



STATE OF  
COLORADO

Eschberger - DNR, Amy <amy.eschberger@state.co.us>

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## Bivens Pit (M-1985-184) - Technical Revision Request Cover Sheet & Letter

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Tim Gerken <tgerken@telesto-inc.com>

Tue, Dec 22, 2020 at 10:22 AM

To: "amy.eschberger@state.co.us" <amy.eschberger@state.co.us>

Cc: Walt Niccoli <wniccoli@telesto-inc.com>, "bivensrecycling@yahoo.com" <bivensrecycling@yahoo.com>

Ms. Eschberger,

Telesto Solutions, Inc. submits this letter on behalf of Bivens Trucking and Excavating, Inc. in response to your inspection of the Bivens Pit (M-1985-184) on September 2, 2020. This letter attached presents a Technical Revision request to the Bivens Pit mine and reclamation plans.

In addition to this email, a hard copy of this Technical Revision letter and a check, with the associated fee of \$216, has been sent certified mail on December 22, 2020, to the Denver DMRS office.

Please contact us with any questions regarding this submittal.

Thank you for your consideration of this request.

Happy Holidays!

-Tim Gerken

*Tim J. Gerken*

Geologist

Telesto Solutions, Inc.

[750 14<sup>th</sup> St. SW](#)

[Loveland, CO 80537](#)

(970)-484-7704 – Office

(720)-438-5513 -- Cell



20201222\_Bivens Pit\_(M-1985-184)\_TR\_Response Letter 2020\_Final.pdf

6550K



## COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY

1313 Sherman Street, Room 215, Denver, Colorado 80203 ph(303) 866-3567

### REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M- \_\_\_\_\_ Site Name: \_\_\_\_\_

County \_\_\_\_\_ TR# \_\_\_\_\_ (DRMS Use only)

Permittee: \_\_\_\_\_

Operator (If Other than Permittee): \_\_\_\_\_

Permittee Representative: \_\_\_\_\_

Please provide a brief description of the proposed revision: \_\_\_\_\_

As defined by the Minerals Rules, a Technical Revision (TR) is: “a change in the permit or application which does not have more than a minor effect upon the approved or proposed Reclamation or Environmental Protection Plan.” The Division is charged with determining if the revision as submitted meets this definition. If the Division determines that the proposed revision is beyond the scope of a TR, the Division may require the submittal of a permit amendment to make the required or desired changes to the permit.

The request for a TR is not considered “filed for review” until the appropriate fee is received by the Division (as listed below by permit type). Please submit the appropriate fee with your request to expedite the review process. After the TR is submitted with the appropriate fee, the Division will determine if it is approvable within 30 days. If the Division requires additional information to approve a TR, you will be notified of specific deficiencies that will need to be addressed. If at the end of the 30 day review period there are still outstanding deficiencies, the Division must deny the TR unless the permittee requests additional time, in writing, to provide the required information.

There is no pre-defined format for the submittal of a TR; however, it is up to the permittee to provide sufficient information to the Division to approve the TR request, including updated mining and reclamation plan maps that accurately depict the changes proposed in the requested TR.

Required Fees for Technical Revision by Permit Type - Please mark the correct fee and submit it with your request for a Technical Revision.

<u>Permit Type</u>	<u>Required TR Fee</u>	<u>Submitted</u> (mark only one)
110c, 111, 112 construction materials, and 112 quarries	\$216	<input type="checkbox"/>
112 hard rock (not DMO)	\$175	<input type="checkbox"/>
110d, 112d(1, 2 or 3)	\$1006	<input type="checkbox"/>



December 22, 2020

**Via Electronic Mail**

Amy Eschberger  
Colorado Division of Reclamation, Mining and Safety  
1313 Sherman Street, Room 215  
Denver, Colorado 80203  
amy.eschberger@state.co.us

**Subject: Bivens Trucking and Excavating, Inc –  
Bivens Pit, Permit No. M-1985184,  
September 2, 2020 Inspection**

Dear Ms. Eschberger:

Telesto Solutions, Inc. (Telesto) submits this letter on behalf of Bivens Trucking and Excavating, Inc. (Bivens) in response to your inspection of the Bivens Pit (M-1985-184) on September 2, 2020. This letter presents a Technical Revision request to the Bivens Pit mine and reclamation plans. Primary topics of the revisions include a post mining land use (PMLU) of recreation and residential living quarters.

***Existing Site Conditions***

The current approved mine plan is for an 112c sand and gravel operation for an on 11 acre mine pit. At this time, operations and mining disturbed approximately 10.6 acres. The disturbed area includes a the reclaimed Phase 1 pit (i.e., 3.5-acre pond), the stockpiling and processing areas around the pond, the 0.3-acre recreational area along the eastern edge of the pond, the truck scale and scale house, and the residential area located at the southern end of the site (Figure 1).

In 2003, the previous permittee, Jamie Killion, submitted the approved Technical Revision No. 1 (TR-1) (Attachment 1). TR-1 decreased the pond area from 6.5 acres to 4.5 acres at final reclamation. Additionally, TR-1 stated that any construction material stockpiled within the permit boundary would be considered reclamation backfill.

At this time, Phase 1 of the mine plan is complete. Currently, the pond is approximately, 3.5 acres. Approximately, 5.0 acres have been reclaimed in accordance with the approved reclamation plan. Approximately, 9,250 cy of topsoil mixed with fertilizer is located at the western edge of the site. Topsoil recycling, amending, and sales is an ongoing part of Bivens' business. Stabilization of the topsoil stockpiles is continual via mechanical means (i.e., grading, loading, hauling sales). Bivens maintains enough topsoil on site to complete

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**Colorado Office (Corporate)**

750 14<sup>th</sup> Street SW  
Loveland, Colorado 80537  
970-484-7704 / 970-484-7789 (FAX)

**Grand Junction**

751 Horizon Court, Suite 109  
Grand Junction, Colorado 81506  
970-697-1550

**New Mexico Office**

1303 Pope Street  
Silver City, New Mexico 88061  
575-538-5620 / 575-538-5625 (FAX)

reclamation at any time. Thus, Bivens believes that their operations stabilizes the stockpiles, and, due to operation and sales, commit to stabilizing these piles by sloping and seeding with annual grasses as recommended in the site inspection report (DRMS, 2020) if no commercial activities occur for a year.

Since taking over the permit in 2009, Bivens stabilized and revegetated the pond shorelines in accordance with the approved reclamation plan (Figure 2). The site inspection report describes the successful shoreline reclamation and revegetation:

*“During the inspection, the Division walked around the perimeter of the pond and observed its shorelines to be graded to 3H:1V or flatter and stable with good vegetative cover consisting of grasses and wetland vegetation (consisting primarily of cattails). Cobblestones have been placed along the pond slopes beneath the water line. Portions of the northwestern and eastern shorelines have been stabilized with boulders. Portions of the southern shoreline have been stabilized with cobblestones. No erosion problems were observed.” (DRMS, 2020).*

Bivens requests acceptance of this Technical Revision 2 (TR-2) to the approved mine plan, reclamation plan, and TR-1 as described in the next two sections.

### **Updated Mine Plan**

Bivens plans to continue mining the pit from Phase 1 (i.e., the existing pond) to the south and expanding the pond to its original mine plan surface area of 6.5 acres (Figure 3). The proposed mining to the south of the current pond is described as the Final Phase.

During the Final Phase, Bivens will screen and crush mined material in the processing area. Bivens will incorporate aggregate/construction materials recycling into the mined material processing as approved by their Larimer County special use permit (Attachment 2). Bivens will continue to use the eastern edge of the permit area as the processing and storage area for additional mined material, concrete and asphalt rubble, fill dirt, sand and rock (Figure 3). The area will cover approximately, 1.7-acres within the permit area. A portion of the mined, crushed and/or recycled material will be sold and hauled off site. Bivens estimates no more than, 28,000 cy of imported materials will be stored on site at a time, per TR-1. Bivens may backfill a part or all of the Final Phase pit with inert fill material as allowed in the current permit, but at no time will the surface area of open water exceed 6.5 acres.

Completion of mining the Final Phase will be congruous with construction material recycling operation until all material not needed for reclamation is sold and hauled off-site. At a minimum, Bivens will keep 1,050 cy of road base material onsite for reclamation of the 1.7 acres area. Stockpiled material, including concrete, asphalt, sand, fill dirt, topsoil, sand and rock will remain onsite and be considered as reclamation backfill material in the

event the financial warranty was forfeited, and the State had to complete reclamation to the site.

During the Final Phase of mining, additional salvaged topsoil will be stored with existing topsoil stockpiles to the land to west/southwest of the pond. Topsoil will continue to be stripped at an 8 to 12-inch depth. If topsoil stockpiles exist in a non-commercial state for more than one growing season, then they will be sloped to 3:1 V or flatter and seeded with a fast-growing vegetative cover, per the approved permit.

During the Final Phase, the residential area will remain at its current location at the southern end of the site (Figure 3). This area includes a residential house, garage, carport, chain-link fence, rock bins and stockpile materials. The residential area is part of the requested TR-2 as an approved PMLU (see next section).

The eastern edge of the existing pond will remain as recreational beach area (Figure 3). The recreational area includes a sandy beach, trees, a small dock, gravel boat ramp, a few small cabins, a fire pit, picnic area, a playground, wooden fencing, and artistic structures. The recreational area covers approximately, 0.3-acre. The recreational area is part of the requested TR-2 as an approved PMLU (see next section).

### ***Updated Post Mining Land Use and Reclamation Plan***

Reclamation will be continuous throughout the Final Phase mining process. As more shoreline is created and expanding of the pond progresses, topsoil will be replaced, at a depth of 12-inches, along banks. The topsoil will be seeded with the approved seed mix, as soon as practical (late fall or early spring). The banks will be graded a minimum 3H:1V slope from 5 feet above to 10 feet below expected water line. Shorelines and banks will be stabilized with boulders, cobblestones, and/or concrete riprap as needed to prevent erosion.

Bivens requests to reclaim the processing and recycling area as a RV parking/recreational area (Figure 4). This 1.3-acre area will be either covered with 6-inches of road base material that is stored on site (if a parking lot), or excavated for a water feature. If reclaimed as a parking lot, road base will be spread evenly and graded drain to the pond at an approximate 1% slope. All the road base material will come from existing material stockpiles onsite. At a minimum, 1,050 cy of road base material will be required to cover the parking lot and remain onsite to be used for this reclamation. If excavated for a water feature, Bivens will place the excavated inter material in the Final Phase mine pit.

The disturbed perimeter area, around the 1.3-acre parking lot or water feature, will be tilled, graded, retopsoiled at a depth of approximately, 12 inches, and revegetated with the approved reclamation grass seed mix (switchgrass, slender, wheatgrass, tall wheatgrass, alkali sacaton, yellow sweet clover) (Figure 4).

Bivens requests that the eastern edge of the pond remains as a recreational beach area covering approximately, 0.4 acres (Figure 4) as a PMLU. The recreational beach area will be expanded by 0.1-acre from its current size of 0.3-acre to 0.4-acre. The recreational beach area will remain graded to 5:1 V or flatter for pond access. Bivens also requests the updated reclamation plan includes leaving access roads around the property post mining (Figure 4). The access roads will be located at the southeastern edge of the property and continue around the reclaimed pond to the reclaimed parking lot. The access road widths will be no less than, 20-feet wide to allow two-way traffic. The access road will cover, approximately, 1.3-acres around the site and will require 1,050 cy of road base material to be placed at 6-inches of depth. At a minimum, this amount of road base material (in addition to the road base for the parking lot area) will be stored on site throughout the mining and reclamation process (for a total of 2,100 cy).

The final reclamation plan includes up to 6.5-acres of surface water being exposed (Figure 4). The pond will be used as water storage and recreational use. The current water-court approved augmentation plan covers the additional exposed groundwater in the pond. (Attachment 3). The area around the expanded pond will be reclaimed in accordance with the approved reclamation plan. The final reclamation plan includes the pond shorelines graded to 3H:1 V slope, stabilized, compacted and revegetated with the approved seeding, per approved permit. Shoreline stabilization will be completed as feasible after the final phase of mining.

In addition to the vegetation area around the pond, final reclamation includes revegetating the areas on both sides the access roads, the perimeter of the RV parking lot/water feature and recreational beach area, and the land around the residential area (Figure 4). The total revegetated area will cover approximately, 2.7-acres. Approximately 4,360 cy of topsoil will be required to cover the area with 12-inches of topsoil. The seeding process of the area will remain as described in the approved final reclamation plan.

Bivens will remove the truck scale and scale house at the end of operations. The area will be scarified, retopsoiled, and revegetated, per the approved permit.

Bivens requests the residential area and associated structures, located at the southern end of the site, remain following final reclamation (Figure 4) as an approved PMLU. The residential area and associated structures cover approximately, 0.5-acre.

## **Summary**

For TR-2, Bivens includes the following mine plan revisions:

- Continue mining the remaining mining phase (Final Phase)
- Process mined materials in conjunction with construction recycling

To: Amy Eschberger, DMRS

Date: 12/22/2020

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- Cessation of mining and processing operations indicates the end of mining

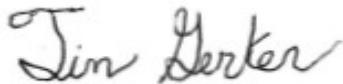
For TR-2, Bivens submits the following changes to the PMLU and reclamation plan:

- Include recreation and permanent residence as an approved PMLU
- 2.6 acres of road-base covered RV parking and access roads requiring 2,100 cy of road base
- 2.7 acres of revegetated lands surrounding the access roads and RV parking/water park
- Up to 6.5 acres of open water storage (pond) with slopes ranging from 5H:1V (recreation area) to 3H:1V for remaining areas

Thank you for your review of this Technical Revision to the Bivens Pit. Please contact us if you have any questions regarding these actions.

Sincerely,

***Telesto Solutions, Inc.***



Tim Gerken  
Staff Geologist

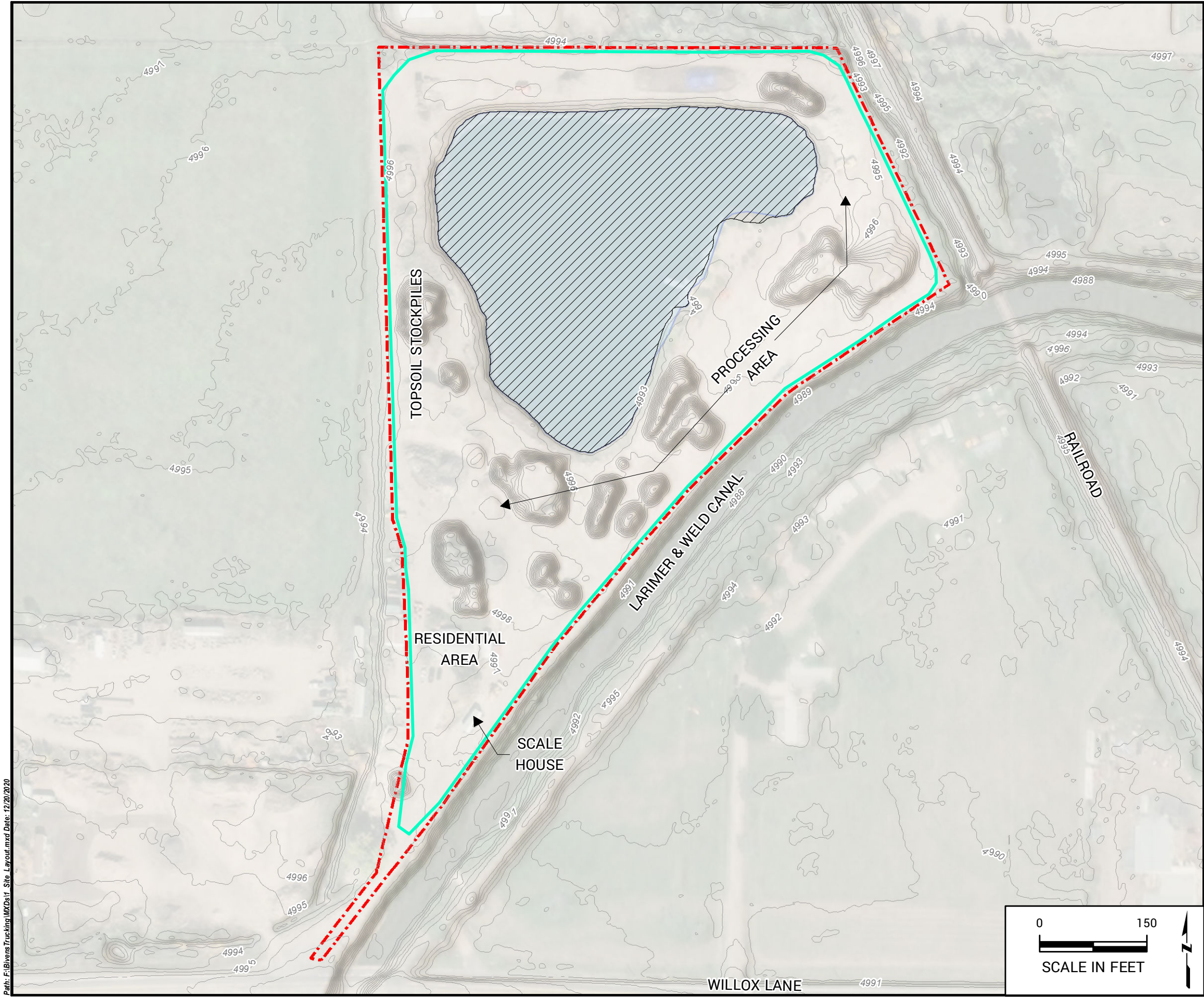
TJG:wln

Enclosure

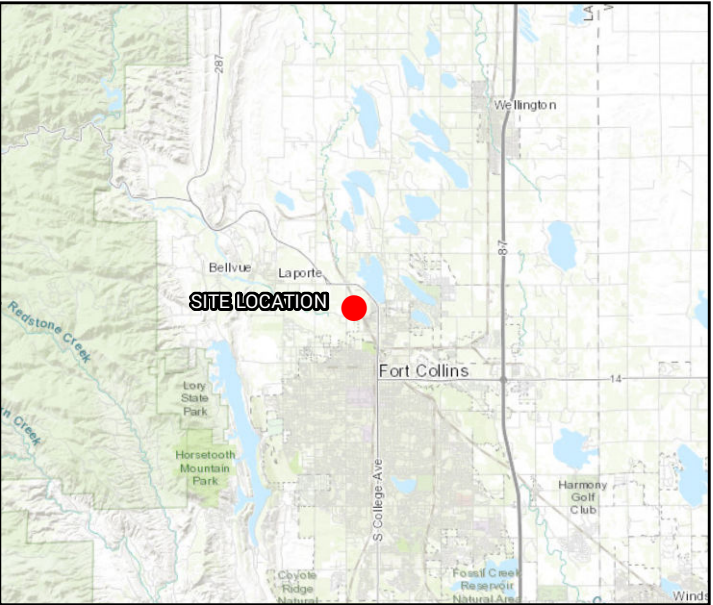
cc: Aaron Bivens, Bivens Trucking & Excavating, Inc.

## Figures





- LEGEND
- PERMITTED DISTURBANCE AREA, 11.1 ACRES
  - INITIAL MINING PHASE (RECLAIMED)
  - PERMIT BOUNDARY
  - ELEVATION CONTOUR (FEET) 1' INTERVALS



Coordinate System: NAD 1983 StatePlane Colorado North FIPS 0501 Feet

FIGURE 1  
SITE LAYOUT

862 W WILLOX LANE  
FORT COLLINS, COLORADO

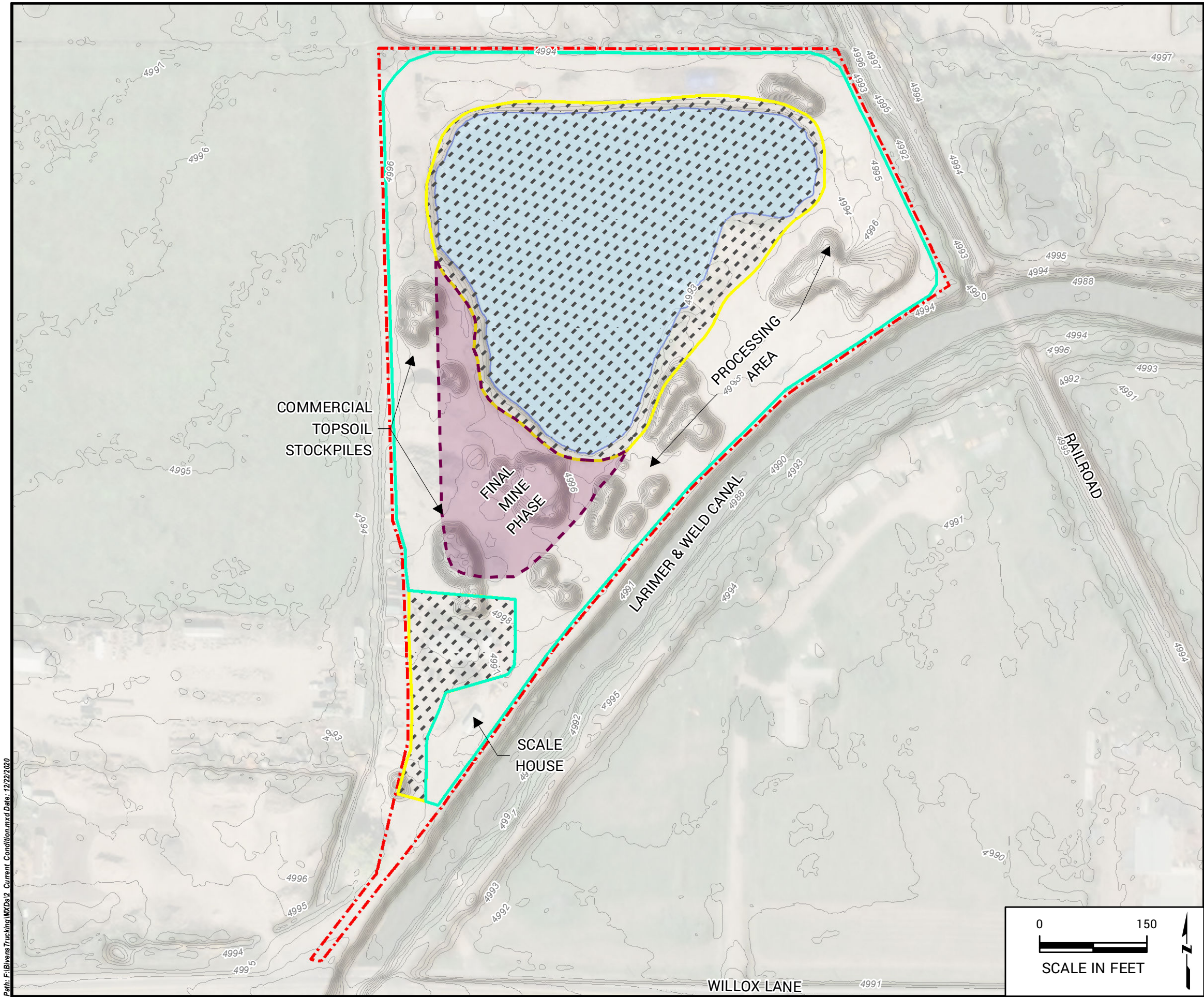
PREPARED BY:

**TELESTO**  
SOLUTIONS INCORPORATED  
Loveland, Colorado (970) 484-7704  
www.teleso-inc.com

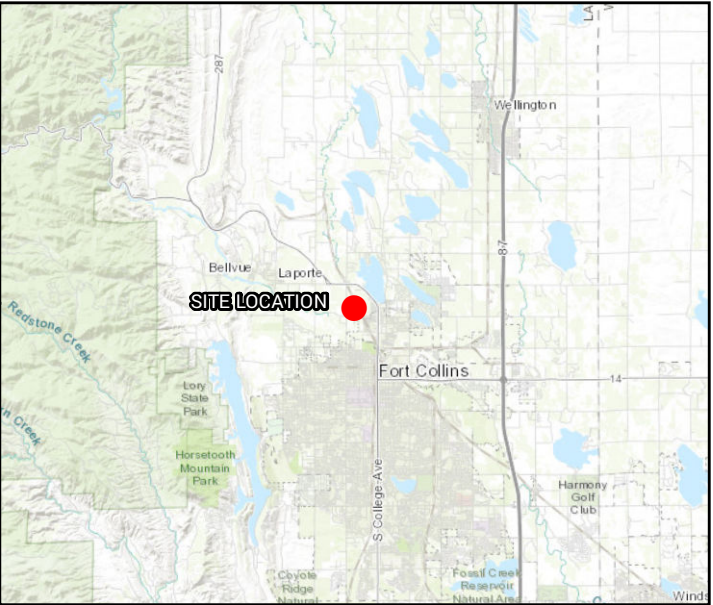
PREPARED FOR:

**BIVENS TRUCKING &  
EXCAVATING, INC.**





- LEGEND
- RECLAIMED AREA, 5.0 ACRES
  - PERMITTED DISTURBANCE AREA, 10.6 ACRES
  - PERMIT BOUNDARY
  - ELEVATION CONTOUR (FEET) 1' INTERVALS



Coordinate System: NAD 1983 StatePlane Colorado North FIPS 0501 Feet

FIGURE 2  
CURRENT CONDITION

862 W WILLOX LANE  
FORT COLLINS, COLORADO

PREPARED BY:

**TELESTO**  
SOLUTIONS INCORPORATED  
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www.teleso-inc.com

PREPARED FOR:

**BIVENS TRUCKING &  
EXCAVATING, INC.**



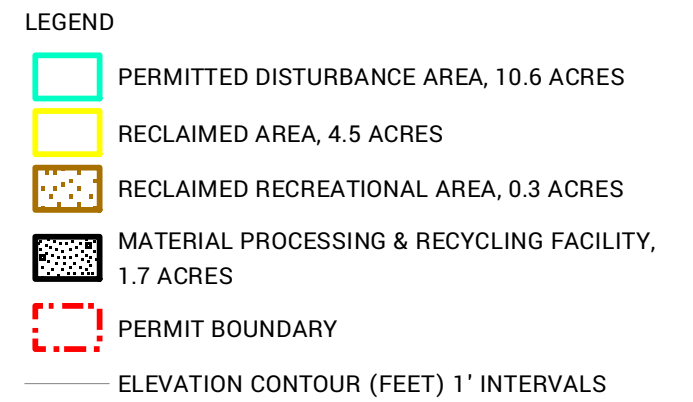


FIGURE 3  
UPDATED MINE PLAN  
862 W WILLOX LANE  
FORT COLLINS, COLORADO

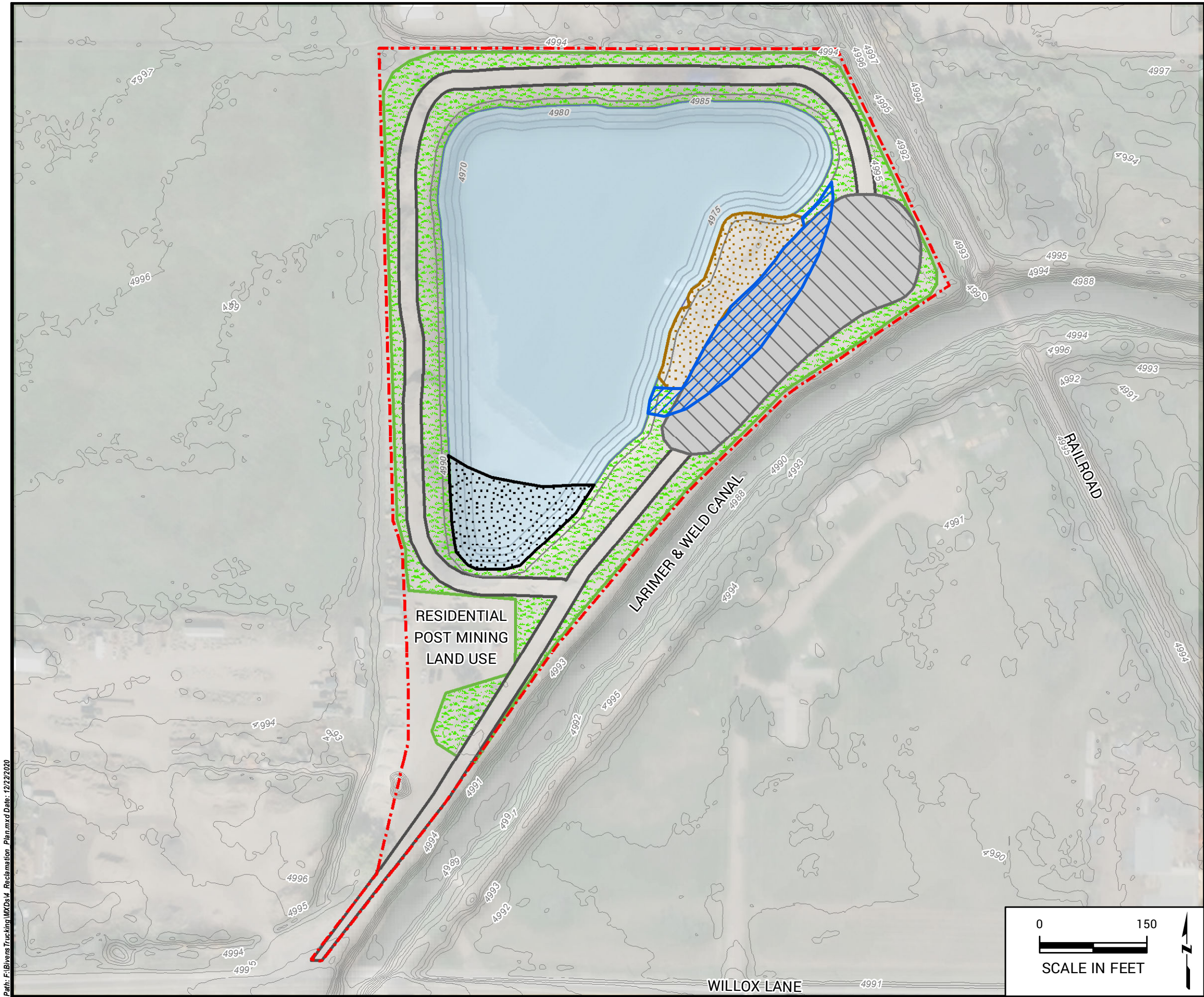
PREPARED BY:



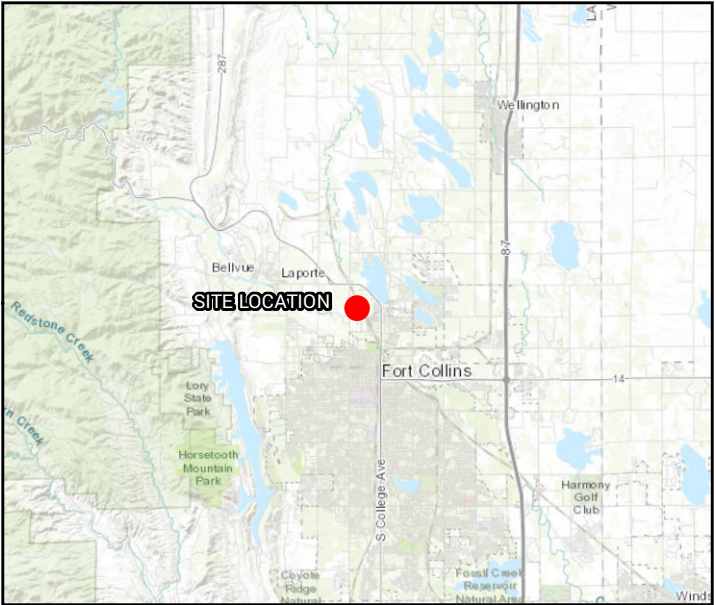
PREPARED FOR:

**BIVENS TRUCKING &  
EXCAVATING, INC.**





- LEGEND
- RECLAIMED WATERBODY, 4.9 ACRES
  - REVEGETATION AREA, 2.7 ACRES
  - RECLAIMED RECREATIONAL AREA, 0.4 ACRES
  - RECLAIMED PARKING LOT, 1.3 ACRES
  - ROAD, 1.3 ACRES
  - POTENTIAL WATER FEATURE
  - POTENTIAL INERT BACKFILL AS OFFSET BY POTENTIAL WATER FEATURE
  - PERMIT BOUNDARY
  - ELEVATION CONTOUR (FEET) 1' INTERVALS



Coordinate System: NAD 1983 StatePlane Colorado North FIPS 0501 Feet

FIGURE 4  
POST MINING LAND USE & RECLAMATION PLAN

862 W WILLOX LANE  
FORT COLLINS, COLORADO

PREPARED BY:

**TELESTO**  
SOLUTIONS INCORPORATED  
Loveland, Colorado (970) 484-7704  
www.teleso-inc.com

PREPARED FOR:

**BIVENS TRUCKING &  
EXCAVATING, INC.**



To: Amy Eschberger, DMRS

Date: 12/22/2020

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## **Attachment 1**

### **Technical Revision 1**

Permit #: M-1985-184 Confidential?: N  
Class: TR-01 Type-Seq.: \_\_\_\_\_  
From: Killion Enterprises To: DMG  
Doc. Name: Additional Info. + Extend Deadline  
Doc. Date (if no date stamp): 10-31-03 Date



862 W. Willox Ln.  
Fort Collins, CO 80524  
Phone: 970-482-0358  
Fax: 970-221-1626

October 29, 2003

Colorado Division of Minerals and Geology  
Department of Natural Resources  
1313 Sherman Street, Room 215  
Denver, CO 80203-2273  
ATTN: Erica S. Crosby

**RECEIVED**

**OCT 31 2003**

*Division of Minerals and Geology*

*RE: Reclamation Plan Revision*  
Permit No. M-1985-184

Dear Erica,

We are submitting the reclamation plan revision for your review. Please extend our deadline to November 14, 2003 to allow enough time for processing.

Thank You,

A handwritten signature in cursive script that reads "Jamie Killion".

Jamie Killion  
Enclosure (1)

AMENDMENTS AND ADDITIONS TO EXISTING RECLAMATION PLAN  
M-1985-184  
KILLION

-The surface water area will be approximately 4.5 acres at final reclamation.

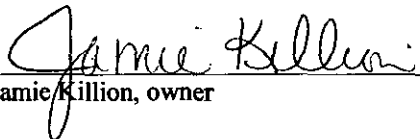
-In addition to mining, the land is used to store and process concrete and asphalt rubble, fill dirt, and topsoil. This material is brought onsite by contractors from different excavation sites in or around Fort Collins. Wood is not accepted and metal is accepted only in wire form and in small amounts.

-The amounts of materials on site average as such:

concrete rubble:	12,000 yd
asphalt rubble:	3,000 yd
processed concrete/asphalt:	4,000 yd
fill dirt:	3,000 yd
topsoil:	6,000 yd

-Unprocessed concrete and asphalt will make acceptable fill materials for the reclamation process including the stabilization of the shorelines and fill. Processed concrete and asphalt is 1" base course and 1.5" rock, both of which can be used for fill materials. The fill dirt and topsoil would then be placed over the rubble or base course and rock for finishing.

-Based on the average amounts, all of the onsite material can be used for reclamation. In the event that there is an excess of material after reclamation is complete Larimer/Weld Irrigation Company that manages the Eaton Ditch has asked that any extra concrete or asphalt rubble be placed against the banks of the ditch for erosion control. Any excess base course or rock can be sold for \$5.00 - \$7.00 per ton.

  
\_\_\_\_\_  
Jamie Killion, owner

10/28/03  
Date

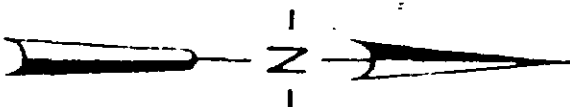
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# PERMIT AREA

15 2

CENTER SW 1/4

SEC. 35

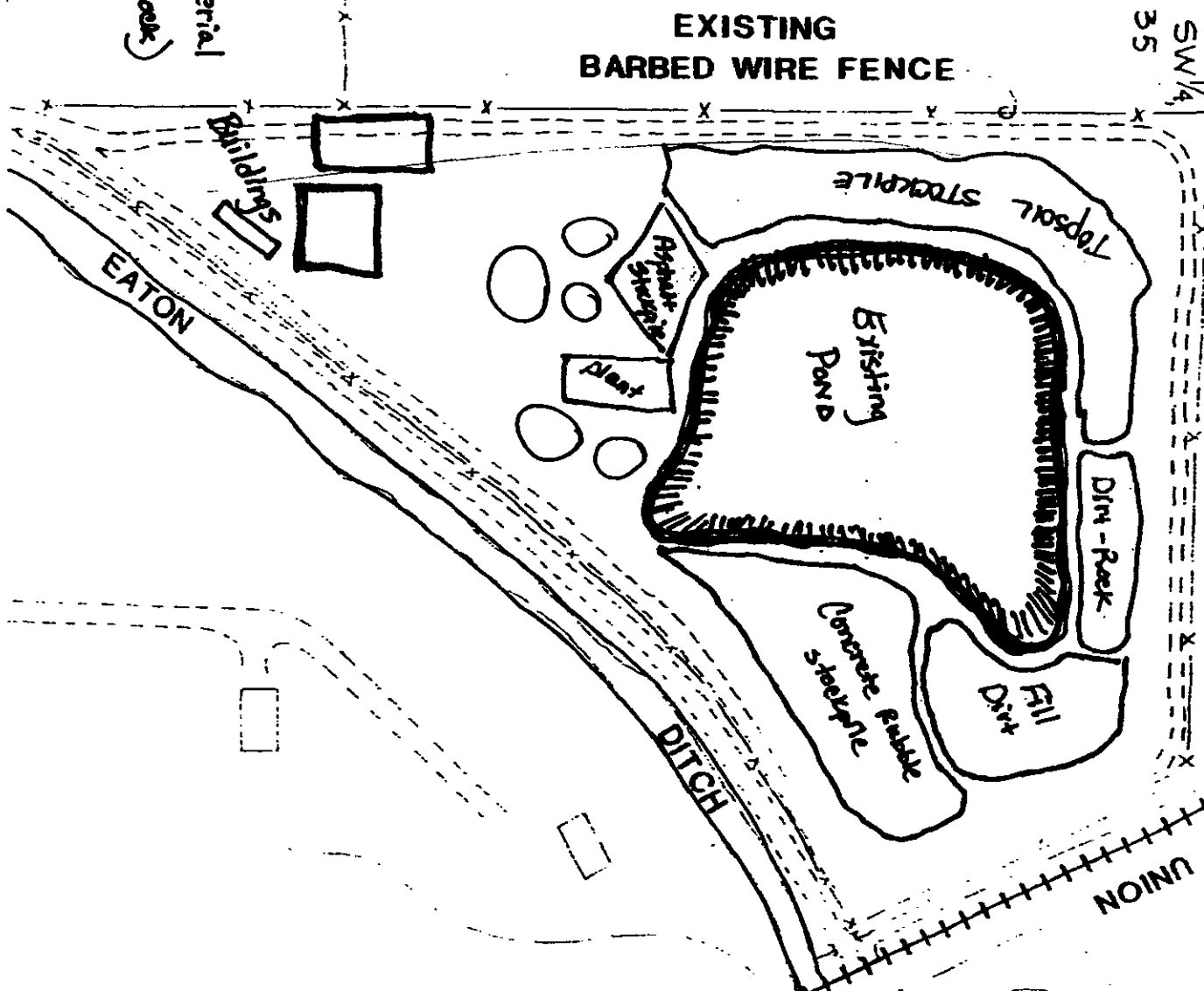


## RECLAMATION PLAN

(Existing Layout)

10/28/03

○ = processed material  
(Base Course & Rock)





# PERMIT AREA

1500

4995

CENTER SW 1/4,  
SEC. 35

EXISTING  
BARBED WIRE FENCE

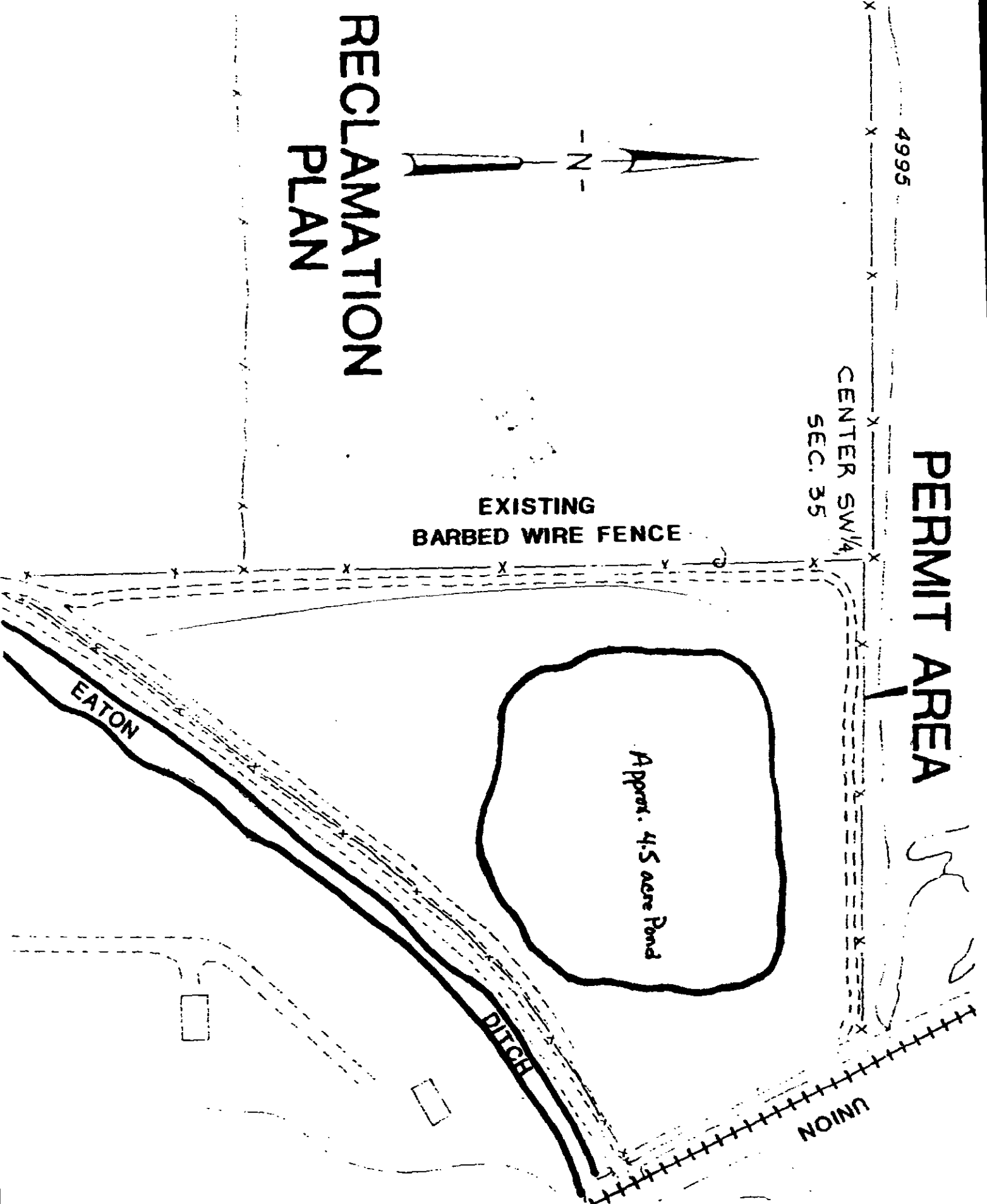
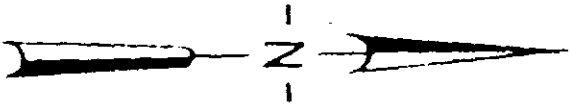
Approx. 4.5 acre Pond

DITCH

EATON

UNION

## RECLAMATION PLAN



To: Amy Eschberger, DMRS

Date: 12/22/2020

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## **Attachment 2**

### **Larimer County Use by Special Review Material Recycling**

2. NAUTA PIT NO. 2 SPECIAL REVIEW:

Staff Findings include that the proposed use complies with the intent and purposes of the Comprehensive Zoning Resolution and Comprehensive Plan; the proposed use is compatible with surrounding land uses and should have no significant impact on surrounding properties or land values in the neighborhood, and the proposal would not impair the public health, welfare, prosperity, or safety by creating undesirable traffic congestion, unsanitary conditions, overburdening of utilities or adverse environmental influences in the area. The recommendation of the Planning Commission/Department is approval of the Special Review and the "Public Street Capacity" waiver with the following conditions: (1) development and operation of the site to be consistent with the plans as submitted; (2) verification from the Larimer/Weld Ditch Company that they have no objections to the mining plan or to the discharge of water into the ditch; (3) haul trucks are to use only the roads indicated in the application, and (4) crusher would only be operated from 7:00 a.m. to 6:00 p.m., Monday through Friday.

3. JONES/VIKING FARMS EXEMPTION:

Staff Findings include that the Jones/Viking Farms Exemption was approved October 15, 1985, with the condition that an Ownership Certificate be received from the owner of Tract 3 indicating consent to the land division; applicants request that the Ownership Certificate requirement be removed, because the owners of Tract 3 are unwilling to execute a consent agreement, and the Assistant County Attorney states no objection to the condition being removed, as owners of Tract 3 would have little equitable grounds for objection to the County's action. The recommendation of the Planning Department is approval of the request to amend conditions of approval of the Jones/Viking Farm Exemption, by removing the condition that an Ownership Certificate be received from the owner of Tract 3.

M O T I O N

Commissioner Klason moved that the Board adopt the Staff Findings and approve Nauta Pit No. 1 Special Review; Nauta Pit No. 2 Special Review and Jones/Viking Farms Exemption, with the conditions outlined for each.

Motion carried 3-0.

4. HANSEN SPECIAL REVIEW:

Jerry White explained that the request is for special review to operate a grayhound breeding kennel on 10.13 acres zoned RE-Rural Estate. The proposal was originally for 50 animals and has been amended to 100. Staff Findings include that the proposed use complies with the intent and purposes of the Comprehensive Plan and Zoning Resolution; if operated and maintained properly, the kennel will have no significant impact on surrounding land uses

OVER  
→

Library of Congress  
Herby certifying t  
of the Proceedin

(S L E L)

Mary R. Bloom  
Clerk to the Board

To: Amy Eschberger, DMRS

Date: 12/22/2020

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## **Attachment 3**

### **Approved Augmentation Plan**

# CENTRAL FILES

RECEIVED

JUL 1 - '92

DISTRICT COURT, WATER DIVISION I, STATE OF COLORADO

Case No: 90-CW-129  
(W-7813-74)

## DECREE OF THE WATER COURT APPROVING PLAN FOR AUGMENTATION

CONCERNING THE APPLICATION FOR APPROVAL OF PLAN FOR AUGMENTATION  
OF:

CHARLES R. and CONNIE L. NAUTA in LARIMER COUNTY

THIS MATTER came on to be heard upon the Application of Charles R. Nauta and Connie L. Nauta for Approval of Plan for Augmentation filed in this Court on July 9, 1990. The Applicants appeared by and through their attorney, John E. Reid of NELSON, REID & SCHWARTZ. The Court being fully advised in the premises, does hereby find:

All notices required by law of the filing of this application have been fulfilled, and the Court has jurisdiction over this application.

The time for filing statements of opposition expired September 30, 1990. One statement of opposition to said application was filed by the Central Colorado Water Conservancy District and the Ground Water Management Subdistrict of the Central Colorado Water Conservancy District.

The Findings and Ruling of the Referee, Raymond S. Liesman, were entered August 12, 1991, are generally embodied herein with some modification, and to the extent not so modified are confirmed and approved. Protest to the original Findings and Rulings of the Referee was filed by the State Engineer and the Division Engineer for Water Division No. 1.

All matters contained in the application having been reviewed, and testimony having been taken where such testimony is necessary, and such corrections and modifications made as are indicated by the evidence presented herein, IT IS HEREBY THE JUDGMENT AND DECREE OF THIS COURT:

1. The name, address and telephone number of the applicants:

Charles R. Nauta and Connie L. Nauta  
832 Wood Street  
Fort Collins, Colorado 80521  
303-482-9537

# CENTRAL FILES

2. The name and location of the structure augmented:

Nauta Pit #2, a sand and gravel mining operation located in the SE-1/4 of the SW-1/4 of Section 35, Township 8 North, Range 69 West of the 6th P.M. on a tract of land westerly of the Union Pacific right of way and northerly of the Eaton Ditch, Larimer County, Colorado. The center of the pit to be at a point approximately 1000 feet North and 1600 feet East of the SE Corner, Section 35.

There are no other water rights diverted from this structure.

3. Previous decrees for water rights used for augmentation:

- A. Date entered: February 6, 1979
- B. Case No.: W-7813-74
- C. Court: District Court, Water Division I
- D. Legal Description of points of diversion: SE-1/4 of SW-1/4 of Section 2, and N-1/2 of NE-1/4 of NW-1/4 of Section 11, Township 7 North, Range 69 West of the 6th P.M., Larimer County, Colorado
- E. Source: Salvage Water from Griffin Drain and Nauta Drain
- F. Amount: Griffin Drain 0.30 cfs; Nauta Drain 0.13 cfs
- G. Appropriation: Griffin Drain August 15, 1914; Nauta Drain June 1, 1964.
- H. Decreed use: Griffin Drain and Nauta Drain for irrigation of 40 acres to east of points of diversion and evaporation replacement.

4. Historic Use: Both the Griffin Drain water and the Nauta Drain water were historically used for the irrigation of 40 acres of alfalfa-grass hay meadows in the SE1SW1 and SW1SE1 of Section 2, Township 7 North, Range 69 West of the 6th P.M., Larimer County, Colorado, comprising 53 acre feet of water. Affidavits verifying actual diversion of the water emanating from these drain tiles for irrigation of said lands are of record in Case No. W-7813-74 in this Court and by this reference are incorporated herein.

5. Statement of Plan for Augmentation: Applicants shall provide replacement water from the adjudicated irrigation and evaporation replacement rights sufficient to augment any

stream depletion and return flow adversely affected by the mining operation conducted by applicant. Three sources of water consumption are associated with this mining operation: moisture loss in materials removed, dust suppression, and lake evaporation.

#### Moisture Loss In Materials

A maximum of 30,000 tons of material will be mined per year. At an average moisture content of four percent, 0.88 acre feet of water is required to augment this loss.

#### Dust Control

Applicant proposes to apply 1/8 inch of water three times per day for fifty days per year to control dust on the 1,500 linear feet of unpaved haul road on the premises. This equates to 1.08 acre feet of water per year.

#### Lake Evaporation

Area of Water Surface Left By Mining: 6.05 acres  
Gross Annual Lake Evaporation: 38.50 inches/year  
Net Annual Precipitation: 14.47 inches/year  
Effective Precipitation: 11.38 inches/year  
Net Annual Lake Evaporation: 27.12 inches/year  
Annual Lake Evaporation: 14.69 acre feet

#### Historic Consumptive Use

Wet Meadow - 5.60 acres x 27.4 inches	12.79 acre feet
Pasture Grass - 0.90 acres x 20.4 inches	1.53 acre feet
Gross Consumptive Use	14.32 acre feet
Less Effective Precipitation	6.16 acre feet
Net Consumptive Use	8.16 acre feet
Evaporation Replacement Required	6.53 acre feet

Of the 53 acre feet previously allotted for irrigation, it is assumed that fifty percent would be consumptively used leaving 26.50 acre feet for augmentation.

A maximum of 8.49 acre feet of augmentation per year will be required during active mining operations:

Moisture Loss	0.88
Dust Control	1.08
Lake Evaporation	14.69
Less Historic Consumptive Use	(8.16)
Augmentation Required	8.49



After mining is completed, an annual average of 6.53 acre feet of augmentation will be required.

6. Conditions of Approval:

- a) Augmentation shall be accomplished by adjusting the volume of replacement water on a monthly basis in relation to the actual consumption generated by the mining operation.
- b) The actual amount of replacement water to be provided by Applicants for moisture loss in materials shall be based on the actual volume of material mined on a monthly basis to be released during the next succeeding month.
- c) Replacement water to be provided for dust control shall be provided by Applicants on the days water is applied on Applicants premises for such purpose and shall be released in accordance with the chart appended hereto and by reference incorporated herein.
- d) Replacement water to be provided for lake evaporation shall be provided by Applicants on a monthly basis in proportion to the average monthly evaporation percentage as set forth in the chart appended hereto.
- e) Replacement water from the drains shall be deposited in the Nauta Storage Reservoir through which it shall pass prior to release to the Poudre River. Releases of replacement water shall be made from the Nauta Storage Reservoir to the Poudre River and shall be regulated by the Water Commissioner. Releases shall be monitored by flow measurement of the wasteway ditch that runs from the northeast corner of the Nauta Storage Reservoir to the Poudre River. Applicants shall receive a credit of fifty percent for all water delivered through the reservoir from the drains.
- f) Applicants shall maintain a monthly tabulation sheet setting forth the actual monthly data set forth in the chart appended hereto which shall include a report of the

actual amount of replacement water released in compliance with the terms and conditions of this agreement. Applicants shall operate the plan of augmentation so as to insure there is no deficit in the amount of replacement water.

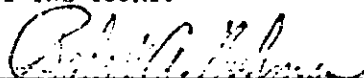
- g) Any further irrigation of lands historically irrigated by water from the Griffin Drain and the Nauta Drain shall be permanently curtailed.
  - h) The applicant shall install and maintain such measuring devices and maintain and provide such records as the Division Engineer may require for administration of this right.
- 7. The aforesaid terms and conditions are adequate to prevent injury to the owner of or persons entitled to use water under any vested water right or any decreed conditional water right.
  - 8. Applicants have applied for a well permit for the subject augmented premises which is now pending with the Office of the State Engineer. More than six months have elapsed since Applicants submitted said well permit application.
  - 9. Any change of water rights embodied in this augmentation plan from that set forth in the decree identified in paragraph 3 above will not injuriously affect the owner of or persons entitled to use water under any vested water right or any decreed conditional water right for the reason that all said established water rights have previously been adjudicated as salvage water indigenous to Larimer County, Colorado, and in administering this Ruling, the State Engineer shall be guided by the fact that a call to stop the diverting of water would not result in additional water reaching a natural stream.
  - 10. This plan of augmentation shall be subject to reconsideration by the water judge on the question of injury to the vested rights of others for a period of 5 years after Nauta Pit #2 is completed pursuant to CRS 37-92-304(6).
  - 11. This plan of augmentation meets all applicable requirements of C. R. S. Sections 37-92-103(9), 302(1)(2) and 305(8).

IT IS ORDERED that the foregoing plan of augmentation is approved subject to the terms and conditions set forth above.

MAY 23 1992

DATED: \_\_\_\_\_, 1992.

BY THE COURT:



ROBERT A. BEHRMAN  
Water Judge  
Water Division No. 1  
State of Colorado



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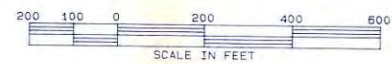
PRESENT CONDITIONS  
(OCT. 1, 1987)

Best Copy Available



HISTORIC CONDITIONS  
(MAY 15, 1972)

Best Copy Available



LEGEND

- PERMIT BOUNDARY OF PIT #1
- BOUNDARY FOR HISTORICALLY IRRIGATED PROPERTY

NOTES:

- 1. AERIAL PHOTOS OBTAINED FROM COLORADO AERIAL PHOTO SERVICE.

Best Copy Available

Best Copy Available

Best Copy Available

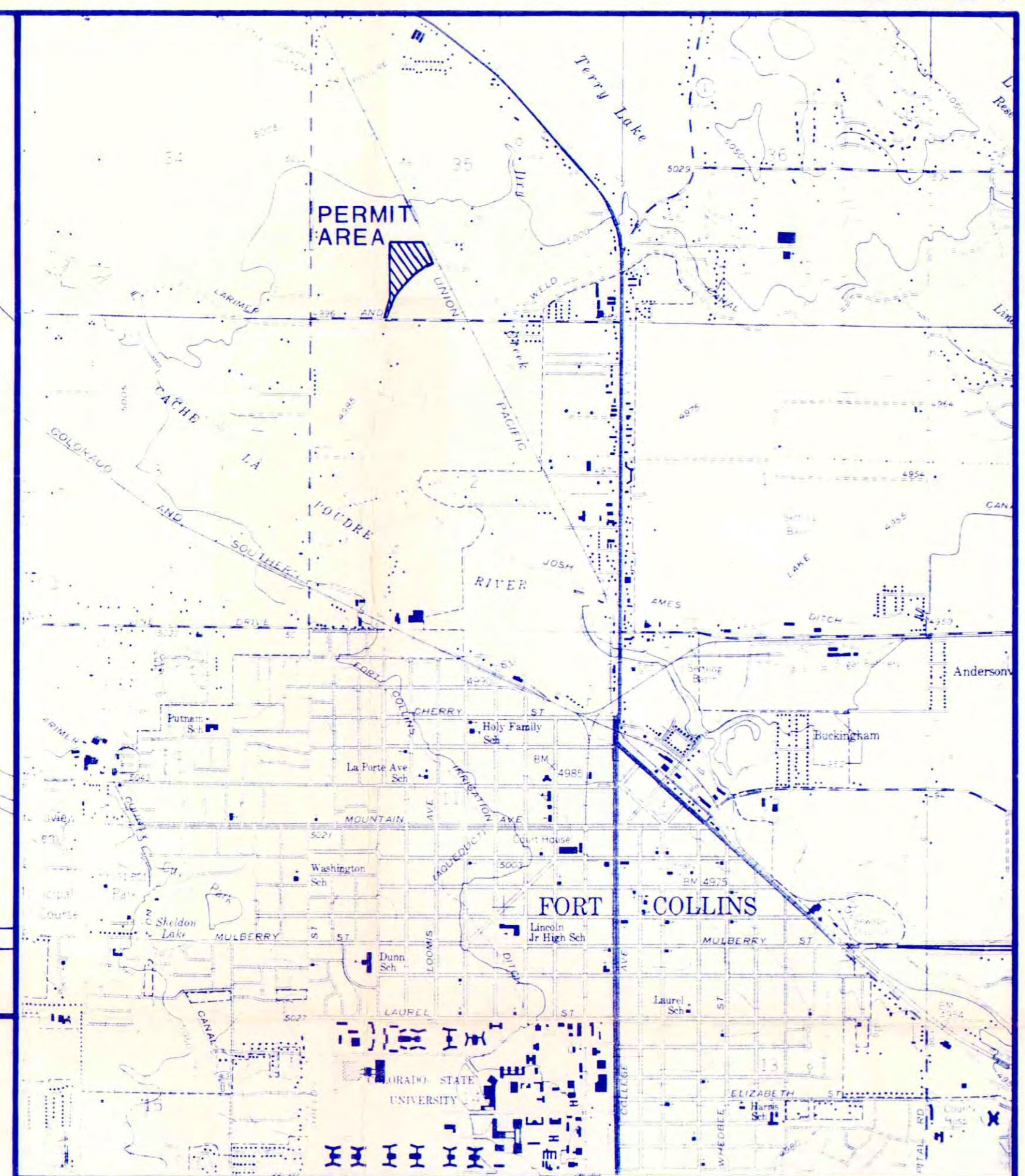
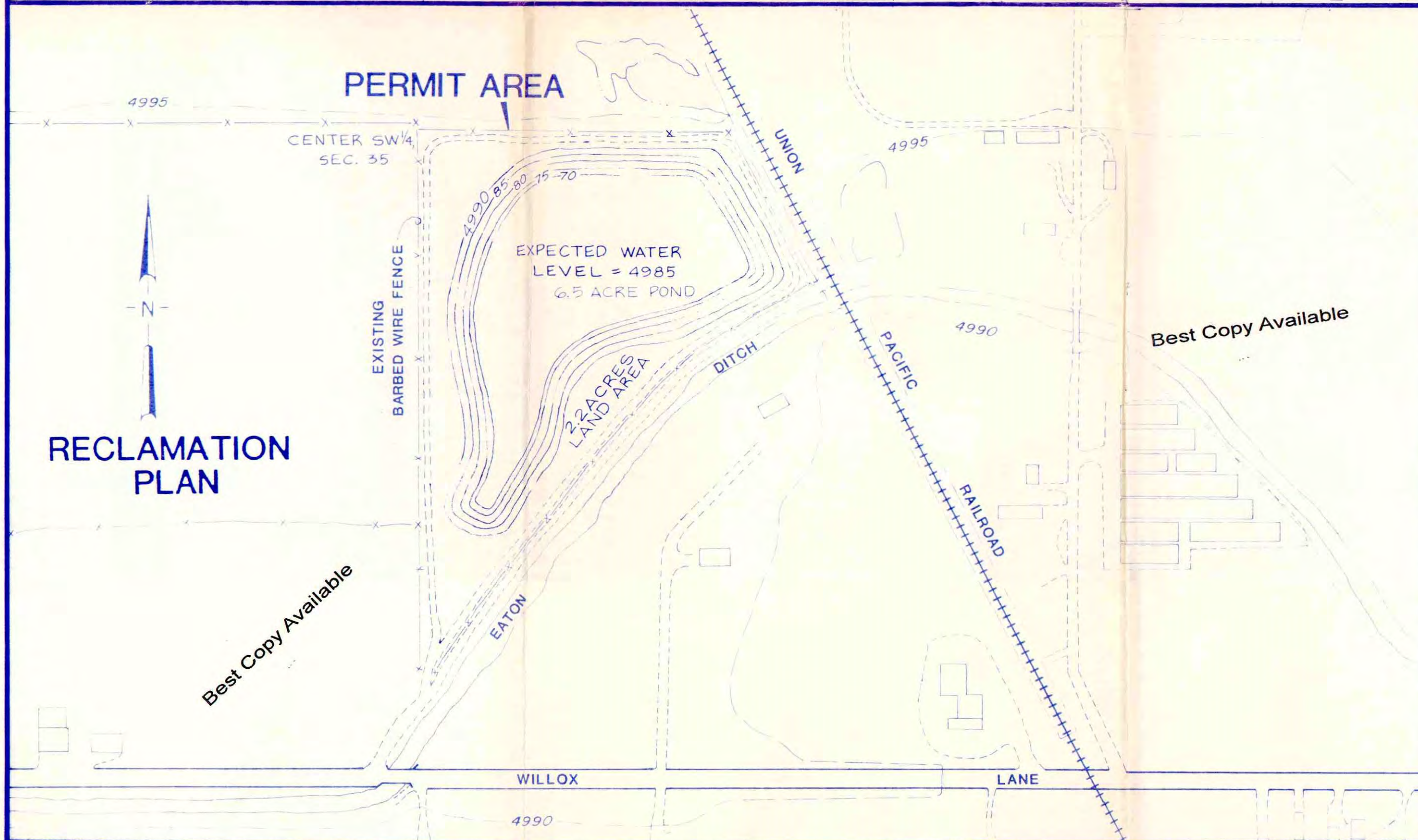
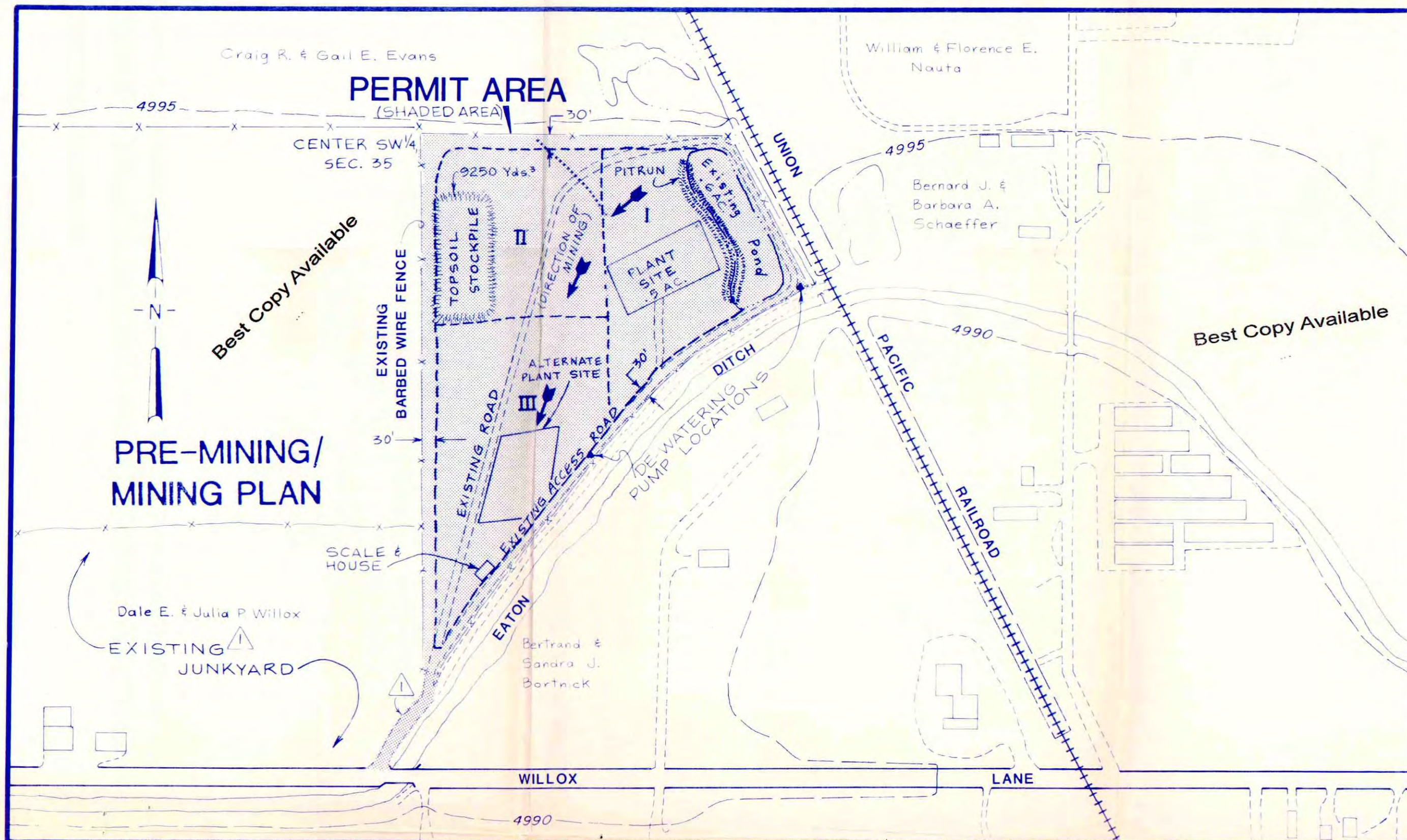
JUN 27 1990

**CHARLES R. NAUTA PROPERTY  
AUGMENTATION PLAN  
FOR PIT #2**

	TUTTLE APPLGATE RINDAHL, INC.		DATE: 2-29-88	SCALE: 1" = 200'
	Consultants for Land and Resource Development		JOB NO: 88-0806	
	11990 Grant Street, Suite 410		DRAWN BY: SJA	SHEET 1
	Denver, Colorado 80233		CHECKED BY: CMA	OF

(303)452-6611





SCALE: 1"=2000'

**VICINITY MAP**

**LEGAL DESCRIPTION**

A PORTION OF LAND IN THE SE 1/4 SW 1/4 OF SEC. 35 LYING WESTERLY OF UNION PACIFIC R.O.W. AND NORTHERLY OF EATON DITCH, T8N, R69W OF THE 6th P.M., LARIMER COUNTY, COLORADO.

SCALE 1"=200'

200 100 0 200 Feet

JUN 27 1990

CONTOUR INTERVAL= 5 FT.

1-10 Add "junk yard" note  
Add road into permit Area  
Add Adj. Landowners  
REVISIONS

**CHARLES NAUTA  
PIT #2  
PRE-MINING, MINING, & RECL. PLANS**

	TUTTLE, APPLGATE, RINDAHL, INC.		DATE 9-11-85	JOB NO. 85-0806
	11990 GRANT STREET SUITE 410 DENVER, COLORADO (303)452-6611 80233		DRAWN BY RJA	CHECKED BY HCH
SHEET 1 OF 1		SCALE AS SHOWN SHEETS		