

STATE MINE INSPECTOR

MAR 14 2023

RECLAMATION AND CLOSURE PLAN

TRI COUNTY MATERIALS, INC.

DOS CONDADOS MATERIAL SOURCE

**SUBMITTED TO THE STATE MINE
INSPECTOR'S OFFICE FOR REVIEW AND
APPROVAL IN ACCORDANCE WITH
ARIZONA REVISED STATUTE
TITLE 27 - CHAPTER 6
STATE MINE INSPECTOR AGGREGATE
MINED LAND RECLAMATION**

MARCH 2023

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1.0 ADMINISTRATIVE INFORMATION

Company: Tri County Materials, Inc.

Contact: Peter Vlassis
Tri County Materials, Inc.
3215 S Hwy 191
Safford, AZ 85548
(Office) 928-428-1371

Applicant: Peter Vlassis
Tri County Materials, Inc.
3215 S Hwy 191
Safford, AZ 85548
(Office) 928-428-1371

Permit
Technical
Consultant: Jill Himes, Himes Consulting LLC
3301 West Genoa Way
Chandler, AZ 85226
(480) 899-5708 (office)
(602) 499-9253 (cell)
jillhimes@cox.net

Landowner: Tri County Materials, Inc.
3215 S Hwy 191
Safford, AZ 85548
(Office) 928-428-1371

Parcel No: 103-20-008A

Operator: Tri County Materials, Inc.

2.0 INTRODUCTION

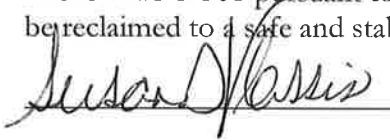
2.1 PURPOSE AND SCOPE

Tri County Materials, Inc. proposes to continue to conduct aggregate mining and processing at their property south of Solomon in Graham County, Arizona. The Dos Condados Material Source is an existing aggregate mine located within Section 25, Township 7 South, Range 26 East, Gila and Salt River Meridian, Graham County, Arizona.

The purpose of this Mine Reclamation and Closure Plan (MRCP) is to present the details of rehabilitation of the Dos Condados Material Source in Graham County, Arizona concurrent with or after mining operations have ceased in accordance with the Arizona Aggregate Mined Lands Act (AAMLRA) (Arizona Revised Statutes[A.R.S.] § 27-1201 as authorized by A.R.S. § 27-1204. This plan has been developed pursuant to the format and content prescribed in the Arizona Aggregate Mined Lands Reclamation Rules (Arizona Administrative Code {A.A.C}, R11-3-101, et seq.). The MRCP addresses environmental, technical and operational issues that are identified in those documents.

2.2 RECLAMATION STATEMENT OF RESPONSIBILITY

Tri County Materials, Inc. assumes responsibility for the reclamation of surface disturbances that are attributable to the aggregate mining unit consistent with A.R.S. §. 27-1201 and A.C.C. R11-3-501 pursuant to that chapter. All areas that have been disturbed at the site will be reclaimed to a safe and stable condition when mine operations conclude.



3-8-23

Signature

Date

President

Title

2.3 RECLAMATION APPROACH

Tri County Materials, Inc. will reclaim areas surrounding and within the excavated areas necessary to accomplish the post-mining land use of open space. The goals of the mine plan and reclamation measures are to provide for a safe, stable, and sustainable site once mining has ceased. Reclamation will take place concurrently to the degree possible, but no later than the cessation of mining activities.

2.4 CURRENT OWNERSHIP AND LAND USE INCLUDED IN THE AGGREGATE MINING UNIT

Tri County Materials, Inc. is conducting aggregate mining and processing operations for commercial use at the Dos Condados Material Source. The site boundary consists of 53.1 acres, and includes disturbed and undisturbed areas as shown in Table 1 below, and in Figure 3. The extraction/processing operation consists of mining to remove aggregate material as described in A.R.S. § 27-441. At the Dos Condados Material Source, material is simply excavated and hauled offsite for processing. There is no other processing or handling at the site proposed. Operations include excavation, stockpiling, loading, and hauling. Access is from the existing Dos Condados Road. Land use is currently open space and mining. Tri County Materials, Inc. has estimated the removal of up to 2.957 million cubic yards over a period of 30 years.

The project vicinity lies within the Arizona upland subdivision of the Sonoran Desertscrub vegetation community as described by Brown (1994). Vegetation is characterized by creosotebush flats (*Larrea tridentata*) and snakeweed (*Gutierrezia sarothrae*), with some catclaw acacia (*Acacia greggii*), mesquite (*Prosopis juliflora*), Mormon tea (*Ephedra* sp.), staghorn cholla (*Opuntia versicolor*), barrel cactus (*Ferocactus wislizeni*), and prickly pear cactus (*Opuntia* sp.), with a grass understory.

The project site is located within the Arizona Game and Fish Department's Game Management Unit 28 in the Tucson Regional District. This unit is managed for bighorn sheep, black bear, javelina, mule deer, white-tailed deer, elk, sandhill crane, cottontail rabbit, dove, and quail. Wildlife and/or wildlife sign observed in the project vicinity include mourning dove (*Zenaidura macroura*), common crow (*Corvus corax*), cactus wren (*Campylorhynchus brunneicapillus*), black-tailed jackrabbit (*Lepus californicus*), and desert cottontail (*Sylvilagus auduboni*).

Table 1
Existing Surface Disturbance

Feature	Acres
Access Road	0.6
Mining	10.6
Undisturbed	41.9
Total	53.1

2.5 PROPOSED POST-AGGREGATE MINING LAND USE

Proposed post-aggregate mining land use of the site is open space. Current nearby use is open space, mining and grazing.

2.6 DESCRIPTION OF THE AGGREGATE MINING UNIT AND PROPOSED SURFACE DISTURBANCES

Currently the site includes a small material source and Dos Condados access road. Proposed surface disturbances include increasing the aggregate mining to a final disturbance of approximately 51.1 acres. The mining areas will extend to the east and north over the life of the mine, as shown in Figure 4, with 3:1 slopes incorporated into their mining plan. Stockpiles will occur in the area of immediate mining. Eventually, Dos Condados Road will be relocated to the west to allow full mine development. Proposed surface disturbances are shown in Table 2 below.

Table 2
Proposed Final Surface Disturbance

Feature	Acres
Mining Area	51.1
Access Road	2.0
Total	53.1

2.7 EXISTING AND PROPOSED FINAL TOPOGRAPHY

Existing topography and survey information is provided in Figure 3 attached. Existing elevations range from approximately 3,000 ft above mean sea level (msl) in the northern portion of the site to a peak of 3,070 ft above msl in the existing pit area. Proposed final elevations are shown in Figure 4 attached. Proposed final topography of the slopes will have an overall 3:1 slope to provide a safe slope at the end of mine life. The mining plan will not result in the development of a pit, but will meet existing ground elevations to the north.

2.8 A NARRATIVE DESCRIPTION OF ROADS

Existing roadways include Dos Condados Road, a private road to access the parcel. Over time, this access road will be re-rerouted the west to allow bypass of the material source. Existing access roads are shown in Figures 3 with the re-route of Dos Condados Road shown in 4.

2.9 ACREAGE AFFECTED BY EACH TYPE OF SURFACE DISTURBANCE

Area Descriptions:

2.9.1 Mining Area

Aggregate mining at this site would impact approximately 40.5 acres of undisturbed area. As this site rises to the south-southwest, removal of material will not result in a pit but will match ground surface levels on the northern property boundary. Slopes are planned at 3:1. Final build-out is shown in Figure 4. Stockpiles will be temporarily placed in the immediate mining area, however, no processing is proposed at this site. The material will simply be hauled off-site to Tri County's existing processing area.

2.9.2 Access Roads

Existing roadways include Dos Condados Road, a private road to access the parcel. Over time, this access road will be re-routed the west to allow bypass of the material source. The existing access road is shown in Figure 3 with the re-route of Dos Condados Road shown in 4.

3.0 RECLAMATION

3.1 EQUIPMENT AND STRUCTURE REMOVAL

There is no equipment proposed to occur at this site other than an excavator. The haul trucks are kept off-site. There are no buildings or structures proposed to be located on the site.

3.2 ROADS, POWER LINES, WATERLINES AND FENCES

Dos Condados Road will be retained for use but re-routed over time, as shown in Figure 4. There are no powerlines that occur within the site. There are no waterlines within the site. Portions of the site are currently fenced; however, as no hazardous conditions will remain at the end of reclamation, additional fencing is not proposed per landowner request.

3.3 AREA PREPARATION

Post-mining, the site interior will be re-graded and scarified to promote natural revegetation, as shown in Figure 5.

3.4 SLOPE STABILIZATION

Mining incorporates 3:1 (horizontal:vertical) slopes or flatter to result in stability for the area. No additional physical stabilization will be necessary after mining.

3.5 SOIL CONSERVATION

Natural revegetation on previously disturbed areas in the vicinity has been previously successful. Natural revegetation of the disturbed areas is therefore reasonably expected to be successful without soil amendments. Due to the hilly terrain, very little topsoil occurs.

3.6 REVEGETATION

To promote natural revegetation, scarification will be conducted within the disturbed areas to support the open space land use of the site. Since these areas are not proposed to support grazing, fish or wildlife habitat, forestry or recreation post-mining land uses, proposed measures to encourage fish and wildlife habitat are not required to be described further in accordance with A.R.S. §27-1271 (B)(9d).

3.7 THE PROPOSED RECLAMATION MEASURES TO ACHIEVE POST MINE LAND USE AND PUBLIC SAFETY

A. What measures will restrict public access to pits or other hazardous surface features?

As the mined slopes are proposed at 3:1, no hazardous surface features are anticipated to remain after reclamation. Fencing is not proposed per landowner request. In addition, all scrap metal, wood, trash and other debris that pose a threat to public safety or create a public nuisance will be removed from the project site.

B. What measures will be taken to address erosion control and stability?

Site-specific grading shall be conducted, as necessary, to address erosion. No permanent piles of mined material or overburden will remain. Slope stability at a 3:1 slope is incorporated into the mining plan.

C. What measures will be taken to address revegetation, conservation, and the care and monitoring of revegetated areas?

Scarification would promote natural revegetation which occurs in the region. As revegetation is not proposed, monitoring of revegetated areas is not required.

3.8 TIMELINE AND PHASING OF RECLAMATION

Mining will begin immediately upon approval. In accordance with A.R.S. § 27-926, reclamation & monitoring will be completed within one year of cessation of mining. Proposed tentative schedule includes:

- Mining operations are anticipated to continue for 30 years until 2053.
- Reclamation will commence immediately upon completion of mining operations and is estimated to be completed within one year (estimated 2054).
- Year 1 includes grading, scarification to promote natural revegetation, and annual monitoring (trash removal, natural revegetation monitoring).
- Reclamation will be deemed complete once the reclaimed surfaces have been regraded to a safe and stable condition, scarification has been conducted, and ASMI verifies that the owner or operator has fulfilled the requirements of the approved reclamation plan.

3.9 RECLAMATION COSTS – FINANCIAL ASSURANCE

All reclamation costs will be wholly born by the applicant. Financial surety will be obtained by bonding.

4.0 MINE CLOSURE

4.1 MINING AREAS

Reclamation of the mining area will commence immediately upon closure of mining operations. There will be no substantial period between operation and reclamation.

4.2 PROCESSING AND OTHER AREAS

Stockpile areas will be removed by the end of mine life. There is no processing proposed at this site. Reclamation will commence immediately upon completion of mining operations. There will be no substantial period between operation and reclamation.

4.3 PERSONNEL

Personnel employed at this site will be re-assigned to other job sites if possible or assigned to assist with the reclamation process and then re-assigned.

4.4 MONITORING

The closure of operations at this site will be monitored in accordance with the approved conditions of this plan in accordance with the Arizona State Mine Inspector's Office. During reclamation, monitoring will occur annually to remove trash and conduct a general inspection.

APPENDIX 1
RECLAMATION COST ESTIMATE

**DOS CONDADOS MATERIALSOURCE
Reclamation Construction Estimate**

3/7/2023

Dos Condados Material Source - portions of Section 25, T 7 S, R 26 E, G&SRM, Graham County, Arizona
Excavation areas will be graded and scarified.

As there are no concrete pads or infrastructure at the site, no removals will be needed.

Unit Price estimates are provided by Total Maintenance Erosion Control, LLC

Proposed Reclamation Cost Estimation Summary - WorkSheet

Reclamation Item	Units	Description	Suggested Cost	Number of Units	Reclamation Cost
Processing and Stockpile Area					
	Acre	Re-Grading & Leveling	\$ 500.00	51.1	\$ 25,550
	Acre	Revegetation Cost (Disc)	\$ 607	51.1	\$ 31,000
	Acre	Revegetation Cost (Hydro-seed)	\$ 1,175	0.0	\$ -
	Each	Containerized Trees and Shrubs	\$ 10	0.0	\$ -
Roads (Access)					
(Roads with Side Slope < 30%)	Linear Ft.	Re-Grading and Topsoiling Costs	\$ 1.70	0.0	\$ -
(Roads with Side Slope >30%)	Linear Ft.	Re-Grading and Topsoiling Costs	\$ 2.60		\$ -
	Acre	Regrading - Ripping	\$ 607	0.0	\$ -
	Acre	Revegetation Cost (Hydro-seed)	\$ 1,175		\$ -
Structures					
(Break-up and bury Slab)	Sq. Ft.	Demolition & Removal - Metal Building	\$ 3.40		\$ -
(Break-up and bury Slab)	Sq. Ft.	Demolition & Removal - Masonry Block Building	\$ 3.50		\$ -
(Break-up and bury Slab)	Sq. Ft.	Demolition & Removal - Concrete Building	\$ 15.86		\$ -
	Linear Mile	Powerline Removal (Single Pole Utility)	\$ 10,000		\$ -
	each	Transformer Removal	\$ 5,000		\$ -
	Linear Ft.	Demolition - Chain Link Fencing	\$ 3.47		\$ -
	Linear Ft.	Demolition - Barb Wire Fencing (3 strand)	\$ 1.94		\$ -
	Linear Ft.	Removal - 15" Culvert	\$ 10.29		\$ -
	Linear Ft.	Removal - 36" Culvert	\$ 17.15		\$ -
	Each	Processing Equipment Removal	10,000	0.0	\$ -
Construction					
	Linear Ft.	Construction - Fencing	\$ 8.00		\$ -
	Sq. Yard	Install Berm	\$ 500.00	0.0	\$ -
Material Haulage for Backfill					
Miscellaneous Leveling	Cu. Yard	Truck and Loader - 2000Ft. One Way	\$ 1.03		\$ -
	Cu. Yard	Dozer and Scraper - 1000Ft. One Way	\$ 0.72		\$ -
Care and Maintenance					
	Each	Processing Area Cleanup	\$ 2,000.00	0.0	\$ -
	Annual	Site Monitor and Reporting	\$ 500	1.0	\$ 500

Estimated Reclamation Operating and Material \$ 57,100

Administrative Costs					
% of O&M Cost		Contingency	10%		\$ 1,620
% of O&M Cost		General Mobilization / De-Mobilization	4%		\$ 648
% of O&M Cost		Indirect costs	2%		\$ 324
% of O&M Cost		Contractor Profit	10%		\$ 1,620
% of O&M Cost		Contract Administration	10%		\$ 1,620

Total Estimated Financial Assurance \$ 62,932

PREPARED BY: Greg Gentsch, P.E.

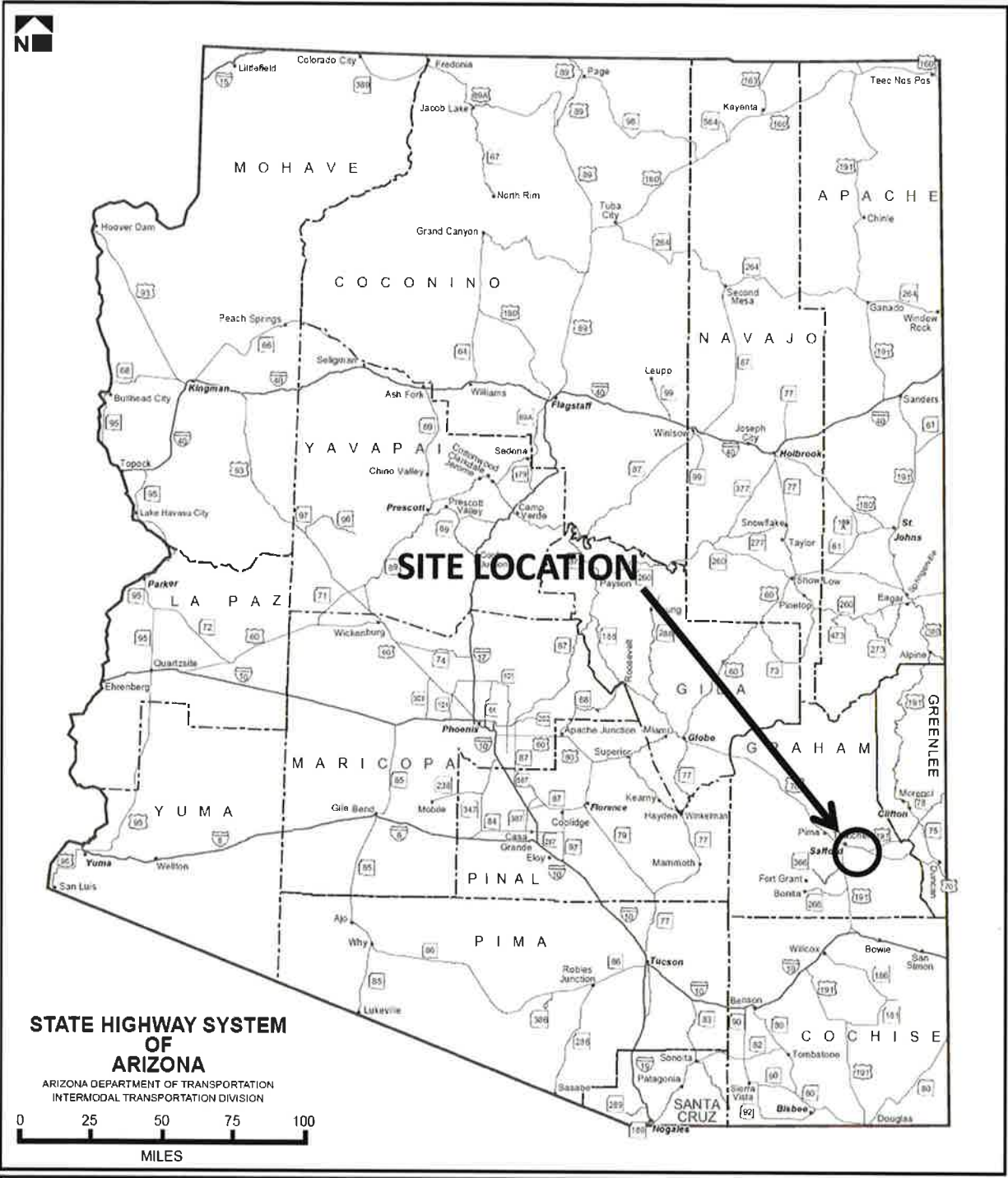


Figure 1. State Map.
Tri County Materials, Inc. Dos Condados Material Source.
Graham County, AZ.

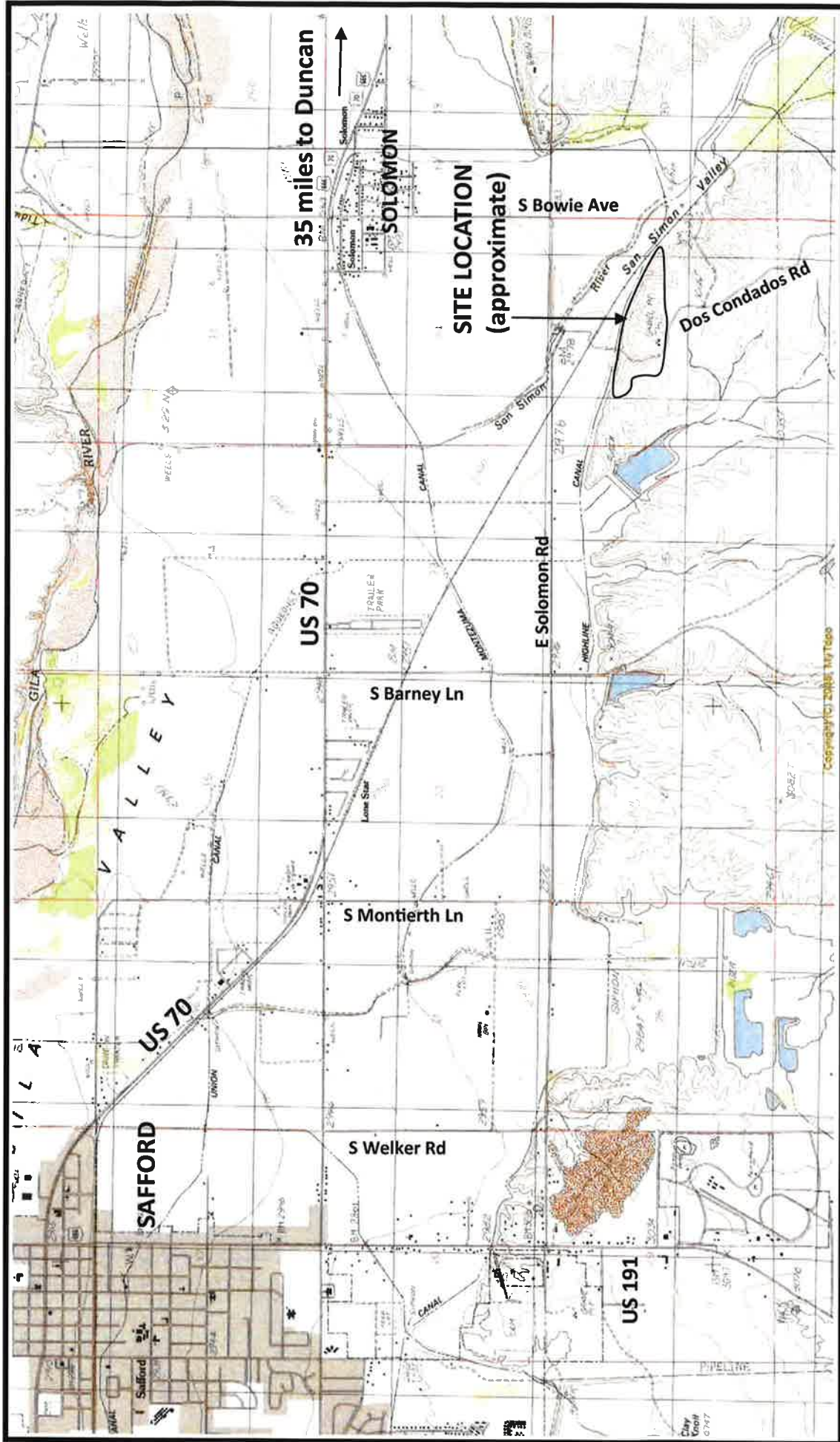


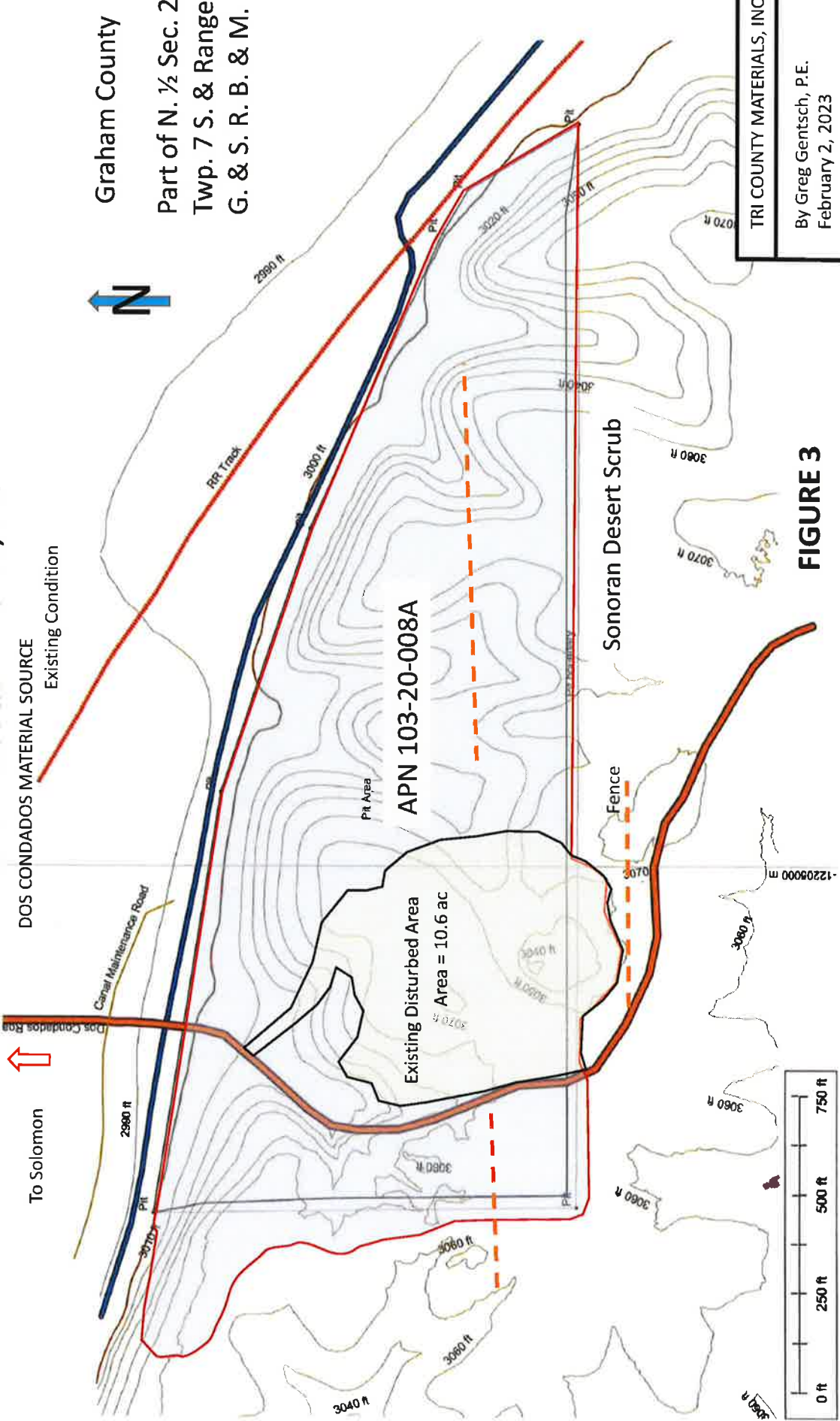
Figure 2. Vicinity Map.
 Tri County Materials, Inc. Dos Condados Material Source.
 Graham County, AZ.



USGS 7.5 Minute Quadrangles: Safford, AZ (1985)
 and San Jose, AZ (1985).

TRI COUNTY MATERIALS, INC.

DOS CONDADOS MATERIAL SOURCE
Existing Condition



Graham County
Part of N. 1/2 Sec. 25
Twp. 7 S. & Range 26 E
G. & S. R. B. & M.

APN 103-20-008A

Existing Disturbed Area
Area = 10.6 ac

Sonoran Desert Scrub

Fence



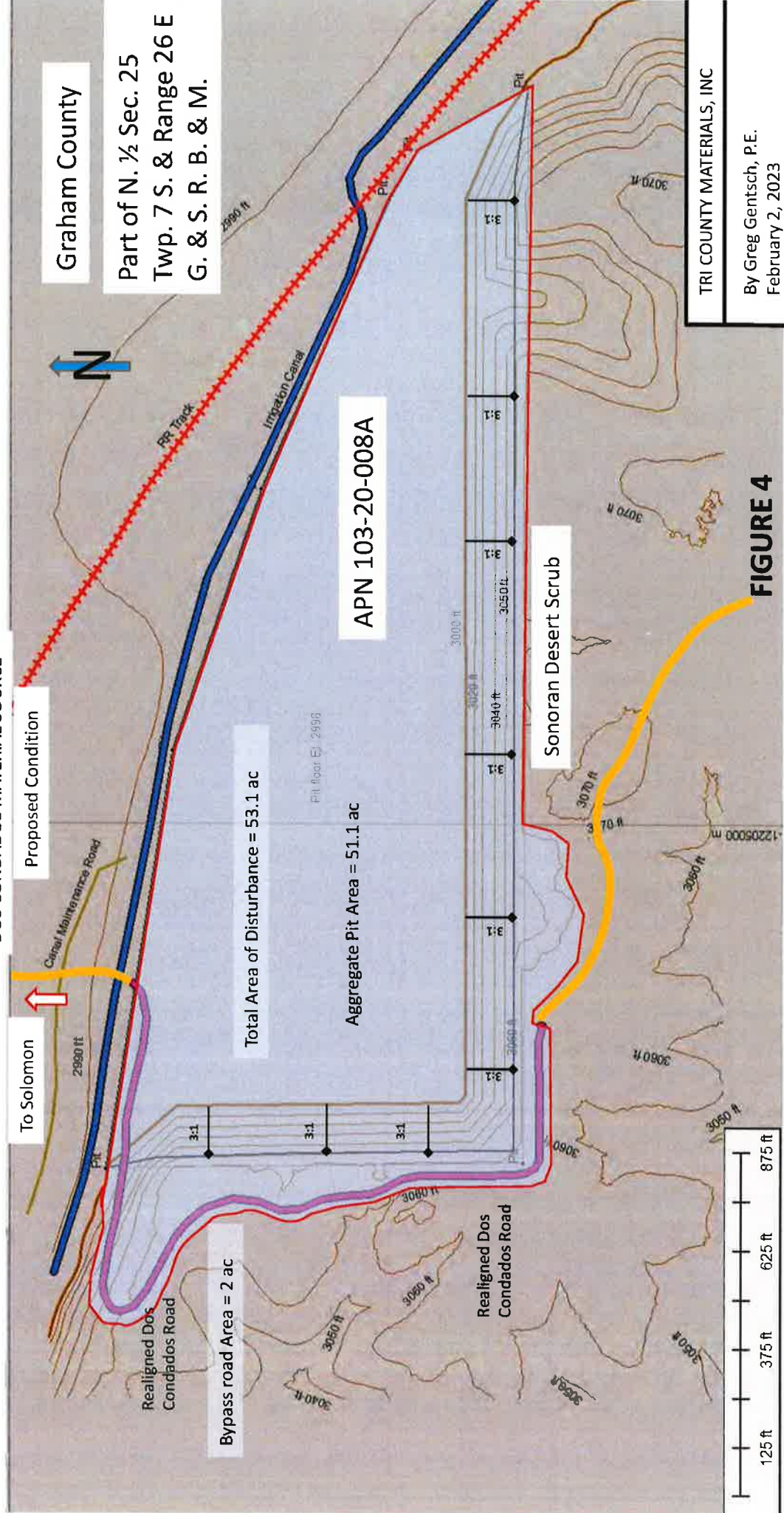
FIGURE 3

TRI COUNTY MATERIALS, INC

By Greg Gentsch, P.E.
February 2, 2023

TRI COUNTY MATERIALS, INC.

DOS CONDADOS MATERIAL SOURCE



Graham County

Part of N. 1/2 Sec. 25
Twp. 7 S. & Range 26 E
G. & S. R. B. & M.

APN 103-20-008A

Bypass road Area = 2 ac

Total Area of Disturbance = 53.1 ac

Aggregate Pit Area = 51.1 ac

Sonoran Desert Scrub

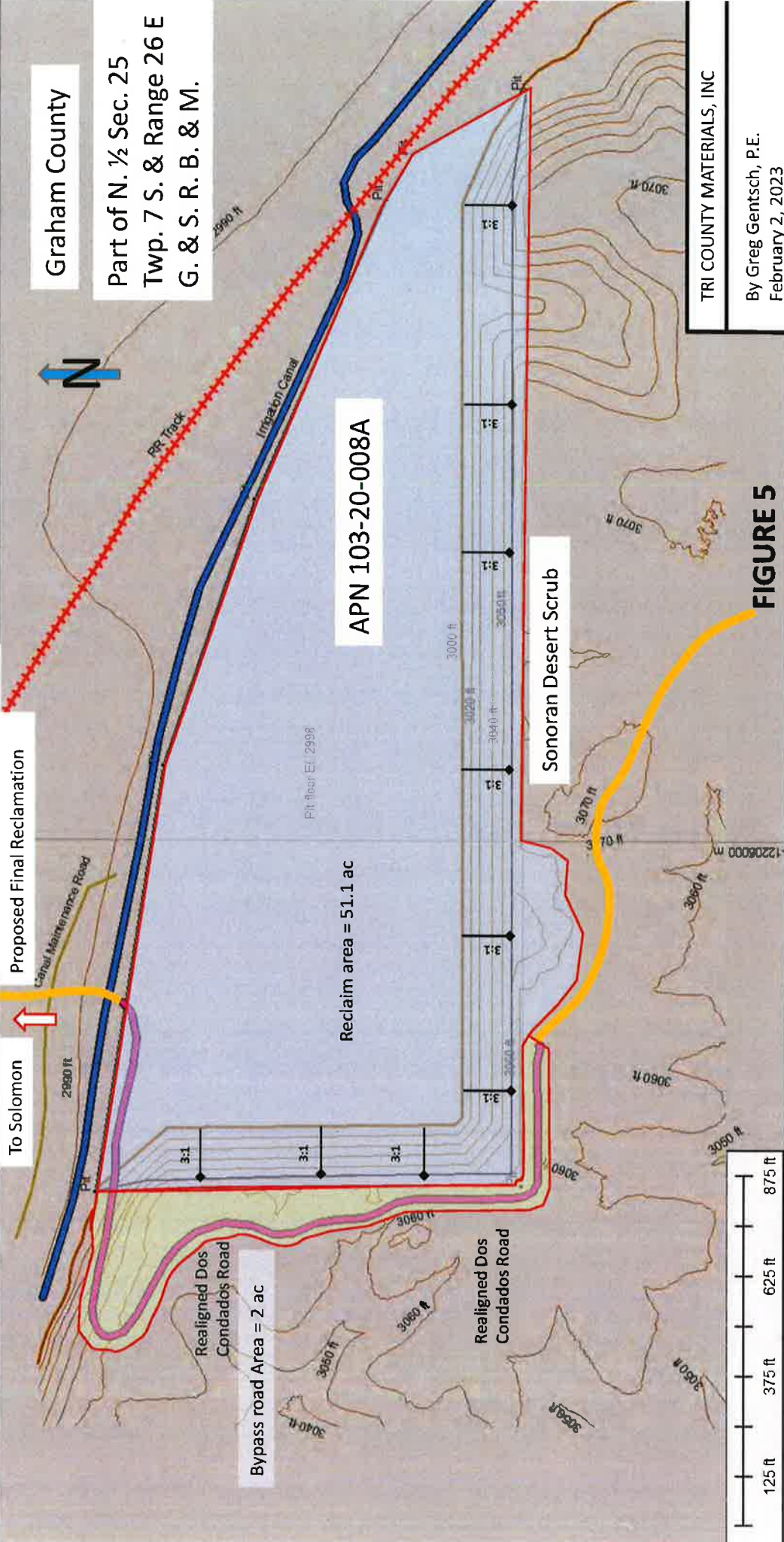
TRI COUNTY MATERIALS, INC

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February 2, 2023

FIGURE 4

TRI COUNTY MATERIALS, INC.

DOS CONDADOS MATERIAL SOURCE



Graham County

Part of N. 1/2 Sec. 25
Twp. 7 S. & Range 26 E
G. & S. R. B. & M.

APN 103-20-008A

Sonoran Desert Scrub

Reclaim area = 51.1 ac

Bypass road Area = 2 ac

Realigned Dos
Condados Road

Realigned Dos
Condados Road



FIGURE 5

TRI COUNTY MATERIALS, INC

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February 2, 2023