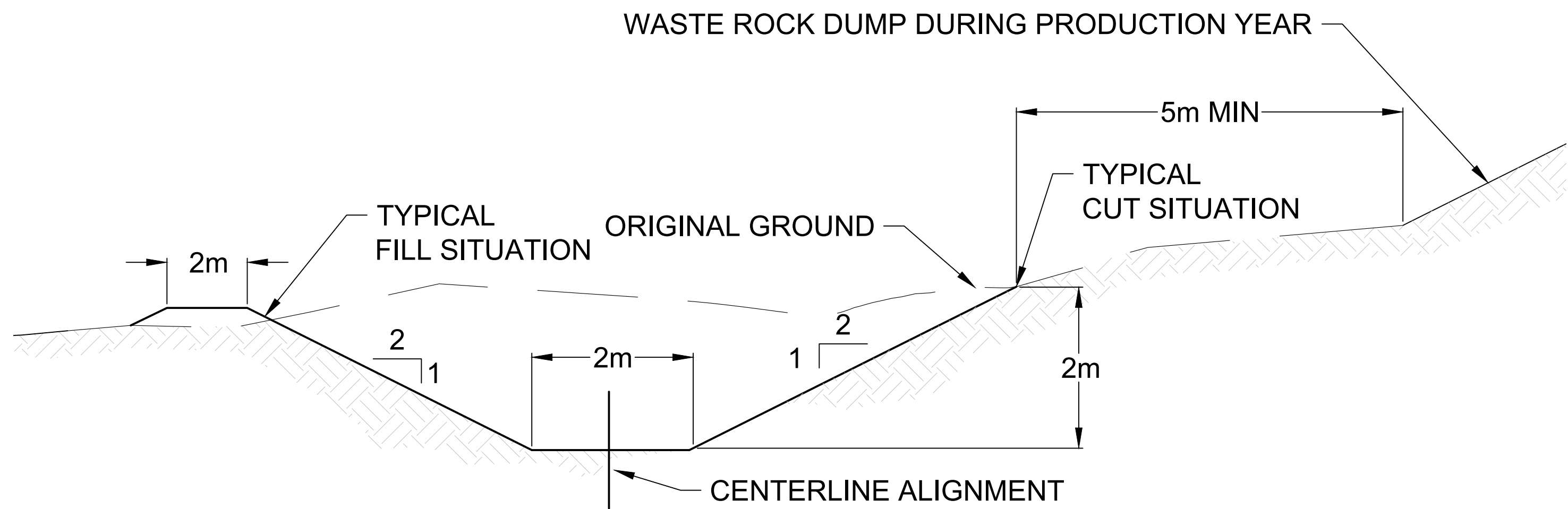
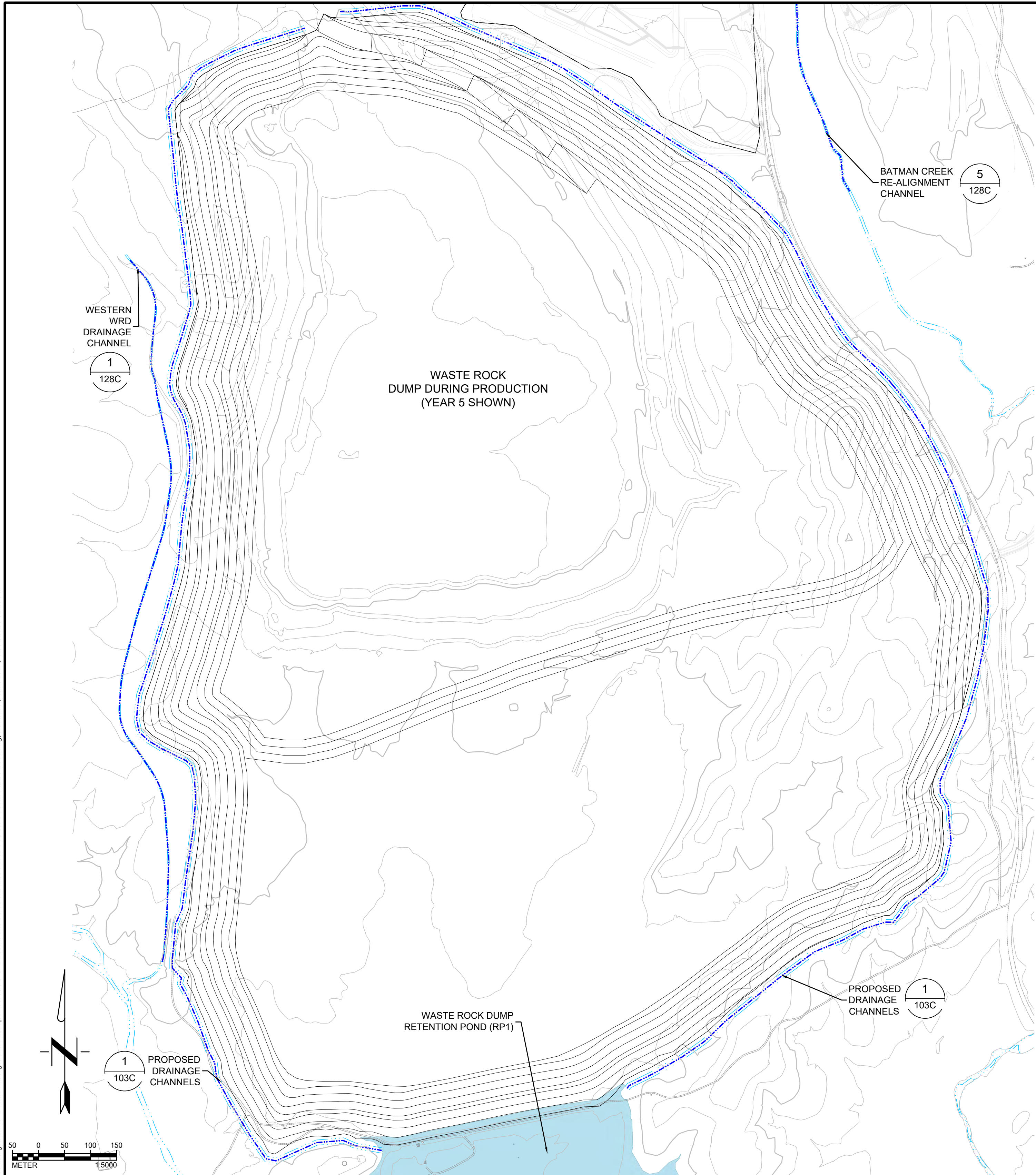


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1 TYPICAL WASTE ROCK DRAINAGE CHANNEL
103C SCALE: N.T.S

ENGINEER'S SEAL

PRELIMINARY DRAWING

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Rev	Description	BY	Date

Scale: AS SHOWN

Designed by: CC
 Drawn by: VH
 Checked by: VS
 Approved by: VS

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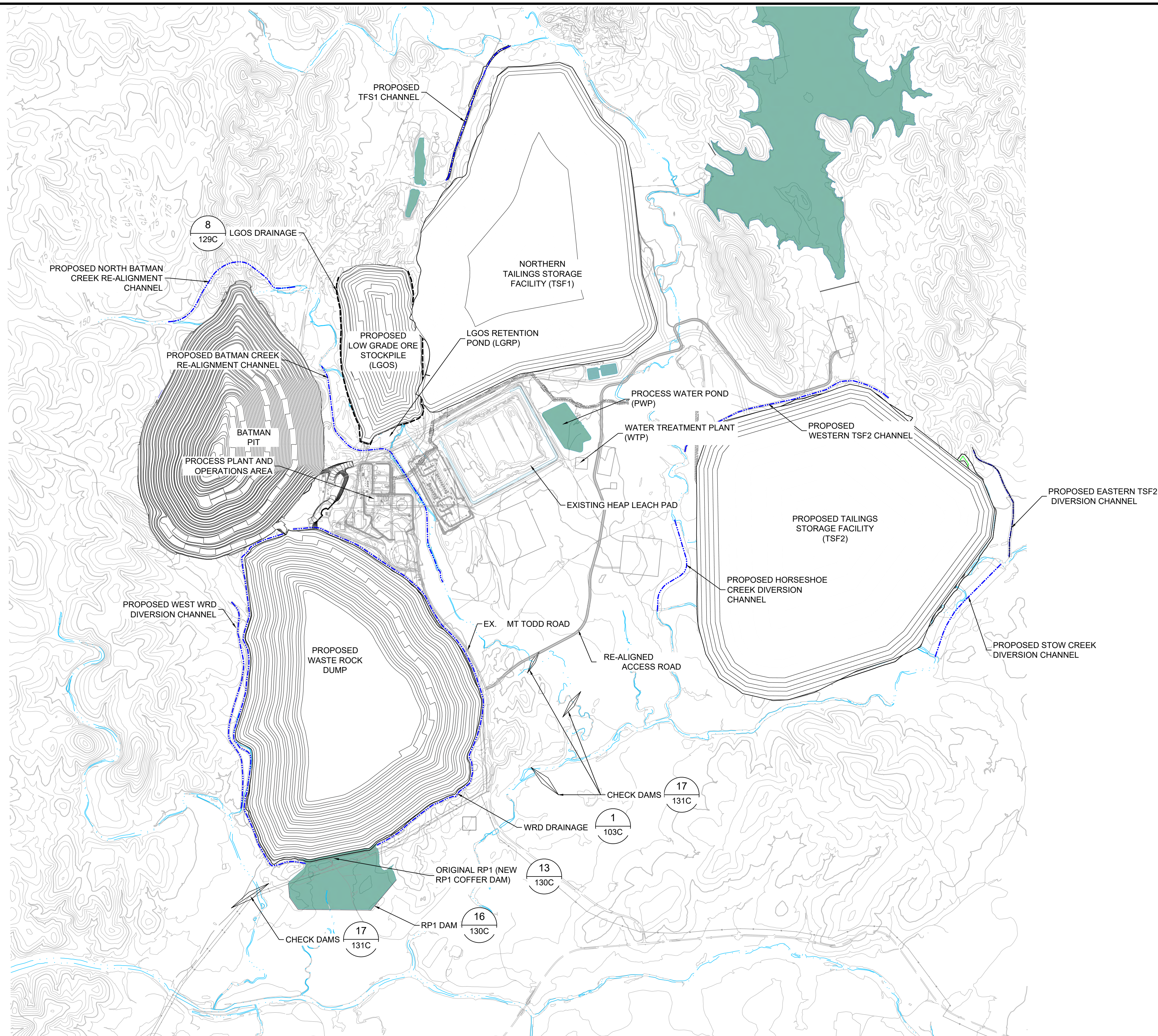
**SURFACE WATER MANAGEMENT PLAN
 WASTE ROCK DUMP DRAINAGE
 PERIMETER CHANNELS PLAN**



Project: 2021 MT TODD FEASIBILITY STUDY DRAINAGE DESIGN	Project no.: 200-01299-21007	4520-DC-103C
Location: NORTHERN TERRITORY, AUSTRALIA	Date: 12/16/2021	

SHEET
4 OF 34

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△	ADDRESSED 08/2017 CLIENT COMMENTS	DF	11/03/2017
△	PRELIMINARY DESIGN ISSUED FOR REVIEW	JC	05/12/2017
△	PRELIMINARY DESIGN	CC	04/21/2017

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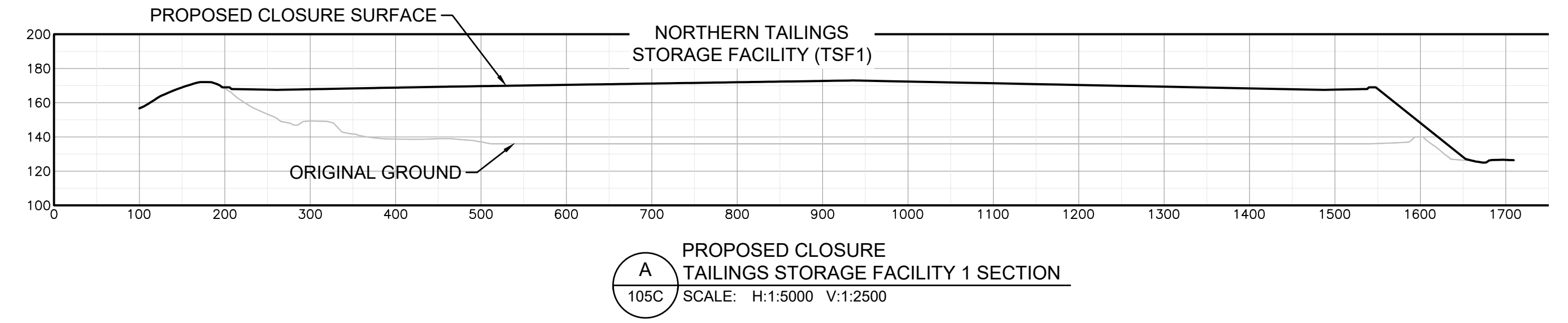
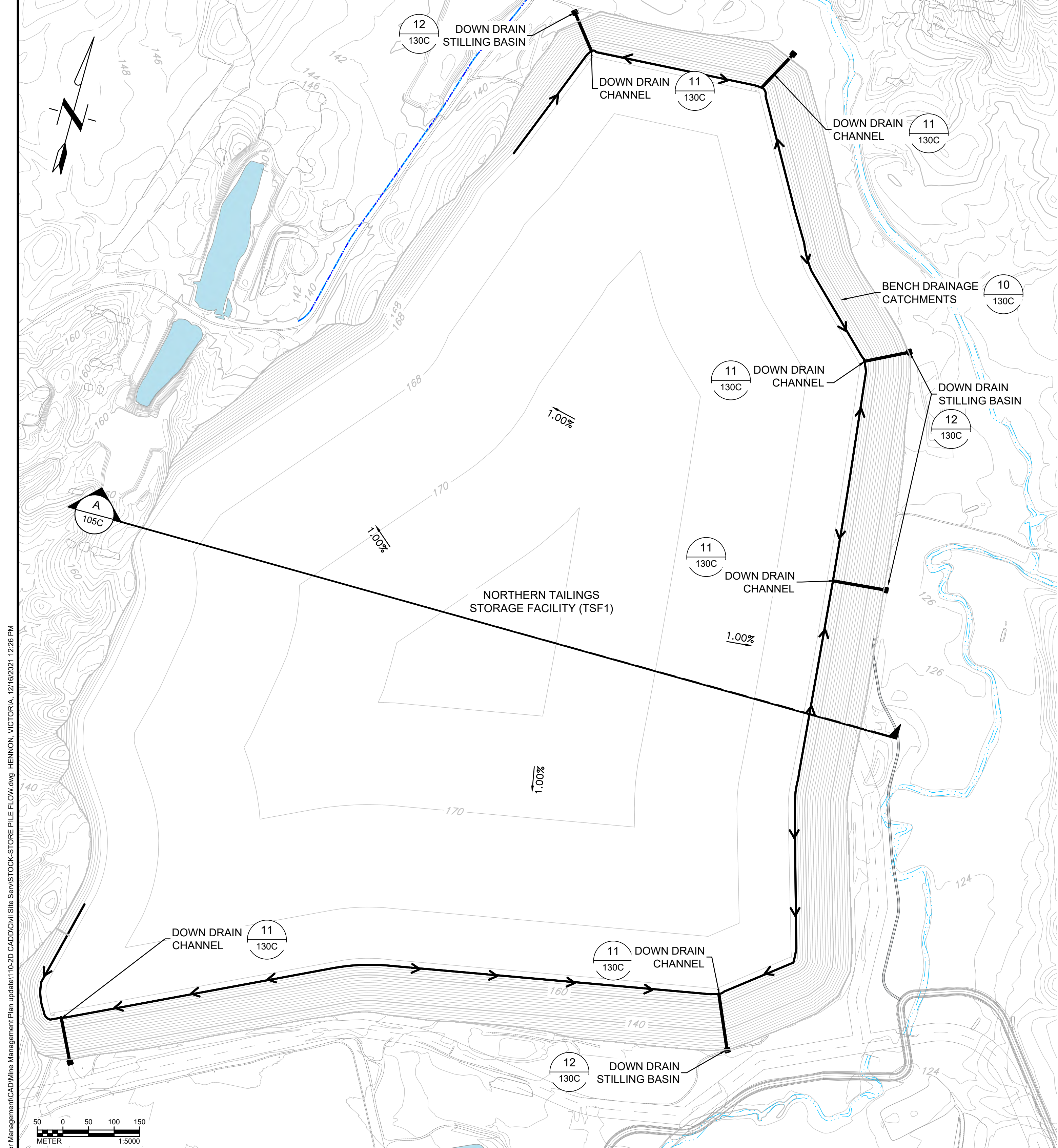
**STORMWATER MANAGEMENT PLAN
 PROPOSED SEDIMENT AND EROSION
 CONTROL PLAN**



Project: 2021 MT TODD FEASIBILITY STUDY DRAINAGE DESIGN
 Project no.: 200-01299-21007
 Location: NORTHERN TERRITORY, AUSTRALIA
 Date: 12/16/2021

4520-DC-104C

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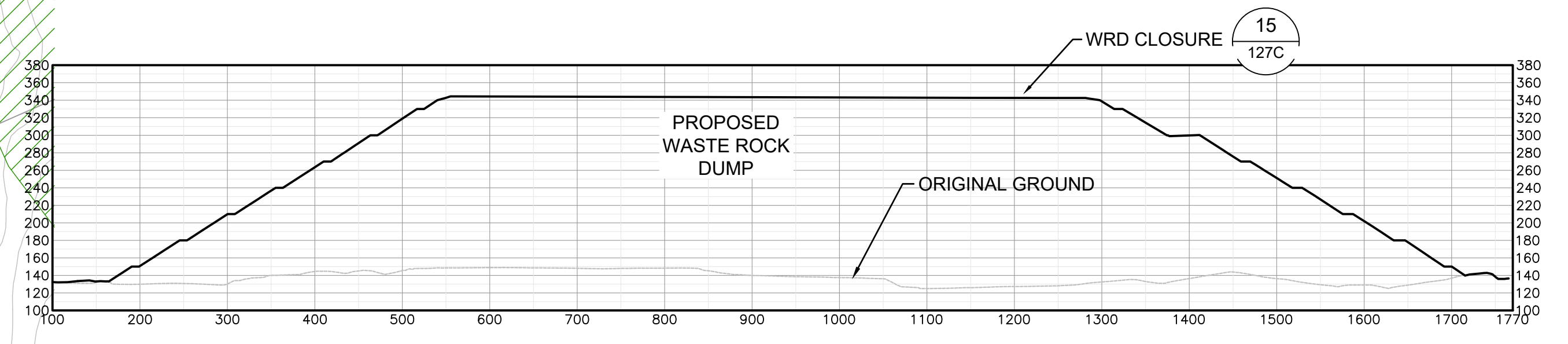
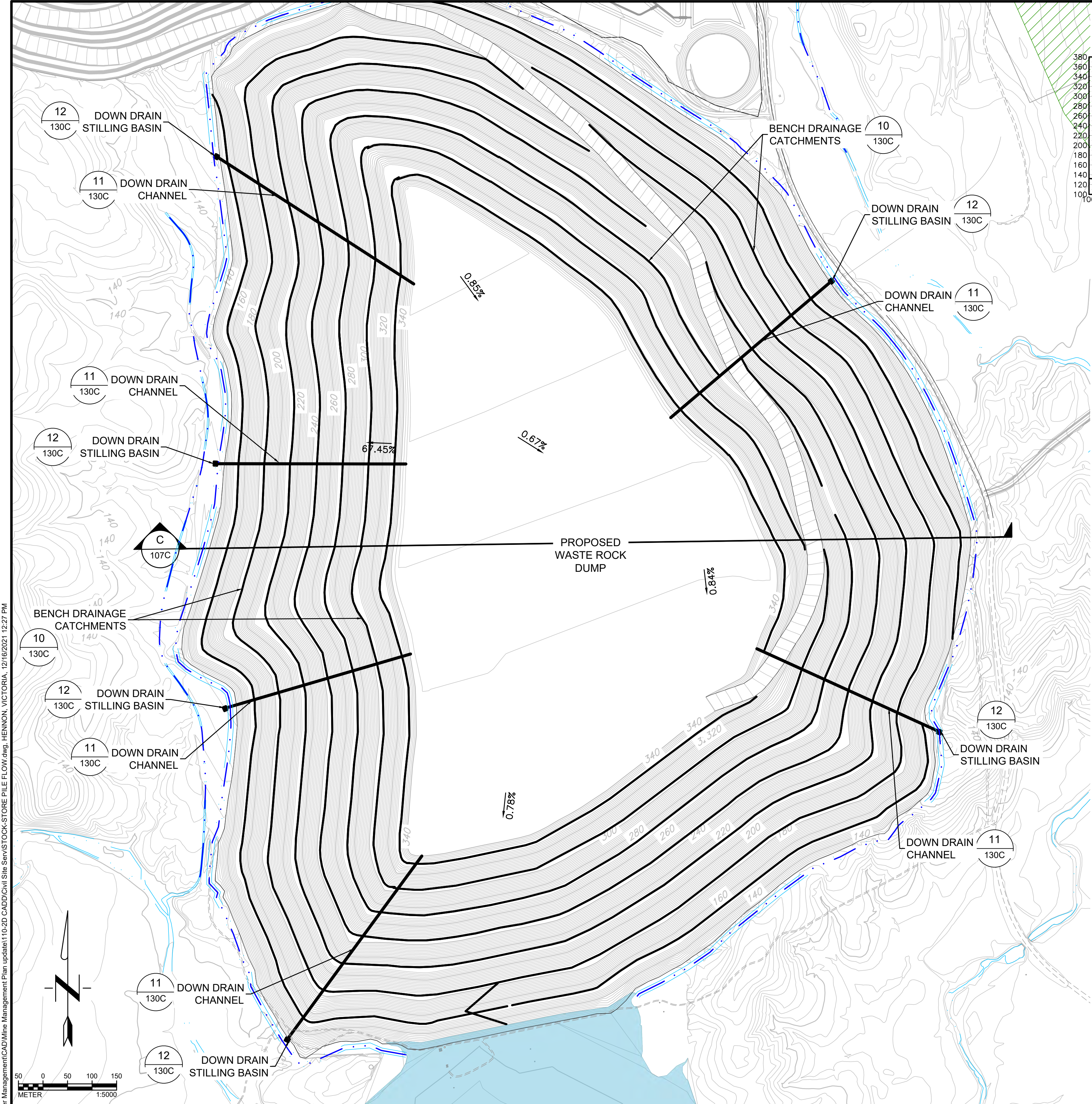


TSF1 Runoff Volume by Bench						
Bench	Footprint Area (ha)	Exposed Finished Area (ha)	Runoff Coefficient	100 YR-Rainfall intensity (mm/hr)	Runoff by Bench (m³/s)	Total Runoff (m³/s)
Crown	41.06	41.06	0.33	95	3.58	3.58

TSF1 Draindown Channel HEC-RAS Model Output						
Location	Flow Regime	Min. Channel El. (m)	W.S.E (m)	Channel Depth (m)	Freeboard (m)	Channel Velocity (m/s)
Top of TSF1	100-Year Flow	167.75	168.41	0.66	0.59	1.63
Beginning of Draindown Channel	100-Year Flow	167.63	168.19	0.56	0.69	2.03
Entering Stilling Basin	100-Year Flow	123.07	123.84	0.77	0.48	1.32
Stilling basin	100-Year Flow	122.32	123.89	1.57	-0.32	0.46
Stilling basin	100-Year Flow	122.32	123.89	1.57	-0.32	0.46
Exiting to Environment	100-Year Flow	123.07	123.77	0.7	0.55	1.5

P:\01280200-012899-1\007075 Site-View Water Management\CADD\Site Management Plan update\110-2D CAD\Civil Site Serv\STOCK-STOCK-STORE FILE FLOW.dwg - HENNON, VICTORIA, 12/16/2021 12:28 PM

<p>ENGINEER'S SEAL</p> <p style="text-align: center;">PRELIMINARY DRAWING</p> <p style="text-align: center;">NOT ISSUED FOR CONSTRUCTION</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Rev</th> <th>Description</th> <th>BY</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>▲</td> <td>2021 FEASIBILITY STUDY</td> <td>VH</td> <td>12/16/2021</td> </tr> <tr> <td>▲</td> <td>ADDRESSED 08/2017 CLIENT COMMENTS</td> <td>DF</td> <td>11/03/2017</td> </tr> <tr> <td>▲</td> <td>PRELIMINARY DESIGN ISSUED FOR REVIEW</td> <td>JC</td> <td>05/12/2017</td> </tr> <tr> <td>▲</td> <td>PRELIMINARY DESIGN</td> <td>CC</td> <td>04/21/2017</td> </tr> </tbody> </table>	Rev	Description	BY	Date	▲	2021 FEASIBILITY STUDY	VH	12/16/2021	▲	ADDRESSED 08/2017 CLIENT COMMENTS	DF	11/03/2017	▲	PRELIMINARY DESIGN ISSUED FOR REVIEW	JC	05/12/2017	▲	PRELIMINARY DESIGN	CC	04/21/2017	<p>Scale: AS SHOWN</p> <p>Designed by: CC Drawn by: VH Checked by: VS Approved by: VS</p> <p>Issued by:</p>	<p>Issued by:</p> <div style="text-align: center;"> VISTA GOLD </div>	<div style="text-align: center;"> TETRA TECH </div> <p style="font-size: small;">350 Indiana Street, Suite 500 Golden, Colorado 80401 (303) 217-5700 (303) 217-5705 fax</p>	<p style="text-align: center;">SURFACE WATER MANAGEMENT PLAN PROPOSED TAILINGS STORAGE FACILITY 1 DRAINAGE PLAN</p> <p style="text-align: center;">▲ D REVISION</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Project: 2021 MT TODD FEASIBILITY STUDY DRAINAGE DESIGN</td> <td>Project no.: 200-01299-21007</td> <td rowspan="2" style="text-align: center; vertical-align: middle;">4520-DC-105C</td> </tr> <tr> <td>Location: NORTHERN TERRITORY, AUSTRALIA</td> <td>Date: 12/16/2021</td> </tr> </table> <p style="text-align: right; font-size: small;">SHEET 6 OF 34</p>	Project: 2021 MT TODD FEASIBILITY STUDY DRAINAGE DESIGN	Project no.: 200-01299-21007	4520-DC-105C	Location: NORTHERN TERRITORY, AUSTRALIA	Date: 12/16/2021
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Location: NORTHERN TERRITORY, AUSTRALIA	Date: 12/16/2021																													



PROPOSED CLOSURE
WASTE ROCK DUMP SECTION
SCALE: H:1:5000 V:1:5000

Bench	Footprint Area (ha)	Exposed Finished Area (ha)	Runoff Coefficient	100 YR-Rainfall Intensity (mm/hr)	Runoff by Bench (m ³ /s)	Total Runoff (m ³ /s)
1	70.24	3.68	0.33	95	0.32	6.12
2	66.55	6.16	0.33	95	0.54	5.80
3	60.40	5.54	0.33	95	0.48	5.26
4	54.85	5.18	0.33	95	0.45	4.78
5	49.68	4.58	0.33	95	0.40	4.33
6	45.09	3.49	0.33	95	0.30	3.93
Crown	41.60	41.60	0.33	95	3.63	3.63

Location	Flow Regime	Min. Channel El. (m)	W.S.E (m)	Channel Depth (m)	Freeboard (m)	Channel Velocity (m/s)
Crown	100-Year Flow	346.88	347.45	0.57	0.68	2.04
Beginning of Draindown Channel	100-Year Flow	346.75	347.23	0.48	0.77	2.52
Beginning of Bench 7	100-Year Flow	328.89	329.55	0.66	0.59	1.64
End of Bench 7	100-Year Flow	328.75	329.32	0.57	0.68	2.04
Beginning of Bench 6	100-Year Flow	298.9	299.59	0.69	0.56	1.67
End of Bench 6	100-Year Flow	298.75	299.34	0.59	0.66	2.08
Beginning of Bench 5	100-Year Flow	268.91	269.64	0.73	0.52	1.71
End of Bench 5	100-Year Flow	268.75	269.38	0.63	0.62	2.12
Beginning of Bench 4	100-Year Flow	238.91	239.68	0.77	0.48	1.76
End of Bench 4	100-Year Flow	238.75	239.41	0.66	0.59	2.17
Beginning of Bench 3	100-Year Flow	208.92	209.72	0.8	0.45	1.81
End of Bench 3	100-Year Flow	208.75	209.45	0.7	0.55	2.22
Beginning of Bench 2	100-Year Flow	178.92	179.77	0.85	0.4	1.86
End of Bench 2	100-Year Flow	178.75	179.49	0.74	0.51	2.27
Beginning of Bench 1	100-Year Flow	148.91	149.78	0.87	0.38	1.89
End of Bench 1	100-Year Flow	148.75	149.51	0.76	0.49	2.3
Entering Stilling Basin	100-Year Flow	144.96	145.24	0.28	0.97	8.51
Edge of Stilling Basin	100-Year Flow	144.33	145.89	1.56	-0.31	0.78
Stilling basin	100-Year Flow	143.58	145.91	2.33	-1.08	0.46
Stilling basin	100-Year Flow	143.58	145.91	2.33	-1.08	0.46
Exiting to Environment	100-Year Flow	144.83	145.75	0.92	0.33	1.73

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ADDRESS	08/2017 CLIENT COMMENTS	DF	11/03/2017
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SURFACE WATER MANAGEMENT PLAN
PROPOSED WASTE ROCK DUMP
DRAINAGE PLAN

Project: 2021 MT TODD FEASIBILITY STUDY DRAINAGE DESIGN
Project no.: 200-01299-21007
Location: NORTHERN TERRITORY, AUSTRALIA
Date: 12/16/2021

4520-DC-107C
SHEET 8 OF 34