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December 14, 2017

Kyle Moselle
Department of Natural Resources
Office of Project Management and Permitting
400 Willoughby Street
Juneau, AK 99801-01019

Re: FGMI Phase 9 Pit Expansion

Dear Mr. Moselle:

Fairbanks Gold Mining, Inc. (FGMI) is requesting an amendment to the Plan of Operations for the Fort Knox Gold Mine. FGMI proposes to expand the pit with the Phase 9 pit expansion.

This submittal includes the *Fort Knox Mine Plan of Operations Amendment Request, Phase 9 Pit Expansion, December 14, 2017* document.

Should you have any questions, please contact me at 970-490-2287 or mark.huffington@kinross.com.

Sincerely,



Mark A. Huffington
Environmental Superintendent

Cc: Brent Martellaro, ADNR, brent.martellaro@alaska.gov
Tim Pilon, ADEC, tim.pilon@alaska.gov
Bartly Kleven, FGMI, bartly.kleven@kinross.com
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KINROSS

Fort Knox

Fort Knox Mine Plan of Operations Amendment Request



Phase 9 Pit Expansion

December 14, 2017

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Abbreviations

amsl	above mean sea level
BCHLF	Barnes Creek Heap Leach Facility
BCWRD	Barnes Creek Waste Rock Dump
cy	cubic yard
DEC	Alaska Department of Environmental Conservation
DNR	Alaska Department of Natural Resources
FEMA	Federal Emergency Management Agency
ft	feet
ft ²	square feet
FGMI	Fairbanks Gold Mining, Inc.
Fort Knox	Fort Knox Mine
gpm	gallons per minute
H	horizontal
hr	hour
lb/cf	pounds per cubic feet
LCRS	leachate collection and recovery system
M	million
Mt	million tons
PCMS	process component monitoring system
PFS	prefeasibility study
TSF	tailings storage facility
V	vertical
WCHLF	Walter Creek Heap Leach Facility
WRD	waste rock dump
YPWRD	Yellow Pup Waste Rock Dump
yr	year

1.0 INTRODUCTION

Fairbanks Gold Mining, Inc. (FGMI) is requesting a Plan of Operations amendment approval at its Fort Knox Mine (Fort Knox) for the Phase 9 expansion of the Fort Knox pit. The proposed Phase 9 expansion is located on property known as Parcel G and Parcel B. The Plan of Operations amendment request also includes expansions of the Barnes Creek Waste Rock Dump to an ultimate elevation of 2,600 feet (ft) above mean sea level (amsl) and the Yellow Pup Waste Rock Dump to an ultimate elevation of 2,400 ft amsl. The proposed waste rock dump expansions are also needed to accommodate waste rock mined with the Parcel G pit expansion.

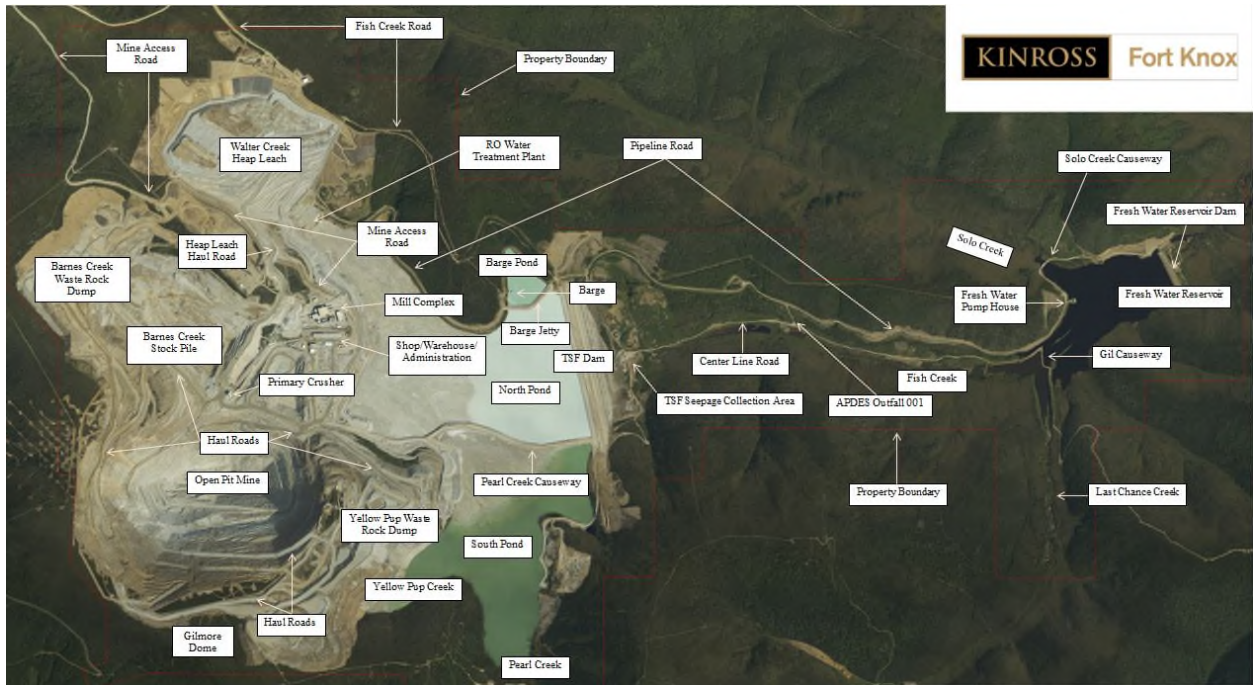
1.1 Site Description

Fort Knox is owned and operated by FGMI, a wholly owned subsidiary of Kinross Gold USA, Inc. Fort Knox is located in the Fairbanks North Star Borough, approximately 26-road miles northeast of Fairbanks, Alaska (Figure 1). It is located along a belt of lode and placer deposits that comprise one of the highest gold-producing areas in Alaska. The deposit at Fort Knox is mined by conventional open-pit methods on a year-round basis, seven days per week. Fort Knox processes ore onsite at a carbon in-pulp mill with a daily capacity of up to 45,000 tons. In recent years, Fort Knox has produced approximately 350,000 to 400,000 ounces of gold annually. Major site facilities include the active open pit mine, mill, tailings storage facility (TSF), waste rock dumps, water storage reservoir, and the Walter Creek Valley Heap Leach Facility (Figure 2).

Figure 1: Site Location



Figure 2: Mine Facilities



2.0 PHASE 9 PIT EXPANSION

FGMI proposes to expand the Fort Knox mine pit to the area known as Phase 9. The proposed Phase 9 expansion is located on property known as Parcel G and Parcel B (Attachments 1 – 4).

The proposed expansion includes approximately 173.4 million tons of rock of which 63.4 million tons is ore for processing and 110 million tons is waste rock (Attachment 3). The proposed Phase 9 expansion disturbance is approximately 91.6 acres (Attachment 5).

Table 1 – Phase 9 Pit Expansion Quantities

Facility	Ore Processing (million tons)	Waste Rock (million tons)
Mill	1.4	
Walter Creek Heap Leach	24	
Barnes Creek Heap Leach	38	
Barnes Creek Waste Rock Dump		73
Yellow Pup Waste Rock Dump		27
In-Pit Waste Rock Dump		10

2.1 Reclamation

Reclamation of the Phase 9 Pit Expansion is included as an amendment to the *Fairbanks Gold Mining, Inc., Reclamation Plan and Closure Plan, November 2013, Rev 2*. The amendment is provided as a separate document.

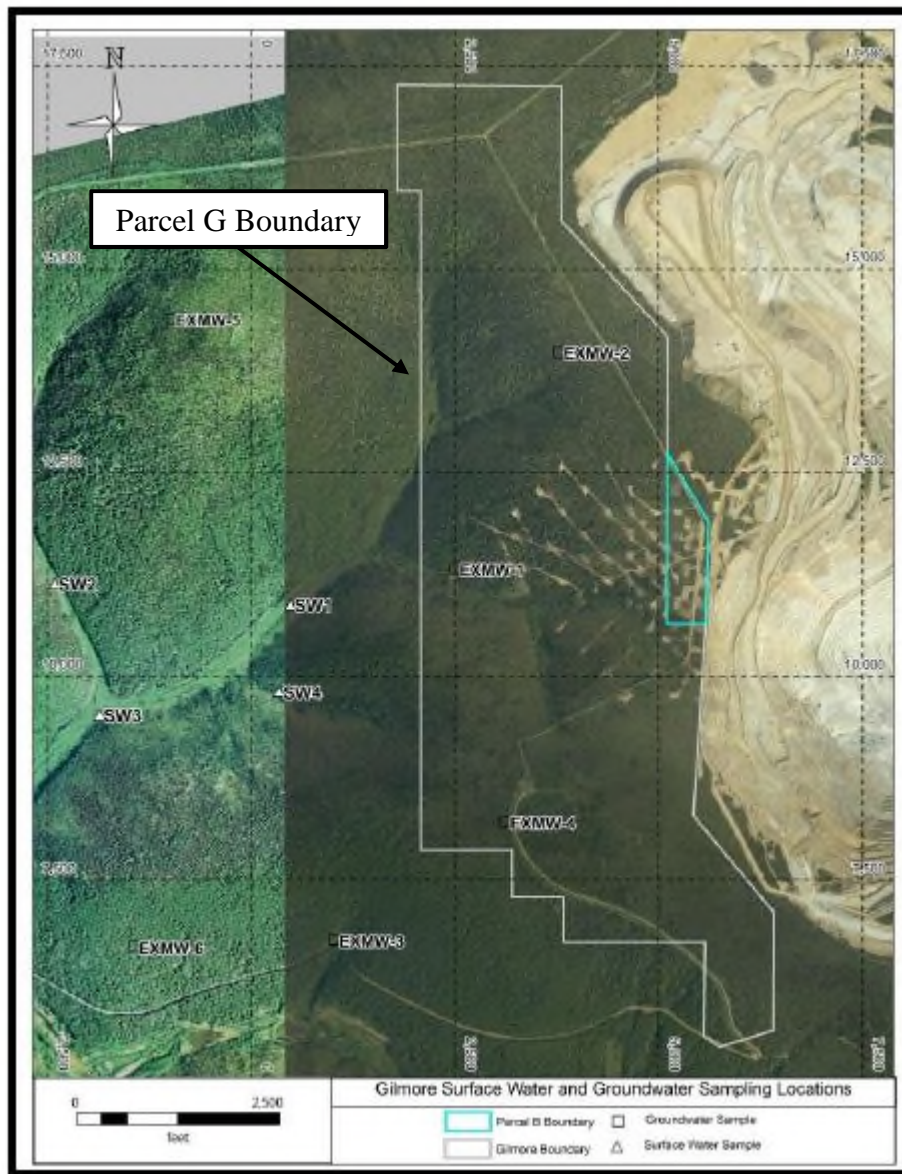
2.2 Wetlands

A wetlands delineation was performed by Michael Baker International in 2015 for Parcel G. No wetlands were identified in the Phase 9 Pit Expansion area.

2.3 Groundwater Monitoring Wells

Parcel G includes three existing groundwater monitoring wells located west of the Phase 9 pit expansion (Figure 3). The monitoring wells are designated EXMW-1, EXWM – 2, and EXWM-4. These three monitoring wells will be continued to be monitored on a periodic schedule.

Figure 3 – Parcel G Groundwater Monitoring Well Locations



3.0 BARNES CREEK WASTE ROCK DUMP

The current Barnes Creek Waste Rock Dump (BCWRD) is authorized for an ultimate height of 2,400 ft amsl, and FGMI is requesting for the BCWRD ultimate height be increased 200 ft to 2,600 ft amsl. The figure of Attachment 4 identifies the increased ultimate height of 2,600 ft amsl. The BCWRD will increase in size by approximately 90 acres (Attachment 5) with the 200-foot height increase. The expansion will accommodate approximately 73 Mt waste rock from mining of the Phase 9 expansion.

3.1 Reclamation

Reclamation of the BCWRD expansion is included in the Phase 9 Pit Expansion amendment to the *Fairbanks Gold Mining, Inc., Reclamation Plan and Closure Plan, November 2013, Rev 2*. The amendment is provided as a separate document.

3.2 Wetlands

There are no wetlands identified in the expansion area.

4.0 YELLOW PUP WASTE ROCK DUMP

The current Yellow Pup Waste Rock Dump (YPWRD) is authorized for an ultimate height of 2,350 ft amsl, and FGMI is requesting an expansion for the YPWRD for the ultimate height be increased 50 ft to 2,400 ft amsl. The figure of Attachment 4 identifies the increased height to 2,400 ft amsl. The increased height will accommodate approximately 27 Mt of waste rock from mining of the Phase 9 expansion. The YPWRD expansion request increases the size by approximately 48.6 acres (Attachment 5).

4.1 Reclamation

Reclamation of the YPWRD expansion is included in the Phase 9 Pit Expansion amendment to the *Fairbanks Gold Mining, Inc., Reclamation Plan and Closure Plan, November 2013, Rev 2*. The amendment is provided as a separate document.

4.2 Wetlands

Wetlands associated with the YPWRD expansion were mitigated with in-lieu fee compensatory mitigation for impacts with the US Army Corps of Engineers (ACOE) POA-1992-574-M22 in 2013 and POA-1992-574-M24 in 2014.

5.0 IN-PIT WASTE ROCK DUMP

The proposed In-Pit Waste Rock Dump identified in Attachments 2 through 4 will accommodate approximately 10 Mt of waste rock from mining of the Phase 9 expansion.

5.1 Reclamation

Reclamation of the In-Pit Waste Rock Dump is included in the Phase 9 Pit Expansion amendment to the *Fairbanks Gold Mining, Inc., Reclamation Plan and Closure Plan, November 2013, Rev 2*. The amendment is provided as a separate document.

5.2 Wetlands

There are no wetlands identified in the area for the In-Pit Waste Rock Dump.

6.0 REFERENCES

Michael Baker International, 2015, *Preliminary Jurisdictional Determination and Functional Assessment Report. Fort Knox Gold Mine Gilmore Exploration Area*, December 23, 2015.



Site Overview

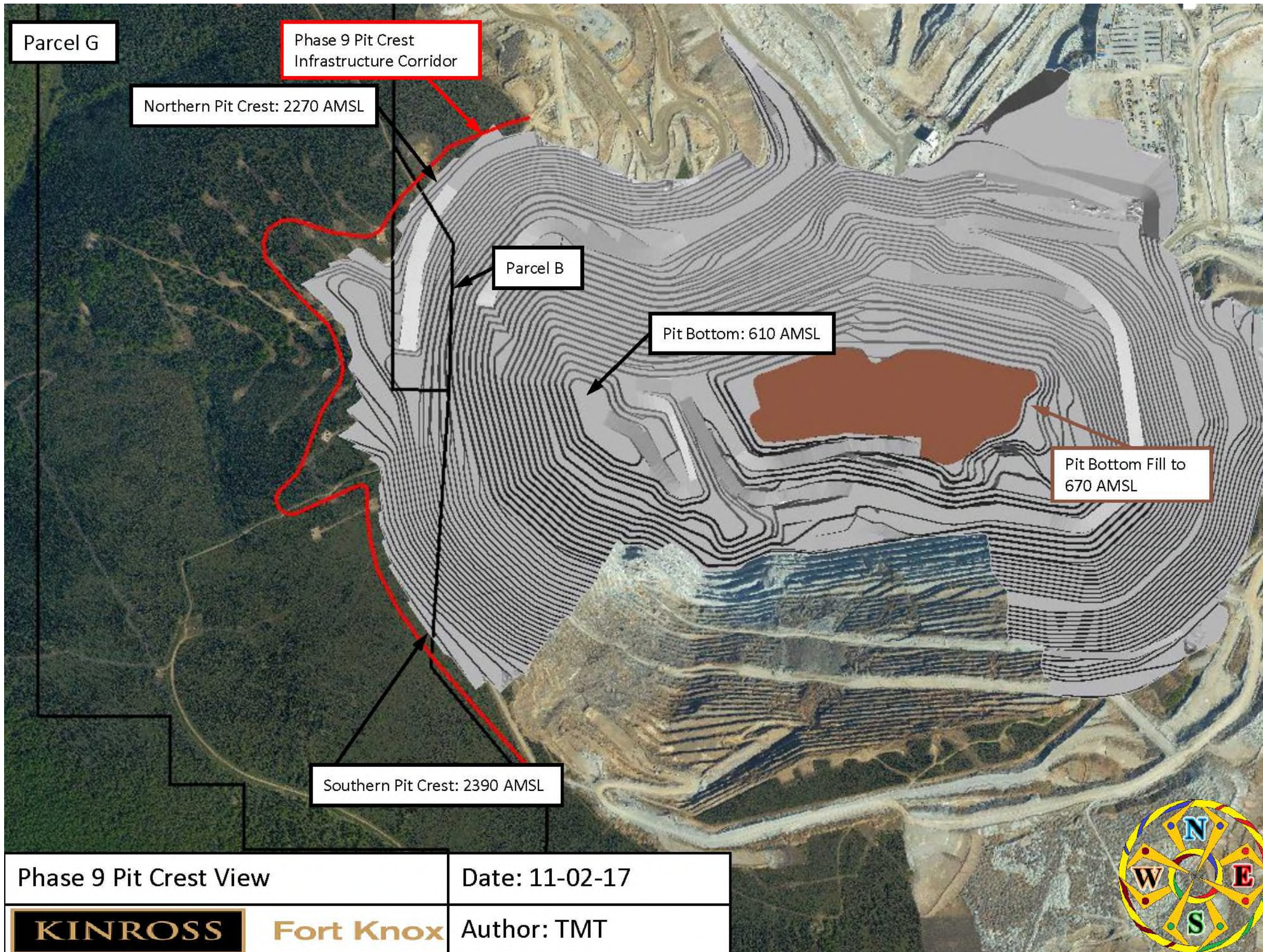
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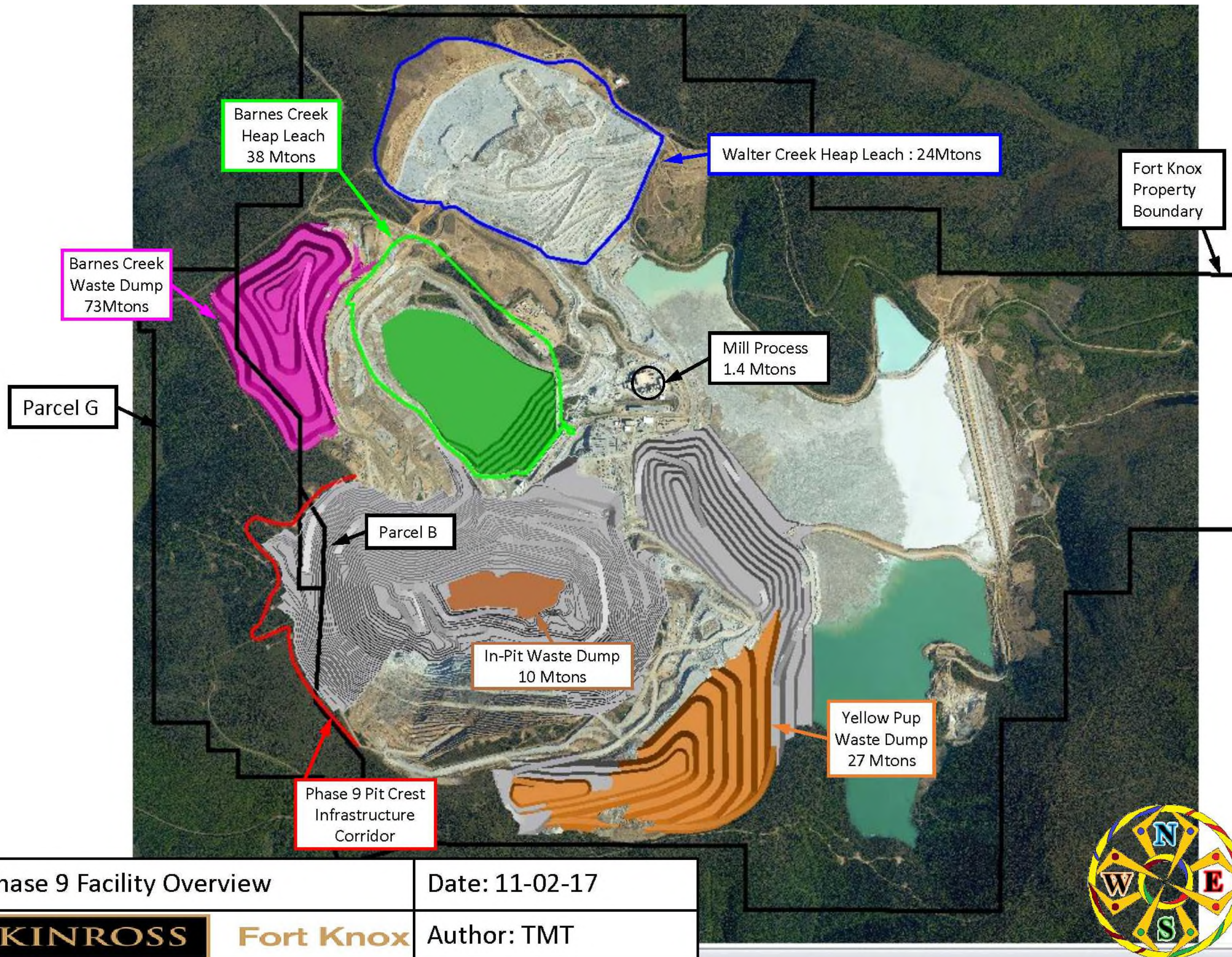
Fort Knox

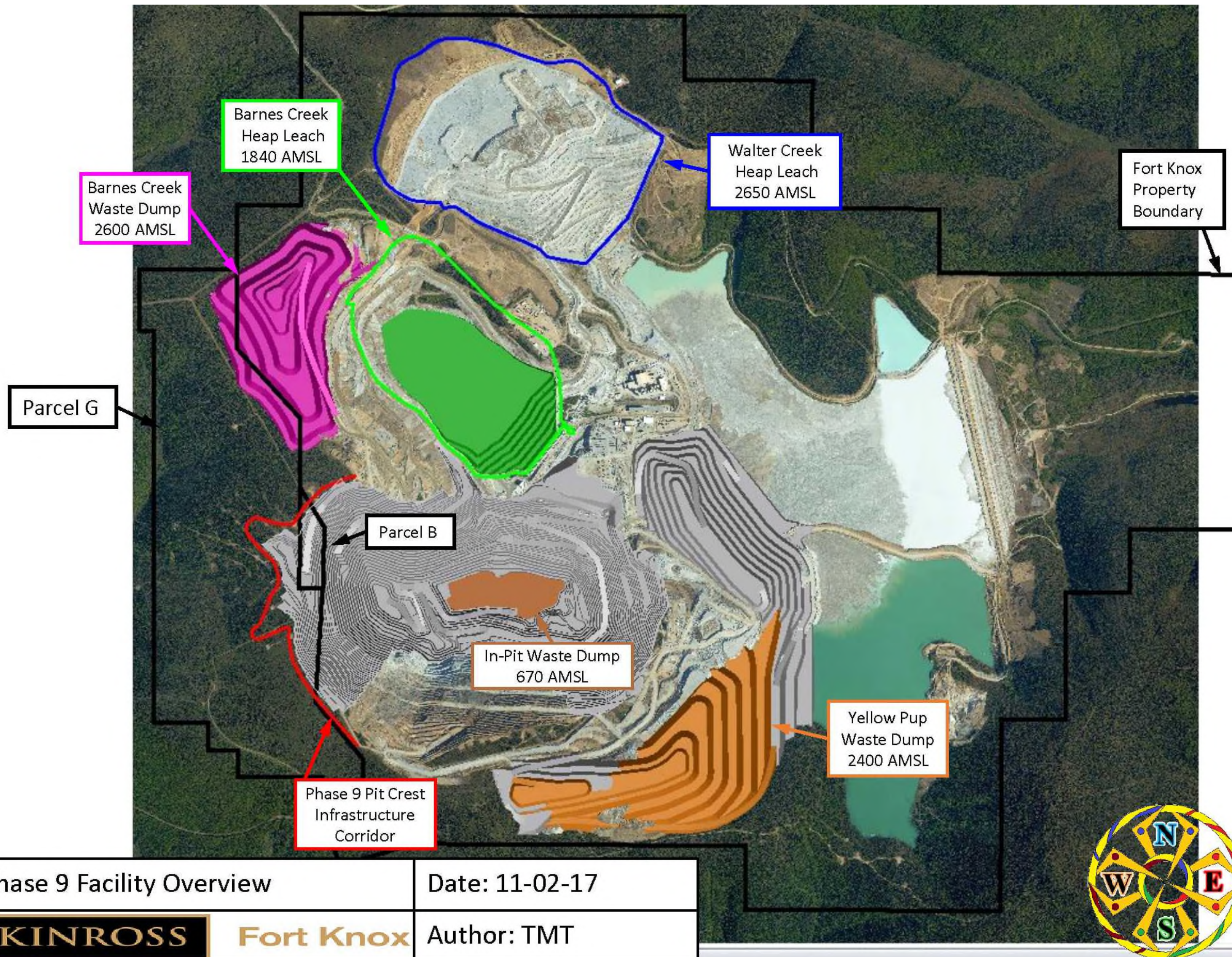
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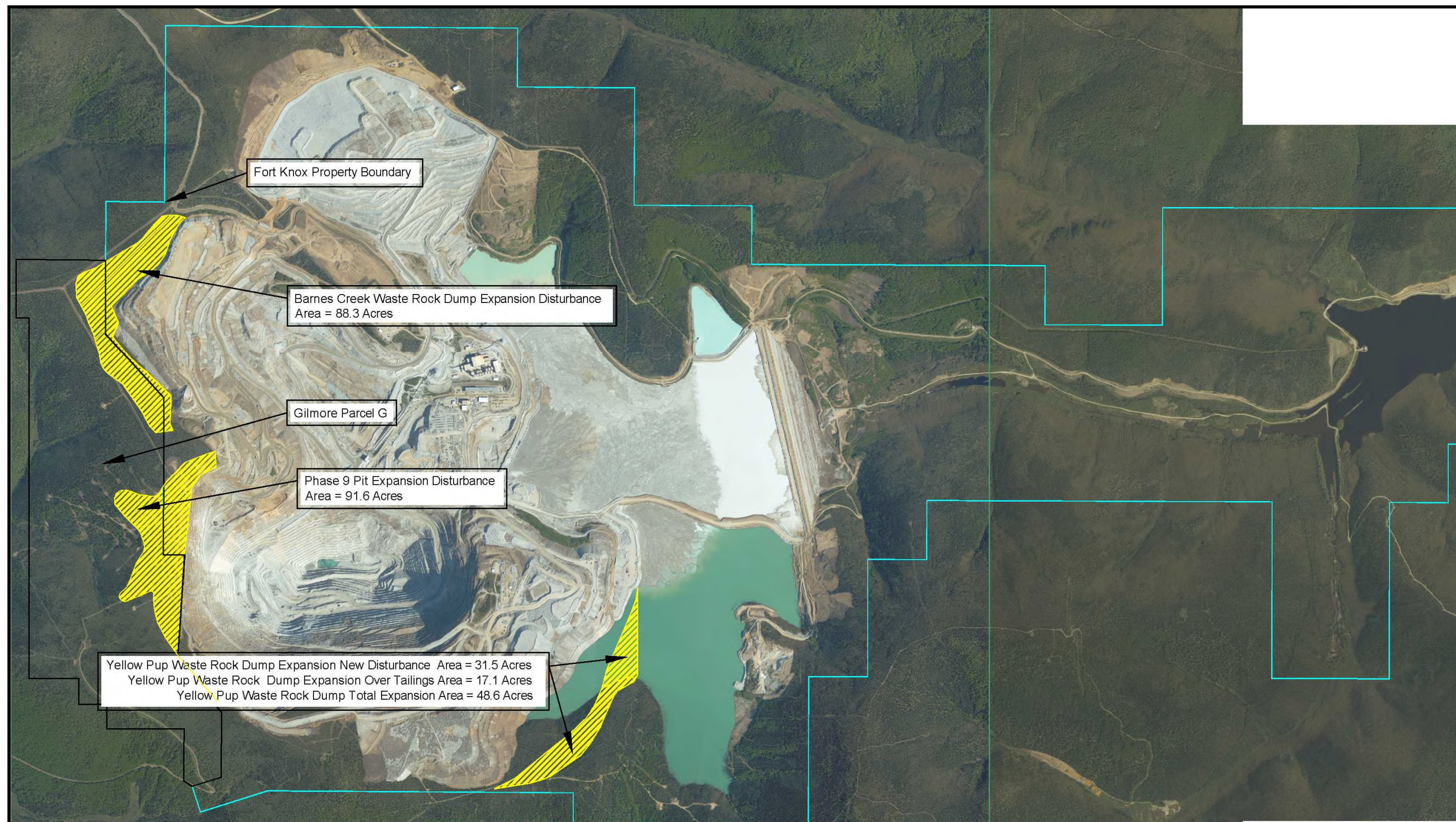


Phase 9 Pit Crest View	Date: 11-02-17
KINROSS Fort Knox	Author: TMT





Phase 9 Facility Overview	Date: 11-02-17
KINROSS Fort Knox	Author: TMT



Yellow Pup Waste Rock Dump Expansion New Disturbance Area = 31.5 Acres
 Yellow Pup Waste Rock Dump Expansion Over Tailings Area = 17.1 Acres
 Yellow Pup Waste Rock Dump Total Expansion Area = 48.6 Acres

Fort Knox Property Boundary

Barnes Creek Waste Rock Dump Expansion Disturbance Area = 88.3 Acres

Gilmore Parcel G

Phase 9 Pit Expansion Disturbance Area = 91.6 Acres

KINROSS Fort Knox

2017 Expansion Area
 Gilmore Phase 9
 Date: December 2017

-  Expansion Footprint
-  Gilmore Parcel G Boundary
-  Property Boundary

