

DEC 19 2023



Himes Consulting LLC

December 14, 2023

Reference No. 22-30

Arizona State Mine Inspector
Amanda Lothner, Reclamation Specialist
1700 W. Washington, Suite 403
Phoenix, AZ 85007-2805

Re: Reclamation Plan for Desert Construction, Inc. Hackberry Material Source

Dear Ms. Lothner:

Enclosed please find two copies of the revised pages for the Reclamation and Closure Plan for the Hackberry Material Source in response to your November 6 Technical Comments. The following changes have been made:

1. Reclamation of the ponds has been added to Section 3.3 and added to the figures (page 6).
2. Section 3.1 has been updated to indicate that no concrete pads are associated with the office trailer onsite and the cost estimate has been updated accordingly (page 6).
3. The well has been added to Sections 2.6, 2.9.2, and 3.2 and to the figures. The landowner has requested to retain the well (pages 4-6).
4. Section 3.5 has been updated to indicate that in addition to the revegetation of the disturbed areas reasonably being expected to be successful without soil amendment, as the majority of mining is within a wash area or a hilly area, there is very little topsoil available (page 6).
5. Sections 3.7 and 4.2 have been updated to explain that the cost estimate includes stockpile grading in the case they remain due to unforeseen circumstances (pages 7 and 8).
6. The cost estimate has been updated to reflect two annual site visits and using recommended ARPA rates (Appendix 1).
7. The cover page has been updated with the new date (December 2023).

Please feel free to contact me in regards to any questions.

Sincerely,

A handwritten signature in cursive script that reads "Jill A. Himes".

HIMES CONSULTING, LLC
Jill A. Himes

cc: Tom Fulton, Desert Construction, Inc.

RECLAMATION AND CLOSURE PLAN

DESERT CONSTRUCTION, INC.
HACKBERRY 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**

DECEMBER 2023

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 and grazing.

2.6 DESCRIPTION OF THE AGGREGATE MINING UNIT AND PROPOSED SURFACE DISTURBANCES

Approximately 32.7 acres are currently disturbed from existing mining activities. Proposed surface disturbances include aggregate mining to a final disturbance of approximately 66.2 acres. The mining area in the southwestern portion of the site will extend to the southern corner. The mining area on the northeast side of the site will extend out to the north and eastern boundary over the life of the mine to the east, as shown in Figure 4, with 3:1 (H:V) slopes incorporated into their mining plan. The processing area, located on the northwest side will remain the same size and currently includes a crusher, screen, stockpiles, ponds, a well, and an office trailer. Proposed surface disturbances are shown in Table 2 below.

Table 2
Proposed Final Surface Disturbance

Feature	Acres
Access Road	1.7
Interior Roads	3.6
Mining Area 1	52.6
Mining Area 2	13.6
Processing Area	9.0
Staging Area	1.5
Disturbed Area	2.0
Undisturbed Area	69.7
Total	153.7

2.7 EXISTING AND PROPOSED FINAL TOPOGRAPHY

Existing topography and survey information is provided in Figure 3 attached. Existing elevations range from approximately 3,480 feet above mean sea level (msl) in the northwest corner to a peak of 3,581 ft above msl in the northeast corner of the site. Proposed final elevations are shown in Figure 4 attached. Proposed final topography of the slopes will have an overall 3:1 (H:V) slope to provide a safe slope at the end of mine life. Bottom elevations of each mining area will match existing ground elevations in the center of the site.

2.8 A NARRATIVE DESCRIPTION OF ROADS

Existing roadways include the existing access road to the site from Route 66 and several interior dirt access roads. These access roads are not anticipated to change over the life of the mine. Existing access roads are shown in Figures 3 and 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 66.2 acres. Final build-out is shown in Figure 4. The mining area in the southwestern portion of the site will extend to the southern corner. The mining area on the northeast side of the site will extend out to the north and eastern boundary over the life of the mine to the east, as shown in Figure 4, with 3:1 (H:V) slopes incorporated into their mining plan. As this site is mountainous, removal of material will not result in a pit but will match ground surface levels on the property boundary with one side slope planned at 3:1 (H:V).

2.9.2 Processing Area

The processing area, located on 9.0 acres in the northwest portion of the site, will remain the same size and currently includes a crusher, screen, stockpiles, conveyors, ponds, a well, and an office trailer.

2.9.2 Staging Area

The staging area occurs to the southeast of the processing area and includes equipment and material storage. This area is not proposed to change in size over the life of the mine.

2.9.3 Access Roads

The existing access road to the site from Route 66 is 1.7 acres. Several interior dirt access roads are 3.6 acres within the site. These access roads are not anticipated to change over the life of the mine. Existing access roads are shown in Figures 3 and 4.

3.0 RECLAMATION

3.1 EQUIPMENT AND STRUCTURE REMOVAL

All proposed equipment on this site is mobile and can be re-located at will throughout the mining process. Mobile equipment will be removed from the site prior to closure for use at other sites. The mobile office trailer will be removed along with the mobile equipment. There are no concrete pads associated with the mobile equipment or trailer.

3.2 ROADS, POWER LINES, WATERLINES AND FENCES

The main access road will be retained for use. Interior dirt roads will be scarified for natural revegetation, as shown in Figure 5. There are no powerlines or waterlines that occur within the site. The existing well will be retained per landowner request. Mobile generators will be used on an as-needed basis for the mining equipment which will be removed post-mining. The site is currently not fenced. As no hazardous conditions will remain at the end of reclamation, fencing is not proposed per landowner request.

3.3 AREA PREPARATION

Post-mining, disturbed areas will be re-graded and scarified to promote natural revegetation as shown in Figure 5. The ponds will be included in this re-grading and leveling with excavated material from the ponds pushed back in and slopes caved.

3.4 SLOPE STABILIZATION

Mining incorporates 3:1 (H:V) 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. As the majority of mining is within a wash area or a hilly area, there is very little topsoil available.

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 (H:V), 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. If stockpiles remain onsite at closure due to unforeseen circumstances, grading of stockpiles has been included in the cost estimate (Appendix 1). Slope stability at a 3:1 (H:V) 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

In accordance with A.R.S. § 27-926, reclamation & monitoring will be completed within 2 years of cessation of mining. Proposed tentative schedule includes:

- Mining operations are anticipated to continue for 15 years until 2038.
- Reclamation on the processing and related areas will commence immediately upon completion of mining operations and is estimated to be completed within 2 years (estimated 2040).
- Year 1 includes equipment removal, processing area cleanup, grading, scarification to promote natural revegetation, and annual monitoring (trash removal, natural revegetation monitoring).
- Year 2 includes annual monitoring.
- Reclamation will be deemed complete once the reclaimed surfaces have been regraded to a safe and stable condition, scarification has been conducted, access restrictions measures are in place, 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. If stockpiles remain onsite at closure due to unforeseen circumstances, grading of stockpiles has been included in the cost estimate (Appendix 1). 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.

HACKBERRY MATERIAL SOURCE
Reclamation Construction Estimate

12/13/2023

Hackberry Material Source - portions of Section 11, T. 23N, R 14W, G&SRM, Mohave County, Arizona

Excavation Areas are approximately 82.3 acres which will be graded and scarified.

There are no concrete pads or infrastructure at the site but there is one mobile office to be removed.

ARPA unit cost estimates are utilized.

Proposed Reclamation Cost Estimation Summary - WorkSheet

Reclamation Item	Units	Description	Suggested Cost	Number of Units	Reclamation Cost	Source
Excavation, Processing and Stockpile Areas						
	Acre	Re-Grading and leveling	728.40	82.3	\$ 59,947	ARPA
	Acre	Revegetation Cost (Disc)	728.40	82	\$ 59,900	ARPA
	Acre	Revegetation Cost (Hydro-seed)	1,410.00		\$ -	
	Each	Containerized Trees and Shrubs	12.00	-	\$ -	
Roads (Access)						
(Roads with Side Slope < 30%)	Linear Ft.	Re-Grading and Topsoiling Costs	2.04	3,000.0	6,120.0	ARPA
(Roads with Side Slope >30%)	Linear Ft.	Re-Grading and Topsoiling Costs	3.12		\$ -	
	Acre	Regrading - Ripping	728.40	1.7	\$ 1,200	ARPA
	Acre	Revegetation Cost (Hydro-seed)	1,410.00		\$ -	
Structures						
(Break-up and bury Slab)	Sq. Ft.	Demolition & Removal - Metal Building	4.08		\$ -	
(Break-up and bury Slab)	Sq. Ft.	Demolition & Removal - Masonry Block Building	4.20		\$ -	
(Break-up and bury Slab)	Sq. Ft.	Demolition & Removal - Concrete Building	19.03		\$ -	
	Linear Mile	Powerline Removal (Single Pole Utility)	12,000.00		\$ -	
	each	Transformer Removal	6,000.00		\$ -	
	Linear Ft.	Demolition - Chain Link Fencing	4.16		\$ -	
	Linear Ft.	Demolition - Barb Wire Fencing (3 strand)	2.33		\$ -	
	Linear Ft.	Removal - 15" Culvert	12.35		\$ -	
	Linear Ft.	Removal - 36" Culvert	20.58		\$ -	
	Each	Processing Equipment Removal	10,000.00	1	\$ 10,000	P.E. Estimate
Construction						
	Linear Ft.	Construction - Barb Wire Fencing (3 strand)	2.26		\$ -	
	Sq. Yard	Install Rip Rap Erosion Lining	28.50		\$ -	
Material Haulage for Backfill						
Miscellaneous Leveling	Cu. Yard	Truck and Loader - 2000Ft. One Way	1.24		\$ -	
	Cu. Yard	Dozer and Scraper - 1000Ft. One Way	0.86		\$ -	
Care and Maintenance						
	Each	Processing Area Cleanup	2,000.00	1	\$ 2,000	P.E. Estimate
	Annual	Site Monitor and Reporting	2,400.00	2	\$ 4,800	ARPA

Estimated Reclamation Operating and Material (O&M) Cost Sub-Total = \$ 144,000

Administrative Costs						
	% of O&M Cost	Contingency	10%		\$ 14,400	
	% of O&M Cost	General Mobilization / De-Mobilization	4%		\$ 5,800	
	% of O&M Cost	Indirect costs	2%		\$ 2,900	
	% of O&M Cost	Contractor Profit	10%		\$ 14,400	
	% of O&M Cost	Contract Administration	10%		\$ 14,400	

Total Estimated Financial Assurance Amount = \$ 195,900





PREPARED BY: RAYMOND W. STADLER, P.E.

HACKBERRY MATERIAL SOURCE

MATERIAL SOURCE & PLANT SITE EXISTING CONDITIONS

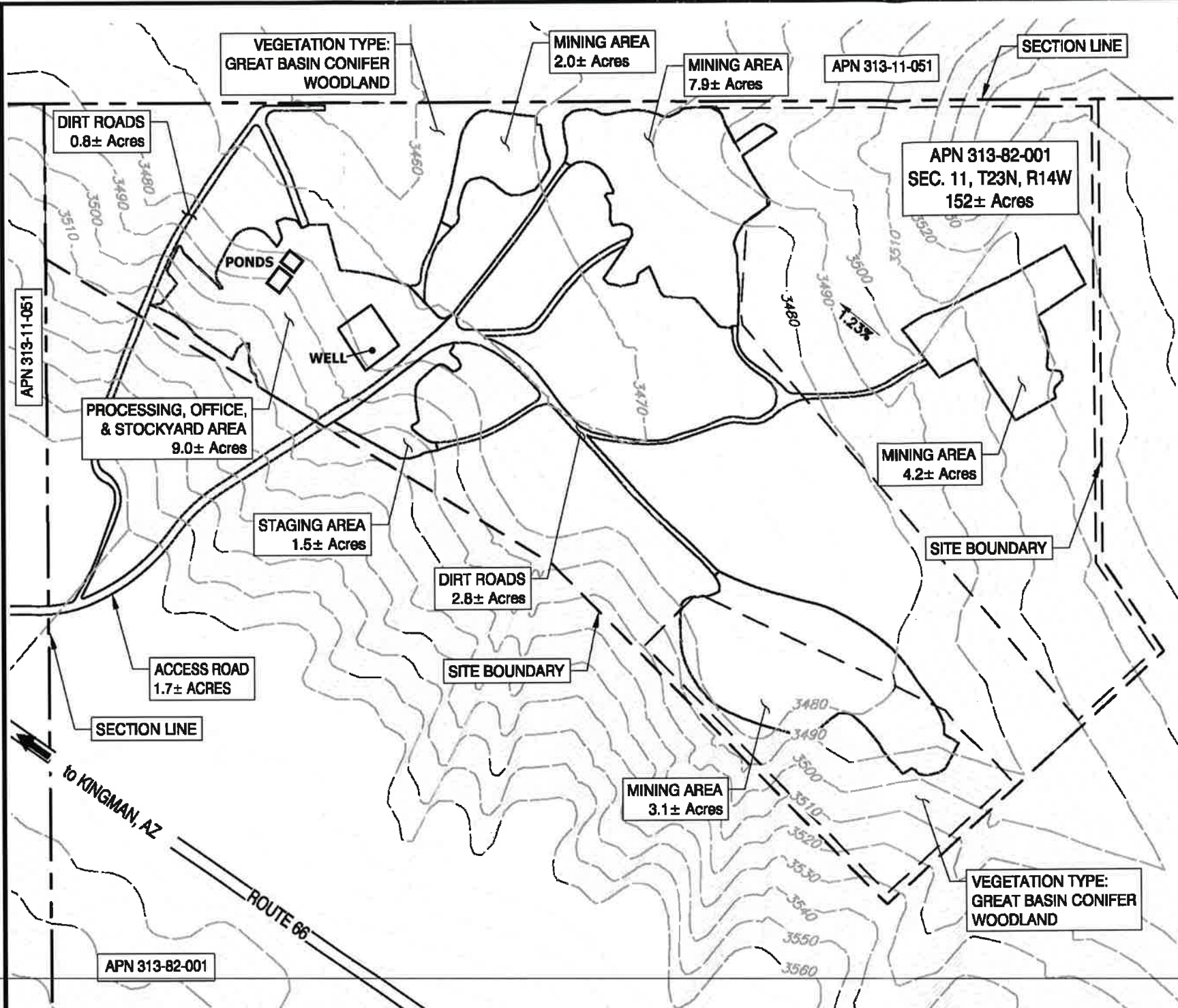
A PORTION OF SECTION 11, T-23N., R-14W,
of the GILA & SALT RIVER BASE & MERIDIAN
MOHAVE COUNTY, ARIZONA

LEGEND

-  SECTION LINE
-  ACCESS ROAD
-  EXISTING 10' CONTOURS
-  EXISTING 2' CONTOURS

MATERIAL & PLANT AREAS

<i>EXISTING CONDITIONS</i>	
ACCESS ROAD	- 1.7± ACRES
<i>LIMIT OF MINING AREA</i>	
MINING AREA	- 17.2± ACRES
PROCESSING AREA	- 9.0± ACRES
STAGING AREA	- 1.5± ACRES
DIRT ROADS	- 3.6± ACRES
UNDISTURBED AREA	- 120.7± ACRES
	- 152.0± ACRES
TOTAL	- 153.7± ACRES



SCALE: 1" = 400'

RAYMOND W. STADLER P.E., R.L.S.
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FIGURE 3

HACKBERRY MATERIAL SOURCE

MATERIAL SOURCE & PLANT SITE PROPOSED CONDITIONS

A PORTION OF SECTION 11, T-23N., R-14W,
of the GILA & SALT RIVER BASE & MERIDIAN
MOHAVE COUNTY, ARIZONA

LEGEND

---	PROPERTY LINE
- - - -	EXISTING 10' CONTOURS
- - - -	EXISTING 2' CONTOURS
---	PROPOSED 10' CONTOURS
---	PROPOSED 2' CONTOURS

MATERIAL & PROCESSING AREAS

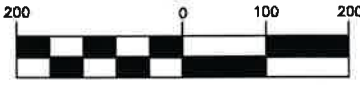
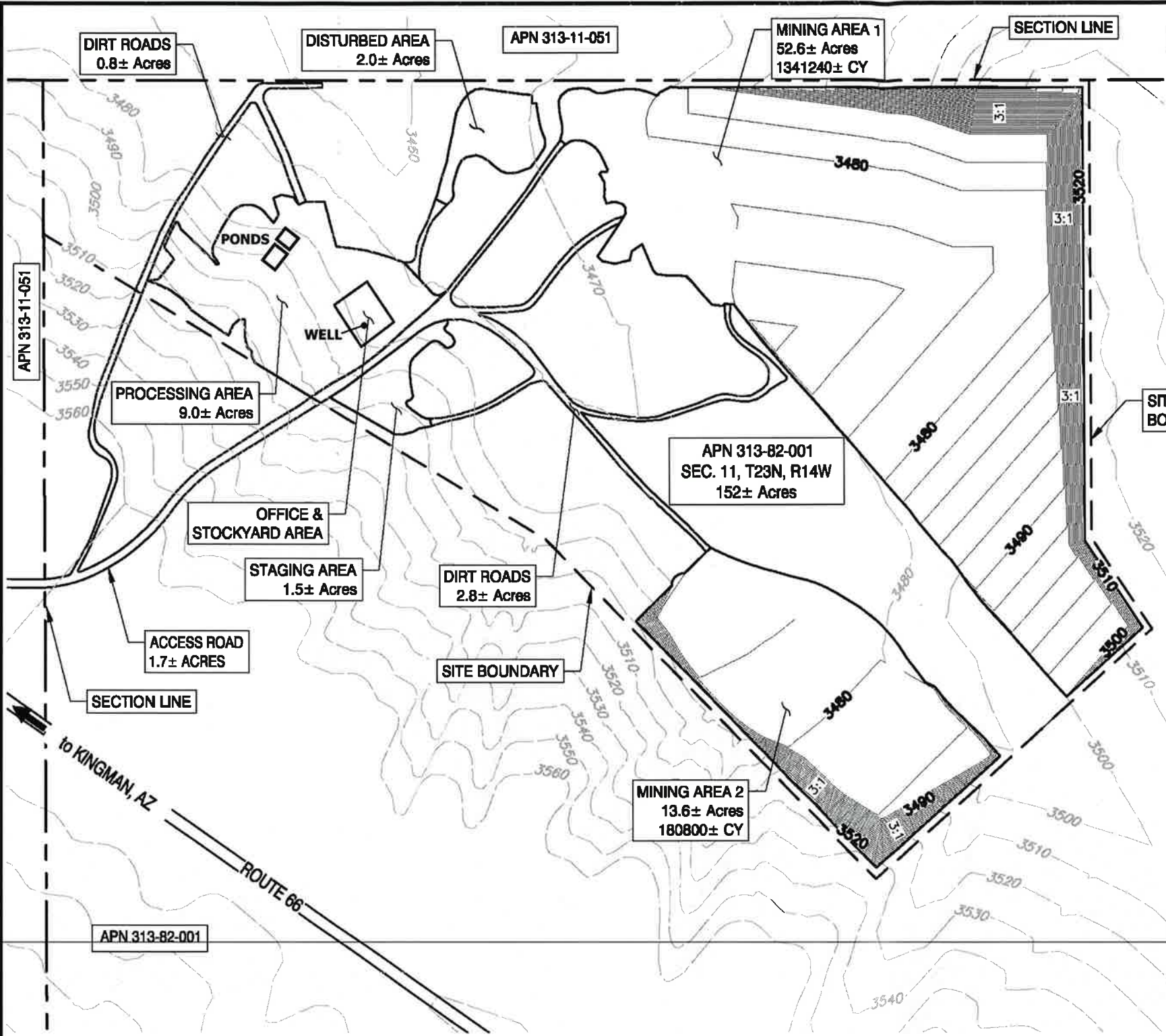
ACCESS ROAD	- 1.7± ACRES
PROCESSING AREA	- 9.0± ACRES
STAGING AREA	- 1.5± ACRES
MINING AREA 1	- 52.6± ACRES
MINING AREA 2	- 13.6± ACRES
DIRT ROADS	- 3.6± ACRES
DISTURBED AREA	- 2.0± ACRES
UNDISTURBED AREA	- 69.7± ACRES

TOTAL - 153.7± ACRES

SOURCE MATERIAL VOLUME

MINING AREA	- 66.2± ACRES
VOLUME MINING AREA 1	- 1,341,240± C.Y.
VOLUME MINING AREA 2	- 180,800± C.Y.

TOTAL AREA - 66.2± ACRES
TOTAL VOLUME - 1,522,040± C.Y.



SCALE: 1" = 400'

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FIGURE 4

HACKBERRY MATERIAL SOURCE

MATERIAL SOURCE & PLANT SITE RECLAMATION & POST MINING LAND USE MAP "OPEN SPACE"

A PORTION OF SECTION 11, T-23N., R-14W,
of the GILA & SALT RIVER BASE & MERIDIAN
MOHAVE COUNTY, ARIZONA

LEGEND

-  PROPERTY LINE
-  EXISTING 10' CONTOURS
-  EXISTING 2' CONTOURS
-  PROPOSED 10' CONTOURS
-  PROPOSED 2' CONTOURS
-  FINAL GRADING AREA & SCARIFYING

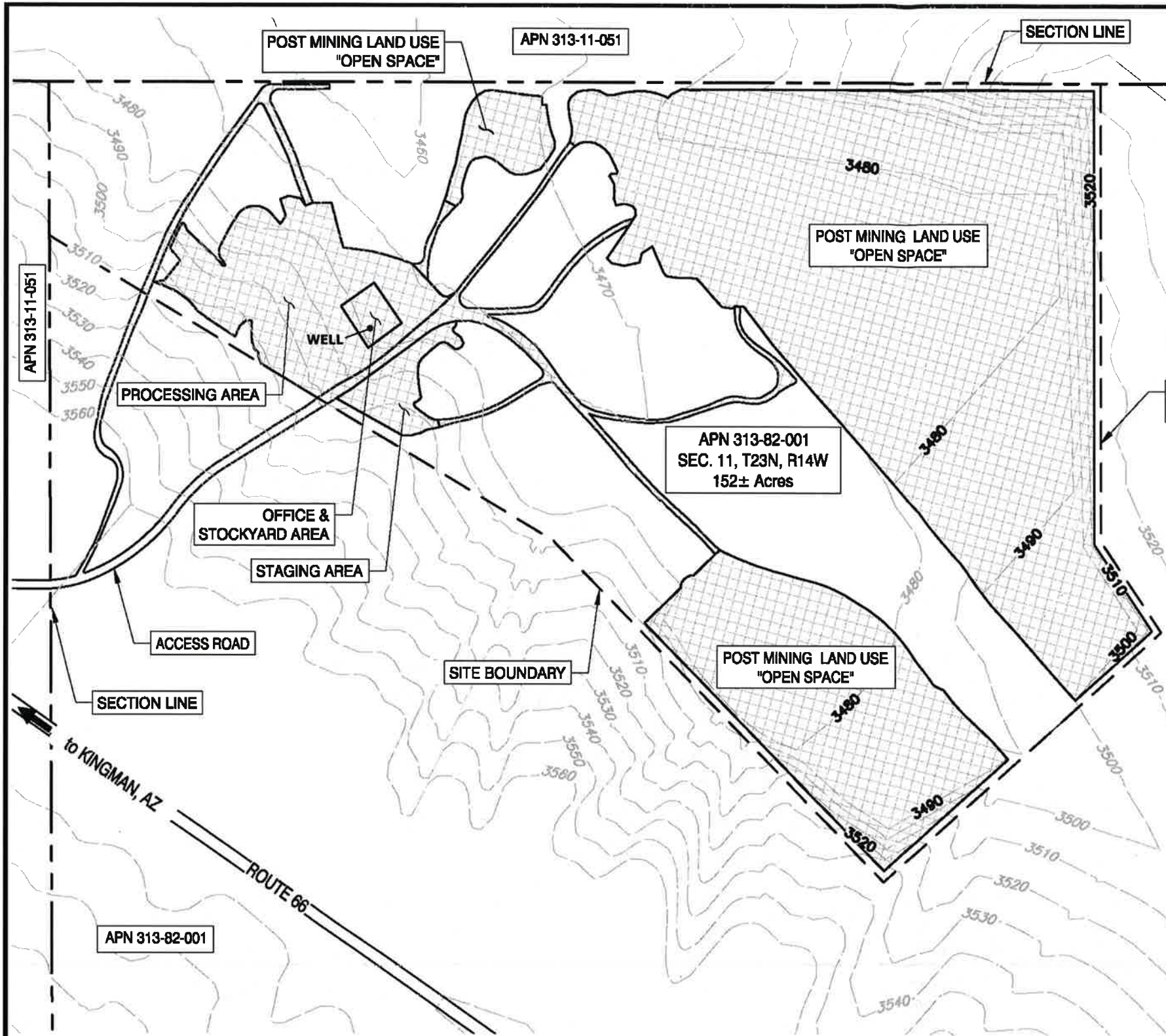
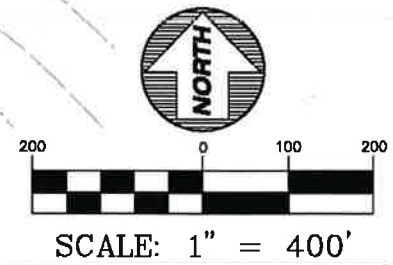


FIGURE 5



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