Appendix A
Highest Liability Year

June 16, 2024
Via Electronic Mail

Ms. Mariana Lafon
Freeport-McMoRan Chino Mines Company
99 Chino Mine Road
Vanadium, New Mexico 88023

Subject: **Chino's Closure Closeout Plan**
Next 5-Year Highest Liability Year-Update based on Agencies' Comments

Dear Mariana:

INTRODUCTION

Telesto Solutions, Inc. (Telesto) utilized a method based on the change in areas over time to determine the highest liability year (HLY) in Freeport McMoRan Chino Mines Company's (Chino's) update to their Closure/Closeout Plan (CCP) for Chino's North Mine Area (NMA) and South Mine Area (SMA). Telesto determined that the HLY in the next 5-year CCP period would be End of Year 5 (EOY-5). The New Mexico Environment Department, Ground Water Quality Bureau, Mining Environmental Compliance Section (NMED) suggested that utilizing the reclamation cost index (RCI) approach would more clearly show the HLY and demonstrate how Chino expects the mine to change over the CCP period.

APPROACH

Highest reclamation cost year calculations are typically based only on the earthwork reclamation cost estimate (RCE) at Chino because the amount of water requiring treatment at the end of mining varies little, and earthwork, thus, drives the difference between years. Rather than run a full RCE for each year of the five-year mine plan, Telesto relied on the RCI approach based upon individual areas for top surfaces, slopes near reclamation grade, and steep slopes. In this update, Telesto based the analysis on the footprint areas for significant facilities in the North Mine Area (NMA):

- 3A Stockpile
- Chino Pit
- Kessel Stockpile
- Southwest Lampbright
- Lampbright and North Lampbright Leach Stockpiles

Colorado Office (Corporate)
750 14th Street SW
Loveland, Colorado 80537
970-484-7704 / 970-484-7789 (FAX)

New Mexico Office
1303 Pope Street
Silver City, New Mexico 88061
575-538-5620 / 575-538-5625 (FAX)

- Southwest Lampbright
- South Stockpile
- West Stockpile

The facilities in the South Mine Area (SMA) change little over the 5-year CCP period. Thus, the SMA has little effect on the results and is omitted from the RCI analysis.

Telesto utilized GIS and elevation contours of the respective five EOY mine plans provided by Chino Mine Planning to create digital elevation models. We then summarized the total slope area per each category in the RCI analysis as follows:

- 0 to 5%, for areas needing little to no grading
- 6% to 33% (3H:1V) for slopes near acceptable reclamation angles requiring minimal grading
- >33% for steep slopes that require significant regrading to achieve reclamation angles

We then multiplied each area for each category by its respective RCI Factor[1] (Table 1) as described in Equation 1, grouping by year.

Table 1 RCI Factor

Category	Historical RCI Factor Ranges	RCI Factor for this Analysis
Flat Areas	0.2 – 0.5	0.4
Areas near Reclamation Grade	0.5 – 0.9	0.7
Areas with Steep Grades	1.0 – 2.0	1.5

Equation 1

$$WA_{year} = \sum Area_{category} \times F_{RCI}$$

Where:

- WA_{year} *is the weighted area for each year*
- $Area_{category}$ *is the area of each category for the respective year*
- F_{RCI} *is the RCI factor for the respective category*

We then calculate the RCI by dividing the WA_{year} by 1000.

CALCULATIONS AND RESULTS

Figures 1 through 5 display the top surfaces, side slopes near reclamation grade, and steep slopes subject to reclamation for EOY1 through EOY5, respectively. Table 2

[1] The RCI Factor represents the relative cost of reclaiming the categorical areas relative to one another based on past RCEs.

presents the calculation results and shows that the EOY5 RCI is the highest cost reclamation year.

Table 2 RCI Calculation Summary

Slope Category	0-5%	5%-33%	>33%	Total
Year	**Slope Area (acre)**			
EOY1	620	550	1,000	2,170
EOY2	730	550	990	2,270
EOY3	720	590	1,030	2,340
EOY4	650	600	1,050	2,300
EOY5	760	670	1,060	2,490
RCI Factor	0.4	0.7	1.5	
Year	**Weighted Slope Areas**			**RCI**
EOY1	248	385	1,500	2.13
EOY2	292	385	1,485	2.16
EOY3	288	413	1,545	2.25
EOY4	260	420	1,575	2.26
EOY5	304	469	1,590	**2.36**

DISCUSSION AND CONCLUSION

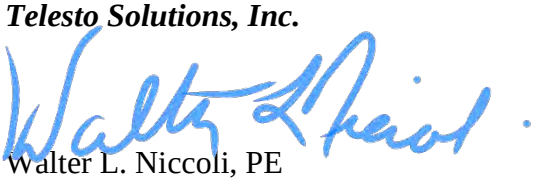
The five-year mine life utilized in this analysis corresponds to the internal timeframe for short-term planning used by Chino's mine planners.

Buttressing of the Southwest Lampbright and Lampbright stockpiles' slopes reduces the amount of steep slope needing regrading on the stockpiles, which reduces the RCE required. Buttressing is shown to occur between the EOY1 and EOY2, but due to safety concerns and availability of equipment, buttressing is planned for this year. Regardless of when the buttressing infill occurs, the Kessel Stockpile growth dominates reclamation costs, and EOY5 remains the highest liability year.

Given that both the NMA and SMA highest reclamation cost year is EOY5, Telesto will base the CCP and RCE on the EOY5 mine plan with Agency concurrence.

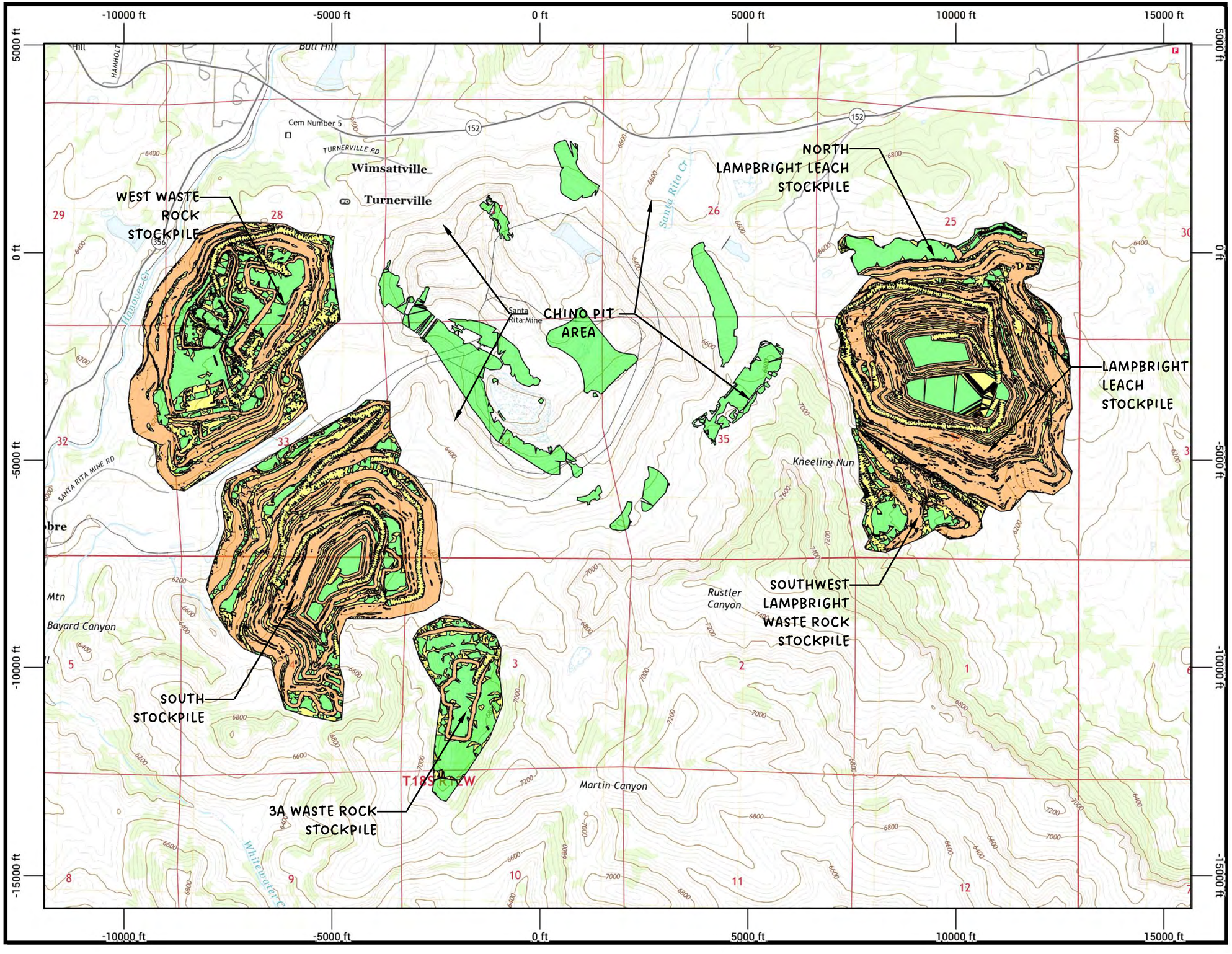
If you have any questions or concerns with this letter report, please do not hesitate to contact me or Jon Cullor at your earliest convenience.

Sincerely,
Telesto Solutions, Inc.



Walter L. Niccoli, PE
Principal/Senior Engineer

cc: Christian Krueger, Tyler Johnson, Sherry Burt-Kested, Tom Shelley



NOTES:

0-5%
TOP AND FLAT AREAS
MINIMAL GRADING

5-33%
RECLAMTION SLOPE AREAS
AVERAGE GRADING

>33%
STEEP AREAS
MAXIMUM GRADING

N

0 2,2500

SCALE IN FEET

COORDINATE SYSTEM
NAD83 CHINO LOCAL

FIGURE 1
CCP EOY-1 SLOPE AREAS

PREPARED BY:
TELESTO SOLUTIONS INCORPORATED

PREPARED FOR:
FREEPORT-MCMORAN

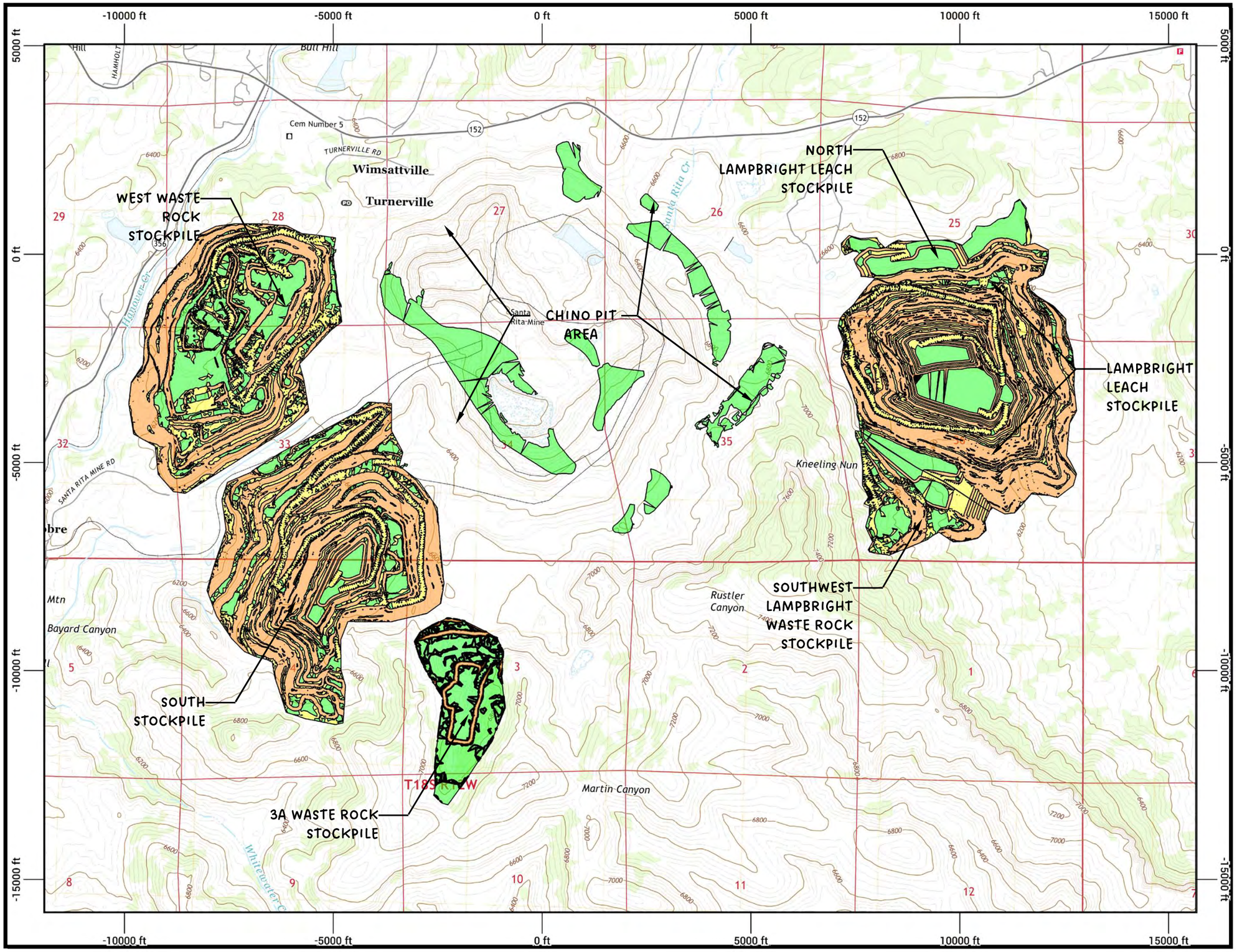


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FIGURE 2
CCP EOY-2 SLOPE AREAS

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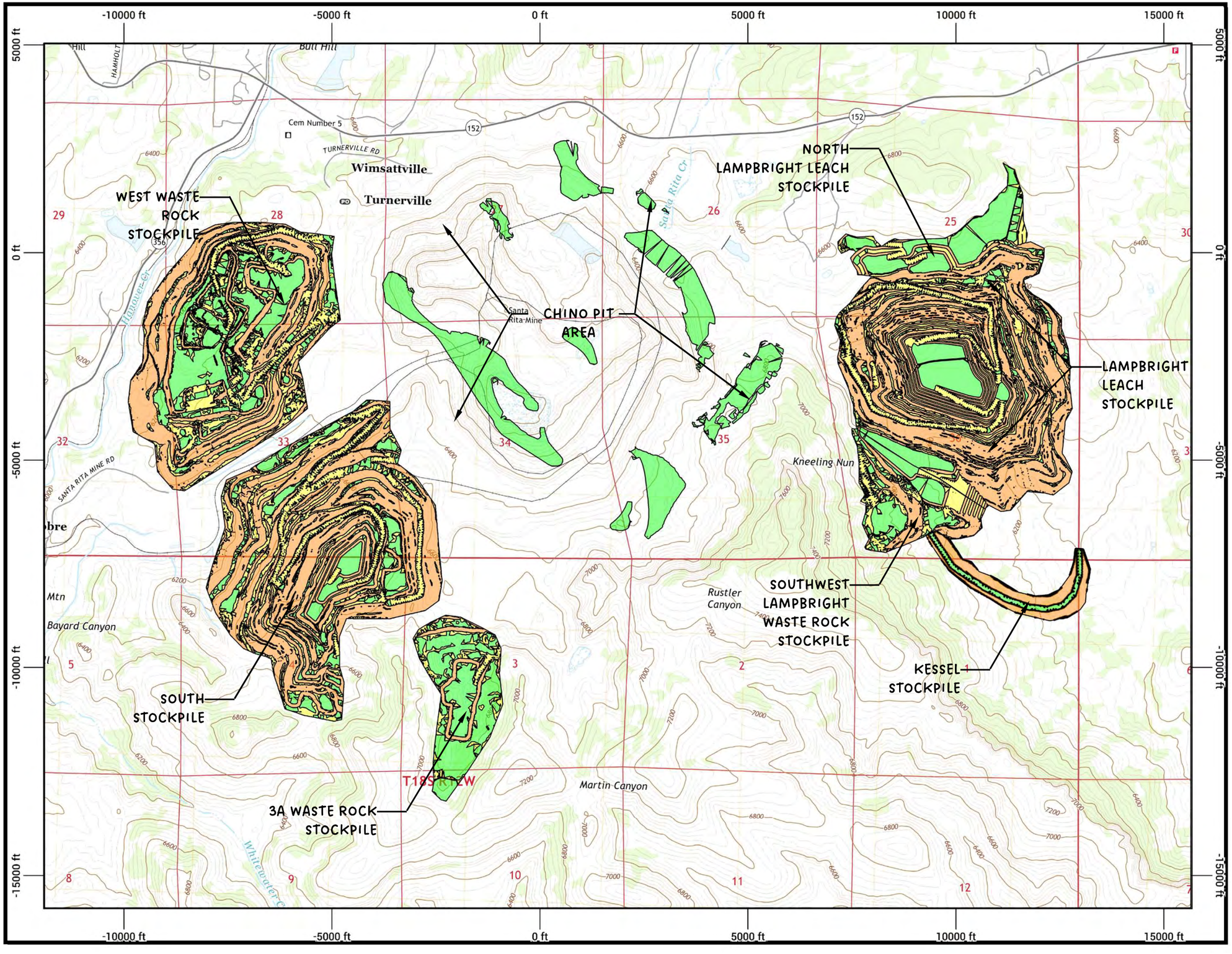

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FIGURE 3
CCP EOY-3 SLOPE AREAS

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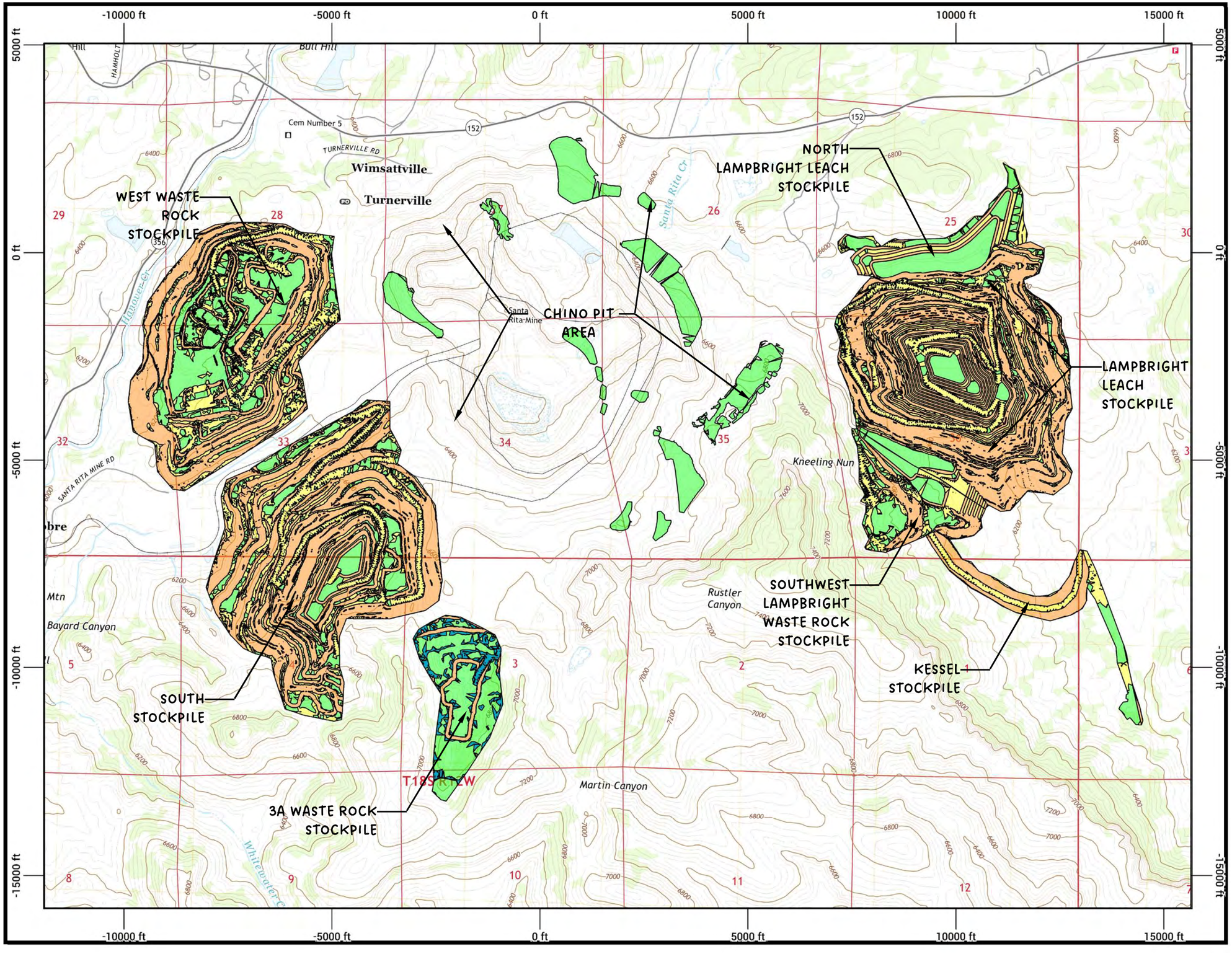

NOTES:

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AVERAGE GRADING

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N

0 2,2500

SCALE IN FEET

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FIGURE 4
CCP EOY-4 SLOPE AREAS

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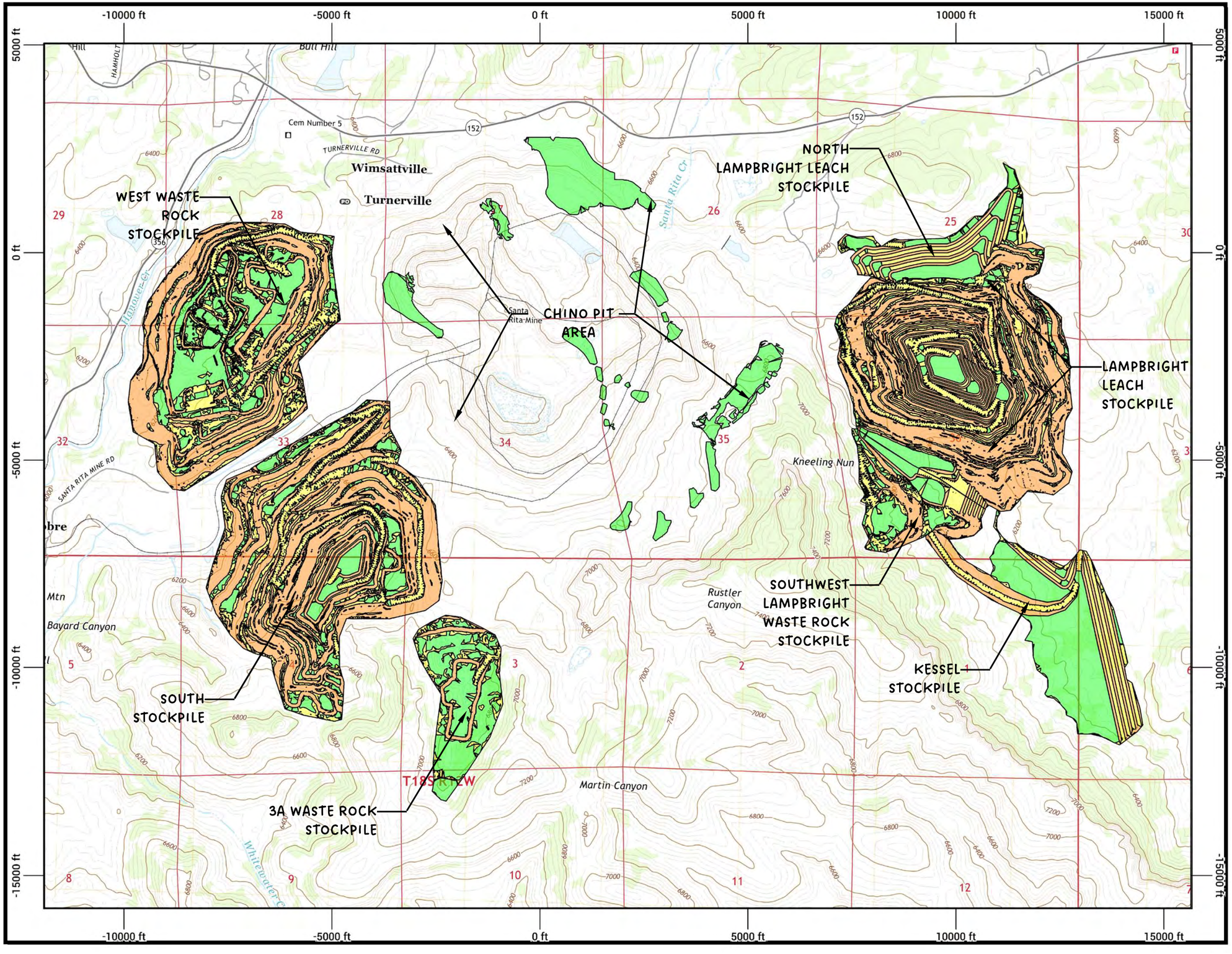

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MAXIMUM GRADING

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0 2,2500

SCALE IN FEET

COORDINATE SYSTEM
NAD83 CHINO LOCAL

FIGURE 5
CCP EOY-5 SLOPE AREAS

PREPARED BY:
TELESTO SOLUTIONS INCORPORATED

PREPARED FOR:
FREEPORT-McMoRan

State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
and the
ENVIRONMENT DEPARTMENT

MICHELLE LUJAN GRISHAM
GOVERNOR

Howie Morales
Lieutenant Governor

James C. Kenney
SECRETARY, NMED

Melanie A. Kenderdine
SECRETARY, EMNRD

July 19, 2024

Mr. Tyler Johnson, Chief Engineer
Freeport-McMoRan Chino Mines Company
P.O. Box 10
Bayard, NM 88023

RE: Response to Chino Closure Closeout Plan – Highest Liability Year, Chino Mine, Grant County, New Mexico, Permit No. GR009RE

Dear Mr. Johnson:

The New Mexico Mining and Minerals Division ("MMD") and the New Mexico Environment Department ("NMED"), collectively the "Agencies," have reviewed the document entitled *Chino's Closure Closeout Plan – Highest Liability Year, Permit GR009RE and Discharge Permit 1340 (DP-1340)* ("Report") prepared by Telesto Solutions Incorporated ("Telesto") on behalf of Freeport-McMoRan Chino Mines Company ("Chino") and received June 20, 2024. The Report determined that the highest liability year for the Chino Mine over the next 5-year Closure Closeout Plan ("CCP") period would be End of Year 5 ("EOY 5") based on the results of reclamation cost index analysis. The Agencies concur with this determination of EOY 5 as the highest liability year.

If you have any questions, please feel free to contact Kevin Barnes at (505) 470-5354 or by email at kevin.barnes@emnrd.nm.gov, and/or Jordan Anderson at (505) 660-8908 or by email at jordan.anderson@env.nm.gov.

Sincerely,

Kevin Barnes, Permit Lead
New Mexico Mining and Minerals Division
Mining Act Reclamation Program

Jordan Anderson, Permit Lead
New Mexico Environment Department
Mining Environmental Compliance Section

cc: Mine File (GR009RE)