



PUBLIC NOTICE

**U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT**

BUILDING STRONG®

**APPLICATION FOR PERMIT
Sierrita Mine Stockpile Expansion**

Public Notice/Application No.: SPL-2011-00160-MWL

Project: Sierrita Mine Stockpile Expansion

Comment Period: August 25, 2015 through September 25, 2015

Project Manager: Michael Langley; 602-230-6953; Michael.W.Langley@usace.army.mil

Applicant

Diana Kelts
Freeport McMoRan Sierrita Inc.
6200 West Duval Mine Road
Green Valley, Arizona 85614

Contact

Sheila Logan
Telesto Solutions Inc
5342 N 16th Street
Suite 130
Phoenix, Arizona 85016

Location

The proposed stockpile expansion is located within portions of Sections 3 through 10 of Township 18 South, Range 12 East, approximately 25 miles south of Tucson and 8 miles west of the community of Green Valley, Pima County, Arizona.

Activity

Freeport McMoRan Sierrita Inc. is proposing to expand two existing development rock stockpiles adjacent to the north side of the existing open pit at the Sierrita Mine. The stockpile expansion would require the direct permanent discharge of fill materials to approximately 18.2 acres of waters of the U.S. In addition, the proposed project would have an indirect effect on approximately 0.2 acre of waters of the U.S. and would temporarily affect approximately 0.3 acre of waters of the U.S. No special aquatic sites would be affected by this activity. For more information see page 4 of this notice.

Interested parties are hereby notified an application has been received for a Department of the Army permit for the activity described herein and shown on the attached drawings. We invite you to review today's public notice and provide views on the proposed work. By providing substantive, site-specific comments to the Corps Regulatory Division, you provide information that supports the Corps' decision-making process. All comments received during the comment period become part of the record and will be considered in the decision. This permit will be issued, issued with special conditions, or denied under Section 404 of the Clean Water Act.

Comments should be mailed to:

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS
REGULATORY DIVISION
ATTN: Michael Langley
3636 N. Central Ave, Suite 900
Phoenix, AZ 85012-1939

Alternatively, comments can be sent electronically to: Michael.W.Langley@usace.army.mil

The mission of the U.S. Army Corps of Engineers Regulatory Program is to protect the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands. The Regulatory Program in the Los Angeles District is executed to protect aquatic resources by developing and implementing short- and long-term initiatives to improve regulatory products, processes, program transparency, and customer feedback considering current staffing levels and historical funding trends.

Corps permits are necessary for any work, including construction and dredging, in the Nation's navigable water and their tributary waters. The Corps balances the reasonably foreseeable benefits and detriments of proposed projects, and makes permit decisions that recognize the essential values of the Nation's aquatic ecosystems to the general public, as well as the property rights of private citizens who want to use their land. The Corps strives to make its permit decisions in a timely manner that minimizes impacts to the regulated public.

During the permit process, the Corps considers the views of other Federal, state and local agencies, interest groups, and the general public. The results of this careful public interest review are fair and equitable decisions that allow reasonable use of private property, infrastructure development, and growth of the economy, while offsetting the authorized impacts to the waters of the United States. The permit review process serves to first avoid and then minimize adverse effects of projects on aquatic resources to the maximum practicable extent. Any remaining unavoidable adverse impacts to the aquatic environment are offset by compensatory mitigation requirements, which may include restoration, enhancement, establishment, and/or preservation of aquatic ecosystem system functions and services.

Evaluation Factors

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof. Factors that will be considered include conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people. In addition, if the proposal would discharge dredged or fill material,

the evaluation of the activity will include application of the EPA Guidelines (40 CFR Part 230) as required by Section 404 (b)(1) of the Clean Water Act.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Preliminary Review of Selected Factors

EIS Determination- A preliminary determination has been made that an environmental impact statement is not required for the proposed work.

Water Quality- The applicant is required to obtain water quality certification, under Section 401 of the Clean Water Act, from the Arizona Department of Environmental Quality. Section 401 requires any applicant for an individual Section 404 permit provide proof of water quality certification to the Corps of Engineers prior to permit issuance.

Coastal Zone Management- Not applicable within the State of Arizona.

Essential Fish Habitat- No Essential Fish Habitat (EFH), as defined by the Magnuson-Stevens Fishery Conservation and Management Act, occurs within the project area and no EFH is affected by the proposed project.

Cultural Resources- Based on preliminary information, the project may adversely impact cultural resources that are eligible for listing under the National Register of Historic Places. Consultation with Native American tribes and the State Historic Preservation Officer will occur with respect to cultural resources impacts associated with this project. Native American tribes will also be consulted regarding the presence of any traditional cultural properties that could potentially be affected by this project.

Endangered Species- Preliminary determinations indicate that the proposed activity would potentially affect federally-listed endangered or threatened species or their critical habitat. Therefore, formal consultation under Section 7 of the Endangered Species Act is required.

Public Hearing- Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearing shall state with particularity the reasons for holding a public hearing.

Proposed Activity for Which a Permit is Required

Basic Project Purpose- The basic project purpose comprises the fundamental, essential, or irreducible purpose of the proposed project, and is used by the Corps to determine whether the applicant's project is water dependent (i.e., requires access or proximity to or siting within the special

aquatic site to fulfill its basic purpose). Because no fills are proposed within special aquatic sites, identification of the basic project purpose is not necessary.

Overall Project Purpose- The overall project purpose serves as the basis for the Corps' 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, and which allows a reasonable range of alternatives to be analyzed.

The overall project purpose is the construction of development rock stockpiles, which allow the continued efficient and economic development of mineral resources associated with the Sierrita Mine. The proposed stockpile extension would assist in sustaining employment at the mine site and continue to provide economic benefits to the surrounding communities, Pima County, and the state. The proposed project would also continue the generation of additional revenues for the state and county through continuing indirect employment and tax generation.

Additional Project Information

Background- The Sierrita Mine complex covers approximately 38,600 acres of land and includes two existing, open pit porphyry copper and molybdenum mines (the Sierrita and Twin Buttes open pits) along with milling/concentrating facilities and solution extraction plant. Support facilities and activities include development rock and overburden stockpiles, tailings impoundments, and vehicle and equipment maintenance, warehousing, and shipping (truck and rail) facilities. The primary products of the operation are copper and molybdenum concentrates, copper cathode, and copper sulfate.

Project description- In order to maximize the total production from the finite ore body resource, operations must be carefully and efficiency planned. To this end, Sierrita is planning to expand existing development rock stockpiles on the north side of the Sierrita open pit. The stockpile extension would be constructed in the same manner as the existing stockpiles, primarily using the large-scale mining, end-dump haulage trucks and bulldozers. The expanded stockpiles would accommodate an additional, approximately 1.2 billion tons of development rock and would expand over an additional, approximately 1,000 acres of land beyond the existing stockpiles. As proposed, the expanded stockpiles and ancillary facilities (e.g., stormwater management, access roads, utility relocation) would have a total footprint of approximately 1,400 acres, 400 acres of which has been previously disturbed. The stockpiles would reach a maximum elevation of approximately 4,800 feet above mean sea level (amsl), extending approximately 600 to 1,000 feet above the existing ground surface. The height above the existing ground increases to the east, as the slope of the natural ground surface slopes toward the Santa Cruz Valley.

The same type of development rock would continue to be placed in the development rock stockpiles. Generally, the materials generated from the open pit are categorized as either ore or development rock – which may be mineralized or un-mineralized. Material with an assay grade above a pre-determined minimum is directed to the mill for processing (ore); the remaining material is directed to stockpiles as development rock. The ore cutoff grade which distinguishes ore from development rock varies based on economics.

The stockpile extension would also require stormwater management. As depicted in the attached figures, a constructed channel would convey off-site stormwater run-on around the western, northern, and eastern side of the proposed stockpile extension, reporting back to the natural channel on the east side of the mine at the existing railroad crossing of Demetrie Wash. The channel would be

approximately five miles long and would convey the 100-year, 24-hour return storm event. On-site stormwater run-off would be incorporated into the Sierrita Mine process water circuit for reuse and/or discharged to down-gradient receiving waters depending on water quality, in compliance with the Arizona Pollutant Discharge Elimination System program's Mining Multi-Sector General Permit.

An existing power line owned by Trico Electric Cooperative (Trico) would be relocated to accommodate the extension of the stockpiles.

Proposed Mitigation– The proposed mitigation may change as a result of comments received in response to this public notice, the applicant's response to those comments, and/or the need for the project to comply with the 404(b)(1) Guidelines. In consideration of the above, the proposed mitigation sequence (avoidance/minimization/compensation), as applied to the proposed project is summarized below:

Avoidance/Minimization: Avoidance and minimization has been demonstrated by the applicant as follows:

- Proposing the extension of the existing stockpiles, rather than proposing new footprints minimizes the overall impact to the environment and avoids/reduces impacts to waters of the U.S. Expanding the stockpile allows more rock to be placed on existing stockpile surfaces, rather than on undisturbed land.
- Expanding the existing stockpiles adjacent to the edge of the existing Sierrita Mine open pit eliminates the need for construction of connecting haulage roads, which could require crossings and potential impacts to waters of the U.S.
- Expanding the existing stockpiles allows current stockpile surfaces to be built to a higher elevation before "pinnacled," which minimizes the footprint area, and correspondingly, avoids additional impacts to waters of the U.S.
- Maintaining connectivity to down-gradient ephemeral drainages through the construction of the stormwater management channel around the proposed stockpile extension, rather than isolating the upland drainage area, minimizes indirect impacts to the down-gradient ephemeral drainages.
- Ensuring the proper management of on-site stormwater run-off from the stockpiles avoids and minimizes impacts to downstream ephemeral drainages
- Adhering to the environmental protection measures during mining operations, closure, and post-closure minimizes impacts to waters of the U.S., including continued compliance with the Mining Multi-Sector General Permit under the Arizona Pollutant Discharge Elimination System and implementation of the Stormwater Pollution Prevention Plan and stormwater control measures.
- Continuing to comply with the Aquifer Protection Permit ensures stockpile stability and protects groundwater through its location within the demonstrated passive containment capture zone.
- Designing the stockpiles to reduce infiltration, contain seeps, minimize sediment loading, maintain mass stability, and control run-on, run-off, and discharge works to minimize potential indirect or adverse environmental consequences.

Compensation: The proposed mitigation may change as a result of comments received in response to this public notice, the applicant's response to those comments, and/or the need for the project to comply with the 404(b)(1) Guidelines. In consideration of the above, the applicant has proposed to compensate for the loss of waters of the U.S. associated with this project by providing payment to an appropriate In-Lieu Fee Program.

Proposed Special Conditions

Special Conditions have not yet been developed and will be based on the results of the environmental assessment and 404 permit analysis.

For additional information please call Michael Langley of my staff at 602-230-6953 or via e-mail at Michael.W.Langley@usace.army.mil. This public notice is issued by the Chief, Regulatory Division.

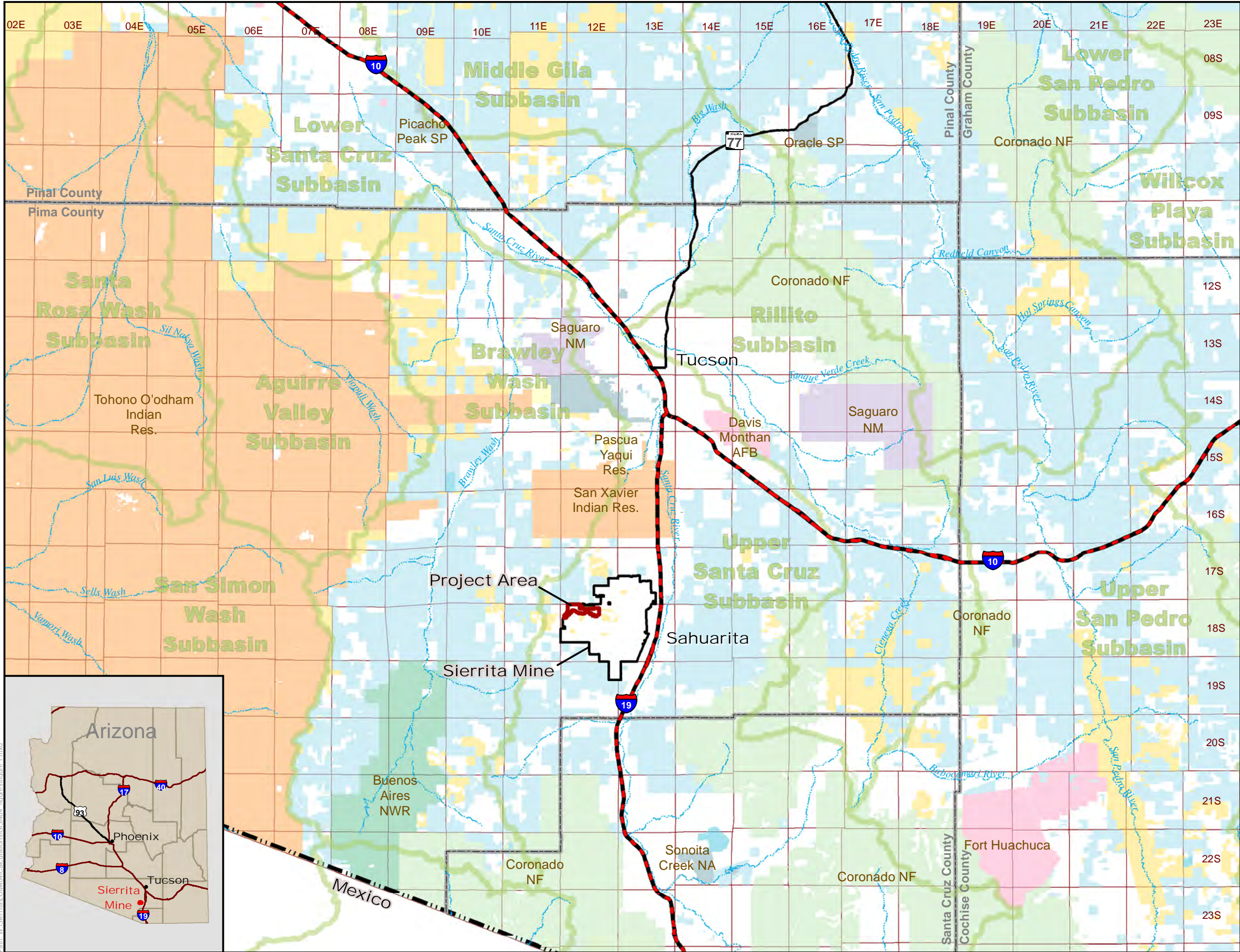


Regulatory Program Goals:

- To provide strong protection of the nation's aquatic environment, including wetlands.
- To ensure the Corps provides the regulated public with fair and reasonable decisions.
- To enhance the efficiency of the Corps' administration of its regulatory program.

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS
3636 N. Central Ave, Suite 900
Phoenix, AZ 85012-1939

WWW.SPL.USACE.ARMY.MIL/MISSIONS/REGULATORY



Legend

- Sierrita Mine
- Project Area
- Subbasin (HUC8)

Land Status

- Bureau of Land Management (BLM)
- Bureau of Reclamation
- County
- Indian Lands
- Local or State Parks
- Military
- National Park Service (NPS)
- Other
- Private Land (No Color)
- State Trust Land
- State Wildlife Area
- US Forest Service (USFS)
- US Fish and Wildlife (USFWS)

0 10
SCALE IN MILES

COORDINATE SYSTEM
SIERRITA LOCAL MINE

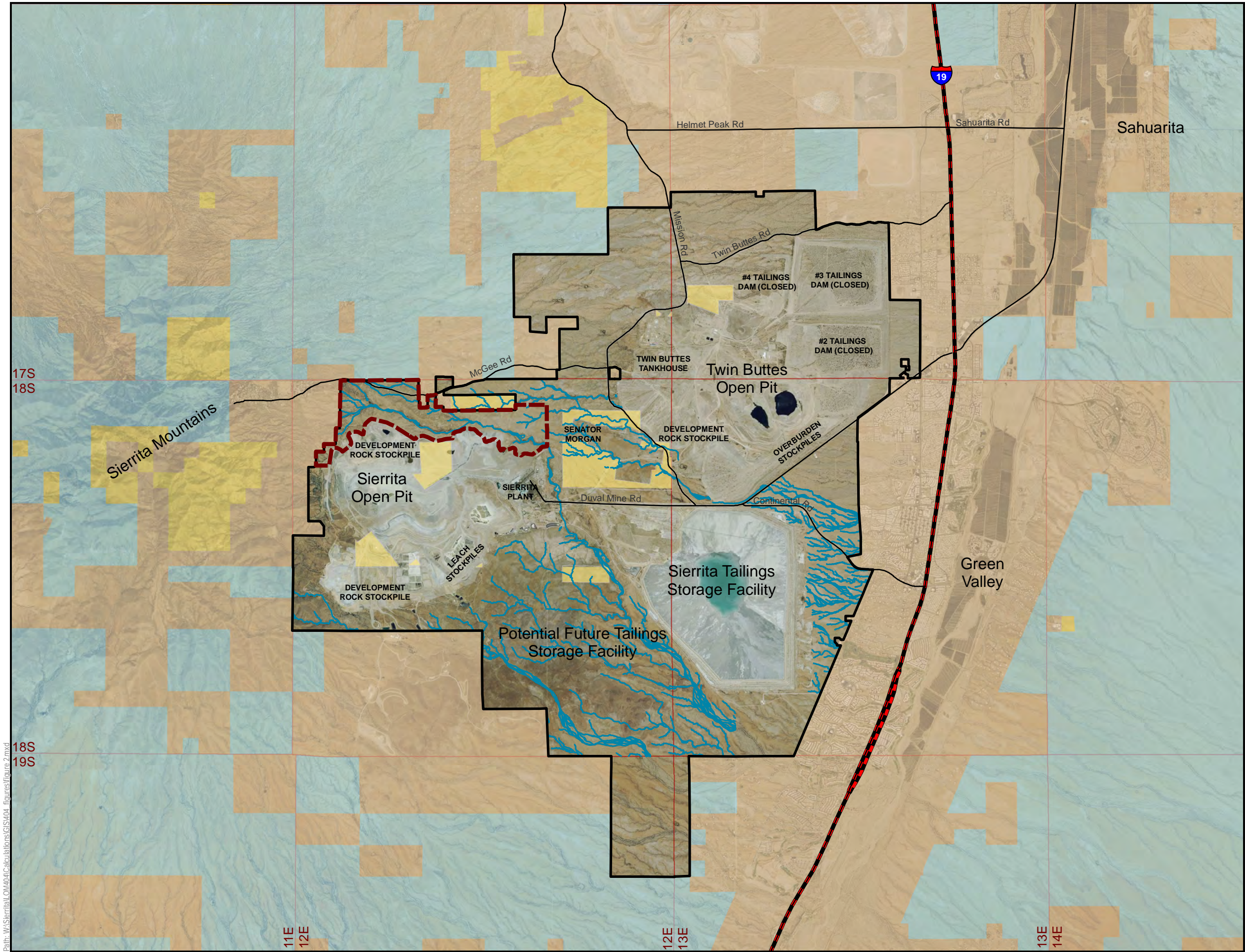
FIGURE 1
REGIONAL OVERVIEW
SIERRITA STOCKPILE EXTENSION

PREPARED BY:

TELESTO
SOLUTIONS INCORPORATED
Phoenix, Arizona (602) 314-4566
www.telesto-inc.com

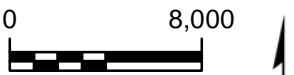
PREPARED FOR:

FREEPORT-McMoRAN



Legend

- Sierrita Mine
- Project Area
- Waters of the U.S.
- Surface Management**
 - Bureau of Land Management (BLM)
 - State Trust Land
 - Sierrita Mine Private Land (No Color)
 - Other Private Land



SCALE IN FEET

COORDINATE SYSTEM
SIERRITA LOCAL MINE



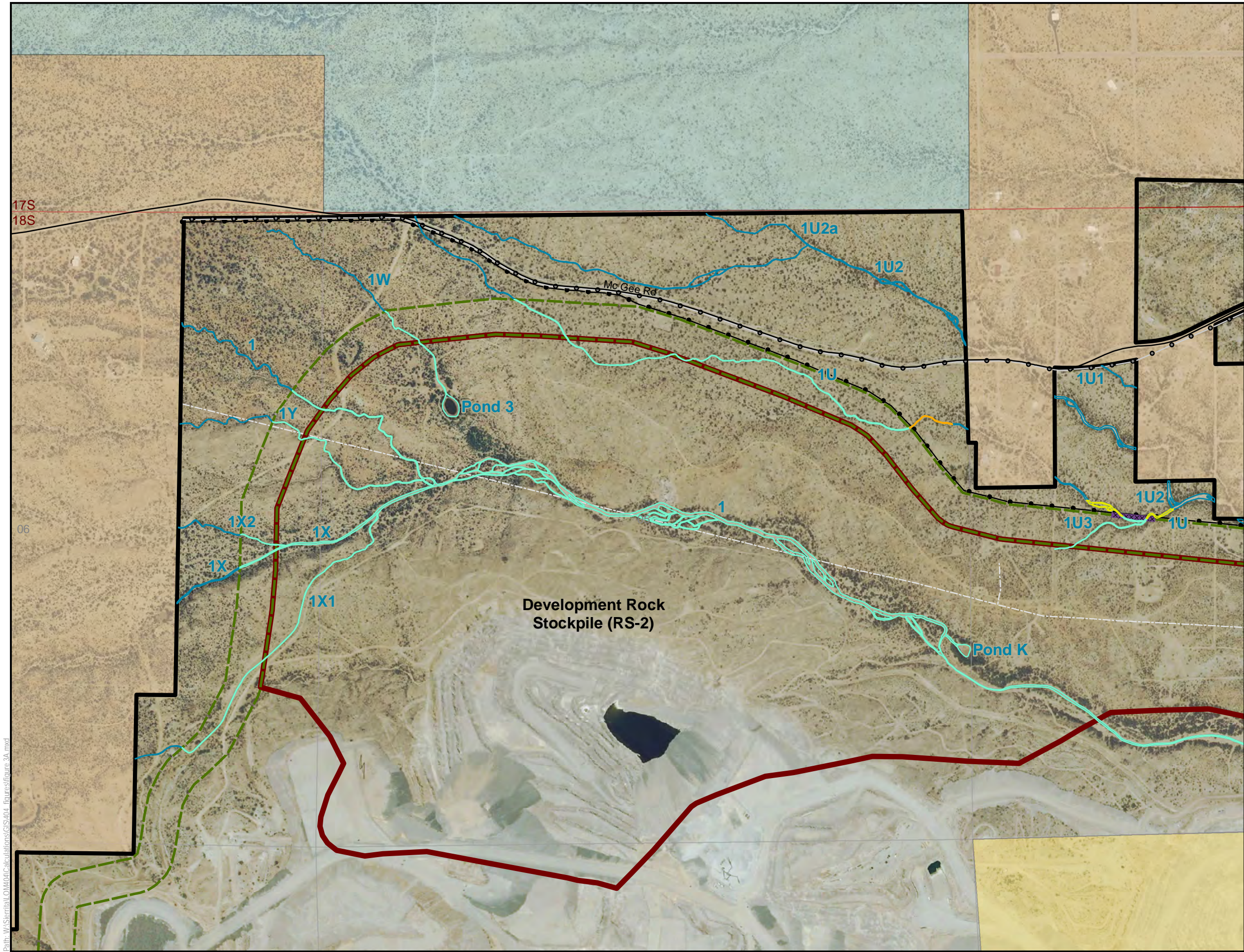
FIGURE 2
PROJECT VICINITY AND
EXISTING FACILITIES
SIERRITA STOCKPILE EXTENSION

PREPARED BY:

TELESTO
SOLUTIONS INCORPORATED
Phoenix, Arizona (602) 314-4566
www.telesto-inc.com

PREPARED FOR:

Fm FREEPORT-McMoRAN



Legend

- Sierrita Mine
- Waters of the U.S.
- Trico Power Line
- Powerline Relocation Opt 1
- Powerline Relocation Opt 2

Surface Management

- Bureau of Land Management (BLM)
- State Trust Land
- Sierrita Mine Private Land (No Color)
- Other Private Land

Proposed Action

- Stockpile Extension
- Stormwater Management Channel
- Separation Berm

Impacts to Waters of the U.S.

- Direct
- Indirect
- Temporary

Note: Portions of Demetrie Wash and its headwater channels have been identified by the Corps of Engineers in its Approved Jurisdictional Determination (Corps File No. SPL-2011 00160-MWL) as waters of the U.S. under the Clean Water Act (CWA), and this determination is shown here as "waters of the U.S."



SCALE IN FEET

COORDINATE SYSTEM
SIERRITA LOCAL MINE



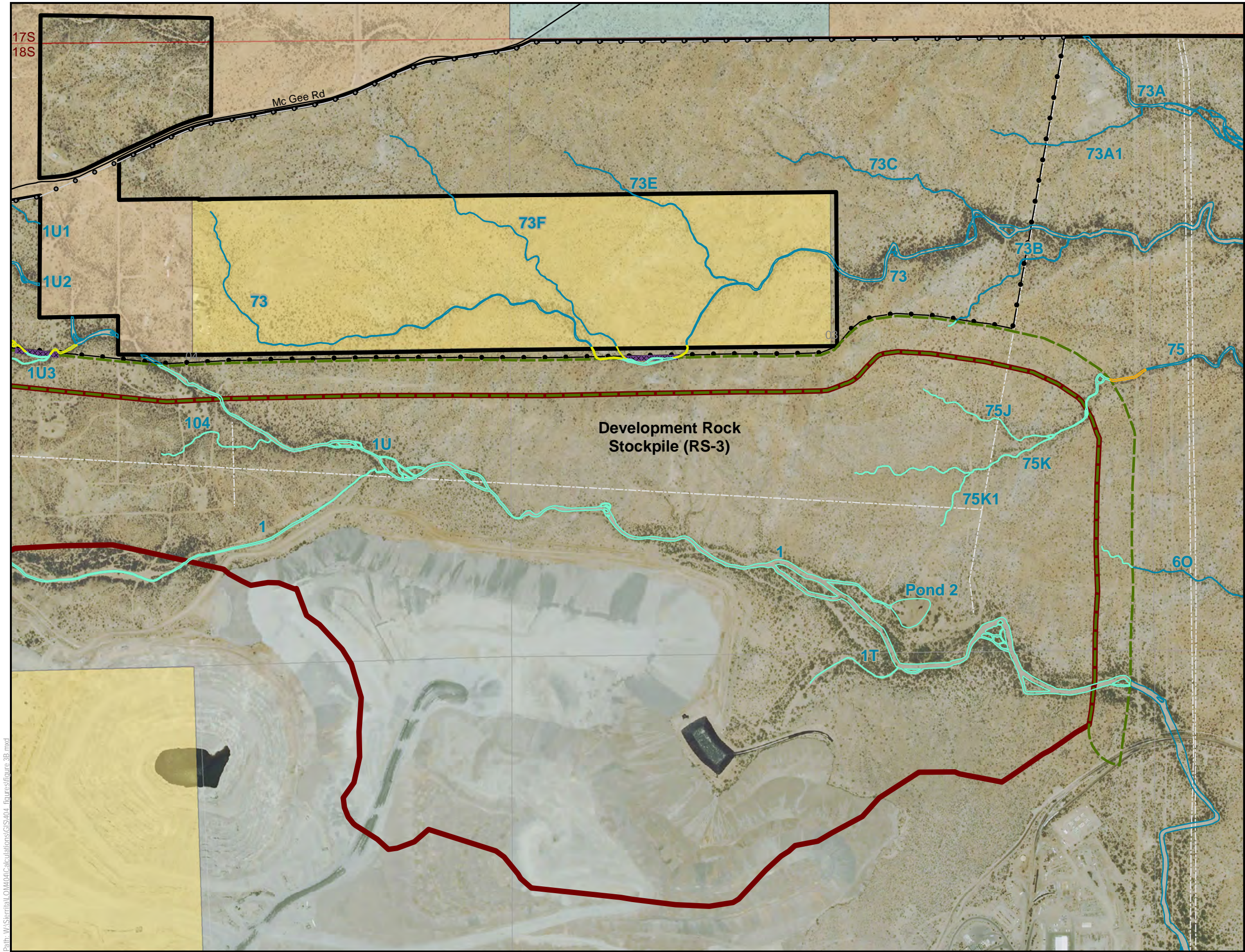
FIGURE 3A
PROPOSED ACTION
SIERRITA 404 ALTERNATIVES

PREPARED BY:

TELESTO
SOLUTIONS INCORPORATED
Phoenix, Arizona (602) 314-4566
www.telesto-inc.com

PREPARED FOR:

Fm **FREEMPORT-McMoRAN**



Legend

- Sierrita Mine
- Waters of the U.S.
- Trico Power Line
- Powerline Relocation Opt 1
- Powerline Relocation Opt 2

Surface Management

- Bureau of Land Management (BLM)
- State Trust Land
- Sierrita Mine Private Land (No Color)
- Other Private Land

Proposed Action

- Stockpile Extension
- Stormwater Management Channel
- Separation Berm

Impacts to Waters of the U.S.

- Direct
- Indirect
- Temporary

Note: Portions of Demetrie Wash and its headwater channels have been identified by the Corps of Engineers in its Approved Jurisdictional Determination (Corps File No. SPL-2011 00160-MWL) as waters of the U.S. under the Clean Water Act (CWA), and this determination is shown here as "waters of the U.S."



SCALE IN FEET

COORDINATE SYSTEM
SIERRITA LOCAL MINE



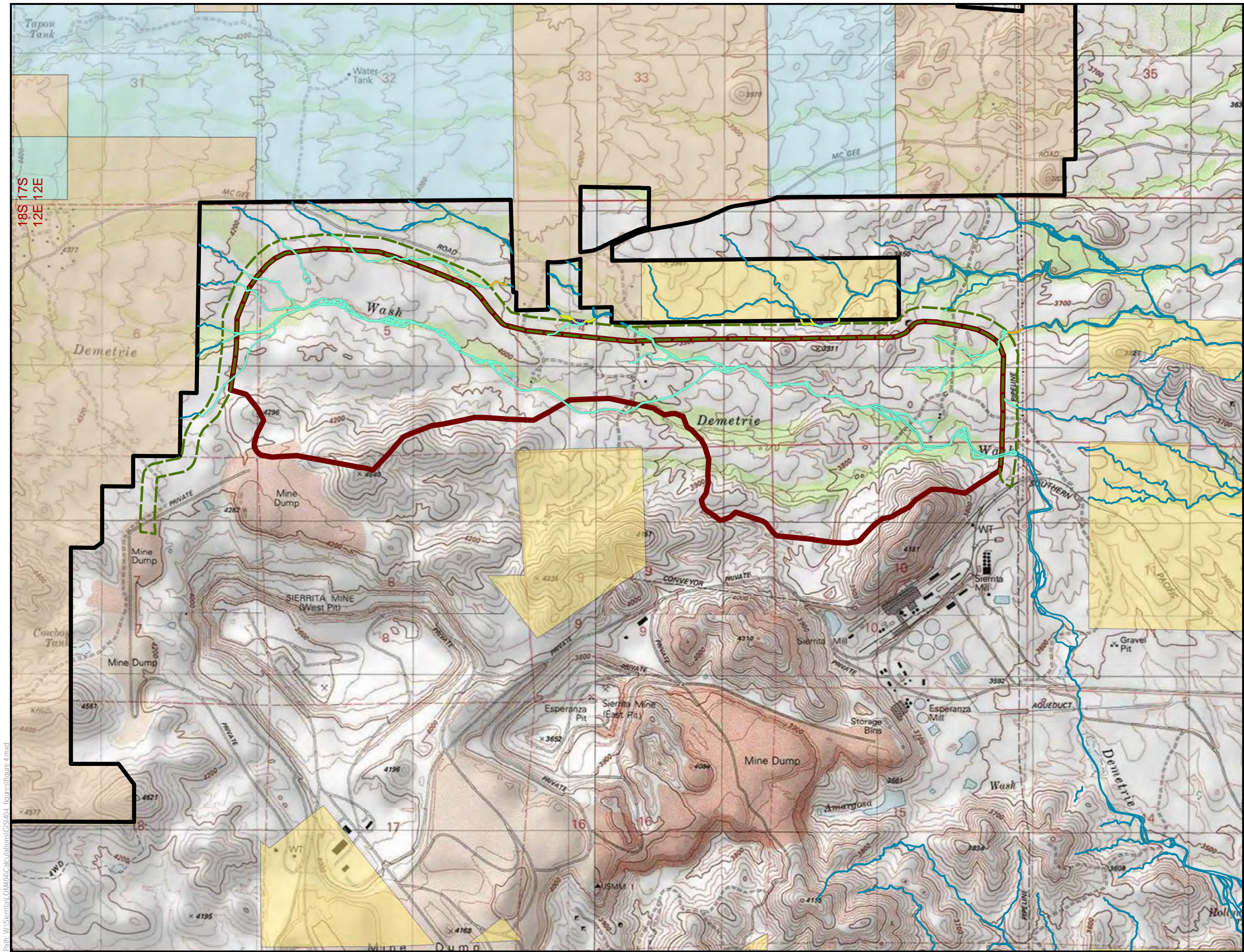
FIGURE 3B
PROPOSED ACTION
SIERRITA 404 ALTERNATIVES

PREPARED BY:



PREPARED FOR:





Legend

- Sierrita Mine
- Waters of the U.S.
- Surface Management**
 - Bureau of Land Management (BLM)
 - State Trust Land
 - Sierrita Mine Private Land (No Color)
 - Other Private Land

Proposed Action

- Stockpile Extension
- Stormwater Management Channel
- Separation Berm

Impacts to Waters of the U.S.

- Direct
- Indirect
- Temporary

0 2,000

SCALE IN FEET

COORDINATE SYSTEM
SIERRITA LOCAL MINE



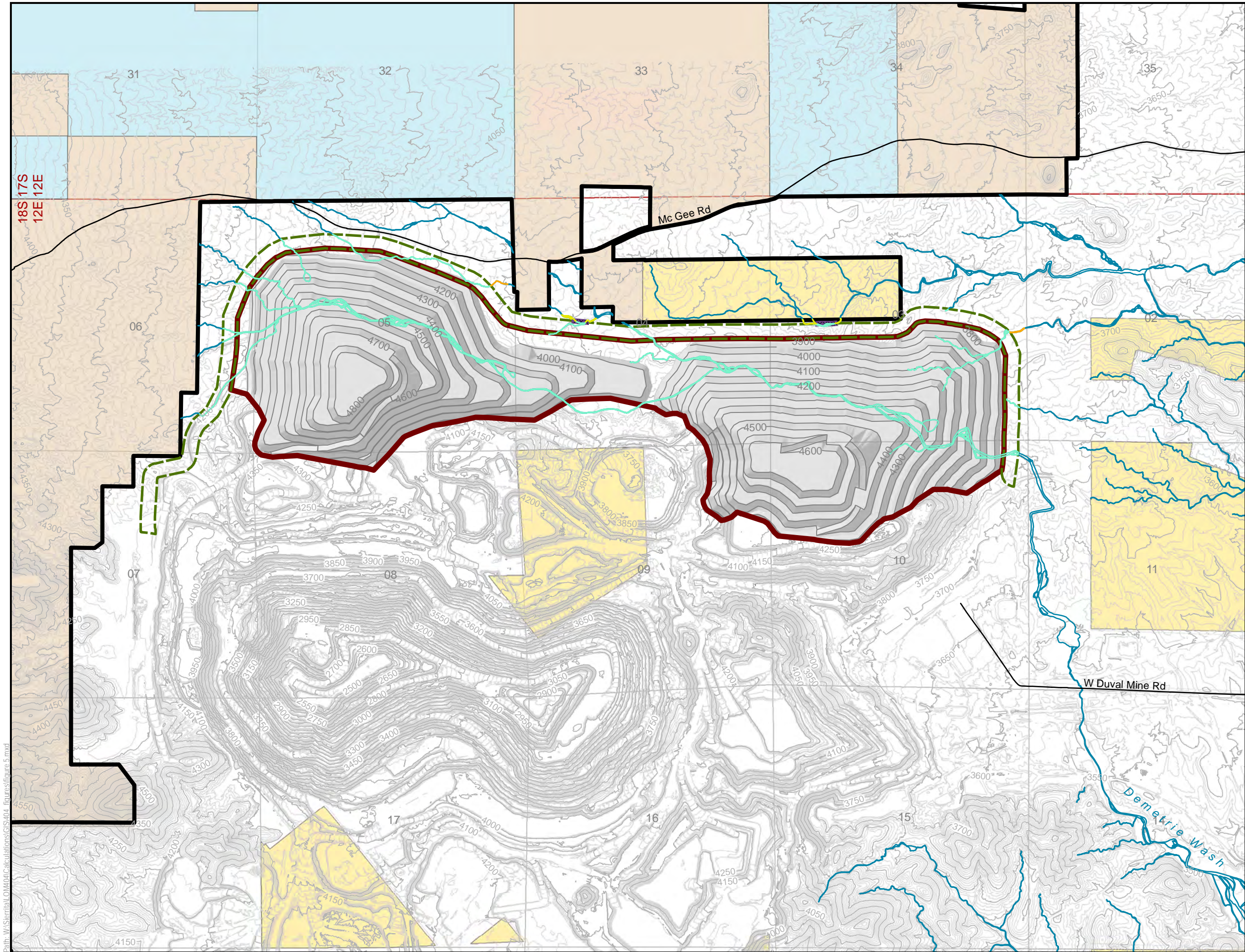
FIGURE 4
PROPOSED ACTION
USGS TOPO MAP
SIERRITA STOCKPILE EXTENSION

PREPARED BY:

TELESTO
SOLUTIONS INCORPORATED
Phoenix, Arizona (602) 314-4566
www.telesto-inc.com

PREPARED FOR:

FREEPORT-McMoRAN



Path: W:\Sierrita\OM\MapCalculations\GIS\04_figures\figure 5.mxd

Legend

- Sierrita Mine
- Waters of the U.S.
- Surface Management**
 - Bureau of Land Management (BLM)
 - State Trust Land
 - Sierrita Mine Private Land (No Color)
 - Other Private Land

Proposed Action

- Stockpile Extension
- Stormwater Management Channel
- Separation Berm

Impacts to Waters of the U.S.

- Direct
- Indirect
- Temporary

Existing Contour Interval = 10 feet
Proposed Action Contour Interval = 50 feet



SCALE IN FEET

COORDINATE SYSTEM
SIERRITA LOCAL MINE



FIGURE 5
PROPOSED ACTION
TOPOGRAPHIC MAP
SIERRITA STOCKPILE EXTENSION

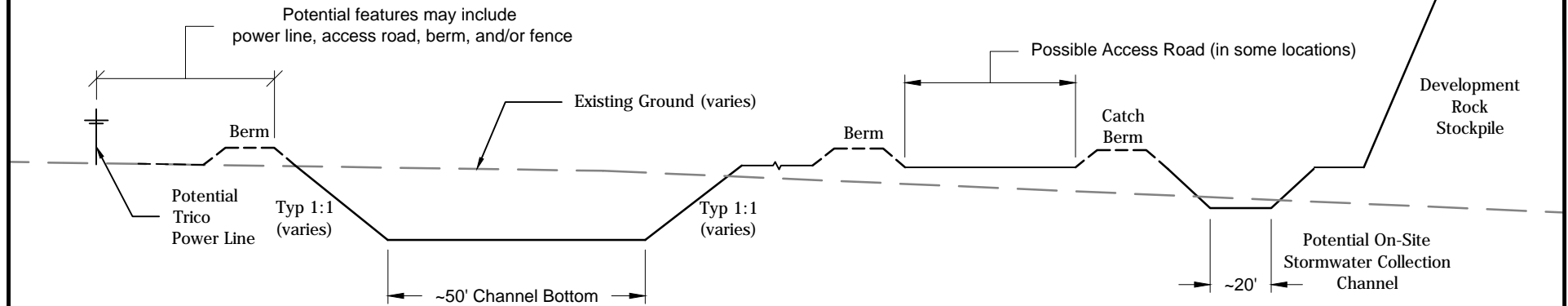
PREPARED BY:

TELESTO
SOLUTIONS INCORPORATED
Phoenix, Arizona (602) 314-4566
www.telesto-inc.com

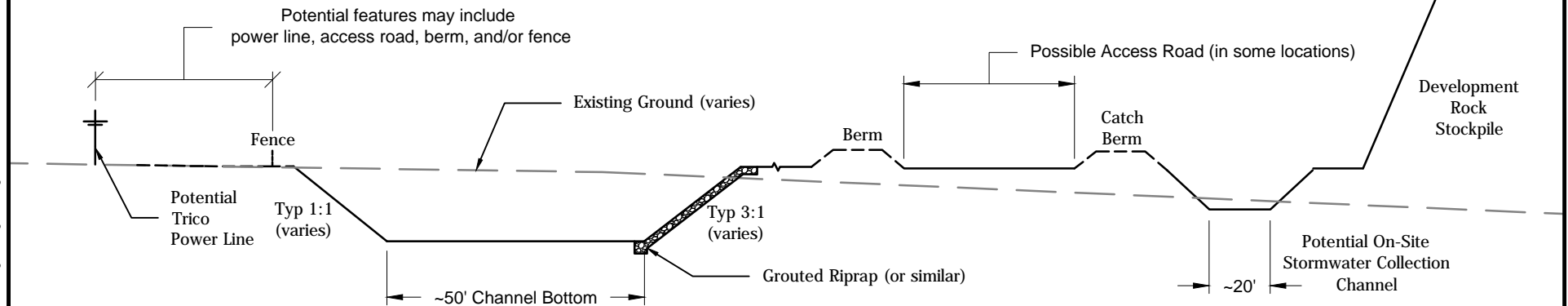
PREPARED FOR:

FREEPORT-McMoRAN

TYPICAL STORMWATER MANAGEMENT CHANNEL



TYPICAL STORMWATER MANAGEMENT CHANNEL AT INTERCEPT POINT



**PRELIMINARY
NOT TO SCALE**

FIGURE 6

**TYPICAL STORMWATER MANAGEMENT CHANNEL CROSS SECTIONS
SIERRITA STOCKPILE EXTENSION**