

ENGINEERING CHANGE NOTICE

Project: Former Satralloy Site Slag Removal Interim Action	ECN No.: 004				
Project No.: US0033555.9828	Date: 9/22/2025				
Engineering Change Notice Name: Mine Area Stockpile Expansion in NE Corner	Contract No.: 35862100006-001				
Project Feature: NE Corner of Mine Area Stockpile, Mine Area Stockpile Main Access Road Grading in the Vicinity of MW-116 and MW-104					
Affected Documents: Design Drawing Sheets 105, 125, 500-502, 520-522, 530-531, 540, 600, 606					
<p>Description of Change: The limits of the Mine Area Stockpile were extended as far as practical in the NE corner (considering the property boundary and topography) to provide additional slag fill capacity. Additionally, the main access road grading was revised in the vicinity of MW-116 and MW-104 so that these existing wells are located at the edge of the road rather than in the center of the road. The resulting changes are presented in Design Drawings Revision 3 – Mine Area Stockpile Expansion in NE Corner and include the following:</p> <ul style="list-style-type: none"> • Silt fence limits were updated in the NE and NW corners (Sheet 105). • Clearing extents were updated in the NE and NW corners (Sheet 125). • Mine Area Stockpile slag fill placement surface and area of slag placement was updated in the NE corner (Sheets 500-502). • Limits of the slag stockpile final cover were updated in the NE and NW corners (Sheets 500-502). • Mine Area Stockpile perimeter road alignment and profiles were updated in the NE and NW corners (Sheets 500-502, 520-522, and 530-531). • Mine Area Stockpile final cover surface, main access road location, and perimeter fence location were updated in the NE and NW corners (Sheets 520-522, 540, 600, and 606). Note that the Mine Area Stockpile final cover surface was designed to tie-in with the previous design surface such that the configurations of the north and east downchutes remain unchanged. • Drainage bench and access ramp locations were updated in the NE corner (Sheets 520-522, 540, 600, and 606). • Extents of the native grass mix seeding area were updated in the NE and NW corners (Sheets 600-606). • To reduce the potential for erosion in the NE corner, an area of armored cover soil was added to the toe of the stockpile cover slope where the slope length exceeds 126 ft. Crushed aggregate is to be mixed into the top 6 inches of the stockpile cover, 50% by volume. The armored cover soil area is approximately 42,413 sf (0.97 acres), which will require approximately 393 cy of crushed aggregate. 					
<p>The additional slag fill capacity due to this design change is estimated to be 141,836 bcy. This includes an estimated 73,564 bcy of additional borrow material to be excavated from the north side slope of the Former Mine Area (expansion of Borrow Area A to the north), which shall then be backfilled with slag. The actual volume of borrow material to be excavated is expected to vary due to field conditions, which could impact the slag fill capacity.</p>					
<p>Monitoring well MW-103 has been abandoned as part of this design change and therefore was removed from all Revision 3 sheets. Potential replacement of MW-103 will be addressed in a long-term monitoring plan.</p>					
<p>The table below summarizes the changes to quantity estimates resulting from the changes described above.</p>					
Bid Form Item Number	Bid Form Item Name	Units	Initial Estimate	Revised Estimate	Change
2	SLAG CONSOLIDATION				
2.1	Temporary Erosion and Sediment Control Installation				
2.1.1	Silt Fence	lf	18,300	18,400	100

ENGINEERING CHANGE NOTICE

Bid Form Item Number	Bid Form Item Name	Units	Initial Estimate	Revised Estimate	Change
2.2	Main Access Road				
2.2.1	Subgrade Preparation	sf	266,740	266,580	-160
2.2.2	Geogrid	sf	147,963	147,774	-189
2.2.3	Gravel Surfacing	cy	1,827	1,824	-3
2.2.4	Drainage Ditch	lf	3,694	3,687	-7
2.2.5	Safety Berm	lf	3,694	3,687	-7
2.3	Clearing and Grubbing				
2.3.1	Cut and Mulch Trees - Primary Areas	ac	87.8	90.0	2.2
2.3.2	Remove and Dispose of Stumps - Primary Areas	ac	87.8	90.0	2.2
2.4	Remove and Stockpile Topsoil - Former Mine Area	bcy	46,840	48,651	1,811
2.5	Remove and Stockpile Borrow Material (Clean Soil Fill)	bcy	850,110	921,614	71,504
2.8	Consolidated Stockpile Cover				
2.8.1	Load Clean Soil Fill, Haul, and Spread on Consolidated SP	ecy	131,013	137,169	6,156
2.8.4	Load Vegetative Soil, Haul, and Spread on Consolidated SP	cy	39,701	41,566	1,865
2.8.5	Seeding - Native Grass Seed Mix	ac	49.2	51.5	2.3
3	CONSOLIDATED STOCKPILE ACCESS AND DRAINAGE FEATURES				
3.1	Drainage Benches				
3.1.1	Subgrade Preparation	sf	206,853	207,018	165
3.1.2	Geogrid	sf	74,709	74,619	-90
3.1.3	Gravel Surfacing	cy	922	921	-1
3.1.4	Drainage Ditch	lf	8,301	8,291	-10
3.1.5	Safety Berm	lf	8,301	8,291	-10
3.2	Access Ramps				
3.2.1	Subgrade Preparation	sf	12,813	12,598	-215
3.2.2	Geogrid	sf	12,383	12,195	-188
3.2.3	Gravel Surfacing	cy	153	151	-2
3.2.4	Drainage Ditch	lf	854	841	-13
5	FENCING				
5.1	Perimeter Fencing - Consolidated Stockpile	lf	7,242	7,359	117

RECON shall correspond directly with WSP Construction Management and CAMC Project Management with any cost or schedule impacts as a result of this ECN.

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Justification for Change:

Due to slag removal volume estimates to date exceeding original slag volume estimates, and limited area available for slag placement in the Former Mine Area, the Mine Area Stockpile was expanded into the NE corner to increase slag fill capacity. Additional area recently became available in the NE corner with the abandonment of oil/gas wells OGGC04 and OGGC05, and furthermore, a significant volume of overburden is estimated to be present on the north side slope of the Former Mine Area – removal of this overburden for use as borrow material elsewhere on site provides additional slag fill capacity.

Significant Design Change – Regulatory approval of this ECN is required prior to construction
 Insignificant Design Change – No regulatory approval is required

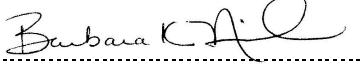
Prepared by: Vanessa Nancarrow, PE

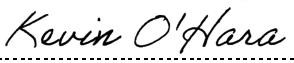
Approvals:

WSP Design Engineer:  Date: Oct. 27, 2025

WSP Project Director:  Date: Oct. 27, 2025

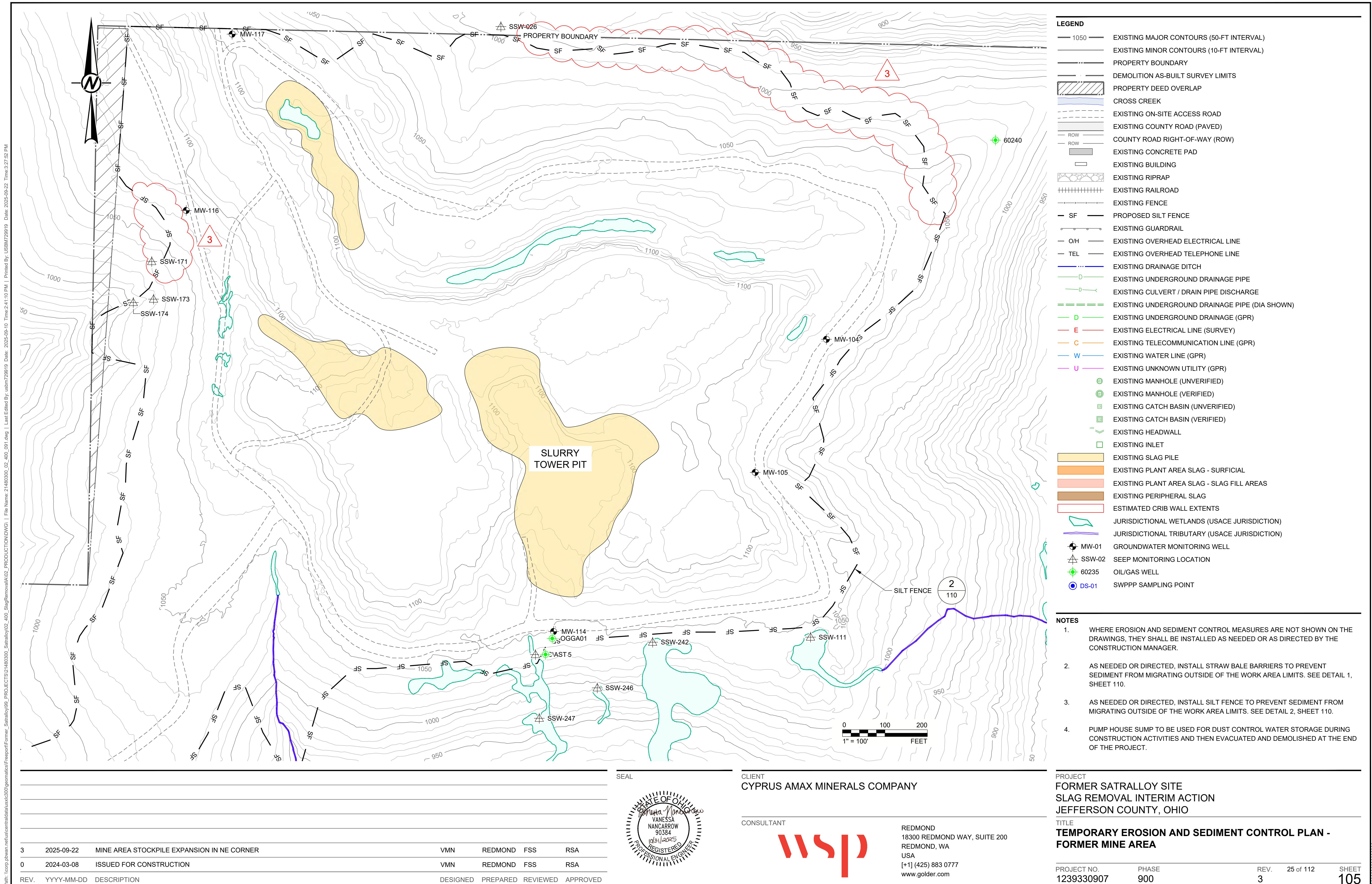
WSP Construction Manager:  Date: Oct. 27, 2025

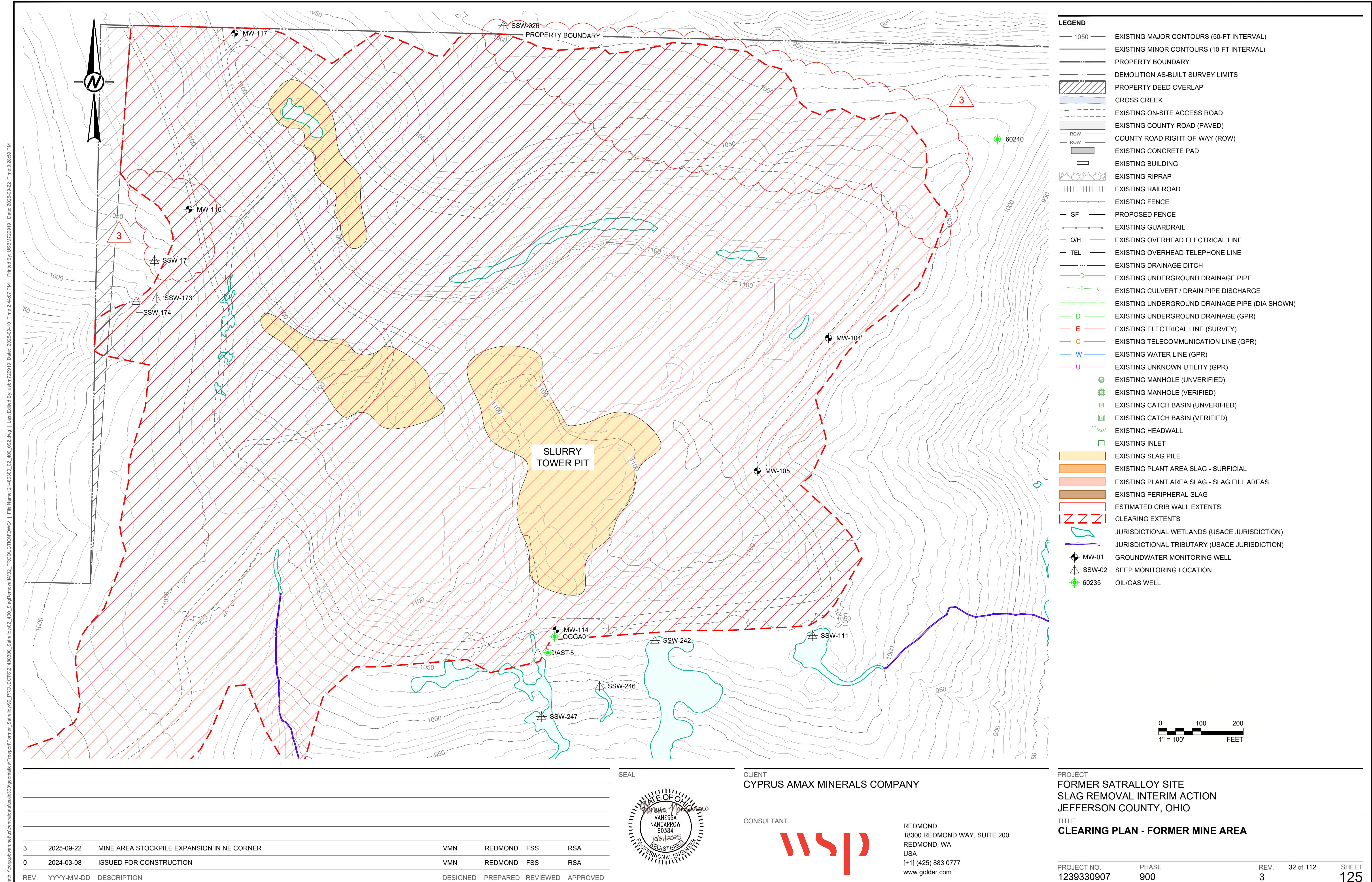
CAMC Program Manager:  Date: Oct. 27, 2025

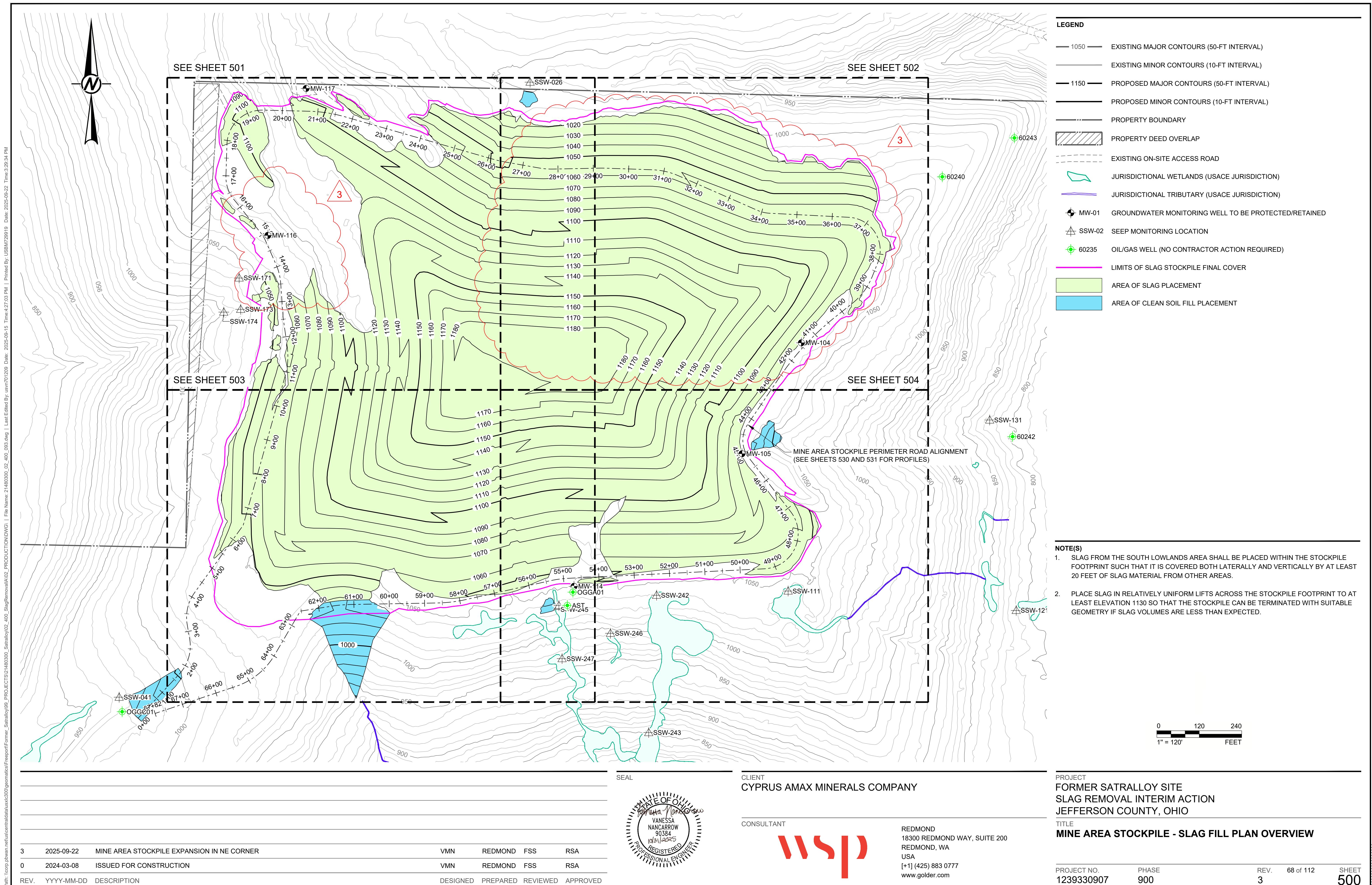
OEPA Site Coordinator:  Date: Oct. 29, 2025

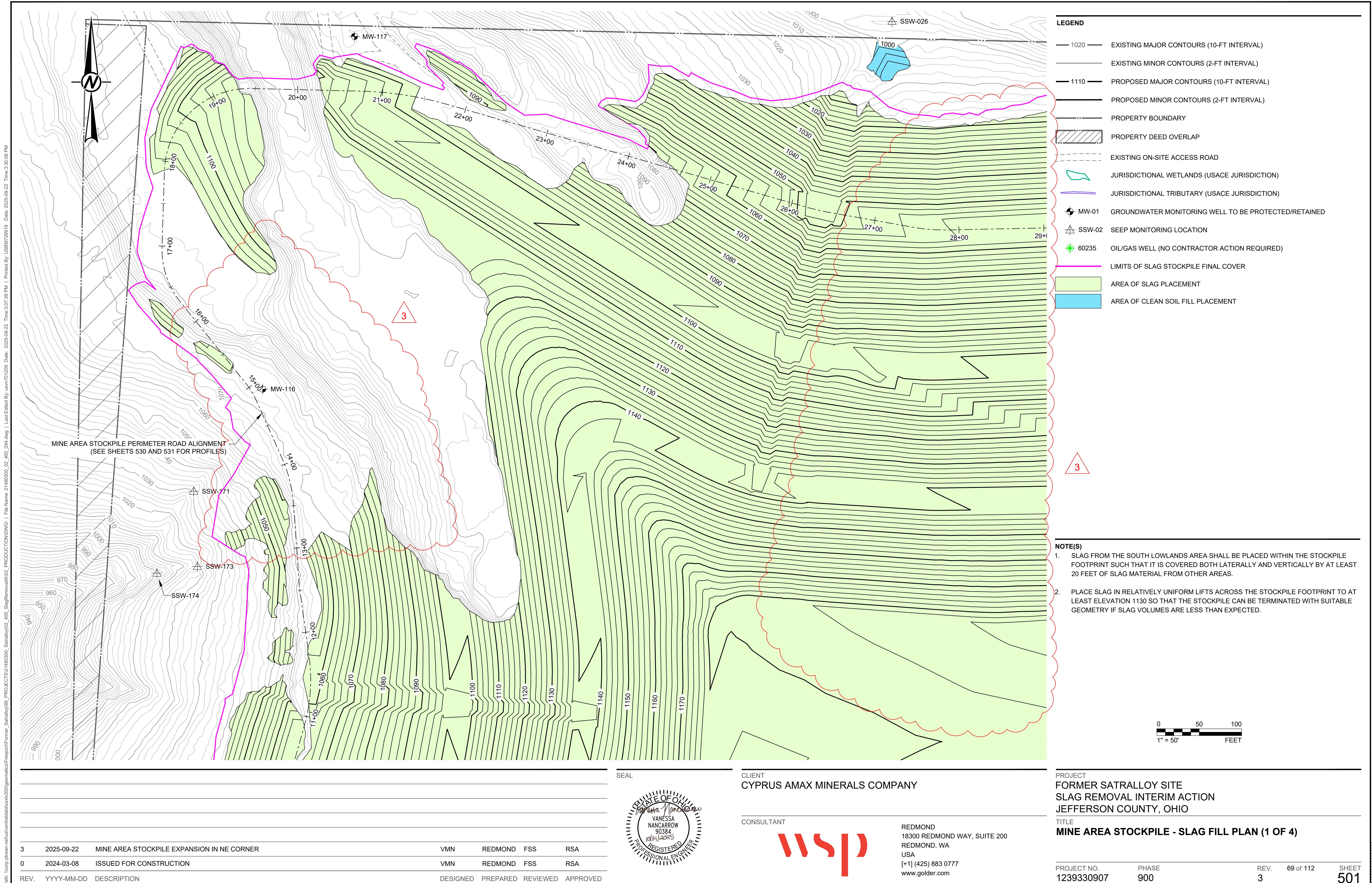
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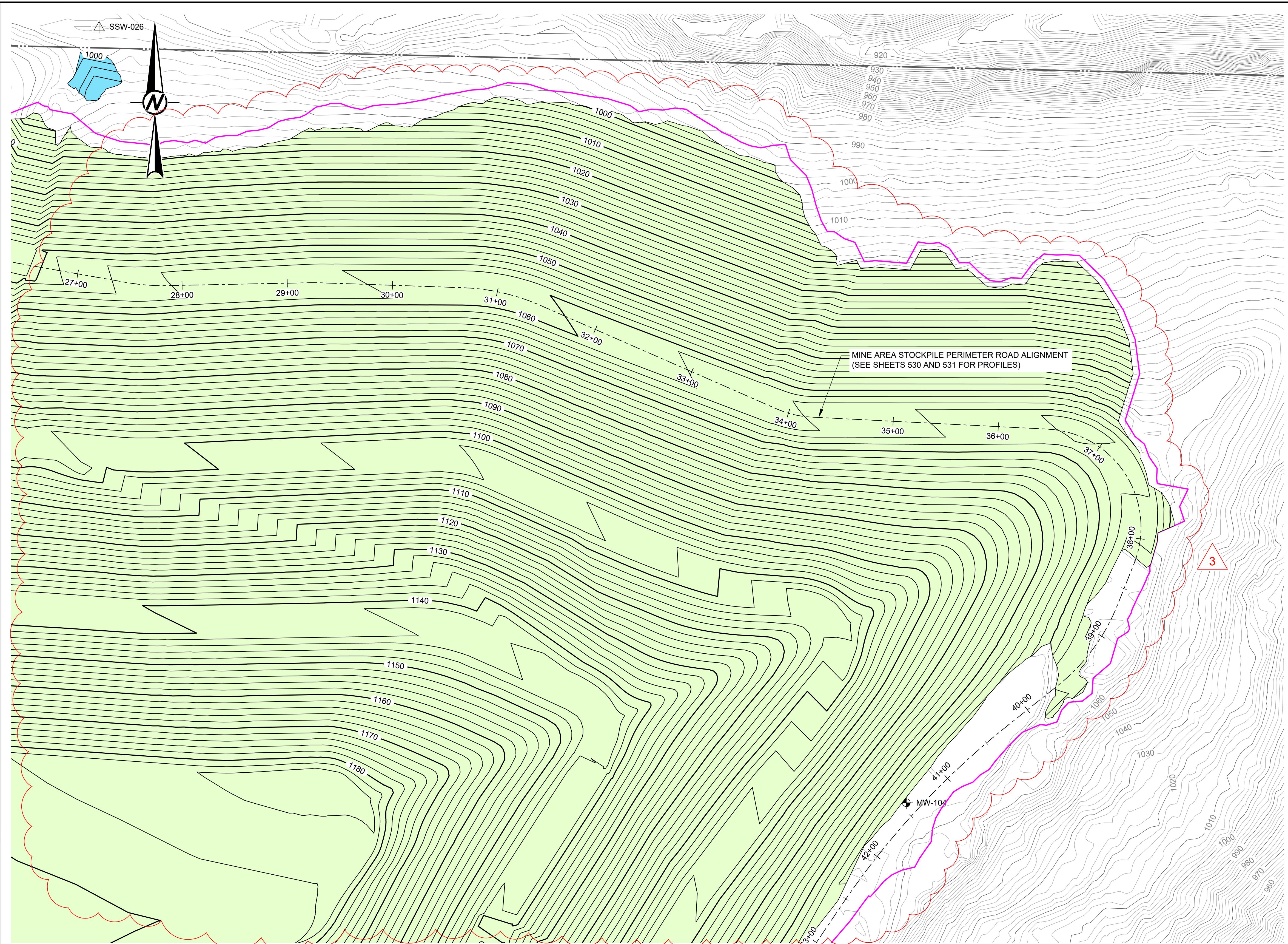
<input checked="" type="checkbox"/> Barbara Nielsen	CAMC Program Manager	<input checked="" type="checkbox"/> Rick Meyers	RECON Branch Manager
<input checked="" type="checkbox"/> Jordan Sisson	CAMC Project Manager	<input checked="" type="checkbox"/> Chuck Williams	RECON Project Manager
<input checked="" type="checkbox"/> Jason Pingel	CAMC HSO	<input checked="" type="checkbox"/> Kent Geis	RECON Project Manager
<input checked="" type="checkbox"/> Steve Anderson	WSP Project Director	<input checked="" type="checkbox"/> Jon Richardson	RECON Construction Manager
<input checked="" type="checkbox"/> Brent Barbich	WSP Project Manager	<input checked="" type="checkbox"/> Mark Sackman	RECON SSO
<input checked="" type="checkbox"/> Cameron Beul	WSP Construction Manager	<input checked="" type="checkbox"/> Kevin O'Hara	OEPA Site Coordinator
<input checked="" type="checkbox"/> Richard Pletz	WSP HSO	<input checked="" type="checkbox"/> Laura Stodola	WSP Project Files









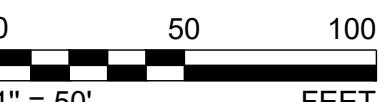


LEGEND	
— 1020 —	EXISTING MAJOR CONTOURS (10-FT INTERVAL)
— — —	EXISTING MINOR CONTOURS (2-FT INTERVAL)
— 1110 —	PROPOSED MAJOR CONTOURS (10-FT INTERVAL)
— — —	PROPOSED MINOR CONTOURS (2-FT INTERVAL)
— · · —	PROPERTY BOUNDARY
	PROPERTY DEED OVERLAP
	EXISTING ON-SITE ACCESS ROAD
	JURISDICTIONAL WETLANDS (USACE JURISDICTION)
	JURISDICTIONAL TRIBUTARY (USACE JURISDICTION)
	MW-01 GROUNDWATER MONITORING WELL TO BE PROTECTED/RETAINED
	SSW-02 SEEP MONITORING LOCATION
	60235 OIL/GAS WELL (NO CONTRACTOR ACTION REQUIRED)
	LIMITS OF SLAG STOCKPILE FINAL COVER
	AREA OF SLAG PLACEMENT
	AREA OF CLEAN SOIL FILL PLACEMENT

NOTE(S)

NOTE(S)

1. SLAG FROM THE SOUTH LOWLANDS AREA SHALL BE PLACED WITHIN THE STOCKPILE FOOTPRINT SUCH THAT IT IS COVERED BOTH LATERALLY AND VERTICALLY BY AT LEAST 20 FEET OF SLAG MATERIAL FROM OTHER AREAS.
2. PLACE SLAG IN RELATIVELY UNIFORM LIFTS ACROSS THE STOCKPILE FOOTPRINT TO AT LEAST ELEVATION 1130 SO THAT THE STOCKPILE CAN BE TERMINATED WITH SUITABLE GEOMETRY IF SLAG VOLUMES ARE LESS THAN EXPECTED.



**PROJECT
FORMER SATRALLOY SITE
SLAG REMOVAL INTERIM ACTION
JEFFERSON COUNTY, OHIO**

TITLE
MINE AREA STOCKPILE - SLAG FILL PLAN (2 OF 4)

3 2025-09-22 MINE AREA STOCKPILE EXPANSION IN NE CORNER

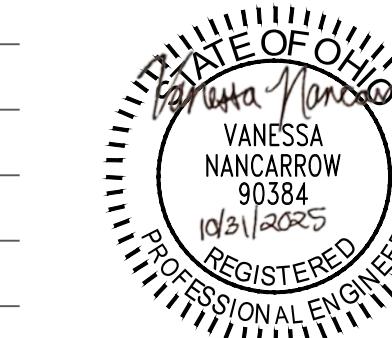
2024-03-08 ISSUED FOR CONSTRUCTION

0 2024-03-06 ISSUED FOR

VMN REDMOND ESS RSA

VMN REDMOND ESS RSA

VMN REDMOND FSS RSA



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CYPRUS AMAX MINERALS COMPANY

CONSULT

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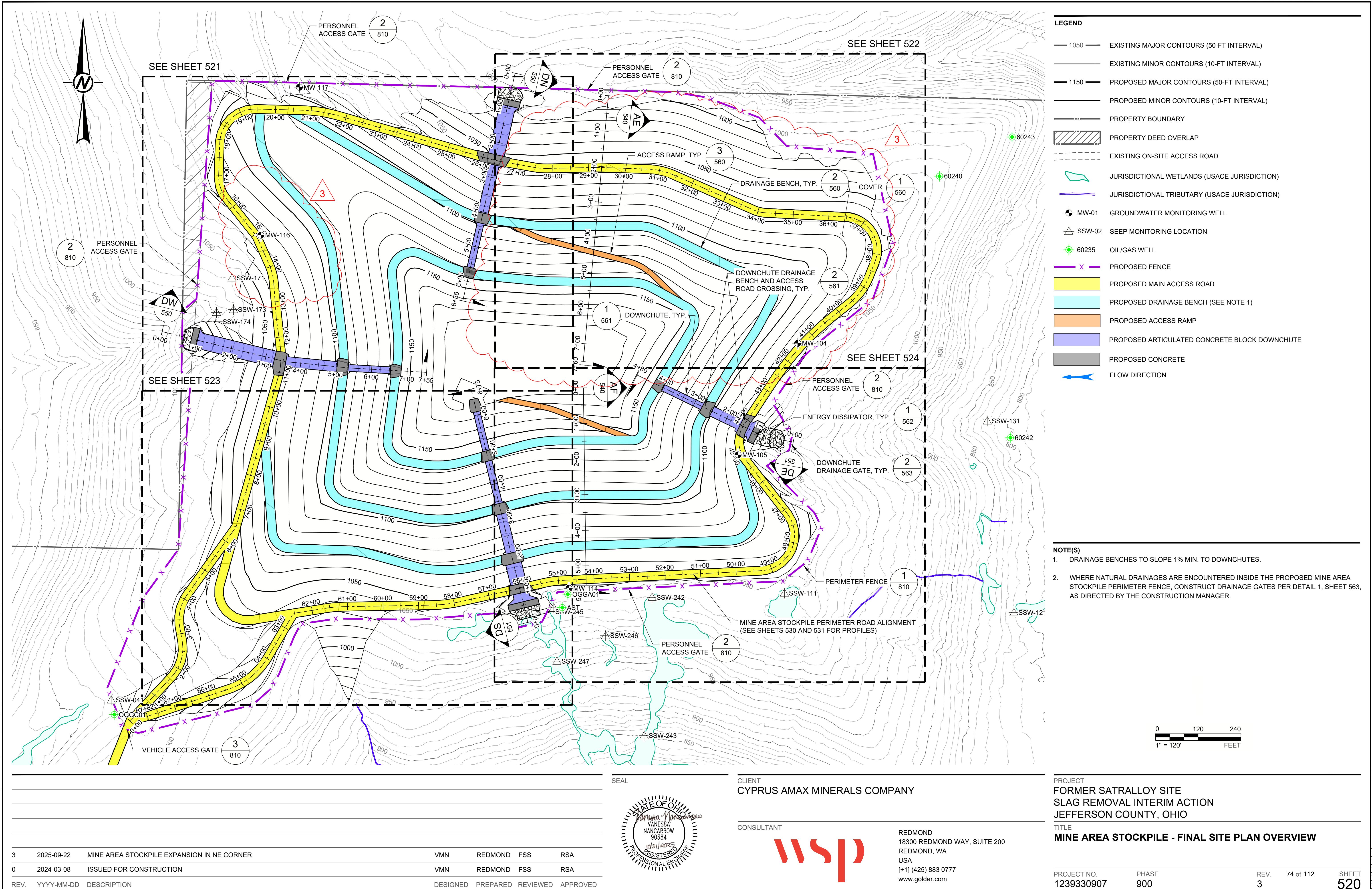
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USA
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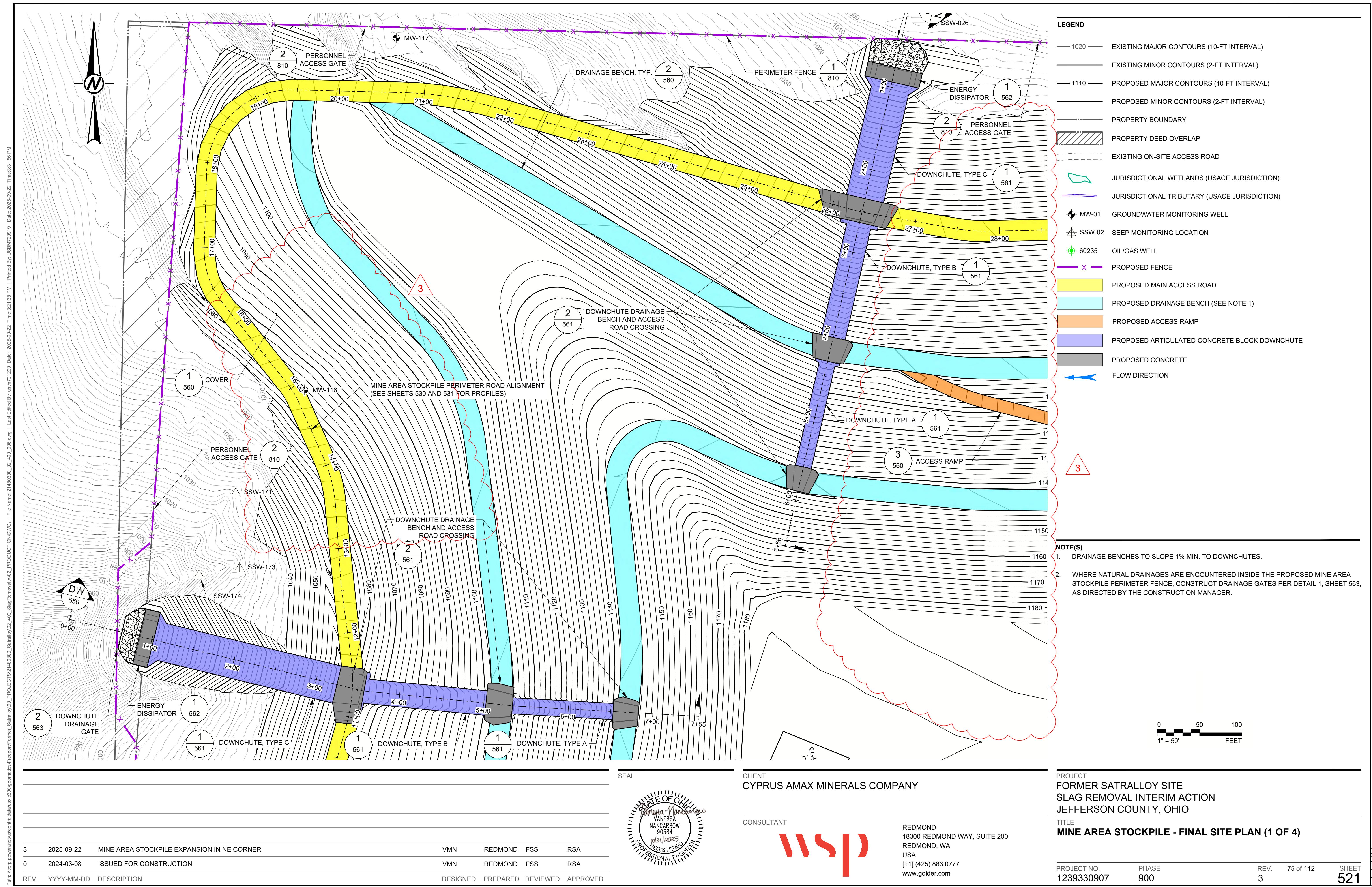
PROJECT NO. 1239330907 PHASE 900

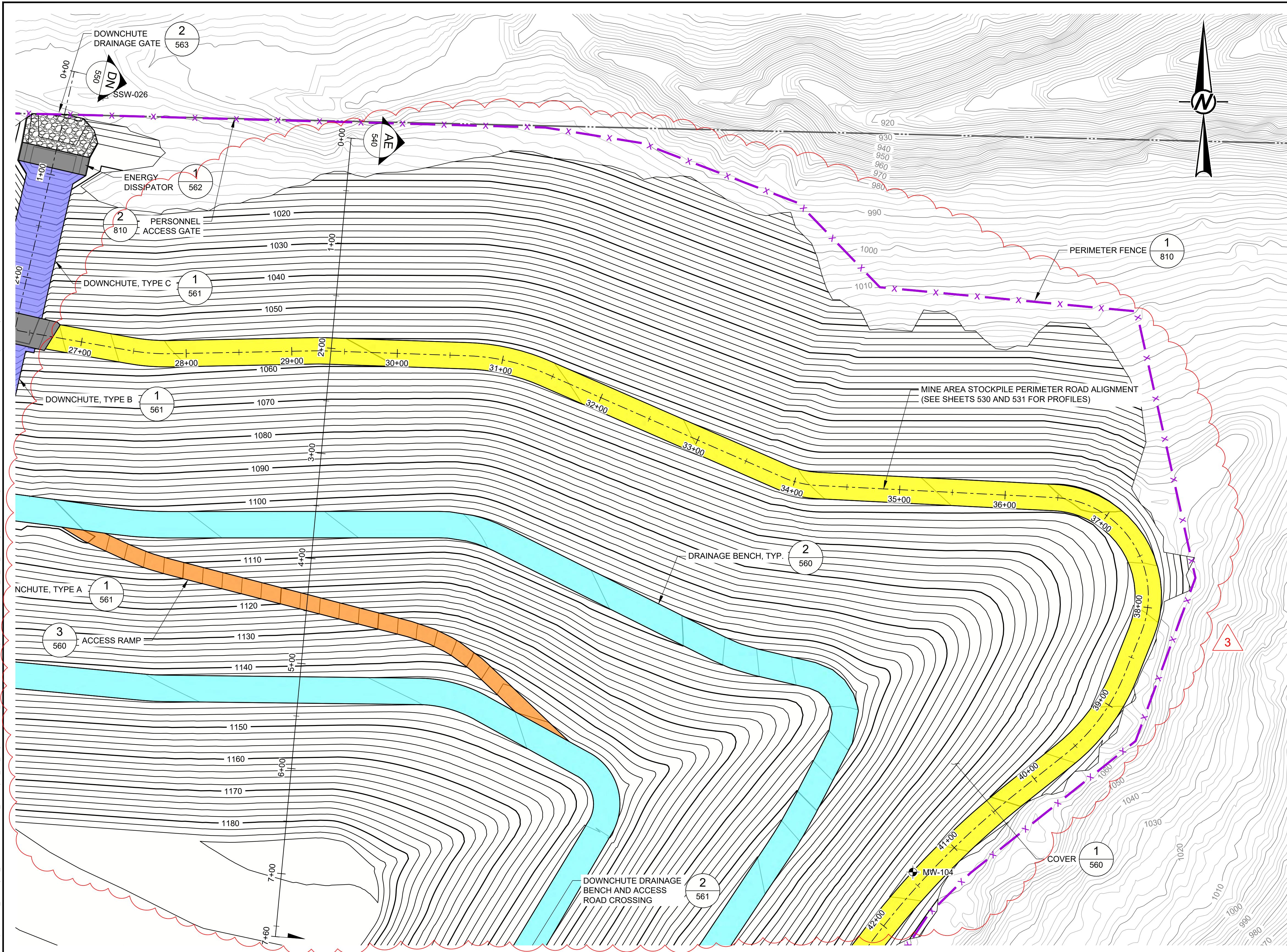
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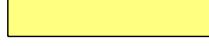
REV 70 of 112

SHEET
500





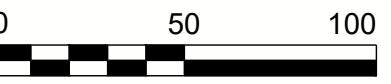


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— — —	EXISTING MINOR CONTOURS (2-FT INTERVAL)
— 1110 —	PROPOSED MAJOR CONTOURS (10-FT INTERVAL)
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— · · —	PROPERTY BOUNDARY
	PROPERTY DEED OVERLAP
— · · —	EXISTING ON-SITE ACCESS ROAD
	JURISDICTIONAL WETLANDS (USACE JURISDICTION)
	JURISDICTIONAL TRIBUTARY (USACE JURISDICTION)
	MW-01 GROUNDWATER MONITORING WELL
	SSW-02 SEEP MONITORING LOCATION
	60235 OIL/GAS WELL
— X —	PROPOSED FENCE
	PROPOSED MAIN ACCESS ROAD
	PROPOSED DRAINAGE BENCH (SEE NOTE 1)
	PROPOSED ACCESS RAMP
	PROPOSED ARTICULATED CONCRETE BLOCK DOWNCHUTE
	PROPOSED CONCRETE
	FLOW DIRECTION

NOTE(S)

NOTE(S)

1. DRAINAGE BENCHES TO SLOPE 1% MIN. TO DOWNCHUTES.
2. WHERE NATURAL DRAINAGES ARE ENCOUNTERED INSIDE THE PROPOSED MINE AREA STOCKPILE PERIMETER FENCE, CONSTRUCT DRAINAGE GATES PER DETAIL 1, SHEET 563, AS DIRECTED BY THE CONSTRUCTION MANAGER



PROJECT
**FORMER SATRALLOY SITE
SLAG REMOVAL INTERIM ACTION
JEFFERSON COUNTY, OHIO**

TITLE
MINE AREA STOCKPILE - FINAL SITE PLAN (2 OF 4)

PROJECT NO. PHASE REV. 76 of 112 SHEET
1239330907 900 3 522

3	2025-09-22	MINE AREA STOCKPILE EXPANSION IN NE CORNER
0	2024-03-08	ISSUED FOR CONSTRUCTION
REV.	YYYY-MM-DD	DESCRIPTION

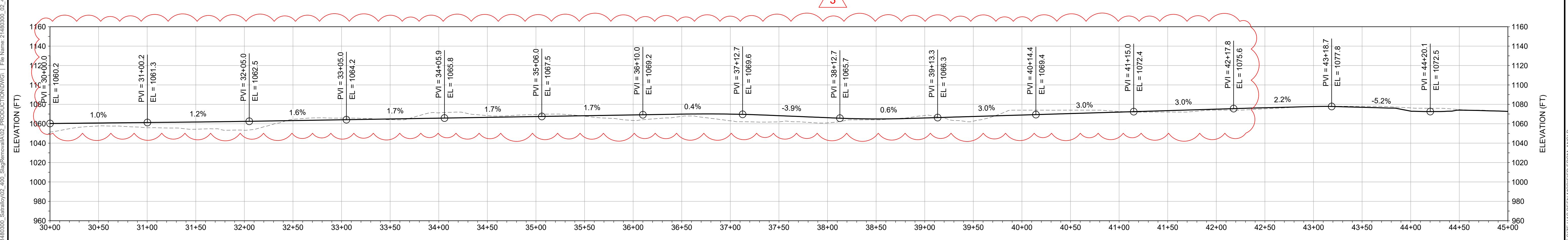
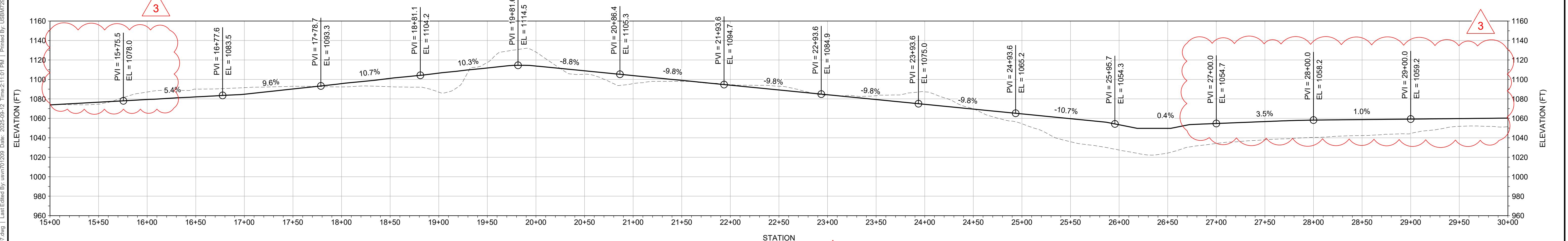
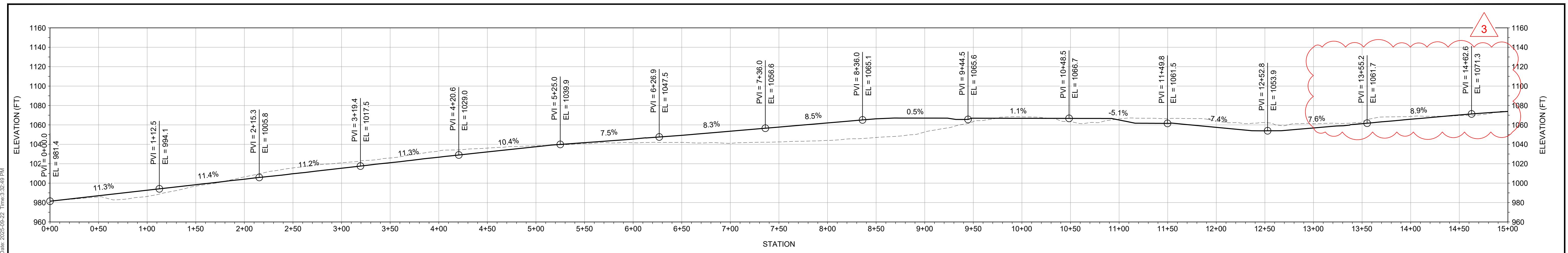
VMN	REDMOND	FSS	RSA
VMN	REDMOND	FSS	RSA
DESIGNED	PREPARED	REVIEWED	APPROVED



CLIENT
CYPRUS AMAX MINERALS COMPANY

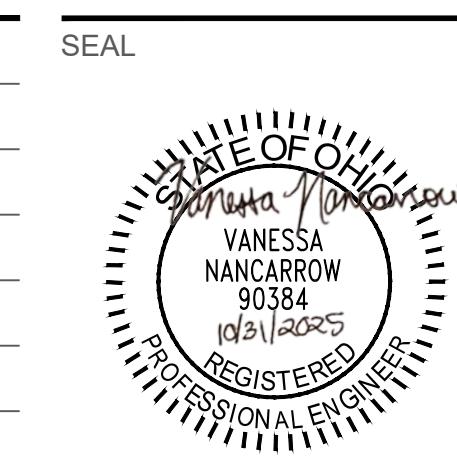
CONSUL

The image features the WSP logo in red on the left, followed by the company's name, address, and contact information in black text.



LEGEND

----- EXISTING GROUND PROFILE
_____ PROPOSED GROUND PROFILE



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The image features the WSI logo on the left, consisting of the letters 'WSI' in a stylized, red, blocky font. To the right of the logo is a vertical red bar. To the right of the bar is the company's address: '18300 REDMOND WAY, SUITE 200' on the first line, 'REDMOND, WA' on the second line, 'USA' on the third line, and the phone number '[+1] (425) 883 0777' on the fourth line. Below the phone number is the website 'www.golder.com'.

**PROJECT
FORMER SATRALLOY SITE
SLAG REMOVAL INTERIM ACTION
JEFFERSON COUNTY, OHIO**

TITLE **MINE AREA STOCKPILE - PERIMETER ROAD PROFILE (1 OF 2)**

WATERFALL PROFILE (FIG. 2)

PROJECT NO. PHASE REV. 79 of 112 SHEET

PROJECT NO. PHASE REV. 79 of 112 SHEET
1239330907 900 3 530

2025-03-28 MINE AREA STOCKPILE EXPANSION IN NE CORNER

3 2025-09-22 MINE AREA STOCKPILE EXPANSION IN NE CORNER

0 2024-03-08 ISSUED FOR CONSTRUCTION

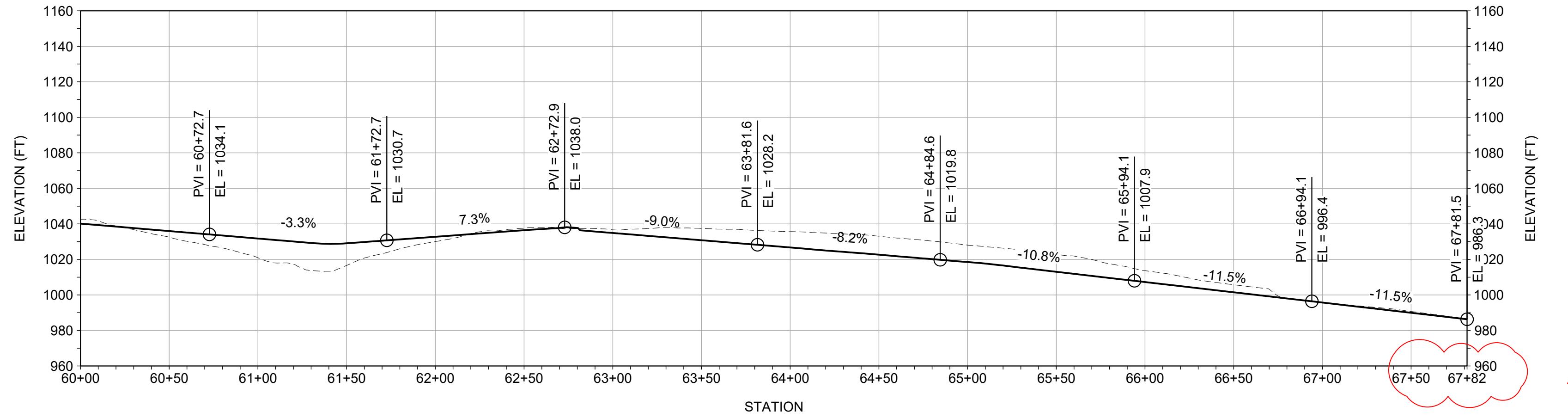
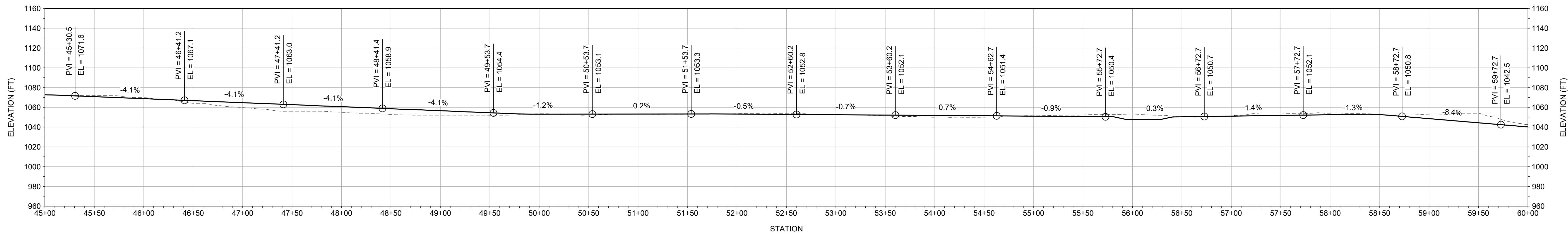
VMN PERMOND FCC PCA

VMN REDMOND FSS RSA

VMN REDMOND FSS RSA

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WPS Office



LEGEND

----- EXISTING GROUND PROFILE
_____ PROPOSED GROUND PROFILE

3 2025-09-22 MINE AREA STOCKPILE EXPANSION IN NE CORNER

0 2024-03-08 ISSUED FOR CONSTRUCTION

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The logo for WSPI, featuring the letters 'W', 'S', 'P', and 'I' in a stylized, red, blocky font, with a vertical red bar extending from the 'P'.

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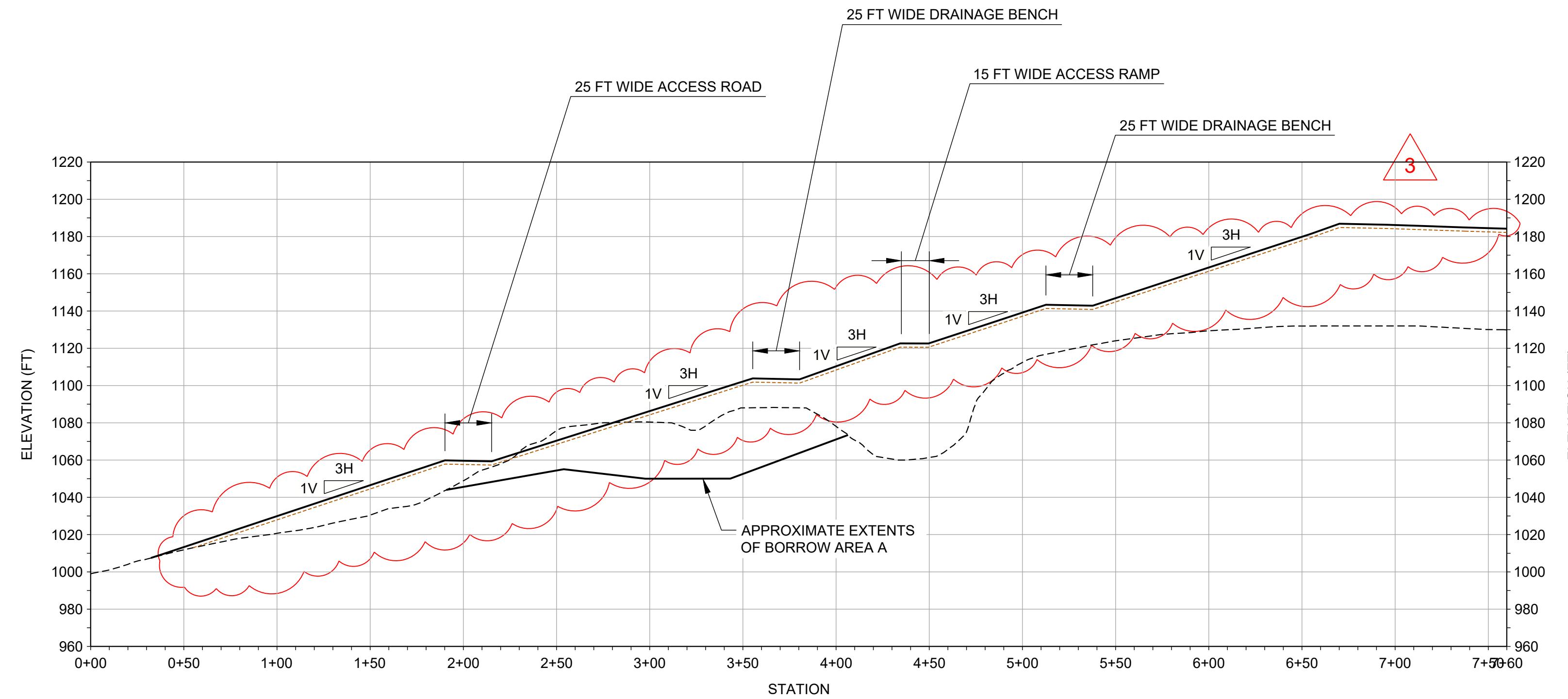
PROJECT
**FORMER SATRALLOY SITE
SLAG REMOVAL INTERIM ACTION
JEFFERSON COUNTY, OHIO**

TITLE **MINE AREA STOCKPILE - PERIMETER ROAD PROFILE E (2 OF 2)**

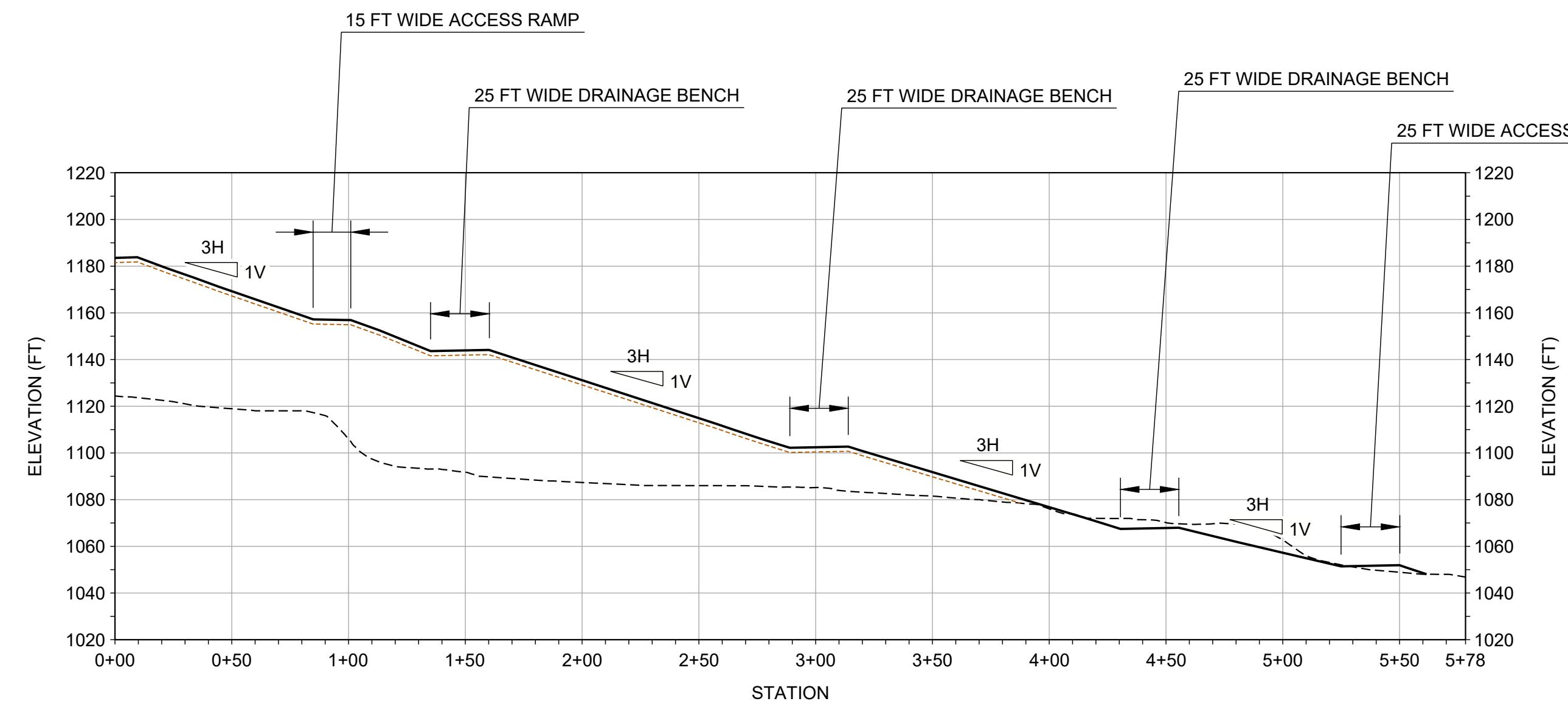
MINE AREA STOCKPILE PERIMETER ROAD PROFILE (2 OF 2)

PROJECT NO. PHASE REV. 80 of 112 SHEET
1000000007 200 6 501

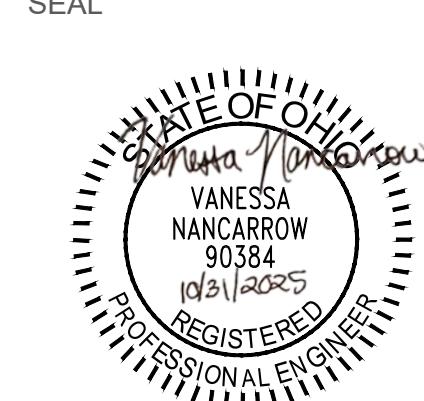
A scale bar with a black and white checkered pattern. Above the bar, the number '50' is centered. To the right of the bar, the number '100' is centered. Below the bar, the text '= 50\' is on the left and 'FEET' is on the right, indicating the scale.



SCALE 1" = 50' AE MINE AREA STOCKPILE - SECTION AE



SCALE 1" = 50' **AF** MINE AREA STOCKPILE - SECTION AF



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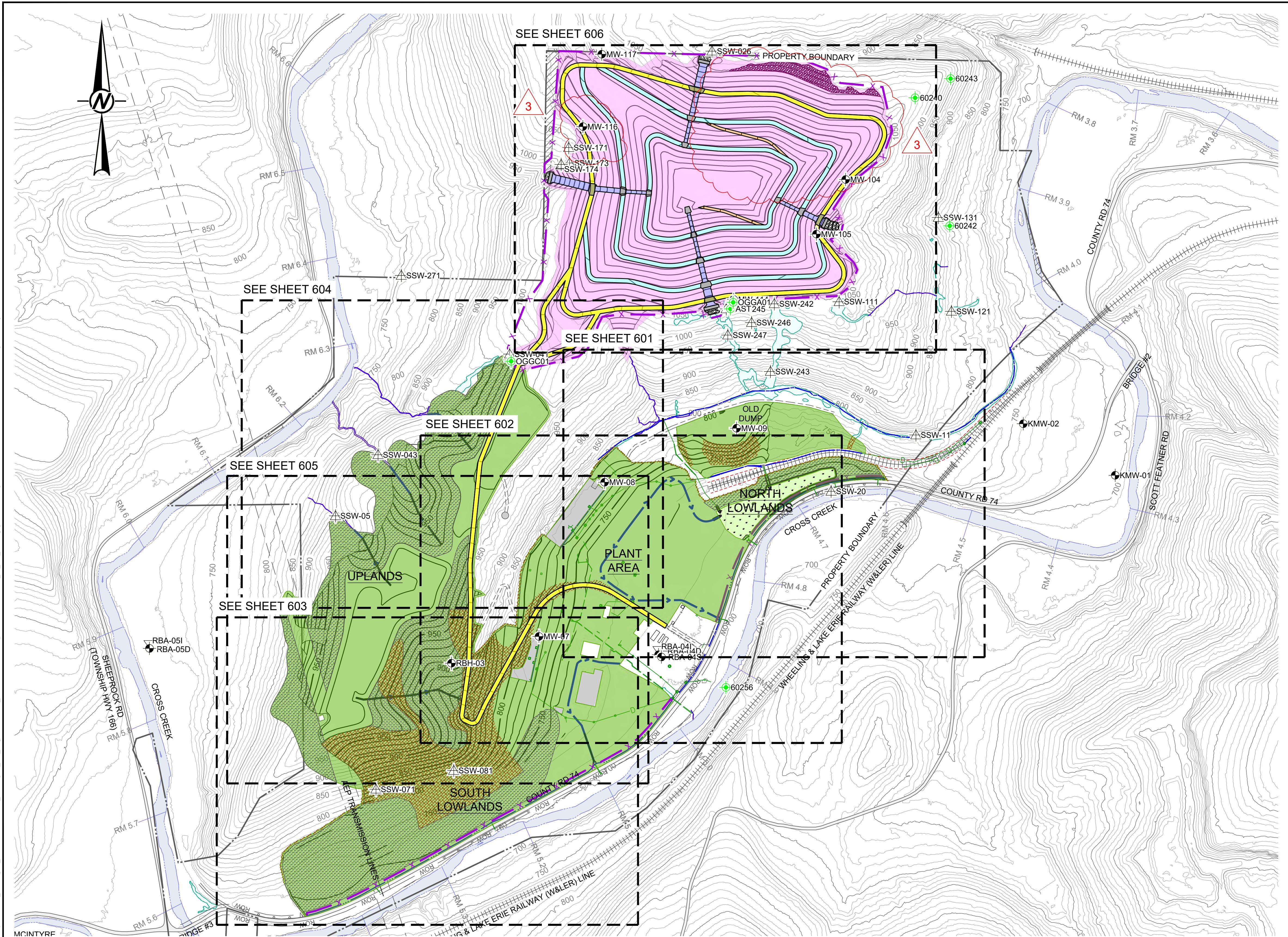
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JEFFERSON COUNTY, OHIO**

TITLE

MINE AREA STOCKPILE - SECTIONS

PROJECT NO.
1239330907



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**PROJECT
FORMER SATRALLOY SITE
SLAG REMOVAL INTERIM ACTION
JEFFERSON COUNTY, OHIO**

TITLE
**RESTORATION AND SURFACE WATER MANAGEMENT PLAN -
SITE OVERVIEW**

PROJECT NO.	PHASE	REV.	90 of 112	SHEET
1239330907	900	3		600

