

FOR MMD USE ONLY:

PROJECT NAME: _____

PERMIT NUMBER: _____

DATE RECEIVED: _____

DATE APPROVED: _____

LEAD INSPECTOR: _____

FORM REVISION DATE: 09/19/09

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT**

Director

Mining and Minerals Division

1220 South Saint Francis Drive

Santa Fe, New Mexico 87505

Telephone: (505) 476-3400

Webpage: www.MMD.state.nm.us/MMD/index.htm

**SUBPART 3
MINIMAL IMPACT EXPLORATION
PERMIT APPLICATION**

The following information is required under the New Mexico Mining Act (Sections 69-36-1 through 69-36-20, NMSA 1978) and associated rules. The Mining and Minerals Division of the Energy, Minerals and Natural Resources Department is the administrative agency through which this application is to be processed. See §302, Minimal Impact Exploration Operations, of the New Mexico Mining Act Rules for all regulations associated with Minimal Impact Exploration Operations.

The applicant is requested to use this application. If additional space is needed, all information requested in this form must be submitted in this same format.

To be considered a minimal impact exploration operation, the following requirements apply:

- A minimal impact exploration operation will **not** exceed **1000 cubic yards** of excavation, per permit.
- Disturbances for constructed roads, drill pads and mud pits shall be **no more than 5 acres total**.

Permit Application Requirements: (§302.A - C)

- Please submit six copies of the application.
- Confidential information shall be **clearly** identified and submitted separately
- Exploration commencing after 12/31/94 shall submit an application not less than 45 days prior to the anticipated date of operations.
- Renewal applications shall be filed at least 30 days preceding expiration of the current permit.

Check the "YES" or "NO" box for each of the following characteristics as related to the proposed minimal impact exploration operation:

YES NO

- Located in or having a direct surface impact on wetlands, springs, perennial or intermittent streams, lakes, rivers, reservoirs or riparian areas.
- Located in designated critical habitat areas as determined in accordance with the federal Endangered Species Act of 1973 or in areas determined by the Department of Game and Fish likely to result in an adverse impact on an endangered species designated in accordance with the Wildlife Conservation Act, Sections 17-2-37 through 17-2-46 NMSA 1978 or by the State Forestry Division for the Endangered Plants Act, section 75-6-1 NMSA 1978.
- Located in an area designated as Federal Wilderness Area, Wilderness Study Area, Area of Critical Environmental Concern, or an area within the National Wild and Scenic River System.
- Located in a known cemetery or other burial ground.
- Located in an area with cultural resources listed on either the National Register of Historic Places or the State Register of Cultural Properties.
- Having or expected to have a direct impact on ground water that has a total dissolved solids concentration of less than 10,000 mg/L, except exploratory drilling intersecting ground water may be performed as a minimal impact operation.
- Expected to use or using cyanide, mercury amalgam, heap leaching or dump leaching in its operations.

- Expected to result in point or non-point source surface or subsurface releases of acid or other toxic substances from the permit area.
- Requiring a variance from any part of these Rules as part of the permit application.

IMPORTANT NOTES!!

- ! If the operation exceeds 1000 cubic yards of excavation or disturbs more than 5 acres total or any of the above boxes have been checked "YES", then the exploration does not qualify as a minimal impact exploration operation.**
- ! If you do meet the above requirements and have checked "NO" to all of the previous boxes, continue filling out this application.**
- ! Obtaining a Mining Act permit does not necessarily satisfy the obligation to obtain other federal, state and local permits.**
- ! All proposed disturbance should be flagged or staked in the field prior to the Mining and Mineral Division's (MMD) initial inspection. Failure to properly mark any proposed drill holes or trenches will delay processing of the permit application.**
- ! All proposed disturbance, including any new proposed access road centerlines, all four (4) corners of any proposed drill pads, and proposed drill hole location(s) within the drill pad area must be staked in the field.**
- ! Any staking of proposed disturbances (access road centerline, drill pad corners, drill hole) should be completed using durable materials such as steel re-bar stakes or T-posts. MMD recommends using rebar stakes of suitable height, and flagging on the rebar at all four (4) corners. Drill holes should be marked by a single T-post driven at the location of proposed drilling.**
- ! The application will be deemed incomplete, without a proper map included. Provide a 1:24,000 USGS quadrangle map with the application. The map should identify locations of drill holes, pads and any new disturbance anticipated**
- ! If possible, please include with this application for submittal, any other operational plans that may have been submitted, as required, to other land management agencies. Plans of Operations (POO) submitted to the USFS and Notices of Intent (NOI) submitted to the BLM are very helpful in processing this application.**

**PLEASE FILL IN ALL APPLICABLE INFORMATION AS COMPLETELY AS POSSIBLE.
PLEASE PRINT OR TYPE ALL INFORMATION.**

1. OPERATOR INFORMATION (§304.D.1)

PROJECT NAME: Turquoise Mountain Project
NAME OF APPLICANT (or entity obligated under the Mining A#207): <u>Southern Silver Exploration Corp. (U.S.), a wholly owned subsidiary of Southern Silver Exploration Corp.</u>
ADDRESS: <u>4790 Caughlin Pkwy, #207</u> <u>Reno, Nevada 89519-0907</u> <u>Attn: Joe Kizis</u>
PHONE: <u>775-775-746-3780</u>
FAX:
NAME OF OWNER (if different from Applicant's name and address):
ADDRESS:
PHONE:
FAX:
NAME OF ON-SITE CONTACT OR OPERATOR'S REPRESENTATIVE: <u>Elliott Crist or Joseph Kizis</u>
ADDRESS: <u>4790 Caughlin Pkwy, #207</u> <u>Reno, Nevada 89519-0907</u>
PHONE: <u>775-813-0058 (Crist Cell-Primary Contact) 775-746-3780</u> <u>(office),</u> <u>775-772-8746 (Kizis Cell)</u>
FAX:

2. RIGHT TO ENTER INFORMATION (§302.D.1)

- A. Describe or attach copies of documents that give the applicant the right to enter the property to conduct the exploration and reclamation, include: lease agreements, access agreements, right of way agreements, surface owner agreements, and claim numbers, if applicable.

Land Status of Areas Where Proposed Work is Planned

Claim Name	NMMC #	Site
Oro 423	199370	21-A
Oro 222	191590	21-B
State Section 36, T27S, R16W		21-C
Oro 91	191594	21-D
TQ-1	187655	21-E
State Section 2, T28S, R16W		21-F
Oro 147	191548	21-G
Oro 123	191536	21-H

(1) Six of the proposed sites are on unpatented lode claims that are on BLM land. These claims are either owned, or under lease, to Southern Silver. Two of the sites are on New Mexico State land that is under lease to Southern Silver.

ORO Claim Group BLM federal lode claims (the ORO claim group) have been acquired via completion of the requirements of an option agreement from Phillip J. Sterling and Manuel H. Hernandez. The BLM website LR2000 reflects this change of ownership and substantiates Southern Silver as the owner and that the claims are active. Proof of this ownership is available on the BLM website LR2000.

TQ-1 Claim One drill site (Site E) will be on the TQ-1 claim that is owned by:

North American Turquoise Co. LLC
650 Oso Ridge Rt.
Grants, New Mexico 87020-0407

Southern Silver has a lease on the TQ-1 claim providing the right to conduct exploration on the claim. A copy of the lease agreement will be provided digitally to MMD.

- B. List the names and addresses of surface and mineral ownership within the proposed permit area. If the mineral is federal mineral, indicate as federal mineral, but provide the name of the claim holder or lease holder.

Surface Owner(s):

Six of the Eight Sites are on Federal BLM Land Under Location of Unpatented Lode Claims (federal mineral) to Southern Silver or American Turquoise

Five of the sites are located on the Oro Claim Group owned by:
Southern Silver Exploration Corp. (U.S.)
4790 Caughlin Pkwy #207
Reno, NV 89519-0907
Phone (775)746-3780

Southern Silver Exploration Corp. (US) is the operator and is a wholly owned subsidiary of Southern Silver Exploration Corp.

“Southern Silver” will designate Southern Silver Exploration Corp. (U.S.) in this application.

The TQ-1 claim is owned by:

North American Turquoise Co. LLC
650 Oso Ridge Rt.
Grants, New Mexico 87020-0407

Southern Silver has a lease on the TQ-1 claim that grants the right to explore the claim.

State Section 36, T27S, R16W and State Section 2, T28S R16W

Southern Silver has leases on these sections from the state of New Mexico that grants them the right to explore. The New Mexico State Leases are designated as HG 104-0 and HG 105-0. Southern Silver is working with New Mexico State Lands to coordinate the application

of this permit and appropriate bonding to work on the state lands.

Please address all correspondence concerning this application to:

**Elliott M. Crist (consulting geologist for Southern Silver)
Southern Silver Exploration Corp. (US)
4790 Caughlin Pkwy #207
Reno, NV 89519-0907
Phone (775)746-3780
bigecrist@charter.net**

- C. Provide information on any Cultural Resource Survey that may have been performed on the site. The survey would have been provided to the landowner or land management agency. Please provide the following: author, title, and date and report number.

The BLM conducted archeological surveys in 2009 and 2011 in connection with permits issued to Southern Silver for proposed work in the general vicinity of the work proposed by the application. Although many sites were permitted for these programs, only 9 sites were actually constructed and drilled. None of the 8 sites addressed by this application are actually on the sites that were archeologically studied by these former programs. Reports describing the archeological findings by the BLM archeologist were not made available to Southern Silver, but clearance to drill was granted.

Southern Silver commissioned Neal Ackerly to conduct archeological surveys on some sites in the general vicinity of Old Hachita. Copies of his reports will be provided in digital format to MMD.

Attachment Please see separate reports____

- D. Provide information on any vegetation or wildlife surveys that may have been performed on the site.

New Mexico Mining and Minerals and the BLM conducted surveys in connection with permits issued in 2009 and 2011.

3. MAPS AND LOCATION (§302.D.2)

- A. Provide a legal description of the proposed site (i.e. Township(s), Range(s) and Section(s) NM PLSS (as well as GPS coordinates corresponding to each proposed drill hole.

Proposed Permit Area Legal Description:

T27S, R16W, Sections 35 and 36

T28S, R16W, Sections 1, 2 and 3

Proposed Drill Hole/Exploration Site GPS Coordinate(s):

1. List the drill hole/exploration name and the GPS Coordinate for each site.
2. Include datum/coordinate system of GPS coordinates (i.e. decimal degrees, UTM Zone 13, UTM Zone 12, NAD 27, NAD 1983, WGS 1984, etc.).

**Turquoise Mountain Proposed Drill Sites
Southern Silver Exploration Corp. (US)**

Datum 1927 Con US (UTM Zone 12)		
Drill Site	Easting	Northing
21-A	739851	3532589
21-B	740780	3533200
21-C	742750	3533123
21-D	743600	3531962
21-E	740704	3534249
21-F	741930	3531710
21-G	742178	3533478
21-H	742290	3532300

Laydown Area (if used) 745490 3535360

Datum 1983 NAD (UTM Zone 12)		
Drill Site	Easting	Northing
21-A	739788	3532785
21-B	740717	3533396
21-C	742687	3533319
21-D	743537	3532158
21-E	740641	3534445
21-F	741867	3531906
21-G	742115	3533674
21-H	742227	3532496

Laydown Area (if used) 745427 3535556

NOTE: The sites will be staked in the field and labeled with black marking on 36" wooden stakes. Boundaries of the sites will be marked with 36" lath. Overland travel routes will be flagged and periodic stakes will be placed on the proposed routes.

Provide a topographic map(s) of at least 1 inch = 2,000 feet or appropriate scale for the size of disturbance (i.e. a 1:24,000 USGS Quadrangle map). The map name and at

least two edges of the map (i.e. bottom and side edge) clearly showing all areas of land to be disturbed by the proposed exploration and reclamation. If the area to be explored contains the following features, show them on the map(s):

1. Boundary of the proposed permit area on a topographic map, and the area of proposed disturbance. This boundary should be labeled.
2. Perennial, intermittent and ephemeral streams, springs, wetlands, riparian areas, lakes and reservoirs
3. Residences
4. Proposed and existing roads and other access routes
5. Pipelines and support facilities
6. Cemeteries, burial grounds and cultural resources
7. Previously disturbed areas
8. Oil, gas, water wells and monitoring wells within the permit area
9. Areas and types of proposed disturbances that include the anticipated dimensions of each proposed disturbance
10. Identify the location of drill holes, shafts, pits, adits, trenches, ponds, stockpiles, wastes dumps etc.

Two maps are attached to this application. Both utilize the "USGS 7.5" Playas Peak New Mexico topographic base". One map is of a smaller scale illustrating the general area of planned work and the access from US Route 9. The map illustrates the state land that is under lease to Southern Silver and is within the general outline of the BLM land controlled by Southern Silver. Four patents are illustrated on the map; three are within the outline of the Southern Silver Oro Claims. Southern Silver owns the largest patent, but not the two small patents shown. No work will be done on these two small patents. The lay-down area for the temporary storage of equipment and supplies is also shown on this smaller scale map.

The other map is of a larger scale that illustrates the location of the 8 drill sites and the planned access route to Site F on state land.

B. Provide detailed written driving directions to access the site.

The project is located approximately 50 miles southwest of Deming. Travel 32 miles west of Deming on Interstate Route 10, and then travel south on route 146 for 19 miles to the town of Hachita and the intersection with US

Route 9. Travel 4.6 miles west on Route 9 from Hachita to a gate on the south side of the highway. Open the gate (close after passing) and proceed southwest on a dirt road to a network of dirt roads that access the proposed drill sites as shown on the attached maps.

4. EXPLORATION DESCRIPTION (§302.D.3 & 4)

A. List the proposed exploration dates:

Start Date: **September 1, 2021** _____

End Date: **September 1, 2022 or 1 year from permit approval; Extension of the permit may be desired and will be applied for at least 30 days prior to the expiration date.** _____

B. List the mineral or minerals to be explored for:

Minerals containing gold, silver, copper, lead, zinc, molybdenum and other associated minerals

C. Check the box beside the box beside the proposed method(s) of exploration.

Cuts Pits Trenches Shafts

Tunnels/Adits/Declines

Air drilling Fluid drilling Drilling & Blasting

Other method (describe): **Core drilling utilizing mud media for circulation**

D. List the following approximate proposed disturbance for each:

Drill pads:

How Many? 8 _____ Width (ft.): 60 _____ Length (ft.) 100 _____

Drill holes:

How Many? 8 _____ Depth (ft.): maximum 3,300' Diameter (in.): 4' _____

Laydown Area (25' X 60")

Other Types of Excavations or Surface Disturbances:

Please describe: Equipment and supplies may be temporarily stored in an

un-vegetated flat area approximately 2,000 feet south of US Route 9 on the main access road to the drill sites. No disturbance will be done on this area and the approximate size of the area for storage of mud and pipe (if used at all) should be approximately 25'X60' .

Access to the vicinity of the drill sites is from existing roads, and five of the eight sites can be constructed immediately adjacent to these roads. Overland access will be required to Site E (approximately 80 feet), and Site D (approximately 60 feet) and Site G (approximately 1,360'). No actual road construction is anticipated, but minor sloping may be necessary to permit safe and efficient access across dry washes.

An excavator or backhoe will be used to conduct minor leveling and vegetation removal. This equipment should be sufficient to accomplish the minor road improvements that are required and sloping across dry washes on the overland travel route. A dozer or road grader would be necessary only if extensive, long stretches of existing roads have been severely damaged by washouts.

Sumps will be constructed within the 60'X 100' drill pad to contain drill fluids and cuttings, according to the as yet unspecified specifications of the driller. A total of 8 sump systems will be constructed. Typically, the sump systems will consist of either one 25 foot long trench approximately 8 feet wide and 6 feet deep, or two parallel trenches, each approximately 12 feet long, 8 feet wide and 6 feet deep separated by a distance of about 4 feet. A short shallow connecting trench will permit mud flow from one trench to the other. All sumps will include a sloped exit ramp for livestock, wildlife or humans to escape in the event of accidental entrapment. The amount of material excavated by these sumps in total will be approximately 250 cubic yards (accounting for sloping of the sumps at one end). Top Soil will be stockpiled for distribution over the surface of excavated sumps. Safety fencing will be constructed around the trench and a shorter finer grid mesh will discourage smaller wildlife (small reptiles for example) from entering. After drilling is complete, and the pits contain mud, fencing will be placed over the sumps to discourage bird entry.

The mud sumps will contain all cuttings and no discharge of drill fluids from the drill pad will occur.

Drilling will be conducted using a truck, track or skid mounted core rig. Drill support equipment, such as pickup trucks, water trucks and service vehicles

will be used.

Short stretches of the existing road may require minor leveling and filling in of washouts, but none of this work will change the overall character of the roads. Short areas across minor dry washes on the longer (Site F) overland travel route may require minor sloping and leveling to permit efficient and safe passage of equipment. Some drill sites will require minor leveling but most will only require vegetation removal. Sumps will be constructed within the 60' X 100' drill pad to contain drill fluids and cuttings.

Travel on overland routes will be kept to one track as much as possible.

Water will be obtained from a nearby established source.

The total estimated disturbance on BLM and State Land is:

Acres of drill sites = $(8 \times 60' \times 100) / 43,560 = 1.10$ acres

Area of laydown area (if used) $25' \times 60' / 43,560 = 0.03$ acres

Total Acres Drill Sites and Laydown Area: $(1.10 + 0.03) = 1.13$ acres
estimated total disturbance for drill sites and laydown area (BLM and State)

E. Describe the typical equipment to be used for the exploration operations.

(1) A backhoe or small excavator will be utilized to construct mud sumps. This equipment will also conduct minor leveling of drill sites, access routes and roads, and to remove vegetation in order to provide a safe work area. The backhoe or small excavator will also make minor road repairs as necessary (due to washouts) and conduct minor leveling and sloping across minor dry wash drainages. The overall character of the existing roads will not be changed and improvements will be restricted to those necessary to allow safe and efficient transport of equipment and personnel.

(2) A truck, track or skid mounted core rig will do the drilling. A pipe truck, water truck, service trucks and pick-up trucks will be utilized to provide personnel and drilling supplies to the drill sites

F. Road(s).

Roads shall be located to minimize disturbance to land and wildlife and enhance stability. Roads shall be constructed and maintained to control erosion. Roads constructed in or across intermittent or perennial streams require site specific designs. Roads to remain permanent must be approved by the surface owner and must be stabilized to control erosion.

List for New Road(s) the following:

Road description: **None** _____ Length (ft.) ____ Width (ft.) ____

List for Extension or Widening of Existing Road(s) the following:

No roads will be widened.

No actual road construction will be done. Minor leveling and sloping may be necessary in order to provide safe and efficient overland access across minor dry washes to Site F. Overland travel access will include the following:

Acres of overland travel:

To Site D - 60 feet (BLM)

To Site F - 1,360 feet (State Section)

To Site E - 80 feet (BLM)

Total: 1,500 feet; Assume 15 foot width for overland travel routes
 $(1,500 \times 15) / 43,560 = 0.52$ acres

- G. Describe (location and size) any support facility disturbances (equipment staging, storage and/or lay down areas, vehicle parking, temporary housing and/or trailers) to be created or situated on the site during exploration operations.

Drill mud and drill equipment may be temporarily stored in a non-vegetated, flat area approximately 2,000 feet south of Route 9 and adjacent to the main dirt road (see small scale map) or on one of the drill sites. An area of approximately 25' X 60' should be adequate for this temporary storage area. All equipment and materials will be removed soon after the drilling project is completed.

TOTAL ACREAGE TO BE DISTURBED: 1.66 acres

BLM Drill Sites and Laydown Area	0.86 acres
State Drill Stites	0.28 acres
BLM Overland Travel	0.05 acres
State Overland Travel	0.47 acres

5. CHEMICAL USE (§302.D.4)

A. List all chemicals, and include Material Safety Data Sheets (MSDS), for any chemicals proposed to be used by the exploration operation, including but not limited to any drilling mud, polymers, down-hole bit lubricants, lost circulation materials (LCM), or any other drilling additives, fuel and lubricants. Material Safety Data Sheets (MSDS) describing must be included. If any water is to be hauled onsite, please provide source information and intended use.

Name	Use
Bentonite and non-toxic polymers	Drilling fluids
Water (obtained from local ranch)	Drilling fluid
Cement or approved abandonment material	Abandon drill hole

B. Describe in detail a plan for the containment, use and disposal of all chemicals listed above:

All drilling fluids will be contained in sumps constructed on the drill sites. The cuttings and mud will be buried when excess water has evaporated sufficiently to allow burial and re-contouring consistent with the previous surface.

C. Refueling of the drill rig will occur on site. Fueling will be monitored at all times by a drill crew member_____

D. Appropriate spill clean-up materials, such as absorbent pads, bentonite etc. will be available on site at all times during construction, site preparations and drilling activities to address potential spills. Drop cloths or plastic tarps will be placed and secured under rigs while drilling in addition to any other immobilized, stages or

temporarily stored equipment parked for durations extending longer than 48 hours, to contain any spill or leakage from the drill rig and any other related equipment _____

E. Identify spill cleanup materials that will be kept on-site (check all that apply):

- BENTONITE CLAY OR CAT LITTER
- Adsorbent pads, rolls, mats, socks, pillows, dikes, etc.
- Drum or barrel for containing contaminated soil/adsorbent materials
- Other/list: Plastic sheeting under equipment _____
- Other/list: _____
- Other/list: _____

F. Applicant/owner/representative agrees to immediately notify the State of New Mexico immediately of any spills of hazardous materials (see page 1 of this application for phone numbers to notify): X Yes No

6. GROUND WATER INFORMATION (§302.D.5)

A. Provide an estimate of depth to ground water and the total dissolved solids (TDS) concentration.

Depth to ground water (ft.): A shaft in the general area has standing water at a depth of less than 100 feet _____
TDS concentration (mg/L): **unknown** _____

B. What is the source of this information?

Estimate by throwing a rock down the shaft and listening for the splash.

C. Will dewatering activities be conducted:

- Yes No

If yes, please describe:

D. Applicant agrees to contain any water produced from the exploration borehole at the drill site and acknowledges that discharge of this

water to a watercourse may be a violation of the Federal Clean Water Act:

Yes No

E. Is any drilling proposed to occur within the channel of any perennial, intermittent, or ephemeral streams? Yes No

F. Is any drilling anticipated to occur within 100 feet of any perennial, intermittent, or ephemeral streams? Yes No

7. RECLAMATION AND OPERATION PLAN (§302.D.6)

Reclamation of the disturbed area shall be initiated as soon as possible following the completion or abandonment of the exploration operation, unless the disturbed area is included within a complete permit application for a new mining operation.

Topsoil or topdressing material removal and stockpiling shall precede any excavation within the drill site area. All lands, including access roads or terrain damaged in gaining access to or clearing the site, or lands whose natural state has been substantially disturbed as a result of the exploration by drilling, shall be restored as nearly as possible to their original condition. Where vegetation has been removed or destroyed within the permit area, vegetative cover shall be reestablished by seeding, planting, transplanting, or by other adequate methods. All open mud pits shall be constructed in a manner to prevent wildlife entrapment, and shall be constructed to prevent any overflows. When drilling is completed, the mud pits shall be allowed to dry and then backfilled with native cover.

A. Describe in general how the operation will be operated to salvage topsoil, best prevent erosion, protect wildlife, and meet the requirements of reclamation described above. Include the removal and storage of excavated material and the construction of roads. Describe how these facilities will be protected from erosion. If applicable, describe dewatering activities, the location and construction of mud pits and drill pads and any other activities causing disturbance.

Actions that will be taken to minimize degradation include:

- the utilization of existing roads wherever possible;**
- confinement of travel to the drill sites via a single track overland access route;**

- construction of sumps to contain drill cuttings and drill fluids;
- limiting drill fluids to only non-toxic products;
- All drill holes will be plugged in accord with New Mexico Administrative Code NMAC 19.27.4.30 with onsite drilling equipment prior to the drill rig leaving the site.
- recontouring of drill sites and the sumps to pre-disturbance characteristics
- application of stockpiled top soil where removed by excavating activities;
- reseeding with a seed mix and application rate prescribed by the BLM
- All equipment will be removed from the site upon completion of the drilling
- All equipment will be properly muffled and equipped with suitable and necessary fire suppression equipment, such as fire extinguishers and hand tools
- All equipment will be pressure washed prior to entry to the areas of planned disturbance
- All trash generated will be removed from the site and disposed of at an approved facility;

- B. Describe in general how re-contouring, topsoil or topdressing, and re-establishment of vegetation will be conducted. If no revegetation is planned, provide a justification as to why none is needed.

The drill sites will be re-contoured to their approximate state prior to disturbance activities.

Topsoil excavated from the sumps will be stockpiled and spread over the areas that are dug. This will be done soon after the sumps have dried sufficiently to allow re-contouring without shrinkage due to evaporation of water, usually less than 4 months or less after the completion of drilling.

Reseeding of the drill sites and the laydown area will be done at the same time as reseeding of the sumps is done. Any removed vegetation will be distributed over the disturbance in order to act as a mulch. Re-vegetation may not be possible in some areas, such as the laydown area, because of soil conditions due to periodic flooding during the monsoon season and the perpetual un-vegetated state of the area.

Overland travel will be reseeded. Overland travel routes will be ripped (scarified) prior to seeding if directed by the BLM or Mines and Minerals as necessary. Mulch material from sources outside of the project area

will be done if directed by the BLM or MMD assuming that acceptable weed free mulch can be obtained that is acceptable to both agencies. If minor sloping and leveling is necessary for access across dry washes, the original character of the wash will be restored as much as practical. The overland travel will avoid the most significant vegetation as much as practical. Surface mesquite will be selectively removed from the overland access routes in order to avoid flat tires.

The short stretches of road that are upgraded will remain so unless other procedures are recommended by the BLM or Mines and Minerals.

- C. Where revegetation is to be conducted, describe the plant species to be used in the re-establishment of vegetation.

Plant name	Seeding Rate (lbs./acre)
Seed mixture and seeding rates will be as requested by BLM and specified in their anticipated Notice acceptance for these sites. It is assumed that the BLM recommended seed mixture and coverage rates will be acceptable for reseeding state land as well, but if not, Southern Silver will follow MMD instructions. A broadcast seeder will be utilized. The BLM requires that reseeding be done between June 15 and July 15. Reseeding will occur in the first interval of this date range after drill sites have been recontoured and sumps have dried out to prevent shrinkage due to evaporation. In addition to re-seeding in the prescribed date range, seed will be broadcast immediately after recontouring in order to take advantage of the freshly scared land.	

- D. Proposed Reclamation dates:

Start Date: **Re-contouring and sump burial will commence within 4 months of the completion of drilling, assuming that they have dried sufficiently to avoid shrinkage.**

End Date: **Reseeding will be accomplished between June 15 and July 15, 2022 if surface re-contouring is completed by the latter date. The BLM stipulates that reseeding must be done between June 15 and July 15. Reseeding may have to be completed in 2023 if re-contouring is not completed by July 15, 2022.**

- E. If this is a drilling operation each drill hole shall be plugged from total depth to within 2 feet of the original ground surface or the collar of the hole, whichever is lower, with a column of cement, high density bentonite clay or other materials specified in the permit. If the approved plugging material is not cement, then the top ten feet of the column must be a cement plug. The hole shall be backfilled with topdressing or topsoil from above the cement plug to the original ground surface. The hole shall be plugged as soon as is practical after drilling is complete, but no later than 30 days after completion of drilling; however, if a water bearing stratum is encountered, the hole shall be plugged as soon as practicable and satisfy the requirements of the Office of the State Engineer and the New Mexico Environment Department for proper plugging of such holes. This plugging requirement may be waived if the State Engineer issues a permit for a well for the exploration drill hole. Describe how drill holes will be plugged. What plugging methods will be employed where groundwater is encountered versus holes where no groundwater is encountered? (Plugging methods must comply with 19.27.4 NMAC of the State Engineer Office's plugging and abandonment requirements.)

It is assumed that ground water will be encountered; therefore, NMAC 19.27.4.30 methods and materials will be utilized to plug all holes: *"To plug a well, the entire well shall be filled from the bottom upwards to land surface using a tremie pipe"* or through drill pipe. *"The well shall be plugged with neat cement slurry, bentonite based plugging material, or other sealing material approved by the state engineer for use in the plugging of non-artesian wells."* The upper portion between a depth of 12' and 2' will be filled with cement as a cap if neat cement is not used as plugging material. The upper 2' will be filled with dirt.

All holes will be abandoned as wet, thus no dry hole abandonment procedures will be done.

All drill holes will be properly abandoned immediately upon completion of each hole before the drill rig leaves the site. Only one drill hole will be open during the duration of the program; that hole being the hole that the drill rig is actually on.

Bonding will be sufficient to cover the two deepest holes that are scheduled to be drilled. The deepest hole is planned to be 3,300 feet deep and the next deepest is scheduled to be 2,630 feet in depth. The other 6 drill holes are planned to be less than 2,630 feet, and will not exceed this

depth unless the bonding for the 3,300 foot hole has been recycled by MMD. After satisfactory abandonment of a drill hole is complete as witnessed by the Southern Silver representative and/or documented by drill logs, New Mexico Mining and Minerals will be informed of the abandonment and the bond will be recycled to the next hole to be drilled.

F. Describe how the reclamation of portals, drilling mud and/or waste pits, adits, shafts, ponds, roads or other disturbances will be performed.

Sumps will be allowed to dry prior to filling and re-contouring so that minimal slumpage will occur due to shrinkage of wet mud after burial.

8. PERMIT FEES (§302.I.2)

A. Attach the permit fees as determined pursuant to Subpart 2. The application fee for a minimal impact exploration permit is \$500.00.

Check the method of payment.

Cash

Check

Check Number: 1574

9. FINANCIAL ASSURANCE (302.I.(5))

Financial assurance must be posted with Mining and Minerals Division prior to approval of this application. The acceptable forms of financial assurance are surety bonds, letters of credit, or cash accounts described in 19.10.12.1208 NMAC. Provide an estimate of, and an instrument for, the proposed financial assurance required by Subpart 12.

Attachment: **Please See Bond Calculation of \$95,105.00. Southern Silver**

is

Also working with New Mexico State Lands to ensure that the bonding requirements for the work on state land are met.

10. CERTIFICATION REQUIREMENT (§302.I.3 & 4)

Each application shall be signed by the applicant or an authorized agent of the applicant for the operation with the following certification made.

(Certification does not require notarization):

I certify that I have personally examined and am familiar with the information submitted herein, and based on my inquiry of those individuals

responsible for obtaining the information; I believe the submitted information is true, accurate, and complete. I agree to comply with the reclamation requirements set forth in this permit application and related correspondence, the New Mexico Mining Act and the Rules. Further, I certify that I am not in violation of any other obligation under the New Mexico Mining Act or the Rules adopted pursuant to that Act and I allow the Director to enter the permit area, without delay, for the purposes of conducting inspections during exploration and reclamation.

Signature of Permittee or Authorized Agent

Name (typed or print) Elliott M. Crist

Title/Position: as Agent and Consulting Geologist for Southern Silver

Date: February 25, 2021

Cost Estimate: Southern Silver/Turquoise Mountain Minimal Impact Exploration Project

Subsurface Plugging and Abandonment Financial Assurance

2 hole floating option

\$ Cost/Ft.	Ft.	Number of Holes	Total
14	3,300	1	46200
14	2,630	1	36820
Total Abandonment			83020

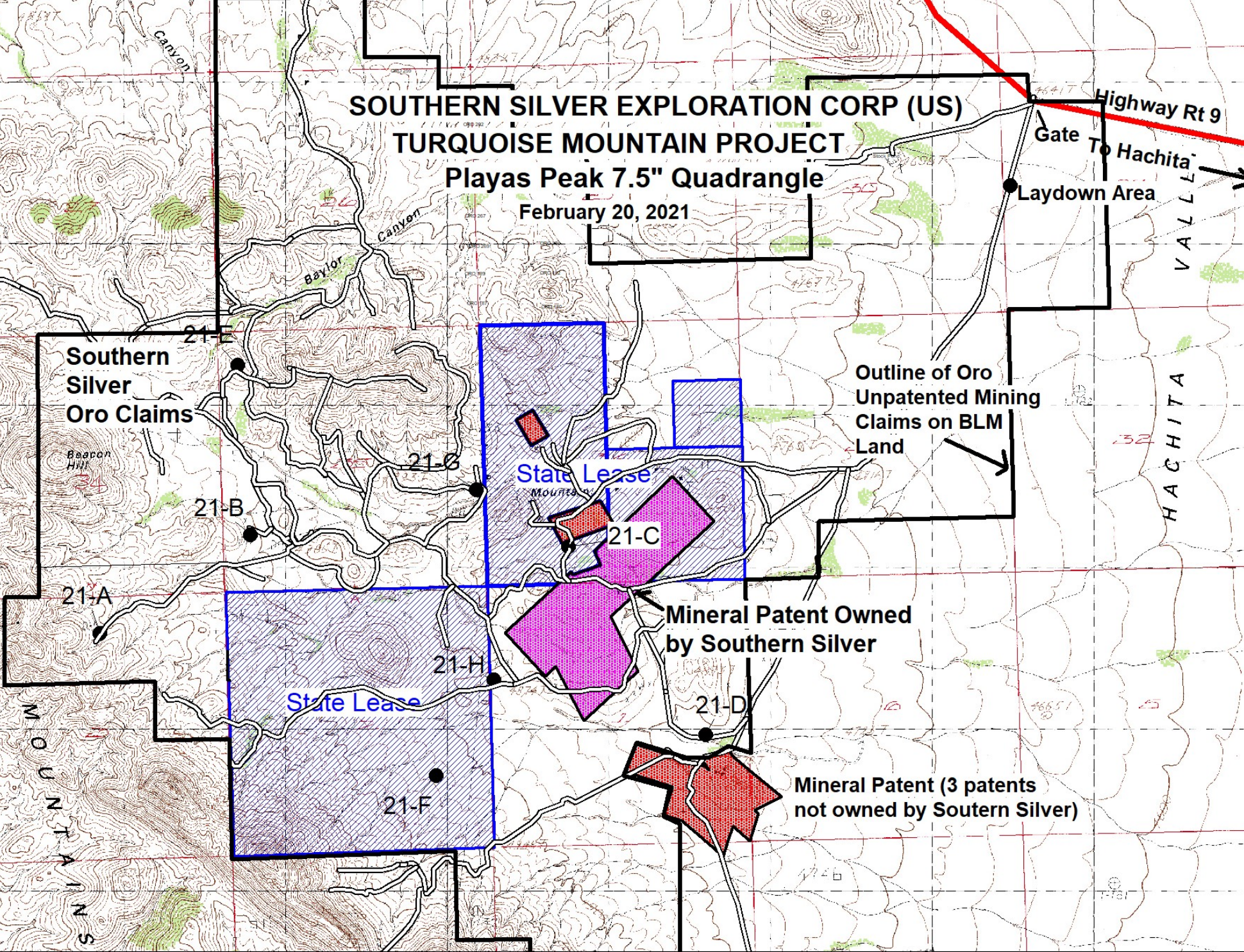
Surface Reclamation Financial Assurance

Category	\$Cost/Acre	Number of Acres	Total
First acre or less	8900	1	8900.00
Additional acres	4900	0.65	3,185.00
Total Surface			12085.00

Total FA (\$) 95,105.00

SOUTHERN SILVER EXPLORATION CORP (US)
TURQUOISE MOUNTAIN PROJECT
Playas Peak 7.5" Quadrangle

February 20, 2021



Southern Silver Oro Claims

Outline of Oro Unpatented Mining Claims on BLM Land

State Lease

Mineral Patent Owned by Southern Silver

Mineral Patent (3 patents not owned by Southern Silver)

Highway Rt 9

Gate to Hachita

Laydown Area

HACHITA VALLEY

HACHITA

TURQUOISE MOUNTAINS

21-E

21-B

21-G

21-C

21-A

21-H

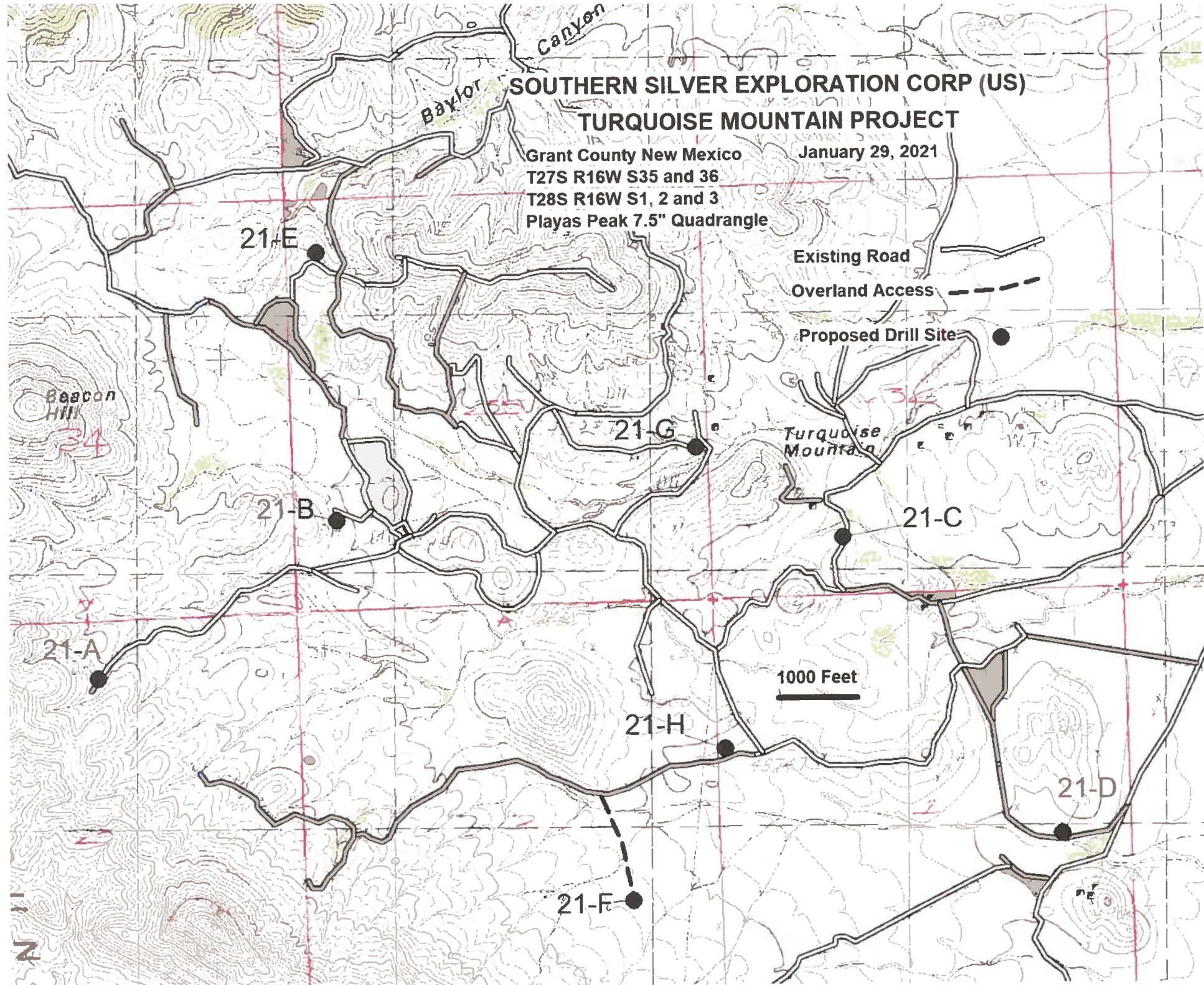
21-D

21-F

SOUTHERN SILVER EXPLORATION CORP (US)
TURQUOISE MOUNTAIN PROJECT

Grant County New Mexico
T27S R16W S35 and 36
T28S R16W S1, 2 and 3
Playas Peak 7.5" Quadrangle

January 29, 2021



Existing Road

Overland Access

Proposed Drill Site

Turquoise Mountain

1000 Feet

21-E

21-B

21-A

21-G

21-C

21-H

21-D

21-F

Beacon Hill

Baylor Canyon

N