
Camilletti Milner #2 Gravel Pit

Special Use Permit

ACTIVITY #: PL-19-194

HEARING DATES: Planning Commission: 1/16/20 at 6:00 pm
Board of County Commissioners: 1/28/20 at 1:30 pm

PETITIONER: Precision Excavating, Inc.

PETITION: Renewal of Special Use Permit PP2010-001 and modification of condition of approval #17

LEGAL: SE ¼ SE ¼ Section 9, SW ¼ SW ¼, E ½ W ½, W ½ NE ¼, SE ¼ (LESS TR) Section 10, ALL (LESS TOWN OF MILNER & US 40 ROW, LESS 8.38A TO ROUTT COUNTY) Section 15, ALL IN 6-86

LOCATION: Approximately 2,700' southeast of the Town of Milner

HAUL ROUTE: CR 179

STAFF CONTACT: Alan Goldich; agoldich@co.routt.co.us

ATTACHMENTS:

1. Vicinity map
2. Narrative
3. Current Permit
4. Vegetation Monitoring Report
5. Groundwater monitoring summary
6. Mine, site, and reclamation plans

History:

1. PP2000-003: The first SUP for this pit was issued to Precision Excavating and Camilletti and Sons, Inc. (landowner) in 2001. The expiration date for this permit was June 5, 2011. This permit was for the pit that is on the northeast side of Trout Creek and south of the Yampa River.
2. PP2009-006: A new SUP was issued for the expansion of the pit to the other side of Trout Creek. The expiration date of this permit was December 22, 2019.

Multiple conditions of approval are present in the current permit that address the vegetation around the pit that serve as visual screens. There was concern that the dewatering operations (pumping of accumulated water out of the pit as the floor of the pit goes below the water table) of the pit would lower the water table that these plants were accustomed to, and require, for survival. In response to this, a cutoff wall was constructed on the north and southeast portions of the pit to help maintain the groundwater level outside of the pit. The

following is a brief description of the individual conditions that relate to the surrounding vegetation. Please see the current permit (attached) for the full language.

10. No pit expansion within 600' of the cottonwoods and willows on the east side of the pit unless documented evidence that the cutoff walls are preserving vegetative health and vigor.
 14. Berm and landscaping on east side of pit. Plantings shall be willows at least 6' tall.
 17. Cottonwood and willow health monitoring plan.
 18. Vegetative screening on the north side of the pit.
 19. Detailed irrigation plan for cottonwood, willow, and wetlands outside of the pit boundary.
 20. 50' buffer from all wetlands outside of the pit boundary.
3. PP2010-001: An amendment to the mine plan was approved in 2010. The conditions of approval and expiration date of this permit remained the same as PP2009-006, based on the Zoning Regulations which restrict permit periods for gravel pits to ten (10) years.
 4. Historical sales volume consists of the following:

Year	Sales Volume
2009	130,813 tons
2010	92,768 tons
2011	89,639 tons
2012	78,229 tons
2013	120,276 tons
2014	86,278 tons

Year	Sales Volume
2015	99,704 tons
2016	64,084 tons
2017	61,217 tons
2018	37,826 tons
2019	42,793 tons

Site Description:

The site is located approximately half a mile south of the Town of Milner, CO. It is south of the Yampa River on County Road 179. The original pit area is east of Trout Creek and the expansion area is west of Trout Creek. There is a powerline that runs approximately east/west through the original pit. Except for a small area on the northern boundary of the pit, the area north of the powerline has not been mined. The active mining area is located in the expansion area on the west side of Trout Creek. The scale, scale house, staging area, sanitary facilities, processing area, stockpiles and sediment ponds are located in the original pit on the east/northeast side of Trout Creek. The Yampa River ranges between 200' and 300' from the pit boundary. The pit is surrounded by wetlands due to its close proximity to the confluence of the Yampa River and Trout Creek. There are mature cottonwood trees on the north side of the two pit areas that provide a visual screen as viewed from the Town of Milner and on the portions of CR 179 north of the pit. On the east side of the pit, there are willows and other wetland vegetation that provides a visual screen to the more southern sections of CR 179. There is a berm on the east side of the pit that provides additional screening to CR 179. In 2010 a blowdown of cottonwoods that provided a visual screen to the southeast portion of the pit occurred. Surrounding land uses include grazing/pasture land. The Saddle Mountain Ranchettes subdivision is located approximately .75 miles to the southeast of pit on a hillside that overlooks the pit.

Pit Area Calculations			
	Total Area	Original Pit	Expansion Area
Permit boundary	118.35 acres	42.35 acres	76 acres
Total disturbance restriction	60 acres	35 acres	25 acres
Total disturbance	43.46 acres	23.95 acres	19.51 acres
Reclaimed area	12.24 acres	9.62 acres	2.62 acres

Project Description:

This application is to renew the existing permit for a period of 10 additional years. The applicant is requesting that specific condition of approval #17 from PP2009-006 be modified or removed. Specific condition #17 requires a vegetation monitoring plan for the areas to the north and west of the original pit and provide visual screens. Although the application materials do not specify what kind of modification is being requested, conversations with the applicant indicates that they are looking for relief from the biweekly monitoring and monthly reporting. Specific condition #17 reads:

Minimum setbacks to all cottonwood and willow stands outside the mine area shall be 100 feet. Permittee shall undertake biweekly groundwater monitoring program as approved by the Planning Administrator. Monitoring well locations (up to 16) shall be substantially as shown in the irrigation plan from Water Resources Consultants dated May 30, 2001. Groundwater levels shall be submitted monthly (or as required by Planning Administrator) to the Routt County Planning Department for the life of the mine. Permittee shall also institute a cottonwood health-monitoring program, as approved by the Planning Administrator. Minimum setbacks may be increased or decreased by the Planning Administrator based on the results of the monitoring programs. In no case shall the setbacks be reduced to less than 100 feet. Permittee shall endeavor to maintain groundwater levels at the seasonal baseline levels established through the approved monitoring program. If the monitoring wells show a groundwater level decrease under the cottonwoods of 12"- 18", corrective action by the permittee shall be required. If the monitoring wells show a decrease of 18" or more the permittee shall cease dewatering as soon as is practical or within 7 days whichever is sooner.

This condition only applies to the original pit on the east side of Trout Creek. The purpose of this condition was to ensure that the health of the cottonwoods on the north side of the original pit and other surrounding vegetation was maintained. Nothing to the north of the existing overhead electric line has been mined except for a small portion on the north boundary. This is one of the areas that the groundwater cutoff wall has been constructed in. See the attached map. The permittee does not plan on mining this area in the near future.

The monitoring wells referenced in condition #17 were installed and have been monitored. Results from this monitoring has been submitted to the Planning Department, however from 2012 to 2014, monitoring did not take place at the frequency required by the SUP. Monitoring since 2015 has been conducted at the frequency specified in the SUP. The information submitted has readings for the individual wells as well as averages for all of the wells. These averages do not show a drop of 18" has occurred. There is an irrigation system that pumps water from the settling ponds on the west side of the original pit to the cottonwood areas to the north of the pit to help maintain the groundwater level.

Western Bionomics has been conducting health assessments of the surrounding vegetation since the pit has been in existence. They submitted a report with this application stating that the health of the surrounding vegetation has remained relatively constant, indicating that vegetative health has been maintained. Western Bionomics has stated that they support relaxation of this condition.

Staff Comments:

- In 2001 when this pit was originally permitted, the floodplain in the pit area was not mapped by FEMA. Revised floodplain maps were issued in 2005. This resulted in the original pit being located in the mapped floodplain. The pit expansion is also contained within the mapped area. During the review for the expansion of the pit, floodplains were not taken into consideration. A Floodplain Development permit will have to be obtained for the expansion area only since the original pit was permitted prior to this area being mapped. A condition of

approval requiring this is suggested. It is suggested that the Floodplain Development permit be in place by July 1, 2020.

- No complaints have been filed with the Planning Department since the expansion of the pit in 2009.
- The current Weed Management Plan (submitted in 2001) does not contain the same level of detail that is currently required for gravel pits. The Weed Department suggested additional conditions be included requiring a new plan be developed and additional monitoring and reporting requirements.
- Due to the time of year this application was submitted, staff was not able to confirm compliance with several conditions of approval. Those include:
 - Independent confirmation of the findings on the health of the vegetation surrounding the pit.
 - Amount of disturbed area
 - Confirmation of a water truck for dust suppression on site
 - Spray bars on all processing equipment
 - Presence of irrigation system in working order
 - Weed control
 - Maximum amount of disturbed highwall
 - Maintenance of 50' undisturbed buffer from Trout Creek and surrounding wetlands
 - Stockpiles and equipment located below top of highwall
- All of the conditions of approval for reporting to the County have been complied with since the most recent permit was issued, although not in a timely manner. No other compliance issues were identified on the site visit conducted in conjunction with this application.
- The latest DRMS inspection of the pit took place in August of 2016. There were no issues identified during the inspection and the operation was not out of compliance in any way. According to the inspection report, the bond amount that the State holds for reclamation of the pit is up to date.
- Since the most recent approval, none of the applicable Master Plan or Zoning Regulations have changed. Since this operation has already been determined to be in compliance with the applicable policies and regulations, a full review of this application was not completed. A review of the regulations that relate to the modification of specific condition #17 only was completed.

*****Issues for Discussion*****

1. Should the requirement to track and report the groundwater level in the monitoring wells continue as currently approved?

Compliance with the Routt County Master Plan and Zoning Resolution

Applicable Regulations – Routt County Zoning Resolution

- 6.1.7.D Wildlife and Wildlife Habitat.
- 6.1.7.I Noise
- 6.1.7.G Visual Amenities and Scenic Qualities.

- 6.1.5 The proposal shall meet or exceed accepted industry standards and Best Management Practices (BMP's).

Mitigation Techniques to Reduce Impacts to Scenic Quality:

- 6.9.E Provide effective screening of equipment and stockpile areas:
- 3) Maintain landscaping, weed control and vegetation viability for the life of the project.
 - 4) Proposed landscaping, screening, fencing and other visual impact mitigation shall be approved by the Planning Director, Planning Commission or Board of County Commissioners prior to operation.
 - 7) Significant vegetation shall be preserved whenever possible.
- 9.2.A Shall be compatible with surrounding agricultural, residential, and recreational land uses by selection of location and/or mitigation.
- 9.2.C Equipment used for the operation will not be visible from adjacent or surrounding residences, or will be mitigated to the extent possible to reduce visual impacts. The Planning Commission and the Board of Commissioners will determine sufficiency of mitigation.
- 9.2.K Routt County requires the use of the most recent technologically advanced and proven procedures and equipment to mitigate the significant negative impacts of mining operations and associated uses.

Applicable Policies – Routt County Master Plan

- 5.3.B While respecting private property rights, the County will not approve development applications or special use permits that would lead to the degradation of the environment without proper mitigation that would bring the proposal into compliance with the Master Plan, appropriate sub-area plans, Zoning Resolution, and Subdivision Regulations.
- 5.3.F Routt County will continue to consider the impacts of development and uses on view corridors, water, wetland, and air.
- 7.3.K Routt County desires to ensure that new long-term mineral extraction operations shall be mitigated for visual impacts along entryways to growth centers, and to ensure that visual impacts of existing operations are mitigated to the maximum extent feasible.
- 7.3.P Routt County requires the use of the most technologically advanced procedures and equipment to mitigate the significant negative impacts of mining operations and associated uses.
- 7.3.Z Long term mining operations and associated uses should be located in areas where they do not greatly impact scenic vistas, where there are compatible agricultural and industrial uses, and where they are not in proximity to residential neighborhoods, recreational, or other incompatible uses.

Staff comments: The cottonwoods provide habitat for multiple species of wildlife and provide significant visual and noise mitigation of the pit, so maintaining the health of this vegetation is important. Maintaining this screen is vital to keeping the pit compatible with the surrounding uses. Equipment is visible from surrounding residences due to the fact that those residences are on a hill that overlook the pit, however these residences are to the south of the pit and are not affected by the cottonwoods the monitoring program is meant to protect. Since the area immediately adjacent to the cottonwoods has not been

mined, the concern for these trees still exists. Conditions of approval suggested by staff relieve the permittee from bi-weekly documentation of the groundwater levels in the monitoring wells and submission of this information until mining of this area is proposed. Notification to the County of intent to mine this area is part of the proposed condition.

***Is the application in compliance with the Policies and Regulations outlined above? Yes or No*

Planning Commission and Board of County Commissioners Options

1. **Approve the Special Use Permit request with conditions and/or performance standards** if it is determined that certain conditions and/or performance standards are necessary to ensure public, health, safety, and welfare and/or make the use compatible with immediately adjacent and neighborhood properties and uses and/or bring the proposal into compliance with the Routt County Zoning Regulations and Routt County Master Plan and sub area plans.
2. **Approve the Special Use Permit request without conditions** if it is determined that the petition will not adversely affect the public health, safety, and welfare and the proposed use is compatible with the immediately adjacent and nearby neighborhood properties and uses and the proposal is in compliance with the Routt County Zoning Regulations and complies with the guidelines of the Routt County Master Plan and sub area plans.
3. **Deny the Special Use Permit request** if it is determined that the petition will adversely affect the public health, safety, and welfare and/or the proposed use is not compatible with the immediately adjacent and nearby neighborhood properties and uses and/or the proposed use is not in compliance with the Routt County Zoning Regulations and/or the Routt County Master Plan and sub area plans. Make specific findings of fact; cite specific regulations or policies by number from the Routt County Master Plan and the Routt County Zoning Regulations.
4. **Table the Special Use Permit request** if additional information is required to fully evaluate the petition. Give specific direction to the petitioner and staff.

Findings of Fact

Findings of Fact that may be appropriate if the Special Use Permit is **approved**:

1. The proposal with the following conditions meets the applicable guidelines of the Routt County Master Plan and is in compliance with Sections 4, 5, 6 and 9 of the Routt County Zoning Regulations.
2. The Special Use Permit with the following conditions will not adversely affect the public health, safety, and welfare.
3. The proposal with the following conditions is compatible with the immediately adjacent and neighboring properties.
4. Due to the time of year this application was processed, staff was unable to conduct a thorough inspection of the site and operation.

Conditions

Conditions that may be appropriate include the following (Language with a strike through it is proposed to be removed. Language that is bold is proposed to be added.):

General Conditions:

1. ~~The Special Use Permit (SUP) is valid for ten years from the date of issuance of the amended SUP, provided it is acted upon within one year of approval. The SUP shall be deemed to have automatically lapsed if the uses permitted herein are discontinued for a period of one (1) year.~~
2. The SUP is contingent upon compliance with the applicable provisions of the Routt County Zoning Regulations including but not limited to Sections 4, 5, 6, and 9.
3. The SUP is limited to uses and facilities presented in the approved project plans. Any additional uses or facilities must be applied for in a new or amended application.
4. Any complaints or concerns which may arise from this operation may be cause for review of the SUP, at any time, and amendment or addition of conditions, or revocation of the permit if necessary.
5. In the event that Routt County commences an action to enforce or interpret this SUP, the substantially prevailing party shall be entitled to recover its costs in such action including, without limitation, attorney fees.
6. No junk, trash, or inoperative vehicles shall be stored on the property.
7. Fuel, flammable materials, or hazardous materials shall be kept in a safe area ~~as approved by the Chief Building Inspector and Department of Environmental Health~~ **and shall be stored in accordance with state and local environmental requirements.** Any spills of fuels or hazardous materials shall be reported to the Routt County Planning Department within three days of occurrence.
8. All exterior lighting shall be downcast and opaquely shielded.
9. Prior to the issuance of the permit, the permittee shall provide evidence of liability insurance in the amount of no less than \$1,000,000 per occurrence. ~~with either unlimited aggregate or a policy endorsement requiring notice to Routt County of all claims made.~~ **Permittee shall notify Routt County Planning Department of any claims make against the policy. Certificate of liability insurance shall include all permit numbers associated with the activity.**
10. **Accessory structures/uses associated with this permit may be administratively approved by the Planning Director without notice.**
11. **Transfer of this SUP may occur only after a statement has been filed with the Planning Director by the transferee guaranteeing that they will comply with the terms and conditions of the permit. if transferee is not the landowner of the permitted area, Transferee shall submit written consent to the transfer by the landowner. Failure to receive approval for the transfer shall constitute sufficient cause for revocation of the permit if the subject property is transferred. Bonds, insurance certificates or other security required in the permit shall also be filed with the Planning Director by the transferee to assure the work will be completed as specified. Any proposal to change the terms and conditions of a permit shall require a new permit.**

- ~~12. The operator shall prevent the spread of weeds to surrounding lands and shall eradicate any noxious weeds occurring on the site in accordance with an approved Weed Control Management Plan approved by the Routt County Extension Office. Confirmation of the approved plan is required prior to issuance of the permit. Revegetation of disturbed areas shall occur within one growing season with a seed mix which avoids the use of aggressive grasses.~~
- 13. The permittee shall prevent the spread of weeds to surrounding lands and shall comply with the Colorado Noxious Weed Act as amended in 2013 and the Routt County approved noxious weed management plan. A weed mitigation plan shall be developed by the Permittee and reviewed and approved by the Weed Supervisor prior to issuance of the Special Use Permit.**
- ~~14. Routt County has the authority to close any county road at its discretion if such road surface is in poor condition and would be further damaged by additional use.~~
- ~~15. The operation will be reviewed every 2 years by planning staff; if there are violations then it will be forwarded with a staff report to Planning Commission, and/or Board of County Commissioners.~~
- ~~16. This permit is contingent upon permits being obtained for air and water emissions, reclamation, and other appropriate permits from all involved agencies. Including, but not limited to CDMG Mined Land Reclamation permit, Colorado Department of Health Air Pollution Emission Notices, CDOT access permit, Army Corps of Engineers wetland permit and NPDES permit. All applicable permits shall be submitted to the Planning Department prior to issuance of the SUP and shall be consistent with Routt County SUP approval.~~
- 17. This permit is contingent upon any required permits being obtained and complied with from all involved agencies including, but not limited to the following:**
- a) Division of Reclamation, Mining and Safety (DRMS) 112 Construction Materials Permit**
 - b) Colorado Department of Public Health and Environment (CDPHE) Air Pollution Control Division (APCD) Air Quality Permit**
 - c) CDPHE Stormwater Management Plan**
 - d) Army Corps of Engineers (ACOE) wetland permits**
 - e) Routt County Public Works Grading & Excavating permit**
 - f) Colorado Department of Transportation (CDOT) access permit**
- The operation shall comply with all Federal, State, and local laws. Copies of permits or letters of approval shall be submitted to the Routt County Planning Department prior to operations.**
- ~~18. All applicable standards set forth by the Colorado Department of Health and the Routt County Department of Environmental Health shall be complied with. The operation shall comply with all Federal, State and local laws.~~
- 19. Copies of all financial guarantees related to the project shall be submitted to the Planning Director prior to issuance of the Special Use Permit.**

Specific Conditions:

20. The Special Use Permit (SUP) is valid for ten years from the **BCC approval date** ~~date of issuance of the amended SUP~~, provided it is acted upon within one year of approval. The SUP shall be deemed to have automatically lapsed if the uses permitted herein are discontinued for a period of one (1) year.

21. Approved uses include:

- a) **Extraction of gravel deposits**
- b) **Crushing and processing of gravel deposits**
- c) **Stockpiling of topsoil, overburden, and extracted and processed gravel**
- d) Scale, scale house (approximately 500 sq ft), office building (approximately 1,000 sq ft), a maintenance shed (40'x60'), fuel tanks, crusher, conveyance system and related equipment, and toilet
- e) **Recycling of soil and concrete rubble**
- f) **Reclamation**

20. The operation consists of:

- a. Sales from the gravel pit shall not exceed 850,000 tons in any twelve consecutive months.
- b. Hours of operation for loading and hauling shall be from 7:30 am a.m. to 7:00 p.m. Monday through Saturday. Hours of operation for operation of the crusher shall be 7:00 a.m. to 7:00 p.m. **Operation, as used in this condition, shall include the firing up and operation of the crusher, loading, hauling, extraction, sorting and crushing of gravel and other materials, reclamation activities, and shipping and receiving of non-aggregate materials.**
- c. There shall be no operation on Sundays and national holidays, which are Christmas Day, Thanksgiving Day, New Year's Day, Fourth of July, Presidents Day, Memorial Day, and Labor Day.
- d. **Warming of equipment is allowed 15 minutes prior to startup.**
- e. **A waiver of hours and/or days of operation for public projects or for projects with special technical requirements may be approved by the Planning Director without notice.**

22. ~~Prior to recordation of this Permit the Permittee shall execute an agreement acceptable to the Routt County Attorney outlining the details of the permittee's contribution of a~~ **Permittee shall continue to contribute** \$0.03 per ton fee for each ton hauled out of the Milner Pit #2 for the costs of maintenance, dust control or improvements to the County Road 179, the bridge over the Yampa River, and County Road 178.

23. A maximum of 60 acres, 35 acres in the Existing Pit and 25 acres in the Expansion Area, shall be disturbed at any time. Disturbed acreage is defined as all areas not covered by water, pavement or substantially noxious weed free vegetation, but does not include areas of temporary disturbance related to construction of cutoff walls in advance of mining. Reclamation according to approved plans including grading, topsoiling and seeding shall occur concurrently with mineral extraction in each area.

24. Any proposed amendments to the ~~Mine Land Reclamation Division~~ **DRMS** permit must be approved by Planning Administrator and may be cause for a review of the SUP.

25. Soil and vegetation shall not be stripped in excess of an area required for one year of mining except as required to construct cutoff walls in advance of mining.
26. Topsoil and overburden stockpiles shall have a minimum of 3:1 slopes, and shall be revegetated if left undisturbed for more than six months.

Reporting:

27. Operator shall submit ~~Division of Minerals and Geology~~ **DRMS** Annual Report for the pit to the Planning Department **by August 15th** of ~~within two weeks of due date~~ each year for compliance verification.
- 28. The operator shall submit an annual report to the Planning Department and the Assessor's office that details total materials hauled, remaining reserves, and total number of truck trips by February 15th of the following year.**
- 29. Permittee shall conduct an annual inventory of weeds on site each spring including but not limited to species identification and map locations. Inventory shall be submitted to Routt County Weed Program (RCWP) supervisor within 30 days of conducting the survey.**
- 30. Permittee shall submit an annual report prior to December 31 of each year to document all weed control measures undertaken, including herbicides used, rates of application, and total gallons of mixed herbicide solution applied.**
- 31. Permittee shall notify the Routt County Environmental Health Department of any written or verbal notice of violation or citation issued to the Permittee by DRMS, CDPHE, or any other permitting agency. Copies of inspection reports, annual reports, asphalt plant and crusher relocation notices, and any other documentation required to be submitted to DRMS, CDPHE, or any other permitting agency for any permits obtained through those agencies shall be submitted to the Routt County Environmental Health Department.**

Access and Traffic:

32. Permittee shall coordinate with the school districts to eliminate truck hauling from the pit south on County Road 179 during school bus hours.
33. The operator shall immediately remove all products, fill material or sediments spilled, dropped, washed, or tracked onto County Roads 178 and 179.
- 34. Overweight and over length permits for vehicles shall be obtained from the Routt County Road and Bridge Director prior to the use of such vehicles.**
- 35. All trucks and equipment accessing from the private access drive shall be able to exit and be located on private property and off of State Highway road right of way before encountering a fence, gate, or cattleguard. At a minimum, the distance from the County road right of way to any gate, fence, or cattleguard shall be 1.5 times the length of the longest vehicle.**

The following conditions only apply to the Original Pit:

36. Expansion of the pit into an area affecting the cottonwoods and willows on the east side of the property shall not take place within 600 feet of the cottonwoods and willows

on the east side of the property until there is documented evidence that the cutoff walls or other measures are effective in preserving the health and vigor of the cottonwood stands.

37. ~~Landscaping to provide visual screening from County Road 179 shall be completed prior to any sales from the mine. Willow planting areas shown on the landscape plan shall be a minimum of 6 feet in height.~~ **Permittee shall ensure landscaping used to provide a visual screen to CR 179 is alive and healthy.** Permittee will be required to replace any vegetation that dies. ~~Slopes on the berm that screens office and scales shall not exceed 5:1 facing County Road 179.~~
38. Minimum setback of the disturbed area from County Road 179 shall be 100 feet from the edge of the widened pavement but in no case shall be less than that shown on the approved mine plan.
39. Minimum setbacks to all cottonwood and willow stands outside the mine area shall be 100 feet. ~~Permittee shall undertake biweekly groundwater monitoring program as approved by the Planning Administrator. Monitoring well locations (up to 16) shall be substantially as shown in the irrigation plan from Water Resources Consultants dated May 30, 2001. Groundwater levels shall be submitted monthly (or as required by Planning Administrator) to the Routt County Planning Department for the life of the mine.~~ Permittee shall also institute a **continue the** cottonwood health-monitoring program, as approved by the Planning Administrator. Minimum setbacks may be increased or decreased by the Planning Administrator based on the results of the monitoring programs. In no case shall the setbacks be reduced to less than 100 feet. Permittee shall endeavor to maintain groundwater levels at the seasonal baseline levels established through the approved monitoring program. If the monitoring wells show a groundwater level decrease under the cottonwoods of 12"- 18", corrective action by the permittee shall be required. If the monitoring wells show a decrease of 18" or more the permittee shall cease dewatering as soon as is practical or within 7 days whichever is sooner.
40. **Permittee shall inform the Planning Department of its intent to mine the northern area of the original pit on the east side of Trout Creek. Once this activity begins, permittee shall undertake a biweekly groundwater monitoring program as previously instituted. Groundwater levels shall be submitted annually to the Routt County Planning Department.**
41. The applicant shall implement a revised landscape plan for all of those portions of the riparian area to the north of mine block 2 covering the area between the Yampa River and the north portion of the mine pit area where cottonwood seedlings will be transported into those areas currently devoid of cottonwoods or willows. The density of these plantings shall be based upon monitoring data collected in connection with #16 above and shall be determined based upon the naturally occurring spacing between mature cottonwood trees found in this area. Survival of these transplanted seedlings will be reported to the Planning Administrator in the Annual Report.
42. **Permittee shall continue to implement the irrigation plan for the cottonwood and wetland areas outside of the mine area.** ~~Concurrent with the cottonwood tree monitoring plan described above, the applicant shall submit a detailed irrigation plan~~

~~for both cottonwood and wetlands areas outside the mine area to be approved by the Planning Administrator, documenting the methods, quantities and frequency of irrigation. Sub-surface irrigation may be required if surface irrigation proves ineffective in maintaining cottonwood health & vigor. In addition, the applicant's Stormwater Management Plan shall be modified with the Colorado Department of Health; showing that this cottonwood treed area has been modified to be an approved discharge point for this mine.~~

43. Permittee shall maintain a 50' undisturbed buffer from all jurisdictional wetlands outside the mine boundary. Permittee is required to maintain existing wetlands vegetation through irrigation or other means. The Planning Administrator may increase the setback if required to maintain wetlands in premining condition.
44. A minimum 50' undisturbed buffer shall be maintained from the wetlands surrounding Trout Creek. No mining activity or equipment shall be allowed in the buffer area. Light vehicle use within this buffer along the existing ranch road to access the property to the west of this site or to maintain and service the electric pumps located in the sediment pond in the southwestern portion of the mine area shall not be considered to meet the definition of mining activity or equipment.
45. No berms or stockpiles associated with the perimeter drainage ditch located outside the active mine area shall be permitted.
46. A maximum of 1000 lineal feet of disturbed high wall is allowed at any time, except as necessary to construct cutoff walls in advance of mining. All other high wall areas shall have either permanent or temporary revegetation actively in progress. This requires the placement of suitable soils and seeding. Irrigation will be required as necessary to establish vegetation.
47. All stockpiles and equipment, except for the truck scale, office trailers, toilet, maintenance shed and scale house shall be located below the top of the pit highwall dependent on the area available on the pit floor where the equipment is visually screened.
48. ~~Applicant shall submit a revised mine plan for approval by Planning Administrator showing the relocation of the dewatering outfall, and changes to the mine area depicting increased setbacks as required prior to the issuance of the Special Use Permit.~~

Reclamation:

49. **The permittee shall be responsible for reclamation as set forth by DRMS gravel mining guidelines and approved reclamation plan. All buffer zones required by the DRMS permit shall be included as a part of this permit, if they are more stringent than those set forth herein.**
50. ~~Permittee shall work with and obtain approval from Planning Administrator of a revised reclamation plan prior to the issuance of the SUP. Lakeshore reclamation shall consist of undulating shorelines, and seeding/revegetation shall include water-tolerant plants, cottonwoods, willows, and other appropriate vegetation. Shoreline revegetation should be developed for waterfowl and wetland areas with native plants; revegetation plans should follow guidelines of the Colorado Division of Wildlife. Slope configurations along~~

~~with water depths in the proposed ponds shall be variable and generally slopes should not exceed 6:1 from existing grade to the shoreline area. Slopes in the shoreline area shall average 10:1. Creation of straight shorelines shall not be acceptable as reclamation. (This condition applies to the Existing Pit only.)~~

~~51. The reclamation plan for the Expansion Area, dated May 14, 2009, shall be the revised plan entitled, DOW Comments, Reclamation Plan Map, C-2, Sheet 2 of 3.~~

Air and Water Quality

52. A Floodplain Development permit shall be obtained by July 1, 2020. This deadline may be extended administratively without notice if due diligence on obtaining the permit has been demonstrated that is acceptable to the Planning Director.

53. The Special Use Permit is contingent upon the petitioner complying with the applicable requirements of Regulation 1, Section III.D.1.b of the Colorado Air Quality Control Commission, as a minimum standard. The operation shall maintain a State-approved fugitive dust control plan for the sand and gravel operation. In addition, no off-site transport of visible dust emissions shall be allowed. The Planning Administrator may require temporary closure of the facility if dust control measures are not effective. All haul roads and disturbed sites shall be watered and/or chemically stabilized to minimize dust. Watering operations shall be increased immediately in response to periods of high wind. The operator shall take all appropriate actions to mitigate and control dust from all sources, including stockpiles. Environmental Health Director may require temporary closure of facility if dust control measures are not effective.

~~54. The Special Use Permit is contingent upon the petitioner complying with the applicable requirements of Regulation III.D of the Colorado Air Quality Control Commission, as a minimum standard, with the following stipulations:~~

~~A) The operation shall establish a fugitive dust control plan approved by the Planning Administrator for the sand and gravel operation. Periodic inspections by the State and County will be used to determine compliance with the plan.~~

~~B) The dust control plan shall be formulated by the petitioner in cooperation with the planning staff, then forwarded to the Colorado Air Quality Control Division, and is subject to control and administration by Routt County, i.e., Planning Department staff and/or Department of Environmental Health. Routt County Environmental Health Department approval of plan shall be required prior to any grading activity.~~

~~C) The dust control plan can be amended by Planning Commission and the Board of County Commissioners if found to be necessary.~~

~~D) The dust control plan shall address site-specific issues of concern, such as the topsoil stockpiles, revegetation, wind breaking, watering and/or stabilization of haul roads and stockpiles. Temporary closures may be required during times of high wind. Windbreaking shall occur as necessary by placement of gravel stockpiles or other material in a manner so as to~~

~~prevent blowing of material from such piles. This condition will apply to stockpiles, disturbed areas, and any berms that may be developed.~~

Noise

55. Noise from associated equipment and trucks shall be muffled as much as possible. Operations plan shall include a loop system for trucks and equipment to reduce backup requirements. Trucks entering County Road 178 from US Highway 40 shall avoid using “jake brakes” except in cases of emergency. **Operator shall encourage drivers to not use their “jake brakes” while entering or leaving the site.**
56. Noise from all on-site sources and from haul trucks shall ~~not exceed the performance standards in the State noise statute, C. R. S. 25-12-101~~ **be in compliance with the performance standards in the State noise statute (C.R.S. 25-12-103).** Violations of performance standards shall be enforceable by the Routt County Planning Department and may be cause for a review of the SUP by Planning Commission and/or the Board of County Commissioners. ~~Noise monitoring will be performed at the property line semi-annually by Planning staff.~~
57. Emphasis shall be placed on using only electric pumps connected to line power. In the event of a power failure or other emergency condition, or during the construction of cutoff walls in advance of mining, engine-driven diesel pumps may be used, provided that the Planning Administrator is notified before such pumps are installed. In the Expansion Area, if line power is not available, one diesel electric generator may be used provided that the installation plan of the generator, which may include additional noise suppression and other requirements, is approved by the Planning Director.
58. ~~If allowed by federal regulations, the permittee is required to install proximity-sensitive backup alarms on all loaders.~~

Miscellaneous:

59. ~~Prior to recordation of this permit, the Landowner shall execute a development agreement acceptable to the Routt County Attorney to ensure that the 80-acre land “set aside” in compliance with the conservation mitigation requirements of Section 9.4.1.D of the Routt County Zoning Regulations shall be preserved from all future residential or commercial development.~~
60. **The operator shall use the use of the mostly technologically advanced and proved procedures and equipment to mitigate the significant impacts of mining operations and associated uses.**
61. **County staff shall conduct a thorough and complete inspection of the site and operation by July 1, 2020. Any issues identified in the inspection may be cause for review by Planning Commission and/or the Board of County Commissioners.**



Imagery ©2019 Google, Imagery ©2019 Maxar Technologies, USDA Farm Service Agency, Map data ©2019 500 ft

Routt County SUP2009-006 Renewal

Vicinity Map



October 22, 2019

Camilletti Milner Pit #2

Precision Excavating, Inc. has been operating this gravel mine since 2001. Our current permit issued on December 22, 2009 is expiring and we are applying to renew the permit. We are not requesting any boundary expansion, but would request removal / adjustment of condition 17.

This gravel mine provides numerous aggregate products to the valley. Examples range from large asphalt paving projects at Y.V.R.A., concrete aggregates to local batch plants, gravels for public and private roads and small home owner drives and landscaping.

Hours of operation are 7:00 am to 7:00 pm Monday through Saturday. Hauling does not start until 7:30 am during school hours. We average 3 employees year round at this mine. They operate our crushing and washing equipment during the summer and mining equipment late fall/early winter.

Traffic is typically light on most days since the recession, and only increases noticeably in the event of larger projects, usually with durations of 1-2 months. Equipment at this site, in addition to crushing and washing equipment, are loaders, haul trucks and track excavators.

This operation has been a good neighbor in the area and has followed the permit conditions continually. We are in good standing, as well, with the Colorado Division of Reclamation Mining and Safety. An inspection report by the State is attached.

Precision Excavating Inc.

A handwritten signature in blue ink that reads "David L. Zehner".

President



ROUTT COUNTY

Board of County Commissioners

P.O. Box 773598
Steamboat Springs, CO 80477

(970) 879-0108
fax (970) 879-3992

SPECIAL USE PERMIT

Routt County, Colorado

Permit No.: PP2009-006 (replaces PP2005-078)

Project Name: Camilletti Milner Pit Expansion

Land Owner: Camilletti & Sons Inc

Permittee: Precision Excavating, Inc.

Address: P.O. Box 790
Hayden, CO 81639

Type of Use: Gravel Pit, Crusher and associated Facilities; Camilletti Milner Pit #2

Location/Legal Description: Expansion Area: An 80-acre tract of land located within the South 1/2 of Section 15 and the North 1/2 of the North 1/2 of Section 22, T6N;R86W

Existing Gravel Pit: A portion of the South East 1/4 of Section 15, Township 6 North, Range 86 West

Period of Permit: December 22, 2009 – December 22, 2019

Board Approval Date: May 26, 2009

This approval is subject to the following conditions:

General Conditions:

1. The Special Use Permit (SUP) is valid for ten years from the date of issuance of the amended SUP, provided it is acted upon within one year of approval. The SUP shall be deemed to have automatically lapsed if the uses permitted herein are discontinued for a period of one (1) year.
2. The SUP is contingent upon compliance with the applicable provisions of the Routt County Zoning Regulations including but not limited to Sections 4, 5, 6, and 9.

3. The SUP is limited to uses and facilities presented in the approved project plans. Any additional uses or facilities must be applied for in a new or amended application.
4. Any complaints or concerns which may arise from this operation may be cause for review of the SUP, at any time, and amendment or addition of conditions, or revocation of the permit if necessary.
5. In the event that Routt County commences an action to enforce or interpret this SUP, the substantially prevailing party shall be entitled to recover its costs in such action including, without limitation, attorney fees.
6. No junk, trash, or inoperative vehicles shall be stored on the property.
7. Fuel, flammable materials, or hazardous materials shall be kept in a safe area and shall be stored in accordance with state and local environmental requirements.
8. All exterior lighting shall be downcast and opaquely shielded.
9. Prior to the issuance of the permit, the permittee shall provide evidence of liability insurance in the amount of no less than \$1,000,000 per occurrence with either unlimited aggregate or a policy endorsement requiring notice to Routt County of all claims made. Routt County shall be named as an additional insured on the policy.
10. The operator shall prevent the spread of weeds to surrounding lands and shall eradicate any noxious weeds occurring on the site in accordance with an approved Weed Control Management Plan approved by the Routt County Extension Office. Confirmation of the approved plan is required prior to issuance of the permit. Revegetation of disturbed areas shall occur within one growing season with a seed mix which avoids the use of aggressive grasses.
11. Routt County has the authority to close any county road at its discretion if such road surface is in poor condition and would be further damaged by additional use.
12. The operation will be reviewed every 2 years by planning staff; if there are violations then it will be forwarded with a staff report to Planning Commission, and/or Board of County Commissioners.
13. This permit is contingent upon permits being obtained for air and water emissions, reclamation, and other appropriate permits from all involved agencies. Including, but not limited to CDMG Mined Land Reclamation permit, Colorado Department of Health Air Pollution Emission Notices, CDOT access permit, Army Corps of Engineers wetland permit and NPDES permit. All applicable permits shall be submitted to the Planning Department prior to issuance of the SUP and shall be consistent with Routt County SUP approval.
14. All applicable standards set forth by the Colorado Department of Health and the Routt County Department of Environmental Health shall be complied with. The operation shall comply with all Federal, State and local laws.

Specific Conditions:

1. Sales from the gravel pit shall not exceed 850,000 tons in any twelve consecutive months.

2. Prior to recordation of this Permit the Permittee shall execute an agreement acceptable to the Routt County Attorney outlining the details of the permittee's contribution of a \$0.03 per ton fee for each ton hauled out of the Milner Pit #2 for the costs of maintenance, dust control or improvements to the County Road 179, the bridge over the Yampa River, and County Road 178.
3. Facilities included as part of this gravel pit include a scale house (approximately 500 sf), office trailer (approximately 1000 sf) to be located near the active pit area, a 40'x 60' maintenance shed, fuel tanks, crusher, conveyance system and related equipment.
4. Any proposed amendments to the Mine Land Reclamation Division permit must be approved by Planning Administrator and may be cause for a review of the SUP.
5. Days of operation shall be Monday through Saturday. No mining, reclamation, or crushing activities shall occur on Sundays or the following national holidays: Christmas, Thanksgiving, New Year's Day, Fourth of July, Presidents' Day, Memorial Day, and Labor Day, except as may be approved by the Planning Administrator or Board of County Commissioners for emergency situations.
6. Hours of operation for loading and hauling shall be from 7:30 a.m. to 7:00 p.m. Hours of operation for the crusher shall be 7:00 a.m. to 7:00 p.m. Equipment warming is allowed 15 minutes prior to beginning operations in the morning. "Operation", as used in this condition, shall not include the use of the office or maintenance building.
7. A maximum of 60 acres, 35 acres in the Existing Pit and 25 acres in the Expansion Area, shall be disturbed at any time. Disturbed acreage is defined as all areas not covered by water, pavement or substantially noxious weed free vegetation, but does not include areas of temporary disturbance related to construction of cutoff walls in advance of mining. Reclamation according to approved plans including grading, topsoiling and seeding shall occur concurrently with mineral extraction in each area.
8. Soil and vegetation shall not be stripped in excess of an area required for one year of mining except as required to construct cutoff walls in advance of mining.
9. Operator shall submit Division of Minerals and Geology Annual Report for the Pit to the Planning Department within two weeks of due date each year for compliance verification.
10. Expansion of the pit into an area affecting the cottonwoods and willows on the east side of the property shall not take place within 600 feet of the cottonwoods and willows on the east side of the property until there is documented evidence that the cutoff walls or other measures are effective in preserving the health and vigor of the cottonwood stands. (This condition applies to the Existing Pit only.)
11. Permittee shall coordinate with the school districts to eliminate truck hauling from the pit south on County Road 179 during school bus hours.
12. Permittee shall work with and obtain approval from Planning Administrator of a revised reclamation plan prior to the issuance of the SUP. Lakeshore reclamation shall consist of undulating shorelines, and seeding/revegetation shall include water-tolerant plants, cottonwoods, willows, and other appropriate vegetation. Shoreline revegetation should be developed for waterfowl and wetland areas with native plants; revegetation plans should follow guidelines of the Colorado Division of Wildlife.

Slope configurations along with water depths in the proposed ponds shall be variable and generally slopes should not exceed 6:1 from existing grade to the shoreline area. Slopes in the shoreline area shall average 10:1. Creation of straight shorelines shall not be acceptable as reclamation. (This condition applies to the Existing Pit only.)

13. The reclamation plan for the Expansion Area, dated May 14, 2009, shall be the revised plan entitled, DOW Comments, Reclamation Plan Map, C-2, Sheet 2 of 3.

14. Landscaping to provide visual screening from County Road 179 shall be completed prior to any sales from the mine. Willow planting areas shown on the landscape plan shall be a minimum of 6 feet in height. Permittee will be required to replace any vegetation that dies. Slopes on the berm that screens office and scales shall not exceed 5:1 facing County Road 179. (This condition applies to the Existing Pit only.)

15. Minimum setback of the disturbed area from County Road 179 shall be 100 feet from the edge of the widened pavement but in no case shall be less than that shown on the approved mine plan. (This condition applies to the Existing Pit only.)

16. The operator shall immediately remove all products, fill material or sediments spilled, dropped, washed, or tracked onto County Roads 178 and 179.

17. Minimum setbacks to all cottonwood and willow stands outside the mine area shall be 100 feet. Permittee shall undertake biweekly groundwater monitoring program as approved by the Planning Administrator. Monitoring well locations (up to 16) shall be substantially as shown in the irrigation plan from Water Resources Consultants dated May 30, 2001. Groundwater levels shall be submitted monthly (or as required by Planning Administrator) to the Routt County Planning Department for the life of the mine. Permittee shall also institute a cottonwood health-monitoring program, as approved by the Planning Administrator. Minimum setbacks may be increased or decreased by the Planning Administrator based on the results of the monitoring programs. In no case shall the setbacks be reduced to less than 100 feet. Permittee shall endeavor to maintain groundwater levels at the seasonal baseline levels established through the approved monitoring program. If the monitoring wells show a groundwater level decrease under the cottonwoods of 12"- 18", corrective action by the permittee shall be required. If the monitoring wells show a decrease of 18" or more the permittee shall cease dewatering as soon as is practical or within 7 days whichever is sooner. (This condition applies to the Existing Pit only.)

18. The applicant shall implement a revised landscape plan for all of those portions of the riparian area to the north of mine block 2 covering the area between the Yampa River and the north portion of the mine pit area where cottonwood seedlings will be transported into those areas currently devoid of cottonwoods or willows. The density of these plantings shall be based upon monitoring data collected in connection with #16 above and shall be determined based upon the naturally occurring spacing between mature cottonwood trees found in this area. Survival of these transplanted seedlings will be reported to the Planning Administrator in the Annual Report. (This condition applies to the Existing Pit only.)

19. Concurrent with the cottonwood tree monitoring plan described above, the applicant shall submit a detailed irrigation plan for both cottonwood and wetlands areas outside the mine area to be approved by the Planning Administrator, documenting the methods, quantities and frequency of irrigation. Sub-surface

irrigation may be required if surface irrigation proves ineffective in maintaining cottonwood health & vigor. In addition, the applicant's Stormwater Management Plan shall be modified with the Colorado Department of Health; showing that this cottonwood treed area has been modified to be an approved discharge point for this mine. (This condition applies to the Existing Pit only.)

20. Permittee shall maintain a 50' undisturbed buffer from all jurisdictional wetlands outside the mine boundary. Permittee is required to maintain existing wetlands vegetation through irrigation or other means. The Planning Administrator may increase the setback if required to maintain wetlands in premining condition. (This condition applies to the Existing Pit only.)

21. A maximum of 1000 lineal feet of disturbed high wall is allowed at any time, except as necessary to construct cutoff walls in advance of mining. All other high wall areas shall have either permanent or temporary revegetation actively in progress. This requires the placement of suitable soils and seeding. Irrigation will be required as necessary to establish vegetation. (This condition applies to the Existing Pit only.)

22. A maximum of 1000 lineal feet of disturbed high wall is allowed at any time, except as necessary to construct cutoff walls in advance of mining. All other high wall areas shall have either permanent or temporary revegetation actively in progress. This requires the placement of suitable soils and seeding. Irrigation will be required as necessary to establish vegetation. (This condition applies to the Expansion Area only.)

23. All stockpiles and equipment, except for the truck scale, office trailers, toilet, maintenance shed and scale house shall be located below the top of the pit highwall dependent on the area available on the pit floor where the equipment is visually screened. (This condition applies to the Existing Pit only.)

24. Topsoil and overburden stockpiles shall have a minimum of 3:1 slopes, and shall be revegetated if left undisturbed for more than six months.

25. No berms or stockpiles associated with the perimeter drainage ditch located outside the active mine area shall be permitted. (This condition applies to the Existing Pit only.)

Air and Water Quality

26. All haul roads and disturbed sites shall be watered and/or chemically stabilized to minimize dust. Watering operations shall be increased immediately in response to periods of high wind. Environmental Health Director may require temporary closure of facility if dust control measures are not effective.

27. The Special Use Permit is contingent upon the petitioner complying with the applicable requirements of Regulation III.D of the Colorado Air Quality Control Commission, as a minimum standard, with the following stipulations:

A) The operation shall establish a fugitive dust control plan approved by the Planning Administrator for the sand and gravel operation. Periodic inspections by the State and County will be used to determine compliance with the plan.

B) The dust control plan shall be formulated by the petitioner in cooperation with the planning staff, then forwarded to the Colorado Air Quality Control Division, and is subject to control and administration by Routt County,

i.e., Planning Department staff and/or Department of Environmental Health. Routt County Environmental Health Department approval of plan shall be required prior to any grading activity.

C) The dust control plan can be amended by Planning Commission and the Board of County Commissioners if found to be necessary.

D) The dust control plan shall address site-specific issues of concern, such as the topsoil stockpiles, revegetation, wind breaking, watering and/or stabilization of haul roads and stockpiles. Temporary closures may be required during times of high wind. Windbreaking shall occur as necessary by placement of gravel stockpiles or other material in a manner so as to prevent blowing of material from such piles. This condition will apply to stockpiles, disturbed areas, and any berms that may be developed.

28. A minimum 50' undisturbed buffer shall be maintained from the wetlands surrounding Trout Creek. No mining activity or equipment shall be allowed in the buffer area. Light vehicle use within this buffer along the existing ranch road to access the property to the west of this site or to maintain and service the electric pumps located in the sediment pond in the southwestern portion of the mine area shall not be considered to meet the definition of mining activity or equipment. (This condition applies to the Existing Pit only.)

29. Applicant shall submit a revised mine plan for approval by Planning Administrator showing the relocation of the dewatering outfall, and changes to the mine area depicting increased setbacks as required prior to the issuance of the Special Use Permit. (This condition applies to the Existing Pit only.)

Noise

30. Noise from associated equipment and trucks shall be muffled as much as possible. Operations plan shall include a loop system for trucks and equipment to reduce backup requirements. Trucks entering County Road 178 from US Highway 40 shall avoid using "jake brakes" except in cases of emergency.

31. Noise from all on-site sources and from haul trucks shall not exceed the performance standards in the State noise statute, C. R. S. 25-12-101. Violations of performance standards shall be enforceable by the Routt County Planning Department and may be cause for a review of the SUP by Planning Commission and/or the Board of County Commissioners. Noise monitoring will be performed at the property line semi-annually by Planning staff.

32. Emphasis shall be placed on using only electric pumps connected to line power. In the event of a power failure or other emergency condition, or during the construction of cutoff walls in advance of mining, engine-driven diesel pumps may be used, provided that the Planning Administrator is notified before such pumps are installed. In the Expansion Area, if line power is not available, one diesel electric generator may be used provided that the installation plan of the generator, which may include additional noise suppression and other requirements, is approved by the Planning Director.

33. If allowed by federal regulations, the permittee is required to install proximity-sensitive backup alarms on all loaders.

34. Prior to recordation of this permit, the Landowner shall execute a development agreement acceptable to the Routt County Attorney to ensure that the 80-acre land "set aside" in compliance with the conservation mitigation requirements of Section

9.4.1.D of the Routt County Zoning Regulations shall be preserved from all future residential or commercial development.

Permit Issued by the Routt County Board of Commissioners:



Douglas B. Monger, Chairman

12/22/09

Date

ATTEST:



Kay Weinland, Clerk and Recorder


12/29/09

Date

ACCEPTED:



Permittee

12/22/09

Date

This permit may be subject to an Annual Fee: The permits/approval shall not be issued until all fees have been paid in full. Failure to pay fees may result in revocation of this permit. Permits/Approvals that require an ongoing review will be assessed an Annual Fee. Additional fees for mitigation monitoring will be charged on an hourly basis for staff time required to review and/or implement conditions of approval.

Cottonwood Tree and Riparian Vegetation 2019 Monitoring Report Camilletti-Milner Pit #2

November 20, 2019



WESTERN BIONOMICS, INC.

Natural Resource Management Services

31040 Willow Lane Steamboat Springs, Colorado 80487

970-846-8223 • kscolfer@westernbionomics.com

Table of Contents

1. Introduction.....	1
2. Methodology	1
3. Results	1
3.1 Narrowleaf Cottonwood Trees.....	1
3.1.1 East Side Cottonwood Stand.....	1
3.1.2 North Side Cottonwood Stand.....	2
3.1.3 West Side Cottonwood Stand.....	2
3.2 Riparian Shrubs.....	2
3.2.1 East Shrub Stand	2
3.2.1.1 Transplants.....	3
3.2.1.2 Volunteer Shrubs and Seedlings	3
3.2.2 Northeast Shrub Stand.....	3
3.2.3 North Shrub Stand.....	3
3.2.4 Northwest Shrub Stand	3
3.2.5 West Shrub Stand.....	4
4. Summary.....	4
5. Recommendations	5

1. INTRODUCTION

Since 2001, Precision Excavating, Inc. (PEI) has operated the Camilletti Milner Pit # 2 (CMP #2) located just outside of Milner, in unincorporated Routt County, Colorado. In accordance with PEI's Routt County Special Use Permit (SUP) PP2005-078, the health of cottonwood stands and riparian shrubs is documented in this report. The Routt County Planning Department (RCPD) required the monitoring as a condition of approval due to the visual screening provided by riparian vegetation on the east and north sides of the facility.

2. METHODOLOGY

Western Bionomics conducted vegetation monitoring on September 13, 2019 to assess the health and vigor of cottonwood and willow stands that surround the site. Cottonwood trees and riparian shrubs were grouped into stands by position relative to the mine limits. The overall condition of each stand was assessed via a qualitative drive-through survey. Health and vigor was assessed at the stand-level based upon a qualitative assessment of percent dead crown, percent live leaves, crown ratio, crown diameter, presence or absence of chlorotic leaves, and bole appearance.

3. RESULTS

3.1 NARROWLEAF COTTONWOOD TREES

3.1.1 East Side Cottonwood Stand

PEI constructed a subsurface barrier wall between the East Stand and the gravel pit during winter 2006/2007. The intent of the barrier wall was to inhibit the migration of groundwater from the East Stand area to the pit and to help maintain groundwater elevations at historical levels with the goal of providing sufficient groundwater hydrology to maintain or improve the health and vigor of trees and shrubs in this stand. From 2006 through 2009, the status of trees in this stand remained constant with 22% of trees in good shape, attesting to the barrier's ability to maintain adequate subsurface water for these trees.

In 2010 the stand took on a different appearance in response to a severe wind event that blew down hundreds of cottonwoods in the Yampa Valley between Craig and Steamboat Springs. The Camilletti

Milner Pit did not escape damage from the winds, which blew down 28 trees in the East Stand. Most of the trees that blew over had been rated in previous exams as possessing good indicators of health and vigor. The blowdown was a function of the greater sail area (more leaves and branches) possessed by healthy trees. The small diameter of the stand contributed to the stand's inability to withstand the high winds. The drought of 2012 posed additional stress on the remaining stand.

The stand has since completely died off. Hundreds of cottonwood and willow seedlings and saplings are successfully regenerating at the location of the East Stand, providing recruitment that will eventually replace the stand. The canopies of these recruitment trees and shrubs already provide visual screening from CR 179. These regenerating trees and shrubs will ensure the survival of this stand well into the future.

3.1.2 North Side Cottonwood Stand

In late November 2007, PEI began constructing an additional subsurface groundwater barrier wall at the west side of the north pit boundary. The purpose of the barrier wall is the same as the wall located at the southeast pit boundary (i.e. to inhibit the migration of groundwater from the North Stand area to the pit and to help maintain groundwater elevations at historical levels). Construction of the barrier wall has progressed coincident with the extension of the mine area to the east.

The results of Western Bionomics' 2019 qualitative examination revealed that the overall health of the cottonwoods in the North Stand has remained consistent since 2015. Cottonwoods and willows in the north stand are regenerating in the understory. An estimated 200 volunteer willow seedlings and several dozen cottonwood seedlings were observed in the north stand during the 2019 survey.

3.1.3 West Side Cottonwood Stand

During the fall and winter of 2005/2006, PEI constructed a subsurface groundwater barrier wall between the West Stand and the gravel pit. The intent of the barrier wall was to inhibit the migration of groundwater from the West Stand area to the pit and to minimize potential groundwater elevation declines from pit dewatering operations. Monitoring conducted since construction of the barrier wall suggests that the condition of this stand has improved since its initial dieback in 2003. Monitoring conducted in 2019 demonstrated continued improvement in cottonwood health and vigor.

Based upon Western Bionomics' observations of surface water since 2007, the barrier wall appears to be functioning as intended. Standing water has been observed at low points throughout the cottonwood stand and flowing water has been observed in a swale that is located within the stand. Because of improved water retention in the West Stand area, natural regeneration continues to increase and survival of regenerated trees and shrubs is occurring from year to year.

3.2 RIPARIAN SHRUBS

Riparian shrubs on the property within 200 feet of the mine limits are distributed individually and in random groups and clumps. Geyer willow (*Salix geyeri*), planeleaf willow (*Salix planifolia*), sandbar willow (*Salix exigua*), red-osier dogwood (*Swida sericea*), hawthorn (*Crataegus rivularis*), white-stem gooseberry (*Ribes inerme*), and dusky willow (*Salix melanopsis*) are present in the shrub canopy in various proportions in each stand.

3.2.1 East Shrub Stand

The east shrub stand is sparsely stocked with Geyer, planeleaf, and dusky willow. Naturally occurring shrubs range from 6 feet to 15 feet in height and from 8 feet to 15 feet in width. Not including

transplanted willows, approximately 15% of the crown exhibits dead stems and branches and 100% of the foliage of native willows was alive. Chlorotic leaves were not observed. The characteristics exhibited by this stand have remained consistent since the onset of mining.

3.2.1.1 Transplants

PEI began transplanting willows in 2002. In 2004, upland trees and shrubs were planted along the eastern edge of the property as well. Three spruce trees were planted in 2004 and several lilac bushes were planted in 2005. Health and vigor of transplants has continued to improve since 2002. In 2012, a slight decline was observed, most likely due to the drought. Monitoring in 2018 suggests that shrub health and vigor apparent within this stand remains steady. In addition, natural regeneration has increased dramatically since 2006, as described in the following section. It is apparent that the plan to establish a vegetative screen for the east side of the mine is working, and can be expected to improve over time.

3.2.1.2 Volunteer Shrubs and Seedlings

Cottonwoods and willows are regenerating via apparent suckering and/or by seed adjacent to the east side cottonwood stand. Prior to 2007, naturally regenerating willows or cottonwoods were not observed. Abundant regeneration is now apparent, demonstrating that adequate hydrology is present in this area to foster natural regeneration.

3.2.2 Northeast Shrub Stand

Shrubs in the Northeast Stand include Geyer, planeleaf, and dusky willows, white-stem gooseberry, red-osier dogwood, and hawthorn. Height ranges from 2 foot tall recruitment shrubs to mature 15 foot clumps of all species. Some extremely old planeleaf willows that exhibit almost 6 inch diameter trunks at the root collar were observed. Shrub clumps vary from individual shrubs with 4 foot diameter crowns to large shrub clumps made up of several individuals (and various species) exhibiting 50 foot diameter crowns.

The northeast shrub stand exhibited approximately 10% dead crown. However, 100% of foliage was alive and chlorotic foliage was not observed. Overall vigor of the shrub stand has appeared stable and in good condition since 2002.

3.2.3 North Shrub Stand

Shrubs in the North Stand primarily include dusky willow and sandbar willow. Shrub height ranges from 4 feet to 15 feet. All shrubs are arranged in a single large clump located in a shallow abandoned overflow channel that trends east to west.

North Stand shrubs exhibited approximately 30% dead crown. However, 100% of remaining foliage was alive and chlorotic foliage was not observed. Based upon historical data, stand vigor was stable until a decrease of health in 2005. Since 2005, further decrease in vigor has not been observed and the stand appears stable and in good condition.

3.2.4 Northwest Shrub Stand

Northwest Stand shrubs include Geyer willow, planeleaf willow, sandbar willow, and cottonwood shrubs. Shrub clumps range in height from 2 feet to 20 feet and are generally associated with abandoned overflow channels. Approximately 15% of the crown was dead, while 100% of the foliage was alive. Chlorotic foliage was not observed. Since 2002, overall vigor of the stand has been stable and in excellent condition.

3.2.5 West Shrub Stand

A shrub die-off occurred concurrent with the cottonwood decline at this location. Approximately 10% of the willows in the West Stand survive. Since 2008, standing and flowing water has been observed each year at low points throughout the area. Natural regeneration in this area has been observed to be increasing from year to year.

4. SUMMARY

Since PEI began operating the CMP #2 in 2001, cottonwood tree and shrub stands have been monitored for health and vigor. The programs were in response to Routt County Planning Department concerns regarding visual screening of the pit provided by riparian vegetation. Dewater operations are routinely conducted at the pit. Therefore, potential adverse impacts to cottonwood tree stands from groundwater level drawdown had been a concern.

In order to inhibit the migration of groundwater from cottonwood stands to the pit and help maintain water elevations at historical seasonal levels, PEI constructed subsurface groundwater barrier walls. Walls were constructed in the following areas:

- 1) At the southeast corner of the facility adjacent to the East Stand,
- 2) At the west side of the pit adjacent to the West Stand.
- 3) At the northern pit boundary adjacent to the North Stand.

Standing water present in swales and other isolated depressions suggest that the barrier walls are helping to keep groundwater levels at historic or higher levels. In addition, improved natural regeneration in the East Stand and slowing of the downward trend in the West Stand cottonwoods suggests that trees and shrubs are responding to the increased availability of water following barrier wall installations.

In summary, the general health of trees and shrubs in the cottonwood stands is as follows.

- The overall health and vigor of cottonwood trees in the East Stand declined from the beginning of monitoring in 2002 through 2005. Starting in 2006 the stand demonstrated an upward trend until 2010 when a windstorm toppled 28 trees in the stand. Trees that survived the wind were poorer quality trees with less sail area. Most of these trees had succumbed to mortality by the time monitoring was conducted in 2019. Conversely, volunteer shrubs and cottonwood seedlings are abundant and in excellent condition in the east stand area. These new trees and shrubs are expected to continue development and should adequately replace the visual screen lost to the cottonwood blowdown and subsequent mortality.
- Based upon the relative difference between 2015 and 2019 visual examinations, overall health of the North Stand has remained stable.
- Since construction of the west groundwater barrier wall, the decline in health of the West Stand has slowed. Cottonwood health characteristics improved in 2006 and have remained stable to slightly increasing since that time.

Tree health and mortality trends at the Camilletti Milner Pit appear to significantly associate with factors such as age and precipitation trends, in addition to groundwater level drawdown from pit dewatering activities. Barring continued drought, the health and vigor in the West Stand is expected to continue to stabilize. Higher groundwater levels at the East, West, and North Stands, as a result of the barrier walls, should assist natural regeneration and reforestation efforts, as well as facilitate increased health and vigor of the cottonwood trees and shrubs.

5. RECOMMENDATIONS

The following recommendations should help manage cottonwood tree and shrub habitat and health.

- Continue to use discharge water from gravel pit operations to irrigate the north, east, and west cottonwood tree stands.
- Continue to plant cottonwood seedlings and saplings directly in constructed ditch banks and adjacent to natural swales where irrigation water will flow. Newly established cottonwood stands would be a benefit to the riparian ecosystem of the Yampa Valley, as young regenerating stands are currently not present at a frequency that is thought to have occurred historically. Establishing young cottonwoods would be a direct benefit to the Yampa Valley riparian ecosystem beyond that which would have existed in the absence of the CMP #2.
- Soil disturbances associated with transplanting at the east side of the pit and with irrigation ditch construction and salvage logging to the west have led to a substantial invasion of Canada thistle. Weed control should be continued aggressively with additional planting of desirable plant species in order to help reduce the influence and competitive advantage of thistles.
- Scarification treatment of topsoil could potentially enhance natural regeneration of cottonwood trees and shrubs in the West Stand. Scarification exposes mineral earth and fosters prolific cottonwood sprouting following seed fall in the early summer. However based upon the current thistle infestation, scarification would likely only prepare the seedbed and result in expansion of the thistle invasion. Thistles would have to be controlled before conducting scarification.



November 21, 2019

Routt County Planning Department
ATTN: Chad Phillips, Planning Director
136 6th Street, Suite 200
Steamboat Springs, CO 80487

RE: Camilletti Milner Pit #2 Vegetation and Groundwater Monitoring

Dear Chad:

Since 2002, as a condition of the Pit's Routt County Special Use Permit (SUP), Western Bionomics has been monitoring the health and vigor of cottonwood and willow stands surrounding the Camilletti Milner Pit #2. Precision Excavating has similarly been monitoring groundwater levels surrounding the Pit, as another requirement of the Pit's SUP. The vegetation and groundwater monitoring was required by the SUP due to the County's desire that woody vegetation be maintained on the North and East of the Pit to provide a visual screen as viewed from the Community of Milner and from County Road 179. Dewater operations are routinely conducted at the pit; therefore, potential adverse impacts to cottonwood tree stands from groundwater level drawdown had been a concern during the permitting process.

As a summary of Western Bionomics' 17 year vegetation monitoring project, cottonwood and willow stands on the East and North of the Pit have retained their function as a vegetation screen. During this period Precision Excavating has demonstrated the ability to mine gravel while simultaneously preventing adverse groundwater impacts from damaging the health and vigor of tree and shrub stands adjacent to the Pit.

In 2006, Precision began installation of subterranean groundwater barrier walls around the active mining/processing cell that have since prevented groundwater drawdowns adjacent to the Pit. The results of their groundwater monitoring effort are demonstrated by their most recent groundwater monitoring data (see attachment), which indicates that groundwater levels have been maintained and perhaps even improved since Precision began constructing barrier walls.

The benefits of the barrier walls are also evident in the persistence of cottonwood and willow stands on the north and east of the Pit (see attached oblique aerial photograph). The east willow stand in particular exhibits healthy and vigorous growth each year. The over-mature north cottonwood stand, while exhibiting a decline in the health of over-mature trees between 2002 and 2015, has remained in a state of equilibrium since 2015 and retains its vegetative screening function. Regenerating seedlings as saplings are apparent in the understory of the North and East stands, and are expected to eventually develop as mature replacement trees that will continue to function as a vegetative screen.

The foregoing information has been well-documented in my yearly *Cottonwood Tree and Riparian Vegetation Monitoring Reports*. Overall, the healthy and vigorous status of woody vegetation to the East and North of the Pit, in combination with the information in their groundwater monitoring data, demonstrates that Precision's groundwater management is working and will continue to benefit woody vegetation surrounding the Pit.

Based on my years of monitoring the Pit, it is my professional opinion that Precision has maintained groundwater levels surrounding the Pit, which has fostered continued health and vigor of vegetation that provides a vegetative screen. Precision has demonstrated that they can conduct mining operations while simultaneously fostering healthy cottonwood and willow stands adjacent to the Pit.

I understand that Precision would like some relief from the cost and effort of producing these yearly monitoring reports. After the beneficial results documented in 17 years of monitoring, I am confident that Precision can continue to maintain woody vegetation for a screen, and I would be comfortable with relaxation of the County's requirement for yearly monitoring. If I can provide further information, please feel free to contact me directly.

Sincerely,

Western Bionomics Inc.

A handwritten signature in black ink, appearing to read 'Kelly Colfer', written in a cursive style.

Kelly Colfer

Principal

Attachments: Groundwater Monitoring Data
 Aerial Photograph

cc: David Zehner



CAMILLETTI MILNER PIT #2

OBLIQUE AERIAL PHOTOGRAPH
September 13, 2019

Western Bionomics Inc.
Natural Resource Management Services

31040 WILLOW LANE STEAMBOAT SPRINGS, CO 80487 970-846-8223

Date: 9-13-2019 Drawn: KSC

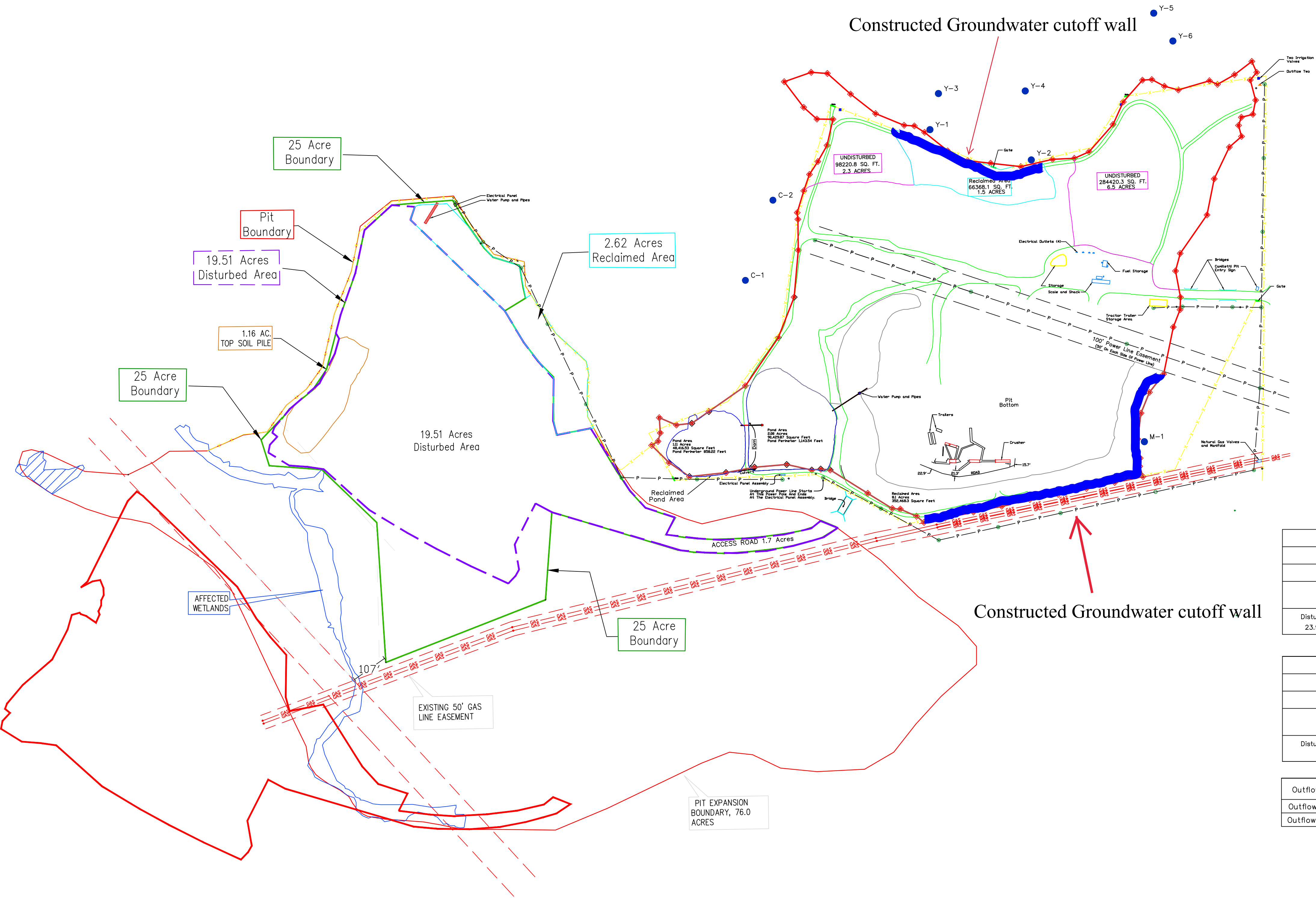
SHEET NO. 1 OF 1

REVISIONS

No.	Item	Date

33 of 36

CAMILLETTI - MILNER PIT NUMBER TWO AMENDED
COUNTY OF ROUTT, STATE OF COLORADO



Legend

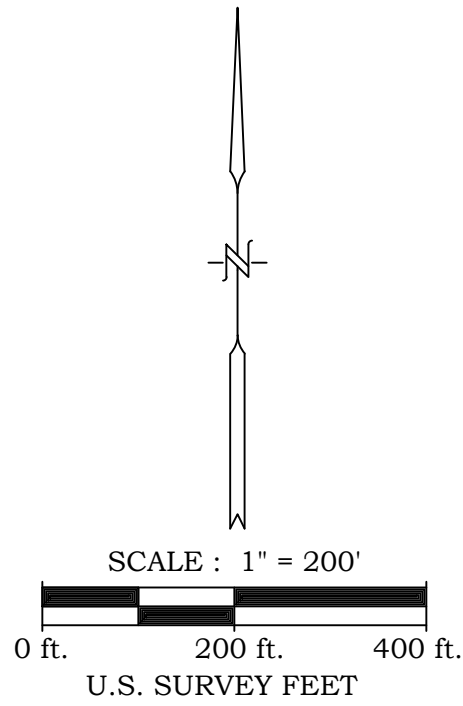
- Pit Boundary
- Pit Boundary Point
- Pit Control Point
- Fence Line
- Power Pole
- Power Line
- Power Pole Restraint
- Outflow Point
- Irrigation Valve
- Underground Water Monitoring Well
- Pit Road
- Disturbed Area
- Reclaim Area
- Undisturbed Area
- Topsoil

Notes

CAMILLETTI-MILNER PIT NUMBER TWO		
Pit Areas Were Calculated On Dec. 01, 2016.		
Pit Surveyed Nov. 30, 2016.		
Pit Boundary Area 42.35 Acres		
Disturbed Area 23.95 Acres	Undisturbed Area 8.78 Acres	Reclaimed Area 9.62 Acres

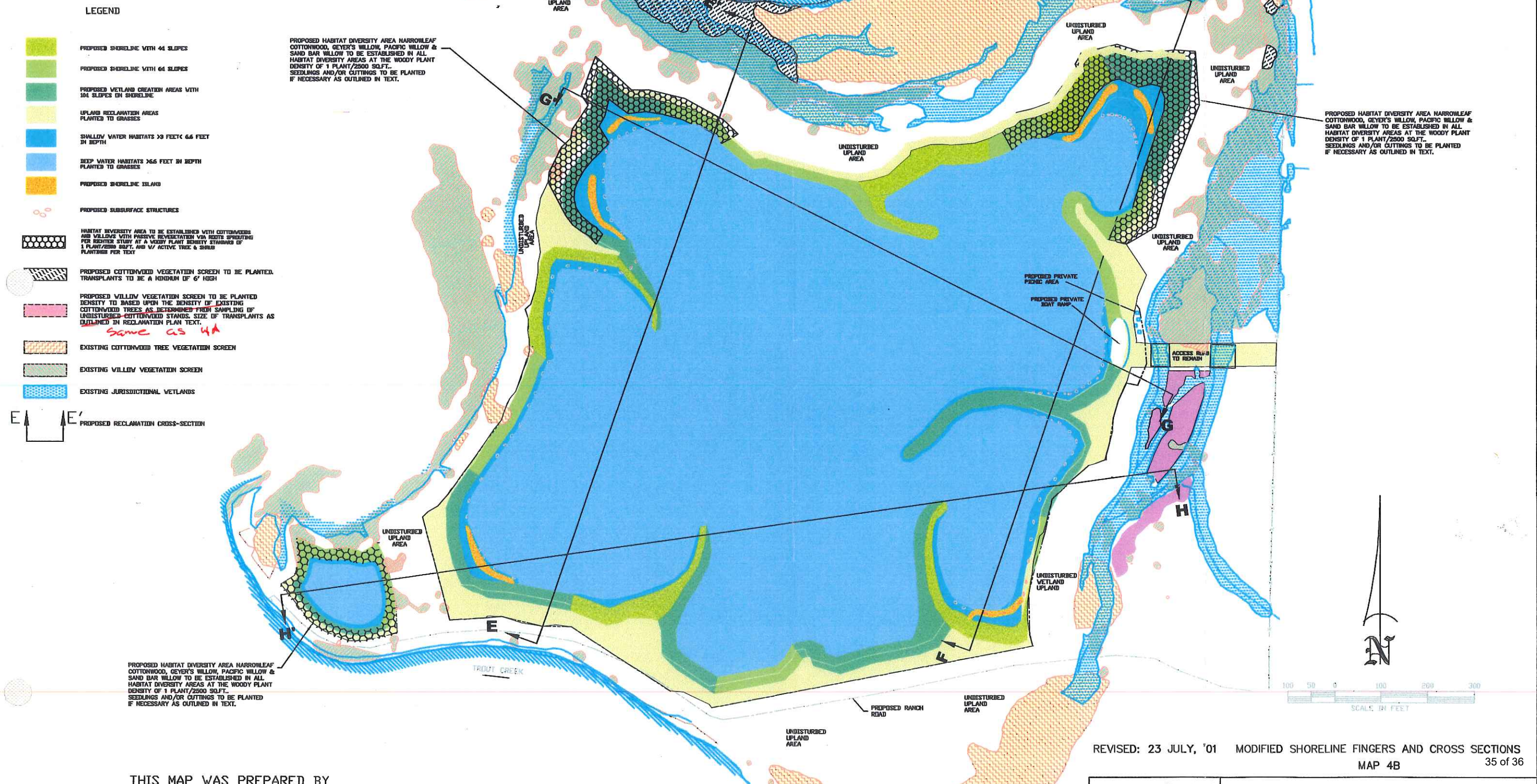
CAMILLETTI-MILNER PIT EXPANSION		
Pit Areas Were Calculated On July 29th, 2019.		
Pit Surveyed Nov. 30, 2016.		
Pit Boundary Area 76.00 Acres		
Disturbed Area 19.51	Undisturbed Area 53.87 Acres	Reclaimed Area 2.62 Acres

Outflow	Latitude	Longitude	Date Measured
Outflow 1	40° 28' 33.16463" N	107° 01' 14.67913" W	3/27/2007
Outflow 2	40° 28' 35.26802" N	107° 00' 42.92658" W	1/25/2007

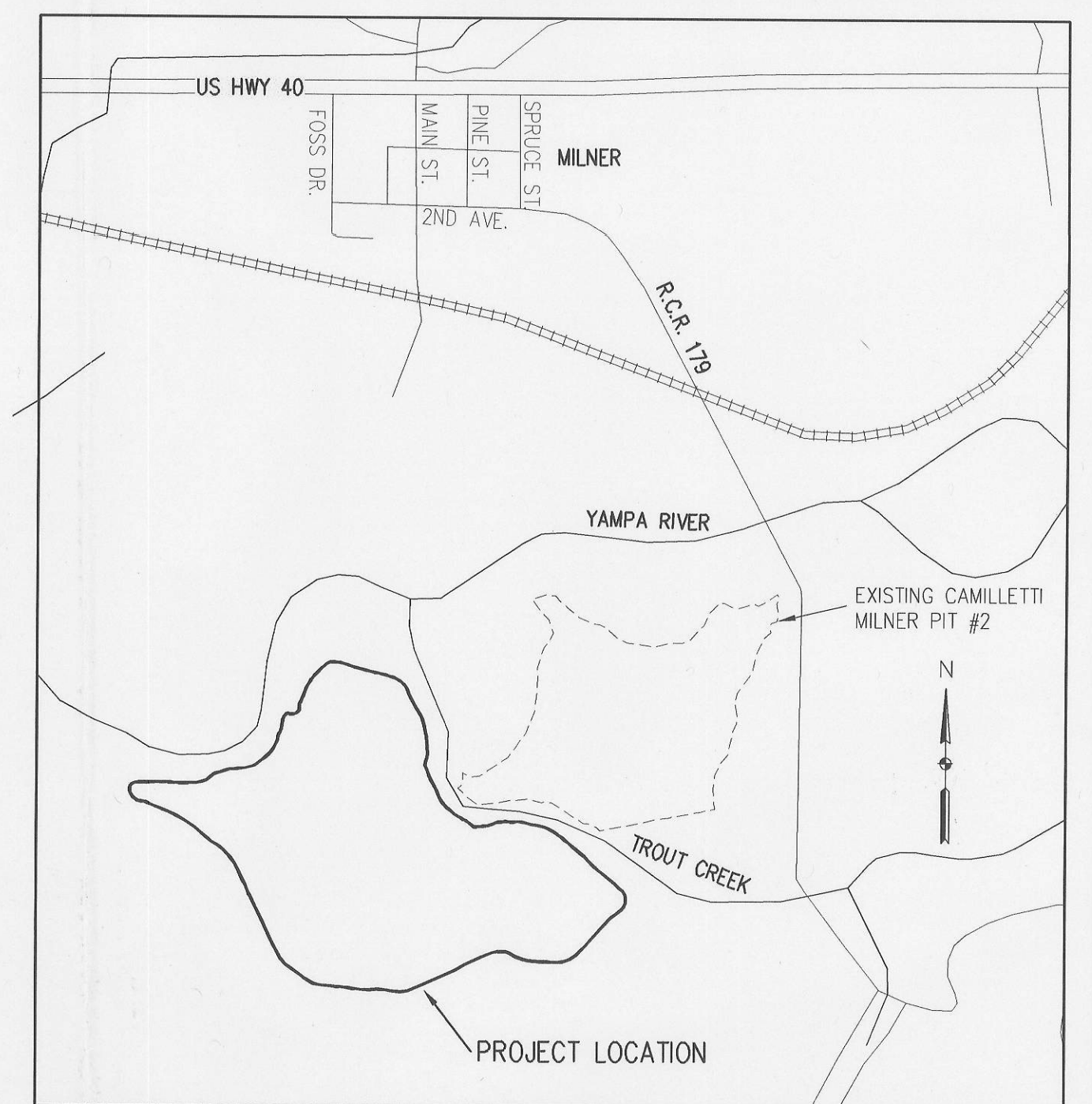


PRECISION EXCAVATING, INC. EMAIL: dzehner@precisionexcavatinginc.com	REVISIONS:	CAMILLETTI - MILNER PIT NUMBER TWO AMENDED COUNTY OF ROUTT, STATE OF COLORADO
	F.W.12/10/14	
JOB: 197	DATE: 7/29/19	E.F.R.MILNER PIT 2014
	DRAFTING: FSE	FIELD: SAY
		SHEET: 1 of 1

Original Pit Reclamation Plan



CAMILLETTI - MILNER PIT NUMBER TWO AMENDED
LOCATED IN THE SOUTH 1/2 OF SECTION 15 & THE NORTH 1/2 OF THE NORTH
1/2 OF SECTION 22, TOWNSHIP 6 NORTH, RANGE 86 WEST OF THE 6TH P.M.,
ROUTT COUNTY, STATE OF COLORADO



VICINITY MAP
SCALE 1"=1000'

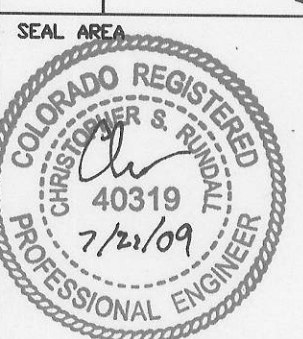
- LEGEND**
- | | |
|--|--|
| | PIT BOUNDARY |
| | SECTION LINE |
| | SECTION CORNER |
| | EX. FENCE LINE |
| | EX. POWER POLE |
| | EX. POWER LINE |
| | EXISTING PIT ROAD |
| | EXISTING/PROPOSED EASEMENT |
| | EX. GAS LINE |
| | PROPOSED GAS LINE |
| | PERMANENT POND |
| | HABITAT DIVERSITY AREA |
| | SHALLOW WATER HABITAT (LESS THAN 6 FT. IN DEPTH) |
| | RIVER/CREEK SANDBAR |
| | RIVER ISLAND |
| | NORMAL HIGH WATER MARK IN RIVER/CREEK |
| | CROSS SECTION LOCATION |
| | NOMINAL SLOPE ON FILL OR CUT |
| | EXISTING CONTOUR |
| | PROPOSED CONTOUR |

RECEIVED

SCANNED

JUL 23 2009
Division of Reclamation,
Mining and Safety

Permit# M-2001-023 Confidential? N
Class Revision Type Seq AM-01
MV# _____
Inspection Date _____
Doc Date 7-23-09
Doc Name Reclamation Plan Map
From DRMS/Other baseline Corporation
To DRMS/Other DRMS
Recipients PSN



1/19/2009 INITIAL SUBMIT

DRAWING SIZE 24" X 36"

SURVEY INFO	20
-------------	----

PRECISION EXC.

DRAWING NAME
co20102...New Pit Mining Plan.d

SHEET 2 OF 3

62

CZ

36 of 36

1. FLOODPLAIN INFORMATION IS INCLUDED IN A SEPARATE DOCUMENT AND PREPARED BY WATER RESOURCE CONSULTANTS.
2. EXISTING CONDITIONS SURVEY INFORMATION, MINING AND RECLAMATION PLAN LAYOUT PROVIDED BY PRECISION EXCAVATING.
3. WETLANDS DELINEATION PROVIDED BY WESTERN BIOMONICS. SEE NARRATIVE BY WESTERN BIOMONICS FOR WETLANDS IMPACT MITIGATION.
4. THE SEQUENCING AND DIRECTION OF MINING WILL DEPEND ON THE OUTCOME OF NEGOTIATIONS WITH XCEL REGARDING RELOCATION OF THE EXISTING GAS LINES AND THE CONDITIONS SET FORTH WITHIN THE MINERAL LEASE AGREEMENT FOR THE STATE OWNED PROPERTY.
5. IN THE EVENT THAT THE EXISTING POWER LINE IS RELOCATED, THE MINING OPERATIONS AND ASSOCIATED RECLAMATION WILL EXTEND FURTHER TO THE SOUTH AND WEST TO THE PROPOSED PIT BOUNDARY.
6. FINAL RECLAMATION MAY VARY DEPENDING ON THE AVAILABILITY OF CLEAN, IMPORTED FILL.
7. THE ANTICIPATED GRAVEL RESERVES IN THE PROPOSED 80 ACRE MINE AREA IS 4 TO 5 MILLION TONS.
8. THE AVERAGE TOPSOIL DEPTH IS 1 FOOT AND THE AVERAGE OVERBURDEN DEPTH IS 3 FEET.
9. 25% OF THE SHORELINE IN THE EXPANSION AREA WILL BE RECLAIMED TO SLOPES BETWEEN 6:1 AND 10:1. THIS 25% OF SHORELINE WILL BE A HABITAT DIVERSITY AREA WITH RIPARIAN PLANTINGS AS CALLED OUT ON THIS PLAN. THE REMAINING 75% OF THE SHORELINE IN THE EXPANSION AREA WILL BE RECLAIMED TO 3:1 SLOPES. ALL DISTURBED AREAS WILL BE REVEGETATED USING SEED MIXTURES. SPECIFIC DETAILS FOR REVEGETATION AND PLANTINGS ARE PROVIDED IN THE "REVISED RECLAMATION PLAN FOR THE CAMILLETTI MULNER PIT #2 GRAVEL MINE" BY IME DATED JULY 23, 2001.
10. PRECISION EXCAVATING, INC. HAS COMMITTED TO NOT MINE WITHIN 200 FEET OF THE XCEL GAS LINE AND YVEA POWER LINE UNTIL STRUCTURE AGREEMENTS ARE PROVIDED TO THE COLORADO DIVISION OF RECLAMATION, MINING, AND SAFETY IN ACCORDANCE WITH RULE 6.4.19.

RECLAMATION PLAN MAP

