

Community & Economic
Development Department
www.adcogov.org



4430 South Adams County Parkway
1st Floor, Suite W2000
Brighton, CO 80601-8204
PHONE 720.523.6800
FAX 720.523.6998

Development Review Team Comments

Date: 9/8/2020

Project Number: EXG2020-00001

Project Name: Tucson South

BOARD OF COUNTY COMMISSIONERS

Eva J. Henry
DISTRICT 1

Charles "Chaz" Tedesco
DISTRICT 2

Emma Pinter
DISTRICT 3

Steve O'Dorisio
DISTRICT 4

Mary Hodge
DISTRICT 5

Commenting Division: Planner Review

Name of Reviewer: Greg Barnes

Date: 09/08/2020

Email: gjbarnes@adcogov.org

Resubmittal Required

PLN01: The application is for a Conditional Use Permit within the A-1 zone district with NRCO overlay to allow for extraction use. The site is heavily impacted by floodplain and floodway.

AI Response: Acknowledged

PLN02: My apologies if my comments are already addressed in your submittal. When over 900 pages of material is submitted, it becomes difficult for the public, agencies, and our staff to adequately review the information. Please consider being more concise and remove duplicate information from your resubmittal.

AI Response: Based on comments received for application RCU2019-0002 as well as our neighborhood outreach and conceptual review comments for the current application, Aggregate wanted to ensure the application contained comprehensive information and studies addressing all the comments. In order to make the application easier to review and find information, however, Aggregate took care to remove duplicate information, create a Table of Contents, create clear references to supplemental studies, and provide an executive summary and FAQ sheet. Please see the attached **Applications Materials 03 (A03)** for a revised executive summary that includes links to specific locations within the larger application document and supplemental materials for ease of accessing additional information.

PLN03: I would like to see a summarized description of process and timeline. You say that there will be no trucking, yet there are hauling roads. Clearly some hauling has to occur to construct the berms. What is the timing of berm installation? Timing of conveyor installation? Are there metrics that will be met to ensure the eight ear timeline?

AI Response: Please see **Supplemental Materials 21 (S21)** for a detailed description of the pre-mining process and timeline. This summary separates the pre-mining construction work from the mining operations in order to show the equipment, personnel, and timing for each phase. This timeline outlines the specific time periods to complete construction of the conveyor systems, slurry wall, berms, landscaping, and environmental monitoring systems studies. Berm construction will utilize on-site materials and will only require transportation of materials within each cell utilizing equipment shown on the summary via the referenced internal roads. Slurry wall installation will utilize bentonite that is delivered to the site in 1,000 – 2,000 lb bags via a flatbed delivery truck. No off-site hauling trucks will be needed for delivery of the bentonite materials, and only traffic related to construction vehicles incidental to the above pre-mining construction tasks will occur. Aggregate will agree to a condition of approval that these pre-mining construction tasks will be completed within 12 months of approval of this application.

Immediately upon completion of these tasks Aggregate will commence mining operations subject to an eight-year completion date. To ensure the eight-year timeline will be met, Aggregate will agree to a condition of approval requiring the project be complete, including reclamation, within eight years after completion of the conveyor installation, with no allowance

for extensions. Aggregate's reclamation bond, which was required as part of our DRMS permit, insures completion of the project including reclamation.

PLN04: What happens in 2028 if the work isn't done? What guarantees can be placed to ensure that promises are being kept?

AI Response: To provide clarity and certainty as to the length of the pre-mining construction activities, Aggregate has provided **Supplemental Materials 21 (S21)**. Aggregate will agree to a condition of approval requiring these activities be complete in 12 months of approval of this application and a condition of approval requiring the project be complete, including reclamation, within eight years after completion of the conveyor installation, with no allowance for extensions.

PLN05: Plans for reclamation don't show detail of fence or trail that are mentioned in your application. We will want to see these.

AI Response: Please see attached **Supplemental Materials 23 (S23)** which provides a narrative of the proposed fence, trail, and landscaping. It is Aggregate's understanding the County will approve final plans for flood-friendly fencing, and landscaping as part of the post-approval construction permitting process.

PLN06: After reclamation, how will landscaping be irrigated and maintained?

AI Response: After reclamation, the trail easement owner will assume responsibility for landscaping irrigation and maintenance. A variety of plants will be selected which, once established, should not require continued irrigation. Should permanent irrigation be desired by the easement holder, water can be supplied by way of wells, surface water or municipal water lines. It is important to note that Aggregate's landscaping plans specifically include the water conservation goals of the Colorado Water Plan and local water conservation plans. The City of Brighton Parks Department has provided a list of desired plant species from their Open Space Standards and Specifications document, which are in alignment with Aggregate's plans. Aggregate will continue to work with Adams County Open Space and the City of Brighton Parks Department to accommodate their desired vegetation and irrigation.

PLN07: Criterion #4 of the approval criteria for conditional use permits states that the conditional use is compatible with the surrounding area, harmonious with the character of the neighborhood, not detrimental to the immediate area, not detrimental to the future development of the area, and not detrimental to the health, safety, or welfare of the inhabitants of the area and the County. In making this determination, the Planning Commission and the Board of County Commissioners shall find, at a minimum, that the conditional use will not result in excessive traffic generation, noise, vibration, dust, glare, heat, smoke, fumes, gas, odors, or inappropriate hours of operation. Based on the surrounding area, presence of floodplain, and proximity to heavily populated areas into Brighton, there are concerns that this criterion will not be met.

AI Response: Aggregate appreciates the County's concerns that the use will meet this criterion, and believes it has made significant changes to this application to proactively address these concerns in a creative way. Specifically, not only has the South Parcel been eliminated from the DRMS permit and this application, but this valuable piece of property will be conveyed to either Brighton or Adams County to provide a benefit to all Adams County and Brighton residents as an open space that is an extension of Brighton Parks' long-term plans.

Additionally, Aggregate has worked with the County to identify floodplain-friendly farm-style fencing to be used both during and after the mining operation and reclamation, and is working on living screening options for Highway 7. The exact fence style will be determined in conjunction with the County, after this application is approved.

To mitigate impacts to the surrounding area of excessive traffic generation, Aggregate has eliminated the previously-proposed 400 daily truck trips to transport mined material to the processing facility, and will instead exclusively use a conveyor system. This conveyor system will also mitigate dust, noise, fumes, and odors associated with truck hauling and alleviate adverse impacts to the County roads and bridges, and the neighborhood's safety concerns associated with heavy truck traffic.

To further address compatibility concerns associated with dust, air quality monitoring has been taken to a new level in this application. Through the use of third party air modeling, Aggregate has identified critical locations for the placement of air monitoring equipment to maximum areas of impact based on dispersion modeling. Such monitors are especially well suited for evaluating fugitive particulate concentrations, and are widely used by agencies and industry alike for compliance impacts. Wind stations will be installed with the monitors and will report wind speed and direction, with monthly results provided to Adams County. In their comments, Tri-County Health recognized and applauded Aggregate for these improvements to the application.

Finally, Aggregate will agree to a condition of approval that limits its hours of operation to 7 am to 7 pm Monday through Saturday, closed Sundays and holidays, and a reduction of the total time period for mining and reclamation to eight years after completion of the conveyor installation.

PLN08: I would like to know more about conveyor. Will it generate noise? What will it look like? I believe that the application only provides detail on the road crossing.

AI Response: Aggregate anticipates utilizing a conveyor for this project with belt material that minimizes noise. Based on sound decibel measurements within close proximity to the proposed conveyor, noise impacts at all points along the conveyor route will be below noise standards applicable to the A1 zone. Since sound attenuates quickly with distance, any conveyor noise will likely blend into pre-existing background levels at the property lines.

It is also important to note any private property on which the conveyor will be placed, will be subject to comprehensive agreements assuring specific performance standards are met by Aggregate, to the satisfaction of the landowner.

Please see **Supplemental Materials 22 (S22)** for a rendering of the conveyor along with pictures of the actual conveyor that will be installed.

PLN09: When will conveyor easements be secured and finalized? What is the likelihood that the conveyor will need to be relocated?

AI Response: Easement negotiations for the two proposed conveyor routes are continuing. Aggregate will agree to a condition of approval that the conveyor location and easements be finalized, and the conveyor installation be complete no later than 12 months after approval of this application. The conveyor will not be relocated once installed.

PLN10: Is there any opportunities for displacing the floodplain to allow for berming along Highway 7? Can screening be achieved by breakaway fencing?

AI Response: Berming will only be located outside of the floodplain. Screening within the floodplain and floodway will be achieved using a combination of plants and fencing. Aggregate will provide landscaping plans for the County's review during the Floodplain Use Permit process. In the interim, please see the attached **Supplemental Materials 23 (S23)** for a more detailed explanation of the proposed landscaping.

Commenting Division: Development Engineering Review

Name of Reviewer: Matthew Emmens

Date: 09/04/2020

Email: memmens@adcogov.org

Resubmittal Required

Review complete with comments. See doc # 6097935. Re-submittal required.

Commenting Division: ROW Review

Name of Reviewer: Mark Alessi

Date: **Email:** 09/02/2020

Resubmittal Required

ROW1: Tucson Street is classified as a collector street per the 2012 Adams County Master Transportation Plan. As such it should have a half right-of-way width of 40 feet (80ft for full street). Submit legal description and exhibit of right of way dedication.

AI Response: The legal descriptions and exhibits for right of way dedications were submitted with the application on July 30, 2020. Please see **Supplemental Materials 20 (S20)**.

ROW2: The applicant has indicated on the site plan submitted that they will be dedicating additional right of way to bring Tucson Street up to collector width standards.

AI Response: Please see the dedication of additional right of way in **Supplemental Materials 20 (S20)**.

ROW3: Services of a licensed Professional Land Surveyor should be secured to create the plat.

AI Response: A licensed Professional Land Surveyor was used to create the plat. Please see the signed and stamped legal descriptions and exhibits in **Supplemental Materials 20 (S20)**.

ROW4: Submit legal description and exhibit of right of way dedication.

AI Response: Aggregate revised the ROW legal descriptions and exhibits to show easements and easement dimensions within the dedicated ROW, as requested. Signed and stamped versions will be provided after approval, prior to the ROW dedication. Please see **Supplemental Materials 20 (S20)**.

Commenting Division: Environmental Analyst Review

Name of Reviewer: Katie Keefe

Date: 08/28/2020

Email:

Complete

Recommended Conditions of Approval:

1. The applicant will install two (2) continuous, real-time Particulate Matter (PM) monitors along the southwest and northeast property line that are capable of providing real-time emissions data for PM-2.5, PM-10 and Total-PM to monitor fugitive dust during all project phases including site preparation and active mining.

AI Response: Acknowledged and Agreed.

2. The applicant shall report any documented exceedance of the 24-hour ambient air quality standard for particulate matter to the Adams County Environmental Program Manager within 8-hours of such occurrence. Concurrent APCD notification may be required.

AI Response: Acknowledged and Agreed.

3. The applicant shall co-locate wind gauges with data logging capabilities to track wind speed and direction with the PM monitors.

AI Response: Acknowledged and Agreed.

4. Records of wind speed and direction shall be included in the monthly air monitoring reports provided to Adams County Environmental Program Manager.

AI Response: Acknowledged and Agreed.

5. Mining and material moving operations shall cease when sustained wind speeds equal or exceed 25 mph or when wind gusts exceed 35 mph.

AI Response: Acknowledged and Agreed.

6. Records of high wind speed shutdowns shall be maintained and included in the monthly air monitoring report submitted to Adams County, as applicable.

AI Response: Acknowledged and Agreed.

7. The applicant shall provide Adams County notification of all complaints received pertaining to offsite impacts and resolution of such complaints as part of the monthly air monitoring report, as applicable.

AI Response: Acknowledged and Agreed.

Commenting Division: Environmental Analyst Review

Name of Reviewer: Katie Keefe

Date: 08/28/2020

Email:

8. The applicant will provide the County with a copy of the Annual Reclamation Report as submitted to the Division of Reclamation and Mining, and Safety.

AI Response: Acknowledged and Agreed.

9. If any construction is planned to occur between October 15th and July 31st, raptor and bald eagle surveys shall be conducted by a qualified biologist prior to disturbance. Survey reports shall be provided to both Adams County prior to commencement of mining operations.

AI Response: Acknowledged and Agreed.

10. If additional raptor nests are discovered or activity status changes, impacts to nest locations shall be minimized using the buffer zones and seasonal restrictions approved by CPW (2020).

AI Response: Acknowledged and Agreed.

11. A permanent, dedicated oil and gas well maintenance and work-over setback of not less than fifty (50) feet in width and 100 feet in length shall be established for each plugged and abandoned well within the project boundaries. There shall be public access for ingress and egress to the setback of not less than twenty feet.

AI Response: This requirement is not applicable as Aggregate will provide documentation from the well owner that all subsurface equipment has been removed and the well abandoned at a depth such that our mining operations will not impact the plugged and abandoned well.

12. The applicant shall obtain a separate inert fill permit prior to importing additional fill material if necessary to complete mined area reclamation.

AI Response: Acknowledged and Agreed.

Commenting Division: Environmental Analyst Review

Name of Reviewer: Katie Keefe

Date: 08/28/2020

Email:

Comment

ENV1. There are two plugged and abandoned oil and gas wells owned by Great Western Operating Company located within the proposed mining project limits. Well API 00106980 is located within the western portion of parcel 0157101300002 and well API 00107140 is located along the northwest edge of parcel 0157101100002.

AI Response: This requirement is not applicable as Aggregate will provide documentation from the well owner that all subsurface equipment has been removed and the well abandoned at a depth such that our mining operations will not impact the plugged and abandoned well.

ENV2. For site-specific development plans which contain plugged and abandoned wells, there shall be a dedicated well maintenance and workover setback for each well, the dimensions of which shall be not less than fifty feet in width and 100 feet in length. The plugged and abandoned well shall be located in the center of the setback. There shall be public access for ingress and egress to the setback of a width of not less than twenty feet.

AI Response: This requirement is not applicable as Aggregate will provide documentation from the well owner that all subsurface equipment has been removed and the well abandoned at a depth such that our mining operations will not impact the plugged and abandoned well.

ENV3. Meteorological station/wind gauge capable of logging both wind speed and direction shall be co-located with PM monitors.

AI Response: Acknowledged and Agreed.

ENV4. A requirement to provide to the County as part of the monthly air monitoring reports, associated wind data, records of high-speed wind shutdown periods, and information on the resolution of complaints pertaining to off-site impacts will be recommended as a condition of approval.

AI Response: Acknowledged and Agreed.

ENV5. AI should also consult with Adams County Open Space and Parks Department, local NRCS district office and consider consulting with Colorado Native Plant Society in regard to tree and plant selection and appropriate native grass seed mix for site restoration.

AI Response: AI is working with the City of Brighton Parks Department, Adams County Open Space, and a landscape architect to select plants for the trail easement. The native grass seed mix for site restoration was developed in coordination with a local reclamation seeding expert. AI will also consult with the local NRCS district office and the Colorado Native Plant Society for recommendations on appropriate grass, plant, and tree selections.

Commenting Division: Environmental Analyst Review

Name of Reviewer: Katie Keefe

Date: 08/28/2020

Email:

ENV6. The applicant has stated all backfill materials necessary for site reclamation will come from on-site mining activities. Please note that a separate inert fill permit must be obtained prior to importing additional fill materials that may be necessary to complete reclamation activities.

AI Response: Acknowledged and Agreed.

Commenting Division: Parks Review

Name of Reviewer: Aaron Clark

Date: 08/24/2020

Email: aclark@adcogov.org

Complete

PRK1: Parks is pleased that the parcel south of Highway 7 has been removed from consideration for mining in this case. Regarding the question of donating the parcel to the County, Parks is open to discussing this.

AI Response: AI has reached out to Adams County Open Space to schedule a meeting discussing the donation of the south parcel.

Commenting Division: Planner Review

Name of Reviewer: Greg Barnes

Date: 08/13/2020

Email: gjbarnes@adcogov.org External Agencies Selected

Aggregate Industries Tucson South Resource Case # EXG2020-00001

ENG1: Flood Insurance Rate Map – FIRM Panel # (08001C0327H & 08001C0326H), Federal Emergency Management Agency, March 5, 2007. According to the above reference, a portion of the project site is located within a special flood hazard delineated area; If construction activity occurs in this area of the project site, A floodplain use permit will be required.

AI Response: Acknowledged and Agreed.

ENG2: The applicant shall be responsible to ensure compliance with all Federal, State, and Local water quality construction requirements. The project site is not within the County's MS4 Stormwater Permit area; and Adams County Stormwater (SWQ) Permit will not be required. The installation of erosion and sediment control BMPs are expected.

AI Response: Acknowledged and Agreed.

ENG3: The Trip Generation Letter (TGL) submitted with the application has been reviewed. Although County Staff is in agreement with the methodology used in the TGL, it is hard to believe that there will only be 6 employees working on this site. Will there be visits by supervisors, inspectors, equipment repair crews, how often will water trucks be visiting the site? Please add more information about the site operations so that staff can determine if the trip generation is acceptable.

AI Response: Please see the attached Supplemental Materials 21 (S21) for additional details on pre-mining construction activities, including equipment and employees. As provided for in the TGL, there will be only six dedicated on-site employees once mining operations commence.

ENG4: The developer is responsible for the repair or replacement of any County infrastructure that is broken or damaged because of the operations.

AI Response: Acknowledged and Agreed.

ENG5: If the applicant is proposing to install over 3,000 square feet of impervious area on the project site, a drainage report and drainage plans in accordance to Chapter 9 of the Adams County Development Review Manual, are required to be completed by a registered professional engineer and submitted to Adams County for review and final approval.

AI Response: AI is not proposing to install over 3,000 square feet of impervious area on the project site. In fact, the site will remain entirely pervious except for movable blocks or timbers used to set feeders for belts.

ENG6: The submittal documents indicate that the site will be served by several conveyor belts. The locations of the conveyor belts are not clearly shown. Revise the plans to clearly indicate where the conveyor belts will be located and exactly where the below grade roadway crossings will be located.

AI Response: Please refer to **Application Materials 04 (A04)** for revised site plans with benchmarks showing the distance the conveyor will be located from the property line.

ENG7: As mentioned, the site is to be served by several conveyor belts that will take six (6) months to construct. Will there be any hauling of material before the conveyor belts become operational?

AI Response: There will be no off-site hauling of mined material to the processing plant at any time during the operation of the mine, even prior to conveyor installation. Please see **Supplemental Materials 21 (S21)** for a detailed description of the pre-mining construction and timeline, which addresses on-site transportation of overburden material for berm construction, delivery of bentonite for slurry wall construction via flatbed delivery trucks, and delivery of landscaping materials. Aggregate will agree to a condition of approval that mined materials will only be conveyed off-site for processing via the system of proposed conveyors.

ENG8: Prior to the commencement of any type of operations, including site preparations, clearing and grubbing, staging of equipment, etc. The applicant must submit for review and approval all construction documents (i.e. site grading plans, conveyor belt construction plans, erosion and sediment control plans, traffic impact study's, drainage reports, etc).

AI Response: Acknowledged and Agreed.

ENG9: All roadway accesses from E 168th Ave and Tucson St. into the development must be permitted by the County. Access permits will be reviewed and approved with the Engineering Review of the site construction documents (See Comment ENG8 above). The County would prefer to limit access to this development. Preferably the County would allow one access to be permitted off E 168th Ave (for both parcels) and two access points off Tucson St. (one on either side of the roadway and facing each other). However, the Fire District may require additional access points. If the District does require additional accesses to the properties, a letter or map, from the District, showing where the additional access should be located must be submitted to the County

AI Response: Acknowledged and Agreed.



**City of Brighton
Community Development**
500 South 4th Avenue
Brighton, CO 80601
303.655.2059 Office
www.brightonco.gov

August 21, 2020
Adams County Community and Economic
Development Department 4430 S. Adams
County Pkwy.
Suite W200A Brighton, CO 80601
Re: Aggregate Industries Mining

(Case No. EXG2020-00001) Mr. Barnes,

On behalf of the City of Brighton, I appreciate the opportunity to comment on the proposed conditional use permit for the Aggregate Industries Mining project. The comments below are based on the Case Number EXG2020-00001 and the referral attachments sent to the City of Brighton on August 13, 2020.

The City of Brighton would appreciate the opportunity to work with Adams County and Aggregate Industries on a way to mitigate any impacts of the proposed mining operation on the City's infrastructure and on the health, safety, and welfare of the citizens of Brighton and the surrounding area. Some of the most significant impacts to Brighton will be regarding the use of conveyors, lighting, noise, visual impacts, and hours of operation.

Based upon the Executive Summary of the Tucson South Resource Conditional Use Permit, which was attached to the August 13, 2020 referral package (the "CUP Plans"), The applicant, Aggregate Industries (AI) states that the originally proposed plans have been narrowed in scope to only include onsite excavation and direct conveyance to the existing Wattenberg Lakes Resource Site. This will eliminate the need for truck traffic associated with the transport of mining materials. Additionally, the 24 acre south parcel (located southeast corner of Bridge Street and the Tucson Street alignment) will no longer be mined. The CUP Plans also state that the mining operations will be completed within eight (8) years from the time of conveyor installation. Hours of operation are proposed to be 7 am to 7 pm Monday through Saturday. A third party air quality consultant will be utilized to install two (2) real-time air quality monitors on the site.

Bridge Street (HWY 7) Right-of-Way Dedication:

The City would like to ensure that AI dedicate adequate right-of-way (ROW) for the eventual expansion of Bridge Street and to take this land dedication into consideration prior to planning the site and when laying out the berms, trail, fencing, and landscaping.

Lighting:

The City requests that all lighting on the site be contained completely on site, with cut-off lighting fixtures, to prevent light from spilling off-site. In addition, the City requests that light poles be no higher than 35-feet tall within 300' of an adjacent roadway and no higher than 50-feet tall at the interior of the site. The City also requests that the lighting levels would be limited to no more than 15 lumens per square foot in any specific spot, and no more than 100,000 lumens per gross acre (average of 2.3 lumens per gross acre), measured from between three (3) and five (5) feet above finished grade.

Landscaping and Reclamation:

In order to reduce the visual and other impacts to the City of Brighton, the City requests that all mining operations be setback 50-feet from Tucson Street and Hwy 7 in order to accommodate landscaped berms and future roadway improvement/expansion projects.

The City previously negotiated the following conditions during the mining application in 2011. We would appreciate your help in assuring that these conditions be placed on the current conditional use through the county. The City requests that the County and the operators, Aggregate Industries (AI) meet with City staff to establish a reclamation plan, including a landscaping and trails plan prior to approval of the conditional use. More specifically, the City requests the following:

- That landscaping be installed on the site during the first spring planting season, after all necessary permits for the mining are obtained. (Agreed)
- That, prior to installing the landscaping, AI work with City staff to determine the location of future trails along the Hwy 7 and Tucson Street corridors, and that AI install landscaping along these roadways in a location that will ensure that a trail can be installed in the future, without disturbing the trees and shrubs and other landscaping. (Agreed)
- That the landscaping shall have a native, irregular character to compliment the riparian corridor and shall include native and adaptive species. (Agreed)
- That AI install an irrigation system to ensure that the plantings are established, and that AI maintain the plantings during the mining and reclamation process. (Agreed)
- That AI shall install a grass berm, a minimum of 12-feet tall at the southwest corner of the property to help screen the line of sight to the north, into the mine, from Hwy 7. (Agreed)

Thank you, again, for the opportunity to comment on the proposed project. We appreciate the opportunity to work with the County's staff and Aggregate Industries to ensure the needs and concerns of all parties are adequately addressed.

Cordially,

A handwritten signature in black ink that reads "Jason Bradford". The signature is written in a cursive, flowing style.

Jason Bradford, AICP Planning Manager

Page 2 of 2

Greg Barnes

From: BFR Plan Reviews <planreviews@brightonfire.org>
Sent: Tuesday, September 8, 2020 8:06 AM
To: Greg Barnes
Subject: RE: For Review: Tucson South (EXG2020-00001)

Please be cautious: This email was sent from outside Adams County

Good morning,

At this time the Fire District has no

comments or concerns. Thank you!



Carla Gutierrez

Rescue District 500 S. 4th Ave – 3rd Floor Brighton CO 80601
Office: 303.654.8042 / Cell: 720-684-7669
www.brightonfire.org

From: Greg Barnes <GJBarnes@adcogov.org>
Sent: Thursday, August 13, 2020 3:28 PM
To: Greg Barnes <GJBarnes@adcogov.org>
Subject: For Review: Tucson South (EXG2020-00001)

The Adams County Planning Commission is requesting comments on the following application: conditional use permit to allow extraction use in the Agricultural-1 (A-1) zone district. This request

is located near 12255 East 160th Avenue. The Assessor's Parcel Numbers are:

0157101000016, 0157101000017, 0157101000028, 0157101000033, 0157101000034,
0157101000035, 0157101002001, 0157101100002,
0157101200010, 0157101300001, 0157101300002.

Applicant Information:

CHANCE ALLEN

AGGREGATE INDUSTRIES - WCR, INC 1687 COLE BLVD

SUITE 300

GOLDEN, CO 80401

Please forward any written comments on this application to the Community and Economic Development Department at 4430 South Adams County Parkway, Suite W2000A Brighton, CO 80601-8216 or call (720) 523-6800 by 09/07/2020 in order that your comments may be taken into consideration in the review of this case. If you would like your comments included verbatim please send your response by way of e-mail to GJBarnes@adcogov.org.

Once comments have been received and the staff report written, the staff report and notice of public hearing dates may be forwarded to you upon request. The full text of the proposed request and additional colored maps can be obtained by contacting this office or by accessing the Adams County web site at www.adcogov.org/planning/currentcases. Thank you for your review of this case.



Greg Barnes

Planner III, *Community and Economic Development Dept.*

ADAMS COUNTY, COLORADO

4430 S. Adams County

Parkway, 1st Floor, Suite

W2000A Brighton, CO 80601-

8216

720.523.6853 gjbarnes@adcogov.org

adcogov.org

Beginning July 27, 2020, my work schedule is:

Monday – Alternating weeks

of 7 am – 3:30 pm and off

Tuesday – Friday – 7 am –

4:30 pm

Greg Barnes

From: Loeffler - CDOT, Steven <steven.loeffler@state.co.us>
Sent: Wednesday, August 19, 2020 2:54 PM
To: Greg Barnes
Cc: Bradley Sheehan - CDOT
Subject: EXG2020-00001, Tuscon South

Please be cautious: This email was sent from outside Adams County

Greg,

I have reviewed the referral request for a CUP to allow extraction use located near 12255 East 160th Avenue and have the following comments:

- A review was done by CDOT Hydraulics in 2019 of the Drainage letter for this proposed mining operation. At that time Hydraulics had no major concerns. If there have been any changes to the plan or if the drainage has been updated we would like to review a copy.

AI Response: There have been no changes to the project that impact drainage.

- If any work is proposed in the State Highway 7 Right-of-Way a permit from our office will be required. Application can be made online at the following link: <https://cdotpermits.force.com/utilitypermits/s/login/>

Thank you. AI will not be crossing or using Hwy 7 so a right of way permit is not needed.

- Any signing for this mining operation must be on premise and cannot be either partly or wholly in the state highway Right-of-Way.

Acknowledged and Agreed.

- It is understood that the mined aggregate will be taken North by conveyor to the Wattenberg/Platte Valley facility in Weld County and the impact State Highway 7 will be low. If this is incorrect, we will want to review the updated Traffic Study.

This is correct. No impacts to Hwy 7 are being contemplated.

Thank you for the opportunity to review this referral.

Steve Loeffler
Permits Unit- Region 1



P 303.757.9891 | F 303.757.9886
2829 W. Howard Pl. 2nd Floor, Denver, CO 80204

steven.loeffler@state.co.us | www.codot.gov |
www.cotrip.org



COLORADO
Division of Water Resources
Department of Natural Resources

August 25, 2020

Greg Barnes
Adams County Planning &
Development Department
Transmission via email:
CBarnes@adcogov.org

Re: Aggregate Industries - WCR, Inc.-
Conditional Use Permit Case no.
EXG2020-00001
Sec. 1, T1S, R67W, 6th P.M.
Water

Division 1, Water

District 2 Dear Mr.

Barnes,

This referral does not appear to qualify as a “subdivision” as defined in Section 30-28-101(10)(a),

C.R.S. Therefore, pursuant to the State Engineer’s March 4, 2005 and March 11, 2011 memorandums to county planning directors, this office will only perform a cursory review of the referral information and provide informal comments. The comments do not address the adequacy of the water supply plan for this project or the ability of the water supply plan to satisfy any County regulations or requirements.

In addition, the comments provided herein cannot be used to guarantee a viable water supply plan or infrastructure, the issuance of a well permit, or physical availability of water.

The applicant (Aggregate Industries-WCR, Inc.) requests an amendment to the original conditional use permit for a sand and gravel mine (EXG2004-004), to allow a change in the planned use from wet mining, onsite crushing and screening plants, sales yards, and truck transport of mined materials to only include onsite excavation and direct conveyance to the existing Wattenberg Lakes (M2004-051). Additionally, a 24-acre parcel, known as the “South Parcel” is in a process of being removed from the Division of Reclamation, Mining and Safety (“DRMS”) permitted boundary.

According to our records the Tucson South mine site is permitted by the DRMS under permit no. M2004-

44. Depletions resulting from evaporation and mining operations at the site are replaced under a combined Substitute Water Supply Plan, currently valid through December 31, 2020, if not extended. The applicant must maintain a valid Substitute Water Supply Plan until such time as all depletions are replaced or obtain a court-decreed plan for augmentation to cover depletions at the mining site. In addition, the Applicant must maintain a valid well permit for the site.

Acknowledged. Aggregate will renew its approved Substitute Water Supply Plan to cover evaporative losses and any other water use at the site, as necessary during the life of the project.

If stormwater runoff is intercepted by this mining operation and is not diverted or captured in priority, it must be released to the stream system within 72 hours.

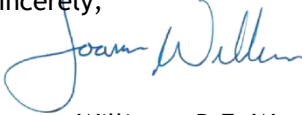


This may require a discharge permit from CDPHE-WQCD. Otherwise, the operator will need to make replacements for evaporation.

Acknowledged and Agreed

Should you or the applicant have any questions, please contact Ioana Comaniciu at (303) 866-3581 x8246.

Sincerely,

A handwritten signature in blue ink, appearing to read "Joanna Williams". The signature is fluid and cursive, with the first name "Joanna" being more prominent than the last name "Williams".

Joanna Williams, P.E. Water Resource Engineer

Ec: Project No. 27265

COLORADO GEOLOGICAL SURVEY

1801 Moly Road
Golden, Colorado 80401



September 3, 2020

Greg Barnes
Adams County Commu and
Economic Development Department
Development Services L Division
GJBarnes@adcogov.org

Location:
Section 1,

T1S, R67W, 6th P.M.
39.9926, -104.8363

Subject: Tucson South EXG2020-00001
Adams County, CO; CGS Unique No. AD-21-0001

Dear Greg:

Colorado Geological Survey has reviewed the Tucson South EXG2020-00001 referral. I understand the applicant requests a conditional use permit to allow extraction of sand and gravel in the A-1 zone district. Permitting and revisions to this mining and reclamation plan are processed by the Colorado Division of Reclamation, Mining, and Safety (DRMS) under file no. M2004044. Reclamation plans involve water storage reservoirs with proposed normal high water elevations of 4954.7 ft. (Reservoir A) and 4953.4 ft. (Reservoir B), according to CUP Application Exhibit F, West Area and East Area Reclamation Plans (Tetra Tech, July 17, 2020).

The available referral documents include an Updated Tucson South Proposed Gravel Mine Slope Stability Analysis; Tetra Tech Job No. 200-23514-18004 (November 9, 2018), and Slope Stability and Setback Updates, July 3, 2019; Tetra Tech Job No. 200-23514-18004 (updated September 16, 2019). Tetra Tech's slope stability analyses and setback recommendations are valid, but only active mining (dewatered) conditions appear to have been modeled. I am concerned about stability of slopes, and improvements along the slope setback, under saturated conditions. Once the reservoirs fill, water levels will be higher than water levels used in Tetra Tech's models, and factors of safety will probably be lower.

CGS recommends that the County require additional stability analysis to verify that the proposed reservoir slopes will be stable under saturated conditions. Since water levels in water storage reservoirs fluctuate, stability should be modelled using saturated slopes but lowered water level conditions.

Thank you for the opportunity to review and comment on this project. If you have questions or require further review, please call me at (303) 384-2643, or e-mail carlson@mines.edu.

A handwritten signature in black ink, appearing to read "Jill Carlson".

Sincerely,

Jill

Carlson, C.E.G. Engineering Geologist

See **Supplemental Materials 24 (S24)** for a detailed explanation of the slope stability requirements.

AD-21-0001_1 Tucson South EXG2020-00001
5:08 PM, 09/03/2020



COLORADO

Parks and Wildlife

Department of Natural Resources

Northeast Regional Office
6060 Broadway
Denver, CO 80216
P 303.291.7227 | F 303.291.7114

September 3, 2020

Mr. Greg Barnes
Community & Economic Development Department
4430 South Adams County Parkway, 1st
Floor, Suite W2000A Brighton, CO
80601-8218

Re: Tucson

South,

EXG2020-

00001 Dear

Mr. Barnes:

Thank you for the opportunity to comment on the proposed conditional use permit for the Aggregate Industries Mining, for extraction and disposal of gravel in an Agricultural-1 zone district. The various parcels that are covered by the Conditional Use Permit are owned by Aggregate Industries Mining, City of Thornton and City of Aurora, and comprise a total of approximately 415-acres. The South Platte River intertwines with portions of the eastern portion of the property. The property is bounded on the north by Adams County-Weld County line, and various parcels of private and local government properties. The property is bounded on the east by various government properties, private properties and the South Platte River. The southern boundary of the property is a mixture of Highway 7, government properties, private properties, and United Power Incorporated property. The western boundary of the property is various parcels of private property, Brighton Ditch, Bratner Ditch, and United Power Incorporated property.

The mission of Colorado Parks and Wildlife (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. Our goal in responding to land use proposals such as this is to provide complete, consistent, and timely information to all entities who request comment on matters within our statutory authority. Current CPW policy directs our efforts towards proposals that will potentially have high impacts to wildlife and wildlife habitat. The emphasis of CPW's concerns is on large acreages, critical habitats, wildlife diversity, and impacts to species of special concern, or those that are state or federally endangered.

CPW would expect to find small passerine birds, deer, wild turkeys, and

small ground dwelling mammals, including possibly black-tailed prairie dogs, within the property boundaries or in the vicinity of the property. Due to the low availability of undeveloped habitat surrounding the site, impacts of the development, as proposed, may be characterized as minimal.

Water Sources

Jeffrey M. Ver Steeg, Acting Director, Colorado Parks and Wildlife • Parks and Wildlife Commission: Robert W. Bray • Matthew Burkett • Charles Garcia • Marie Haskett Carrie Besnette Hauser • John Howard, Chair • Marvin McDaniel • Colleen Pepler • Jennifer Rieke Taylor • James Vigil, Secretary • Michelle Zimmerman, Vice-Chair



If heavy equipment is used near any water source, including the South Platte River, Brighton Ditch, or Brantner Ditch (that was used in another stream, river, lake, reservoir, pond, or wetland), one of the following disinfection practices is necessary prior to construction to prevent the spread of New Zealand mud snails, zebra mussels, quagga mussels, whirling disease, and any other aquatic invasive species into this drainage. These practices are also necessary after project completion, prior to this equipment being used in another stream, river, lake, reservoir, pond, or wetland:

- Remove all mud, plants, debris from equipment (tracks, turrets, buckets, drags, teeth, etc.) and spray/soak equipment in a 1:15 solution of Quat 4 or Super HDQ Neutral institutional cleaner and water. Keep equipment moist for at least 10 minutes **OR**
- Remove all mud, plants and debris from equipment (tracks, turrets, buckets, drags, teeth, etc.) and spray/soak equipment with water greater than 140 degrees F for at least 10 minutes.
- Clean hand tools, boots, and any other equipment that will be used in the water with one of the above options as well. Do not move water from one water body to another. Be sure equipment is dry before use.

Acknowledged - AI does not plan on working within any waterways, but acknowledges these mitigation measures if work does occur near these waterways.

Burrowing Owls

If prairie dog towns are present on the site or if prairie dogs establish themselves on the property prior to any development - CPW recommends that a burrowing owl survey be conducted prior to earth moving. Burrowing owls live on flat, treeless land with short vegetation, and nest underground in burrows dug by prairie dogs, badgers, and foxes. These raptors are classified as a state threatened species and are protected by state and federal laws, including the Migratory Bird Treaty Act. A copy of a burrowing owl survey can be obtained from CPW.

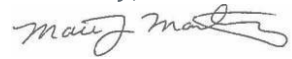
Acknowledged: Owl surveys are planned prior to any construction in accordance with CPW recommendations.

If prairie dogs are present at the site or if prairie dogs establish themselves on the property prior to any development and the developer wants to relocate the prairie dogs, CPW requires the developer to obtain a relocation permit prior to starting any relocation efforts. CPW allows prairie dogs to be relocated to another suitable wild habitat, a license raptor rehabilitation center or to the United States Fish and Wildlife Service Black-footed Ferret Recovery Program. The developer is not allowed to relocate prairie dogs without obtaining a relocation permit. Relocation requirements and an application for a prairie dog relocation can be obtained from CPW.

Acknowledged

If you have any questions or concerns on this project, please feel free to contact District Wildlife Manager Jordan Likes at (303) 291-7135.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Martinez", with a stylized flourish at the end.

Matt Martinez
Area Wildlife Manager

Cc: M. Leslie, K. Cannon, J. Likes

Greg Barnes

From: Matthew Emmens
Sent: Tuesday, September 8, 2020 2:41 PM
To: Greg Barnes
Subject: FW: Promontory Metropolitan District Improvements

From: JR Osborne <c3construction@live.com>
Sent: Tuesday, September 8, 2020 2:13 PM
To: Matthew Emmens <MEmmens@adcogov.org>
Cc: Christine FELZ <christine.felz@lafargeholcim.com>
Subject: Promontory Metropolitan District Improvements

Please be cautious: This email was sent from outside Adams County

Dear Matt,

I spoke with Christine Felz from Lafarge Holcim/Aggregate Industries today about their plans to install a conveyor belt underneath 168th Ave, just west of the Platte River. The two items of concern that the Promontory District has are:

1. The depth of the conveyor belt underneath 168th Avenue.
2. The timeframe of the use for the conveyor belt.

Ms. Felz said that the conveyor belt would be a minimum of 10' feet deep and that the conveyor belt would only be used for an 8 year period, with no timeframe extensions, after they get ADCO approval (hopefully late 2020).

With a 10' minimum depth and an 8-year timeframe, the Promontory District has no objections with the Lafarge Holcim/Aggregate Industries request to install a conveyor belt underneath 168th Avenue.

If you have any questions,

please feel free to contact me.

Very Truly Yours,

J.R. Osborne
Promontory
Metropolitan District
President 303-880-
6410

AI appreciates the opportunity to work with the Metro District, and will continue to do so. Based on current information neither AI nor the Metro Districts anticipates any conflicts related to the crossing on 168th Street based on proposed installation locations, depth, and timeframes of both party's projects.



September 4, 2020

Greg Barnes
Adams County Community and
Economic Development 4430 South
Adams County Parkway, Suite
W2000A Brighton, CO 80601

RE: Aggregate Industries Tucson
South, EXG2020-00001 TCHD
Case No. 6430

Dear Mr. Barnes

Thank you for the opportunity to review and comment on the conditional use permit to allow extraction located near 12255 East 160th Avenue, north of Highway 7 and west of Kuner Road. The case referral materials indicate that the revised plan does not include activities previously planned, including crushing, screening, sales, and truck transport. Tri-County Health Department (TCHD) staff has reviewed the application for compliance with applicable environmental and public health regulations and principles of healthy community design. After reviewing the application, TCHD has the following comments.

Air Pollution

Exposure to air pollution is associated with a number of health problems including asthma, lung cancer, and heart disease.

Permit Required

The Colorado Department of Public Health and Environment Air Pollution Control Division (APCD) regulates air emissions of hazardous air pollutants, asbestos, and chlorofluorocarbons (CFCs). The applicant's air permit may be required to be updated for this project. If required, Tri-County recommends that the County require the applicant to have obtained or updated the facility's air emissions permit as a condition for issuance of a building permit. The applicant shall contact the APCD at (303) 692- 3100 for more information. Additional information is available at <https://www.colorado.gov/pacific/cdphe/categories/services-and-information/environment/air-quality/air-emissions-business-and-industry>

Acknowledged and Agreed. AI has an air permit in place but will update the permit as needed prior to commencement of operations.

Fugitive Dust

The Colorado Department of Public Health and Environment Air Pollution Control Division (APCD) regulates air emissions, including fugitive dust. Control measures may be necessary to minimize the amount of fugitive emissions from site activities including haul roads, stockpiles, and erosion. The applicant shall contact the APCD, at (303) 692- 3100 for more information. Additional information is available at

<https://www.colorado.gov/pacific/cdphe/categories/services-and-information/environment/air-quality/business-and-industry>.

Acknowledged and Agreed.

Air Quality Monitoring and Modeling

The case referral materials indicate that a third party consultant will conduct an air modeling analysis and will commit to installing two real time air quality monitors on site. Data from these monitors will be transmitted monthly to Adams County. TCHD supports air quality monitoring in order to study and analyze sources of pollution, and implement controls to decrease air pollution. TCHD applauds the applicant for making this information available to Adams County and encourages a data sharing platform that would allow for sharing real time data in a timely manner.

Thank you for acknowledging the proactive measures AI has taken in order to demonstrate project emissions will meet all regulatory levels to protect human health and the environment. We look forward to sharing real time particulate monitoring data to assure ongoing transparency.

Please feel free to contact me at 720-200-1575 or kboyer@tchd.org if you have any questions about TCHD's comments.

Sincerely,




Kathy Boyer, REHS
Land Use and Built

Environment Specialist III

cc: Sheila Lynch,

Monte Deatrich, TCHD



Your Touchstone Energy® Cooperative 



September 6, 2020

Adams County Community & Economic
Development Department 4430 South Adams
County Parkway

Re:

EXG202000001

– Tucson South

Dear Greg

Barnes:

On behalf of United Power, Inc., thank you for inviting us to review and comment on the EXG2020-00001 – Tucson South. After review of the information, United Power, Inc. has no concerns or objection to the proposed conditional use permit to allow extraction use in the A-1 zone district, contingent upon United Power's ability to maintain all existing rights, facilities/equipment, and existing easements. This request should not hinder our ability for future expansion, including all present and any future accommodations for electrical distribution.

We look forward to safely and efficiently providing reliable electric power and outstanding service.

AI Response – Thank you for your response.

Thank you,

Samantha Riblett United Power, Inc.
Right of Way Administrative Assistant
O: 303-637-1324 | Email: platreferral@unitedpower.com

Greg Barnes

From: John Ashburn <jashburnjr@hotmail.com>
Sent: Sunday, August 30, 2020 4:14 PM
To: Greg Barnes
Cc: John Ashburn
Subject: Case # EXG2020-00001 Aggregate Industries

Importance: High

Please be cautious: This email was sent from outside Adams County

Dear Adams County Planning Commission,

I am writing this email to express my extreme concern regarding the Aggregate Industries conditional use permit to allow extraction use in the Agricultural-1 (A-1) zone district. As you know, this application, if approved, would site an open pit aggregate mining operation immediately to the west of downtown Brighton and directly between downtown Brighton and an extremely large area of Brighton that is currently undergoing new residential development. As someone with more than two decades of experience with above ground and below ground mining operations, I can tell you that despite mitigation efforts, the proposed open pit aggregate mining operation will almost certainly create both dust and noise issues for both downtown Brighton and the surrounding residential areas, both current and future. In addition, the operation will almost certainly depress real estate values during the term of its operation. While the area proposed for this operation may have been an appropriate one 10 or 15 years ago, it is no longer an appropriate area for such an operation. Brighton is growing rapidly and has a very "bright" future. At this point in time, the Adams County Planning Commission should be focused on developing this area in a manner that will benefit Brighton and its citizens as the community continues to grow, not projects that will certainly have an adverse impact on future economic development. The area in question is now much better suited to residential or commercial development, both of which would be much more compatible with the other current and planned developments in the area. It would neither be appropriate, nor responsible, for the Adams County Planning Commission (or any Planning Commission for that matter) to allow an open pit aggregate mining operation to be first established in the middle of a thriving and actively developing community.

Accordingly, I would respectfully request that the Planning Commission not approve the proposed conditional use permit for Aggregate Industries. Please include my comments verbatim in the Commission's report and review of this case. Also, please inform me of any future public hearing dates and forward a copy of the staff report to me when available. Thank you for your time and consideration.

Sincerely,

John F. Ashburn, Jr. Attorney at Law

Dear Mr. Ashburn,

Thanks for your comments and we appreciate your concerns. The current project has been carefully evaluated by third party experts whose analysis indicates that project noise and

emissions will be below applicable regulatory levels designed to be protective of human health. Real time particulate monitoring and a twenty-four hour complaint hotline will assure ongoing compliance and transparency. Given the distance of the project away from Brighton on the other side of Highway 85 and the temporary nature of the project, no diminution of property values is expected.

Greg Barnes

From: Tina Cullen <Tina.Cullen@elevationscu.com>
Sent: Wednesday, August 26, 2020 9:12 AM
To: Greg Barnes
Subject: Aggregate Industries - Tucson South

Please be cautious: This email was sent from outside Adams County

Good morning,

I live in Brighton, Todd Creek Riverside. I received the letter regarding AI's application (again) for mining aggregate near my home. I strongly object to allowing this to go forward. I was so proud of the Board for denying their request back in November of last year. It felt like we had advocates who cared about the people who live here and the businesses who want to thrive here. I really hope that advocacy continues.

The trucks that already use Highway 7 and Highway 85 as their main routes continue to destroy the roads, pollute the air, and make living and commuting here a terrible experience. We've had to replace 3 windshields since living here due to the lack of consideration from truckers who don't cover their aggregate loads. As Adams County and Brighton continue to grow, the traffic has become heavier with just the residents. Adding more heavy trucks to that traffic would be a mistake and a loss for those of us who chose to make Brighton our home. We want to build something here, not just focus on revenue for the county. We want a thriving community, not an industrial center. Please don't let industry and revenue be the primary focus in our county.

Thank you for your consideration.

Christina Cullen | Quality

Control Specialist II

[Elevations Credit Union](#)

1 Environmental Way, Broomfield

P.O. Box 9004,

Boulder, CO

80301 t:

303.443.4672

x. 1813 |

It matters where you bank.



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Please consider the environment before printing.

Greg Barnes

Dear Ms. Cullen,

Thank you for taking the time to comment on our application. Aggregate Industries heard and responded to your concerns and the concerns of others regarding truck hauling traffic last November and has positively changed the application to address these concerns. This new application has eliminated the previously-proposed 400 daily truck trips for hauling mined material via local roads, including Highway 7, to the processing facility and instead all materials will be transported via an overland conveyor system.

Greg Barnes

From: CenturyLink Customer <lepantzeus@q.com>
Sent: Wednesday, August 19, 2020 6:48 PM
To: Greg Barnes
Cc: JOHN C LEPANT
Subject: Case Number EXG2020-00001 Tucson South

Please be cautious: This email was sent from outside Adams County

ATTN: Greg Barnes, Planner III

In Regards: Case Name: Tucson South
Case

Number: EXG2020-00001

19 August 2020

Dear Mr. Barnes,

Am sending you this email in response to your Letter headed ' REQUEST
FOR COMMENTS ' regarding the above permit application.

Would respectfully request this permit be approved.

The Letter states you will include these comments verbatim in the case review. That is
perfectly acceptable to me.

I am a long time resident of Brighton and have lived near this aggregate
operation at my house on Denver Street for more than ten years.
There has never been any trouble for me whatsoever from this operation.
The truck drivers are careful and courteous and the operation is
very well managed to the point that many local residents are not even aware
that it exists. It is a quiet, unobtrusive, and comports well
with the other activities adjacent which are primarily light industry and agriculture.

This mining operation supports local jobs and more importantly provides
materials required for building businesses, homes, and local
infrastructure all along the Colorado Front Range. Much has been said and written
by others about the importance of infrastructure, both
in terms of maintaining current infrastructure and building new infrastructure.
There is no need to reiterate those points here and Adams

County is well versed on that need as it is part the ongoing County services. It is very likely the County has been a customer buying materials from the applicant.

A healthy construction industry and good infrastructure are both necessary for a healthy economy. The applicant provides materials that are critical to both. Doing so improves the economy of not just Adams County but the entire State of Colorado. The applicant has a long history of responsible business practices, operations, and stewardship. Approving this permit will not change the characteristics of the immediate area as those types of operations already exist there.

Therefore, as there is minimal impact, the applicant has a long history of responsible conduct, and this operation supports the economies of both Adams County and the entire State of Colorado, I respectfully request that this permit be approved.

Sincerely, John C Lepant

Dear John,

Thank you for your comments in support of AI's application! We will work hard to continue to be a positive member of the community and local economy.

B. Michl Lloyd 12202 East 168th Avenue

Brighton, CO 80602

303-659-4545

September 3, 2020

Adams County Community & Economic
Development Department 4430 South Adams
County Parkway, 1st Floor, Suite W2000A
Brighton, CO 80601-8218

Attention: Greg Barnes

RE: Comments on Aggregate Industries'
Application for Conditional Use Permit
Case Number EXG2020-00001 -
"Tucson South"

Dear Mr. Barnes:

This letter is in response to your August 13th request for comments on the above referenced Conditional Use Permit Application.

Even though Aggregate's current application eliminates a lot of the traffic concerns, includes donation of property south of highway 7, commits to a fixed life (without any extension requests) and supposedly enhances air quality monitoring compared to their application that was denied unanously by the Commissioners present at the November 2019 meeting, I still do not believe their proposed activity meets the County's Conditional Use Permit Criteria.

AI carefully evaluated the primary community concerns expressed last year, which were truck traffic and project duration. We addressed each of these concerns in this new application. Specifically, this application eliminates the previously-proposed 400 daily truck trips for hauling mined material, and instead all material will be transported via an overland conveyor system. In addition, we have committed to active real time dust monitoring. AI appreciates your concern over the County's Conditional Use Permit approval criteria. We believe that this application, however, demonstrates that impacts have been mitigated and it meets the criteria for approval for this protected aggregate resource.

The Commissioners are well aware of all of the objections and concerns raised by the community and businesses in 2019 regarding Aggregate not meeting these criteria and I will not reiterate those; however I believe that those concerns are still valid and maybe more so now that almost another year has passed and the area continues to grow – not get smaller. Aggregate seems convinced this is a rural farming area and back in 2004

when the mine was initially approved it probably was. However it is now over 16 years later and it is not a rural farming area any more. I do not believe the residents should have to "pay" for Aggregate's failure to act on this project much sooner.

The mining of this resource will provide many benefits to the community including vital high paying jobs, taxes, land donation, and construction materials needed to support growth and development. Aggregate will mitigate views into the site through landscaping, berms, and floodplain-friendly farm-style fencing. No truck traffic for material hauling or onsite processing will occur at this site. We have committed to a concise eight-year time period with no allowance for an extension to further alleviate impacts.

As to Aurora's water storage, they have the alternative to use the site as they do a site in Weld County and inject river water into the ground, filter it through the sand and gravel and extract the filtered water using wells. Aurora has a several million gallon water storage tank and distribution pipeline immediately adjacent to the west of the proposed mine site.

I do not believe those of us that are not citizens of Aurora should have to bear the responsibility of providing the area to store water that does not benefit us. This would leave the surface area of the site available for numerous uses that could definitely enhance the community.

Not meeting the criteria for a Conditional Use Permit ("CUP") combined with Aurora's alternative regarding water storage and Aggregate's alternatives for potential mine sites in less populated areas I recommend that the application once again be denied.

Knowing that some of Aggregate's changes from their previous application may cause others to be more inclined to be in favor of their current application, I would suggest that certain conditions be required if the current application were to be approved.

Conveyor System - Aggregate has committed to not starting mining until the conveyor system is operational however not all easements, approvals and engineering, etc. for the conveyor system are in place and accordingly a final route for the conveyor system has not been proposed. An Aggregate representative stated in the October 29, 2019 Commission meeting that it could take 18 months or more to complete the conveyor system. You could possibly believe they could accomplish this if all of the factors were under their control – but the easements and approvals are not under their control. I would expect there to be considerable opposition if some of the proposed routes ended up being the “final” route.

The current application shows both potential conveyor routes. We expect to affirm the exact route prior to the Planning Commission hearing and have agreed to a condition of approval that the conveyor easements will be finalized, and the conveyor installed within 12 months of approval of this application. Each route was selected to minimize impacts to the community.

I believe that Aurora needs to clarify and justify why they cannot grant an easement for the conveyor along the east side of their pit north of 168th Ave. Such a route would appear to be the least objectionable. It was stated that “litigation” was preventing them from granting such an easement. But this sounds like an “easy out” and the fact remains that this whole project benefits Aurora and not Brighton or the neighborhood.

AI continues to evaluate all routes including the use of the Aurora tract North of Highway 168. It is important to note that AI has worked to reduce impacts related to both the East and West routes. In all cases, any required agreements will be in place providing consent of each landowner prior to construction of the conveyor.

I believe Aggregate is premature in applying for a CUP before having at least the route for the conveyor finalized. If for any reason the CUP is approved there should at least be a condition precedent that sets a time limit for having the conveyor operational.

AI has agreed to a condition of approval that requires the conveyor route to be finalized and the conveyor constructed within 12 months of approval of this application.

Life of mine – Aggregate stated in the current application that mining and reclamation would be reduced to 8 years from the time the conveyor is installed and that no extensions would be requested. One Commissioner commented on the prior application that the life should not exceed 5 years and an Aggregate representative stated in the October 29, 2019 Commission meeting that it could be completed in as little as 4 years. Five years appears reasonable to me.

The issue though is they do not commit to a start date for what ever the time limit is. Since the start of the life begins with an operational conveyor system such a start date could be drug out for quite some time and this mine could last as long as other Aggregate mines in the County.

AI has agreed that the CUP approval will be conditional upon conveyor installation within 12 months of approval. Our current project proposal makes a firm commitment for mining and reclamation within eight years of conveyor installation while using a low impact conveyor. AI will agree to a condition that provides for no extensions of the CUP.

Slurry Wall – Aggregate says that “Tract K” as designated on their maps will not be mined but will be used as the staging area for material necessary for the slurry wall installation. The slurry wall(s) for this mine will be measured in miles, will require a substantial amount of material to be hauled to the site by trucks and will not be installed in any short time period.

AI has significant experience constructing slurry walls and has accounted for the laydown areas and time period needed to construct. Contractor traffic will be minimal and will occur over a short period of time during the first 12 months of the project.

Tract K is west of the area to be mined and encompasses two elevations – one level is relatively close in elevation to the area to be mined and houses Aurora's huge water storage tank and related facilities and does not have a large area for staging anything. This area is accessible by a service road however in order to access the area for the slurry wall they would have to cross the Brighton Ditch and there are no substantial bridges that cross the Brighton Ditch or they would have to use Highway 7 which has already been determined to be unacceptable. They still will have to traverse the total width of the site to get to the east side for installation of that portion of the slurry wall.

The other elevation is substantially higher (a very steep hill), is west of the Brantner Ditch and adjoins my property. There are no roads to access this area accordingly getting material to this area would be very problematic and to access the area for the slurry wall would be equally problematic and would mean crossing the Brantner Ditch (with no existing substantial bridges), traversing a very steep hill and then crossing the Brighton Ditch. Using 168th Avenue, crossing Great Western's oil and gas well site, crossing a farm field and a residential back yard to gain access would be totally unacceptable. Again, this area is even further west of the mine area. In addition this area borders residential backyards of a number of new homes in a substantial residential development.

Materials for the slurry wall will have to be moved by large trucks and without adequate roads and bridges I believe using Tract K as a staging area for the slurry wall is not only totally impractical but also totally unacceptable. Materials for the slurry wall should be staged close to where they are going to be used. Aggregate has well over 100 acres to use for this staging.

The application does not address the truck traffic, routes, etc. necessary to get slurry wall material to the site. Given the length of the slurry wall(s) I would not expect these to be minor issues and they should be addressed in the application.

Truck traffic during slurry wall construction will be minimal and short term. Access will be gained by way of existing perimeter roads or through the Tract itself.

South Parcel – One of Aggregate's responses indicated the State's approval of removal of the South Parcel from the mine permit was expected by August 31st. Did the State approve the removal?

Yes, the permit amendment removing the South Parcel has been approved by the DRMS.

Seeding Berms, etc. - Aggregate does not mention irrigating any of the seeded or landscaped area. Given our recent weather patterns I would not expect any landscaping to survive without irrigation.

Aggregate will install an irrigation system which will be used during establishment and on an ongoing basis to ensure the viability of the installed landscaping.

Concurrent reclamation - "Concurrent reclamation" is not adequately defined. Aggregate 's history of concurrent reclamation on the Tuscon North Mine meant leaving significant high walls (with a 3 wire farm fence that had mostly fallen down and a trailer park with a significant number of children close by) for years. Reclamation on that site was supposedly concurrent. If history is any indication, leaving it to Aggregate's discretion as to when a mining area is "complete" means that a significant portion or none of the site is likely to be reclaimed concurrent with being mined. Accordingly, a limited number of linear yards of pit walls allowed to be disturbed at any given time before being reclaimed should be defined for the whole site.

Mining and reclamation will occur in accordance with the approved site plans and DRMS permits. This will entail concurrently reclaiming the mined area in approximately 30 acre increments, which is approximately 800 linear feet of mine face. Overburden from mining will be used to complete reclamation slopes. Access will also be controlled by using perimeter fencing which meets both MSHA security requirements and community aesthetic concerns.

Yours truly,

B. Michl Lloyd

Greg Barnes

From: Greg Barnes
Sent: Friday, September 4, 2020 8:25 AM
To: Greg Barnes
Cc: Aaron Clark
Subject: Tucson South - Public Comment

Wayne Medlin prefers the parcel south of Highway 7 stay with the Adams County Parks system, rather than the City of Brighton's system. He lives adjacent to the property.

waynemedlin@hotmail.com / 303-819-7884

Al has discussed the future use of the South Parcel with both Brighton Parks and Recreation and Adams County Open Space. Al's only interest is that this donation of land is maximized to meet the most appropriate and desirable open space use to the benefit of the community.



Greg Barnes

Planner III, *Community and Economic Development Dept.*

ADAMS COUNTY, COLORADO

4430 S. Adams County

Parkway, 1st Floor, Suite

W2000A Brighton, CO 80601-

8216

720.523.6853 gjbarnes@adcogov.org

adcogov.org

Beginning July 27, 2020, my work schedule is:

Monday – Alternating weeks

of 7 am – 3:30 pm and off

Tuesday – Friday – 7 am –

4:30 pm

Greg Barnes

From: Christy Montoya <christy.montoya@me.com>
Sent: Tuesday, August 25, 2020 4:39 PM
To: Greg Barnes
Subject: Tucson South EXG2020-00001 Comment

Please be cautious: This email was sent from outside Adams County

Hi Mr. Barnes,

This email is in reply to the letter dated 8/13/2020, Request for Comments.

Please do not approve the conditional use permit to allow extraction use for Aggregate Industries, EXG2020-00001. There is too much drilling, fracking, excavation, water pipeline installation (RCU2020-00004) contained within a very small area. How much more are all the people that live in the immediate neighborhoods going to be subjected to?

Adams County was once beautiful with open space and farm land. Not anymore, corporations such as Aggregate Industries continue to suck all they can out of the earth with promises of air quality monitoring, donation of land for "open space" and a "dust complaint hotline" then move on to the next site to subject more people to their pollution. A hotline to complain about dust says it all!!! Currently, we can't open our windows due to the frack site right behind our house, if approved the Aggregate extraction and conveyor belt pollution will be even worse; in addition to the dust there will be noise pollution! Who regulates that? Who is going to respond to complaints? Aggregate Industries? If so, that's an absolute JOKE!! What's worse is the joke will be on all the neighboring families who live in close proximity to the extraction site.

It should be a requirement for the applicant, Chance Allen and his family, to move into a house next door to the Tucson South extraction site in order to get the permit approved. That way he could experience first hand all of the false promises Aggregate Industries has included in their application.

Please include my comments verbatim.

Furthermore, please forward the staff report and notice of public hearing dates upon completion, via email or USPS. If unable to send, I'll come pick them up.

Thank you, Christy Montoya

Dear Ms. Montoya,

Thank you for your comments and AI sincerely appreciates your concerns. AI has proactively completed an ambient air quality impacts assessment and a noise study of the project. These indicate that impacts will be well below regulatory thresholds in place to protect health and safety. The post construction air monitoring will provide real time data which will be shared with Adams County. This is in addition to the Colorado Department of Public Health and Environment, who will also have direct enforcement authority over our operations. The hot-line phone number is provided as an added communication tool for the community, not as a replacement for agency reports. AI will be supplying a monthly record to Adams County, which will include any reported concerns from the community.

Greg Barnes

From: Greg Barnes
Sent: Thursday, August 20, 2020 11:08 AM
To: Greg Barnes
Cc: Matthew Emmens; Katie Keefe; Gail Moon
Subject: Phone Comments: Wayne Mueller on Tucson South (EXG2020-00001)

FYI - I had a phone conversation with Wayne Mueller (wmuhler@yahoo.com) on the morning of August 20, 2020.

- Has concerns about reclamation and end use.
- Wants assurance that end product will actually be a water reservoir
The final reclamation of the site will be a water storage facility. .
- Believes the current site is not being controlled for weeds. (See Page 20 of application)
AI acknowledges that weed control should and will be a top priority for this site.
- Believes a high water table in the area may present flooding issues for conveyor location.
The conveyor will not impede water drainage from its natural course
Has concerns that the mining process is not wet mining, like what is being claimed. Suggests that we evaluate if mining practices are appropriate. Dredging operations may be more expensive but will create less off-site impacts. **Dredging operations would be more intensive with regard to water use and noise in comparison to below grade mining. Such operations would require onsite processing to dewater and classify dredged materials. Even after slurry wall installation and dewatering, native materials will remain moist and will be supplemented with onsite hydration.**
Has concerns about the duration being 8 years from the conveyor being operational. **AI has committed to eight years and will agree to a condition that no extension of the permit will be requested or allowed.**
- Additional concerns that the operator does not have a great track record of compliance. **AI has operated in the Denver Metro area for over 30 years and remains committed to environmental compliance. AI believes any past concerns have been addressed with the appropriate agencies, but looks forward to working with Adams County and the community on this project to ensure compliance.**



Greg Barnes

Planner III, *Community and Economic Development Dept.*

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Tuesday – Friday – 7 am –

4:30 pm

Greg Barnes

From: Mary Jane Olsavsky <maryjaneolsavsky@gmail.com>
Sent: Saturday, August 29, 2020 3:02 PM
To: Greg Barnes
Cc: Mary Jane Olsavsky
Subject: Comments on proposal Tuscon South EXG2020-00001

Please be cautious: This email was sent from outside Adams County

WE DO NOT WANT A MINING PIT OPERATING FROM 7 am-7pm 6 DAYS A WEEK! THIS WILL DISRUPT OUR NEIGHBORHOOD WHICH IS OVERLOOKING THE PIT AREA. NO FENCE ALONG HIGHWAY 7 WILL PREVENT THE NOISE FROM REACHING US IN TODD CREEK RIVERSIDE. LOOK AT THE RECORD OF THIS COMPANY AND THEIR RECORD OF COMPLETING PROJECTS ON TIME. EIGHT YEARS WILL TURN INTO 20 YEARS!

We are not a town. Todd Creek is more like a village. We moved out here to get away from the city and enjoy our space. There are homes along Riverdale and Hwy 7 that would be drastically affected by this. Also, do we really want a gravel pit to be the welcome view into Brighton?

My husband and I retired and built here. One of the most wonderful things about living here is the peace and quiet. When city dwellers come to visit you can just see some invisible power bathe them with peacefulness. With so much development everywhere now, our area is like a precious jewel that should not be tarnished.

The proposed mine would be one-half mile from our home. It is obvious to me that the entire fabric of our lives here would be ripped to shreds. If we could bring ourselves to sell our Dream Home, the property value would be ridiculous.

I have been reading the comments from local citizens who oppose the Gravel Pit Mining Proposal on Hwy 7 the CO2 emissions from construction trucks, the air pollution, the water pollution and danger to our Wild and Scenic designated Area, and the obliteration of our wildlife habitat.

And regarding the danger of fire, our area gets drier every year and I live every day in summer and early fall with a nagging fear of forest fire. We often spend a few days breathing smoke from fires somewhere in the mountains. Even now after a dry winter it is dry

Greg Barnes

enough to be a high fire danger. Mining operations and large trucks can spark fires easily.

**Thanks for your
consideration,**

**Mary Jane
Olsavsky**

Dear Ms. Olsavsky,

Thank you for your comments and as a resident living in close proximity to our project we understand your concerns and hope that our response will help clarify our project scope. Our proposed operating hours will be limited to 7am to 7pm, Monday-Saturday. Our use will be temporary and in no case will mining and reclamation extend beyond eight years. There will be no allowance for any extensions of time through Aggregate's agreement to such a condition to the permit.

Given that we have revised the application to exclude truck hauling of mined material, CO2 and other tailpipe emissions due to this activity have been eliminated. Air dispersion modeling completed by a third party demonstrated that our emissions will be well below the National Ambient Air Quality Standards. Real time dust monitors will serve to prove compliance each day.

We have taken all measures possible to minimize viewports into the site through landscaping, fencing and berms.

We share your concerns over fire hazards as we have also seen these impacts on regional air quality. AI works with the local fire department and other agencies to ensure a safe facility and to maintain compliance with all MSHA requirements regarding jobsite safety .

Greg Barnes

From: Kay Olsen <kinden14@yahoo.com>
Sent: Tuesday, August 25, 2020 2:05 PM
To: Greg Barnes
Subject: Gravel Pit Hwy 7

Please be cautious: This email was sent from outside Adams County

Dear Mr. Barnes,

As a citizen of Brighton, I would like to register my disapproval of the creation of a gravel pit/mine anywhere near our city. The noise, pollution, and traffic may have been manageable 10 years ago, but with our higher population density, it is not, in my opinion, a worthwhile endeavor.

Although I don't have a geographic/geologic map available, I find it hard to believe that there are not more suitable locations for this. Perhaps 20 miles out of town east/north? I have a family member with an immune disorder that involves the lungs; this would be a real and present danger to his health.

Please consider the human factor, not the money factor, when making your decision. Best regards,

Kay Olsen 303-909-9525

Dear Ms. Olsen,

Thanks for taking the time to comment on our application. The Tucson South site was once proposed as a mine with a full onsite crushing and screening plant, onsite stockpile yards and off-site hauling by large gravel trucks. The use has now been restricted to only onsite excavation and conveyance north by way of a low profile overland conveyor system. As a result of these changes, noise and dust emissions will be well below regulatory levels.

Sand and gravel mines located long distances from the marketplace are not cost effective and ultimately result in excess on-road emissions and wear and tear to the road.

Greg Barnes

From: Manuel Ornelas <manuelmids@comcast.net>
Sent: Monday, September 7, 2020 9:56 PM
To: Greg Barnes
Subject: BRIDGE A. LTD AND BRIDGE B. LTD COMMENTS
Attachments: scan0003.pdf

Please be cautious: This email was sent
from outside Adams County Case Name:
Tucson South
Case Number: EXG2020-00001

Mr. Barnes,

This is on behalf Of: BRIDGE A. LTD 75 WEST BRIDGE ST. BRIGHTON CO and BRIDGE B.
LTD 115 WEST BRIDGE B. LTD

1- What are the proposed distances of excavations West and East of
the River and how deep?

No excavation will occur east of the Platte River. Setbacks vary along
the west side, but in all instances will be at least 200 feet from the
river. Materials will be mined to a depth of 25-40 feet depending on
quality of the material and the depth to bedrock.

2- What are the proposed distances of excavation South and North
of Highway 7 and how deep?

Setbacks vary along Highway 7, but will be approximately 105 feet
from the edge of ROW. This includes a 25 foot setback to the slurry
wall and then an additional 80 foot on average to the existing edge of
ROW. No mining will occur south of Highway 7.

3- What is the proposed distance of installation of the conveyor
system West and East of River?

The conveyor will not be located east of the River. The conveyor will
be at least 200 feet west of the river in the East Cell.

Greg Barnes

Please let us know

Thanks,

Manuel Ornelas manuelmds@comcast.net

Greg Barnes

From: Della Thompson <JATDT@msn.com>
Sent: Wednesday, August 26, 2020 10:30 AM
To: Greg Barnes
Subject: RE: HWY 7 mining and traffic

Please be cautious: This email was sent from outside Adams County

Thank you for your response. I have one more concern:

HWY 7 needs to be widened from at least Colorado Blvd to HWY 85. The county needs to hold businesses accountable to provide some if not all funding for roads in Adam's County. Taxes go up but no major structural improvements are being done, including bridges.

If this is not in line with your responsibilities, please

route to correct department. However roads on HWy 7

and Road 2 are in need of widening.

Note land on Road 2 by Sacks land will be covered with houses. It seems visionary to widen Road 2 while space is still available and houses are not built up to the road.

Sincerely,
Della Thompson

AI will not use Highway 7 for this operation. This is one of the most important changes in the current application based on concerns expressed in 2019. AI has accounted for future expansion of Highway 7 in our site plan, however, so that when CDOT decides to widen the road, it will not conflict with this site plan or the post-mined reclaimed site.

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message -----

From: Greg Barnes <GJBarnes@adcogov.org> Date: 8/26/20 9:45 AM (GMT-07:00)
To: Della Thompson <jatdt@msn.com> Subject: RE: HWY 7 mining and traffic

Thank you for providing comments on this case. At the end of the referral period, all comments received will be shared with the applicant, and they will be asked to provide a response. You will be notified when the County receives their response to your comments.

Your comments will also be shared with the Planning Commission and Board of County Commissioners when the project goes to public hearings. The County will send you a notification letter when the hearings are scheduled.

Greg Barnes
Planner III, Community and
Economic Development Dept.
ADAMS COUNTY, COLORADO
4430 S. Adams County

Greg Barnes

Parkway, 1st Floor, Suite
W2000A Brighton, CO 80601-
8216
720.523.6853
gjbarnes@adcogov.org
adcogov.org

Beginning July 27, 2020, my work schedule is:

Monday - Alternating weeks

of 7 am - 3:30 pm and off

Tuesday - Friday - 7 am -

4:30 pm

-----Original Message-----

From: Della Thompson <jatdt@msn.com> Sent: Monday, August 24, 2020 7:10

PM To: Greg Barnes <GJBarnes@adcogov.org> Subject: HWY 7 mining and traffic

Please be cautious: This email was sent from outside Adams County Dear Mr

Barnes,

My concern is the traffic with semi hauling equipment.

I understand currently drivers are paid per load. I believe this is a dangerous practice.

This encourages drivers to speed. No matter what route is approved, the danger exist when they access HWY 7 or Road

2, then on to HWY 85 to go to a specified destination via many other roads.

There is no offsite truck traffic for transportation of mined material proposed in our revised application, so this concern is not applicable to our proposed operations.

Please make this one

major topic on the

agendas. Sincerely,

Della THOMPSON

10561 East 158th CT Brighton, CO 80602

720 254 7162

Sent from my iPad

Greg Barnes

From: Debbie W <dj019283@gmail.com>
Sent: Thursday, September 3, 2020 8:36 AM
To: Emma Pinter; Eva Henry; Chaz Tedesco; Steve O'Dorisio; Mary Hodge; Greg Barnes; Jen Rutter; Jill Jennings Golich
Subject: EXG2020-00001 (Aggregate Industries Plan)

Please be cautious: This email was sent from outside Adams County

Hello,

I commented in 2019 and watched the hearing last year in which the County made good points against the Aggregate plan. Without reiterating all you have had to read and hear in the past: the noise and air pollution issues are still a concern; rather than improving Brighton and Adams County which has been agricultural and admittedly becoming more residential, it will bring just bring industrial problems; Business owners trying to improve Brighton downtown will be negatively impacted; Neither the "pond" that exists near the proposed area nor their land south of Hwy 7 have the desirable natural effect they claim residents will be left with; I understand you are looking to allow more acre lot housing just west of the area and that will lower property values and probably deter sales; etc. I admittedly have not read the 424 page application, but it does not appear to account for all of the concerns for Brighton and Adams County residents and businesses.

Thank you

Aggregate has worked closely with Brighton and ADCO on this revised application and believes it has listened to and addressed concerns. The proposed use will allow for the extraction of a necessary and protected aggregate resource while minimizing impacts to the surrounding community. AI will continue to work with stakeholders to ensure the South parcel donation is put to the most suitable open space use, as determined by Adams County and Brighton.

September 7, 2020 Adams County

Re: The Tucson South Gravel Pit Application 2020 Case Number: EXG2020-0001

To Whom it may Concern,

With all due respect, . . . For those of us who have followed this case and are familiar with the 2019 hearings (presentations, testimony, technical aspects, etc.), aside from now "starting" the project with the conveyor (allegedly this whole project was planned to be primarily mined by conveyor), the nuts and bolts of this application are still the same and an industrial mining operation at the gateway of downtown Brighton should never be allowed! Last year, at the start of the October 29th hearing, the south parcel had ALREADY been removed from the permit (not counting what they were doing behind the scenes), Aggregate had committed to air monitoring, Aurora had committed to a more decorative fence, and by the end of the hearing the time frame discussed was even less. So it has been disturbing to hear Aggregate Industries, in three different presentations that we have attended, (to city entities and the neighbors), explain how they have now come back with all these significant/major changes. Additionally, the Request For Comments is now making comparisons between their 2004 Permit and this current application to establish some change. The old application should have no bearing. In 2004, the majority of residential subdivisions that line Hwy 7 were not there, our development, Platteview Farms Plaza, was nothing but a pile of weeds and a conglomeration of utility poles and lines, the Pavillions did not exist, the Kum and Go gas station did not exist, and the Roundabout Crossings did not exist. So those 16 years have brought about changes that make their 2004 application not appropriate for comparison. Additionally, the dangling of the South Parcel as a gift should not be tied to this permit in any fashion. To us it equates to no more than a bribe or pay-to play tactic as it does not take away the gravel pit, or the fact that there is no way to take away the experience, visibility, or association of this gravel mine as you approach the gateway of Brighton (via Hwy 7) or exit it and it offers no great value. For the record: We are private Business owners that have invested several millions of dollars in Platteview Farms Plaza - (Miller St. & Hwy 7- home to Autowash, Piasano Liquors, Papa Johns Pizza, and Santiagos Mexican Restaurant) - AND are Brighton homeowners. Since the mid 2000's we have worked diligently in multiple ways to help revitalize the Brighton Downtown District, . . . trying to clean it up and create a pleasing environment that would help breathe new life, counterbalance Brighton's challenges, and attract both businesses and consumers to the downtown area, . . . businesses that could thrive because individuals would DESIRE to be there! Efforts include my husband's 7+/- years as a commissioner on BURA (BRIGHTON URBAN RENEWAL AUTHORITY) and roughly 3 years on the board of the Downtown Partnership - so we are speaking from having been in the trenches and on the front line. Downtown Brighton is challenged and a gravel pit at this gateway negates and undermines ALL that has been worked for (or the millions of tax dollars that have or are currently being spent!) to help negate its challenges. Regarding the requirements of the Conditional Use Permit:

1. The conditional use is not compatible with the surrounding area, not harmonious with the character of the neighborhood, detrimental to the immediate area, detrimental to the future development of the area, and detrimental to the health, safety, or welfare of the inhabitants of the area and the County. (including wildlife!)

The subject use is located in a Mining Conservation Overlay District which has been established by Adams County to protect valuable aggregate resources such as Tucson

South. AI has demonstrated that it will meet both the specific and general performance criteria applicable to this application. Air quality, noise, traffic, safety, and infrastructure impacts have all been assessed, mitigated, and demonstrated to be below regulatory thresholds.

2. The conditional use permit cannot address all off-site impacts. Please consider the following facts:

1. HWY 7 IS THE WEST GATEWAY to Downtown Brighton - and there is no way, traveling this MAIN ROUTE, in either direction that you would NOT be able to see this mine, or experience it. Specifically, you can NOT physically block/berm the view approaching from the west. And it will be visible exiting the city gates as well relative to the elevation and floodway (cannot berm it there). AND, it will also be visible at the Tucson intersection area.

Viewports along the highway will be shielded by a combination of berms, fencing and a living screen. Additionally, the excavation will be on average 20 feet below-grade once operations are established.

2. DUST - Environmental Issues of Health, and Safety: The method of mining will be a DRY mining technique - there will be dust! Slurry walls are created to keep water out of the pit and while the initial dewatering phase may take a year, the ground WILL dry out. Weld County confirmed dust issues on Aggregate's activities citing the type of wind conditions that exist out here as well as the physical impossibility of keeping the expansive overburden piles and surfaces wet enough to prevent it - and Aggregate's own representative admitted as much during a hearing. Crystalline silica dust is one of the particulates commonly found in gravel operations - and this is a known carcinogen! "This respirable silica dust causes lung disease and lung cancer. It only takes a very small amount of airborne silica dust to create a health hazard." (<https://www.silicasafe.org/know-the-hazard/why-is-silica-hazardous>) Dust particles (PM10) (big dust particles) can range in size from 2.5 to 10 micrometers in diameter. They can stay in the air for a number of minutes to a number of hours and can travel as little as a hundred yards or as much as 30 miles! Fine particles (PM2.5) (small dust particles) are 2.5 micrometers in diameter, or smaller, and can stay in the air for days or weeks -- and can travel much farther; many hundreds of miles! (and it is the smaller particles that are much more dangerous)

(https://webcms.pima.gov/UserFiles/Servers/Server_6/File/Government/Environmental%20Quality/Air/Air%20Monitoring/AWhatIsParticulateMatter1.pdf) Air monitoring may sound good but gusts, pockets, and swirls of wind NEVER disperse dust equally or proportionately. You could not physically have enough monitors to accurately track true air quality. We were recipients once of a nasty gram (certified letter) from Todd Creek Village Parks and Recreation's legal counsel that accused us of painting a portion of their white rail fence brown - threatening repercussions for not fixing it! The fence appeared that way because of light moisture (misting rain) followed by an unequal dispersment of heavy dust. A monitor 200' away would never have picked up the same air/dust reading that we would have had at our house. So even though air monitoring may sound good, they're really pointless because they don't solve, resolve, or accurately track the problem. (letter and pictures available upon request!) (WET MINING WOULD GO A LONG WAY TO SOLVING THIS ISSUE)

The proposed operational plan will entail mining moist materials which will be attained through residual moisture in the subaqueous materials and daily watering of exposed materials. This technique has been proven to be effective at reducing particulate emissions. Wet mining is water intensive (a scarce resource) and results in greater noise due to onsite process dewatering and screening activities.

Aggregate Industries is committed to compliance with MSHA standards for Crystalline Silica

and has a comprehensive compliance plan in place at all of its facilities to comply with this rule which is primarily designed to protect onsite workers in close proximity operations. It is also important to note that respirable silica (Quartz) is a naturally occurring subset of all sand and gravel materials and comprises only a small percentage (< 10%) of the total dust concentrations from such sources. Data from the on-site dust monitors will also allow extrapolation of silica data.

Monitoring locations have been selected to correspond to maximum areas of impact based on dispersion modeling and such monitors are well suited for evaluating fugitive particulate concentrations. This type of field ambient monitoring is widely used by agencies and industry alike for compliance impacts. Wind stations to be installed with the monitors and will report wind speed and direction.

3. TRUCKING: The trucking impact will still be felt. Aggregate Industries has stated in their neighborhood and city presentations that roughly 75% of their product comes back down into Adams County. Per their application last year it was estimated that the quantity extracted from the Tucson South Mine would necessitate 420 semi-truck trips a day in traffic. If 75% of that quantity (or whatever quantity) moves back down into Adam's County, that is a lot of additional trucks. These trucks will use Hwy 85, Hwy 7, and County Rd. 2 to arrive at their destinations and then return. Note: Aggregate Industries is alleged to have had a previous road maintenance agreement in place with the Tucson North mine that they are said to have not honored. This was brought up at the Neighborhood Meeting and Aggregate side stepped it at the time and has still never addressed it. There is current road damage (sinking) to Holly St. (NW corner Holly/Hwy 7- turn lane to go west onto Hwy 7) which has been caused by gravel trucks sitting and waiting to turn west (tax payers will likely pay for the repair) and we do not think that it is unreasonable for Aggregate to step up and address their past permit/damage and whether or not they honored their agreement.

There are no new truck traffic impacts which will result from approval of this project. There is no offsite hauling associated with Tucson South, instead all 400 previously proposed daily truck trips will be eliminated by Aggregate's use of an overland conveyor system. The existing Wattenberg site in Weld County will continue to operate and use approved roads as it has for 15-20 years. The approval of this permit does not add to the existing traffic pattern on HWY 85.

4. Length of project/mining. No matter WHAT commitments are made up front, there is NO easy way to solve an incomplete job/project. It would be irresponsible to disregard the history of mining pits because they speak VOLUMES about the truth.

Approval will be conditioned upon an eight-year time frame with no allowance for extension. Reclamation bonds, future water storage commitments, and other financial assurances will ensure that project mining and reclamation is complete on time

5. Reclamation and end use of land: The Platte River corridor throughout Adams County has been pock marked and scarred with endless mining. Not every community has the opportunity to have river front property or access to it. It should be valued - especially with this land sitting right outside the downtown gateway as it has access off of major roads, and an additional intersecting road. Aggregate Industries suggests that there is not much other use for this land. Yes there is a portion that is in a flood way (unbuildable but could have community uses), but 100 year flood plains are buildable! I have sold both residential and multifamily homes that were built in 100 year flood plains and have seen successful commercial developments as well. (Campus? Medical facility? Sports fields/Soccer fields, etc.) They would all hold more value than an augmentation reservoir that may or may not have water in it. HIGHEST and BEST USE of land should always be considered. Please see these links for consideration as

to creative uses for Floodplains: <https://toolkit.climate.gov/case-studies/building-smart-floodplain> (Ft. Collins, Colorado) -- <https://theconversation.com/design-for-flooding-how-cities-can-make-room-for-water-105844> <https://www.sasaki.com/voices/getting-creative-in-the-floodplain/> The current reclamation calls for the end use of this land to be augmentation reservoirs for the City of Aurora and augmentation reservoirs may not even have water in them. Aurora's current reservoir off Tucson St. epitomizes blight.

Aggregate Industries understands that Aurora's water storage reservoirs are not a use you prefer for this site, but believes this use will equally meet vital community needs for a secure source of water for years to come. Moreover, each of the above preferred uses would be expected to add heavier traffic loads to Hwy 7 and degrade the natural environment in this area, which has been designated as part of the County's natural resources overlay district. Finally, strict requirements regarding building in a floodplain are necessary to prevent impacts to upstream properties and adverse impacts to wetlands, and much of the property is in the floodway, which is totally unbuildable.

6. FENCE: The fence that is being shown will be a possibility AFTER the project is completed but nobody seems able to answer what the fence will be during construction and mining. Adams County Development Standards and Regulations 3-38-066-12 (regarding gravel pit operations) requires the "prison fencing" ("V" mesh or chain link fence to a height of 72" topped with three strands of barbed wire canted to a 45 degree angle). How much this can safely be altered (if at all) is questionable. The sides of the mine (known as the high-wall) are extremely lengthy (2300 feet on the previous DRMS application) and will be nearly vertical during mining. They only become less steep (3-1) in the final reclamation.

Aggregate Industries will not install chain link "prison style" fencing before during or after the project is complete. The County indicated in the neighborhood meeting and subsequent conversations with AI that farm style fencing will be allowed during the mining operation and therefore, such a fence will be used. AI has supplied several examples of such fencing to the County for its consideration and approval.

AI will be completing concurrent reclamation. As new areas are opened up, the previous area will be backfilled to final slopes and seeded. This is an efficient way to mine and avoids double handling materials. It also mitigates impacts of mining on the surrounding area, comporting with the County's CUP approval criteria. There is no plan to leave 2300 feet of mine face exposed.

7. COST BENEFITS: There are not benefits to the City of Brighton or Adams County but in the neighborhood and city presentations, Aggregate Industries states that there could be benefits of up to a 30% savings in having a quarry less than 25 miles away. Given the number of gravel pits out in the Weld and Adams County region, (less than 25 miles away) we all should be able to get GREAT pricing because of our proximity! - But we have personally purchased tons and tons of a variety of different aggregate (including concrete) for various applications over the past several years and pricing is and has been relatively similar across the WHOLE metropolitan area! This would apply to them in bidding a job giving them room for a higher or lower profit margin, (and Aggregate Industries admitted this in our private meeting with them) but I would love to see where this would EVER benefit anyone in general. 8.

Thanks for your comment. AI believes construction aggregates are a great benefit to the community. It is well established that the value of any mineral deposit is based on its proximity to the end use due to high logistics cost. This site was always considered to be a valuable mineral deposit. Growth and development of roads infrastructure and medical plazas are not possible without these foundational materials.

The Adams County Mineral Extraction Plan (Multiple-Sequential use of Commercial Mineral Property) states “it is the intent of the state legislature, through this statutory guideline, to make mining areas beneficial to the community before, during and after mining.” Their plans seem to be a revolving door so commenting on what they actually are is difficult. However, Aggregate’s current proposed reclamation leaves the pits to be filled as reservoirs for the City of Aurora - with no public access. The trail they reference will be outside the fence along Hwy 7 and so nothing in this plan benefits the community, the wildlife, or the City of Brighton in any fashion. In fact it successfully does the opposite by blighting Brighton’s west gateway. There are already two reservoirs straddling Tucson St. which also fail to benefit our community or the native wildlife. They are fenced, ugly, and surrounded by infinite weeds and dirt.

As stated previously the subject site is located in a MCOB and the applicant has demonstrated that both the specific and general performance criteria for this use has been met. The scope of the project has been restricted significantly to ensure the impacts are mitigated so as to be in harmony with the surrounding area. A water storage pond surrounded by floodplain-friendly farm style fencing and an adjacent trail will provide a suitable and aesthetically pleasing long-term use. The South parcel donation for a community Open Space adds to this value.

9. Wildlife: At last year’s hearings, Aggregate Industries implied that gravel pits were beneficial to the area’s wildlife and that the wildlife would grow and benefit from it. Besides removing all the surface area from any sort of wildlife use, Aggregate will also be REMOVING all the cottonwoods that exist on their east parcel (runs from the river towards Tucson St. - home to many forms of wildlife). Additionally, no bushes or trees can be planted on the perimeter due to potential damage to the slurry wall. Please go look at the two existing reservoirs off Tucson St. and see if you really think these fenced pits benefit or increase the wildlife.

AI has completed a comprehensive wildlife study to support this project. AI will complete Owl surveys prior to startup of pre-mining construction activities. Cottonwoods will be relocated as possible based on size restrictions and in accordance with arborist’s recommendations.

10. THIS HAS TO BE WEIGHED IN ON: Brighton has benefited greatly from the residential growth to the west of the city (off Hwy 7). The growth has really helped to support and build businesses/revenue, but much of this west area is in a “no man’s land” (for retail or services). It leaves consumers picking between “drives” that are either east into Brighton, west towards Larkridge/I-25, or south down into Thornton. This is important because incentive to go into Brighton could soon be diminished by Thornton’s current aggressive plans for growth (even up into Weld County). We attended Thornton’s May 26th City Council meeting and twice in a discussion on a proposed med/higher density subdivision, it was vocalized that they did NOT want consumers/homeowners going to Brighton for business!!! They want the tax dollars in THEIR community. They are approving some major development with much of it currently calling for six lane roads to flank it, (i.e. Quebec and Holly) - REGARDLESS of having the necessary infrastructure (Hwy 7 staying two lanes!) to support it. Some of the zoning for this sort of density was approved years ago with the assumption that the RTD’s FasTracks light rail North Station (Colorado/Hwy 7) would be complete. However, FasTracks was estimated to be another 20 years out, . . . PRIOR to COVID! There are no immediate plans from CDOT to expand Hwy 7. But this has not stopped Thornton from approving these developments without having the necessary infrastructure. This will make the commute to Brighton a longer and less feasible or appealing endeavor – and adding a gravel pit to the gateway will only exacerbate

the negativity of this drive and further diminish the appeal of Brighton. Please, PLEASE consider the negative aspects of this proposed gravel pit. THIS IS NOT THE RIGHT LOCATION FOR THIS SORT OF INDUSTRIAL ACTIVITY and there is so much more that can be done with this land! For the sake of so many in this community, who call this home, please care. Respectfully submitted, Mark Cordova and Sherie Gould-Cordova Downtown Brighton Business Owners - Platteview Farms Plaza 124-128 W. Bridge St., Brighton, CO 80601 (303) 880-6788 5680 E. 165th Pl., Brighton, CO 80602

AI appreciates your concerns with the traffic load on Highway 7 and has revised its application so as to eliminate truck traffic for hauling of mined material from Highway 7. The timing of any Highway 7 expansion is beyond the scope of this application. We have, however, accounted for future CDOT expansion of the highway in the location of the slurry wall and setbacks from right of way so when CDOT widening occurs the future reservoirs will not conflict.



Right of Way & Permits

1123 West 3rd Avenue
Denver, Colorado 80223
Telephone: **303.571.3306**
Facsimile: 303. 571. 3284
donna.l.george@xcelenergy.com

September 9, 2020

Adams County Community and Economic Development Department
4430 South Adams County Parkway, 3rd Floor, Suite W3000
Brighton, CO 80601

Attn: Greg Barnes

Re: Tucson South, Case # EXG2020-00001

Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has determined **there is a possible conflict** with the above captioned project. Public Service Company has existing electric transmission lines and associated land rights as shown within this property. Any activity including grading, proposed landscaping, erosion control or similar activities involving our existing right-of-way will require Public Service Company approval. Encroachments across Public Service Company's easements must be reviewed for safety standards, operational and maintenance clearances, liability issues, and acknowledged with a Public Service Company License Agreement to be executed with the property owner. PSCo is requesting that, prior to any final approval of the conditional use documentation, it is the responsibility of the property owner/developer/contractor to have this project assigned to a Land Rights Agent for development plan review and execution of a License Agreement (via website www.xcelenergy.com/rightofway or email coloradorightofway@xcelenergy.com).

PSCo also has natural gas distribution facilities running along Tucson Street, 168th Avenue and 160th Avenue.

AI Response: AI will work with Xcel prior to any activities in an existing Xcel right-of-way to ensure there are no conflicts or to obtain the appropriate approvals.

Donna George
Right of Way and Permits
Public Service Company of Colorado / Xcel Energy
Office: 303-571-3306 – Email: donna.l.george@xcelenergy.com



Water Resources
15151 E. Alameda Parkway, Suite 3600
Aurora, Colorado 80012
303.739.7370

Worth Discovering • auroragov.org

September 11, 2020

Adams County Community and Economic Development Department
4430 South Adams County Parkway, Suite W2000A
Brighton, CO 80601-8216

RE: Comments on the Conditional Use Permit to allow extraction use in Agricultural-1 (A-1) zone district, Case Name Tucson South, Case Number EXG2020-00001

Dear Adams County Planning Commission:

The City of Aurora Water Department (Aurora Water) appreciates the opportunity to comment on the Conditional Use Permit for gravel mining submitted by Aggregate Industries in case number EXG2020-00001.

The City of Aurora is located within three counties, Adams, Arapahoe and Douglas. Our planning department estimates that 1/3 of our population resides in the Adams County portion of the city. The 2010 census estimated Aurora's population to be 325,000 residents. Currently, we believe that number has grown to nearly 380,000. Aurora is also home to University of Colorado Hospital and the Anschutz Medical Campus, Children's Hospital, the Veterans Hospital and the Gaylord of the Rockies Hotel and Convention Center and Amazon, all of which are also in Adams County.

As a result of the 2002 drought, Aurora Water began planning the \$750M Prairie Waters Project to recapture reusable return flows in the South Platte River below the Metro Water Reclamation Facility. This project became operational in 2010. Water storage through reclaimed gravel pit reservoirs is a critical component to this project. In 2003, Aurora Water signed a contract to purchase the Tucson South gravel reservoir from Aggregate Industries after it had been completed and reclaimed to become a component of the Prairie Waters system.

The Front Range and the City of Aurora is experiencing significant growth and we expect the growth to continue. With that comes the demand for both water and sand and gravel resources. The Tucson South gravel mine helps meet both of these demands within Adams County and the larger Front Range area. Aurora Water supports the approval of this project.

We appreciate your time and the consideration of our comments in the application. Please contact me or my staff with any questions or requests for additional information.

Sincerely,

Marshall P. Brown
General Manager
Aurora Water

**AGGREGATE INDUSTRIES – WCR, INC
TUCSON SOUTH RESOURCE
CONDITIONAL USE PERMIT APPLICATION
PROJECT DESCRIPTION**



JULY 30, 2020

EXECUTIVE SUMMARY

TUCSON SOUTH RESOURCE CONDITIONAL USE PERMIT APPLICATION

This application for a Conditional Use Permit (CUP) for gravel mining (“Application”) is presented by Aggregate Industries-WCR, Inc. (“Aggregate Industries”) to Adams County, Colorado for review and approval as provided for in the Adams County Development Standards and Regulations.

Aggregate Industries-WCR, Inc. is seeking a conditional use permit to mine land owned by Aggregate Industries and the City of Aurora in Adams County, Colorado. The site is located west of Brighton, north of Highway 7, and South of 168th Street. Aggregate Industries is pleased to present this revised application based on feedback from the community, local agencies, and other key stakeholders. Aggregate Industries appreciates the time and effort of the stakeholders who contributed their input to the Application’s development, and looks forward to continued collaboration during the County review process.

HISTORY AND REVISED SCOPE

When initially permitted in 2004 (EXG2004-0004), the planned use of the property included wet mining, onsite crushing and screening plants, sales yards, and truck transport of mined materials. This revised plan has been narrowed in scope to only include onsite excavation and direct conveyance to the existing Wattenberg Lakes Resource site located 1.5 miles to the north, in Weld County. Onsite processing plants, sales yards, and material export by truck are no longer included in this CUP application. Additionally, a 24-acre parcel, known as the “South Parcel” has been removed from the Division of Reclamation, Mining and Safety permit, pending its approval. Aggregate Industries will instead donate this parcel to either the City of Brighton or Adams County for open space.

In this revised Application, we also are proposing enhanced environmental controls and studies to demonstrate to the community that air emissions will be significantly below local, state and federal regulatory levels.

Aggregate Industries believes the Application provides a proposed use that is compatible and in harmony with surrounding uses, which will benefit the community by providing a vital, local source of construction materials to meet construction demand in Adams County, while reducing costs of local building and road projects, enhancing economic development potential and providing job opportunities in Adams County.

The Project Fact Sheet follows on the next page.

SUMMARY OF REVISED PERMIT APPLICATION

Overview

Aggregate Industries is seeking a permit for land it owns west of Brighton, Colorado, located north of Highway 7 and south of the Adams/Weld County line (168th Street).

Aggregate Industries proposes to limit mining to the parcels north of Highway 7 and use an overland conveyor system to bring material to the existing Wattenberg/Platte Valley facility in Weld County. By removing the property south of Highway 7 and installing a conveyor system, this revised proposal eliminates traffic concerns on Highway 7, Tucson Street, and 168th Ave. raised during a 2019 application. A parcel of land south of Highway 7 that is owned by Aggregate Industries will not be part of the permit.

Aggregate Industries proposes to extract material and complete reclamation at the site over an eight-year time period. The land will feature perimeter seeded berms during mining and buffer areas on Highway 7 and along the South Platte River. Upon completion of mining, the community will benefit from a water storage facility featuring a crusher fines regional trail with native landscaping and decorative fencing.

Aggregate Industries proposes to donate the property south of Highway 7, which contains significant aggregate resources, as a conservation easement or open space land that, if desired by the community, will include a nature trail and nature demonstration area.



1. TRAFFIC ELIMINATION

Aggregate Industries has revised the application to remove all haul out operations. A 1.5-mile-long overland conveyor system will be installed prior to commencement of production. This mitigates traffic concerns on Highway 7, Tucson Street, and 168th Ave.

Please see [Section D](#) and Supplemental Materials 01.



2. MINING & RECLAMATION TIMELINE

Mining and Reclamation will be reduced to 8 years from the time the conveyor is installed, assuming an operating schedule of Monday through Saturday, 7 a.m. to 7 p.m.

Please see [Section D](#) for additional information.



3. POST MINE WATER STORAGE RESOURCE

Enhanced post mine water storage resource – City of Aurora has committed to farm style fencing with an enhanced landscape trail along Highway 7.

Please see [Page 14](#) and Supplemental Materials 23 (S23) for fencing and landscape plans.



4. REMOVAL & DONATION OF PROPERTY SOUTH OF HIGHWAY 7

The property south of Highway 7 will not be included in the new county application. Aggregate Industries will donate the parcel or place a Conservation Easement on the parcel. Aggregate Industries will also work with the County to include a nature trail and nature demonstration area on the south parcel.

Please see [Page 12](#) and Application Materials 04 (A04).



5. AIR QUALITY MONITORING & MODELING

Aggregate Industries will utilize an expert third party consultant to conduct an air modeling analysis and will commit to installing two real time air quality monitors on site. Aggregate Industries will transmit data from the monitors monthly to Adams County. Aggregate Industries will provide a hotline for dust complaints. Aggregate Industries will meet quarterly with neighbors to update the status of the project.

Please see [Page 24](#) for a detailed explanation and Supplemental Materials (S06).

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TUCSON SOUTH RESOURCE CONDITIONAL USE PERMIT PROJECT DESCRIPTION

SECTION A

INTRODUCTION AND OVERVIEW

The Tucson South Resource CUP Area is owned by Aggregate Industries and the City of Aurora and consists of a dryland field¹, a small, partially reclaimed gravel resource and a former residence. The property is located north of Colorado Highway 7, and is bisected by Tucson Street (the “Property”).

There are few productive uses of the Property that are compliant with requirements of the flood control and natural resource overlay districts, the County’s mineral extraction plan, and the dry up agreement with Todd Creek Farms Metropolitan District, which removed access to historic water rights for irrigation of crops, and that are congruent with the future land use designation, all while providing for utilization and enjoyment of the rural environment. Mineral extraction and reclamation as water storage facilities, however, is one such use.

The mineral deposits at the Property, which were evaluated and determined to be viable commercial deposits, are a valuable commodity for the community, providing a vital source of construction materials to meet ever-increasing demand throughout Adams County and the region. Further, the mining operations will provide direct and indirect employment opportunities.

The mining and reclamation plan to recover this valuable resource was revised after extensive public engagement to limit the duration to eight (8) years after conveyor installation is completed, with mining operations conducted from 7:00 am to 7:00 pm, Monday through Saturday, no mining operations on Sundays and no truck transportation of mined material. Additionally, Aggregate Industries is providing enhanced mitigation of external impacts to ensure compatibility and harmony with the surrounding area and committing to no requested extensions of the CUP permit.

The end result will be a future use of the Property as water storage facilities and upland meadow. These permitted uses in the flood control district provide a long-term benefit to wildlife and the community, increase the natural resource protection factor of the Property pursuant to the natural resource overlay district requirements, and continue the utilization and enjoyment of the rural environment.

¹ While zoned A-1 which allows for agricultural uses, due to the dry-up agreement with Todd Creek Farms Metropolitan District covering the entire west cell, there are no historic irrigation water rights available for a typical agricultural use of this property.

CUP AREA DESCRIPTION

The proposed CUP Area contains the following tracts of land as shown on Sheet 1 of the Conditional Use Site Plan (the “Site Plan”):

- Tracts of land owned by Aggregate Industries referred to on the Site Plan as Tracts A, B, D, E, F, H and M.
- Tracts of land owned by the City of Aurora referred to on the Site Plan as Tracts C, G and K².
- Tucson Street right-of-way referred to on the Site Plan as Tract L.
- Land owned by the City of Thornton referred to on our maps as Tract M. (Note: Aggregate Industries is working with the landowner to obtain a right-of-way easement for a conveyor on this tract).
- Land owned by the City of Aurora referred to on our maps as Tract N. (Note: This tract is the preferred option for the conveyor route. Aggregate Industries is working with landowners to obtain right-of-way easements for the conveyor following this path).

EXISTING LAND USES OF THE PROPERTY

The Property, where the proposed CUP Area is located is zoned A-1 and is also part of the flood control and natural resource overlay districts, and is subject to the County’s mineral extraction plan. The current Property uses consist of dryland field, one unoccupied house, a former greenhouse growing operation and a parcel of land from a previously permitted mining operation.

The former greenhouse growing operation was demolished by the City of Aurora in preparation for mining. Aggregate Industries will remove the vacant house prior to start-up of mining operations. The United Power overhead electric line on the west side of the West parcel will also be removed in accordance with the agreement with United Power.

² Tract K will be used as a staging area for the slurry wall construction, only.

Onsite improvements owned by Aggregate Industries or other property owners that are located within the CUP Area such as unimproved roads, fences, alluvial water wells and associated pumps, houses and outbuildings, and irrigation ditches and laterals, may be removed or relocated during mining and reclamation. Structures, easements, or rights-of-ways not owned by the Applicant or other property owners will not be disturbed without prior permission (see Site Plans). None of the easements, rights-of-ways, or associated structures are expected to be in conflict with mining or reclamation operations.

There are two established oil and gas wells and associated facilities located on the Property. The operator of the well on the west parcel capped and abandoned the well in 2019. The other well, located on the east parcel, is not located in close proximity to and will not interfere with Aggregate Industries' proposed mining operations.

ADJACENT LAND USES

Adjacent land uses relative to compatibility with the proposed use are summarized in Table 1 below. Please see the Conditional Use Permit Approval Criteria following in Section B for a complete analysis of the project's compatibility and harmony with the surrounding area. Please also see **Supplemental Materials 16 (S16)** for a color-coded map showing the adjacent properties' zoning.

TABLE 1 – ADJACENT LAND USES

Location	Existing Zoning	Current Uses	Compatibility
North Boundary East of Tucson Street	Heavy Industrial I-3 District and Agricultural A-1 District	City of Thornton Tucson Resource Pit (water storage facility) and a single family dwelling	Proposed use will be compatible with higher intensity I-3 use. In addition, a buffer parcel, setbacks, operational limits and engineering controls will assure compatibility with the A-1 use.
North Boundary West of Tucson Street	Agricultural A-1 District	City of Aurora Challenger Pit (storage facility)	Proposed use will be compatible with similar Challenger Pit use. Applicant is working with Aurora on Conveyor Easement for proposed use.
West Boundary	Agricultural A-1 District	City of Aurora Storage Pump Station and Electricity Power Substation	Proposed use is limited to the East side of Brighton Ditch and will be compatible with adjacent Aurora and United Power uses.
South Boundary	Bounded by Highway 7. Beyond Highway 7, A-1 and C-1 Districts exist	Adjacent Major Arterial Highway	Presence of Highway 7, berms, installation of landscaped trail, living screen along South Boundary in addition to the donation of South Parcel will adequately buffer proposed use and assure compatibility with adjacent A-1 and C-1 uses.
East Boundary	Agricultural A-1 District	South Platte River Open Space	Compatibility assured through mining setbacks from open space area and native plantings. Beyond the Open Space Corridor Highway 85 will provide additional buffer.

FINAL PROPOSED LAND USES OF THE PROPERTY

The proposed final land use for the Property is lined municipal water storage for the West cell and the majority of the East cell, with upland meadow on the northern portion of the East cell. Adjacent land uses, as discussed above include: water storage to the north, rural residential and agriculture to the south, City of Brighton wildlife conservation area and the South Platte River to the east, and water storage and a United Power substation to the west.

As discussed below, the lined water storage and upland meadows future uses are permitted uses in the flood control district, are congruent with the future land use designation for the Property and are compatible with existing adjacent land uses and the surrounding area. These future uses of the Property also provide an increased natural resource protection factor for the Property, and a long-term benefit to wildlife and the community while maintaining the Property in a condition that allows for utilization and enjoyment of the rural environment.

SECTION B

CONDITIONAL USE PERMIT APPROVAL CRITERIA

Section 2-02-09-06 of the Adams County Development Standards and Regulations (the “Development Standards”) contains the approval criteria for all conditional use permit applications in Adams County.

Aggregate Industries has reviewed Section 2-02-09-06 of the Development Standards and is confident this Application meets all criteria as discussed below.

1. Permitted in the Zone District

The Property is located in the A-1 Zone District. Section 3-08-04-05(1) of the Development Standards permits Extraction and Disposal Uses in the A-1 Zone District with an approved conditional use permit, and Section 11-02-198 of the Development Standards includes “mining” in the definition of “Extraction and Disposal Uses.” Therefore, the Project is a permitted use of the Property with an approved conditional use permit. Accordingly, the Application satisfies this criterion.

2. Consistency with the Purposes of the Adams County Development Standards and Regulations

Section 1-01-03 of the Development Standards states that the general purpose and intent of the Development Standards is to “assist in the orderly, efficient, and integrated development of the County” by “divid[ing] the unincorporated area of the County into zone districts” in order to “designate, regulate and restrict the location of uses.” Section 3-08-01 of the Development Standards provides that the A-1 Zone District is “primarily designed for the utilization and enjoyment of the County’s rural environment”, while Section 2-02-08 of the Development Standards provides the purpose for conditional use permits in Adams County and states, “[c]onditional uses are those uses which are presumptively compatible with other land uses authorized or permitted in a zone district, but, if approved, which require more discretionary review than those uses which are authorized.” As a permitted conditional use in an A-1 zone district that appropriately utilizes the rural environment, the proposed mining and reclamation uses are consistent with these Development Standards and the Application satisfies this criterion through the CUP discretionary review process.

The Property is also subject to, and the Application is consistent with, the Adams County Mineral Extraction Plan, which was established by the County in response to the passage of C.R.S. § 34-1-301 et seq. Specifically, C.R.S. § 34-1-301 requires all populous counties of the State of Colorado, which includes Adams County, to develop a rational plan for extraction of commercial mineral deposits because such commercial mineral deposits are essential to the State of Colorado's economy. Accordingly, Adams County adopted the Adams County Mineral Extraction Plan on March 28, 2005 as its rational plan for extraction of commercial mineral deposits.

Page 5 of the Sand, Gravel and Quarry Aggregate Resources Map, which is codified within the Adams County Mineral Extraction Plan, shows that the Property is located in the F-4 Zone, which is defined as "Floodplain Deposit" with "Probable Aggregate Resource". Additional site-specific evaluations completed by Aggregate Industries identified these deposits as a viable commercial mineral deposit that includes many million tons of quality, salable aggregate. This commercial mineral deposit has significant economic value to the community, and will be mined and reclaimed in a manner that protects natural resources while providing for concurrent rehabilitation of mined land, and so the Application meets this criterion. Please see **Supplemental Materials 17 (S17)** for a copy of the Adams County Mineral Conservation Overlay Map.

The Application is also consistent with the stated purpose of the Natural Resources Conservation Overlay District, pursuant to Section 3-39-01 of the Development Standards, which is to "(1) provide for the protection of natural, wildlife, agricultural, and cultural resources, which are an essential component of the community's economic base and establish the character of the community; and (2) preserve and enhance the quality of life for County residents." Specifically, the proposed mining operation and reclamation of the Property will,

- Conserve environmentally sensitive areas, provide water habitat for migrating birds and preserve areas as upland meadow for other species. Please see the Biological Resources Inventory Report attached to this application as **Supplemental Materials 10 (S10)** for more details.
- Separate and define urban areas as it will prevent future development of the Property, creating a separation between urban downtown Brighton and rural agricultural areas west of the City of Brighton.
- Prevent urban nuisance complaints as it will separate the rural, agricultural areas from future residential or commercial development.
- Limit the extension of services and infrastructure that would be costly as the proposed mining and water storage uses do not require water and sewer services.
- Preserve environmentally sensitive areas by creating ponds and upland meadow, which will be used by wildlife.
- Prevent the spread of urban growth and eliminate the potential for future residential and commercial development, thereby preserving the rural character and environmentally sensitive areas.

Further, the Application is consistent with the Flood Control Overlay District stated purpose under Section 3-37-01 of the Development Standards, which is to “establish reasonable limitations and controls of land uses within the 100-year floodplain. Mineral extraction and water storage facilities are permitted uses for which Aggregate Industries has obtained a Floodplain Development Permit. As shown on the Adams County Floodplain map, much of the Property is in the floodway and essentially undevelopable, while the remainder is in the floodplain, which restricts development of the Property for many otherwise permitted A-1 uses. Please see the attached **Supplemental Materials 18 (S18)** for a copy of the Adams County Floodplain map overlain on the Tucson South permit area.

Lastly, the Application is also consistent with the Imagine Adams County Comprehensive Plan adopted in December 2012 (the “Comprehensive Plan”). The “Resource Extraction” section found on page 43 of the Comprehensive Plan states, “Adams County contains sand, gravel, coal, oil and gas resources. The extraction of these resources contributes to the local economy, providing employment to County citizens and tax income to the government. Mining contributes to a healthy economy as readily available local sources lower the cost of shipping materials used in construction or to provide essential fuels.” Accordingly, Policy 7.5 of the Comprehensive Plan is to “Establish Regulations for Resource Extraction” and “[p]rovide for the extraction of subsurface resources in accordance with State law, but require mitigation of undesirable impacts to the natural environment and community as well as plans for viable potential reuse of land.” As explained below, the Project will implement a variety of control measures to ensure the Project mitigates undesirable impacts to the natural environment and therefore, is consistent with the Comprehensive Plan’s goal of proper mineral extraction.

As discussed above, the Project is not only consistent with the purpose and intent of the Development Standards but it also furthers the goals and intent of the Adams County Mineral Extraction Plan and the Comprehensive Plan by extracting commercially-viable mineral resources and ensuring adequate reclamation of the same, a defined priority under Colorado statutory law, and therefore, the Application satisfies this criterion.

3. Compliance with the Adams County Development Standards and Regulations and applicable Performance Standards

As referenced throughout this application, Aggregate Industries is committed to complying with all applicable sections of the Development Standards. Additionally, as explained below in Section C - Performance Standards Approval Criteria, the Project will comply with all applicable performance standards contained in the Development Standards. Accordingly, the Application satisfies this criterion because it will comply with all applicable Development Standards and Performance Standards.

4. Compatibility and Harmony with the Surrounding Area

Section 2-02-09-06 of the Development Standards states that all conditional uses must be “compatible with the surrounding area, harmonious with the character of the neighborhood, not detrimental to the immediate area, not detrimental to the future development of the area, and not detrimental to the health, safety, or welfare of the inhabitants of the area and the County. In making this determination, the Planning Commission and the Board of County Commissioners shall find, at a minimum, that the conditional use will not result in excessive traffic generation, noise, vibration, dust, glare, heat, smoke, fumes, gas, odors, or inappropriate hours of operation.”

As discussed above, the Property is surrounded by mostly undeveloped agricultural land and water storage facilities with a few adjacent residential uses, and is also located within a floodway and floodplain. The surrounding area consists of the Todd Creek Neighborhood to the west; the South Platte River, the westernmost part of Brighton and State Highway 85 to the east; more Adams County A-1 Zone district uses to the south; and Weld County agricultural uses to the north.

Aggregate Industries has developed a mining and reclamation plan that is consistent with the Adams County and City of Brighton Comprehensive Plans, including the future land use designation of the Property, and is proposing the following enhanced mitigation measures to ensure compatibility and harmony with the surrounding area during mining and reclamation:

- No onsite processing plants, eliminating potential noise, fumes, dust and traffic.
- Use of a conveyor to totally eliminate truck hauling traffic and road wear.
- Seeded screening berms and decorative plantings to protect views along Highway 7³.
- Setbacks that exceed the minimum requirements from adjacent properties and the South Platte River corridor.
- Limited hours of operation: Monday – Saturday, 7am -7pm, with no Sunday operations.
- Limited timeframe for mining and reclamation with no requested extensions.
- Noise mitigation measures, such as berms, living screen and operating below grade.
- Concurrent reclamation of mined portions of the Property.
- Enhanced air quality monitoring and reporting to Adams County.
- Trail construction and trail easement dedication to the City of Brighton or Adams County Open Space during reclamation⁴.
- Donation of the South Parcel for open space.
- Preservation of environmentally sensitive areas.

³ To the extent possible, Aggregate Industries intends to relocate healthy, mature trees from the active mining area to the setback area between the South Platte River and the East cell.

⁴ Ownership and maintenance of the easement by either Adams County or City of Brighton will be finalized prior to approval of the permit.

These mitigation measures will ensure that the potential impacts of a typical sand and gravel mining operation, including but not limited to, noise, dust and traffic are mitigated to provide compatibility with the surrounding area. Accordingly, the Application satisfies this criterion because the majority of the area adjacent to the Property is undeveloped - agricultural land and water storage - and impacts to the surrounding residential uses will be sufficiently mitigated to maintain harmony between the proposed use and these uses.

5. Off-Site Impacts

Aggregate Industries has worked with Adams County staff and community stakeholders to address all potential off-site impacts and will continue to do so throughout the CUP application process. Potential impacts and mitigation measures are described below.

- Utilities and Resources - No adverse impacts are expected as utility needs are minimal for the proposed use.
- Traffic and Roads – No offsite material hauling from the Property will occur. Traffic analysis of traffic due to onsite workforce travel to the Property indicated no increase in regional road traffic. Please see **Supplemental Materials 01 (S01)** for a copy of the 2020 Trip Generation Analysis prepared by Kimley-Horn Associates.
- Haul Routes- No hauling from the Property will occur and no changes in haul routes from the Platte Valley processing facility will occur. All hauling of processed aggregate will be from the existing Platte Valley facility in Weld County with controls in place to assure trucks avoid downtown Brighton.
- Environmental – Potential air quality, noise and vibration impacts will be mitigated to the maximum extent possible as discussed in detail in following sections.
- View sheds – Aggregate Industries will install screening berms along the south side of the West cell and will install a living screen consisting of native plantings along the south side of the East cell.

Accordingly, the Application satisfies this criterion because it has addressed, and implemented mitigation measures for all potential off-site impacts.

6. Site Suitability with the Conditional Use

The Property is suitable for the Project because it provides adequate usable space, adequate access, and does not contain environmental constraints that would otherwise prohibit the Project. Specifically, the Property is large enough that it can be mined and still provide setbacks from the Project boundaries that are generally greater than 30 feet wide. Additionally, the Property is close enough in proximity to Aggregate Industries' Wattenberg Lakes Resource that all of the aggregate resource mined on the Property can be transported to the Wattenberg Lakes Resource site via overland conveyors. Accordingly, the Application satisfies this criterion because of the size of the Property and proposed site design.

7. Site Plan Convenience and Functionality

The site plan for the Project provides the most convenient and functional use of the Property. Specifically, this criterion focuses on parking scheme, traffic circulation, open space, fencing, screening, landscaping, signage, and lighting. The Project does not necessitate parking schemes or traffic circulation, but does include fencing, screening, landscaping and lighting in a manner that optimizes the functionality of the Property while still protecting the adjacent and surrounding properties from the negative impacts associated with the Project. Upgraded fencing will be used in consultation with the County and stakeholders, including the City of Aurora, to assure both an aesthetically pleasing and code compliant fence material is used. The Project's site plan identifies screening, landscaping and fencing, which meets requirements of the Development Standards and effectively utilizes the Property for the Project. Accordingly, the Application satisfies this criterion because it optimizes the convenience and functionality of the Property.

8. Availability and Adequacy of Necessary Services

This criterion serves to ensure that necessary services including, sewer, water, storm water drainage, fire protection, police protection, and roads, are available and adequate to serve the needs of the Project. The subject application based on its limited scope will have inherently low impact on utility and other community services and therefore satisfies this requirement. Please see **Application Materials 07 (A07)** for a copy of the will serve letter from United Power to service this project.

SECTION C

PERFORMANCE STANDARDS APPROVAL CRITERIA

The Development Standards require that all conditional use permits comply with general and specific performance standards.

General Performance Standards

Section 4-10-1-01-02 provides that the Project must comply with the following general performance standards: (1) fencing, walls and screening; (2) parking; (3) signage; (4) weeds and offending vegetation; (5) site design considerations; (6) operational standards; (7) off-road utility, dumpster, recycling, and trash handling facilities; and (8) off-premise signs (collectively, the “General Performance Standards”). The proposed use will meet each of these general standards as depicted on the site plan and discussed below:

As shown on the Project’s site plan and discussed below, Aggregate Industries is committed to, and has designed the Project in a manner that satisfies all of the General Performance Standards.

1. Adequate fencing and screening will be installed per the site plans and is described in more detail above under “Off-Site Impacts”.
2. Parking will be sufficient for five to six employees who will be assigned to this site.
3. Signage will be provided at the site entrance indicating the site name, DRMS permit number, site manager phone number and the dust hotline number.
4. Weeds and offending vegetation will be maintained according to the Weed Management Plan (see **Supplemental Materials 11 (S11)** for a copy of the Weed Management Plan).
5. Site Design Considerations – please see the Mining Plan Section below for a more detailed description of design considerations.
6. Operational Standards – please see the Mining Plan Section below for a more detailed description of operational standards.
7. Off-road utility, dumpster, recycling and trash handling facilities will be provided for this site.
8. Off-premise signs will be maintained for this facility.

Accordingly, the Application satisfies this criterion.

Specific Performance Standards

Section 4-10-02-03-01 of the Development Standards requires all conditional use permits for extraction uses, which includes the Project, to comply with the following specific performance standards: (1) compliance with the Colorado Department of Natural Resources; (2) site size; (3) blasting hours; (4) stagnant water; (5) plan for development of the site; (6) standards of the MCO Zone District; and (7) recreational prospecting in creeks and rivers (collectively, the “Specific Performance Standards”).

The proposed use will meet each of the specific performance standards as depicted on the site plan and or discussed below:

1. Compliance with the Colorado Department of Natural Resources

As discussed below in the Adams County Review Criteria, Section 3-38-06 Operation and Rehabilitation Standards for all Mining Operations Section, there is already an existing state mining permit for the Property, which Aggregate Industries is in the process of amending to remove the South Parcel. The amendment will be approved by the State prior to approval of this Application. Accordingly, the Application satisfies this criterion.

2. Site Size

As discussed above and as shown on the Project’s site plan, the Property is of sufficient size and dimensions to accommodate the proposed operations. Specifically, the Property is large enough to extract the necessary aggregate resources while still providing buffering and setbacks that exceed the requirements contained in the Development Standards. Accordingly, the Application satisfies this criterion.

3. Blasting Hours

The Project will not utilize blasting. Accordingly, the Application satisfies this criterion because it is inapplicable.

4. Stagnant Water

Aggregate Industries is committed to spraying breeding places of mosquitoes and other insects and/or draining stagnant water to prevent the creation of such breeding places. Accordingly, the Application satisfies this criterion. Please see **Supplemental Materials 19 (S19)** attached to this application for Aggregate Industries’ Mosquito Control Plan.

5. Plan for Development of the Site

As discussed below in the Mining Plan Section and Reclamation Section, the Project includes a plan for the mining phases and the reclamation phase that will be approved as part of this application. Accordingly, the Application satisfies this criterion.

6. Standards of the MCO Zone District

As discussed below in the Adams County Review Criteria, Section 3-38-06 Operation and Rehabilitation Standards for all Mining Operations Section, the Project will meet all standards of the MCO Zone District. The Adams County Mineral Extraction Plan designates this area as an F4 deposit (unevaluated). Additional site-specific evaluations completed by Aggregate Industries have identified a viable deposit that includes many million tons of quality, salable aggregate on the property. The aggregate on this site is clearly a Commercial Mineral Deposit and has significant economic value to the community. The Adams County Mineral Resource Conservation Overlay District was specifically established to protect valuable, sand and gravel resources within Adams County. The district contemplates extraction of sand and gravel subject to specific performance standards. Accordingly, the Application satisfies this criterion.

7. Recreational Prospecting in Creeks and Rivers

The Project does not contemplate recreational prospecting in creeks or rivers. Accordingly, the Application satisfies this criterion because it is not applicable.

SECTION D

ADAMS COUNTY REVIEW CRITERIA, SECTION 3-38-06 OPERATION AND REHABILITATION STANDARDS FOR ALL MINING OPERATIONS

3-38-06-01 MINING PERMIT REQUIRED

All mining operations shall have a permit to excavate issued by the State of Colorado prior to beginning mineral extraction.

Please see the enclosed **Supplemental Materials 03 (S03)** for a copy of the Colorado Division of Reclamation Mining and Safety (DRMS) permit issued for this site. Aggregate Industries received this permit on February 5, 2007. The permit was amended in 2019 and the amended permit was approved on November 20, 2019. Aggregate has submitted a Technical Revision request to the Division to remove the area known as the “South Parcel” from the permit boundary. This is expected to be approved by August 31, 2020. For additional information on the mine plan, please see the following sections below.

MINING PLAN

Mine Phasing

Aggregate Industries anticipates mining and reclaiming the proposed Tucson South Resource site within a period not to exceed 8 years. The rate of mining and overall life of the mine is dependent on several factors including product demand, but mining and reclamation will not extend past 8 years regardless of external and economic factors.

The mining plan currently contemplates mining in two phases:

- West (Phase 1), is located north of Highway 7 and west of Tucson Street and included Tracts A, B and C.
- East (Phase 2) is north of Highway 7 and east of Tucson Street and includes Tracts D, E, F, G and H.

Tract J or Tract N will contain the conveyor to carry product off-site to the Wattenberg Lakes facility in Weld County and will be used during all mining phases.

Processing and sale of the material will occur on the Platte Valley site (M-1989-120) in Weld County. A summary of mining phases is presented in the following table.

Mine Phase	Total Acreage To be mined (acres)	Duration (years)
West	72	4
East	83.8	4
Total	155.8	8

Mining will be integrated with concurrent reclamation activities. A slurry wall will be installed around the West and East cells prior to mining.

3-38-06-02 EXCAVATION SETBACK FROM ADJACENT PROPERTY

No excavation or deposit of overburden within twenty-five (25) feet of the boundary of adjacent property, easement, irrigation ditch or right-of-way is permitted unless written agreement of the owner(s) of such property, easement, irrigation ditch, or right-of-way is obtained by the mining operation.

The application meets the setback standards as outlined above. Setbacks from the top of slope of each mining cell to the proposed permit boundary or man-made structures not owned by the applicant will be 30 feet or greater. Specific setbacks from Highway 7 and Tucson Street also account for future expansion of the roadways. The perimeter setbacks from the permit boundary are shown on Sheets 4 and 5 of the Site Plan.

These setbacks were determined in combination with Adams County regulations and the Slope Stability Analysis prepared by Tetra Tech. The Geotechnical Stability Exhibit is included in the DRMS permit (see **Supplemental Materials 03 (S03)** for a copy of this report).

3-38-06-03 EXCAVATION SETBACK FROM NEARBY RESIDENCE

No excavation within one-hundred-twenty-five (125) feet of any existing residence is permitted unless written agreement of the owners and occupants of such residence are obtained.

No excavation will take place within 125' of any residence not owned by the Applicant. Please see explanation above.

3-38-06-04 ROCK CRUSHERS SETBACK FROM NEARBY RESIDENCE

No excavation involving the use of rock crushers or other similar equipment shall take place within two-hundred-fifty (250) feet of a residence.

There are no rock crushing operations associated with this permit.

3-38-06-05 HAULING ROADS

Hauling roads within the premises shall be maintained in a reasonably dust free condition.

Roads for hauling material to the conveyor loading point and other onsite roads will be maintained through the use of a water truck and chemical dust suppressants as needed. Aggregate Industries will also install dust monitors on the northeast and southwest boundaries to monitor dust from the operation.

3-38-06-06 HOURS OF OPERATION

Mineral excavation, crushing, hauling, loading, sorting or similar operation shall only occur between the hours of 6:00 a.m. to 10:00 p.m. Shorter hours of operation may be imposed in urbanized areas, as part of conditional use approval.

The Property is located in a rural area, not an urbanized area. Proposed hours of operation are limited to 7:00AM to 7:00PM, Monday – Saturday.

3-38-06-07 TWO FEET OF WATER BEARING STRATA

All sand and gravel shall be excavated in such a manner as to have an average of two (2) feet of undisturbed sand and gravel to provide a water bearing strata, unless the reclamation plan provides for a permanent lake or a landfill.

Areas where excavation will occur will be reclaimed as lined, water storage ponds in accordance with this requirement.

3-38-06-08 CUT SLOPES

In no event shall a slope of less than 2:1 be left for dry pits, or a slope of 3:1 to a depth of ten (10) feet and 2:1 thereafter for a wet pit when operations are completed, except as provided herein.

All reclaimed slopes will be a minimum of 3:1. Please see the attached **Supplemental Materials 03 (S03)** for detailed explanation of the slopes. This material includes the Slope Stability Analysis prepared by Tetra Tech.

3-38-06-09 HAULING ROUTE

The operator shall submit a route plan to the Director of Community and Economic Development and receive permission to use for haulage any public right-of-way not designated for such haulage by reason of load limit, dust, right-of-way or pavement width or other relevant factors. The Director of Community and Economic Development may place reasonable restrictions on such right-of-way use.

This plan does not include material hauling. This plan proposes transporting material by conveyor only. Please see the attached **Supplemental Materials 01 (S01)** for the 2020 Trip Generation Analysis prepared by Kimley-Horn Associates for the incidental daily entry and exit of onsite personnel.

3-38-06-10 EXCAVATION PIT FLOOR

The floor of excavation pits whether wet or dry shall be left in a reasonably smooth condition.

Reclamation will leave the floor of the water storage ponds in a smooth condition. This condition must be met as required for lined water storage ponds.

3-38-06-11 FLOODING AND DRAINAGE

The operator shall not excavate, store overburden, or excavate materials or dike in such a manner as to increase any drainage or flooding on property not owned by the operator or damage to public facilities.

A complete Floodplain Use Permit Application was prepared by Tetra Tech for this property. The complete application is included with the application under **Supplemental Materials 04 (S04)**. The report provided the following conclusions:

From the results of the modeling, Aggregate Industries has demonstrated compliance with applicable rules and regulations regarding work within the effective floodplain. Fill for temporary stockpiles are proposed in areas that were selected because the location was presumed to have the least impacts on water surface elevations and were located outside the effective floodway. Hydraulic modeling was performed to evaluate the impacts.

Adams County allows up to 0.25 feet of rise in the water surface elevations. The results of the modeling, including the unlikely “all phases” scenario, show that the total impacts on water surface elevation do not exceed 0.09 feet of rise.

Adams County issued Aggregate Industries a Floodplain Use Permit in 2019 for this project. Aggregate Industries will update the Floodplain Use Permit as necessary.

DRAINAGE

In general, drainage on the site flows toward the South Platte River to the north and east of the Property. The drainage pattern in the West cell either flows to local low spots on the Property, is conveyed off-site to the north via sheet flow or is conveyed via an irrigation return ditch to the East cell. The East cell generally drains north and east to the South Platte River via overland flow or through existing channels and ditches left by historic disturbance of the Property.

Aggregate Industries has prepared an On-Site Grading and Drainage Memo. Please see **Supplemental Materials 05 (S05)** attached to this application for the full report.

Aggregate mining, including stripping and stockpiling, are expected to decrease the amount of runoff leaving the site. This is due to the creation of excavations, which will trap all rainfall that falls within the excavation. Minor increase in runoff may result from the construction of the water storage pond access roads and the conveyor system. This increase will be offset by the reduction in runoff due to the excavation of the mines. Phase 2 drains east towards the South Platte River. Runoff is generally not concentrated, except in the area where a previous owner constructed outflow ditches to the river.

As demonstrated with the calculations in the report, the cumulative impact of mining operations is a net reduction in peak runoff from the site. This reduction is due to the impacts of creating basins which will capture runoff. Runoff that falls in the water storage ponds will be released at a controlled rate in accordance with the operational guidelines of the water storage ponds.

3-38-06-12 FENCING

Prior to starting excavation, the operator shall fence gravel pit operations with a "V" mesh or chain link fence to a height of seventy-two (72) inches topped with three strands of barbed wire canted to a forty-five (45) degree angle outward. Where the operation is adjacent to subdivided and/or developed commercial, residential, or industrial property (except I-3) a solid screen fence will be erected to prevent the visibility of the mining operation if deemed necessary by the Community and Economic Development Department. The operator may fence the entire area immediately, or fence only areas of excavation; however, no fence shall be removed until rehabilitation has been completed.

The applicant will install fencing that is deemed appropriate by the Community and Economic Development Department during the mining phase. In order to comply with Floodplain Use regulations, Aggregate Industries has proposed a standard three strand barbed wire fence. Please see the Site Plans, sheet C-6 for details on proposed fencing. Final fencing will be installed by the City of Aurora and will conform to input provided by community stakeholders and the County.

3-38-06-13 NOISE

All operations shall conform to noise, vibration, and other standards in the performance standards section of these standards and regulations.

Any potential noise from the project will be limited to the use of belt conveyors and traditional material handling equipment such as front-end loaders, excavators and off-road trucks. This equipment is not expected to result in any nuisance noise condition or code violation. Based on the 2020 noise assessment Behrens & Associates completed on identical equipment in use at a similar site, the expected worst-case scenario impacts are presented in the table below. Background noise data from the Project site was also collected to provide added context. The table below indicates that expected property boundary impacts will be well below acceptable limits and will be consistent with pre-existing background noise levels.

Equipment Type	Noise DB Level relative to closest Boundary	Percent of A-1 DB standard at Boundary per code 4-13-03	South (Hwy 7) Background DB Measured
Off-road Mobile ₁	66.9	83.6%	66
Feeder ₁	59.6	74.5%	
Belt Conveyor ₂	48.8	61.0%	

- 1) Feeders and Off-road equipment will operate below grade and a long distance from the boundary. The results above are conservatively estimated at 200 feet.
- 2) The results above are conservatively estimated at 40 feet

Additional noise mitigation measures include the use of white noise back up alarms in lieu of beepers on all equipment. Berms and largely below grade operations will also serve to significantly buffer sound. No onsite crushing, screening, or blasting are associated with this permit.

3-38-06-14 RECLAMATION OF SPENT AREAS NEAR EXISTING DEVELOPMENT

Where the operation is adjacent to subdivided property and/or to developed commercial, residential or industrial (except I-3), once mining has been completed, said site is not to be used as an area to stockpile sand and gravel resources. The mining operator shall reclaim the area as soon as possible after mining has been completed to prevent soil erosion and nuisance conditions. In all cases, reclamation shall occur no later than five (5) years after mining has been completed.

The site will be concurrently reclaimed to create the water storage ponds. When an area is completely mined out from grade to bedrock, each section approximately 800-foot-wide (or approximately 30 acres), will begin side slope reclamation while the next phase of mining commences. Due to the floodway, there is limited space for stockpile placement at this site; by concurrently reclaiming, as an area is being prepared for mining, the overburden and topsoil can be stripped and immediately placed, or stockpiled in the previously mined area, limiting the material handling. It is estimated that within 6 months of an area being completely mined, it will be totally reclaimed.

Backfilling of mining cells and other reclamation activities will be concurrent with mining. Topsoil, overburden, and non-marketable material excavated during mining will be used almost immediately. Small temporary stockpiles may be created within or along the edge of the mining cells. When enough material is available in the stockpile, the material will be graded into the previously mined areas. Locations of topsoil and overburden stockpiles are shown on the Mine Plans.

Additional Reclamation Information

Reclamation of the proposed permit area will include uplands and lined, open water ponds. Cottonwoods and native plantings will be planted along the South Platte River on the eastern side of the east cell⁵. The trees and plantings will be selected based on consultation with Brighton Parks and a professional vegetation specialist. Timing and installation of the plantings will be coordinated with the Urban Drainage and Flood Control District. It is anticipated that these plantings will be installed prior to mining in the East cell and will be established as part of the concurrent reclamation of the site. The primary reclamation process will be backfilling the slopes of the mined-out areas to be reclaimed as water storage and the partially reclaimed area on the northern end of the East cell to create an upland meadow. Overburden, and non-marketable materials from the site will be used as backfill. As mined out cells are backfilled, rough grading will establish the slopes and elevations necessary to facilitate the appropriate land form for that

⁵ To the extent possible, Aggregate Industries intends to relocate healthy, mature trees from the active mining area to the setback area between the South Platte River and the East cell.

specific area of the site. In upland areas backfill materials will be placed to an elevation near or below the pre-mining surface elevation. For areas where ponds are to be located, backfill will be used to create pond side slopes. Pond depth may extend all the way to bedrock and side slopes will be 3H:1V or flatter.

Seeding will produce good vegetation cover over much of the reclaimed site. Roads not necessary for future access and other disturbed areas will be reclaimed with overburden, topsoil and vegetative cover to stabilize the areas and minimize erosion.

All available topsoil and overburden material will be used for backfilling and reclamation.

3-38-06-15 AIR EMISSIONS

Since Air Quality concerns were expressed by the County and neighboring stakeholders, the Application has been very carefully crafted to address this issue through: 1) a reduction in the scope of dust generating activities 2) state of the art monitoring and emissions controls and 3) completion of ambient impacts assessment demonstrating that worst case project emissions will be well below the Environmental Protection Agency's ("EPA") National Ambient Air Quality Standards (NAAQS). Each of these areas is discussed as follows:

1. **Reduced Scope of Activities:** It is extremely important to underscore that the restricted scope of operations through the use of only conveyors and offsite processing have resulted in 90 percent fewer particulate emissions (PM10) than would have otherwise occurred by way of onsite processing or direct haul out.
2. **Installing Emission Control and Monitoring:** Fugitive dust emissions will be carefully controlled through the use of a dedicated onsite water truck that will pre-wet materials which will already contain a high degree of moisture due to their original position in subaqueous beds. Enclosed conveyor transfer points, high efficiency water sprays, dust suppression palliatives, and strict high wind shut down provisions will also assure that airborne emissions are compliant.

In order to provide complete transparency to the community, Aggregate Industries will install two real time dust monitors. The results of the monitoring data will be shared with Adams County so that compliant levels of emissions (24 hrs NAAQS) can be verified throughout the life the project. The monitors, powered by solar with backup batteries, will be placed at the appropriate downwind and upwind locations which also coincide with the location of highest potential concentration. The dust monitor specifications are provided as **Supplemental Materials 06 (S06)** for reference and will be installed prior to start-up of mining operations.

3. **Completion of Ambient Air Quality Assessment:** Aggregate Industries has gone above and beyond Colorado Department of Public Health and Environment (CDPHE) air permit requirements by contracting with Trinity Consultants to conduct a worse case Ambient Air

Quality impacts analysis that utilized EPA and CDPHE recommended dispersion modeling software, AERMOD. Combined with meteorological data provided by CDPHE, project emissions from mining and conveying materials were modeled. The ambient impacts are presented on the table below and indicate that even under potential worse case emissions are estimated to be less than 80 percent of the applicable PM₁₀ and PM_{2.5} standards even with a conservatively high background concentration included. Taken alone, emissions from Aggregate Industries operations are below 50 percent of the NAAQS standard.

Pollutant	Avg Period	GLCmax (µg/m)	Background Concentration^b (µg/m³)	Total Impact (µg/m³)	NAAQS (µg/m³)	% of NAAQS
PM _{2.5}	24-HR	6.52	22	28.52	35	81.5%
PM _{2.5}	Annual	1.81	7.0	8.81	12	73.4%
PM ₁₀	24-HR	59.96	60	119.96	150	80.0%

- a. The CDPHE provided preprocessed meteorological data sets on June 15, 2020 (v19191) using 2009 meteorological data from the Fort Saint Vrain surface meteorological tower and the Denver upper air station for use in the AERMOD air dispersion modeling analysis. CDPHE has determined that the meteorological data provided is both conservative and representative of the Tucson South Pit.
- b. The CDPHE provided a background concentration determination on July 16, 2020 indicating that the data above (and in Table 1) should be used for the proposed facility for PM₁₀ and PM_{2.5} standards.

The complete air quality assessment report is provided as **Supplemental Materials 06 (S06)** and the Air Pollution Emissions Notice (APEN) and issued Construction Permit from CDPHE is provided as **Supplemental Materials 07 (S07)**.

In summary, based on the restricted operations, high level of controls, post construction monitoring, and ambient air quality assessment, the Application exceeds all local, state and federal air quality requirements.

3-38-06-16 WATER QUALITY

All water uses, and discharges shall conform to standards established by the State Water Quality Control Commission and the water laws of the State of Colorado.

Stormwater discharges are regulated and covered by Colorado Discharge Permit System (CDPS) Permit COR400000. This permit specifically covers discharges associated with construction activities only. This permit's applicability has been interpreted to mean that haul road creation and erection of the conveyor system would be considered construction activities covered by COR400000.

As a mine, all stormwater discharges, except as noted in the COR400000 permit, are covered under permit COG500000, which includes discharges from sand and gravel mining and processing. The SWMPs for both permits must include erosion control drawings that are periodically updated to reflect the measures installed, maintained, or removed. This site is not within the boundaries of the County's MS4 and therefore does not require a separate County permit. Please see **Supplemental**

Materials 08 (S08) for a more detailed explanation of applicable water quality permits and **Supplemental Materials 09 (S09)** for a copy of the COG-500000 issued permit for this site.

3-38-06-17 SLOPE STABILIZATION

All slopes shall be stabilized and land remaining in the natural water level must be revegetated in a manner compatible with the surrounding area, and subject to the approval of the Adams County Community and Economic Development Department.

Once backfill is placed to the approximate final grade for upland meadow or pond side slope creation, the area will be rough graded to establish final elevations, slopes, and transitions. Final grading will include the addition of topsoil and surface preparation for revegetation. Special attention shall be given to transitions from reclaimed areas to undisturbed land. The final topography will not create new surface drainage directed onto adjacent properties.

Pond side slopes will include the steepest reclaimed grades on the site, potentially as steep as 3H:1V. The side slopes will be graded smooth to accommodate future maintenance of the lined water storage ponds. The reclamation will not leave high walls on the property.

Please see the attached **Supplemental Materials 03 (S03)** for detailed explanation of the slopes. This material includes the Slope Stability Analysis prepared by Tetra Tech in 2019.

3-38-06-18 REVEGETATION

The revegetation plan must meet the standards of the Colorado State University Extension Agency. After revegetation of an area, the area must be maintained for a period of three (3) years or until all vegetation is firmly established in the reclaimed area.

Following mining, disturbed areas will be seeded with a mixture of upland grass species and a weed management plan will be implemented. Revegetation with native grasses and the weed management plan will help minimize the weedy vegetation that typically degrades wildlife habitat.

Please refer to the attached **Supplemental Materials 10 (S10)** *Tucson South Sand and Gravel Mine Project - Adams County, Colorado Biological Resources Inventory Report September 2018*, prepared by Tetra Tech. Specific details and recommendations regarding vegetation and wildlife are outlined in the report.

Four List B Noxious Weed species were identified in the Project area and two List C noxious weeds were identified. Aggregate Industries has prepared a weed management plan. Please see **Supplemental Materials 11 (S11)** for a copy of the Weed Management Plan.

SECTION E

ADDITIONAL INFORMATION

Water Resources

This site is directly adjacent to the Brantner Ditch, Brighton Ditch and the South Platte River. The Brantner Ditch, the Brighton Ditch and South Platte River will not be disturbed because of the mining and reclamation activities on the site.

Water use at the site is governed by the current well permit (Permit No. 81342-F) and the associated Substitute Water Supply Plan (SWSP) for the site. Water use will be at its highest during the mining phase of the project. Mining at the site will intercept groundwater that is tributary to the South Platte River. Consumptive uses of groundwater at the site include evaporation from groundwater exposed to the atmosphere, water retained in material hauled off sites, and water used for dust control.

Evaporative losses at the site are attributable to groundwater exposed in the dewatering trenches in the West and East cells and groundwater exposed in the settling pond. The dewatering trenches will be constructed following completion of the slurry walls surrounding the West and East cells. The maximum exposed surface area during the life of the mine is equal to the dewatering trench surrounding the West cell (Phase 1). The maximum exposed surface area during the life of the mine is estimated at 4 acres. Additional exposed groundwater from the old Tucson Pit (DRMS Permit No. M-1991-140) has been incorporated into the permit boundary of the Tucson South Pit. Therefore, the maximum exposed groundwater allowed pursuant to the approved well permit is 25 acres.

Potential Mining Impacts on Groundwater

Tucson South Resource Groundwater Modeling Study on the Hydrogeologic Effects of Mining, prepared by Tetra Tech RMC dated August 2004 was submitted to DRMS August 3, 2004. The plan was reviewed and approved by the Division as part of the original permit for the site and approved with the amended permit in 2018 as groundwater conditions in the area have not changed. The approved Groundwater Monitoring and Mitigation Plan is attached to the Application under Exhibit G of **Supplemental Materials 03 (S03)**. A brief summary of the monitoring and mitigation is provided below:

To establish a baseline, Aggregate Industries installed 17 monitoring wells at the mining site and is already measuring water levels monthly prior to the beginning of mining and will continue monthly monitoring through the life of the project. Baseline data collected from the monitoring program will provide a range of relative water levels associated with pre-mining groundwater conditions.

If, during mining, the relative seasonal groundwater elevation at any of the domestic wells or monitoring wells differs from the baseline conditions by more than two feet, and the condition was not observed during baseline monitoring, or if Aggregate Industries receives a complaint from any well owner within 600 feet from the site boundary, then Aggregate Industries will evaluate the cause and take action within 30 days and the DRMS will be notified. A description of the complete process and potential mitigation measures are detailed in Exhibit G of **Supplemental Materials 03 (S03)**.

WILDLIFE INFORMATION

Please refer to the attached **Supplemental Materials 10 (S10)** *Tucson South Sand and Gravel Mine Project - Adams County, Colorado Biological Resources Inventory Report September 2018*, prepared by Tetra Tech. Specific details and recommendations regarding vegetation and wildlife are outlined in the report. The general wildlife resources described in the study are as follows:

No federal listed species were determined to have suitable habitat in the Project area. Five state-listed species were determined to have suitable habitat and potential to occur within the Project area including burrowing owl (ST), brassy minnow (ST), plains minnow (SE), suckermouth minnow (SE), and river otter (ST). These species are protected against take under CRS 33-2-105. Species-specific mitigation measures for each species are described in Section 2.2.1.4 and are summarized in Table 10 in the *Tucson South Sand and Gravel Mine Project - Adams County, Colorado Biological Resources Inventory Report September 2018*, prepared by Tetra Tech. All state threatened and state endangered species within the Project area will be protected against take under CRS 33-2-105.

Migratory Birds

Two potential raptor nests were observed in the Project area during the raptor nest survey. Both were confirmed to be inactive at the time of the survey. Nest surveys will be completed prior to the first year of construction during the winter months prior to leaf-out of trees in the Project. If an active raptor nest is encountered during pre-construction surveys, Aggregate Industries will follow the recommendations of Colorado Parks and Wildlife's most recent "Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors" (CPW 2020). Construction disturbance is not expected to affect raptors to the extent that injury, loss of productivity, or nest abandonment occurs. All migratory birds within the Project area will be protected against take under the Migratory Bird Treaty Act.

Wetlands

An approved Jurisdictional Determination was completed for this project by the Army Corps of Engineers on July 23, 2019. Based on the approval, a Department of Army (DA) permit will not be required for this project. Please see the attached **Supplemental Materials 12 (S12)** for a copy of the No Permit Required Letter.

CULTURAL RESOURCES

A Cultural Resource Inventory for the Tucson South Sand and Gravel Mine Project, Adams County, Colorado, was prepared by Tetra Tech in September 2018. This cultural resource inventory resulted in the identification of four new cultural resources. Three of the sites have been recommended as not eligible for inclusion on to the National Register of Historic Places (NRHP). One site (a segment of the Brighton Ditch) was left unevaluated, pending further research to better assess their NRHP eligibility. However, this site will not be disturbed by this project's activities. A complete copy of the report is included with this application under **Supplemental Materials 13 (S13)**.

SECTION F

CONCEPTUAL REVIEW REFERRAL COMMENTS

Please see **Supplemental Materials 14 (S14)** for responses to each of the referral comments.

SECTION G

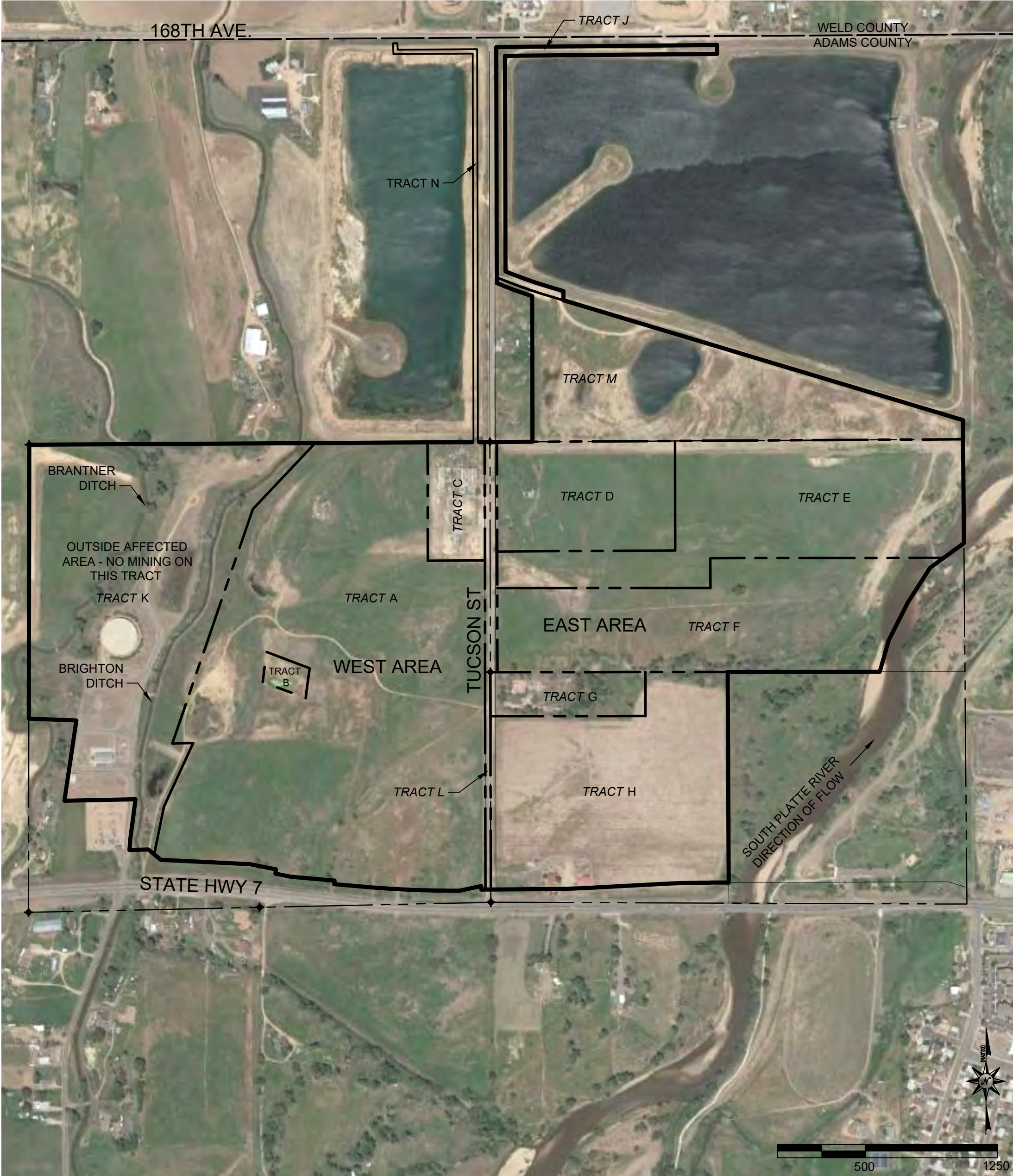
SUMMARY OF PUBLIC OUTREACH

Please see **Supplemental Materials 15 (S15)** for a summary of Aggregate Industries' public outreach efforts for this project up to the date of application submission.

APPENDIX

- Supplemental Materials 01 – Trip Generation Analysis
- Supplemental Materials 02 – Neighborhood Meeting Summary
- Supplemental Materials 03 – Colorado Division of Reclamation Mining and Safety Permit
- Supplemental Materials 04 – Floodplain Use Permit and No Rise Certification
- Supplemental Materials 05 – On-site Grading and Drainage Memo
- Supplemental Materials 06 – Air Quality Assessment Report and Dust Monitor Specifications
- Supplemental Materials 07 – CDPHE Air Permit
- Supplemental Materials 08 – Water Quality Permits Memo
- Supplemental Materials 09 – CDPHE COG500000 Permit
- Supplemental Materials 10 – Biological Resources Inventory Report
- Supplemental Materials 11 – Weed Management Plan
- Supplemental Materials 12 – US Army Corps of Engineers No Permit Required Letter
- Supplemental Materials 13 – Cultural Resources Inventory Report
- Supplemental Materials 14 – Conceptual Review Referral Comments and Responses
- Supplemental Materials 15 – Summary of Public Outreach
- Supplemental Materials 16 – Adjacent Land Use Map
- Supplemental Materials 17 – Adams County Mineral Conservation Overlay Map
- Supplemental Materials 18 – Floodway and Floodplain Map
- Supplemental Materials 19 – Mosquito Control Plan
- Supplemental Materials 20 – Right of Way Dedications

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MINING NOTES:

- REFER TO EXHIBITS C-2 AND C-3 FOR ADJACENT PROPERTY OWNERS, SOURCE OF SURVEY/TOPOGRAPHY, AND BENCHMARK INFORMATION.
- AN ENGINEERING STABILITY ANALYSIS FOR SLIDING FAILURE HAS BEEN PERFORMED. MINING OCCURRING WITHIN 200' OF A MAN-MADE STRUCTURE NOT OWNED BY THE APPLICANT/OPERATOR HAS ADEQUATE SETBACK FOR SLIDING FAILURE. THE LIMIT OF MINING EXCAVATION BY THE GEOTECHNICAL SLOPE STABILITY ANALYSIS IS SHOWN ON EXHIBITS C-4 AND C-5.
- FOR THE WEST AND EAST CELLS, THE OPERATOR WILL USE DRY MINING TECHNIQUES AND EXCAVATE MATERIAL BY BACKHOE, BULLDOZERS, AND SIMILAR EQUIPMENT. THE MINING FOR THESE PHASES WILL INVOLVE INSTALLATION OF A SLURRY WALL, DE-WATERING ACTIVE MINING AREAS, AND PUMPING WATER FROM DE-WATERED AREAS IN ACCORDANCE WITH THE DISCHARGE PERMIT.
- TOPSOIL AND OVERBURDEN STOCKPILES SHALL BE TEMPORARILY STORED IN THE AREAS SHOWN. THE STOCKPILES IN THE FLOODPLAIN SHALL BE ALIGNED PARALLEL TO THE FLOOD-FLOW DIRECTION OF THE S. PLATTE RIVER, HAVE A MAXIMUM HEIGHT OF 30", A MAXIMUM LENGTH OF 300', MAXIMUM 3H:1V SLOPES, AND A MINIMUM OF 100' BETWEEN STOCKPILES.
- OVERBURDEN AND TOPSOIL STOCKPILES ABOVE EXISTING GRADE, THAT ARE EXPECTED TO BE PRESENT FOR OVER 1 YEAR, WILL BE SEEDED WITH A TEMPORARY SEED MIX AS WEATHER PERMITS.
- OVERBURDEN AND TOPSOIL STOCKPILES MAY BE STORED IN THE BOTTOM OF THE MINING CELLS IN EAST AND WEST MINING AREAS AS LONG AS THE TOP OF THE STOCKPILE IS BELOW THE PRE-MINING SURFACE ELEVATION.
- STOCKPILED TOPSOIL WILL BE SEGREGATED FROM OTHER SPOIL.
- THE OPERATION WILL INVOLVE CONCURRENT MINING AND RECLAMATION WITH FINAL SLOPES BEING 3H:1V, AND PLACEMENT OF 6" TO 12" OF TOPSOIL ON ALL RECONSTRUCTED AREAS ABOVE THE PROPOSED HIGH WATER LEVEL OF THE FUTURE RESERVOIR, AND OTHER DISTURBED AREAS AS NECESSARY.
- TETRA TECH INC. IS NOT RESPONSIBLE FOR SAFETY, IN, ON, OR ABOUT THE PROJECT SITE, NOR FOR

- COMPLIANCE BY THE APPROPRIATE PARTY OF ANY REGULATIONS THERETO.
- A MINIMUM OF TEN (10) FEET OF CLEARANCE FROM ANY EXISTING POWERLINE OR FUTURE POWERLINE SHALL BE MAINTAINED AT ALL TIMES AS OUTLINED BY STATE STATUTES.
 - UTILITIES SHOWN ON THIS PLAN WERE FIELD LOCATED AT THE TIME OF PLAN PREPARATION. FOR SAFETY, THE OPERATOR SHOULD LOCATE UTILITIES PRIOR TO SLURRY WALL CONSTRUCTION, OR MINING ACTIVITY.
 - SLURRY WALL SHOWN HEREIN IS GENERAL LOCATION ONLY. THE PORTION OF THE SLURRY WALL IN THE TUCSON STREET ROW WILL BE CONSTRUCTED UPON APPROVAL OF ADAMS COUNTY.
 - NO IRRIGATION DITCHES WILL BE DISTURBED. LATERALS THAT SERVE THE PROPERTY WILL BE REMOVED.
 - WETLANDS BUFFER SHALL NOT BE DISTURBED UNTIL USACE AUTHORIZATION IS OBTAINED.
 - USACE HAS INFORMED AGGREGATE INDUSTRIES - WCR, INC THAT NO PERMIT IS REQUIRED FOR THIS PROJECT.
 - THE MINING LIMITS SHOWN HEREIN ASSUME A 3H:1V (EAST AND WEST AREAS) AS DESCRIBED IN THE SLOPE STABILITY AND SETBACK UPDATES MEMO (TETRA TECH, JULY 9, 2019). DEVIATIONS FROM THE ASSUMPTIONS MADE IN THE MEMO MAY IMPACT THE ALLOWABLE GEOTECHNICAL SETBACK. THIS MEMO DOES NOT DOCUMENT SETBACKS THAT ARE BASED ON MUTUAL AGREEMENTS OR ADAMS COUNTY REGULATIONS.

SHEET INDEX:

- | | |
|-----|--|
| C-1 | EXHIBIT C COVER SHEET & MINING NOTES |
| C-2 | EXHIBIT C PER-MINING PLAN MAP WEST AREAS |
| C-3 | EXHIBIT C PRE-MINING PLAN MAP EAST AREA |
| C-4 | EXHIBIT C WEST AREA MINING PLAN |
| C-5 | EXHIBIT C EAST AREA MINING PLAN |
| C-6 | EXHIBIT C MINING DETAILS |

CERTIFICATION:

THIS MAP WAS ORIGINALLY PREPARED & CERTIFIED BY TETRATECH, 3/15/2019, PROJECT NUMBER 200-23514-18004. MODIFIED BY MARK SPANIEL WITH LAFARGEHOLCIM.

07/17/2020

Mark Spaniel

GRAVEL MINING APPLICANT / OPERATOR:

AGGREGATE INDUSTRIES-WCR, INC.
1687 COLE BLVD, SUITE 300
GOLDEN, COLORADO 80401

SURFACE OWNERS:

AGGREGATE INDUSTRIES-WCR, INC. (TRACTS A, B, D, E, F, H, I, AND M)
1687 COLE BLVD, SUITE 300
GOLDEN, COLORADO 80401

CITY OF AURORA (TRACTS C, G, K, AND N)
15151 EAST ALAMEDA PARKWAY
SUITE 3600
AURORA, COLORADO 80012

CITY OF THORNTON (TRACT J)
12450 WASHINGTON STREET
THORNTON, COLORADO 80241

ADAMS COUNTY (TRACT L)
ADAMS COUNTY GOVERNMENT CENTER
4430 SOUTH ADAMS COUNTY PARKWAY
BRIGHTON, COLORADO 80601

PLEASE REFER TO SHEETS C-2 AND C-3 FOR ADJACENT PROPERTY OWNERS WITHIN 200' OF PERMIT BOUNDARY. ADJACENT PROPERTY OWNER INFORMATION WAS PROVIDED BY ADAMS COUNTY AND WELD COUNTY RECORDS.

EXISTING VEGETATION:

THE LAND COVER FOR THE PROJECT AREA WAS DETERMINED THROUGH A DESKTOP ANALYSIS OF THE NATIONAL LAND COVER DATABASE (FRY ET AL 2011). THE PROJECT LIES WITHIN COVER CLASSES IDENTIFIED BY THE NLCD AS CULTIVATED CROPLAND, HAY/PASTURE, HERBACEOUS, GRASSLANDS, WOODY AND HERBACEOUS WETLANDS, AND DEVELOPED AND BARREN.

UTILITY INFORMATION:

UTILITY INFORMATION TAKEN FROM THE TUCSON SOUTH ALTAINSPS LAND TITLE SURVEY DATED SEPTEMBER 7, 2018 BY CIVIL ARTS.

WETLAND NOTE:

WETLANDS SHOWN ON PLANS ARE PER INVESTIGATION REPORTS BY TETRA TECH DATED AUGUST 2017.

FLOOD HAZARD INFORMATION:

FLOODPLAIN INFORMATION IS FROM FLOOD INSURANCE RATE MAP, PANEL NO. 08001C0327H & 08001C0326H, DATED MARCH 5, 2007. A PORTION OF THIS LAND LIES WITHIN ZONE AE (SPECIAL FLOOD HAZARD AREAS INUNDATED BY THE 1% ANNUAL CHANCE FLOOD) AND REGULATORY FLOODWAY.

MINING AREA ACREAGE TABLE:

AREA/PHASE	TRACT	PERMIT BOUNDARY	AFFECTED AREA		MINED AREA	
WEST/ PHASE 1	A	82.6	137.6	82.6	88.6	72.0
	B	1.0		1.0		
	C	5.0		5.0		
	K	49.0		0.0		
EAST/ PHASE 2	D	14.4	139.4	14.4	139.4	83.8
	E	30.7		30.7		
	F	29.6		29.6		
	G	4.9		4.9		
	H	32.6		32.6		
	M	27.2		27.2		
CONVEYOR	J	3.3	3.3	3.3	3.3	0.0
	N	1.6	1.6	1.6	1.6	0.0
TUCSON ST	L	2.9	2.9	2.9	2.9	0.0

FLOOD HAZARD LEGEND:

EFFECTIVE ZONE AE: AREA OF 1% ANNUAL CHANCE FLOOD WITH BASE FLOOD ELEVATIONS DETERMINED, AS SHOWN ON FEMA FIRM (MARCH 5, 2007)

EFFECTIVE ZONE X: AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD, AS SHOWN ON FEMA FIRM (MARCH 5, 2007)

EFFECTIVE FLOODWAY: THE FLOODWAY IS THE CHANNEL OF A STREAM PLUS ANY ADJACENT FLOODPLAIN AREAS THAT MUST BE KEPT FREE OF ENCROACHMENT SO THAT THE 1% ANNUAL CHANCE FLOOD CAN BE CARRIED WITHOUT SUBSTANTIAL INCREASES IN FLOOD HEIGHTS, AS SHOWN ON FEMA FIRM (MARCH 5, 2007)

PRE-PROJECT / MINING CONDITIONS: AREA OF 1% ANNUAL CHANCE FLOODPLAIN PER TETRA TECH STUDY (NOV. 2018 OR AS REVISED)

LEGAL DESCRIPTIONS:

TRACT A

THAT PARCEL OF LAND AS DESCRIBED IN A GENERAL WARRANTY DEED RECORDED FEBRUARY 27, 2001 AT RECEPTION NO. C0765905, COUNTY OF ADAMS, STATE OF COLORADO.

EXCEPT PARCEL B AS DESCRIBED IN A GENERAL WARRANTY DEED RECORDED FEBRUARY 27, 2001 AT RECEPTION NO. C0765905, COUNTY OF ADAMS, STATE OF COLORADO.

AND EXCEPT THAT TRACT OF LAND CONVEYED TO CITY OF AURORA AS DESCRIBED IN GENERAL WARRANTY DEED RECORDED DECEMBER 22, 2005, AS RECEPTION NO. 20051222001359920, COUNTY OF ADAMS, STATE OF COLORADO.

TRACT B

A PARCEL OF LAND IN THE SW 1/4 OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF ADAMS, STATE OF COLORADO, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID SECTION 1; THENCE NORTH ALONG THE WEST LINE OF SAID SECTION 1 A DISTANCE OF 1449 FEET; THENCE S84°05'E A DISTANCE OF 1334.7 FEET TO THE TRUE POINT OF BEGINNING; THENCE S89°18'E, 260.7 FEET; THENCE N07°32'E, 171.6 FEET; THENCE N69°18'W, 260.7 FEET; THENCE S07°32'W, 171.6 FEET TO THE POINT OF BEGINNING, COUNTY OF ADAMS, STATE OF COLORADO.

TRACT C

ALL THAT TRACT OF LAND DESCRIBED IN THE SPECIAL WARRANTY DEED RECORDED SEPTEMBER 28, 2016 AT RECEPTION NO. 2016000080681, COUNTY OF ADAMS, STATE OF COLORADO.

TRACT D

THAT PART OF THE NORTH ONE-HALF SOUTHEAST ONE-QUARTER, SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE SIXTH PRINCIPAL MERIDIAN, ADAMS COUNTY, COLORADO DESCRIBED AS:

COMMENCING AT THE NORTHWEST CORNER OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, SAID POINT BEING THE POINT OF BEGINNING; THENCE N. 89°37'18" E. ALONG THE NORTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER A DISTANCE OF 1050.57 FEET; THENCE S. 00°08'29" E. PARALLEL WITH THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER A DISTANCE OF 621.95 FEET TO A LINE THAT IS PARALLEL WITH THE NORTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE QUARTER AND 5 FEET SOUTH OF AN EXISTING HOUSE; THENCE S. 89°37'18" W. ALONG SAID LINE A DISTANCE OF 1050.57 FEET TO THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE N. 00°08'29" W. ALONG THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER A DISTANCE OF 621.95 FEET, TO THE POINT OF BEGINNING; EXCEPT THE WEST 40.00 FEET THEREOF, COUNTY OF ADAMS, STATE OF COLORADO.

TRACT E

THAT PART OF THE NORTH ONE-HALF SOUTHEAST ONE QUARTER SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE SIXTH PRINCIPAL MERIDIAN, ADAMS COUNTY, COLORADO, LYING NORTH AND WEST OF THE CENTERLINE OF THE SOUTH PLATTE RIVER, DESCRIBED AS:

COMMENCING AT THE NORTHWEST CORNER OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE SOUTH 00°08'29" EAST ALONG THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 621.95 FEET TO A LINE THAT IS PARALLEL WITH THE NORTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER AND 5 FEET SOUTH OF AN EXISTING HOUSE AND THE POINT OF BEGINNING; THENCE NORTH 89°37'18" EAST, PARALLEL WITH THE NORTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 1050.57 FEET; THENCE NORTH 00°08'29" WEST, PARALLEL WITH THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 621.95 FEET TO THE NORTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE NORTH 89°37'18" EAST ALONG THE NORTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 1635.47 FEET TO THE NORTHEAST CORNER OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE SOUTH 00°31'01" EAST ALONG THE EAST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 590.02 FEET TO THE CENTERLINE OF THE SOUTH PLATTE RIVER; THENCE SOUTHERLY ALONG THE CENTERLINE OF THE SOUTH PLATTE RIVER SOUTH 53°55'12" WEST, A DISTANCE OF 142.93 FEET TO A LINE THAT IS 646.34 FEET NORTH OF AND PARALLEL WITH THE SOUTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE SOUTH 89°54'25" WEST ALONG SAID LINE, A DISTANCE OF 1324.16 FEET TO A LINE THAT IS 1250.00 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE SOUTH 00°08'29" EAST, PARALLEL WITH THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 169.08 FEET TO A LINE THAT IS 477.26 FEET NORTH OF AND PARALLEL WITH THE SOUTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE SOUTH 89°54'25" WEST ALONG SAID LINE, A DISTANCE OF 1250.00 FEET TO THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE NORTH 00°08'29" WEST ALONG THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 207.94 FEET TO THE POINT OF BEGINNING. EXCEPT THE WEST 40.00 FEET THEREOF, COUNTY OF ADAMS, STATE OF COLORADO.

TRACT F

THAT PART OF THE NORTH ONE-HALF OF THE SOUTHEAST ONE-QUARTER, SECTION 1, TOWNSHIP 1, SOUTH, RANGE 67 WEST OF THE SIXTH PRINCIPAL MERIDIAN, ADAMS COUNTY, STATE OF COLORADO, LYING NORTH AND WEST OF THE CENTERLINE OF THE SOUTH PLATTE RIVER DESCRIBED AS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, SAID POINT BEING THE POINT OF BEGINNING; THENCE N00°08'29"W, ALONG THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER A DISTANCE OF 477.26 FEET; THENCE N89°54'25"E, PARALLEL WITH THE SOUTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 1250.00 FEET; THENCE N00°08'29", PARALLEL WITH THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 169.08 FEET; THENCE N89°54'25"E, PARALLEL WITH THE SOUTH LINE OF SAID NORTH ONE HALF SOUTHEAST ONE-QUARTER A DISTANCE OF 1324.16 FEET TO THE CENTERLINE OF THE SOUTH PLATTE RIVER, THENCE BY THE FOLLOWING COURSES AND DISTANCES ALONG THE CENTERLINE OF THE SOUTH PLATTE RIVER, S53°55'12"W, 94.57 FEET; S32°39'44"W, 231.53 FEET; S26°54'09"W, 242.48 FEET; S15°48'38"W, 187.17 FEET TO THE SOUTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE S89°54'25"W, ALONG THE SOUTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 2210.47 FEET TO THE POINT OF BEGINNING, EXCEPT THE WEST 40.00 FEET THEREOF, COUNTY OF ADAMS, STATE OF COLORADO.

TRACT G

ALL THAT TRACT OF LAND DESCRIBED IN THE QUIT CLAIM DEED RECORDED MARCH 2, 2017 AT RECEPTION NO. 2017000018970, COUNTY OF ADAMS, STATE OF COLORADO.

TRACT H

THE SW1/4 OF THE SE1/4 OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST, EXCEPT THAT PART AS DESCRIBED IN BOOK 1055 AT PAGE 52, AND IN BOOK 1214 AT PAGE 326 AND EXCEPT THAT PART DESCRIBED IN BOOK 1205 AT PAGE 128, COUNTY OF ADAMS, STATE OF COLORADO

TRACT J

A PORTION OF A PARCEL OWNED BY THE CITY OF THORNTON (PN: 01571010023081) LOCATED IN THE NORTHEAST QUARTER OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: THE WEST 50.00 FEET; THE NORTH 50.00 FEET OF THE WEST 1250.00 FEET; AND THE SOUTH 50.00 FEET OF THE WEST 380.00 FEET.

TRACT K

A PARCEL OF LAND LOCATED IN THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF ADAMS, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE EAST QUARTER CORNER OF SAID SECTION 1; THENCE SOUTH 89°38'58" WEST 2445.14 FEET ALONG THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 1; THENCE NORTH 00°06'03" WEST 827.14 FEET; THENCE 214.58 FEET ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 2944.62 FEET AND A LONG CHORD WHICH BEARS NORTH 69°36'00" WEST 214.53 FEET TO A POINT LYING 40.00 FEET EASTERLY FROM THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 1; THENCE NORTH 00°06'03" WEST 32.52 FEET PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 1; THENCE 305.94 FEET ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 2914.62 FEET AND A LONG CHORD WHICH BEARS SOUTH 70°16'28" EAST 305.80 FEET, SAID POINT BEING ON THE SOUTHERLY LINE OF THE TUCSON RESOURCES SUBDIVISION AS RECORDED IN THE ADAMS COUNTY RECORDS IN FILE 17 MAP 855; THENCE SOUTH 73°16'48" EAST 2463.67 FEET ALONG THE SOUTHERLY LINE OF SAID TUCSON RESOURCES SUBDIVISION TO THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 1; THENCE SOUTH 00°10'30" EAST 108.13 FEET ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 1 TO THE POINT OF BEGINNING.

TRACT L (TUCSON STREET RIGHT-OF-WAY)

A TRACT OF LAND LOCATED IN THE SOUTH HALF OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE CENTER-SOUTH ONE-SIXTEENTH CORNER OF SECTION 1; THENCE ALONG THE NORTH-SOUTH CENTERLINE OF SECTION 1 SOUTH 00°06'29" EAST 1234.13 FEET TO A POINT WHENCE THE SOUTH ONE-QUARTER CORNER OF SECTION 1 BEARS SOUTH 00°06'29" EAST 72.70 FEET; THENCE LEAVING SAID NORTH-SOUTH CENTERLINE SOUTH 89°33'20" WEST 30.00 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF TUCSON STREET, THENCE ALONG SAID WESTERLY RIGHT-OF-WAY LINE NORTH 00°06'29" WEST 2541.11 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHWEST QUARTER OF SECTION 1; THENCE ALONG SAID NORTH LINE NORTH 89°40'23" EAST 30.00 FEET TO THE CENTER ONE-QUARTER CORNER OF SECTION 1; THENCE ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF SECTION 1 NORTH 89°39'20" EAST 40.00 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF TUCSON STREET; THENCE ALONG SAID EASTERLY RIGHT-OF-WAY LINE SOUTH 00°06'29" EAST 1307.12 FEET; THENCE LEAVING SAID EASTERLY RIGHT-OF-WAY LINE SOUTH 89°56'30" WEST 40.00 FEET TO THE CENTER-SOUTH ONE-SIXTEENTH CORNER OF SECTION 1 AND THE POINT OF BEGINNING.

TRACT M

A PARCEL OF LAND LOCATED IN THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE EAST ONE-QUARTER CORNER OF SECTION 1; THENCE WEST 2445.14 FEET; THENCE NORTH 827.14 FEET; THENCE 214.58 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 2944.62 FEET AND A LONG CHORD WHICH BEARS NORTH 69°36" WEST 214.53 FEET TO A POINT 40 FEET EASTERLY FROM THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 1; THENCE NORTH 32.52 FEET; THENCE 305.94 FEET ALONG THE ARC OF A CURVE TO THE LEFT, HAVING A RADIUS OF 2914.62 FEET AND A LONG CHORD WHICH BEARS SOUTH 70°16" EAST 305.80 FEET; THENCE SOUTH 73°16" EAST 2463.67 FEET; THENCE SOUTH 108.13 FEET TO THE POINT OF BEGINNING.

TRACT N

A PORTION OF A PARCEL OWNED BY THE CITY OF AURORA (PN: 157101200010) A STRIP OF LAND BEING 25 FEET IN WIDTH, TO BE USED AS AN EASEMENT, LOCATED IN THE NORTHWEST OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, SAID 25 FOOT WIDE STRIP OF LAND BEING 12.5 FEET EITHER SIDE OF THE FOLLOWING DESCRIBED CENTERLINE, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF THE NORTHWEST QUARTER OF SAID SECTION 1; THENCE ALONG THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 1, SAID LINE ALSO BEING THE SOUTH LINE OF A PARCEL OF LAND RECORDED AT BOOK 1, PAGE 3795, RECEPTION NUMBER 2010-018, SOUTH 89°38'46" WEST A DISTANCE OF 68.20 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 00°06'37" WEST, A DISTANCE OF 2219.37 FEET, SAID LINE BEING 68.20 FEET WEST OF AND PARALLEL TO THE EAST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 1, AND 27.02 FEET WEST OF THE EAST LINE OF A PARCEL OF LAND RECORDED AT BOOK 1, PAGE 3795, SAID LINE ALSO BEING THE WEST RIGHT OF WAY LINE OF TUCSON STREET; THENCE SOUTH 89°31'48" WEST, A DISTANCE OF 450.84 FEET, BEING 32.79 FEET SOUTH OF AND PARALLEL TO THE NORTHERLY LINE OF SAID PARCEL AS RECORDED AT BOOK 1, PAGE 3795, SAID LINE ALSO BEING THE SOUTH RIGHT OF WAY LINE OF 168TH AVE, ALSO KNOWN AS BASELINE ROAD, SAID LINE ALSO BEING 72.92 FEET SOUTH OF AND PARALLEL TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 36, TOWNSHIP 1 NORTH, RANGE 57 WEST OF THE 6TH PRINCIPAL MERIDIAN; THENCE NORTH 02°04'13" WEST, A DISTANCE OF 32.67 FEET TO THE POINT OF TERMINUS, FROM WHENCE THE NORTH EAST CORNER OF THE NORTHWEST QUARTER BEARS NORTH 85°06'18" EAST, A DISTANCE 521.97 FEET.

TETRA TECH



www.tetrattech.com
1900 S. Sunset St., Ste. 1 E
Englewood, Colorado 80155
Phone: (303) 772-8282

AGGREGATE INDUSTRIES - WCR, INC.

TUCSON SOUTH RESOURCE

EXHIBIT C

COVER SHEET & MINING NOTES

Project No.: 200-23514-18004

Designed By: JAB

Drawn By: JJA

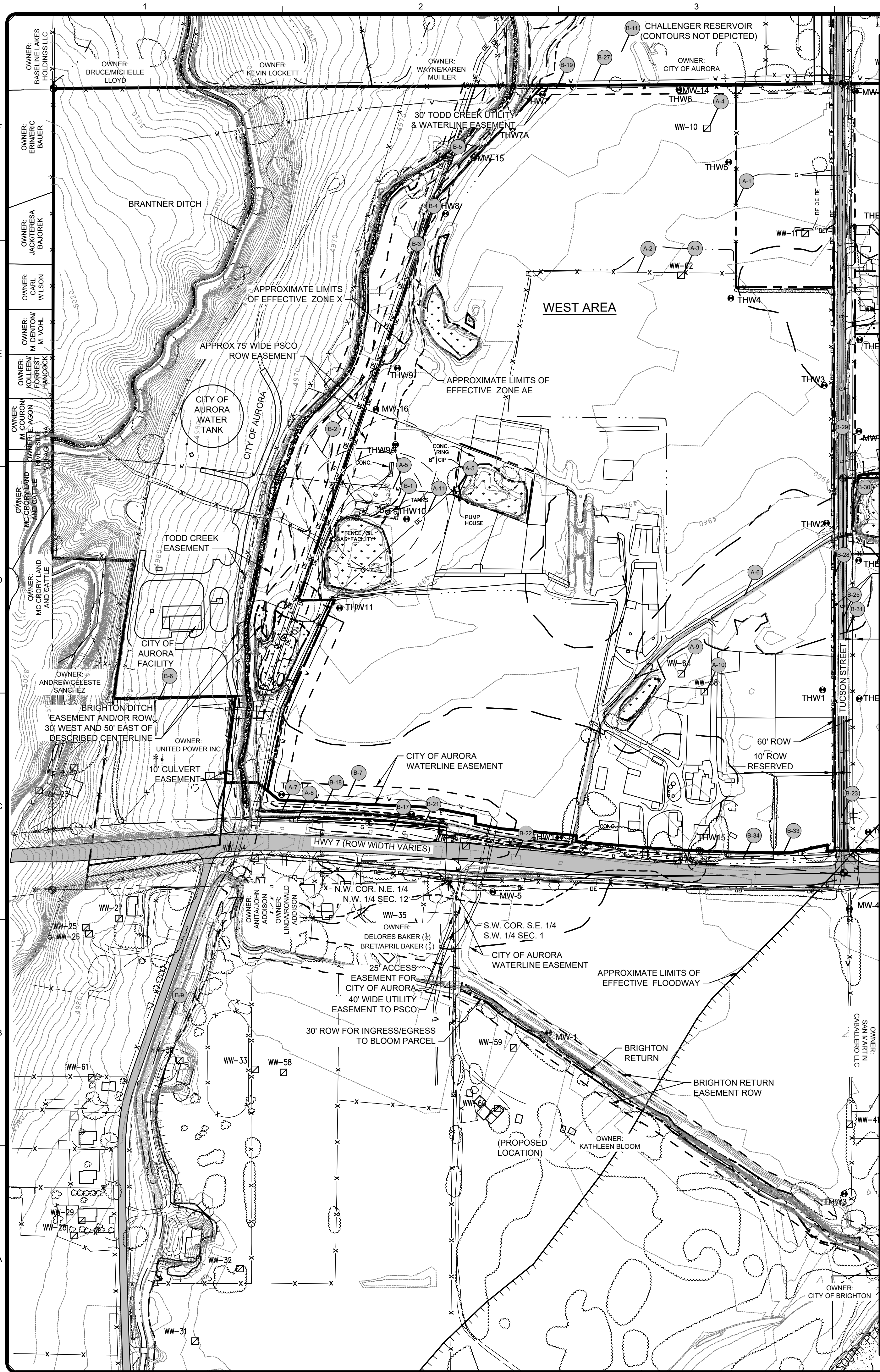
Checked By: JAB

C-1

EXHIBIT

Bar Measures 1 inch

Copyright: Tetra Tech



MATCHLINE SEE SHT C-3

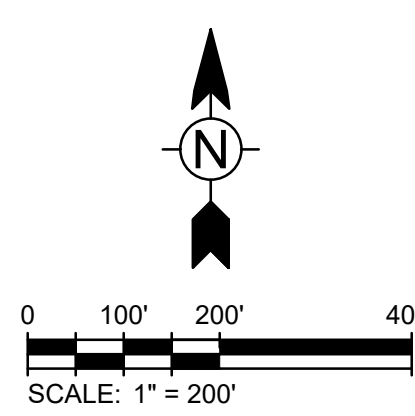
LEGEND:

- MINE PERMIT BOUNDARY
- TRACT BOUNDARY
- EASEMENT
- EFFECTIVE FLOODWAY
- EFFECTIVE ZONE AE
- EFFECTIVE ZONE X
- PRE-PROJECT MINING CONDITIONS 100-YR FLOODPLAIN
- EXISTING WETLAND BOUNDARY
- EXISTING EDGE OF WATER
- EXISTING 2' CONTOURS
- EXISTING FENCE
- EXISTING EDGE OF ROAD
- EXISTING ELECTRIC LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING GAS LINE
- EXISTING WATER LINE
- EXISTING TELEPHONE LINE
- EXISTING ASPHALT ROAD
- EXISTING SOUTH PLATTE RIVER
- UDFCD STABILIZATION
- EXISTING WETLANDS
- MONITORING WELL LOCATION WITH WELL ID #
- WATER WELL LOCATION WITH WELL ID #
- EXISTING TREES
- UTILITY POLE
- SECTION CORNER MONUMENT

STRUCTURE LIST

STRUCTURES TO BE REMOVED					
STRUCTURE ID	STRUCTURE DESCRIPTION	OWNER	ADDRESS	RECOMMENDED OFFSET PER STABILITY ANALYSIS (FT)*	STRUCTURE AGREEMENT OR EXCAVATION LIMITS (FT)**
A-1	FENCE	CITY OF AURORA	15151 EAST ALAMEDA PARKWAY, SUITE 3600, AURORA, COLORADO, 80012	-	-
A-2	FENCE LOCATED ON PROPERTY	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-
A-3	WW-42	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-
A-4	WW-10	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-
A-5	PUMP HOUSE, WELL & WATERLINE	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-
A-6	IRRIGATION DITCH	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-
A-7	IRRIGATION LATERALS	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-
A-8	IRRIGATION LATERALS	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-
A-9	WW-64	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-
A-10	WW-38	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-
A-11	OVERHEAD ELECTRIC WITH POWER POLES	UNITED POWER INC	PO BOX 929, BRIGHTON, CO, 80602	-	-
STRUCTURES TO BE PROTECTED					
STRUCTURE ID	STRUCTURE DESCRIPTION	OWNER	ADDRESS	RECOMMENDED OFFSET PER STABILITY ANALYSIS (FT)*	STRUCTURE AGREEMENT OR EXCAVATION LIMITS (FT)**
B-1	OIL AND GAS FACILITY, WELL, APPURTENANCES, AND FENCE	GREAT WESTERN OPERATING COMPANY, LLC		56	56
B-2	GAS LINE	GREAT WESTERN OPERATING COMPANY, LLC		56	56
B-3	OVERHEAD ELECTRIC WITH POWER POLES	PUBLIC SERVICE CO. OF COLO.	1800 LARIMER ST, DENVER, COLORADO, 80202	68	75 MINIMUM
B-4	OVERHEAD ELECTRIC WITH POWER POLES	PUBLIC SERVICE CO. OF COLO.	1800 LARIMER ST, DENVER, COLORADO, 80202	68	75 MINIMUM
B-5	OVERHEAD ELECTRIC WITH POWER POLES	PUBLIC SERVICE CO. OF COLO.	1800 LARIMER ST, DENVER, COLORADO, 80202	68	75 MINIMUM
B-6	ELECTRICAL SUBSTATION	UNITED POWER INC	PO BOX 929, BRIGHTON, CO, 80602	45	511
B-7	WATERLINE	CITY OF AURORA	15151 EAST ALAMEDA PARKWAY, SUITE 3600, AURORA, COLORADO, 80012	72 MIN (N OF HWY 7) 30 MIN (S OF HWY 7)	83 MIN (N OF HWY 7) 75 MIN (S OF HWY 7)
B-8	INTENTIONALLY NOT USED			-	-
B-9	BRIGHTON DITCH	BRIGHTON DITCH COMPANY	3286 WELD COUNTY ROAD 23, FT LUPTON CO 80621	35	90 MINIMUM
B-11	CHALLENGER RESERVOIR	CITY OF AURORA	15151 EAST ALAMEDA PARKWAY, SUITE 3600, AURORA, COLORADO, 80012	45	176
B-17	GAS LINE	XCEL	414 NICOLLET MALL, MINNEAPOLIS, MN, 55401	106	189
B-18	UNDERGROUND ELECTRIC	UNITED POWER INC	PO BOX 929, BRIGHTON, CO, 80602	106	133
B-19	WATERLINE	TODD CREEK FARMS METROPOLITAN DIST. NO. 1	7550 EAST 152ND AVE, BRIGHTON, COLORADO, 80401	45	55
B-21	FENCE	COLORADO DEPARTMENT OF TRANSPORTATION	2829 W. HOWARD PLACE, DENVER, CO, 80204	106	174
B-22	CO STATE HIGHWAY 7	COLORADO DEPARTMENT OF TRANSPORTATION	2829 W. HOWARD PLACE, DENVER, CO, 80204	106	185
B-23	GAS LINE	XCEL	414 NICOLLET MALL, MINNEAPOLIS, MN, 55401	44	80
B-25	TUSCON STREET	ADAMS COUNTY	4430 S. ADAMS COUNTY PARKWAY, BRIGHTON, COLORADO, 80601	44	71
B-27	WATERLINE	TODD CREEK FARMS METROPOLITAN DIST. NO. 1	7550 EAST 152ND AVE, BRIGHTON, COLORADO, 80401	45	79
B-28	OVERHEAD ELECTRIC WITH POWER POLES	UNITED POWER INC	PO BOX 929, BRIGHTON, CO, 80602	44	53
B-29	FENCE	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	44	48
B-30	FENCE	CITY OF AURORA	15151 EAST ALAMEDA PARKWAY, SUITE 3600, AURORA, COLORADO, 80012	44	122
B-31	TELEPHONE LINE	CENTURY LINK	PO BOX 2560, OMAHA, NE, 68103	44	97
B-33	OVERHEAD ELECTRIC WITH POWER POLES	UNITED POWER INC	PO BOX 929, BRIGHTON, CO, 80602	106	111
B-34	UNDERGROUND ELECTRIC	UNITED POWER INC	PO BOX 929, BRIGHTON, CO, 80602	106	128

* Offset is selected from nearest feature analyzed in the stability analysis
** Actual offset distance is measured from the feature to the mining excavation limit shown on sheet.



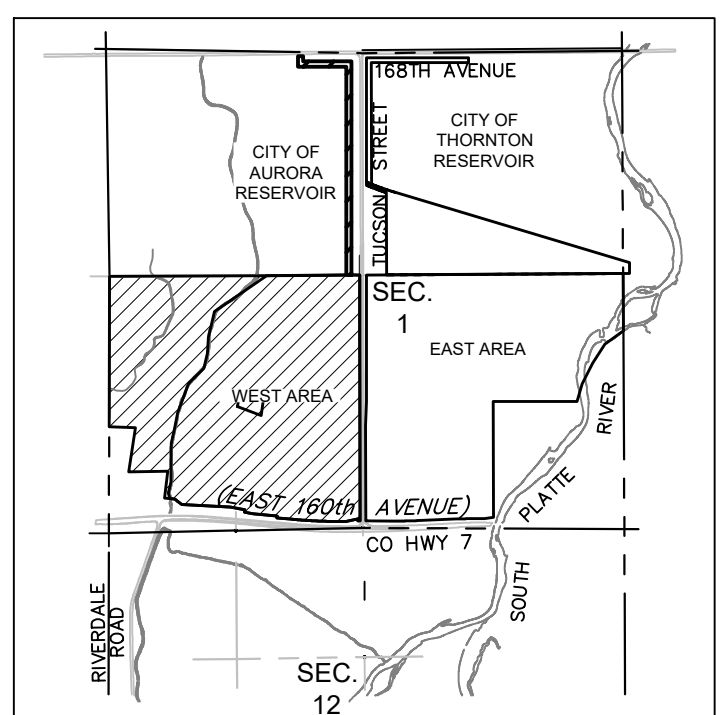
CERTIFICATION:

THIS MAP WAS ORIGINALLY PREPARED & CERTIFIED BY TETRATECH, 3/15/2019, PROJECT NUMBER 200-23514-18004. MODIFIED BY MARK SPANIEL WITH LAFARGEHOLCIM.

Mark Spaniel

07/23/2020

KEY MAP
NOT TO SCALE



SURVEY/TOPOGRAPHIC INFORMATION:

BASEMAP INFORMATION AND TOPOGRAPHY: (5/26/2002) CARRERA MAPPING, INC., 4743 SOUTH CATHAY COURT AURORA, COLORADO, 80015 PHONE: (303) 693-5999

SURVEY INFORMATION: CIVIL ARTS 1500 KANSAS AVE, STE. 2-E LONGMONT, CO 80501

BOUNDARY INFORMATION AND EXISTING UTILITIES: CIVIL ARTS 1500 KANSAS AVE, STE. 2-E LONGMONT, CO 80501 (SEE LEGAL DESCRIPTIONS)

FEATURES OUTSIDE PROPERTY BOUNDARY WERE PROVIDED BY: AERIAL PHOTO AND USGS MAP

WELL INFORMATION:

☐ WW-# LOCATIONS ARE APPROXIMATE, BASED ON SEO DATABASE AND DOOR TO DOOR SURVEY, AND COULD BE ABANDONED OR DESTROYED. INFORMATION IS FROM TETRA TECH WELL INVENTORY REPORT DATED MARCH 13, 2004.

TETRA TECH

www.tetrattech.com
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Longmont, CO 80501
Phone: (303) 772-5262

AGGREGATE INDUSTRIES - WCR, INC.

TUCSON SOUTH RESOURCE

EXHIBIT C

PRE-MINING PLAN MAP

WEST AREA

Project No.: 200-23514-18004

Designed By:

Drawn By:

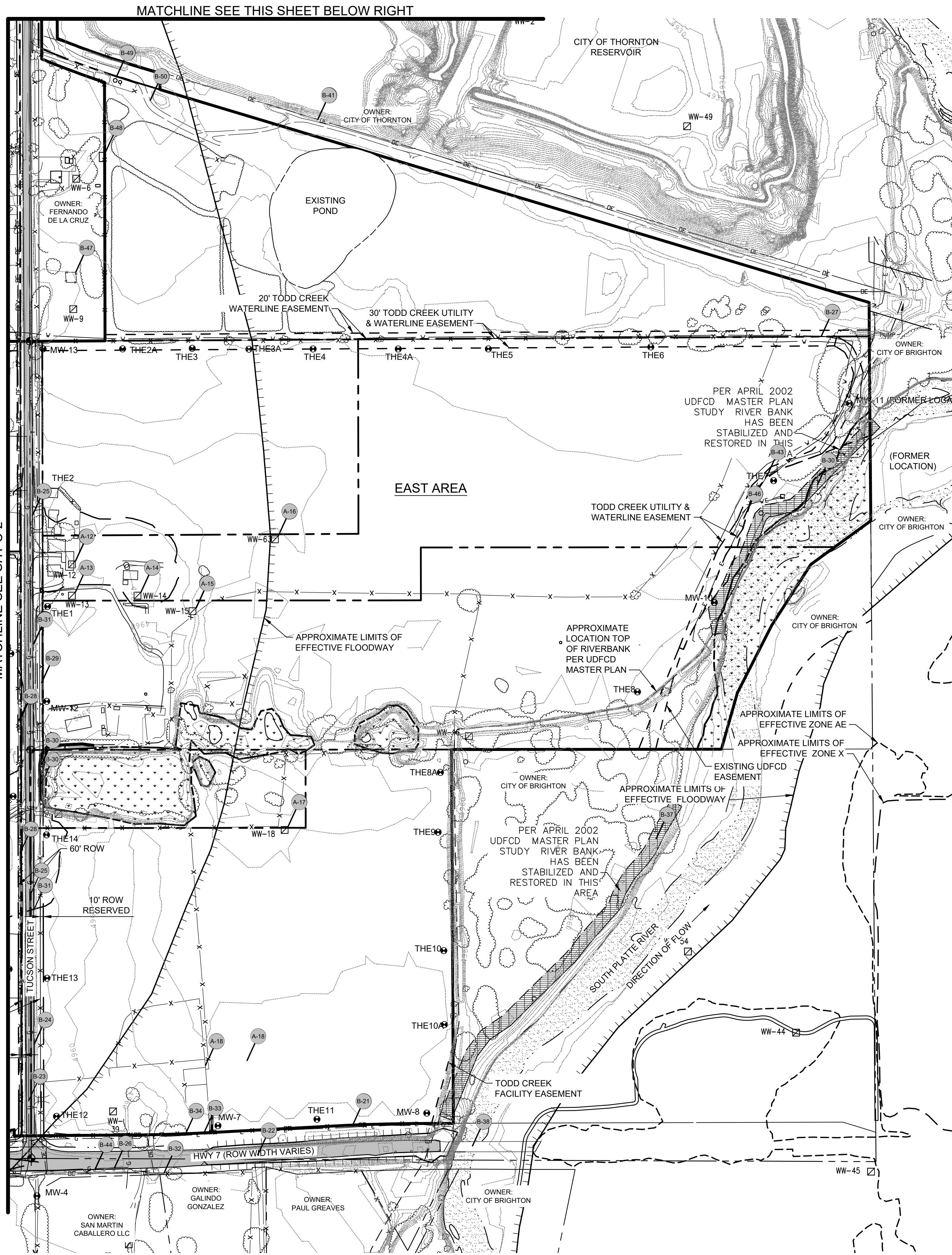
Checked By:

C-2

EXHIBIT

Bar Measures 1 inch

4/29/2020 3:16:28 PM - DRAWING1.DWG - ANDRYAUSKAS, JEREMY

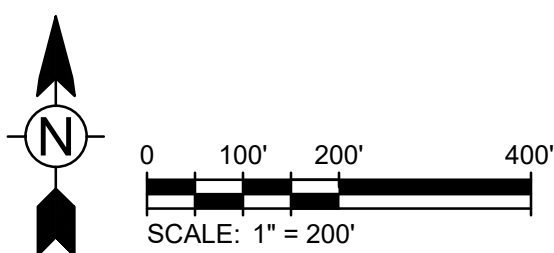


CERTIFICATION:

THIS MAP WAS ORIGINALLY PREPARED & CERTIFIED BY TETRATECH, 3/15/2019, PROJECT NUMBER 200-23514-18004. MODIFIED BY MARK SPANIEL WITH LAFARGEHOLCIM.

Mark Spaniel

07/23/2020



LEGEND:

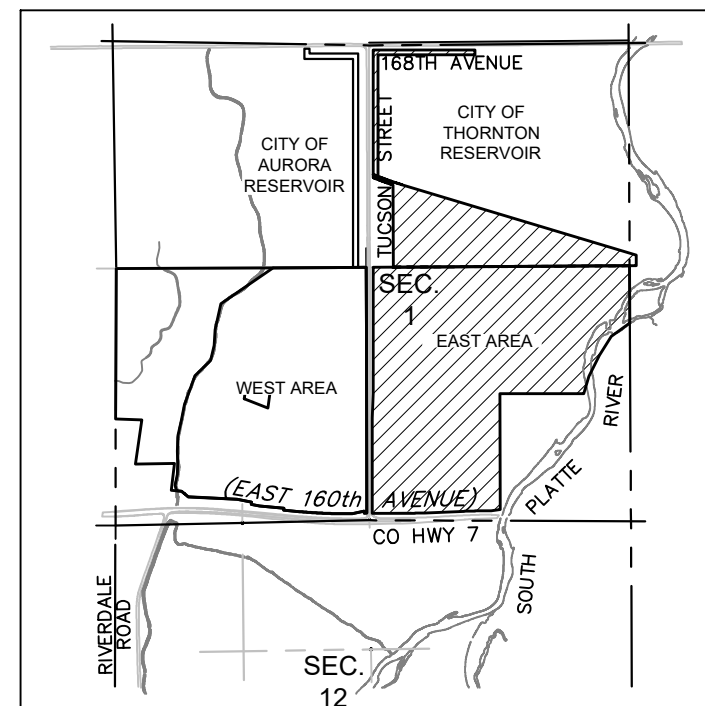
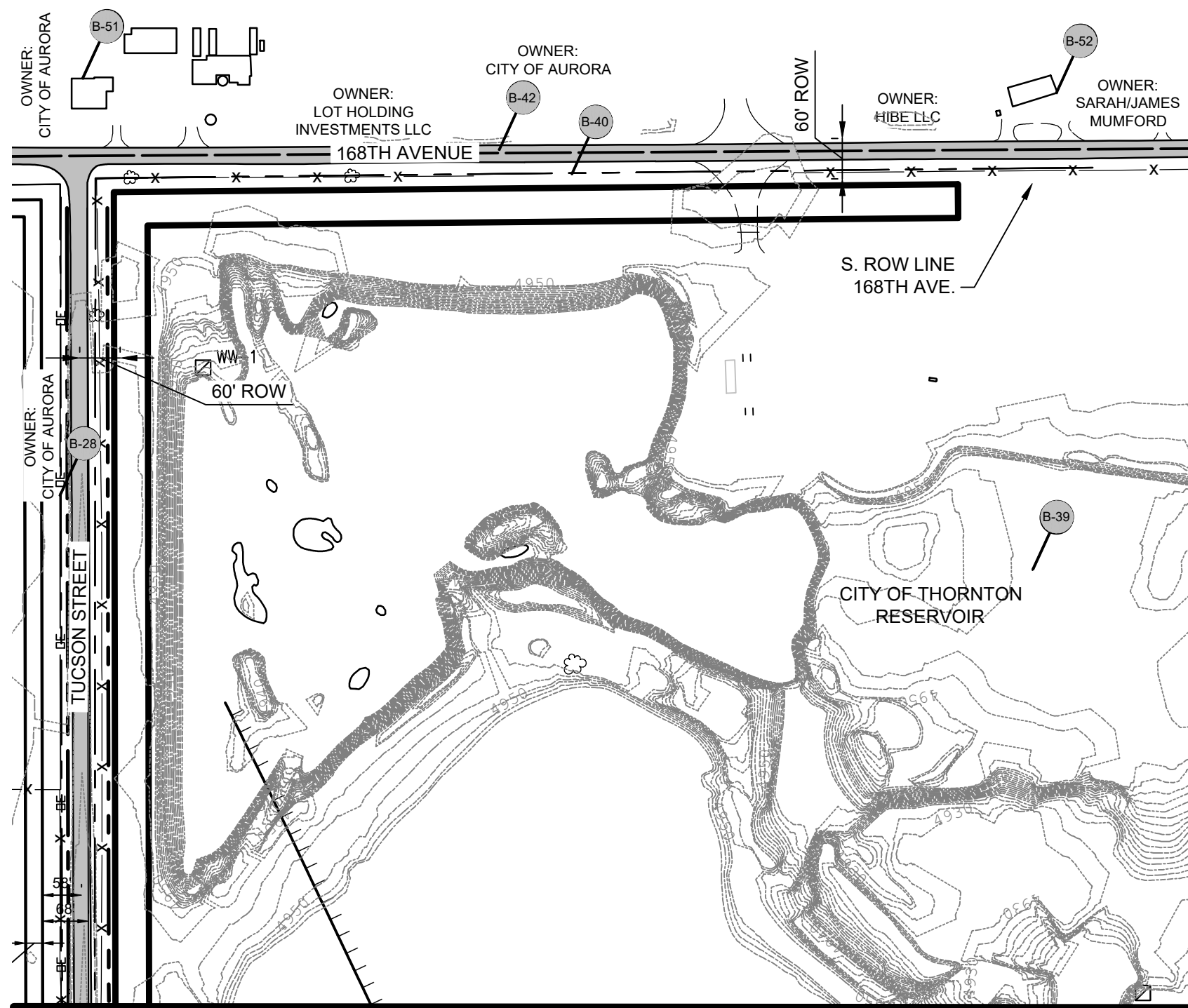
	MINE PERMIT BOUNDARY		EXISTING ASPHALT ROAD
	TRACT BOUNDARY		EXISTING SOUTH PLATTE RIVER
	EASEMENT		UDFCD STABILIZATION
	EFFECTIVE FLOODWAY		EXISTING WETLANDS
	EFFECTIVE ZONE AE		MONITORING WELL LOCATION WITH WELL ID #
	EFFECTIVE ZONE X		WATER WELL LOCATION WITH WELL ID #
	PRE-PROJECT/MINING CONDITIONS 100-YR FLOODPLAIN		EXISTING TREES
	EXISTING WETLAND BOUNDARY		UTILITY POLE
	EXISTING EDGE OF WATER		SECTION CORNER MONUMENT
	EXISTING 2' CONTOURS		
	EXISTING FENCE		
	EXISTING EDGE OF ROAD		
	EXISTING ELECTRIC LINE		
	EXISTING OVERHEAD ELECTRIC LINE		
	EXISTING GAS LINE		
	EXISTING WATER LINE		
	EXISTING TELEPHONE LINE		

STRUCTURE LIST

STRUCTURES TO BE REMOVED				RECOMMENDED OFFSET PER STABILITY ANALYSIS (FT)*	STRUCTURE AGREEMENT OR UDFCD OFFSET (FT)	ACTUAL OFFSET FROM MINING EXCAVATION LIMITS (FT)**
STRUCTURE ID	STRUCTURE DESCRIPTION	OWNER	ADDRESS			
A-12	WW-12	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-	-
A-13	WW-13	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-	-
A-14	WW-14	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-	-
A-15	WW-15	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-	-
A-16	WW-63	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-	-
A-17	WW-18	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-	-
A-18	PRIVATE RESIDENCE	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-	-
STRUCTURES TO BE PROTECTED				RECOMMENDED OFFSET PER STABILITY ANALYSIS (FT)*	STRUCTURE AGREEMENT OR UDFCD OFFSET (FT)	ACTUAL OFFSET FROM MINING EXCAVATION LIMITS (FT)**
STRUCTURE ID	STRUCTURE DESCRIPTION	OWNER	ADDRESS			
B-21	FENCE	COLORADO DEPARTMENT OF TRANSPORTATION	2829 W. HOWARD PLACE, DENVER, CO, 80204	35	-	55
B-22	CO STATE HIGHWAY 7	COLORADO DEPARTMENT OF TRANSPORTATION	2829 W. HOWARD PLACE, DENVER, CO, 80204	35	-	133
B-23	GAS LINE	XCEL	414 NICOLLET MALL, MINNEAPOLIS, MN, 55401	35	-	104
B-24	TELEPHONE LINE	CENTURY LINK	PO BOX 2560, OMAHA, NE, 68103	35	-	81
B-25	TUCSON STREET	ADAMS COUNTY	4430 S. ADAMS COUNTY PARKWAY, BRIGHTON, COLORADO, 80601	35	-	84
B-26	GAS LINE	XCEL	414 NICOLLET MALL, MINNEAPOLIS, MN, 55401	35	-	158
B-27	WATERLINE	TODD CREEK FARMS METROPOLITAN DIST. NO. 1	7550 EAST 152ND AVE, BRIGHTON, COLORADO, 80401	35	20	200
B-28	OVERHEAD ELECTRIC WITH POWER POLES	UNITED POWER INC	PO BOX 929, BRIGHTON, CO, 80602	35	-	126
B-29	FENCE	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	35	-	56
B-30	FENCE	CITY OF AURORA	15151 EAST ALAMEDA PARKWAY, SUITE 3600, AURORA, COLORADO, 80012	35	-	57
B-31	TELEPHONE LINE	CENTURY LINK	PO BOX 2560, OMAHA, NE, 68103	35	-	81
B-32	OVERHEAD ELECTRIC WITH POWER POLES	UNITED POWER INC	PO BOX 929, BRIGHTON, CO, 80602	35	-	176
B-33	OVERHEAD ELECTRIC WITH POWER POLES	UNITED POWER INC	PO BOX 929, BRIGHTON, CO, 80602	35	-	51
B-34	UNDERGROUND ELECTRIC	UNITED POWER INC	PO BOX 929, BRIGHTON, CO, 80602	35	-	58
B-35	FENCE	SAN MARTIN CABALLERO, LLC	13110 E 160TH AVE, BRIGHTON, CO, 80601	-	-	-
B-36	RIVERBANK STABILIZATION	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT	2480 W. 26TH AVE, SUITE 156B, DENVER, COLORADO, 80211	44	200	200 MINIMUM
B-37	RIVERBANK STABILIZATION	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT	2480 W. 26TH AVE, SUITE 156B, DENVER, COLORADO, 80211	44	200	200 MINIMUM
B-38	HIGHWAY 7 BRIDGE	COLORADO DEPARTMENT OF TRANSPORTATION	2829 W. HOWARD PLACE, DENVER, CO, 80204	-	200	338
B-39	THORNTON RESERVOIR	CITY OF THORNTON	9500 CMC DR, THORNTON CO 80229-4326	-	-	335
B-40	OVERHEAD ELECTRIC WITH POWER POLES	UNITED POWER INC	PO BOX 929, BRIGHTON, CO, 80602	-	-	2335
B-41	OVERHEAD ELECTRIC WITH POWER POLES	UNITED POWER INC	PO BOX 929, BRIGHTON, CO, 80602	-	-	776
B-42	168TH STREET	ADAMS COUNTY	4430 S. ADAMS COUNTY PARKWAY, BRIGHTON, COLORADO, 80601	-	-	2350
B-43	WATERLINE, WELL, PUMP HOUSE & APPURTENANCES	TODD CREEK FARMS METROPOLITAN DIST. NO. 1	7550 EAST 152ND AVE, BRIGHTON, COLORADO, 80401	-	20	143
B-44	GUARDRAIL	COLORADO DEPARTMENT OF TRANSPORTATION	2829 W. HOWARD PLACE, DENVER, CO, 80204	35	-	162
B-45	INTENTIONALLY NOT USED			-	-	-
B-46	UNDERGROUND ELECTRIC	TODD CREEK FARMS METROPOLITAN DIST. NO. 1	7550 EAST 152ND AVE, BRIGHTON, COLORADO, 80401	-	20	173
B-47	PRIVATE RESIDENCE AND OUT BUILDINGS	FERNANDO DE LA CRUZ	16400 TUCSON STREET, BRIGHTON, CO, 80601	-	-	292
B-48	PRIVATE RESIDENCE AND OUT BUILDINGS	FERNANDO ARMANDO DE LA CRUZ BRECEDA	16400 TUCSON STREET, BRIGHTON, CO, 80601	-	-	675
B-49	OIL AND GAS FACILITY	GREAT WESTERN OPERATING COMPANY, LLC		-	-	916
B-50	ACCESS ROAD	AGGREGATE INDUSTRIES WCR, INC.	1687 COLE BLVD, SUITE 300, GOLDEN, COLORADO, 80401	-	-	839
B-51	PRIVATE RESIDENCE AND OUT BUILDINGS	CHRISTOFER MUEHLER	11585 COUNTY ROAD 2, BRIGHTON, CO, 80603	-	-	2405
B-52	PRIVATE RESIDENCE AND OUT BUILDINGS	JAMES AND SARAH MUMFORD	11835 COUNTY ROAD 2, BRIGHTON, CO, 80603	-	-	2415

* Offset is selected from nearest feature analyzed in the stability analysis

** Actual offset distance is measured from the feature to the mining excavation limit shown on sheet.



KEY MAP
NOT TO SCALE

Bar Measures 1 inch

TETRA TECH

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Longmont, CO 80501
Phone: (303) 772-5282

AGGREGATE INDUSTRIES - WCR, INC.

TUCSON SOUTH RESOURCE

EXHIBIT C

PRE-MINING PLAN MAP

EAST AREA

Project No.: 200-23514-18004

Designed By:

Drawn By:

Checked By:

C-3

EXHIBIT

MARK

DATE

DESCRIPTION

BY

1

7/9/19

FIRST ADEQUACY REVIEW RESPONSE

TH

2

9/16/19

SECOND ADEQUACY REVIEW RESPONSE

TH

3

11/8/19

THIRD ADEQUACY REVIEW RESPONSE

TH

4

5/11/20

REMOVE SOUTH AREA FROM MINING LIMIT

MES

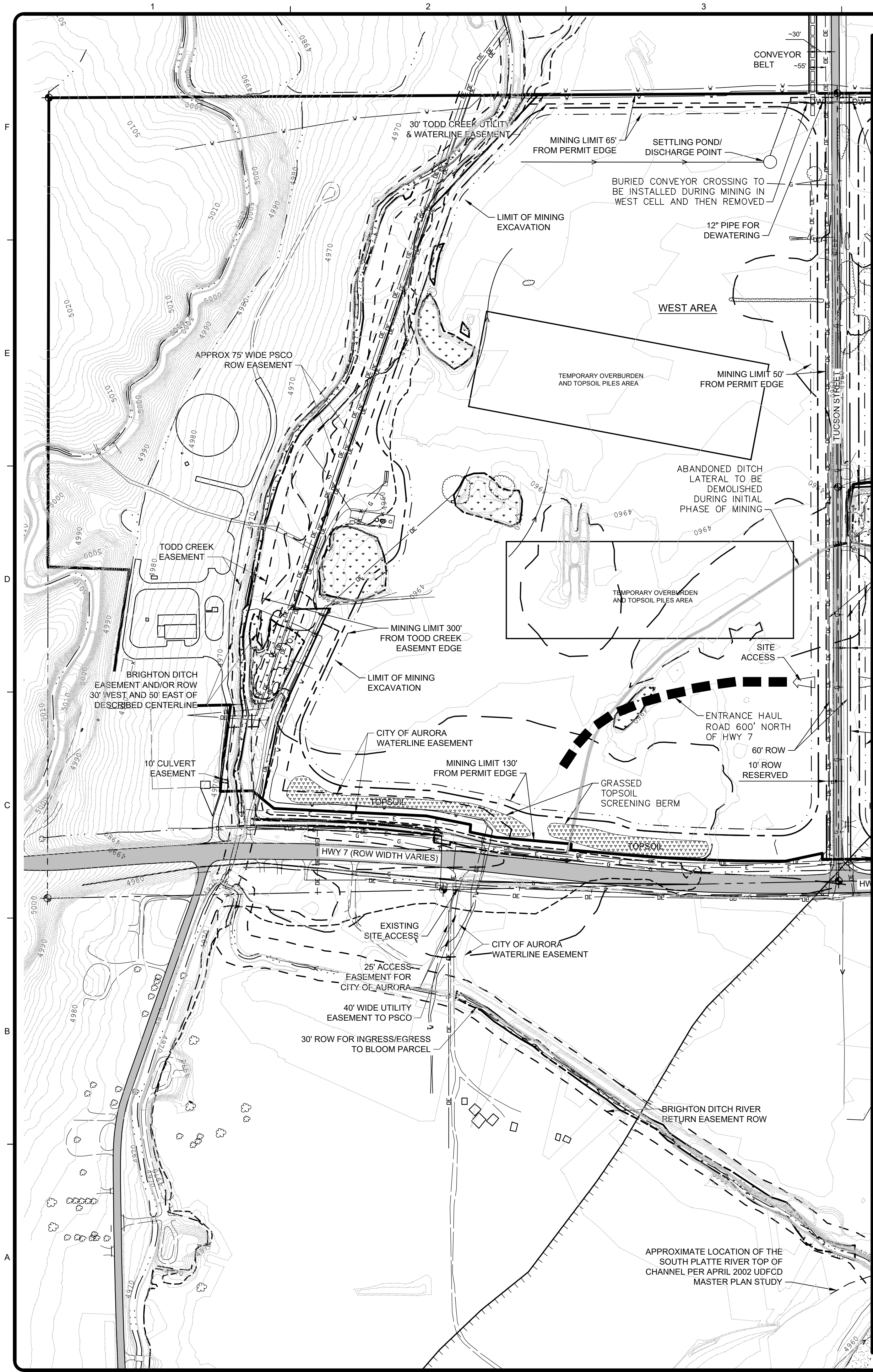
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7/17/20

ADD TRACT N

MES

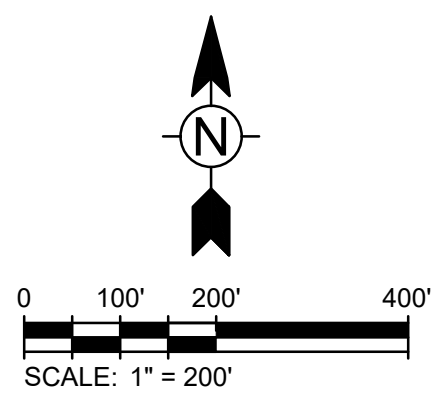
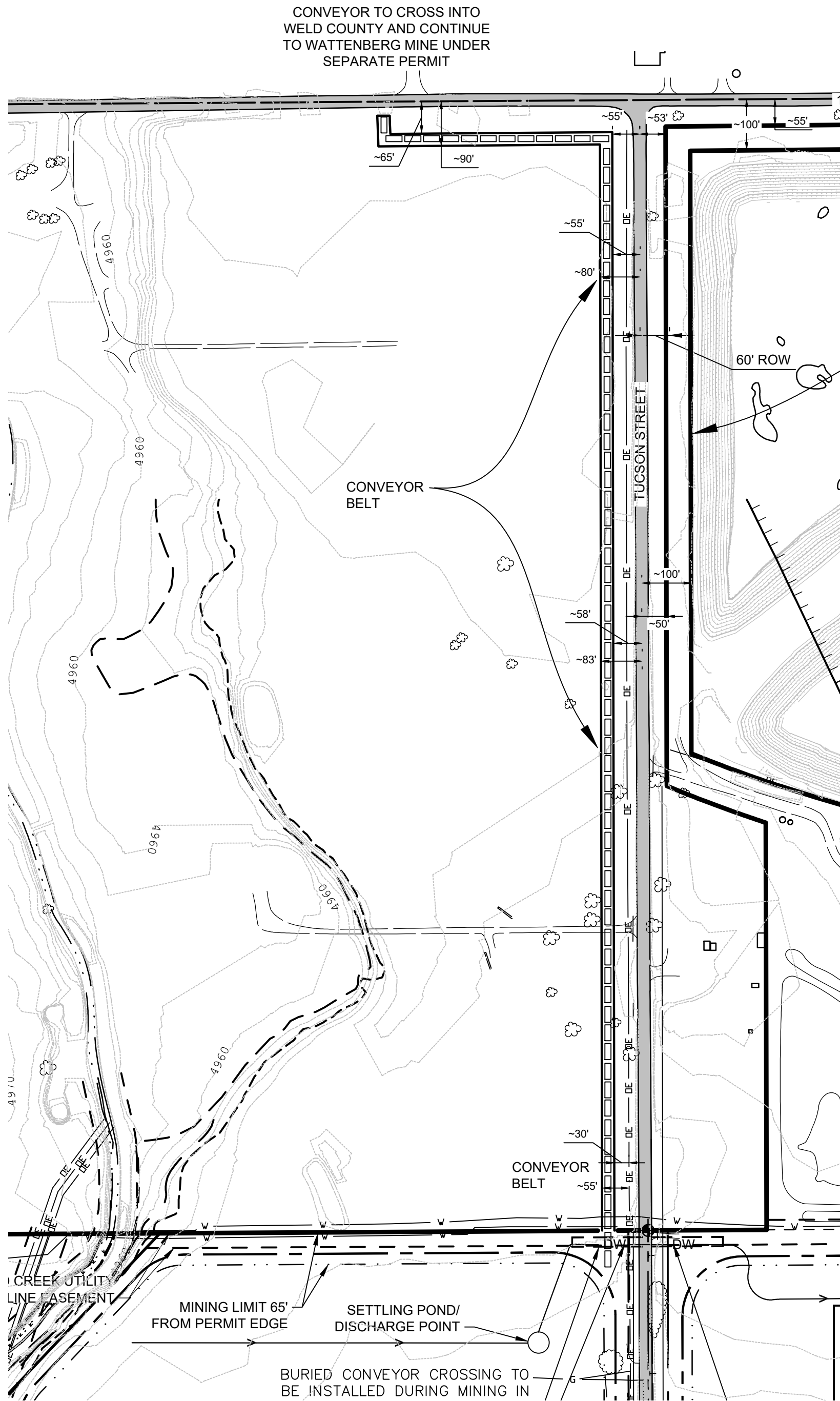
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MATCHLINE SEE SHT C-5

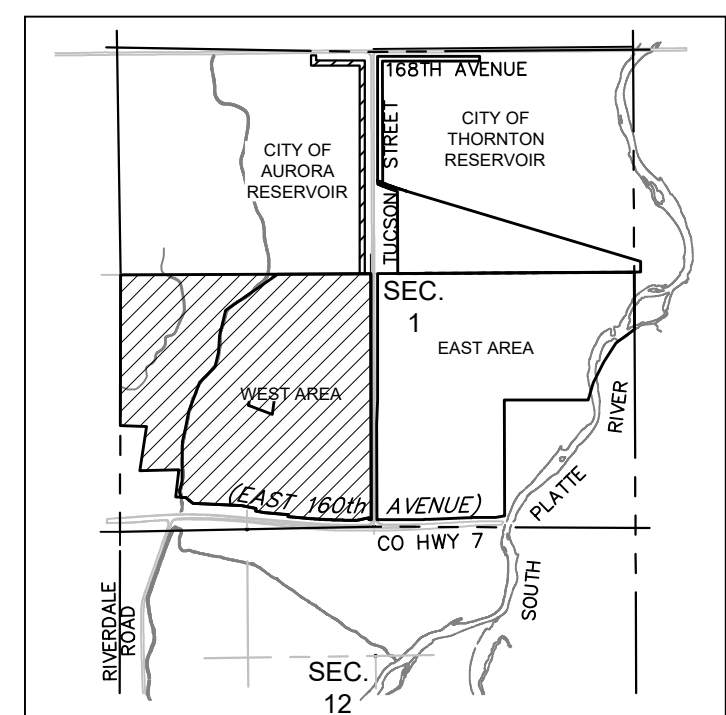
CERTIFICATION:
THIS MAP WAS ORIGINALLY PREPARED & CERTIFIED BY TETRA TECH,
3/15/2019, PROJECT NUMBER 200-23514-18004. MODIFIED BY MARK
SPANIEL WITH LAFARGEHOLCIM.

Mark Spaniel 9/21/20



- LEGEND:
- MINE PERMIT BOUNDARY
 - TRACT BOUNDARY
 - EASEMENT
 - EFFECTIVE FLOODWAY
 - EFFECTIVE ZONE AE
 - EFFECTIVE ZONE X
 - PRE-PROJECT/MINING CONDITIONS 100-YR FLOODPLAIN
 - EXISTING WETLAND BOUNDARY
 - EXISTING EDGE OF WATER
 - EXISTING 2' CONTOURS
 - EXISTING FENCE
 - EXISTING EDGE OF ROAD
 - EXISTING ELECTRIC LINE
 - EXISTING OVERHEAD ELECTRIC LINE
 - EXISTING GAS LINE
 - EXISTING WATER LINE
 - EXISTING TELEPHONE LINE
 - PROPOSED SLURRY WALL
 - LIMIT OF MINING EXCAVATION PER SLOPE STABILITY ANALYSIS
 - SURFACE DEWATERING TRENCH
 - 12" PIPE FOR DEWATERING
 - ON SITE HAUL ROAD
 - ON SITE CONVEYOR
 - PROPOSED ACCESS
 - OVERBURDEN STOCKPILE
 - TOPSOIL STOCKPILE
 - TOPSOIL SCREENING BERM W/ GRASS COVER
 - SETTLING POND/DISCHARGE POINT
 - EXISTING ASPHALT ROAD
 - EXISTING SOUTH PLATTE RIVER
 - UDFCD STABILIZATION
 - EXISTING WETLANDS

NOTE:
1. CONCEPTUAL UNDERDRAIN AND DETAILS ARE PRESENTED IN EXHIBIT G.



TETRA TECH

AGGREGATE INDUSTRIES - WCR, INC.

TUCSON SOUTH RESOURCE

EXHIBIT C

WEST AREA

MINING PLAN

Project No.: 200-23514-18004

Designed By:

Drawn By:

Checked By:

C-4

EXHIBIT

www.tetratech.com

1900 S. Sunset St., Ste. 1-E

Longmont, CO 80501

Phone: (303) 772-5282

BY

TH

TH

TH

MES

MES

DATE

DESCRIPTION

1

7/8/19

FIRST ADEQUACY REVIEW RESPONSE

2

9/16/19

SECOND ADEQUACY REVIEW RESPONSE

3

11/8/19

THIRD ADEQUACY REVIEW RESPONSE

4

5/1/20

REMOVE SOUTH AREA FROM MINING PLAN

5

7/17/20

ADD TRACT N & MOVED BELT TO TRACT N

MARK

DATE

DESCRIPTION

1

7/8/19

FIRST ADEQUACY REVIEW RESPONSE

2

9/16/19

SECOND ADEQUACY REVIEW RESPONSE

3

11/8/19

THIRD ADEQUACY REVIEW RESPONSE

4

5/1/20

REMOVE SOUTH AREA FROM MINING PLAN

5

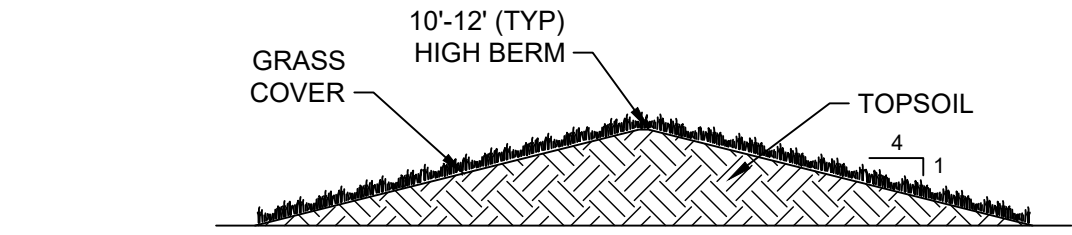
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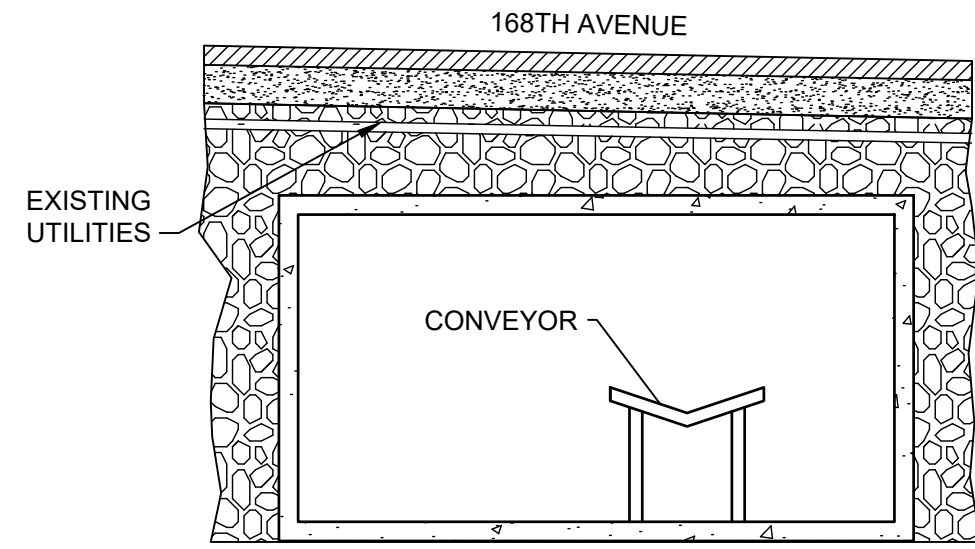
Copyright: Tetra Tech

Bar Measures 1 inch

7/1/2019 9:36:08 AM - C:\PROJECTS\DENVER\23514\1133-23514-17005\CAD\SHEETFILES\DRMS\C-5 EXHIBIT C EAST AREA (PHASE 3) MINING PLAN.DWG - ANDRYAUSKAS, JEREMY

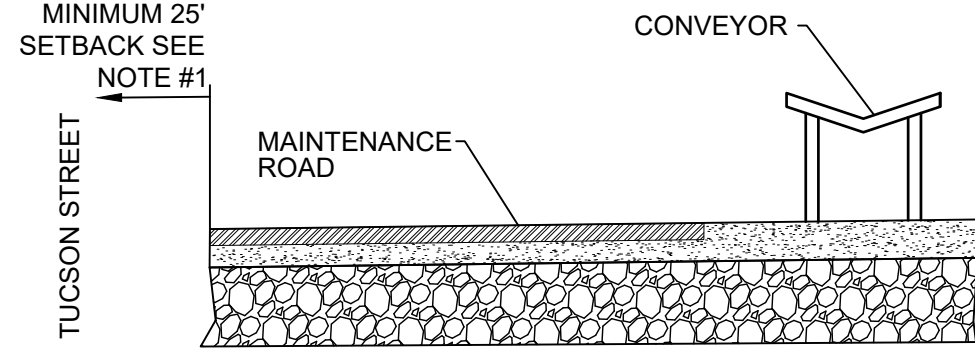


1 TEMPORARY GRASS SCREENING BERM
NTS



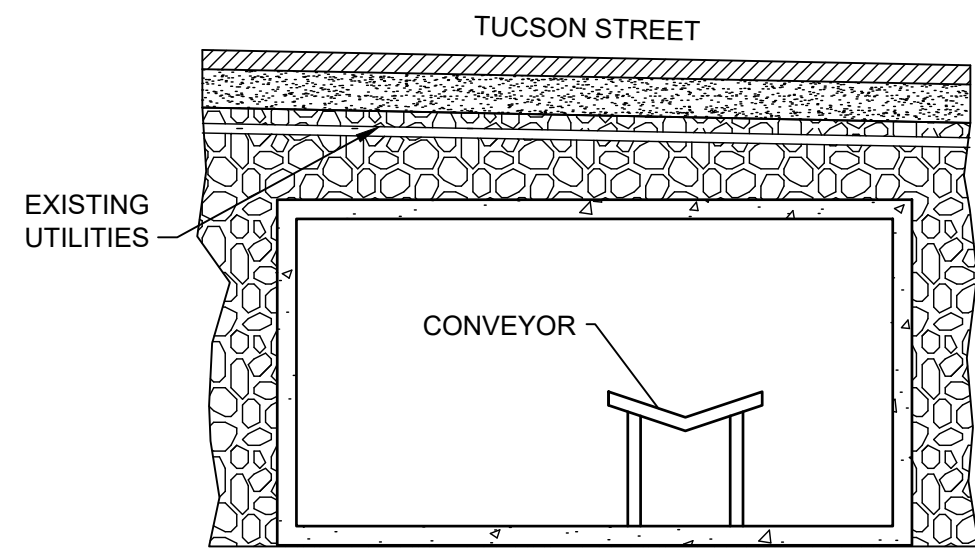
- NOTE:
1. THIS DETAIL IS INTENDED TO BE CONCEPTUAL DESIGN. INSTALLATION OF THE CONVEYOR CROSSING BOX UNDER 168TH AVENUE IS SUBJECT TO APPROVAL OF ADAMS COUNTY AND WELD COUNTY PUBLIC WORKS DEPT. AND COORDINATION WITH EXISTING UTILITIES.
 2. CONVEYOR UNDER 168TH STREET WILL BE PERMITTED THROUGH AN AMENDMENT TO WATTENBERG LAKES (M-2004-051) 112 PERMIT.

2 168TH AVENUE CONVEYOR CROSSING DETAIL
NTS



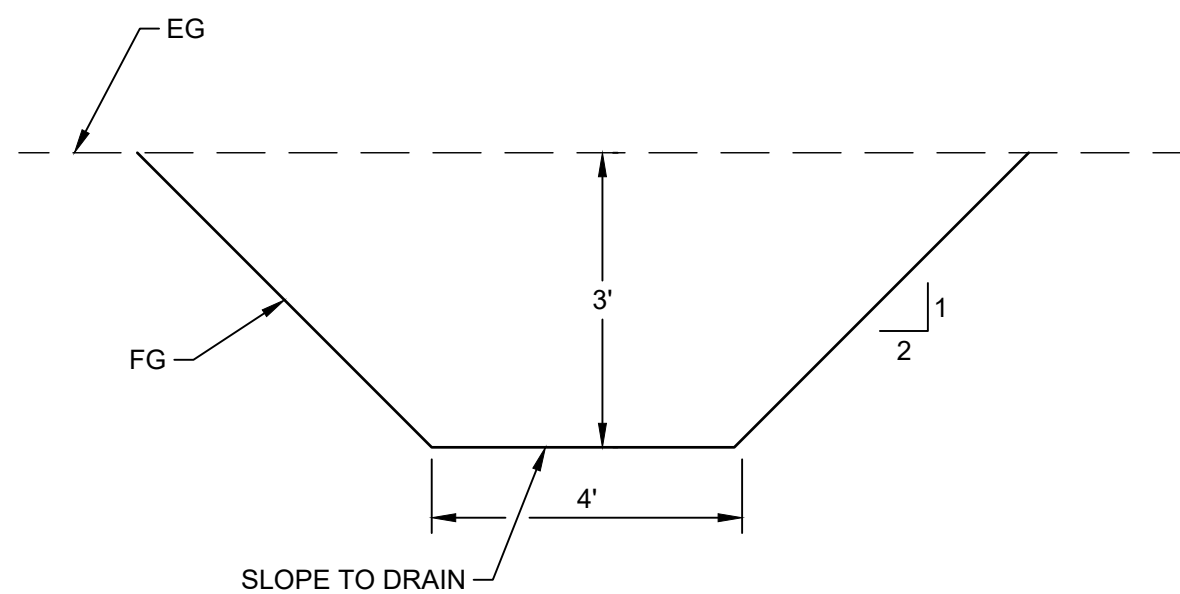
- NOTE:
1. CONVEYOR ACCESS AND MAINTENANCE ROAD SHALL BE SETBACK A MINIMUM OF 25' FROM TUCSON STREET.

3 ON-SITE ABOVE GROUND CONVEYOR SYSTEM DETAIL
NTS

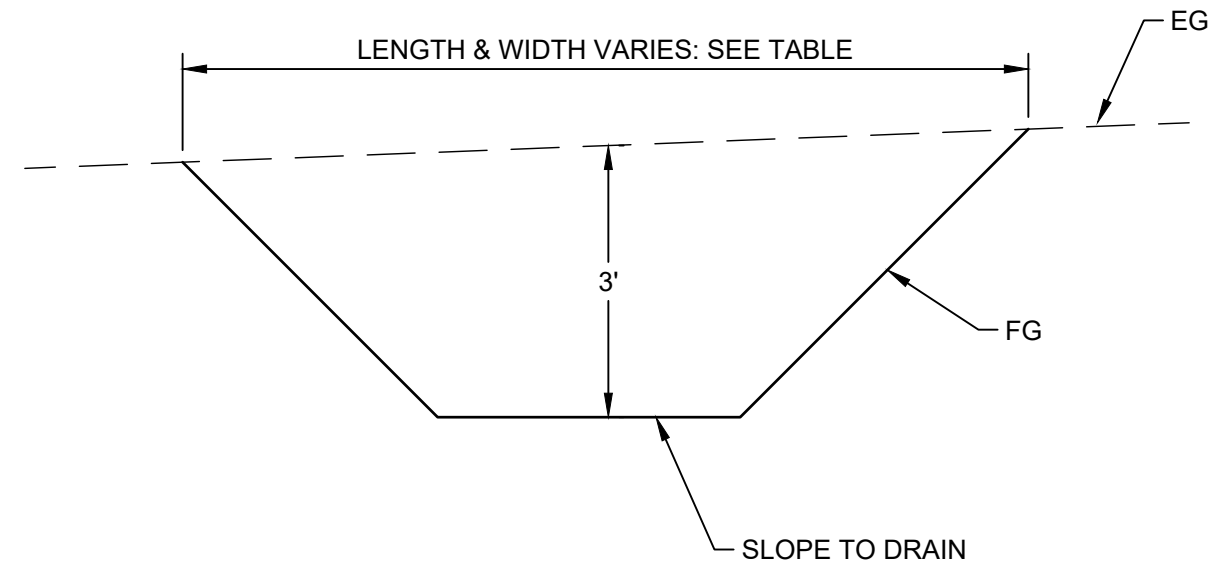


- NOTE:
1. THIS DETAIL IS INTENDED TO BE CONCEPTUAL DESIGN. INSTALLATION OF THE CONVEYOR CROSSING BOX UNDER TUCSON STREET IS SUBJECT TO APPROVAL OF ADAMS COUNTY AND WELD COUNTY PUBLIC WORKS DEPT. AND COORDINATION WITH EXISTING UTILITIES.

4 TUCSON STREET CONVEYOR CROSSING DETAIL
NTS

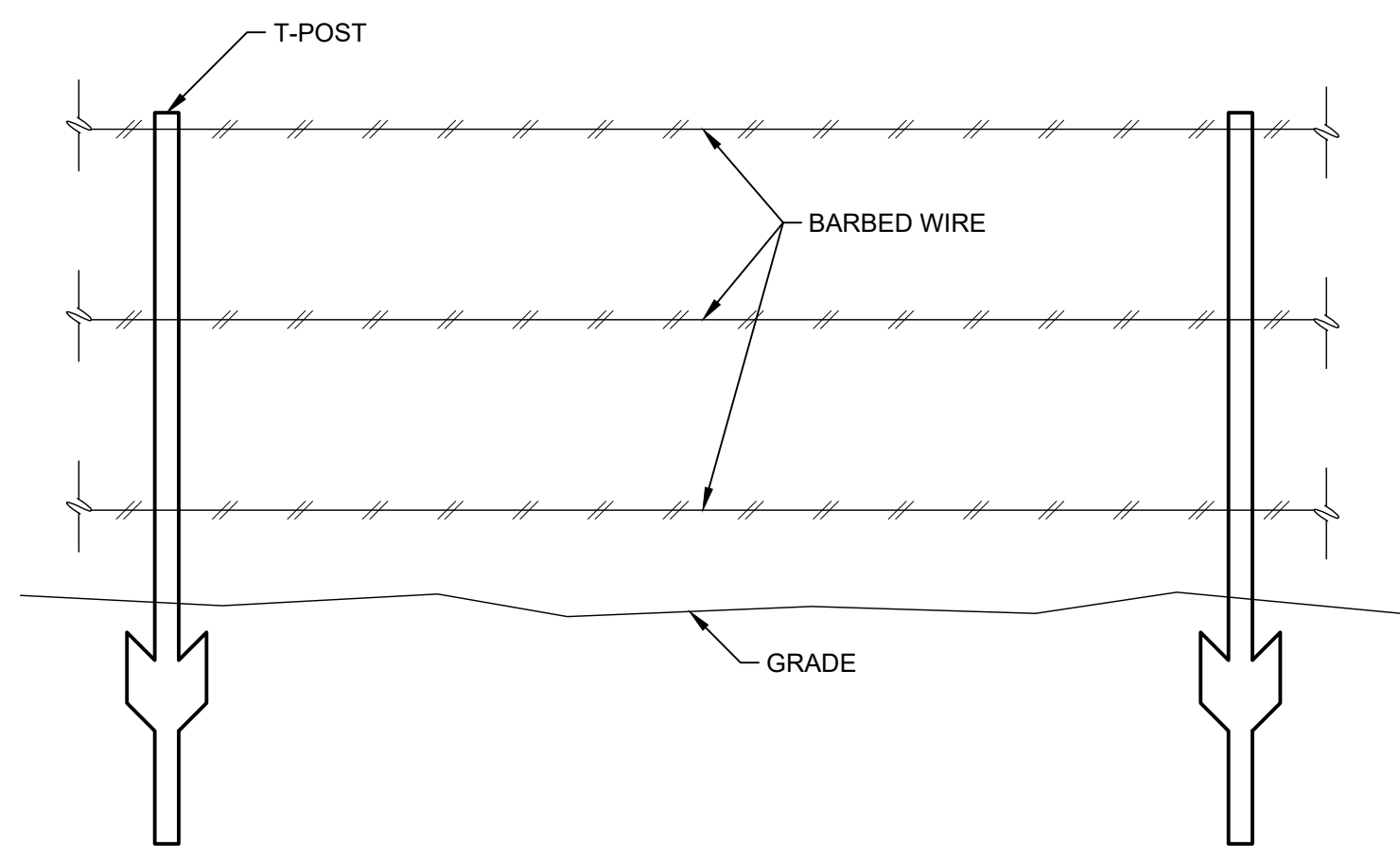


5 TYPICAL SURFACE WATER DIVERSION CHANNEL
NTS



CELL	POND DIMENSIONS
WEST	140x140
EAST	155x155
SOUTH	60x60

6 TYPICAL SURFACE WATER DIVERSION CHANNEL
NTS



7 3-WIRE FARM FENCE DETAIL
NTS

CERTIFICATION:

THIS MAP WAS ORIGINALLY PREPARED & CERTIFIED BY TETRATECH, 3/15/2019, PROJECT NUMBER 200-23514-18004. MODIFIED BY MARK SPANIEL WITH LAFARGEHOLCIM.

Mark Spaniel

07/23/2020



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AGGREGATE INDUSTRIES - WCR, INC.

TUCSON SOUTH
RESOURCE

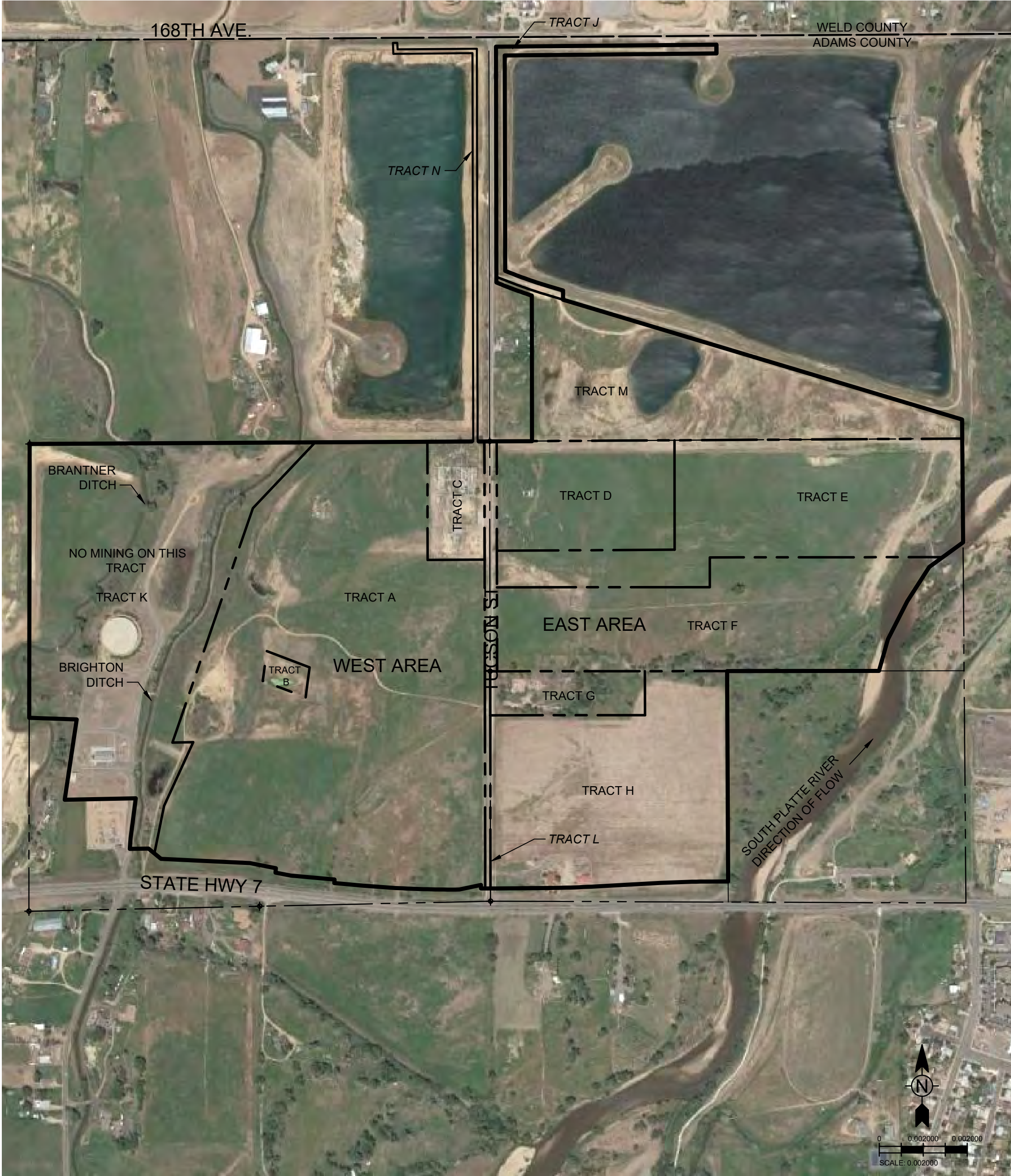
EXHIBIT C
MINING PLAN DETAILS

Project No.: 200-23514-18004
Designed By: JAB
Drawn By: JJA
Checked By: JAB

C-6
EXHIBIT

Bar Measures 1 inch

Copyright: Tetra Tech



- RECLAMATION NOTES:**
- ALL FINAL RECLAIMED RESERVOIR SIDE SLOPES SHALL BE NO STEEPER THAN 3H:1V. 6" - 12" OF TOPSOIL WILL BE PLACED ON ALL SLOPES ABOVE THE ASSUMED HIGH-WATER LINE. RE-VEGETATION SHALL USE SEED MIXES LISTED IN TABLE BELOW, OR SIMILAR ALTERNATE MIX BASED ON COMMERCIAL AVAILABILITY. AT THE TIME OF RECLAMATION, ALL SUBSTITUTIONS WILL BE DETERMINED IN CONSULTATION WITH QUALIFIED EXPERTS, AND APPROPRIATE TO THE REGION AND SOIL REGIME.
 - HIGH WATER LINE IS APPROXIMATE BASED ON AN ASSUMED 1' FREEBOARD.
 - AREAS TO BE RECLAIMED AS UPLAND WILL RECEIVE A MINIMUM OF 6" - 12" TOPSOIL TO BETTER ESTABLISH GRASSES AND PLANTINGS.
 - PLANTINGS WILL BE INSTALLED WHEN MINING COMMENCES IN THE EAST CELL (PHASE 2). PLANTINGS WILL BE INSTALLED BY A RECLAMATION CONTRACTOR IN SEPTEMBER AND HAND WATERED UNTIL THE GROUND FREEZES. PLANTINGS WILL BE MONITORED IN THE SPRING TO MAKE SURE THEY ARE LEAVING OUT, REPLACED AS NECESSARY TO PROVIDE THE QUANTITIES AS ORIGINALLY INSTALLED AND WATERED AS NECESSARY THROUGH THE FIRST THREE GROWING SEASONS TO ESTABLISH.
 - AT RECLAMATION, AGGREGATE INDUSTRIES-WCR, INC. WILL ATTAIN UDS&FO APPROVAL OF PLANTING LOCATIONS WITHIN THE UDS&FO EASEMENT ALONG THE SOUTH PLATTE RIVER PRIOR TO INSTALLATION.
 - SEEDING WILL BE DONE DURING THE FIRST FAVORABLE SEEDING SEASON FOLLOWING TOPSOIL PLACEMENT. BASED ON RECOMMENDATION OF THE NRCS, IT IS ANTICIPATED THAT SEEDING WILL BE DONE BETWEEN OCT 15 AND MAY 1, UNLESS WEATHER CONDITIONS REQUIRE SEEDING OUTSIDE THESE MONTHS.
 - CERTIFIED WEED-FREE STRAW CRIMPED INTO TOPSOIL WILL BE USED WHERE GRASSES ARE TO BE ESTABLISHED ABOVE THE HIGH-WATER LINE ON RESERVOIR SIDESLOPES, OR NEW SEEDS PLANTED INTO A COVER CROP.
 - NATIVE TREES AND SHRUBS WILL BE PLANTED ON THE WESTERN SIDE BETWEEN THE RIVER AND EAST RESERVOIR.

CERTIFICATION:

THIS MAP WAS ORIGINALLY PREPARED & CERTIFIED BY TETRATECH, 3/15/2019, PROJECT NUMBER 200-23514-18004. MODIFIED BY MARK SPANIEL WITH LAFARGEHOLCIM.

Mark Spaniel

07/23/2020

SHEET INDEX:

F-1	COVER SHEET & RECLAMATION NOTES
F-2	RECLAMATION PLAN MAP - WEST AREA
F-3	RECLAMATION PLAN MAP - EAST AREA

GRAVEL MINING APPLICANT / OPERATOR:

AGGREGATE INDUSTRIES-WCR, INC.
1687 COLE BLVD, SUITE 300
GOLDEN, COLORADO 80401

SURFACE OWNERS:

AGGREGATE INDUSTRIES-WCR, INC. (TRACTS A, B, D, E, F, H, I, AND M)
1687 COLE BLVD, SUITE 300
GOLDEN, COLORADO 80401

CITY OF AURORA (TRACTS C, G, AND K)
15151 EAST ALAMEDA PARKWAY
SUITE 3800
AURORA, COLORADO 80012

CITY OF THORNTON (TRACT J)
12450 WASHINGTON STREET
THORNTON, COLORADO 80241

ADAMS COUNTY (TRACT L)
ADAMS COUNTY GOVERNMENT CENTER
4430 SOUTH ADAMS COUNTY PARKWAY
BRIGHTON, COLORADO 80601

RECLAMATION AREA ACREAGE TABLE:

RECLAMATION PLAN AREAS	ACREAGES
MINING AREAS RECLAIMED TO WATER STORAGE	155.8
DISTURBED, BUT NOT MINED LAND RECLAIMED TO UPLAND MEADOW	86.7
UNDISTURBED AREAS OUTSIDE AFFECTED AREA	49.0
TUCSON STREET ROW	2.9
TOTAL	294.4

SEED MIX AND SEED MIX NOTES:

UPLAND MEADOW GRASS SEED	SCIENTIFIC NAME	VARIETY	% OF MIX	APPLICATION RATE* (#PLS/ACRE)
BIG BLUESTEM	ANDROPOGON GERARDII	KAW	15%	1.7
BLUE GRAMA	BOUTELOUA GRACILIS	HACHITA, LOVINGTON	10%	0.3
GREEN NEEDLAGRASS	NASSELLA VIRIDULA	LODOM	15%	1.5
SIDE OATS GRAMA	BOUTELOUA CURTIPENDULA	VAUGHN, BUTTE	10%	1
SWITCHGRASS	PANICUM VIRGATUM	BLACKWELL	20%	2
WESTERN WHEAT GRASS	PASCOPYRUM SMITHII	ARRIBA, BARTON	30%	4.8
TOTAL				11.3
*APPLICATION RATE IS FOR DRILL SEEDING. IF SEED IS TO BE BROADCAST, THE APPLICATION RATE WILL BE DOUBLED.				
TEMPORARY STOCKPILE VEGETATION:				
LUNA PUBESCENT WHEAT GRASS - 15 LB/AC				
AMUR INTERMEDIATE WHEAT GRASS - 15 LB/AC				

TUCSON SOUTH RESOURCE RECLAMATION PLAN MAPS

LEGAL DESCRIPTIONS:

TRACT A

THAT PARCEL OF LAND AS DESCRIBED IN A GENERAL WARRANTY DEED RECORDED FEBRUARY 27, 2001 AT RECEPTION NO. C0765905, COUNTY OF ADAMS, STATE OF COLORADO.

EXCEPT PARCEL B AS DESCRIBED IN A GENERAL WARRANTY DEED RECORDED FEBRUARY 27, 2001 AT RECEPTION NO. C0765905, COUNTY OF ADAMS, STATE OF COLORADO.

AND EXCEPT THAT TRACT OF LAND CONVEYED TO CITY OF AURORA AS DESCRIBED IN GENERAL WARRANTY DEED RECORDED DECEMBER 22, 2005, AS RECEPTION NO. 20051222001399920, COUNTY OF ADAMS, STATE OF COLORADO.

TRACT B

A PARCEL OF LAND IN THE SW 1/4 OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF ADAMS, STATE OF COLORADO, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID SECTION 1; THENCE NORTH ALONG THE WEST LINE OF SAID SECTION 1 A DISTANCE OF 1449 FEET; THENCE S84°05'E A DISTANCE OF 1334.7 FEET TO THE TRUE POINT OF BEGINNING;
THENCE S69°18'E, 260.7 FEET;
THENCE N07°32'E, 171.6 FEET;
THENCE N69°18'W, 260.7 FEET;
THENCE S07°32'W, 171.6 FEET TO THE POINT OF BEGINNING, COUNTY OF ADAMS, STATE OF COLORADO.

TRACT C

ALL THAT TRACT OF LAND DESCRIBED IN THE SPECIAL WARRANTY DEED RECORDED SEPTEMBER 26, 2016 AT RECEPTION NO. 2016000080681, COUNTY OF ADAMS, STATE OF COLORADO.

TRACT D

THAT PART OF THE NORTH ONE-HALF SOUTHEAST ONE-QUARTER, SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE SIXTH PRINCIPAL MERIDIAN, ADAMS COUNTY, COLORADO DESCRIBED AS:

COMMENCING AT THE NORTHWEST CORNER OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, SAID POINT BEING THE POINT OF BEGINNING; THENCE N 89°37'18" E, ALONG THE NORTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER A DISTANCE OF 1050.57 FEET; THENCE S. 00°08'29" E, PARALLEL WITH THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER A DISTANCE OF 621.95 FEET TO A LINE THAT IS PARALLEL WITH THE NORTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER AND 5 FEET SOUTH OF AN EXISTING HOUSE; THENCE S. 89°37'18" W, ALONG SAID LINE A DISTANCE OF 1050.57 FEET TO THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE N. 00°08'29" W, ALONG THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER A DISTANCE OF 621.95 FEET, TO THE POINT OF BEGINNING; EXCEPT THE WEST 40.00 FEET THEREOF, COUNTY OF ADAMS, STATE OF COLORADO.

TRACT E

THAT PART OF THE NORTH ONE-HALF SOUTHEAST ONE QUARTER SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE SIXTH PRINCIPAL MERIDIAN, ADAMS COUNTY, COLORADO, LYING NORTH AND WEST OF THE CENTERLINE OF THE SOUTH PLATTE RIVER, DESCRIBED AS:

COMMENCING AT THE NORTHWEST CORNER OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE SOUTH 00°08'29" EAST ALONG THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 590.02 FEET TO THE CENTERLINE OF THE SOUTH PLATTE RIVER; THENCE SOUTHERLY ALONG THE CENTERLINE OF THE SOUTH PLATTE RIVER SOUTH 53°55'12" WEST, A DISTANCE OF 142.93 FEET TO A LINE THAT IS 646.34 FEET NORTH OF AND PARALLEL WITH THE SOUTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE SOUTH 89°54'25" WEST ALONG SAID LINE, A DISTANCE OF 1324.16 FEET TO A LINE THAT IS 1250.00 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE SOUTH 00°08'29" EAST, PARALLEL WITH THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 169.08 FEET TO A LINE THAT IS 477.26 FEET NORTH OF AND PARALLEL WITH THE SOUTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE SOUTH 89°54'25" WEST ALONG SAID LINE, A DISTANCE OF 1250.00 FEET TO THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE NORTH 00°08'29" WEST ALONG THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 207.94 FEET TO THE POINT OF BEGINNING, EXCEPT THE WEST 40.00 FEET THEREOF, COUNTY OF ADAMS, STATE OF COLORADO.

TRACT F

THAT PART OF THE NORTH ONE-HALF OF THE SOUTHEAST ONE-QUARTER, SECTION 1, TOWNSHIP 1, SOUTH, RANGE 67 WEST OF THE SIXTH PRINCIPAL MERIDIAN, ADAMS COUNTY, STATE OF COLORADO, LYING NORTH AND WEST OF THE CENTERLINE OF THE SOUTH PLATTE RIVER DESCRIBED AS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, SAID POINT BEING THE POINT OF BEGINNING; THENCE N00°08'29"W, ALONG THE WEST LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER A DISTANCE OF 477.26 FEET; THENCE N89°54'25"E, PARALLEL WITH THE SOUTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 1324.16 FEET TO THE CENTERLINE OF THE SOUTH PLATTE RIVER; THENCE BY THE FOLLOWING COURSES AND DISTANCES ALONG THE CENTERLINE OF THE SOUTH PLATTE RIVER: S63°55'12"W, 94.57 FEET; S32°39'44"W, 231.53 FEET; S26°54'09"W, 242.48 FEET; S15°48'38"W, 187.17 FEET TO THE SOUTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER; THENCE S89°54'25"W, ALONG THE SOUTH LINE OF SAID NORTH ONE-HALF SOUTHEAST ONE-QUARTER, A DISTANCE OF 2210.47 FEET TO THE POINT OF BEGINNING, EXCEPT THE WEST 40.00 FEET THEREOF, COUNTY OF ADAMS, STATE OF COLORADO.

TRACT G

ALL THAT TRACT OF LAND DESCRIBED IN THE QUIT CLAIM DEED RECORDED MARCH 2, 2017 AT RECEPTION NO. 2017000018970, COUNTY OF ADAMS, STATE OF COLORADO.

TRACT H

THE SW1/4 OF THE SE1/4 OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST, EXCEPT THAT PART AS DESCRIBED IN BOOK 1055 AT PAGE 52, AND IN BOOK 1214 AT PAGE 326 AND EXCEPT THAT PART DESCRIBED IN BOOK 1205 AT PAGE 128, COUNTY OF ADAMS, STATE OF COLORADO

TRACT J

A PORTION OF A PARCEL OWNED BY THE CITY OF THORNTON (PN: 0157101002001) LOCATED IN THE NORTHEAST QUARTER OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
THE WEST 50.00 FEET; THE NORTH 50.00 FEET OF THE WEST 1250.00 FEET; AND THE SOUTH 50.00 FEET OF THE WEST 380.00 FEET.

TRACT K

A PARCEL OF LAND LOCATED IN THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF ADAMS, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE EAST QUARTER CORNER OF SAID SECTION 1; THENCE SOUTH 89°39'53" WEST 2445.14 FEET ALONG THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 1; THENCE NORTH 00°08'03" WEST 827.14 FEET; THENCE 214.58 FEET ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 2944.62 FEET AND A LONG CHORD WHICH BEARS NORTH 69°36'00" WEST 214.53 FEET TO A POINT LYING 40.00 FEET EASTERLY FROM THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 1; THENCE NORTH 00°08'03" WEST 32.52 FEET PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 1; THENCE 305.94 FEET ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 2914.62 FEET AND A LONG CHORD WHICH BEARS SOUTH 70°16'26" EAST 305.80 FEET, SAID POINT BEING ON THE SOUTHERLY LINE OF THE TUCSON RESOURCES SUBDIVISION AS RECORDED IN THE ADAMS COUNTY RECORDS IN FILE 17 MAP 855; THENCE SOUTH 73°16'48" EAST 2463.67 FEET ALONG THE SOUTHERLY LINE OF SAID TUCSON RESOURCES SUBDIVISION TO THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 1; THENCE SOUTH 00°10'30" EAST 108.13 FEET ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 1 TO THE POINT OF BEGINNING.

TRACT L (TUCSON STREET RIGHT-OF-WAY)

A TRACT OF LAND LOCATED IN THE SOUTH HALF OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE CENTER-SOUTH ONE-SIXTEENTH CORNER OF SECTION 1; THENCE ALONG THE NORTH-SOUTH CENTERLINE OF SECTION 1 SOUTH 00°08'29" EAST 1234.13 FEET TO A POINT WHENCE THE SOUTH ONE-QUARTER CORNER OF SECTION 1 BEARS SOUTH 00°08'29" EAST 72.70 FEET; THENCE LEAVING SAID NORTH-SOUTH CENTERLINE SOUTH 89°33'20" WEST 30.00 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF TUCSON STREET; THENCE ALONG SAID WESTERLY RIGHT-OF-WAY LINE NORTH 00°06'29" WEST 2541.11 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHWEST QUARTER OF SECTION 1; THENCE ALONG SAID NORTH LINE NORTH 89°40'23" EAST 30.00 FEET TO THE CENTER ONE-QUARTER CORNER OF SECTION 1; THENCE ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF SECTION 1 NORTH 89°39'20" EAST 40.00 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF TUCSON STREET; THENCE ALONG SAID EASTERLY RIGHT-OF-WAY LINE SOUTH 00°08'29" EAST 1307.12 FEET; THENCE LEAVING SAID EASTERLY RIGHT-OF-WAY LINE SOUTH 89°56'30" WEST 40.00 FEET TO THE CENTER-SOUTH ONE-SIXTEENTH CORNER OF SECTION 1 AND THE POINT OF BEGINNING.

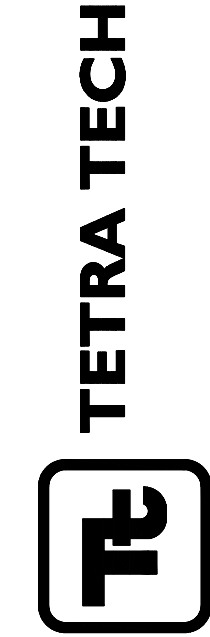
TRACT M

A PARCEL OF LAND LOCATED IN THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE EAST ONE-QUARTER CORNER OF SECTION 1; THENCE WEST 2445.14 FEET; THENCE NORTH 827.14 FEET; THENCE 214.58 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 2944.62 FEET AND A LONG CHORD WHICH BEARS NORTH 69°36" WEST 214.53 FEET TO A POINT 40 FEET EASTERLY FROM THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 1; THENCE NORTH 32.52 FEET; THENCE 305.94 FEET ALONG THE ARC OF A CURVE TO THE LEFT, HAVING A RADIUS OF 2914.62 FEET AND A LONG CHORD WHICH BEARS SOUTH 70°16' EAST 305.80 FEET; THENCE SOUTH 73°16' EAST 2463.67 FEET; THENCE SOUTH 108.13 FEET TO THE POINT OF BEGINNING.

TRACT N

A PORTION OF A PARCEL OWNED BY THE CITY OF AURORA (PN: 157101200001) A STRIP OF LAND BEING 25 FEET WIDE, TO BE USED AS AN EASEMENT LOCATED IN THE NORTHWEST OF SECTION 1 TOWNSHIP 1 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, SAID 25 FOOT WIDE STRIP OF LAND BEING 12.5 FEET EITHER SIDE OF THE FOLLOWING DESCRIBED CENTERLINE, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF THE NORTHWEST QUARTER OF SAID SECTION 1; THENCE ALONG THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 1, SAID LINE ALSO BEING THE SOUTH LINE OF A PARCEL OF LAND RECORDED AT BOOK 1, PAGE 3795, RECEPTION NUMBER 2010-018, SOUTH 89°38'45" WEST A DISTANCE OF 68.20 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 00°06'37" WEST, A DISTANCE OF 2219.37 FEET, SAID LINE BEING 68.20 FEET WEST OF AND PARALLEL TO THE EAST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 1, AND 27.02 FEET WEST OF THE EAST LINE OF A PARCEL OF LAND RECORDED AT BOOK 1, PAGE 3795, SAID LINE ALSO BEING THE WEST RIGHT OF WAY LINE OF TUCSON STREET; THENCE SOUTH 89°31'48" WEST, A DISTANCE OF 450.84 FEET, BEING 32.79 FEET SOUTH OF AND PARALLEL TO THE SOUTHERLY LINE OF SAID PARCEL AS RECORDED AT BOOK 1, PAGE 3795, SAID LINE ALSO BEING THE SOUTH RIGHT OF WAY LINE OF 168TH AVE, ALSO KNOWN AS BASELINE ROAD, SAID LINE ALSO BEING 72.92 FEET SOUTH OF AND PARALLEL TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 36, TOWNSHIP 1 NORTH, RANGE 57 WEST OF THE 6TH PRINCIPAL MERIDIAN; THENCE NORTH 02°04'13" WEST, A DISTANCE OF 32.67 FEET TO THE POINT OF TERMINUS, FROM WHENCE THE NORTH EAST CORNER OF THE NORTHWEST QUARTER BEARS NORTH 85°06'18" EAST, A DISTANCE 521.97 FEET.



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Longmont, CO 80501
Phone: (303) 772-5282

MARK	DATE	DESCRIPTION	BY
1	7/8/19	FIRST ADEQUACY REVIEW RESPONSE	TH
2	9/16/19	SECOND ADEQUACY REVIEW RESPONSE	TH
3	11/6/19	THIRD ADEQUACY REVIEW RESPONSE	TH
4	5/1/20	REMOVE SOUTH AREA FROM REC PLAN	MES
5	7/17/20	ADD TRACT N	MES

AGGREGATE INDUSTRIES - WCR, INC.

TUCSON SOUTH RESOURCE

EXHIBIT F

COVER SHEET

& RECLAMATION NOTES

Project No.: 200-23514-18004
Designed By: JAB
Drawn By: JAB
Checked By: JAB

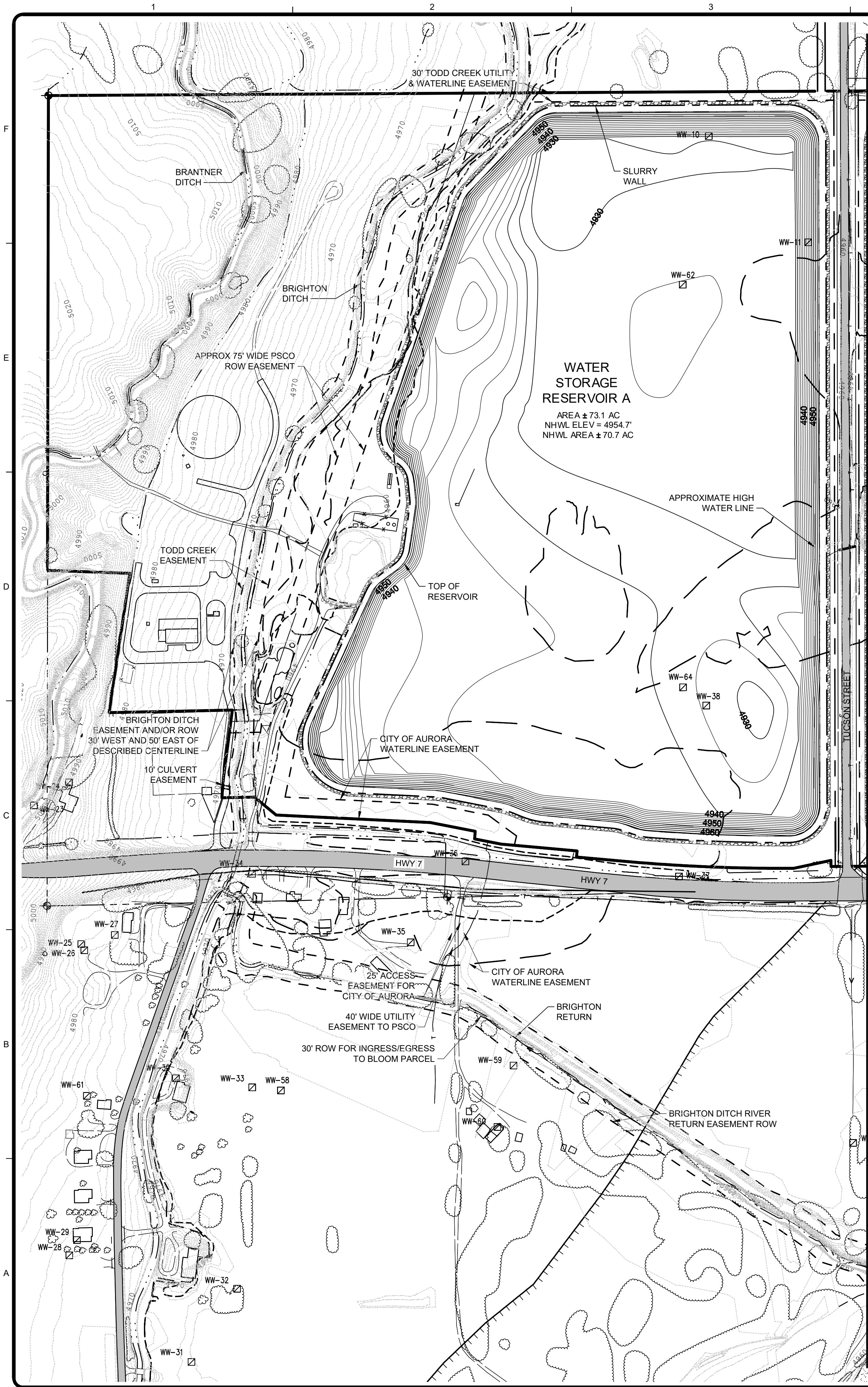
F-1

EXHIBIT

Bar Measures 1 inch

Copyright: Tetra Tech

4/29/2020 3:16:28 PM - DRAWING1.DWG - ANDRYAUSKAS, JEREMY



MATCHLINE SEE THIS SHEET BELOW RIGHT

RECLAIMED AS UPLAND MEADOW

20' TODD CREEK WATERLINE EASEMENT

30' TODD CREEK UTILITY & WATERLINE EASEMENT

SLURRY WALL

TOP OF RESERVOIR

APPROXIMATE HIGH WATER LINE

WATER STORAGE RESERVOIR B
AREA ± 85.2 AC
NHWL ELEV = 4953.4'
NHWL AREA ± 82.7 AC

NATIVE TREES & SHRUBS PLANTED BETWEEN RIVER AND RESERVOIR

TODD CREEK UTILITY & WATERLINE EASEMENT

APPROXIMATE LOCATION OF THE SOUTH PLATTE RIVER TOP OF CHANNEL PER APRIL 2002 UDFCD MASTER PLAN STUDY BY CAMP, DRESSER AND MCKEE

EXISTING UDFCD EASEMENT

MORGAN SMITH NATURE AREA (CITY OF BRIGHTON)

SOUTH PLATTE RIVER DIRECTION OF FLOW

TODD CREEK FACILITY EASEMENT

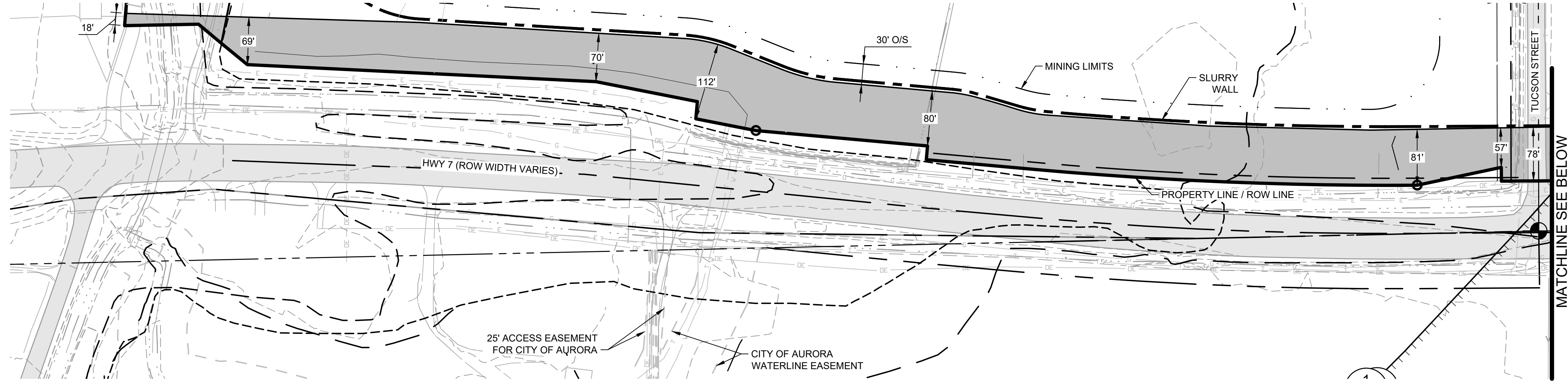
HWY 7

LUCSON STREET

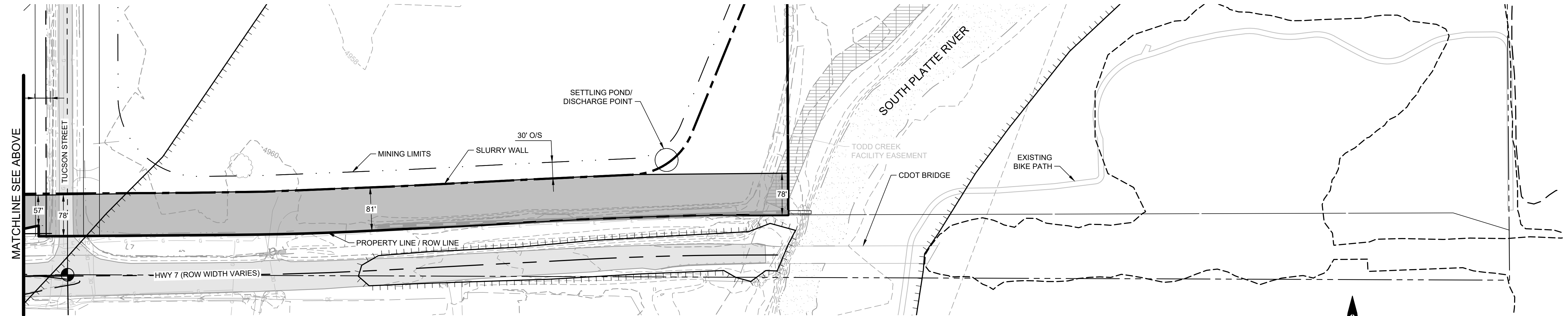
MATCHLINE SEE SHT F-2

Copyright: Tetra Tech

5/1/2019 8:29:06 AM - P:\23514\133-23514-17005\CADD\CONCEPTUAL\FIG 1 PROPOSED BIKEPATH CORRIDOR.DWG - WITTENMEIER, CHUCK

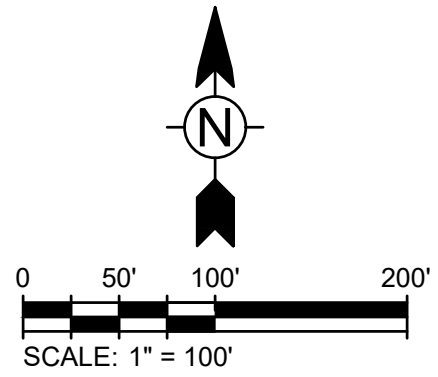
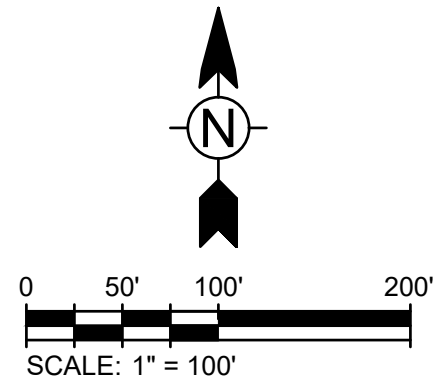


PLAN
SCALE: 1" = 100'



PLAN
SCALE: 1" = 100'

- LEGEND:
- MINE PERMIT BOUNDARY
 - TRACT BOUNDARY
 - EASEMENT
 - EFFECTIVE FLOODWAY
 - EFFECTIVE ZONE AE
 - EFFECTIVE ZONE X
 - PRE-PROJECT/MINING CONDITIONS 100-YR FLOODPLAIN
 - EXISTING WETLAND BOUNDARY
 - EXISTING EDGE OF WATER
 - EXISTING 2' CONTOURS
 - EXISTING FENCE
 - EXISTING EDGE OF ROAD
 - EXISTING OVERHEAD ELECTRIC LINE
 - EXISTING GAS LINE
 - EXISTING WATER LINE
 - EXISTING TELEPHONE LINE
 - PROPOSED SLURRY WALL
 - LIMIT OF MINING EXCAVATION PER SLOPE STABILITY ANALYSIS
 - SURFACE DEWATERING TRENCH
 - 12" PIPE FOR DEWATERING
 - ON SITE HAUL ROAD/CONVEYOR
 - PROPOSED ACCESS
 - OVERBURDEN & TOPSOIL STOCKPILES
 - TOPSOIL STOCKPILE
 - TOPSOIL SCREENING BERM W/ GRASS COVER
 - SETTLING POND/DISCHARGE POINT
 - EXISTING ASPHALT ROAD
 - EXISTING SOUTH PLATTE RIVER
 - UDFCD STABILIZATION
 - POTENTIAL BIKE PATH CORRIDOR

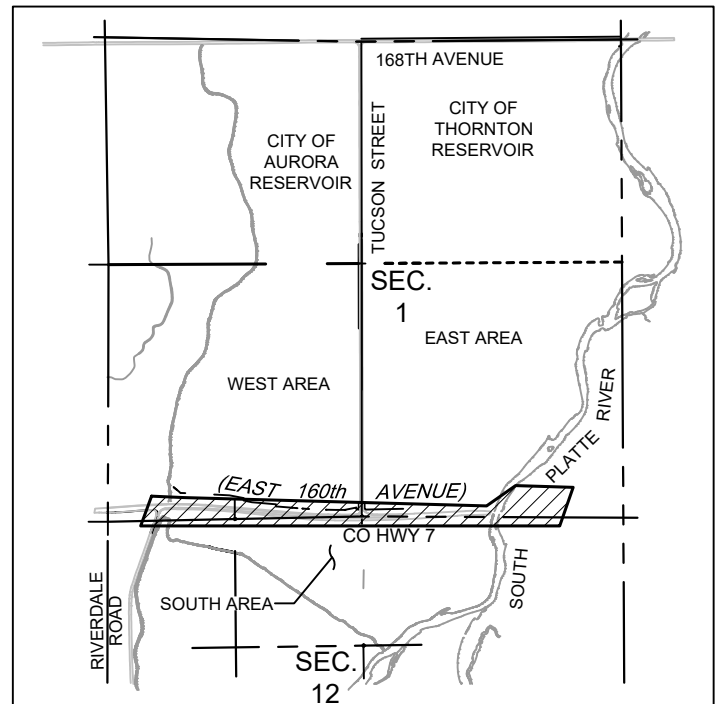


CERTIFICATION:

THIS MAP WAS ORIGINALLY PREPARED & CERTIFIED BY TETRATECH, 3/15/2019, PROJECT NUMBER 200-23514-18004. MODIFIED BY MARK SPANIEL WITH LAFARGEHOLCIM.

Mark Spaniel

07/17/2020



KEY MAP
NOT TO SCALE

TETRA TECH



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Longmont, CO 80501
Phone: (303) 772-5282

AGGREGATE INDUSTRIES - WCR, INC.

TUCSON SOUTH
RESOURCE

PROPOSED
BIKEPATH CORRIDOR

Project No.: 200-23514-18004
Designed By:
Drawn By: CFW
Checked By:

FIG 1
EXHIBIT

Bar Measures 1 inch

Copyright: Tetra Tech

EXHIBIT A

AGGREGATE INDUSTRIES ADDITIONAL 10 FOOT RIGHT OF WAY FOR A PARCEL AT REC C0765905

A 10 foot wide parcel of land to be used as additional right of Way located on the East edge of the Southwest quarter of Section 1, Township 1 South, Range 67 West, of the 6th Principal Meridian, County of Adams, State of Colorado, and more particularly described as follows:

Commencing at the Southeast Corner of the Southwest Quarter of Section 1, Township 1 South, Range 67 West, of the 6th principal Meridian;

Thence North 00° 08'07" West, a distance of 72.70 feet along the North-South Center of Section line of said Section 1, to a point of intersection with the North line of State Highway 7;

Thence South 89° 31'43" West, a distance of 30.00 feet along the north line of State Highway 7 to a point of intersection with the West Right of Way line of Tucson Street, and the True Point of Beginning;

Thence continuing along the previous course, South 89° 31'43" West, a distance of 10.00 feet;

Thence North 00° 08'07" West, a distance of 1869.13 feet, said line being 40.00 feet West of and parallel to the North-South Center of Section line for said Section 1 to a point of intersection with south line of a parcel of land recorded at Book 2017000042398 at Adams County Clerk and Recorder;

Thence North 89° 38'48" East, a distance of 10.00 feet, along the North line of said south line of a parcel of land recorded at Book 2017000042398 at Adams County Clerk and Recorder, to a point of intersection with the West Right of Way of Tucson Street, from whence the Northeast Corner of the Southwest Quarter of said Section 1 bears North 02° 25' 13" East a distance of 672.78 feet;

Thence South 00° 08'07" West, a distance of 1869.11 feet, Along the West Right of Way line of Tucson Street, said Right of Way line being 30.00 feet West of and parallel to the North-South Center of section line of said Section 1, to a point of intersection with the North Right of Way line of Highway 7 and the Point of Beginning.

Containing 18691.22 Sq. Ft. or 0.4291 Acres, more or less.

Exhibit B attached and hereby made a part thereof.

SURVEYOR'S CERTIFICATE

I, Karl Philip Thullen, a duly registered Professional Land Surveyor in the State of Colorado do hereby certify that the above easement description was prepared by me or under my direct supervision and is in accordance with the applicable standards of practice and is accurate based upon my knowledge, information and belief.

For and on behalf of Aggregate industries/Lafargeholcim.


Karl Philip Thullen, Colorado P.L.S. No. 38006

Dated this 16th day of September, 2019.

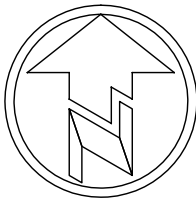
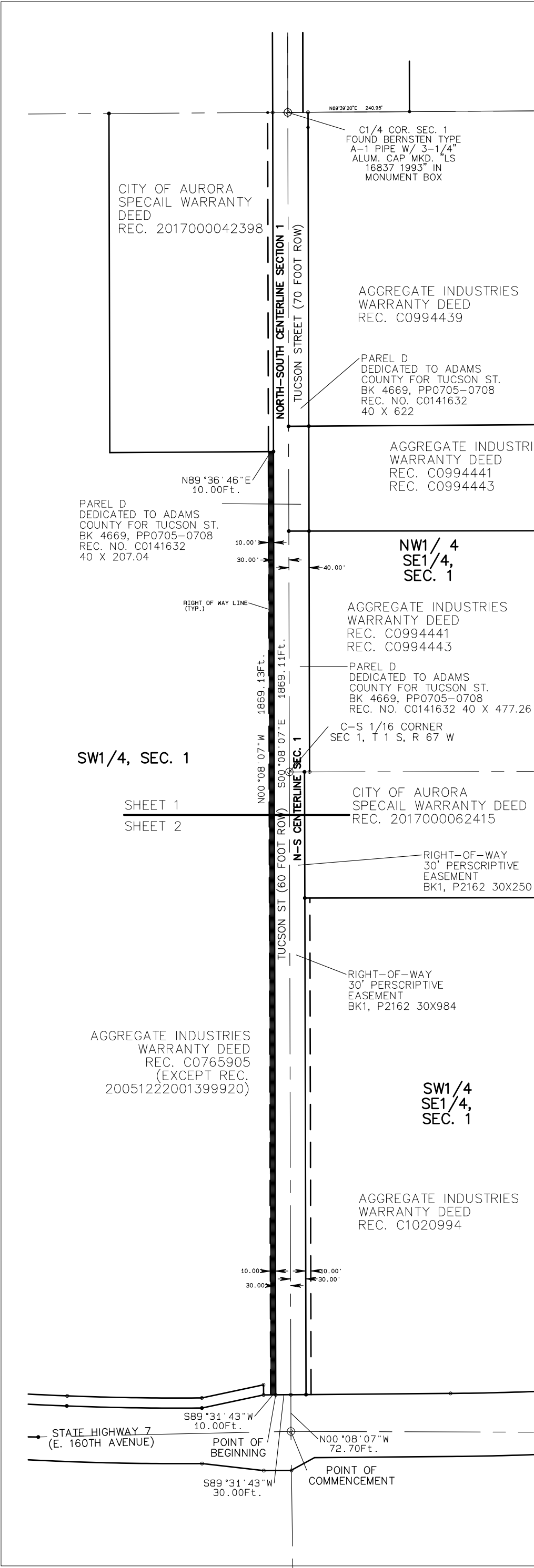
NOTE

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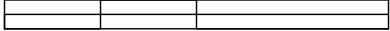
NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of certification shown hereon.

EXHIBIT B

AGGREGATE INDUSTRIES
ADDITIONAL 10 FOOT RIGHT OF WAY
FOR A PARCEL AT REC C0765905
LOCATED IN THE EAST HALF OF
THE SOUTHWEST
QUARTER OF SECTION 1,
TOWNSHIP 1 SOUTH,
RANGE 67 WEST
OF THE 6TH P.M.
COUNTY OF ADAMS
STATE OF COLORADO.



200 100 0 200



SCALE IN FEET

EXHIBIT A

AGGREGATE INDUSTRIES ADDITIONAL 10 FOOT RIGHT OF WAY FOR A PARCEL AT REC. C1020994

A 10 foot wide parcel of land to be used as additional right of Way, located on the West side of the Southwest quarter of the Southeast Quarter of Section 1, Township 1 South, Range 67 West, of the 6th Principal Meridian, County of Adams, State of Colorado, and more particularly described as follows:

Commencing at the Southwest Corner of the Southeast Quarter of Section 1, Township 1 South, Range 67 West, of the 6th principal Meridian;

Thence North 00° 08'07" West, a distance of 72.70 feet along the North-South Center of Section line of said Section 1, to a point of intersection with the North line of State Highway 7;

Thence North 89° 31'35" East, a distance of 30.00 feet along the north line of State Highway 7 to a point of intersection with the East Right of Way line of Tucson Street, and the True Point of Beginning;

Thence continuing along the previous course, North 89° 31'43" East, a distance of 10.00 feet;

Thence North 00° 08'07" West, a distance of 983.95 feet, said line being 40.00 feet East of and parallel to the North-South Center of Section line for said Section 1, to a point of intersection with the North line of the Southwest Quarter of the Southeast Quarter of said Section 1;

Thence South 89° 54'52" West, a distance of 10.00 feet, along said north line of the Southwest Quarter of the Southeast Quarter of Section 1 to a point of intersection on the East Right of Way of Tucson Street, from whence the Northwest Corner of the Southwest Quarter of the Southeast Quarter of said Section 1 bears North 06° 58'39" West, a distance of 251.82 feet;

Thence South 00° 08'07" West, a distance of 984.02 feet, Along the East Right of Way line of said Tucson Street, said Right of Way line being 30.00 feet East of and parallel to the North-South Center of Section line of said Section 1, to a point of intersection with the North Right of Way line of Highway 7 and the Point of Beginning.

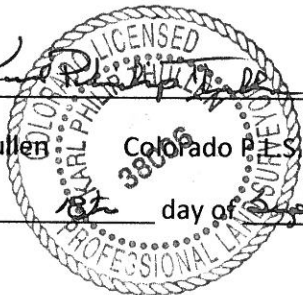
Containing 9839.88 Sq. Ft. or 0.2259 Acres, more or less.

Exhibit B attached and hereby made a part thereof.

SURVEYOR'S CERTIFICATE

I, Karl Philip Thullen, a duly registered Professional Land Surveyor in the State of Colorado do hereby certify that the above easement description was prepared by me or under my direct supervision and is in accordance with the applicable standards of practice and is accurate based upon my knowledge, information and belief.

For and on behalf of Aggregate industries/Lafargeholcim.



Karl Philip Thullen Colorado P.L.S. No. 38006
Dated this 18th day of September, 2019.

NOTE

The word "certify" or "certification" as used herein is understood to be an expression of professional opinion by the surveyor, based upon his best knowledge, information, and belief. As such, it does not constitute a guarantee, nor a warranty, expressed or implied.

NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of certification shown hereon.

EXHIBIT B

AGGREGATE INDUSTRIES
ADDITIONAL 10 FOOT RIGHT OF WAY
FOR A PARCEL AT REC. C1020994
LOCATED IN THE WEST HALF OF
THE SOUTHWEST QUARTER OF
THE SOUTH EAST QUARTER
OF SECTION 1,
TOWNSHIP 1 SOUTH,
RANGE 67 WEST
OF THE 6TH P.M.
COUNTY OF ADAMS
STATE OF COLORADO.

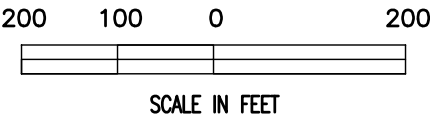
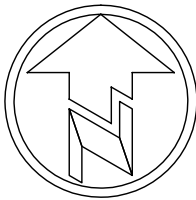
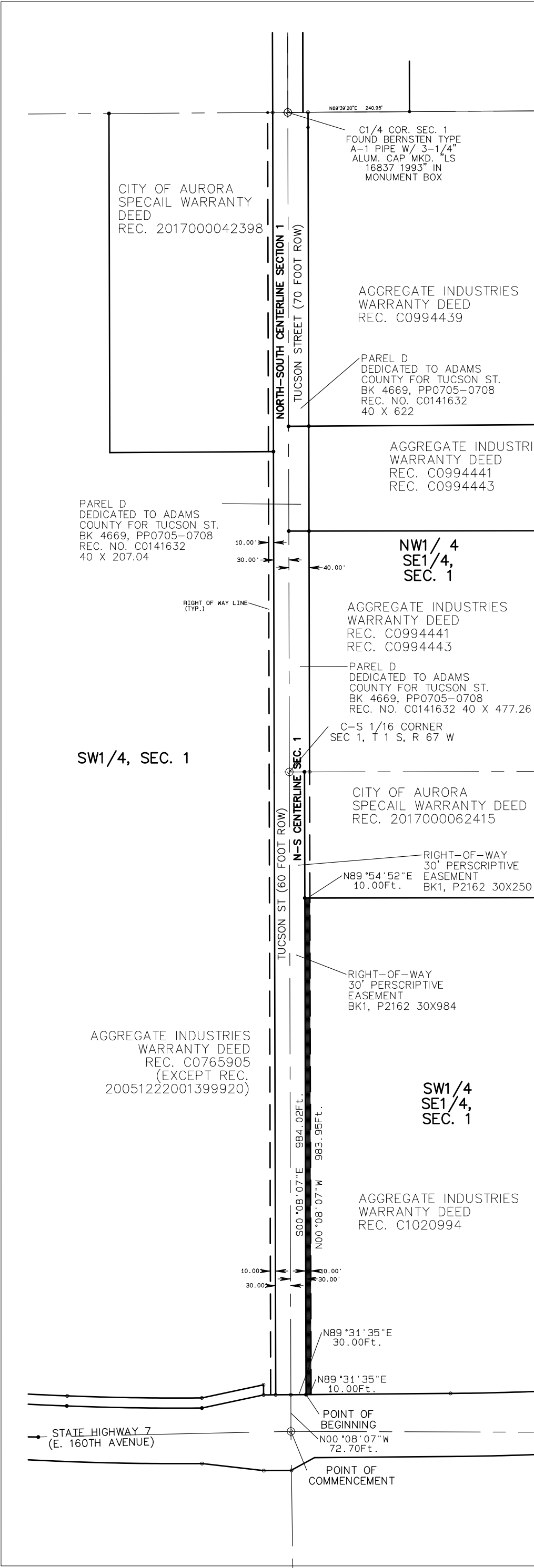


EXHIBIT A

CITY OF AURORA
ADDITIONAL 10 FOOT RIGHT OF WAY FOR
A PARCEL AT REC. 2017000062415

A 10 foot wide parcel of land to be used as additional right of Way, located on the West side of the Southwest quarter of the Southeast Quarter of Section 1, Township 1 South, Range 67 West, of the 6th Principal Meridian, County of Adams, State of Colorado, and more particularly described as follows:

Commencing at the Southwest Corner of the Southeast Quarter of Section 1, Township 1 South, Range 67 West, of the 6th principal Meridian;

Thence North 00° 08'07" West, a distance of 72.700 feet along the North-South Center of Section line of said Section 1, to a point of intersection with the North Right of Way line of Colorado State Highway 7;

Thence continuing along the previous bearing, North 00° 08'07" West, a distance of 984.02 feet along the North-South Center of Section line of said Section 1;

Thence North 89° 54'52" East, a distance of 30.00 feet to a point of intersection with the East Right of Way line of Tucson Street and the south line of a parcel of land recorded at the Adams county Clerk and Recorder at Reception number 2017000062415, and the True Point of Beginning;

Thence continuing along the previous course, North 89° 54'52" East, a distance of 10.00 feet;

Thence North 00° 08'07" West, a distance of 250.00 feet, said line being 40.00 feet East of and parallel to the North-South Center of Section line for said Section 1, to a point of intersection with the North line of the Southwest Quarter of the Southeast Quarter of said Section 1;

Thence South 89° 54'52" West, a distance of 10.00 feet, along said north line of the Southwest Quarter of the Southeast Quarter of Section 1 to a point of intersection on the East Right of Way of Tucson Street, from whence the Northwest Corner of the Southwest Quarter of the Southeast Quarter of said Section 1 bears South 89° 54'52" West, a distance 30.00 feet;

Thence South 00° 08'07" West, a distance of 250.00 feet, Along the East Right of Way line of said Tucson Street, said Right of Way line being 30.00 feet East of and parallel to the North-South Center of Section line of said Section 1, and the true Point of Beginning.

Containing 2500.00 Sq. Ft. or 0.0574 Acres, more or less.

Exhibit B attached and hereby made a part thereof.

SURVEYOR'S CERTIFICATE

I, Karl Philip Thullen, a duly registered Professional Land Surveyor in the State of Colorado do hereby certify that the above easement description was prepared by me or under my direct supervision and is in accordance with the applicable standards of practice and is accurate based upon my knowledge, information and belief.

For and on behalf of Aggregate Industries/LafargeHolcim.


Karl Philip Thullen, Colorado P.L.S. No. 38006

Dated this 18th day of September, 2019.

NOTE

The word "certify" or "certification" as used herein is understood to be an expression of professional opinion by the surveyor, based upon his best knowledge, information, and belief. As such, it does not constitute a guarantee, nor a warranty, expressed or implied.

NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of certification shown hereon.

EXHIBIT B

CITY OF AURORA
ADDITIONAL 10 FOOT RIGHT OF WAY
FOR A PARCEL AT
REC. 2017000062415
LOCATED IN THE WEST HALF OF
THE SOUTHWEST QUARTER OF
THE SOUTH EAST QUARTER
OF SECTION 1,
TOWNSHIP 1 SOUTH,
RANGE 67 WEST
OF THE 6TH P.M.
COUNTY OF ADAMS
STATE OF COLORADO.

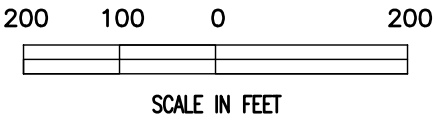
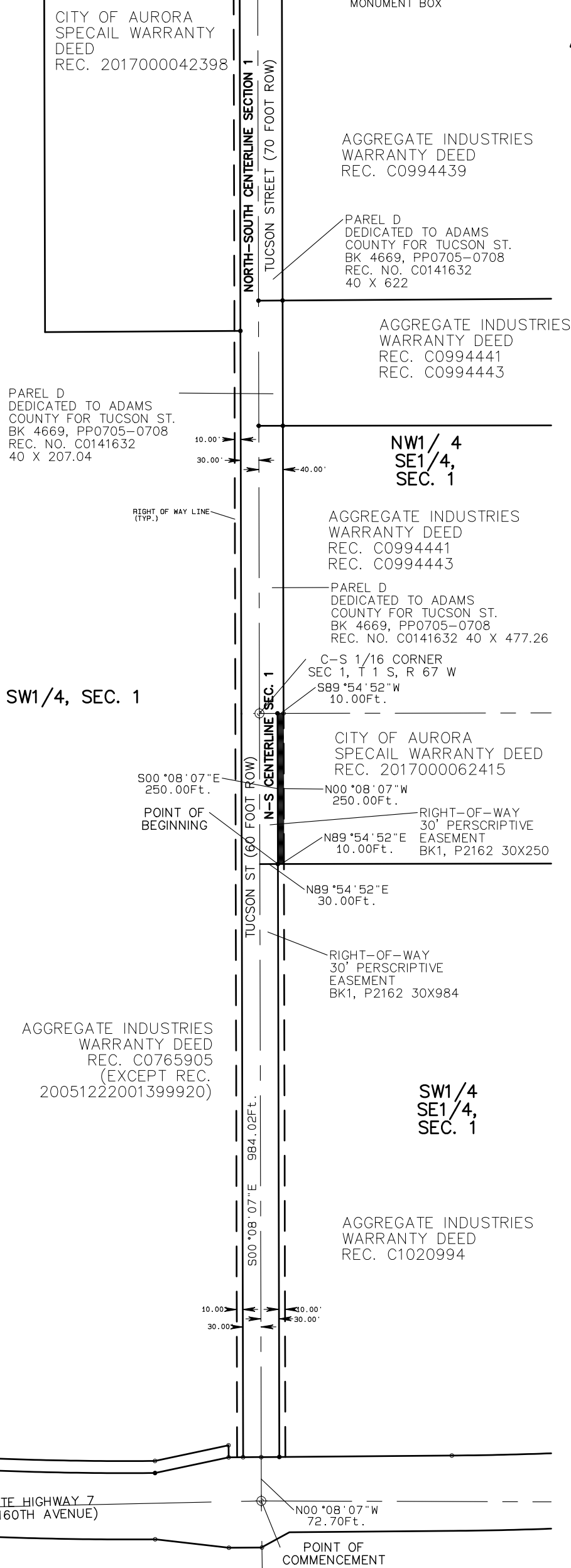


EXHIBIT A

CITY OF AURORA
ADDITIONAL RIGHT OF WAY FOR
A PARCEL AT REC. 2017000042398

A 10 foot wide parcel of land to be used as additional right of Way located on the East edge of the Southwest quarter of Section 1, Township 1 South, Range 67 West, of the 6th Principal Meridian, County of Adams, State of Colorado, and more particularly described as follows:

Commencing at the Southeast Corner of the Southwest Quarter of Section 1, Township 1 South, Range 67 West, of the 6th principal Meridian;

Thence North 00 08'07" west , a distance of 72.70 feet along the North-South Center of Section line of said Section 1, to a point of intersection with the North line of State Highway 7;

Thence North 00 08'07" West, a distance of 1869.04 feet along the North-South Center of Section line of said Section 1;

Thence South 89 51' 53" West, a distance of 30.00 feet, to a point of intersection with the west Right of Way line of Tucson Street and the south line of a parcel recorded at the Adams County Clerk and Recorder at Book 2017000042398, and the True Point of Beginning ;

Thence South 89 36'46" West, a distance of 10.00 feet;

Thence North 00 08'07" West, a distance of 672.00 feet, said line being 40.00 feet West of and parallel to the North-South Center of Section line for said Section 1 to a point of intersection with North line of the Southwest Quarter of said Section 1, Town Ship 1 South, Range 67 West;

Thence North 89 38'48" East, a distance of 10.00 feet, along the North line of the Southwest Quarter of said Section 1, Town Ship 1 South, Range 67 West, to a point of intersection with the West Right of Way of Tucson Street, from whence the Northeast Corner of the Southwest Quarter of said Section 1 bears North 89 38' 46" East a distance of 30.00 feet;

Thence South 00 08'07" East, a distance of 672.00 feet, Along the West Right of Way line of Tucson Street, said Right of Way line being 30.00 feet West of and parallel to the North-South Center of section line of said Section 1, to a point of intersection with west Right of Way line of Tucson Street and the south line of a parcel recorded at the Adams County Clerk and Recorder at Book 2017000042398, and the Point of Beginning.


Containing 6720.00 Sq. Ft. or 0.1543 Acres more or less.

Exhibit B attached and hereby made a part thereof.

SURVEYOR'S CERTIFICATE

I, Karl Philip Thullen, a duly registered Professional Land Surveyor in the State of Colorado do hereby certify that the above easement description was prepared by me or under my direct supervision and is in accordance with the applicable standards of practice and is accurate based upon my knowledge, information and belief.

For and on behalf of Aggregate industries/Lafargeholcim.


Karl Philip Thullen Colorado License No. 38006
Dated this 15th day of September, 2019.

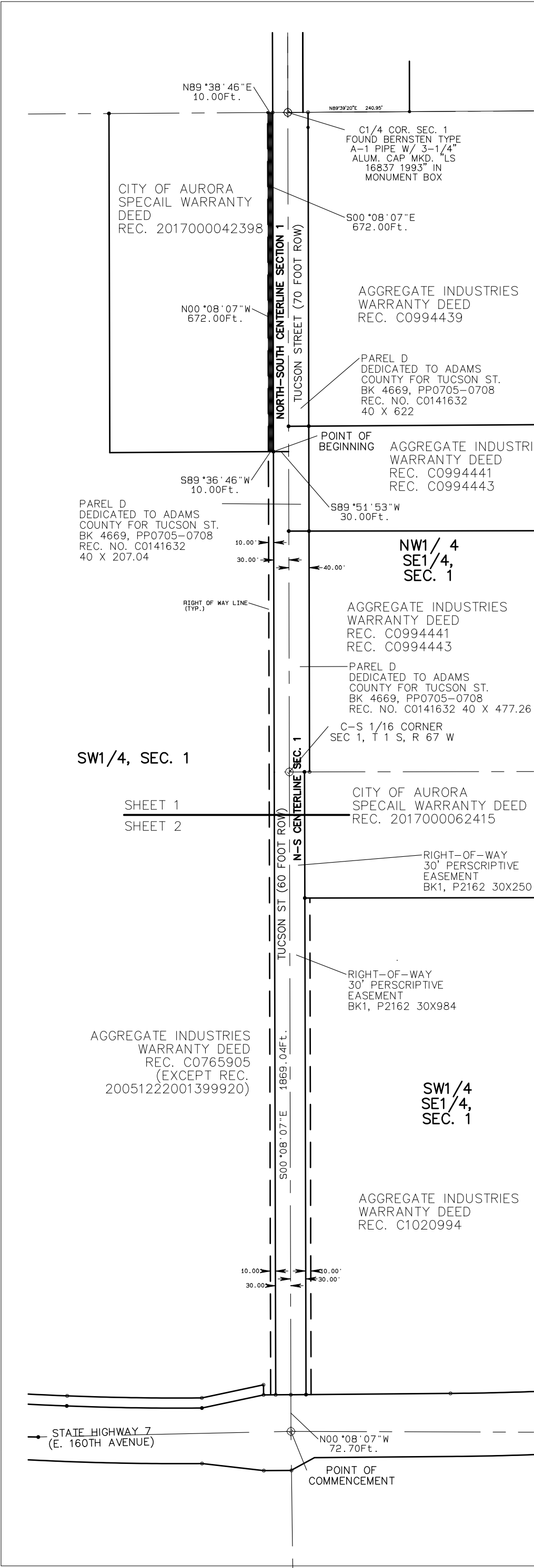
NOTE

The word "certify" or "certification" as used herein is understood to be an expression of professional opinion by the surveyor, based upon his best knowledge, information, and belief. As such, it does not constitute a guarantee, nor a warranty, expressed or implied.

NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of certification shown hereon.

EXHIBIT B

CITY OF AURORA
ADDITIONAL RIGHT OF WAY FOR
A PARCEL AT REC. 2017000042398
LOCATED IN THE EAST HALF OF
THE SOUTHWEST QUARTER OF
SECTION 1,
TOWNSHIP 1 SOUTH,
RANGE 67 WEST
OF THE 6TH P.M.
COUNTY OF ADAMS
STATE OF COLORADO.





TUCSON SOUTH PROJECT SCHEDULE

Project Name	Estimated Start Date	Estimated Finish Date	Estimated Duration	Estimated Number of People	Estimated Type of Equipment
Designate a Project Manager	Tue 12/15/20	Tue 12/15/20	1 day	1	
Land & Environmental Phase	Mon 1/4/21	Fri 5/7/21	90 days		
Permits	Mon 1/4/21	Fri 5/7/21	90 days		
Access permit	Mon 1/4/21	Sun 2/28/21	41 days	NA	
Conveyor construction permit	Mon 1/4/21	Fri 5/7/21	90 days	NA	
Pre-construction Nest Survey	Thu 2/18/21	Thu 2/18/21	1 day	2	1 pickup truck
Pre-Mine Phase					
Remove powerlines	Tue 12/15/20	Mon 5/31/21	6 mons	4	1 telescopic boom lift, 1 pickup truck
Locating	Mon 2/15/21	Fri 2/19/21	1 wk	2	1 pickup
Access construction	Mon 3/1/21	Fri 3/12/21	2 wks	4	1 dozer, 1 loader, 1 Compactor, 1 roller
Ready-line construction (Pit office areas, parking space, trailers)	Mon 3/1/21	Fri 4/9/21	30 days	4	1 forklift, 1 dozer, 1 water truck, 1 Pick up truck
Land scaping & Irrigation	Mon 3/15/21	Fri 4/23/21	30 days	6	1 backhoe, 1 flatbed, 1 trailer
Fencing, Signage & Gates	Mon 3/15/21	Fri 5/14/21	45 days	4	1 fence driver, 1 pickup truck
Slurry walls	Mon 3/15/21	Tue 8/31/21	122 days	10	3 D6 dozers, 2 Exc, 1 loader, De-sanding machine
Electricals	Thu 4/1/21	Wed 4/21/21	3 wks	3	1 forklift, 1 pick up truck
Conveyor construction	Thu 4/1/21	Wed 9/15/21	120 days	10	1 grader, 1 forklift, 1 man lift
Dewatering Pipe line construction	Thu 4/1/21	Wed 4/21/21	3 wks	4	1 truck with trailer, 1 skids steer, 1 fusion machine
Crossing construction	Mon 5/10/21	Fri 5/28/21	3 wks	12	1 Crane, 1 forklift, 1 skid steer, 1 compactor, 1 roller for Asphalt layer, 1 Exc, 1 Hydro Exc
Mine & Reclamation Phase					
Stripping					
Berm creation	Mon 3/15/21	Fri 4/23/21	30 days	4	2 trucks, 1 Exc & 1 Loader
Site Commissioning Phase					
Safety	Mon 8/16/21	Mon 8/16/21	1 day	1	1 Pickup truck
Environmental	Mon 8/16/21	Mon 8/16/21	1 day	1	1 Pickup truck

Tucson South Overland Conveyor



Tucson South Resource Landscape Plans

Aggregate Industries (Aggregate) is proposing the following landscape plans for the Tucson South Resource Mine, EXG2020-00001.

Mining Phase Landscaping

Living Screen

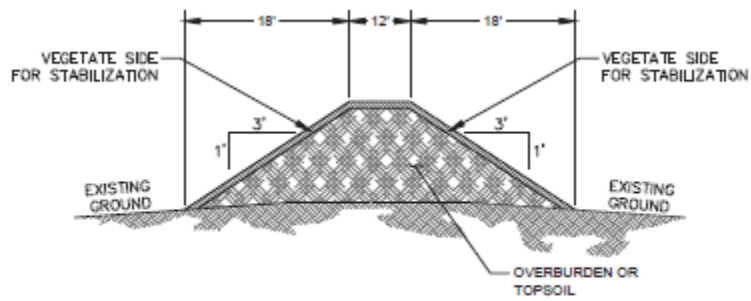
Due to Adams County floodplain regulations, Aggregate cannot create berms within the floodplain on the East Cell. As an alternative, Aggregate proposes to install a living screen. Ideas for the living screen have been presented to Aggregate by the City of Brighton Parks Department, who is the likely trail easement owner, in accordance with the City of Brighton's Open Space Standards and Specifications. Some potential species may include:

Common Name	Scientific Name
Rocky Mountain Juniper Species	<i>Juniperus scopulorum</i>
Pinyon Pine	<i>Pinus edulis</i>
Bosnian Pine	<i>Pinus heldreichii</i>
Western Hackberry	<i>Celtis occidentalis</i>

Please note that this list is subject to change based on additional feedback from the City of Brighton, Adams County and recommendations from the landscape architect. When selecting vegetation, Aggregate will work with the landscape architect to develop an appropriate design that meets the screening needs while considering utilities and slurry wall location and floodplain requirements. The living screen will be irrigated, as necessary.

Screening Berms

Aggregate will install screening berms during the mining phase on the West Cell. This will block views from Highway 7 into the site during mining. The dimensions of these berms will be 12 feet high with 3:1 slopes as depicted below:



TYPICAL BERMING SECTION

N.T.S.

Aggregate proposes to seed the berms immediately upon installation with the following seed mix:

Upland Meadow Grass Seed	Scientific Name	Variety	% of Mix	Application Rate* (#PLS/acre)
Big Bluestem	Andropogon gerardii	Kaw	15%	1.7
Blue Grama	Bouteloua gracilis	Hachita, Lovington	10%	0.3
Green Needlegrass	Nassella viridula	Lodom	15%	1.5
Sideoats Grama	Bouteloua curtipendula	Vaughn, Butte	10%	1.0
Switchgrass	Panicum virgatum	Blackwell	20%	2.0
Western Wheatgrass	Pascopyrum smithii	Arriba, Barton	30%	4.8
Total				11.3

Fencing

Aggregate proposes installing a floodplain-friendly, three-strand barbed wire farm style fence during the mining phase. This fence design was selected in order to meet security needs for Mine Safety and Health Administration (MSHA) requirements as well as Adams County floodplain regulations. Aggregate will install the living screen described above on the south (Highway 7) side of the fence.

Reclamation Phase Landscaping

Post-Mine Berms

Aggregate Industries proposes to leave small, vegetated berms on the West Cell during the post-mine phase. These berms will be positioned along Colorado State Highway 7, along the fence line. The dimensions of the berms are still to be determined, but will include a living screen on top of the berm to further shield views across the ponds. The following seed mix is an example of the mix that will be incorporated into the final landscaping plans:

Upland Meadow Grass Seed	Scientific Name	Variety	% of Mix	Application Rate* (#PLS/acre)
Big Bluestem	Andropogon gerardii	Kaw	15%	1.7
Blue Grama	Bouteloua gracilis	Hachita, Lovington	10%	0.3
Green Needlegrass	Nassella viridula	Lodom	15%	1.5
Sideoats Grama	Bouteloua curtipendula	Vaughn, Butte	10%	1.0
Switchgrass	Panicum virgatum	Blackwell	20%	2.0
Western Wheatgrass	Pascopyrum smithii	Arriba, Barton	30%	4.8
Total				11.3

A pollinator friendly seed mix can also be incorporate into the mix design. A sample pollinator seed mix may include:

Common Name
Annual Sunflower
Maximillian Sunflower
Purple Prairie Clover
Black-eyed Susan
Plains Coreopsis
Upright Prairie Coneflower
Blue Flax
Western Yarrow
Common Milkweed
Blanketflower
Fourwing Saltbrush
Fringed Sage
Rubber Rabbitbrush

Various natural and low water consumption-decorative plants will be selected for the berm in addition to the seed mix. Aggregate is working with a landscape architect to develop an appropriate plant list that will provide screening. Ideas for these species have also been presented to Aggregate by the City of Brighton Parks Department, the likely trail easement owner in

accordance with the City of Brighton's Open Space Standards and Specifications. Some potential species may include:

Common Name	Scientific Name
Autumn Amber Three Leaf Sumac	<i>Rhus trilobata</i>
Native Ninebark	<i>Physocarpus monogynus</i>
Blue Mist Spirea	<i>Caryopteris x clandonensis</i>
Silver Sagebrush	<i>Artemisia cana</i>
Western Sand Cherry	<i>Prunus besseyi</i> 'Pawnee Buttes'

Please note that this list is subject to change based on feedback from the City of Brighton, Adams County and recommendations from the landscape architect.



1687 Cole Boulevard
Suite 300
Golden, CO 80401

Phone: 303-985-1070
Fax: 303-716-5295
www.aggregate-us.com

September 23, 2020

Colorado Geological Survey
Attn: Jill Carlson
1801 Moly Road
Golden, CO 80401

**RE: Aggregate Industries-WCR, Inc. Response to Colorado Geological Survey Review
Comment on Tucson South EXG2020-00001 Referral**

Dear Ms. Carlson,

This memorandum is in response to a September 3, 2020 comment regarding the stability evaluation performed in support of Aggregate Industries-WCR Inc. (AI) Tucson South EXG2020-00001 referral. In this comment, you state the following:

“.... Tetra Tech’s slope stability analyses and setback recommendations are valid, but only active mining (dewatered) conditions appear to have been modelled. I am concerned about stability of slopes, and improvements along the slope setback, under saturated conditions. Once the reservoirs fill, water levels will be higher than water levels used in Tetra Tech’s models, and factors of safety will probably be lower. CGS recommends that the County require additional stability analysis to verify that the proposed reservoir slopes will be stable under saturated conditions. Since water levels in water storage reservoirs fluctuate, stability should be modelled using saturated slopes but lowered water level conditions....”

According to the Colorado Division of Reclamation Mining and Safety (DRMS) March 19, 2018 memorandum regarding the Proposed Slope Stability/Geotechnical Analysis Policy for the Mined Land Reclamation Board, the DRMS established factors of safety for specific scenarios using:

“standard of care for factors of safety accepted by the industry, including literature searches, regulatory agency requirements/guidelines, and departments of transportation standards. In order to be consistent with other Colorado State agencies, we also considered FS standards used by the Colorado Department of Transportation (CDOT) and the Colorado Geological Survey (CGS)...”

The DRMS stability policy only requires the typical cross sections be modelled under active mining and reclamation static and seismic conditions. Your comment refers to conditions that would be encountered during reservoir operations, specifically the Rapid Drawdown Scenario. Under this scenario, the reservoir is modelled with a specific normal high water line and with a subsequent volumetric drawdown. This allows for excess pore pressures to develop in the reservoir slope, which under certain conditions, will decrease the overall slope stability of the reservoir slopes. This decrease is only applicable during drawdown conditions. During static reservoir conditions, the stability of the slopes will be significantly higher than modelled due to the action of the weight of the water on the slopes and no excess pore pressures present in the slopes.

This scenario is only applicable to the end user and their reservoir operating procedures. Typically, the end user will evaluate the reservoir slopes based on specific engineering characteristics of the material with respect to reservoir drawdown rates (differing slope pore water pressure conditions). This is a modelling technique that

will establish the maximum drawdown rate (usually in feet/day) that the slope conditions will allow. This drawdown rate would be incorporated into the standard operational procedures for the reservoir.

Therefore, this additional stability modelling suggestion is not required for mine and reclamation slope design or construction as it pertains to this site.



Jeremy Deuto, P.E., P.G.
Regional Land and Environment Manager
Aggregate Industries-WCR Inc.