Worksheet* found here: http://deq.mt.gov/Mining/opencut (click on the "Forms" tab), check the appropriate box on page 2, and provide information below as determined by the *Determining Depth to Groundwater Worksheet*. Note: Seasonal high water levels may be influenced by irrigation and ditches and must be accounted for when determining groundwater elevations.

- The seasonal high water table is the highest level that water typically rises to each year.
- The seasonal low water table is the lowest level that water typically falls to each year.

1. The maximum depth of mining is: **16 feet below ground surface**
2. The seasonal high water table level is: **8 feet below ground surface**
3. The seasonal low water table level is: **13 feet below ground surface**
4. Water levels were determined by the following method(s):
   ☒ **Determining Depth to Groundwater Worksheet** (check box on page 2 and attach) ☐ **Other:**

Seasonal high water table:	8.0 feet
Maximum depth of mining:	16.0 feet
Difference =	- 8.0 feet

a. If the difference is ≥3 proceed to Section C2.

b. If the difference is ≤0, a pond and/or wetland will be left for final reclamation. **Butana Sand & Gravel** must include "pond" or "wetland" as a postmining land use in Section E2-2, as well as complete Section E3 & the *Pond & Wetland Design Worksheet*.

c. If the difference is >0 and <3, soil could become saturated or ground water could occur in some portions of the pit. Therefore, explain how **Butana Sand & Gravel** will maintain a minimum of 3 feet of separation between the seasonal high water table and the reclaimed ground surface (e.g. The Operator will: backfill the site to maintain a minimum 3 feet of earthen material between water and the reclaimed ground surface; construct a permanent drainage mechanism; etc.):

☐ **Butana Sand & Gravel would cease mining at or above the high water table and use on-site materials to backfill to ensure that a minimum of 3 feet of material is maintained above the seasonal high water table for final reclamation. No water feature would remain for final reclamation.**

☒ **Other/Additional Information: As explained in the Determining Depth to Groundwater Worksheet, 5 piezometers were installed in test pits 6, 8, 10, 17, and 19. Depth to groundwater was measured in these piezometers in January 2020 by WET. Additionally, the tops of the casings and ground elevations were surveyed by WET. Depth to groundwater varies across the site and the average depth to groundwater was reported above. The January measurements are being considered "seasonal low water level". During test pit logging, WET personnel observed soil staining indicating previous high groundwater levels. The average difference between the top of staining and January 2020 groundwater levels was calculated to be 5ft. Thus, the seasonal high groundwater levels reported above were determined by subtracting 5ft frin the low water depth (13-5=8ft). Since the final reclamation plans call for ponds that are 3ft deep (below the low groundwater level), the maximum depth of mining will be 13+3=16ft. Please note that due to varying topography and groundwater depths across the site, the actual mining depths and groundwater levels will vary. Groundwater level monitoring will continue and mining depths and reclamation elevations will be adjusted accordingly if groundwater levels are found to vary significantly from what's reported above.**

C2. SOIL AND OVERBURDEN *[MCA 82-4-403(14) & 82-4-434(2)(c)] & [ARM 17.24.218(c-d) & 17.24.220(2)(b)]*

1. **In the table below**, provide soil and overburden thickness data obtained from test holes excavated within the proposed permit area (bonded and non-bonded areas). **Butana Sand & Gravel** is required to provide no less than three test holes spaced representatively to describe proposed permit areas of less than nine acres, and one test hole per each three-acre area for proposed permit areas of nine acres or more, with a maximum of 20 representatively spaced test holes for proposed permit areas that exceed 60 acres, or as otherwise approved by the DEQ.
   - **Clear, labeled photos showing the top three feet of the soil profile with a visible scale must be provided to the DEQ for each test hole. Soil photos must be labeled with the *Soil Test Hole ID* (see below table) and corresponding**

locations must be shown on the Site Map [ARM 17.24.221(3)]. Label the soil photos and Site Map with the proper *Test Hole I.D.* as provided in the table in Section C2-2 of the application (i.e. T1, T2, T3, etc.). Applications submitted with poor photos not meeting the soil guideline would be deemed incomplete.

- Test holes must be of sufficient depth to measure the thicknesses of soil and overburden (minimum of 3 feet deep).
- Exposures of the soil and overburden profile, such as a roadcut, may be used in lieu of a test hole, as long as 3 feet of the profile is exposed and clear photos are taken.
- The soil is usually darker than overburden, may contain roots, and typically extends deeper than just the top few inches of rich organic matter. The number of roots and degree of darkening typically decrease with depth. Soil is the "growth media" that allows for successful revegetation. Soil in many areas is rocky, but that does not preclude the need to save it for use in reclamation.
- For tips on proper identification of soil depths and taking photos that will be accepted by the Opencut Mining Section, refer to the *Soil Guideline* found at: http://deq.mt.gov/Mining/opencut (click on the "Forms" tab)
- NRCS soil data can be used as a reference but does not replace onsite soil data.

2. **Date test pits were dug:** Feb 2018, Jan 2020
Logged by: WET (R. Farren, J. Foltz)

Soil Test Hole I.D. on Map	Soil Thickness (inches)	Overburden Thickness (inches)	Total Depth of Test Hole (ft)	Water encountered in Test Hole? (ft)	Optional Info (e.g. soil and overburden type, texture, or structure, rock content, root description, etc.)
T1	23	0	12.3	☐No ☒Yes-Depth to water = 12.3'	2018 pit
T2	34	0	13.7	☐No ☒Yes-Depth to water = 13.7'	2018 pit
T3	22	0	15	☐No ☒Yes-Depth to water = 15'	2018 pit
T4	22	0	12.7	☐No ☒Yes-Depth to water = 12.7'	2018 pit
T5	26	0	8.8	☐No ☒Yes-Depth to water = 8.8'	2018 pit
T6	18	0	13.2	☐No ☒Yes-Depth to water = 13.2'	
T7	5	0	16.2	☐No ☒Yes-Depth to water = 15.9'	
T8	13	0	16.4	☐No ☒Yes-Depth to water = 15.1'	
T9	18	0	7.1	☒No ☐Yes-Depth to water =	
T10	8	0	17.7	☐No ☒Yes-Depth to water = 16.0'	
T11	12	0	5.9	☒No ☐Yes-Depth to water =	
T12	29	0	5.8	☒No ☐Yes-Depth to water =	
T13	6	0	5.1	☒No ☐Yes-Depth to water =	
T14	10	0	5.4	☒No ☐Yes-Depth to water =	

T15	18	0	6.2	☒No ☐Yes-Depth to water =	
T16	14	0	6.1	☒No ☐Yes-Depth to water =	
T17	44	0	10.1	☐No ☒Yes-Depth to water = 7.3'	
T18	42	0	8.8	☒No ☐Yes-Depth to water =	
T19	11	0	13.7	☐No ☒Yes-Depth to water = 11.8'	
T20	26	0	3.5'	☒No ☐Yes-Depth to water =	

3. If the minimum number of required test holes were not dug for this site, then explain in detail why not:

   Note: This application may be found deficient if test holes do not meet the specifications described in C2-1 above, the *Soil Guideline*, and ARM 17.24.218(1)(c).

4. **In the table below**, provide soil and overburden thicknesses to be stripped and salvaged for reclamation to the nearest inch. If available, up to 24 inches of soil and overburden must be stripped, salvaged and replaced for reclamation. The soil to be stripped, salvaged and replaced for reclamation must include the **top** 24 inches of the soil profile.
   Note: If overburden is a mine material or will be used as binder, an appropriate quantity must first be stripped and salvaged to satisfy the soil plus overburden replacement thickness requirement (24 inches cumulative).

Soil	Average Soil Thickness to be Stripped, Salvaged, Replaced for Reclamation (inches)
Permit Area Soil	18
Permitted Access Road Soil	0
Overburden	**Average Overburden Thickness to be Stripped, Salvaged and Replaced for Reclamation (inches)**
Permit Area Overburden	0
Total Soil & Overburden thickness to be Replaced for Reclamation (up to 24 inches required if available).	18

Note: Depending on the additional surface area created from Opencut mining, the actual soil depths replaced for reclamation may vary slightly from the amount noted above.

a. Use this section to provide custom information pertaining to soil replacement (if applicable):
   The average soil thickness from the 2020 test pits was calculated to be approximately 18 inches. Please note that Test Pits 5, 12, and 17 are slightly outside the proposed permit boundary. These pits were excluded from the average soil thickness calculation. The 2018 amendment required 20 inches of soil/overburden for reclamation. An area-weighted average for soil thickness was calculated between the 2020 test pit data and the 2018 data to arrive at an average soil thickness of 18 inches for the entire site. Actual placed depth of topsoil during reclamation may vary from 18 inches due to varying depths of soil/overburden across the site. No overburden/soil will be exported/removed from the site. It will all be used for reclamation. Additional topsoil may become available during reclamation since the ponded areas will not require topsoil. The soil from these areas will be placed in neighboring areas.

b. If the average depth of **soil** at this site is 24 inches or less, skip to C3. If the average depth of **soil** at this site is greater than 24 inches, explain what will be done with the excess soil:

☐Soil in excess of 24 inches will be stripped, salvaged and replaced for final reclamation.
☐Soil in excess of 24 inches will not be saved for final reclamation, but will leave the site. **Butana Sand & Gravel** understands they must strip, salvage and replace the top 24 inches of soil for final reclamation.
☐Other: Explain

C3. EXISTING SITE CONDITIONS *[ARM 17.24.221(3)]*

1. Is an existing disturbance located within the proposed permit boundary (e.g. permitted, unpermitted, historical, Limited Opencut Operation, etc.)? ☒Yes ☐No
   If No, skip to C4. If Yes, Check the appropriate boxes below.
   a. ☒All soil and overburden was stripped and salvaged from the disturbed area and remains on site.
   The location of the soil and overburden stockpiles must be identified on the Site Map.
   Additional Description (if applicable): All soil within the current 15.2 bonded acres has been either undisturbed or stripped and stockpiled on site.

   b. ☐Soil and overburden from the disturbed area has been lost and/or removed from the site.
   The following quantity of soil **cubic yards** will be imported to the site to ensure the previously disturbed area is reclaimed to the productive postmining land use identified in this permit. Ensure the quantity stated in this section is added to the *Reclamation Bond Spreadsheet's* line item *Cost to Import, Purchase and Place Soil* and that it is identical to the quantity identified here.
   Additional Description (if applicable):

   c. ☒Soil from the area to be permitted would be used to reclaim the existing disturbance, and the soil idenitified in section C2-4 has been averaged to account for reclamaton of both the existing disturbance and the undisturbed area.

   d. Will the disturbed area that is contained within the proposed permit boundary be used for further Opencut operations or will it be reclaimed only? ☐**Reclaimed Only** ☒**Used for further Opencut Operations**
   Additional Description (if applicable): A portion of the proposed amendment area has been subject to historic opencut activities as well as a Small Miner's Exemption permit through the Hard Rock program. Some of these areas have been previously stripped of topsoil. These areas will require topsoil from other undisturbed portions of the permit area. The approximate quantity of topsoil onsite (both stockpiled and undisturbed) was calculated. This volume was divided by the area of current and future disturbance to determine the average topsoil thickness to be placed during reclamation. This value is reported in C2-4. The proposed non-bonded area (14.5ac) within the boundary of #1114 will not be disturbed. This area is currently reclaimed and was only included as part of this proposed amendment boundary to allow for release/closure of the #1114 permit.

C4. ACCESS ROADS *[MCA 82-4-403(1) & 82-4-431(2)(c)] & [ARM 17.24. 202(1); 17.24.206(2); 17.24.218(1); 17.24.219(1)(e); & 17.24.221]*

1. Access road(s) must meet the requirements of the Opencut Act and rules and be consistent with the Landowner Consultation form signed by the landowner.

C5. HOURS OF OPERATION *[MCA 82-4-434](2)(m)] & [ARM 17.24.218(1)(f)]*

1. The **DEQ may impose reasonable** limits on hours of operation to reduce adverse impacts on residential and Sage Grouse areas. **Butana Sand & Gravel** must propose hours of operation by checking box "**a**", "**b**" or "**c**" below (thereby adopting the hours stated), or by checking box "**d**" and providing the required information.
2. DEQ will assess the site conditions and may restrict the hours of operation on a case by case basis. If residential areas are within ½ mile of the proposed Opencut operation (with the potential exception of the landowner's residence), DEQ may require Option "**a**." Alternatively, the operator could obtain a signed letter from each residence stating alternative proposed hours of operation are acceptable.

   Note: Equipment start-up and warmup is part of operations and can only occur within the below designated hours of operation. Equipment startup can occur for maintenance.

   a. ☐ Permitted hours and activities are as follows:
      - Monday-Friday 7 am to 7 pm - Activities: All permitted activities allowed
      - Saturday 8 am to 5 pm - Activities: Maintenance only

      Temporary Extended Hours: The above restricted hours of operation apply unless adjacent property owners and residents are notified of temporary extended hours for public works projects. Temporary extended hours are 24 hours a day, 7 days a week, Monday through Saturday. Extended hours must not exceed 30 consecutive working days, with no more than 30 days of extended hours in any six-month period. At least 30 days must elapse between periods of extended hours.

Prior to commencing temporary extended hours, Butana Sand & Gravel must:

- Notify in writing the adjacent property owners and residents within ½-mile of the permit area;
- Notify in writing the County Commissioners;
- Publish notice of the extended days and hours of operation in the local newspaper at least seven days prior to commencing operations within the extended hours; and
- Keep and maintain a complete and accurate record of the hours operated. Butana Sand & Gravel shall submit the record to the department within two work days after receipt of a request from the department.

b. ☐ Permitted hours and activities are as follows:

- Monday–Friday: 7:00 am-7:00 pm - Activities: All permitted activities allowed.

c. ☐ Site is located in Sage Grouse Core, General Habitat, or Interconnectivity area, and the permitted hours of operation are restricted to those stipulated in the attached Montana Sage Grouse Habitat Conservation Program's letter. Check the box for this section and "d" below and enter the required Sage Grouse hours.

d. ☒ Permitted hours and activities are as follows:

- Mon–Fri: 6 am- 10 pm Activities: ☒All Activities ☐Crushing ☐Hauling ☐Loading ☐Maintenance ☐Mining ☐Other:
- Saturday: 6 am- 10 pm Activities: ☒All Activities ☐Crushing ☐Hauling ☐Loading ☐Maintenance ☐Mining ☐Other:
- Sunday: _____ am- _____ pm Activities: ☐All Activities ☐Crushing ☐Hauling ☐Loading ☐Maintenance ☐Mining ☐Other:

Additional information: Saturday operations will only be periodic. For most weeks, activities will only occur Monday-Friday. Most common hours of operation will be 7am-5pm, but some projects may require 6am-10pm operations.

C6. MAPPING *[MCA 82-4-403(11)(b)] & [ARM 17.24.221]*

1. The Site, Area, Reclamation and Location Maps must meet the requirements of the Opencut Mining Act, associated rules, and Map Guideline. The Map Guideline can be found here: http://deq.mt.gov/Mining/opencut (click on the "Forms" tab).

C7. MARKERS *[ARM 17.24.218(1)(a)]*

1. The site must be marked in accordance with the Opencut Mining Act and associated rules.

C8. ADDITIONAL INFORMATION *[MCA 82-4-432(1) & 82-4-434(2)] & [ARM 17.24.222]*

1. If applicable, provide additional site preparation and planning information not addressed above.
   Answer: None

SECTION D – WATER PROTECTION, MINING & PROCESSING

D1. WATER PROTECTION *[MCA 82-4-434(2)(l)] & [ARM 17.24.218(1)]*

1. Butana Sand & Gravel must:
   - **a.** Protect on-site and off-site surface water and ground water from adverse changes in quality and quantity that could be caused by Opencut operations.
   - **b.** Prevent, minimize, or mitigate adverse impacts to on-site and off-site surface and ground water systems and structures that could be caused by Opencut operations.
   - **c.** Properly establish, use, and reclaim hydrologic structures and systems used for Opencut operations.
   - **d.** Keep waste and stationary equipment above the seasonal high-water level of surface and ground water and dispose of all petroleum, solvent, and chemical wastes in compliance with applicable state laws and rules.
   - **e.** Butana Sand & Gravel has reviewed and will comply with the current DEQ *Spill Management and Reporting Policy* document found on the DEQ's Enforcement website.

2. Butana Sand & Gravel has consulted DEQ Water Protection Bureau (WPB) and will obtain all required Montana Pollutant Discharge Elimination System (MPDES) permits including but not limited to:
   - Authorization under the Stormwater Industrial General Permit (a.k.a. Stormwater Industrial (SWI) or Multi-Sector

General Permit (MSGP), and/or

- Authorization under the Sand and Gravel General Permit (required for pit dewatering or process water discharges off-site into a state water).

All BMPs would be installed, maintained, and operated in accordance with the MSGP issued by the Water Protection Bureau and/or other requirements of the Water Protection Bureau to prevent the discharge of pollutants to a state water.

a. Determine if a Storm Water Permit or Sand and Gravel General Permit is required for your Opencut operation by reviewing the "Water Protection Bureau Permitting Guide: Sand and Gravel Operations" located at this link http://deq.mt.gov/Mining/opencut (click on the "Forms" tab), and by contacting the Montana Department of Environmental Quality's Water Protection Bureau at (406) 444-5546.

Date WPB was Contacted for the proposed Site: 1/23/2020

Indicate which of the below permits may be required from the Montana Department of Environmental Quality's Water Protection Bureau:

☒ None ☐ Storm Water Permit ☐ Sand and Gravel General Permit ☐ Other:

D2. FUEL DISPENSING & FUEL STORAGE *[MCA 82-4-434(2)] & [ARM 17.24.218(1)(i)]*

1. **Butana Sand & Gravel** agrees to manage fuel as follows:
   a. Routinely inspect and maintain fuel tanks, guard posts, secondary containment, fittings, piping, hoses, filters, and dispensers to prevent leaks and spills. The Department recommends using the *Aboveground Storage Tanks Self-Inspection Checklist* available from the Petroleum Tank Release Compensation Board at: http://deq.mt.gov/Portals/112/DEQAdmin/PET/Documents/Forms/StorageTankChecklist.pdf.
   b. Retrieve, handle, and dispose of spilled fuel and contaminated materials and soil in a lawful manner.
   c. Report a fuel spill of any quantity that reaches state waters or is greater than 25 gallons to the Montana Spill Hotline (406-324-4777). Note: "State waters" as defined in 75-5-103, MCA is defined as follows:
   "State waters" *means a body of water, irrigation system, or drainage system, either surface or underground.*

2. **Will there be stationary fuel storage on-site, mobile fueling on-site, or any type of on-site fueling?** ☒ Yes ☐ No
   If **No**, skip to Section D3.
   Note: In accordance with ARM 17.24.218(1)(i), off-site fuel storage and fueling must be conducted in accordance with current codes adopted by the state fire marshal.
   If **Yes**, **Butana Sand & Gravel** must fill out and attach the *Fuel Guideline for Spill Prevention & Management Worksheet* and check the appropriate box on page 1.

3. Additional Information (if applicable):
   None

D3. WATER MANAGEMENT & USE *[MCA 82-4-434(2)(l)] & [ARM 17.24.218(1)(g, h & i) & [ARM 17.24.219(1)(b)]*

1. Indicate the proposed use(s) of water:
   ☐ Asphalt Plant ☐ Concrete Batch Plant ☒ Dust Control (e.g. roads, crusher, etc.) ☐ Pug Milling
   ☐ Wash Plant ☒ Other: **Water will be used for dust control as needed on crushers/conveyors. Water will be applied to roads as necessary.**
   a. Is the water source within 300 feet of the permit area? ☒ Yes ☐ No
   If **No**, skip to D3-1b.
   If **Yes**, identify the source of the water to be used and show its location on a map.
   ☐ Irrigation Ditch ☐ Pit ☒ Pond ☐ Well ☐ Other:
   b. Will water be stored on-site? ☐ Yes ☒ No
   If **No**, skip to D3-1c.
   If **Yes**, what will the water be stored in?
   ☐ Detention/Retention Pond ☐ Lined Detention/Retention Pond ☐ Water Storage Tank
   ☐ Other:
   c. **Butana Sand & Gravel** has consulted with DNRC and understands the requirements regarding water rights and ground water development related to this Opencut operation. **Butana Sand & Gravel** has or will obtain the appropriate and applicable water rights to conduct the activities identified in D3-1.
   d. **Butana Sand & Gravel** must take all necessary precautions and measures to protect the water rights of other parties.
   ☒ **Butana Sand & Gravel Agrees:** Additional Information (if applicable): **none**

2. Will dewatering be conducted at this site? ☐ Yes ☒ No
   If **No**, skip to Section D4.

If **Yes**, ensure the appropriate boxes in Section D1-2 above are checked indicating the permit required from the DEQ Water Protection Bureau. Show the location of all pertinent features related to dewatering on the Site Map and provide the following information.

a. Describe how the site will be dewatered:
☐ **Surface water flow from site via a ditch, drainage channel, etc.**
☐ **Pumping from:** ☐ Pond ☐ Pit ☐ Wells ☐ Other:
☐ **Other:**

b. Where will the water be discharged?
☐ **Pond** ☐ **Pit** ☐ **Ditch** ☐ **Creek** ☐ **River** ☐ **Ground Surface** ☐ **Wells** ☐ **Wetland**
☐ **Other:**

c. Additional Information (if applicable):

D4. SETBACKS, EASEMENTS, & PROHIBITED AREAS *[MCA 82-4-434(2)] & [ARM 17.24.218(1)(h-k) & 17.24.221]*

1. The Opencut Act states that the DEQ cannot accept a plan of operation unless the plan provides that surface water and ground water will be given appropriate protection, consistent with state law, from deterioration of water quality and quantity that may arise as a result of the Opencut operation [MCA 82-4-434 (2)(l)].
Will Opencut operations be conducted within a waterway (e.g. ephemeral drainage, river, stream/creek, pond/lake, wetland or other surface water feature)? ☐ **Yes** ☒ **No**
If **No**, skip to D4-2.
If **Yes**, complete the *Stream/Waterway Worksheet* to guide **Butana Sand & Gravel** through the requirements of the Opencut Mining Act. The *Stream/Waterway Worksheet* is found here http://deq.mt.gov/Mining/opencut (click on the "Forms" tab).
Attach the *Stream/Waterway Worksheet* and required criteria to this application and check the appropriate box on page 2.

2. Are there utilities, infrastructure, improvements, or easements within the proposed Opencut boundary?
Note: Features outside the permit boundary that have easements that extend within the permit boundary would require documentation. These features may include transmission lines, pipelines, ditches, etc.
☒ **Yes** ☐ **No**
If **No**, skip to D4-3.
If **Yes**, show the utilities, infrastructure, improvements or easements and/or required setbacks on the Site Map and/or Area Map, and complete "a" and "b" below:

a. The width of required setbacks or easements within or adjacent to the proposed Opencut boundary are as follows:
☐ **Ditch: Setback/Easement = _____ ft.**
☒ **Above Ground Utilities (e.g. power lines, poles, structures, etc.): Setback/Easement = 50 ft.**
☐ **Underground Utilities (e.g. gas, oil, fiber optic, etc.): Setback/Easement = _____ ft.**
☐ **Road: Setback/Easement = _____ ft.**
☐ **Other: Setback/Easement = _____ ft.**
Further Explanation (if applicable):

b. **Butana Sand & Gravel** must provide documentation from the dominant estate holding the easement (e.g. utility company, ditch rider, agency, private individual, etc.) describing its requirements. Check the appropriate box below and on page 2, and attach the documentation.
☒ **Easement holder has requirements for a setback or easement and documentation is attached.** These may include: **a)** the required setback; **b)** crossing requirements; **c)** maximum ground slope allowed; and **d)** any other requirements for activities conducted under, over, or adjacent to the easement or the infrastructure it contains (e.g. inspections, safety, excavation, stockpiling, etc.).
☐ **Easement holder has no requirements for a setback or easement and documentation is attached.**

3. Are there drainages, waterways, or other areas within or adjacent to the proposed permit boundary where Opencut operations would be prohibited, and from which a setback or buffer would be required [*ARM 17.24.218(1)(h & j)*]? ☐ **Yes** ☒ **No**
If **No**, skip to D5.
If **Yes**, check those that apply, provide the buffer/setback distance from the edge of the feature, and show its location on the Site Map:

a. ☐ **Ephemeral Drainage:** Setback from edge of defined channel = _____ ft.
b. ☐ **River:** Setback from edge of defined channel = _____ ft.
c. ☐ **Stream/Creek:** Setback from edge of defined channel = _____ ft.
d. ☐ **Pond/Lake:** Setback from high water mark = _____ ft.
e. ☐ **Wetland:** Setback from wetland = _____ ft.
f. ☐ **Other:** _____ Setback = _____ ft.

Further Explanation (if applicable):

4. Is the site or a portion of the site located within the floodplain or floodway? Click the following link to view the FEMA Flood Map Service: https://msc.fema.gov/portal/home.
☐**Yes** ☒**No**
If **No**, skip to D5-1.
If **Yes**, provide a letter, permit, or other document from the local county floodplain administrator stating whether there are requirements, restrictions, etc., for this site and update this application as necessary to be consistent with any requirements.

D5. MINING DESCRIPTION *[MCA 82-4-434(2)] & [ARM 17.24.218(1)]*

1. Is the site expected to be worked continuously or intermittently?
☒**Worked continuously (i.e. year round)**
☐**Worked intermittently (i.e. on occasion when material is needed)**
Additional information (if needed):

2. Will any of the processing equipment identified in Section A1-10 be moved on-site and off-site as needed, or is it expected to remain on-site during the life of the permit?
☐**No Processing Equipment** ☐**Remain on-site** ☒**Move on-site and off-site as needed**
☐ **Additional Information:**

3. Will processing equipment be stationary or move with the highwall as mining progresses across the site?
☐ **No Processing Equipment.**
☐ **Mobile processing equipment checked in A1-10 and mine material stockpiles would remain in one general location throughout the life of the permit (location is identified on Site Map).**
☒ **Mobile processing equipment checked in A1-10 and mine material stockpiles would move with mining activity (i.e. migrate with the highwall).**
Further Explanation (if applicable):
☐ **Other:**

4. Typically, the following excavating or hauling equipment is used on-site:
Backhoe, Dozer, Dump/Haul Truck, Excavator, Loader, Scraper and Skidsteer.
If applicable, identify any other equipment that may be used on-site:
☐**Drag Line** ☐**Dredge** - Type: ☐**Other:**

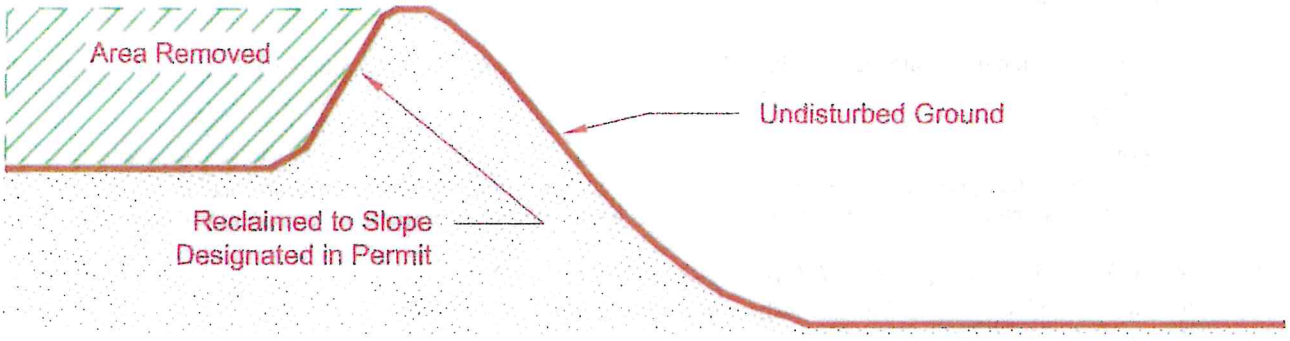
5. Opencut Operation Mining Direction:
   a. Describe where Opencut operations would begin at this site (e.g. north corner, west corner, southeast corner, existing disturbance, etc.):
   Opencut activities will begin at: Existing disturbance at the south end of the permit area
   b. Describe the direction that Opencut operations would progress across the site over time (e.g. north to south, southeast to west then north, etc.):
   Opencut activities will progress: South to north

6. If there are no non-bonded areas, skip to Section D5-7 below. If the permit boundary contains non-bonded areas:
   a. Describe where Opencut operations will begin in the proposed non-bonded area(s), once they are bonded (e.g. north corner, west corner, southeast corner, center, disturbance, etc.):
   Answer: south side
   b. Describe in which direction the Opencut operation will progress in the proposed non-bonded area(s), once they are bonded (e.g. north to south, southeast to west then north, clockwise from center, etc.):
   Answer: south to north

   Note: Butana Sand & Gravel must submit a *Request to Modify Bonded Acreage* and obtain written approval from the DEQ before any Opencut activities (i.e. disturbance, stripping, mining, parking, etc.) can be conducted in any non-bonded area(s).

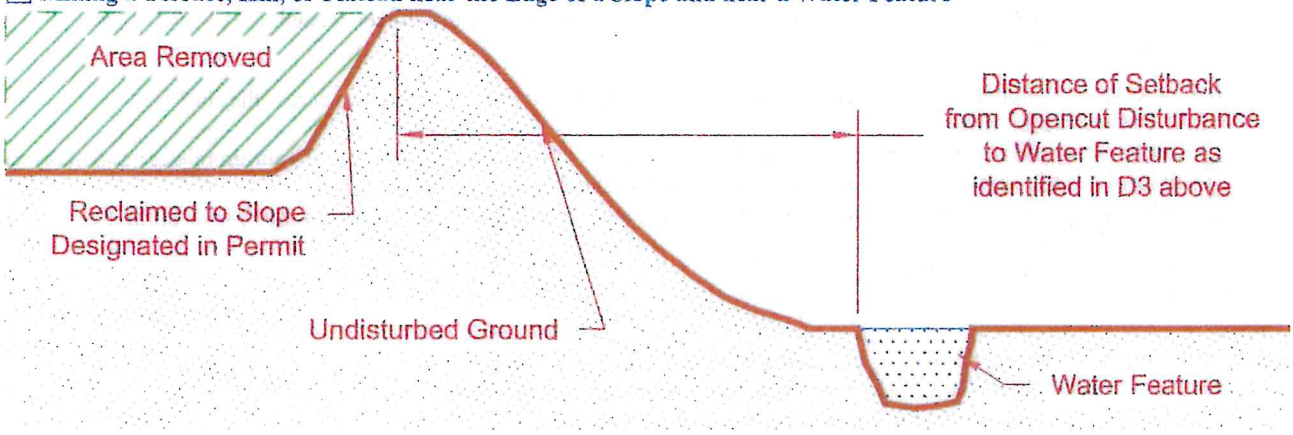
7. Choose all scenarios below that best describe the method of mining across the entire site. If none of the scenarios depict how the site would be mined, complete "7j" below with a detailed explanation.

   a. ☐ **Mining a Terrace, Hill, or Plateau near the Edge of a Slope**



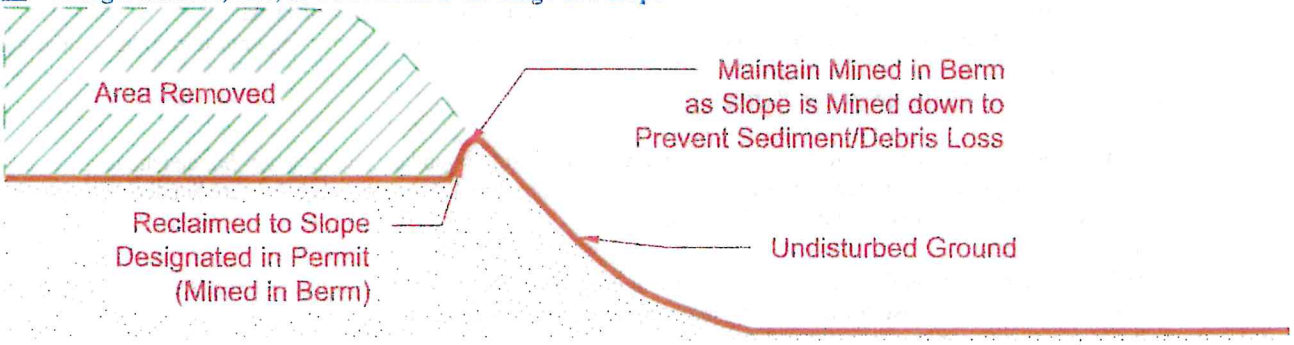
This mining method would be implemented at or near the following locations within the permitted boundary (check all that apply) ☐All ☐North ☐South ☐West ☐East ☐Northwest ☐Northeast ☐Southwest ☐Southeast
Additional Information:

b. ☐ **Mining a Terrace, Hill, or Plateau near the Edge of a Slope and near a Water Feature**



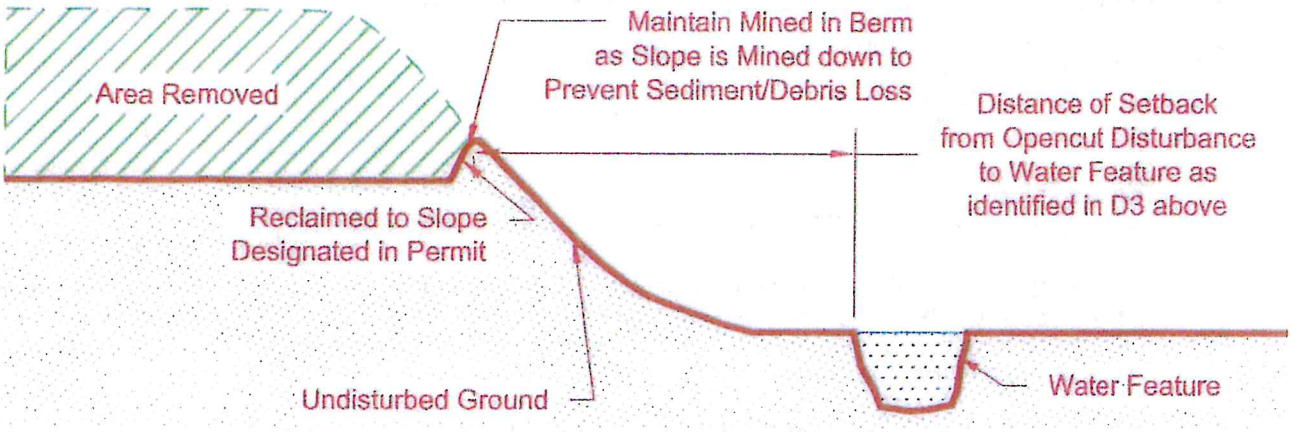
This mining method would be implemented at or near the following locations within the permitted boundary (check all that apply) ☐All ☐North ☐South ☐West ☐East ☐Northwest ☐Northeast ☐Southwest ☐Southeast
Additional Information:

c. ☐ **Mining a Terrace, Hill, or Plateau near the Edge of a Slope**



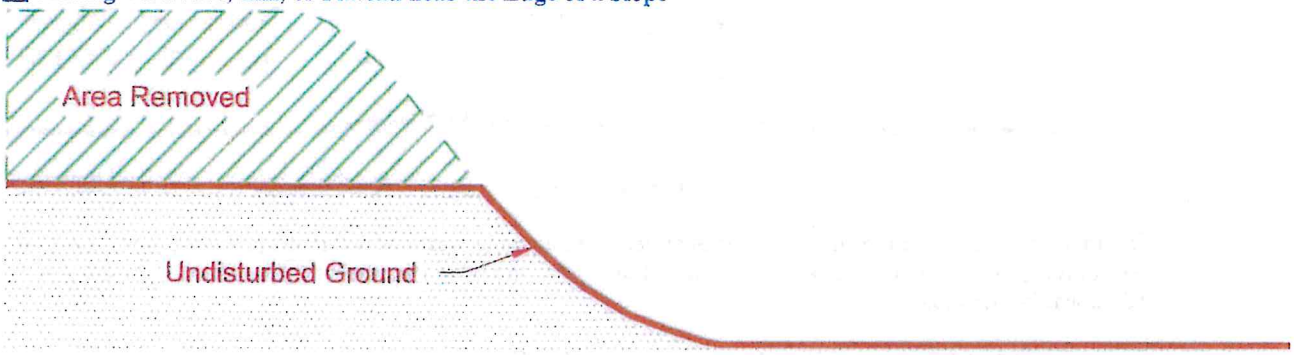
This mining method would be implemented at or near the following locations within the permitted boundary (check all that apply) ☐All ☐North ☐South ☐West ☐East ☐Northwest ☐Northeast ☐Southwest ☐Southeast
Additional Information:

d. ☐ **Mining a Terrace, Hill, or Plateau near the Edge of a Slope and near a Water Feature**



This mining method would be implemented at or near the following locations within the permitted boundary (check all that apply) ☐All ☐North ☐South ☐West ☐East ☐Northwest ☐Northeast ☐Southwest ☐Southeast
Additional Information:

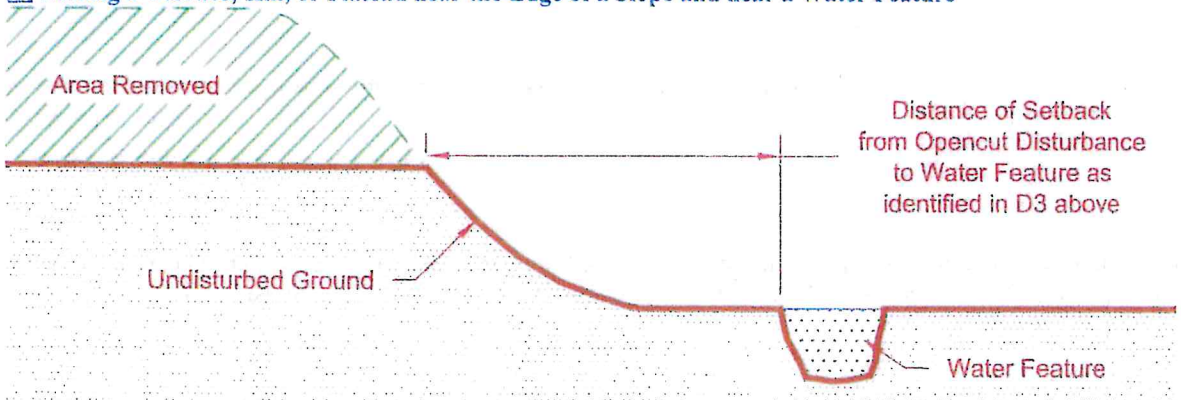
e. ☐ **Mining a Terrace, Hill, or Plateau near the Edge of a Slope**



This mining method would be implemented at or near the following locations within the permitted boundary (check all that apply) ☐All ☐North ☐South ☐West ☐East ☐Northwest ☐Northeast ☐Southwest ☐Southeast
Additional Information:

i. This mining method requires **Butana Sand & Gravel** to ensure that no sediment or debris erodes or is pushed down the slope. **Butana Sand & Gravel** would implement, as necessary, erosion control measures at the edge of the slope or slightly downslope (within permit boundary) to prevent loss of sediment and debris.

f. ☐ **Mining a Terrace, Hill, or Plateau near the Edge of a Slope and near a Water Feature**



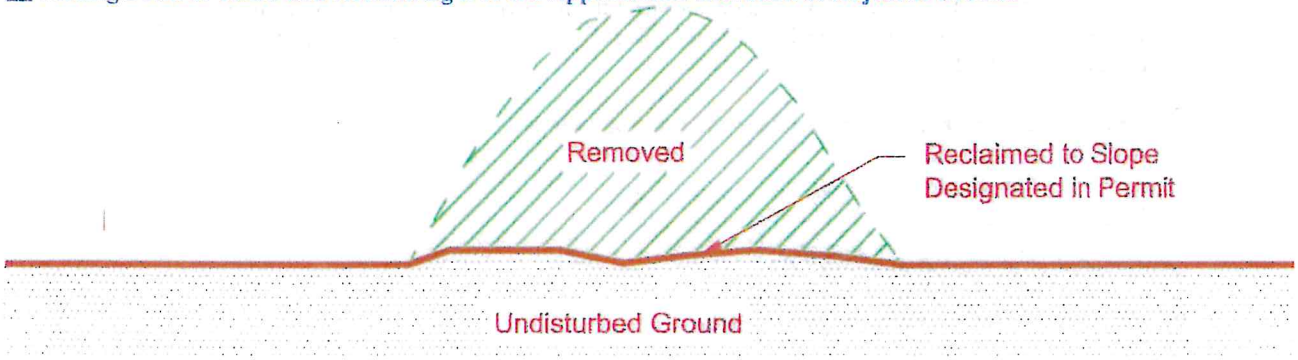
This mining method would be implemented at or near the following locations within the permitted boundary (check all that apply) ☐All ☐North ☐South ☐West ☐East ☐Northwest ☐Northeast ☐Southwest ☐Southeast
Additional Information:

This mining method requires **Butana Sand & Gravel** to ensure that no sediment or debris erodes or is pushed down the slope. **Butana Sand & Gravel** would implement, as necessary, erosion control measures at the edge of the slope or slightly downslope (within permit boundary) to prevent loss of sediment and debris.

g. ☒ **Mining a Relatively Flat Area to Create a Depression**

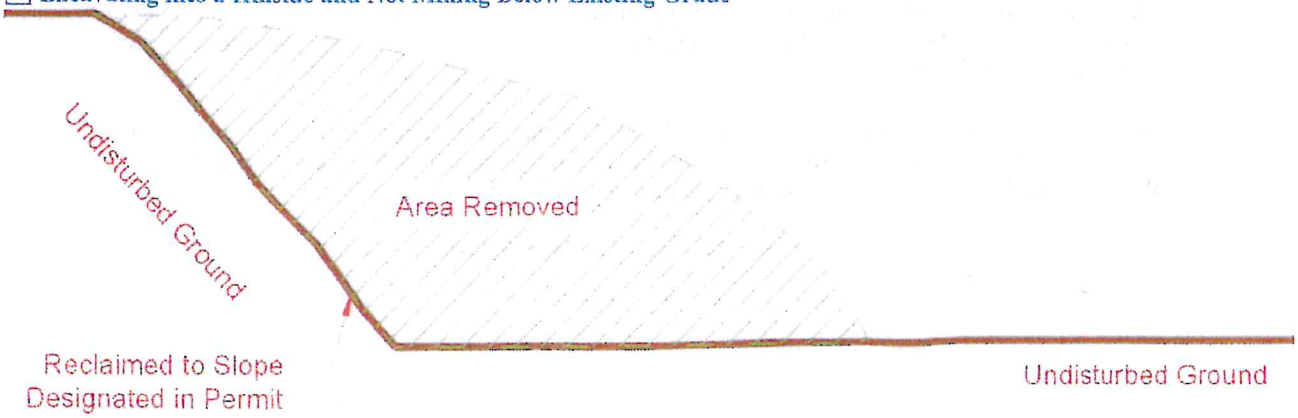
This mining method would be implemented at or near the following locations within the permitted boundary (check all that apply) ☒All ☐North ☐South ☐West ☐East ☐Northwest ☐Northeast ☐Southwest ☐Southeast
Additional Information: **The non-bonded area that encompasses a portion of Permit #1114 will not be mined, this area will only be further reclaimed.**

h. ☐ **Mining a Hill or Knob and Reclaiming it to the Approximate Elevation of Adjacent Ground**



This mining method would be implemented at or near the following locations within the permitted boundary (check all that apply) ☐All ☐North ☐South ☐West ☐East ☐Northwest ☐Northeast ☐Southwest ☐Southeast
Additional Information:

i. ☐ **Excavating into a Hillside and Not Mining Below Existing Grade**



This mining method would be implemented at or near the following locations within the permitted boundary (check all that apply) ☐All ☐North ☐South ☐West ☐East ☐Northwest ☐Northeast ☐Southwest ☐Southeast
Additional Information:

j. ☐Other Scenario
Describe:

8. Any slope steeper than 3:1 with a height of 5 feet or greater, present for any length of time, is considered to be a highwall. Will this site have highwalls? ☐No ☒Yes If Yes, skip to D5-8b.
   a. If No, explain in detail how this site will be mined without ever creating a highwall on-site. Note that mining without a highwall is not typical and is difficult to achieve.
      Answer:
   b. If Yes,

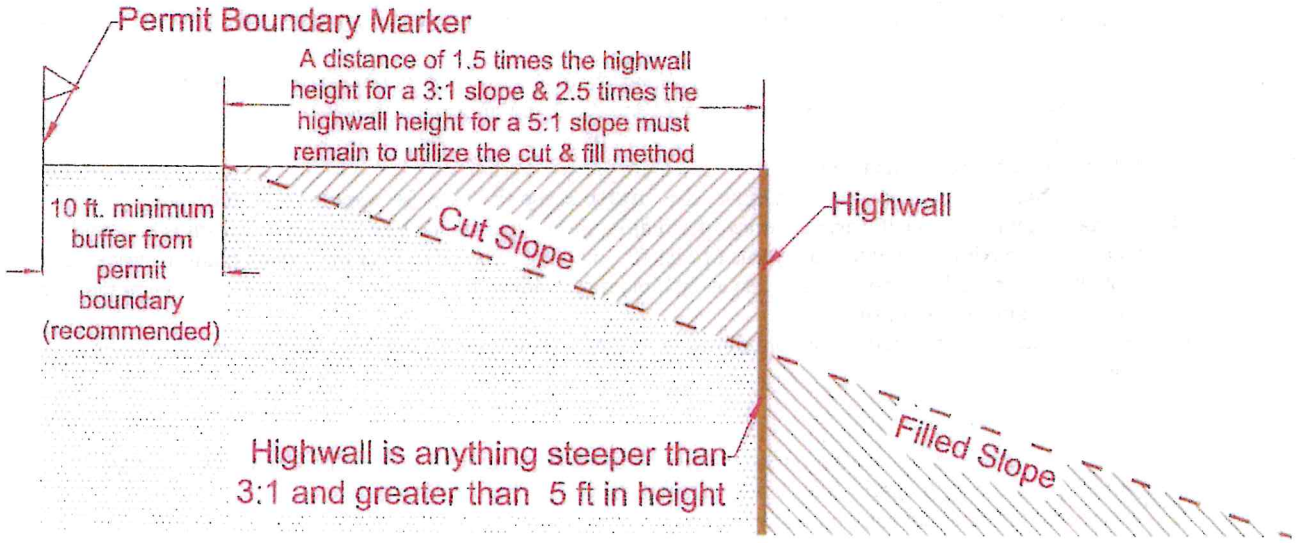
i. The maximum **length** of highwall on-site at any given time will be: 5000 linear feet. Note: This number must be used on the *Reclamation Bond Spreadsheet.*

ii. The maximum **height** of highwall on-site at any given time will be: 13 feet. Note: This number must be used on the *Reclamation Bond Spreadsheet* and will typically be consistent with the maximum depth of mining (see Section C1-1).

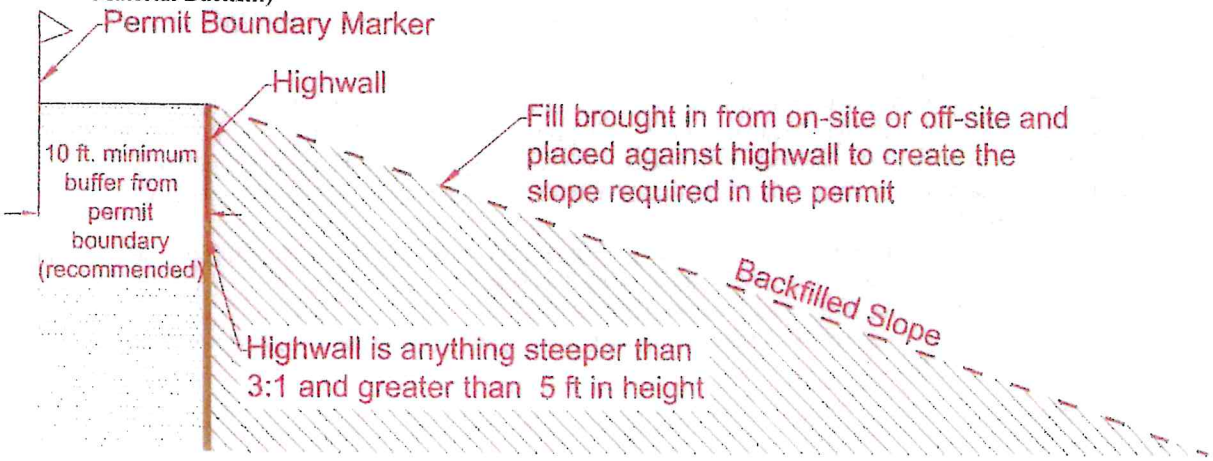
iii. If the maximum height of highwall identified in D5-8 above is not identical to the maximum mine depth identified in C1-1 (i.e.16), explain in detail how the site will be mined: **The areas that will be mined to 16 feet below ground will be in the middle of the permit area, away from the highwall. These areas will act as the "deep water" portion of the ponds and will be mined last after the remaining permit area has been mined to 10-13 feet below ground as needed to meet the reclamation plan.**

iv. Choose the highwall scenario below that best depicts how this site will be mined:

- ☒ **Cut & Fill Scenario** (complete Highwall section on *Reclamation Bond Spreadsheet*)
  - **Butana Sand & Gravel** understands that choosing this scenario requires that a buffer of unmined area be kept between the highwall and the permit/bonded boundary. Therefore, **Butana Sand & Gravel** will maintain an adequate buffer to allow for cut-and-fill to be conducted.
  - **NOTE**: It is recommended that if the cut-and-fill scenario is to be used, the maximum advanced position of the highwall be clearly marked on the ground with durable markers to ensure enough material remains in place for slope reduction.



- ☐ **Backfill Scenario for areas where the Cut & Fill Method is not an Option** (Complete Section D6 – Mine Material Backfill)



D6. MINE MATERIAL BACKFILL *[ARM 17.24.218(1) & 17.24.219]*

1. If "Backfill Scenario" was chosen in D5-8(a) or if any mine area backfill locations are planned (e.g. using material to raise

the level of the pit floor to accomplish the reclamation plan), complete this section. If not, skip to Section D7.

☐ **Highwall Backfill*** ☐ **Mine Area Backfill****

Show the planned backfill location(s) on the Site Map or Reclamation Map and provide the following information:

a. Describe where the backfill material will come from:
☐ **On-site** – Describe:
☐ **Off-site**- Describe:

b. Material type(s) to be used as backfill (check all that apply):
☐ **Pit Run** ☐ **Gravel** ☐ **Oversize Rock** ☐ **Reject Fines** ☐ **Backhaul** (Clean Fill Only)
☐ **Other:**

*Highwall Backfill: **Butana Sand & Gravel** must identify the linear feet, height, and slope of highwall to be backfilled on the *Reclamation Bond Spreadsheet* under "Highwall Backfill." Additionally, **Butana Sand & Gravel** must bond for transport/placement cost for the quantity of material to be placed against the highwall for backfill under the "Backfill Transport/Placement" cost line item ($2/cy for on-site generated backfill and $15/cy for off-site generated backfill).
Mine Area Backfill: **Butana Sand & Gravel must identify the acreage, depth, and compaction percentage on the *Reclamation Bond Spreadsheet* under "Mine Area Backfill." Additionally, **Butana Sand & Gravel** must bond for transport/placement cost for the quantity of material to be placed on-site for backfill under the "Backfill Transport/Placement" cost line item ($2/cy for on-site generated backfill and $15/cy for off-site generated backfill).

D7. FACILITIES *[MCA 82-4-434] & [ARM 17.24.218(1)(e), ARM 17.24.218(1)(i) & 17.24.219(1)(b)]*

1. If an Asphalt Plant, Wash Plant, or Concrete Plant was checked in A1-2c or A1-10 above, complete this section. If **Not**, skip to D7-2.

a. ☒ **Asphalt Plant** – If stationary or near a water feature, identify the specific or general location on the Site Map.
→ Must be checked in section A1-10 for a new permit and A1-2c for an Amendment
→ Must remain in compliance with D1-1.

i. Where will the asphalt plant be set up?
Answer: Near the southern portion of the site. Refer to the site map for approximate location.

ii. A small amount of asphalt waste generated from daily startup and shutdown of the asphalt plant is expected; therefore, a maximum of 300 cubic yards of asphalt can be located onsite, near the asphalt plant. However, the asphalt waste must be removed when the asphalt plant is removed from the site, unless the site is permitted and bonded to store asphalt onsite.

iii. Describe additional restrictions or commitments on location of asphalt plant (placement away from water, residences, etc.)

b. ☐ **Concrete Plant** - If stationary, or near a water feature, identify the specific or general location on the Site Map.
→ Must be checked in section A1-10 for a new permit and A1-2c for an Amendment

i. Where will the concrete plant be set up?
Answer:

ii. Describe what will be done with wastewater created from the concrete plant.
☐ **Butana Sand & Gravel** will dispose of wastewater in an off-site location, greater than 300 feet from the permitted boundary, and in an area that would not impact surface or ground water.
☐ **Butana Sand & Gravel** will dispose of wastewater on-site or within 300 feet of the permitted boundary, and in an area that would not impact surface or ground water (location must be shown on Site Map).
☐ **Other: Describe:**

iii. Where will truck washouts occur?
☐ **Butana Sand & Gravel** will conduct truck washouts in an off-site location, located greater than 300 feet from the permitted boundary, and in an area that would not impact surface or ground water.
☐ **Butana Sand & Gravel** will conduct truck washouts on-site in or within 300 feet of the permitted boundary, and in an area that would not impact surface or ground water (location must be shown on Site Map).
☐ **Other: Describe:**

iv. Describe how and where return loads and excess or reject product will be handled or stored. If on-site or within 300 feet of the permitted boundary, show the location on the Site Map.
☐ **Concrete will be poured into casts to make products**
☐ **Concrete will be poured on-site and buried under 3 feet of material suitable for sustaining the postmining land use.**
☐ **Other:**

c. ☐ **Wash Plant** - If stationary, or near a water feature, identify the specific or general location on the Site Map.
→ Must be checked in section A1-10 for a new permit and A1-2c for an Amendment

i. Where will the wash plant be set up?

Answer:

ii. How many settling ponds will be used for the wash plant? ☐1 ☐2 ☐3 ☐4 ☐Other _____

iii. What will the approximate depth of the settling pond(s) be? **Answer:** feet

iv. Will settling pond(s) be lined? ☐No ☐Yes
If Yes, type of liner:

v. Where will the wash plant obtain its water?
☐**On-site well or well within 300 feet of permit boundary** (Identify location on Site Map)
☐**Surface water source within 300 feet of permit boundary** (Identify location on Site Map)
☐**Source located greater than 300 feet from permitted boundary**
☐**Other:**

vi. Will the water from the wash plant be recycled back into the wash plant? ☐Yes ☐No
If **No**, explain:

vii. **Butana Sand & Gravel** must show the location of the wash plant and any settling ponds or other wash plant features on the Site Map.

viii. If **Butana Sand & Gravel** attaches the Opencut Mining Section's *Wash Plant Settling Pond Guideline*, check the appropriate box on page 2.

2. Will salt or a salt mixed with product be stored on-site? ☐Yes ☒No
If **No**, skip to D8.
If **Yes**, complete the following:

a. Show the proposed salt material stockpile(s) on the Site Map.

b. Indicate the maximum quantity of salt or salt product that would be stored on-site: cubic yards

c. Describe how salt materials would be stored on-site:
Storage Pad: ☐**Asphalt Pad** ☐**Concrete Pad** ☐**Other Impermeable Surface – Describe:**
Cover: ☐**Enclosed Structure** ☐**Roof Only** ☐**Tarp** ☐**Other Cover – Describe:**
Other Storage Method:

d. Describe the measures to be taken to protect on and off-site surface water and ground water from deterioration of water quality due to salt storage per 82-4-434(2)(l), MCA & ARM 17.24.218(1)(h).
Answer:

D8. ASPHALT & CONCRETE RECYCLING *[ARM 17.24.206; 17.24.219(1)(b); & 17.24.221(3)]*

1. **Asphalt Recycling** – Typically, recycling involves accumulating materials containing asphalt, crushing these materials periodically, and stockpiling the resulting crushed asphalt product as is or blending it with other suitable materials. These recycled products are commonly used to surface roads, and operations permitted to operate an asphalt plant may also use these as feed into the plant.

Asphalt is considered to have the potential to impact water quality. As a result:

- An operation that imports materials containing asphalt must be permitted to store the debris awaiting recycling. Note: Imported debris may be a mixture of various materials (e.g. asphalt, concrete, soil, gravel, etc.). However, if the debris contains asphalt, it must be permitted as asphalt storage.
- Similarly, if a site permitted to operate an asphalt plant will stockpile asphalt produced on-site (e.g. excess or reject material), the operation must be permitted and bonded for asphalt storage.

a. Will asphalt or materials containing asphalt be stockpiled at the site? ☒Yes ☐No

If **No**, skip to D8-1b.

If **Yes**, **Butana Sand & Gravel** must comply with the following requirements for stockpiled asphalt:

i. The maximum amount of asphalt or material containing asphalt awaiting recycling that will be on-site at any time is 5000 cubic yards.

ii. This maximum value must be used in the *Reclamation Bond Spreadsheet* to calculate the cost to either recycle (i.e. crush) the asphalt, or dispose of it off-site in a lawful manner.

iii. Asphalt must be stored in the "asphalt stockpile area" shown on the Site Map.

iv. Asphalt must be kept out of ground water and surface water (runoff channels, puddles, ponds, etc.); the only water that should come in contact with the asphalt stockpile is rain and snow.

v. Imported asphalt must not be buried or otherwise disposed of on-site. During the final reclamation process, on-site asphalt stockpiles must be: **a)** removed from the site and disposed of in a lawful manner, or **b)** recycled into useful products which are removed from the site or used on-site to surface roads that are included in the approved postmining land use. Only on-site generated asphalt that has never left the site can be buried on-site as long as it is buried at least 25 feet above the ordinary high water table and under 3 feet of clean fill material suitable for sustaining the postmining vegetation.

b. Will on-site generated asphalt be buried on-site? ☐Yes ☒No
If No, skip to D8-2.
If Yes, item C of the *Landowner Consultation Form* must be checked "Yes." In addition, § 82-4-434(2)(l), MCA requires the DEQ to protect surface and ground water from deterioration of water quality and quantity that may arise as a result of the Opencut operations. The Opencut Mining Section may require that a ground water monitoring plan and monitoring well installation plan be designed to protect ground water. Therefore, the below items must be addressed to bury on-site generated asphalt.

i. What is the distance between the bottom of the proposed buried asphalt and the ordinary high water table?
Answer: ____ feet. (Buried on-site generated asphalt must be located at least 25 feet above the ordinary high water table.)

ii. How was the elevation of the ordinary high water table on-site confirmed?
☐**Monitoring wells were installed to confirm ordinary high water level** (data must be attached and the Monitoring Well Installation Plan on page 2 must be checked).
☐**Other:**

iii. Where will the required 3 feet of material suitable for sustaining postmining vegetation be obtained?
Answer: (Ensure that the additional fill is bonded for on the *Reclamation Bond Spreadsheet*)

2. **Concrete Recycling** – Hardened concrete is not considered to have potential to impact water quality. As a result, concrete debris from construction or demolition projects may be imported to the site and stockpiled pending recycling or used as mined-area backfill. Similarly, sites permitted to operate a concrete plant may stockpile excess or reject product that becomes hardened on-site.

a. Will hardened concrete be stored at the site? ☒Yes ☐No

If No, skip to Section D-9.

If Yes, **Butana Sand & Gravel** must comply with the following requirements for hardened concrete:

i. When concrete is deposited at the site, any protruding metal must be cut off and collected. Any metal exposed during subsequent handling, transfer, crushing, or recycling must promptly be freed and collected. As a result, no protruding metal should be visible at any time. Salvaged metal must periodically be transported off-site for recycling or other lawful disposal.

ii. Concrete must be stored in the "concrete stockpile area" shown on the Site Map.

iii. Concrete present at the site during the final reclamation process must be **a)** removed from the site and disposed of in a lawful manner, **b)** recycled into useful products, or **c)** buried on-site under at least 3 feet of clean fill material suitable for sustaining the postmining vegetation.

Note: If asphalt is present in concrete stockpiles, the site must be permitted for asphalt recycling (refer to Section D8-1 above.)

D9. REJECT FINES *[ARM 17.24.219]*

1. Reject fines are natural or crushed rock that is generally ¼ inch or smaller. Reject fines are usually created from screening product/material. Reject fines are typically pushed back into the pit to act as backfill before replacing the overburden and soil, or they are hauled off-site.
2. Will reject fines be created at this site?
☐Yes ☒ No
If No, skip to Section D10.

If Yes, how will reject fines be handled at this site? Check all that apply:

a. ☐**Reject fines will be hauled off-site before accumulating to 10,000 cubic yards.**

b. ☐**Reject fines will be periodically placed back into the mine area as operations progress through the life of the permit. Reject fines will not be allowed to accumulate to more than 10,000 cubic yards.**

c. ☐**Reject fines will be stockpiled and used for reclamation at a later date.**

i. The maximum quantity of fines to be stockpiled is cubic yards*

*Note: If more than 10,000 cubic yards of stockpiled reject fines will be located on-site, the entire stockpile must be bonded for on the *Reclamation Bond Spreadsheet* at a rate of $1.00 per cubic yard. Ensure the *Reclamation Bond Spreadsheet* is consistent with the quantity entered in this section.

d. ☐**Other:**

D10. SOIL, OVERBURDEN, & MINE MATERIAL COMMITMENTS *[MCA 82-4-434(2)(c)] & [ARM 17.24.218(1)(c-d) & 17.24.219(1)(c) & 17.24.220(2)(b)]*

1. **Butana Sand & Gravel** will comply with the following requirements:

a. Prior to conducting any Opencut operations, soil and overburden must be stripped separately to the average thicknesses identified in Section C2-4. (Note: Stripping soil may create low spots that collect water, necessitating the establishment of drainage ways, or the construction of raised roadbeds and work areas.)

b. **Butana Sand & Gravel** must strip, stockpile, save and replace all soil (and overburden if sufficient soil is unavailable) to a minimum depth of 24 inches or to another depth approved in writing by the DEQ and record the average thicknesses of soil to be replaced in Section C2-4.

c. All stripped soil and overburden must be: i) hauled directly to areas prepared for reclamation and re-soiling, or ii) promptly stockpiled and protected from erosion, comingling, contamination, compaction, and unnecessary disturbance. At the first seasonal opportunity, **Butana Sand & Gravel** must shape and seed, with an approved perennial seed mix, any stockpile that will remain for 2 or more years.

d. Designate all soil and overburden stockpiles with signage that is legible, visible, and placed so that equipment operators and inspectors may readily identify the type of stockpile being worked for the life of the stockpile.

e. **Butana Sand & Gravel** must not haul soil off-site, give it away, or sell it without written approval from the DEQ.

f. Soil and overburden must be handled separately and **Butana Sand & Gravel** will avoid mixing these materials, or handling them when wet or frozen. Overburden must be stockpiled only on areas where soil has been stripped to the required depth. Soil may be stockpiled on stripped or unstripped areas.

g. A minimum 10-foot wide buffer zone stripped of soil and needed overburden must be maintained along the crest (edge) of highwalls. This practice helps to ensure that soil will not be lost to mining. Highwalls are defined in D5-8.

h. Soil, overburden, and mine material stockpiles must be kept out of drainage bottoms and off of slopes steeper than 3:1. All excavated and/or processed mine material must be: **i)** removed from the site, **ii)** buried on-site, or **iii)** left for the landowner in accordance with the *Landowner Consultation* form and Section E7.

i. Burn pile residue, building demolition debris, metal, plastic, tires, and other wastes must be disposed of off-site and in a lawful manner, unless otherwise stated in the permit.

j. All clean fill (i.e. dirt, sand, fines, gravel, and oversize rock) that cannot, or will not, be buried during final reclamation must be removed from the permit area prior to bond or liability release request, with the exception of materials left for the landowner.

D11. ADDITIONAL IMPACTS *[MCA 82-4-434(2)(m)] & [ARM 17.24.218(1)(f & k)]*

1. Are there residences within 1,000 feet of the permit boundary? ☒ **Yes** ☐ **No**

2. Indicate the methods and materials that would be used to mitigate impacts of the processing equipment listed in Section A1-10 from the neighboring properties.
☒**Berms** ☐**Buffer zones** ☒**Dust mitigation** ☐**Equipment enclosures** ☐**Fences** ☐**Paving**
☐**Restricted Hours** ☐**Revegetation** ☐**Speed limits** ☐**Vegetative screens**
☒**Other/Additional Information: Topsoil will be bermed around the site perimeter. Berms will be approximately 6-12ft tall with slopes between 1:1(H:V) and 1.5:1(H:V).**

D12. ADDITIONAL COMMITMENTS *[MCA 82-4-434(3)(g)&(h) & MCA 82-4-437] & [ARM 17.24.214 & 17.24.218(1)(l)]*

1. **Butana Sand & Gravel** understands that obtaining an Opencut Mining Permit does not relieve **Butana Sand & Gravel's** obligation to comply with any other applicable federal, state, county, or local statute, regulation, or ordinance. Therefore, **Butana Sand & Gravel** is responsible for identifying and obtaining any other permits and approvals from other agencies required for the proposed activities (Refer to "How to Obtain and Comply with an Opencut Mining Permit" on the Opencut website). Obtaining an Opencut permit does not necessarily mean that an Operator can legally mine the site without first obtaining permits from other agencies.

2. **Butana Sand & Gravel** will comply with the following requirements:

   a. Key personnel and subcontractors involved in Opencut operations **must be informed** of the requirements of this Plan and **must be provided** a copy of this Plan. In addition, they **must be shown** each boundary marker location and informed of the importance of the markers.

   b. Proper precautions must be taken to prevent wildfires.

   c. Appropriate protection must be provided for identified cultural resources that could be affected by Opencut operations. If any other cultural resources are discovered, **Butana Sand & Gravel** must: i) temporarily halt work, or move to another area, and ii) promptly notify the State Historic Preservation Office (406-444-7715).

   d. By March 1st of each year, **Butana Sand & Gravel** must complete and return the Annual Production Report (APR) form that the Opencut Mining Section sends early in the year. **Butana Sand & Gravel** must report the requested information regarding mining conducted during the preceding calendar year. In addition, **Butana Sand & Gravel** must calculate the fee for the preceding year's production (per cubic yard of material mined) and submit payment to the DEQ

along with the APR.

D13. ADDITIONAL INFORMATION *[MCA 82-4-432(1) & 82-4-434(2)] & [ARM 17.24.222]*

1. If applicable, provide additional water protection, mining, and processing information not addressed above.
   Answer: **The site will be mined to the approximate high groundwater level or slightly above to maintain a "dry" mining area. Once the entire site is mined to this level, the Operator will start excavating below the high groundwater level down to the approximate reclamation grade. This excavation will start on one end of the mine (likely the north end) and proceed towards the other end (likely south). Material that exists between the low and high groundwater levels (10-13 feet below ground) will be mined during times of low groundwater so that dewatering efforts are not required. The "deep water" portion of the ponds (13-16 feet below ground) are located in the middle of the pit and will be mined last after the remainder of the pit has been mined to the appropriate depth. These "channels" will be excavated during low groundwater conditions.**

SECTION E – RECLAMATION PLAN

E1. RECLAMATION TIMEFRAME *[MCA 82-2-431(10) & (11); 82-4-434(2)(k); 82-4-434(3) & (4)] & [ARM 17.24.219(1)]*

1. Reclamation must be:
   a. Completed in accordance with this Plan and as concurrent with the Opencut operations as feasible.
   b. Completed on an area no longer needed for Opencut operations within one year after the cessation of such operations.
   c. Completed on an area that **Butana Sand & Gravel** no longer has the right to use for Opencut operations within one year after the termination of such right.
   d. Completed by the Term of the Permit (final reclamation date) that **Butana Sand & Gravel** specifies below.
   e. **Butana Sand & Gravel** must specify the final reclamation date based on various business and environmental factors, including:
      i. The estimated demand for mine materials, the expected rate of production, and accessible material reserves.
      ii. The time required to establish productive vegetation comparable to that growing on similar undisturbed land nearby. Typical minimum timeframes for revegetation are:
         - At least 2 additional years to establish vegetation and control noxious weeds on grassland and forest areas.
         - At least 1 additional year for the first successful harvest on cropland.
   f. Final reclamation of the site is complete when the postmining land use has been achieved, including successful revegetation or crop harvest, and noxious weed control. Therefore, DEQ recommends that **Butana Sand & Gravel** be sure to allow sufficient time for successful vegetative growth, thereby avoiding the need to submit an amendment application requesting only to extend the final reclamation date.
   g. Final Reclamation Date is: Month December, Year 2040
   h. **Butana Sand & Gravel** certifies that the reclamation date chosen fits the operator's production and business needs.

   Note:
   - If **Butana Sand & Gravel** will not be able to achieve the postmining land use by this date, an amendment application must be submitted to extend the final reclamation date. Such an application must be submitted well in advance of the reclamation date to allow time for processing and approval of the amendment.
   - If the final reclamation date passes before **Butana Sand & Gravel** achieves the postmining land use, the permit would no longer be valid. The operator would subsequently be required to cease all Opencut activities and enter into an agreement with the DEQ Enforcement Program to either reclaim the site to the permitted postmining land use or re-permit the site.
   - The expiration or termination of a permit does not relieve **Butana Sand & Gravel** from the obligation to conduct reclamation as required by the plan of operation or the liability for costs of reclamation exceeding the amount of the bond.

E2. POSTMINING LAND USES *[MCA 82-4-434(1) & (2)] & [ARM 17.24.219(1)(a)]*

1. The site will be reclaimed to the postmining land use(s) below. Show all postmining land uses on the Reclamation Map.

   ☐ Permitted Access Road(s): Length _____ Width _____

   ☐ Internal Road(s): Length _____ Width _____

   ☒ Cropland, Rangeland and/or Pasture (cropland requires 5:1 or flatter slopes for reclamation & Rangeland and/or Pasture require 3:1 slopes or flatter for final reclamation)

   ☒ Year-round Pond: ☐ Fishery ☐ Livestock ☐ Recreation ☒ Wildlife ☐ Other:

   ☐ Seasonal Pond: Purpose- ☒ Wetland ☐ Seasonal Wetland

   ☐ Berms ☐ Fences ☐ Landowner Equipment Storage Area*

☐ Landowner Material Stockpile Area*

☐ Industrial/Commercial** ☐ Residential** ☐ Vegetative Screens ☐ Other:

***Landowner Equipment Storage Areas & Landowner Material Stockpile Areas** must be shown on the Reclamation Map (include approximate acreage).

****Residential** and **Industrial/Commercial** land uses may require submittal of planning documents and approvals.

Butana Sand & Gravel understands that all soil taken from residential or industrial/commercial areas must be kept on site for reclamation and cannot be removed or sold until the DEQ has determined the postmining land use has been met, thereby verifying the soil is not needed to reclaim the area, or other remaining areas. This verification is achieved when **Butana Sand & Gravel** submits a Phase I or Phase II release request, the site is inspected, and the release request is approved.

Note: If site plans change, **Butana Sand & Gravel** must submit an amendment application to update the postmining land use(s).

2. What facilities and structures will remain after reclamation of the site is completed?
☒ None ☐ Concrete Structures ☐ Gravel or Paved Surface Area ☐ Office ☐ Scale
☐ Other:

   i. Describe the purpose of leaving these facilities or structures intact.
   Answer:

E3. PONDS AND WETLANDS *[MCA 82-4-434(1) & (2)] & [ARM 17.24.219(1) & 17.24.221(5)]*

1. If Section E2 above does not designate a pond, seasonal pond, or wetland as a postmining land use, skip to Section E4; otherwise, proceed to E3-2 below.
2. As a water feature would remain, complete the *Pond and Wetland Design Worksheet,* check the appropriate box on page 2, and include the worksheet with the application submittal. The *Pond and Wetland Design Worksheet* can be found here: http://deq.mt.gov/Mining/opencut (click on the "Forms" tab).
3. **Butana Sand & Gravel** understands that all soil taken from the pond or wetland area must be kept on-site for reclamation and cannot be removed or sold until the DEQ has determined the postmining land use has been met, thereby verifying the soil is not needed to reclaim the pond or wetland area, or other remaining areas. This verification is achieved when **Butana Sand & Gravel** submits a Phase I or Phase II release request, the site is inspected, and the release request is approved.
4. **Butana Sand & Gravel** has consulted with DNRC and understands the requirements regarding water rights and ground water development related to reclaiming to the postmining land uses identified in E2-1. The DNRC water right flow chart can be accessed here: http://deq.mt.gov/Mining/opencut.
Additional Information (if applicable): **none**

E4. SITE CLEANUP, GRADING AND RECLAMATION *[ARM 17.24.219(1) & 17.24.221(5)]*

1. **Butana Sand & Gravel** must comply with the following requirements:
   a. Leave reclaimed surfaces in a stable condition, graded to drain to low areas where applicable, and blended into the surrounding topography and drainageways. Note: Irregular contours are preferred for livestock and wildlife habitat; areas of unvarying slope should be minimized; and drainageways must be reclaimed similar to surrounding natural conditions.
   b. Leave reclaimed surfaces with 5:1 or flatter slopes for hayland and cropland, 4:1 or flatter slopes for sandy surfaces, and 3:1 or flatter slopes for other areas (The DEQ may approve steeper slopes on a case by case basis).
   c. Leave reclaimed surfaces at least 3 feet above the seasonal high water table level for dryland reclamation and at least 3 feet below the seasonal low water table level for pond reclamation (The DEQ may approve seasonal ponds for certain situations).
   d. Retrieve and properly use, stockpile, or dispose of all refuse and spilled mine materials (e.g. chips, oversize, etc.) found in the permit area and along access roads as such materials will impair revegetation.

2. Indicate the grade of the steepest slope that would remain after the site is reclaimed.
☒ 3:1 ☐ 4:1 ☐ 5:1 ☐ 6:1 ☐ Other:

Note: This reclamation slope ratio must be used on the *Reclamation Bond Spreadsheet.*
If a slope of 3:1 or flatter was checked, skip to E4-3.
If the *Other* box was checked above and **Butana Sand & Gravel** intends to have slopes steeper than 3:1, address the following:
Butana Sand & Gravel must provide a slope stability study prepared by a professional engineer licensed in accordance with Title 37, chapter 67, part 3, MCA, or a geologist with five years of post-graduate academic or professional work experience in the field of soil or rock mechanics, documenting that the slopes will remain stable [ARM 17.24.219 (c)].
☐ Slope Stability Analysis Attached (check the appropriate box on page 2)
☐ Further Description (if applicable):

3. Will the site be graded to blend in with surrounding topography? ☒Yes ☐No
If No, explain in detail how the site will be graded:

4. Would a water collection area remain for final reclamation?
☒Yes ☐No
   a. If Yes, where will precipitation/stormwater/snow-melt, etc. concentrate or drain to in the reclaimed depression?
      i. ☒Seasonal or year-round wetland or pond (applicable postmining land use must be checked in E2).
      ii. ☐Runoff collection area(s) in bottom of depression graded specifically to collect any runoff, thereby not impacting other areas of the site with ponding or pooling of water.
      • Approximate location of water collection area(s) must be shown on the Reclamation Map
      ☐Water collection area is ≤ ½ acre in size;
      ☐Water collection area is > ½ and ≤ 1 acre in size – Explain why water collection area needs to be greater than ½ acre in size
      iii. ☐Other-Describe:

   b. If No, describe where stormwater will concentrate or drain to, i.e. water will flow to the (check all that apply):
      i. ☐Water would infiltrate into the ground ☐East ☐North ☐Northeast ☐Northwest ☐South ☐Southeast ☐Southwest ☐West
      ☐Further Description:
      ii. Water will flow off-site via:
      ☐Reclaimed drainages, swales, etc. within the permitted boundary ☐Reclaimed slopes
      ☐Other-Describe:

      Note: ARM 17.24.221(5) requires that the Reclamation Map contain arrows depicting the anticipated direction of water flow across the reclaimed site.

E5. SOIL AND OVERBURDEN SURFACE PREPARATION AND REPLACEMENT
[ARM 17.24.202(14) & 17.24.219(1)(g)]

1. Compacted soil and overburden must be tilled to allow air and water movement, root penetration, and the subsurface drainage necessary for plant growth. Will **Butana Sand & Gravel** alleviate compaction by deep-tilling or ripping all compacted surfaces to a depth of at least 12 inches before re-soiling? ☒Yes ☐No

   Note: The DEQ recommends the following:
   a. Ripping or deep tilling is not required for non-compactable materials such as sand and gravel.
   b. Ripper shanks should be spaced about equal to the ripping depth.
   c. Rip along contours where possible and when soil and overburden are dry enough to shatter.
   d. Protect ripped areas from recompaction.

   If No, explain in detail how overburden and soil compaction would be alleviated, or explain why relieving compaction would not be necessary:

2. Indicate the methods to be used to relieve soil compaction and prepare the seedbed.
☐Chiseling ☒Disking ☐Harrowing ☐Packing ☐Other:

3. **Butana Sand & Gravel** will limit the presence of large rocks that are not characteristic of the soil prior to disturbance and may inhibit successful revegetation and agricultural production. Method(s) that will be used include:
☒Blading Off and Removal of Large Rocks ☐Rock Picker ☐Rolling ☐Screening ☐Hand Picking ☐Other:

E6. REVEGETATION *[MCA 82-4-431(2)(c) & 82-4-434(2)] & [ARM 17.24.218(1)(j) & 17.24.219(1)(h)]*

1. **Butana Sand & Gravel** must comply with the following requirements:
   a. Establish vegetation capable of sustaining the designated postmining land use(s).
   b. Use certified weed-free seed and comply with local weed district requirements.
   c. Seed during the late fall or early spring seeding season (unless otherwise approved) and seed along contours for drill seeding.
   d. Ensure that areas seeded or planted to perennial species can be, and are, appropriately protected and managed from the time of seeding or planting through two growing seasons, or until site stabilization and revegetation are achieved, whichever is longer.
   e. Revegetation success on non-cropland areas is achieved when vegetation capable of sustaining the designated

postmining land use has been established. Revegetation success on cropland areas is achieved when a crop has been harvested from the entire area and the yield is comparable to those of crops grown on similar undisturbed sites under similar growing conditions.

f. Except for those postmining land uses that do not require vegetation, each surface area of the site that will be disturbed will be revegetated when its use for the Opencut operation is no longer needed.

g. **Butana Sand & Gravel** must attach the Opencut Mining Section's *Weed Board Notification of Opencut Operation* form that **Butana Sand & Gravel** has submitted to the weed board in the county or counties in which the proposed operation is located and check the appropriate box on page 1.

2. Will **Butana Sand & Gravel** apply fertilizer, compost, mulch, or other soil amendments? ☐**Yes** ☒**No**

3. The primary method of seeding will be: ☐**Drilling*** ☒**Broadcasting****

*Sagebrush seed cannot be drill seeded and must be broadcast at the rates identified in the sagebrush seed mix. Grass and forb seeds in a sagebrush seed mix can be drill seeded.

**Broadcast seeding must be at double the rate used for drilling (i.e. 24 lbs/acre or more).

4. The DEQ's *Seed Mix Guideline* is available on the Opencut Mining Section's website at http://deq.mt.gov/Mining/opencut (click on the "Forms" tab).
Will seed mixes described in the Seed Mix Guideline be used for final reclamation? ☒**Yes** ☐**No**
If **No**, complete the table below with a custom seed mix.
If **Yes**, check the appropriate box on page 2, attach a copy of the guideline, and indicate below which seed mix(es) would be used.

☐**Native Grazing/Pasture** ☐**Non-Native Grazing/Pasture**
☐**Native Rangeland** (for moist/riparian regions)
☒**Native Rangeland** (for arid regions) ☒**Wetland Seed Mix** (for pond edges or wetland areas)

OR

☐**Cropland seed mix designated by Landowner at time of reclamation**

OR

Recommended Seed Mixes for Sage Grouse Habitat

If the site is in general, core, or interconnectivity sage grouse habitat, **Butana Sand & Gravel** must choose the appropriate seed mix below, unless the landowner has requested an alternate seed mix (refer to the Landowner Consultation form).
☐**Northern Region** ☐**Central & Southeastern Regions** ☐**Southwestern and South Central Regions**

In the table below, describe the seed mix species and rates of seeding (pure live seed per acre) that will be used:

SEED TYPE	SEED RATE
TOTAL SEEDING RATE	0.0 pounds pure live seed/acre

Additional Seeding Information (if applicable):

5. Indicate the measures to be used to manage and protect the site until reclamation vegetation is established.
☒**Noxious Weed Control** (mandatory) ☐**Fencing** (include cost of fencing on the *Reclamation Bond Spreadsheet*)
☒**No Grazing (Butana Sand & Gravel** should secure written commitment from landowner)
☐**Other:**

6. Indicate the method(s) or types of erosion control Best Management Practices (BMPs) that would be used at this site during reclamation to inhibit erosion and promote plant growth. **Butana Sand & Gravel** must maintain the below checked erosion control BMP's during reclamation to protect water quality and prevent sediment from leaving the site (as needed):
☒**Equipment Tracking** (orientated to trap moisture and break water flow) ☐**Erosion Control Blankets** ☐**Mulch**
☒**Seeding/Harrowing Along Contour** ☐**Slopes 5:1 or Flatter** ☐**Straw Bales**
☐**Vegetated Buffer Strip** ☐**Wattles** ☐**Other:**

E7. MATERIAL REMAINING FOR LANDOWNER *[ARM 17.24.203(5); 17.24.206; 17.24.219(1)(b); & 17.24.221(5)(c)]*

1. Does Question B of the *Landowner Consultation* form indicate that mine material will remain at the conclusion of Opencut operations; or, if the landowner is the Operator, will mine material remain at the conclusion of Opencut operations?
   ☐Yes ☒No
   If No, skip to Section E8.
2. The following requirements apply to leaving mine material for the landowner at the conclusion of Opencut operations:
   - Landowner mine materials must be left in a single location that will be accessible by road. If the landowner stockpile is not adjacent to an existing public road, the road to the stockpile must be shown on the Reclamation Map.
   - Landowner mine material stockpiles must be segregated into piles of similar types and grades.
   - Landowner mine material stockpiles must be located in the area designated on the Reclamation Map.
   - **Butana Sand & Gravel** must leave the quantity of soil necessary to reclaim the stockpile area within 100 feet of the mine material stockpile to remain for the landowner.
     - Thickness of soil required to be stripped from the site is **18 inches** * _____ **acres** (estimated number of acres that will be occupied by the soil stockpile area) = **0 cubic yards of soil that must remain for the landowner material stockpile area.**

E8. ADDITIONAL INFORMATION *[MCA 82-4-432(1) & 82-4-434(2)] & [ARM 17.24.222]*

1. If applicable, provide additional reclamation information not addressed above.
   Answer: none

SECTION F – RECLAMATION BOND CALCULATION *[MCA 82-4-433] & [ARM 17.24.203 & ARM 17.24.220]*

Government Operators: Skip to Section G.

Non-Government Operators:

1. Attach a proposed *Reclamation Bond Spreadsheet* and check the appropriate box on page 1.
2. The purpose of the *Reclamation Bond Spreadsheet* is to provide a reasonable estimate of the cost for the DEQ to reclaim the site in accordance with the *Opencut Mining Plan of Operation & Application* at the time of the site's maximum permitted disturbance. As a result, the estimated costs include equipment mobilization and project administration. The DEQ will review the proposed bond calculation and make a final determination as to the required bond amount.
3. Bond is not required to be posted for government operators or for acreage permitted as Non-Bonded until the acreage is needed for Opencut operations. Prior to commencing any such operations, **Butana Sand & Gravel** must submit a *Request to Modify Bonded Acreage* form, supporting documents, and post additional bond (if appropriate) on the undisturbed acreage. No Opencut activities, including equipment parking, can begin on non-bonded acreage until the *Request to Modify Bonded Acreage* form, supporting documents, and bond are approved in writing by the DEQ.
4. **Butana Sand & Gravel** understands that the DEQ may adjust the bond yearly.
5. Provide additional information relevant to the *Reclamation Bond Spreadsheet* if applicable:
   none

Proceed to Section G – Certification and ensure it is fully completed

SECTION G – CERTIFICATION *[MCA 82-4-432(1)(e)] & [ARM 17.24.222(3)]*

The person signing below represents that (check one box):

☒ I am an officer or an employee of **Butana Sand & Gravel** and I am duly authorized to bind the Operator identified on page 1 of the *Opencut Mining Plan of Operations & Application* as a corporation, limited partnership, limited liability company, or other corporate entity in good standing and authorized to do business in Montana, and in this capacity I acknowledge and certify that:

Or

☐ I am the Operator identified on page 1 of the *Opencut Mining Plan of Operation & Application* and I acknowledge and certify that:

1) The attachments that follow my signature are incorporated into and enforceable as part of the *Opencut Mining Plan of Operation & Application*;

2) **Butana Sand & Gravel** has the legal right to conduct Opencut operations in the permit area described in the *Opencut Mining Plan of Operation & Application*;

3) **Butana Sand & Gravel** consents to and acknowledges that the DEQ and its representatives may access the site to inspect the permit area at any reasonable time, and that while the DEQ attempts to provide reasonable notice of an inspection to **Butana Sand & Gravel** when practicable under the circumstances, inspections may be conducted without prior notice as necessary to determine whether Opencut operations are being conducted in compliance with the permit, Act, and rules [82-4-422(1)(d) and 425, MCA] & [ARM 17-24-206(3)].

4) I have read and understand all the information, representations, terms, requirements, and conditions set forth in *Opencut Mining Plan of Operation & Application*;

5) The information, representations, and statements provided or acknowledged in the *Opencut Mining Plan of Operation & Application* are, to the best of my knowledge and belief, true and correct; and,

6) **Butana Sand & Gravel** agrees to abide by and comply with the Opencut Mining Act, Montana Code Annotated sections 82-4-401 through 82-4-446, and Administrative Rules of Montana 17.24.201 through 17.24.226, and all representations, terms, requirements, and conditions set forth in the *Opencut Mining Plan of Operation & Application* and the *Opencut Mining Permit* approved by the DEQ, and communicate the same to any contractor or supervisor who directs Opencut operations under authority of the *Opencut Mining Permit*.

By: _____ **John Jeffery**

Signature **Legibly print or type name**

Owner 2-5-20

Title Date

Support Document

c. SHPO

Stephen Frazee

From: Murdo, Damon <dmurdo@mt.gov>
Sent: Tuesday, January 14, 2020 11:39 AM
To: Stephen Frazee
Subject: RE: File Search Request for Opencut Operation
Attachments: CRABS.XLSX; CRIS.XLSX; 2020011404.pdf

Big Sky. Big Land. Big History.
Montana
Historical Society

January 14, 2020

Stephen Frazee
WET
480 E Park St.
Butte MT 59701

RE: DK JAN OPENCUT AMENDMENT, DEER LODGE. SHPO Project#: 2020011404

Dear Mr. Frazee:

I have conducted a cultural resource file search for the above-cited project located in Section 26, T4N R10W. According to our records there have been two previously recorded sites within the designated search locale. These sites are not within the proposed project boundary. In addition to the sites there have been a few previously conducted cultural resource inventories done in the areas. I've attached a list of these sites and reports. If you would like any further information regarding these sites or reports, you may contact me at the number listed below.

It is SHPO's position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are to be altered and are over fifty years old, we would recommend that they be recorded, and a determination of their eligibility be made prior to any disturbance taking place.

Based on previous disturbance in the area we feel that there is a low likelihood cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time. However, should structures need to be altered or if cultural materials be inadvertently discovered during this project we would ask that our office be contacted, and the site investigated.

If you have any further questions or comments, you may contact me at (406) 444-7767 or by e-mail at dmurdo@mt.gov. I have attached an invoice for the file search. Thank you for consulting with us.

Sincerely,

Damon Murdo
Cultural Records Manager
State Historic Preservation Office

File: DEQ/OPENCUT/2020

Township:4 N Range:10 W Section: 26

JEPSON DANIEL A., ET AL.

12/1/1989 CLASS I AND CLASS III CULTURAL RESOURCE INVENTORIES OF AT & T SPOKANE-BILLINGS FIBER OPTIC FACILITIES IN MONTANA

CRABS Document Number: ZZ 6 10823 Agency Document Number:

Township:4 N Range:10 W Section: 26

GRAY DALE M.

11/1/1994 SILVER BOW CREEK STREAMSIDE TAILINGS

CRABS Document Number: SB 6 16611 Agency Document Number:

Township:4 N Range:10 W Section: 26

AXLINE JON A.

3/1/2000 INVENTORY AND ASSESSMENT: REINFORCED CONCRETE T-BEAM BRIDGES

CRABS Document Number: ZZ 4 24227 Agency Document Number:

Township:4 N Range:10 W Section: 26

AXLINE JON

3/29/2010 SILVER BOW CREEK - 4 MILES SOUTH OF OPPORTUNITY

CRABS Document Number: DL 4 31448 Agency Document Number: BR 9012(153)

STATE HISTORIC PRESERVATION OFFICE
Cultural Resource Information Systems
CRIS Township, Range, Section Report
Report Date:2/3/2020

Site #	Twp	Rng	Sec	Qs	Site Type 1	Site Type 2	Time Period	Owner	NR Status
24DL0458	4N	10W	26	SE	Historic Railroad, Stage Route, Travel	Historic Placer Mine	1920-1930	No Data	Undetermined*
24DL0707	4N	10W	26	SE	Historic Vehicular/Foot Bridge		Historic More Than One Decade	MDOT	Eligible

Support Document

d. Well Logs

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Return to menu
Plot this site in State Library Digital Atlas
Plot this site in Google Maps
View scanned well log (6/9/2009 12:06:15 PM)

Site Name: FURGESON, H.E.
GWIC Id: 51299

Section 1: Well Owner(s)

1) FURGESON, H.E. (MAIL)
BOX 141
OPPORTUNITY MT 59711 [02/14/1973]

Section 2: Location

Township	Range	Section	Quarter Sections
04N	10W	26	NE¼ NW¼

County: DEER LODGE
Geocode:

Latitude	Longitude	Geomethod	Datum
46.07571710695	-112.811652162	TRS-SEC	NAD83

Ground Surface Altitude	Ground Surface Method	Datum	Date
5000			

Addition: **Block:** **Lot:**

Section 3: Proposed Use of Water

STOCKWATER (1)

Section 4: Type of Work

Drilling Method: CHURN DRILL
Status: NEW WELL

Section 5: Well Completion Date

Date well completed: Wednesday, February 14, 1973

Section 6: Well Construction Details

Borehole dimensions

From	To	Diameter
0	25	6

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
-0.5	25	6	0.25			STEEL

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
18	23	6			TORCH CUTS

Annular Space (Seal/Grout/Packer)

There are no annular space records assigned to this well.

Section 7: Well Test Data

Total Depth: 25
Static Water Level: 9
Water Temperature:

Bailer Test *

15 gpm with _ feet of drawdown after 1 hours.
Time of recovery _ hours.
Recovery water level _ feet.
Pumping water level _ feet.

** During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

Section 9: Well Log

Geologic Source

110ALVM - ALLUVIUM (QUATERNARY)

From	To	Description
0	4	TOPSOIL
4	8	GRAVEL
8	12	SAND AND GRAVEL CEMENTED WATER
12	18	CEMENTED GRAVEL
18	25	SAND AND GRAVEL-WATER

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name: W. F. KENTFIELD
Company: OKEEFE DRILLING CO
License No: WWC-8
Date Completed: 2/14/1973

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Return to menu
Plot this site in State Library Digital Atlas
Plot this site in Google Maps
View scanned well log (6/9/2009 12:05:50 PM)

Site Name: JAN, D.K.
GWIC Id: 87416

Section 1: Well Owner(s)

1) JAN, D.K. (MAIL)
3610 CRACKERVILLE
ANACONDA MT 59711 [09/18/1990]

Section 2: Location

Township	Range	Section	Quarter Sections
04N	10W	26	SW¼ NE¼

County

DEER LODGE

Geocode

Latitude	Longitude	Geomethod	Datum
46.07205335695	-112.806406412	TRS-SEC	NAD83

Ground Surface Altitude **Ground Surface Method** **Datum** **Date**

Addition **Block** **Lot**

Section 3: Proposed Use of Water

COMMERCIAL (1)
INDUSTRIAL (2)

Section 4: Type of Work

Drilling Method: UNKNOWN
Status: NEW WELL

Section 5: Well Completion Date

Date well completed: Tuesday, September 18, 1990

Section 6: Well Construction Details

Borehole dimensions

From	To	Diameter
0	160	6

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
-2	160	6	0.25		WELDED	STEEL

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
160	160	6			OPEN BOTTOM

Annular Space (Seal/Grout/Packer)

From	To	Description	Cont. Fed?
0	20	BENTONITE	

Section 7: Well Test Data

Total Depth: 160
Static Water Level: 45
Water Temperature:

Air Test *

55 gpm with drill stem set at _ feet for 2 hours.
Time of recovery 1 hours.
Recovery water level 45 feet.
Pumping water level 120 feet.

** During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

Section 9: Well Log

Geologic Source

120SDMS - SEDIMENTS (TERTIARY)

From	To	Description
0	23	SAND AND GRAVEL
23	24	HARDPAN
24	48	SAND AND GRAVEL
48	90	SAND AND GRAVEL AND CLAY
90	94	CLAY
94	160	SAND AND GRAVEL AND WATER

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name: BRUCE BRAZILL
Company: BRAZILL DRILLING
License No: WWC-355
Date Completed: 9/18/1990

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Return to menu
Plot this site in State Library Digital Atlas
Plot this site in Google Maps
View field visits for this site
View water quality for this site
View scanned published report (6/29/2010 8:35:40 AM)
View scanned well log (8/16/2010 12:52:49 PM)

Site Name: JAN, DENG KUI
GWIC Id: 253115

Section 1: Well Owner(s)

1) JAN, DENG KUI (MAIL)
5515 CLINTON DR.
HOUSTON TX 77020 [11/09/2009]
2) JAN, DENG KUI (WELL)
3311 CRACKERVILLE ROAD
CRACKERVILLE MT N/A [11/09/2009]

Section 2: Location

Township	Range	Section	Quarter Sections
04N	10W	26	NE¼ NW¼ SW¼ SE¼

County: DEER LODGE
Geocode: 30128626401020001

Latitude	Longitude	Geomethod	Datum
46.066779613	-112.806678653	NAV-GPS	NAD83

Ground Surface Altitude	Ground Surface Method	Datum	Date
4791			

Addition: Block: Lot:

Section 3: Proposed Use of Water

MONITORING (1)

Section 4: Type of Work

Drilling Method: AIR ROTARY
Status: NEW WELL

Section 5: Well Completion Date

Date well completed: Wednesday, November 04, 2009

Section 6: Well Construction Details

Borehole dimensions

From	To	Diameter
0	104	8

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
-2	107	8	0.25		WELDED	STEEL
0	101	4.5		200.0	THREADED	PVC

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
91	101	4.5		.04	SCREEN-CONTINUOUS-PVC
96	100	4.5	100	1/4X1.5	PERFORATED CASING

Annular Space (Seal/Grout/Packer)

From	To	Description	Cont. Fed?
80	86	BENTONITE	Y
86	101	.	
86	101	.25 GRAVEL	

Section 7: Well Test Data

Total Depth: 101
Static Water Level: 35
Water Temperature:

Air Test *

20 gpm with drill stem set at 90 feet for 1 hours.
Time of recovery _ hours.
Recovery water level _ feet.
Pumping water level _ feet.

* During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.

Section 8: Remarks

CORE BLOCKED. THIS WELL REPLACES GWIC ID 250394.

Section 9: Well Log

Geologic Source
120SNGR - SAND AND GRAVEL (TERTIARY)

From	To	Description
0	2	TOPSOIL
2	15	GRAVEL, SAND (H2O)
15	52	CLAY, BOULDERS
52	78	HARDPAN
78	95	CLAY, GRAVEL
95	101	GRAVEL, (H2O)
101	107	CORE BLOCKED TO STOP HEAVING GROUND

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name: TERRY LINDSAY
Company: LINDSAY DRILLING CO INC
License No: WWC-253
Date Completed: 11/4/2009

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Return to menu
Plot this site in State Library Digital Atlas
Plot this site in Google Maps
View hydrograph for this site
View field visits for this site
View water quality for this site

Site Name: JAN, DENG KUI
GWIC Id: 255400

Section 1: Well Owner(s)

1) JAN, DENG KUI (WELL)
3765 CRACKERVILLE RD
ANACONDA MT 59711 [04/25/2014]
2) JAN, DENG KUI (WELL)
3610 CRACKERVILLE RD
ANACONDA MT 59711 [01/06/2014]
3) JAN, DENG KUI (MAIL)
5515 CLINTON DR
HOUSTON TX 77020 [05/31/2012]
4) JAN, DENG KUI (MAIL)
3765 CRACKERVILLE R
N/A N/A N/A [No Date]

Section 2: Location

Township	Range	Section	Quarter Sections
04N	10W	26	SW¼ NW¼ SE¼ SE¼

County	Geocode
DEER LODGE	30128626401030000

Latitude	Longitude	Geomethod	Datum
46.065422	-112.803568	NAV-GPS	NAD83

Ground Surface Altitude	Ground Surface Method	Datum	Date
5040	MAP		5/5/2010

Measuring Point Altitude	MP Method	Datum	Date Applies
5040	MAP	NAVD88	4/25/2014

Addition	Block	Lot

Section 3: Proposed Use of Water

DOMESTIC (1)

Section 4: Type of Work

Drilling Method:
Status:

Section 5: Well Completion Date

Date well completed: N/A

Section 6: Well Construction Details

There are no borehole dimensions assigned to this well.
There are no casing strings assigned to this well.
There are no completion records assigned to this well.

Annular Space (Seal/Grout/Packer)

There are no annular space records assigned to this well.

Section 7: Well Test Data

Total Depth: 82
Static Water Level: 56
Water Temperature: 8.9 °C

** During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

Section 9: Well Log

Geologic Source

112SNGR - SAND AND GRAVEL (PLEISTOCENE)

Lithology Data

There are no lithologic details assigned to this well.

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name:
Company: BRAZILL DRILLING
License No: -
Date Completed:

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Return to menu
Plot this site in State Library Digital Atlas
Plot this site in Google Maps
View hydrograph for this site
View field visits for this site
View water quality for this site

Site Name: RUSS, EMILY
GWIC Id: 255402

Section 1: Well Owner(s)
1) RUSS, EMILY (WELL)
3332 CRACKERVILLE RD
ANACONDA MT 59711 [01/06/2014]
2) RUSS, EMILY (MAIL)
20 HATHAWAY LANE
KALISPELL MT 59901 [05/31/2012]

Section 2: Location

Township	Range	Section	Quarter Sections
04N	10W	26	SW¼ NW¼ SE¼ SW¼

County	Geocode
DEER LODGE	30128626304010000

Latitude	Longitude	Geomethod	Datum
46.066508	-112.811598	NAV-GPS	NAD83

Ground Surface Altitude	Ground Surface Method	Datum	Date
5034	MAP	NAVD88	6/19/2014

Measuring Point Altitude	MP Method	Datum	Date Applies
5034	MAP	NAVD88	6/19/2014

Addition	Block	Lot

Section 3: Proposed Use of Water
DOMESTIC (1)

Section 4: Type of Work
Drilling Method:
Status:

Section 5: Well Completion Date
Date well completed: N/A

Section 6: Well Construction Details
There are no borehole dimensions assigned to this well.
There are no casing strings assigned to this well.
There are no completion records assigned to this well.
Annular Space (Seal/Grout/Packer)

There are no annular space records assigned to this well.

Section 7: Well Test Data

Total Depth: 61
Static Water Level: 28
Water Temperature: 10 °C

* During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.

Section 8: Remarks

Section 9: Well Log
Geologic Source
112SNGR - SAND AND GRAVEL (PLEISTOCENE)
Lithology Data

There are no lithologic details assigned to this well.

Driller Certification
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name:
Company: OKEEFE DRILLING CO
License No: -
Date Completed:

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Return to menu
Plot this site in State Library Digital Atlas
Plot this site in Google Maps
View hydrograph for this site
View field visits for this site
View water quality for this site

Site Name: JENRICH, TROY
GWIC Id: 278056

Section 1: W ell Owner(s)

1) JENRICH, BERNIE AND CARYLE (MAIL)
723 PEBBLE BEACH RD
BILLINGS MT 59105 [05/21/2014]
2) JENRICH, TROY (MAIL)
PO BOX 1324
ANACONDA MT 59711 [05/21/2014]
3) JENRICH, TROY (WELL)
3446 CRACKERVILLE RD
ANACONDA MT 59711 [04/21/2014]

Section 2: Location

Township	Range	Section	Quarter Sections
04N	10W	26	NE¼ SE¼ SW¼

County: DEER LODGE
Geocode: 30128626304020000

Latitude	Longitude	Geomethod	Datum
46.065513	-112.810025	NAV-GPS	NAD83

Ground Surface Altitude	Ground Surface Method	Datum	Date
5038	MAP	NAVD88	5/21/2014

Addition | Block | Lot

Section 3: Proposed Use of W ater

DOMESTIC (1)

Section 4: T ype of W ork

Drilling Method:
Status: NEW WELL

Section 5: W ell Completion Date

Date well completed: N/A

Section 6: W ell Construction Details

There are no borehole dimensions assigned to this well.

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
0	160	6				CASING (TYPE UNKNOWN)

There are no completion records assigned to this well.

Annular Space (Seal/Grout/Packer)

There are no annular space records assigned to this well.

Section 7: W ell Test Data

Total Depth: 160
Static Water Level: 32
Water Temperature: 10.7 °C

* During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.

Section 8: Remarks

Section 9: W ell Log

Geologic Source
Unassigned

From	To	Description
0	60	SANDY GRAVELS
60	160	CLAY

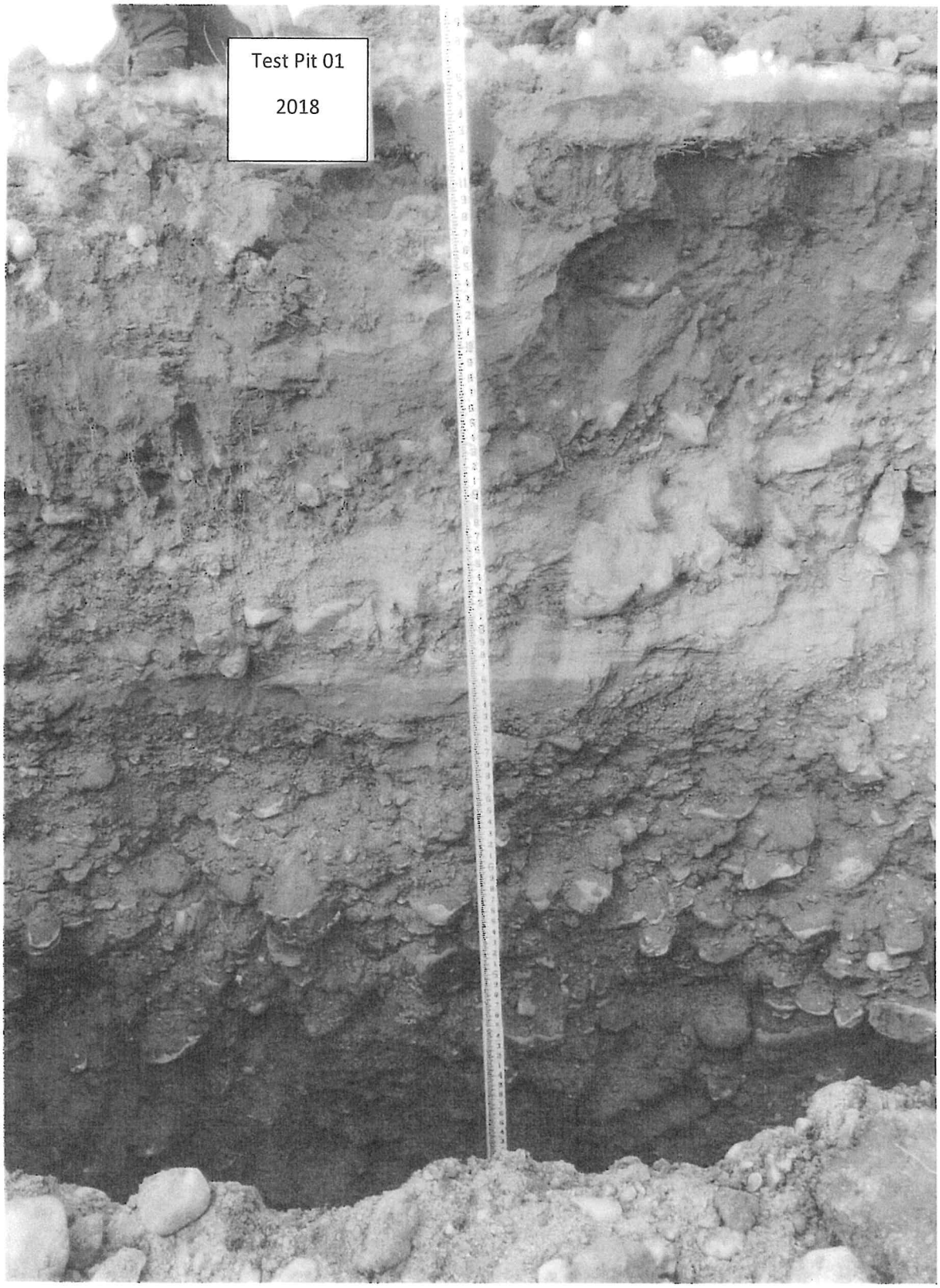
Driller Certification

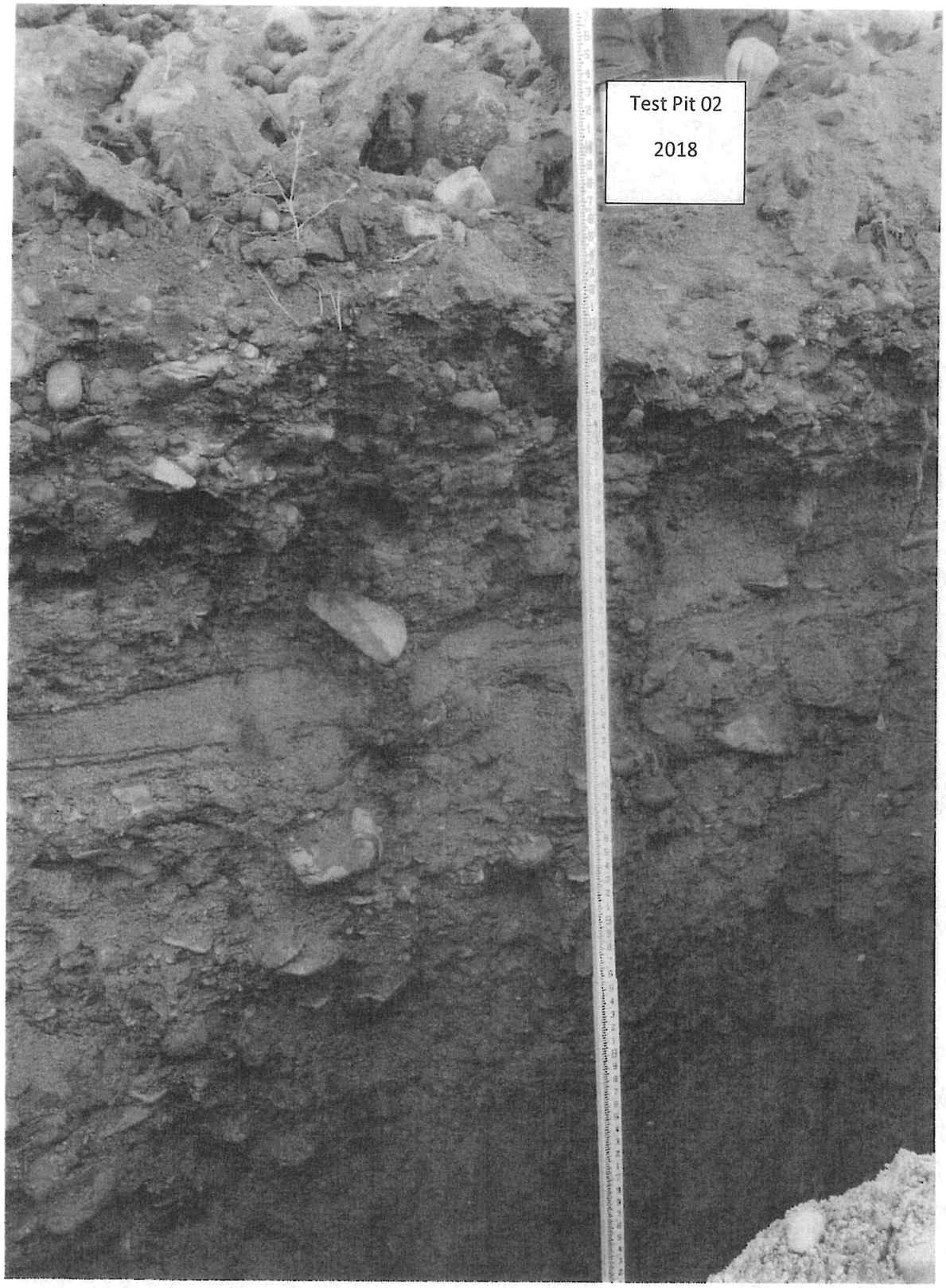
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

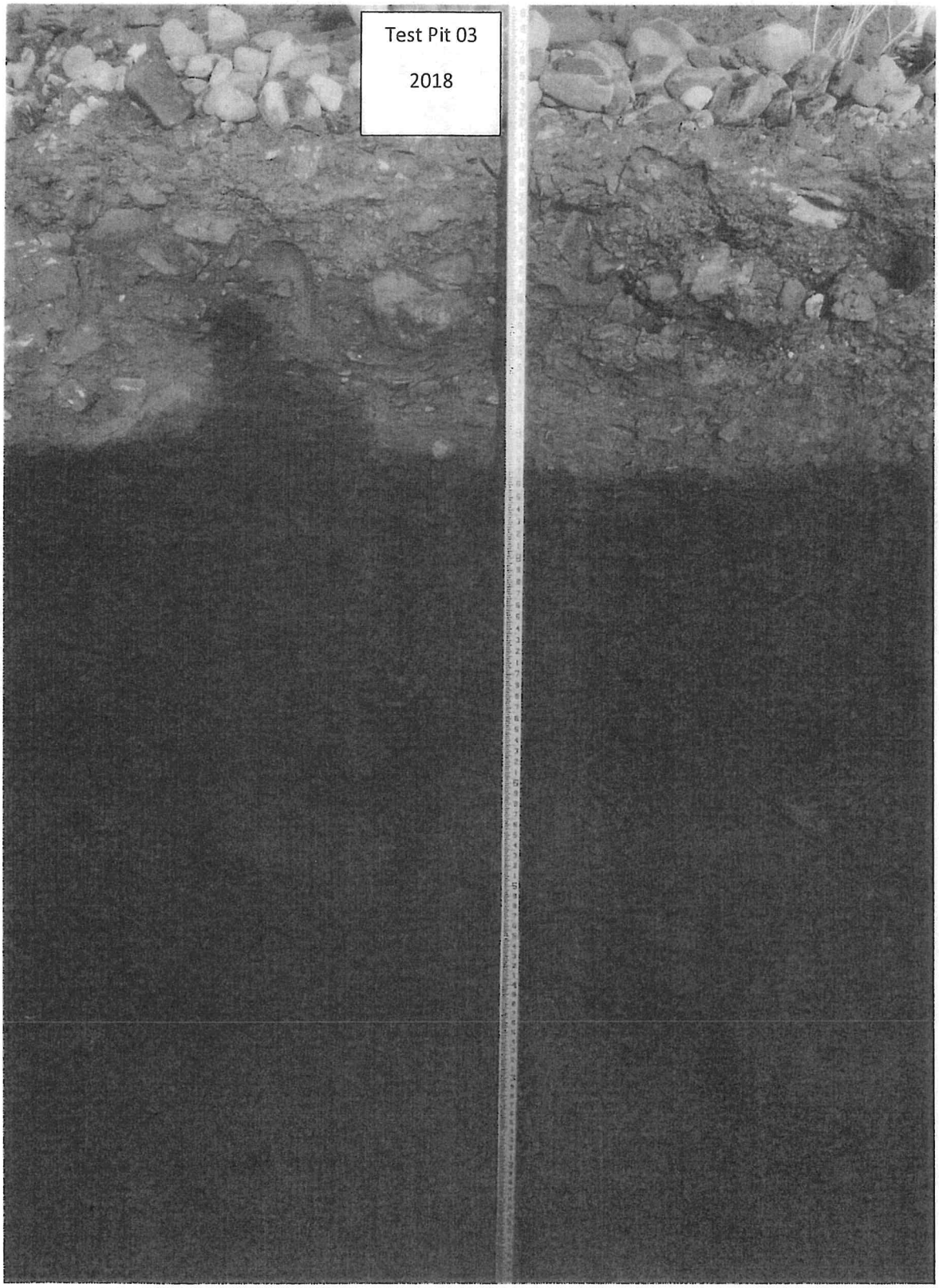
Name:
Company: PARSONS DRILLING
License No: -
Date Completed:

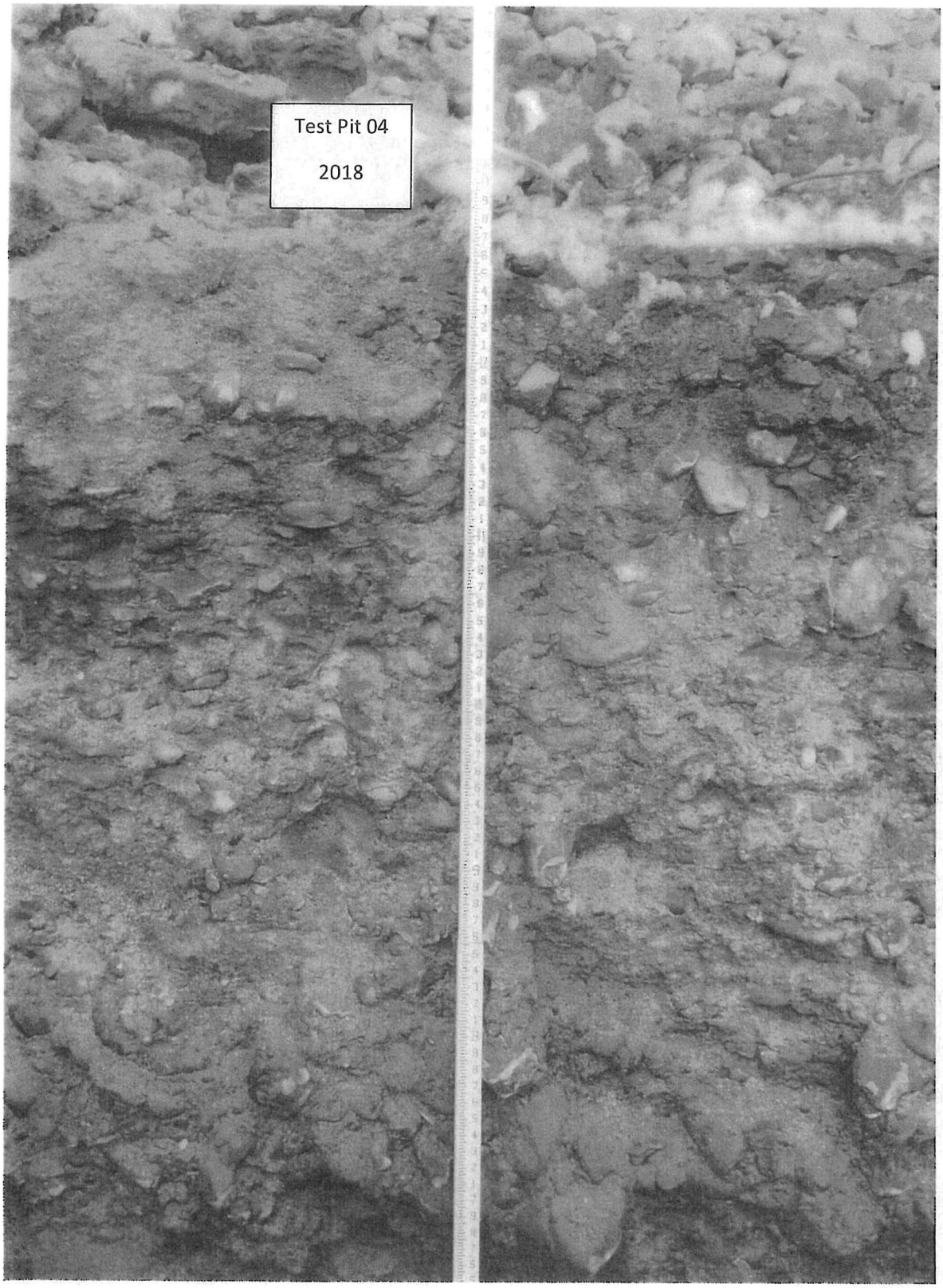
Support Document

e. Soil Photos


Test Pit 01
2018


Test Pit 02
2018


Test Pit 03
2018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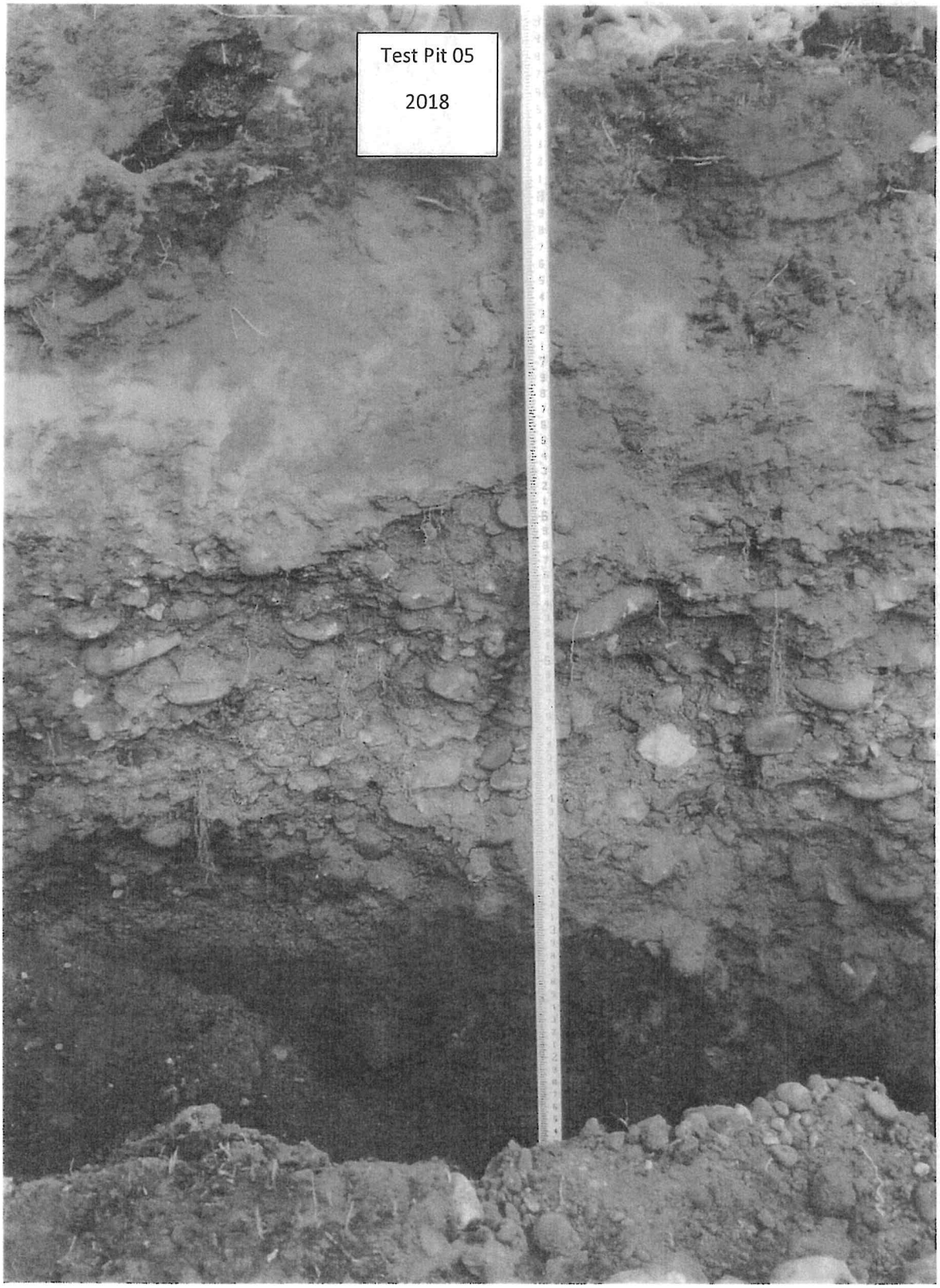
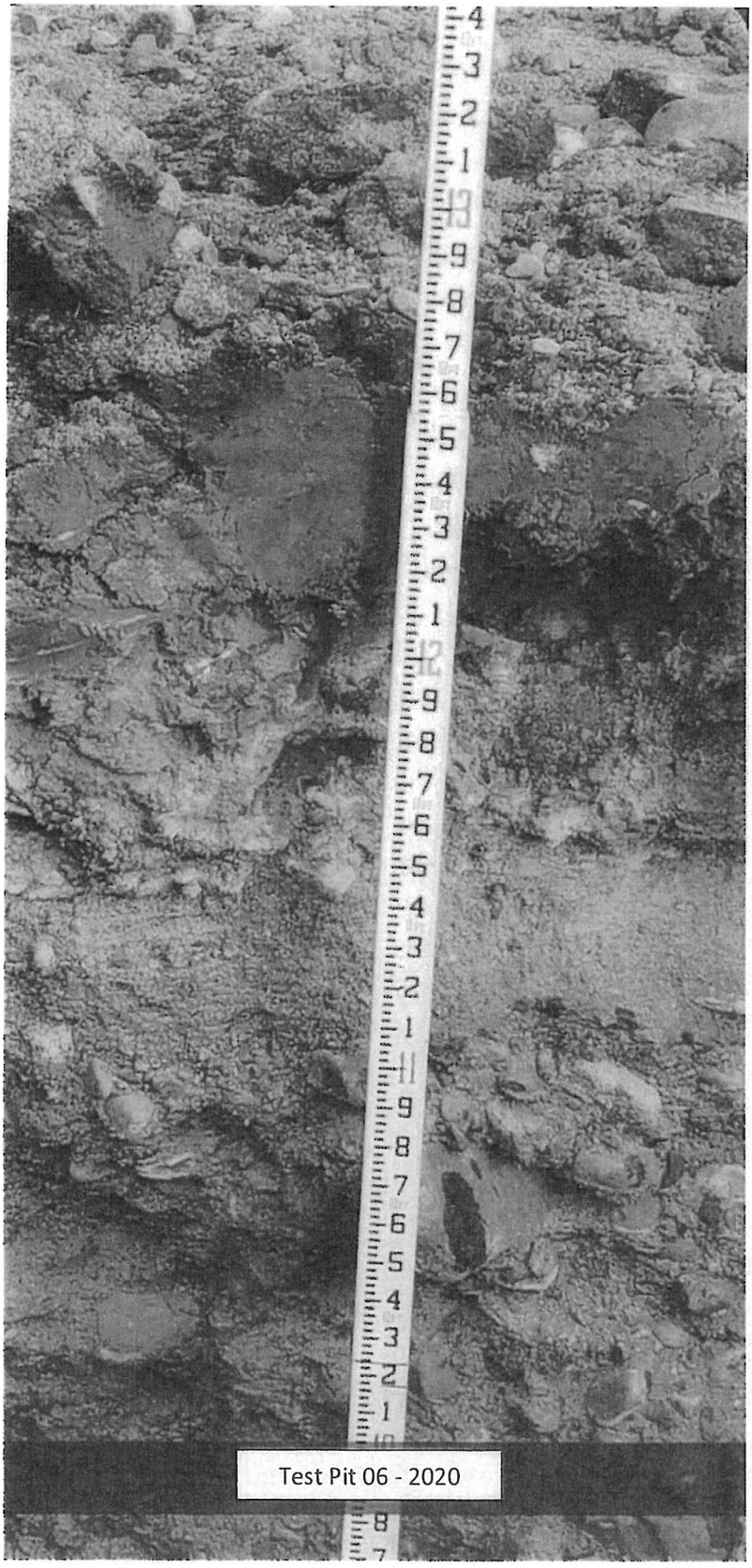
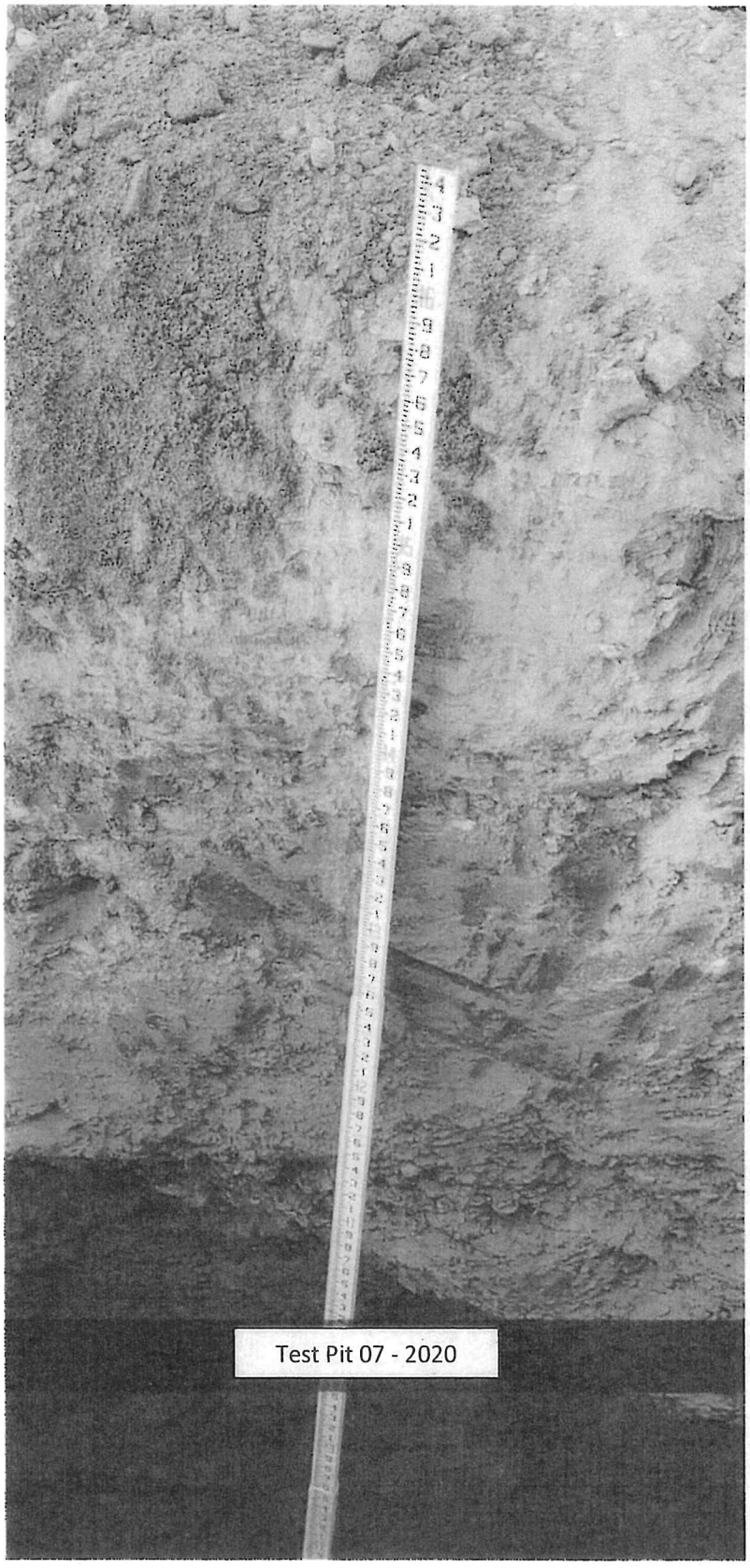
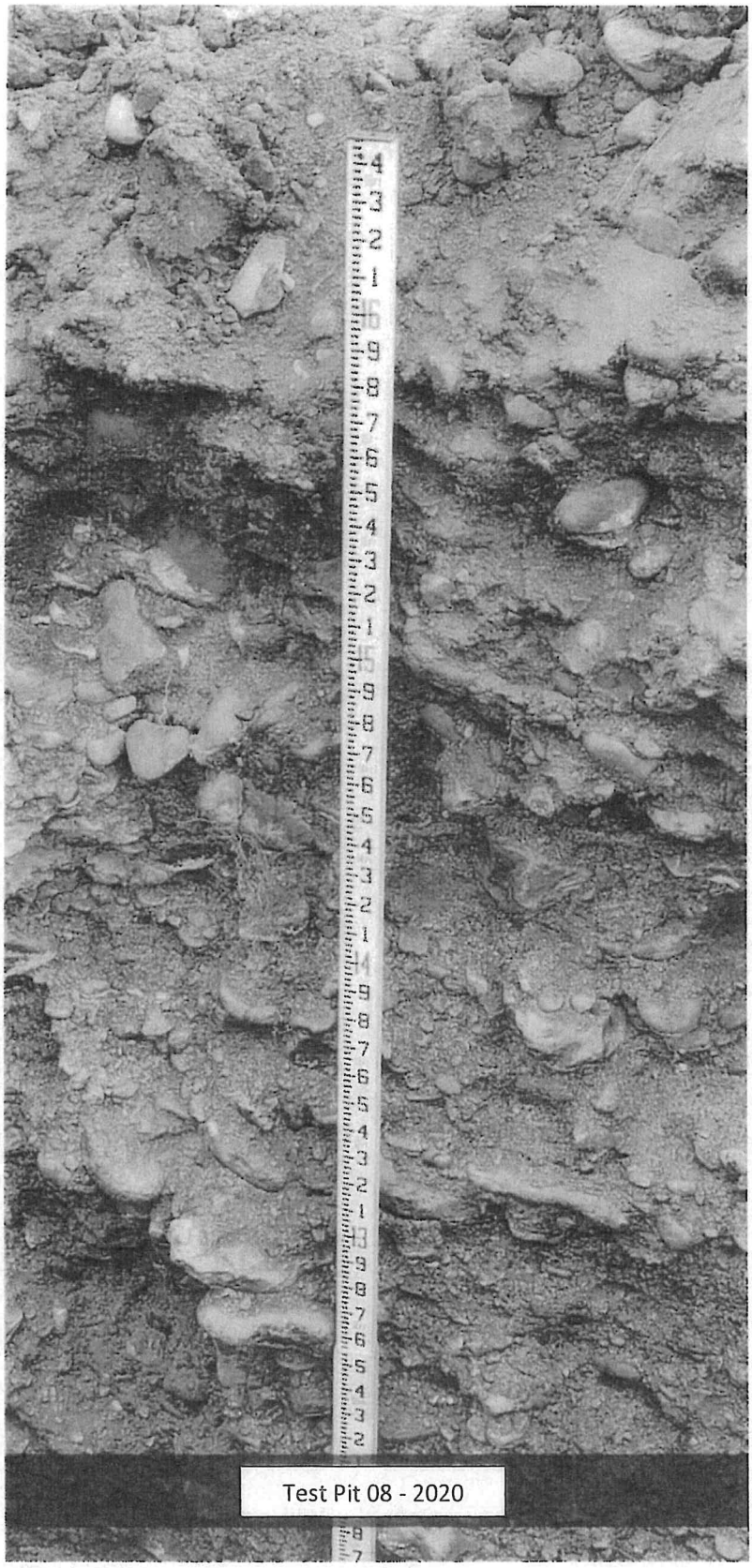
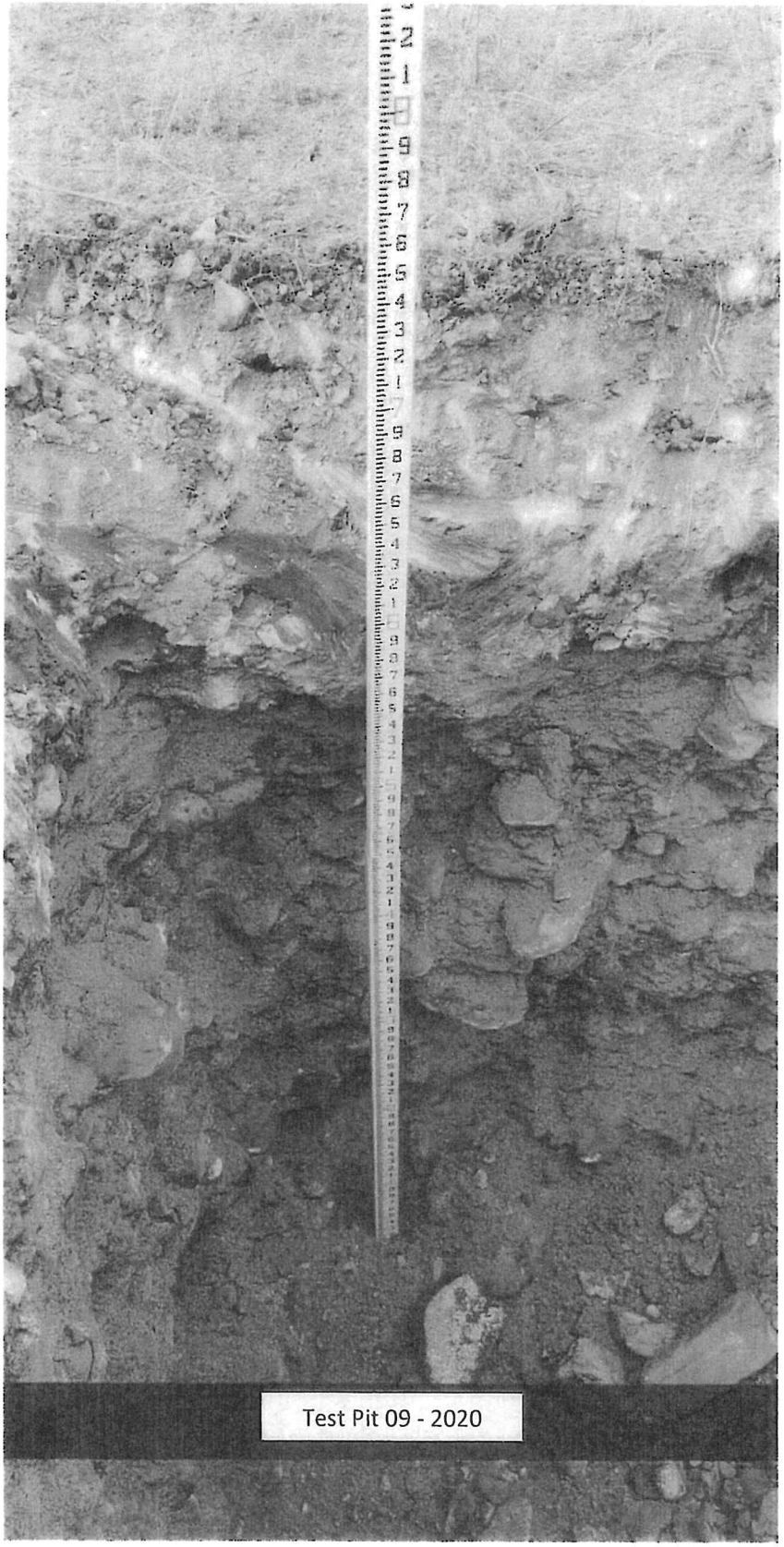
2018


Test Pit 05
2018


Test Pit 06 - 2020

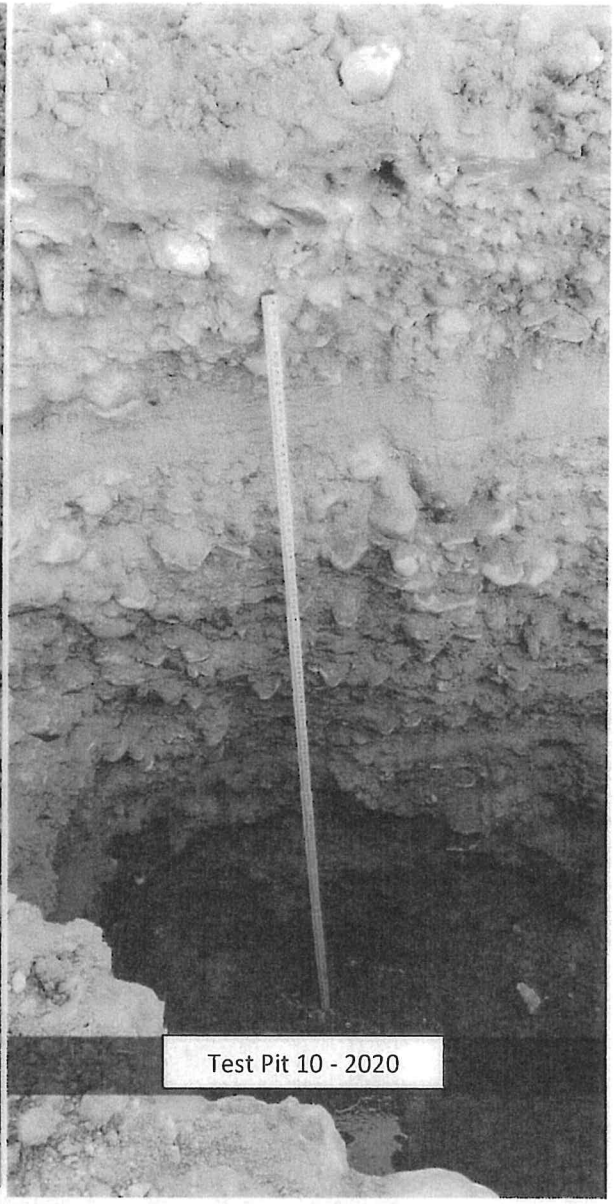

Test Pit 07 - 2020

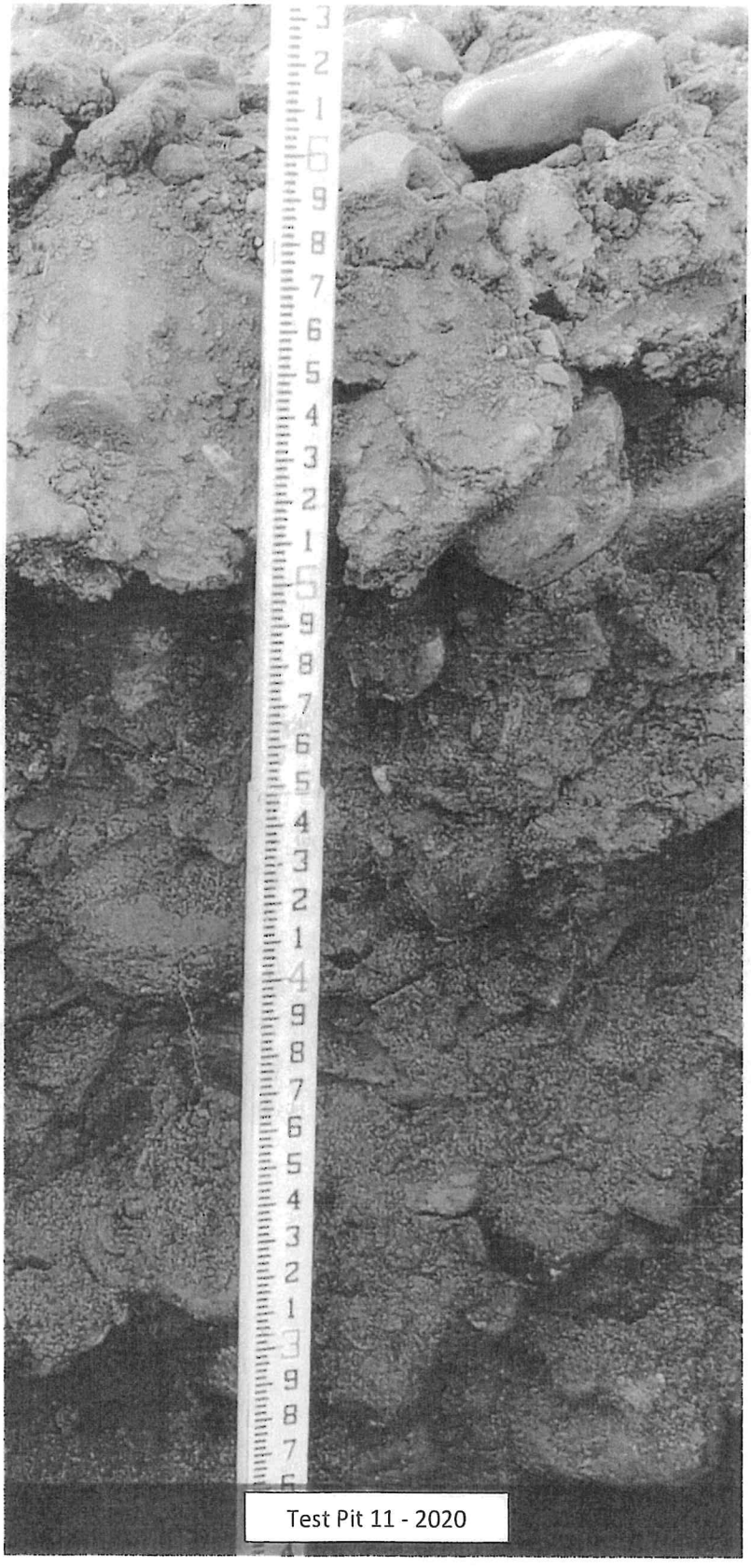

Test Pit 08 - 2020



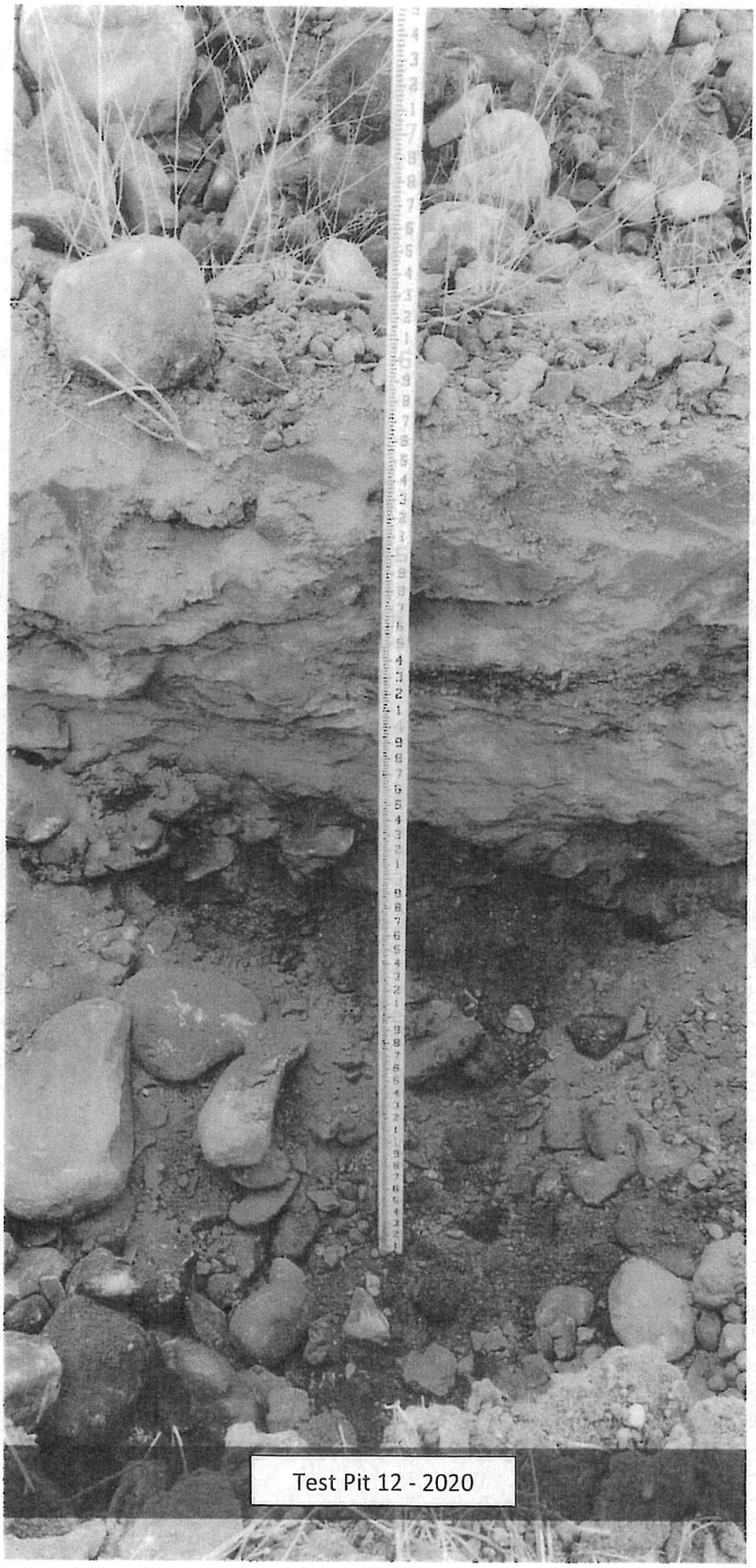
Test Pit 09 - 2020


Test Pit 10 - 2020

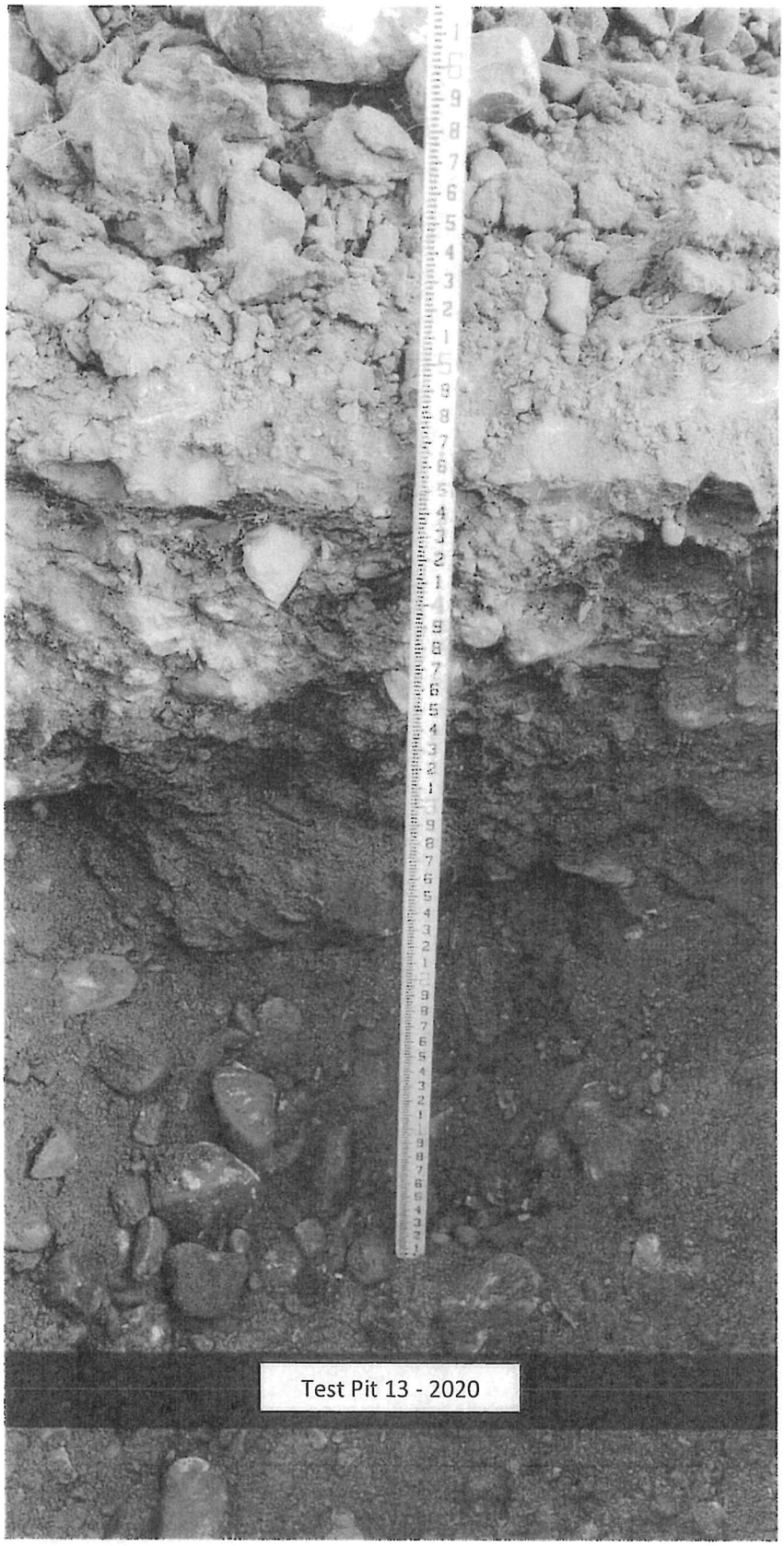

Test Pit 10 - 2020

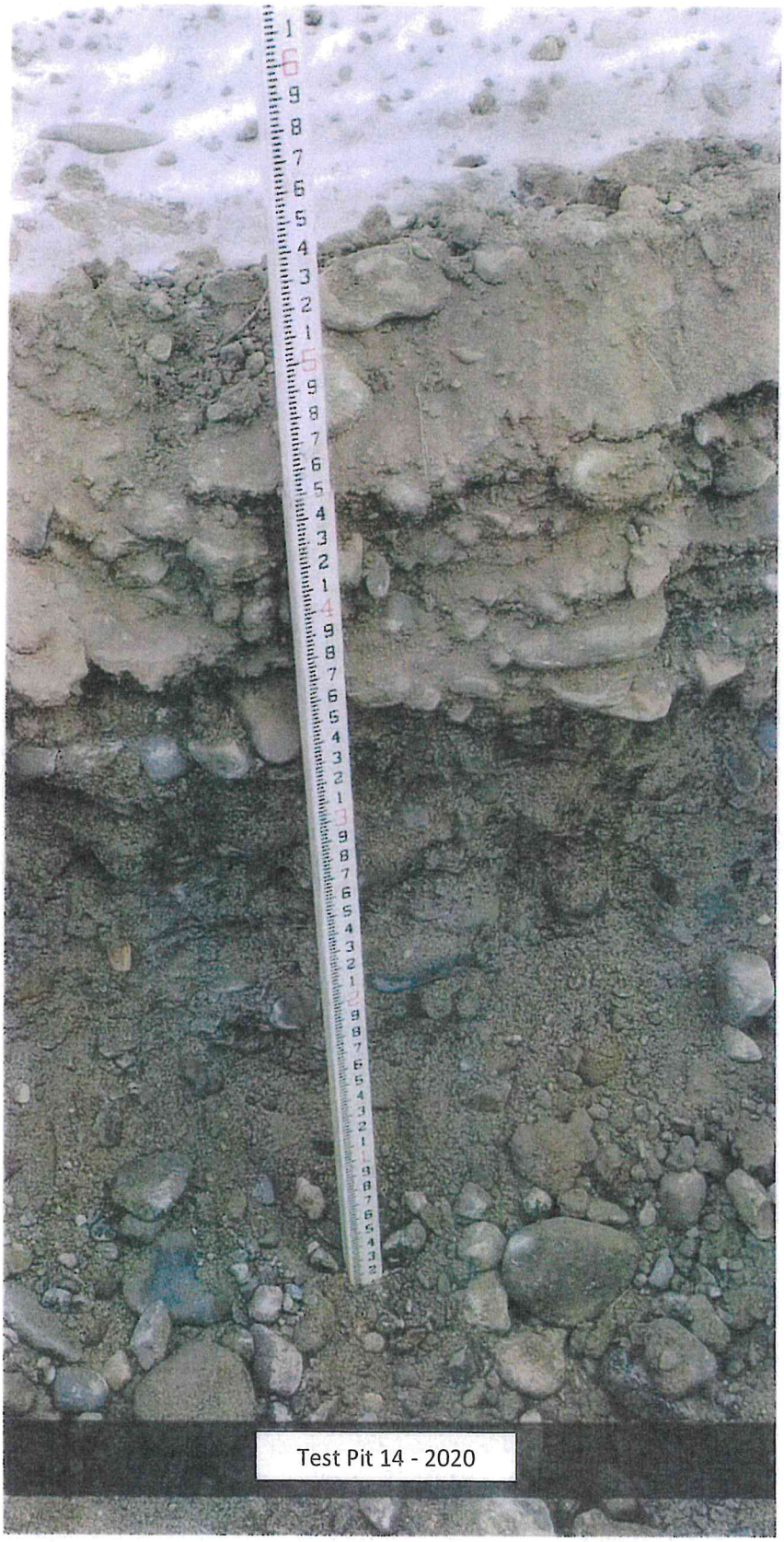


Test Pit 11 - 2020

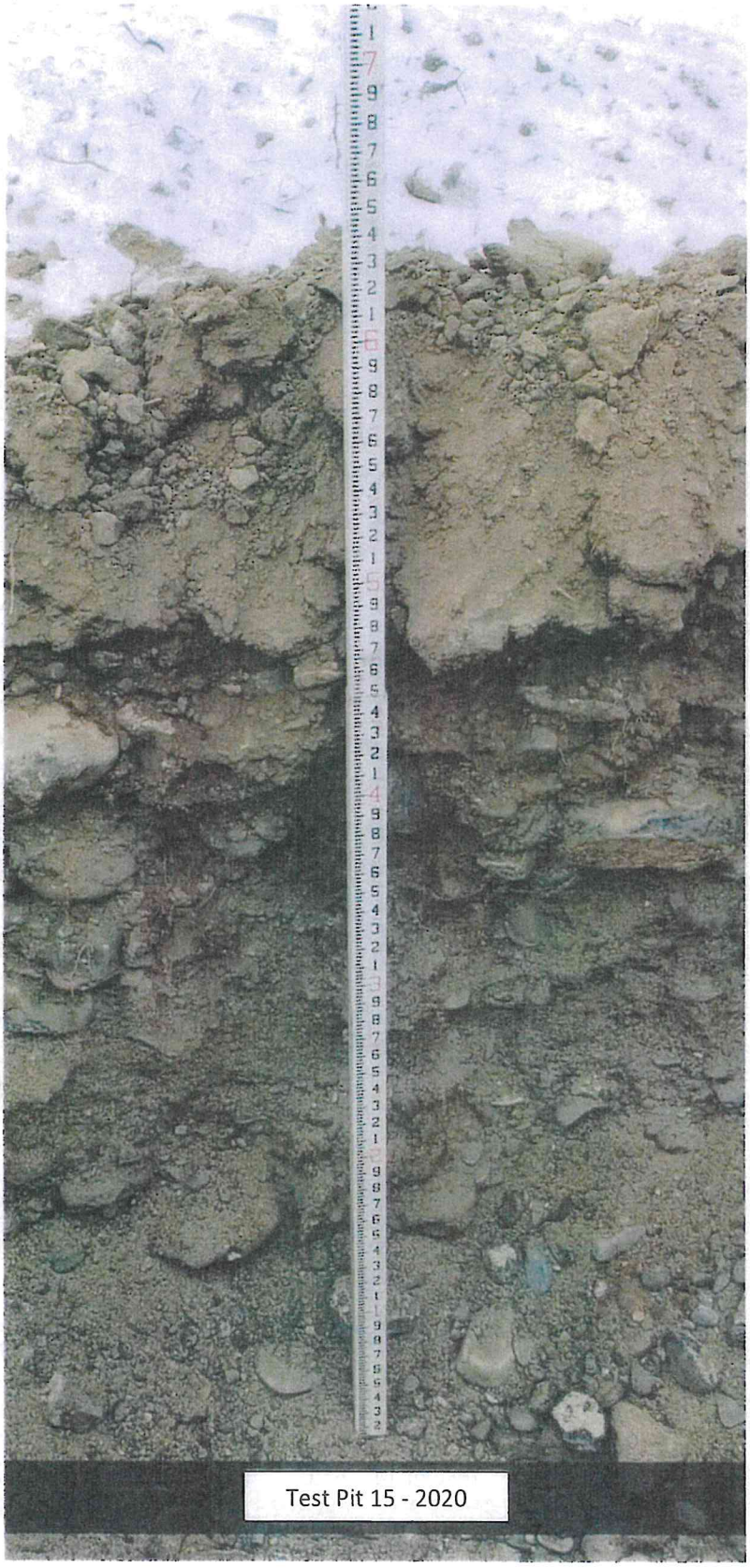


Test Pit 12 - 2020

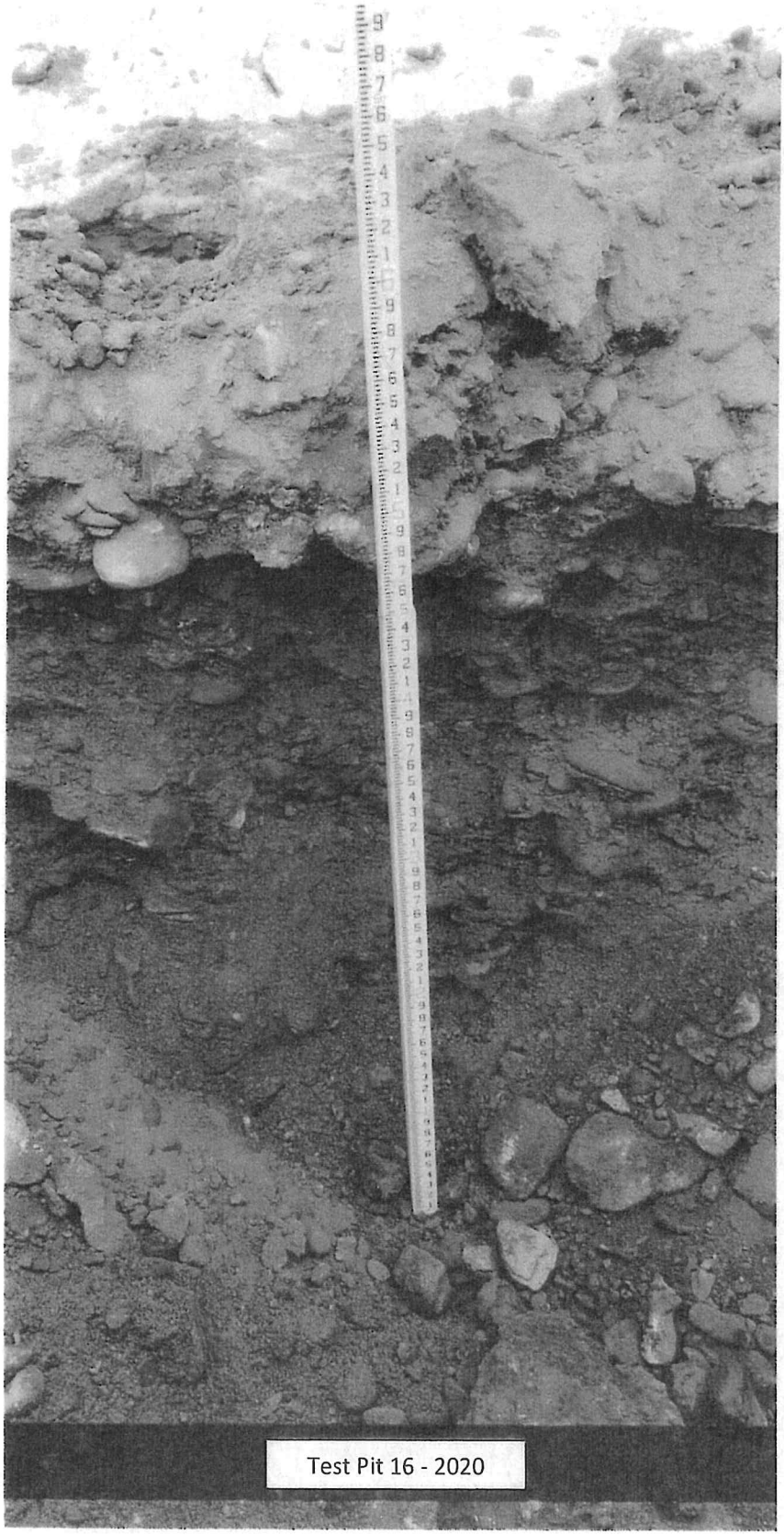

Test Pit 13 - 2020



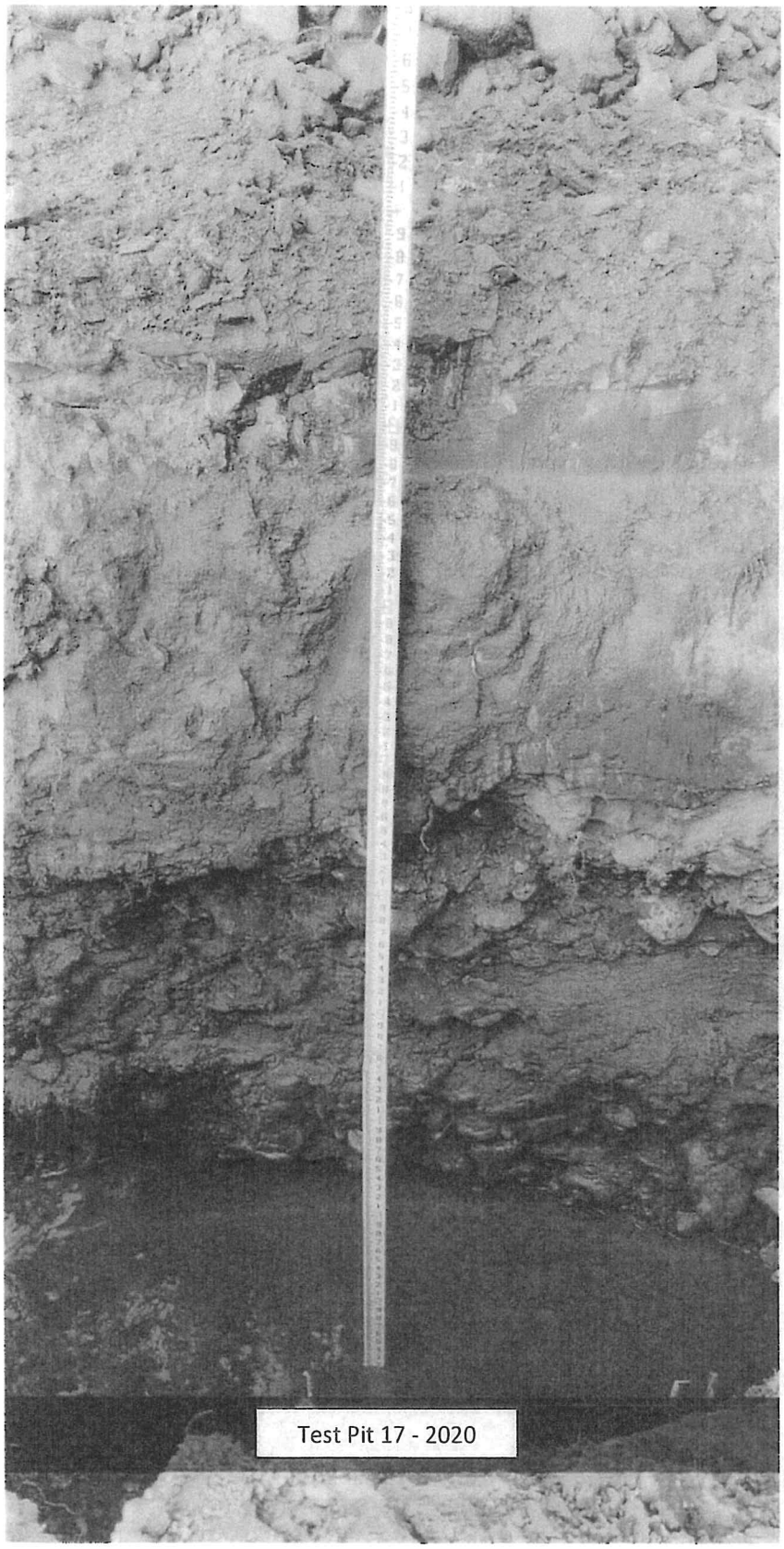
Test Pit 14 - 2020

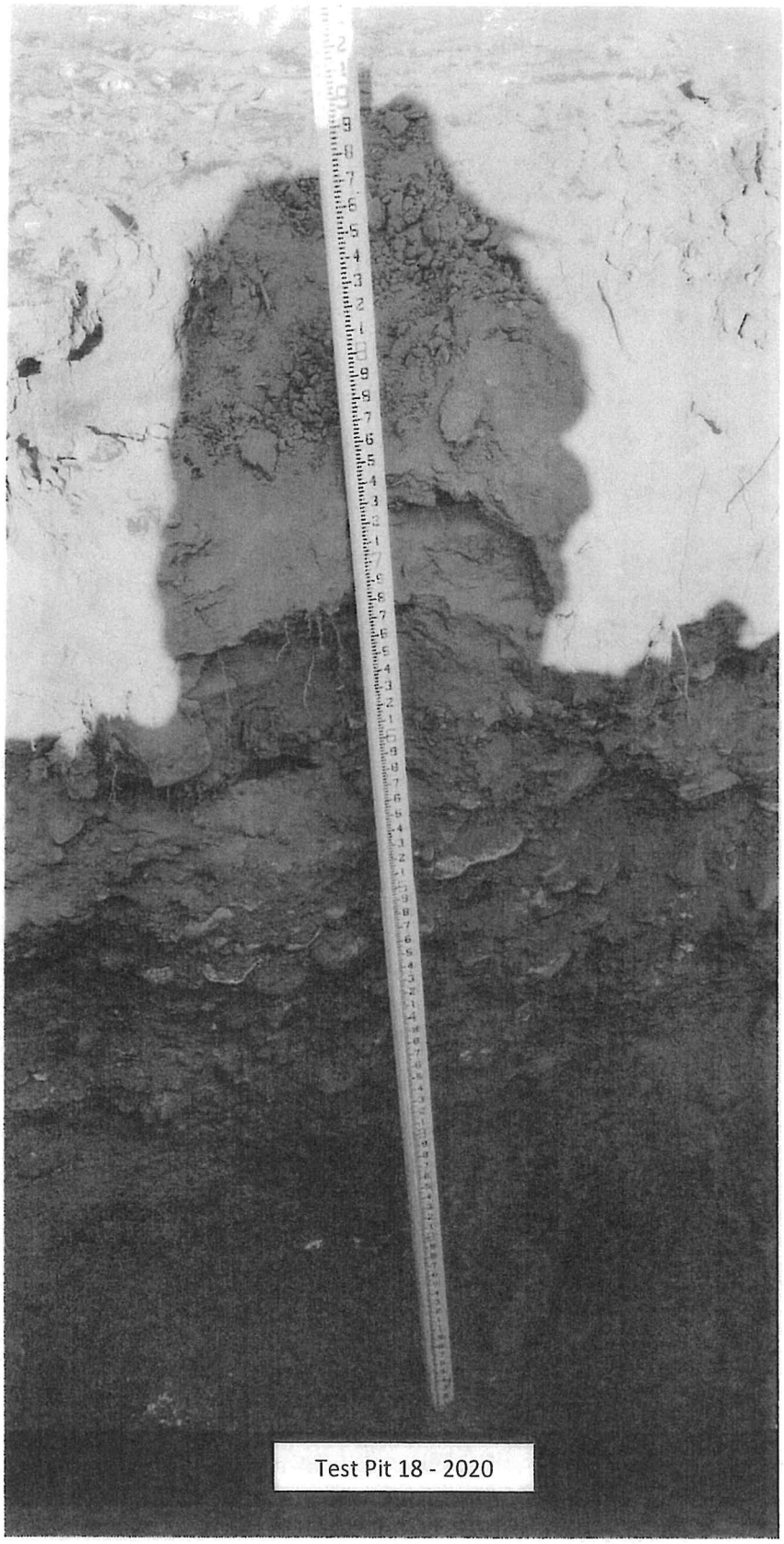


Test Pit 15 - 2020

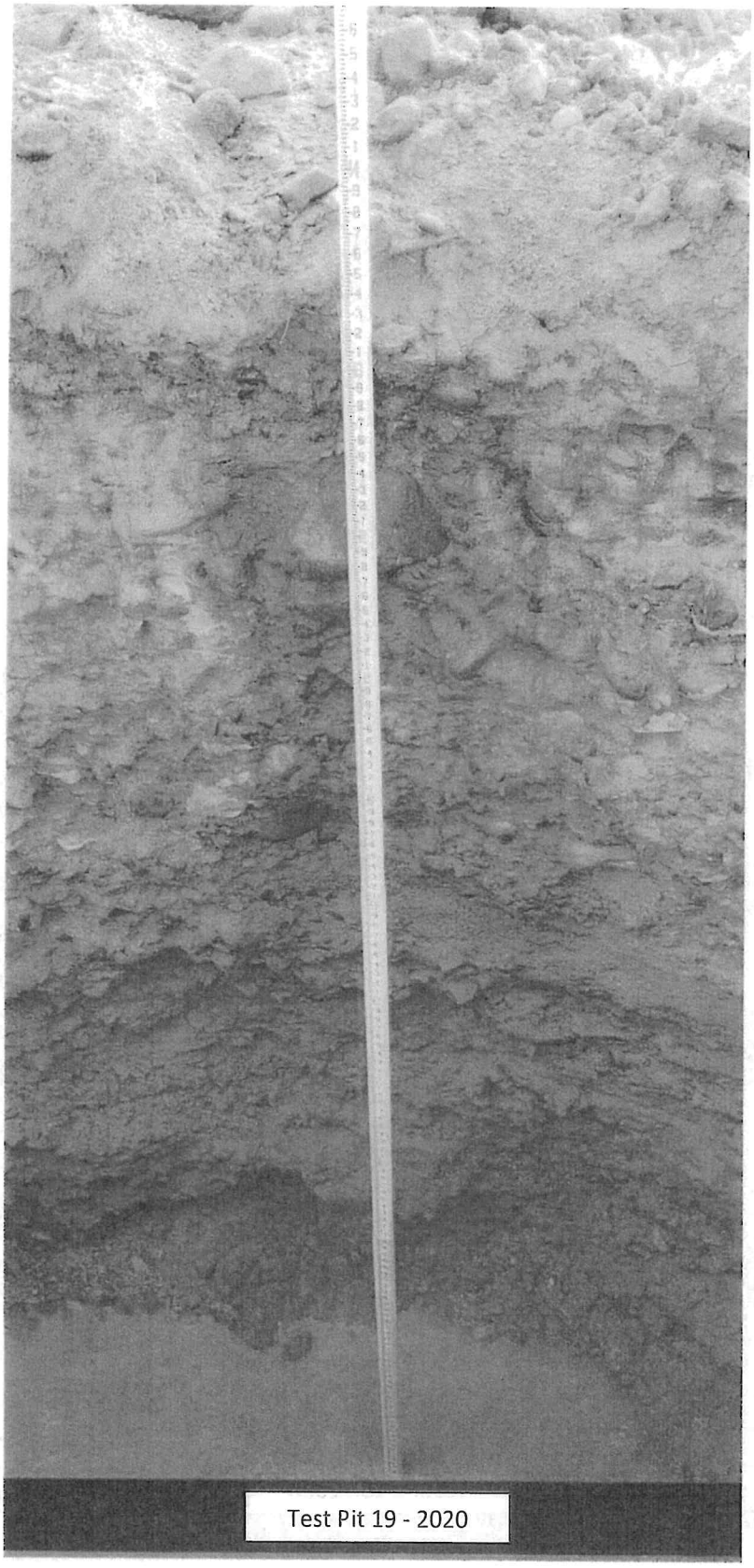


Test Pit 16 - 2020

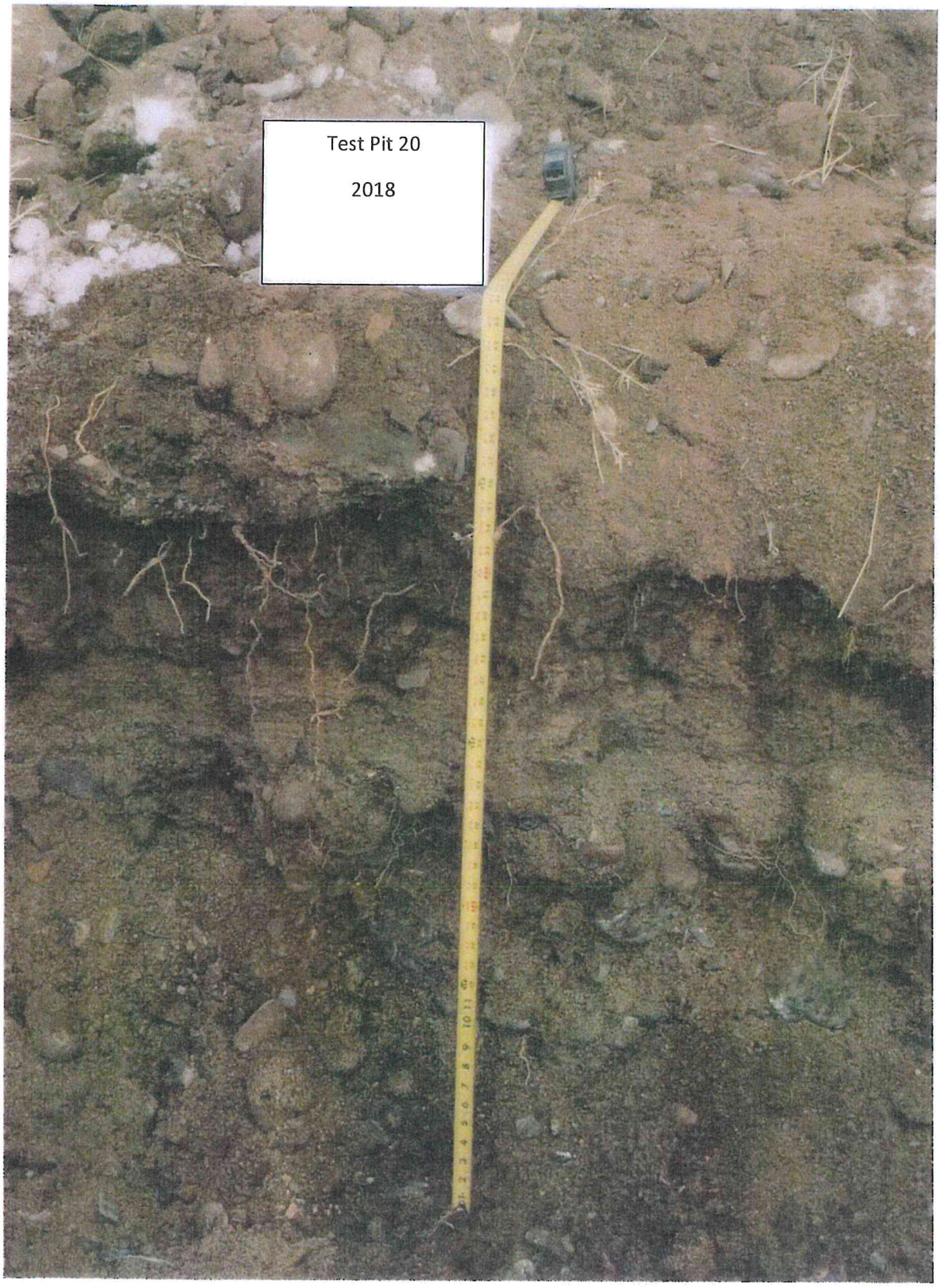

Test Pit 17 - 2020



Test Pit 18 - 2020

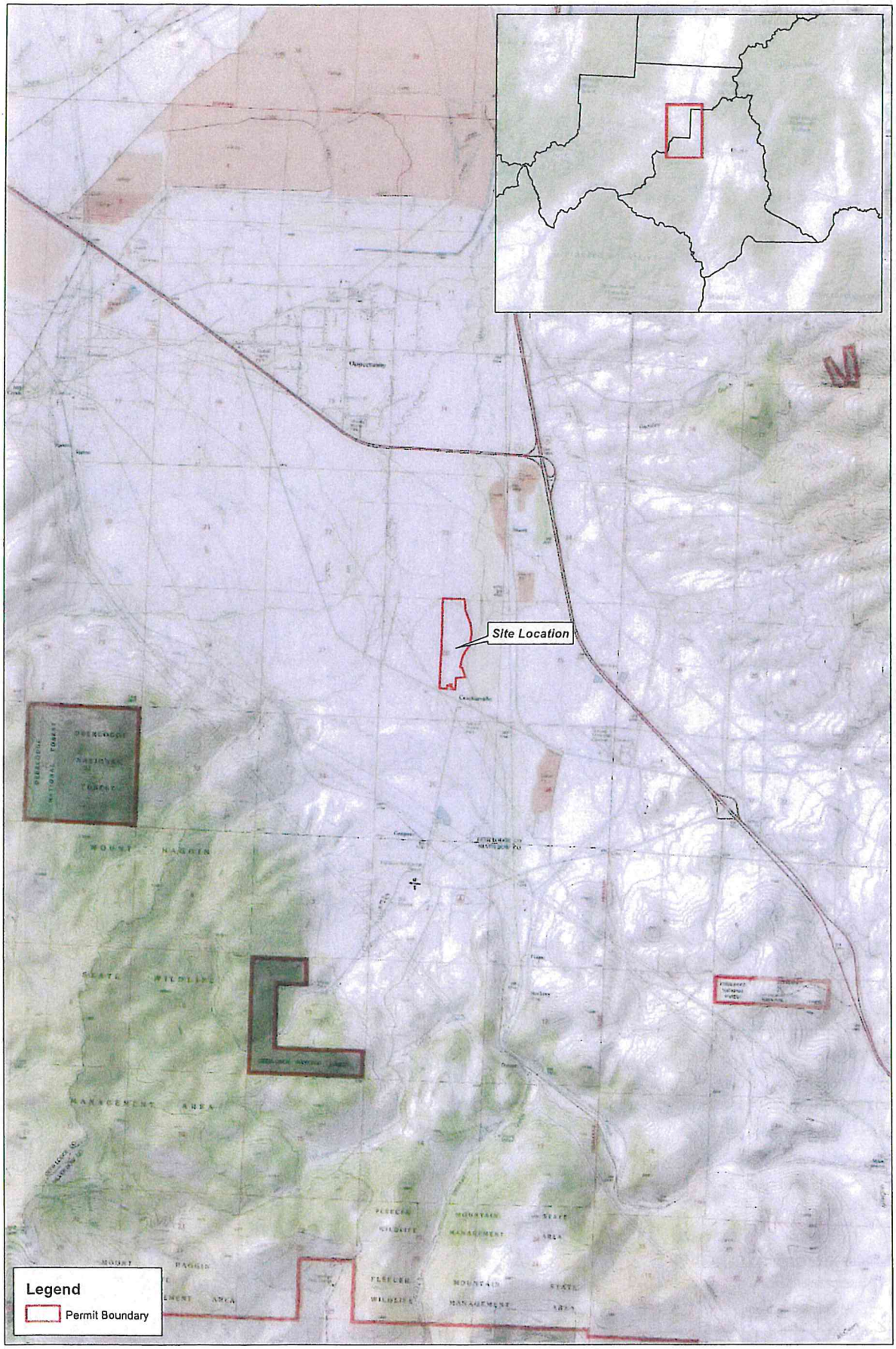


Test Pit 19 - 2020

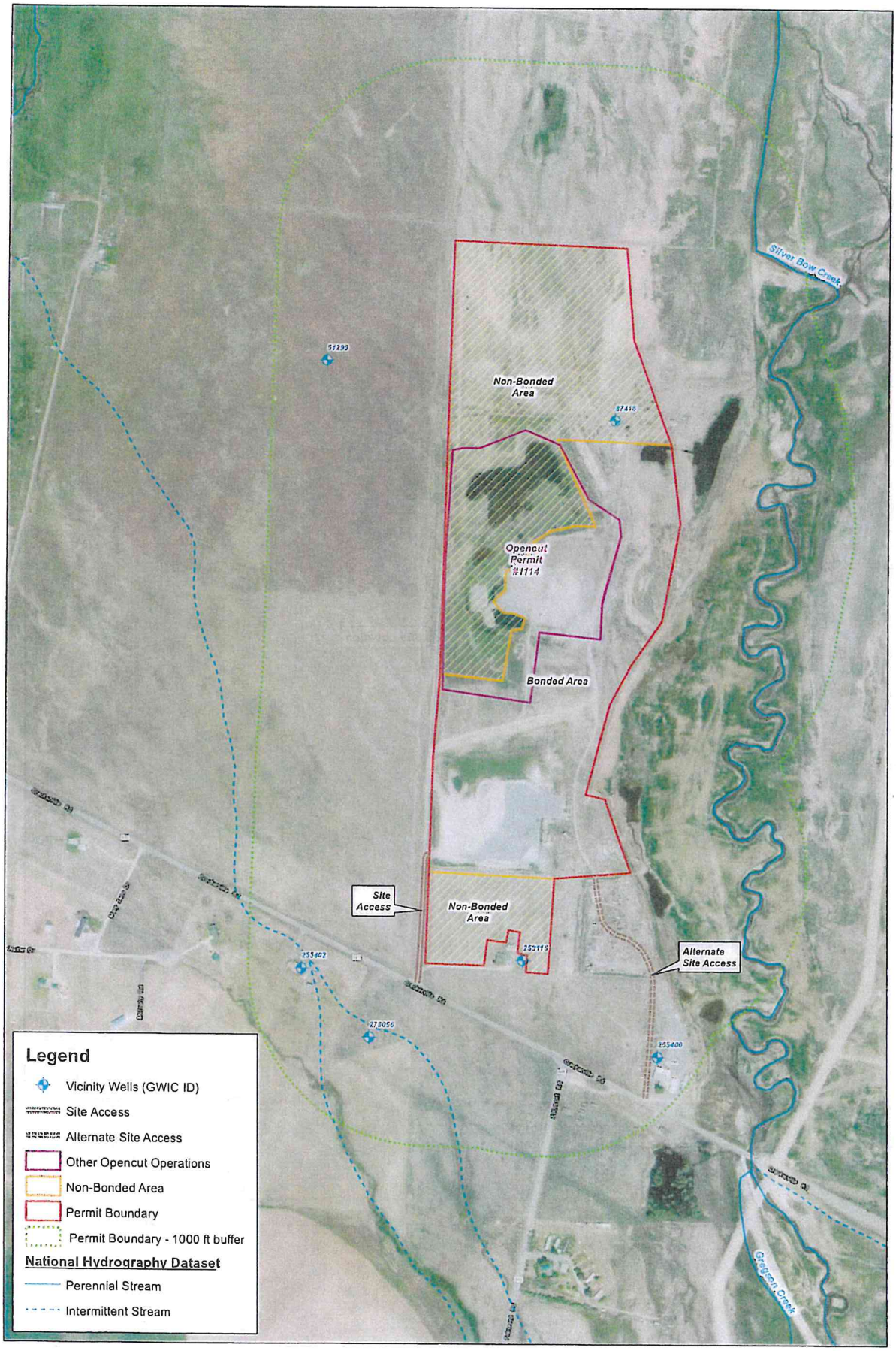

Test Pit 20
2018

Support Document

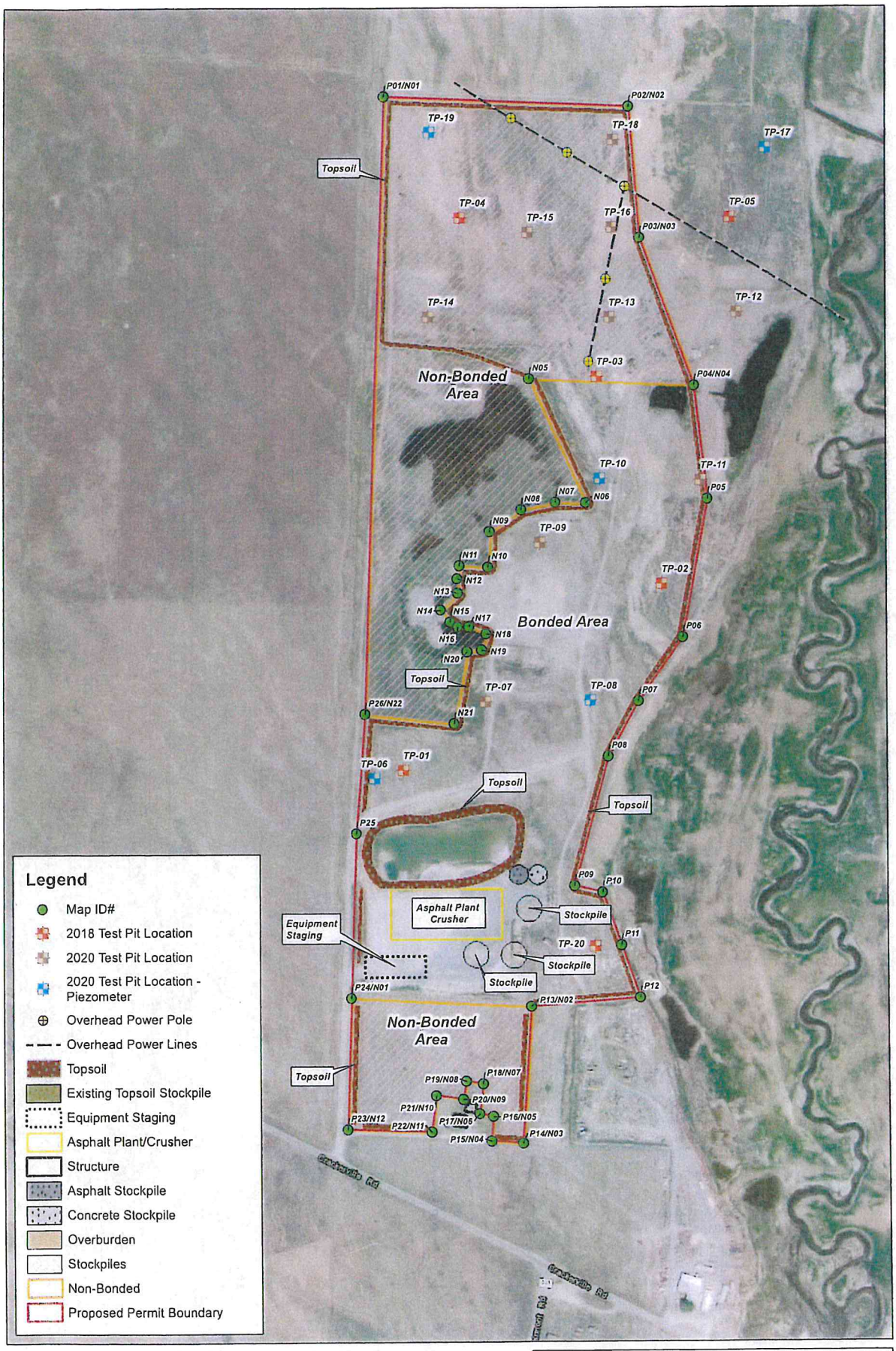
f.-i. Maps

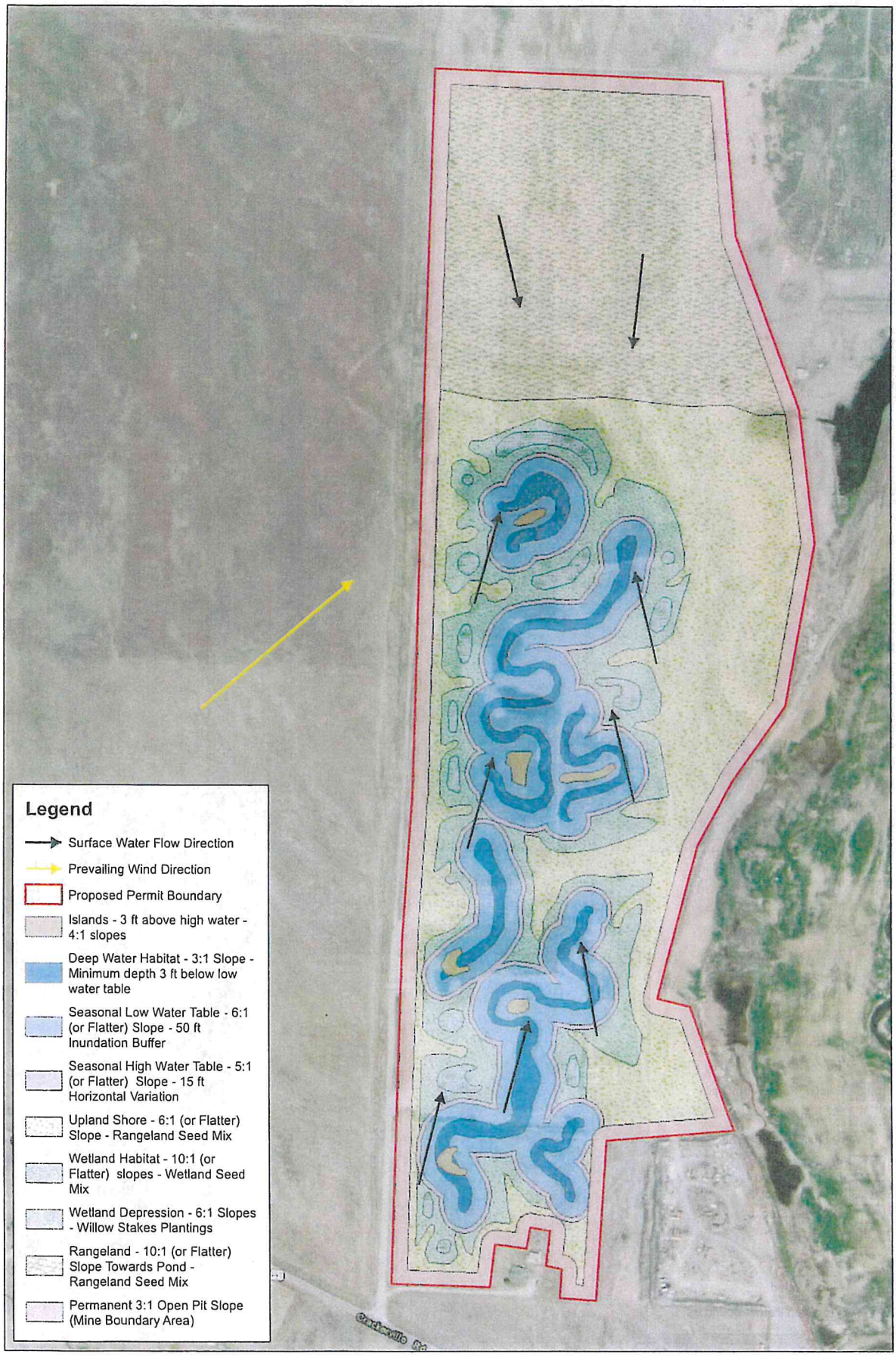


Operator: Bulana Sand & Gravel	Location Map
Site Name: DK Jan	
T4N,R10W,S26 Deer Lodge County MT	
Job#: BUTANAM02	FIGURE 1
Date: 2/4/2020	



Operator: Butana Sand & Gravel	Area Map
Site Name: DK Jan	
T4N,R10W,S26 Deer Lodge County MT	
Job#: BUTANAM02	FIGURE 2
Date: 2/5/2020	


P01/N01
P02/N02
TP-19
TP-18
TP-17
Topsoil
TP-04
TP-15
TP-16
TP-05
P03/N03
TP-14
TP-13
TP-12
TP-03
N05
P04/N04
Non-Bonded Area
TP-10
TP-11
P05
N08
N07
N06
N09
TP-09
N11
N10
TP-02
N12
N13
N14
N15
N17
Bonded Area
P06
N16
N18
N19
N20
Topsoil
TP-07
TP-08
P07
P26/N22
N21
P08
TP-06
TP-01
Topsoil
Topsoil
P25
P09
P10
Asphalt Plant Crusher
Stockpile
Equipment Staging
TP-20
P11
Stockpile
Stockpile
P24/N01
P13/N02
P12
Non-Bonded Area
Topsoil
P19/N08
P18/N07
P20/N09
P21/N10
P23/N12
P17/N06
P16/N05
P22/N11
P15/N04
P14/N03
Legend
Map ID#
2018 Test Pit Location
2020 Test Pit Location
2020 Test Pit Location - Piezometer
Overhead Power Pole
Overhead Power Lines
Topsoil
Existing Topsoil Stockpile
Equipment Staging
Asphalt Plant/Crusher
Structure
Asphalt Stockpile
Concrete Stockpile
Overburden
Stockpiles
Non-Bonded
Proposed Permit Boundary
0
350
700
1,050
Feet
N
W
E
S
Operator: Butana Sand & Gravel
Site Name: DK Jan
Site Map
T4N,R10W,S26
Deer Lodge County MT
Job#: BUTANAM02
Date: 2/5/2020
FIGURE 3



Operator: Butana Sand & Gravel	Reclamation Map
Site Name: DK Jan	
T4N,R10W,S26 Deer Lodge County MT	
Job#: BUTANAM02	FIGURE 4
Date: 2/5/2020	

Support Document

j. Boundary Coordinate Table

OPERATOR PROPOSED PERMIT BOUNDARY COORDINATES TABLE

Purpose of this Boundary Coordinate Table: Amendment Application

1) Use this form to submit coordinates to delineate the **Operator Proposed Permit Boundary**.

2) If delineating multiple Permit Boundaries, use separate **Operator Proposed Permit Boundary** tables to delineate each Permit Boundary.

3) When providing coordinates for an **Amended** Permit boundary, you must include coordinates that delineate the ***entire*** new Operator Proposed Permit Boundary (i.e. one proposed boundary that encompasses both the existing permitted boundary and proposed amendment area).

4) If **Bonded** and **Non-Bonded** area is present, complete the **Operator Proposed Non-Bonded Boundary Coordinate** table **in addition** to this form.

5) All boundaries are created automatically by a computer program, therefore

- All coordinates **must** be in geographic sequence, so that the Operator Proposed Permit Boundary is created by connecting Map ID #P1 to Map ID #P2 to Map ID #P3, etc.
- The last Map ID # in the BCT would connect to the first Map ID# to complete the boundary.
- The Map ID# for each coordinate (e.g. P1, P2, P3 etc.) must be shown on the site map.
- Coordinates must be submitted in **Decimal Degrees** and **WGS 84** datum and include a negative longitude to plot in Montana.

6) Do Not provide coordinates for any other features (e.g. screen, test holes, asphalt plant, etc.).

Do Not leave blank rows in between coordinates in the BCT. Providing coordinates for additional features or leaving spaces will result in a boundary that cannot be drawn and the BCT will be deemed incomplete and/or deficient

7) Only put numerical coordinates in the Latitude or Longitude boxes (i.e. no "N" or "W"), or this BCT will not be accepted. Coordinates must be in decimal degree format and provided to the fifth decimal point.
Example: Latitude 46.58946 & Longitude -112.00480.

8) Email the completed Microsoft Excel table to: DEQopencut@mt.gov with "Subject" line: **BCT (Operator-Site Name)**. Do **not** include a printed version of this table with the paper application submitted to the Program's Helena office.

Operator Name: Butana Sand & Gravel

Site Name: DK Jan

Permit # (if not a new app) 3025 **Date:** 2/6/2020

MAP ID#	LATITUDE	LONGITUDE (must be negative)	DESCRIPTION (not required)
P1	46.07763	-112.80894	
P2	46.07763	-112.80510	
P3	46.07624	-112.80484	
P4	46.07469	-112.80389	
P5	46.07350	-112.80361	
P6	46.07202	-112.80391	
P7	46.07132	-112.80456	
P8	46.07072	-112.80500	
P9	46.06933	-112.80545	
P10	46.06927	-112.80501	
P11	46.06873	-112.80469	
P12	46.06818	-112.80436	
P13	46.06804	-112.80606	
P14	46.06660	-112.80612	
P15	46.06661	-112.80660	
P16	46.06687	-112.80659	
P17	46.06689	-112.80680	
P18	46.06720	-112.80677	

P19	46.06723	-112.80703	
P20	46.06704	-112.80707	
P21	46.06706	-112.80749	
P22	46.06668	-112.80754	
P23	46.06667	-112.80885	
P24	46.06805	-112.80886	
P25	46.06979	-112.80888	
P26	46.07106	-112.80882	
P27		-	
P28		-	
P29		-	
P30		-	
P31		-	
P32		-	
P33		-	
P34		-	
P35		-	
P36		-	
P37		-	
P38		-	
P39		-	
P40		-	
P41		-	
P42		-	
P43		-	
P44		-	
P45		-	
P46		-	
P47		-	
P48		-	
P49		-	
P50		-	
P51		-	
P52		-	
P53		-	
P54		-	
P55		-	
P56		-	
P57		-	
P58		-	
P59		-	
P60		-	
P61		-	
P62		-	
P63		-	
P64		-	
P65		-	
P66		-	
P67		-	
P68		-	
P69		-	
P70		-	

OPERATOR PROPOSED NON-BONDED BOUNDARY COORDINATE TABLE

Private Operators bonding the entire site would **Not** use this table.
Counties and other Government agencies not required to post a bond would **Not** use this table.
Use the **Operator Proposed Permit Boundary Coordinate** table to depict the operator proposed permit boundary.

1) Use this form to submit coordinates to delineate the Operator Proposed Non-Bonded boundary only. By default, the remaining area would be the Bonded area.

2) If delineating multiple Non-Bonded boundaries, use separate **Operator Proposed Non-Bonded Boundary Coordinate** tables to delineate each Non-Bonded boundary.

3) This table must be submitted in conjunction with the Operator Proposed Permit Boundary Coordinate Table, which delineates the entire proposed permit boundary, except when the existing permit boundary is not changing. If the permit boundary is already defined by coordinates and isn't changing, do not resubmit an Operator Proposed Permit Boundary Coordinates Table.

4) All boundaries are created automatically by a computer program, therefore:

- All coordinates must be in geographic sequence, so that the Operator Proposed Permit Boundary is created by connecting Map ID #N1 to Map ID #N2 to Map ID #N3, etc.
- The last Map ID # in the BCT would connect to the first Map ID# to complete the boundary.
- The Map ID# for each coordinate (e.g. N1, N2, N3 etc.) must be shown on the site map.
- Coordinates must be submitted in Decimal Degrees and WGS 84 datum and include a negative longitude to plot in Montana

5) Do Not provide coordinates for any other features (e.g. screen, test holes, asphalt plant, etc.).
Do Not leave blank rows in between coordinates in the BCT.
Providing coordinates for additional features or leaving spaces will result in a boundary that cannot be drawn and the BCT will be deemed incomplete and/or deficient.

6) Only put numerical coordinates in the Latitude or Longitude boxes (i.e. no "N" or "W"), or this BCT will not be accepted. Coordinates must be in decimal degree format and provided to the fifth decimal point.
Example: Latitude 46.58946 & Longitude -112.00480.

7) Email the completed Microsoft Excel table to: DEQopencut@mt.gov with "Subject" line: **BCT (Operator-Site Name)**. Do **not** include a printed version of this table with the paper application submitted to the Program's Helena office.

Operator Name: Butana Sand & Gravel

Site Name: DK Jan

Permit # (if not a new app) 3025 **Date:** 2/6/2020

MAP ID#	LATITUDE	LONGITUDE	DESCRIPTION (not required)
N1	46.06805	-112.80886	
N2	46.06804	-112.80606	
N3	46.06660	-112.80612	
N4	46.06661	-112.80660	
N5	46.06687	-112.80659	
N6	46.06689	-112.80680	
N7	46.06720	-112.80677	
N8	46.06723	-112.80703	
N9	46.06704	-112.80707	
N10	46.06706	-112.80749	
N11	46.06668	-112.80754	
N12	46.06667	-112.80885	
N13		-	
N14		-	
N15		-	
N16		-	
N17		-	

OPERATOR PROPOSED NON-BONDED BOUNDARY COORDINATE TABLE

Private Operators bonding the entire site would **Not** use this table.
Counties and other Government agencies not required to post a bond would **Not** use this table.
Use the **Operator Proposed Permit Boundary Coordinate** table to depict the operator proposed permit boundary.

1) Use this form to submit coordinates to delineate the Operator Proposed Non-Bonded boundary only. By default, the remaining area would be the Bonded area.

2) If delineating multiple Non-Bonded boundaries, use separate **Operator Proposed Non-Bonded Boundary Coordinate** tables to delineate each Non-Bonded boundary.

3) This table must be submitted in conjunction with the Operator Proposed Permit Boundary Coordinate Table, which delineates the entire proposed permit boundary, except when the existing permit boundary is not changing. If the permit boundary is already defined by coordinates and isn't changing, do not resubmit an Operator Proposed Permit Boundary Coordinates Table.

4) All boundaries are created automatically by a computer program, therefore:

- All coordinates must be in geographic sequence, so that the Operator Proposed Permit Boundary is created by connecting Map ID #N1 to Map ID #N2 to Map ID #N3, etc.
- The last Map ID # in the BCT would connect to the first Map ID# to complete the boundary.
- The Map ID# for each coordinate (e.g. N1, N2, N3 etc.) must be shown on the site map.
- Coordinates must be submitted in Decimal Degrees and WGS 84 datum and include a negative longitude to plot in Montana

5) Do Not provide coordinates for any other features (e.g. screen, test holes, asphalt plant, etc.).
Do Not leave blank rows in between coordinates in the BCT.
Providing coordinates for additional features or leaving spaces will result in a boundary that cannot be drawn and the BCT will be deemed incomplete and/or deficient.

6) Only put numerical coordinates in the Latitude or Longitude boxes (i.e. no "N" or "W"), or this BCT will not be accepted. Coordinates must be in decimal degree format and provided to the fifth decimal point.
Example: Latitude 46.58946 & Longitude -112.00480.

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Operator Name: Butana Sand & Gravel

Site Name: DK Jan

Permit # (if not a new app) 3025 **Date:** 2/6/2020

MAP ID#	LATITUDE	LONGITUDE	DESCRIPTION (not required)
N1	46.07763	-112.80894	
N2	46.07763	-112.80510	
N3	46.07624	-112.80484	
N4	46.07469	-112.80389	
N5	46.07469	-112.80647	
N6	46.07340	-112.80551	
N7	46.07340	-112.80598	
N8	46.07330	-112.80651	
N9	46.07306	-112.80699	
N10	46.07268	-112.80699	
N11	46.07268	-112.80744	
N12	46.07255	-112.80746	
N13	46.07239	-112.80745	
N14	46.07220	-112.80770	
N15	46.07208	-112.80755	
N16	46.07203	-112.80743	
N17	46.07204	-112.80726	

N18	46.07197	-112.80698	
N19	46.07180	-112.80704	
N20	46.07177	-112.80727	
N21	46.07100	-112.80742	
N22	46.07106	-112.80882	
N23		-	
N24		-	
N25		-	
N26		-	
N27		-	
N28		-	
N29		-	
N30		-	
N31		-	
N32		-	
N33		-	
N34		-	
N35		-	
N36		-	
N37		-	
N38		-	
N39		-	
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N60		-	
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N62		-	
N63		-	
N64		-	
N65		-	
N66		-	
N67		-	
N68		-	
N69		-	

Support Document

k. Weed Board Notification of Opencut Operation

DEQ OPENCUT MINING SECTION • PO BOX 200901 • HELENA MT 59620-0901 • PHONE: 406-444-4970 • FAX: 406-444-4988 • Email: DEQOpencut@mt.gov

WEED BOARD NOTIFICATION OF OPENCUT OPERATION

In accordance with the Opencut Mining Act and its implementing Rules (ARM 17.24.218(1)(iii)), an Operator applying for an Opencut Mining Permit must:

- Complete this form;
- Submit it to the weed board in the county or counties in which the proposed Opencut operation is located; and,
- Attach a copy to the Opencut Mining Permit application submitted to the Montana Department of Environmental Quality (DEQ).

All fields must be completed and a Location Map must be attached.

In accordance with ARM 17.24.221, the **Location Map** may be on an aerial or topo base, and must show the site location in relation to the nearest town, city, or major intersection and be sufficient to allow the public to locate the proposed site. The map must also provide:

- Operator name
- Site name
- Legal description of the proposed permit area (Section, Township, and Range)
- Bar scale
- North arrow
- Date of drafting

Operator Name: Butana Sand & Gravel

Site Name: DK Jan **County:** Deer Lodge

OPERATOR CERTIFICATION: The person signing below certifies that: ***a)*** a Location Map meeting the requirements of ARM 17.24.221 was attached; and ***b)*** the form and map were submitted to the weed board in the county or counties in which the proposed Opencut operation is located.

Printed Name: John Jeffery (Butana Sand &Gravel) **Title:** Owner

Signature: [signature] **Date:** 2-5-20

Support Document

I. Reclamation Bond Spreadsheet

Reclamation Bond Spreadsheet

INSTRUCTIONS: Enter your data in the shaded boxes. See page 3 for detailed instructions.

Operator Name: Butana Sand & Gravel
Site Name: DK Jan
Prepared by: Stephen Frazee (WET)
Date: 2/1/2020

Total Permitted Acres = 96.9 acres*

*Must match the "Total Permitted Acres" in A1-12 of the Opencut Mining Plan of Operation & Application.

Comments:
Maximum depth of mining is 16ft but maximum highwall height is only 13ft. The areas that will be mined to 16ft below ground will be in the middle of the permit area, away from the highwall. These areas will act as the "deep water" portion of the ponds and will be mined last after the remaining permit area has been mined to 13 feet below ground.

BONDED ACREAGE BREAKDOWN

Must match the "Acreage Breakdown" in section A1-12 of the Opencut Mining Plan of Operation & Application.

Bonded	46.4	acres
Phase I Release Bonded Area		acres
Non-Bonded	50.5	acres
Access Road		acres
Total Bonded Area =	46.4	acres**

**The Total Bonded Area must be identical to the acreage on the Bond submitted by the Operator to the Department.

Lineal Feet & Height must match section D4-8 of Opencut Mining Plan of Operation & Application, and reclamation slope ratio must match section E4-2

Highwall Cut/Fill (refer to section D4-8)

Description	linear feet	height	reclamation slope ratio		cubic yards	
Highwall	5000	13	3	:1	11,736	total
				:1	0	11,736

Highwall Backfill (refer to section D4-8 & D6) - Covers cost of grading & sloping fill material along highwall face to create the permitted slope. Must also complete **Backfill Transport/Placement** line item below.

Description	linear feet	height	reclamation slope ratio		cubic yards	
				:1	0	total
				:1	0	0

Mine Area Backfill (Refer to section D6) - Covers the cost of placing backfill material in the pit or to raise the level of the pit floor. Must also complete **Backfill Transport/Placement** line item below.

Description	acres	depth		compaction %	cubic yards	
					0	total
					0	0

Mine soil replacement	18	inches soil	Overburden Replacement	0	inches OB	total 18
Access road soil replacement	0	inches soil	Overburden Replacement	0	inches OB	total 0

* Soil and overburden inches must match section C2-4.

ITEM	UNIT	AMOUNT		RATE		TOTAL
Highwall Cut/Fill		11,736	cu yds	$1	per cubic yard	$11,736
Highwall Backfill & Mine Area Backfill		0	cu yds	$1.50	per cubic yard	$0
Backfill Transport/Placement Cost-Onsite $2cy, offsite $15c		0	cu yds		per cubic yard	$0
Bonded area grading		46.4	acres	$100	per acre	$4,640
Bonded area ripping		46.4	acres	$100	per acre	$4,640
Bonded soil and OB replacement	18 inches	46.4	acres	$1.25	per cubic yard	$140,360
Access road area grading		0.0	acres	$100	per acre	$0
Access road area ripping		0.0	acres	$100	per acre	$0
Access road soil replacement	0 inches	0.0	acres	$1.25	per cubic yard	$0
Seeding or other revegetation		46.4	acres	$600	per acre	$27,840
Weed control		46.4	acres	$100	per acre	$4,640
Fencing		0	linear ft	$1.40	per linear foot	$0
Cost to crush onsite asphalt		5000	cu yds	$4	per cubic yard	$20,000
Cost to import, purchase and place soil		0	cu yds	$18	per cubic yard	$0
Cost to bond for reject fines		0	cu yds	$1	per cubic yard	$0
						$0
						$0
						$0
					Total =	$213,856

Indirect Reclamation costs to DEQ (Mob/DeMob, Contingency, Engineering, Overhead, & Project Management) = 25% up to $1,000,000 bond and 20% for a bond over $1,000,000. Minimum Bond Amount is $25,000 $53,464

Total Area Bonded =	46.4	Rate Per Bonded Acre =	$5,761.21	**Total Bond =**	**$267,320**

Support Document

m. Landowner Consultation

DEQ OPENCUT MINING SECTION • PO BOX 200901 • HELENA MT 59620-0901 • PHONE: 406-444-4970 • FAX: 406-444-4988 • Email: DEQOpencut@mt.gov

LANDOWNER CONSULTATION

This form is required for **all** applicants applying for an Opencut Mining permit **or** for an amendment that will: *a)* add acreage, an asphalt plant, or a concrete plant; *b)* change the postmining land use; or *c)* extend the reclamation date [MCA 82-4-432(2)(d); ARM 17.24.206].

OPERATOR SECTION: All fields must be completed.

Operator Name: Butana Sand & Gravel

Site Name: DK Jan **County:** Deer Lodge

Section 26 **Township** 4 ☒N *or* ☐S **Range** 10 ☐E *or* ☒W *and* **Section** __ **Township** ☐N *or* ☐S **Range** ☐E *or* ☐W Additional legal description if necessary: ____

The person signing below represents that (*check one box*):

☒ I am an officer or an employee of the Operator and I am duly authorized to bind the Operator, which is a corporation, limited partnership, limited liability company, or other corporate entity in good standing and authorized to do business in Montana, and in this capacity I acknowledge and certify that:

Or

☐ I am the Operator and I acknowledge and certify that:

1) The Operator consents to and acknowledges that the DEQ and its representatives may access the site to inspect the permit area at any reasonable time, and that while the DEQ attempts to provide reasonable notice of an inspection to the operator when practicable under the circumstances, inspections may be conducted without prior notice as necessary to determine whether Opencut operations are being conducted in compliance with the permit, Act, and rules [82-4-422(1)(d) and 425, MCA] & [ARM 17-24-206(2)(f) and 206(3)].

2) The Operator shall complete reclamation: *a)* in accordance with the approved Plan of Operation and as concurrent with operations as feasible; *b)* within one year of the cessation of operations or the termination of the right to conduct operations; and *c)* no later than the permitted final reclamation date.

By: [signature] **Signature** — John Jeffery - Butana Sand & Gravel **Legibly print or type name**

Owner **Title** — 2-5-20 **Date**

LANDOWNER SECTION: All fields must be completed. A private road may be included as affected land only with the landowner's consent [MCA 82-4-403(11)].

A. Does the Landowner want the Operator to permit an access road(s) (i.e. existing or proposed non-public road that connects an Opencut operation to a public access)?

☐ **Not applicable:** The site will be accessed from the immediately adjacent public road.

☒ **No:** The landowner does not want an access road included in the permit.

☐ **Yes and:** ☐ **Access road will be reclaimed at final reclamation or** ☐ **Access road will remain at final reclamation:**

Access Road 1 **Width:** ____ feet. Location must be identified on the site map and reclamation map.

Access Road 2 **Width:** ____ feet. Location must be identified on the site map and reclamation map.

B. Does the Landowner want stockpile(s) of mine material left at the conclusion of Opencut operations? ☒No ☐Yes

Note: *a)* mine material must be left in a location that will be accessible by road; *b)* the total volume of mine material left is typically 10,000 cubic yards or less (to help ensure it can be consumed and the site reclaimed within 5-10 years); and *c)* once consumed, the Landowner is responsible for reclaiming the area using a soil stockpile left by the Operator for that purpose.

If Yes, as per ARM 17.24.219(1)(b), describe the type and volume of mine material(s) to be left:

1. Type of mine material(s) to be left: ☐Gravel ☐Sand ☐Other: ____
2. Total volume of mine material to be left in cubic yards: ____
3. If the total is more than 10,000 cubic yards, identify potential local uses consistent with it being consumed within 5-10 years: ____

C. Does the Landowner consent to allow the burial of onsite generated asphalt on their land within the permitted boundaries?

☒No ☐Yes (in accordance with ARM 17.24.219(1)(b))

If Yes, refer to section D7-1 of the Opencut Mining Plan of Operation and Application.

LANDOWNER SECTION (Continued):

D. Landowner acknowledges and affirms the following:

1. The Operator is applying for a permit to conduct operations in accordance with: *a)* the Opencut Mining Act (Title 82, chapter 4, part 4, MCA); *b)* its implementing rules (ARM Title 17, chapter 24, subchapter 2); and *c)* the site-specific Plan of Operation.
2. The Landowner: *a)* owns the land and the legal rights to all its earthen materials are owned or have been obtained; *b)* has been consulted by the Operator about the proposed Plan of Operation; and *c)* understands the Montana Department of Environmental Quality (DEQ) may require the Operator to revise that Plan before the permit or amendment is approved.
3. If the DEQ approves the permit, the following will apply to the permit area:
   a. The Operator will have the exclusive right to conduct Opencut operations.
   b. The Operator and future assignees (party assuming the permit) may allow another party to conduct permitted Opencut operations only if the Operator retains control over that party's activities and the Operator remains responsible for any violations that may occur.
   c. The Landowner may not authorize Opencut operations by another party until that party obtains the Operator's permission.
4. The DEQ can enforce requirements of the Act, rules, and permit. Any other arrangements or understandings between the Landowner and Operator are private matters that should be stated in a separate written agreement between those two parties.
5. DEQ personnel have the right to access the site to inspect the permit area at any reasonable time. The Operator and DEQ's agents or contractors have the right to access the site to complete reclamation in accordance with the Plan of Operation.
6. The Operator may request Phase 1 or Phase 2 release of the permit once the site or a portion of it has been reclaimed according to the Plan of Operation. DEQ will notify the Operator and the Landowner of its decision regarding each release request.
7. DEQ typically releases a site reclaimed to cropland after one successful crop; a site reclaimed to perennial vegetation (i.e. rangeland and/or pasture) is typically released after two complete growing seasons or when revegetation is established, whichever is longer.
8. It is the Landowner's responsibility to disclose this form to any purchaser of the site prior to closing and to advise the purchaser of the status of the Opencut Mining permit.
9. If a pond remains at final reclamation, it may be the landowner's responsibility to obtain a water right from the DNRC if one is required.

E. The following must be filled out for sites located in Sage Grouse Habitat:

If the site is in Sage Grouse habitat designated by Executive Orders 12-2015 and 21-2015, and any part of the proposed permit area is privately owned, the private Landowner acknowledges that he/she:

- Has knowledge of the Montana Sage Grouse Habitat Conservation Program letter contained in the Opencut permit application, and understands the letter provides recommendations for reclamation of this site to maintain sage grouse populations and habitat so Montana can manage its own lands, wildlife, and economy, and a listing under the Endangered Species Act will not be warranted.
- Understands Executive Order 12-2015 stipulates that:
  - Reclamation should re-establish native grasses, forbs, and shrubs to achieve cover, species composition, and life form diversity commensurate with the surrounding plant community and replace sage grouse habitat to the degree conditions allow.
  - Landowners should be consulted on the desired plant mix on private land and have the option of deciding whether the site will be reclaimed with the recommended sage grouse seed mix or an alternate seed mix.

    Landowner chooses the following seed mix:

    ☐ **Recommended seed mix for sage grouse habitat** ☐ **Alternate seed mix as chosen in Section E6-4 of the application**

F. LANDOWNER SIGNATURE:

Landowner Name (print or type): Butana Sand & Gravel (John Jeffery)

Address: PO Box 269

City: Belgrade **State:** MT **Zip:** 59714

Phone#: 406-494-2867 **Cell Phone# (optional):**

Email (optional):

Landowner Signature: John M Jeffery **Date:** 2-5-20

Support Document

n. Zoning Compliance

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ZONING COMPLIANCE

In accordance with Opencut Mining Act sections 82-4-431(8) & 432(2)(b), sand and gravel operations must meet applicable local zoning regulations. As a result, this form is required unless the Operator is proposing to mine **bentonite, clay, scoria, peat,** or **soil**.

In accordance with section 17.24.223 of the rules implementing the Act, this form is required for a sand or gravel operation to apply for a **permit** or **an amendment adding acreage, changing the postmining land use or adding an asphalt or concrete plant**.

OPERATOR SECTION: All fields must be completed.

Operator Name: Butana Sand & Gravel

Site Name: DK Jan **County:** Deer Lodge

Section(s) 26 & ___ **Township** 4 ☒**North** or ☐**South** **Range** 10 ☐**East** or ☒**West**

Section(s) ___ & ___ **Township** ___ ☐**North** or ☐**South** **Range** ___ ☐**East** or ☐**West**

LOCAL GOVERNING BODY SECTION: Complete all items unless so directed by *italics* below.

In accordance with section 82-4-432(2)(b) of the Opencut Mining Act and section 17.24.223 of the rules implementing the Act, **the local governing body having jurisdiction over the area to be mined must certify that the proposed mine site and Plan of Operation comply with applicable local zoning regulations** adopted under MCA Title 76, Chapter 2. The certification must be submitted on this DEQ form.

1. The Operator has provided the local governing body with a site map, location map and a Plan of Operation for the proposed sand and gravel operation identified above: ☐Yes or ☐No If **No**, this form is not acceptable.
2. Check **one** box:

   a. ☐ Site is **not** zoned.

   b. ☐ Site is **zoned** and **does not comply** with local zoning regulations.; therefore, **no Opencut operations can occur**. Site is zoned as: _____

   c. ☐ Site is **zoned** and local zoning regulations **do not require** a local license or permit for the proposed Opencut operations. Site is zoned as: _____

   d. ☐ Site is **zoned** and local zoning regulations **require** a local license or permit for the proposed Opencut operations. Site is zoned as: _____

      Local zoning regulations require the following license or permit: _____

The application cannot be deemed complete until a copy of the local license or permit for the proposed operation is submitted to the Department.

CERTIFICATION BY LOCAL GOVERNING BODY:

Name of Local Governing Body: _____

Official's Name (print legibly): _____ **Title:** _____

Signature: _____ **Date:** _____

Support Document

o. Surface Landowner List

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SURFACE LANDOWNERS LIST

Operator: Butana Sand & Gravel

Site: DK Jan

An Opencut mining permit or amendment application must include this form if the application is for either:

A. A new permit (MCA 82-4-432 [5]); or

B. An amendment increasing the acreage by 50% or more of the amount of permitted acreage in the original permit (MCA 82-4-4432 [11]).

If applicable, the Operator must submit this form to DEQ at two separate points during the application process.

First Submittal - For the application, the Operator must:

1- Provide the names of the surface owners of land located within one-half mile of the boundary of the proposed Opencut permit.
2- Compile the names using the owners of record as shown in the paper or electronic records of the county clerk and recorder for the county where the proposed Opencut operation is located.
3- Obtain the names no more than 60 days prior to submission of the application.
4- Include the landowner of the proposed permit area.

Second Submittal - For public notice, the Operator must provide:

1- The names and addresses of the surface owners notified pursuant to public notice.
2- The date each landowner was sent public notice.

If necessary, use additional sheet(s) to list additional landowners.

Indicate the total number of pages of this Surface Landowers List submittal 2 pages

By submitting this form the Operator affirms that this ☑ **First Submittal (Application) OR** ☐ **Second Submittal**

Submittal of this form certifies that Public Notice must be completed pursuant to the public notice section of MCA 82-4-432.

Email this completed form in Microsoft Excel format to: DEQOpencut@mt.gov with "Subject" line: **SLL (Operator-SiteName)**.
Do **not** include a printed version of this form with the paper application submitted to the Helena office.

NOTE: When determining the number of surface landowners eligible to request a public meeting:
1) Multiple parties owning the same parcel of land are counted as 1 landowner.
2) A party owning multiple parcels of land is counted as 1 landowner, regardless of the number of parcels owned.

#	Surface Landowner Name		Mailing Address - Required for public notice				Public Notice Date
	First Name	Last Name	Street Address	City	ST	Zip	
1	Lawrence	Beck	5108 VILLAGE VIEW WAY APT 2	MISSOULA	MT	59803	
2	Butana Sand & Gravel		PO Box 269	Belgrade	MT	59714	
3	Karen	Daniels	205 Fairmont Rd	Anaconda	MT	59711	
4	Loyd	Daniels	1409 Jadwin Ave	Richland	WA	99354	
5	Deer Lodge County		800 Main St	Anaconda	MT	59711	
6	David F and Barbara Jane	Dierenfeldt	433 Ashleigh Ln	Anaconda	MT	59711	
7	Bruce	Duxbury	120 Walter Dr	Anaconda	MT	59711	
8	James	Forsman	100 Mary Jane Ln	Anaconda	MT	59711	
9	Highway Commission		2701 Prospect Ave	Helena	MT	59601	
10	Kathleen	Hollow	3601 Albany	Butte	MT	59701	
11	Stephan	Hotaling	1968 SW Aladdin St	Port Saint Lucie	FL	34953	

12	Bernhard & Caryle	Jenrich	723 Pebble Beach Rd	Billings	MT	59105	
13	Douglas & Brenda	Krattiger	169 Ashleigh Dr	Anaconda	MT	59711	
14	Beverly	Lawhorn	1968 SW Aladdin St	Port Saint Lucie	FL	34953	
15	Mike	Maxfield	28117 3rd Ave NE	Arlington	WA	98223	
16	Thomas	McNeely	359 Ashleigh Dr	Anaconda	MT	59711	
17	Arthur	Morin	PO Box 1209	Pine Grove	CA	95665	
18	MT DEQ - Attn Bill Kirly		PO Box 200901	Helena	MT	59620	
19	Patrick	Mulcahy	100 Mulcahy Rd	Anaconda	MT	59711	
20	Erin S & Betty Jo	Nelson	PO Box 179	Anaconda	MT	59711	
21	Peterson Fairmont Ranch Inc		805 Durant Canyon Rd	Anaconda	MT	59711	
22	Alex & Sheila	Reid	22 Mary Jane Dr	Anaconda	MT	59711	
23	Emily	Russ	20 Hathaway Ln	Kalispell	MT	59901	
24	Richard & Diane	Salle	305 Ashleigh Ln	Anaconda	MT	59711	
25	Matt	Smith	902 Rickards St	Anaconda	MT	59711	
26	Spangler Ranch LLC		PO Box 110	Ramsay	MT	59748	
27	State of Montana		1420 E 6th Ave	Helena	MT	59601	
28	Albertina Strenlik ETAL	Attn - Joseph Strenlik	1120 W 4th St	Anaconda	MT	59711	
29	David & Toni	Zimmer	75 Ashleigh Dr	Anaconda	MT	59711	
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Support Document

p. Fuel Guideline for Spill Prevention

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FUEL GUIDELINE FOR SPILL PREVENTION & MANAGEMENT WORKSHEET

The Opencut Act states that the Department cannot accept a plan of operation unless the plan provides that: the Opencut operation will be conducted to avoid fires; that procedures will be implemented to prevent significant physical harm to the affected land or adjacent land, structures, improvements, or life forms; and that surface water and ground water will be given appropriate protection, consistent with state law, from deterioration of water quality and quantity that may arise as a result of the Opencut operation (82-4-434(2), MCA). This guideline provides the basic requirements that ensure a plan of operation is acceptable for Opencut operations that have storage of fuel, regulated petroleum products, or on-site fueling operations.

A. SITE SPECIFIC INFORMATION

1. **Operator Name:** Butana Sand & Gravel
2. **Site Name:** DK Jan
3. **Opencut Number (if permitted):** 3025
4. **Describe how fuel will be stored or dispensed at this site (check all that apply and display location(s) on site map):**

   ☒ **Mobile Fueling from Tank Vehicle**
   ☐ **On-Site Fuel Tank:** ☐ **Single Wall or** ☐ **Double Wall**
   ☐ **Designated fueling area (display on site map)**
   ☐ **Other:**

5. If required, the Operator should prepare a Spill Prevention, Control and Countermeasure Plan (SPCC Plan). See Section G below.

B. GENERAL

Opencut operations with fuel storage or on-site equipment fueling have the potential for fires and for leaks, spills, and overfills that could contaminate surface water, groundwater, and soil. Human caused fires have become an increasingly significant issue in Montana and the Western United States. Petroleum releases that result in expensive cleanup costs and fines equate to a preventable loss of money from an Opencut mine operation. The information in this guideline is designed to:

- Ensure operators have incentives to improve fuel storage and fueling facilities in order to minimize the likelihood of accidental releases (75-11-301(6), MCA);
- Safeguard and reduce the risk of harm to human health and the environment by preventing spills (82-4-402(2) and 82-4-434(2), MCA);
- Ensure compliance with the codes adopted by the State Fire Marshal for fuel tank storage and fuel dispensing facilities (International Fire Code, Section 5704-Storage and Section 2304-Dispensing Operations adopted in ARM 23.12.402); and
- Ensure an Operator's eligibility for reimbursement up to $1 million to assist with cleanup and damages caused by an accidental release when fully compliant with the Petroleum Tank Release Compensation (PTRC) Board requirements that pertain to the prevention and mitigation of a petroleum release (75-11-308, MCA and ARM 17.58.326(1)).

Meeting all provisions of the International Fire Code (IFC) that are applicable to stationary above-ground storage tanks should ensure compliance with Applicable Rules Governing the Operating and Management of Petroleum Storage Tanks (ARM 17.58.326), and thereby result in an Operator's eligibility for spill reimbursement. Also, meeting all provisions of the IFC would minimize the risk of fires and the risk of spills from fuel tanks and fuel dispensing, thereby reducing or eliminating potential liability of an Operator.

C. STORAGE

The following storage provisions apply to fixed aboveground storage tanks (ASTs) and to portable tanks with capacity greater than 660 gallons:

1. Protection from vehicle impacts by installation of properly constructed and spaced posts or approved physical barriers.
2. Secondary containment designed to contain spill of largest vessel with:
   a. Containment wall having minimum 4.6 inches of freeboard, and
   b. An audible or visual alarm signal for 90% of tank capacity; OR
   c. Impermeable secondary containment.
3. Resting on the ground or foundations made of concrete, masonry, piling, or steel designed to:
   a. Minimize the possibility of uneven settling, and
   b. Minimize corrosion in any part of the tank resting on the foundation.

D. DISPENSING

The following dispensing provisions apply to fixed ASTs and to portable tanks with capacity greater than 660 gallons:

1. An accessible emergency disconnect switch is properly located within 20 to 100 feet to stop the transfer of fuel to the dispensers.
2. Dispensing devices are protected against physical damage and collision damage by secure bolted mounting on a concrete island 6 inches or more in height.
3. Dispensing hoses for gasoline and diesel are equipped with emergency breakaway device to retain liquids.
4. If dispensing hoses are attached to a hose-retrieving mechanism a breakaway device is located between the nozzle and the point of attachment.

E. PIPING

If any tanks have a piping system (e.g. between tanks and asphalt plant) or an underground line connection, then additional requirements apply. See the AST Piping section of the Self-Inspection Checklist. If there is an underground line connected to an AST, registration with DEQ is required at: http://deq.mt.gov/Land/ust/notificationregist.

F. SELF-INSPECTION CHECKLIST

The Operator must routinely inspect and maintain fuel tanks to prevent leaks and spills (ARM 17.24.218(1)(i)(ii)). The Department strongly recommends that Operators use the Self-Inspection Checklist to ensure compliance for all ASTs, piping and fuel dispensing at Opencut sites. If an AST is found to be out of compliance at the time a release is discovered, then eligibility for spill reimbursement is denied. If a spill occurs when the site is compliant with all items on the checklist, then an Operator should be eligible for financial assistance with the cleanup and damages caused by an accidental tank release. ASTs are either fully ineligible or eligible for reimbursement up to $1 million.

The AST checklist is included below and is available from the Petroleum Tank Release Compensation (PTRCB) at:
http://deq/mt.gov/Portals/112/DEQAdmin/PET/Documents/Forms/StorageTankChecklist.pdf.

1. **How will ASTs be routinely inspected and maintained to prevent leaks and spills at the site:**

   ☐ **PTRCB AST Self-Inspection Checklist**
   ☐ **Operator AST Self-Inspection Checklist**
   ☐ **Other (Describe):**

G. SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN

If a facility has cumulative above-ground storage capacity of 1,320 gallons or more of regulated liquids, then for water protection, an Operator may be required to prepare and implement a SPCC Plan. It is the Operator's responsibility to determine if the on-site storage of regulated liquids (fuel, asphalt binder, oil, etc.) at the site requires an SPCC Plan. Eligibility for compensation from the PTRC Board is based on, to the extent required, whether an SPCC Plan has been prepared and implemented when the EPA regulation 40 CFR 112.3 is applicable to petroleum tanks at the site.

The National Asphalt Pavement Association has environment, health & safety publications available that may assist in developing an SPCC Plan to ensure compliance: https://store.asphaltpavement.org/. Guidance from the EPA and acceptable SPCC formats can be found at: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/spill-prevention-control-and-countermeasure-17.

If a professional scientist or engineer would be of service, a list of consultants that conduct work in Montana is available at the following link: http://deq.mt.gov/Land/Lust/consultantlist.

H. MOBILE FUELING

Mobile fueling from tank vehicles into fuel tanks of motor vehicles or equipment at gravel pits is allowed in accordance with IFC Section 5706.2.8. A tank vehicle, by IFC definition has a mounted or integral cargo tank that is used for transporting fuel and includes self-propelled vehicles and full trailers and semitrailers. Tank vehicles shall not be used as storage tanks (IFC Section 5704.2.2). Fuel dispensing from tank vehicles shall be conducted not less than 50 feet from structures or combustible storage. The following mobile fueling provisions apply to dispensing fuel from tank vehicles:

1. The tank vehicle's specific function is that of supplying fuel to motor vehicle fuel tanks.
2. The dispensing hose does not exceed 100 feet in length.
3. The dispensing nozzle is an a*pproved* type.
4. The dispensing hose is properly placed on an *approved* reel or in a compartment provided before the tank vehicle is moved.
5. Signs prohibiting smoking or open flames within 25 feet of the vehicle or the point of refueling are prominently posted on the tank vehicle.
6. Electrical devices and wiring in areas where fuel dispensing is conducted are in accordance with NFPA 70.
7. Tank vehicle-dispensing equipment is operated only by designated personnel who are trained to handle and dispense motor fuels.
8. Provisions are made for controlling and mitigating unauthorized discharges.

Petroleum Tank Release Compensation Board
Aboveground Storage Tank
Self-Inspection Checklist

		Tank #	Tank#	Tank#	Tank #	Tank #
1	Is the aboveground storage tank (AST) temporary or permanently removed from service? (If yes, notification to the State Fire Marshal's office is required)	YES NO	YES NO	YES NO	YES NO	YES NO
2	Is there an underground line connected to the aboveground storage tank? (If yes, registration with DEQ is required.)	YES NO	YES NO	YES NO	YES NO	YES NO
3a	(i) Is the aboveground tank protected from vehicle impacts by posts constructed of steel not less than 4 inches in diameter and concrete filled? (ARM 17.58.326(1)(a)(i))	YES NO	YES NO	YES NO	YES NO	YES NO
	(ii)Are the guard posts spaced not more than 4 feet between posts on center? (ARM 17.58.326(1)(a)(i))	YES NO	YES NO	YES NO	YES NO	YES NO
	(iii) Are the guard posts set not less than 3 feet deep in a concrete footing of not less than 15-inches in diameter? (ARM 17.58.326(1)(a)(i))	YES NO	YES NO	YES NO	YES NO	YES NO
	(iv) Are the guard posts set with the top of the posts not less than 3 feet above the ground? (ARM 17.58.326(1)(a)(i))	YES NO	YES NO	YES NO	YES NO	YES NO
	(v) Are the guard posts located not less than 3 feet from the protected object? (ARM 17.58.326(1)(a)(i))	YES NO	YES NO	YES NO	YES NO	YES NO
3b	**Or** is the tank protected by a physical barrier at least 36 inches in height and can resist a force of 12,000 pounds applied 36 inches above the adjacent ground surface? (ARM 17.58.326(1)(a)(i))	YES NO	YES NO	YES NO	YES NO	YES NO
4	Is the secondary containment of the outdoor storage area designed to contain a spill of the largest vessel? (ARM 17.58.326(1)(a)(v))	YES NO	YES NO	YES NO	YES NO	YES NO
5	Does the aboveground tank secondary containment wall have at least 4.6 inches of freeboard? (ARM 17.58.326(1)(a)(v))	YES NO	YES NO	YES NO	YES NO	YES NO
6a	Does the aboveground tank have an audible or visual alarm signal to notify the person filling the tank the fluid level has reached 90 percent of tank capacity no later than December 31, 2013? (ARM 17.58.326(1)(a)(vi)(A))	YES NO N/A	YES NO N/A	YES NO N/A	YES NO N/A	YES NO N/A
6b	**Or** does the tank have a petroleum impermeable secondary containment designed in accordance with the International Fire Code no later than December 31, 2013? (ARM 17.58.326(1)(a)(vi)(B))	YES NO N/A	YES NO N/A	YES NO N/A	YES NO N/A	YES NO N/A
7	Is the metal tank welded, riveted and caulked, bolted, or constructed using a combination of these methods? (ARM 17.58.326(1)(b)(i))	YES NO	YES NO	YES NO	YES NO	YES NO
8	Is the aboveground tank resting on the ground or on a foundation made of concrete, masonry, piling, or steel? (ARM 17.58.326(1)(b)(ii))	YES NO	YES NO	YES NO	YES NO	YES NO
9	Is the aboveground tank foundation designed to minimize the possibility of uneven settling of the tank and to minimize corrosion in any part of the tank resting on the foundation? (ARM 17.58.326(1)(b)(iii))	YES NO	YES NO	YES NO	YES NO	YES NO
10	If required by 40 Code of Federal Regulations, Section 112.3, do you have a Spill Prevention, Control and Countermeasure Plan? (ARM 17.58.326(1)(e))	YES/ NO/ Not Required				

Petroleum Tank Release Compensation Board
Aboveground Storage Tank
Self-Inspection Checklist

		Tank #	Tank#	Tank#	Tank #	Tank #
AST Piping						
1	Is the piping maintained liquid tight? (ARM 17.58.326(1)(b)(iv))	YES NO	YES NO	YES NO	YES NO	YES NO
2	Is the piping joint liquid tight and welded, flanged, threaded or mechanically attached? (ARM 17.58.326(1)(b)(v))	YES NO	YES NO	YES NO	YES NO	YES NO
3	Are the threaded aboveground joints made with a suitable thread sealant or lubricant? (ARM 17.58.326(1)(b)(vi))	YES NO	YES NO	YES NO	YES NO	YES NO
4	Is the aboveground piping system subject to external corrosion protected? (ARM 17.58.326(1)(b)(vii)), (ARM 17.58.326(1)(c)(ii))	YES NO	YES NO	YES NO	YES NO	YES NO
5	Is the piping in contact with the soil properly engineered, installed and corrosion protected? (ARM 17.58.326(1)(c)(i))	YES NO	YES NO	YES NO	YES NO	YES NO
6	Is the aboveground piping substantially supported and protected against physical damage? (ARM 17.58.326(1)(d)(x)(A))	YES NO	YES NO	YES NO	YES NO	YES NO
Dispensers						
1	Is the tank provided with an accessible emergency disconnect switch in an approved location to stop the transfer of fuel to the dispensers in the event of a fuel spill or other emergency? (ARM 17.58.326(1)(a)(ii))	YES NO	YES NO	YES NO	YES NO	YES NO
2	Is the emergency disconnect switch for exterior fuel dispenser located within 100 feet of, but not less than 20 feet from the fuel dispensers? (ARM 17.58.326(1)(a)(ii))	YES NO	YES NO	YES NO	YES NO	YES NO
3	Are the dispensing devices protected against physical damage by mounting on a concrete island six inches or more in height? (ARM 17.58.326(1)(a)(iii))	YES NO	YES NO	YES NO	YES NO	YES NO
4	Are the dispensing hoses for gasoline and diesel equipped with a listed emergency breakaway device designed to retain liquid on both sides of the breakaway point? (ARM 17.58.326(1)(a)(iv))	YES NO	YES NO	YES NO	YES NO	YES NO
5	If the dispensing hoses are attached to a hose-retrieving mechanism, do they have a breakaway located between the hose nozzle and the point of attachment of the retrieval mechanism to the hose? (ARM 17.58.326(1)(a)(iv))	YES NO N/A	YES NO N/A	YES NO N/A	YES NO N/A	YES NO N/A
6	Are the dispensing devices mounted on concrete islands and securely bolted in place and protected against collision damage? (ARM 17.58.326(1)(c)(iii))	YES NO	YES NO	YES NO	YES NO	YES NO
Comments:						

Support Document

q. Depth to Groundwater Worksheet

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DETERMINING DEPTH TO GROUNDWATER WORKSHEET

The Opencut Mining Act (Act) requires that a Plan of Operation (Plan) provide appropriate protection of surface and groundwater quality and quantity. This document provides direction for Operators regarding methods to establish depth to seasonal high groundwater levels within the proposed permit boundary, as required by ARM 17.24.218(1)(g). Additionally, if it is determined that Opencut operations would result in a surface water feature for a postmining land use, the Plan would include a pond and/or wetland design and follow the requirements of the *Pond Guideline* in addition to this worksheet.

This form includes automated calculations that require Microsoft Word 2010 or newer. As you enter data into this form, auto calculate fields will auto populate (tab out of each field to ensure they auto calculate). Autocalculate fields contain red text. If an autocalculate field is blank, either: a) the required information was not entered, or b) the blank field does not pertain to your application.

A. SITE SPECIFIC INFORMATION

1. **Operator Name:** Butana Sand & Gravel
2. **Site Name:** DK Jan
3. **Opencut Number (if permitted):** 3025
4. Proposed Maximum Depth of Mining (must be identical to mine depth in permit/amendment application): 16 feet below ground surface

B. DETERMINING DEPTH TO GROUNDWATER

The following information assists in:

- Determining and designing appropriate postmining land uses within the proposed permit boundary;
- Identifying the potential for impacts to surface and/or groundwater resources; and
- Determining if a *Water Resources Assessment* would be required prior to submittal/approval of an Opencut application.

The following estimated depths to groundwater are considered preliminary and would be reviewed by Opencut. Ensure documentation submitted supporting estimated groundwater levels is complete, accurate and conclusive as Opencut reserves the right to refute information included in this form if it is not accurately documented.

1. **Choose the method(s) below (minimum of one method must be chosen) that were used to determine seasonal high water levels for this site:**

   a. ☒ **Elevation of Nearby Surface Water:** The elevation of nearby surface water for ponds and potholes, etc., may provide supporting evidence of groundwater elevation if those features are created from groundwater. This method works best for nearby water features that were created by Opencut operations, or if there are prairie potholes containing surface water. This method requires accurate elevation data that establishes the elevation of surface water in existing nearby ponds and/or potholes, as well as the lowest elevation within the proposed permit boundary. It is recommended the elevation data be obtained by surveying the identified features/locations, although other forms of obtaining elevation information may be acceptable if adequate documentation is provided. (i.e. topographic maps, etc.) Provide the following information:

i. Surface water feature(s) used to determine groundwater levels must be identified and labeled with their elevation on the Area Map and Site Map (if applicable).

ii. Enter the lowest elevation of the proposed mine site (i.e. actual surveyed, or other acceptable means of determining pre-disturbance elevation) where mining would occur to the proposed mining depth stated in A-4 above (i.e. 16 feet) and the *Opencut Mining Plan of Operation and Application.*

Lowest Elevation where mining would occur to depth stated in A-4 above = _____ feet

Note: If mining to the depth stated in A-4 above would not occur throughout the entire site, explain in detail here where and to what depth mining would occur at this site: _____

iii. Elevation of nearest applicable (most representative/closest) surface water feature (i.e. prairie potholes, wetlands, springs, etc.):

_____ feet - **Date Surveyed (if applicable):** _____ **Water Feature (name, type):** _____

iv. Elevation of lowest proposed mining depth (Lowest elevation at site, part ii, minus Maximum depth of mining, part A-4) - 16 feet

v. Is the elevation of the lowest proposed mining depth (- 16 feet) lower in elevation or within three feet of the Groundwater Elevation (i.e. elevation of nearby surface water, part iii) (0 feet)? **If** - 16 feet - 0 feet = - 16 feet ≤ 3 feet then check **"Yes"** ☐ **Yes** ☐ **No**

If **Yes**, choose the appropriate water feature postmining land use in Section E of the Opencut Mining Plan of Operation and Application. Check the appropriate box on page 2 of the Plan of Operation. Follow and complete the requirements of the *Pond and Wetland Design Worksheet*. Proceed to Section C below.

If **No**, check the appropriate box on page 2 of the *Opencut Mining Plan of Operation and Application* and include this document and all supporting documentation with your application.

vi. Additional information:

Surface water elevations were surveyed by WET in January 2020 in several locations (see site map). These elevations were used along with additional information collected that is described below in the following sections.

b. ☐ **Well Logs & GWIC Well Data:** Information can be used for existing wells within 1,000 feet of the permit boundary. If no wells are located within 1,000 feet, well data from existing wells further than 1,000 feet from the boundary may be used if they are applicable to the proposed site. In most cases, the wells that are located closest to the site and at the same approximate elevation are the most representative. All well log information used as a basis for water level estimates must also be listed on the Well Information Table in the "Wells" section of the application and the corresponding well logs must be submitted with the permit application. Well logs can be accessed from the "Mapping DEQ's Data" site located here: http://deq.mt.gov/Mining/opencut (click on Mapping DEQ's Data) tab. Wells displayed online are frequently located incorrectly, so the operator must "ground truth" the actual well locations to ensure applicability of the well log. The actual location of each well used to support the groundwater depth estimates must be displayed on the Area Map.

The Operator must use the closest and most applicable wells when determining seasonal high and low water depths. Up to three wells can be used to determine groundwater depth.

	Well I.D. on Map	Static Water Level (feet)	Ground Elev. of Well	Lineal ft from Permit BNDRY	Water Elevation
Well #1					0 feet
Well #2					0 feet

Well #3 0 feet

i. Enter the lowest elevation of the proposed mine site (i.e. actual surveyed, or other acceptable means of determining pre-disturbance elevation) where mining would occur to the proposed mining depth stated in A-4 above (i.e. 16 feet) and the *Opencut Mining Plan of Operation and Application.*

Lowest Elevation where mining would occur to depth stated in A-4 above = feet

ii. Well #1: Lowest elevation of proposed mine site (0 feet) – mining depth (16 feet) = a mining elevation of - 16 feet. - 16 feet - 0 feet = - 16 feet.

If- 16 feet ≤ 3 feet, then check "Yes" ☐ Yes ☐ No

iii. Well #2: Lowest elevation of proposed mine site (0 feet) – mining depth (16 feet) = a mining elevation of - 16 feet. - 16 feet - 0 feet = - 16 feet.

If- 16 feet ≤ 3 feet, then check "Yes" ☐ Yes ☐ No

iv. Well #3: Lowest elevation of proposed mine site (0 feet) – mining depth (16 feet) = a mining elevation of - 16 feet. - 16 feet - 0 feet = - 16 feet.

If- 16 feet ≤ 3 feet, then check "Yes" ☐ Yes ☐ No

If **Yes**, to any of the above choose an appropriate water feature postmining land use in Section E of the *Opencut Mining Plan of Operation and Application*, check the appropriate box on page 2, follow and complete the requirements of the *Pond and Wetland Design Worksheet* and proceed to Section C below.

If **No**, check the appropriate box on page 2 of the *Opencut Mining Plan of Operation and Application* and include a copy of this document and all supporting documentation with the application.

v. Additional information:

c. ☒ **Groundwater Observation/Monitoring Wells:** Groundwater observation/monitoring wells provide a viable method for determining the elevation of groundwater as well as for taking water samples. Refer to **Appendix A – Groundwater Observation Well Installation and Measuring Procedures** for the requirements to allow the use of this method of determining depth to groundwater. Ensure all data and measurements supporting the below information is provided with the application (i.e. Appendix A and other supporting data). Provide the following information:

i. The estimated seasonal low water table level measurement (furthest from ground surface, deepest): 13 feet.

ii. The estimated seasonal high-water table level measurement (closest to ground surface, shallowest): 8 feet.

iii. Estimated seasonal high water table level measurement (8 feet) minus (-) proposed maximum mining (16 feet) depth = (- 8 feet)
Is this number (- 8 feet) ≤ 3 feet? ☒ Yes ☐ No

If **Yes**, choose the appropriate water feature postmining land use in Section E of the Opencut Mining Plan of Operation and Application, check the appropriate box on page 2, follow and complete the requirements of the *Pond Guideline* and proceed to Section C below.

If **No**, check the appropriate box on page 2 of the *Opencut Mining Plan of Operation and Application* and include a copy of this document and all supporting documentation with the application.

iv. Additional information:
Monitoring wells were installed at Test Pits 16, 18, 20, 27, 29. The tops of the casing were surveyed with GPS by WET in order to determine groundwater elevations.

Additionally, surface water elevations were surveyed with GPS in January 2020 in several locations in the existing ponds at the site. The monitoring well data and the surface water elevations were used to build a groundwater surface model. Visible soil staining was observed by a WET Staff geologist in the test pits and the depth of staining was noted. This staining was used to develop the seasonal high groundwater surface model. The average difference between the top of the staining and the January 2020 groundwater elevations was 5ft. As such, the January 2020 groundwater model was raised 5ft to approximate the high groundwater level for the site.

d. ☐ **Test Hole Observation:** Field observations by the operator, such as test pit information, may be acceptable in support of groundwater level estimates. Choose the method used at the proposed site and results below:

i. ☐ Groundwater or evidence of groundwater was observed in onsite test holes. Provide complete test hole information in the permit application supporting the seasonal high and low groundwater estimates.

1. Choose the appropriate water feature postmining land use in Section E of the Opencut Mining Plan of Operation and Application, follow and complete the requirements of the *Pond and Wetland Design Worksheet*and proceed to Section C below.

Additional information:

ii. ☐ Groundwater or evidence of groundwater was not observed in onsite test holes.

1. Check the appropriate box on page 2 of the *Opencut Mining Plan of Operation and Application*, and include a copy of this document and the required report summarizing test pit results with the application.

The following criteria must be met and included in the report to substantiate groundwater estimates based on this method:

a. A minimum of 2-test pits must be located in low areas of the site and the test pits must be completed to a minimum of three feet deeper than the proposed maximum mining depth, and rationale and justification for the selected soil test pit locations must be provided.
b. Test pits must be located and spaced to provide representative data for the entire proposed permit area, and must include the lowest elevations within the site.
c. Hire a professional soils expert to conduct a detailed soil profile of each test pit, specifically looking for indications of water (i.e. mottling, redoximorphic features, gleying, water, etc.).
d. Provide a report summarizing the results and describing how the seasonal high and low water levels were determined. Include a description of topography and how it interacts with the test pit locations and other pertinent supporting information. Complete the Soil Test hole table located in Section C of the permit application.

*Note that this method is only applicable to sites where the groundwater flows through clay or soil and not gravel.

Additional information:

e. ☐ **Other Methods to Determine Seasonal High and Low Water Depths (explain):**

C. DETERMINING IF A WATER RESOURCE ASSESSMENT BY AN EXPERT IS REQUIRED

This section will help to determine if the Operator would be required to follow the *Groundwater Guideline*. Opencut recommends that the Operator request a Pre-Application meeting by completing the following form: http://deq.mt.gov/Mining/opencut. A Pre-Application meeting request prompts an Opencut scientist to contact the Operator to set up an onsite meeting to discuss the specifics of the site and help to determine if the Operator would need to follow the *Groundwater Guideline*.

Check the box or boxes that apply to the proposed site:

1. Following a Pre-Application Meeting, the Opencut Inspection Report states that the Operator must follow the *Groundwater Guideline*.
   ☒Yes ☐No ☐NA (explain under additional information below)
   Additional Information (if applicable):

2. There are 10 or more residences and/or property owners within ½ mile of the proposed Opencut permit boundary and Opencut operations would occur into groundwater ☒Yes ☐No
   Additional Information (if applicable): **Most landowners within 1/2 mile of the proposed boundary are upgradient from the site. Based on groundwater observations and analysis by WET, the general groundwater flow direction at the site is northwest. There are only 2 landowners (exlcuding Butana Sand & Gravel) downgradient of the site within a 1/2 mile of the permit boundary.**

3. Water Wells are located downgradient and within 1,000 ft. of the proposed Opencut site and Opencut operations would occur into groundwater? ☐Yes ☒No
   Additional Information (if applicable): **Wells from the GWIC database that occur downgradient of the site (within 1000ft of the boundary) are incorrectly located. No known wells occur downgradient, within 1000ft of the proposed boundary. Silver Bow Creek flows north, but the groundwater flow direction**

4. There is a public water supply well within 100 feet of the proposed permit boundary? ☐Yes ☒No
   Additional Information (if applicable):

   If **Yes** to any of the above, refer to the *Groundwater Guideline* and complete the requirements for a *Water Resources Assessment* prior to submittal of an Opencut application. The DEQ *Groundwater Guide* also outlines requirements for groundwater monitoring and reporting at sites where monitoring is required.

NOTE: It is the Operator's responsibility to demonstrate compliance with the water assessment and protection requirements of the Act and Rules. Providing a conclusive and appropriate basis for estimated groundwater depths is required for an application to be determined complete and/or to have meaningful review by DEQ Opencut. Understanding that additional information may be required ahead of time at a specific site, potentially including a *Water Resources Assessment* and/or groundwater monitoring as described in this document and the *Groundwater Guideline*, gives the Operator an opportunity to gather the required data prior to submitting a permit application.

APPENDIX A - GROUNDWATER OBSERVATION WELL INSTALLATION AND MEASURING PROCEDURES

The Operator may be required to provide data identifying the existing water levels through the installation of observation wells and a consistent measurement of those wells in order to accurately determine the postmining land use(s). The observation well plan must be prepared by a competent professional for Opencut to review and include the information listed below. Field data must be accompanied by the names and addresses of the parties that collected and analyzed the data, and must include a description of the methodologies used to gather and analyze the data [ARM 17.24.222(2)].

The plan must include:

- Observation well plan to determine actual seasonal high and low water levels within the proposed permit boundary.
- Installation of a minimum of three (3) groundwater observation wells at the lowest elevations of the site. Refer to "Where to Install" and "Installation Process" sections below for more detailed information.
- Measurement of groundwater for a sufficient period of time to determine a peak and a sustained decline in the groundwater level. Refer to the Observation Schedule below for further guidance.
- A report summarizing observation results including a description of topography, a map showing well locations, well logs, a table summarizing groundwater data collected, and actual seasonal high and low groundwater levels based on the collected data. The report must include total precipitation for the previous year and snowpack equivalent compared to the 30-year historical average. The results must be submitted for analysis and review with the application and prior to permit approval.

Observation Schedule

Observation wells must be installed before or during the time when groundwater levels are highest. This is typically during spring runoff and/or during the irrigation period, but may also occur at some other time during the year. Observation measurements must be made weekly or more frequently during the appropriate periods of suspected high groundwater. Observation measurements must be made at a minimum of once a week for a minimum of four weeks when groundwater is at its highest to accurately determine high groundwater level. More complex sites must include at least two weeks of observation measurements prior to and two weeks of observation measurements after the groundwater peak. Failure to meet these criteria would likely result in the Opencut Section rejecting the results. The applicant is encouraged to submit a Pre-Application Meeting Request to seek guidance on any groundwater observation well plan and installation prior to implementing the plan or submitting a permit application. The monitoring and measurements of the observation wells must be

completed by a qualified site evaluator such as a soil scientist, professional engineer, hydrogeologist, or geologist who has experience and knowledge on how to properly take and record measurements from an observation well.

Surface water levels may be indicative of the groundwater levels that could peak several weeks after spring runoff and the irrigation season.

Local conditions may indicate that there is more than one geologic horizon that can become seasonally saturated. Observation wells must be installed to the depth of mining and preferably three feet deeper than the proposed mining depth. The wells should be placed in, but not extended through, the horizon that is to be monitored.

The Opencut Section may refuse to accept seasonal high groundwater data when the total precipitation for the previous year, defined as May 1 of the previous year to April 30 of the current year, if April 1 snowpack equivalent, measured at the nearest officially recognized observation station, is more than 25 percent below the 30-year historical average. This is based upon the definition of drought conditions created by the National Drought Mitigation Center. The Opencut Section may consider soil morphology and data from nearby groundwater observation sites with similar soil, geology, and proximity to streams or irrigation ditches, if available, to determine seasonal high groundwater elevation during periods of drought.

Where to Install

The observation wells must be installed in locations representative of typical groundwater conditions at the site. At least two of the wells should be in low lying areas of the site and the wells should be spread out to represent conditions across the site. Larger sites or sites with highly variable conditions and/or topography may require the installation of additional wells. Opencut may require additional observation wells if the wells installed by the Operator are not installed properly and/or are not in locations considered representative of the site.

Installation Process

The following criteria must be met for installed observation wells:

- The observation wells must be installed vertically into a dug or drilled hole.
- A slotted water well pipe should be used that is wide enough in diameter to install a measuring device.
- The slotted water well pipe must be installed a minimum of three feet deeper than the proposed mining depth.
- Slotted pipe (PVC is the most common material) with slot sizes between 0.04 and 0.10 inches wide is suggested. Slots should be horizontal and spaced at intervals less than or equal to 0.5 inches. Refer to ARM 36.21.650 for additional information on casing perforations. Alternate well materials are acceptable if they meet the requirements of ARM 36.21.640 (DNRC well casing requirements).
- The pipe must be perforated from 1 foot below the ground surface to 3 feet below the proposed maximum mining depth.
- The casing must be unperforated 1 foot below the ground surface to the top of the observation well. The observation well must extend at least 2 feet above the ground surface.
- The top of the observation well must be sealed with a watertight cap.
- The area around the well must be backfilled with native material to 1 foot below the ground surface.
- The observation well must be sealed in such a manner that prevents surface runoff from running along the outside of the well casing. The well should be sealed from 1 foot below the ground surface to slightly above grade to allow for subsidence and to maintain a positive ground slope away from the well casing. The material used to seal the well can be either fine-grained material or bentonite.
- Each observation well should be flagged to facilitate locating the well and labeled with a well number, operator name, and site name.

Measuring Procedures

Lower a measuring tape or stick to the water level and measure the distance from the water level to the top of the pipe (refer to example on last page). Water levels should be measured to the nearest inch. A plunking device or electronic water sensor can also be used. Data should be submitted in a similar form to that of the example.

Measure the distance from the top of the pipe to the natural ground surface (B distance) (refer to example). Then measure the distance from the top of the pipe to the water level (A distance) (refer to example). Subtract B from A. This value equals the actual separation between the water table and the natural ground surface.

Decommissioning

If observation wells were installed deeper than 10 feet below the proposed mine depth, the operator may be required to follow the standards in ARM 36.21.810.

Ground Water Observation Results

Monitored By:

Location :

Section _____ Township_____, Range_____ Lot # _____

Observation Well # _____

A= Distance to top of casing to the ground water level in pipe (inches).
Note: If the observation pipe is dry, enter the total depth measured and "dry" in this column.
B= Distance from top of casing to the natural ground surface (inches).

Other Location Information:

Date	Time	A (inches)	B (inches)	A-B (inches)

Ground Water Observation Well Design

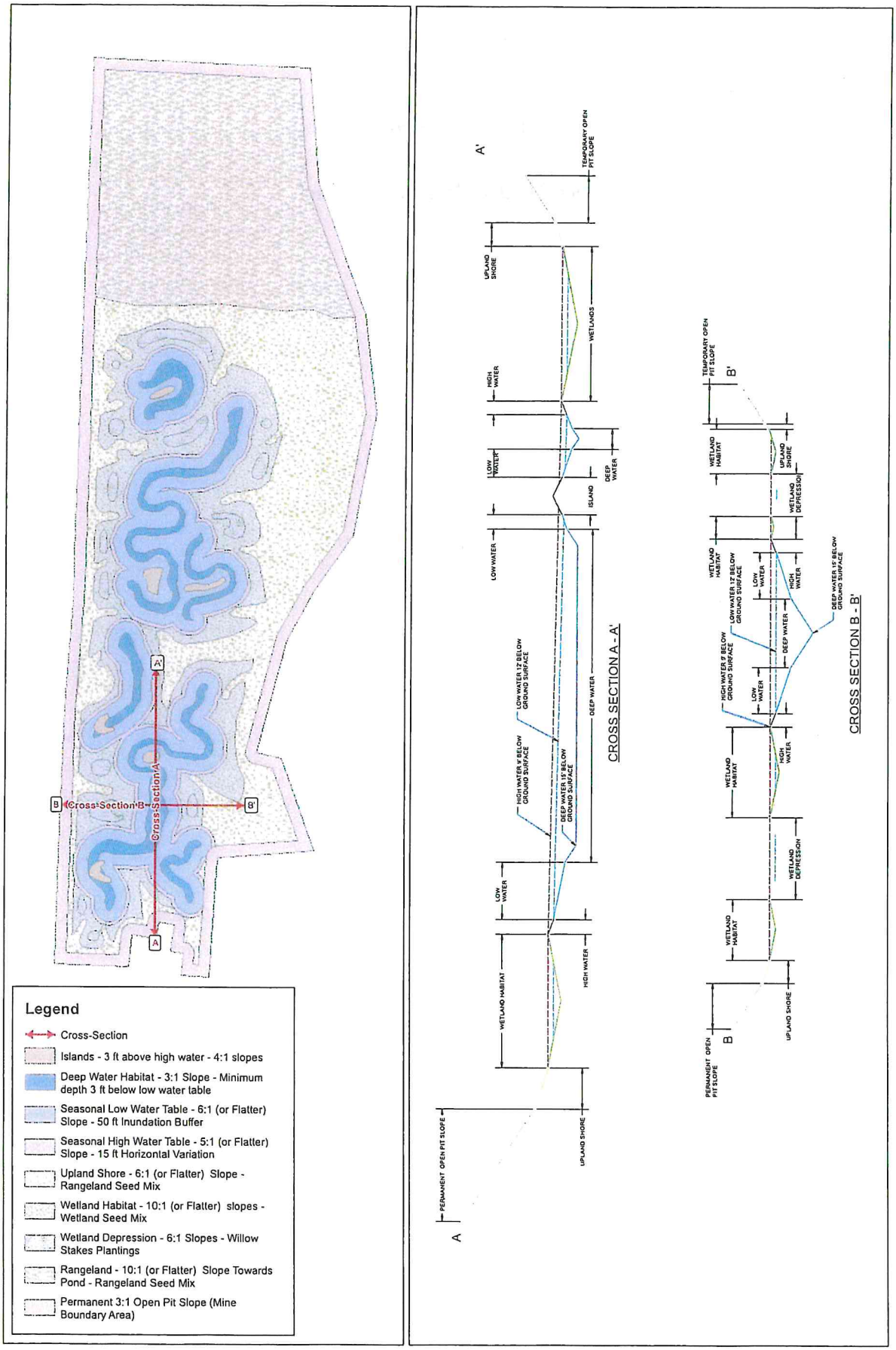
Support Document

r. Bond

Bond not included as attachment for MDP Application. Bond will be obtained prior to submitting application to DEQ. Current bond amount is ~$142,000. This amendment application will increase the bond amount to ~$267,000.

Support Document

w. Pond/Wetland Cross-Sections



0 400 800 1,200 Feet

N W E S

Operator: Butana Sand & Gravel	Pond/Wetland X-Section
Site Name: DK Jan	
T4N,R10W,S26 Deer Lodge County MT	
Job#: BUTANAM02	FIGURE 4a
Date: 2/5/2020	

Support Document

x. Pond/Wetland Design Worksheet

DEQ OPENCUT MINING SECTION • PO BOX 200901 • HELENA MT 59620-0901 • PHONE: 406-444-4970 • FAX: 406-444-4988 • EMAIL: DEQOpencut@mt.gov

POND & WETLAND DESIGN WORKSHEET

Follow this worksheet to design a year-round pond, seasonal pond or wetland. Also refer to the below example Reclamation Map, Pond Plan View Contour Map, and cross-section drawings.

A - Site Specific Information:

1. **Operator Name:** Butana Sand & Gravel
2. **Site Name:** DK Jan
3. Indicate whether ponds, wetlands, or both will remain as a result of Opencut Operations.
   ☐ Ponds Only ☐ Wetlands Only ☒ Both Ponds and Wetlands
4. Indicate the number of ponds to be constructed:
   ☐ None ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ Other:
   a. Indicate the maximum depth: 6 feet
5. Indicate the number of wetlands to be constructed:
   ☐ None ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ Other:
   a. Indicate the maximum depth: 3 feet

B - Ponds & Wetlands

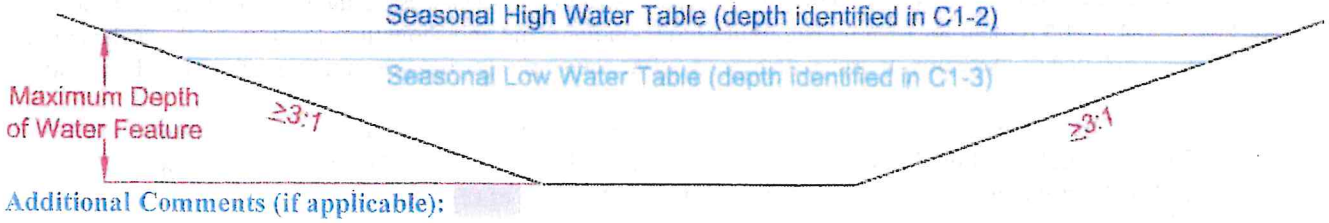
Consult the landowner about the mine site and pond design, the Opencut operations, and desired postmining designation of the pond. The pond design and construction should balance the needs and desires of the pond owner with the Opencut mine plan of operation. The prospective pond builder (the operator and landowner) are responsible for knowing the legal requirements for building a pond. Necessary state and federal permits will vary with specific site factors and individual circumstances. Consult the Department of Fish, Wildlife & Parks to learn what aquatic nuisance species are prohibited, how to prevent introduction, and what is essential to prevent the spread of troublesome invaders. Obtaining proper water rights for a new pond may be necessary under Montana law.

1. Refer to the Department of Natural Resource and Conservation (DNRC) guideline "*Opencut Mining: Do You Need a Water Right?*" or consult the DNRC for operator or landowner requirements regarding water rights and ground water development for ponds. The DNRC *Opencut Mining: Do You Need a Water Right?* guideline is found here: http://deq.mt.gov/Mining/opencut.

2. In the *Postmining Land Uses* section of the Plan of Operation, designate all types of ponds, wetlands and uses that apply. Many ponds have seasonal wetland areas or shallow inlets that act as functional wetlands. Constructed wetlands and ponds may qualify for technical assistance or mitigation grants (refer to suggested sources at the end of this worksheet). A well-designed pond or wetland may also increase the value and productivity of the mined property.

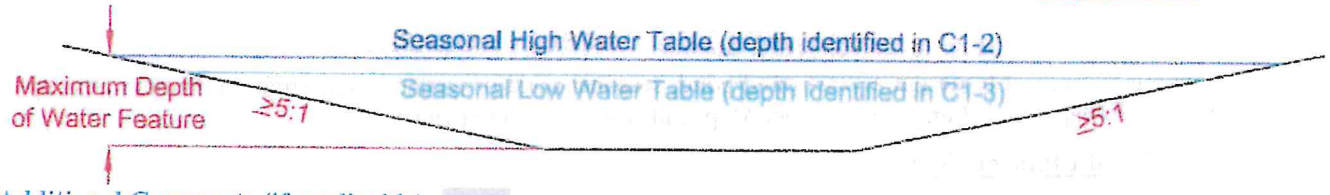
3. Designate a minimum of one long-axis cross-section and one short-axis cross-section drawing for each proposed pond or wetland. At least one cross-section with a slope of 5:1 or flatter must be used for most water features. Alternatively, create and submit additional cross-sections that represent the pond/wetland or submit a contour map of the finished pond. Identify locations on the reclamation map.

a. ☐



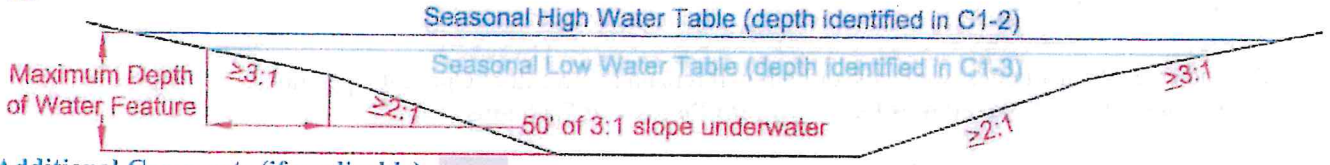
Additional Comments (if applicable):

b. ☐



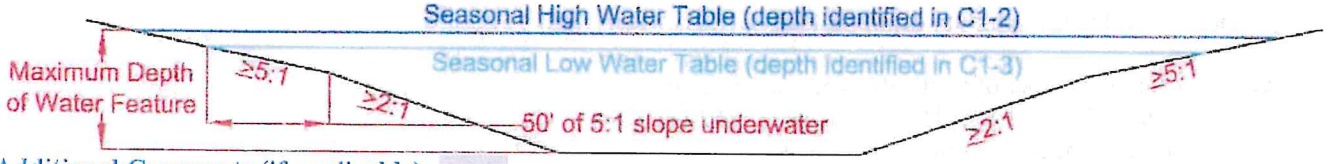
Additional Comments (if applicable):

c. ☐



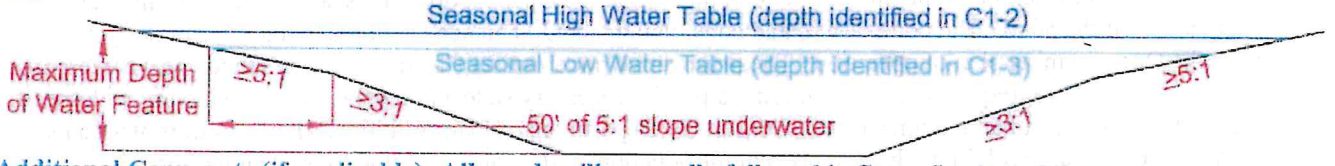
Additional Comments (if applicable):

d. ☐



Additional Comments (if applicable):

e. ☒



Additional Comments (if applicable): All ponds will generally follow this Cross-Section. The 5:1 slopes will likely be much shallower (closer to 20:1) to maintain the required 50ft buffer width without extending too deep.

f. If additional cross-sections are needed to depict the pond/wetland, each cross section must contain the following:
   i. Depths,
   ii. Slopes,
   iii. Physical features, and
   iv. Seasonal high and seasonal low water levels

   ☐ Additional Cross-Sections are attached (check appropriate box on page 2 of the application).

   Additional Comments (if applicable):

g. Optional Alternative: Attach a labeled Contour Map showing the depth of each proposed pond or wetland with a contour interval appropriate for the pond/wetland depth.

   ☐ The labeled Contour Map is attached (check appropriate box on page 2 of the application).

   Additional Comments (if applicable):

4. Ponds and wetlands must have several areas of 5:1 or flatter slopes along the shoreline, as well as leading into the pond for 50 feet under water before dropping off to a steeper slope. Depending on the pond or wetland type, 10 to 25 percent of the pond needs to be 5:1 or flatter slopes to provide access to the water feature. Indicate all slopes that would remain for final reclamation of the pond/wetland and show their location on the reclamation map. Check one or more box in each category to define the slopes for final reclamation of the pond/wetland feature:

   a. Above High Water: ☒5:1 ☒3:1 ☐3:1 (if <3:1 is checked complete 4d below)
   b. Between High and Low Water: ☒5:1 ☐3:1 ☐3:1 (if <3:1 is checked complete 4d below)
   c. Below Low Water: ☐5:1 ☒3:1 ☐3:1 (angle of repose)
   d. Slopes <3:1 above the seasonal high and/or low water table require a slope stability study completed in accordance with ARM 17.24.219(1)(c)(vii).

☐ The slope stability analysis is attached (check appropriate box on page 2 of the application).

5. Check the physical features below that are included in the pond/wetland design. The features included in the design must meet the specific requirements described about each feature below.
☒ **Irregular Shoreline** ☒ **Inlets/Bays** ☒ **Islands** ☐ **Peninsulas** ☐ **Submerged habitat features**
☐ **Boat Ramp** ☐ **Livestock Watering Ramp**
☐ **Other:**

6. Ensure the Reclamation Map displays all information and meets the requirements of ARM 17.24.221(5).

C - SOIL REQUIREMENTS:

Operator understands that all soil taken from the pond or wetland area must be kept on-site for reclamation and cannot be removed or sold until the DEQ has determined the postmining land use has been met, thereby verifying the soil is not needed to reclaim the pond or wetland area, or other remaining areas. A Phase I or Phase II release must be submitted and approved prior to removing or selling soil. To obtain Phase I approval, a representative portion of the shoreline must also be reclaimed to Phase I of II standards.

D - WATER LEVELS

Accurately determine the site's existing or expected seasonal high and low water levels using Opencut's *Determining Depth to Groundwater Worksheet* found here: http://deq.mt.gov/Mining/opencut (click on "Forms" tab). During Opencut operations, use this water level information and appropriate survey methods to establish correct pond feature elevations. In this worksheet, the term "normal water level" means the prevalent water table or surface water level during the year. Refer to the Groundwater Guideline for further information on how to accurately assess water levels.

Use the below criteria as applicable for your water feature design:

E - ORIENTATION AND SHORELINES

If possible, orient the long-axis of the mine pit (future pond) perpendicular to the prevailing wind. Build in a sinuous shoreline by mining the pit with an irregular shape. Make shorelines irregular with points, coves, inlets, peninsulas and bays located around 50% or more of the pond (see Figure 5). Inlets and peninsulas need to be 1 to 4 times longer than their width, and located every 200 to 300 feet along the shore. Orientation perpendicular to the prevailing wind minimizes fetch (the distance wind blows over water), thus reducing wave action. Irregularly-shaped shorelines increase edge habitat, provide various plant and animal habitats, and reduce wind and wave impacts on aquatic vegetation and shorelines.

F - SHORE PROTECTION, RESOILING AND REVEGETATION

Shorelines with excessive downwind erosive wave actions may need protection with riprap, cobbles, or pit run gravel placed from 2 feet above the seasonal high water level to 2 feet below the seasonal low water level. Install berms, ditches, catchments, or erosion control products where runoff could carry sediment into the pond or erode shore slopes. Show areas of shoreline protection on the Reclamation Map.

All soil salvaged from the pond or wetland area must be kept on-site for reclamation and cannot be removed or sold until the DEQ has determined the postmining land use has been met, thereby verifying the soil is not needed to reclaim the pond or wetland area, or other remaining areas.

Hydric soil introduces aquatic plants and plant propagules to the pond, which facilitates plant and animal establishment and helps stabilize shorelines via vegetative growth. Salvage hydric soils that are present in existing wetlands, wet depressions or ditches within the permitted mine or facility area. Avoid obtaining soil from cattail or reed canary grass areas since these aggressive plants are undesirable. Stockpile hydric soil separately and keep wet. Place hydric soil along shorelines to enhance a vegetative wave action barrier. If an island or mainland shore shows excessive erosion before the permit is released, the DEQ will require stabilization of those areas. Replace soil above and below the seasonal low water table level during the driest season.

Seed upland areas at the first seasonal opportunity to minimize the time that replaced soil is exposed to erosion and invasive weeds. Use the DEQ wetland seed mix for the pond edges, transition zones, and submerged areas, or provide a custom seed mix that includes a minimum of 5 wetland species (e.g. obligate wetland and facultative wetland species). Islands must have soil replaced and be seeded or planted.

G - ISLANDS

Islands increase edge habitat by increasing shoreline length, provide nesting and loafing sites for wildlife, and add aesthetic appeal. Create islands by leaving natural material in place or by mounding and compacting materials (see Figure 1). Oversize rock piles can be used as loafing islands and can serve as riprap for islands in large ponds or wetlands that are subject to erosive wave action.

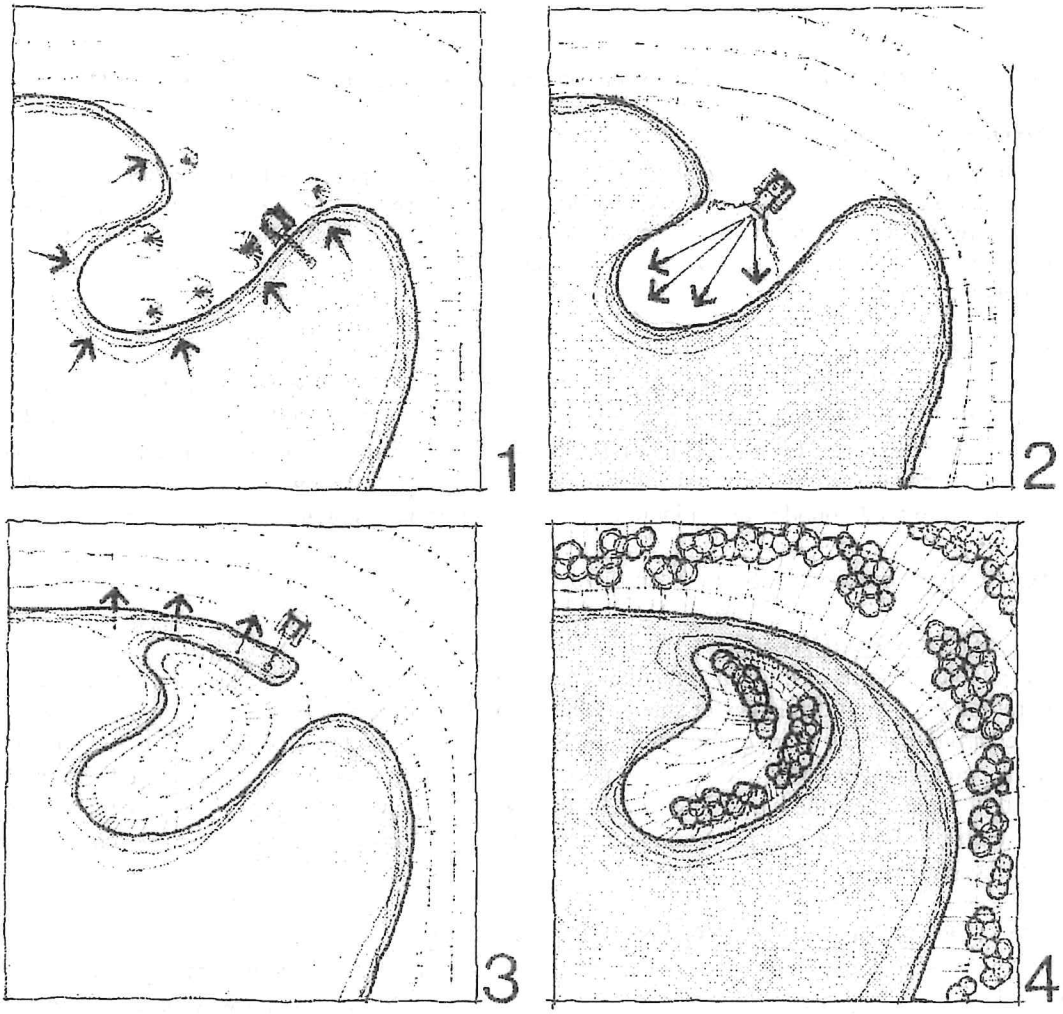


Figure 1. Island construction during active mining. (From Michalski [1987], Rehabilitation of Pits and Quarries for Fish and Wildlife, Ontario Ministry of Natural Resources.)

Location. If possible, locate islands in the upwind side of the pond or an area protected from the prevailing wind to minimize erosive wind and wave action. Maintain at least a 50-foot wide, 2-foot deep separation between islands and the mainland, and keep islands at least 150 feet apart. Adequate distance between islands minimizes territorial strife among nesting birds. Adequate separation between islands and the mainland reduces terrestrial predators from reaching islands.

Size and Shape. Make islands ranging from 25-foot diameter circles to 50- by 200-foot rectangles at the seasonal high water level. If possible, orient the long axis of islands parallel with the prevailing wind. Make the shorelines of large islands irregular. Islands oriented parallel with the prevailing wind are exposed to less wind and wave action. Linear islands with irregular shorelines provide better nesting opportunities. Horseshoe shaped islands with the mouth of the horseshoe in the lee of prevailing wind provide ideal shelter for waterfowl broods. The inner banks should be more gently sloped than the outer banks to increase the sheltering effect (see Figure 2).

Height and Shore Slope. Make islands with flat or rounded tops at least 3 feet above the seasonal high water level. Grade the island flanks to 5:1 or flatter slopes that go at least 3.5 feet below normal water level. A 5:1 or flatter shore slope provides access for wildlife and reduces erosion. A water depth of at least 3.5 feet

around an island controls emergent vegetation, which caters to the preference of nesting waterfowl for open shorelines and helps provide a separation between island and shoreline.

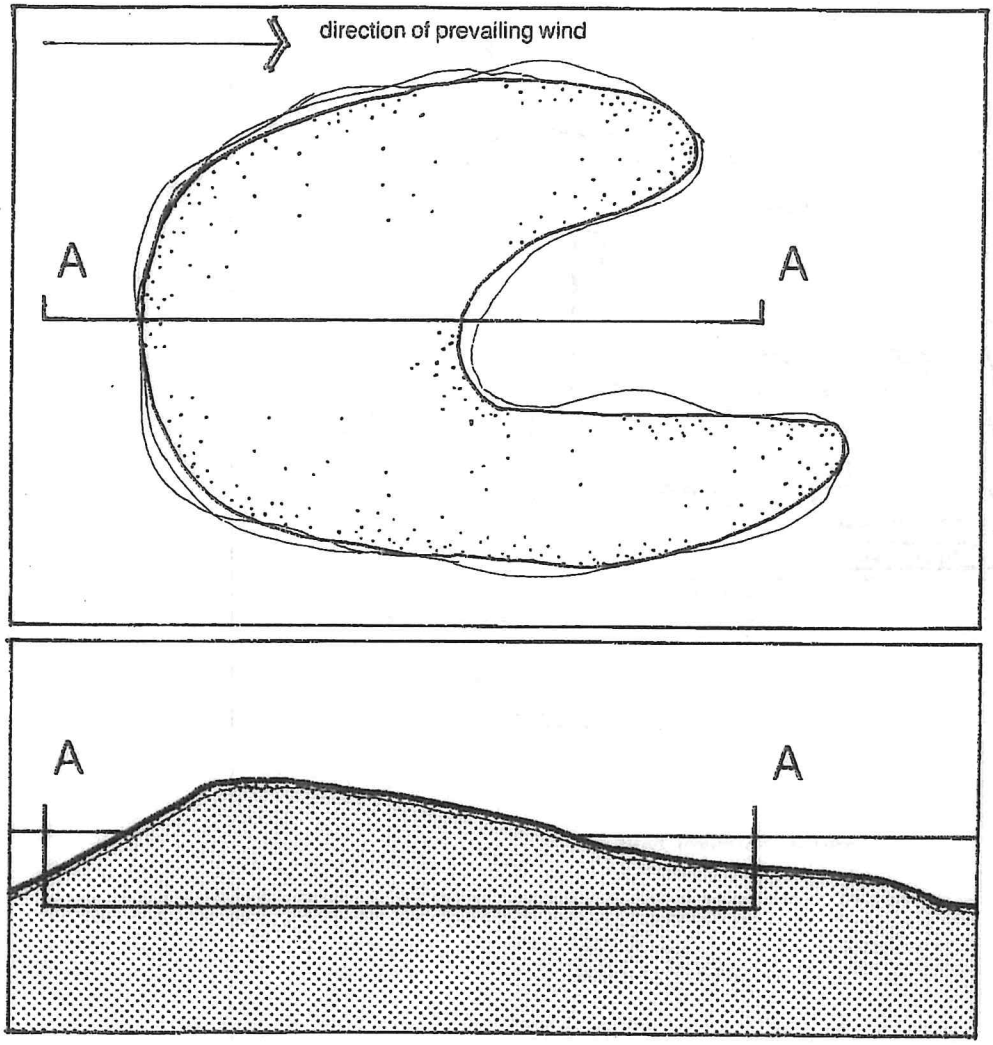


Figure 2. Horseshoe island construction. (From Michalski [1987], Rehabilitation of Pits and Quarries for Fish and Wildlife, Ontario Ministry of Natural Resources.)

H - FENCED BUFFER AND LIVESTOCK WATERING RAMP

Refer to the DNRC *Opencut Mining: Do You Need a Water Right?* guideline found on the Opencut News webpage as a water right would likely be required from DNRC for a livestock watering ramp. Unrestricted livestock will overgraze a pond site, trample the shore and pond bed, muddy and enrich the water, and shorten the life of a pond. Fencing will help vegetation establish and prevent livestock-related problems. Healthy vegetation filters out sediment and contaminants and provides cover for wildlife. A watering ramp provides livestock access to water. A 10-foot-wide ramp will service about 60 cows. Remove shade and other livestock attractants from around the ramp to keep livestock from loafing in or near the area.

If livestock use the area, establish a buffer around the pond by constructing a wildlife-friendly, durable fence at least 50-feet back from the seasonal high water level. If livestock need access to water, construct one or more watering ramps as follows:

1. Grade a minimum 10-foot wide, 5:1 ramp extending from 15 feet upslope of the seasonal high water level to 5 feet downslope of the seasonal low water level. Skip to item 4 if the ramp foundation consists of natural gravel deposit.
2. Install an appropriate geotextile or geogrid over the entire ramp area.
3. Cover the geotextile or geogrid with minimum 12 inches of pit run or graded gravel.

4. Install a fence that runs around the end and up the sides of the ramp to a gap in the perimeter fence. Keep the fence just inside the graveled ramp area so livestock remain on firm footing.

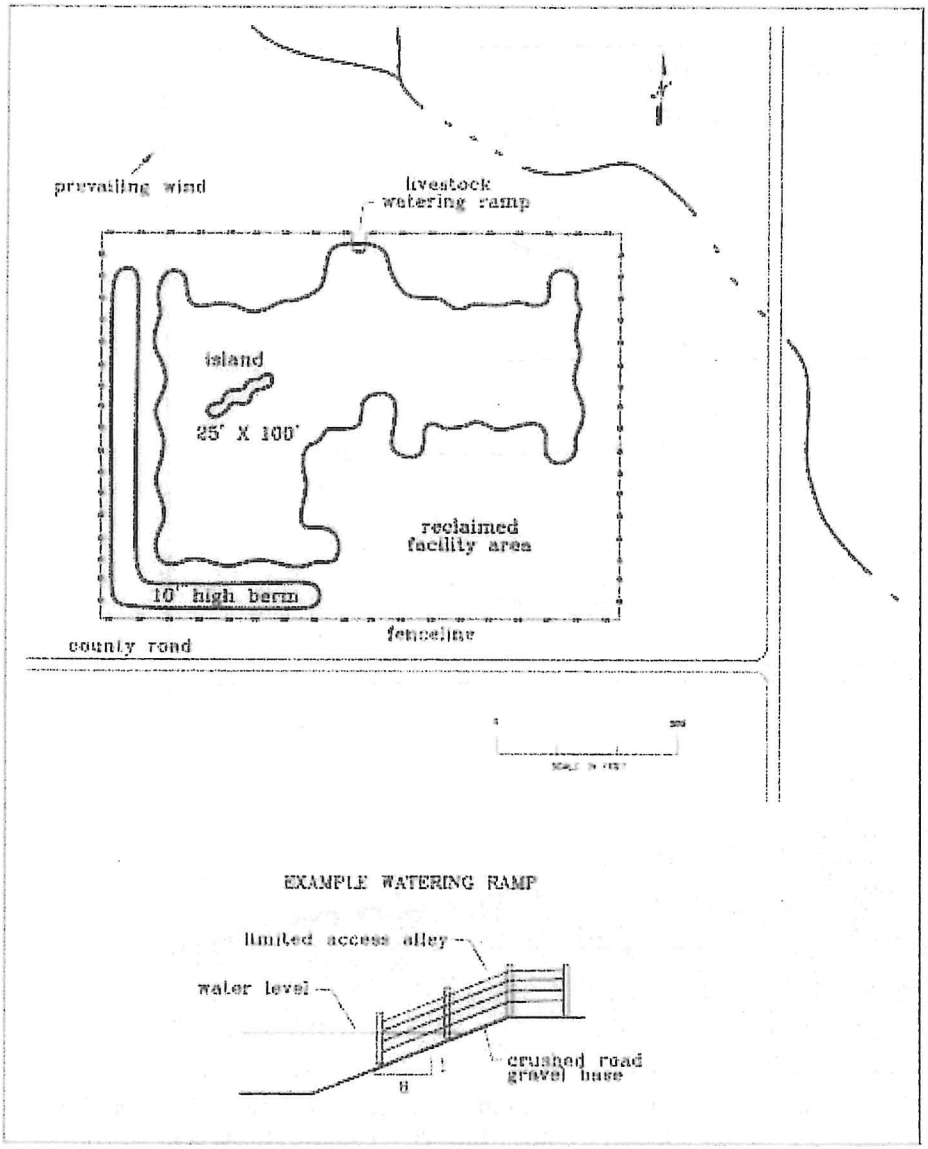


Figure 3. Example fenced buffer and livestock watering ramp.

I - WETLAND

The following criteria apply to the creation of a wetland. DEQ will consider site specific proposals for seasonal wetlands, which are wetlands that hold water through some of the summer but usually go dry by season's end. In addition to the items discussed under All Ponds, follow these criteria for permanent or seasonal wetland ponds.

Size. One to five acres is optimal, although an area as small as 0.25 acre can be a functional wetland. Wetlands larger than five acres are acceptable. A group of small wetlands creates more diverse habitats, and is better for wildlife than one large wetland, as long as they are located at least 100 to 300 feet apart, or closer if tall vegetation screens the wetlands from one another.

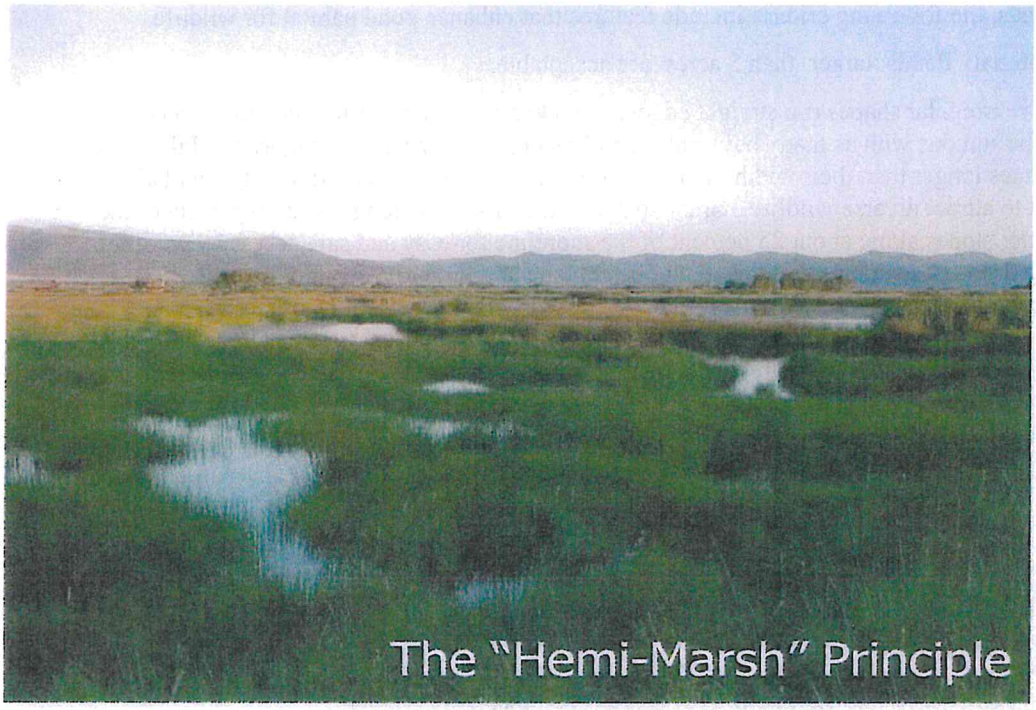


Figure 4. Hemi-Marsh. (From Katie Salsbury [2009], Guidelines for Designing Wildlife Friendly Ponds. North Fork Native Plants).

Shore Slopes. Wetlands that have irregular shapes (no straight edges) provide more shoreline and increase habitat diversity. Shorelines need to be irregular with as many bays, inlets, and peninsulas as practical. Inlets and peninsulas need to be 1 to 4 times longer than their width. Placement of large woody debris and boulders will also increase availability of habitat to attract diverse wildlife. Grade the slopes to range from 10:1 to 5:1 along about 75 percent of the shoreline. Intersperse steep drop-off segments that are about 50-feet long and drop to a depth of at least 3.5 feet below normal water level along the other 25 percent of shoreline. A 5:1 shore slope provides good access for wildlife. Gradual slopes (10:1or flatter) on approximately half of the wetland shoreline are recommended to provide mudflats, emergent vegetation, feeding and hiding cover for wildlife, and to minimize soil erosion and slope slumping.

Depths. Create the following approximate wetland depths and coverage areas based on the normal water level:

1. Shallows up to 3.5-feet deep over 35 percent or more of the area.
2. Deep water areas a maximum of 10-feet deep (rooted aquatic vegetation can grow in water up to 6.5-feet deep).

If possible, locate the majority of shallows on the upwind side of the wetland. Vary water depths across the wetland by intermixing shallow and deep water areas. Aquatic vegetation is better protected from wind and wave action in upwind shallows. Areas shallower than 3.5-feet deep support emergent vegetation that benefits certain wildlife and attracts dabbling ducks. Intermixing shallow and deep water areas allows the formation of a mosaic of aquatic vegetation and open water, as shown in Figure 4 above.

Bed. Incorporating micro-topography into the bed encourages the development of greater diversity of wetland plants. In various places on at least 50 percent of the shallows bed, apply 6 to 36 inches of fine-textured substrate such as hydric or upland soil. Leave other areas of sandy, gravelly, and cobbly surfaces. Place boulders, rock piles, and tree trunks in shallows, leaving a portion of each above the normal water level. Place vegetative debris (from clearing activities) in the wetland to provide habitat for waterfowl and promote habitat for invertebrates. Fine-textured substrates support wetland plants and animals. Boulders, rock piles, and tree trunks in shallows provide resting sites for wildlife.

J - WILDLIFE POND

Ponds may be designed to have features that enhance wildlife habitat while also including features to optimize fish production, and can simultaneously create wetlands next to the pond with diverse aquatic habitats. In addition to the

items discussed under All Ponds, the following criteria include features that enhance pond habitat for wildlife.

Size. One to five acres is optimal. Ponds larger than 5 acres are acceptable.

Shore Slopes. Ponds that have irregular shapes (no straight edges) provide more shoreline and increase habitat diversity. Shorelines need to be sinuous with as many bays, inlets, and peninsulas as practical (Figure 5). Inlets and peninsulas need to be 1 to 4 times longer than their width. Placement of large woody debris and boulders will also increase availability of habitat to attract diverse wildlife. Grade to 3:1 or flatter slopes along about 50 percent of the shoreline. Grade to 5:1 or flatter slopes along about 25 percent of the shoreline for easy and safe access by wildlife and humans. Intersperse steep drop-off segments that are about 50-feet long and drop to a depth of at least 3.5 feet below normal water level along the other 25 percent of shoreline. Steep drop-offs keep portions of the shoreline free of emergent vegetation, which benefits certain wildlife and provides better recreational access. Plant vegetation that varies in both height and hydric needs. Ensure soil is retained onsite for placement onto shorelines to allow for vegetative growth.

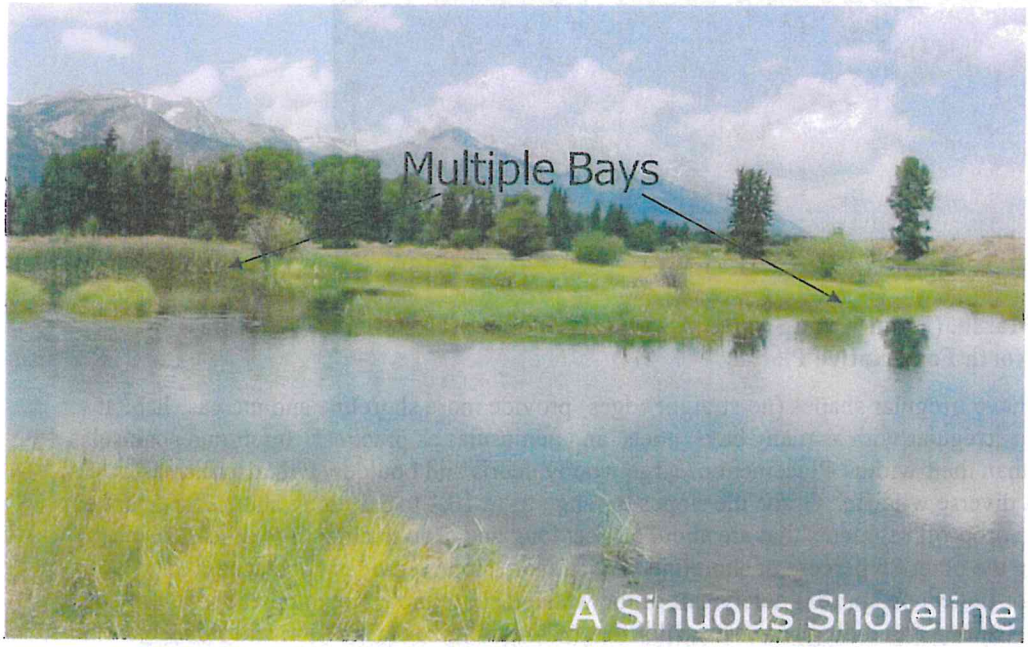


Figure 5. Bays and Shoreline. (From Katie Salsbury [2009], Guidelines for Designing Wildlife Friendly Ponds. North Fork Native Plants).

Depths. Create the following approximate pond depths and coverage areas based on the normal water level:

1. Shallows up to 3.5-feet deep over 25 percent of the area to allow emergent vegetation to grow and provide food and cover.
2. Intermediate depth areas 8-feet deep over 50 percent of the area.
3. Deep water areas of at least 15-feet deep over 25 percent of the area.

Wildlife primarily use shallow water while the steep drop-offs keep portions of the shoreline free of emergent vegetation, which benefits certain wildlife and provides better recreational access. Deep water prevents the growth of emergent vegetation and attracts diving ducks. Intermixing shallow and deep water areas allows the formation of a mosaic of emergent vegetation and open water, which makes good wildlife habitat.

Bed. In various areas on at least 50 percent of the shallows bed, apply 6 inches of fine-textured substrate such as hydric or upland soil. Leave areas of sandy, gravelly, and cobbly surfaces. Place boulders, rock piles, and tree trunks in shallows, leaving a portion of each above the normal water level. Place these same items across intermediate depth and deep water areas, anchoring tree trunks via partial burial in the pond bottom. Fine-textured substrates support wetland plants and animals. Rough intermediate depth and deep water beds, and steep slopes between the various pond bed levels provide diverse habitat. Boulders, rock piles, and tree trunks in shallows provide resting sites for wildlife, and in intermediate depth and deep water areas they provide better fish habitat.

K - FISH POND (Excerpted from *A Guide to Building and Managing Private Fish Ponds in Montana. 2006.*)
Across the mountainous western half of Montana, and in regions of eastern Montana where cold water springs are

found, spectacular fishing can be provided in some very small trout ponds. Proper design and construction of a pond will dictate fishery quality. Fish stocking requires a Non-Commercial Private Fish Pond License ($10 fee as of 2018) issued by MT Fish, Wildlife and Parks (FWP). The FWP permit will list specific fish species approved for the pond, and the pond builder may choose from these species. Aquatic nuisance species are a threat to ponds throughout Montana. Knowing what is prohibited, how to prevent introduction and dispersal, and where to find information is essential to prevent the spread of troublesome invaders.

Size. One to five acres is optimal. Ponds larger than 5 acres are acceptable, but smaller ponds are easier to manage and produce more pounds of fish per acre than large ponds. For ponds smaller than 1 acre, supplemental feeding of fish may be necessary.

Shore Slopes. The aquatic vegetation zones will occupy the first contour below water surface. These shallow water wetlands (Figure 6) should extend from the shoreline to a depth of about three feet and amount to anywhere from 10-25% of the pond surface area depending on the oxygen and nutrient qualities of the site. The shallow areas will quickly be colonized by fish food in the form of zooplankton, crustaceans, insects, and amphibians. Near- shore areas should have a gentle slope for safety for humans and animals.
Below the vegetation contour, the pond bottom should slope steeply down to a depth of at least ten feet to prevent growth of aquatic plants. The steep slope will also provide prime feeding area for fish. Terraces in the 6- to 8-foot contours are good places for piles of large rocks or woody debris that will provide cover.

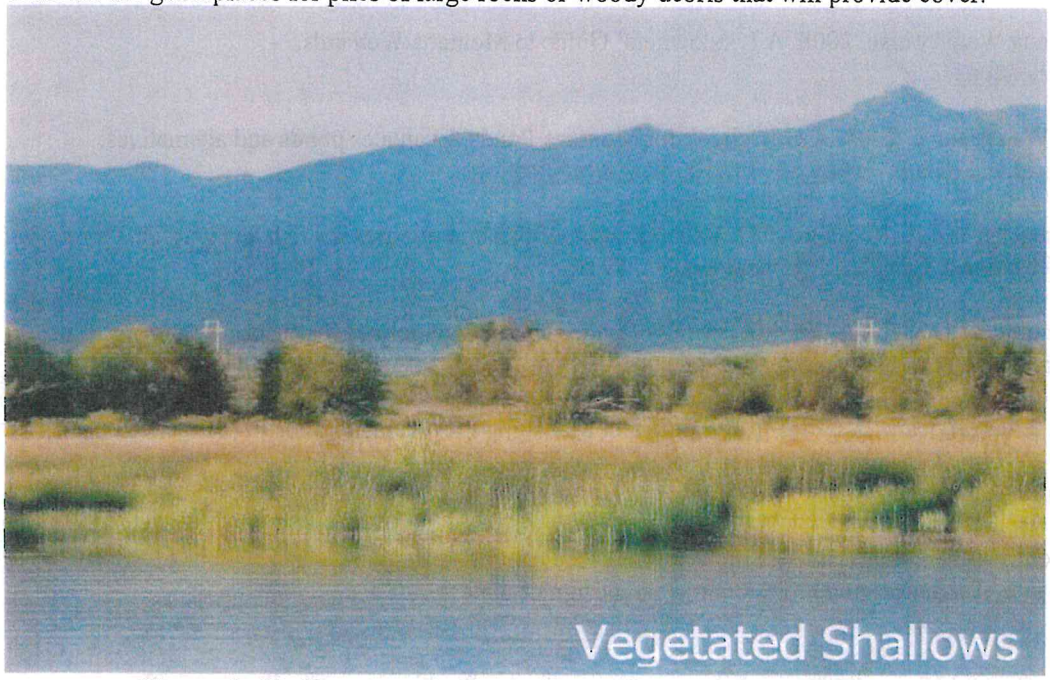


Figure 6. Shallow Aquatic Zone. (From Katie Salsbury [2009], Guidelines for Designing Wildlife Friendly Ponds. North Fork Native Plants).

Depths. Shallows are needed for wetland habitat, fish forage production, fish reproduction, and aesthetics. Intermediate depth and deep water areas maintain open water by discouraging the growth of aquatic vegetation. Deep water ensures that wintertime dissolved oxygen will be adequate to support fish populations and that there will be unfrozen areas within the pond.

The maximum depths that are necessary to prevent vegetation growth and the necessary depths to prevent anoxic conditions (winterkill) vary around the state. A pond 12 feet deep may need half its area at that depth, while one 15 feet deep may need only one-third its area at this depth to prevent anoxic conditions. Conditions in eastern Montana require a maximum depth of at least 10 feet to prevent vegetative growth. This variation in conditions around the state illustrates the importance of talking to a professional familiar with the area for design and construction of the pond. Aeration and recirculation are additional methods that may be needed to prevent anoxic conditions. These types of devices can be expensive and will add to the total cost of the pond maintenance.

Bed. In various areas on at least 50 percent of the shallows bed, apply 6 inches of fine-textured substrate such as hydric or upland soil. Leave areas of sandy, gravelly, and cobbly surfaces. Place boulders, rock piles, and tree trunks in shallows, leaving a portion of each above the normal water level. Place these same items across intermediate depth and deep water areas, anchoring tree trunks via partial burial in the pond bottom. Fine-textured substrates support wetland plants and animals. Rough intermediate depth and deep water beds, and steep slopes between the various pond bed levels provide better fish habitat. Boulders, rock piles, and tree trunks in shallows provide resting sites for wildlife, and in intermediate depth and deep water areas they provide better fish habitat.

L - WATER SOURCE POND

In addition to the items discussed under All Ponds, follow these criteria for a water source pond.

Typically, a pond 1 acre or smaller may be designated as a water source pond for livestock, irrigation, fire fighting reserve, or general use. Note that these uses would require a water right from DNRC. Grade at least one shore slope to 5:1 and the rest to 3:1. Build the pond so it is at least 3.5-feet deep at normal water level. A 5:1 slope provides good access for livestock, wildlife, and other uses. Water depths of at least 3.5 feet limit the growth of emergent vegetation, thus maintaining open water.

M - REFERENCES

Bender-Keigley, Janet. Montana Watercourse. 2008. A Landowners' Guide to Montana Wetlands. www.mtwatercourse.org/publications

LeBeau, Michelle. Montana Watercourse. 2005. A Guidebook for Montana Ponds. Evaluates ponds and alternatives; contacts and references for technical details. www.mtwatercourse.org/publications

Michalski, M. F. P., D. R. Gregory, and A. J. Usher. 1987. Rehabilitation of pits and quarries for fish and wildlife. Ontario Ministry of Natural Resources, Land Management Branch. 59 pp.

Salsbury, Katie. 2009. Guidelines for Designing Wildlife Friendly Ponds. Tips and guidelines for ensuring pond functions for fish and wildlife. North Fork Native Plants. www.northforknativeplants.com/library

Schrank, Sally. MT FWP Fisheries Division. A Guide to Building and Managing Private Fish Ponds in Montana. 2006. Planning, legal requirements, design, stocking, and management of fish ponds. http://fwp.mt.gov/fishing/regulations/ponds.html

Soil Conservation Service. Ponds -- Planning, Design, Construction. U.S. Dept. of Agriculture, Ag. Handbook Number 590, Washington, 1997, 85 pages. Technical guide for planning and design of ponds.

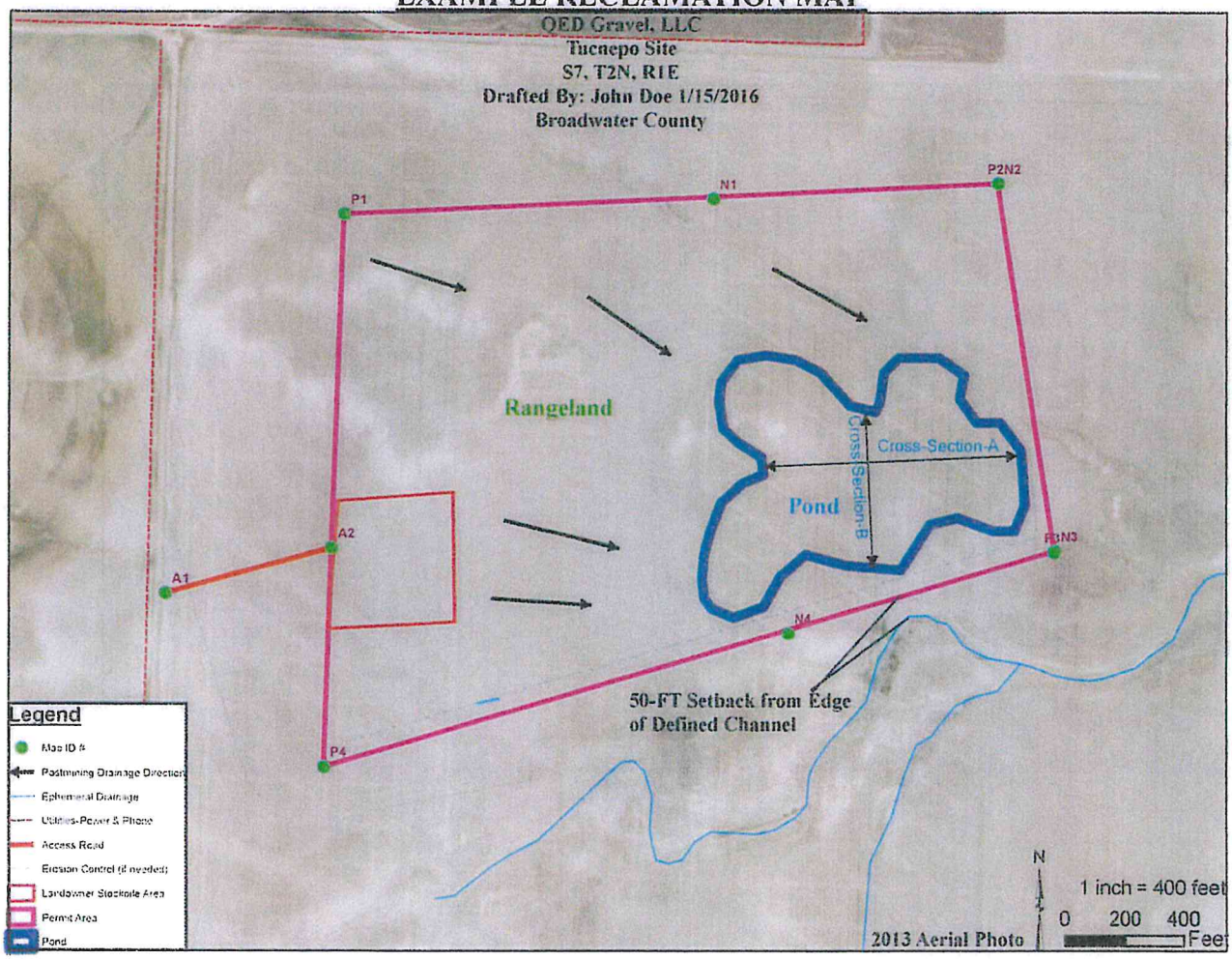
N - PROGRAMS FOR TECHNICAL ASSISTANCE

Montana Wetlands Legacy Program; MT Fish, Wildlife & Parks (www.wetlandslegacy.org)

Wetland Mitigation Program; MT Dept. of Transportation (www.mdt.mt.gov)

Wetland Reserve and Wildlife Habitat Incentive Programs; Natural Resources Conservation Service (www.mt.nrcs.usda.gov/programs)

EXAMPLE RECLAMATION MAP



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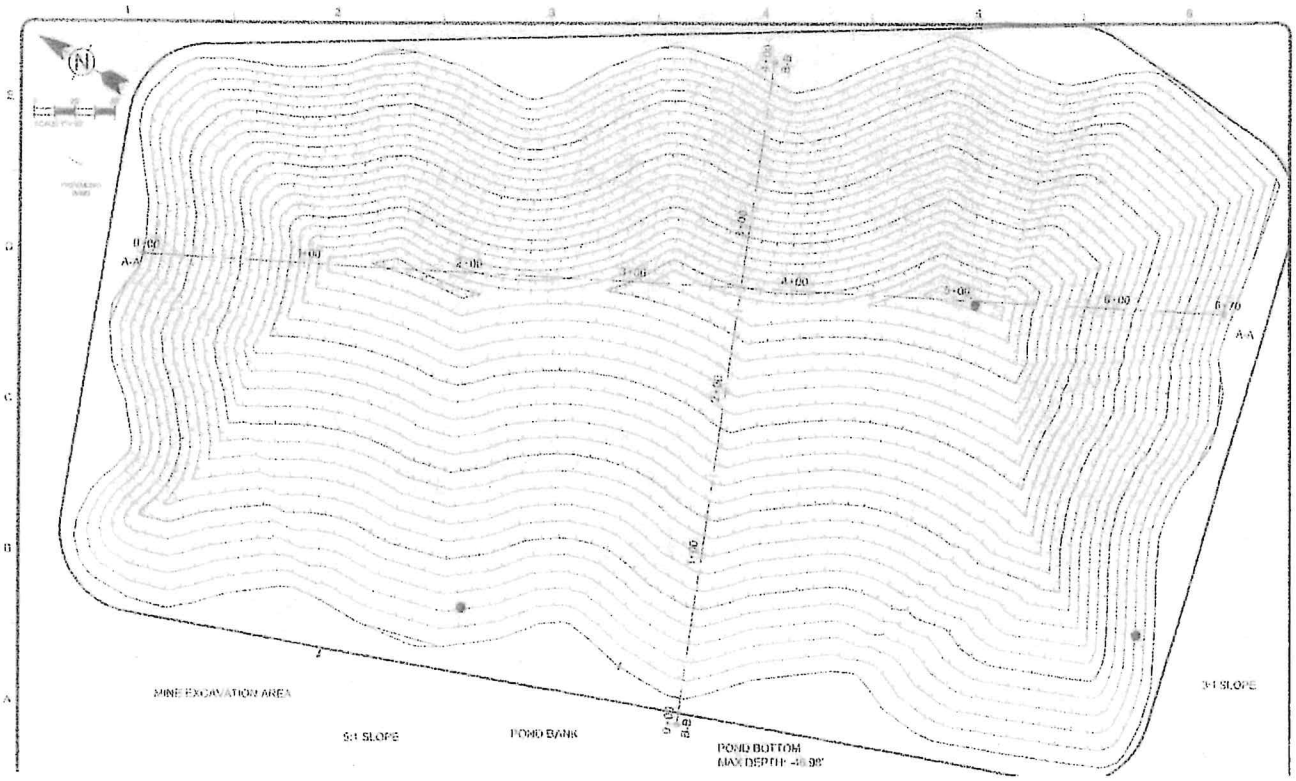
EXAMPLE PLAN VIEW CONTOUR MAP



Support Document

y. Seed Mix Guideline

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SEED MIX GUIDELINE - NON SAGE GROUSE HABITAT

The following seed mixes are recommended for Opencut mine site reclamation on Montana's plains, foothills, intermountain valleys, and wetland areas. The use of one of the site-specific seed mixes listed below may be appropriate depending on site conditions, the postmining land use, compatibility with surrounding vegetation, or landowner preference. The drill rates given are based on 12 pounds of pure live grass seed per acre, with an additional 1 to 2 pounds of forbs. The use of the forbs is highly recommended as they will fill the niche usually occupied by noxious weeds and other weedy species. The use of highly competitive introduced grasses, particularly crested wheatgrass and smooth brome, is not recommended unless the area to be seeded is in, or next to, an area where such species are already established. A nurse crop is recommended on highly erodible sites and, if used, should be seeded at 10 lbs/acre. The use of wheat, oat, or barley (in order of preference) is recommended for cover crop and nurse crop seeding.

- The Operator must purchase certified seed on a pure live seed (PLS) basis.
- Contact your local county extension agent or the Natural Resource Conservation Service (NRCS) for assistance with formulating alternative seed mixes.
- The seeding rate must be doubled for broadcast seeding.

NATIVE GRAZING/PASTURE MIX - For general use throughout the state

Species	Lbs PLS/Acre
Slender wheatgrass	2
Western wheatgrass	3
Thickspike wheatgrass	2.5
Bluebunch wheatgrass	2.5
Green needlegrass	2
Western Yarrow*	0.5

NON-NATIVE GRAZING/PASTURE MIX - For general use throughout the state

Species	Lbs PLS/Acre
Intermediate wheatgrass	3
Orchardgrass	3
Timothy	2
Tall Fescue	2
Alfalfa	2

NATIVE RANGELAND MIX - For moist/riparian areas

Species	Lbs PLS/Acre
Mountain brome	2
Bluejoint reedgrass	1
Tufted hairgrass	1
Canada wild rye	2
Western wheatgrass	3
Bluebunch wheatgrass	2
Western yarrow*	1

NATIVE RANGELAND MIX - For arid regions

Species	Lbs PLS/Acre
Slender wheatgrass	1
Thickspike wheatgrass	5
Western wheatgrass	3
Sandbergs bluegrass	2
Prairie junegrass	1
Yellow prairie coneflower*	1

WETLAND SEED MIX - For pond edges throughout the state

Species	Lbs PLS/Acre
Slough grass	2
Basin Wildrye	2
Baltic rush	1
Nebraska sedge	2
Creeping spike rush	2
Beaked sedge	2
Bluejoint reedgrass	1

* - Listed forbs may be substituted for other forb species depending on availability/pricing. Alternative forbs include but are not limited to Purple Coneflower, Yellow Prairie Coneflower, Western Yarrow, Lewis Flax, Rocky Mountain Bee Plant, Scarlet Globemallow, Alfalfa and Prairie Sagewort.

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SEED MIX GUIDELINE - SAGE GROUSE HABITAT

The following seed mixes are **REQUIRED** for Opencut mine site reclamation within Sage Grouse General, Interconnectivity and Core Habitat areas; unless a baseline vegetative study is completed by a vegetation specialist using accepted sampling criteria. The Operator must choose the seed mix that is designed for the region that the Opencut mine will be located in. Refer to page 4 of this document for the Sagebrush Seeding Method that must be used with the below seed mixes.

Sagebrush **cannot** be drill seeded and must be broadcast seeded at the rates described below. It may be necessary to broadcast seed sagebrush separately from the other seeds, especially if the other seeds are drill seeded.

- The Operator must purchase certified seed on a pure live seed (PLS) basis.
- The seeding rate must be doubled for broadcast seeding.

NORTHERN REGION SAGEBRUSH SEED MIX

Grasses	Lbs PLS/Acre
Agropyron smithii – Western Wheatgrass	1.5 for drill seed rate & 3.0 for broadcast
Agropyron dasystachyum – Thickspike wheatgrass	.75 for drill seed rate and 1.5 for broadcast
Koeleria cristata – Prairie junegrass	0.05 for drill seed rate and 0.1 for broadcast
Poa sandbergii – Sandberg bluegrass	0.25 for drill seed rate and.5 for broadcast
Stipa comate – Needle and thread	1.25 for drill seed rate and 2.5 for broadcast
Forbs	
Achillea millefolium – Yarrow	0.025 for drill seed rate and 0.05 for broadcast
Artemisia frigida – Fringed sagewort	0.025 for drill seed rate and 0.05 for broadcast
Shrubs	
Artemisia cana – Silver sagebrush	5.0 for broadcast rate No Drill Seeding allowed
Artemisia tridentata ssp. Wyomingensis – Wyoming Big Sagebrush	2.0 for broadcast rate No Drill Seeding allowed
Chrysothamnus nauseosus – Rubber rabbitbrush	1.0 for drill seed rate and 2.0 for broadcast

Info:

1. The northern region includes the following counties: Blaine, Chouteau, Hill, Liberty Phillips, Roosevelt, and Valley.
2. In general, shrub seed should originate from areas within 300 miles of the project to insure compatibility with local conditions.
3. Seeding grass at a heavier rate than shown is likely to reduce sagebrush establishment.
4. The species described in the seed mix must be used at the rates required.

CENTRAL & SOUTHEASTERN REGIONS SAGEBRUSH SEED MIX

Grasses	Lbs PLS/Acre
Agropyron smithii – Western wheatgrass	.75 for drill seed rate & 1.5 for broadcast
Agropyron spicatum – Bluebunch wheatgrass	.5 for drill seed rate & 1.0 for broadcast
Agropyron trachycaulum – Slender wheatgrass	.5 for drill seed rate & 1.0 for broadcast
Calamovilfa longifolia – Prairie sandreed	0.38 for drill seed rate & .75 for broadcast
Poa sandbergii – Sandberg bluegrass	0.25 for drill seed rate & .5 for broadcast
Schizachyrium scoparium – Little bluestem	0.25 for drill seed rate & .5 for broadcast
Stipa comata – Needle and thread	1.25 for drill seed rate & 2.5 for broadcast
Forbs	
Achillea millefolium – Yarrow	0.025 for drill seed rate & 0.05 for broadcast
Artemisia frigida – Fringed sagewort	0.025 for drill seed rate & 0.05 for broadcast
Shrubs	
Artemisia cana – Silver sagebrush	2.0 for broadcast rate No Drill Seeding allowed
Artemisia tridentata ssp. Wyomingensis – Wyoming Big Sagebrush	3.0 for broadcast rate No Drill Seeding allowed
Chrysothamnus nauseosus – Rubber rabbitbrush	1.0 for drill seed rate & 2.0 for broadcast

Info:

1. The central and southeastern region includes the following counties: Big Horn, Carbon, Carter, Custer, Dawson, Fallon, Fergus, Garfield, Golden, Judith Basin, McCone, Musselshell, Petroleum, Powder River, Prairie, Rosebud, Stillwater, Treasure, Wibaux, Wheatland, and Yellowstone.
2. In general, shrub seed should originate from areas within 300 miles of the project to insure compatibility with local conditions.
3. Seeding grass at a heavier rate than shown is likely to reduce sagebrush establishment.
4. The species described in the seed mix must be used at the rates required.

SOUTHWESTERN AND SOUTH CENTRAL REGIONS SAGEBRUSH SEED MIX

Grasses	Lbs PLS/Acre
Agropyron smithii – Western wheatgrass	.5 for drill seed rate & 1.0 for broadcast
Agropyron spicatum – Bluebunch wheatgrass	1.0 for drill seed rate & 2.0 for broadcast
Agropyron trachycaulum – Slender wheatgrass	.5 for drill seed rate & 1.0 for broadcast
Festuca idahoensis – Idaho fescue	0.13 for drill seed rate & 0.25 for broadcast
Poa sandbergii – Sandberg bluegrass	0.13 for drill seed rate & 0.25 for broadcast
Stipa comata – Needle and thread	1.0 for drill seed rate & 2.0 for broadcast
Forbs	
Achillea millefolium – Yarrow	0.025 for drill seed rate & 0.05 for broadcast
Dalea purpureum – Purple prairie clover	.5 for drill seed rate & 1.0 for broadcast
Shrubs	
Artemisia tridentata ssp. Tridentate – Basin big sagebrush	2.0 for broadcast rate No Drill Seeding allowed
Artemisia tridentata ssp. Vaseyana – Mountain big sagebrush	2.0 for broadcast rate No Drill Seeding allowed
Chrysothamnus nauseosus – Rubber rabbitbrush	1.0 for drill seed rate & 2.0 for broadcast

Info:

1. The southwestern and south central region includes the following counties: Beaverhead, Broadwater, Deer Lodge, Gallatin, Jefferson, Madison, Meagher, Park, Silverbow, and Sweetgrass.
2. In general, shrub seed should originate from areas within 300 miles of the project to insure compatibility with local conditions.
3. Seeding grass at a heavier rate than shown is likely to reduce sagebrush establishment.
4. The species described in the seed mix must be used at the rates required.

SAGEBRUSH SEEDING METHOD & TIPS

- Broadcast seeding is the best method to seed sagebrush.
- Ensure a relatively firm seedbed; a boot should register in the soil but not sink. If the soil is too hard, sagebrush seed will not establish.
- Sagebrush is to be seeded between October 15 and March 1 in Montana.
- Seeding on snow is an effective means of establishing sagebrush.
- Seeding immediately prior to snow or rain is often effective.
- Do not seed sagebrush seed more than 1/8 inch below the surface.
- Mix sagebrush seed and forb seed with grass seed in a broadcast seeder to prevent clogging. Seeding sagebrush by itself without a carrier, like native wheatgrass seed, is often difficult.
- Broadcast the seed manually or mechanically using cyclone-type bucket spreaders. Mix seed frequently to prevent clogging. Do not use a grain drill.
- Following broadcast seeding, good seed/soil contact must be established. Drag a flexible meadow harrow or a chain over the seeded area.
- Hydraulic seeding equipment (hydro-seeder) can be effective if the seed is applied without any hydro mulch. Sagebrush and other forbs often stick in hydromulch, do not contact the soil, and often do not grow. Apply hydromulch in a second application after seeding.

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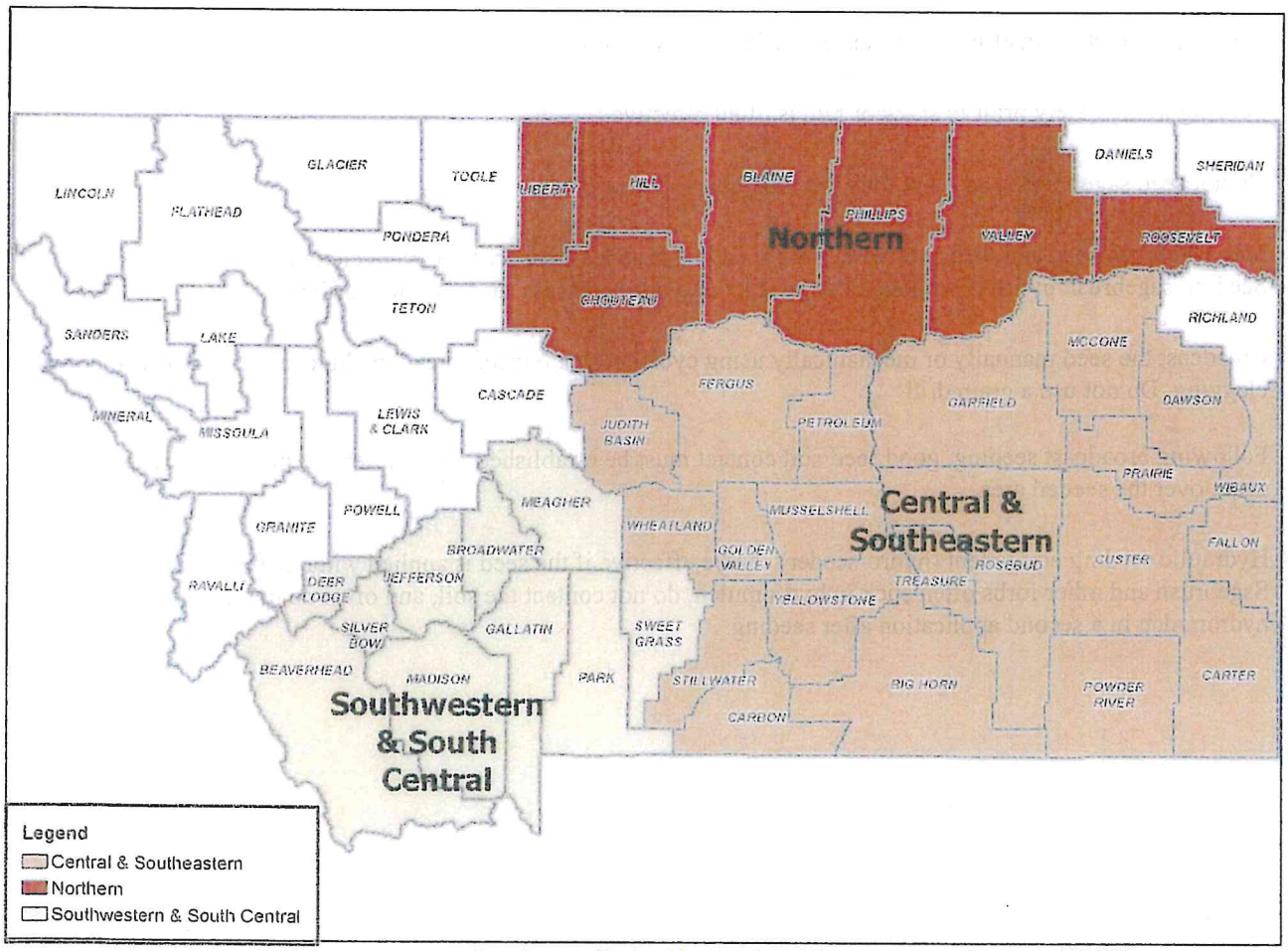


Sage Grouse Region Map for Seed Mixes

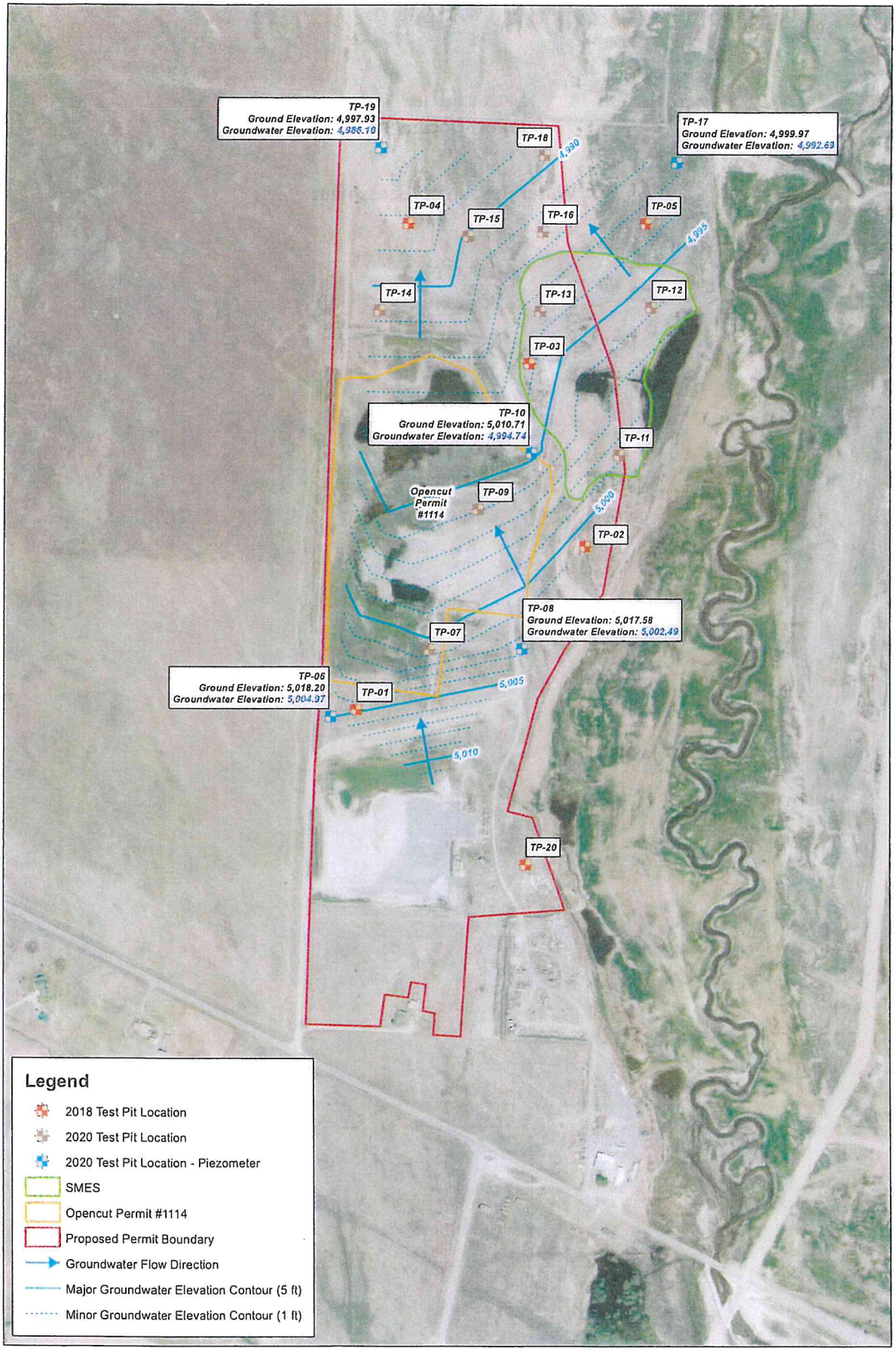
J.d. Conner
3/17/2016
Aerial Photo 2013

0 420,000 Feet
N
1 inch = 420,000 feet

DEQ
Industrial and Energy Minerals Bureau
Opencut Mining Program

Support Document

cc. Water Resources Assessment


TP-19
Ground Elevation: 4,997.93
Groundwater Elevation: 4,986.10
TP-18
4,990
TP-17
Ground Elevation: 4,999.97
Groundwater Elevation: 4,992.69
TP-04
TP-15
TP-16
TP-05
4,995
TP-14
TP-13
TP-12
TP-03
TP-10
Ground Elevation: 5,010.71
Groundwater Elevation: 4,994.74
TP-11
Opencut Permit #1114
TP-09
5,000
TP-02
TP-08
Ground Elevation: 5,017.58
Groundwater Elevation: 5,002.49
TP-07
TP-06
Ground Elevation: 5,018.20
Groundwater Elevation: 5,004.37
TP-01
5,005
5,010
TP-20
Legend
2018 Test Pit Location
2020 Test Pit Location
2020 Test Pit Location - Piezometer
SMES
Opencut Permit #1114
Proposed Permit Boundary
Groundwater Flow Direction
Major Groundwater Elevation Contour (5 ft)
Minor Groundwater Elevation Contour (1 ft)
0
400
800
1,200
Feet
N
W
E
S
Operator: Butana Sand & Gravel
Site Name: DK Jan
Water Resource Assessment
T4N,R10W,S26
Deer Lodge County MT
Job#: BUTANAM02
FIGURE 5
Date: 2/5/2020

CONSERVATION DISTRICT REPRESENTATIVE / PLANNING BOARD

Carlye Hansen

From: ROSE NYMAN <rose.nyman1@gmail.com>
Sent: Wednesday, December 04, 2019 11:26 AM
To: Carlye Hansen; Gayla Hess
Subject: Fwd: Vacancy

---------- Forwarded message ---------
From: ROSE NYMAN <rose.nyman1@gmail.com>
Date: Wed, Dec 4, 2019 at 11:25 AM
Subject: Re: Vacancy
To: Lori Sturm <lsturm@adlc.us>

Hi,

Thanks for the info. I remembered that clause, however, wasn't sure about the advertising. I will ask Carlye to put it on the next planning board agenda.

On Wed, Dec 4, 2019 at 9:15 AM Lori Sturm <lsturm@adlc.us> wrote:
>
> Good morning Rose:
>
>
>
> Info from the Code of Ord.
>
>
>
> · Subdivision II. - Planning Board[5]
>
> SHARE LINK TO SECTIONPRINT SECTIONDOWNLOAD (DOCX) OF SECTIONSEMAIL
> SECTION
>
> · Sec. 2-190. - Membership; appointment.
>
> SHARE LINK TO SECTIONPRINT SECTIONDOWNLOAD (DOCX) OF SECTIONSEMAIL
> SECTION
>
> (a)
>
> The planning board shall have nine members.
>
> (b)
>
> All members of the planning board shall permanently reside in the County.
>
> (c)
>

> If possible, the Commission shall appoint eight members evenly throughout the development districts of the County. The ninth member is to be appointed by the board of supervisors of a conservation district from the members or associate members of the board of supervisors, subject to approval of the other eight appointed members. If there is no member or associate member of the board of supervisors of a conservation district who is able or willing to serve on the planning board, then the ninth member is selected by the eight appointed planning board members with the consent and approval of the Commission.
>
> (d)
>
> All of the appointments shall be confirmed by the Commission.
>
> It appears the Planning Board can appoint a representative to fulfill the position of the Conservation District member. Then approval from the Commission. At the end of that term it would go back to being advertised as a vacancy from a conservation district.
>
> I believe this could be part of the Planning Board Agenda.
>
> Let me know what you think.
>
>
>
> Lori
>
>
>
>

RESOLUTION 17-35

RESOLUTION 17-35

A RESOLUTION REAFFIRMING THE ANACONDA-DEER LODGE COUNTY CHARTER AND THE ANACONDA-DEER LODGE COUNTY ADMINISTRATIVE CODE REGARDING PUBLIC HEARINGS BEFORE THE BOARD OF COMMISSIONERS AND/OR ANY ANACONDA DEER LODGE COUNTY BOARDS AND COMMITTEES.

WHEREAS, the Board of Commissioners, as well as authorized Boards and Committees of Anaconda-Deer Lodge County may conduct public hearings for the purpose of providing reasonable opportunities for citizen participation prior to final decisions; and

WHEREAS, a public hearing is an opportunity for the public to offer comments on the record regarding any matter which is the subject of the public hearing; and

WHEREAS, MCA 7-1-4131 (attachment "A") sets forth minimum standard that local governments shall abide by when conducting public hearings; and

WHEREAS, the Anaconda-Deer Lodge County Charter (Art.III, Sec.6, part.2) requires the Commission to adopt by ordinance a set of written rules to govern its organization and procedures consistent with state law, and

WHEREAS, the Anaconda-Deer Lodge County Commissioner has adopted a plan of organization and structure ordinance commonly referred to as the Administrative Code which is also required by ADLC Charter (Art.V, sec.2) which includes procedures regarding boards, commission, advisors, studies and other government activities, and

WHEREAS, the Anaconda-Deer Lodge County Administrative Code, Art.II, sec. 3, states that "no final action shall be taken on any ordinance or amendment thereto without a public hearing as required by law";

NOW, THEREFORE, BE IT RESOLVED by the Anaconda-Deer Lodge County Board of Commissioners that:

1) Public Hearings shall be conducted consistent with state law, by the Anaconda-Deer Lodge County Board of Commissioners, boards and committees that are legally authorized by Montana state law or Anaconda-Deer Lodge County Charter, Administrative Code, Ordinance or resolution.

2) All public hearings shall require public notice as required by state law, MCA 7-1-4127 which states that the notice must be published twice, with at least six (6) day separating each publication. The publication must include the information required by, and, be placed in a qualified local newspaper as addressed in MCA 7-1-4127.

3) The presiding officer will open the public hearing and verify that the public hearing was properly posted. Opening and closing of the public hearing may be verbal and/or with use of a gavel.

4) An explanation on the public hearing subject may be provided by the presiding officer and/or a staff report may be provided. At this time board members may ask questions and/or seek clarification on the matter.

5) The presiding officer will address any written comments received on the matter.

6) The Board shall not be bound by the strict rules of evidence and may exclude irrelevant, immaterial, incompetent or unduly repetitious comments, testimony or evidence.

7) Public testimony will be heard from both proponents and opponents.

8) Board members are discouraged from interaction with the public. However, the board members may ask clarifying questions from any testimony. Discussion among the board members may take place after the public hearing is closed.

9) The presiding officer will close the public hearing after all public members have had an opportunity to testify at least once.

Effective this 6th day of February, 2018.

Terry Vermeire, Commission Chair

Attested:

Sandra Wenger
Deputy Clerk of the Commission

Attachment -A

MCA 7-1-4131. Public hearing. (1) When required, the governing body shall conduct public hearings for the purpose of providing reasonable opportunity for citizen participation prior to final decisions.

(2) At a minimum, a public hearing shall provide for submission of both oral and written testimony for and against the action or matter at issue. If the hearing is not held before the ultimate decision makers, provision shall be made for the transmittal of a summary or transcript of the testimony received to the ultimate decision makers prior to their determination.

(3) Public hearings may be held at regular or special meetings of the governing body.

(4) Petitions and letters received by the governing body or executive prior to the hearing shall be entered by reference into the minutes of the governing body and considered as other testimony received at the hearing.

(5) Hearings may be adjourned from day to day or to a date certain.

(6) Except for budget hearings, the governing body may designate a subcommittee or hearing examiner to conduct public hearings.