STATE MINE INSPECTOR

SEP 29 2022

Himes Consulting LLC

September 26, 2022
Reference No. 21-51

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

Re: Reclamation Plan Corrections, Peacock Material Source, Mohave County, AZ

Dear Ms. Lothner:

Technical comments were received on September 7, 2022 for the Peacock Material Source. The minor editorial corrections have been incorporated, with the exception of the addition of the county as requested in bullet 2 (as the county is already listed in the previous sentence).

Two copies of these corrected pages are attached. In addition, a new cover page (with an updated date) is attached. As well, Page 7 is attached with the correction requested during the Administrative Review (and provided in the July 11 response letter).

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

Sincerely,

Jill A. Himes

HIMES CONSULTING, LLC
Jill A. Himes
Biologist

cc: Tom Fulton, Desert Construction, Inc.

3301 W. Genoa Way • Chandler, AZ 85226 • Phone 480.899.5708 • Fax 480.659.4102 • jillhimes@cox.net

STATE MINE INSPECTOR
SEP 29 2022

RECLAMATION AND CLOSURE PLAN

DESERT CONSTRUCTION, INC.

PEACOCK 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

SEPTEMBER 2022

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1.0 ADMINISTRATIVE INFORMATION

Company:	Desert Construction, Inc.
Contact:	Tom Fulton Desert Construction, Inc. 4490 E Hwy 66 Kingman, AZ 86401 (Office) 928 757-2213 (Cell) 928 715-1247 tomfulton@desertconstruction.net
Applicant:	Tom Fulton Desert Construction, Inc. 4490 E Hwy 66 Kingman, AZ 86401 (Office) 928 757-2213 (Cell) 928 715-1247 tomfulton@desertconstruction.net
Permit Technical Consultant:	Jill Himes, Himes Consulting LLC 3301West Genoa Way Chandler, AZ 85226 (480) 899-5708 (602) 499-9253 (cell) jillhimes@cox.net
Landowner:	Desert Construction, Inc. 4490 E Hwy 66 Kingman, AZ 86401 (Office) 928 757-2213 (Cell) 928 715-1247
Parcel No:	354-13-002 354-13-005 354-37-009
Operator:	Desert Construction, Inc.

2.0 INTRODUCTION

2.1 PURPOSE AND SCOPE

Desert Construction, Inc. proposes to conduct aggregate mining and processing at their property east of Kingman in Mohave County, Arizona. The Peacock Material Source is located within the NE ¼ of Section 19 and the NW ¼ of Section 20 in Township 21 North, Range 14 West, Gila and Salt River Meridian.

The purpose of this Mine Reclamation and Closure Plan (MRCP) is to present the details of rehabilitation of the Peacock Material Source in Mohave 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

Desert Construction, 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.

Tom [illegible] 9-22-22

Signature Date

OPERATIONS MANAGER

Title

2.3 RECLAMATION APPROACH

Desert Construction, 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

Desert Construction, Inc. is conducting aggregate mining and processing operations for commercial use at the Peacock Material Source. The mining boundary is currently undisturbed and includes approximately 117 acres, 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 Peacock Material Source, the process includes the use of a screen, crusher, and other mobile equipment for the support of production, and other construction material related operations. Proposed operations would include excavation, screening, crushing, stockpiling, loading, and hauling. Access is from Kathy Road. Land use is currently open space and grazing. Desert Construction, Inc. has estimated the removal of up to 6.67 million cubic yards over a period of 15 years.

The project vicinity lies within the semidesert grassland vegetation community as described by Brown (1994). Vegetation is characterized by juniper grasslands, with juniper (*Juniperus monosperma*), an occasional Mormon tea (*Ephedra trifurca*), snakeweed (*Guttierezia sarothrae*), jimmyweed (*Isocoma heterophylla*), shrub live oak (*Quercus turbinella*), fourwing saltbush (*Atriplex canescens*), crucifixion thorn (*Castela emoryi*), desert trumpet (*Eriogonum inflatum*), narrowleaf goldenbush (*Ericameria linearifolia*), and firecracker penstemon (*Penstemon eatoni*). Cacti and succulents observed consist of beavertail (*Opuntia basilaris*), club cholla (*Opuntia clavata*), hedgehog cactus (*Echinocereus* sp.), yucca (*Yucca* sp.), and buckhorn cholla (*Cylindropuntia acanthocarpa*). Although heavily grazed, an understory of grasses, including grama grasses (*Bouteloua* spp.), occurs. The site is located with Arizona Game and Fish Department (AGFD)'s Game Management Unit 15B. Species in this unit include javelina, antelope, elk, bighorn sheep, mountain lion, mule deer, dove, and quail. Wildlife and/or wildlife sign observed include mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), cactus wren (*Campylorhynchus brunneicapillus*), black-throated sparrow (*Amphispiza bilineata*), Swainson's hawk (*Buteo swainsoni*), white-throated woodrat (*Neotoma albigula*), and mule deer (*Odocoileus hemionus*).

Table 1
Existing Surface Disturbance

Feature	Acres
Access Roads	1.1
Undisturbed	116
Total	**117.1**

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, grazing, and residential.

2.6 DESCRIPTION OF THE AGGREGATE MINING UNIT AND PROPOSED SURFACE DISTURBANCES

Currently the site is undisturbed apart from access roads. Proposed surface disturbances include aggregate mining to a final disturbance of approximately 92 acres. The mining areas will begin from west and increase over the life of the mine to the east, as shown in Figure 4, with 2:1 slopes incorporated into their mining plan. The processing area, located on the west side by Kathy Road, will include a crusher, screen, stockpiles, and an office trailer. Proposed surface disturbances are shown in Table 2 below.

Table 2
Proposed Final Surface Disturbance

Feature	Acres
Mining Area	92.0
Processing Area & Stockpiles	8.5
Access Road	1.1
Undisturbed	15.5
Total	117.1

2.7 EXISTING AND PROPOSED FINAL TOPOGRAPHY

Existing topography and survey information is provided in Figure 3 attached. Existing elevations range from approximately 4,215 ft above mean sea level (msl) in the northwestern corner to a peak of 4,400 ft above msl in the south-central portion of the site. Proposed final elevations are shown in Figure 4 attached. Proposed final topography of the slopes will have an overall 2:1 slope to provide a safe slope at the end of mine life. The mining plan will not result in the development of a pit.

2.8 A NARRATIVE DESCRIPTION OF ROADS

Existing roadways include Kathy Road, a county-maintained roadway along the western boundary and Jackie Road, a private road in the eastern portion of the parcel. These access roads are not anticipated to change; however, temporary internal access roads may be used over time as mining advances. Ruff Road will remain in place at the end of mining; however, its gradient will change based on topographical changes. 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 92 acres of undisturbed area. As this site is mountainous, removal of material will not result in a pit but will match ground surface levels on the property boundary. Slopes are planned at 2:1. Final build-out is shown in Figure 4.

2.9.2 Processing Area

The processing area will be placed on the western side of the site, and will including a crusher, a screen plant, stockpiles, equipment, and an office trailer.

2.9.3 Access Roads

Kathy Road, a county-maintained roadway, is not proposed to change. Jackie Road, a private road in the eastern portion of the parcel is also proposed to remain in place. Temporary internal access roads may be used over time as mining advances. Ruff Road will remain in place at the end of mining; however, its gradient will change based on topographical changes. 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. All mobile equipment will be removed from the site. There are no buildings or structures proposed to be located on the site.

3.2 ROADS, POWER LINES, WATERLINES AND FENCES

Kathy Road is a county-maintained road and will be retained for use. Jackie Road and Ruff Road will also be maintained over time for later use, as shown in Figure 4. There are no powerlines that occur within the site. There are no waterlines within the site. 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, the site interior will be re-graded and scarified to promote natural revegetation.

3.4 SLOPE STABILIZATION

Mining incorporates 2:1 (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 mountainous and rocky 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 2:1, 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 2:1 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, anticipated in late 2022. 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 2037.
- 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 2039).
- 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.

APPENDIX 1

RECLAMATION COST ESTIMATE

PEACOCK MATERIAL SOURCE
Reclamation Cost Estimate

7/11/2022

Peacock Material Source - portions of Section 19 & 20, T.21N., R.14W., G&SRM, Mohave County, Arizona
Excavation Areas are approximately 101.6 acres which will be graded
There are no concrete pads or infrastructure at the site, no removals will be needed.
Unit Price estimates provided by TLC Excavation, Inc.

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	101.6	$ 50,800
	Acre	Revegetation Cost (Disc)	$ 607	0.0	$ -
	Acre	Revegetation Cost (Hydro-seed)	$ 1,175		$ -
	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	78.0	$ 47,300
	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		$ -
(Break-up and remove)	Each	Processing Equipment Removal	10,000	1.0	$ 10,000
Construction					
	Linear Ft.	Construction - Barb Wire Fencing (3 strand)	$ 8.00		$ -
	Sq. Yard	Install Rip Rap Erosion Lining	$ 23.75		$ -
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	3.0	$ 6,000
	Annual	Site Monitor and Reporting	$ 500	2.0	$ 1,000
				Estimated Reclamation Operating and Material	$ 115,100
Administrative Costs					
	% of O&M Cost	Contigency	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 Administation	10%		$ 1,620
				Total Estimated Financial Assura	$ 120,932

PREPARED BY: Raymond W. Stadler, P.E.

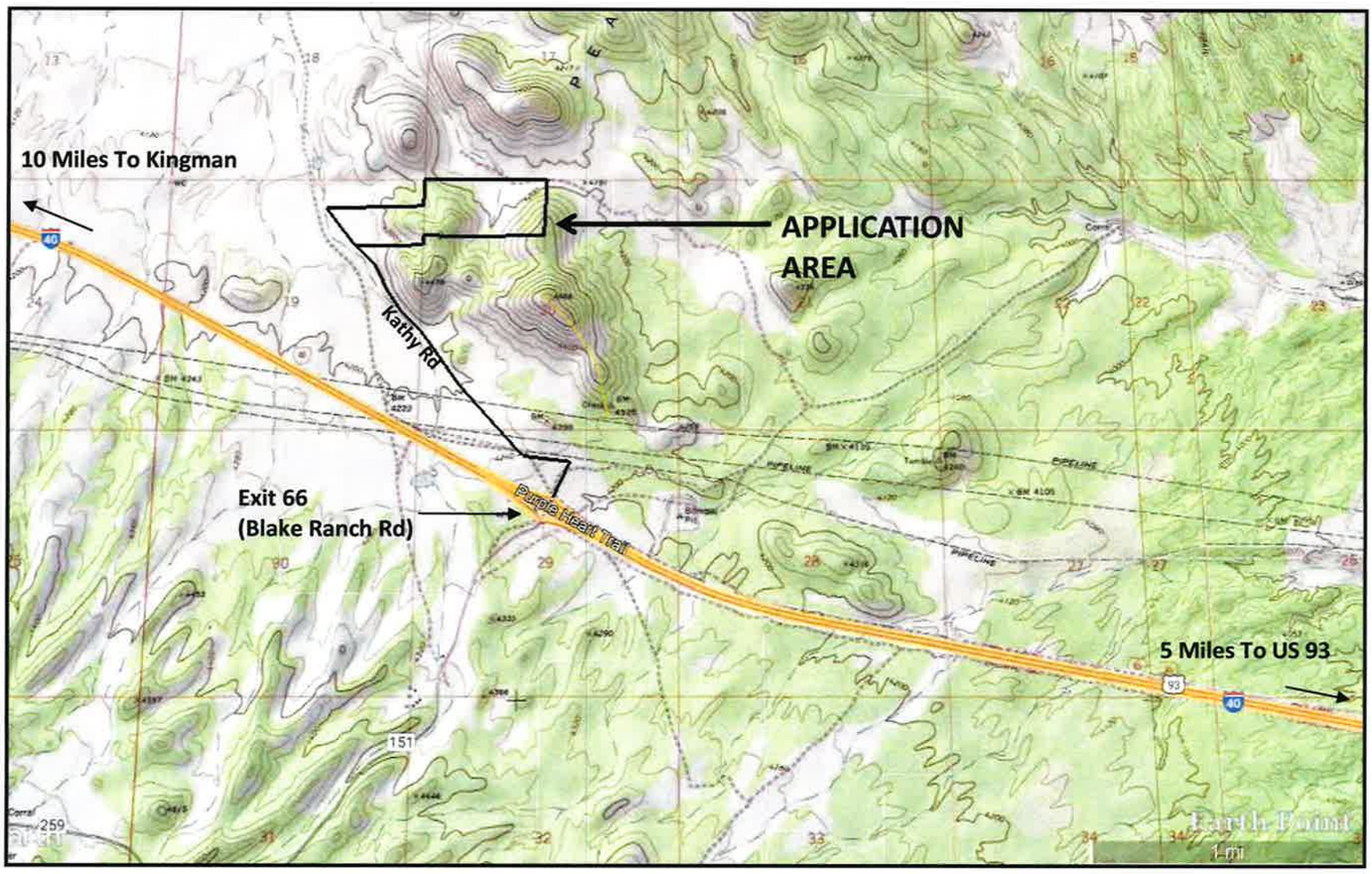


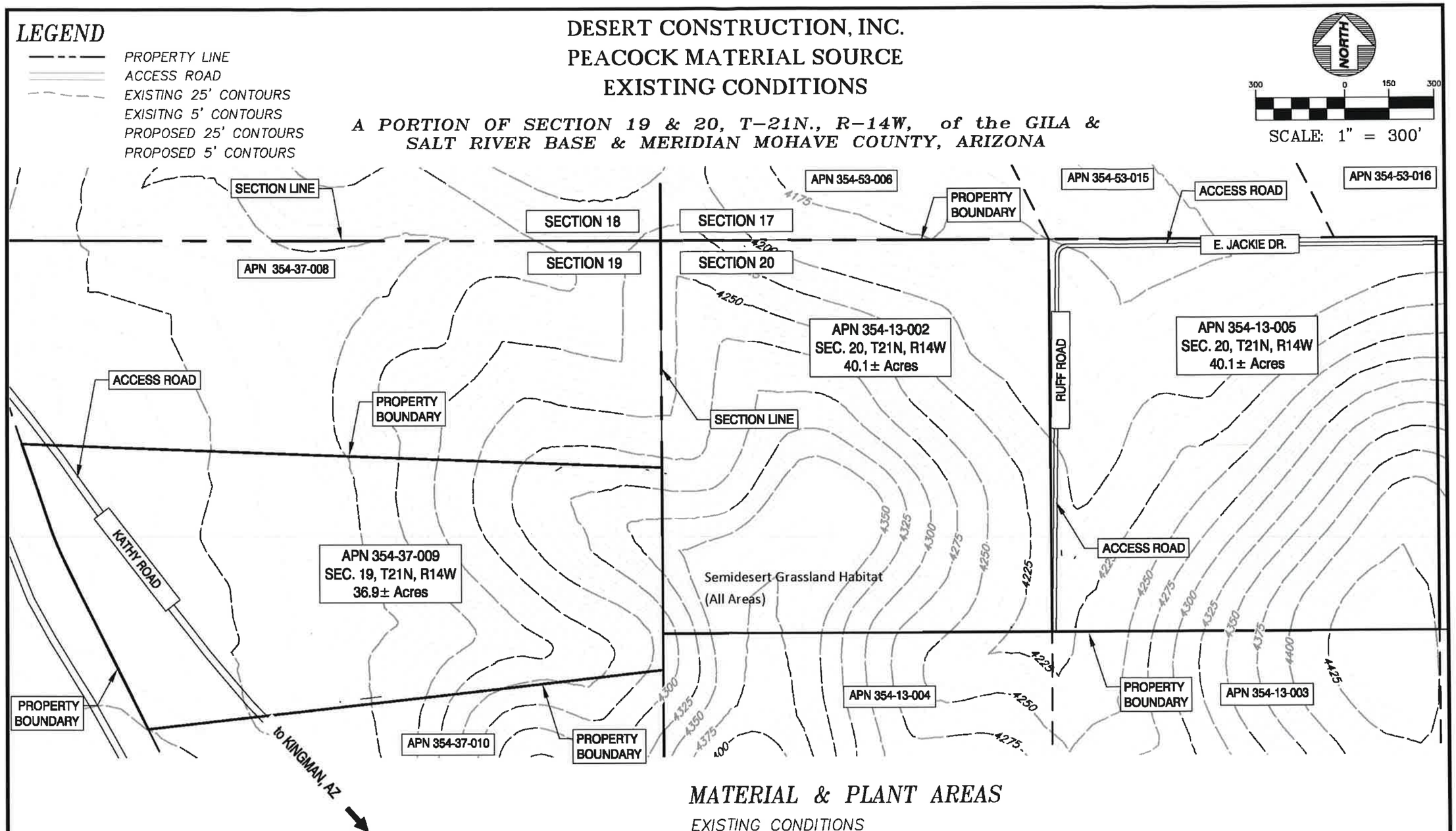
Figure 2. Project Vicinity Map.
Peacock Material Source.
Mohave County, AZ.

0 1 Mile

Base Maps: USGS 7.5-Minute Quad Map: Hualapai Spring, AZ.

DESERT CONSTRUCTION, INC.
PEACOCK MATERIAL SOURCE
EXISTING CONDITIONS

A PORTION OF SECTION 19 & 20, T-21N., R-14W, of the GILA & SALT RIVER BASE & MERIDIAN MOHAVE COUNTY, ARIZONA



MATERIAL & PLANT AREAS

EXISTING CONDITIONS

ACCESS ROAD	– 1.1± ACRES
MINING AREA	
UNDISTURBED AREA	– 116.0± ACRES
TOTAL	– 117.1± ACRES

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FIGURE 3

DESERT CONSTRUCTION, INC.
PEACOCK MATERIAL SOURCE
PROPOSED CONDITIONS

A PORTION OF SECTION 19 & 20, T-21N., R-14W, of the GILA & SALT RIVER BASE & MERIDIAN MOHAVE COUNTY, ARIZONA

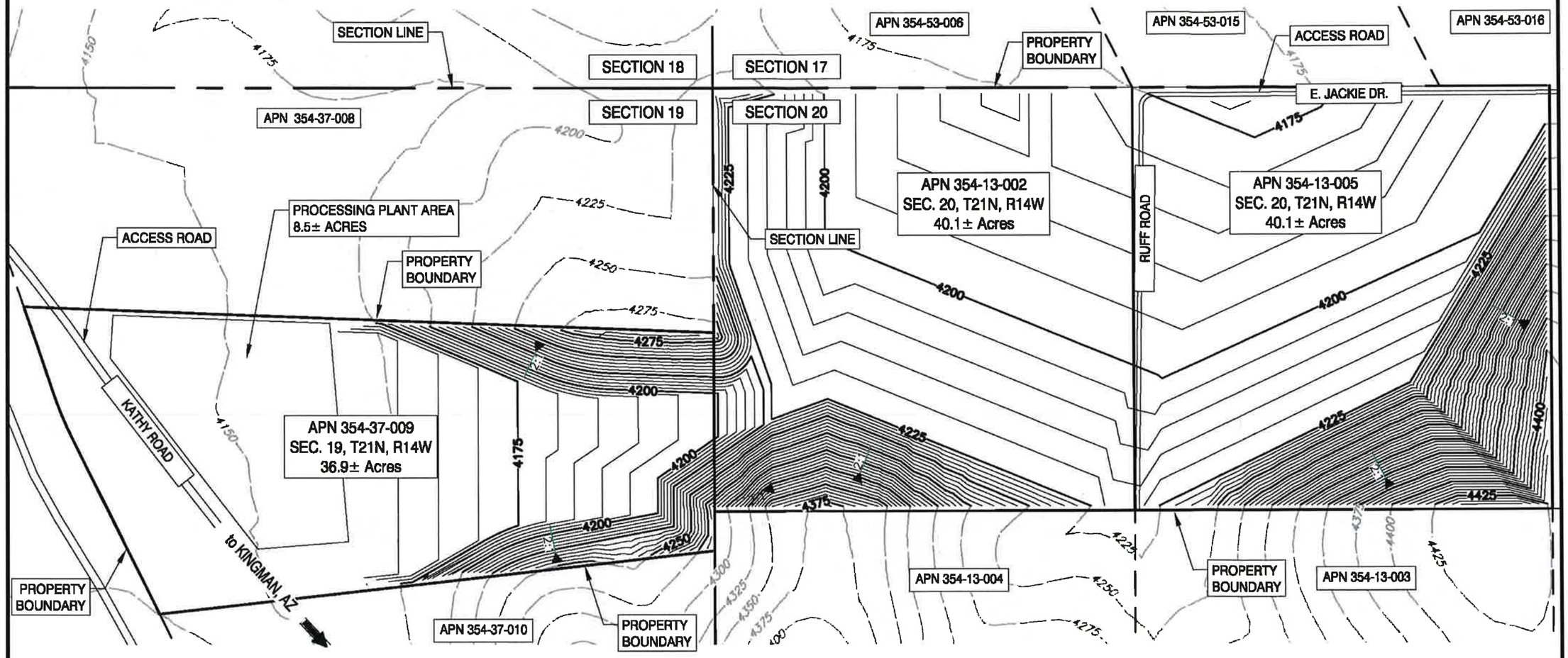
LEGEND

- PROPERTY LINE
- ACCESS ROAD
- EXISTING 25' CONTOURS
- EXISITNG 5' CONTOURS
- PROPOSED 25' CONTOURS
- PROPOSED 5' CONTOURS

NORTH

300 0 150 300

SCALE: 1" = 300'



MATERIAL & PROCESSING AREAS

ACCESS ROAD	– 1.1± ACRES
PROCESSING AREA	– 8.5± ACRES
MINING AREA	– 92.0± ACRES
UNDISTURBED AREA	– 15.5± ACRES
TOTAL	– 117.1± ACRES

SOURCE MATERIAL VOLUME

MINING AREA	– 92.0± ACRES
VOLUME MINING AREA	– 6,670,600± C.Y.
TOTAL AREA	– 92.0± ACRES
TOTAL VOLUME	–6,670,600± C.Y.

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FIGURE 4

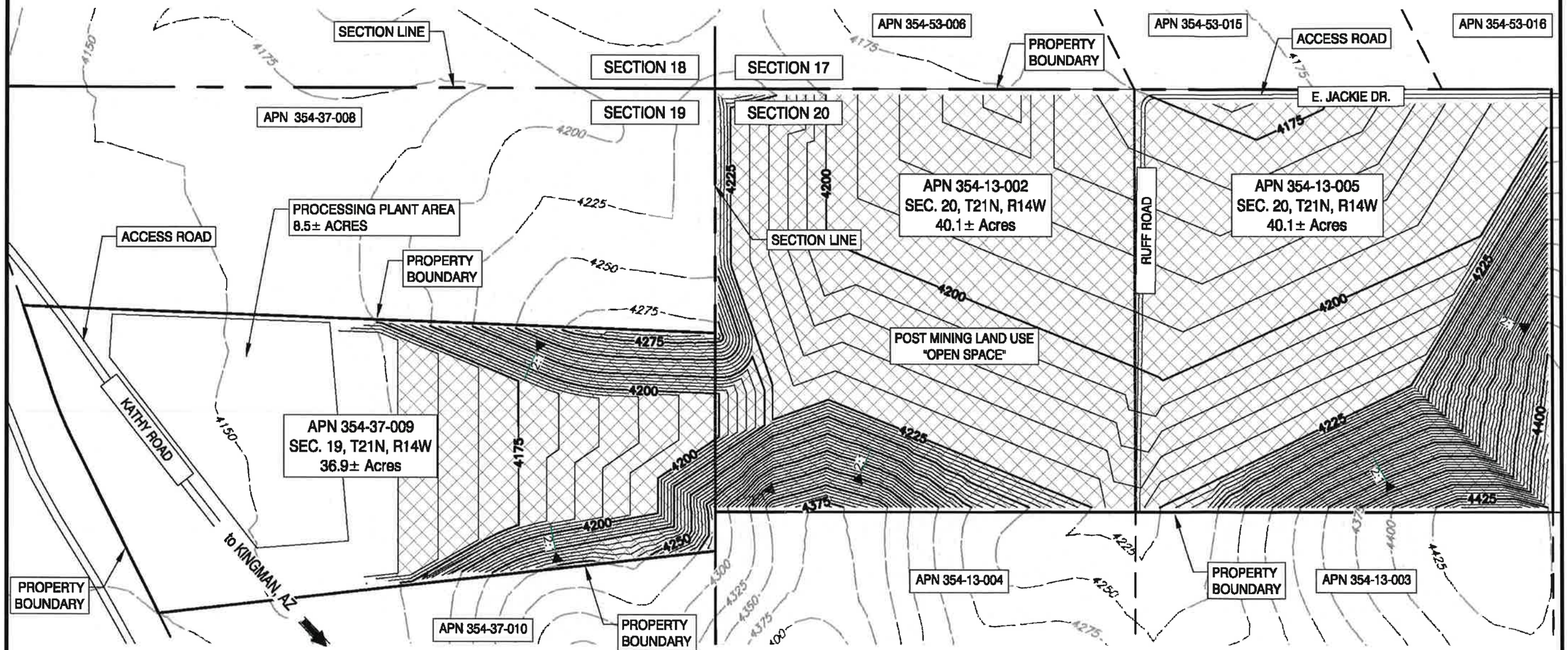
DESERT CONSTRUCTION, INC.
PEACOCK MATERIAL SOURCE
RECLAMATION & POST-MINING LAND USE MAP "OPEN SPACE"

A PORTION OF SECTION 19 & 20, T-21N., R-14W, of the GILA & SALT RIVER BASE & MERIDIAN MOHAVE COUNTY, ARIZONA

NORTH

300 0 150 300

SCALE: 1" = 300'



LEGEND

- PROPERTY LINE
- ACCESS ROAD
- EXISTING 25' CONTOURS
- EXISITNG 5' CONTOURS
- PROPOSED 25' CONTOURS
- PROPOSED 5' CONTOURS
- FINAL GRADING AREA & SCARIFYING

FIGURE 5

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