

April 19, 2023

Mr. Peter Hays Environmental Protection Specialist State of Colorado Division of Reclamation, Mining, & Safety 1313 Sherman Street – Room 215 Denver, CO 80203

RE: J-2 Contracting Company, Sunset Industrial Pit, File No. M-2023-001, 112c Permit Application Adequacy Review Response

Dear Mr. Hays,

J-2 Contracting Company (J-2) has received the Division's Adequacy Review of the 112 Construction Materials Reclamation Permit Application letter dated April 6, 2023. Below are the comments and the corresponding responses that we have provided to address the comments.

#### Comments

1. The Division received state agency comments from History Colorado, Colorado Parks and Wildlife, Division of Water Resources and public comments from Anderson's Sales & Salvage, Inc. Copies of the comment letters were emailed to the Applicant as they were received by the Division and are attached. Please address the comments in the letters and revise the permit application accordingly.

No objections to the permit application were received by the Division during the public comment period.

Response: We provided information back to History Colorado on February 23, 2023, regarding the cultural resources survey that was conducted by SWCA and included in the application package to the DRMS. History Colorado responded back via e-mail thanking us for sending over and would reach out if they had any questions. We have not received any questions from them since they provided the response on February 23, 2023.

We have met with CPW along with our environmental consultant, ERC. We provided responses back to CPW through ERC regarding their comments. The response ERC provided back to CPW and CPW's e-mail response are attached dated April 3, 2023.

The comments from DWR will be addressed once approval is received from the DRMS as J-2 Contracting Company will obtain a well permit, substitute water supply plan approval, document all wells within 600 feet of the proposed well permit and obtain waivers, if possible, from well owners within 600 feet of the proposed well permit. All of these items will be pursued and obtained prior to exposing groundwater at the pit. J-2 Contracting Company commits to providing these approvals prior to exposing groundwater. The groundwater model provided to the DRMS indicates that mounding will be minimal for the proposed slurry wall and not

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affect the existing aquifer. Monitoring wells have been installed to monitor groundwater levels before and after the slurry wall is installed. These will be monitored monthly for the life of the mine and can determine if mitigation is necessary to mitigate effects from mounding or shadowing from the slurry wall. Based on information in the groundwater model we don't anticipate the slurry wall will have effects that would require mitigation.

The comments from Anderson's Sales and Salvage, Inc. will be addressed during the Weld County Use by Special Review permit process. J-2 Contracting Company has a traffic consultant preparing a traffic study to determine the warranted traffic improvements based on the impact of the proposed traffic from the Sunset Industrial Pit. The City of Greeley controls the access and improvements that can be made for 8<sup>th</sup> Street. The City of Greeley will be providing comments in regard to any future traffic improvements and where they should be placed based on their review of the traffic study provided by J-2 Contracting Company to Weld County for the Use by Special Review Permit.

#### 1.6 Public Notice

2. Pursuant to Rules 1.6.2(1)(d) and 1.6.5(1), please submit proof of publication in a newspaper of general circulation in the locality of the proposed mining operation.

The Applicant submitted proof of publication in the Greeley Tribune to the Division via email on March 7, 2023. No additional response is required by the Applicant.

#### Response: Acknowledged.

3. Pursuant to Rule 1.6.2(e), please submit proof of the notice to all owners of record of surface and mineral rights of the affected land and the owners of record of all land surface within 200 feet of the boundary of the affected land including all easement holders located on the affected land and within 200 feet of the boundary of the affected land. Proof of notice may be return receipts of a Certified Mailing or by proof of personal service.

The Applicant submitted proof of notice to the owners of record of all land surface within 200 feet via email to the Division on February 21, 2023. On March 7, 2023, the Applicant provided Division with the return receipts of the certified mailings or other documentation for all owners of record including easement owners.

#### Response: Acknowledged.

4. Please provide proof of notice to the Owners of Record of the surface and mineral rights of the affected land, Sunset Industrial, LLC, pursuant to Rule 1.6.2(e).

Response: J-2 Contracting Company provided a copy of the public notice along with a structure agreement to Sunset Industrial, LLC. Please see letter from Sunset Industrial, LLC attached stating that they were delivered a copy of the public notice along with a structure agreement by hand from J-2 Contracting Company. The mineral rights were also notified based on the mineral title search that lists Kerr-McGee Oil and Gas Onshore, LP and Extraction Oil and Gas, LLC as

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#### the only entities required to provide notice to. We provided notice letters to those entities on January 30, 2023 via e-mail to you and provided the certified mail receipts and return receipts on March 7, 2023 via e-mail to you.

#### 6.4 Specific Exhibit Requirements – Regular 112 Operations

The following items must be addressed by the Applicant in order to satisfy the requirements of C.R.S. 34-32.5-101 et seq. and the Mineral Rules and Regulations of the Mined Land Reclamation Board:

#### 6.4.1 Exhibit A – Legal Description

5. Pursuant to Rule 6.4.1(2), the main entrance to the mine site shall be located based on a USGS topographic map showing latitude and longitude. The Applicant provided the coordinate to the entrance located in the southwest corner of the site.

During the pre-operational inspection conducted on March 30, 2023, the Applicant stated the primary entrance might be relocated to the existing entrance east of the transfer station. Please commit to updating Exhibit A if the main entrance to the mine site is relocated in the future.

## Response: J-2 Contracting Company commits to updating Exhibit A if the main entrance to the mine site is relocated in the future.

#### 6.4.4 Exhibit D – Mining Plan

6. The Applicant states 8th Street is immediately adjacent to the west side of the permit boundary. The Division believes the Applicant intended to state 8th Street is located immediately adjacent to the south side of the permit boundary. Please review Exhibit D and revise the exhibit accordingly.

#### Response: Exhibit D has been corrected.

7. The Applicant states a concrete and asphalt batch plant will be located within Phase 2 in the future. Please commit to providing the Division with the appropriate Weld County zoning for the plants prior to construction and operation of the plants.

# Response: J-2 Contracting Company commits to providing the Division with the appropriate Weld County zoning for the plants prior to construction and operation of the plants. A change of zone for the property was recently approved to change all zoning on the property to I-3 Heavy Industrial. The Board of County Commissioners Resolution is attached.

8. The Applicant states the concrete truck washout area will be a 30-foot by 20-fot three cell concrete structure. Please provide a typical layout detail for the processing facilities, including the washout area, proposed in the Phase 2 - Batch Plant Area on the Exhibit C map.

Response: A typical layout detail has been provided for the processing facilities including the washout area on the Phase 2 – Batch Plant Area on the updated Exhibit C map.

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9. The Applicant states the mineral deed requires that no surface facilities are located on this property. Please revise Exhibit D to clarify what type of surface facilities are not allowed on the property by the deed and update Exhibit D accordingly.

Response: Exhibit D has been revised to clarify and include the language provided in the mineral deed. The deed states "This deed is subject to "No Surface Occupancy" and it is agreed and understood that Grantee, its successors or assigns shall not be allowed access to the surface, nor shall Grantee conduct any operations or locate any facilities on the surface of the subject lands. Grantee shall be entitled to all other mineral rights associated with oil and gas development, including the ability to participate in and receive royalty payments from the drilling of directional or horizontal wellbores."

10. The Applicant states mining will not expose groundwater prior to the slurry wall being constructed around each phase. During the pre-operational inspection conducted on March 30, 2023, the Applicant stated the intent is to mine the upper portion of the phases within 3 to 4 feet of the anticipated high groundwater elevation prior to installation of the slurry walls. Please update Exhibit D to explain the proposed mining sequence for the mining phases.

## Response: Exhibit D has been revised to clarify the mine phasing where there will be four phases. Phase 1a, Phase 1, Phase 2a, and Phase 2 will be the phases for the mining.

11. The Applicant states the design specification for the slurry wall and quality control procedures used during construction will ensure that the reclaimed reservoir meets State Engineer's Office (SEO) performance standards. Please commit to providing the slurry wall design and/or as-built documents as a technical revision to the permit when available.

## Response: J-2 Contracting Company commits to providing the Division with the slurry wall design and/or as-built documents as a technical revision to the permit when available.

12. The Applicant states all soil and overburden material will be used on-site for reclamation and long-term stockpiling is not anticipated. Please clarify the location of the stockpiles in Exhibit D. The Exhibit C maps indicate stockpile areas in the western section of Phase 2 and along the western boundary of Phase 1. Please state if the stockpiles will be stored in these storage areas or around the perimeter of the site as a visual berm. Please revise Exhibits C and D accordingly.

Response: The stockpiles will be stored in the areas shown on the Exhibit C maps along the eastern section of Phase 2 and the east side of Phase 1. The location description has been updated in Exhibit D.

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#### 6.4.5 Exhibit E – Reclamation Plan

13. The Applicant states during reclamation activities, inlet and outlet facilities for the reservoir will be designed and installed once the operational criteria of the proposed reservoir have been identified by an end user. Please commit to providing the inlet/outlet structure design and/or as-built documents as a technical revision to the permit when available.

## Response: J-2 Contracting Company commits to providing the Division with the inlet/outlet structure design and/or as-built documents as a technical revision to the permit when available.

14. In the Topsoiling section of Exhibit E, the Applicant states approximately the top six inches of soil on the property is classified as topsoil. In Exhibit D, the Applicant states the depth of the topsoil is approximately twelve inches over the majority of the mining area. Please explain this discrepancy and revised Exhibits D and E accordingly.

## Response: The topsoil depth on the property is approximately the top twelve inches. The Exhibit E narrative has been updated to reflect this.

15. The Applicant proposes to monitor groundwater levels through both interior and exterior monitoring wells installed or have access to before, during and after the mining and reclamation is complete so impacts to the groundwater table can be identified and address by the Applicant. Please commit to providing all available groundwater elevation data and a well location map annually to the Division with the annual report for the site.

Response: J-2 Contracting Company commits to providing the Division with the monitor well reading depths and elevations for groundwater and monitor well location map annually with the annual report.

#### 6.4.7 Exhibit G – Water Information

16. The Applicant states 8th Street is immediately adjacent to the west side of the permit boundary. The Division believes the Applicant intended to state 8th Street is located immediately adjacent to the south side of the permit boundary. Please review Exhibit G and revise the exhibit accordingly.

Response: The Exhibit G narrative has been modified to state the correct location of 8<sup>th</sup> Street.

#### 6.4.9 Exhibit I – Soils Information

17. The Applicant provided a brief version of the NRCS soil survey for the proposed mine site. Please submit a full version of the NRCS soil survey with soil profile depths for the proposed mine site for Division review.

## Response: The Exhibit I has been modified to include the full version of the NRCS soil survey with soil profile depths.

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#### 6.4.12 Exhibit L – Reclamation Costs

18. The Division reviewed the phased reclamation cost estimate provided in the permit application. The structure of the estimate is acceptable to the Division. The Division recommends setting the initial required financial warranty amount for the site at the Phase 1a and 1 warranty amount.

During the pre-operational inspection conducted on March 30, 2023, the consultant J&T Consulting, Inc. stated a revised reclamation cost estimate would be submitted to the Division soon. The Division will determine the required financial warranty for the site based on the revised cost estimate when available.

### Response: The Exhibit L already shows the Phase 1a, Phase 1, Phase 2a, and Phase 2 bond calculations that were discussed at the inspection.

#### 6.4.13 Exhibit M – Other Permits and Licenses

19. Please commit to providing copies of all required and approved permits and licenses to the Division when available.

## Response: J-2 Contracting Company commits to providing the Division with copies of all required and approved permits and licenses when available.

#### 6.4.16 Exhibit P – Municipalities within Two Miles

20. The Applicant listed the City of Greeley as the only municipality within two-miles of the proposed mine site. Please verify there are no other municipalities located within 2 miles of the proposed mine site.

Response: We have reviewed the limits of all municipalities within the area using the Weld County GIS mapping and the next closest municipality besides the City of Greeley is the Town of Kersey and the Town of Kersey limits are 1.62 miles away. This is due to the Town of Kersey annexing Weld County Road 49. We have updated Exhibit P to include the Town of Kersey.

#### 6.4.18 Exhibit R – Proof of Filing with County Clerk and Recorder

21. Please provide an affidavit or receipt indicating the date on which the revised application information required to address this adequacy letter was placed with the Weld County Clerk and Recorder for public review, pursuant to Subparagraph 1.6.2(1)(c).

### Response: We have included a stamped received copy of the transmittal provided to the Weld County Clerk to the Board.

#### 6.5 Geotechnical Stability Exhibit

22. The Division reviewed and will accept the stability analysis demonstrating the require offsets from the structures within 200 feet of the affected area of the proposed mine site if the Applicant is unable to obtain notarized structure agreements with all structure owners.

#### Response: Acknowledged.



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Please let us know if you have any questions or concerns with the responses and attachments we have provided.

Sincerely,

Joh

J.C. York, P.E.

**J&T Consulting, Inc.** 

Attachments:

- 1. History Colorado Information
- 2. Colorado Parks and Wildlife Information
- 3. Proof of Notice Letter from Sunset Industrial, LLC
- 4. List of Mineral Owners and Lessees to be Noticed from Zeren Land Services
- 5. E-mails to Peter Hays for Certified Mail Receipts and Return Receipts
- 6. Letters for Public Notice to Kerr McGee and Extraction
- 7. Updated Exhibit D
- 8. Board of County Commissioners Resolution on Change of Zone
- 9. Updated Exhibit C Maps
- 10. Updated Exhibit E
- 11. Updated Exhibit G
- 12. Updated NRCS Soils Information
- 13. Updated Exhibit P
- 14. Proof of Filing with County Clerk to the Board Stamped Transmittal

#### JC York

From:	JC York
Sent:	Thursday, February 23, 2023 2:18 PM
То:	holly.mckee@state.co.us
Cc:	Chris Leone
Subject:	DRMS Sunset Industrial Pit, File No. M-2023-001
Attachments:	HC_82496_DRMS_Sunset Industrial Pit, File No. M-2023-001.pdf; Fairmeadow Gravel CR Tech Memo_ 10252022.pdf

Holly -

We received your comment letter back to the DRMS (first attachment in this e-mail) and I wanted to follow up and provide the cultural resource survey that SWCA conducted for us as I don't know if the DRMS included it in the information they provided to you as we submitted this with our application to the DRMS. SWCA concluded none of the areas were of any significance. Please let me know that you received the e-mail and give me a call if you have any questions.

Regards,

J.C.

J.C. York, P.E.

#### J&T Consulting, Inc.

305 Denver Avenue, Suite D Fort Lupton, CO 80621

Office: (303) 857-6222 Mobile: (970) 222-9530 FAX: (303) 857-6224

#### JC York

From:	Mckee-Huth - HC, Holly <holly.mckee@state.co.us></holly.mckee@state.co.us>
Sent:	Thursday, February 23, 2023 4:04 PM
То:	JC York
Cc:	Chris Leone; Holly Norton - HC
Subject:	Re: DRMS Sunset Industrial Pit, File No. M-2023-001

Hi JC,

We did not receive this with the Sunset Industrial Pit permit notification, but we appreciate you sending it our way. We will be sure to reach out to you if we have any questions.

Sincerely,

Holly McKee-Huth

#### **Holly McKee-Huth**

GIS Manager | Cultural Resource Information Specialist, Archaeology

Pronouns: she/her/hers

History Colorado | Office of Archaeology and Historic Preservation

303/866-4670 | holly.mckee@state.co.us

History Colorado Center |1200 Broadway | Denver, Colorado 80203 | HistoryColorado.org

Under the Colorado Open Records Act (CORA), all messages sent by or to me on this state-owned e-mail account may be subject to public disclosure.

We acknowledge that the land currently known as Colorado has been the traditional homelands of Indigenous peoples since time immemorial. We are grateful to work in partnership with the 48 sovereign nations who continue to call this land home. Together, we plan exhibits; collect, preserve, and interpret artifacts; do archaeological work; and create educational programs to share the history of Colorado.

On Thu, Feb 23, 2023 at 2:22 PM JC York <<u>icyork@j-tconsulting.com</u>> wrote:

Holly -

×

We received your comment letter back to the DRMS (first attachment in this e-mail) and I wanted to follow up and provide the cultural resource survey that SWCA conducted for us as I don't know if the DRMS included it in the information they provided to you as we submitted this with our application to the DRMS. SWCA concluded none of the areas were of any significance. Please let me know that you received the e-mail and give me a call if you have any questions.

#### Regards,

J.C.

J.C. York, P.E.

#### J&T Consulting, Inc.

305 Denver Avenue, Suite D

Fort Lupton, CO 80621

Office: (303) 857-6222

Mobile: (970) 222-9530

FAX: (303) 857-6224



April 3, 2023

J&T Consulting, Inc. 305 Denver Avenue, Suite D Fort Lupton, CO 80621

#### Re: Response to CPW's Comments on the Sunset Industrial Pit (M-2023-001)

Ecological Resource Consultants, Inc. (ERC) provides this response to Colorado Parks and Wildlife (CPW) comment letter dated February 7, 2023 (CPW letter-Attached) for the Sunset Industrial Pit project (Project Site), located in Weld County, Colorado. This response specifically addresses concerns/recommendation: 2. Bald Eagle Roosting Area. CPW provided this comment as part of the Colorado Division of Reclamation, Mining & Safety review for M-2023-001 application. The CPW letter states that "Within the proposed mining project, there is overlap with Bald Eagle roosting habitat, a high priority habitat identified by CPW."

ERC met with Jackson Davis, CPW District Wildlife Manager Area 4/Greeley North on March 16, 2023 near the Project Site to address the CPW letter concerns related to the potential eagle roost site (roost site) and project, evaluate site specific characteristics and discuss potential discrepancies on the available CPW mapping.

It was determined that two different CPW mapping layers are available that relate to the potential roost site. First, ERC originally used the most recent downloadable CPW Species Activity Mapping (SAM) that was determined to depict the extents of a Bald Eagle Roost Site (FID 72) with a **1/4-mile protective buffer** (**Refer to Figure 1**). This 1/4-mile protective buffer ends to the southwest outside of the Project Site by approximately 25 feet. ERC was then provided CPW mapping of the same area that assumed to depict a **1/2-mile protective buffer** around the potential roost site which does overlap a portion of the Project Site (**Refer to Figure 2**).

Per CPW Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors (2020), no permitted, authorized or human encroachment activities should occur within 1/4-mile radius of an active night and communal roost sites from November 15 through March 15 if there is no direct line of site and 1/2-mile if there is a direct line of site between the roost and the activity. It should also be noted in areas determined "Highly Developed Area", these protective buffers are reduced to **1/8-mile** and **1/4-mile** respectively. The roost site and the Project Site would be considered a "Highly Developed Area" per CPW definitions as there are 10 or more daily occupied facilities within 1/4 -mile of the roost site. The active status of the roost site has not been confirmed herein.

- 1. Per CPW recommendations the Project Site is considered to be within a "Highly Developed Area" with no direct line of sight, therefore the 1/8-mile recommended protective buffer should be considered for the Project Site. The 1/8-mile protective buffer does not extend onto the Project Site.
- 2. Based on site specific conditions and CPW site meeting on March 16, 2023, a 1/4-mile recommended protective buffer could be maintained without any restricts to proposed activities within the Project Site.



Figure 1. CWP Eagle Roost Site ¼-mile Recommended Protective Buffer (shaded area). Project Site depicted by red outline.



Figure 2. CWP Eagle Roost Site 1/2-mile Recommended Protective Buffer (shaded area). Project Site depicted by red outline.







Figure 3. Project Site Analysis In Relation to Potential Eagle Roost Site.

Green Circle = assumed general potential Eagle Roost Site. Blue Circle = is the ¼-mile CPW recommended protective buffer Yellow Circle = is the recommended ½-mile CPW recommended protective buffer Red numbers = areas considered as part of Highly Developed Area Orange arrow = general obstructed line of sight from Project Site to potential eagle roost site Red outline = Project Site

In conclusion, based on this evaluation and coordination with the CPW, the Project Site and proposed activities should not be restricted for protection of the potential eagle roost site. The Project Site will maintain a ¼-mile protective buffer which given site specific characteristics is larger than the CPW recommended guidelines.

For additional consideration, gravel operations are not anticipated to occur within the 1/2-mile protective buffer after sunset and before sunrise. during the most critical periods of roosting, between November 15 through March 15, therefore proving additional protections to the potential roost site.

CPW concurred with the findings herein in an email response dated March 29, 2023 as attached.

Ecological Resource Consultants, Inc.

David J. Blauch, Vice President, Senior Ecologist

#### [EXTERNAL]

Hi Dave,

I apologize for the delay, as I was on leave.

This looks good to me. I would still recommend that monitoring should take place for all raptors, including the bald eagle roost site, should activity take place during the roosting time frame and/or nesting time frame.

Thanks,

Jackson

On Tue, Mar 28, 2023 at 6:22 PM Dave Blauch <<u>Dave@erccolorado.net</u>> wrote:

Good day Jackson, I just wanted to follow up on this previous email and see if we can get a response comment or if you would like to discus in more detail.

Thanks

dave

From: Dave Blauch Sent: Tuesday, March 21, 2023 4:14 PM To: Davis - DNR, Jackson <<u>jackson.davis@state.co.us</u>> Cc: JC York <<u>jcyork@j-tconsulting.com</u>> Subject: RE: FW: Sunset Industrial Pit - DRMS M-2023-001

Jackson, thanks for taking the time last week to meet on site and review the project.

Attached I compiled a summary of our discussions.

If you can confirm (email is fine at this point) that CPW is in agreement with this letter.

If I have missed something just let me know and we can work to revise.

Thank you-

Dave Blauch



COLORADO

#### Parks and Wildlife

Department of Natural Resources Fort Collins Service Center- Area 4 317 W. Prospect Rd Fort Collins, CO 80525 P 970.472.4300

February 7, 2023

Mr. Peter Hayes Minerals Specialist Colorado Division of Reclamation, Mining & Safety <u>peter.hays@state.co.us</u>

RE: CPW's Comments on the Sunset Industrial Pit (M-2023-001)

Dear Mr. Hayes:

Thank you for the opportunity for Colorado Parks and Wildlife (CPW) to comment on the proposed Sunset Industrial Pit project. It is our understanding that the proposed mining operating will take place at or near Section 3, Township 5N, Range 65W in Weld County, just east of the Greeley city limits. It is also our understanding that the property will be mined in 2 pits and later reclaimed as a water storage reservoir, with a total finished footprint of approximately 54 surface acres.

The mission of CPW is to perpetuate the wildlife resources of the state, to provide a quality state parks system, and to provide enjoyable and sustainable outdoor recreation opportunities that educate and inspire current and future generations to serve as active stewards of Colorado's natural resources. CPW has a statutory responsibility to manage all wildlife species in Colorado, and to promote a variety of recreational opportunities throughout Colorado. The protection of wildlife habitats, wildlife, and access to hunting recreation are of extreme importance to CPW. CPW recommends that all proposed projects be assessed to avoid, minimize, or mitigate impacts to sensitive wildlife habitats and species. That includes species of concern, big game winter concentration areas, breeding and nesting habitats for sensitive ground-nesting birds, and nests of raptors sensitive to development to prevent the loss of habitat or fragmentation of habitat. One way we achieve this goal is by responding to referral comment requests, as is the case for this project.



Once again, thank you for the opportunity to comment on this project and as such CPW has the following concerns/ recommendations for the project:

#### 1. Wildlife Conflict and Collisions with Adjacent Properties

Please refer to CPW's Living with Wildlife-Canada Goose<sup>1</sup>

Weld County and the Cache la Poudre River are important migration corridors for migratory birds, such as Canada Geese, Mallards, Sandhill Cranes, Bald Eagles, and a variety of other species. During the spring and fall migration, large flocks of waterfowl migrate throughout Weld County, frequently stopping at open fields and reservoirs to rest for the physically demanding conditions and distances they fly.

It is common behavior for migrating avian species to stop at productive agriculture fields and open bodies of water, where predators are relatively scarce, and crucial habitat is available for resting. Many migratory birds, especially Ducks and Geese, require open bodies of water during all stages of their life cycles.

By creating open bodies of water, waterfowl will be attracted year-round to this site to rest, rear young, and forage on available vegetation within the body of water and immediate surrounding area. While providing resting and feeding grounds to wildlife is important for conservation, placing an open water pit directly next to a municipal airport may increase collisions with landing aircraft, placing pilots and the airport in danger.

CPW recommends that landscape modifications and/or exclusions and barriers be put in place to discourage Canada Geese and other waterfowl species from selecting this site. Where possible, CPW recommends creating barriers on the shorelines (such as introducing hedges or fencing) to create a physical and visual barrier between the proposed water reservoir and the shoreline. By dissuading waterfowl from utilizing the banks of the water storage facility, waterfowl may avoid selecting the site, thereby decreasing the likelihood of collisions.

Keeping in mind that creating natural vegetation takes time, it is advisable that temporary fencing be erected. If fencing is created, the fencing should be at least two (2) feet high and with openings no larger than three by three (3x3) inches.

No singular method to discourage waterfowl will prevent habitat selection by determined wildlife. Utilizing multiple methods, such as hazing with noisemakers, scare tape, and/or trained dogs in conjunction with landscape modifications may discourage waterfowl and other migratory birds from selecting open water, but these efforts must be done consistently and preferably each time Canada Geese and other species arrive on site.

2. Bald Eagle Roosting Area

Please refer to CPW's Recommended Buffer Zones and Seasonal Restrictions.<sup>2</sup>

Within the proposed mining project, there is overlap with Bald Eagle roosting habitat, a high priority habitat identified by CPW.

Due to the unique development landscape, and due to the high density of structures within the immediate roost site buffer, CPW recommends that no permitted or authorized human activities occur between November 15<sup>th</sup> to March 15<sup>th</sup> within one quarter mile, if line of site is present; or within 660 feet if the winter roost has no line of site.

CPW also highly recommends pre-construction surveys to assess for other raptor species and nesting activity before construction begins.

If the timing or scope of this project changes and/or if you have any questions, please contact District Wildlife Manager Jackson Davis at 970-342-0461 or jackson.davis@comcast.net

Sincerely,

Anthe

Jason Surface Area Wildlife Manager Area 4- Fort Collins

Cc: Jackson Davis, Mike Sherman, Angelique Curtis

<sup>(1)</sup><u>https://cpw.state.co.us/learn/Pages/LivingwithWildlifeGoose.aspx</u>

<sup>(2)</sup><u>https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/Raptor-Buffer-</u> <u>Guidelines.pdf</u> Sunset Industrial, LLC 105 Coronado Ct, Unit A-101 Fort Collins, CO 80525

Mr. Peter Hays Environmental Protection Specialist Department of Natural Resources Division of Reclamation, Mining and Safety 1313 Sherman Street Room 215 Denver, CO 80203

Re: File M2023-001 - Sunset Industrial Pit – DRMS Construction Material Regular (112) Operation Reclamation Permit – Proof of Notice

Mr. Hays:

Please accept this letter as evidence that the applicant/miner, J-2 Contracting Company, hand delivered the public notice for the Sunset Industrial Pit to our office on January 30, 2023.

Thank you,

Mr. Chris Leone Sunset Industrial, LLC

State of Colorado )ss County of Weld

The foregoing instrument was acknowledged before me this  $\underline{/7}$  day of

and

Notary Public rch 10, 2027 My Commission Expires 9

WENDY SCHUM Notary Public State of Colorado Notary ID # 20154009801 My Commission Expires 03-10-2027



P.O. Box 336337 Greeley, CO 80633 Phone (970) 351-0733 Fax (970) 351-0867

LIST OF MINERAL OWNERS AND MINERAL LESSEES for NOTIFICATION

(Sunset Industrial LLC Property)

#### Subject Property:

Township 5 North, Range 65 West of the 6<sup>th</sup> P.M., Weld County, CO Section 03: E½NW¼, NE¼SW¼, E½SW¼NW¼, and the E½NW¼SW¼; AND That part of the SE¼SW¼ and the E½SW¼SW¼ lying North of the Eight Street Road; EXCEPT that portion described in Deed recorded September 24, 1982 at Reception No. 1904628

Zeren Land Services, an oil and gas title research company, states that to the best of its knowledge the following is a true and accurate list of the names and addresses of the mineral owners and mineral leasehold owners entitled to notice under the Surface Development Notification Act, Colorado Revised Statutes §24-65.5-101, et seq. in the Subject Property based upon the records of the Weld County Assessor and Clerk Recorder as of December 6, 2022 at 7:45 a.m.:

#### Mineral Owners:

None (entitled to notice)

#### **Mineral Leasehold Owners:**

Extraction Oil and Gas LLC 370 17<sup>th</sup> Street, Suite 5300 Denver, CO 80202

Kerr-McGee Oil & Gas Onshore LP Attn: Land Manager/Wattenberg 1099 18<sup>th</sup> Street, Suite 1500 Denver, CO 80202

Dated this 13<sup>th</sup> day of December, 2022

ZEREN LAND SERVICES

By Cynthia A. E. Zeren, CFL Certified Professional Landman #4044

At the request of **J&T Consulting, Inc.** ("Client"), Zeren Land Services, an independent land consulting firm, has prepared the foregoing list of mineral estate owners entitled to notice under the Surface Development Notification Act, Colorado Revised Statutes §24-65.5-101, et seq.

Zeren Land Services, searched (i) the records of the Weld County Assessor relating to the Subject Property for persons identified therein as mineral estate owners, and (ii) the records of the Weld County Clerk and Recorder relating to the Subject Property for recorded requests for notification in the form specified in the Surface Development Notification Act. The results of these searches are set forth above in this List of Mineral Owners Entitled to Notice. At the date of the search, the records of the Assessor and the Clerk and Recorder were posted through December 6, 2022 at 7:45 A.M.

Zeren Land Services, agreed to prepare this listing for the Client only if the Client agreed that the liability of Zeren Land Services, would be strictly limited to the amount paid by the Client for such services. Zeren Land Services, makes no warranty, express, implied or statutory, in connection with the accuracy, completeness or sufficiency of such listing of mineral estate owners. In the event the listing proves to be inaccurate, incomplete, insufficient or otherwise defective in any way whatsoever or for any reason whatsoever, the liability of Zeren Land Services, shall never exceed the actual amount paid by Client to Zeren Land Services, for the listing.

In order to induce Zeren Land Services, to provide such services, Client further agreed to indemnify and hold Zeren Land Services, its managers, members and employees, harmless from and against all claims by all persons (including, but not limited to Client) of whatever kind or character arising out of the preparation and use of each such listing of mineral estate owners, to the extent that such claims exceed the actual amount paid to Client by Zeren Land Services, for such listing. Client specifically intends that both the foregoing limitation on liability and foregoing indemnification shall be binding and effective without regard to the cause of the claim, inaccuracy or defect, including, but not limited to, breach of representation, warranty or duty, any theory of tort or of breach of contract, or the fault or negligence of any party (including Zeren Land Services) of any kind or character (regardless of whether the fault or negligence is sole, joint, concurrent, simple or gross). Client's use of this listing evidences Client's acceptance of, and agreement with, this limitation on liability and the indemnification.

ZEREN LAND SERVICES

Cynthia A. E. Zeren, as President

Date: December 13, 2022

#### JC York

From:	JC York				
Sent:	Monday, January 30, 2023 4:41 PM				
То:	Hays - DNR, Peter				
Cc:	Chris Leone				
Subject:	M 2023-001 Sunset Industrial Pit - Public Notice Sent to Adjacent Surface Owners, Mineral Owners,				
	Easement/Utility Owners				
Attachments:	Property Owner Notice Letter Century Link.pdf; Property Owner Notice Letter City of Greeley Public				
	Works.pdf; Property Owner Notice Letter City of Greeley Realestate Management.pdf; Property				
	Owner Notice Letter City of Greeley Water and Sewer Department.pdf; Property Owner Notice Letter				
	DCP Midstream.pdf; Property Owner Notice Letter Extraction.pdf; Property Owner Notice Letter GAP				
	LLC.pdf; Property Owner Notice Letter Glendenning.pdf; Property Owner Notice Letter Greeley Weld				
	Airport Authority.pdf; Property Owner Notice Letter K&S Properties.pdf; Property Owner Notice				
	Letter Kerr McGee.pdf; Property Owner Notice Letter Noble Energy.pdf; Property Owner Notice Letter				
	North Weld.pdf; Property Owner Notice Letter Ogilvy Land and Irrigating Co.pdf; Property Owner				
	Notice Letter Winters Hoffner.pdf; Property Owner Notice Letter Xcel Energy.pdf; Property Owner				
	Notice Letter Atmos Energy.pdf; Property Owner Notice Letter Bliss Investment.pdf; Property Owner				
	Notice Letter Bliss Produce.pdf				

#### Peter –

Attached are the letters with the publication that will be sent out certified mail. We are also sending out the structure owner agreements with the public notice for those that have structures within 200 feet of the permit boundary. I will attach the signed agreements by J-2 Contracting Co. in a separate e-mail.

Regards,

J.C.

J.C. York, P.E.

#### J&T Consulting, Inc.

305 Denver Avenue, Suite D Fort Lupton, CO 80621

Office: (303) 857-6222 Mobile: (970) 222-9530 FAX: (303) 857-6224

#### **JC York**

From:	JC York	
Sent:	Tuesday, March 7, 2023 3:07 PM	
То:	Hays - DNR, Peter	
Cc:	Chris Leone	
Subject:	M 2023-001 Sunset Industrial Pit - Structure Agreements signed to date, Publisher's Affidavit for	
	Greeley Tribune, and Certified Mail Return Receipts	
Attachments:	Greeley Water and Sewer Structure Agreement-Signed.pdf; Sunset Industrial Structure Agreement-	
	Signed.pdf; DCP Structure Agreement-Signed.pdf; Greeley Tribune Affadavit of Publication 3.3.23.pdf;	
	Structure and Notice Cert Mail Receipts 1.31.23.pdf; Return Receipts.pdf; Ogilvy.pdf	
Attachments:	Greeley Water and Sewer Structure Agreement-Signed.pdf; Sunset Industrial Structure Agreement- Signed.pdf; DCP Structure Agreement-Signed.pdf; Greeley Tribune Affadavit of Publication 3.3.23.pd	

Peter –

Attached are the structure owner agreements that have been signed to date. I have attached the publisher's affidavit for the Greeley Tribune. I am also providing the certified mail receipts for the public notice and structure agreements and return receipts we have received back so far.

I will also be placing these materials with Weld County and will provide a stamped receipt from them once we drop it off to them.

Regards,

J.C.

J.C. York, P.E.

#### J&T Consulting, Inc.

305 Denver Avenue, Suite D Fort Lupton, CO 80621

Office: (303) 857-6222 Mobile: (970) 222-9530 FAX: (303) 857-6224



Heavy Civil Construction | Public Utilities | Parks | Streetscapes | Drainage Improvements | Aggregate Sales | Contract Crushing

January 30, 2023

Extraction Oil & Gas LLC 370 17<sup>th</sup> St., Ste. 5300 Denver, CO 80211

Re: Proof of Notice for a Division of Reclamation, Mining, and Safety (DRMS) 112(c) Reclamation Operation Permit Application for the Sunset Industrial Pit

To Whom It May Concern,

The DRMS requires that applicants submit proof of notice for 112(c) Reclamation Operation permit applications to all owners of record of surface and mineral rights of the affected land and the owners of record of all land surface within 200 feet of the boundary of the affected land, including all easement holders located on the affected land and within 200 feet of the boundary of the affected land.

Attached is a copy of the notice published in the Greeley Tribune that J-2 Contracting Company has applied for a 112(c) Reclamation Operation permit for the Sunset Industrial Pit. Please accept this notice as having been notified that J-2 Contracting Company has applied for this permit.

Copies of the entire permit application are on file and available to be viewed at the Weld County Clerk to the Board, 1150 O Street, Greeley, CO 80632, or at the DRMS office, 1313 Sherman Street, Room 215, Denver, CO 80203. Comments must be in writing and must be received by the DRMS within 20 days from the last publication of the public notice.

Sincerely,

Chris Leone J-2 Contracting Company

<u>January 30, 2023</u> Date

#### PUBLIC NOTICE

J-2 Contracting Company; 105 Coronado Court, Unit A-101, Fort Collins, CO 80525, 970-392-0694, has filed an application for a Regular (112) Construction Materials Operation Reclamation Permit with the Colorado Mined Land Reclamation Board under provisions of the Colorado Land Reclamation Act for the Extraction of Construction Materials. The proposed mine is known as the Sunset Industrial Pit, and is located at or near Section 3, Township 5 North, Range 65 West of the 6th Prime Meridian.

The proposed date of commencement is August, 2023, and the proposed date of completion is December, 2035. The proposed future use of the land is developed water resources. Additional information and tentative decision date may be obtained from the Division of Reclamation, Mining, and Safety, 1313 Sherman Street, Room 215, Denver, Colorado 80203, (303) 866-3567, or at the Weld County Clerk to the Board's office; 1150 O Street, Greeley, CO 80631, or the above-named applicant.

Comments must be in writing and must be received by the Division of Reclamation, Mining, and Safety by 4:00 p.m. on March 20th, 2023.

Please note that under the provisions of C.R.S. 34-32.5-101 et seq. Comments related to noise, truck traffic, hours of operation, visual impacts, effects on property values and other social or economic concerns are issues not subject to this Office's jurisdiction. These subjects, and similar ones, are typically addressed by your local governments, rather than the Division of Reclamation, Mining, and Safety or the Mined Land Reclamation Board.

Greeley Tribune Publication Dates: February 6th, 13th, 20th, and 27th, 2023.



Heavy Civil Construction | Public Utilities | Parks | Streetscapes | Drainage Improvements | Aggregate Sales | Contract Crushing

January 30, 2023

Kerr-McGee Oil & Gas Onshore LP Attention: Land Manager / Wattenberg 1099 18<sup>th</sup> Street, Suite 1500 Denver, CO 80202

Re: Proof of Notice for a Division of Reclamation, Mining, and Safety (DRMS) 112(c) Reclamation Operation Permit Application for the Sunset Industrial Pit

To Whom It May Concern,

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Chris Leone J-2 Contracting Company

January 30, 2023 Date

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Greeley Tribune Publication Dates: February 6th, 13th, 20th, and 27th, 2023.

#### **Mining Plan**

#### Mining Limits

J-2 Contracting proposes to mine in the land located in the E 1/2 of NW 1/4, the NE 1/4 of the SW 1/4, the E 1/2 of the SW 1/4 of the NW 1/4, and the E 1/2 of the NW 1/4 of the SW 1/4 of Section 3, Township 5 North, Range 65 West of the 6<sup>th</sup> Principal Meridian, County of Weld, State of Colorado and that part of the SE 1/4 of the SW 1/4 and the E 1/2 of the SW 1/4 of the SW 1/4 of Section 3, Township 5 North, Range 65 West of the 6<sup>th</sup> Principal Meridian, County of Weld, State of Colorado and that part of the SE 1/4 of the SW 1/4 and the E 1/2 of the SW 1/4 of the SW 1/4 of Section 3, Township 5 North, Range 65 West of the 6<sup>th</sup> Principal Meridian, County of Weld, State of Colorado lying North of the Eighth Street Road except that portion described in deed recorded September 24, 1982, at reception no. 1904628, Weld County, Colorado.

The proposed mining site is located adjacent to the City of Greeley city limits on the north, east, and south property lines, as well as being adjacent to 8<sup>th</sup> Street on the south property line. The Cache La Poudre River is approximately 700 feet south of the site on the south side of the permit boundary. 8<sup>th</sup> Street is immediately adjacent to the south side of the permit boundary. Access to the site will be located at the southwest corner of the permit boundary off of 8<sup>th</sup> Street. The dominant land use surrounding the property is agricultural and industrial.

An aggregate processing plant and recycle crushing area will be located in Phase 1 along the eastern boundary of Phase 1 including stockpiles of pit run and processed aggregates. Overburden/topsoil will be temporarily stored in this area prior to being used for reclamation. Overburden/topsoil will also be temporarily stored in the east side of Phase 2 prior to being used for reclamation, as well as stockpiles of pit run and processed aggregates. A future concrete and asphalt batch plant area will be located within the Phase 2 mining area as shown on the Mining Plan Maps. Additionally, these areas will contain portable equipment, storage bins, and silos as necessary to support the plant operations.

Concrete truck washout and excess concrete product dumping will be included in the future Phase 2 area to ensure that waste materials are recycled and kept from entering the stormwater flows on the site.

The concrete truck washout area will be a 30-foot by 20-foot three cell concrete structure. Concrete trucks will wash the residual product from their mixing drums and chutes into the first cell of the structure. The first cell spills into the second cell, which spills into the third cell. This allows the aggregate and suspended fines to settle into the cells over time. The water and settled material in the three cells are then removed as required and recycled into the concrete batch plant. Generally, the cells would be cleaned on a weekly schedule.

The excess product dumping area will be approximately 50 feet by 100 feet and have an exterior berm to limit the migration of stormwater flows to and from the surrounding areas. Excess product that is deposited in this area will be allowed to cure for approximately 90 days until it becomes inert. It will then be crushed and recycled.

All local, State, and Federal rules and regulations will be followed for the storage and handling of any fuel, asphalt, cement, flyash, and admixtures required for the batching facilities.



The permit boundary will encompass approximately 85.17 acres which will all be affected acreage, and approximately 72.10 acres being mined. The remaining area will consist of access roads and disturbed land. The following table depicts the different affected acreage:

Affected Acreage	Mining Plan Area (acres)
Mined Area	72.10
Access Roads	0.70
Disturbed Land	12.37
TOTAL	85.17

Various setbacks from adjacent roads, adjacent structures, and oil and gas infrastructure will be maintained as mining occurs. All setbacks specified in the surface use agreements with the oil/gas companies will be followed. The final executed agreements are expected to be obtained in the near future and will be forwarded to the Division when they are available. A minimum 200foot setback from any existing oil/gas facility will be maintained until that time. See Exhibit C, Mining Plan Map, and the Slope Stability Report for the mining limit configuration and information on setbacks and their locations. The mineral deed (attached) also requires that no surface facilities are to be located on this property. The deed states "This deed is subject to "No Surface Occupancy" and it is agreed and understood that Grantee, its successors or assigns shall not be allowed access to the surface, nor shall Grantee conduct any operations or locate any facilities on the surface of the subject lands. Grantee shall be entitled to all other mineral rights associated with oil and gas development, including the ability to participate in and receive rovalty payments from the drilling of directional or horizontal wellbores." The abandoned wells would be cutoff after mining has reached the bedrock surface or the reclaimed slope surface where a new cap and any additional concrete for the existing plug would be needed. McCarty Engineering, LLC has provided this service for J-2 Contracting and at other mining permit locations for other operators. They are licensed and bonded to obtain approvals from the COGCC to do these types of re-plug services on abandoned oil and gas wells.

#### Products

Sand and gravel will be the primary product produced from the Sunset Industrial Pit. The principal intended use for the sand and gravel is for road base and construction aggregates.

Subsurface drilling and testing have verified that the Sunset Industrial Pit property contains a significant commercial deposit of sand and gravel. The depth of interbedded sandy clays and clayey to silty sands at the surface range from 0 to 14 feet. The thickness of the aggregate material ranges from 40 to 107 feet where bedrock contact occurs.

#### Mining Methods

The deposit will be dry mined and slurry walls will be constructed around the perimeter of the mining area for Phases 1 and 2. The intent is to mine the upper portion of the phases within 3 to 4 feet of the anticipated high groundwater prior to installation of the slurry walls. Mining will not expose groundwater prior to the slurry wall being constructed around each phase. Design specifications for the slurry wall and quality control procedures used during construction will ensure that the reclaimed reservoir meets State Engineer's Office (SEO) performance standards. Dewatering trenches will be excavated around the perimeter of each mining area prior to mining operations commencing. The depth of the ditches will vary as the mining progresses deeper into the alluvium in order to maintain the groundwater level below the active



mining bottom surface, and therefore minimize the exposed groundwater surface area. The dewatering ditches will flow to a collection pond, from which the water will be pumped and discharged into recharge areas where overflow will reach a culvert that crosses 8<sup>th</sup> Street into the Ogilvy Ditch and ultimately reach the Cache La Poudre River.

The equipment and facilities may include, but are not limited to the following:

#### Processing Equipment

Screens, wash plant, crusher, conveyors, stackers, and other miscellaneous processing equipment.

#### Earth Moving Equipment

Dozers, loaders, scrapers, excavators, and compactors will be used for mining and earth moving operations.

#### Miscellaneous Equipment

Dewatering pumps, electrical trailer, generator trailer, small portable generators and watering trucks will be used as needed.

As mining progresses, topsoil and overburden will be stripped to expose the aggregate product below. All soil and overburden material will be used on-site for reclamation; so long-term stockpiling of these materials is not anticipated. Overburden stockpiles will be located within the proposed mining area. The stockpiles will be placed parallel to the floodplain to mitigate impacts to the floodplain.

Mining of the aggregate will progress down to the underlying bedrock. Since reclamation will occur concurrently with mining, it is not anticipated that overburden material will be stockpiled long-term prior to use in production of road base. During mining the mining face for Phases 1 and 2 will have a 3H:1V slope to bedrock or the bottom of the future reclaimed reservoir. The processed aggregate material will be temporarily stockpiled near the portable processing plant.

Recommendations for monitoring of slope stability, including, conducting a visual inspection of the excavated slopes on a weekly basis for the duration of mining, conducting a visual inspection after a major precipitation event that has saturated the ground using the same procedures, contacting qualified personnel to evaluate and recommend remediation work to stabilize the area in the event a visual inspection detects signs of potential slope failure, and if no visible signs of slope failure are detected during mining, reducing visual inspections to once every six months after mining completion, or after every major precipitation event.

All local, State, and Federal rules and regulations will be followed for the storage and handling of any fuel for the facilities.

#### Topsoil Handling Plan

As stated previously the topsoil will be stripped to expose the aggregate product underlying the topsoil. The topsoil will be stripped using scrapers and stockpiled in the topsoil stockpile as depicted in Exhibit C. The volume of topsoil for all the mining phases is approximately 115,000 cubic yards. The depth of the topsoil is approximately twelve inches over the majority of the mining area. The topsoil will be stripped and stockpiled during each phase of mining where topsoil will only be removed for Phase 1 and Phase 2 as they are going to be mined. The height of the topsoil stockpile will be approximately 15 feet.



#### Mine Phasing

J-2 Contracting anticipates mining and reclaiming the Sunset Industrial Pit in 4 phases, progressing through the phases starting with Phase 1a, Phase 1, Phase 2a, and then Phase 2 as shown on the Mining Plan Map. The overall time required to complete the mining and reclamation is estimated to be 12 years 10.5 months based on an average rate of 650,000 tons per year. The initial production is expected to be 300,00 tons per year with the maximum production expected to be 1,000,000 tons per year. However, it is possible that due to demand fluctuations, mining could progress slower than anticipated and additional time may be required for mining and reclamation of the site.

The operator is proposing to mine Phase 1a first. Phase 1a is 64.22 acres and the estimated time for mining Phase 1a is approximately 2 years and 11 months.

After completion of Phase 1a, and prior to the mining Phase 1, a slurry wall will be installed around the perimeter of Phase 1 prior to exposing groundwater. Phase 1 is 64.22 acres. The estimated time for mining Phase 1 is approximately 7 years and 2 months.

The operator is proposing to mine Phase 2a third as the area is currently being permitted as an RV storage site so this area will not be mined until after Phase 1. The estimated timing for mining Phase 2a is approximately 1 year and 7.5 months.

After completion of Phase 2a and prior to the mining Phase 2 a slurry wall will be installed around the perimeter of Phase 2 prior to exposing groundwater. Phase 2 is 20.95 acres. The estimated time for mining Phase 2 is approximately 1 year and 2 months.

The mining will progress in each phase beginning at the outer edge of the phase where material will be moved toward the interior of the phase such that the mining slope can be established. The mining slope will be established for the entire perimeter of the phase in 3 to 6 feet intervals.

#### Dewatering

Dewatering trenches will be placed along the perimeter of each mining area in Phases 1 and 2. The dewatering trench around the perimeter of the phase being mined will be placed at the toe of the mining slope. As the phase is mined deeper the dewatering trench will be lowered and moved laterally along the mining slope toward the center of that phase. Slurry walls are anticipated to be installed around the perimeter of Phases 1 and 2 prior to exposing groundwater and mining will continue to commence in those phases and it is expected minimal dewatering will be required after the slurry walls are installed due to the slurry walls cutting off groundwater infiltration into the pit. J-2 Contracting Company will have an approved substitute water supply plan and well permit prior to exposing groundwater. The substitute supply plan will be updated annually to account for water that is consumed due to exposing groundwater by the mining operation.

#### <u>Explosives</u>

Explosives will not be used during mining.



#### RESOLUTION

#### RE: GRANT CHANGE OF ZONE, COZ22-0012, FROM THE A (AGRICULTURAL) AND I-3 (HEAVY INDUSTRIAL) ZONE DISTRICTS TO THE I-3 (HEAVY INDUSTRIAL) ZONE DISTRICT – SUNSET INDUSTRIAL, LLC

WHEREAS, the Board of County Commissioners of Weld County, Colorado, pursuant to Colorado statute and the Weld County Home Rule Charter, is vested with the authority of administering the affairs of Weld County, Colorado, and

WHEREAS, a public hearing was held on the 8th day of March, 2023, at 10:00 a.m., in the Chambers of the Board for the purpose of hearing the application of Sunset Industrial, LLC, 105 Coronado Court, Unit A-101, Fort Collins, Colorado 80525, requesting a Change of Zone, COZ22-0012, from the A (Agricultural) and I-3 (Heavy Industrial) Zone Districts to the I-3 (Heavy Industrial) Zone District for a parcel of land located on the following described real estate, to-wit:

Part of the W1/2 of Section 3, Township 5 North, Range 65 West of the 6th P.M., Weld County, Colorado

**WHEREAS,** the applicant was represented by J. C. York, J & T Consulting, Inc., 305 Denver Avenue, Suite D, Fort Lupton, Colorado 80621, and

WHEREAS, Section 23-2-40 of the Weld County Code provides standards for review of such a Change of Zone, and

WHEREAS, the Board of County Commissioners heard all the testimony and statements of those present, studied the request of the applicant and the recommendation of the Weld County Planning Commission and, having been fully informed, finds that this request shall be approved for the following reasons:

- 1. The applicant has complied with all the application requirements listed in Section 23-2-50 of the Weld County Code.
- 2. The applicant has demonstrated that the request is in conformance with Section 23-2-40.B of the Weld County Code as follows:
  - A. Section 23-2-40.B.1 The proposal is consistent with Chapter 22 of the Weld County Code.
    - 1) Section 22-2-30 Land Use Goals and Objectives.
      - a. Section 22-2-30.B states: *"Locate urban development in urban areas."* The North Weld County Water District (NWCWD) currently serves the subject property with public water. Should future development of the site require sanitary sewer, service could be made available from the City of Greeley and would require annexation, according to the November 22, 2022, referral. Urban use of this property is acceptable because it is located in an urban area.

4000400 Demon 1 of 10	CC:PL(TP/MN/Ko) CA(KM)	
<b>4889183                                  </b>	APPL.	2023-0614
Carly Koppes, Clerk and Recorder, Weld County , CO	03/31/23	PL2860
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CHANGE OF ZONE (COZ22-0012) – SUNSET INDUSTRIAL, LLC PAGE 2

- b. Section 22-2-30.C states: "Harmonize development with surrounding land uses." The adjacent lands to the west also have split zoning of A (Agricultural) and I-3 (Heavy Industrial) and are being utilized in farming operations. Further west is the Arc Industrial Business Park Subdivision, zoned I-3 (Heavy Industrial), and lands to the north and east have been annexed into the City of Greeley and are associated with the Greeley-Weld County Airport Authority operations. Lands located south of East 8th Street are zoned I-3 (Heavy Industrial) and utilized as a residence with lands surrounding a five (5)-acre parcel, annexed into the City of Greeley and utilized by the Bliss Produce Company. Industrial use of this property is in harmony with the majority of the surrounding land uses.
- c. Section 22-2-40.A states: "Support compatible economic development opportunities." The site is located within a Weld County Opportunity Zone on the Comprehensive Plan Map and is in an industrial area, thus encouraging the agglomeration of synergistic businesses.
- Β. Section 23-2-40.B.2 - The uses which will be allowed on the subject property by granting the Change Of Zone will be compatible with the surrounding land uses. Surrounding land is being used commercially. Notice was sent to 112 surrounding properties and no responses were received. The City of Greeley referral, dated November 22, 2022, contained only advisory comments for future development and no concerns with the present request. Per the referral, the subject site is located within the City of Greeley's Long Range Expected Growth Area (LREGA) and if annexed into the City of Greeley, any development would be required to follow the Municipal Code criteria. The Greeley Land Use Guidance Map (2017) designates the area as the Northeast Industrial Area for future industrial development land uses. The City of Evans expressed no concerns in the November 8, 2022, referral as it is outside the City of Evans Future Land Use Map area, and the Town of Kersey expressed no concerns in their referral, dated November 8, 2022. The Town of Garden City did not respond to the referral, and the City of Greeley Fire Department also expressed no concerns in their referral, dated November 8, 2022.

Future industrial uses will have to be approved through a Site Plan Review or Use by Special Review process. Site Plan Review and Use by Special Review applications are sent to referral agencies for comments. The Conditions of Approval and Development Standards applied to both this Change of Zone and any future Site Plan Reviews will adequately address and mitigate potential impacts. Due to the proximity of other industrial operations in the vicinity, a Change of Zone to I-3 (Heavy Industrial) is compatible with the surrounding land uses.

4889183 Pages: 2 of 10 03/29/2023 10:15 AM R Fee:\$0.00 Carly Koppes, Clerk and Recorder, Weld County , CO

CHANGE OF ZONE (COZ22-0012) – SUNSET INDUSTRIAL, LLC PAGE 3

- С. Section 23-2-40.B.3 – Adequate water and sewer service can be made available to the site to serve the uses permitted within the proposed zone district. The existing residence is currently served with domestic water from the NWCWD, via account #2184003 and an On-site Wastewater Treatment System (OWTS). The existing OWTS, which is not currently permitted/documented through the Weld County Department of Public Health and Environment, will require an OWTS Evaluation prior to the issuance of the required permit/documentation. In the event the system is found to be inadequate, the system must be brought into compliance with current OWTS regulations, as expressed by the Department of Public Health and Environment in the November 20, 2022, referral response. The City of Greeley in their November 22, 2022, referral stated if in the future, water and sanitary sewer services are requested to serve the property, annexation into the City of Greeley will be required prior to the City of Greeley providing those utility services, as the City of Greeley does not currently provide utility services to the subject property. The NWCWD did not respond to the referral request. Section 24-1-40 of the Weld County Code states "Urban-scale commercial and industrial developments require public or private sewer systems (On-site Wastewater Treatment Systems)."
- D. Section 23-2-40.B.4 Street or highway facilities providing access to the property are adequate in size to meet the requirements of the proposed zone districts.
  - 1) Section 23-3-330 of the Weld County Code states: "Properties zoned I-3 should be located near transportation infrastructure such as highways, railroads, or airports." East 8th Street is designated on the 2011 Greeley Transportation Plan as a minor arterial and a collector road on the Weld County Functional Classification Map (2020). The Weld County Development Review referral. dated November 15, 2022, indicated, per Section 23-2-30, A.4 of the Weld County Code, paved roadways are considered adequate in functional classification, width and structural capacity to meet the traffic requirements of the Change of Zone. The City of Greeley Real Estate Management Department commented on a parcel acquired for right-of-way that is adjacent to the property in review here. The City of Greeley is currently working with a surveyor to obtain the necessary legal descriptions and recording the documents to create future right-of-way and not a separate legal parcel.
- E. Section 23-2-40.B.5 In those instances where the following characteristics are applicable to the rezoning request, the applicant has demonstrated compliance with the applicable standards:
  - Section 23-2-40.B.5.a If the proposed Change of Zone is located within any Overlay District identified by maps officially adopted by the County, that the applicant has demonstrated compliance with

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the County regulations concerning Overlay Districts. Compliance may be demonstrated in a previous public hearing or in the hearing concerning the rezoning application. The site is located within the A-P (Airport) Overlay District. Development of the site will be required to comply with applicable requirements in Chapter 23, Article V, Division 1, of the Weld County Code. The Greeley-Weld County Airport Authority did not respond to the request for comment. Future development applications will be sent to the airport for review. The site is also located in the Floodplain Management Overlay District. Development of the site will be required to comply with applicable requirements in Chapter 23, Article XI of the Weld County Code. The site is not located within the following overlay districts officially adopted by the County: geologic, historic, or Multiple Separate Storm Sewer System (MS4).

- 2) Section 23-2-40.B.5.b – The proposed rezoning will not permit the use of any area known to contain a commercial mineral deposit in a manner which would interfere with the present or future extraction of such deposit by an extractor to any greater extent than under the present zoning of the property. The property contains a significant and sizeable sand and gravel resource. Sand and gravel are present to a depth ranging from 35 to 112 feet throughout the parcel. The parcel can be considered to contain a sand and gravel deposit; and the property owner will be pursuing a Division of Reclamation, Mining, and Safety (DRMS) 112 Construction Materials Permit with the application having been submitted to the DRMS in December of 2022. A Weld County Use by Special Review Permit will be pursued once the DRMS has approved the 112 Construction Materials Permit application. The land that is being proposed as an RV storage area will also be included in the DRMS Permit application as a future phase for mining, where potential batch plants and stockpiling would occur.
- 3) Section 23-2-40.B.5.c - If soil conditions on the site are such that they present moderate or severe limitations to the construction of structures or facilities proposed for the site, such limitations can be overcome and that the limitations will be addressed by the applicant and/or the applicant's successors or assigns prior to the development of the property. Subsurface conditions are varied but consist of gravelly sands to sandy gravels with localized layers of sandy clay. Claystone to sandstone bedrock was encountered at depths ranging from 40 feet to 112 feet below ground surface. The NRCS Report submitted with the application also considered soils. The lower terrace within the floodplain soils that are poorly drained. have a low shrink-swell potential and the substratum consists of recent alluvium and gravelly substratum, which are frequently flooded. Soils primarily located on drainageways on uplands, and floodplains on intermittent streams on uplands, have a low

shrink-swell potential and are rarely flooded. The upper terrace soils are identified as excessively drained, with a low shrink-swell and consist of gravelly alluvium. The soils do not have moderate or severe limitations for construction and permanent structures are not planned for the site. If a permanent structure is constructed on the site in the future, an engineering design will be done for the structure to ensure that its foundation is appropriate for the soils found where it is constructed.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of County Commissioners of Weld County, Colorado, that the application of Sunset Industrial, LLC, for a Change of Zone, COZ22-0012, from the A (Agricultural) and I-3 (Heavy Industrial) Zone Districts to the I-3 (Heavy Industrial) Zone District on the above referenced parcel of land be, and hereby is, granted subject to the following conditions:

- 1. Prior to recording the plat:
  - A. All OWTS located on the property shall have appropriate permits/documentation from the Weld County Department of Public Health and Environment. Any existing OWTS, which is not currently permitted/documented through the Weld County Department of Public Health and Environment, will require an OWTS Evaluation prior to the issuance of the required permit/documentation. In the event the system is found to be inadequate, the system must be brought into compliance with current OWTS regulations.
  - B. The applicant shall either submit a copy of an agreement with the property's mineral owner/operators stipulating that the oil and gas activities have been adequately incorporated into the design of the site or show evidence that an adequate attempt has been made to mitigate the concerns of the mineral owner/operators. The plat shall be amended to include any possible future drilling sites and/or setbacks.
  - C. The applicant shall acknowledge the requirements of the Colorado Division of Water Resources, as stated in the referral response, dated November 14, 2022. Evidence of such shall be submitted, in writing, to the Weld County Department of Planning Services.
  - D. All vehicles located on the property must be operational with current license plates or be screened from all adjacent properties and public rights-of-way or be removed from the property. All other items considered to be part of a non-commercial junkyard must also be removed from the property or screened from adjacent properties and public rights-of-way.
  - E. The applicant shall provide to the Weld County Department of Planning Services a copy of the Access Permit issued by the City of Greeley, which grants access to East 8th Street, or written evidence that the applicant has complied with the requirements of the City of Greeley.

- F. The applicant shall provide to the Weld County Department of Planning Services a copy of the recorded documents associated with the conversion of a legal parcel into future right-if-way for East 8th Street.
- G. The applicant shall receive approval for resubdivision to vacate all road rights-of-way shown on the Map of Union Colony Lands and contained within the property boundary to the Department of Planning Services, per Section 24-9-10 of the Weld County Code. The accepted plat shall be submitted for recording.
- H. The plat shall be amended to delineate the following:
  - 1) All pages of the plat shall be labeled COZ22-0012.
  - 2) The plat shall adhere to Sections 23-2-50.C and .D of the Weld County Code.
  - 3) All recorded easements shall be shown and dimensioned on the Change of Zone plat.
  - 4) All approved accesses shall be delineated on the plat.
  - 5) This portion of East 8th Street is under the jurisdiction of the City of Greeley. Please contact the municipality to verify the right-of-way. Show and label the right-of-way. Show the approved access(es) on the site plan and label with the approved Access Permit number, if applicable.
  - 6) The applicant shall show the approved access point(s) on the plat and label with the approved City of Greeley Access Permit number, if applicable.
  - 7) The applicant shall show the floodplain and floodway (if applicable) boundaries on the map. Label the floodplain boundaries with the FEMA Flood Zone and FEMA Map Panel Number or appropriate study.
- I. The following notes shall be delineated on the Change of Zone plat:
  - The Change of Zone allows for I-3 (Heavy Industrial) uses, which shall comply with the requirements for I-3 (Heavy Industrial) Zone District as set forth in Chapter 23, Article III, Division 4 of the Weld County Code.
  - 2) The operation shall comply with all applicable rules and regulations of the state and federal agencies and the Weld County Code.

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- Any future structures or uses onsite must obtain approval through a Site Plan Review or Use by Special Review.
- 4) Any future structures or uses onsite must obtain the appropriate Zoning and Building Permits.
- 5) The property owner or operator shall be responsible for controlling noxious weeds on the site, pursuant to Chapter 15, Articles I and II, of the Weld County Code.
- 6) Access on the site shall be maintained to mitigate any impacts to the public road, including damages and/or off-site tracking.
- 7) The historical flow patterns and runoff amounts will be maintained on the site.
- 8) Water service may be obtained from the North Weld County Water District.
- 9) The parcel is currently not served by a municipal sanitary sewer system. Sewage disposal may be by an On-site Wastewater Treatment System (OWTS) designed in accordance with the regulations of the Colorado Department of Public Health and Environment, Water Quality Control Division, and the Weld County Code in effect at the time of construction, repair, replacement, or modification of the system.
- 10) Activity or use on the surface of the ground over any part of the OWTS must be restricted to that which shall allow the system to function as designed and which shall not contribute to compaction of the soil or to structural loading detrimental to the structural integrity or capability of the component to function as designed.
- 11) A Flood Hazard Development Permit is required for all construction or development occurring in the floodplain or floodway, as delineated on Federal Emergency Management Agency (FEMA) FIRM Community Panel Map #08123C-1542F and 1541F, dated March 23, 2022 (Cache la Poudre River Floodplain). Any development shall comply with all applicable Weld County requirements, Colorado Water Conservation Board requirements as described in Rules and Regulations for Regulatory Floodplains in Colorado, and FEMA regulations and requirements as described in 44 CFR parts 59, 60, and 65. The FEMA definition of development is any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations, or storage of equipment and materials.

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- 12) FEMA's floodplain boundaries may be updated at any time by FEMA. Prior to the start of any development activities, the owner should contact Weld County to determine if the floodplain boundaries have been modified.
- 13) Building Permits shall be required for any new construction or set up manufactured structure, per Section 29-3-10 of the Weld County Code. A Building Permit application must be completed and submitted. Buildings and structures shall conform to the requirements of the various codes adopted at the time of permit application. Currently, the following have been adopted by Weld County: 2018 International Building Codes, 2018 International Energy Code, 2020 National Electrical Code, and Chapter 29 of the Weld County Code. A plan review shall be approved, and a permit must be issued prior to the start of construction.
- 14) Building Permits issued on the proposed lots will be required to adhere to the fee structure of the County-Wide Road Impact Fee, the County Facility Fee, and Drainage Impact Fee Programs.
- 15) Necessary personnel from the Weld County Departments of Planning Services, Public Works, and Public Health and Environment shall be granted access onto the property at any reasonable time in order to ensure the activities carried out on the property comply with the Conditions of Approval and Development Standards stated herein and all applicable Weld County regulations.
- RIGHT TO EXTRACT MINERAL RESOURCES STATEMENT: 16) Weld County has some of the most abundant mineral resources. including, but not limited to, sand and gravel, oil, natural gas, and coal. Under Title 34 of the Colorado Revised Statutes, minerals are vital resources because (a) the state's commercial mineral deposits are essential to the state's economy; (b) the populous counties of the state face a critical shortage of such deposits; and (c) such deposits should be extracted according to a rational plan, calculated to avoid waste of such deposits and cause the least practicable disruption of the ecology and quality of life of the citizens of the populous counties of the state. Mineral resource locations are widespread throughout the County and people moving into these areas must recognize the various impacts associated with this development. Oftentimes, mineral resource sites are fixed to their geographical and geophysical locations. Moreover, these resources are protected property rights and mineral owners should be afforded the opportunity to extract the mineral resource.

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- 17) The Weld County Right to Farm Statement, as it appears in Section 22-2-30.A.4.a of the Weld County Code, shall be placed on the map and recognized at all times.
- 2. Upon completion of Condition of Approval #1 above, the applicant shall submit one (1) electronic copy (.pdf) of the plat for preliminary approval to the Weld County Department of Planning Services. The plat shall be prepared in accordance with the requirements of Section 23-2-50.D of the Weld County Code.
- 3. Upon approval of the plat, Condition of Approval #2 above, the applicant shall submit to the Department of Planning Services a Mylar plat along with all other documentation required as Conditions of Approval. The Mylar plat shall be recorded in the office of the Weld County Clerk and Recorder by Department of Planning Services. The Mylar plat and additional requirements shall be submitted within 120 days from the date of the Board of County Commissioners Resolution. The applicant shall be responsible for paying the recording fee.
- 4. Any approved amendments to the Official Zoning Map shall be effective immediately upon approval by the Board of County Commissioners unless otherwise specified by the approving Resolution of the Board of County Commissioners. However, no Building Permit shall be issued, and no use shall commence on the property until the plat is recorded and a land use permit perfected.
- 5. If a plat has not been recorded within 120 days of the date of the approval of the Change of Zone (COZ), or within a date specified by the Board of County Commissioners, the Board may require the landowner to appear before it and present evidence substantiating that the COZ has not been abandoned and that the applicant possesses the willingness and ability to record the plat. The Board of County Commissioners may extend the date for recording the plat. If the Board determines that conditions supporting the original approval of the COZ cannot be met, the Board may, after a public hearing, revoke the COZ.
- 6. In accordance with Appendix 5-J of the Weld County Code, should the plat not be recorded within the specified timeline from the date of the Board of County Commissioners Resolution, a \$50.00 recording continuance fee shall be added for each additional three (3) month period.

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CHANGE OF ZONE (COZ22-0012) – SUNSET INDUSTRIAL, LLC PAGE 10

The above and foregoing Resolution was, on motion duly made and seconded, adopted by the following vote on the 8th day of March, A.D., 2023.

	BOARD OF COUNTY COMMISSIONERS WELD COUNTY, COLORADO
ATTEST: Cesther C. Llesik	Mike Freen
Weld County Clerk to the Board	Mike Freeman, Chair
BY: Manin N Uning	Perry J. Buck, Pro-Tem
Deputy Clerk to the Board	Scott K. James
APPROVED AS TO FORM 1861	Kevin D. Ross
County Attorney	
Date of signature: <u>03/22/23</u>	Lori Saine

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PRO MAP ID A C	PERTY OWNERS		J&T Consulting, Inc.	305 Denver Avenue - Suite D Fort Lupton, CO 80621 Ph: 303-857-6222 Fax: 303-857-6224 www.j-tconsulting.com
	LEGEND	PROPERTY LINE	Sunset Industrial Pit	Exhibit C1 - Pre-Mining Plan 1
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MAP ID A B C D	NAME/ADDRESS DIXIE HOFFNER AND JERRY WINT 49 WILLOWCROFT DR LITTLETON, CO 80123-7908 GREELEY-WELD COUNTY AIRPORT PO BOX 727 GREELEY, CO 80632-0727 GAP LLC C/O REALTEC GREELEY CRES 1711 61ST AVE STE 104 GREELEY, CO 80634-3046 CITY OF GREELEY C/O REAL ESTATE MANAGEMENT 1000 10TH ST GREELEY, CO 80631-3808 BLISS INVESTMENT, LLC		J&T Consulting,	305 Denver Avenue - Suite D Fort Lupton, CO 80621 Ph: 303-857-6222 Fax: 303-857-6224 www.j-tconsulting.com
F	PO BOX 816 GREELEY, CO 80632-0816 BLISS PRODUCE CO	96103000040		
G	PO BOX 816 GREELEY, CO 80632–0816 LINDA GLENDENNING	96103000039		N
н	1720 E 8TH ST GREELEY, CO 80631-9717 KS PROPERTIES, LLC PO BOX 865 GREELEY, CO 80632-0865	96103304001	t Industrial Pit	Exhibit C2 - Pre-Mining Plan 2
	<u>LEGEN</u>	D: PROPERTY LINE	Sunset	Exhibit C
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## **Reclamation Plan**

Lined water storage reservoirs will be the final reclaimed use for the Sunset Industrial Pit. Portions of mining areas will be reclaimed as "native" areas, which will be re-seeded with native vegetation. The majority of the mining areas will be reclaimed as water storage reservoirs. The remaining area within the proposed permit boundary will consist of reservoir shoreline, unimproved access roads around the reservoirs, and reclaimed vegetated land.

Final Land Use	Reclamation Plan Area (acres)
Reservoir Water Surface	53.60
Access Roads	9.70
Reclaimed Vegetated Land (Disturbed Land and Slopes above Reservoir Water Surface)	21.87
TOTAL	85.17

## Water Storage Reservoir

In general, the mining limits will be mined down to the shale/claystone/sandstone bedrock. The relatively impermeable bedrock will make the bottom of the reservoir. The reservoir will be separated from the surrounding alluvial aquifer by the slurry wall liner system as detailed in the cross-section shown on the Reclamation Plan Map. The slurry wall liner will be keyed into the bedrock material and extend upward through the height of the alluvium at the bench depicted in the mining plan. A clay liner will be installed above the slurry wall to complete the liner design/construction from the bench elevation to three feet above the reclaimed normal water surface elevation. Design specifications and quality control procedures used during the construction of the slurry wall liner and clay liner will ensure that the reservoir meets the State Engineer's Office (SEO) performance standards for permeability.

All reservoir slopes will be reclaimed to at least 3H:1V final grade Since reclamation will be concurrent with mining, most soil, overburden, and bedrock material excavated during mining will be used almost immediately. Scrapers and dozers and compactors will be used to shape the reclaimed slope material along the reservoir perimeters to achieve the final grade. Upon placing the backfill material, 95 percent compaction will be achieved to ensure adequate integrity of the clay liner above the bench, backfilled areas for haul/access roads and recharge pond areas that are not within the future water storage/reservoir footprint. Final reclamation by capping with topsoil and re-vegetating above the expected reservoir water level will follow grading operations as well as backfilled areas that will not be haul/access roads to minimize the amount of disturbance at any one time.

Recommendations for monitoring of slope stability, including, conducting a visual inspection of the excavated slopes on a weekly basis for the duration of mining, conducting a visual inspection after a major precipitation event that has saturated the ground using the same procedures, contacting qualified personnel to evaluate and recommend remediation work to stabilize the area in the event a visual inspection detects signs of potential slope failure, and if



no visible signs of slope failure are detected during mining, reducing visual inspections to once every six months after mining completion, or after every major precipitation event.

During reclamation activities, inlet and outlet facilities for the reservoir will be designed and installed once the operational criteria of the proposed reservoir have been identified by an end user.

### Reclamation Measures/Materials Handling

Backfilling will be done to provide stabilized shorelines around the reservoir and to minimize erosion. The backfill material will consist of gravel, overburden, clay, and topsoil. There will not be known toxic or hazardous materials in the backfill material. Additionally, it is not likely that acid forming or toxic materials will be encountered during mining. The mining will not leave high walls on the property. In addition, there will be no auger holes, excavations, or shafts left on the property.

Topsoil will be placed to finalize the grading such that seeding can occur. The topsoil will be placed at all disturbed areas and on the mining slope to an elevation matching the expected reservoir water level.

## <u>Topsoiling</u>

Approximately the top twelve inches of soil on the property is classified as topsoil. This layer includes the root zone of grasses and crops, which will be stripped and stockpiled separately. By using concurrent reclamation techniques, the topsoil is not expected to remain in stockpiles for more than one to five years. If the stockpile remains more than one growing season, it will be seeded with a fast-growing vegetative cover to prevent erosion. All topsoil will be retained on-site to reclaim the reservoir shoreline, and other areas disturbed by mining activities. Where required, topsoil will be replaced to a depth of twelve inches.

## **Revegetation**

As mining operations are completed, areas for reclamation will be graded and shaped for revegetation. Runoff or excess water from adjacent areas will not be allowed to flow over slopes being graded and seeded. If needed, berms or channels will be constructed to divert excess water and convey it in a safe and non-erosive manner.

For disturbed areas, the reclamation plan includes re-vegetating with appropriate seed mixes to minimize erosion and re-establish natural terrain. The seed mixture below was selected to be long lasting and regenerating, as recommended by the Greeley Natural Resource Conservation Service Office (see attached recommendation). The ground will be fine graded prior to seeding and mulch will be applied according to recommendations from the NRCS. Reservoir side slopes below the anticipated reservoir water level will not be seeded. The proposed seed mix is shown in the following table.



Final Reclamation Seed Mix	Application Rate * (#PLS/acre)	% in mix			
Sideoats Grama (El Reno variety)	2.7 #PLS/ac	30			
Western Wheatgrass (Arriba)	4.0 #PLS/ac	40			
Green Needlegrass (Lodorm)	2.0 #PLS/ac	20			
Blue Grama (Hachita)	0.45 #PLS/ac	5			
Switchgrass (Blackwell)	0.5 #PLS/ac	5			
Totals	9.65 #PLS/ac	100			
*Application rate is for drilling the seed. If seed is to be broadcast, the application rate will be doubled.					

The seed mix for final reclamation as described above does not require fertilizer as recommended by the local NRCS office in Greeley, Colorado. The seeded areas will be covered with dead crop litter from sorghum or milo crop forage, or with straw mulch at a rate of 4,000 pounds per acre.

If a significant invasion of noxious weeds occurs after seeding, the weeds will be mowed before they can go to seed. The areas will be mowed periodically for additional control as needed. Mechanical control will be used as a first priority. Chemical methods will only be used if no other alternative produces acceptable results.

For temporary earthen stockpiles, the reclamation plan includes re-vegetating with appropriate seed mixes to minimize erosion and establish more rapidly to stabilize the stockpiles. If a temporary earthen stockpile remains more than one growing season, it will be seeded with the seed mix below to prevent erosion. The grass mixture below was selected as recommended by the Greeley NRCS field office. The proposed seed mix is shown in the following table.

Temporary Stockpile Seed Mix	Application Rate * (#PLS/acre)	% in mix			
Slender wheatgrass	3.4 #PLS/ac	44.5			
Pubescent wheatgrass	4.2 #PLS/ac	55			
Sand dropseed	0.03 #PLS/ac	0.5			
Totals	7.63 #PLS/ac	100			
* Application rate is for drilling the seed. If seed is to be broadcast, the application rate will be doubled.					

The seed mix for temporary stockpiles as described above does not require fertilizer as recommended by the local NRCS office in Greeley, Colorado.

## <u>Water – General Requirement</u>

To minimize the effect on the prevailing hydrologic balance, J-2 Contracting Company will:

- a. Comply with all applicable Colorado water laws.
- b. Comply with all applicable Federal and State water quality laws and regulations.
- c. Comply with all Federal and State requirements for dredge and fill.

- d. Re-grade and backfill all sediment and siltation structures after mining is completed.
- e. Monitor groundwater levels adjacent to the site and mitigate any damage to adjacent wells that dewatering activities may have. (See Exhibit G)

## <u>Groundwater – Specific Requirements</u>

The operation will not affect groundwater quality on or off the site. The operation will comply with State groundwater quality standards.

The mining and reclamation may affect the groundwater table surrounding the mine site. The proposed mitigation efforts to minimize these impacts are recharge ponds or ditches in necessary areas to maintain groundwater levels during the mining, and a perimeter drain if needed to convey groundwater around the lined reservoir after the pit side liner is installed. A ground water model by McGrane Water Engineering, LLC has also been provided and the results indicate that water levels will be affected by +/-1 ft and there are not any wells within the predicted water level change so the overall impact of the slurry wall and clay liner will be insignificant. J-2 Contracting Company proposes that they monitor groundwater levels through both interior (within phases of the mining) and exterior (outside the slurry wall lining) monitoring wells that they have installed, or have access to before, during, and after the mining and reclamation is complete so that impacts to the groundwater table, from this mining operation, can be identified and addressed. It is the intent of J-2 Contracting Company to operate responsibly and to mitigate any damage to wells that is directly attributable to the mining and reclamation of this site.

## Reclamation – Approximate Time Table

The initial proposed rate of production for the mine is 300,000 tons per year and the maximum proposed rate of production for the mine is 1,000,000 tons per year. The total time frame to mine all phases assuming an average production rate of 650,000 tons per year is approximately 12 years and 10.5 months. The following table shows the approximate time frame to finish each phase of mining assuming an average production rate of 650,000 tons per year:

Mine Phase and Acreage	Time Frame to Complete and Reclaim Phase
Phase 1a – 64.22 acres	2 years and 11 months
Phase 1 – 64.22 acres	7 years and 2 months
Phase 2a – 20.95 acres	1 year and 7.5 months
Phase 2 – 20.95 acres	1 year and 2 months

The assumed annual production rate is 300,000 tons initially to 1,000,000 tons maximum for processed material leaving the mine each year. The size and area of reclamation varies for each phase but generally consists of the outside mining slope in phases 1a, 1, 2a, and 2 being reclaimed at a 3H:1V slope with the addition of clay, overburden, topsoil, and revegetation. For more information on sequencing and size of the reclamation activities refer to Exhibit L financial warranty calculations.



# EXHIBIT G

## Water Information

## Introduction

The Sunset Industrial Pit mining site is located in the E 1/2 of NW 1/4, the NE 1/4 of the SW 1/4, the E 1/2 of the SW 1/4 of the NW 1/4, and the E 1/2 of the NW 1/4 of the SW 1/4 of Section 3, Township 5 North, Range 65 West of the 6<sup>th</sup> Principal Meridian, County of Weld, State of Colorado and that part of the SE 1/4 of the SW 1/4 and the E 1/2 of the SW 1/4 of the SW 1/4 of Section 3. Township 5 North. Range 65 West of the 6<sup>th</sup> Principal Meridian. County of Weld, State of Colorado lying North of the Eighth Street Road except that portion described in deed recorded September 24, 1982, at reception no. 1904628, Weld County, Colorado. The proposed mining site is adjacent to the City of Greeley city limits, and adjacent to 8<sup>th</sup> Street. The Cache La Poudre River is approximately 700 feet south of the site on the south side of the permit boundary. 8<sup>th</sup> Street is immediately adjacent to the south side of the permit boundary. Access to the site will be located at the southwest corner of the permit boundary off of 8<sup>th</sup> Street. The operation will consist of sand and gravel production and will impact the Cache La Poudre River in the form of depletions due to evaporation and operational losses associated with mining. Mining of the Sunset Industrial Pit mining site will last for approximately 12 years. Once reclamation is complete reservoirs will be created with a total surface area of Reservoir 1 being 41.89 acres and Reservoir 2 11.71 acres.

The depth to groundwater ranges from 18 to 40 feet within the permit boundary (measured in MW-1 through MW-5, See the attached piezometer measurements table). The site will be mined down to a depth of 40 to 112 feet thus exposing groundwater to the atmosphere. This exposed groundwater, along with the operational losses associated with the extraction of sand and gravel deposits, will impact the Cache La Poudre alluvial aquifer. These impacts will cause river depletions that must be augmented. Groundwater will be exposed during the mining once the mining depths reach an elevation of approximately 4614.

To enable dry mining at the Sunset Industrial Pit mining site, there will be dewatering trenches around the various phases of the site. These dewatering trenches will change in length throughout mining. The maximum length will occur when one phase is completely mined, but before the reclamation has begun on any given phase. The maximum size of dewatering trench will be 3,000 feet long and 5 feet wide, or 0.33 acres of exposed surface area. This water will be collected in a recharge pond totaling 3.5 acres. The water will be pumped into dewatering ditch, which traverses the site, into a recharge pond and ultimately into the Cache La Poudre River.

As mining progresses, the dewatering trenches will shift as various cells are reclaimed. The gravel pit will have a slurry wall liner being constructed as mining commences in Phase 1.

## Water Requirements

Water use at the Sunset Industrial Pit mining site will include evaporation from exposed groundwater, dust control of haul roads and stockpiles, and water retained in material removed from the site.



## Evaporative Loss

Evaporative losses are dependent on the exposed water surface area, which may shift throughout the mining operation, but will not exceed the maximum. Exposed surface area at the Sunset Industrial Pit mining site will include groundwater exposed in the dewatering trenches and recharge pond. The maximum exposed surface area at the site during mining is estimated at 3.83 acres. J-2 Contracting Company plans to keep the site dewatered throughout the life of the mine.

Evaporation data was taken from NOAA Technical Report NWS 33, Evaporation Atlas for the 48 Contiguous United States. The annual gross evaporation was determined to be 45 inches for this location. Monthly evaporation percentages are established by guidelines set by the State Engineer's Office. To determine precipitation, data from the National Weather Service for Greeley, CO (UNC) (1967-2022) was used. The long-term average precipitation at the Sunset Industrial Pit mining site is estimated at 14.69 inches. Effective precipitation is calculated as 70% of the total precipitation. The net evaporation is the difference between gross annual evaporation and effective precipitation. The resulting net evaporation is 2.52 feet.

The maximum evaporative loss from the 3.83 acres is 9.67 ac-ft.

## **Operational Loss**

The average annual production from the Sunset Industrial Pit mining site is estimated at 650,000 tons. Using 4% moisture content, the total associated consumptive use for water retained in the material mined is 19.95 ac-ft.

Dust control use is 10,000 gal/day, 6 days/week, 4 weeks/month for 10 months of the year. This equates to 7.4 ac-ft.

Maximum annual operational loss is estimated to be 27.35 ac-ft for Phase 1.

## Consumptive Use

The maximum annual consumptive use (operational loss + evaporation loss) at this site during the mining operation is estimated to be 37.02 ac-ft for Phase 1.

## Replacement Water

The replacement of consumptive uses at the site is will be accounted for in a substitute water supply plan (SWSP) approved by the State Engineer. The SWSP will be obtained prior to any mining activities occurring that expose groundwater.

## Surrounding Water Rights

The attached Figure A-1 Well Permits in the Sunset Industrial Pit – Groundwater Evaluation by McGrane Engineering, LLC shows the permitted wells within 600 feet of the mining limits and permitted wells within the boundaries of the groundwater model/evaluation. The well information and locations were obtained from the Division of Water Resources online mapping well permit locator. This well and water rights information was cross checked with the State's CDSS.



Between the sources, all permitted and decreed wells are included. Table G-1 below is a corresponding list of wells as numbered in the Sunset Industrial Pit – Groundwater Evaluation by McGrane Engineering, LLC that is attached that are within 600 feet of the mining limits.

	Table G-1 - Permitted and Decreed Wells Within 600 Feet of Mining Limits							
Map ID	Permit No	Structure ID	Well Name	Owner	Address	City	State	Zip Code
1	224040-A		Domestic Well	Claus B. Sternberg	2000 East 12 <sup>th</sup> Ave. #37	Denver	со	80206
2	51423-MH		Monitor Well	City of Greeley	1000 10 <sup>th</sup> Street	Greeley	со	80631
3	105592		Domestic Well	Ed Glendenning	1720 East 8 <sup>th</sup> Street	Greeley	со	80631
4	12678-R	WDID 0105503	Anderson Well 3	KS Properties, LLC	P.O. Box 865	Greeley	со	80632
5	161382-A	WDID 0105500	Anderson Well 2	Kenneth Anderson	1490 East 8 <sup>th</sup> Street	Greeley	со	80631
6	276622-A	WDID 0105494		KS Properties, LLC	1490 East 8 <sup>th</sup> Street	Greeley	СО	80631
7	28964	W-5466	Davis No. 3 Well	Sunset Industrial, LLC	105 Coronado Ct, Unit A-101	Fort Collins	СО	80525

At the time of SWSP application/approval, a new gravel pit well permit will be applied for/obtained to include the evaporative and operational losses from the property. If the proposed use of groundwater at the Sunset Industrial Pit mining site results in material injury to surrounding wells, J-2 Contracting Company will ensure that all necessary measures are taken to address the issues.

## Water Quality

An NPDES permit will be obtained from the Water Quality Control Division at the Colorado Department of Public Health & Environment for the Sunset Industrial Pit mining site prior to discharging any groundwater that is dewatered from the site. This permit will be kept current and amended as necessary to ensure that any water discharged from the site will meet the permitted water quality standards.

## Impacts to Groundwater/Hydrologic Balance

J-2 Contracting Company will monitor the groundwater levels surrounding the site and provide groundwater recharge if necessary via perimeter ditches/ponds. J-2 Contracting Company will construct these ditches/ponds in the locations where direct discharge to an existing adjacent irrigation lateral is not available to ensure that stabilized groundwater levels are maintained. They will discharge dewatering flows into existing adjacent irrigation laterals where possible to limit the disturbance to the surrounding land. Slurry wall liners are proposed around the individual phases and will likely be installed either shortly after mining has begun or prior to mining starting.



To summarize the mitigation process, as each phase of mining/dewatering occurs, J-2 Contracting Company will monitor the groundwater levels adjacent to mine as each phase progresses. If groundwater levels drop to a level that prevents an adjacent well from performing acceptably, according to that well's owner, J-2 Contracting Company will either implement a groundwater recharge ditch/pond near the well in order to raise the groundwater level in the vicinity of the well and hence return it's operation to acceptable standards, or will negotiate an agreement with that well owner to replace the well or provide replacement water via other means until the mining and reclamation activities are concluded but it is not anticipated that any groundwater levels will drop since the slurry wall for each phase will be installed prior to exposing groundwater.

Groundwater wells that are not owned by J-2 Contracting Company or Sunset Industrial, LLC (Table G-1) are potentially located within 600 feet of the mining limits. The exact physical location of these wells will be determined during the SWSP and well permit application processes. If wells are found to be within 600 feet of the mining limits, J-2 Contracting Company will either obtain a well waiver from the owner of the well, or provide an agreement with the well owner that J-2 Contracting Company will mitigate and material damage to the well that is directly attributable to the mining and reclamation of the site.

All other wells within 600 feet of the mining limits are either owned by Sunset Industrial, LLC, or are monitoring wells therefore groundwater impacts to these wells do not need to be addressed.

See the attached Piezometer Location Map, and Piezometer Data Summary, which show the locations of monitoring wells around the perimeter of the site that J-2 Contracting Company/Sunset Industrial, LLC has either installed or has access to, and the groundwater level data that has been collected for each well.





National Cooperative Soil Survey

**Conservation Service** 



# Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3	Aquolls and Aquents, gravelly substratum	25.4	29.8%
10	Ellicott-Ellicott sandy-skeletal complex, 0 to 3 percent slopes, rarely flooded	18.4	21.6%
21	Dacono clay loam, 0 to 1 percent slopes	1.8	2.1%
68	Ustic Torriorthents, moderately steep	39.6	46.5%
Totals for Area of Interest	·	85.3	100.0%



# Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named, soils that are similar to the named components, and some minor components that differ in use and management from the major soils.

Most of the soils similar to the major components have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Some minor components, however, have properties and behavior characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities. Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

## **Report—Map Unit Description**

## Weld County, Colorado, Southern Part

## 3—Aquolls and Aquents, gravelly substratum

#### Map Unit Setting

National map unit symbol: 3627 Elevation: 4,000 to 7,200 feet

USDA

Mean annual precipitation: 12 to 18 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 80 to 155 days
Farmland classification: Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

#### Map Unit Composition

Aquolls and similar soils: 55 percent Aquents, gravelly substratum, and similar soils: 30 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Aquolls**

#### Setting

Landform: Swales, flood plains, streams Down-slope shape: Linear Across-slope shape: Linear Parent material: Recent alluvium

#### **Typical profile**

H1 - 0 to 48 inches: loam H2 - 48 to 60 inches: gravelly sand

#### **Properties and qualities**

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 6 to 48 inches
Frequency of flooding: FrequentNone
Frequency of ponding: None
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 6w Hydrologic Soil Group: D Ecological site: R067BY035CO - Salt Meadow Hydric soil rating: Yes

#### **Description of Aquents, Gravelly Substratum**

#### Setting

Landform: Stream terraces Down-slope shape: Linear Across-slope shape: Linear

JSDA

Parent material: Recent alluvium

#### **Typical profile**

*H1 - 0 to 48 inches:* variable *H2 - 48 to 60 inches:* very gravelly sand

#### **Properties and qualities**

Slope: 0 to 3 percent Depth to restrictive feature: More than 80 inches Drainage class: Poorly drained Runoff class: Very high Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (0.57 to 19.98 in/hr) Depth to water table: About 6 to 24 inches Frequency of flooding: FrequentNone Frequency of ponding: None Calcium carbonate, maximum content: 10 percent Maximum salinity: Nonsaline to moderately saline (0.0 to 8.0 mmhos/cm) Available water supply, 0 to 60 inches: Moderate (about 6.6 inches)

#### Interpretive groups

Land capability classification (irrigated): 6w Land capability classification (nonirrigated): 6w Hydrologic Soil Group: D Ecological site: R067BY035CO - Salt Meadow Hydric soil rating: Yes

#### **Minor Components**

#### Bankard

Percent of map unit: 10 percent Hydric soil rating: No

#### **Ustic torrifluvents**

Percent of map unit: 5 percent Hydric soil rating: No

# 10—Ellicott-Ellicott sandy-skeletal complex, 0 to 3 percent slopes, rarely flooded

#### Map Unit Setting

National map unit symbol: 2xsth Elevation: 3,950 to 5,960 feet Mean annual precipitation: 13 to 17 inches Mean annual air temperature: 50 to 54 degrees F Frost-free period: 135 to 165 days Farmland classification: Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

#### **Map Unit Composition**

Ellicott, rarely flooded, and similar soils: 65 percent

USDA

*Ellicott sandy-skeletal, rarely flooded, and similar soils:* 25 percent *Minor components:* 10 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

#### **Description of Ellicott, Rarely Flooded**

#### Setting

Landform: Drainageways, flood plains on intermittent streams Down-slope shape: Linear Across-slope shape: Concave Parent material: Noncalcareous, stratified sandy alluvium

#### **Typical profile**

A - 0 to 4 inches: sand AC - 4 to 13 inches: sand C1 - 13 to 30 inches: sand C2 - 30 to 44 inches: sand C3 - 44 to 80 inches: coarse sand

#### **Properties and qualities**

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (13.00 to 39.96 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.1 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.1 inches)

#### Interpretive groups

Land capability classification (irrigated): 4e Land capability classification (nonirrigated): 7s Hydrologic Soil Group: A Ecological site: R067BY031CO - Sandy Bottomland Hydric soil rating: No

#### Description of Ellicott Sandy-skeletal, Rarely Flooded

#### Setting

Landform: Channels on drainageways, channels on intermittent streams Down-slope shape: Linear Across-slope shape: Concave, linear Parent material: Noncalcareous, stratified sandy alluvium

#### **Typical profile**

A - 0 to 4 inches: very gravelly coarse sand AC - 4 to 13 inches: very gravelly sand C1 - 13 to 30 inches: very gravelly sand

JSDA

C2 - 30 to 44 inches: very gravelly sand C3 - 44 to 80 inches: very gravelly coarse sand

#### Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (13.00 to 39.96 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.1 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.2 inches)

#### Interpretive groups

Land capability classification (irrigated): 4s Land capability classification (nonirrigated): 8s Hydrologic Soil Group: A Ecological site: R067BY031CO - Sandy Bottomland Hydric soil rating: No

#### **Minor Components**

#### Haverson

Percent of map unit: 10 percent Landform: Terraces Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Linear Ecological site: R067BY036CO - Overflow Hydric soil rating: No

## 21—Dacono clay loam, 0 to 1 percent slopes

#### Map Unit Setting

National map unit symbol: 361y Elevation: 4,550 to 4,970 feet Mean annual precipitation: 14 to 18 inches Mean annual air temperature: 48 to 52 degrees F Frost-free period: 140 to 160 days Farmland classification: Prime farmland if irrigated

#### Map Unit Composition

Dacono and similar soils: 85 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

USDA

#### Description of Dacono

#### Setting

Landform: Terraces Down-slope shape: Linear Across-slope shape: Linear Parent material: Mixed alluvium

#### **Typical profile**

H1 - 0 to 12 inches: clay loam
H2 - 12 to 21 inches: clay loam
H3 - 21 to 27 inches: clay loam
H4 - 27 to 60 inches: very gravelly sand

#### **Properties and qualities**

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

#### Interpretive groups

Land capability classification (irrigated): 2s Land capability classification (nonirrigated): 3s Hydrologic Soil Group: C Ecological site: R067BY042CO - Clayey Plains Hydric soil rating: No

#### **Minor Components**

#### Heldt

*Percent of map unit:* 5 percent *Hydric soil rating:* No

#### Nunn

Percent of map unit: 5 percent Hydric soil rating: No

#### Altvan

Percent of map unit: 5 percent Hydric soil rating: No

USDA

## 68—Ustic Torriorthents, moderately steep

#### **Map Unit Setting**

National map unit symbol: 363I Elevation: 4,450 to 5,100 feet Mean annual precipitation: 10 to 16 inches Mean annual air temperature: 46 to 54 degrees F Frost-free period: 120 to 160 days Farmland classification: Not prime farmland

#### **Map Unit Composition**

Ustic torriorthents and similar soils: 85 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Ustic Torriorthents**

#### Setting

Landform: Breaks, escarpments Down-slope shape: Linear Across-slope shape: Linear Parent material: Gravelly alluvium

#### **Typical profile**

H1 - 0 to 10 inches: gravelly sand H2 - 10 to 60 inches: gravelly sand

#### **Properties and qualities**

Slope: 9 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 7s Hydrologic Soil Group: A Ecological site: R067BY063CO - Gravel Breaks Hydric soil rating: No

JSDA

#### Minor Components

#### Columbo

*Percent of map unit:* 10 percent *Hydric soil rating:* No

#### Eckley

Percent of map unit: 3 percent Hydric soil rating: No

#### Otero

Percent of map unit: 2 percent Hydric soil rating: No

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part Survey Area Data: Version 21, Sep 1, 2022



# **EXHIBIT P**

## **Municipalities within Two Miles**

City of Greeley Development Review 1100 10<sup>th</sup> Street – 4<sup>th</sup> Floor Greeley, Colorado 80631

Town of Kersey Physical Address 446 1<sup>st</sup> Street Kersey, Colorado 80644 Mailing Address P.O. Box 657 Kersey, Colorado 80644

