STATE MINE MATERIAL

FEB 2 4 2023

# RECLAMATION AND CLOSURE PLAN

ROCK SUPPLY LLC
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

FEBRUARY 2023



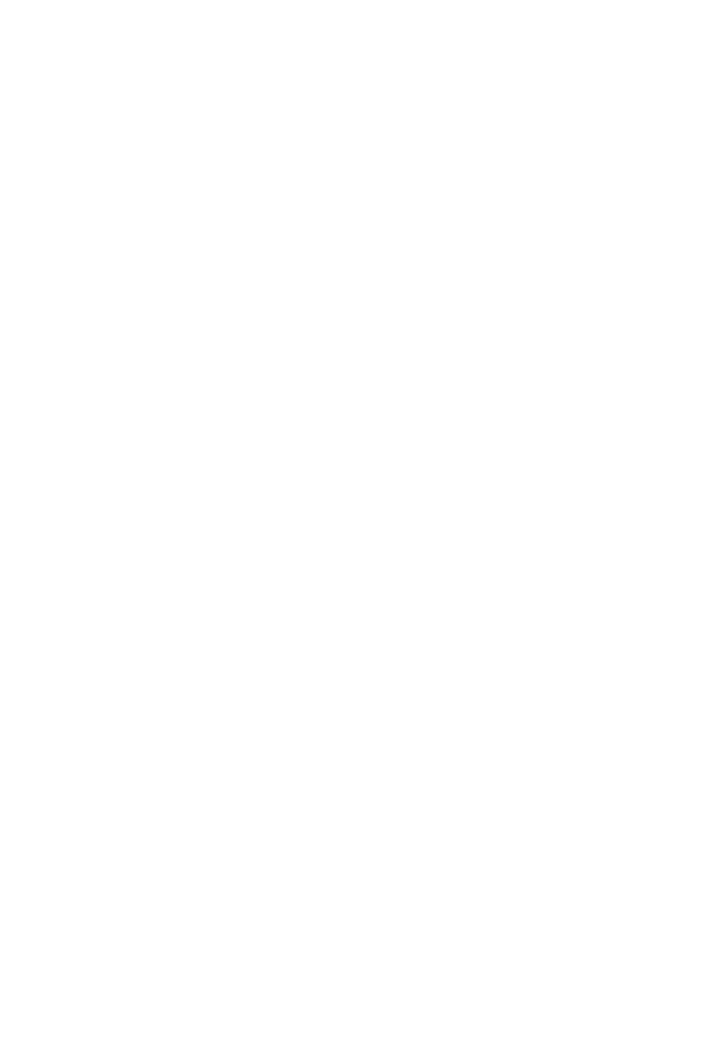
### TABLE OF CONTENTS

1.0 ADMINISTRATIVE INFORMATION
2.0 INTRODUCTION
2.1 Purpose and Scope
2.2 Reclamation Statement of Responsibility
2.3 Reclamation Approach
2.4 Current Ownership and Land Use Included in the Aggregate Mining Unit
2.5 Proposed Post-aggregate Mining Land Use
2.6 Description of the Aggregate Mining Unit and Proposed Surface Disturbances
2.7 Existing and Proposed Final Topography
2.8 A Narrative Description of Roads
2.9 Acreage Affected by Each Type of Surface Disturbance
2.9.1 Mining Area
2.9.2 Processing Area
2.9.3 Access Roads
3.0 RECLAMATION
3.1 Equipment and Structure Removal
3.2 Roads, Power Lines, Waterlines and Fences
3.3 Area Preparation
3.4 Slope Stabilization
3.5 Soil Conservation
3.6 Revegetation
3.7 The Proposed Reclamation Measures to Achieve Post Mine Land Use and
Public Safety
3.8 Timeline and Phasing of Reclamation
3.9 Reclamation Costs – Financial Assurance
4.0 MINE CLOSURE
4.1 Mining Areas
4.2 Processing and Other Areas
4.3 Personnel
4.4 Monitoring

## TABLE OF CONTENTS (CONCLUDED)

Section		<u>Page</u>
TABLES		
Table 1 Table 2	Existing Surface Disturbance Proposed Final Surface Disturbance	3
FIGURE	S	
Figure 1 Figure 2 Figure 3 Figure 4 Figure 5	State Map Site Vicinity Map Existing Conditions Proposed Conditions Reclamation & Post-Mining Land Use Map "Open Space"	
APPENI	DICES	

Appendix 1 Reclamation Construction Estimate



#### 1.0 ADMINISTRATIVE INFORMATION

Company:

Rock Supply LLC

Contact:

James Cox

Rock Supply LLC Phone (928) 231-6838 Email address

Applicant:

Rock Supply LLC P.O. Box 955

Salome, AZ, 85348 Phone (928) 231-6838 Email address

Permit

Jill Himes, Himes Consulting LLC

Technical Consultant:

3301West Genoa Way Chandler, AZ 85226

(480) 899-5708 (602) 499-9253 (cell) jillhimes@cox.net

Landowner:

Fortune Rock, LLC

15215 S 48th St., Suite 130 Phoenix, AZ, 85044

Parcel Nos:

306-44-031A, 306-44-031B, 306-44-031C, 306-44-031D, 306-44-031E

Operator:

Rock Supply LLC

James Cox

#### 2.0 INTRODUCTION

#### 2.1 PURPOSE AND SCOPE

Rock Supply LLC (Rock Supply) proposes to conduct aggregate mining and processing at their material source northwest of Chino Valley in Yavapai County, Arizona. The site is located within a portion of the NW ¼ of Section 31 in Township 17 North, Range 2 West, and the NE ¼ of Section 36, Township 17 North, Range 3 West, Gila & Salt River Meridian, Yavapai County, Arizona.

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

Rock Supply 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.

 $\frac{1-19-2023}{\text{Signature}}$ 

Owner

Title

#### 2.3 RECLAMATION APPROACH

Rock Supply 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

Rock Supply proposes to conduct aggregate mining and processing operations for commercial use at their material source. Approximately 4.7 acres of the site is previously disturbed as shown in Figure 3, from road development, well exploration, and other grading. The extraction/processing operation consists of mining to remove aggregate material as described in A.R.S. § 27-441. At the project site, the process will include the use of a screen and other mobile equipment for the support of production, and other construction material related operations. Operations will consist of excavation, screening, stockpiling, loading, and hauling. Access is directly off of Service Road, a county-maintained road. Land use is currently undeveloped open space. The site contains a total of 25.2 acres, as shown in Table 1 below. Rock Supply has estimated the removal of approximately 616,330 cubic yards over a period of 20 years.

The project vicinity lies within the Great Basin Conifer Woodland vegetation community as described by Brown (1994). Vegetation is characterized by juniper (Juniperus monosperma), skunkbush (Rhus trilobata), buckbrush (Purshia tridentata), pinyon pine (Pinus edulis), and white ratany (Krameria grayii), along with weeds and grasses including sideoats grama (Bouteloua curtipendula), Russian thistle (Salsola kali), silverleaf nightshade (Solanum elaeagnifolia). The project site is located within Arizona Game and Fish Department (AGFD) Game Management Unit 19B. This unit is managed for antelope (Antilocapra americana), elk (Cervus canadensis), javelina (Tayassu tajacu), mule deer (Odocolieus hemionus), mountain lion (Puma concolor), dove (Zenaida sp.), and quail (Callipepla gambelii). Wildlife and/or wildlife sign observed within the project site includes gray fox (Urocyon cinereoargenteus), black-tailed jackrabbit (Lepus californicus), mule deer, Arizona gray squirrel (Sciurus arizonensis), common raven (Corvus corax), red-tailed hawk (Buteo jamaicensis), greater roadrunner (Geococcyx californianus), and whiptail (Aspidoscelis sp.).

Table 1
Existing Surface Disturbance

Feature	Acres	
Access Road	1.6	
Disturbed Areas	3.1	
Undisturbed	20.5	
Total	25.2	

#### 2.5 PROPOSED POSTAGGREGATE MINING LAND USE

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

# 2.6 DESCRIPTION OF THE AGGREGATE MINING UNIT AND PROPOSED SURFACE DISTURBANCES

Proposed surface disturbances include an excavation area of 18.3 acres, as shown in Figure 4. A processing area is proposed in the southeast portion of the property. Equipment including a screen, bulldozer, excavator, loader, and an office trailer will be kept within the processing area/office housing area. Stockpile placement will vary within the mining area and processing area. Rock Supply has estimated the removal of approximately 660,330 cubic yards over a period of 20 years.

Table 2
Proposed Final Surface Disturbance

Feature	Acres
Access Road	1.6
Processing Area	5.0
Mining Area	18.3
Undisturbed	0.3
Total	25.2

#### 2.7 EXISTING AND PROPOSED FINAL TOPOGRAPHY

Existing topography and survey information is provided in Figure 3 (attached). Existing elevations within the project site range from approximately 5,160 feet (ft) above mean sea level (msl) in the southwest corner to 5,000 ft above msl on the northern boundary. 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.

#### 2.8 A NARRATIVE DESCRIPTION OF ROADS

The existing access road provides access through the property with the entrance to the site on the southeast side on Service Road. A gate with lock will be installed at the Service Road entrance. No major changes are proposed to the road apart from elevational changes as mining progresses. The existing access road is 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 is proposed to occur within the majority of the site, with the exception of the southeastern corner, and will impact a total of approximately 18.3 acres. Proposed final build-out is shown in Figure 4.

#### 2.9.2 Processing Area

The processing area is proposed in the southeastern portion of the site. The processing area will include stockpiles, material processing, a screen, equipment not in use (including a bulldozer, loader, and excavator), and an office trailer.

#### 2.9.3 Access Roads

The existing access road provides access through the property with the entrance to the site on the southeast side on Service Road. A gate with lock will be installed at the Service Road entrance. No major changes are proposed to the road apart from elevational changes as mining progresses. The existing access road is shown in Figures 3 and 4.

#### 3.0 RECLAMATION

#### 3.1 EQUIPMENT AND STRUCTURE REMOVAL

All equipment proposed 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

The existing access road within the site will remain in the same location. There are no powerlines that occur within the site. There are no waterlines proposed within the site. Mobile generators are used on an as-needed basis for the mining equipment which will be removed post-mining. During operations or at closure, the entrance will be gated and locked.

#### 3.3 AREA PREPARATION

Post-mining, the site interior will be lightly 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 within the site was observed. Natural revegetation of the disturbed areas is therefore reasonably expected to be successful without soil amendments.

#### 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

- As the mined slopes are proposed at 3:1, no hazardous surface features? As the mined slopes are proposed at 3:1, no hazardous surface features are anticipated to remain after reclamation. The entrance gate will be locked during operations or at closure to prevent access. Vehicular access to the northern area will be restricted by berming the access road. 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. Scarification will promote natural revegetation over the long-term to assist in erosion control. No permanent piles of mined material or overburden will remain. The site will not be mined below ground surface so no pits will be created.
- C. What measures will be taken to address revegetation, conservation, and the care and monitoring of revegetated areas?

Scarification will promote natural revegetation which occurs in the region; however direct revegetation is not proposed as appropriate for the post-mining land use. Monitoring of the entire site will be conducted for one year.

#### 3.8 TIMELINE AND PHASING OF RECLAMATION

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

- Mining operations will begin immediately upon plan approval in 2023 and are anticipated to continue through approximately 2043.
- Reclamation on the processing and related areas will commence immediately upon completion of mining operations and is estimated to be completed within one year of the start date (estimated 2043).
- Activities within this year include equipment removal, processing area cleanup, grading, scarification to promote natural revegetation, berming, and 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, 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. 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 semi-annually to inspect the main gate and lock, remove trash, monitor natural revegetation of scarified areas, and conduct a general inspection.

## **APPENDIX 1**

## RECLAMATION CONSTRUCTION ESTIMATE

# ROCK SUPPLY, LLC MATERIALSOURCE

#### **Reclamation Construction Estimate**

2/22/2023

Rock Supply, LLC Material Source - portions of Section 31, T 17 N, R 2 W, and Section 36, T 17 N, R 3 W, G&S Excavation and processing areas (approximately 22.2 acres) 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 TLC Excavation, Inc.

#### Proposed Reclamation Cost Estimation Summary - WorkSheet

Reclamation Item	Units	Description	Suggested Cost		Number of Units	Reclamation Cost		
Processing and Stockpile Area								
10.00	Acre	Re-Grading & Leveling	S	500.00	22.2	\$	11,100	
	Acre	Revegetation Cost (Disc)	s	607		\$	40	
	Acre	Revegetation Cost (Hydro-seed)	s	1,175		s		
	Each	Containerized Trees and Shrubs	s	10	0.0	\$		
Roads (Access)								
(Roads with Side Slope < 30%)	Linear Ft.	Re-Grading and Topsoiling Costs	S	1.70	0,0	\$	5	
(Roads with Side Slope >30%)	Linear Ft.	Re-Grading and Topsoiling Costs	S	2,60		\$		
	Acre	Regrading - Ripping	s	607	22,2	\$	13,500	
	Acre	Revegetation Cost (Hydro-seed)	s	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		\$	- 3	
	Linear Mile	Powerline Removal (Single Pole Utility)	\$	10,000		\$	-	
	each	Transformer Removal	\$	5,000		\$	20	
	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	1,0	S	10,000	
Construction			_					
	Linear Ft	Construction - Barb Wire Fencing (3 strand)	\$	00.8	<u> </u>	\$	500	
Material Haulage for Backfill	Sq. Yard	Install Berm on northern entrance	\$	500.00	1.0	2	300	
Miscellaneous Leveling	Cu. Yard	Truck and Loader - 2000Ft. One Way	\$	1.03		\$		
ividacenancoda Devening	Cu. Yard	Dozer and Scraper - 1000Ft. One Way	\$	0.72		\$		
Care and Maintenance								
generalise and an annumental and an experience of the second	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 \$ 42,100						
		L		Эрг	S una states		.2,100	
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%		S	1,620	
		Total Estimated Financial Assur \$ 47,932						

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

ARPA - Aggregate Mining Unit Cost Estimate Summary



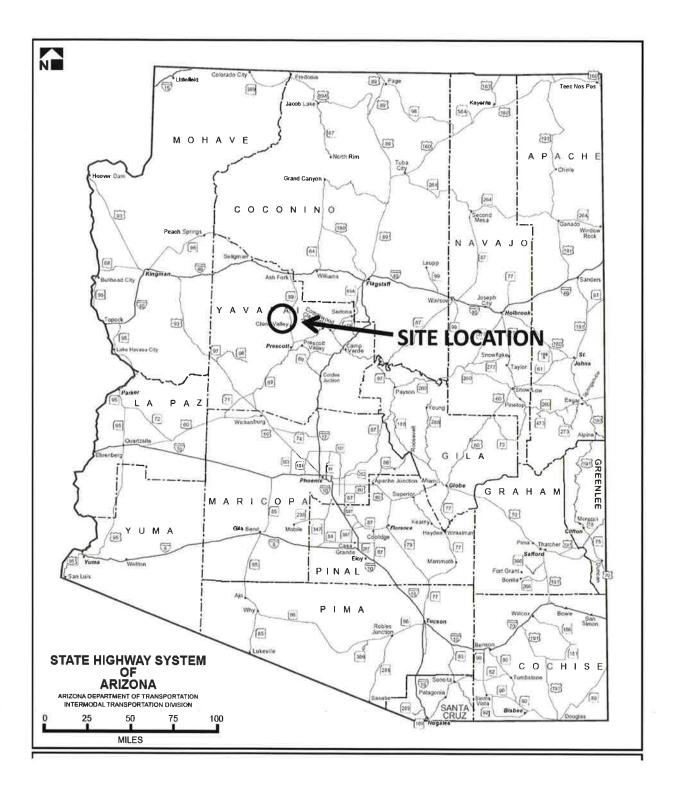


Figure 1. State Map. Rock Supply LLC Material Source. Yavapai County, AZ.

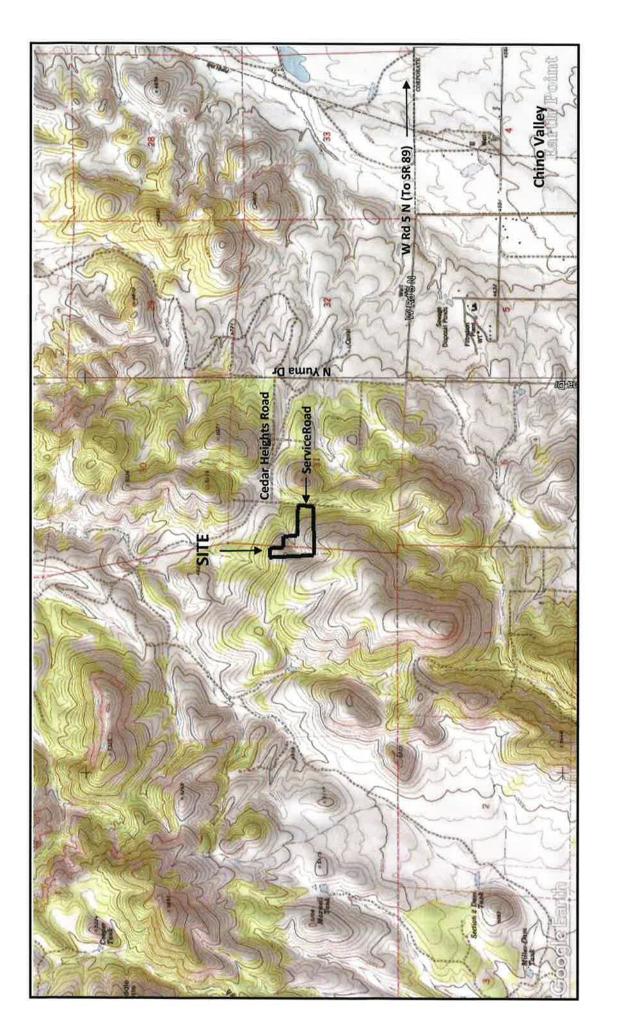


Figure 2. USGS Topographical Map. Rock Supply LLC Material Source Site Vicinity Map. Yavapai County, AZ.





