

ARCOSA

AGGREGATES

STATE MINE INSPECTOR

AUG 25 2023

8/24/2023

Arizona State Mine Inspector's Office
Attn: Reclamation Department
1700 West Washington Street
Suite 403
Phoenix, Arizona 85007

Reference: Technically Incomplete Reclamation Plan for the Glendale Site

See below for the responses to the Technically Incomplete Reclamation Plan for the Glendale Site:

- Please include a description of the measures that will be taken to address erosion control stability [§27-1271 (B.9b)].
 - **Arcosa comment: This has been addressed in section 3.6.**
- Reclamation costs must be computed assuming third-party plan-execution [§27-1292 (B)]. Please include quoted remediation pricing from a third-party provider or calculate remediation to include all expenses and provide pricing sources [§27-1292 (C.2)]. If publications are used to calculate expenditures, please cite the source, and include the version/date of said publication.
 - **Arcosa comment: Third-party quotes have been obtained and the plan, as well as the reclamation bond amount, have been revised.**
- Miscellaneous
 - Table of Contents:
 - Section 5.0 is inconsistent with body of plan.
 - **Arcosa comment: This has been corrected.**
 - 2.1
 - Last paragraph, second sentence: add "West" to Arcosa Aggregates.
 - **Arcosa comment: This has been corrected.**
 - 2

- .9.1
 - Second paragraph:
 - Change to "0.75 miles from the site."
 - Capitalize "C" in City of Glendale.
 - Clarify "recharge station."
 - **Arcosa comment: These items have been corrected.**
- 2.9.2
 - Add "the" between "since" and "1990s."
 - **Arcosa comment: This has been corrected.**
- 3.2
 - Last paragraph, last sentence, add "infrastructure" (or other appropriate noun) between "electrical" and "remain."
 - **Arcosa comment: This has been corrected.**
- 6.2
 - Last sentence references "section 5.12" which does not exist.
 - **Arcosa comment: This has been corrected.**
- 6.9
 - Second paragraph, second sentence: "form" should be "from."
 - **Arcosa comment: This has been corrected.**
- 6.15
 - "Scale House and Scale" does not need to be capitalized.
 - **Arcosa comment: This has been corrected.**

If you have any questions or concerns, please contact John Palmer via the contact information below.

Thank you,

A handwritten signature in black ink, appearing to read 'J. Palmer', written in a cursive style.

John Palmer
Western Region Environmental, Health and Safety
Arcosa Aggregates

3205 West Ray Road, Chandler, Arizona 85226
T 480.987.7917 / M 602.826.4085 / john.palmer@arcosa.com

ARCOSA

**RECLAMATION AND CLOSURE
PLAN**

**ARCOSA AGGREGATES WEST
GLENDALE SITE**

**Section 12, Township 2 North, Range 1 West
Gila and Salt River Baseline and Meridian
Maricopa County, Arizona**

**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**

Submitted November 1st, 2022

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1.0 ADMINISTRATIVE INFORMATION

Company Operator Applicant **Arcosa Aggregates West**
6500 North 115th Avenue
Glendale, Arizona 85307

Company ID: **Glendale Site**

Operation Location: **Section 12, Township 2 North, Range 1 West Gila and Salt River Baseline and Meridian, Maricopa County, Arizona**
Latitude 33.529232 N
Longitude -112.309102W
Parcel Number: 501-55-004F
Parcel Number: 501-55-004G
Parcel Number: 501-55-004E

Contact: **John Palmer**
3205 West Ray Road
Chandler, Arizona 85226
Fax: 480-987-7918
Business Phone: 480-987-7917
Cell Phone: 602-826-4085
Email Address: john.palmer@arcosa.com

Landowner: **Glendale/115, LLC**
2355 East Camelback Road
#900
Phoenix, Arizona 85016

Statutory Agent: **Justin Allen**
500 North Akard Street
Suite 400
Dallas, Texas 75201
Business Phone: 972-942-6544

Regulatory Contact: **Same as Contact**

Permit Technical Consultant: **Same as Contact**

2.0 INTRODUCTION

2.1 Purpose and Scope

Company Narrative and Site-Specific Information

The purpose of this Mine Reclamation and Closure Plan (MRCP) is to present the details of rehabilitation on the “Glendale Site” site located at **6500 North 115th Avenue, Glendale, Arizona 85307**. The mine is located in Maricopa County. Reclamation will be concurrent with or after proposed mining operations have ceased in accordance with the Arizona Aggregate Mined Lands Act (AAMLRA) Arizona Revised Statutes (A.R.S.) 27-1201, et seq. (Title 27, and Chapter 6) as authorized by A.R.S. 27-1204. This plan has been developed pursuant to the format and content prescribed in the proposed Arizona Aggregate Mined Lands Reclamation Rules (Arizona Administrative Code (A.A.C.), R11-3-101, et seq.), which accounts all requirements associated with all mine sites and the mining operation or MRCP submitted to the State Mine Inspector.

The contiguous mine site is made up of 156.1 acres of land: 76.4 acres comprises parcel #501-55-004F, 40 acres comprises parcel #501-55-004G and 39.7 acres comprises parcel #501-55-004E. All 156.1 acres make up the mining operation as all of the land within the parcels is potentially mineable.

Arcosa Aggregates West crushes and screens sand and gravel for the construction industry. All Air Quality and Multi-Sector General Storm Water Permits are in place with Arcosa Aggregates West. No Floodplain use permit is required at this time; one will be obtained prior to mining operations being conducted in the southern portion of the site.

2.2 Reclamation Statement of Responsibility

Arcosa Aggregates West assumes responsibility for the reclamation of surface disturbances that are attributable to the aggregate mining unit consistent with this Reclamation Plan, and ARS (Chapter 6) ARS 27-1201 et seq., and any promulgated rules, in ACC Title 11, Chapter 3.

Pursuant to R11-3-501 and to the entire chapter, all areas that have been disturbed at this mine site will be reclaimed to a safe and stable condition, before and directly after mine operations conclude and will maintain Financial Assurance as needed per A.R.S. 27-1291 & 1292, to carry out the required reclamation as hereby stated per A.R.S. 27-1271 (B) (2).

Signature

Kevin Black

Western Region General Manager

Arcosa Aggregates West

Date

2.2.1 Certificate of Disclosure of Violations

A.R.S. 27-1205 is currently not applicable for this company and this mining site.

2.3 Reclamation Approach

Arcosa Aggregates West will reclaim the disturbed pit areas and will disperse all stockpiles and construction that had taken place on the property for mining operations.

Reclamation, which is not feasible during the operations, will take place immediately after the mining facility has ceased operation. Concurrent or ongoing reclamation, where necessary and feasible, will continue throughout the life cycle of the mining site for this aggregate operation.

Summary of Post Mining Reclamation Task

1. Slope walls to at least 2H:1V (2 horizontal to 1 vertical ratio; for example, for every 10 feet in height, the slope will extend 20 feet outward) for safety and security (to take place concurrently as mining operations continue).
2. Remove crushing and screening plant.
3. Site cleanup including removal of scrap and waste.

2.4 Current Ownership and Land Use Included in the Aggregate Mining Unit

Arcosa Aggregates West will be conducting a sand and gravel mining operation, which encompasses a portion of Section 12, Township 2 North, Range 1 West Gila and Salt River Baseline and Meridian, Maricopa County, Arizona. There is a total of 156.1 acres which have been disturbed 100% by previous operations that constitute the mining area. The landowner is Glendale/115, LLC. The site is located on parcel numbers 501-55-004F, 501-55-004G & 501-55-004E. It is projected that the entire 156.1 acres will be mined and reclaimed.

This site has been operational off and on since the early 1990s. As of November 1st, 2022, close to 85% of the top 30 feet of reserves have been mined. This reclamation plan addresses conditions of the site, assuming that all 156.1 acres of the mining operation will be mined. Reclamation will not be a phased approach and will be completed fully once mining operations cease. Currently, mining operations are taking place within the north 76.4 acres of the site. In the northern, western and southern portions of the site, the pit walls are sloped to 2H:1V, which is the angle of repose for material characteristic of the Agua Fria Wash. In the eastern portion of the site, the pit wall is only sloped in a few areas. There remains 2,375 ft. of pit wall that needs to be sloped. The material that will be utilized to slope the pit walls will come from stockpiles, fines piles, ponds and material that has yet to be mined (cut and fill techniques). Taking into consideration an

aggregation of the current pit footage that has yet to be properly sloped (2,375 ft.) and an eventual pit depth (20-30 ft. from base elevation of 1,046 ft.), along with using a common fill dirt calculator, it is determined that 79,193 cu yd. of material needs to be utilized for sloping. Since the ponds in the southern portion of the site will need to be reclaimed with a dozer as well, it is determined that 483,629 cu yd. of material will need to be moved for disbursement. Coupling the sloping material (79,193 cu yd.) with the pond material disbursement (483,629 cu yd.), 562,822 cu yd. of material will need to be moved. Dispersion of the stock and fines piles into the pits for wall reclamation have been included in the cost estimates.

Arcosa Aggregates West has estimated the removal of up to 50,000 tons per year (maximum estimate) over a 10-year period from the site. Actual tonnages may vary due to market conditions.

The extraction processing operation consists of removing earthen material for aggregate mining as described in A.R.S. 27-441. The process includes the use of crushers, screens, conveyors, and mobile equipment for production of material to be used in the manufacturing of roads, bridges and other construction projects.

It is important to note that since electrical needs change, it will be necessary to update current power needs in terms of electrical lines or generator sets and on-site fuel storage to accommodate heavy equipment.

2.5 Proposed Post Aggregate Mining Land Use

Support functions for proposed post aggregate mining land use:

- Equipment Storage Yard (equipment to include diesel trucks and tractors; heavy equipment such as front-end loaders, dozers, etc.; and other large industrial equipment associated with mining operations).

These support functions will encompass the entire 156.1 acres.

2.6 Description of the Aggregate Mining Unit and Proposed Surface Disturbances

Sections 2.3, 2.4, 2.7, 2.8 and 2.9 give a detailed description of the current and proposed mining operation, area of disturbance and reclamation.

2.7 Existing and Proposed Final Topography Including Waste Rock, Stockpiles, and Fines Areas

The site is located approximately 1,046 feet above sea level. No waste rock exists; all material is used in the production of Aggregate Base Course (ABC) material. Any remaining stockpiles will be disbursed into the open pit once mining operations cease.

Existing topography of the mining area can be found in Appendixes, Map 5. Currently, mining operations are taking place within the north 76.4 acres of the site. In the northern,

western and southern portions of the site, the pit walls are sloped to 2H:1V, which is the angle of repose for material characteristic of the Agua Fria Wash. In the eastern portion of the site, the pit wall is only sloped in a few areas. There remains 2,375 ft. of pit wall that needs to be sloped. The material that will be utilized to slope the pit walls will come from stockpiles, fines piles, ponds and material that has yet to be mined (cut and fill techniques). Taking into consideration an aggregation of the current pit footage that has yet to be properly sloped (2,375 ft.) and an eventual pit depth (20-30 ft. from base elevation of 1,046 ft.), along with using a common fill dirt calculator, it is determined that 79,193 cu yd. of material needs to be utilized for sloping. Since the ponds in the southern portion of the site will need to be reclaimed with a dozer as well, it is determined that 483,629 cu yd. of material will need to be moved for disbursement. Coupling the sloping material (79,193 cu yd.) with the pond material disbursement (483,629 cu yd.), 562,822 cu yd. of material will need to be moved. Dispersion of the stock and fines piles into the pits for wall reclamation have been included in the cost estimates.

Proposed topography of the disturbed pit area can be found in Appendixes, Map 6.

2.8 A Narrative Description of Roads

The facility features one concrete driveway (1 acre) that will remain once mining operations cease. All other internal roads consist of unimproved dirt and gravel.

No manual seeding or re-vegetation will take place; this will occur naturally.

There are no bridges or culverts located on the site. Drainage of the entire property will be maintained throughout the project life and will be directed into the pit for evaporation.

2.9 Acreage Affected by Each Type of Surface Disturbance

Table 1-1 Areas of Disturbance

29.1	Area Description	Area in Acres
29.2	Aggregate Mine Open Pit	145 Acres
29.3	Roads	1 Acre
29.4	Settling Ponds	10.1 Acres
29.5	Overburden Berms	None
29.6	Process Areas	None
29.7	Other Disturbed Areas	None

2.9.1 Area Descriptions

A total of 156.1 acres in Section 12, Township 2 North, Range 1 West Gila and Salt River Baseline and Meridian, Maricopa County, Arizona makes up the mining operation covered in this reclamation and closure plan.

Residential homes are located 0.75 miles from the site (to the west), directly west is the City of Glendale water recharge station, to the north is a municipal landfill, and to the east and south are other sand and gravel mining operations.

2.9.2 Aggregate Mine Open Pit

The open pit contains 156.1 acres of potentially minable material. Portions have been mined since the 1990s. See Maps in Appendixes for additional information regarding the aggregate mine open pit.

2.9.3 Roads

The facility features one concrete driveway (1 acre) that will remain once mining operations cease. All other internal roads consist of unimproved dirt and gravel.

2.9.4 Settling Ponds

The site currently has 10.1 acres of previously used settling ponds. There are no plans for future settling ponds.

2.9.5 Overburden

The site does not currently, and will not in the future, feature overburden.

2.9.6 Process Facilities

The site currently features a crushing and screening plant that will be removed once mining operations cease.

2.9.7 Other

The site does not currently include any other improvements.

3.0 RECLAMATION

3.1 Reclamation Costs

The costs developed for this reclamation plan are based primarily on third-party quotes from local companies. Administrative costs were based on Arizona Rock Products Association recommendations. Dirt moving operations (dozer cut and fill) were based on Big Rentz equipment rental (accessed 2022). Hydroseeding cost based on a quote from Pyramid Environmental Services, LLC. obtained 8/22/2023. Plant tear-down and transport cost based on a quote from Loaded Transport LLC DBA Blue Collar S&S obtained 8/23/2023.

3.1.1 Equipment and Structure Removal

All structures used for the mining operation (e.g.: scale house and scale) will remain at the site for post-reclamation land uses.

Currently, there are no concrete slabs, foundations, or other structures that would require demolition upon reclamation. All equipment at the site that is required to be removed upon reclamation is not fixed and is portable, completely roadworthy, and is able to be mobilized to leave the site at any moment.

Any area that may have been contaminated during the mining operations, such as areas around vehicle parking, will be remediated and reclaimed accordingly.

3.2 Roads, Power Lines, Water Lines, and Fences

The facility features one concrete driveway that will remain once mining operations cease. All other internal roads consist of unimproved dirt and gravel.

The entirety of the site is surrounded by chain link fence for security and safety of the public. No additional fencing will be constructed.

Temporary power lines and water lines that were installed on the property for the mining operation (if necessary) will be removed upon completion of activity. All other electrical infrastructure will remain with the property to facilitate post-reclamation activities.

3.3 Area Preparation

The approximate 156.1 acres of disturbed area will remain active until the current reserves are depleted. If mining operations need to access areas outside of the reserve estimate, an amendment to the plan will be submitted and approval obtained prior to operations beginning. Currently, mining operations are taking place within the north 76.4 acres of the site. In the northern, western and southern portions of the site, the pit walls

are sloped to 2H:1V, which is the angle of repose for material characteristic of the Agua Fria Wash. In the eastern portion of the site, the pit wall is only sloped in a few areas. There remains 2,375 ft. of pit wall that needs to be sloped. The material that will be utilized to slope the pit walls will come from stockpiles, fines piles, ponds and material that has yet to be mined (cut and fill techniques). Taking into consideration an aggregation of the current pit footage that has yet to be properly sloped (2,375 ft.) and an eventual pit depth (20-30 ft. from base elevation of 1,046 ft.), along with using a common fill dirt calculator, it is determined that 79,193 cu yd. of material needs to be utilized for sloping. Since the ponds in the southern portion of the site will need to be reclaimed with a dozer as well, it is determined that 483,629 cu yd. of material will need to be moved for disbursement. Coupling the sloping material (79,193 cu yd.) with the pond material disbursement (483,629 cu yd.), 562,822 cu yd. of material will need to be moved. No topsoil is present; therefore, no topsoil displacement will be necessary.

3.4 Slope Stability

In the northern, western and southern portions of the site, the pit walls are sloped to 2H:1V, which is the angle of repose for material characteristic of the Agua Fria Wash. These areas are currently in and will continue to be in stable condition as this is a requirement of the Mine Safety and Health Administration. In the eastern portion of the site, the pit wall is only sloped in a few areas. The remainder of the areas in the eastern portion of the site are not sloped and are included to be addressed in the plan. No topsoil is present; therefore, no topsoil displacement will be necessary.

3.5 Soil Conservation

No topsoil or conserved soil is expected to be available for reclamation.

3.6 Re-vegetation

In the northern, western and southern portions of the site, the pit walls are sloped. In the eastern portion of the site, the pit wall is only sloped in a few areas. Since these areas have been in a reclaimed state for over five years, natural revegetation has occurred, providing for slope stability, dust control and erosion control stability. The remainder of the pit walls that require sloping will be, upon completion, broadcast hydroseeded to ensure slope stability, dust control and erosion control stability.

Stormwater drainage controls have been established as part of a Storm Water Pollution Prevention Plan (SWPPP) for the site. The SWPPP will be followed in addition to site-specific best management practices. Stormwater will be routed into the pit areas and other low-lying areas within the site. Run-on is not expected to pose an issue due to the topography of the surrounding properties.

3.7 The Proposed Reclamation Measures to Achieve Post Mine Land Use and Public Safety

MEASURES USED TO ACHIEVE POST MINING USE

Measures used to achieve post mining use will include only stock pile disbursement and cut and fill techniques to slope the eastern wall of the pit. The crusher, conveyors and associated equipment will be removed. Where hazards to public safety cannot be reduced by reclamation, weather resistant warning signs have been posted around the perimeter of the site. All scrap metal, wood, trash, and other debris that pose a threat to public safety or create a public nuisance will be removed. The entirety of the site is surrounded by fencing (block wall or chain link fence) for security and safety of the public. No additional fencing will be constructed.

The approximate 156.1 acres of disturbed land will remain active until the current reserves are depleted. Currently, mining operations are taking place within the north 76.4 acres of the site. In the northern, western and southern portions of the site, the pit walls are sloped to 2H:1V, which is the angle of repose for material characteristic of the Agua Fria Wash. In the eastern portion of the site, the pit wall is only sloped in a few areas. There remains 2,375 ft. of pit wall that needs to be sloped. The material that will be utilized to slope the pit walls will come from stockpiles, fines piles, ponds and material that has yet to be mined (cut and fill techniques). Taking into consideration an aggregation of the current pit footage that has yet to be properly sloped (2,375 ft.) and an eventual pit depth (20-30 ft. from base elevation of 1,046 ft.), along with using a common fill dirt calculator, it is determined that 79,193 cu yd. of material needs to be utilized for sloping. Since the ponds in the southern portion of the site will need to be reclaimed with a dozer as well, it is determined that 483,629 cu yd. of material will need to be moved for disbursement. Coupling the sloping material (79,193 cu yd.) with the pond material disbursement (483,629 cu yd.), 562,822 cu yd. of material will need to be moved. Dispersion of the stock and fines piles into the pits for wall reclamation have been included in the cost estimates. No topsoil is present; therefore, no topsoil displacement will be necessary.

The facility features one concrete driveway that will remain once mining operations cease. All other internal roads consist of unimproved dirt and gravel.

No permanent piles of mined material or overburden will be left to restrict drainage (all will be disbursed into the pit upon reclamation).

Erosion control stability is discussed in Section 3.6. Consult Map 6 in Appendixes for final reclamation topography.

Post-aggregate mining land use is not designated for grazing, fish or wildlife habitat, forestry or recreation.

3.8 Timeline

All reclamation will commence immediately upon closure of mining operations. Reclamation of the mining activity shall be designed to minimize hazards to public safety to the extent technically and economically practical.

Arcosa Aggregates West estimates that mining will be completed in 10 years and 12 months will be required to complete reclamation. The projected 10-year estimate of mining, if it occurs, will be addressed annually within Annual Reports submitted to the Arizona State Mine Inspector's office of Reclamation for this site and the reclamation bond will be updated accordingly.

3.9 Reclamation Cost – Financial Assurance

All reclamation cost described will be wholly born by Arcosa Aggregates West.

4.0 MINE CLOSURE

4.1 Mining Areas

All reclamation will commence immediately upon closure of mining operations. Reclamation of the mining activity shall be designed to minimize hazards to public safety to the extent technically and economically practical.

4.2 Processing and Other Areas

Currently, there is one processing area that features a crushing and screening plant within the 156.1 acre disturbance area.

4.3 Personnel

All personnel employed at this site will remain to facilitate the other operations of Arcosa Aggregates West.

4.4 Monitoring

The closure of mining operations at this site will be monitored in accordance with the Arizona State Mine Inspector's Office.

5.2 Table II

Administration Cost Cost	Initial Hours	Annual Hours	Cost Per Hour	Years	Total
Plan Development	60	0	\$0		\$0
Annual Review	0	1	\$125	10	\$1,250
Monitoring	0	5	\$125	3	\$1,875
Assurance Administrator	0	0	\$0	10	\$0
TOTAL					\$3,125

5.3 Table III

Tables	Total
Table 1	\$164,155.00
Table 2	\$3,125.00
Total Tables 1 & 2	\$167,280.00
Contingency and Insurance Cost 10%	\$16,728.00
Total Tables and C/I	\$184,008.00
Total Reclamation Cost	\$184,008.00

6.0 COST DESCRIPTION

6.1 Pit Area

The approximate 156.1 acres of disturbed area will remain active until the current reserves are depleted. Currently, mining operations are taking place within the north 76.4 acres of the site. In the northern, western and southern portions of the site, the pit walls are sloped to 2H:1V, which is the angle of repose for material characteristic of the Agua Fria Wash. In the eastern portion of the site, the pit wall is only sloped in a few areas. There remains 2,375 ft. of pit wall that needs to be sloped. The material that will be utilized to slope the pit walls will come from stockpiles, fines piles, ponds and material that has yet to be mined (cut and fill techniques). Taking into consideration an aggregation of the current pit footage that has yet to be properly sloped (2,375 ft.) and an eventual pit depth (20-30 ft. from base elevation of 1,046 ft.), along with using a common fill dirt calculator, it is determined that 79,193 cu yd. of material needs to be utilized for sloping. Since the ponds in the southern portion of the site will need to be reclaimed with a dozer as well, it is determined that 483,629 cu yd. of material will need to be moved for disbursement. Coupling the sloping material (79,193 cu yd.) with the pond material disbursement (483,629 cu yd.), 562,822 cu yd. of material will need to be moved. Dispersion of the stock and fines piles into the pits for wall reclamation have been included in the cost estimates. No topsoil is present; therefore, no topsoil displacement will be necessary. The cost of this operation is discussed in section 6.8.

6.2 Processing Plants: (Process Area)

Upon reclamation initiation, the crusher, conveyor belts, screens, and any other portable equipment related to the mining operation will be removed from the site. The cost of this operation is discussed in section 6.9.

6.3 Well: (Process Area)

There currently are no wells at the facility. There will be no expense for reclamation.

6.4 Parking: (Process Area)

There currently are no parking structures at the facility. There will be no expense for reclamation.

6.5 Roads

The facility features one concrete driveway (1 acre) that will remain once mining operations cease. All other internal roads consist of unimproved dirt and gravel.

6.6 Settling Ponds

The site currently has 10.1 acres of previously used settling ponds. There are no plans for future settling ponds.

6.7 Overburden Berms

There currently are no, and will not be in the future, overburden berms at the facility.

6.8 Calculated Cost to Re-Contour Pit

The approximate 156.1 acres of disturbed area will remain active until the current reserves are depleted. Currently, mining operations are taking place within the north 76.4 acres of the site. In the northern, western and southern portions of the site, the pit walls are sloped to 2H:1V, which is the angle of repose for material characteristic of the Agua Fria Wash. In the eastern portion of the site, the pit wall is only sloped in a few areas. There remains 2,375 ft. of pit wall that needs to be sloped. The material that will be utilized to slope the pit walls will come from stockpiles, fines piles, ponds and material that has yet to be mined (cut and fill techniques).

Taking into consideration an aggregation of the current pit footage that has yet to be properly sloped (2,375 ft.) and an eventual pit depth (20-30 ft. from base elevation of 1,046 ft.), along with using a common fill dirt calculator, it is determined that 79,193 cu yd. of material needs to be utilized for sloping. Using current fully loaded equipment rental rates for a 99-horsepower blade truck dozer (as of 10/25/2022), with the determination that a dozer of this size, working 10-12 hours in a shift, can move roughly 5,000 cubic yards of material per day, and that a dozer of this size can be rented for \$4,431 per month (fully loaded; operator, fuel, maintenance, transport, etc.) is equal to the ability to move 120,000 cu yd. of material for pit sloping purposes. This easily encompasses the 79,193 cu yd. of material needed for pit sloping, plus adds a buffer for any unforeseen issues or additional grading that needs to occur. Dispersion of any stock and fines piles into the pits for wall reclamation have been included in the cost estimates.

Total Cost

\$4,431.00

6.9 Calculated Cost to Remove Process Plants

Upon reclamation initiation, the crusher, conveyor belts, screens, and any other portable equipment related to the mining operation will be removed from the site.

Estimates to tear down, load and mobilize all equipment related to crushing and screening activities takes approximately 5 days, according to a third-party quote for the work. The quote ranged from \$80,000 to \$140,000 depending upon a number of factors, however, \$140,000 was the worst-case scenario and the number that was utilized for this reclamation plan.

Total Cost
\$140,000

6.10 Calculated Cost to Place Signs and Remove Debris

Costs have been added for the labor to remove any trash or other debris at the site.

Total Cost
\$2,000

6.11 Parking Area

There currently are no specific parking structures at the facility. There will be no expense for reclamation.

Total Cost
\$0

6.12 Calculated Cost to Reclaim Road

The facility does not feature any paved roads; all roads consist of unimproved dirt and gravel.

Total Cost
\$0

6.13 Calculated Cost to Reclaim Settling Ponds / Reclaim Cells

Since the ponds in the southern portion of the site will need to be reclaimed with a dozer, it is determined that 483,629 cu yd. of material will need to be moved for disbursement. Using current fully loaded equipment rental rates (from above) for a 99-horsepower blade truck dozer (as of 10/25/2022), with the determination that a dozer of this size, working 10-12 hours in a shift, can move roughly 5,000 cubic yards of material per day, and that a dozer of this size can be rented for \$4,431 per month (fully loaded; operator, fuel, maintenance, transport, etc.) is equal to the ability to move 480,000 cu yd. of material for pit sloping purposes (in a 4-month period). Using some of the time overage on the pit contouring, this, this easily encompasses the 483,629 cu yd. of material needed for pit sloping, plus keeps a buffer for any unforeseen issues or additional grading that needs to occur with the total rental time-frame. Dispersion of any stock and fines piles into the pits for wall reclamation have been included in the cost estimates.

Total Cost
\$17,724.00

6.14 Calculated Cost to Move Overburden Berms

There currently are no overburden berms at the facility. There will be no expense for reclamation.

Total Cost
\$0

6.15 Calculated Cost to Remove Scales and Scale House

The scale house and scale will remain after mining operations cease and are not within the area of reclamation. There will be no expense for removal.

Total Cost
\$0

6.16 Fees

Application Fees of \$3,800 has been submitted with this reclamation plan.

7.0 RESOURCES

Reclamation costs for this mining plan were acquired from the sources listed below. Table 1-3 estimates the reclamation cost by task.

Resources for information can be obtained through the following publications:

PDS West: Sand and Gravel Reclamation

Mineral Information Institute: Mine Reclamation

Cerrillos Hills of New Mexico: Reclaim Cerrillos Gravel Products

Pit and Quarry: Quarryology 101

LaFarge Equipment Mobilization Rates

Interstate Mining Compact Commission: Bonding

Appraisal of a Gravel Pit by Lloyd R. Manning

McFarland v. Hauser 88 D.L.R. (3rd) 449 (1979)

McCarthy v. Ministry of Transportation & Communication, 28 L.C.R. 213 Ontario Land Compensation Board, July 11, 1983

Buesing Corp.'s Standard Rental/Time and Material Rates

Caterpillar Performance Handbook

Brown and Caldwell Cost and Estimation

Fred Brost, Mine Environmental Consultants

Sunbelt Equipment Rental Rates

Bigrentz.com Equipment Rental Rates

Fill Dirt Calculator (<http://www.filldirtcalculator.com/wedge.html>)

Pyramid Environmental Services, LLC Hydroseed Rates

Loaded Transport dba Blue Collar S & S Mobilization Rates

Appendixes

Maps

Map 1

State Location Map

Arcosa Aggregates West's Glendale Site is located at 6500 North 115th Avenue, Glendale, Arizona 85307 in Maricopa County.

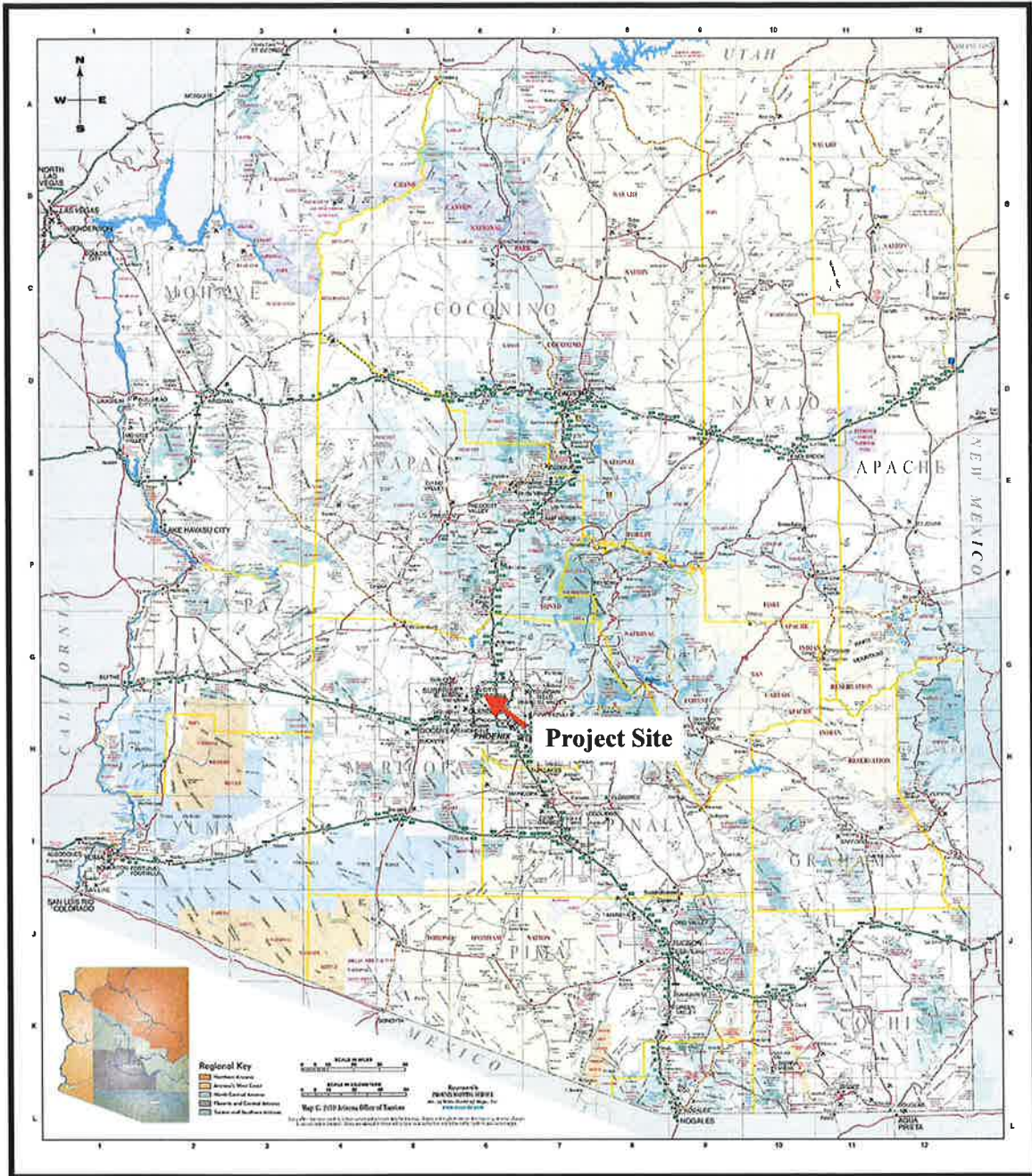
Section 12, Township 2 North, Range 1 West Gila and Salt River Baseline and Meridian, Maricopa County, Arizona

Parcel Numbers: 501-55-004E, 501-55-004F, & 501-55-004G

Latitude: 33.529232N

Longitude: -112.309102W

**Arcosa Aggregates West's Glendale Site
Section 12, Township 2 North, Range 1 West Gila and Salt River Baseline and
Meridian Maricopa County, Arizona**



Map 2

Vicinity and Aerial Map

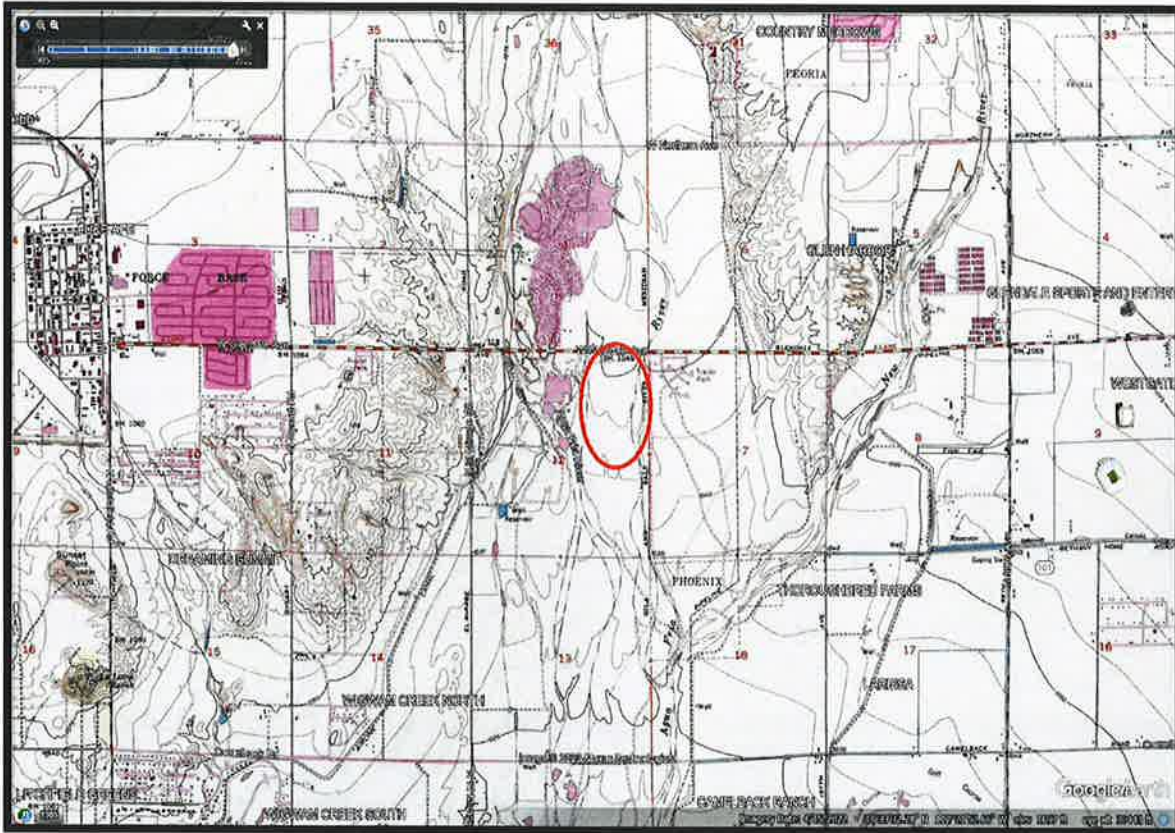
Arcosa Aggregates West's Glendale Site
Major Cross Streets:
Glendale Avenue and El Mirage Road



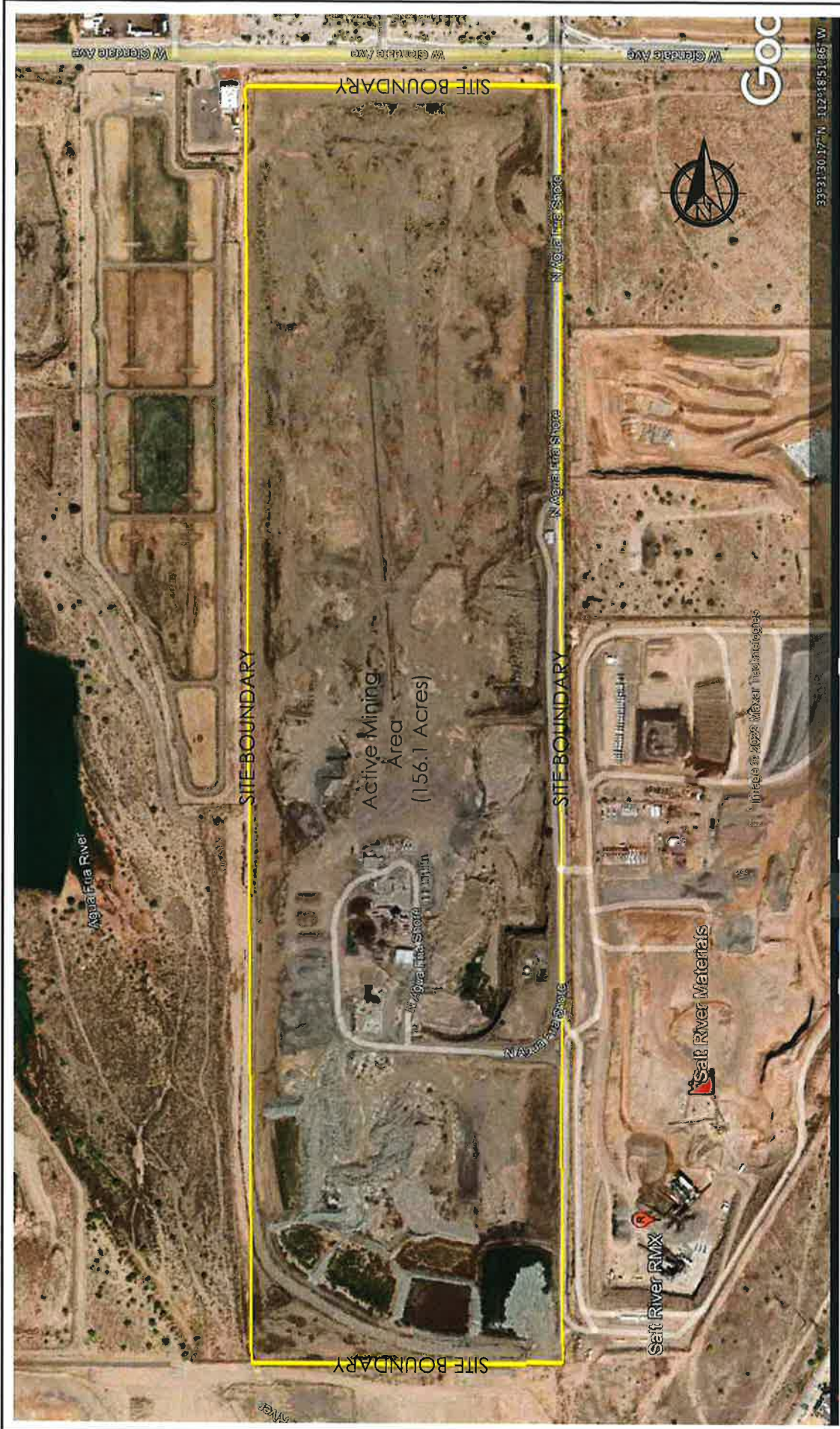
Map 3


Topographical Map

Arcosa Aggregates West Glendale Site
Mean Elevation:
1,046 Feet



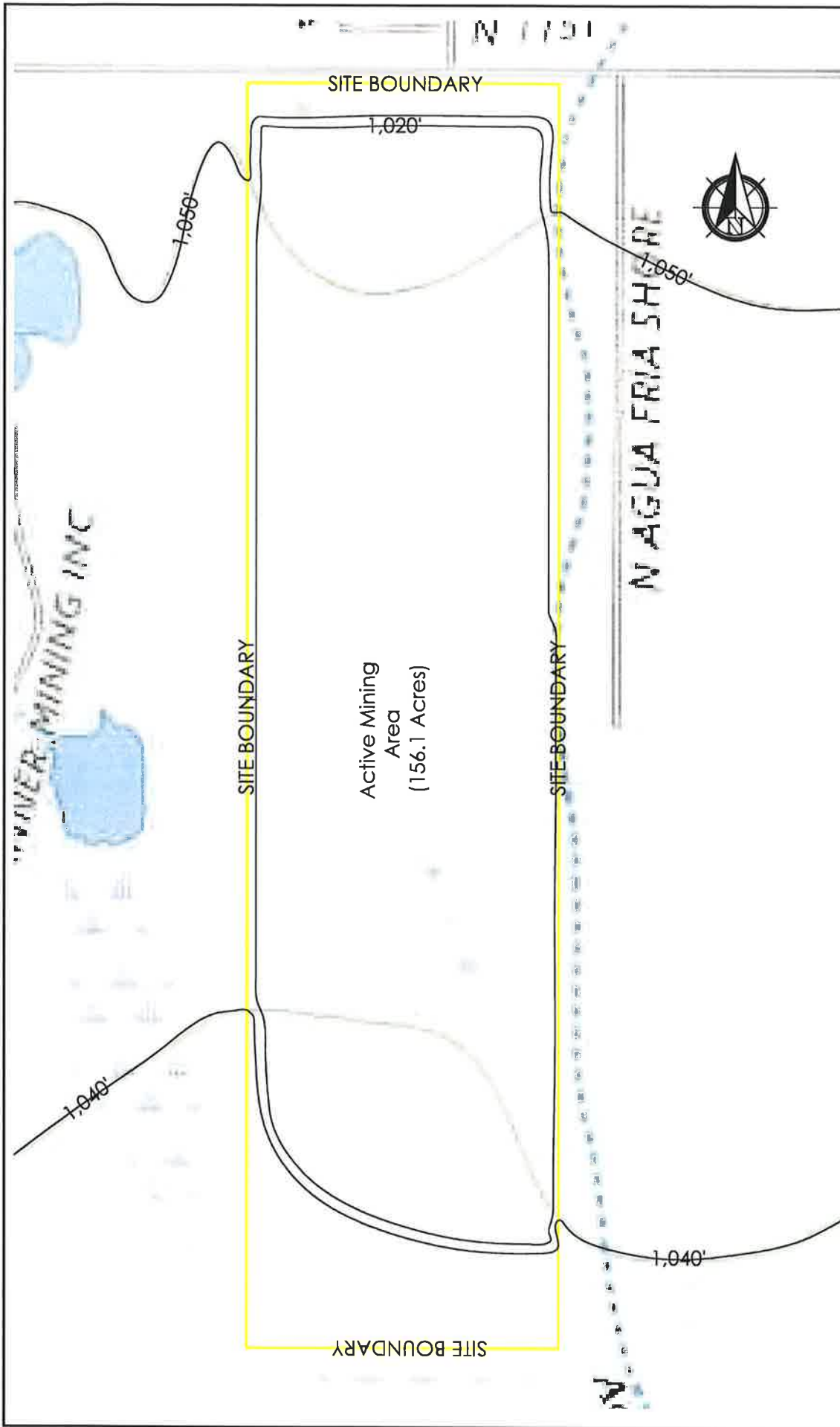
Map 4
Site Plan




SITE: Arcosa Aggregates West's Glendale Site	DRAWING NO. 4	PROJECT NO. 1	DATE: 11/1/22
TITLE: Figure 4 - Site Plan	SCALE: SCALE: 1" = 600' 	DRAWN: JP	REVISION: JP

Map 5

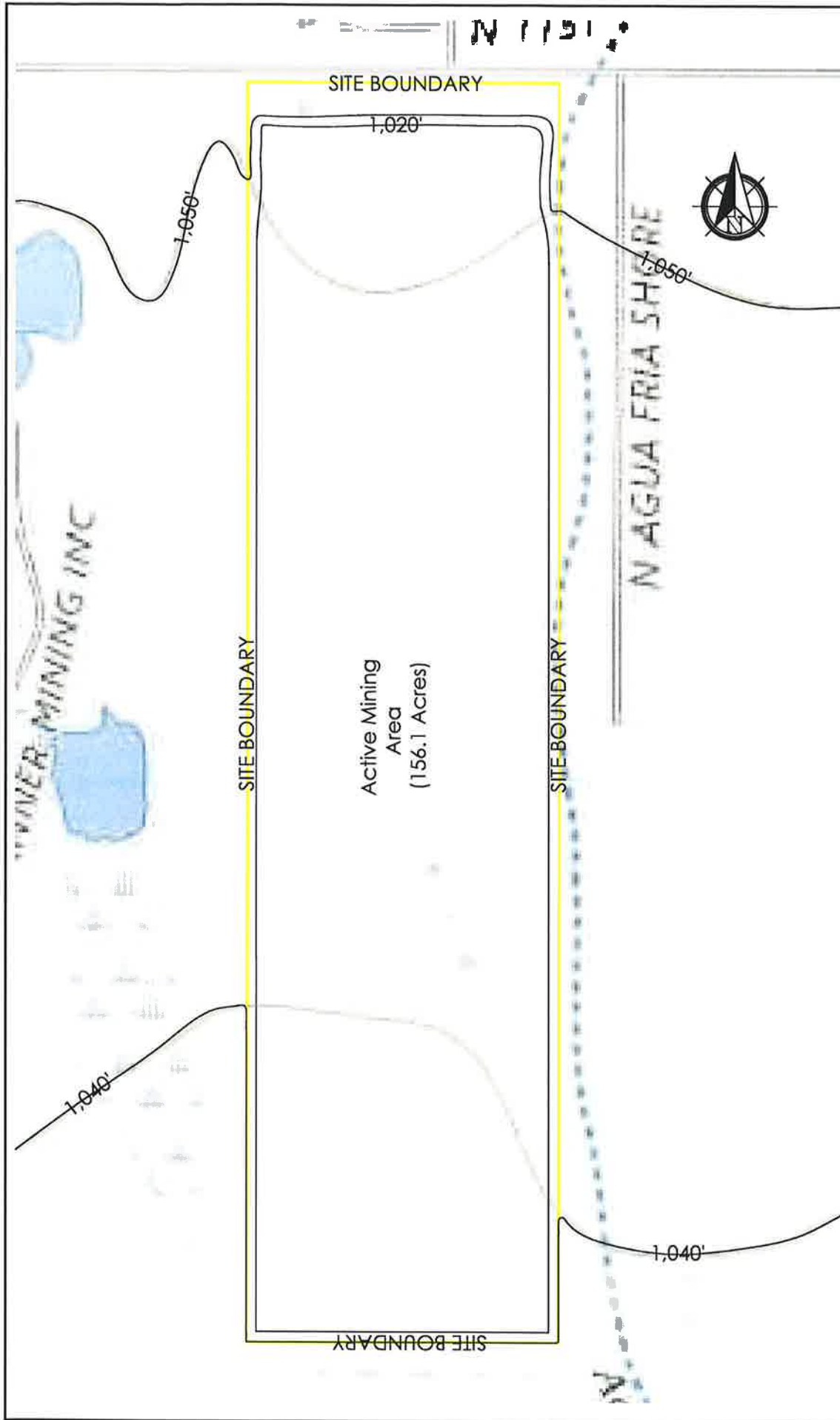
Existing Topography




SITE: Arcosa Aggregates West's Glendale Site	DRAWING NO. 5	PROJECT NO. 1	DATE. 11/1/22
TITLE: Figure 5 - Existing Topographic Map	SCALE. 	DRAWN. JP	REVISION. JP

Map 6

Final Reclamation Topography



SITE: Arcosa Aggregates West's Glendale Site	DRAWING NO. 6	PROJECT NO. 1	DATE 11/1/22
TITLE: Figure 6 - Final Reclamation Topography	SCALE: SCALE: 1" = 600' 	DRAWN BY JP	REVISION JP