



ENGINEERING CHANGE NOTICE

Project: Former Satralloy Site Slag Removal Interim Action	ECN No.: 005																																																
Project No.: US0033555.9828	Date: 10/31/2025																																																
Engineering Change Notice Name: North Mill Building Area Grading Revision	Contract No.: 35862100006-001																																																
Project Feature: Plant Area Final Grading, Plant Area Drainage and Revegetation, Constructed Wetland Outlet																																																	
Affected Documents: Design Drawing Sheets 401-403, 601, 611 and 711																																																	
Description of Change: Using survey data of the existing concrete pad elevations, the final grading surface in the vicinity of the Former North Mill Building was updated to include a minimum 2-foot-thick layer of clean soil fill over the existing concrete pads while generally maintaining the original proposed drainage pattern. The resulting changes are presented in Design Drawings Revision 4 - North Mill Building Area Grading Revision and include the following: <ul style="list-style-type: none">• The final grading surface was updated to cover existing concrete pads with a minimum 2-foot-thick layer of clean soil fill (Sheets 401-403 and 601).• MW-08 shall be maintained (Sheet 402).• The final grading surface was updated to tie into and/or maintain functionality of existing stormwater system features, especially those draining to the wetland near stormwater sampling location SW-12.• Existing catch basins that will be graded over with soil, will be covered with pre-cast concrete covers that are a minimum 6-inches thick.• Extents of the native grass mix seeding area were updated to include the areas where existing concrete pads and counterfort walls will be covered with clean soil fill (Sheet 601).• The final grading surface profiles were updated in Sections OO, PP, and QQ to cover existing concrete pads with a minimum 2-foot-thick layer of clean soil fill (Sheet 611).• The wetland outlet detail was updated to add a 1-foot-wide section of clean soil fill between the limestone rock and armor rock and raise the sill elevation to 689.4 ft (Sheet 711).																																																	
Where providing compaction in accordance with the specifications is not feasible, boulders may be used as backfill behind the North Mill Building foundation wall and at other locations as approved by the WSP Construction Manager. To the extent practical, clean soil fill shall be placed in conjunction with the boulders to minimize void space.																																																	
The table below summarizes the changes to quantity estimates resulting from the changes described above. Note that the quantities for clean soil fill amendment (Bid Item Numbers 4.1.2 and 4.1.3) were also revised to reflect the revised amendment depth of 1 foot across the final grading surface of slag removal areas.																																																	
<table><tr><th>Bid Form Item Number</th><th>Bid Form Item Name</th><th>Units</th><th>Initial Estimate</th><th>Revised Estimate</th><th>Change</th></tr><tr><td>2</td><td>SLAG CONSOLIDATION</td><td></td><td></td><td></td><td></td></tr><tr><td>2.7</td><td>Slag Removal and Placement in Consolidated Stockpile</td><td></td><td></td><td></td><td></td></tr><tr><td>2.7.9</td><td>Excavate and Haul Mill Floor Soil</td><td>bcy</td><td>5,209</td><td>1,963</td><td>-3,246</td></tr><tr><td>2.7.10</td><td>Spread and Compact Slag and Mill Floor Soil in Consolidated SP</td><td>ecy</td><td>1,737,876</td><td>1,734,306</td><td>-3,571</td></tr><tr><td>4</td><td>RESTORATION OF SLAG REMOVAL AREAS</td><td></td><td></td><td></td><td></td></tr><tr><td>4.1</td><td>Backfill and Grading</td><td></td><td></td><td></td><td></td></tr><tr><td>4.1.1</td><td>Load Clean Soil Fill, Haul, and Spread</td><td>ecy</td><td>390,873</td><td>506,038</td><td>115,164</td></tr></table>	Bid Form Item Number	Bid Form Item Name	Units	Initial Estimate	Revised Estimate	Change	2	SLAG CONSOLIDATION					2.7	Slag Removal and Placement in Consolidated Stockpile					2.7.9	Excavate and Haul Mill Floor Soil	bcy	5,209	1,963	-3,246	2.7.10	Spread and Compact Slag and Mill Floor Soil in Consolidated SP	ecy	1,737,876	1,734,306	-3,571	4	RESTORATION OF SLAG REMOVAL AREAS					4.1	Backfill and Grading					4.1.1	Load Clean Soil Fill, Haul, and Spread	ecy	390,873	506,038	115,164	
Bid Form Item Number	Bid Form Item Name	Units	Initial Estimate	Revised Estimate	Change																																												
2	SLAG CONSOLIDATION																																																
2.7	Slag Removal and Placement in Consolidated Stockpile																																																
2.7.9	Excavate and Haul Mill Floor Soil	bcy	5,209	1,963	-3,246																																												
2.7.10	Spread and Compact Slag and Mill Floor Soil in Consolidated SP	ecy	1,737,876	1,734,306	-3,571																																												
4	RESTORATION OF SLAG REMOVAL AREAS																																																
4.1	Backfill and Grading																																																
4.1.1	Load Clean Soil Fill, Haul, and Spread	ecy	390,873	506,038	115,164																																												



ENGINEERING CHANGE NOTICE

Bid Form Item Number	Bid Form Item Name	Units	Initial Estimate	Revised Estimate	Change
4.1.2	Amend Clean Soil Fill with Limestone	ecy	390,873	17,606	-373,267
4.1.3	Compact Amended Clean Soil Fill	ecy	390,873	17,606	-373,267
4.1.4	Fine Grading	sy	514,492	528,189	13,697
4.1.5	Load Vegetative Soil, Haul, and Spread on Backfill Area	cy	85,749	88,032	2,283
4.1.6	Amend Clean Soil Fill with Limestone	cy	78,664	80,947	2,283
4.1.7	Vegetative Soil Amendment	sy	471,982	485,680	13,697
4.2	Revegetation				
4.2.1	Seeding - Milkweed, Native Wildflower and Native Grass Seed Mix	ac	106.3	109.1	2.8
4.2.2	Erosion and Sediment Control Mat	sy	82,924	83,687	762
4.4	Drainage Features				
4.4.1	Grass-Lined Swale	lf	2,952	2,988	36

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

Justification for Change: Originally, the floor between the two main concrete pads of the Former North Mill Building was thought to be composed of soil. The site investigation soil sampling results indicated contaminants of concern within the mill floor soil. Thus, this mill floor soil was proposed to be removed as part of the design. However, during soil excavation in this area, it was found to be underlain by intermittent concrete foundations with varied elevations.

The original proposed drainage pattern assumed that the mill soil floor would be removed, and adjacent concrete pads would remain exposed. However, due to the varied elevations of the concrete foundations found between the two main concrete pads, and because there is a surplus of clean soil fill coming from the Former Mine Area borrow areas, the grading was revised to have a minimum 2-foot-thick layer of clean soil fill over the existing concrete pads in the North Mill Building area while generally maintaining the original proposed drainage pattern.

Regarding the wetland outlet detail on Sheet 711, a clean soil fill “plug” was added between the limestone rock and armor rock to constrain water to drain from wetland at the sill design elevation rather than potentially flow through the rock at a lower elevation if sufficient fines are not present in the armor rock. The sill design elevation was raised from 698 ft to 698.4 ft to accommodate the wetland bottom elevation that was constructed higher than designed and to maintain a minimum depth of 6 inches of water within the wetland.

☐ 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



ENGINEERING CHANGE NOTICE

Approvals:

WSP Design Engineer: Vanessa Nancarrow Date: Oct. 31, 2025

WSP Project Director: [Signature] Date: Oct. 31, 2025

WSP Construction Manager: Cameron Beul Date: Oct. 31, 2025

CAMC Program Manager: Barbara Nielsen Date: Oct. 31, 2025

OEPA Site Coordinator: Not applicable Date: _____

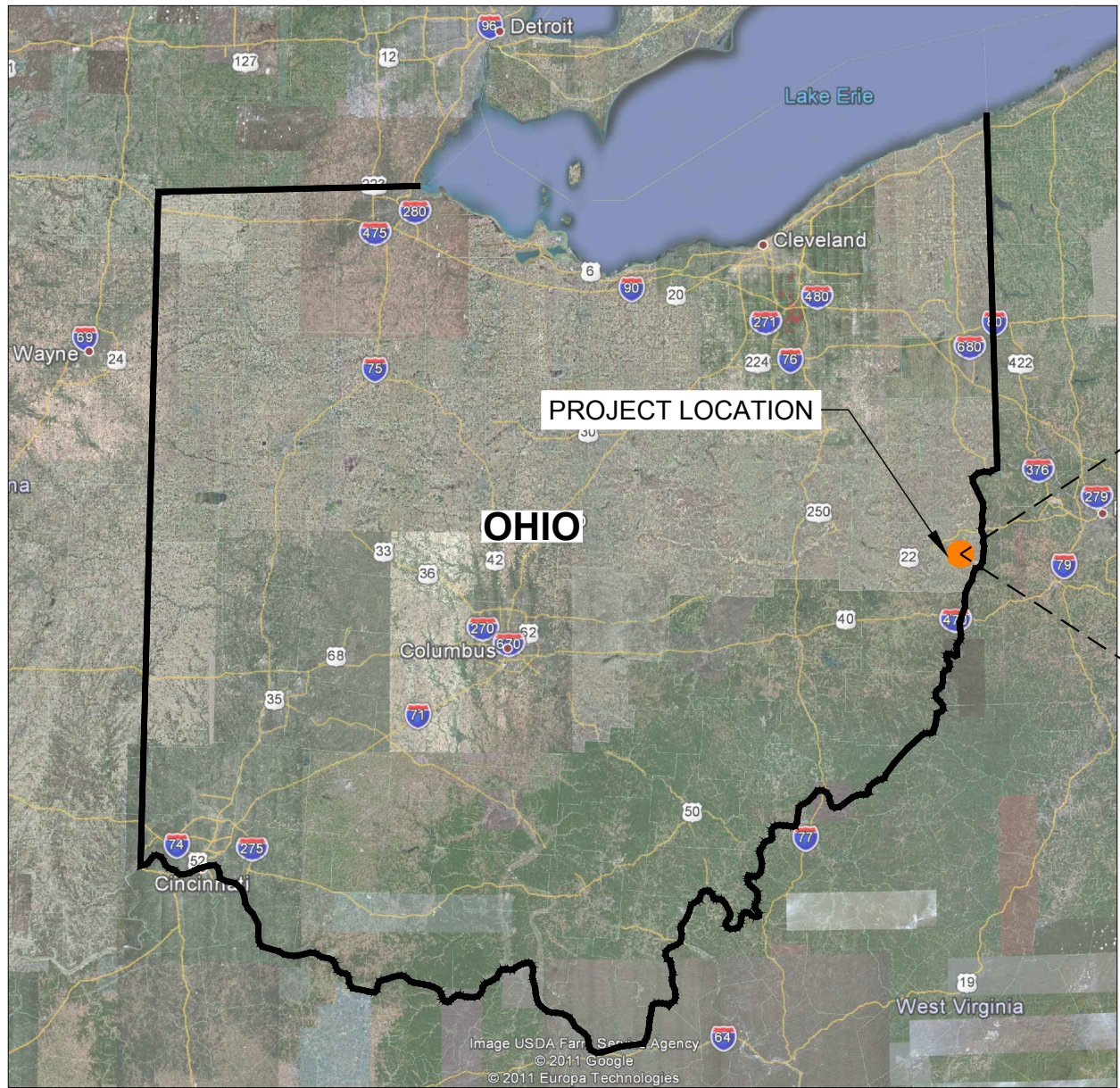
Distribution:

<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"/> Adam Green	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 Controller

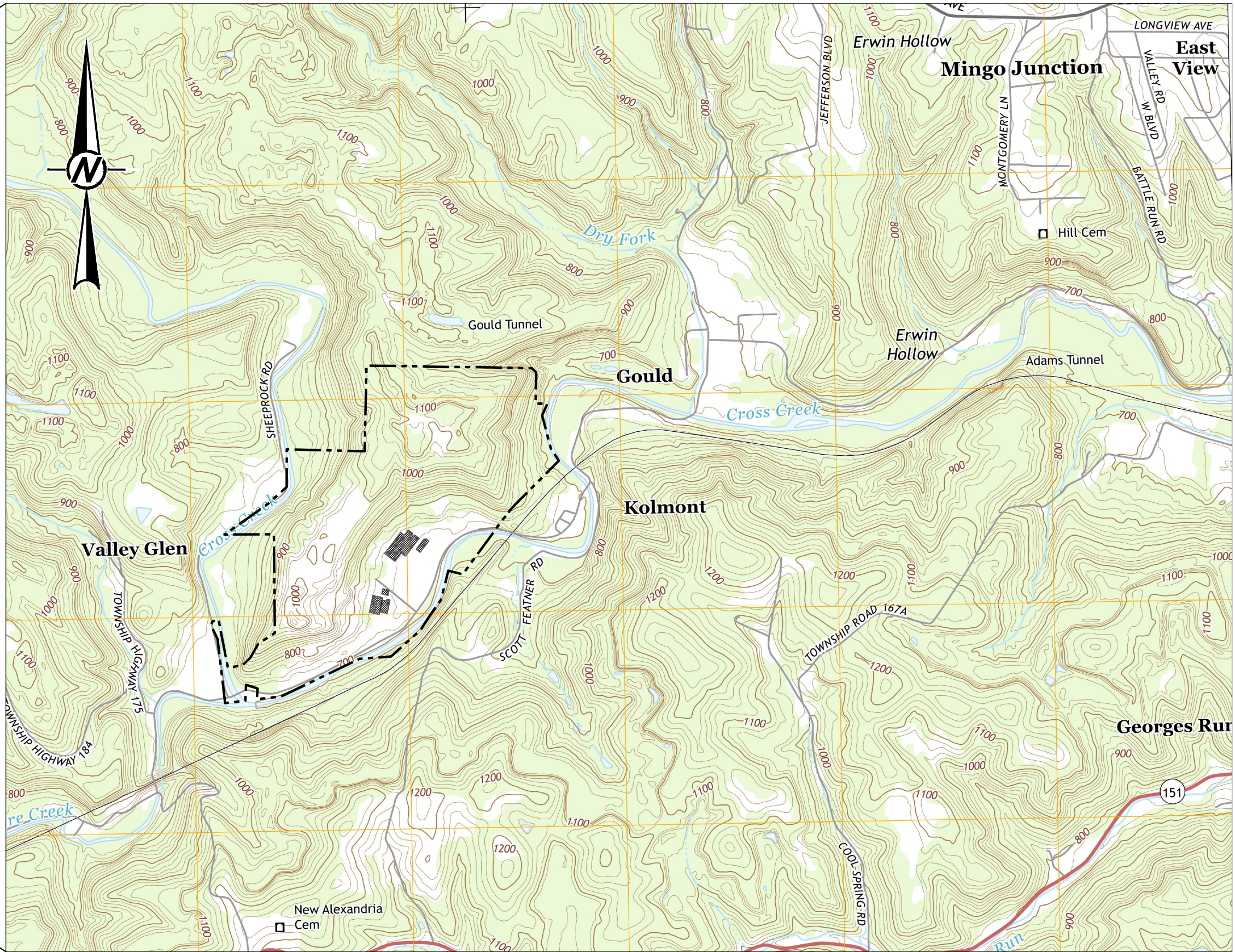
SLAG REMOVAL INTERIM ACTION

FORMER SATRALLOY SITE

JEFFERSON COUNTY, OHIO



LOCATION MAP
NTS



MAP TAKEN FROM USGS 7.5 MINUTE QUADRANGLE OF STEUBENVILLE WEST, OHIO, DATED 2013.

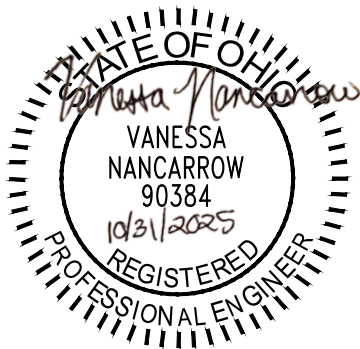
VICINITY MAP
SCALE 1" = 1600'

SITE ADDRESS: 4243 COUNTY ROAD 74, MINGO JUNCTION, OH 43938

4	2025-10-29	NORTH MILL BUILDING AREA GRADING REVISION	VMN	REDMOND	FSS	RSA
3	2025-09-22	MINE AREA STOCKPILE EXPANSION IN NE CORNER	VMN	REDMOND	FSS	RSA
2	2025-07-25	RFI-27: UPPER RAIL FINAL GRADING PLAN	VMN	REDMOND	FSS	RSA
1	2025-04-25	NORTH LOWLANDS DRAINAGE REVISION	VMN	REDMOND	FSS	RSA
0	2025-03-08	ISSUED FOR CONSTRUCTION	VMN	REDMOND	FSS	RSA

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
------	------------	-------------	----------	----------	----------	----------

SEAL



CLIENT
CYPRUS AMAX MINERALS COMPANY

CONSULTANT



REDMOND
18300 REDMOND WAY, SUITE 200
REDMOND, WA
USA
[+1] (425) 883 0777
www.golder.com

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

TITLE
COVER SHEET

PROJECT NO. 1239330907	PHASE 900	REV. 4	1 of 112	SHEET 010
---------------------------	--------------	-----------	----------	--------------

SLAG REMOVAL INTERIM ACTION

FORMER SATRALLOY SITE, JEFFERSON COUNTY, OHIO

DRAWING LIST	
SHEET NUMBER	SHEET TITLE
010	COVER SHEET
011	DRAWING INDEX
020	SITE OVERVIEW
030	SURVEY MONUMENTATION AND CONTROL
040	SITE GROUNDWATER MONITORING WELLS AND OIL GAS WELLS
050	EXISTING CONDITIONS - NORTH LOWLANDS (1 OF 2)
051	EXISTING CONDITIONS - NORTH LOWLANDS (2 OF 2)
052	EXISTING CONDITIONS - PLANT AREA (1 OF 2)
053	EXISTING CONDITIONS - PLANT AREA (2 OF 2)
054	EXISTING CONDITIONS - SOUTH LOWLANDS (1 OF 3)
055	EXISTING CONDITIONS - SOUTH LOWLANDS (2 OF 3)
056	EXISTING CONDITIONS - SOUTH LOWLANDS (3 OF 3)
057	EXISTING CONDITIONS - UPLANDS (1 OF 3)
058	EXISTING CONDITIONS - UPLANDS (2 OF 3)
059	EXISTING CONDITIONS - UPLANDS (3 OF 3)
060	EXISTING CONDITIONS - FORMER MINE AREA (1 OF 4)
061	EXISTING CONDITIONS - FORMER MINE AREA (2 OF 4)
062	EXISTING CONDITIONS - FORMER MINE AREA (3 OF 4)
063	EXISTING CONDITIONS - FORMER MINE AREA (4 OF 4)
100	TEMPORARY EROSION AND SEDIMENT CONTROL PLAN - NORTH LOWLANDS
101	TEMPORARY EROSION AND SEDIMENT CONTROL PLAN - PLANT AREA
102	TEMPORARY EROSION AND SEDIMENT CONTROL PLAN - SOUTH LOWLANDS
103	TEMPORARY EROSION AND SEDIMENT CONTROL PLAN - NORTH UPLANDS
104	TEMPORARY EROSION AND SEDIMENT CONTROL PLAN - SOUTH UPLANDS
105	TEMPORARY EROSION AND SEDIMENT CONTROL PLAN - FORMER MINE AREA
110	TEMPORARY EROSION AND SEDIMENT CONTROL DETAILS
120	CLEARING PLAN - NORTH LOWLANDS
121	CLEARING PLAN - PLANT AREA
122	CLEARING PLAN - SOUTH LOWLANDS
123	CLEARING PLAN - NORTH UPLANDS
124	CLEARING PLAN - SOUTH UPLANDS
125	CLEARING PLAN - FORMER MINE AREA
130	POTENTIAL BORROW MATERIAL ISOPACH - FORMER MINE AREA
140	BORROW AREA DEVELOPMENT PLAN
150	BORROW AREA A - SECTIONS AND VOLUME-ELEVATION CURVES
151	BORROW AREA B - SECTIONS AND VOLUME-ELEVATION CURVES
152	BORROW AREA C - SECTIONS AND VOLUME-ELEVATION CURVES
200	SLAG ISOPACH
210	SLAG REMOVAL PLAN - NORTH LOWLANDS (1 OF 2)
211	SLAG REMOVAL PLAN - NORTH LOWLANDS (2 OF 2)

212	SLAG REMOVAL PLAN - PLANT AREA (1 OF 2)
213	SLAG REMOVAL PLAN - PLANT AREA (2 OF 2)
214	SLAG REMOVAL PLAN - SOUTH LOWLANDS (1 OF 3)
215	SLAG REMOVAL PLAN - SOUTH LOWLANDS (2 OF 3)
216	SLAG REMOVAL PLAN - SOUTH LOWLANDS (3 OF 3)
217	SLAG REMOVAL PLAN - UPLANDS (1 OF 3)
218	SLAG REMOVAL PLAN - UPLANDS (2 OF 3)
219	SLAG REMOVAL PLAN - UPLANDS (3 OF 3)
220	SLAG REMOVAL SECTIONS - NORTH LOWLANDS
221	SLAG REMOVAL SECTIONS - SOUTH LOWLANDS
222	SLAG REMOVAL SECTIONS - PLANT AREA
223	SLAG REMOVAL SECTIONS - UPLANDS (1 OF 2)
224	SLAG REMOVAL SECTIONS - UPLANDS (2 OF 2)
230	CRIB AND FOUNDATION WALL SLAG REMOVAL SECTIONS (1 OF 2)
231	CRIB AND FOUNDATION WALL SLAG REMOVAL SECTIONS (2 OF 2)
300	FORMER NORTH MILL BUILDING FLOOR SOIL REMOVAL PLAN AND SECTION
301	FORMER SOUTH MILL BUILDING FLOOR SOIL REMOVAL PLAN AND SECTION
400	FINAL GRADING PLAN - NORTH LOWLANDS (1 OF 2)
401	FINAL GRADING PLAN - NORTH LOWLANDS (2 OF 2)
402	FINAL GRADING PLAN - PLANT AREA (1 OF 2)
403	FINAL GRADING PLAN - PLANT AREA (2 OF 2)
404	FINAL GRADING PLAN - SOUTH LOWLANDS (1 OF 3)
405	FINAL GRADING PLAN - SOUTH LOWLANDS (2 OF 3)
406	FINAL GRADING PLAN - SOUTH LOWLANDS (3 OF 3)
407	FINAL GRADING PLAN - UPLANDS (1 OF 3)
408	FINAL GRADING PLAN - UPLANDS (2 OF 3)
409	FINAL GRADING PLAN - UPLANDS (3 OF 3)
500	MINE AREA STOCKPILE - SLAG FILL PLAN OVERVIEW
501	MINE AREA STOCKPILE - SLAG FILL PLAN (1 OF 4)
502	MINE AREA STOCKPILE - SLAG FILL PLAN (2 OF 4)
503	MINE AREA STOCKPILE - SLAG FILL PLAN (3 OF 4)
504	MINE AREA STOCKPILE - SLAG FILL PLAN (4 OF 4)
510	MINE AREA STOCKPILE - SLAG FILL VOLUME-ELEVATION CURVES
520	MINE AREA STOCKPILE - FINAL SITE PLAN OVERVIEW
521	MINE AREA STOCKPILE - FINAL SITE PLAN (1 OF 4)
522	MINE AREA STOCKPILE - FINAL SITE PLAN (2 OF 4)
523	MINE AREA STOCKPILE - FINAL SITE PLAN (3 OF 4)
524	MINE AREA STOCKPILE - FINAL SITE PLAN (4 OF 4)
530	MINE AREA STOCKPILE - PERIMETER ROAD PROFILE (1 OF 2)
531	MINE AREA STOCKPILE - PERIMETER ROAD PROFILE (2 OF 2)
540	MINE AREA STOCKPILE - SECTIONS
550	MINE AREA STOCKPILE - DOWNCHUTE PROFILES (1 OF 2)
551	MINE AREA STOCKPILE - DOWNCHUTE PROFILES (2 OF 2)

560	MINE AREA STOCKPILE - DETAILS (1 OF 4)
561	MINE AREA STOCKPILE - DETAILS (2 OF 4)
562	MINE AREA STOCKPILE - DETAILS (3 OF 4)
563	MINE AREA STOCKPILE - DETAILS (4 OF 4)
564	MINE AREA STOCKPILE - STRUCTURAL DETAILS (1 OF 2)
565	MINE AREA STOCKPILE - STRUCTURAL DETAILS (2 OF 2)
600	RESTORATION AND SURFACE WATER MANAGEMENT PLAN - SITE OVERVIEW
601	RESTORATION AND SURFACE WATER MANAGEMENT PLAN - NORTH LOWLANDS
602	RESTORATION AND SURFACE WATER MANAGEMENT PLAN - PLANT AREA
603	RESTORATION AND SURFACE WATER MANAGEMENT PLAN - SOUTH LOWLANDS
604	RESTORATION AND SURFACE WATER MANAGEMENT PLAN - NORTH UPLANDS
605	RESTORATION AND SURFACE WATER MANAGEMENT PLAN - SOUTH UPLANDS
606	RESTORATION AND SURFACE WATER MANAGEMENT PLAN - FORMER MINE AREA
610	FINAL GRADING AND RESTORATION SECTIONS - NORTH LOWLANDS
611	FINAL GRADING AND RESTORATION SECTIONS - PLANT AREA (1 OF 2)
612	FINAL GRADING AND RESTORATION SECTIONS - PLANT AREA (2 OF 2)
613	FINAL GRADING AND RESTORATION SECTIONS - SOUTH LOWLANDS
614	FINAL GRADING AND RESTORATION SECTIONS - UPLANDS (1 OF 2)
615	FINAL GRADING AND RESTORATION SECTIONS - UPLANDS (2 OF 2)
620	RESTORATION EROSION AND SEDIMENT CONTROL DETAILS
630	SURFACE WATER MANAGEMENT DETAILS
700	CONSTRUCTED WETLAND PLAN - NORTH LOWLANDS (1 OF 2)
701	CONSTRUCTED WETLAND PLAN - NORTH LOWLANDS (2 OF 2)
710	CONSTRUCTED WETLAND SECTIONS - NORTH LOWLANDS
711	CONSTRUCTED WETLAND DETAILS - NORTH LOWLANDS
800	MAIN ACCESS ROAD PROFILE (1 OF 2)
801	MAIN ACCESS ROAD PROFILE (2 OF 2)
802	MAIN ACCESS ROAD SECTIONS
810	ACCESS ROAD AND FENCING DETAILS

CONTECH DRAWINGS	
SHEET NO.	SHEET TITLE
CT1	DOWNCHUTE WEST LAYOUT PLAN
CT2	DOWNCHUTE NORTH LAYOUT PLAN
CT3	DOWNCHUTE EAST AND SOUTH LAYOUT PLANS
CT4	DOWNCHUTE SOUTH LAYOUT PLAN AND DOWNCHUTE TYPICAL SECTIONS
CT5	ARTICULATED CONCRETE BLOCK MAT TYPICAL DETAILS

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
4	2025-10-29	NORTH MILL BUILDING AREA GRADING REVISION	VMN	REDMOND	FSS	RSA
3	2025-09-22	MINE AREA STOCKPILE EXPANSION IN NE CORNER	VMN	REDMOND	FSS	RSA
2	2025-07-25	RFI-27: UPPER RAIL FINAL GRADING PLAN	VMN	REDMOND	FSS	RSA
1	2025-04-25	NORTH LOWLANDS DRAINAGE REVISION	VMN	REDMOND	FSS	RSA
0	2025-03-08	ISSUED FOR CONSTRUCTION	VMN	REDMOND	FSS	RSA

SEAL



CLIENT
CYPRUS AMAX MINERALS COMPANY

CONSULTANT



REDMOND
18300 REDMOND WAY, SUITE 200
REDMOND, WA
USA
[+1] (425) 883 0777
www.golder.com

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

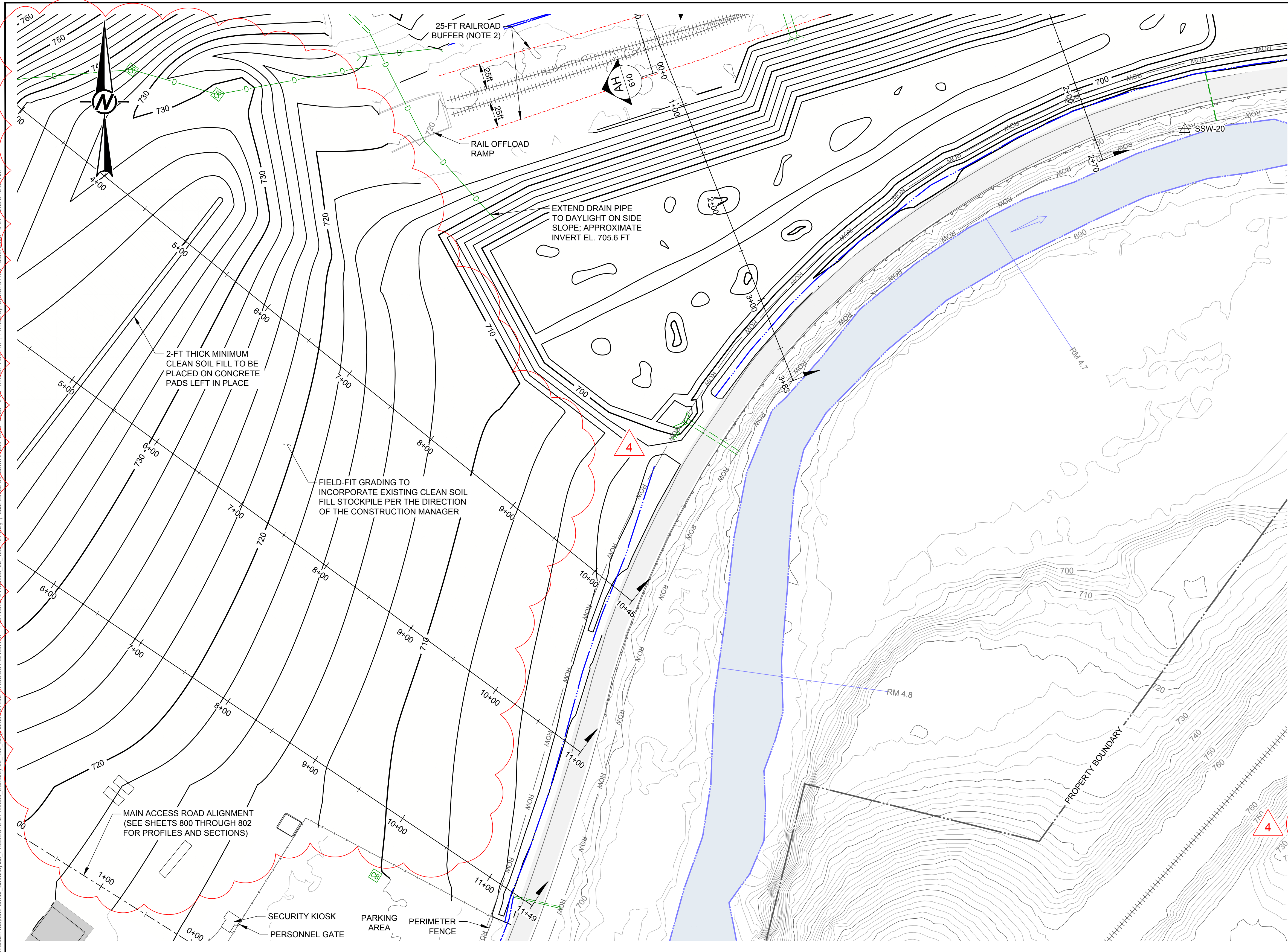
TITLE
DRAWING INDEX

PROJECT NO. 1239330907	PHASE 900	REV. 4	2 of 112	SHEET 011
---------------------------	--------------	-----------	----------	--------------

Path: \\corp.phwan.net\USCentralData\USX_C300\geomatics\Fresno\Fformer_Satralloy\02_400_SlagRemoval\02_PRODUCT\CON\DWG - 400_SlagRemoval\02_400_112.dwg | Last Edited By: usm7070209 Date: 2025-10-29 Time: 12:33:19 PM | Printed By: USX0701463 Date: 2025-10-31 Time: 6:41:09 AM

1 in IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM A3S/D

Path: \\corp.phdwan.net\USCentralData\USX\CD300\geomatics\Fresno\Former_Satralloy\09_PROJECTS\2148030_Satralloy\02_210_101.dwg | Last Edited By: jmm194209 Date: 2025-10-20 Time: 5:17:39 PM | Printed By: jmm194209 Date: 2025-10-21 Time: 10:31:11 AM



LEGEND

800

EXISTING MAJOR CONTOURS (10-FT INTERVAL)

EXISTING MINOR CONTOURS (2-FT INTERVAL)

750

FINAL GRADING SURFACE MAJOR CONTOURS (10-FT INTERVAL)

FINAL GRADING SURFACE MINOR CONTOURS (2-FT INTERVAL)

PROPERTY BOUNDARY

PROPERTY DEED OVERLAP

CROSS CREEK

EXISTING ON-SITE ACCESS ROAD

EXISTING COUNTY ROAD (PAVED)

COUNTY ROAD RIGHT-OF-WAY (ROW)

EXISTING CONCRETE PAD

EXISTING BUILDING

EXISTING RIPRAP

EXISTING RAILROAD

EXISTING FENCE

EXISTING GUARDRAIL

O/H

EXISTING OVERHEAD ELECTRICAL LINE

TEL

EXISTING OVERHEAD TELEPHONE LINE

EXISTING DRAINAGE DITCH

EXISTING UNDERGROUND DRAINAGE PIPE

EXISTING CULVERT / DRAIN PIPE DISCHARGE

EXISTING UNDERGROUND DRAINAGE PIPE (DIA SHOWN)

EXISTING MANHOLE (UNVERIFIED)

EXISTING MANHOLE (VERIFIED)

EXISTING CATCH BASIN (UNVERIFIED)

EXISTING CATCH BASIN (VERIFIED)

EXISTING HEADWALL

EXISTING INLET

JURISDICTIONAL WETLANDS (USACE JURISDICTION)

JURISDICTIONAL TRIBUTARY (USACE JURISDICTION)

MW-01

GROUNDWATER MONITORING WELL

SSW-02

SEEP MONITORING LOCATION

60235

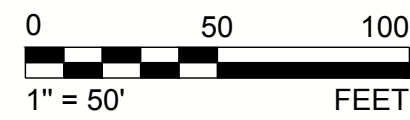
OIL/GAS WELL

- NOTES**
1.

SEE NOTES 1-2, SHEET 210.
2.

NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN THE EXTENTS OF RAILROAD BUFFER ZONE. ALL PERSONNEL ARE PROHIBITED FROM ENTERING THE RAILROAD BUFFER ZONE WITHOUT PRIOR APPROVAL.
3.

REGRADING CONTOURS MAY BE MODIFIED BY THE DESIGN ENGINEER FROM THOSE SHOWN, DEPENDING ON THE ACTUAL EXTENT OF SLAG REMOVAL



REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
4	2025-10-29	NORTH MILL BUILDING AREA GRADING REVISION	VMN	REDMOND	FSS	RSA
3	2025-09-22	MINE AREA STOCKPILE EXPANSION IN NE CORNER	VMN	REDMOND	FSS	RSA
2	2025-07-25	RFI-27: UPPER RAIL FINAL GRADING PLAN	VMN	REDMOND	FSS	RSA
1	2025-04-25	NORTH LOWLANDS DRAINAGE REVISION	VMN	REDMOND	FSS	RSA
0	2025-03-08	ISSUED FOR CONSTRUCTION	VMN	REDMOND	FSS	RSA

SEAL



CLIENT
CYPRUS AMAX MINERALS COMPANY

CONSULTANT



REDMOND
18300 REDMOND WAY, SUITE 200
REDMOND, WA
USA
[+1] (425) 883 0777
www.golder.com

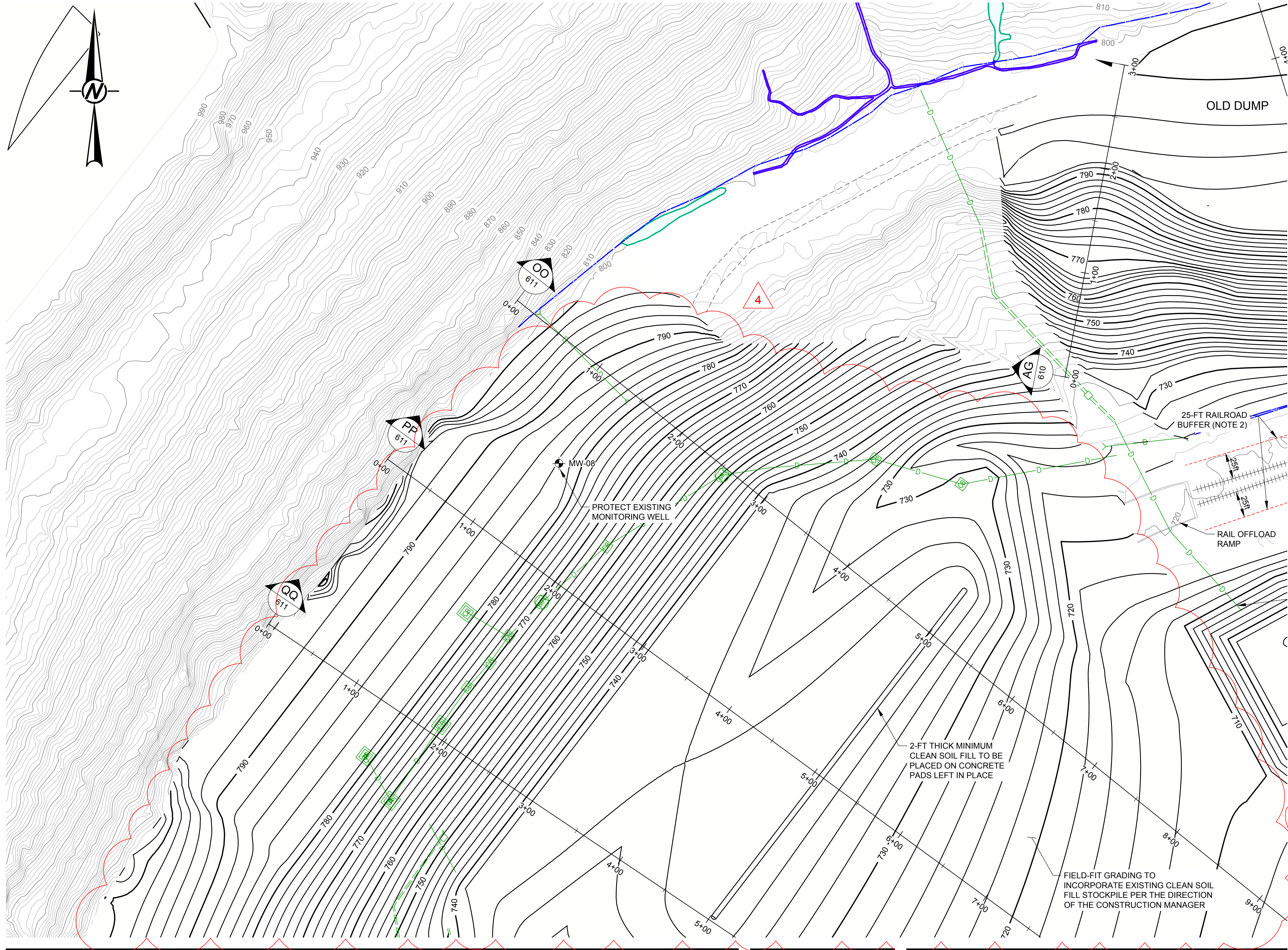
PROJECT
FORMER SATRALLOY SITE
SLAG REMOVAL INTERIM ACTION
JEFFERSON COUNTY, OHIO

TITLE
FINAL GRADING PLAN - NORTH LOWLANDS (2 OF 2)

PROJECT NO. 1239330907	PHASE 900	REV. 4	59 of 112	SHEET 401
---------------------------	--------------	-----------	-----------	--------------

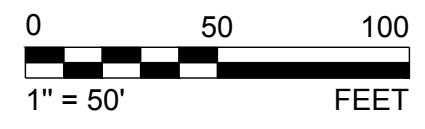
1 in IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI D

Path: \\corp.phwan.net\USCentralData\USX\CD00\geomatics\Fresno\Former_Satralloy\02_400_SlagRemoval\02_PROD\CD00\02_400_101.dwg | File Name: 21480300_02_400_101.dwg | Last Edited By: user7070209 Date: 2025-10-30 Time: 5:17:38 PM | Printed By: USX0701483 Date: 2025-10-31 Time: 6:42:20 AM



- LEGEND**
- 800 — EXISTING MAJOR CONTOURS (10-FT INTERVAL)
 - EXISTING MINOR CONTOURS (2-FT INTERVAL)
 - 750 — FINAL GRADING SURFACE MAJOR CONTOURS (10-FT INTERVAL)
 - FINAL GRADING SURFACE MINOR CONTOURS (2-FT INTERVAL)
 - PROPERTY BOUNDARY
 - PROPERTY DEED OVERLAP
 - CROSS CREEK
 - - - EXISTING ON-SITE ACCESS ROAD
 - - - EXISTING COUNTY ROAD (PAVED)
 - - - ROW
 - - - ROW
 - EXISTING CONCRETE PAD
 - EXISTING BUILDING
 - EXISTING RIPRAP
 - +++++ EXISTING RAILROAD
 - - - EXISTING FENCE
 - - - EXISTING GUARDRAIL
 - O/H — EXISTING OVERHEAD ELECTRICAL LINE
 - TEL — EXISTING OVERHEAD TELEPHONE LINE
 - EXISTING DRAINAGE DITCH
 - D — EXISTING UNDERGROUND DRAINAGE PIPE
 - D — EXISTING CULVERT / DRAIN PIPE DISCHARGE
 - EXISTING UNDERGROUND DRAINAGE PIPE (DIA SHOWN)
 - EXISTING MANHOLE (UNVERIFIED)
 - EXISTING MANHOLE (VERIFIED)
 - EXISTING CATCH BASIN (UNVERIFIED)
 - EXISTING CATCH BASIN (VERIFIED)
 - EXISTING HEADWALL
 - EXISTING INLET
 - JURISDICTIONAL WETLANDS (USACE JURISDICTION)
 - JURISDICTIONAL TRIBUTARY (USACE JURISDICTION)
 - MW-01 GROUNDWATER MONITORING WELL
 - SSW-02 SEEP MONITORING LOCATION
 - 60235 OIL/GAS WELL

- NOTES**
- SEE NOTES 1-2, SHEET 210.
 - NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN THE EXTENTS OF RAILROAD BUFFER ZONE. ALL PERSONNEL ARE PROHIBITED FROM ENTERING THE RAILROAD BUFFER ZONE WITHOUT PRIOR APPROVAL.
 - REGRAIDING CONTOURS MAY BE MODIFIED BY THE DESIGN ENGINEER FROM THOSE SHOWN, DEPENDING ON THE ACTUAL EXTENT OF SLAG REMOVAL.



4	2025-10-29	NORTH MILL BUILDING AREA GRADING REVISION	VMN	REDMOND	FSS	RSA
3	2025-09-22	MINE AREA STOCKPILE EXPANSION IN NE CORNER	VMN	REDMOND	FSS	RSA
2	2025-07-25	RFI-27: UPPER RAIL FINAL GRADING PLAN	VMN	REDMOND	FSS	RSA
1	2025-04-25	NORTH LOWLANDS DRAINAGE REVISION	VMN	REDMOND	FSS	RSA
0	2025-03-08	ISSUED FOR CONSTRUCTION	VMN	REDMOND	FSS	RSA
REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED



CLIENT
CYPRUS AMAX MINERALS COMPANY

CONSULTANT



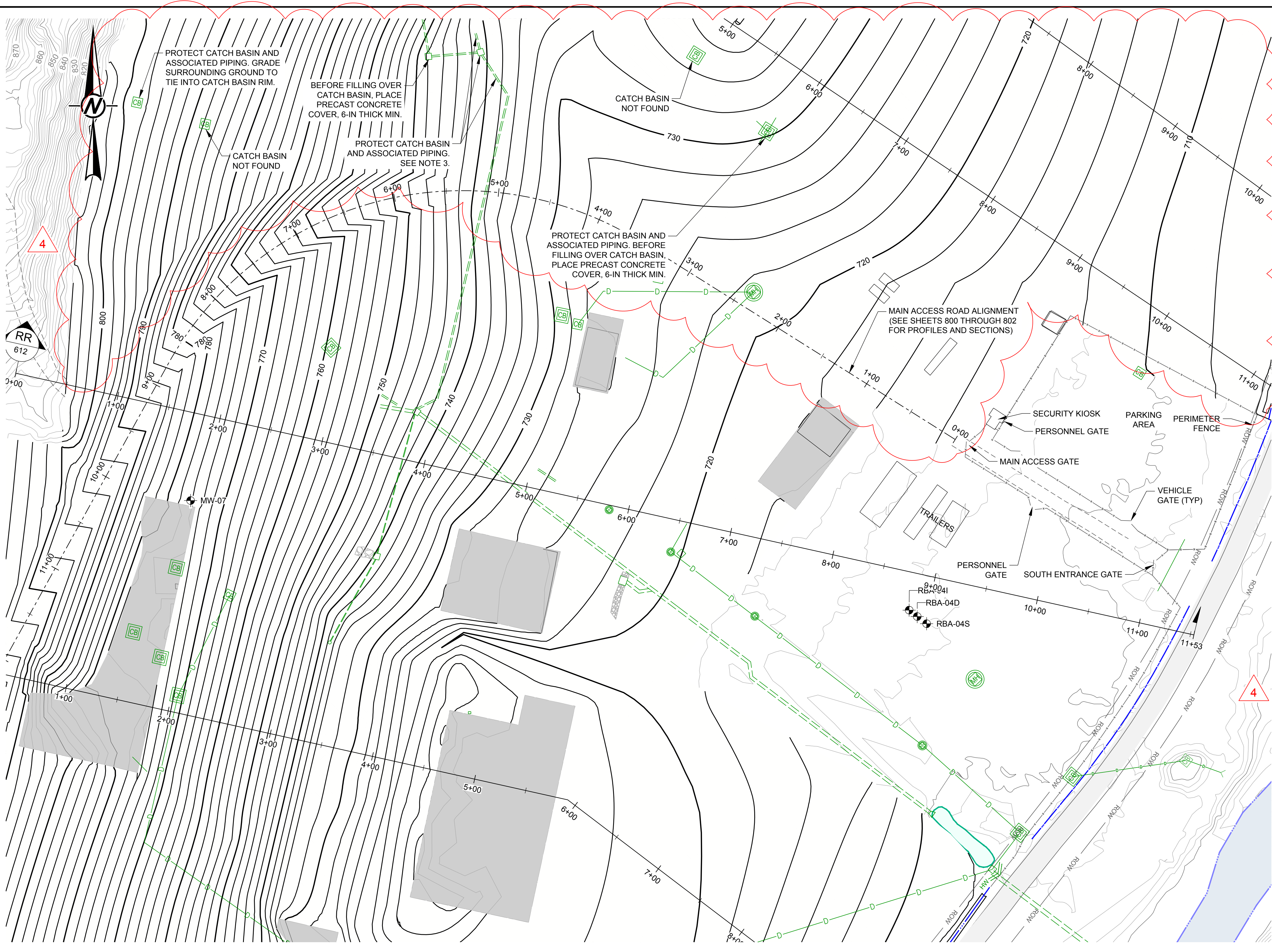
REDMOND
18300 REDMOND WAY, SUITE 200
REDMOND, WA
USA
[+1] (425) 883 0777
www.golder.com

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

TITLE
FINAL GRADING PLAN - PLANT AREA (1 OF 2)

PROJECT NO. 1239330907	PHASE 900	REV. 4	60 of 112	SHEET 402
---------------------------	--------------	-----------	-----------	--------------

Path: \\corp.plnwan.net\USCentralData\USX\CD00\geomatics\Fresno\Former_Satralloy\00_PROJECTS\21460300_Satralloy\02_400_SlagRemoval\002_PRODUCTION\DWG - File Name: 21460300_02_400_101.dwg | Last Edited By: user7070209 Date: 2025-10-30 Time: 5:17:38 PM | Printed By: USX0701403 Date: 2025-10-31 Time: 6:42:39 AM

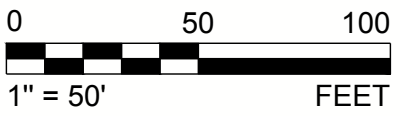


LEGEND

- 800 — EXISTING MAJOR CONTOURS (10-FT INTERVAL)
- EXISTING MINOR CONTOURS (2-FT INTERVAL)
- 750 — FINAL GRADING SURFACE MAJOR CONTOURS (10-FT INTERVAL)
- FINAL GRADING SURFACE MINOR CONTOURS (2-FT INTERVAL)
- PROPERTY BOUNDARY
- PROPERTY DEED OVERLAP
- CROSS CREEK
- EXISTING ON-SITE ACCESS ROAD
- EXISTING COUNTY ROAD (PAVED)
- COUNTY ROAD RIGHT-OF-WAY (ROW)
- EXISTING CONCRETE PAD
- EXISTING BUILDING
- EXISTING RIPRAP
- EXISTING RAILROAD
- EXISTING FENCE
- EXISTING GUARDRAIL
- EXISTING OVERHEAD ELECTRICAL LINE
- EXISTING OVERHEAD TELEPHONE LINE
- EXISTING DRAINAGE DITCH
- EXISTING UNDERGROUND DRAINAGE PIPE
- EXISTING CULVERT / DRAIN PIPE DISCHARGE
- EXISTING UNDERGROUND DRAINAGE PIPE (DIA SHOWN)
- EXISTING MANHOLE (UNVERIFIED)
- EXISTING MANHOLE (VERIFIED)
- EXISTING CATCH BASIN (UNVERIFIED)
- EXISTING CATCH BASIN (VERIFIED)
- EXISTING HEADWALL
- EXISTING INLET
- JURISDICTIONAL WETLANDS (USACE JURISDICTION)
- JURISDICTIONAL TRIBUTARY (USACE JURISDICTION)
- MW-01 GROUNDWATER MONITORING WELL
- SSW-02 SEEP MONITORING LOCATION
- 60235 OIL/GAS WELL

NOTES

- SEE NOTES 1-2, SHEET 210.
- REGRADE CONTOURS MAY BE MODIFIED BY THE DESIGN ENGINEER FROM THOSE SHOWN, DEPENDING ON THE ACTUAL EXTENT OF SLAG REMOVAL.
- BEFORE FILLING OVER EXISTING CATCH BASIN, CLEAN OUT SEDIMENT, SEAL HOLE IN THE WEST SIDE WALL BY PLACING PLYWOOD AND GROUTING BEHIND IT, AND PLACE PRECAST CONCRETE COVER, 6-IN THICK MIN.



REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
4	2025-10-29	NORTH MILL BUILDING AREA GRADING REVISION	VMN	REDMOND	FSS	RSA
3	2025-09-22	MINE AREA STOCKPILE EXPANSION IN NE CORNER	VMN	REDMOND	FSS	RSA
2	2025-07-25	RFI-27: UPPER RAIL FINAL GRADING PLAN	VMN	REDMOND	FSS	RSA
1	2025-04-25	NORTH LOWLANDS DRAINAGE REVISION	VMN	REDMOND	FSS	RSA
0	2025-03-08	ISSUED FOR CONSTRUCTION	VMN	REDMOND	FSS	RSA

SEAL



CLIENT
CYPRUS AMAX MINERALS COMPANY

CONSULTANT

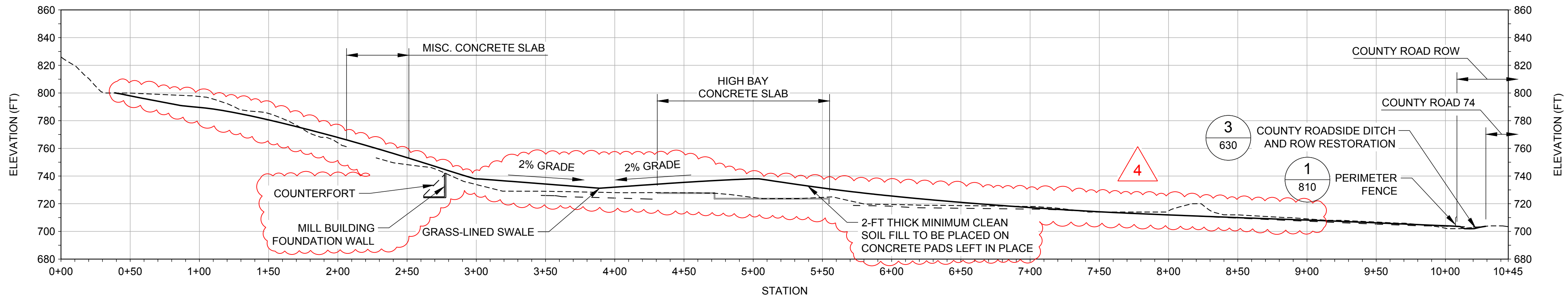


REDMOND
18300 REDMOND WAY, SUITE 200
REDMOND, WA
USA
[+1] (425) 883 0777
www.golder.com

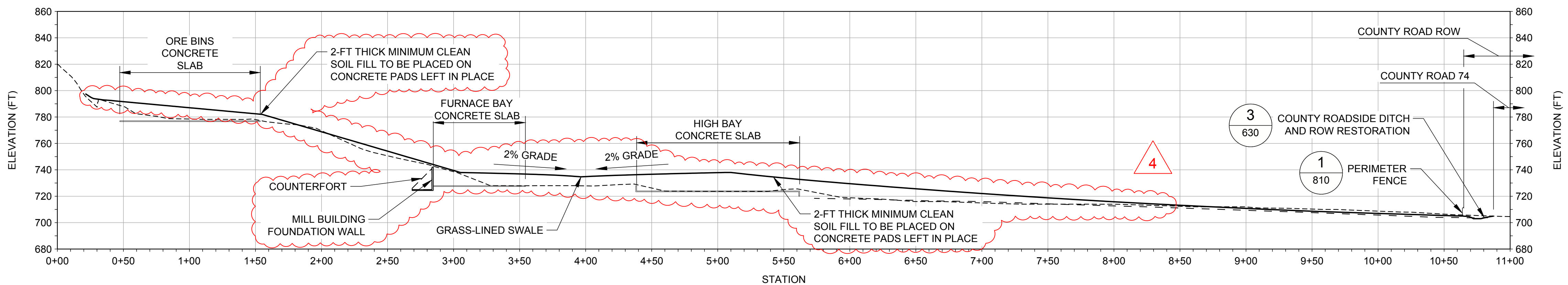
PROJECT FORMER SATRALLOY SITE SLAG REMOVAL INTERIM ACTION JEFFERSON COUNTY, OHIO			
TITLE FINAL GRADING PLAN - PLANT AREA (2 OF 2)			
PROJECT NO. 1239330907	PHASE 900	REV. 4	61 of 112 SHEET 403

1 in IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM A3S/D

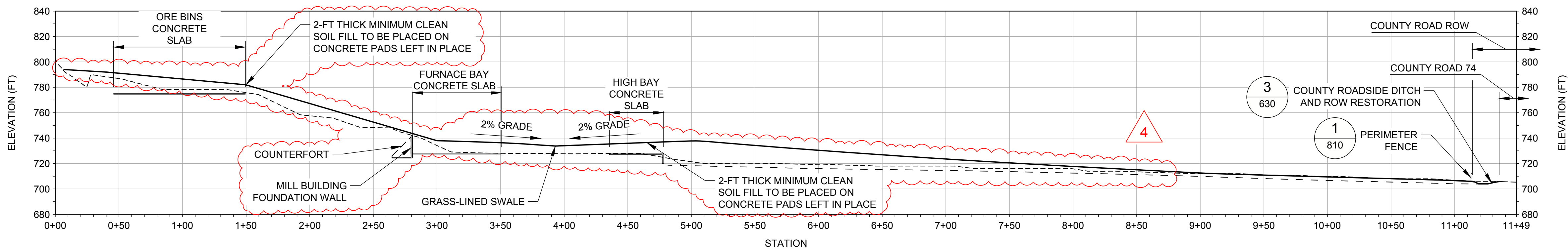
Path: V:\corp\pban\atl\USCentralData\USK_C300\geomatics\Fresno\Former_Satralloy\02_400_SlagRemoval\02_PRODUCTION\DWG | File Name: 2148300_02_400_105.dwg | Last Edited By: user707029 Date: 2025-10-18 Time: 9:39:22 AM | Printed By: USK0701483 Date: 2025-10-31 Time: 6:44:46 AM



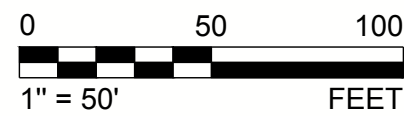
SCALE 1" = 50'
VERT. SCALE 1:1
OO FINAL GRADING PLANT AREA - SECTION OO
401 402 601



SCALE 1" = 50'
VERT. SCALE 1:1
PP FINAL GRADING PLANT AREA - SECTION PP
401 402 602



SCALE 1" = 50'
VERT. SCALE 1:1
QQ FINAL GRADING PLANT AREA - SECTION QQ
401 402 602



SEAL



CLIENT
CYPRUS AMAX MINERALS COMPANY

CONSULTANT



REDMOND
18300 REDMOND WAY, SUITE 200
REDMOND, WA
USA
[+1] (425) 883 0777
www.golder.com

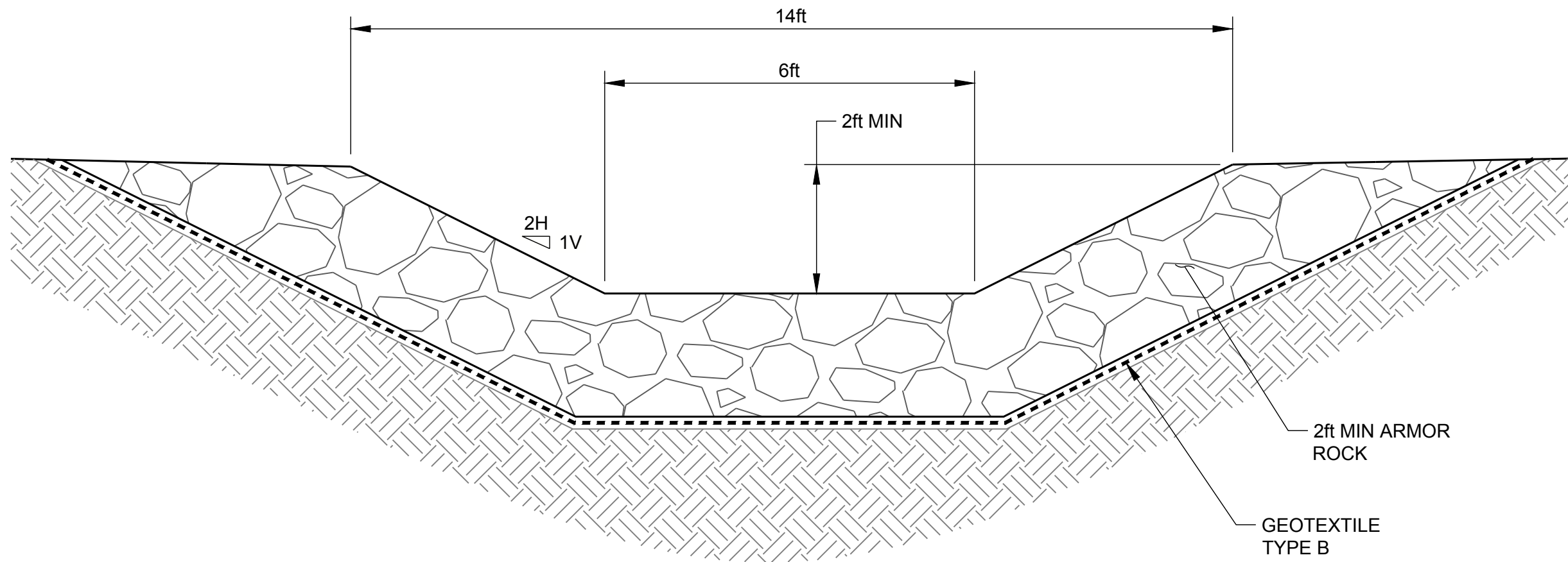
PROJECT
FORMER SATRALLOY SITE
SLAG REMOVAL INTERIM ACTION
JEFFERSON COUNTY, OHIO

TITLE
**FINAL GRADING AND RESTORATION SECTIONS - PLANT AREA
(1 OF 2)**

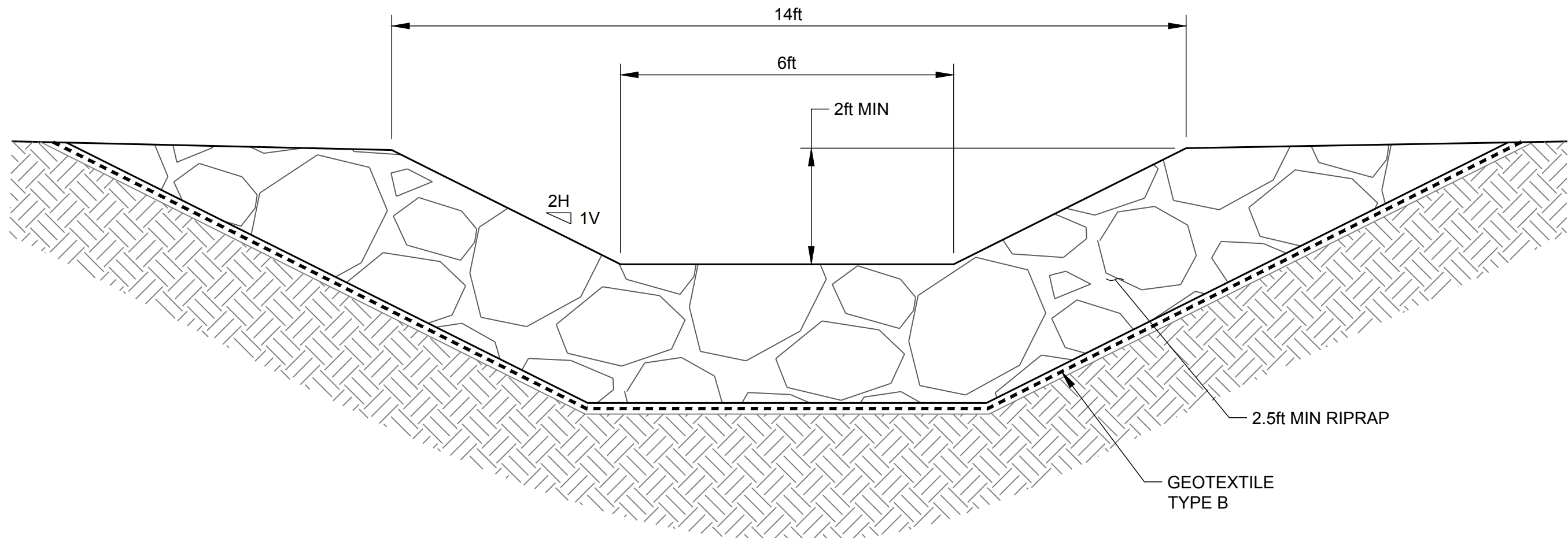
PROJECT NO. 1239330907	PHASE 900	REV. 4	98 of 112	SHEET 611
---------------------------	--------------	-----------	-----------	--------------

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
4	2025-10-29	NORTH MILL BUILDING AREA GRADING REVISION	VMN	REDMOND	FSS	RSA
3	2025-09-22	MINE AREA STOCKPILE EXPANSION IN NE CORNER	VMN	REDMOND	FSS	RSA
2	2025-07-25	RFI-27: UPPER RAIL FINAL GRADING PLAN	VMN	REDMOND	FSS	RSA
1	2025-04-25	NORTH LOWLANDS DRAINAGE REVISION	VMN	REDMOND	FSS	RSA
0	2025-03-08	ISSUED FOR CONSTRUCTION	VMN	REDMOND	FSS	RSA

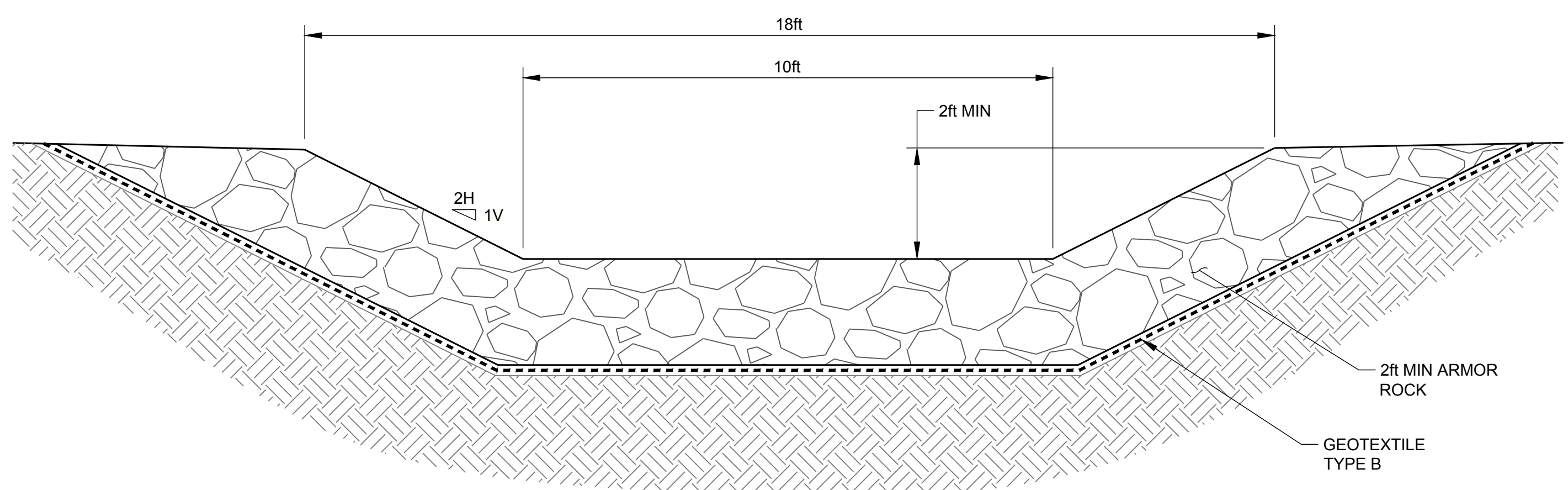
Path: \\corp.phw.net\USCentralData\USX\CD300\geomatics\Fresno\Former_Satralloy\02_400_SlagRemoval\02_PRODUCTION\DWG - File Name: 21480300_02_400_107.dwg | Last Edited By: user7010209 Date: 2025-10-17 Time: 12:51:54 PM | Printed By: USK0701463 Date: 2025-10-31 Time: 6:46:16 AM



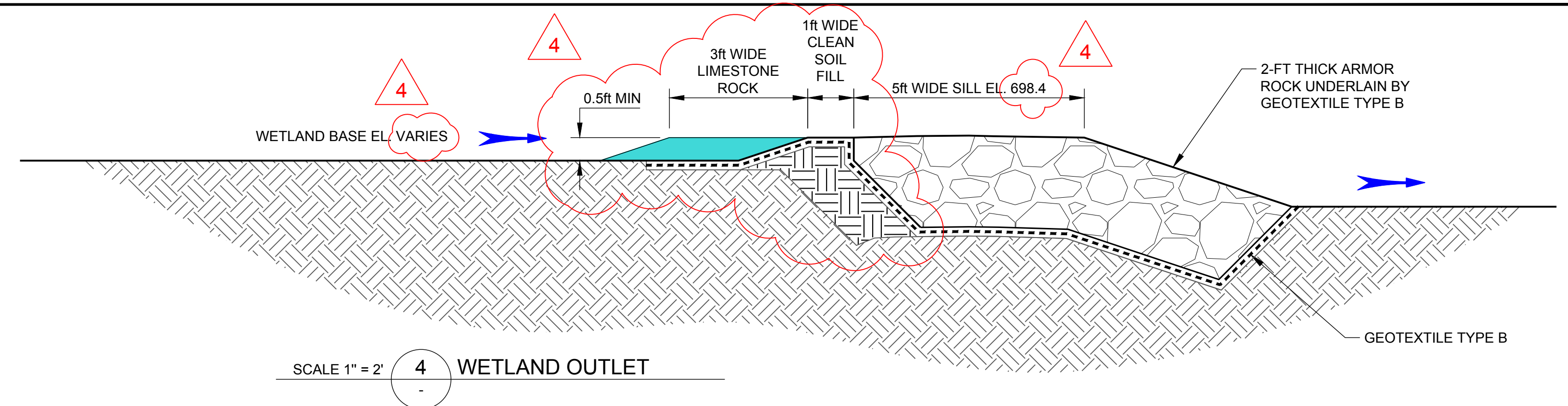
SCALE 1" = 2' 1 NORTH LOWLANDS SWALE DISCHARGE CHANNEL - TYPICAL SECTION



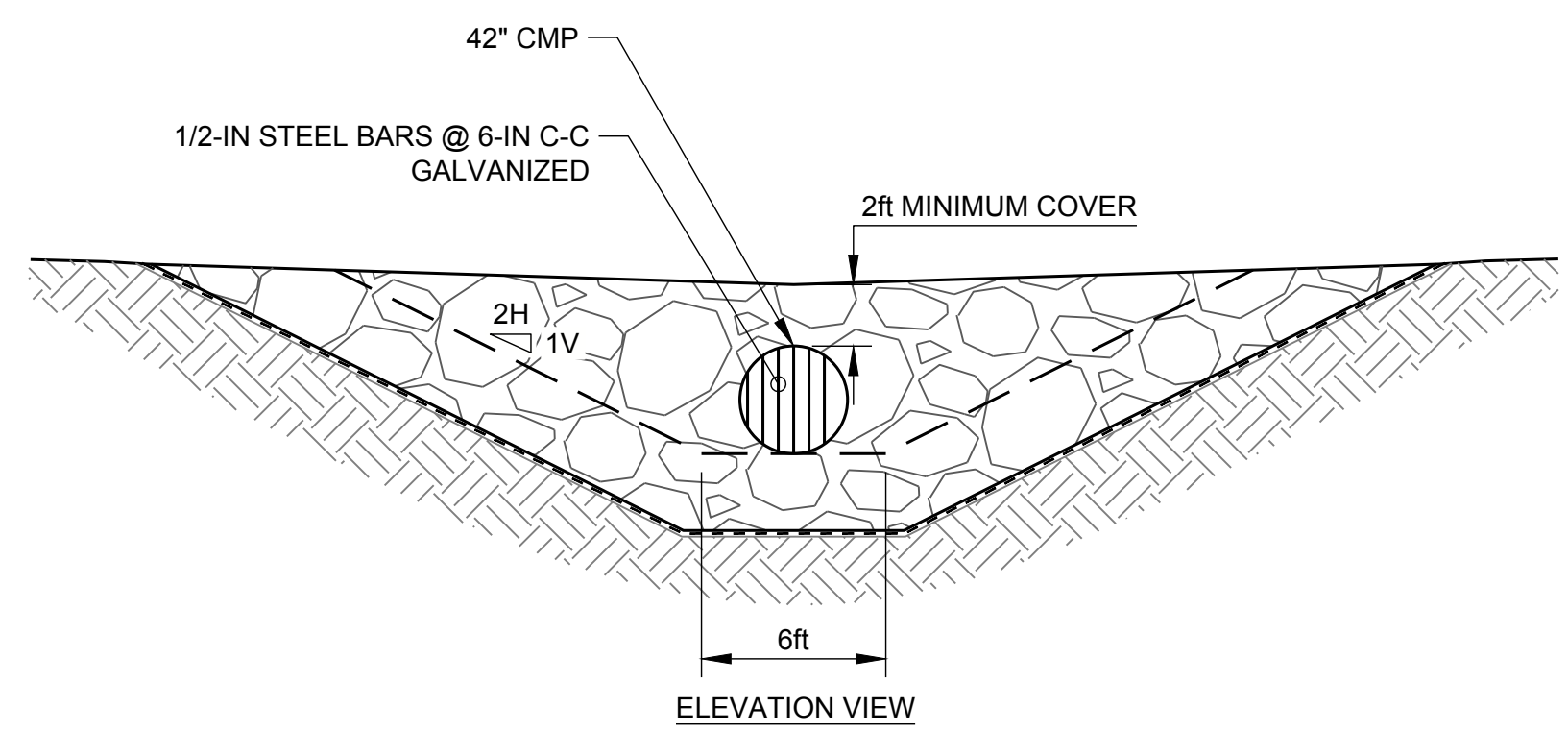
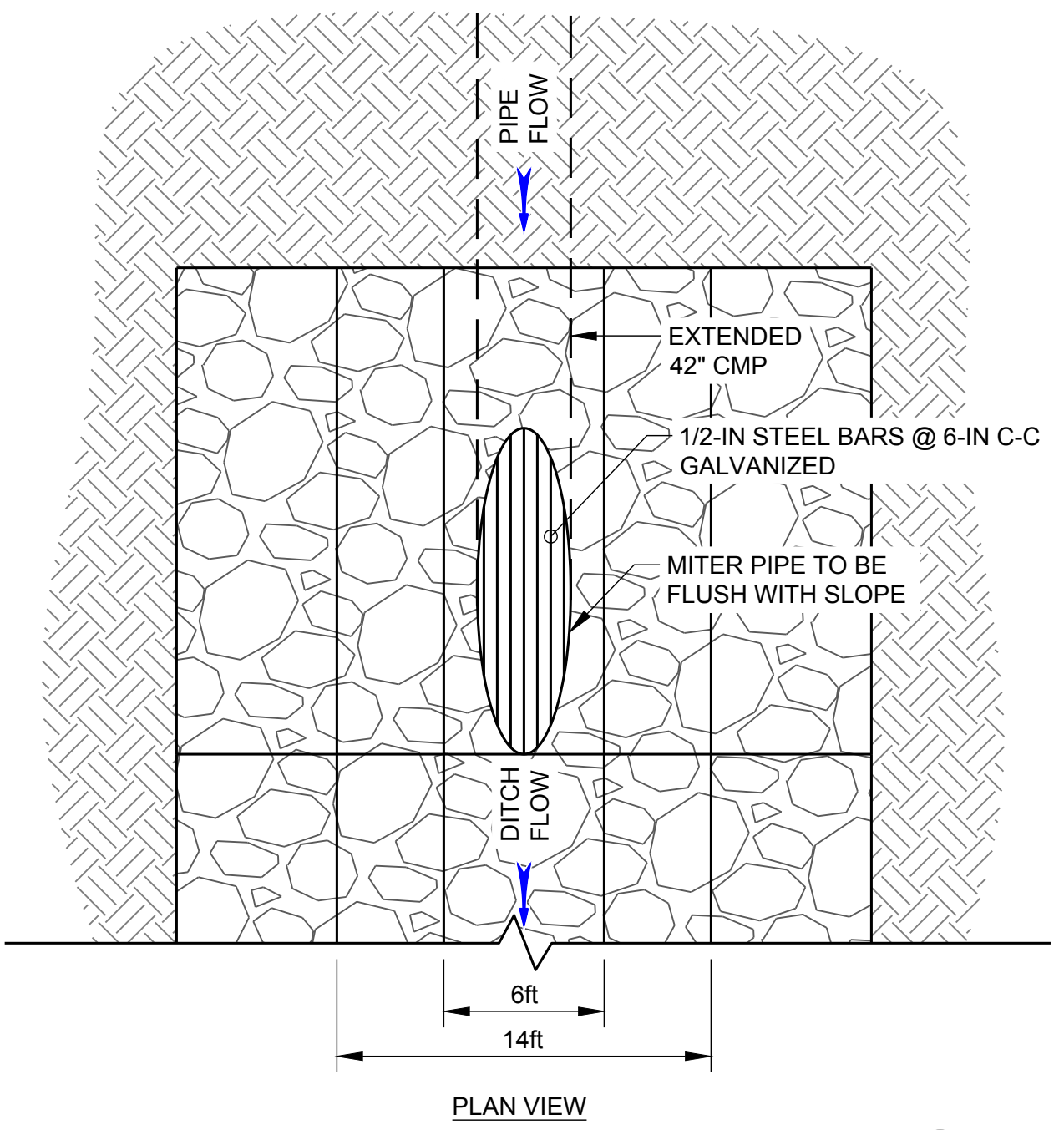
SCALE 1" = 2' 2 NORTH LOWLANDS CMP DISCHARGE CHANNEL - TYPICAL SECTION



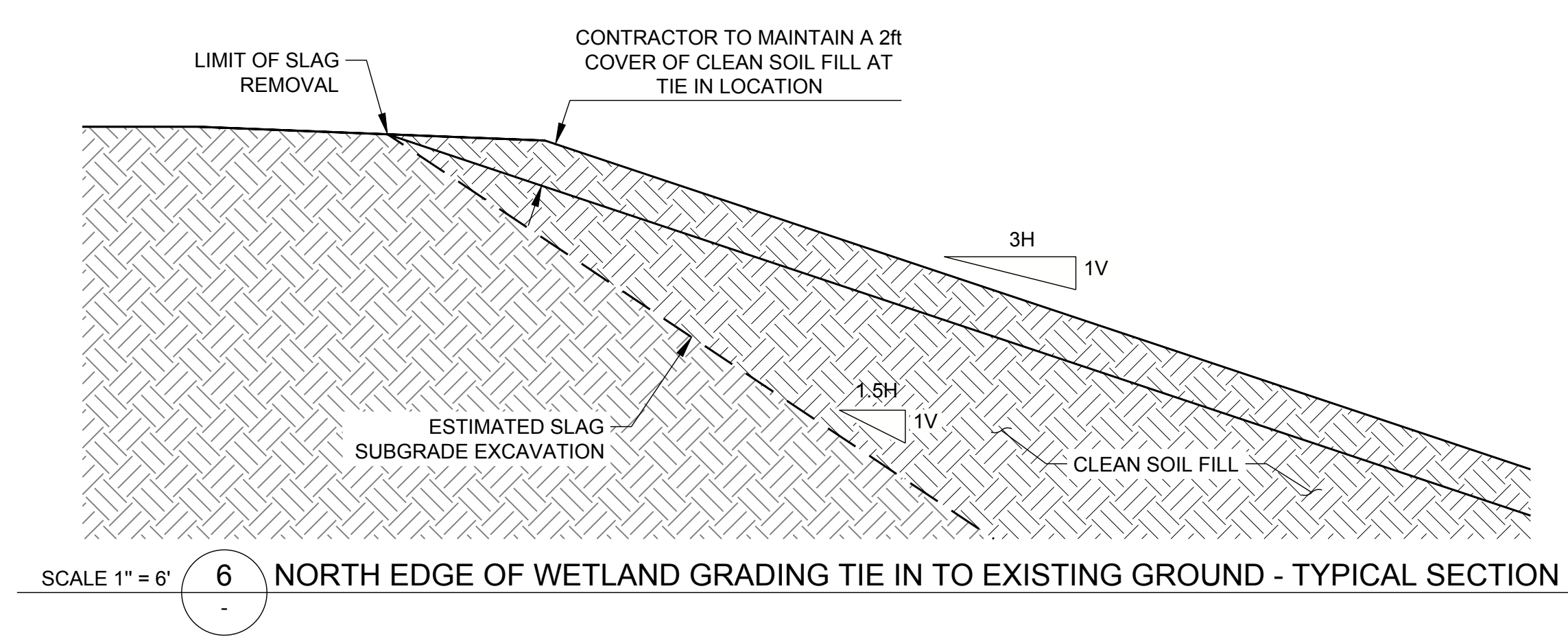
SCALE 1" = 2' 3 TWIN CULVERT DISCHARGE CHANNEL - TYPICAL SECTION



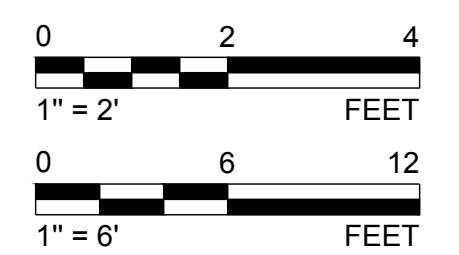
SCALE 1" = 2' 4 WETLAND OUTLET



SCALE 1" = 6' 5 NORTH LOWLANDS CMP TERMINATION



SCALE 1" = 6' 6 NORTH EDGE OF WETLAND GRADING TIE IN TO EXISTING GROUND - TYPICAL SECTION



REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
4	2025-10-29	NORTH MILL BUILDING AREA GRADING REVISION	VMN	REDMOND	FSS	RSA
3	2025-09-22	MINE AREA STOCKPILE EXPANSION IN NE CORNER	VMN	REDMOND	FSS	RSA
2	2025-07-25	RFI-27: UPPER RAIL FINAL GRADING PLAN	VMN	REDMOND	FSS	RSA
1	2025-04-25	NORTH LOWLANDS DRAINAGE REVISION	VMN	REDMOND	FSS	RSA
0	2025-03-08	ISSUED FOR CONSTRUCTION	VMN	REDMOND	FSS	RSA

SEAL



CLIENT
CYPRUS AMAX MINERALS COMPANY

CONSULTANT



REDMOND
18300 REDMOND WAY, SUITE 200
REDMOND, WA
USA
[+1] (425) 883 0777
www.golder.com

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

TITLE
CONSTRUCTED WETLANDS DETAILS - NORTH LOWLANDS

PROJECT NO.	PHASE	REV.	108 of 112	SHEET
1239330907	900	4		711