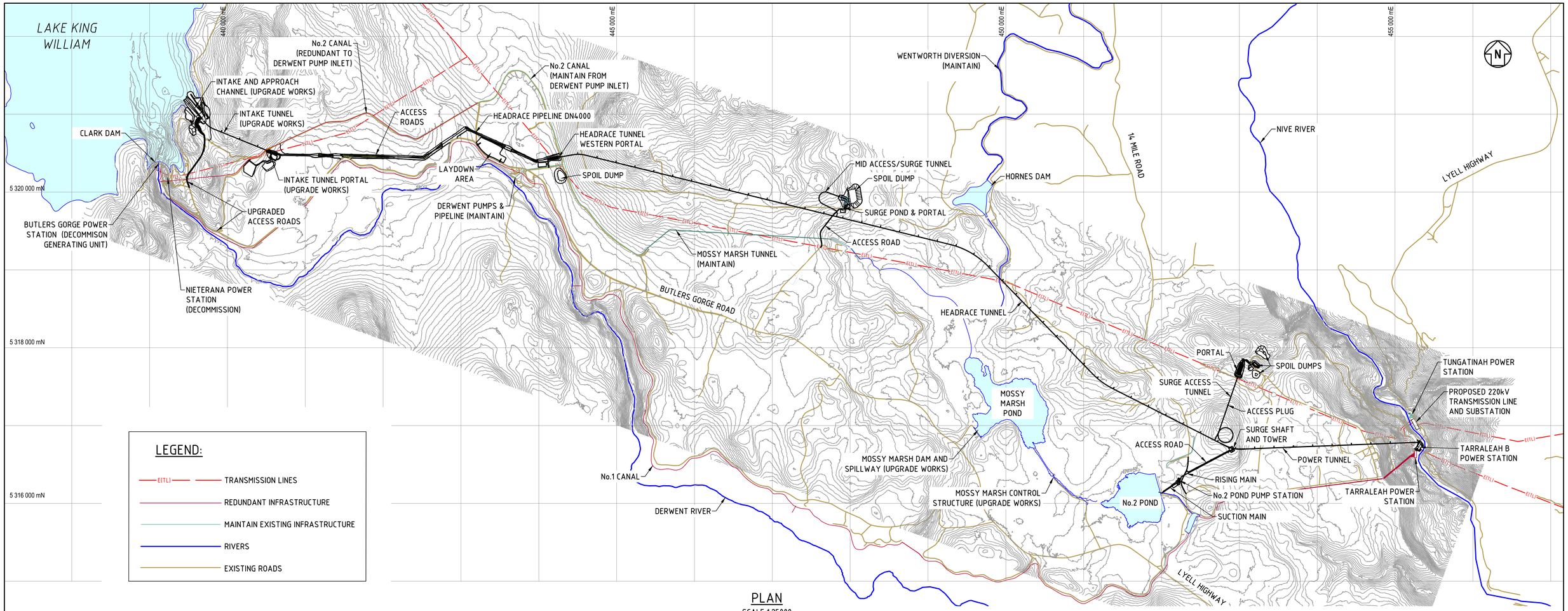
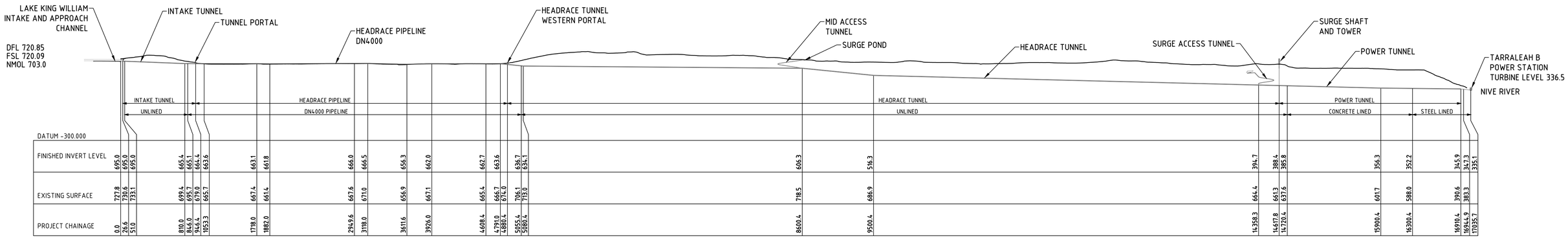
Appendix K

Structural Designs and Layouts

Hydro Tasmania



PLAN
SCALE 1:25000



CHAINAGE REFERENCES			
	PROJECT CHAINAGE	HEADRACE PIPELINE CHAINAGE	HEADRACE/POWER TUNNEL CHAINAGE
FRONT OF INTAKE STRUCTURE	0.000		
START OF HEADRACE PIPELINE	846.010	0.000	
HEADRACE TUNNEL PORTAL	4880.427	4034.417	-20.000
HEADRACE TUNNEL ZERO CHAINAGE	4900.427	4054.417	0.000
CENTRELINE OF SURGE CHAMBER (START OF POWER TUNNEL)	14617.805		9717.378
END OF POWER TUNNEL	16910.427		12010.000

LONGITUDINAL SECTION
SCALE 1:25000

500 250 0 500 1000 1500m

DATUMS: MGA2020Z55 AHD83 SCALE 1: 25000

NOTE:
1. ALL CHAINAGES ARE IN GRID METRES
2. ELEVATIONS, LEVELS, FULL SUPPLY LEVEL (FSL), DESIGN FLOOD LEVEL (DFL), NORMAL MIMIMUM OPERATING LEVEL (NMOL) ARE IN METRES AHD 1983.

ALTERATIONS

REV	DRN	CHK'DSGN	APPR'D DATE
X2	HT	HT	01/5/2023
HEADRACE AND POWER TUNNEL NORTHERN ALIGNEMENT AND POWER STATION SWITCHYARD SITE ADOPTED			
X3	HT	HT	23/7/2024
ALIGNMENT UPDATED FOR ISSUE FOR RFP			
X4	HT	HT	14/8/2024
UPDATES FOR REFERENCE DESIGN ISSUE			

NOT FOR CONSTRUCTION
REFERENCE DESIGN
PRINT DATE: 8/07/2024 1:16:18 PM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

A22817	DERWENT CATCHMENT POWER DEVELOPMENTS
A5968	TARRALEAH POWER DEVELOPMENT GENERAL ARRANGEMENT
TARDEV-HYD-SUR-XX-DR-C-0001	TARRALEAH REDEVELOPMENT POWER SCHEME REFERENCE POINTS

REPR'D FROM –

DRAWN	PO/SB
CHECKED	RJ/JC
DESIGNED	RJ
CHECKED	RVDK
APPROVED	ES/GB
DATE	–
HT AGREED	–
HT ACCEPTED	–

REV –

Hydro Tasmania

CLIENT HYDRO TASMANIA

TITLE TARRALEAH REDEVELOPMENT
GENERAL ARRANGEMENT
PROJECT-WIDE SCHEMATIC
PLAN AND LONGITUDINAL SECTION

SCALE AS SHOWN

DRAWING TARDEV-HYD-AGA-XX-DR-C-0001 REV. X4 SIZE A1

FILENAME: C:\12DS\DATA\HDIPRO12DSA01\H-0150005_TARRALEAH_REDEV_6414_WORK AND TECHNICAL\4.2_CADD\4.2.2_DRAWING\DWG\TARDEV) REDEVELOPMENT\TARDEV-HYD-AGA-XX-DR-C-0001.DWG

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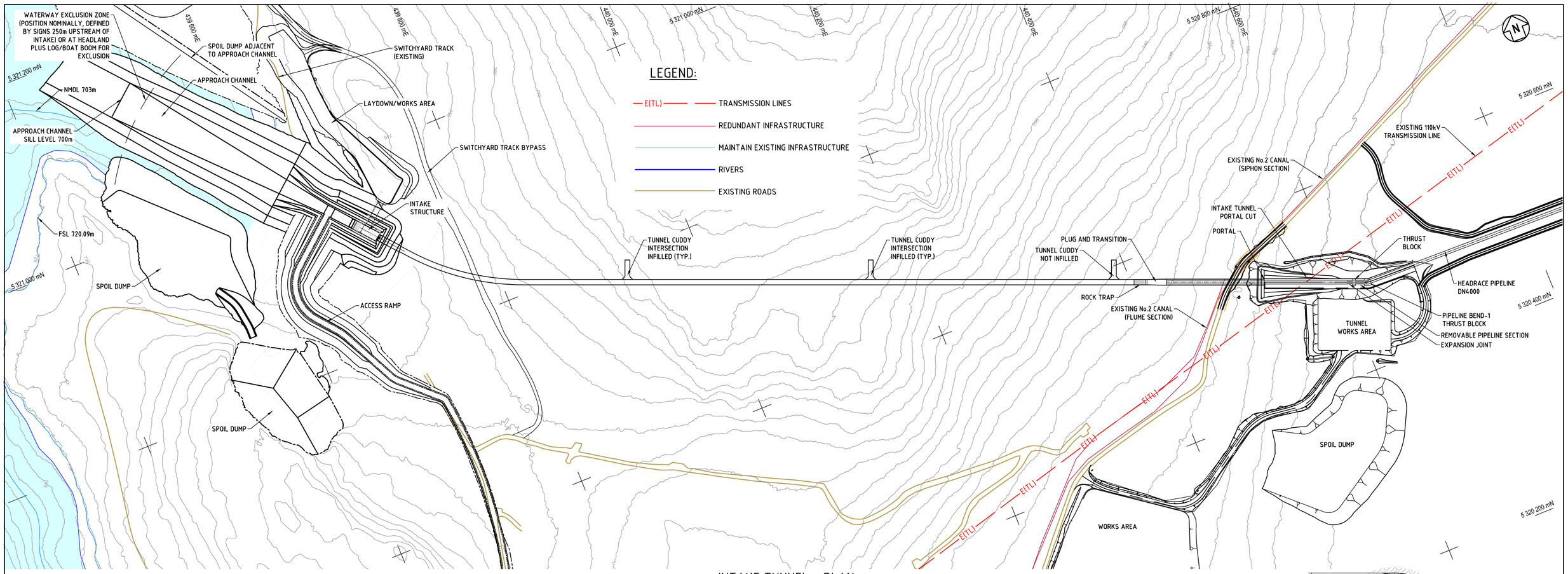
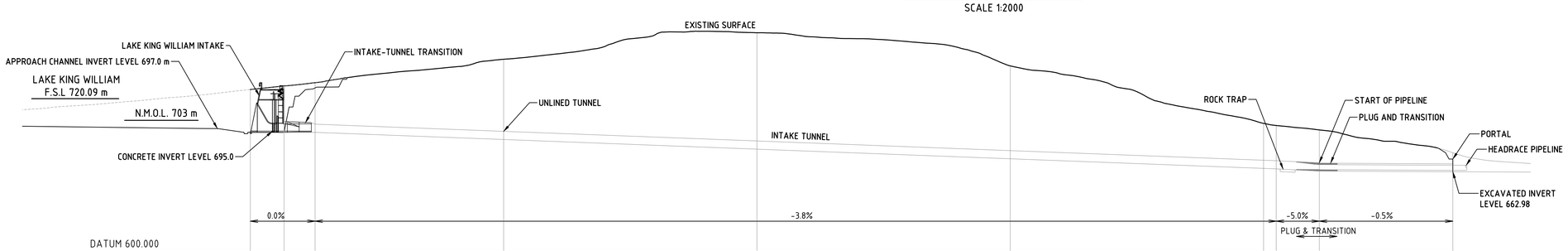


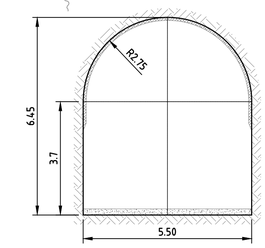
INTAKE TUNNEL - PLAN
SCALE 1:2000



DATUM 600.000

EXCAVATED TUNNEL INVERT LEVEL	694.00	694.00	694.20	688.36	680.77	673.18	665.59	665.21	663.51	662.98
EXISTING SURFACE	721.8	730.6	733.2	751.6	772.5	746.4	701.1	699.4	695.9	678.0
DEPTH TO EXCAVATED TUNNEL LEVEL	-33.8	-36.6	-39.2	-63.3	-91.7	-73.2	-35.5	-34.2	-32.4	-15.0
CHAINAGE	0.00	26.60	51.10	200.00	400.00	600.00	800.00	810.00	844.00	949.44

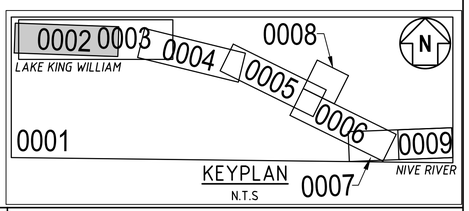
INTAKE TUNNEL - SECTION
SCALE 1:2000



TYPICAL INTAKE TUNNEL PROFILE
SCALE 1:100 (A1)

2 1 0 2 4 6 8 10m
DATUMS: MGA2020Z55 AHD83 SCALE 1:100
40 20 0 40 80 120 160 200m
SCALE 1:2000

NOTE:
1. ALL DIMENSIONS, CHAINAGES ARE IN m AND ELEVATIONS, LEVELS, FULL SUPPLY LEVEL (FSL), DESIGN FLOOD LEVEL (DFL), NORMAL MINIMUM OPERATING LEVEL (NMOL) ARE IN m AHD 1983.



KEYPLAN
N.T.S

ALTERATIONS				
HEADRACE AND POWER TUNNEL NORTHERN ALIGNMENT AND POWER STATION SWITCHYARD SITE ADOPTED	REV X2	DRN HT	CHK/DSGN HT	APPD / DATE HT 17/5/2023
ALIGNMENT UPDATED FOR ISSUE FOR RFP	REV X3	DRN HT	CHK/DSGN HT	APPD / DATE HT 22/12/2024
UPDATES FOR REFERENCE DESIGN ISSUE	REV X4	DRN HT	CHK/DSGN HT	APPD / DATE HT 14/6/2024

NOT FOR CONSTRUCTION
REFERENCE DESIGN
PRINT DATE: 14/06/2024 1:26:32 PM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES	
TARDEV-HYD-AGA-XX-DR-C0001	TARRALEAH REDEVELOPMENT PROJECT WIDE SCHEMATIC
TARDEV-HYD-SUR-XX-DR-C-0001 A1678	TARRALEAH REDEVELOPMENT POWER SCHEME REFERENCE POINTS
A1625	TARRALEAH POWER DEVELOPMENT NO. 2 CANAL GENERAL ARRANGEMENT PLAN, PROFILE & SECTIONS SHEET 1 OF 2 TARRALEAH POWER DEVELOPMENT NO.2 CANAL GENERAL ARRANGEMENT TYPICAL SECTIONS OF MAJOR STRUCTURES SHEET 2 OF 2

REPRO FROM – REV –

DRAWN	PO/SB
CHECKED	RJ/JC
DESIGNED	RJ
CHECKED	RVDK
APPROVED	ES/GB
DATE	–
HT AGREED	–
HT ACCEPTED	–

Hydro Tasmania

CLIENT HYDRO TASMANIA

TITLE TARRALEAH REDEVELOPMENT
GENERAL ARRANGEMENT
INTAKE AND INTAKE TUNNEL
PLAN AND LONGITUDINAL SECTION

SCALE 1:100 1:2000

DRAWING TARDEV-HYD-AGA-XX-DR-C-0002 REV X4 SIZE A1

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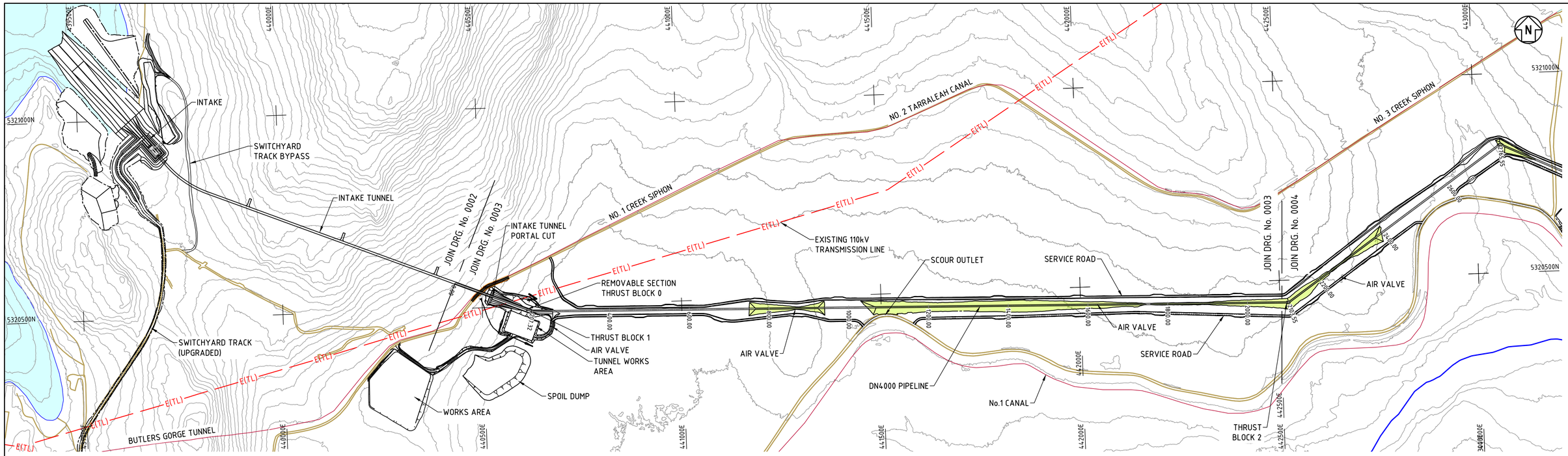

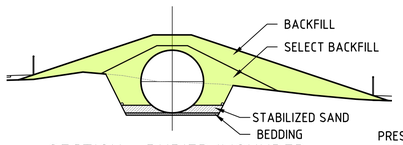

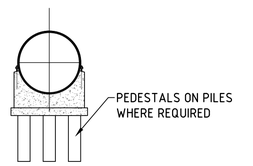

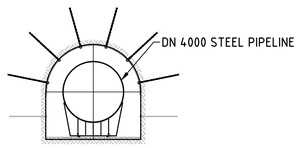

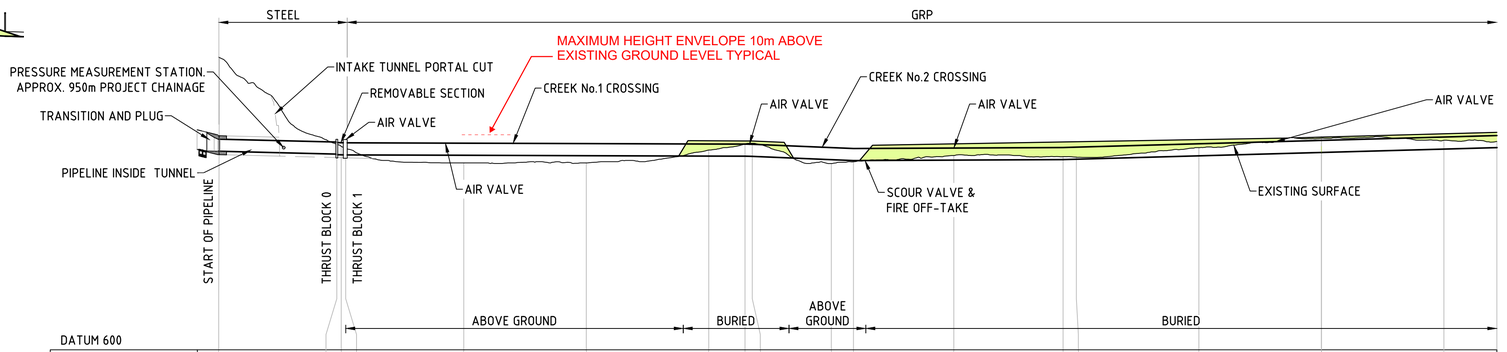

PLAN

SCALE 1:5000 (A1)

SECTION - BURIED/MOUNDED

SCALE 1:200 (A1)

SECTION - ABOVE GROUND

SCALE 1:200 (A1)

TYPICAL PIPE WITHIN INTAKE TUNNEL PROFILE

SCALE 1:200 (A1)

DATUM 600

SPRINGLINE LEVEL	666.60		665.62	665.58	665.46	665.33	665.20	665.16	665.10	664.02	663.72	663.88	664.04	664.16	665.27	666.38	667.48	667.96
EXISTING SURFACE	695.5		666.4	665.7	661.0	661.0	665.2	667.2	667.4	660.8	661.4	663.4	663.0	662.9	666.0	669.0	668.4	668.0
DEPTH TO SPRINGLINE	-28.9		-0.8	-0.1	4.5	4.3	-0.0	-2.1	-2.3	3.2	2.3	0.5	1.0	1.3	-0.7	-2.6	-0.9	-0.0
PIPELINE CHAINAGE	0.00	192.82	200.00	207.32	400.00	600.00	800.00	859.12	870.92	1000.00	1036.12	1200.00	1378.32	1400.00	1600.00	1800.00	2000.00	2086.40

PROJECT CHAINAGE 846.01

LONGITUDINAL SECTION - HEADRACE PIPELINE - DN4000

HOR. SCALE 1:5000 (A1) VER. SCALE 1:1000 (A1)

LEGEND:

— E(TL) — —	TRANSMISSION LINES
—	REDUNDANT INFRASTRUCTURE
—	MAINTAIN EXISTING INFRASTRUCTURE
—	RIVERS
—	EXISTING ROADS
🟩	BURIED/MOUNDED PIPE
▨	CONCRETE

DATUMS: MGA2020Z55 AHD83

NOTE:

1. ALL DIMENSIONS, CHAINAGES ARE IN m AND ELEVATIONS, LEVELS, FULL SUPPLY LEVEL (FSL), DESIGN FLOOD LEVEL (DFL), NORMAL MINIMUM OPERATING LEVEL (NMOL) ARE IN m AHD 1983.

KEYPLAN

N.T.S

ALTERATIONS

REV	DRN	CHK/DSGN	APPD / DATE	
X2	HT	HT	HT 17/5/2023	HEADRACE AND POWER TUNNEL NORTHERN ALIGNEMENT AND POWER STATION SWITCHYARD SITE ADOPTED
X3	HT	HT	HT 22/2/2024	ALIGNMENT UPDATED FOR ISSUE FOR RFP
X4	HT	HT	HT 14/6/2024	UPDATES FOR REFERENCE DESIGN ISSUE

NOT FOR CONSTRUCTION
REFERENCE DESIGN
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ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

TARDEV-HYD-AGA-XX-DR-C0001	TARRALEAH REDEVELOPMENT PROJECT WIDE SCHEMATIC
TARDEV-HYD-SUR-XX-DR-C-0001	TARRALEAH REDEVELOPMENT POWER SCHEME REFERENCE POINTS
A1678	TARRALEAH POWER DEVELOPMENT NO. 2 CANAL GENERAL ARRANGEMENT PLAN, PROFILE & SECTIONS SHEET 1 OF 2
A1625	TARRALEAH POWER DEVELOPMENT NO.2 CANAL GENERAL ARRANGEMENT TYPICAL SECTIONS OF MAJOR STRUCTURES SHEET 2 OF 2

REPR'D FROM –
REV –

DRAWN	RO/SB
CHECKED	RJ/JC
DESIGNED	RJ
CHECKED	RVDK
APPROVED	EB/GB
DATE	-
HT AGREED	-
HT ACCEPTED	-

Hydro Tasmania

-
-
-

CLIENT HYDRO TASMANIA

TITLE
TARRALEAH REDEVELOPMENT
GENERAL ARRANGEMENT
HEADRACE PIPELINE
PLAN AND LONGITUDINAL SECTION 1

SCALE AS SHOWN

DRAWING TARDEV-HYD-AGA-XX-DR-C-0003
REV. X4
SIZE A1

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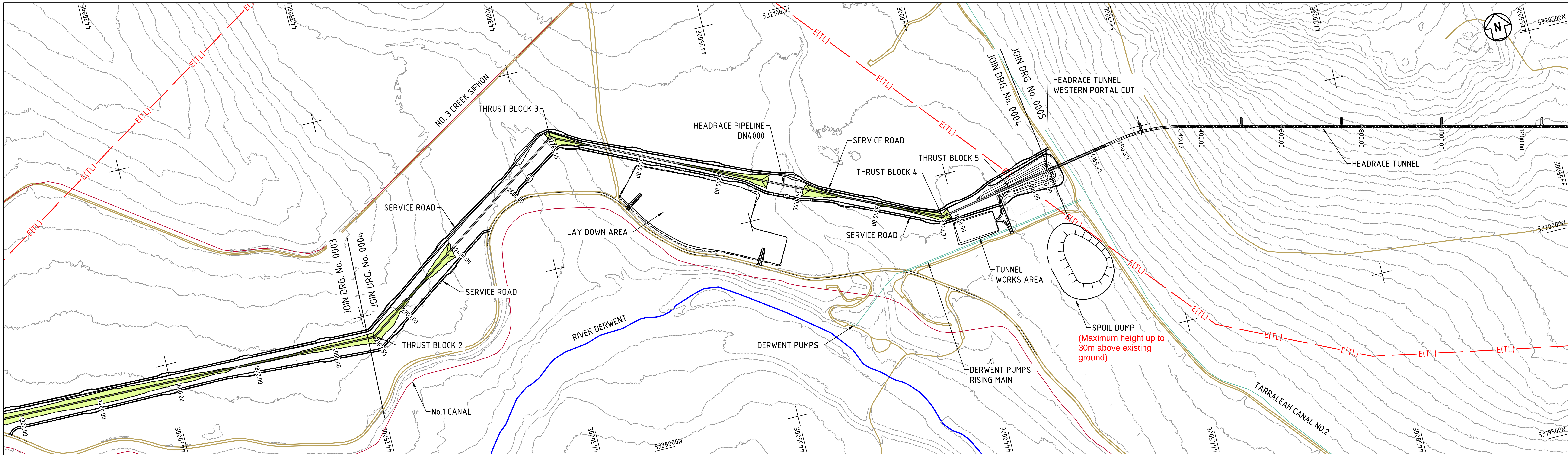
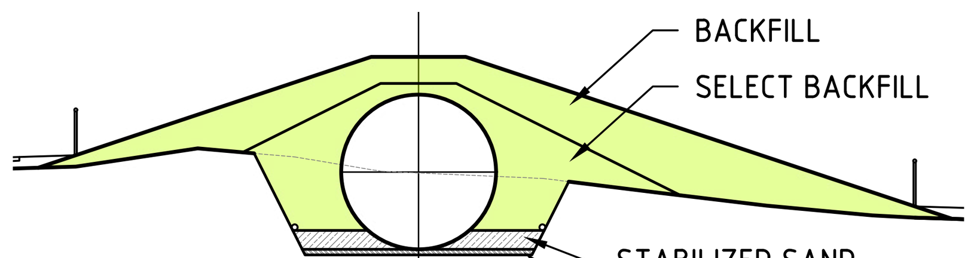


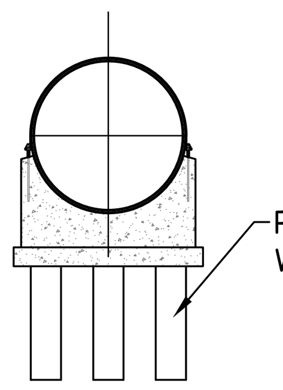
PLAN

SCALE 1:5000 (A1)



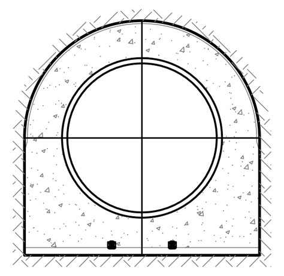
SECTION – BURIED/MOUNDED

SCALE 1:200 (A1)



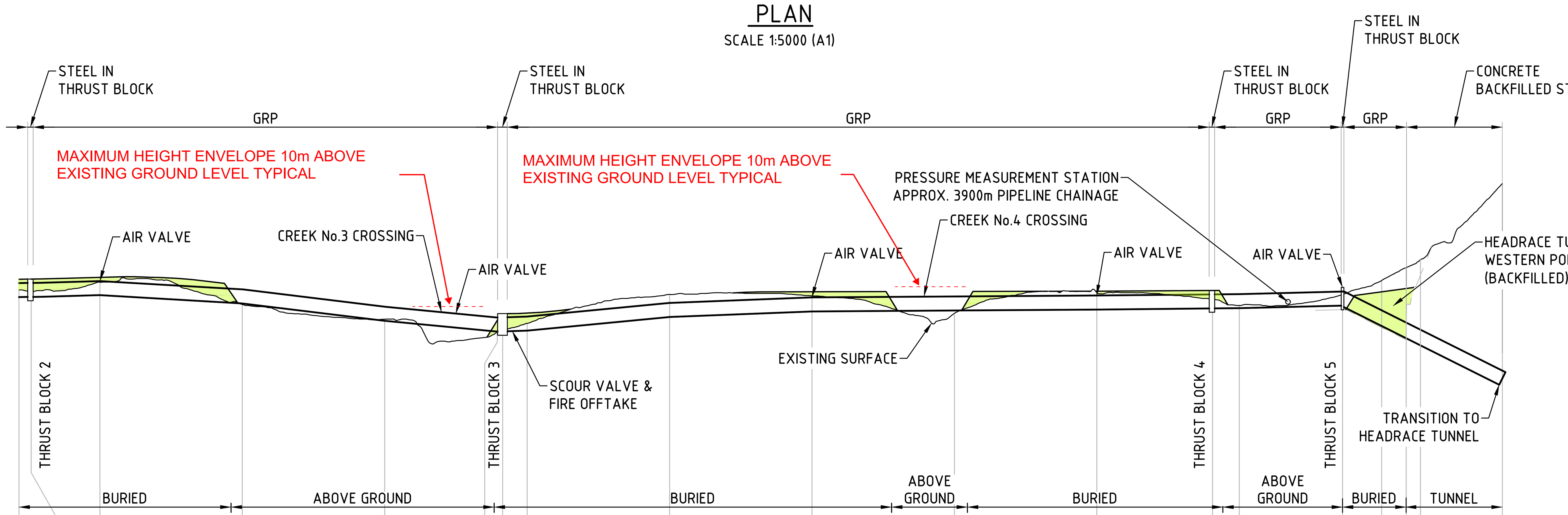
SECTION – ABOVE GROUND

SCALE 1:200 (A1)



SECTION – CONCRETE BACKFILLED IN HEADRACE TUNNEL

SCALE 1:200 (A1)



DATUM 600

SPRINGLINE LEVEL	667.96	668.00	668.50	666.18	661.29	658.25	658.25	658.53	662.36	663.92	664.18	664.45	664.663	664.85	665.56	660.06			643.12
EXISTING SURFACE	668.0	667.6	670.1	663.9	659.8	656.1	656.85	658.6	666.7	666.3	661.4	667.2	665.40	663.6	666.7	670.6	674.2	676.4	697.9
DEPTH TO SPRINGLINE	-0.0	0.4	-1.6	2.3	1.5	2.1	-1.4	-0.1	-4.4	-2.4	2.8	-2.8	0.7	1.2	-1.1	-10.6			-54.8
PIPELINE CHAINAGE	2086.40	2103.55	2200.00	2400.00	2600.00	2758.10	2765.56	2800.00	3000.00	3200.00	3400.00	3600.00	3762.37	3800.00	3945.01	4000.00	4034.41	4054.41	4169.42

TUNNEL CHAINAGE -20.0

PROJECT CHAINAGE 4880.427m
TUNNEL CHAINAGE -20.0m
PIPELINE CHAINAGE 4034.417m

LONGITUDINAL SECTION – HEADRACE PIPELINE – DN4000

HOR. SCALE 1:5000 (A1) VER. SCALE 1:1000 (A1)

LEGEND:

- E(TL) — TRANSMISSION LINES
- REDUNDANT INFRASTRUCTURE
- MAINTAIN EXISTING INFRASTRUCTURE
- RIVERS
- EXISTING ROADS
- BURIED/MOUNDED PIPE
- CONCRETE

DATUMS: MGA2020Z55 AHD83

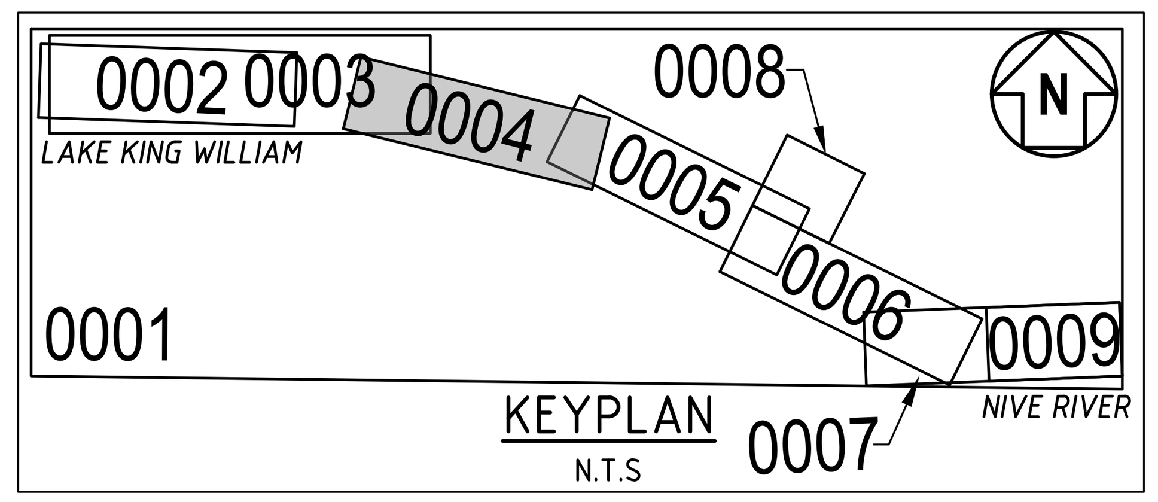
SCALE 1:200

SCALE 1:1000

SCALE 1:5000

NOTE:

1. ALL DIMENSIONS, CHAINAGES ARE IN m AND ELEVATIONS, LEVELS, FULL SUPPLY LEVEL (FSL), DESIGN FLOOD LEVEL (DFL), NORMAL MINIMUM OPERATING LEVEL (NMOL) ARE IN m AHD 1983.



KEYPLAN

N.T.S

ALTERATIONS

REV	DESCRIPTION	DRN	CHK/DSGN	APPD / DATE
X2	HEADRACE AND POWER TUNNEL NORTHERN ALIGNEMENT AND POWER STATION SWITCHYARD SITE ADOPTED	HT	HT	HT 17/5/2023
X3	ALIGNMENT UPDATED FOR ISSUE FOR RFP	HT	HT	HT 22/2/2024
X4	UPDATES FOR REFERENCE DESIGN ISSUE	HT	HT	HT 14/6/2024

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REFERENCE DESIGN
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ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

TARDEV-HYD-AGA-XX-DR-C0001	TARRALEAH REDEVELOPMENT PROJECT WIDE SCHEMATIC
TARDEV-HYD-SUR-XX-DR-C-0001	TARRALEAH REDEVELOPMENT POWER SCHEME REFERENCE POINTS
A1678	TARRALEAH POWER DEVELOPMENT NO. 2 CANAL GENERAL ARRANGEMENT PLAN, PROFILE & SECTIONS SHEET 1 OF 2
A1625	TARRALEAH POWER DEVELOPMENT NO.2 CANAL GENERAL ARRANGEMENT TYPICAL SECTIONS OF MAJOR STRUCTURES SHEET 2 OF 2
A6426	TARRALEAH POWER DEVELOPMENT PUMPING FROM DERWENT RIVER GENERAL LAYOUT AND TYPICAL SECTIONS

REPR'D FROM – REV –

DRAWN	PO/SB
CHECKED	RJ/JC
DESIGNED	RJ
CHECKED	RVDK
APPROVED	ES/GB
DATE	-
HT AGREED	-
HT ACCEPTED	-

Hydro Tasmania

CLIENT: HYDRO TASMANIA

TITLE: TARRALEAH REDEVELOPMENT
GENERAL ARRANGEMENT
HEADRACE PIPELINE
PLAN AND LONGITUDINAL SECTION 2

SCALE: AS SHOWN

DRAWING: TARDEV-HYD-AGA-XX-DR-C-0004 REV. X4 SIZE A1

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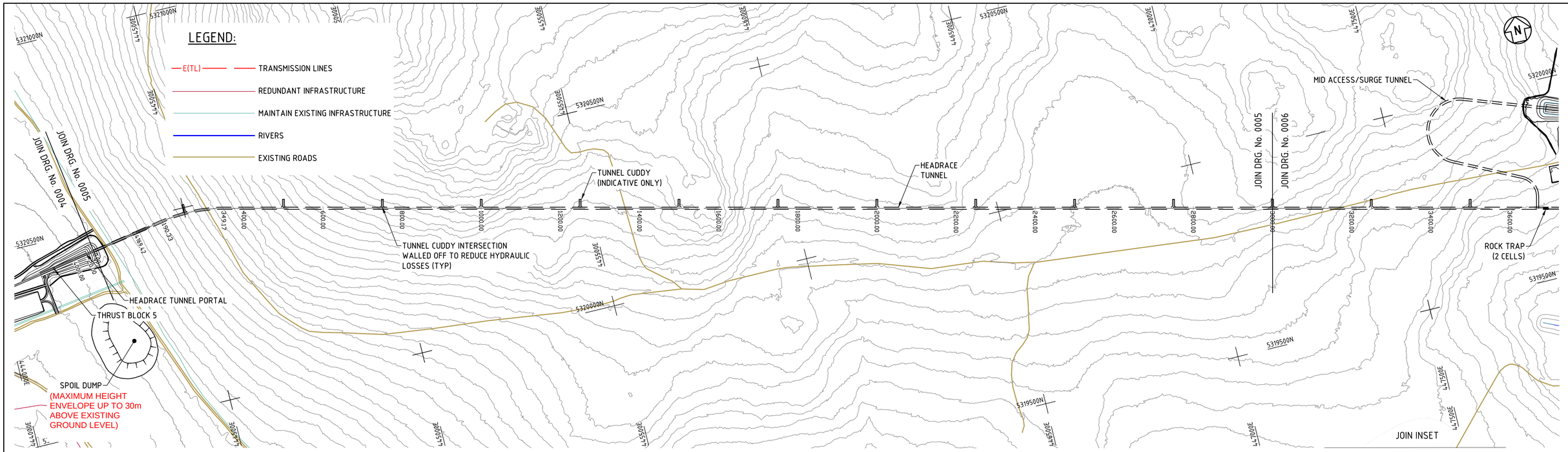
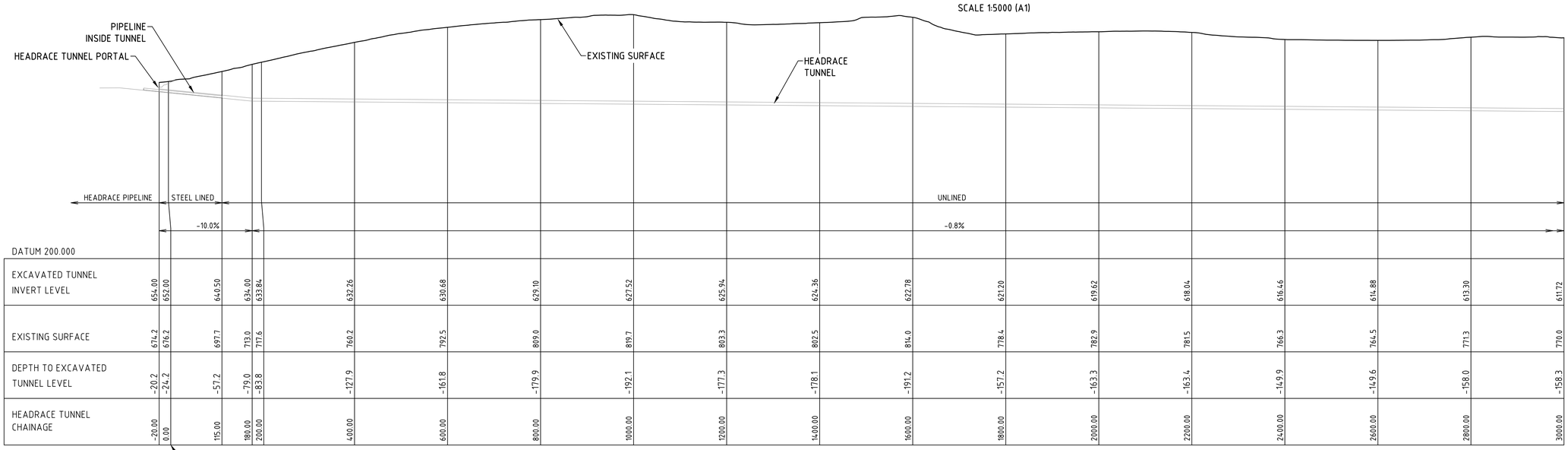


PLAN

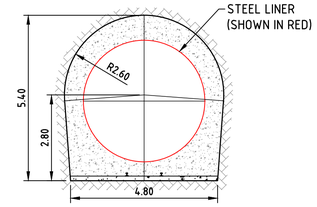
SCALE 1:5000 (A1)



DATUM 200.000																						
EXCAVATED TUNNEL INVERT LEVEL	654.00	652.00	640.50	634.00	633.84	632.26	630.68	629.10	627.52	625.94	624.36	622.78	621.20	619.62	618.04	616.46	614.88	613.30	611.72			
EXISTING SURFACE	674.2	676.2	697.7	713.0	717.6	760.2	792.5	809.0	819.7	803.3	802.5	814.0	778.4	782.9	781.5	766.3	764.5	771.3	770.0			
DEPTH TO EXCAVATED TUNNEL LEVEL	-20.2	-24.2	-57.2	-79.0	-83.8	-127.9	-161.8	-179.9	-192.1	-177.3	-178.1	-191.2	-157.2	-163.3	-163.4	-149.9	-149.6	-158.0	-158.3			
HEADRACE TUNNEL CHAINAGE	-20.00	0.00	115.00	180.00	200.00	400.00	600.00	800.00	1000.00	1200.00	1400.00	1600.00	1800.00	2000.00	2200.00	2400.00	2600.00	2800.00	3000.00			

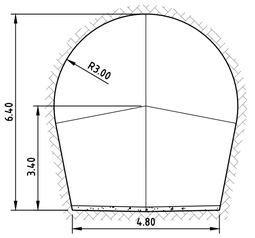
LONGITUDINAL SECTION - HEADRACE TUNNEL

HOR. SCALE 1:5000 (A1)



UPSTREAM STEEL LINED SECTION

SCALE 1:100 (A1)

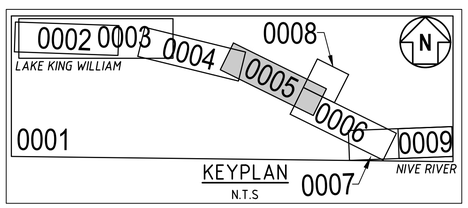


UNLINED EXCAVATION PROFILE

SCALE 1:100 (A1)

NOTE:

1. ALL DIMENSIONS ARE IN METRES
2. HORIZONTAL DATUM GDA2020, ZONE 55
3. ELEVATIONS ARE IN METRES AHD 1983
4. CHAINAGES ARE IN METRES (GRID)
5. CUDDY LOCATIONS ARE INDICATIVE ONLY



ALTERATIONS

REV	DRN	CHK'D/DES	APPD / DATE	DESCRIPTION
X4	HT	HT	14/6/2024	UPDATES FOR REFERENCE DESIGN ISSUE
X3	HT	HT	22/12/2023	ALIGNMENT UPDATED FOR ISSUE FOR RFP
X2	HT	HT	17/5/2023	HEADRACE AND POWER TUNNEL NORTHERN ALIGNMENT AND POWER STATION SWITCHYARD SITE ADOPTED

NOT FOR CONSTRUCTION
REFERENCE DESIGN
PRINT DATE: 14/06/2024 2:25:43 PM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

TARDEV-HYD-AGA-XX-DR-C0001	TARRALEAH REDEVELOPMENT PROJECT WIDE SCHEMATIC
TARDEV-HYD-SUR-XX-DR-C-0001	TARRALEAH REDEVELOPMENT POWER SCHEME REFERENCE POINTS
A1625	TARRALEAH POWER DEVELOPMENT NO.2 CANAL GENERAL ARRANGEMENT

REPR'D FROM – REV –

DRAWN	PO/SB
CHECKED	RJ/JC
DESIGNED	RJ
CHECKED	RVDK
APPROVED	ES/GB
DATE	–
HT AGREED	–
HT ACCEPTED	–

Hydro Tasmania

CLIENT: HYDRO TASMANIA

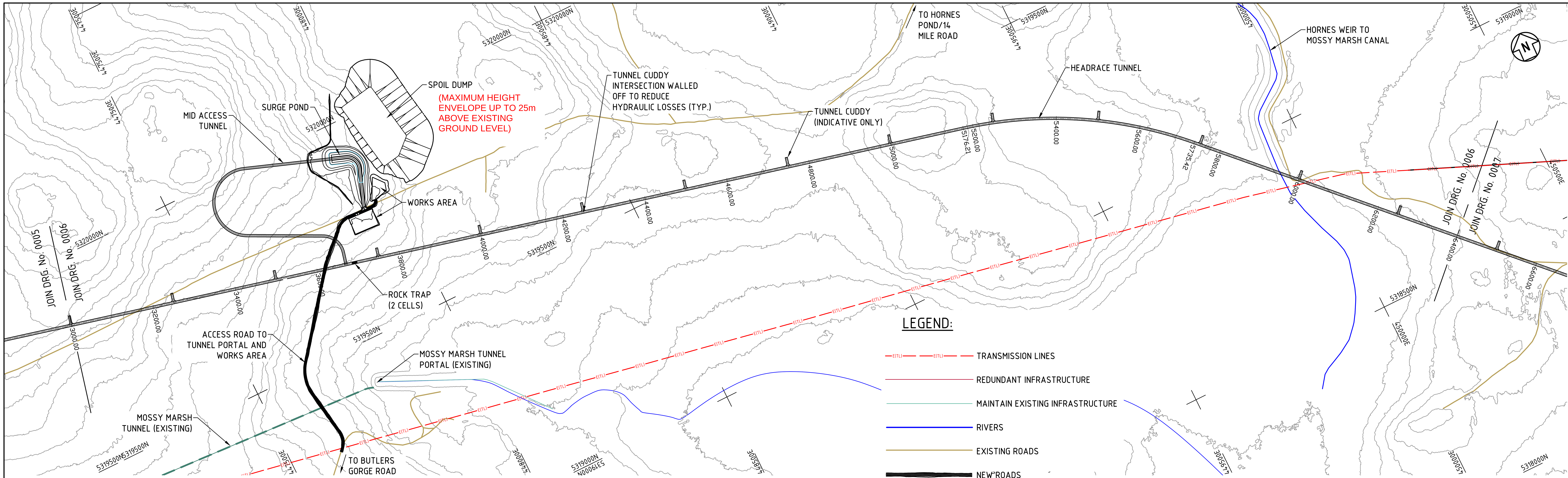
TITLE: TARRALEAH REDEVELOPMENT
GENERAL ARRANGEMENT
HEADRACE TUNNEL
PLAN AND LONGITUDINAL SECTION 1

SCALE: 1:5000

DRAWING: TARDEV-HYD-AGA-XX-DR-C-0005 | REV: X4 | SIZE: A1

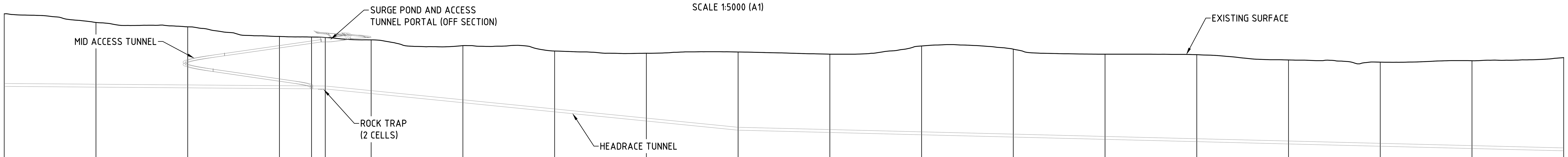
FILENAME: C:\12DS\DATA\HDIPRD12DSA01\H-0150005_TARRALEAH_REDEV_6414_WORK AND TECHNICAL\4.2_CADD\4.2.2_DRAWING\DWG\TAR(DEV) REDEVELOPMENT\TARDEV-HYD-AGA-XX-DR-C-0005.DWG

14/06/2024 2:25:43 PM



PLAN

SCALE 1:5000 (A1)



DATUM 200.000

EXCAVATED TUNNEL INVERT LEVEL	611.72	610.14	608.57	606.99	606.43	606.20	596.20	576.20	556.19	536.19	516.19	511.19	506.19	501.19	496.19	491.19	486.19	481.19	476.19	471.19
EXISTING SURFACE	770.0	751.3	741.7	720.7	719.4	718.5	713.3	700.8	688.9	684.1	686.9	682.1	699.9	693.1	682.0	680.9	669.4	664.7	667.7	674.5
DEPTH TO EXCAVATED TUNNEL LEVEL	-158.3	-141.1	-133.1	-113.7	-113.0	-112.3	-117.1	-124.6	-132.7	-147.9	-170.7	-170.9	-193.7	-191.9	-185.8	-189.8	-183.2	-183.5	-191.5	-203.3
HEADRACE TUNNE CHAINAGE	3000.00	3200.00	3400.00	3600.00	3670.00	3700.00	3800.00	4000.00	4200.00	4400.00	4600.00	4800.00	5000.00	5200.00	5400.00	5600.00	5800.00	6000.00	6200.00	6400.00

LONGITUDINAL SECTION - HEADRACE TUNNEL

HOR. SCALE 1:5000 (A1)

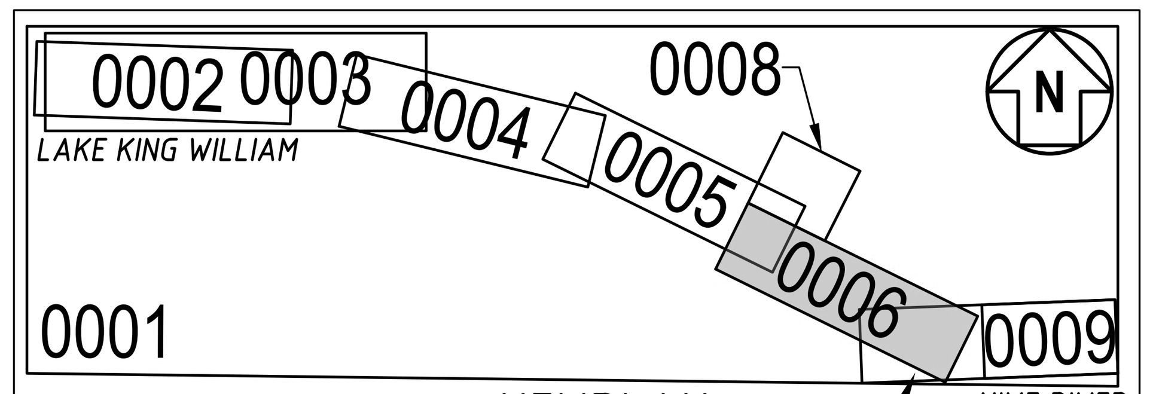
100 50 0 100 200 300 400 500m

DATUMS: MGA2020Z55 AHD83 SCALE 1:5000

NOTE:

1. ALL DIMENSIONS ARE IN METRES
2. HORIZONTAL DATUM GDA2020, ZONE 55
3. ELEVATIONS ARE IN METRES AHD 1983
4. CHAINAGES ARE IN METRES (GRID)
5. CUDDY LOCATIONS ARE INDICATIVE ONLY

FOR TUNNEL PROFILE PLEASE REFER - TARDEV-HYD-AGA-XX-DR-C-0002



KEYPLAN

N.T.S

ALTERATIONS

REV	AMENDMENT	DRN	CHK/DSGN	APPD / DATE
X2	HEADRACE AND POWER TUNNEL NORTHERN ALIGNMENT AND POWER STATION SWITCHYARD SITE ADOPTED	SB	HT	HT 07/11/2023
X3	ALIGNMENT UPDATED FOR ISSUE FOR RFP	RO	HT	HT 22/12/2024
X4	UPDATES FOR REFERENCE DESIGN ISSUE	RO	HT	HT 14/06/2024

NOT FOR CONSTRUCTION
REFERENCE DESIGN
PRINT DATE: 14/06/2024 3:41:05 PM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

TARDEV-HYD-AGA-XX-DR-C-0001	TARRALEAH REDEVELOPMENT PROJECT WIDE SCHEMATIC
TARDEV-HYD-SUR-XX-DR-C-0001	TARRALEAH REDEVELOPMENT POWER SCHEME REFERENCE POINTS
A1625	TARRALEAH POWER DEVELOPMENT No.2 CANAL GENERAL ARRANGEMENT
B1343	TARRALEAH No.2 CANAL MOSSY MARSH TUNNEL REVISED TUNNEL SECTIONS

REP'D FROM - REV -

DRAWN	RO/SB
CHECKED	RJ/JC
DESIGNED	RJ
CHECKED	RVDK
APPROVED	ES/GB
DATE	-
HT AGREED	-
HT ACCEPTED	-

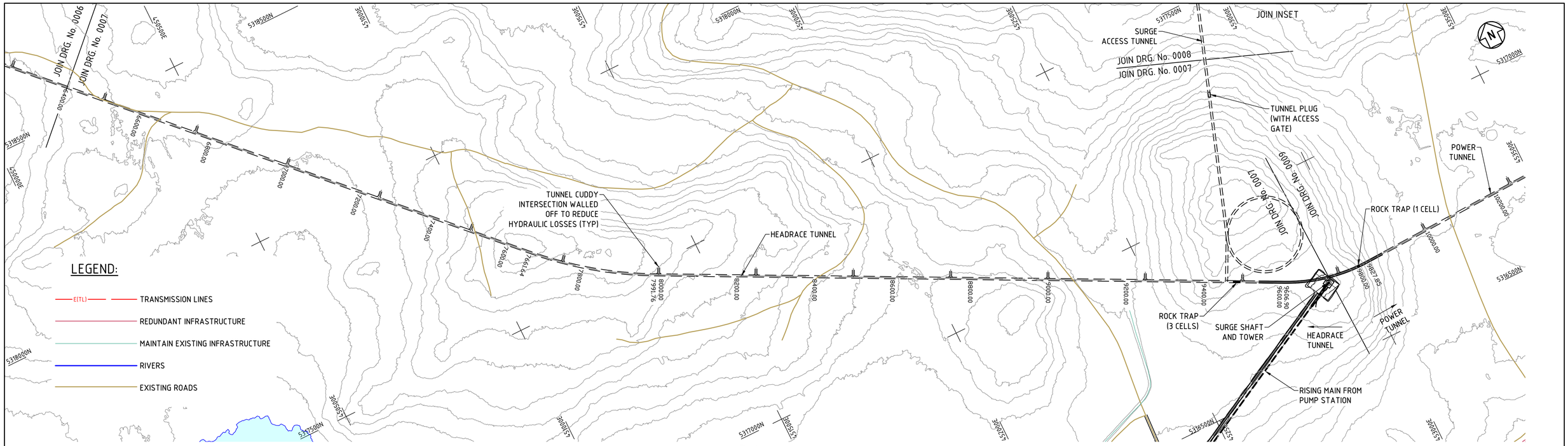
Hydro Tasmania

CLIENT: HYDRO TASMANIA

TITLE: TARRALEAH REDEVELOPMENT
GENERAL ARRANGEMENT
HEADRACE TUNNEL
PLAN AND LONGITUDINAL SECTION 2

SCALE 1:5000

DRAWING TARDEV-HYD-AGA-XX-DR-C-0006 REV X4 SIZE A1



PLAN

SCALE 1:5000 (A1)

EXCAVATED TUNNEL INVERT LEVEL	471.19	466.19	461.19	456.19	451.19	446.19	441.19	436.19	431.19	426.19	421.19	416.19	411.18	406.18	401.18	396.18	394.737	391.18	388.25
EXISTING SURFACE	674.5	681.0	681.2	675.0	675.2	686.9	710.0	702.0	693.3	680.5	665.8	655.8	656.6	647.0	637.8	663.6	664.4	656.0	661.3
DEPTH TO EXCAVATED TUNNEL LEVEL	-203.3	-214.8	-220.1	-218.8	-224.0	-240.7	-268.8	-265.8	-262.2	-254.4	-244.6	-239.6	-245.5	-240.8	-236.6	-267.4	-269.6	-264.8	-273.1
HEADRACE TUNNE CHAINAGE	6400.00	6600.00	6800.00	7000.00	7200.00	7400.00	7600.00	7800.00	8000.00	8200.00	8400.00	8600.00	8800.00	9000.00	9200.00	9400.00	9457.839	9600.00	9717.38

LONGITUDINAL SECTION - HEADRACE TUNNEL

HOR. SCALE 1:5000 (A1)

2 1 0 2 4 6 8 10m

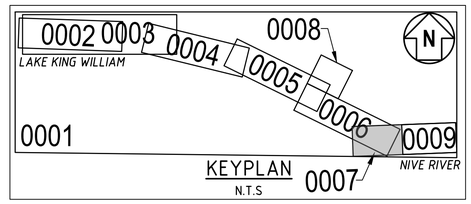
SCALE 1:100

100 50 0 100 200 300 400 500m

DATUMS: MGA2020Z55 AHD83 SCALE 1:5000

NOTE:

1. ALL DIMENSIONS ARE IN METRES
2. HORIZONTAL DATUM GDA2020, ZONE 55
3. ELEVATIONS ARE IN METRES AHD 1983
4. CHAINAGES ARE IN METRES (GRID)
5. CUDDY LOCATIONS ARE INDICATIVE ONLY



ALTERATIONS

REV	DES	CHK'D/DR	APPD / DATE
X2	HT		17/7/2023
HEADRACE AND POWER TUNNEL NORTHERN ALIGNMENT AND POWER STATION SWITCHYARD SITE ADOPTED			
X3	HT		22/2/2024
ALIGNMENT UPDATED FOR ISSUE FOR RFP			
X4	HT		16/8/2024
UPDATES FOR REFERENCE DESIGN ISSUE			

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REFERENCE DESIGN
PRINT DATE: 8/07/2024 12:46:56 PM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

TARDEV-HYD-AGA-XX-DR-C-0001	TARRALEAH REDEVELOPMENT PROJECT WIDE SCHEMATIC
TARDEV-HYD-SUR-XX-DR-C-0001	TARRALEAH REDEVELOPMENT POWER SCHEME REFERENCE POINTS
A1625	TARRALEAH POWER DEVELOPMENT NO.2 CANAL GENERAL ARRANGEMENT

REPRO FROM – REV –

DRAWN	PO/SB
CHECKED	RJ/JC
DESIGNED	RJ
CHECKED	RVDK
APPROVED	ES/GB
DATE	–
HT AGREED	–
HT ACCEPTED	–

Hydro Tasmania

CLIENT HYDRO TASMANIA

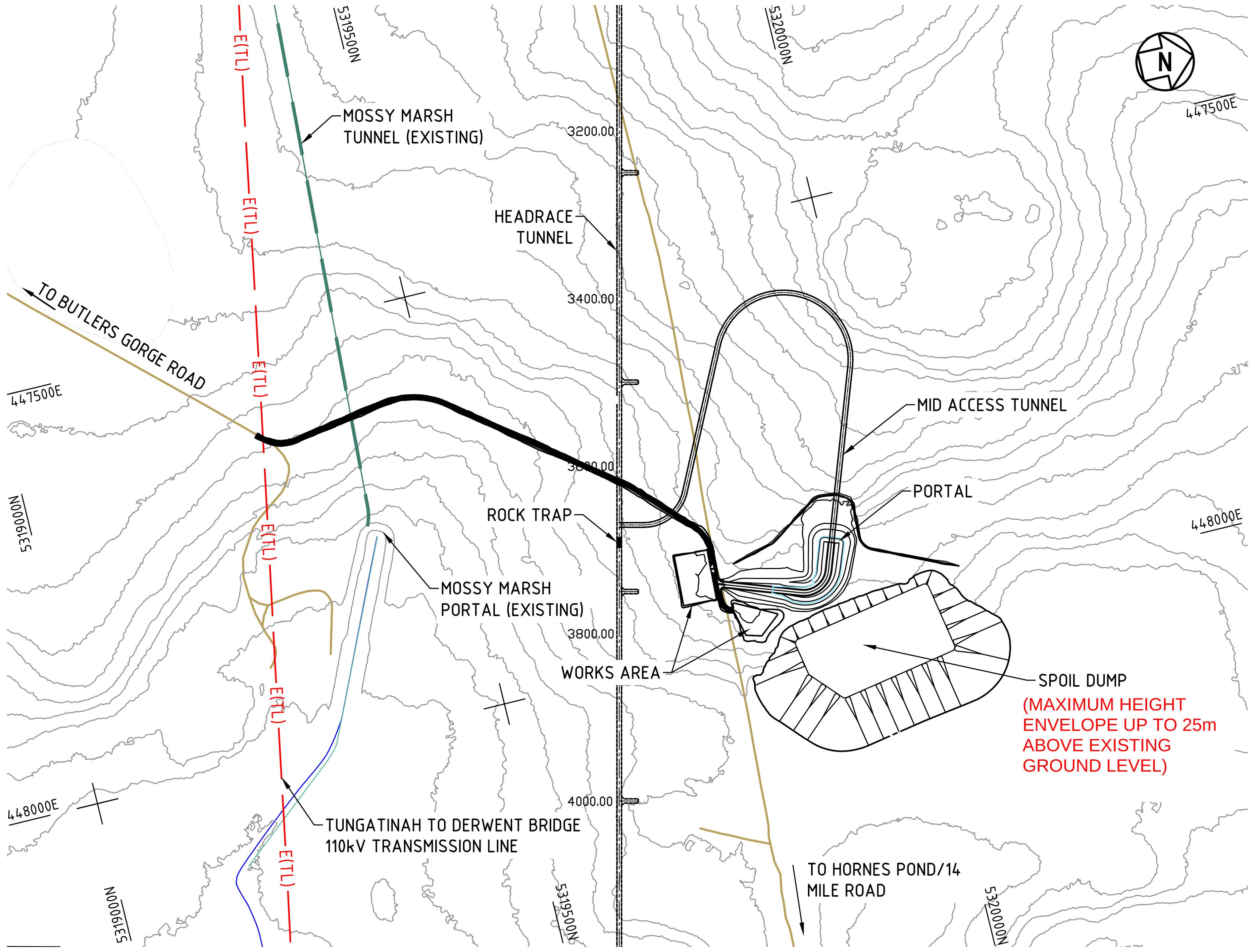
TITLE TARRALEAH REDEVELOPMENT
GENERAL ARRANGEMENT
HEADRACE TUNNEL
PLAN AND LONGITUDINAL SECTION 3

SCALE 1:100 1:5000

DRAWING TARDEV-HYD-AGA-XX-DR-C-0007 REV X4 SIZE A1

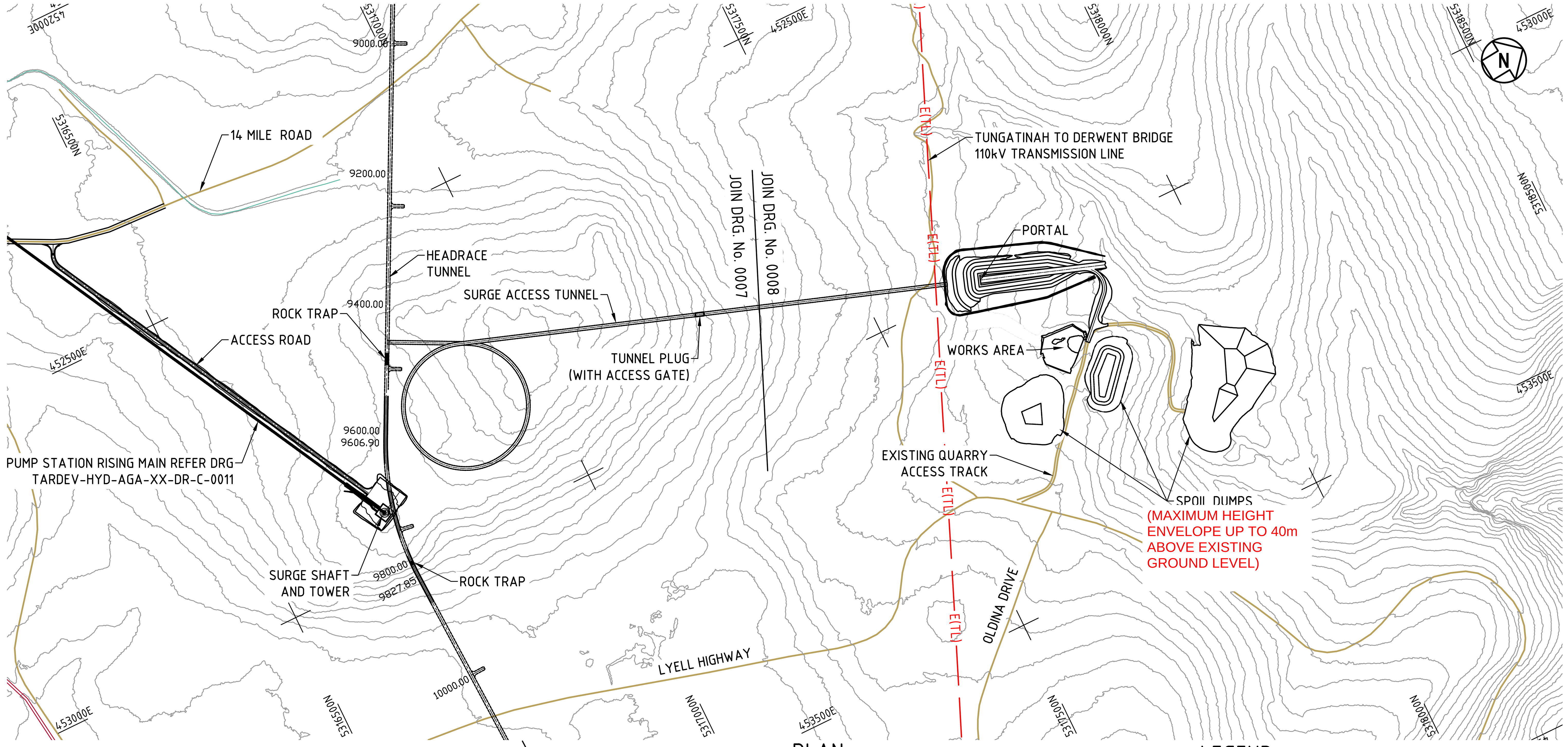
FILENAME: C:\12DS\DATA\HDIPRD12DSA01\M-0150005_TARRALEAH_REDEV__64\4_WORK AND TECHNICAL\4.2_CADD\4.2.2_DRAWING\DWG\TAR(DEV) REDEVELOPMENT\TARDEV-HYD-AGA-XX-DR-C-0007.DWG

8/07/2024 12:46:56 PM



PLAN

SCALE 1:5000 (A1)

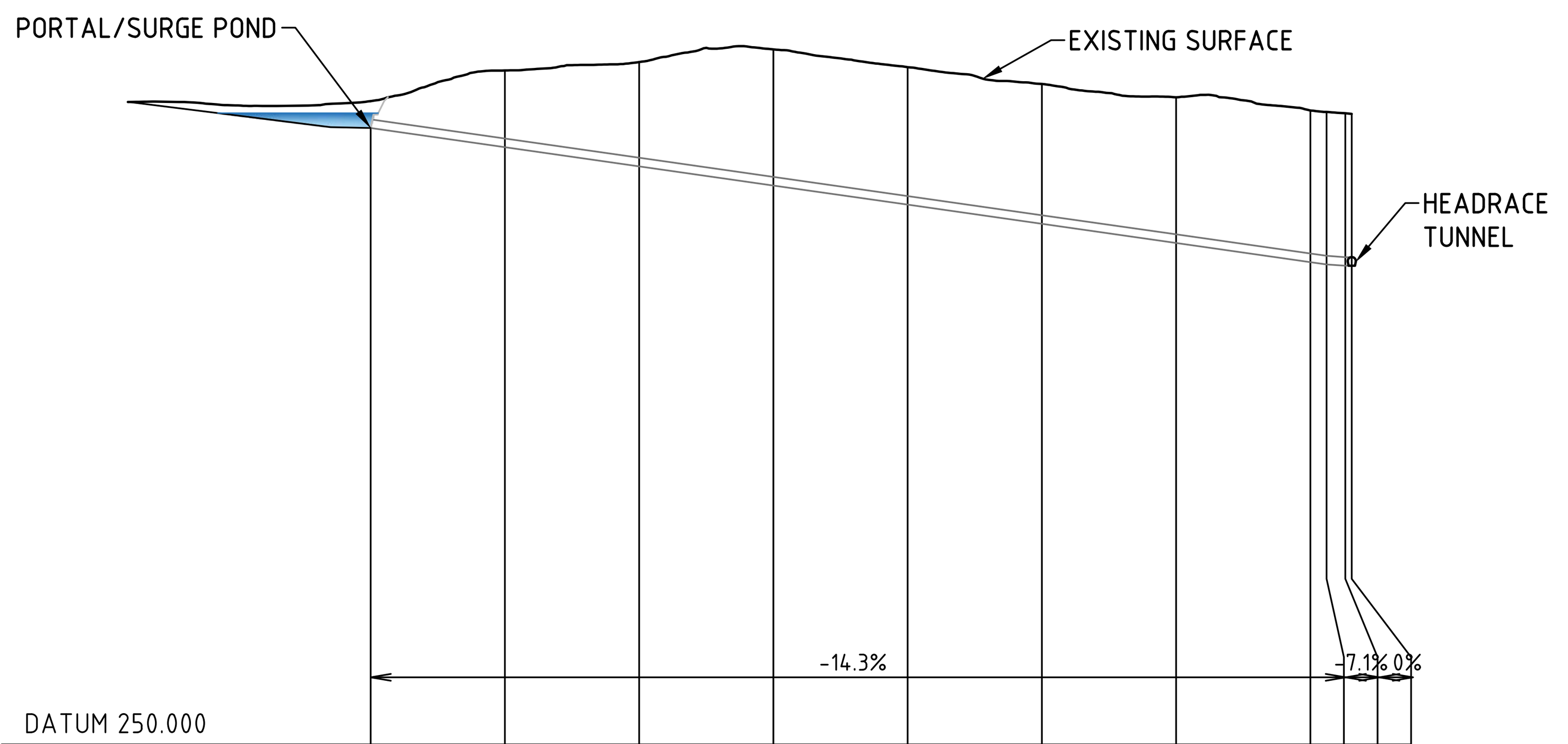


PLAN

SCALE 1:5000 (A1)

LEGEND:

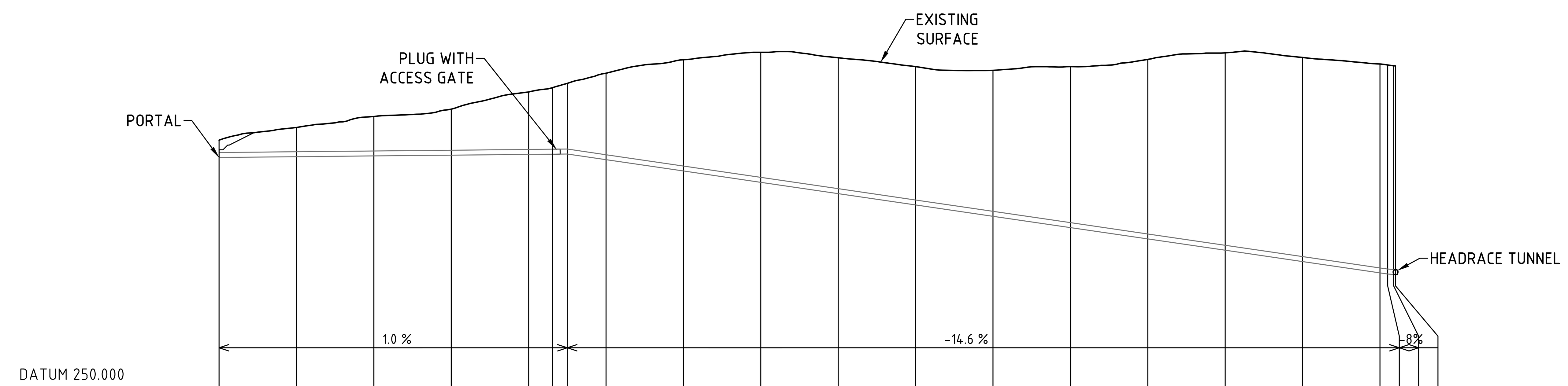
- E(TL) — TRANSMISSION LINES
- REDUNDANT INFRASTRUCTURE
- MAINTAIN EXISTING INFRASTRUCTURE
- RIVERS
- EXISTING ROADS
- NEW ROADS



EXCAVATED TUNNEL INVERT LEVEL	709.000	694.735	680.469	666.204	651.939	637.673	623.408	609.143	607.431	606.431	606.431
EXISTING SURFACE	729.1	751.8	758.1	767.5	754.3	741.8	731.9	722.1	721.0	720.0	719.5
DEPTH TO EXCAVATED TUNNEL LEVEL	-20.1	-57.1	-77.6	-101.3	-102.4	-104.1	-108.5	-112.9	-113.5	-113.6	-113.0
MID ACCESS TUNNEL CHAINAGE	0.00	100.00	200.00	300.00	400.00	500.00	600.00	700.00	712.00	726.00	730.82

LONGITUDINAL SECTION – MID-ACCESS TUNNEL

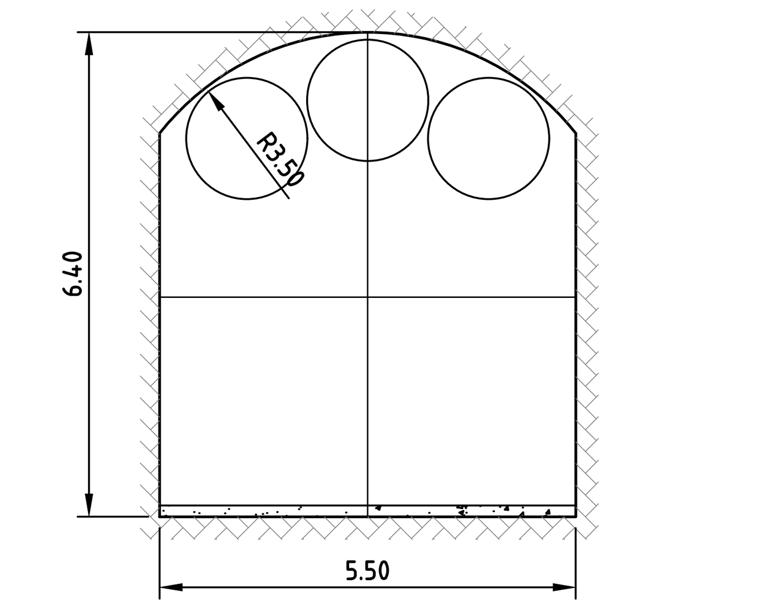
HOR. SCALE 1:5000 (A1)



EXCAVATED TUNNEL INVERT LEVEL	546.000	547.000	548.000	549.000	550.000	550.309	550.500	543.182	528.546	513.909	499.273	484.637	470.001	455.365	440.728	426.092	411.456	396.820	395.356	394.737	394.737
EXISTING SURFACE	568.3	584.8	598.9	608.4	630.7	636.3	641.8	654.9	672.4	682.0	675.0	663.5	658.7	663.5	672.8	681.3	675.3	666.9	665.6	664.6	664.3
DEPTH TO EXCAVATED TUNNEL LEVEL	-22.3	-37.8	-50.9	-59.4	-80.7	-85.9	-91.3	-111.7	-143.8	-168.1	-175.7	-178.8	-188.7	-208.1	-232.1	-255.2	-263.9	-270.0	-270.3	-269.8	-269.6
SURGE ACCESS TUNNEL CHAINAGE	0.00	100.00	200.00	300.00	400.00	430.86	450.00	500.00	600.00	700.00	800.00	900.00	1000.00	1100.00	1200.00	1300.00	1400.00	1500.00	1510.00	1517.74	1520.14

LONGITUDINAL SECTION – SURGE ACCESS TUNNEL

HOR. SCALE 1:5000 (A1)

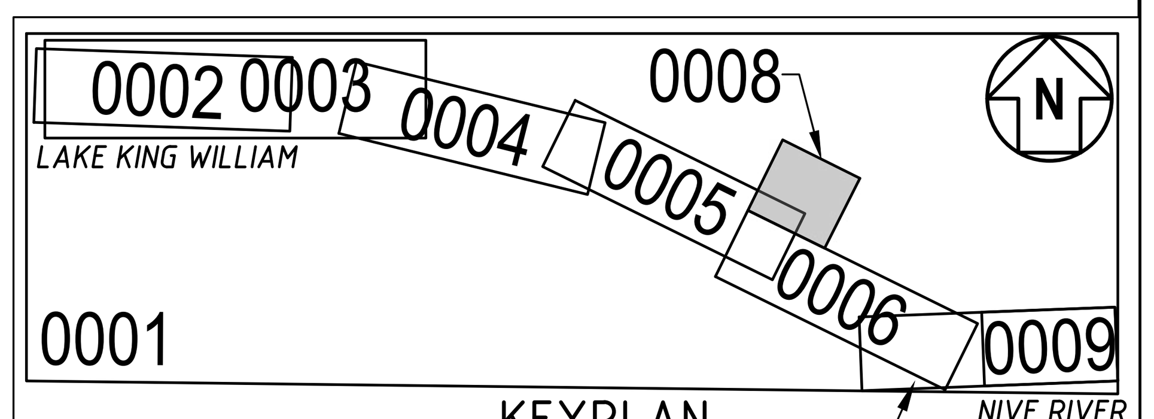


ACCESS TUNNEL PROFILE

SCALE 1:100 (A1)

NOTE:

1. ALL DIMENSIONS ARE IN METRES
2. HORIZONTAL DATUM GDA2020, ZONE 55
3. ELEVATIONS ARE IN METRES AHD 1983
4. CHAINAGES ARE IN METRES (GRID)
5. CUDDY LOCATIONS ARE INDICATIVE ONLY



KEYPLAN

N.T.S

ALTERATIONS

REV	DESCRIPTION	DRN
X2	HEADRACE AND POWER TUNNEL NORTHERN ALIGNMENT AND POWER STATION SWITCHYARD SITE ADOPTED	HT
X3	ALIGNMENT UPDATED FOR ISSUE FOR RFP	HT
X4	UPDATES FOR REFERENCE DESIGN ISSUE	HT

NOT FOR CONSTRUCTION
REFERENCE DESIGN
PRINT DATE: 8/07/2024 12:58:40 PM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

TARDEV-HYD-AGA-XX-DR-C-0001	TARRALEAH REDEVELOPMENT PROJECT WIDE SCHEMATIC
TARDEV-HYD-SUR-XX-DR-C-0001	TARRALEAH REDEVELOPMENT POWER SCHEME REFERENCE POINTS
A1625	TARRALEAH POWER DEVELOPMENT NO.2 CANAL GENERAL ARRANGEMENT
B1343	TARRALEAH NO.2 CANAL MOSSY MARSH TUNNEL REVISED TUNNEL SECTIONS

REPR'D FROM – REV –

DRAWN	PO/SB
CHECKED	RJ/JC
DESIGNED	RJ
CHECKED	RVDK
APPROVED	ES/GB
DATE	–
HT AGREED	–
HT ACCEPTED	–

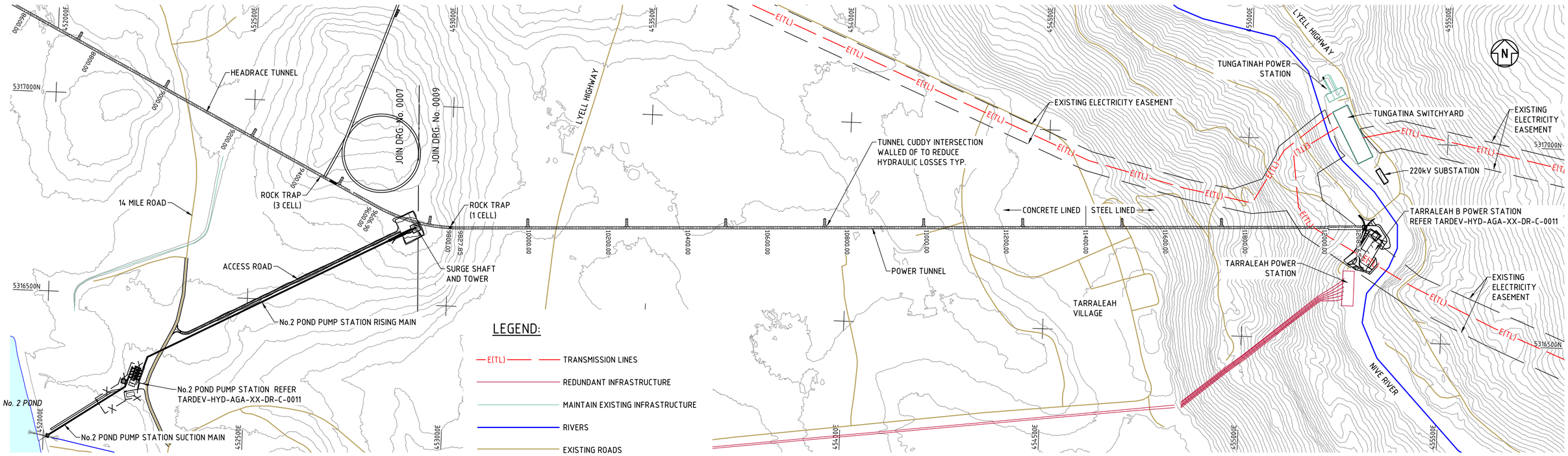
Hydro Tasmania

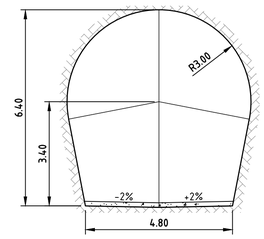
CLIENT: HYDRO TASMANIA

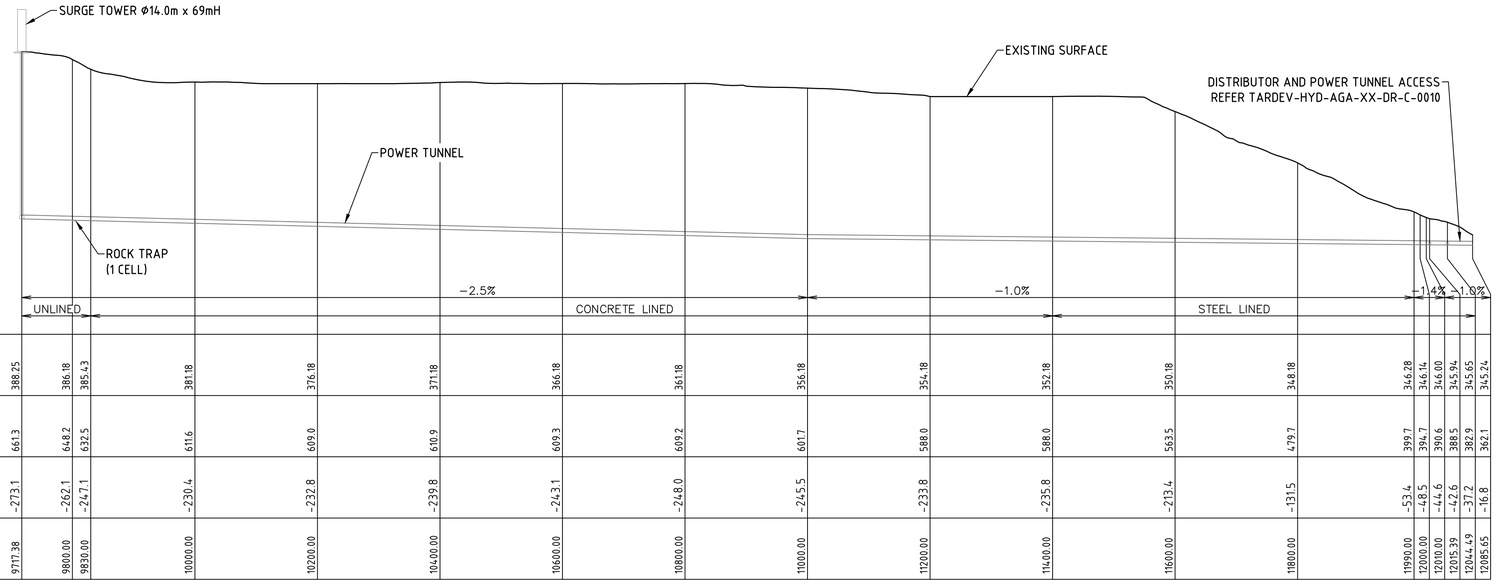
TITLE: TARRALEAH REDEVELOPMENT
GENERAL ARRANGEMENT
HEADRACE ACCESS TUNNELS
PLAN AND LONGITUDINAL SECTIONS

SCALE: 1:100 1:5000

DRAWING: TARDEV-HYD-AGA-XX-DR-C-0008 REV. X4 SIZE A1







PLAN

SCALE 1:5000 (A1)

UNLINED EXCAVATION PROFILE

SCALE 1:100 (A1)

FINISHED CONCRETE LINED PROFILE

SCALE 1:100 (A1)

DOWNSTREAM FINISHED STEEL LINED SECTION

SCALE 1:100 (A1)

DATUM 200.000

EXCAVATED TUNNEL INVERT LEVEL	388.25	386.18	385.43	381.18	376.18	371.18	366.18	361.18	356.18	354.18
EXISTING SURFACE	661.3	648.2	632.5	611.6	609.0	610.9	609.3	609.2	601.7	588.0
DEPTH TO EXCAVATED TUNNEL LEVEL	-273.1	-262.1	-247.1	-230.4	-232.8	-239.8	-243.1	-248.0	-245.5	-233.8
HEADRACE AND POWER TUNNEL CHAINAGE	9717.38	9800.00	9830.00	10000.00	10200.00	10400.00	10600.00	10800.00	11000.00	11200.00

EXCAVATED TUNNEL INVERT LEVEL	352.18	350.18	348.18	346.28	346.14	346.00	345.94	345.65	345.24
EXISTING SURFACE	588.0	563.5	479.7	399.7	394.7	390.6	388.5	382.9	362.1
DEPTH TO EXCAVATED TUNNEL LEVEL	-235.8	-213.4	-131.5	-53.4	-48.5	-44.6	-42.6	-37.2	-16.8
HEADRACE AND POWER TUNNEL CHAINAGE	11400.00	11600.00	11800.00	11990.00	12000.00	12010.00	12015.39	12044.49	12085.65

LONGITUDINAL SECTION – POWER TUNNEL

HOR. SCALE 1:5000 (A1)

DATUMS: MGA2020Z55 AHD83

NOTE:

1. ALL DIMENSIONS ARE IN METRES
2. HORIZONTAL DATUM GDA2020, ZONE 55
3. ELEVATIONS ARE IN METRES AHD 1983
4. CHAINAGES ARE IN METRES (GRID)
5. CUDDY LOCATIONS ARE INDICATIVE ONLY

KEYPLAN

N.T.S

ALTERATIONS

REV	DRN	CHK/DSGN	APPD / DATE	
X2	HT	HT	HT 17/5/2023	HEADRACE AND POWER TUNNEL NORTHERN ALIGNEMENT AND POWER STATION SWITCHYARD SITE ADOPTED
X3	HT	HT	HT 22/2/2024	ALIGNMENT UPDATED FOR ISSUE FOR RFP
X4	HT	HT	HT 14/6/2024	UPDATES FOR REFERENCE DESIGN ISSUE

NOT FOR CONSTRUCTION
REFERENCE DESIGN
PRINT DATE: 8/07/2024 12:22:21 PM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

TARDEV-HYD-AGA-XX-DR-C-0001	TARRALEAH REDEVELOPMENT PROJECT WIDE SCHEMATIC
TARDEV-HYD-SUR-XX-DR-C-0001	TARRALEAH REDEVELOPMENT POWER SCHEME REFERENCE POINTS

REPR'D FROM –   REV –

DRAWN	PO/SB
CHECKED	RJ/JC
DESIGNED	RJ
CHECKED	RVDK
APPROVED	ES/GB
DATE	-
HT AGREED	-
HT ACCEPTED	-

Hydro Tasmania

CLIENT HYDRO TASMANIA

TITLE
TARRALEAH REDEVELOPMENT
GENERAL ARRANGEMENT
POWER TUNNEL
PLAN AND LONGITUDINAL SECTION

SCALE 1:5000 1:100

DRAWING TARDEV-HYD-AGA-XX-DR-C-0009   REV. X4   SIZE A1

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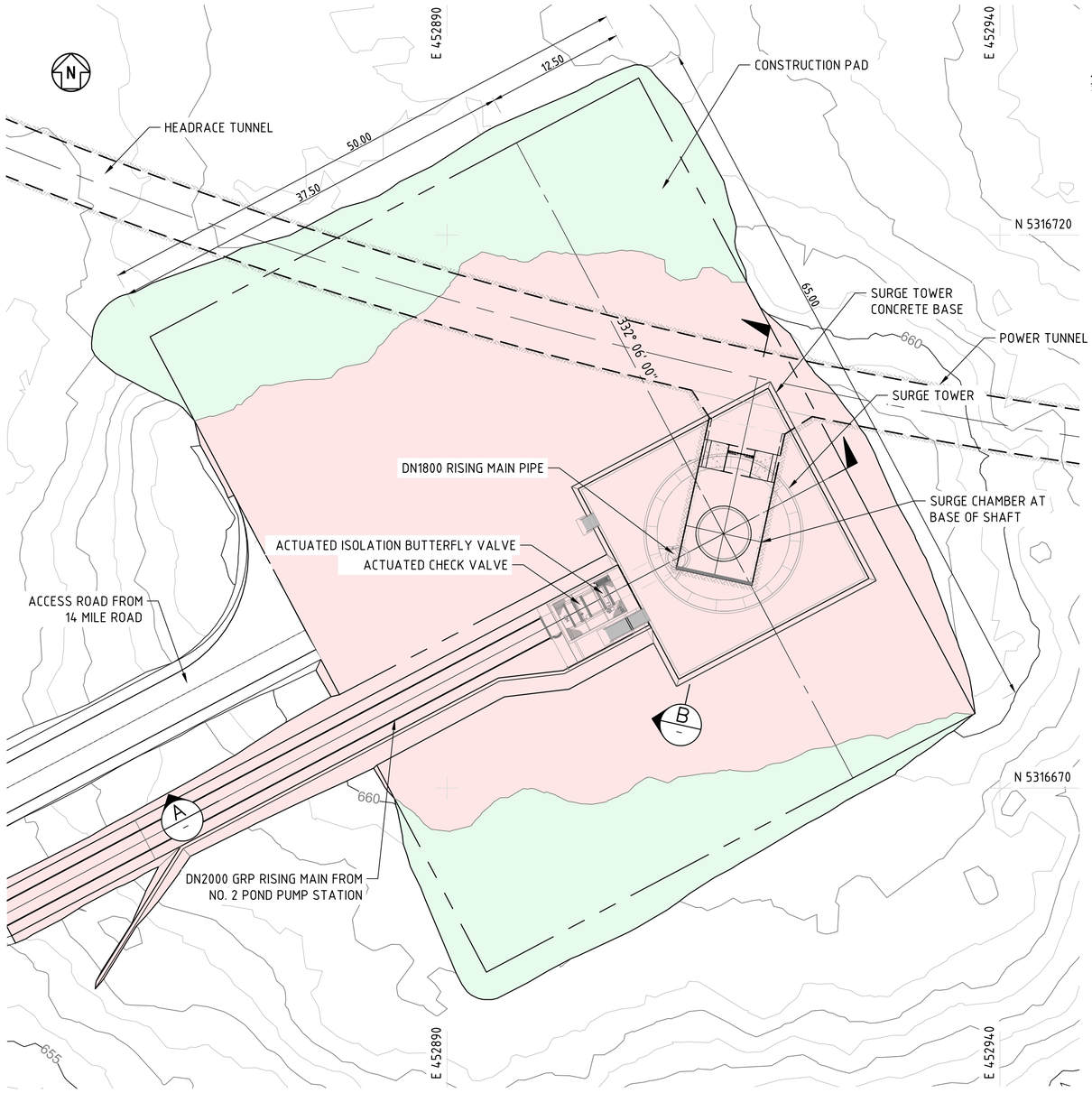
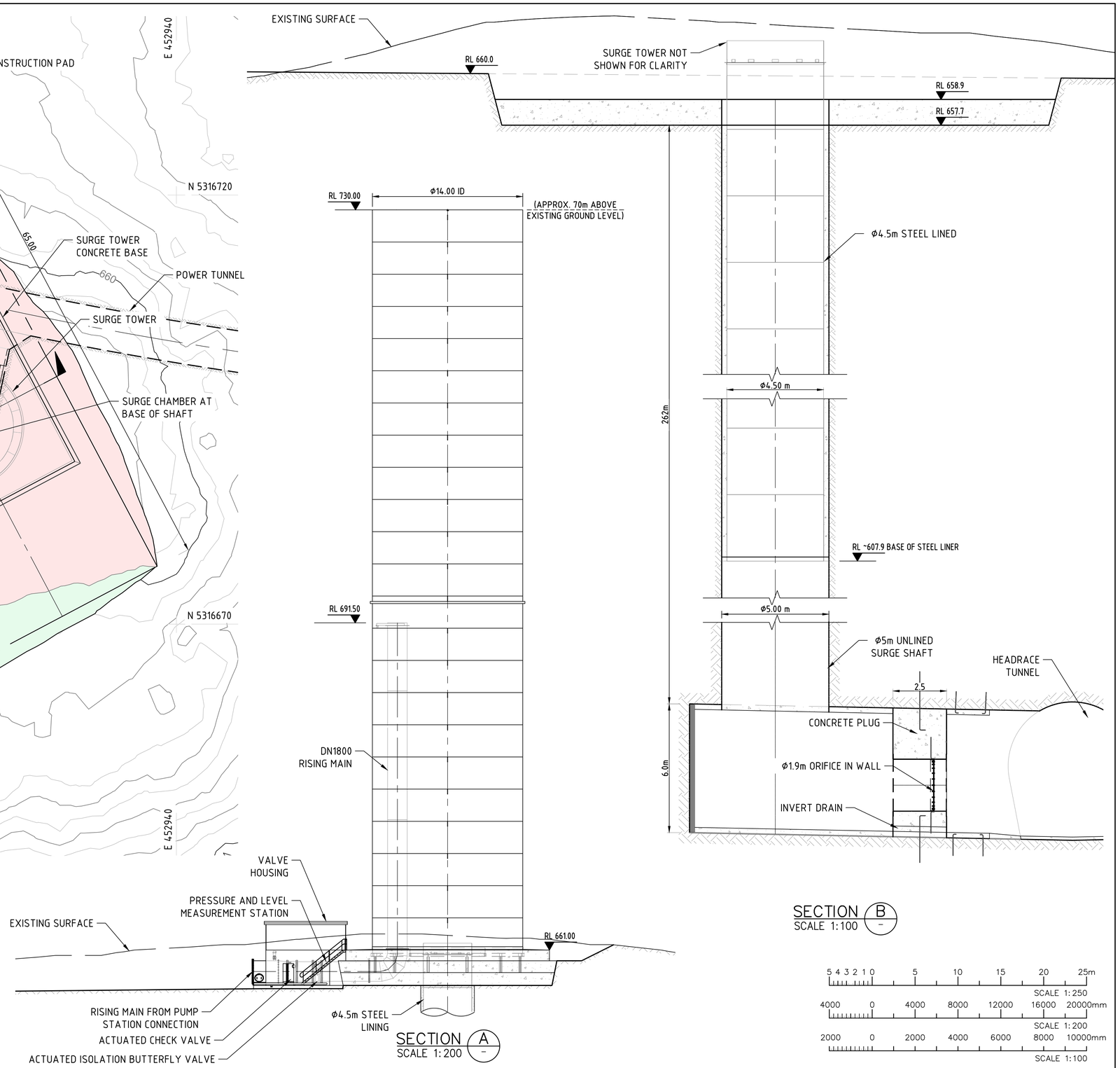


PLAN - SURGE TOWER
SCALE 1:250



SECTION A
SCALE 1:200

SECTION B
SCALE 1:100

LEGEND

CUT

FILL

NOTE:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. ELEVATIONS ARE IN m AHD 1983.
3. HORIZONTAL DATUM: GDA2020 (MGA2020 ZONE 55)
4. SURGE TOWER TO BE PAINTED GREY WITH A LIGHT REFLECTANCE VALUE < 40% IN ACCORDANCE WITH HYDRO TASMANIA COATING SYSTEMS, AS2700 N43 PIPELINE GREY OR APPROVED EQUIVALENT.

5 4 3 2 1 0 5 10 15 20 25m
SCALE 1:250

4000 0 4000 8000 12000 16000 20000mm
SCALE 1:200

2000 0 2000 4000 6000 8000 10000mm
SCALE 1:100

ALTERATIONS				
HEADRACE AND POWER TUNNEL NORTHERN ALIGNMENT AND POWER STATION SWITCHYARD SITE ADOPTED	REV	X2	DRN	HT
	CHK'D/QA	HT	APVD / DATE	17/5/2023
ALIGNMENT UPDATED FOR ISSUE FOR RFP	REV	X3	DRN	HT
	CHK'D/QA	HT	APVD / DATE	23/12/2024
UPDATES FOR REFERENCE DESIGN ISSUE	REV	X4	DRN	HT
	CHK'D/QA	HT	APVD / DATE	14/6/2024
ENVELOPE HEIGHT ADDED. NOTES UPDATED	REV	X5	DRN	PO
	CHK'D/QA	ES	APVD / DATE	11/02/2026

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REFERENCE DESIGN
PRINT DATE: 2/03/2026 3:07:12 PM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES		
TARDEV-HYD-AGA-XX-DR-C-0001	TARRALEAH REDEVELOPMENT PROJECT WIDE SCHEMATIC	
TARDEV-HYD-AGA-XX-DR-C-0007	GENERAL ARRANGEMENT HEADRACE TUNNEL	
TARDEV-HYD-AGA-XX-DR-C-0011	GENERAL ARRANGEMENT NO2 POND PUMP STATION	
REPR'D FROM	–	REV –

DRAWN	RO/SB
CHECKED	RJ/JC
DESIGNED	RJ
CHECKED	RVDK
APPROVED	ES/GB
DATE	–
HT AGREED	–
HT ACCEPTED	–

Hydro Tasmania

CLIENT	HYDRO TASMANIA
TITLE	TARRALEAH REDEVELOPMENT GENERAL ARRANGEMENT SURGE TOWER PLAN AND ELEVATION
SCALE	AS SHOWN
DRAWING	TARDEV-HYD-AGA-XX-DR-C-0013
REV.	X5
SIZE	A1

FILENAME: C:\12DS\DATA\HDIPRD12DSA01\H-0150005_TARRALEAH_REDEV__64\4_WORK AND TECHNICAL\4.2_CADD\4.2.2_DRAWING\DWG\TAR(DEV) REDEVELOPMENT\TARDEV-HYD-AGA-XX-DR-C-0013.DWG

2/03/2026 3:07:12 PM

LEGEND:

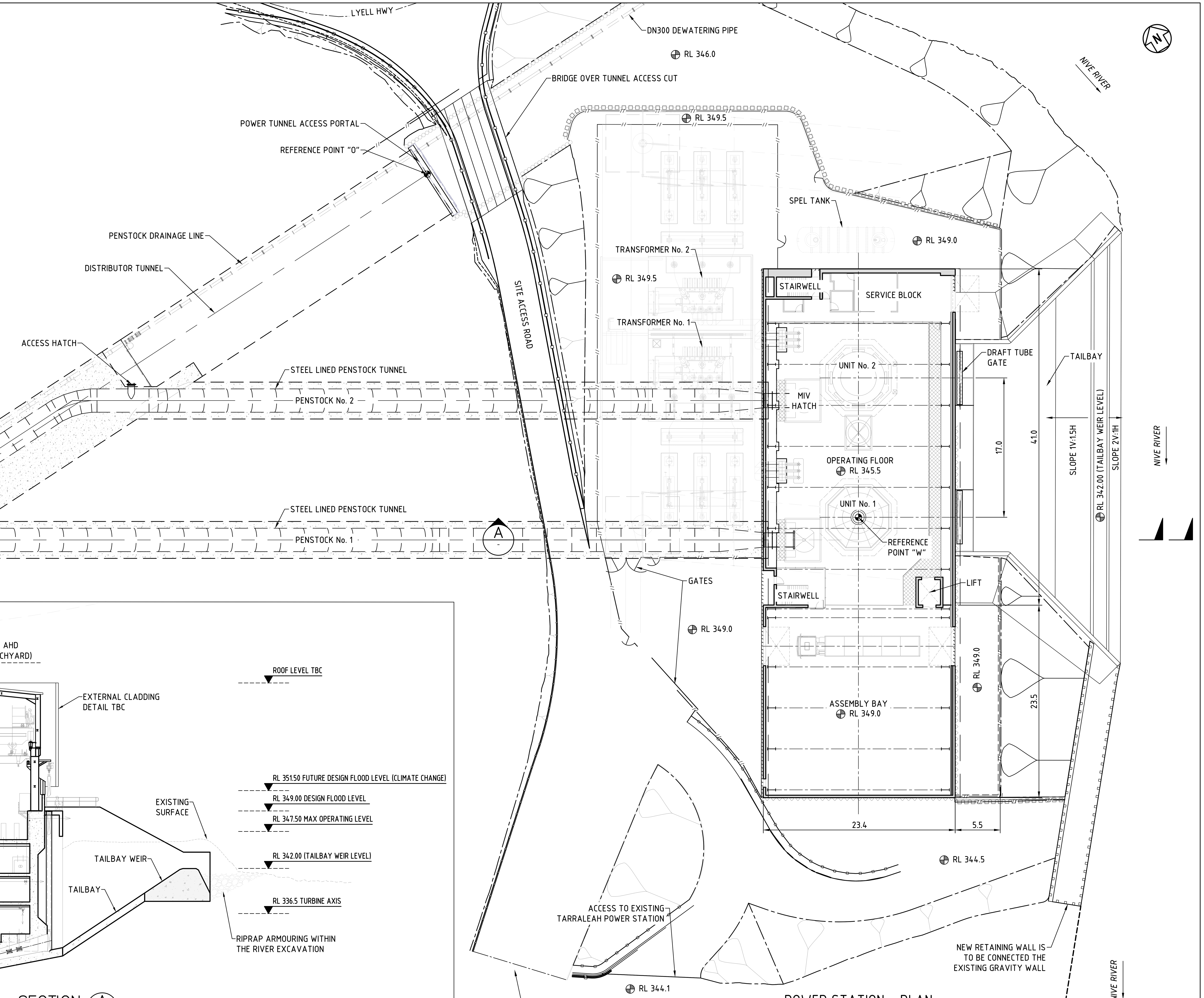
- UNDERGROUND INFRASTRUCTURE
- W-BEAM SAFETY BARRIER
- RETAINING WALL
- SECURITY FENCING
- CUT AND FILL BATTER

NOTE:

1. ALL DIMENSIONS, CHAINAGES ARE IN m AND ELEVATIONS, LEVELS ARE IN m AHD 1983.
2. REFER TO DRAWING TARDEV-HYD-SUR-XX-DR-C-0001 FOR REFERENCE POINT AND SETOUT.
3. REFER TO DRAWING TARDEV-HYD-CWG-PS-C-0001 FOR FOUNDATION DETAILS.
4. REFER TO DRAWING TARDEV-HYD-CUW-PT-DR-C-0002 FOR DISTRIBUTOR AND PENSTOCKS SECTIONS

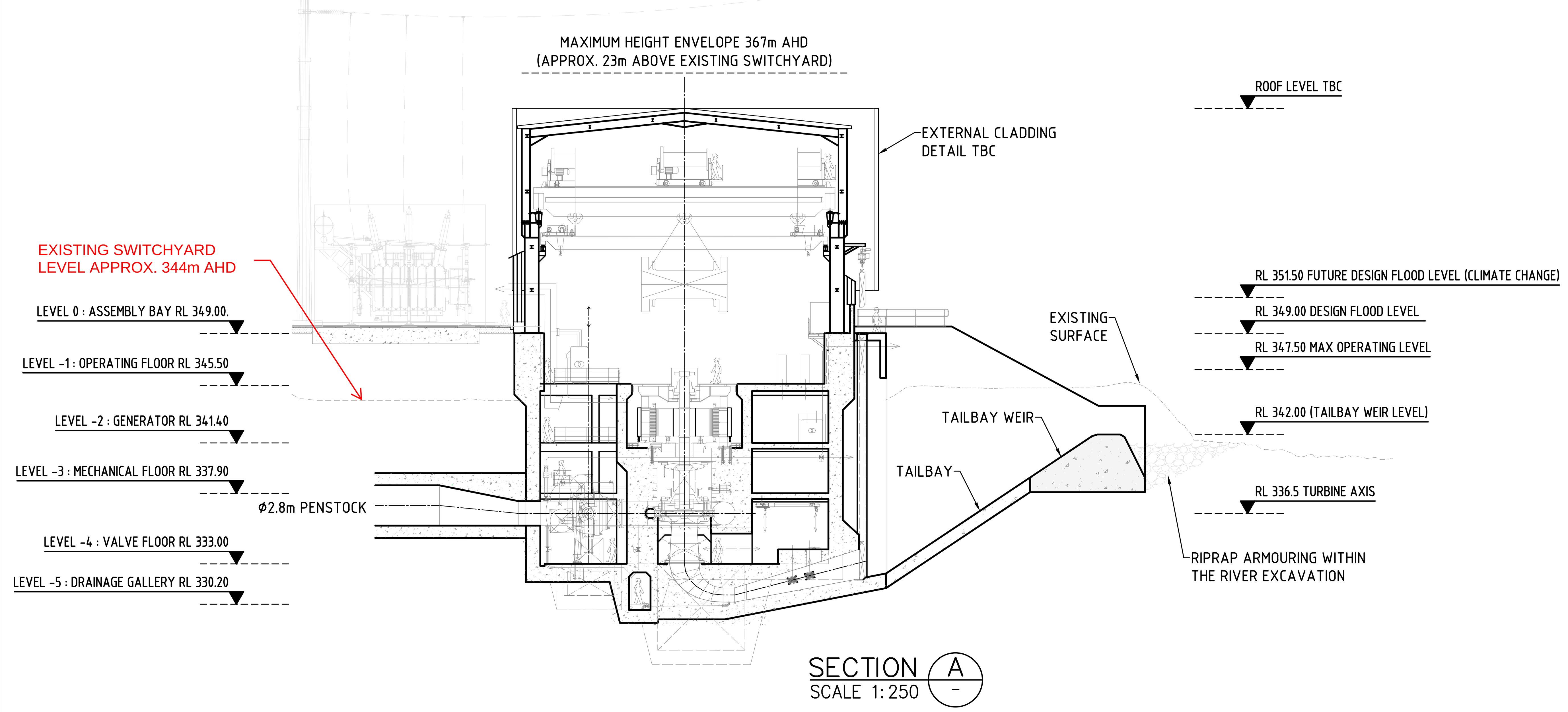
5 4 3 2 1 0 5 10 15 20 25m

DATUMS: MGA2020Z55 AHD83 SCALE 1:250



POWER STATION - PLAN

SCALE 1:250



SECTION A

SCALE 1:250

ALTERATIONS

REV	DESCRIPTION	DRN	CHK/DSGN	APPD / DATE
X2	HEADRACE AND POWER TUNNEL NORTHERN ALIGNEMENT AND POWER STATION SWITCHYARD SITE ADOPTED	HT	HT	HT 17/5/2023
X3	ALIGNMENT UPDATED FOR ISSUE FOR RFP	HT	HT	HT 22/2/2024
X4	UPDATES FOR REFERENCE DESIGN ISSUE	HT	HT	HT 14/6/2024
X5	SWITCHYARD UPDATED FOR LIAPOOTAH CONNECTION. BUILDING ENVELOPE HEIGHTS & CLADDING ADDED.	PO	ES	ES 17/02/2026

NOT FOR CONSTRUCTION

REFERENCE DESIGN

PRINT DATE: 17/02/2026 10:18:37 AM

ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

TARDEV-HYD-AGA-XX-DR-C-0001	GENERAL ARRANGEMENT PROJECT WIDE SCHEMATIC
TARDEV-HYD-SUR-XX-DR-C-0001	TARRALEAH REDEVELOPMENT POWER SCHEME REFERENCE POINTS
TARDEV-HYD-CWG-PS-DR-C-0001	SITE SECTIONS AND DETAILS 1
TARDEV-CST-CAR-PS-DR-A-0001	TARRALEAH POWER STATION HYDRO PARK - SITE PLAN
TARDEV-EDF-AGA-PS-DR-Z-0001	TARRALEAH B POWERSTATION PLAN VIEW AA LEVEL 0 ASSEMBLY BAY FLR

REPR'D FROM – REV –

DRAWN	DS/PO
CHECKED	JC/MH
DESIGNED	JC/MH
CHECKED	RVDK/ES
APPROVED	GB
DATE	-
HT AGREED	ES 17/02/2026
HT ACCEPTED	ES 17/02/2026

Hydro Tasmania

CLIENT: HYDRO TASMANIA

TITLE: TARRALEAH REDEVELOPMENT GENERAL ARRANGEMENT POWER STATION PLAN AND SECTION

SCALE: 1:250

DRAWING: TARDEV-HYD-AGA-XX-DR-C-0010 REV. X5 SIZE A1

FILENAME: C:\12DS\DATA\HD1PRD12DSA01\H-0150005__TARRALEAH__REDEV__64\4__WORK AND TECHNICAL\4.2__CADD\4.2.2__DRAWING\DWG\TAR(DEV) REDEVELOPMENT\TARDEV-HYD-AGA-XX-DR-C-0010.DWG

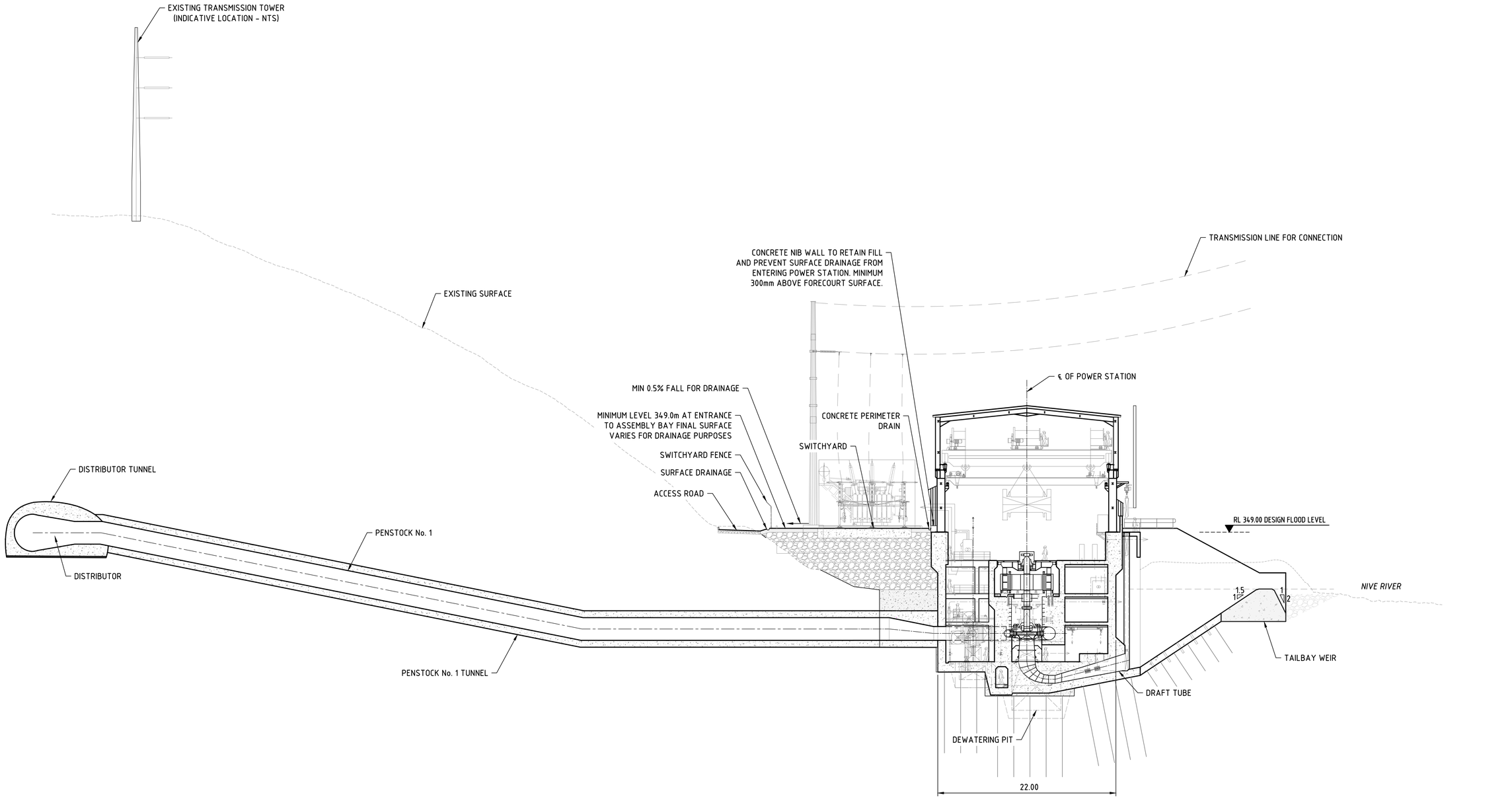
17/02/2026 10:18:37 AM

LEGEND

- FREE DRAINING COMPACTED ROCKFILL
- CONCRETE

NOTES:

1. ALL DIMENSIONS, CHAINAGES ARE IN m AND ELEVATIONS, LEVELS ARE IN m AHD 1983.



SECTION B
SCALE 1:250 AGA-PS-0010

5 4 3 2 1 0 5 10 15 20 25m
DATUMS: MGA2020Z55 AHD83 SCALE 1:250

ALTERATIONS

NOT FOR CONSTRUCTION
REFERENCE DESIGN
PRINT DATE: 30/09/2025 9:30:06 AM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

TARDEV-HYD-AGA-XX-DR-C-0010	GENERAL ARRANGEMENT POWER STATION
TARDEV-HYD-CWG-PS-DR-C-0001	SITE SECTIONS AND DETAILS 1
TARDEV-HYD-CWG-PS-DR-C-0002	SITE SECTIONS AND DETAILS 2
TARDEV-HYD-CWG-PS-DR-C-0003	SWITCHYARD PLAN

REPR'D FROM –
REV –

DRAWN	PO
CHECKED	MH
DESIGNED	JC/MH
CHECKED	ES/DG
APPROVED	ES
DATE	26/09/2025
HT AGREED	ES
HT ACCEPTED	ES

Hydro Tasmania

– – –

CLIENT HYDRO TASMANIA

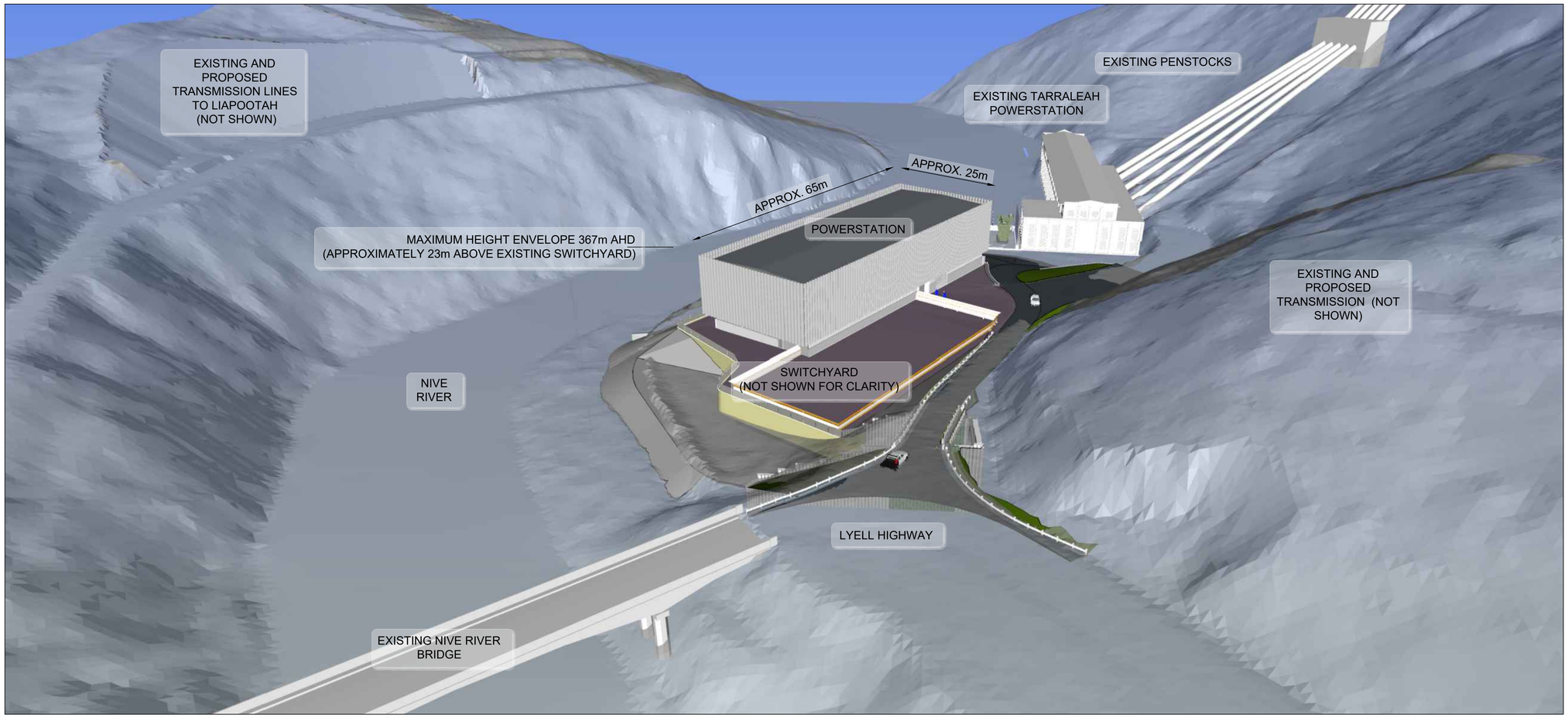
TITLE TARRALEAH REDEVELOPMENT
GENERAL ARRANGEMENT
POWER STATION
SECTION

SCALE 1:250

DRAWING TARDEV-HYD-AGA-XX-DR-C-0014 REV X1 SIZE A1

FILENAME: C:\12DS\DATA\HDIPRD12DSA01\H-0150005_TARRALEAH_REDEV_64\4_WORK AND TECHNICAL\4.2_CADD\4.2.2_DRAWING\DWG\TAR(DEV) REDEVELOPMENT\TARDEV-HYD-AGA-XX-DR-C-0014.DWG

30/09/2025 9:30:06 AM



NORTHEAST OVERVIEW

NTS

NOTES:

1. REPRESENTATIVE RENDER OF REFERENCE DFESIGN, ALL LEVELS AND DETAILS ARE INDICATIVE ONLY.
2. DESIGN MODEL DOES NOT INCLUDE ALL SURFACES, EXISTING INFRASTRUCTURE AND DESIGN ELEMENTS.
3. ALL DETAILS SUBJECT TO FINAL DESIGN IN ACCORDANCE WITH HYDRO TASMANIAS REQUIREMENTS, WHICH INCLUDE ARCHITECTURAL PRINCIPLES FOR THE FACADE WHICH IS TO SCREEN THE PRIMARY STRUCTURE AND ALL ROOF DRAINAGE.
4. BUILDING ENVELOPE SUBJECT TO FINAL DESIGN INCLUDNG EQUIPMENT SIZE AND HANDLING REQUIREMENTS

ALTERATIONS

NOT FOR CONSTRUCTION
INFORMATION ONLY
PRINT DATE: 27/02/2026 2:45:13 PM

REFERENCES

TARDEV-HYD-CWG-PS-DR-C-0000 GENERAL ARRANGEMENT POWER STATION

REPRO FROM TARDEV-HYD-AGA-XX-M3-C-0001 REV –

DRAWN	ES
CHECKED	DS
DESIGNED	–
CHECKED	–
APPROVED	ES
DATE	27/02/2026
HT AGREED	ES
HT ACCEPTED	ES

Hydro Tasmania

– – –

CLIENT HYDRO TASMANIA

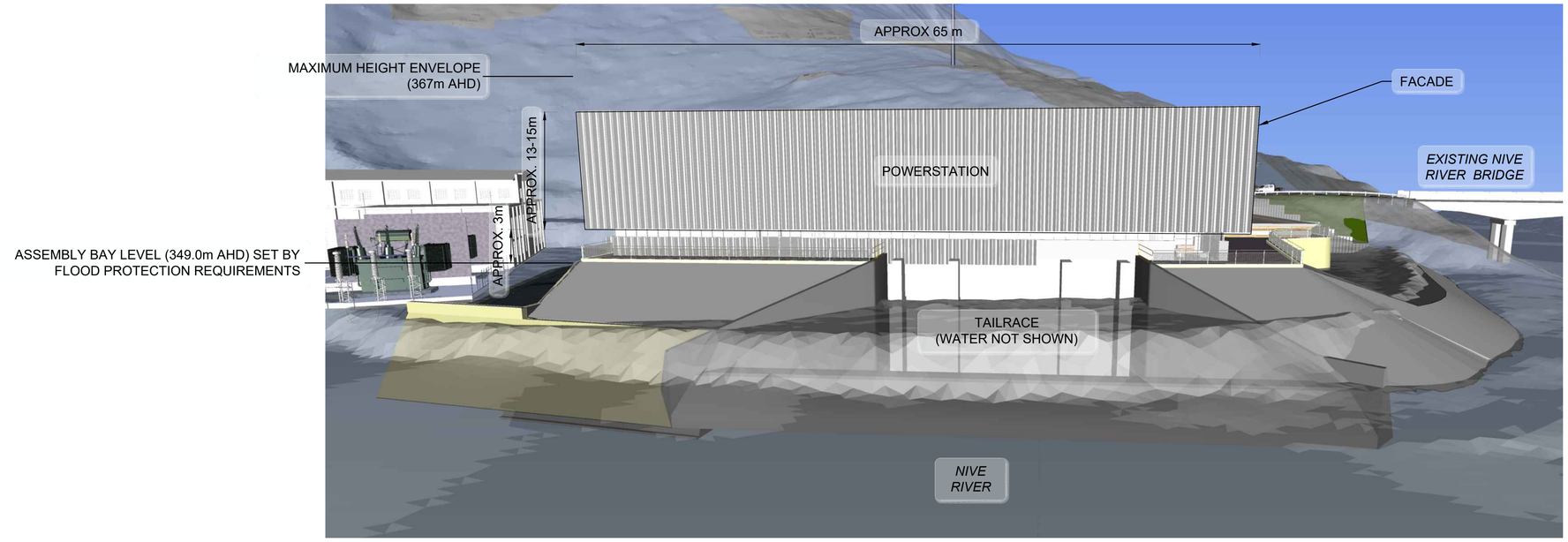
TITLE TARRALEAH REDEVELOPMENT
POWER STATION SITE
NORTHEAST OVERVIEW

SCALE

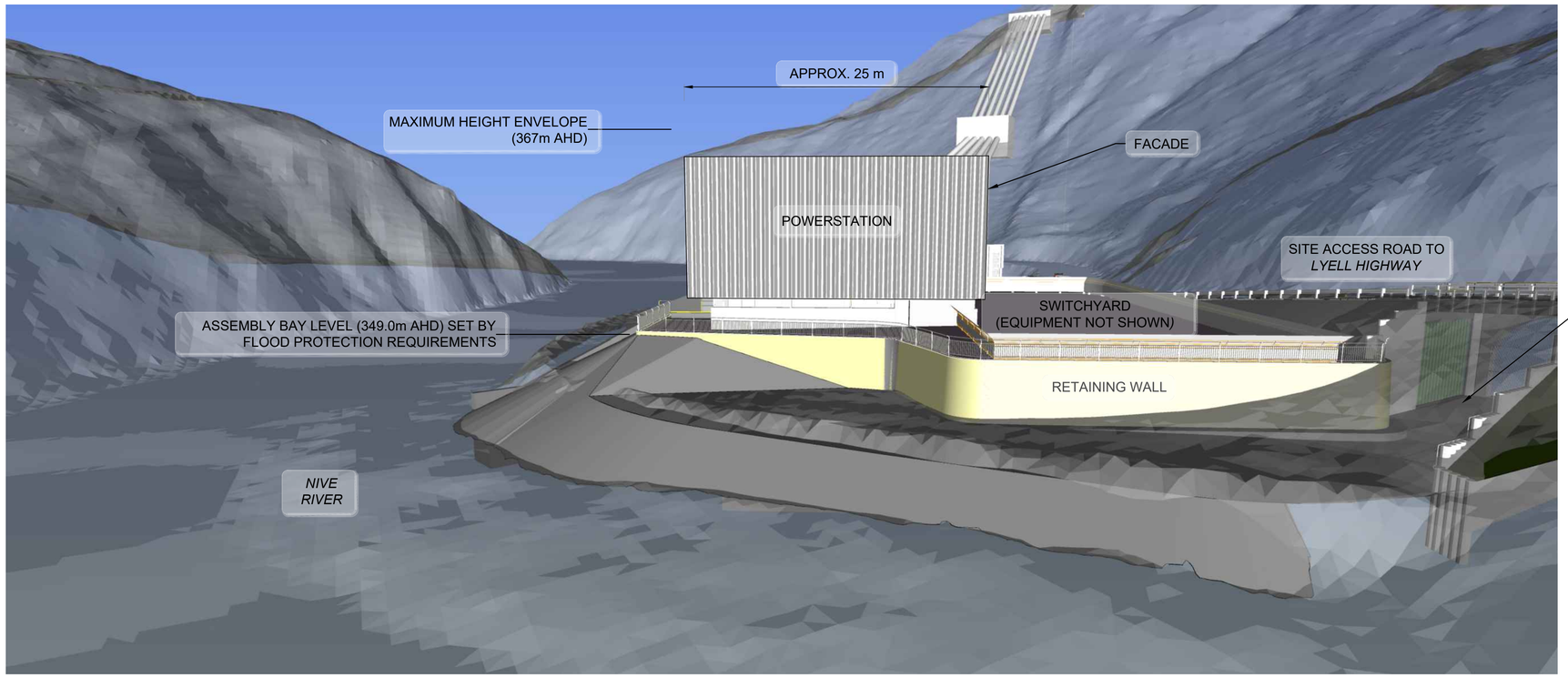
DRAWING TARDEV-HYD-CAR-PS-DR-C-0001 REV X1 SIZE A1

FILENAME: C:\12DS\DATA\HD1PRD12DSA01\H-0150005_TARRALEAH_REDEV_64\4_WORK AND TECHNICAL\4.2_CADD\4.2.2_DRAWING\DWG\TARIDEV) REDEVELOPMENT\TARDEV-HYD-CAR-PS-DR-C-0001.DWG

27/02/2026 2:45:13 PM



EASTERN ELEVATION
NTS



NORTHERN ELEVATION
NTS

NOTES:

1. REPRESENTATIVE RENDER OF REFERENCE DFESIGN, ALL LEVELS AND DETAILS ARE INDICATIVE ONLY.
2. DESIGN MODEL DOES NOT INCLUDE ALL SURFACES, EXISTING INFRASTRUCTURE AND DESIGN ELEMENTS.
3. ALL DETAILS SUBJECT TO FINAL DESIGN IN ACCORDANCE WITH HYDRO TASMANIAS REQUIREMENTS, WHICH INCLUDE ARCHITECTURAL PRINCIPLES FOR THE FACADE WHICH IS TO SCREEN THE PRIMARY STRUCTURE AND ALL ROOF DRAINAGE.
4. BUILDING ENVELOPE SUBJECT TO FINAL DESIGN INCLUDNG EQUIPMENT SIZE AND HANDLING REQUIREMENTS

ALTERATIONS

NOT FOR CONSTRUCTION
INFORMATION ONLY
PRINT DATE: 2/03/2026 3:09:33 PM

REFERENCES

TARDEV-HYD-AGA-XX-DR-C-0010 GENERAL ARRANGEMENT POWER STATION

REPR'D FROM TARDEV-HYD-AGA-XX-M3-C-0001 REV –

DRAWN	ES
CHECKED	DS?
DESIGNED	–
CHECKED	–
APPROVED	ES
DATE	27/02/2026
HT AGREED	ES
HT ACCEPTED	ES

Hydro Tasmania

–
–
–

CLIENT: HYDRO TASMANIA

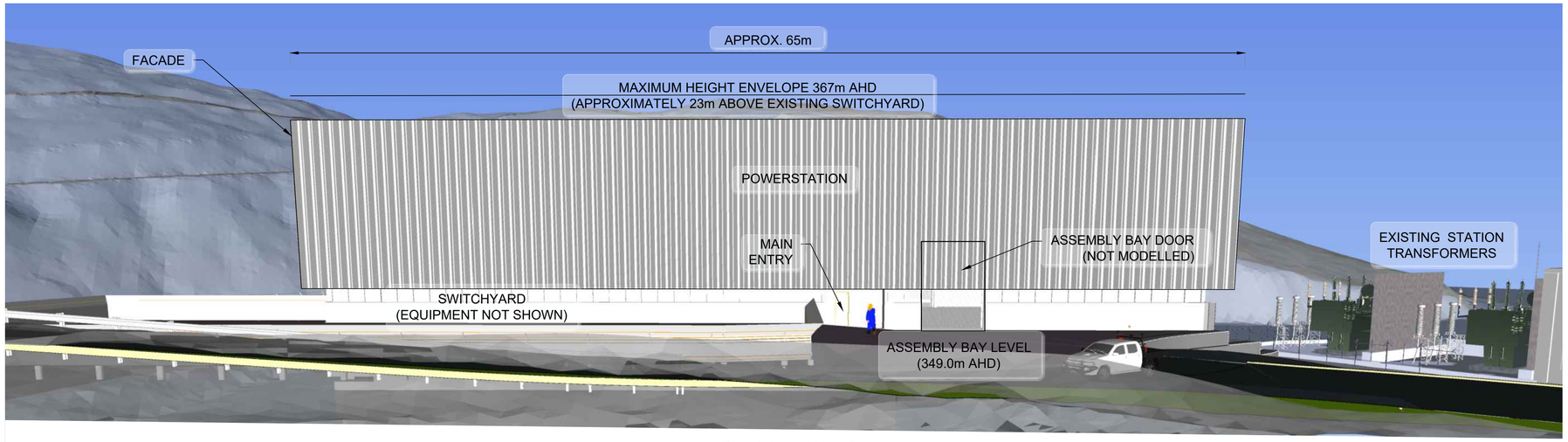
TITLE: TARRALEAH REDEVELOPMENT
POWER STATION SITE
NORTHERN & EASTERN ELEVATIONS

SCALE:

DRAWING: TARDEV-HYD-CAR-PS-DR-C-0002 | REV: X1 | SIZE: A1

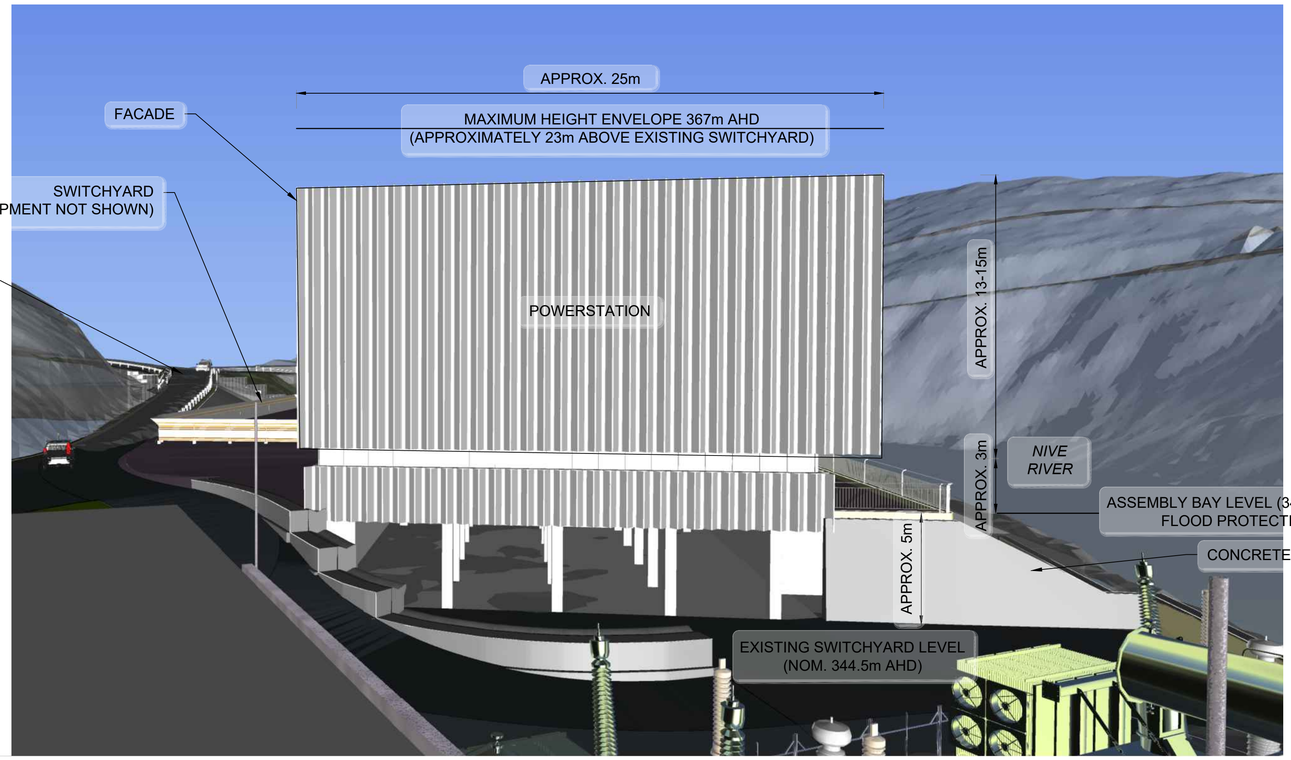
FILENAME: C:\12DS\DATA\HD1PRO12DSA01\H-0150005__TARRALEAH_REDEV__64\4__WORK AND TECHNICAL\4.2__CADD\4.2.2__DRAWING\DWG\TAR(DEV) REDEVELOPMENT\TARDEV-HYD-CAR-PS-DR-C-0002.DWG

2/03/2026 3:09:33 PM



WESTERN ELEVATION

NTS



SOUTHERN ELEVATION

NTS

NOTES:

1. REPRESENTATIVE RENDER OF REFERENCE DFESIGN, ALL LEVELS AND DETAILS ARE INDICATIVE ONLY.
2. DESIGN MODEL DOES NOT INCLUDE ALL SURFACES, EXISTING INFRASTRUCTURE AND DESIGN ELEMENTS.
3. ALL DETAILS SUBJECT TO FINAL DESIGN IN ACCORDANCE WITH HYDRO TASMANIAS REQUIREMENTS, WHICH INCLUDE ARCHITECTURAL PRINCIPLES FOR THE FACADE WHICH IS TO SCREEN THE PRIMARY STRUCTURE AND ALL ROOF DRAINAGE.
4. BUILDING ENVELOPE SUBJECT TO FINAL DESIGN INCLUDNG EQUIPMENT SIZE AND HANDLING REQUIREMENTS

ALTERATIONS

NOT FOR CONSTRUCTION
INFORMATION ONLY
PRINT DATE: 2/03/2026 3:10:09 PM

REFERENCES

TARDEV-HYD-AGA-XX-DR-C-0010 GENERAL ARRANGEMENT POWER STATION

REPR'D FROM TARDEV-HYD-AGA-XX-M3-C-0001 REV –

DRAWN	ES
CHECKED	DS?
DESIGNED	–
CHECKED	–
APPROVED	ES
DATE	27/02/2026
HT AGREED	ES
HT ACCEPTED	ES

Hydro Tasmania

– – –

CLIENT HYDRO TASMANIA

TITLE TARRALEAH REDEVELOPMENT
POWER STATION SITE
WESTERN & SOUTHERN ELEVATIONS

SCALE

DRAWING TARDEV-HYD-CAR-PS-DR-C-0003 REV X1 SIZE A1

FILENAME: C:\12DS\DATA\HD1PRO12DSA01\H-0150005__TARRALEAH_REDEV__64\4__WORK AND TECHNICAL\4.2__CADD\4.2.2__DRAWING\DWG\TAR(DEV) REDEVELOPMENT\TARDEV-HYD-CAR-PS-DR-C-0003.DWG

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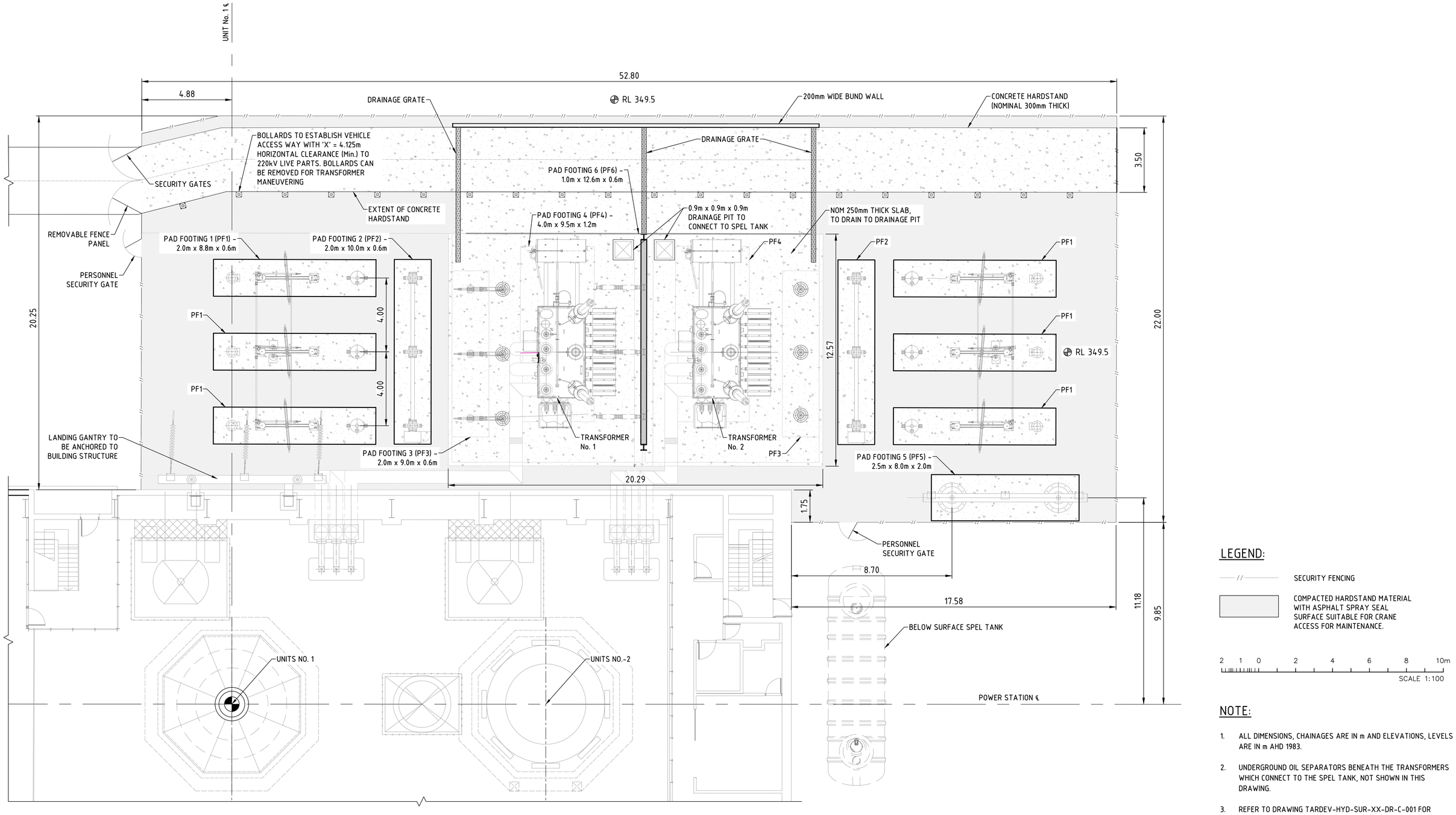


PLAN - SWITCHYARD

SCALE 1:100

LEGEND:

SECURITY FENCING

COMPACTED HARDSTAND MATERIAL WITH ASPHALT SPRAY SEAL SURFACE SUITABLE FOR CRANE ACCESS FOR MAINTENANCE.

2 1 0 2 4 6 8 10m

SCALE 1:100

NOTE:

1. ALL DIMENSIONS, CHAINAGES ARE IN m AND ELEVATIONS, LEVELS ARE IN m AHD 1983.
2. UNDERGROUND OIL SEPARATORS BENEATH THE TRANSFORMERS WHICH CONNECT TO THE SPEL TANK, NOT SHOWN IN THIS DRAWING.
3. REFER TO DRAWING TARDEV-HYD-SUR-XX-DR-C-001 FOR REFERENCE POINT AND SETOUT.
4. FOOTING AND CONCRETE SLAB DIMENSIONS AND THICKNESSES ARE NOMINAL ONLY.

ALTERATIONS

NOT FOR CONSTRUCTION
REFERENCE DESIGN
PRINT DATE: 30/09/2024 12:50:54 PM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

TARDEV-HYD-AGA-XX-DR-C-0010	GENERAL ARRANGEMENT POWER STATION
TARDEV-HYD-CWG-PS-DR-C-0001	SITE SECTIONS AND DETAILS 1
TARDEV-HYD-CWG-PS-DR-C-0002	SITE SECTIONS AND DETAILS 2
TARDEV-HYD-CWG-PS-DR-C-0004	SITE CIVIL WORKS
TARDEV-ENT-EPS-SY-DR-E-0001	GENERAL ARRANGEMENT SWITCHYARD

REPR'D FROM – REV –

DRAWN	PO
CHECKED	MH
DESIGNED	DD/GS
CHECKED	JC
APPROVED	ES/GB
DATE	–
HT AGREED	–
HT ACCEPTED	–

Hydro Tasmania

– – –

CLIENT HYDRO TASMANIA

TITLE TARRALEAH REDEVELOPMENT
POWER STATION SITE
SWITCHYARD
CIVIL WORKS

SCALE 1:100

DRAWING TARDEV-HYD-CWG-PS-DR-C-0003 REV X1 SIZE A1

FILENAME: C:\12DS\DATA\HDIPRO12DSA01\H-0150005_TARRALEAH_REDEV_6414_WORK AND TECHNICAL\4.2_CADD\4.2.2_DRAWING\DWG\TAR(DEV) REDEVELOPMENT\TARDEV-HYD-CWG-PS-DR-C-0003.DWG

30/09/2024 12:50:54 PM

52800 FENCED YARD

46590 BETWEEN TOWERS

TRANSMISSION LINE TERMINAL POLE E455294.53 N 5316734.83

4045 T/L

4045 T/L

BOLLARDS TO ESTABLISH VEHICLE ACCESS WAY WITH 'X' = 4.125m HORIZONTAL CLEARANCE (MIN.) TO 220kV LIVE PARTS. BOLLARDS CAN BE REMOVED FOR TRANSFORMER MANOEUVRING

EXTENT OF CONCRETE HARDSTAND

TRANSMISSION LINE TERMINAL POLE 455318.55 N 5316774.74

4045 T/L

4045 T/L

SOLID FENCE REQ'D FOR BOUNDARY CLEARANCE

REMOVABLE FENCE PANEL

3255 TOWERS

4000

4000

3500

FALL

FALL

FALL

FALL

℄ VT

℄ DS/ES

℄ CT

℄ CB

℄ PI

℄ TX

℄ TX

℄ SA

℄ CB

℄ CT

℄ DS/ES

℄ VT

N

22000 FENCED YARD

B -0002

REMOVABLE SECTION OF ISOPHASE BUS TO ALLOW FOR SYSTEM SPARE TRANSFORMER TO BE INSTALLED IN CASE OF TRANSFORMER FAILURE

17560 FENCED YARD

A -

TARRALEAH B - LIAPOOTAH 220kV T/L

6000

6000

21860

SECTION A - SCALE 1:200

SECTION THROUGH BUILDING IS INDICATIVE ONLY

TARRALEAH B - LIAPOOTAH 220kV T/L No.1

PLAN VIEW 1 - SCALE 1:100

TARRALEAH B - LIAPOOTAH 220kV T/L No.2

LEGEND

- NEW EQUIPMENT
- NEW FOUNDATIONS - ABOVE GROUND
- NEW FOUNDATION - BELOW GROUND
- ISOPHASE BUS
- ELECTRICAL CLEARANCES
- CONDUCTOR
- OPTICAL GROUND WIRE

ELECTRICAL CLEARANCES

N = 2225mm (NON FLASHOVER)
G = 2440mm (GROUND CLEARANCE)
P = 2415mm (PHASE TO PHASE)
X = 4125mm (HORIZONTAL CLEARANCE)
S = 4665mm (SECTION CLEARANCE)

2 1 0 2 4 6m
SCALE 1:100

4 2 0 4 8 12m
SCALE 1:200

ALTERATIONS

NOT FOR CONSTRUCTION
REFERENCE DESIGN
PRINT DATE: 7/05/2025 11:51:04 AM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

REPRO FROM – REV –

DRAWN	SF
CHECKED	GT
DESIGNED	GT
CHECKED	DdG
APPROVED	D.deGROOT
DATE	07/05/2025
HT AGREED	–
HT ACCEPTED	–

Hydro Tasmania

CLIENT: HYDRO TASMANIA

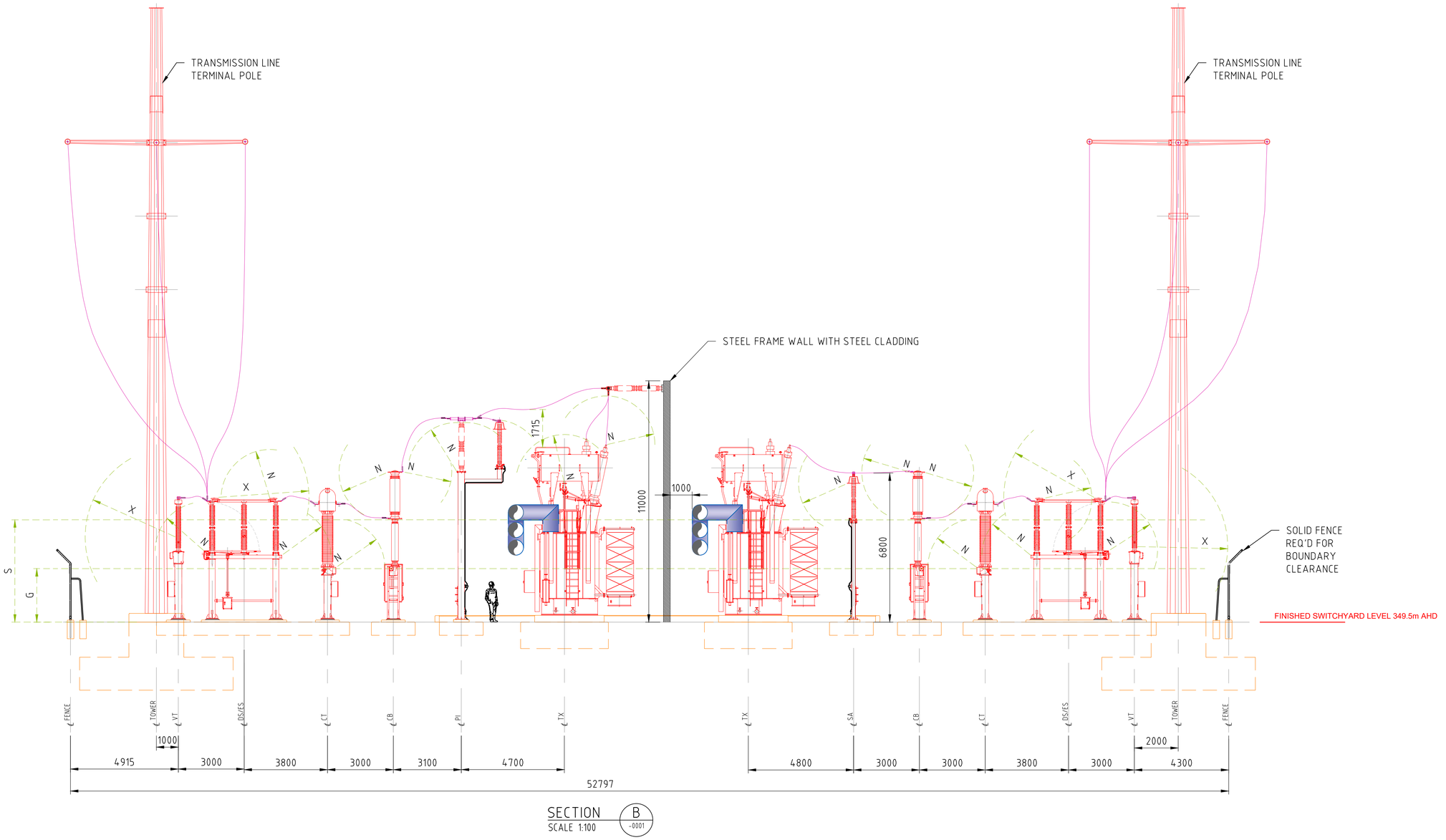
TITLE: TARRALEAH B 220kV SWITCHYARD GENERAL ARRANGEMENT AND SECTION A LIAPOOTAH CONNECTION

SCALE: AS SHOWN

DRAWING: TARDEV-ENT-EPS-SY-DR-E-0002 REV: X1 SIZE: A1

FILENAME: C:\12DS\DATA\HO1PRO12DSA01\H-0150005_TARRALEAH_REDEV_6414_WORK AND TECHNICAL\4.2_CADD\4.2.2_DRAWING\DWG\TAR(DEV) REDEVELOPMENT\TARDEV-ENT-EPS-SY-DR-E-0002.DWG

7/05/2025 11:51:04 AM



SECTION B
SCALE 1:100

LEGEND

- NEW EQUIPMENT
- NEW FOUNDATIONS - ABOVE GROUND
- NEW FOUNDATION - BELOW GROUND
- ISOPHASE BUS
- ELECTRICAL CLEARANCES
- CONDUCTOR
- OPTICAL GROUND WIRE

ELECTRICAL CLEARANCES

N = 2225mm (NON FLASHOVER)
G = 2440mm (GROUND CLEARANCE)
P = 2415mm (PHASE TO PHASE)
X = 4125mm (HORIZONTAL CLEARANCE)
S = 4665mm (SECTION CLEARANCE)

2 1 0 2 4 6m
SCALE 1:100

ALTERATIONS

NOT FOR CONSTRUCTION
REFERENCE DESIGN
PRINT DATE: 7/05/2025 11:50:44 AM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

REPR'D FROM – REV –

DRAWN	SF
CHECKED	GT
DESIGNED	GT
CHECKED	DdG
APPROVED	D.deGROOT
DATE	07/05/2025
HT AGREED	–
HT ACCEPTED	–

Hydro Tasmania

– – –

CLIENT HYDRO TASMANIA

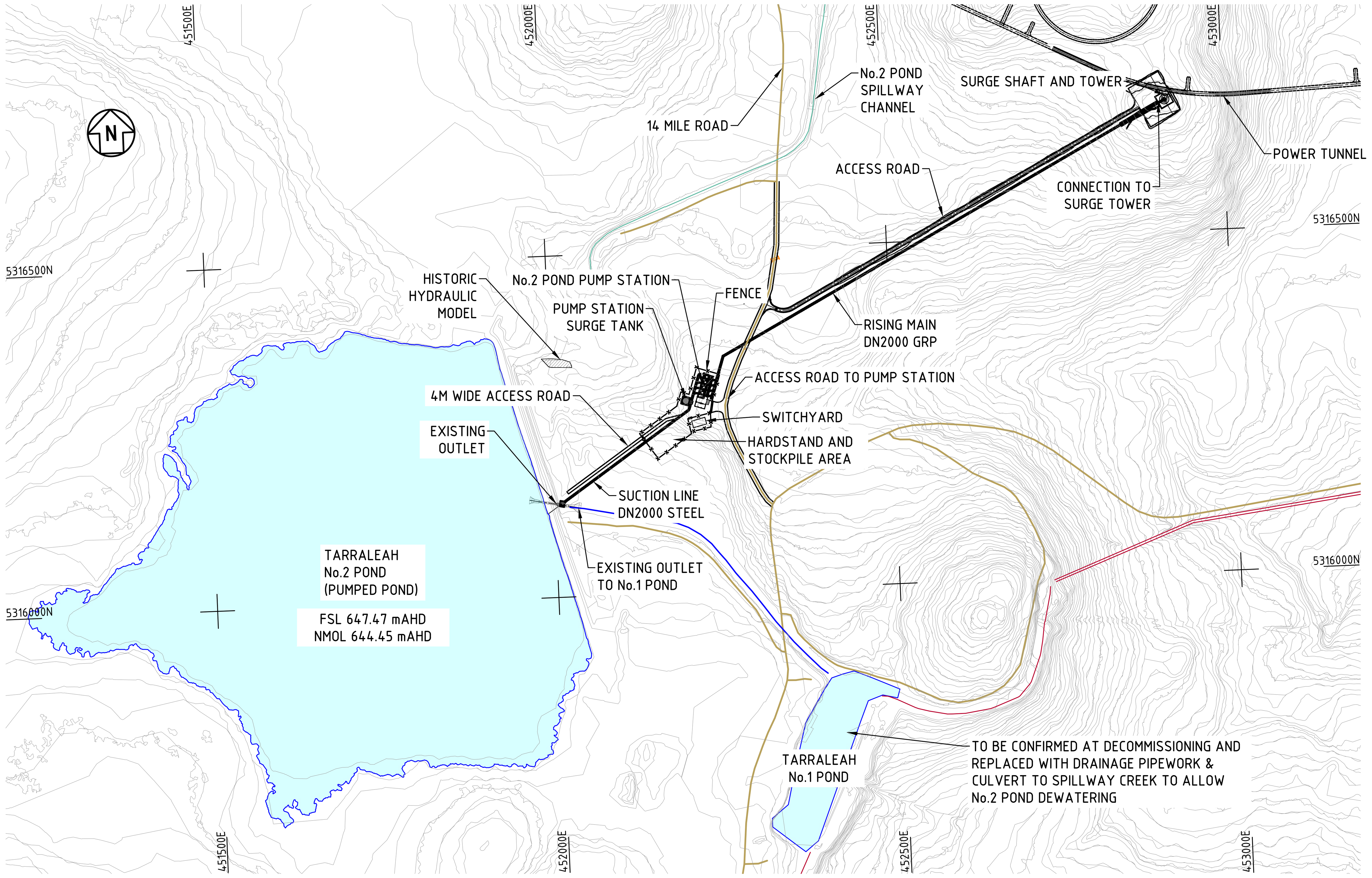
TITLE TARRALEAH B
220kV SWITCHYARD
SECTION B
LIAPOOTAH CONNECTION

SCALE 1:100

DRAWING TARDEV-ENT-EPS-SY-DR-E-0003 REV X1 SIZE A1

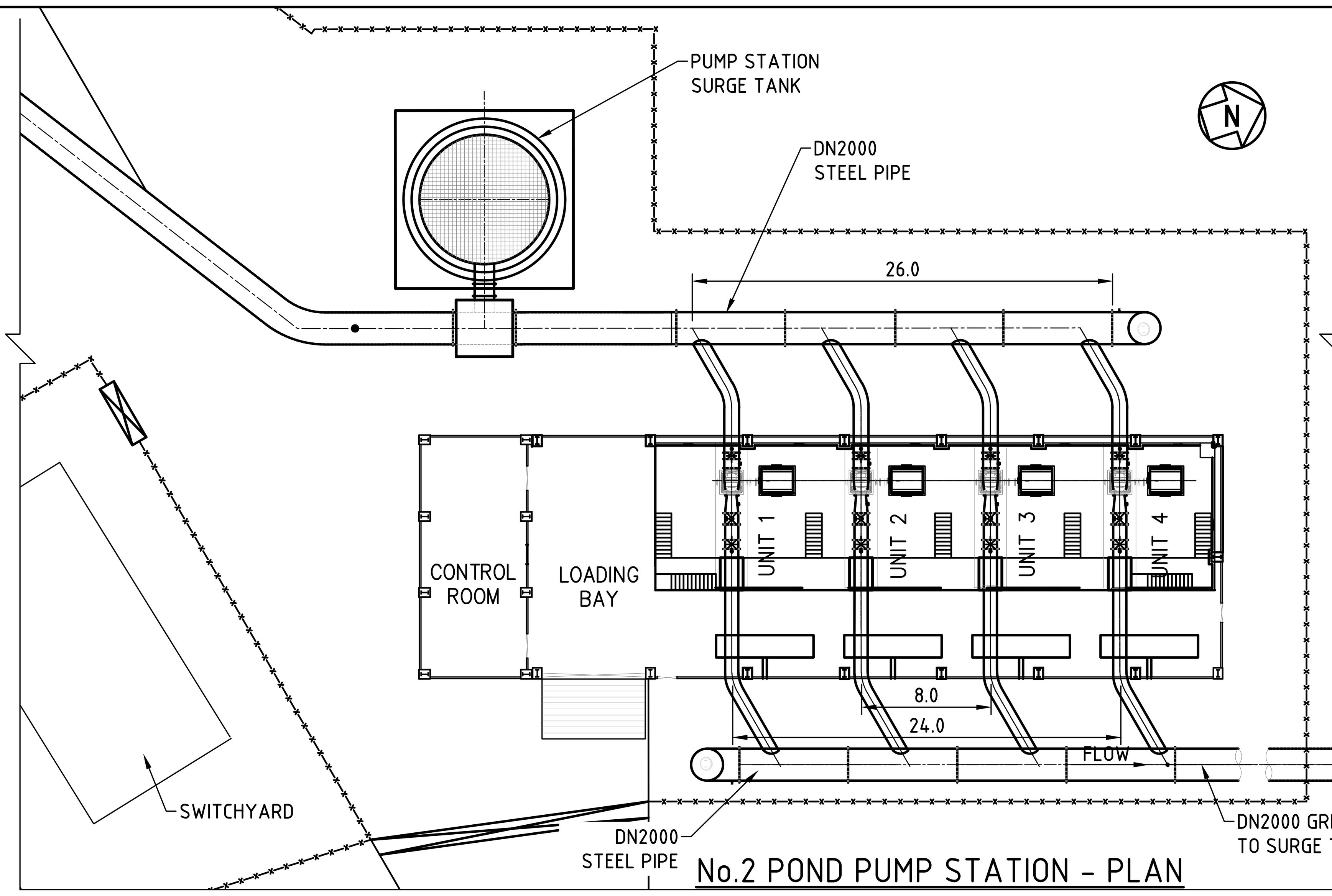
FILENAME: C:\12DS\DATA\HDTPRO12DSA01\H-0150005_TARRALEAH_REDEV_6414_WORK AND TECHNICAL\4.2_CADD\4.2.2_DRAWING\DWG\TAR(DEV) REDEVELOPMENT\TARDEV-ENT-EPS-SY-DR-E-0003.DWG

7/05/2025 11:50:44 AM



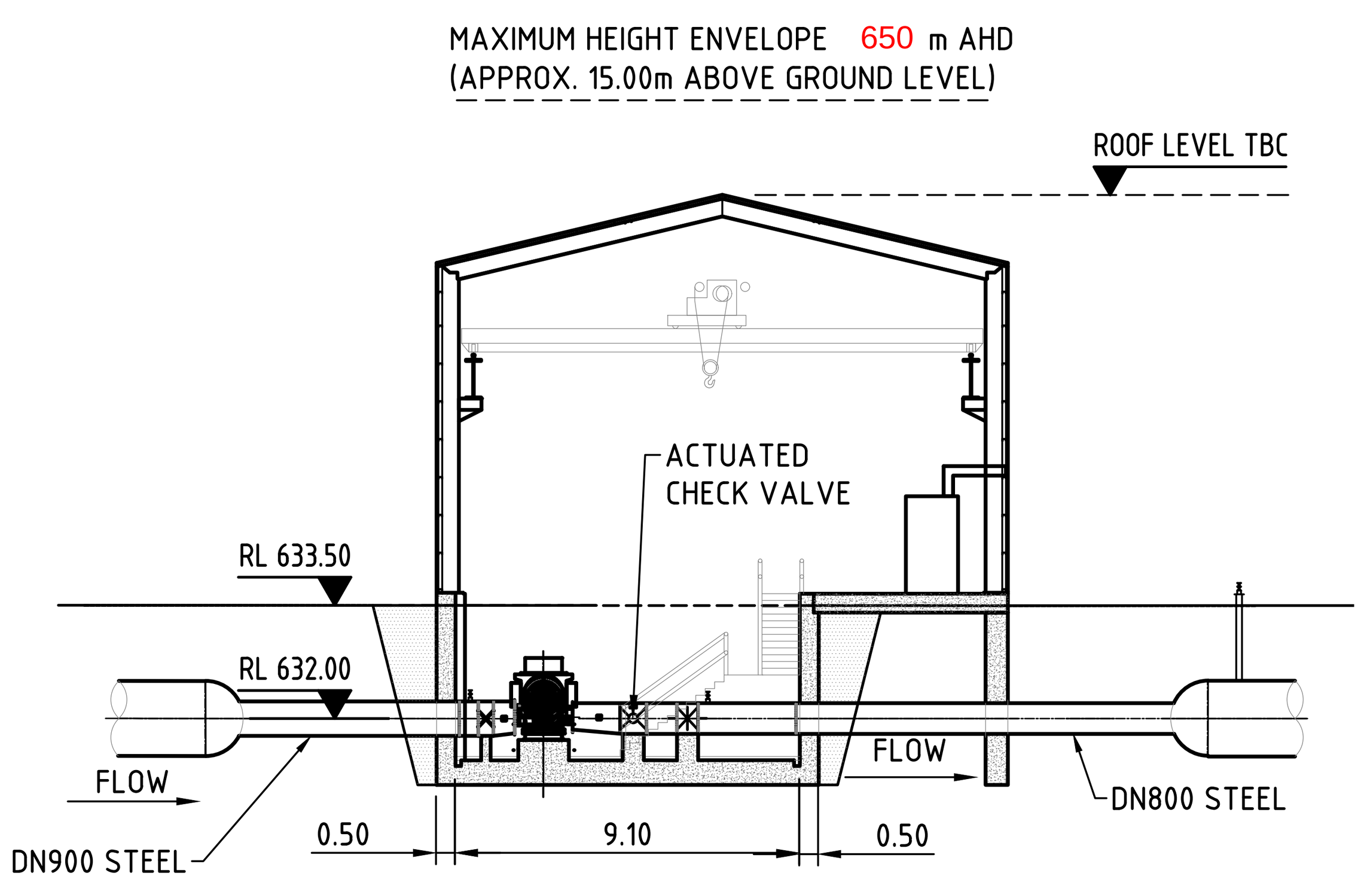
No.2 POND PUMP STATION – LOCATION PLAN

SCALE 1:5000



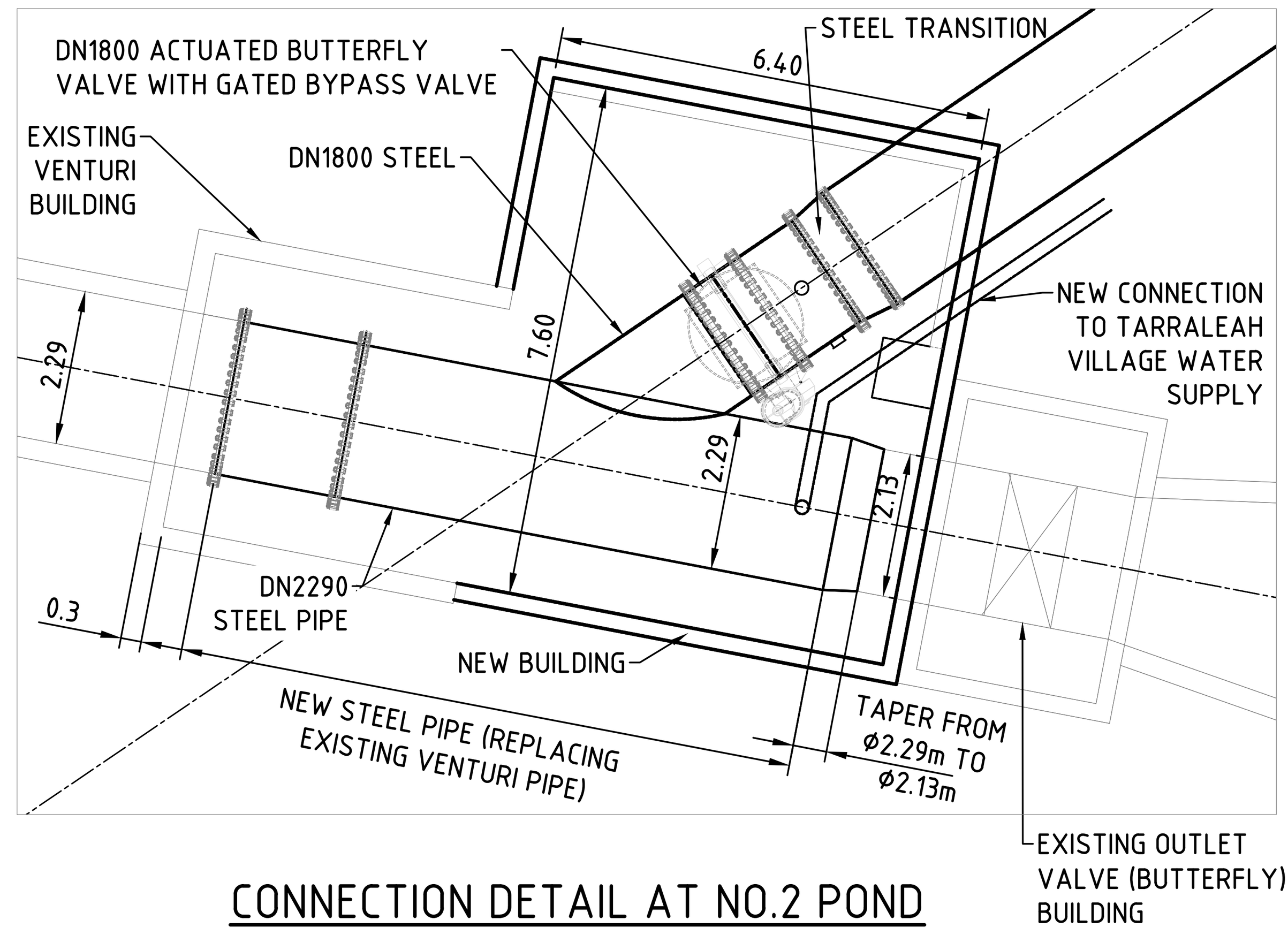
No.2 POND PUMP STATION – PLAN

SCALE 1:300



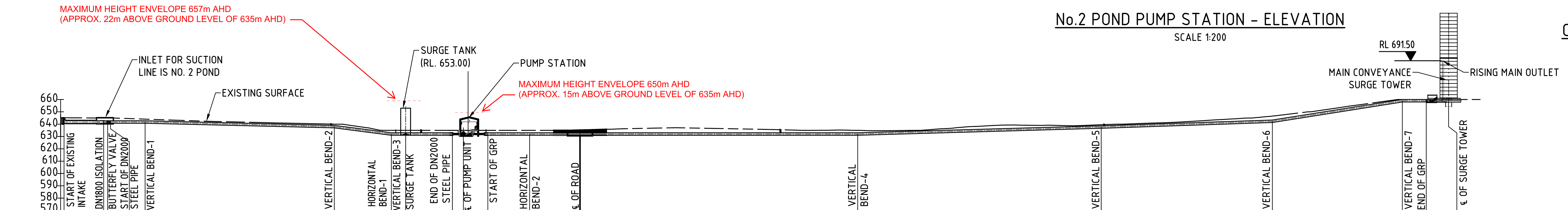
No.2 POND PUMP STATION – ELEVATION

SCALE 1:200



CONNECTION DETAIL AT NO.2 POND

SCALE 1:100



CHAINAGE		EXISTING LEVELS	℄ OF PIPE
-35.00			
-32.20	START OF EXISTING INTAKE	645.24	641.76
00.00	DN1800 ISOLATION BUTTERFLY VALVE	644.99	641.76
3.23	START OF DN2000 STEEL PIPE	644.98	641.76
5.53		644.98	641.76
33.64	VERTICAL BEND-1	644.17	641.76
50.00		643.51	
100.00		641.98	
150.00		640.80	
187.33	VERTICAL BEND-2	640.04	638.00
200.00		639.11	
233.70	HORIZONTAL BEND-1	635.00	632.00
245.29	VERTICAL BEND-3 / SURGE TANK	635.00	632.00
283.28	END OF DN2000 STEEL PIPE	635.00	632.00
292.21	℄ OF PUMP UNIT	635.00	632.035
310.91	START OF GRP	635.01	632.00
346.00	HORIZONTAL BEND-2	634.99	632.00
350.00		635.00	
386.83	℄ OF ROAD	635.48	632.00
400.00		635.57	
450.00		636.83	
500.00		636.47	
550.00		635.47	
600.00		635.23	
612.48	VERTICAL BEND-4	635.00	632.00
650.00		634.90	
700.00		637.74	
750.00		639.15	
800.00		639.12	
810.32	VERTICAL BEND-5	639.57	637.66
850.00		640.85	
900.00		643.29	
949.35	VERTICAL BEND-6	646.55	642.36
950.00		646.62	
1000.00		652.87	
1050.00		659.85	
1054.90	VERTICAL BEND-7	660.00	659.00
1074.36	END OF GRP	660.00	659.00
1091.50		660.00	
1092.54	℄ OF SURGE TOWER	660.00	659.00

LONGITUDINAL SECTION

SCALE 1:2000

2 1 0 2 4 6 8 10m — SCALE 1:100

40 20 0 40 80 120 160 200m — SCALE 1:2000

6 3 0 6 12 18 24 30m — SCALE 1:300

100 50 0 100 200 300 400 500m — SCALE 1:5000

DATUMS: MGA2020Z55 AHD83

LEGEND:

- —X—X—X— FENCED
- —E(TL)— TRANSMISSION LINES
- REDUNDANT INFRASTRUCTURE
- MAINTAIN EXISTING INFRASTRUCTURE
- RIVERS
- ROADS

NOTES:

1. ALL DIMENSIONS AND CHAINAGES ARE IN M AND ELEVATIONS, LEVELS, FULL SUPPLY LEVEL (FSL),
2. PUMPS ARE TO BE LOCATED IN A PIT BELOW NATURAL GROUND SURFACE.

ALTERATIONS

REV	DESCRIPTION	DRN	CHK/DSGN	APPD / DATE
X2	HEADRACE AND POWER TUNNEL NORTHERN ALIGNEMENT AND POWER STATION SWITCHYARD SITE ADOPTED	HT	HT	HT 17/5/2023
X3	ALIGNMENT UPDATED FOR ISSUE FOR RFP	HT	HT	HT 22/2/2024
X4	UPDATES FOR REFERENCE DESIGN ISSUE	HT	HT	HT 14/6/2024
X5	ENVELOPE HEIGHTS ADDED	PO	ES	ES 17/02/2026

NOT FOR CONSTRUCTION
REFERENCE DESIGN
PRINT DATE: 2/03/2026 2:59:55 PM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

TARDEV-HYD-AGA-XX-DR-C-0001	TARRALEAH REDEVELOPMENT PROJECT WIDE SCHEMATIC
A1678	TARRALEAH POWER DEVELOPMENT NO.2 CANAL GENERAL ARRANGEMENT TYPICAL SECTIONS OF MAJOR STRUCTURES SHEET 2 OF 2
A1625	TARRALEAH POWER DEVELOPMENT NO.2 CANAL GENERAL ARRANGEMENT PLAN , PROFILE AND SECTIONS SHEETS 1 OF2
A8075	TARRALEAH POWER DEVELOPMENT PUMPED POND OUTLET WORKS GENERAL LAYOUT

REPR'D FROM – REV –

DRAWN	SP
CHECKED	PK
DESIGNED	MW
CHECKED	RAP
APPROVED	PK
DATE	30-05-2024
HT AGREED	-
HT ACCEPTED	-

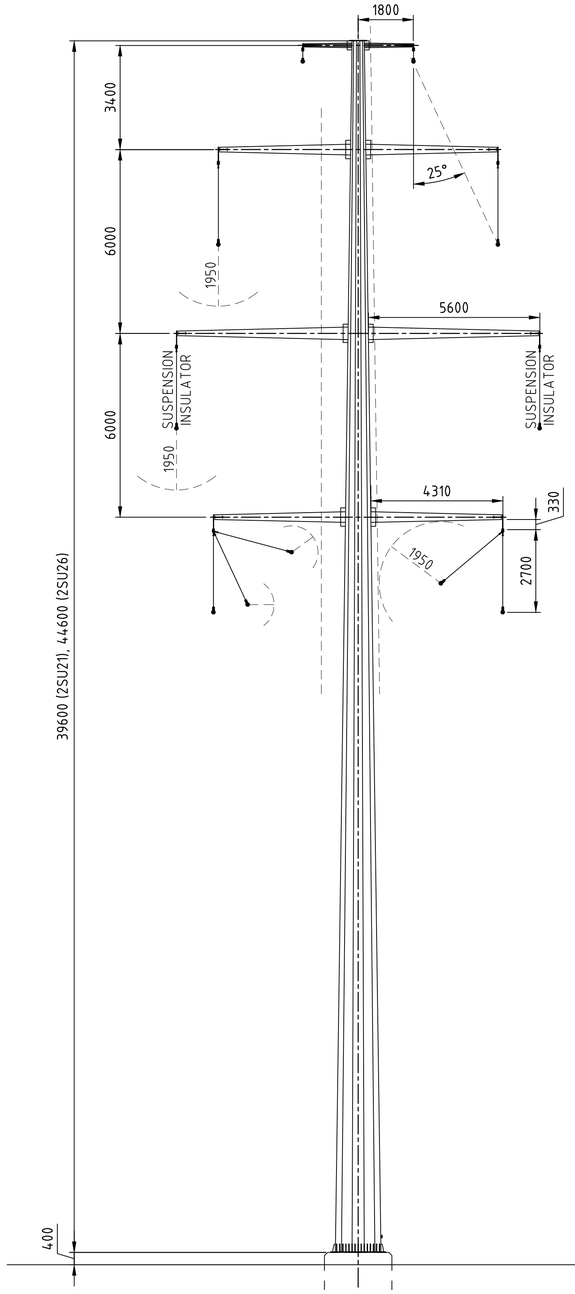
Hydro Tasmania

CLIENT: HYDRO TASMANIA

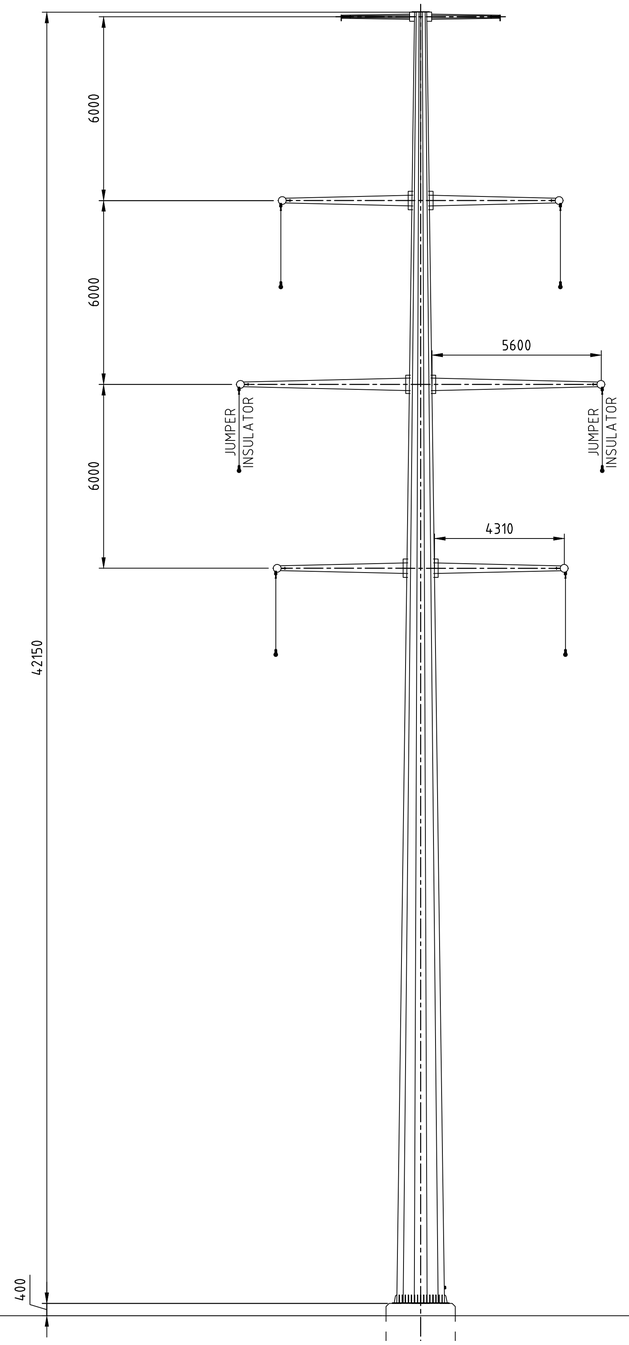
TITLE: TARRALEAH REDEVELOPMENT
NO. 2 PUMP STATION
GENERAL ARRANGEMENT
PLAN AND ELEVATION

SCALE: AS SHOWN

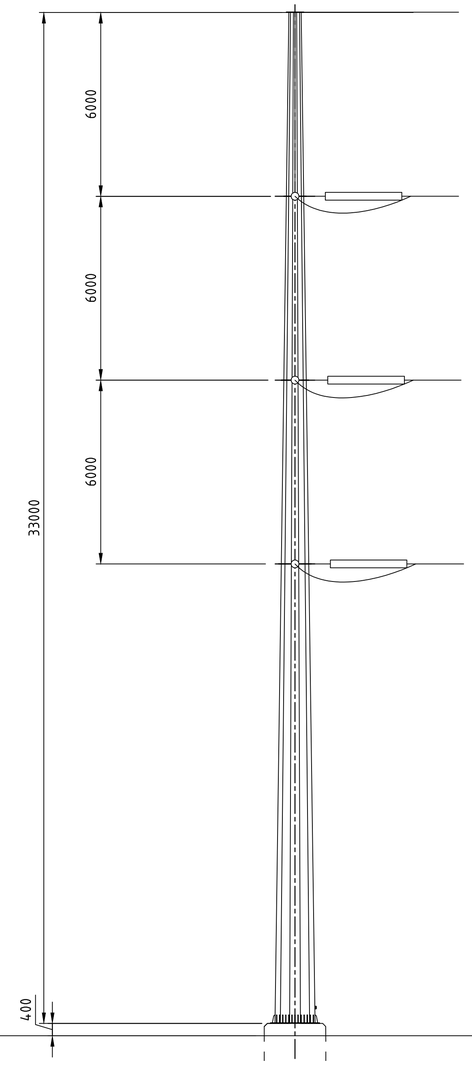
DRAWING: TARDEV-HYD-AGA-XX-DR-C-0011 | REV: X5 | SIZE: A1



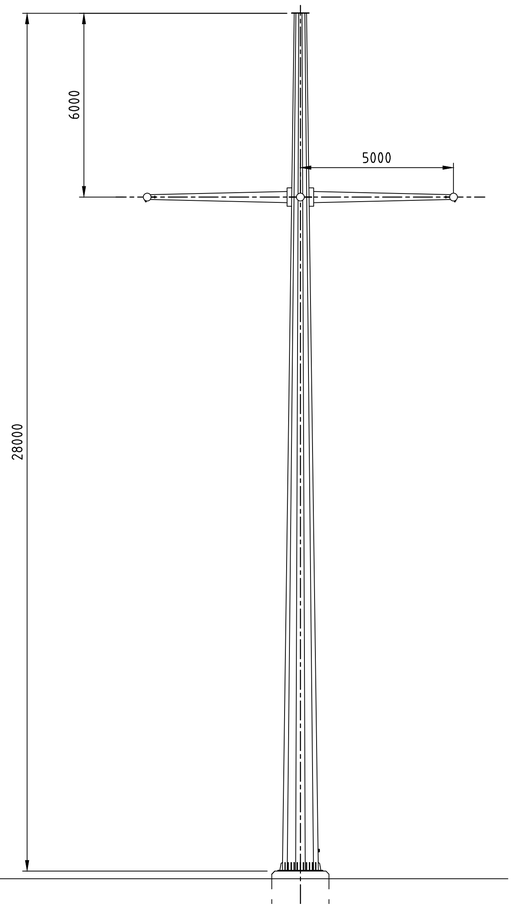
2SU21 & 2SU26
SUSPENSION POLES
MAX HEIGHT = 45m



10ST24, 20TE24, 60ST24
STRAIN/TERMINAL POLES
MAX HEIGHT = 42.55m



90ST15
TERMINAL POLES
MAX HEIGHT = 33.4m



10TE22
TERMINAL POLES
MAX HEIGHT = 28.4m

ALTERATIONS

FOR INFORMATION ONLY

REFERENCES

DRAWN	
CHECKED	
DESIGNED	
CHECKED	
APPROVED	
DATE	
CLIENT APP'D	
DATE	

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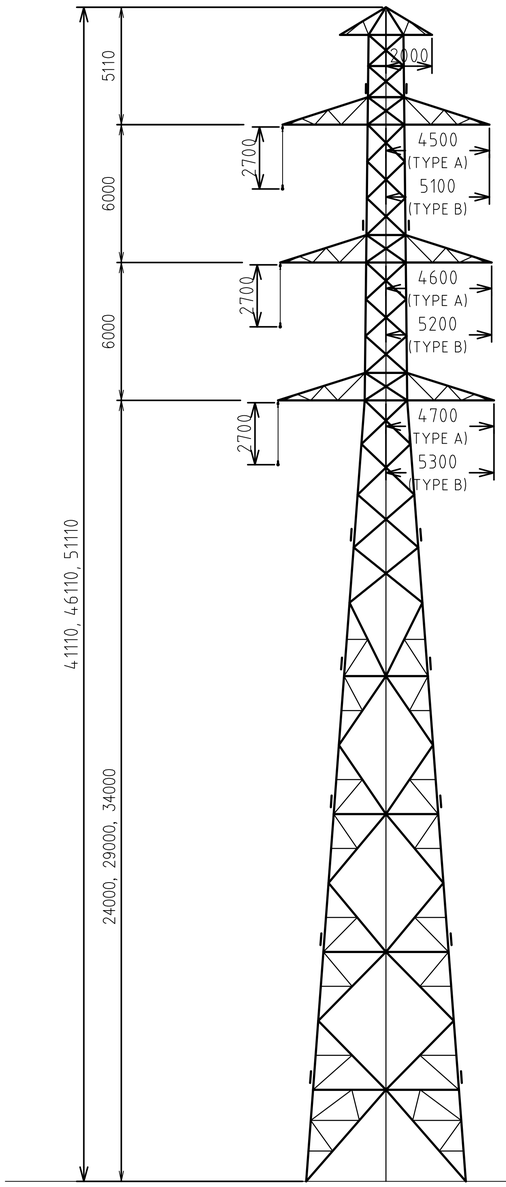
CLIENT: ENGAGEMENT No:

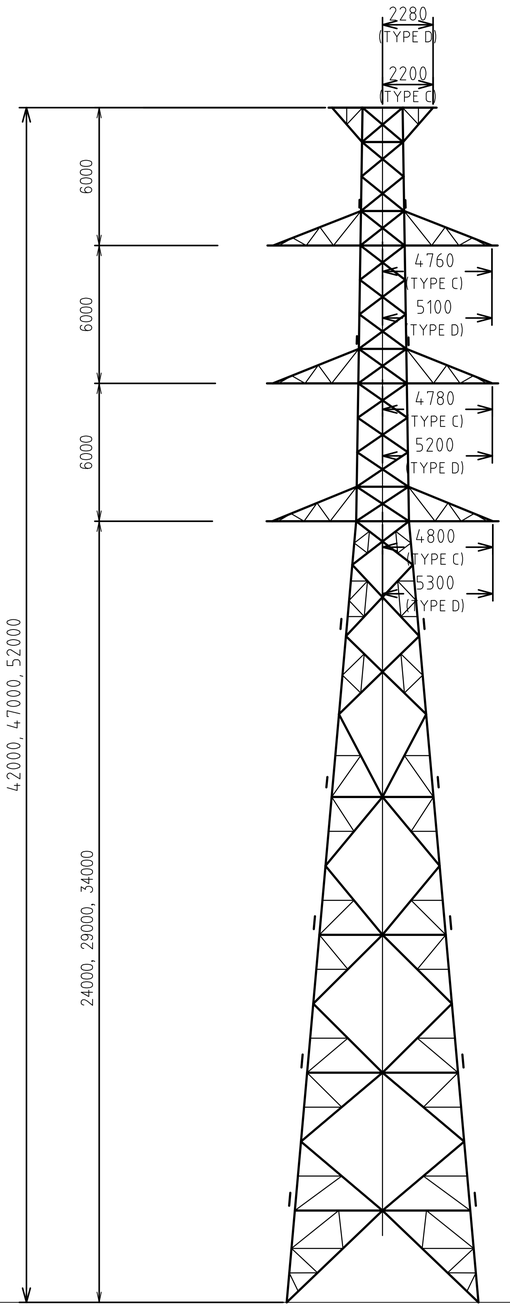
TITLE
TARRALEAH REDEVELOPMENT
TRANSMISSION LINE CONCEPT
TYPICAL TRANSMISSION LINE STRUCTURES
SOUTHERN ROUTE

SCALE: NTS
SIZE: A1
DRG No.
SHT.
REV: 0

FILENAME: C:\USERS\DINOA\ENTURA\C_DRIVE\TAS_HT\TARRA220\2025\DELAGOONOPTION\GA_TARRALIAP_TUNGADEE2026A.DWG



TYPE–A & B
(SUSPENSION TOWER)
MAX HEIGHT = 51.1m



TYPE–C & D
(STRAIN TOWER)
MAX HEIGHT = 52m

ALTERATIONS

FOR INFORMATION ONLY

REFERENCES

DRAWN	
CHECKED	
DESIGNED	
CHECKED	
APPROVED	
DATE	
CLIENT APP'D	
DATE	

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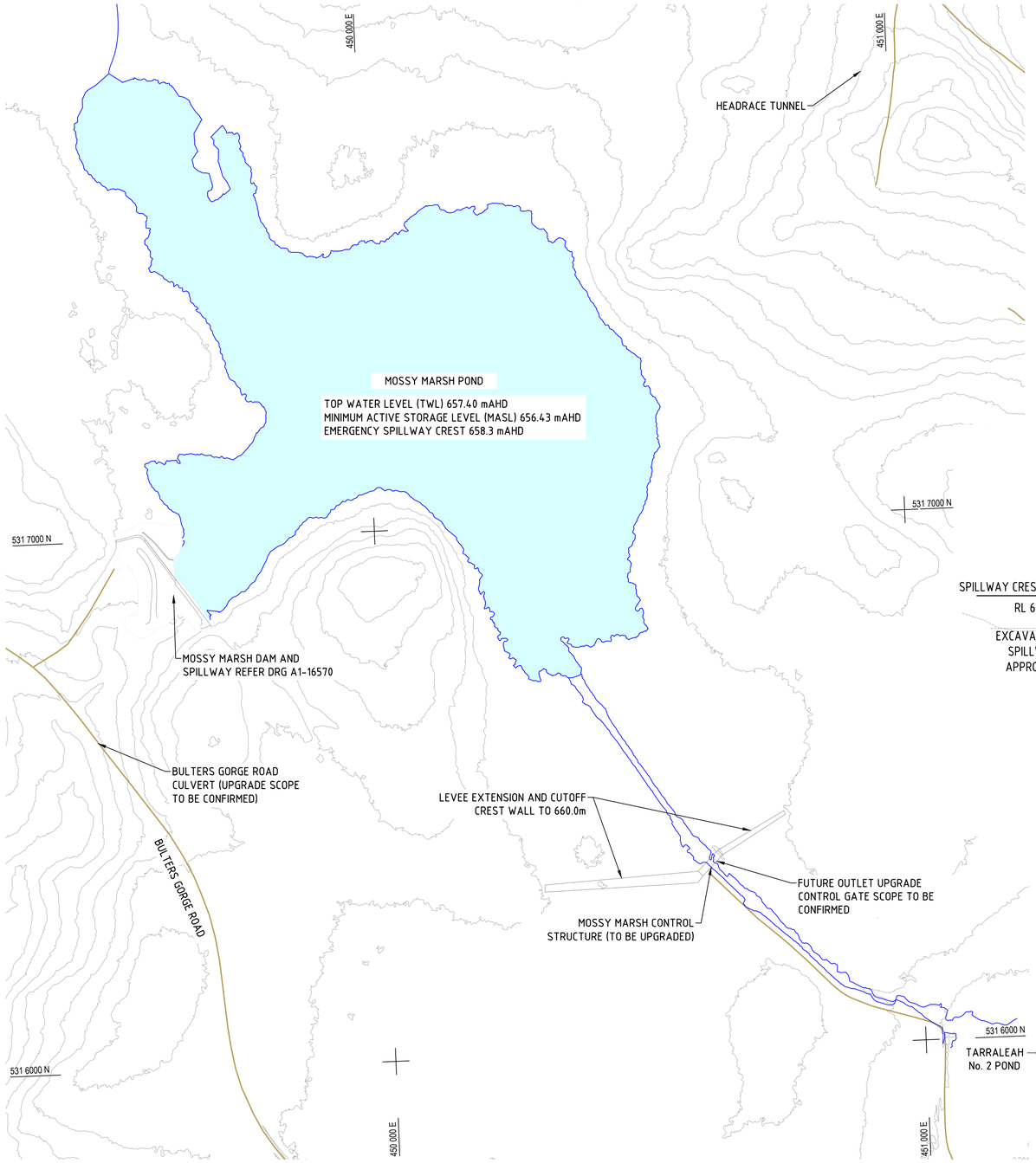
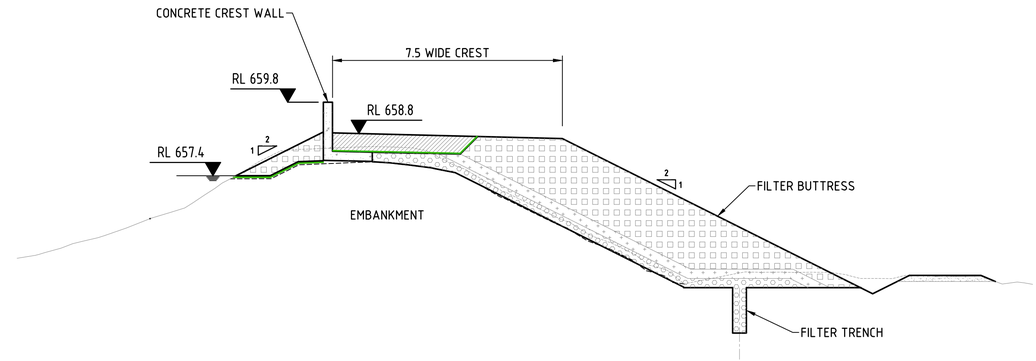
CLIENT:
ENGAGEMENT No:
TITLE
TARRALEAH REDEVELOPMENT
TRANSMISSION LINE CONCEPT
TYPICAL TRANSMISSION LINE STRUCTURES
NORTHERN ROUTE
SCALE: NTS
SIZE: A1
DRG No.:
SHT.:
REV: 0

FILENAME: C:\USERS\DINOA\ENTURA\C_DRIVE\TAS_HT\TARRA220\2025\DELAGOONOPTION\GA_TARRALIAP_TUNGADEE2026A.DWG



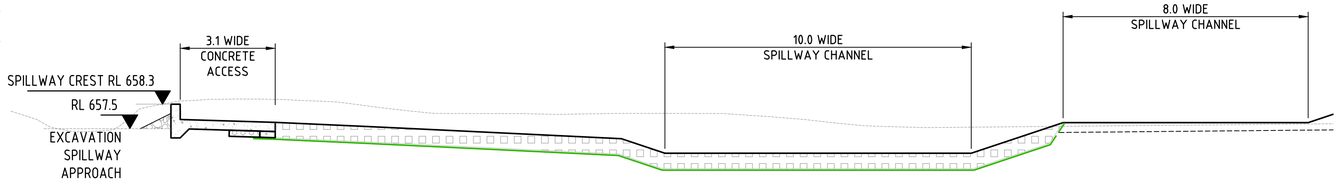
MOSSY MARSH – LOCATION PLAN

SCALE 1:5000



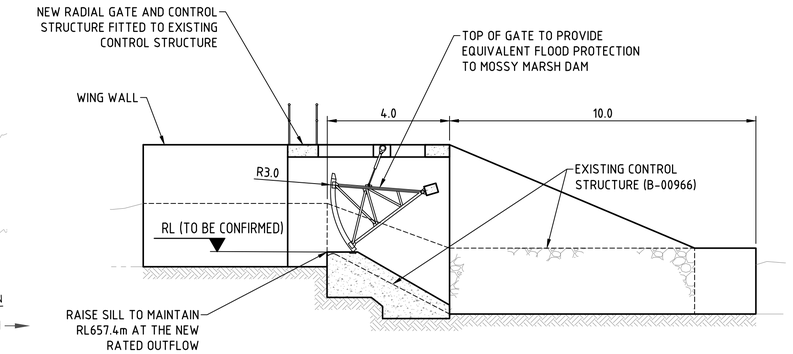
MOSSY MARSH DAM TYPICAL SECTION – UPGRADE COMPLETE

SCALE 1:100



MOSSY MARSH SPILLWAY TYPICAL SECTION – UPGRADE COMPLETE

SCALE 1:100



MOSSY MARSH CONTROL STRUCTURE UPGRADE (TO BE CONSTRUCTED BY HYDRO TASMANIA)

SCALE 1:100

2 1 0 2 4 6 8 10m

DATUMS: MGA2020Z55 AHD83 SCALE 1:100

100 50 0 100 200 300 400 500m

SCALE 1:5000

LEGENDS:

- E(TL) — TRANSMISSION LINES
- REDUNDANT INFRASTRUCTURE
- MAINTAIN EXISTING INFRASTRUCTURE
- RIVERS
- ROADS
- GEO FABRIC
- ROAD BASE
- CONCRETE
- ZONE 2A FILTER
- ZONE 2B FILTER
- RIP RAP
- ZONE 3 ROCK FILL

NOTE:

1. ALL DIMENSIONS, CHAINAGES ARE IN m AND ELEVATIONS, LEVELS, FULL SUPPLY LEVEL (FSL), DESIGN FLOOD LEVEL (DFL), NORMAL MINIMUM OPERATING LEVEL (NMOL) ARE IN m AHD 1983.
2. 2. ALL WORKS TO BE DELIVERED BY HYDRO TASMANIA AND NOT PART OF EPC CONTRACT SCOPE

ALTERATIONS				
HEADRACE AND POWER TUNNEL NORTHERN ALIGNEMENT AND POWER STATION SWITCHYARD SITE ADOPTED	REV X2	DRN HT	CHK/DSN HT	APPR / DATE 17/5/2023
ALIGNMENT UPDATED FOR ISSUE FOR RFP	REV X3	DRN HT	CHK/DSN HT	APPR / DATE 22/2/2024
UPDATES FOR REFERENCE DESIGN ISSUE	REV X4	DRN HT	CHK/DSN HT	APPR / DATE 14/8/2024

NOT FOR CONSTRUCTION
REFERENCE DESIGN
PRINT DATE: 2/03/2026 3:05:59 PM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES	
TARDEV-HYD-AGA-XX-DR-C-0001	TARRALEAH REDEVELOPMENT PROJECT WIDE SCHEMATIC
TARDEV-HYD-SUR-XX-DR-C-0001	TARRALEAH REDEVELOPMENT POWER SCHEME REFERENCE POINTS
B-00966	TARRALEAH NO.2 CANAL MOSSY MARSH TO PUMPED POND CANAL CONTROL AT CH.1900
A1678	TARRALEAH POWER DEVELOPMENT NO.2 CANAL GENERAL ARRANGEMENT PLAN, PROFILE & SECTIONS SHEETS 1 OF 2
A1625	TARRALEAH POWER DEVELOPMENT NO.2 CANAL GENERAL ARRANGEMENT TYPICAL SECTIONS OF MAJOR STRUCTURES SHEETS 2 OF2

REPRO FROM – REV –

DRAWN	RO/SB
CHECKED	RJ/JC
DESIGNED	TEAM
CHECKED	RVDK
APPROVED	ES/GB
DATE	–
HT AGREED	–
HT ACCEPTED	–

Hydro Tasmania

–	
–	
–	

CLIENT: HYDRO TASMANIA

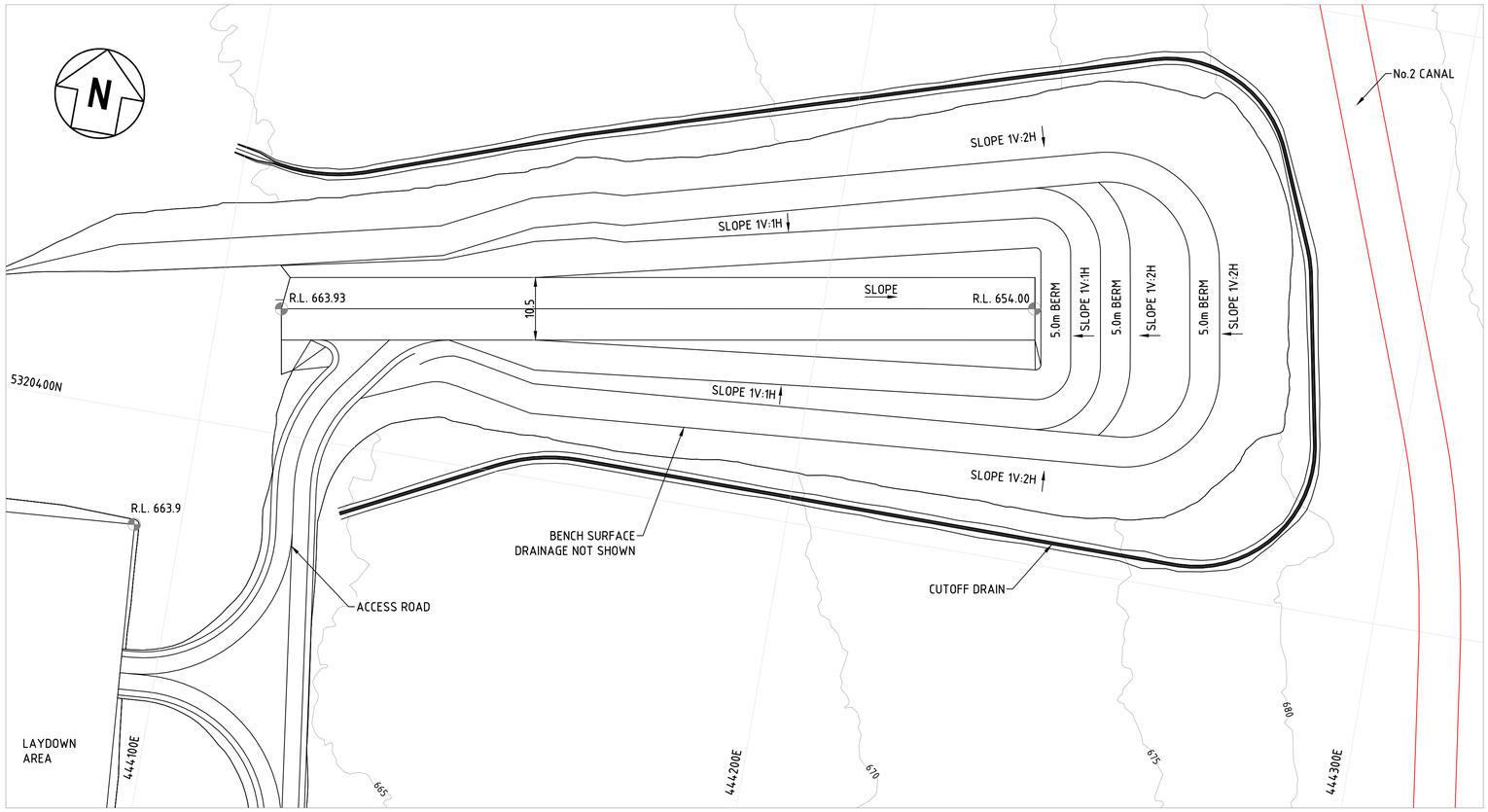
TITLE: TARRALEAH REDEVELOPMENT
GENERAL ARRANGEMENT
MOSSY MARSH UPGRADES
PLAN AND SECTION

SCALE: AS SHOWN

DRAWING: TARDEV-HYD-AGA-XX-DR-C-0012 | REV: X4 | SIZE: A1

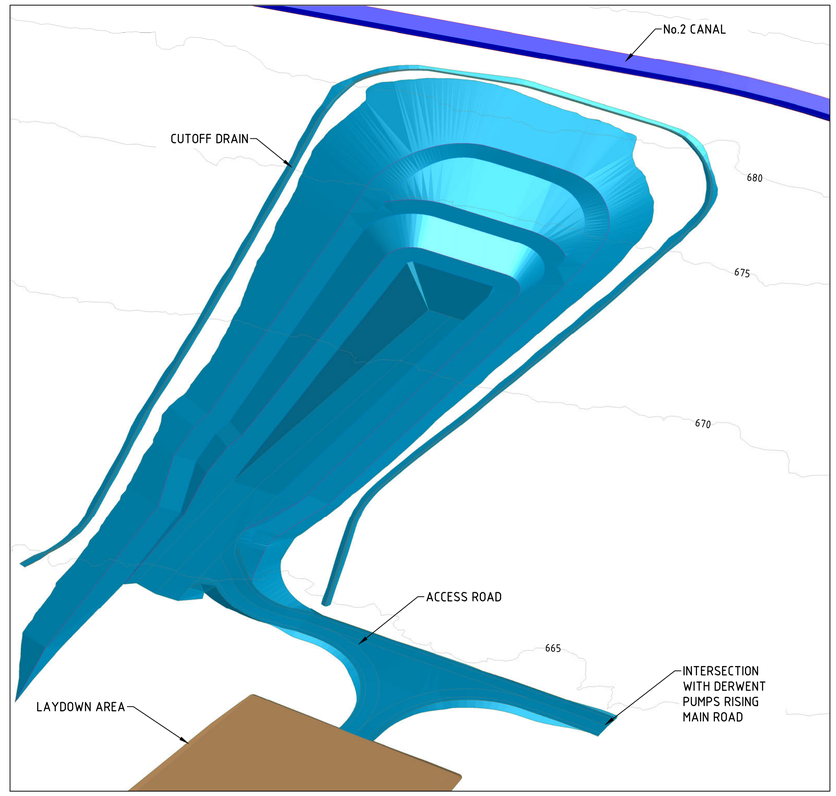
FILENAME: C:\12DS\DATA\HD1PRO12DSA01\H-0150005_TARRALEAH_REDEV_6414_WORK AND TECHNICAL\14.2_CADD\14.2.2_DRAWING\DWG\TARDEV) REDEVELOPMENT\TARDEV-HYD-AGA-XX-DR-C-0012.DWG

2/03/2026 3:05:59 PM



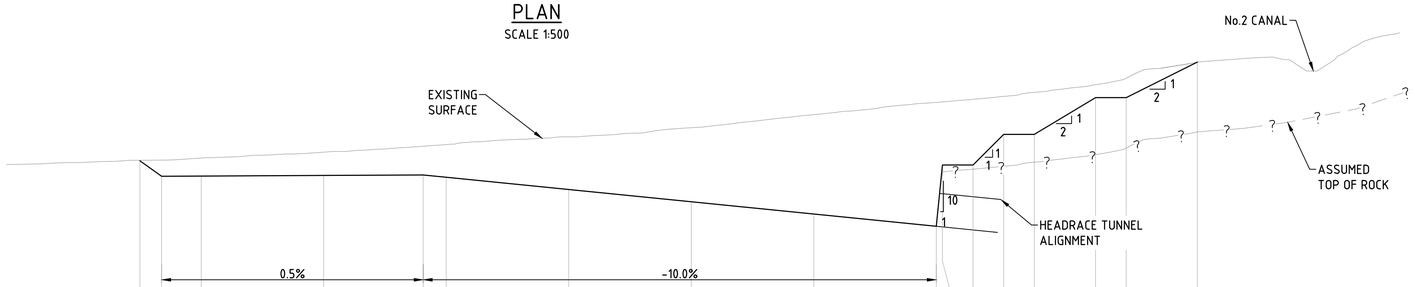
PLAN

SCALE 1:500



ISOMETRIC VIEW

NTS



DATUM RL 640.0

CUT - FILL +	0.00	-2.64	-2.95	-3.81	-4.69	-5.33	-8.60	-12.08	-16.21	-20.21	-10.29	-10.72	-6.20	-6.86	-2.11	-3.15	0.00
DESIGN SURFACE LEVEL	664.68	662.16	662.20	662.29	662.38	662.00	660.00	658.00	656.00	654.00	664.00	664.00	669.00	669.00	675.00	675.00	680.80
EXISTING SURFACE LEVEL	664.68	664.80	665.14	666.10	667.06	667.33	668.60	670.08	672.21	674.21	674.29	674.72	675.20	675.86	677.11	678.15	680.80
CHAINAGE	-130.00	-126.47	-120.00	-100.00	-83.77	-80.00	-60.00	-40.00	-20.00	0.00	1.00	6.00	11.00	16.00	26.00	31.00	42.60

LONGITUDINAL SECTION

SCALE 1:500

NOTE:

1. ALL DIMENSION AND ELEVATIONS ARE IN m.

10 8 6 4 2 0 10 20 30 40 50m

SCALE 1:500

ALTERATIONS

NOT FOR CONSTRUCTION
REFERENCE DESIGN
PRINT DATE: 2/03/2026 3:23:51 PM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

TARDEV-HYD-CGS-HT-DR-C-0001	TUNNEL PORTAL GROUND SUPPORT DETAILS
TARDEV-HYD-CGS-HT-DR-C-0002	ROCK BOLT TYPICAL DETAILS
TARDEV-HYD-CGS-HT-DR-C-0003	FACE SUPPORT SUBSURFACE DRAINAGE

REPRO FROM - REV -

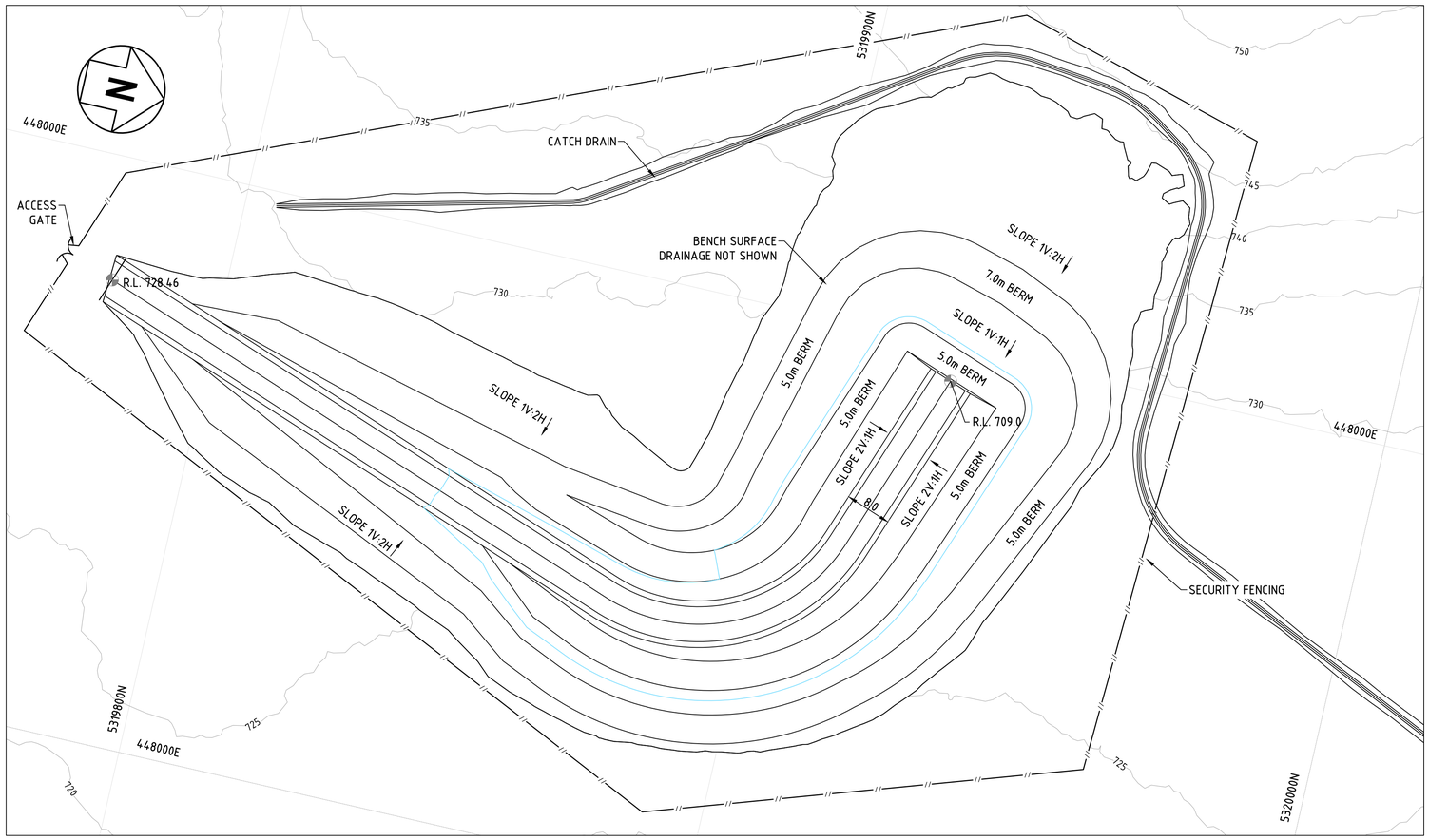
DRAWN	LC
CHECKED	RJ
DESIGNED	LC/JL
CHECKED	RJ/JT
APPROVED	-
DATE	-
HT AGREED	-
HT ACCEPTED	-

Hydro Tasmania

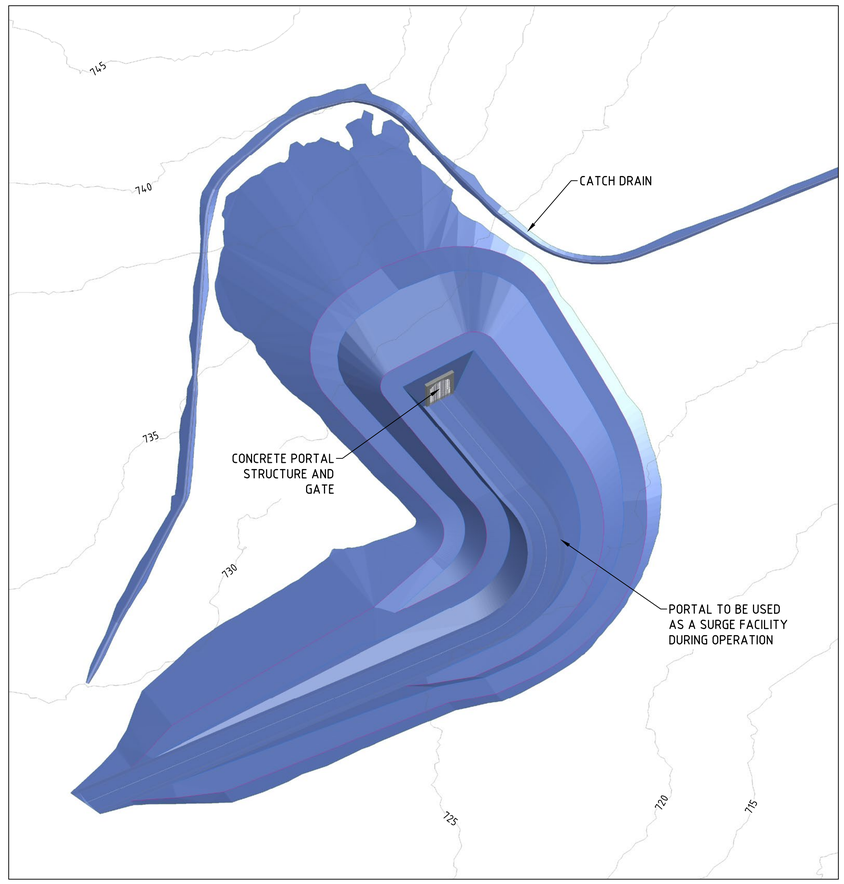
CLIENT	HYDRO TASMANIA
TITLE	TARRALEAH REDEVELOPMENT UNDERGROUND WORKS WESTERN HEADRACE TUNNEL PORTAL EXCAVATION
SCALE	1:500
DRAWING	TARDEV-HYD-CEX-HT-DR-C-0001
REV.	X1
SIZE	A1

FILENAME: C:\12DS\DATA\HD1PRD12DSA01\H-0150005_TARRALEAH_REDEV_6414_WORK AND TECHNICAL\4.2_CADD\4.2.2_DRAWING\DWG\TAR(DEV) REDEVELOPMENT\TARDEV-HYD-CEX-HT-DR-C-0001.DWG

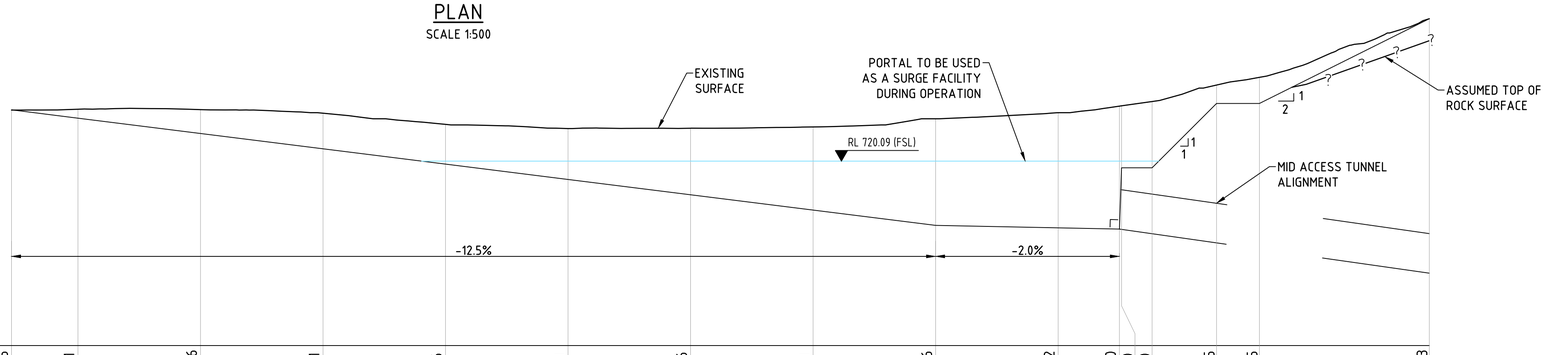
2/03/2026 3:23:51 PM



PLAN
SCALE 1:500



ISOMETRIC VIEW
NTS



DATUM 690.000

DESIGN SURFACE LEVEL	728.5	727.1	724.6	722.1	719.6	717.1	714.6	712.1	709.6	709.2	709.0	719.0	729.5	729.5	743.3
EXISTING SURFACE LEVEL	728.4	728.6	728.5	727.9	726.1	725.4	725.5	725.7	727.0	728.0	729.1	729.1	729.8	732.5	733.8	743.3
CUT/FILL	0.0	-1.5	-3.9	-5.8	-6.5	-8.3	-10.9	-13.6	-17.4	-18.8	-20.1	-10.1	-10.8	-3.0	-4.3	0.0
CHAINAGE	-180.85	-170.00	-150.00	-130.00	-110.00	-90.00	-70.00	-50.00	-30.00	-10.00	0.00	0.35	5.34	15.85	22.86	50.59

LONGITUDINAL SECTION
SCALE 1:500

NOTE:
1. ALL DIMENSION AND ELEVATIONS ARE IN m.

10 8 6 4 2 0 10 20 30 40 50m
SCALE 1:500

ALTERATIONS

NOT FOR CONSTRUCTION
WORK IN PROGRESS
PRINT DATE: 16/07/2024 4:49:09 PM

REFERENCES

TARDEV-HYD-CGS-HT-DR-C-0001	TUNNEL PORTAL GROUND SUPPORT DETAILS
TARDEV-HYD-CGS-HT-DR-C-0002	ROCK BOLT TYPICAL DETAILS
TARDEV-HYD-CGS-HT-DR-C-0003	FACE SUPPORT SUBSURFACE DRAINAGE

REPRO FROM – REV –

DRAWN	LC
CHECKED	RJ
DESIGNED	LC/JL
CHECKED	RJ/JT
APPROVED	–
DATE	–
HT AGREED	–
HT ACCEPTED	–

Hydro Tasmania

– – –

CLIENT HYDRO TASMANIA

TITLE TARRALEAH REDEVELOPMENT
UNDERGROUND WORKS
MID ACCESS TUNNEL PORTAL
EXCAVATION

SCALE 1:500

DRAWING TARDEV-HYD-CEX-HT-DR-C-0002 REV X1 SIZE A1

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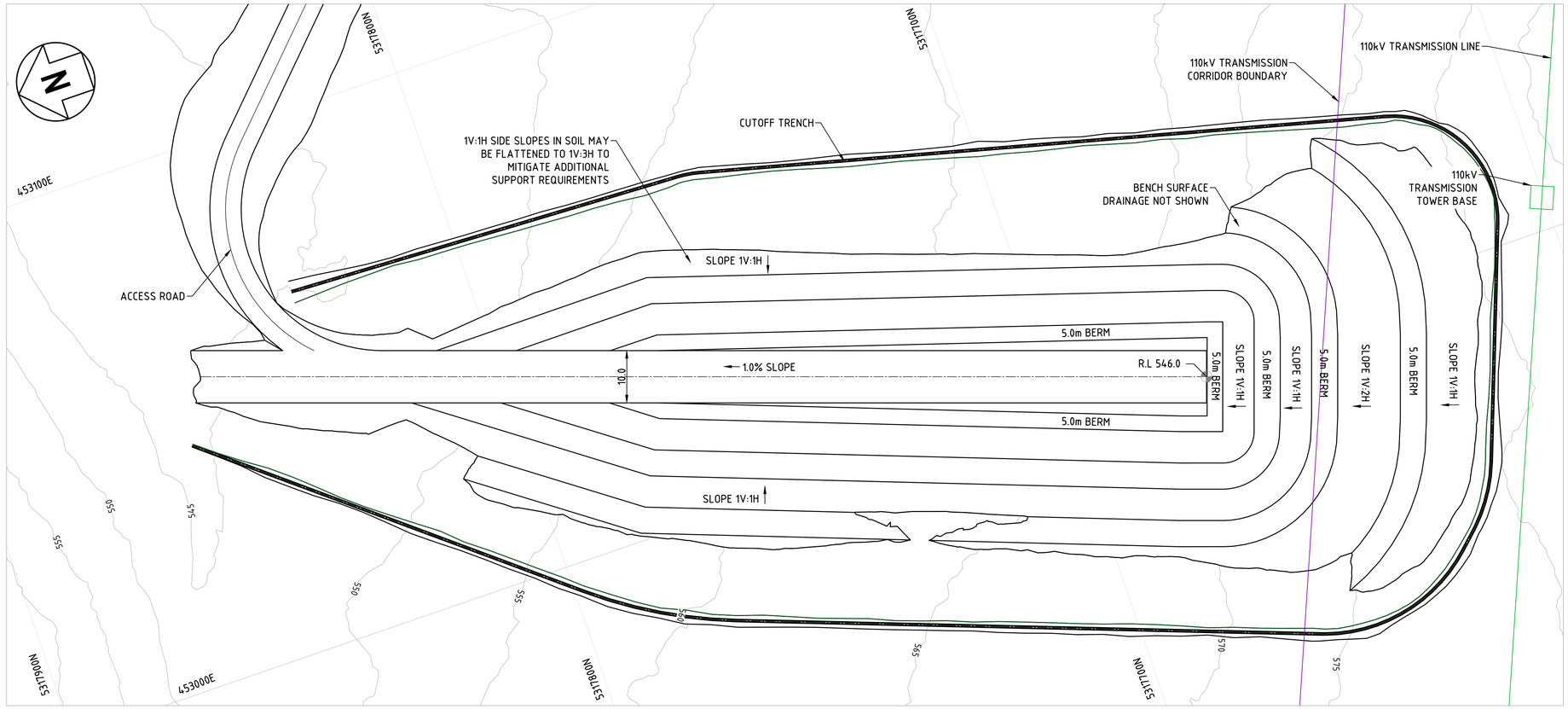
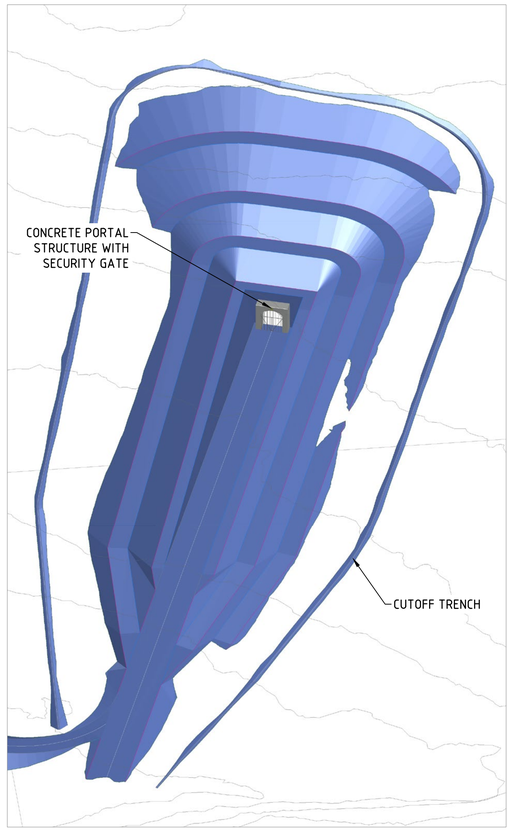
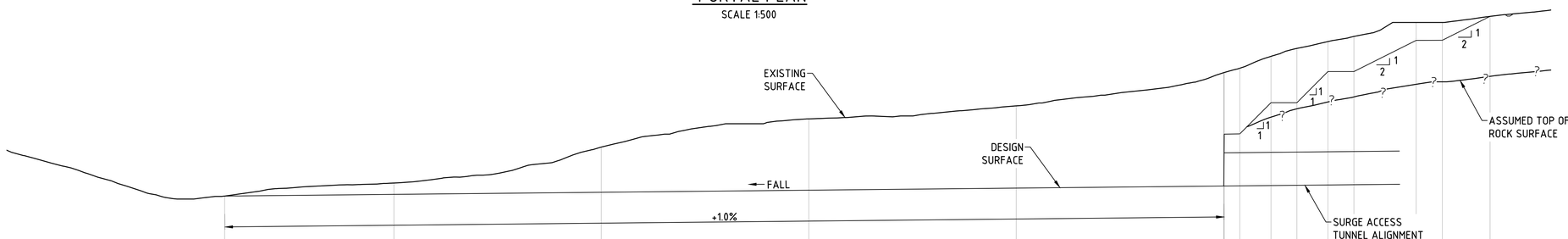


PORTAL PLAN
SCALE 1:500



PORTAL ISOMETRIC VIEW
NTS



DATUM 520.000

DESIGN RL	544.07	544.40	544.80	545.20	545.60	546.00	556.00	556.05	562.05	562.05	568.05	568.05	574.05	574.07	578.68
EXISTING RL	544.1	546.6	553.5	558.9	561.4	567.8	567.9	568.7	571.0	572.5	573.8	574.8	577.5	577.5	578.7
CUT/FILL	-0.0	-2.2	-8.7	-13.7	-15.8	-21.8	-11.9	-12.6	-8.9	-10.5	-5.8	-6.8	-3.5	-3.4	0.0
CHAINAGE	-192.62	-160.00	-120.00	-80.00	-40.00	0.00	0.10	3.10	9.11	14.10	20.10	25.10	37.10	42.14	51.35

LONGITUDINAL SECTION
SCALE 1:500

NOTE:
1. ALL DIMENSION AND ELEVATIONS ARE IN m.

10 8 6 4 2 0 10 20 30 40 50m
SCALE 1:500

ALTERATIONS

NOT FOR CONSTRUCTION
REFERENCE DESIGN
PRINT DATE: 17/07/2024 7:39:12 AM
ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

TARDEV-HYD-CGS-HT-DR-C-0001	TUNNEL PORTAL GROUND SUPPORT DETAILS
TARDEV-HYD-CGS-HT-DR-C-0002	ROCK BOLT TYPICAL DETAILS
TARDEV-HYD-CGS-HT-DR-C-0003	FACE SUPPORT SUBSURFACE DRAINAGE

REPRO FROM: – REV: –

DRAWN	LC
CHECKED	RJ
DESIGNED	LC/JL
CHECKED	RJ/JT
APPROVED	–
DATE	–
HT AGREED	–
HT ACCEPTED	–

Hydro Tasmania

CLIENT	HYDRO TASMANIA
TITLE	TARRALEAH REDEVELOPMENT HEADRACE TUNNEL SURGE ACCESS TUNNEL PORTAL EXCAVATION
SCALE	1:500
DRAWING	TARDEV-HYD-CEX-HT-DR-C-0003
REV.	X1
SIZE	A1

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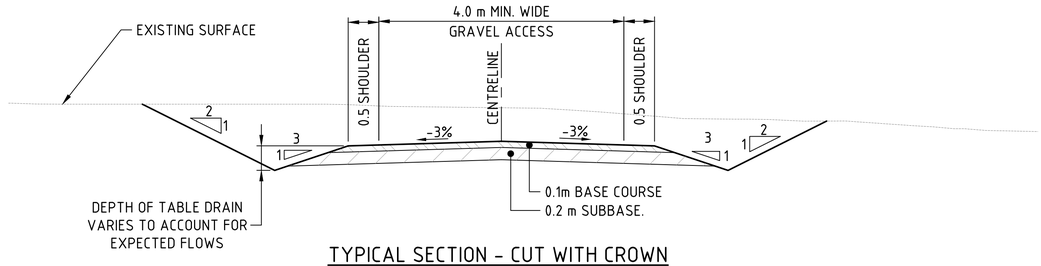
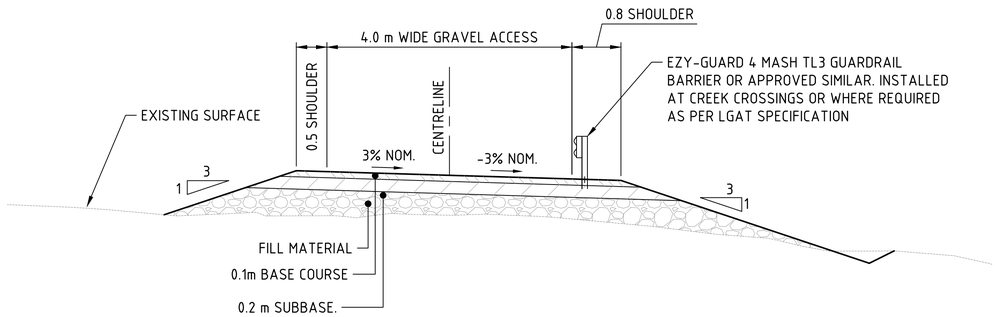
17/07/2024 7:39:12 AM



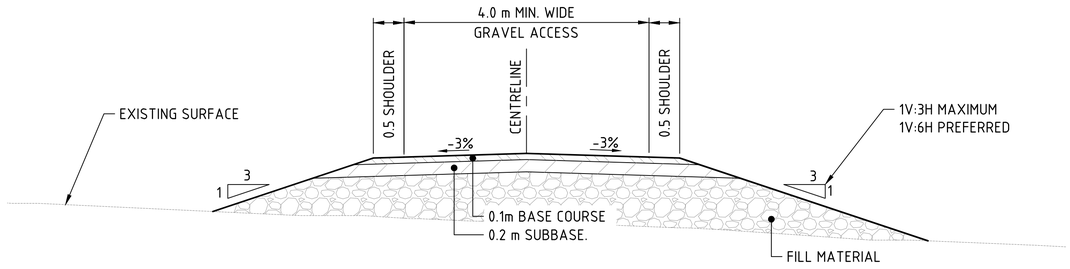
TYPICAL SECTION - CUT WITH CROWN

SCALE 1:50



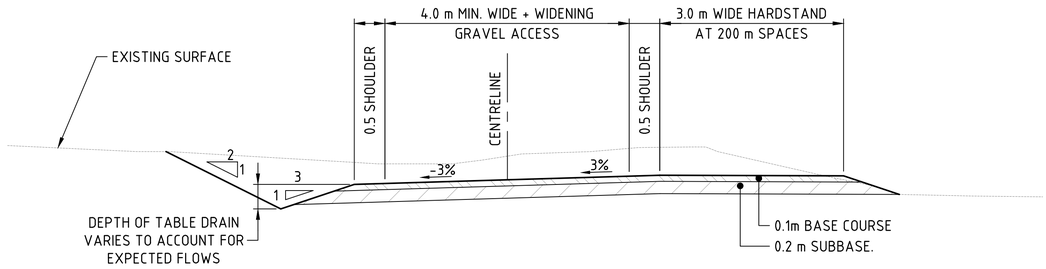
TYPICAL SECTION - SINGLE CROSSFALL

SCALE 1:50



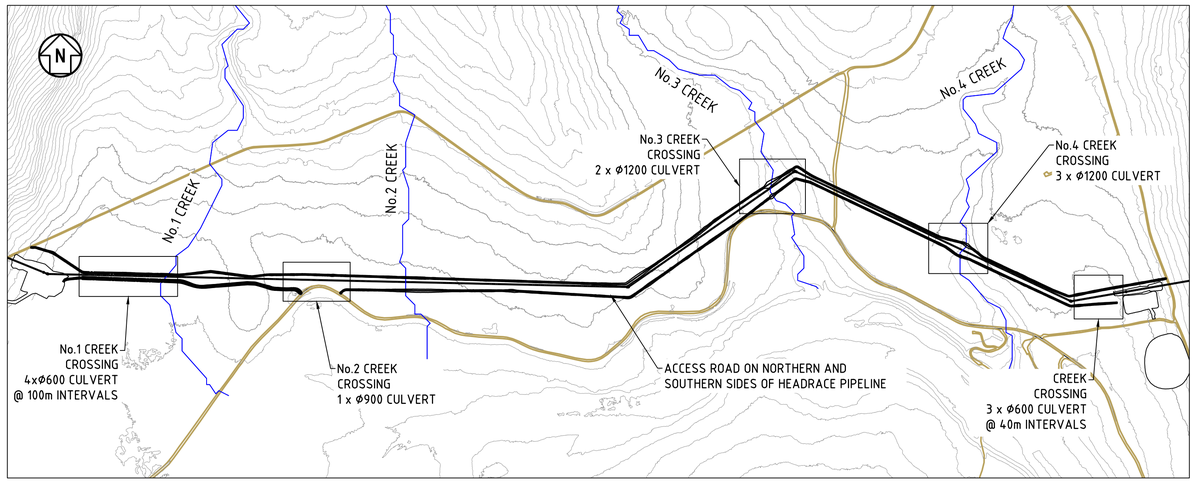
TYPICAL SECTION - FILL

SCALE 1:50



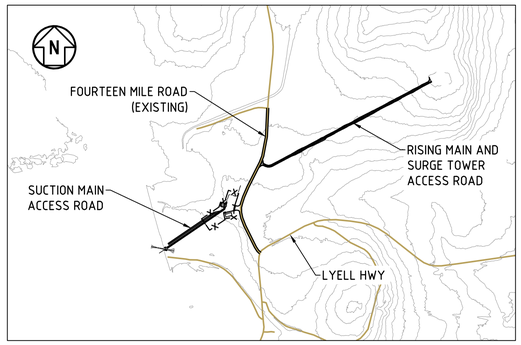
TYPICAL SECTION - WIDENED HARDSTAND AREA

SCALE 1:50



HEADRACE PIPELINE INTERNAL ACCESS ROAD CREEK CROSSINGS

SCALE 1:10,000



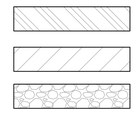
PUMP STATION AND SURGE TOWER INTERNAL ACCESS ROADS

SCALE 1:10,000

NOTE:

1. INTERNAL ACCESS ROADS TO BE IN ACCORDANCE WITH LGAT STANDARD DRAWING TSD-R01-V3 ROAD CLASS CODE US1.
2. PAVEMENT SUBBASE TO BE IN ACCORDANCE WITH LGAT STANDARD SPECIFICATIONS.
3. PAVEMENT BASE COURSE TO BE IN ACCORDANCE WITH DEPARTMENT OF STATE GROWTH SPECIFICATION 'R40 PAVEMENT BASE AND SUBBASE - ROADWORK SPECIFICATIONS SECTION R40.A.5 - UNSEALED ROAD AND UNSEALED SHOULDERS WEARING SURFACE.'
4. PAVEMENT SUBGRADE TO BE MINIMUM CBR 4% IN ACCORDANCE WITH LGAT STANDARD SPECIFICATIONS.
5. INTERSECTIONS TO BE BUILT IN ACCORDANCE WITH LGAT TSD-R05-V3 TRUCK ACCESS TO RURAL PROPERTIES. SUITABLE TO ACCOMODATE A 25.0 m B-DOUBLE TRUCK.
6. ROADSIDE TABLE DRAINS, CUT OFF DRAINS, CULVERTS AND HEADWALLS TO BE INSTALLED TO SUIT TOPOGRAPHY AND IN ACCORDANCE WITH LGAT STANDARD SPECIFICATIONS. RECOMMENDED CULVERT REQUIREMENTS AT CREEK CROSSINGS ARE PROVIDED IN HEADRACE PIPELINE INTERNAL ACCESS ROAD CREEK CROSSINGS PLAN ABOVE.
7. ENTRY POINTS FROM PUBLIC ROAD TO INTERNAL ACCESS ROAD WILL BE CONTROLLED BY HYDRO TASMANIA STARDARD VEHICLE GATES WITH A MINIMUM WIDTH OF 3.6 m, HIGH VIS ROAD BARRIER COVERING FULL EASEMENT WIDTH WITH POST THAT IS RESISTANT TO VANDALISM. VEHICLE GATES SHALL BE SET BACK FROM THE EDGE OF PUBLIC ROAD THE MAXIMUM VEHICLE LENGTH PLUS 1 METRE (25.0 + 1.0). REFER DRAWINGS 0-61963-001 AND 002 FOR VEHICLE GATE ARRANGEMENTS.

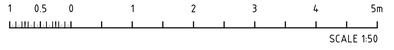
LEGEND:



BASE COURSE

SUB-BASE

FILL MATERIAL



ALTERATIONS

NOT FOR CONSTRUCTION
REFERENCE DESIGN
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ELECTRONIC DOCUMENT CONTROL - UNCONTROLLED IF PRINTED

REFERENCES

REPRO FROM: - REV: -

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CHECKED	RJ
DESIGNED	LC
CHECKED	RJ
APPROVED	-
DATE	-
HT AGREED	-
HT ACCEPTED	-

Hydro Tasmania

CLIENT: HYDRO TASMANIA

TITLE: TARRALEAH REDEVELOPMENT
SCHEME WIDE
INTERNAL ACCESS ROAD AND DRAINAGE
TYPICAL DETAILS

SCALE: 1:50

DRAWING: TARDEV-HYD-CRD-XX-DR-C-0001 REV: X1 SIZE: A1

HYDRO TASMANIA
STANDARD DRAWINGS
FENCING

TABLE OF CONTENTS		
DRAWING	REVISION	DESCRIPTION
A1-16659-001	X1	COVER SHEET AND DRAWING LIST
A1-16659-002	X1	FENCE NOTES
A1-16659-003	X1	CHAIN MESH FENCE - TYPE 1
A1-16659-004	X1	CHAIN MESH FENCE - TYPE 1
A1-16659-005	X1	CHAIN MESH FENCE - TYPE 2
A1-16659-006	X1	CHAIN MESH FENCE - TYPE 2
A1-16659-007	X1	CHAIN MESH FENCE - TYPE 2
A1-16659-008	X1	CHAIN MESH FENCE - TYPE 3
A1-16659-009	X1	CHAIN MESH FENCE - TYPE 3
A1-16659-010	X1	CHAIN MESH FENCE - TYPE 3
A1-16659-011	X1	INSULATED FENCE - TYPE 4
A1-16659-012	X1	INSULATED FENCE - TYPE 4
A1-16659-013	X1	INSULATED FENCE - TYPE 4
A1-16659-014	X1	INSULATED FENCE - TYPE 4

ALTERATIONS

REFERENCES

A1-16659-001 TO 014 STANDARD FENCE DRAWINGS

REPR'D FROM REV

DRAWN	EM
CHECKED	LF
DESIGNED	LF
CHECKED	MB
APPROVED	MB
DATE	16/8/22
CLIENT ACCEPTED	XX
DATE	XX

CLIENT

TITLE STANDARD FENCE DRAWING COVER SHEET

SCALE AS SHOWN

DRAWING A1-16659 | SHT. 001 | REV. X1 | SIZE A1

FILENAME: C:\USERS\YOUDA\ONEDRIVE - HYDRO TASMANIA\PROJECTS\E310111 HYDRO STANDARD FENCE DRAWINGS\A1-16659-001.DWG

GENERAL

G1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION, STRUCTURAL, CIVIL AND RELEVANT ENGINEERING SERVICES, DOCUMENTS AND WITH OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED.
G2. ALL DIMENSIONS SHOWN SHALL BE VERIFIED ON SITE. ENGINEERS DRAWINGS MUST NOT BE SCALED.
G3. DURING CONSTRUCTION THE RESPONSIBLE CONTRACTOR SHALL MAINTAIN THE STRUCTURE IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.
G4. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATION.
G5. UNLESS OTHERWISE NOTED ALL DIMENSIONAL UNITS ARE MILLIMETRES EXCEPT REDUCED LEVELS AND DISTANCE (CHAINAGES) WHICH ARE METRES.
G6. ALL CO-ORDINATES ARE IN METRES UNO.
G7. UNO DENOTES: UNLESS OTHERWISE NOTED.
G8. ALL DIMENSIONS WHICH TIE INTO OR OTHERWISE RELATE TO EXISTING STRUCTURES SHALL BE VERIFIED ON SITE PRIOR TO THE START OF CONSTRUCTION BY THE CONTRACTOR.
G9. ANY DISCREPANCIES WITHIN PROJECT DOCUMENTATION SHALL BE REFERRED TO THE SUPERINTENDENT FOR RESOLUTION.

SITE SAFETY

SS1. ALL WORK SITES CAN BE POTENTIALLY HAZARDOUS TO PEOPLE, PROPERTY AND EQUIPMENT. ALL PEOPLE WHO ARE AUTHORIZED TO BE ON A WORK SITE MUST CAREFULLY CONSIDER, DOCUMENT AND ADOPT SUITABLE SAFE WORK PROCEDURES FOR ALL REQUIRED ACTIVITIES.
SS2. CURRENT LEGISLATION
CURRENT LEGISLATION REQUIRES THAT ALL PERSONS ARE TO CONSIDER THEIR ACTIONS OR INACTION ON THE HEALTH AND SAFETY OF OTHERS AND THEMSELVES
SS3. THE CONTRACTOR SHALL ABIDE WITH AND IS BOUND BY THE CURRENT SAFE WORK AUSTRALIA ACT, REGULATIONS AND CODES OF PRACTICE ISSUED BY STATE GOVERNMENTS AND/OR THEIR AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION, DOCUMENTATION AND MAINTENANCE OF WORK SAFETY PROCEDURES AND OTHER RELEVANT DOCUMENTATION. THE CONTRACTOR SHALL ENSURE THAT ALL SUB-CONTRACTORS AND OTHER AUTHORIZED PEOPLE COMPLY WITH THE ABOVE.
SS4. THE CONTRACTOR SHALL BE ALERT AND PROACTIVE TO IDENTIFY HAZARDS AND MANAGE THE ASSOCIATED RISKS TO ELIMINATE THEM TO AN AGREED RISK LEVEL.
SS5. THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IF THERE IS ANY PERCEIVED RISK RELATED TO THE DESIGN OR CONSTRUCTION OF THE DESIGN. THE CONTRACTOR SHALL ENGAGE SUITABLY QUALIFIED ENGINEERS TO CERTIFY ALL TEMPORARY STRUCTURAL WORKS.
SS6. THE CONTRACTOR SHALL ENGAGE WITH THE SUB-CONTRACTOR AND OTHER AUTHORIZED PEOPLE WHO USE THE SITE TO IDENTIFY THEIR RISKY WORK PROCEDURES AND OTHER ACTIVITIES.
SS7. SUB-CONTRACTORS AND OTHER AUTHORIZED PEOPLE SHALL PROVIDE DOCUMENTATION ABOUT THEIR RISK ASSESSMENTS AND RISK MINIMIZATION.
SS8. PUBLIC SAFETY:
A LIVE SITE THAT HAS WORK UNDERWAY OR IS UNATTENDED HAS A STRONG ATTRACTION TO THE PUBLIC IN GENERAL. THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO PREVENT UNAUTHORIZED PEOPLE ENTERING THE SITE. EXCAVATIONS, STRUCTURES AND ACCESS EQUIPMENT SHALL BE LEFT IN A SECURE MANNER AS IS REASONABLY PRACTICABLE TO PREVENT ANY UNAUTHORIZED PEOPLE ENTERING, CLIMBING OR FALLING. THE SITE SHALL HAVE CLEAR WARNING SIGNS IN APPROPRIATE LOCATIONS EG - 'DANGER KEEP OUT' AND BE SECURELY BARRICADED AND WHEN UNATTENDED LEFT IN A LOCKED CONDITION AS IS REASONABLY PRACTICABLE.
SS9. SPECIFIC ATTENTION SHALL BE PAID TO HIGH RISK ACTIVITIES INCLUDING BUT NOT LIMITED TO:
SITE ESTABLISHMENT
DEMOLITION, RECYCLING AND REMOVAL
TEMPORARY WORKS
EXCAVATION AND TRENCHING - UNSTABLE GROUND
WELDING - EYE PROTECTION
CONSTRUCTION PROCESSES
TRIPS AND FALLS (GENERAL)
UNSTABLE TEMPORARY FOOTINGS
WORKING AT HEIGHT
WORKING AROUND WATER
SS10. SAFE WORK PRACTICES (SWP):
ALL WORKERS UNDERTAKING WORK ON WORK SITE CONTROLLED BY HYDRO TASMANIA MUST ADHERE TO THESE SAFE WORK PRACTICES WHICH PROVIDE:
A) REASONABLE HEALTH, SAFETY AND ENVIRONMENT (HSE) INSTRUCTION TO WORKERS ON HYDRO TASMANIA'S HSE REQUIREMENTS
B) THE MINIMUM HSE REQUIREMENTS FOR WORKERS TO ENSURE THE HEALTH, SAFETY AND WELLBEING OF ALL PERSONNEL SO FAR AS IS REASONABLY PRACTICABLE AND TO ELIMINATE OR MINIMISE ENVIRONMENTAL HARM
C) KEY INFORMATION AND REFERENCES TO HYDRO TASMANIA'S BROADER HSE MANAGEMENT SYSTEM AND ASSOCIATED STANDARDS AND PROCEDURES.

MATERIALS

WIRE FENCE MATERIAL

1. CHAINWIRE MESH, BARBED WIRE, SINGLE STRANDED FENCING WIRE AND TIE WIRE SHALL COMPLY, IN ALL RESPECTS, WITH AS2423
2. WHERE THE CHAINWIRE MESH IS COMPOSED OF GALVANIZED WIRE, ALL OF THE OTHER WIRES USED IN THE FENCE SHALL BE OF THE SAME COATING DESIGNATION, THAT IS, IF THE MESH IS W10Z, THEN ALL GALVANIZED WIRES SHALL BE W10Z

STEEL TUBES

3. MEDIUM QUALITY PIPE FOR POSTS, STAYS, RAILS AND BRACING RAIL SHALL COMPLY WITH AS/NZS17250.1 APPENDIX B
4. THE GALVANIZED (ZINC) COATING ON THE STEEL TUBES SHALL COMPLY WITH AS/NZS 4792 WITH A COATING CLASS OF HDG300 OR EQUIVALENT SERVICE LIFE

FITTINGS/BASEPLATES

5. ALL CLAMPS, PIPE FITTINGS, HINGES, FASTENERS, CATCHES AND BASEPLATES AND ANY OTHER PARTS SHALL BE MANUFACTURED FROM PLAIN CARBON STEEL, SUITABLE FOR HOT-DIP GALVANISING COMPLYING WITH AS/NZS4680

CONCRETE POST FOOTINGS

6. CONCRETE FOR POST FOOTINGS SHALL BE AT LEAST 20MPa IN COMPRESSIVE STRENGTH, REFER GS-AM-105 FOR SUPPLY OF MATERIALS & THE CONSTRUCTION OF MINOR CONCRETE STRUCTURES.

COMPONENTS

GATE POSTS

7. GATE POSTS SHALL BE MEDIUM QUALITY COMPLYING WITH AS/NZS17250.1 APPENDIX B

FENCE POSTS

8. FENCE POSTS SHALL BE MEDIUM QUALITY COMPLYING WITH AS/NZS17250.1 APPENDIX B
9. POST SHALL BE CONTINUOUS WITH NO SLICING ALLOWED. THE TOPS OF THE POSTS SHALL BE PROVIDED WITH TIGHTLY FITTING GALVANIZED CAPS.
10. POST EXTENSIONS FOR THE ATTACHMENT OF BARBED WIRE SHALL BE PROVIDED WITH HOLES NOT GREATER THAN 6mm DIAMETER OR, OPTIONALLY SHALL BE INDENTED NOMINALLY 2mm DEEP AT 150mm CENTRES ABOVE THE TOP OF THE SELVEDGE OF THE CHAINWIRE MESH FOR THE ATTACHMENT OF THE BARBED WIRE.

CHAINWIRE MESH

11. CHAINWIRE MESH (CWM) TO BE MANUFACTURED WITH A NOMINAL 50mm PITCH MESH WITH A WIRE DIAMETER OF 3.15mm
12. THE VARIOUS FENCE TYPES SHALL HAVE THE FOLLOWING SELVEDGE'S:
TYPE 1 - KNUCKLED-KNUCKLED
TYPE 2 - KNUCKLED-BARBED
TYPE 3 - KNUCKLED-BARBED
13. THE CHAINWIRE MESH WILL HAVE A GALVANIZED COATING WITH A DESIGNATION OF W10Z AND IDENTIFYING CODE HG

BARBED WIRE

14. BARBED WIRE SHALL BE MANUFACTURED TO AS2423

BRACING CABLE

15. EACH BRACING CABLE SHALL BE OF THE SAME COATING QUALITY AS SELECTED FOR THE CHAINWIRE MESH AND COMPRISE OF TWO STRANDS OF 3.15mm CORE WIRE TWISTED TOGETHER OR TENSIONED IN CONJUNCTION WITH A GALVANIZED 12mm TURNBUCKLE.

SUPPORT CABLES

16. EACH SUPPORT CABLE SHALL BE OF THE SAME COATING QUALITY AS SELECTED FOR THE MAIN CHAINWIRE MESH AND COMPRISE OF TWIN-TWISTED CABLE WIRE (TWIN-TWISTED 3.15mm DIAMETER WIRES) BOTH WIRES TWISTED TOGETHER BETWEEN POSTS.

LACING WIRE

17. LACING WIRE SHALL BE 2.0mm DIAMETER WIRE AND SHALL BE THE SAME COATING QUALITY AS SELECTED FOR THE CHAINWIRE MESH

TIE WIRE AND CLIPS

18. THE WIRE FOR POSTS SHALL BE THE SAME COATING QUALITY AS SELECTED FOR CHAINWIRE MESH AND COMPRISE SINGLE STRAND 2.0mm DIAMETER CORE WIRE.
19. TIE WIRE TO SECURE CHAINWIRE MESH TO CABLES SHALL SINGLE STRAND 1.57mm DIAMETER CORE WIRE OR ALTERNATIVELY 2.0mm DIAMETER CORE WIRE NETTING CLIPS OF THE SAME QUALITY COATING AS THE CHAINWIRE MESH.

GATES

20. GATES SHALL BE FABRICATED IN ACCORDANCE WITH THE DRAWINGS AND THE FOLLOWING REQUIREMENTS:
21. ALL JOINTS SHALL BE FULLY WELDED JOINTS (STAGGERED WELDING NOT PERMITTED). FILLET WELD SHALL BE NOT LESS THAN 6mm, EXPOSED SURFACE WIDTH SHALL BE CLEANED BY CHIPPING AND WIRE BRUSHING
22. THE GATES SHALL BE HOT DIP GALVANIZED TO THE SAME COATING QUALITY AS THE CHAIN WIRE MESH
23. THE HEIGHT OF THE GATE SHALL MATCH THE HEIGHT OF THE FENCE (SUBJECT TO ALLOWANCE FOR SUFFICIENT MINIMUM GROUND CLEARANCE).
24. THE GATES SHALL BE COVERED WITH CHAINWIRE MESH TO MATCH THE FENCE. THE COVERING SHALL BE DRAWN TAUT AND LACED WITH 2mm LACING WIRE TO THE OUTER FRAME AND TIED TO EACH INTERNAL MEMBER.
25. WHEN REQUIRED, BARBED WIRE SHALL BE STRAINED TAUT AND TIED TO THE GATE EXTENSIONS TO MATCH THE LINES OF THE BARBED WIRE ON THE FENCE.

HINGES

26. WHERE CLIP-TYPE HINGES ARE USED, A COLLAR SHALL BE WELDED TO THE GATE FRAME TO PROVIDE A BEARING SURFACE FOR EITHER THE TOP OR BOTTOM HINGE.

INSTALLATION

LINE AND LEVEL

27. ALL POSTS SHALL BE VERTICAL. HORIZONTAL DISPLACEMENT SHALL NOT BE GREATER THAN THE HEIGHT IF THE POST DIVIDED BY 240. THE TOP OF THE FENCE SHALL BONE EVENLY AND FOLLOW APPROXIMATELY THE PROFILE OF THE GROUND OR LEVELS PREVIOUSLY INDICATED BY THE PURCHASER. UNLESS OTHERWISE AGREED, THE INSTALLATION OF THE FENCE SHALL NOT INCLUDE CUTTING OR FILLING OF THE GROUND TO VARY THE LEVELS.

SPACING OF POSTS

28. POSTS SHALL BE SPACED AT 3000mm MAXIMUM CENTRES. STRAINER ASSEMBLIES SHALL BE INSTALLED AT ANY SIGNIFICANT CHANGE IN DIRECTION AND AT INTERVALS OF NOT GREATER THAN 45m ON FENCES WITH LENGTHS 90m OR GREATER.

FOOTINGS

29. CONCRETE FOOTINGS SHALL NOT BE LESS THAN THE MINIMUM SIZES SPECIFIED IN THE DRAWINGS.
30. THE CONSTITUENTS FOR FOOTINGS SHALL BE THOROUGHLY MIXED AND THE CONCRETE PLACED IN THE POSITION AND THOROUGHLY COMPACTED AS SOON AS POSSIBLE AFTER MIXING, REFER GS-AM-105.
31. AFTER INSTALLATION OF POSTS OR STAYS, THE COMPLEX EXCAVATION SHALL BE FILLED WITH CONCRETE, AND WELL COMPACTED AS FILLING PROCEEDS (ALLOWING MINIMUM 24HR FOR CURING PERIOD).

ATTACHMENT OF PIPE RAILS

32. ALL RAILS SHALL BE SECURELY CONNECTED TO POSTS WITH GALVANIZED BOLTED SPLIT CLAMP-ON TYPE FITTINGS, IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS

ATTACHMENT OF SUPPORT CABLES

33. THE TWO COMPONENT WIRES OF EACH SUPPORT CABLE SHALL BE TWISTED TOGETHER AT INTERVALS BETWEEN POSTS TO FORM A TIGHT SPIRAL PITCH AND SO PROVIDE 1.0 TO 1.2KN TENSION ON THE CABLES TO SUPPORT THE CHAINWIRE MESH. THE TENSIONING OF THE SUPPORT CABLES SHALL NOT BE COMMENCED UNTIL THE CONCRETE FOOTINGS HAVE CURED.

CHAINWIRE MESH

34. UNLESS OTHERWISE SPECIFIED, CHAINWIRE MESH SHALL BE PLACED ON THE OUTSIDE OF POSTS AND STRAINED TAUT BETWEEN 1.0 TO 1.2KN AND SECURED TO EACH SUPPORT RAIN, CABLE AND ALL POSTS WITH TIE WIRES, EXCEPT AT THE END POSTS AND GATE POSTS.
35. AT THE END POSTS AND GATE POSTS THE CHAINWIRE MESH SHALL BE FULLY LACED TO END POSTS, INTERNAL CORNER POSTS AND GATE POSTS. THE SPACE BETWEEN THE BOTTOM SELVEDGE OF THE CHAINWIRE MESH AND THE GROUND SHALL BE SUFFICIENTLY SMALL TO CLEAR THE SURFACE AND MAINTAIN SECURITY.
36. THE CHAINWIRE MESH SHALL BE FULLY LACED THROUGH EACH DIAMOND WITH 2.0mm WIRE, TO EACH RAIL AND THE SELVEDGE EDGE.

THE WIRE AND CLIPS

37. INTERMEDIATE POSTS SHALL HAVE A MINIMUM OF 2 TIES PER POST TO SECURE CHAINWIRE MESH TO POSTS, WITH EACH TIE LOCATED CENTRALLY BETWEEN RAILS AND CABLES. EACH TIE WIRE SHALL BE TWISTED TWICE AND THE ENDS NEATLY CUT OFF AND BENT OVER TO AVOID INJURY.
38. TIE WIRE TO CABLE WIRE SHALL BE 1.57mm WIRE TWISTED TWICE AND NEATLY CUT OFF AND SECURED AT 480mm MAX SPACING (EACH SIXTH DIAMOND ON CHAINWIRE MESH).
39. NETTING CLIPS TO CABLE WIRE SHALL BE 2.0mm WIRE, SIZED CORRECTLY FOR THE APPLICATION AND FIRMLY CLAMPED TOGETHER AND FULLY CLOSED AND OVERLAPPED WITH SUITABLE PLIERS, SECURED AT 320mm MAX. SPACING (EACH FOURTH DIAMOND ON THE CHAINWIRE MESH).

BARBED WIRE

40. BARBED WIRE, WHERE REQUIRED, SHALL BE STRAINED TAUT BETWEEN 1.0 TO 1.2KN BETWEEN POSTS AND SECURED WITH TIE WIRES TO POST INDENTATIONS, AND PRE-SET AT 150mm EQUAL SPACING ABOVE CHAINWIRE MESH.

BOLTS

41. ALL THREADED BOLTS USED FOR ATTACHMENT OF FITTINGS ON FENCES AND GATES SHALL BE SIZED CORRECTLY FOR CLAMP-ON FITTINGS AND SECURELY TIGHTENED WITH NUTS FITTED INSIDE THE FENCE.

GATES - HINGED

42. GATES, WHERE FITTED, SHALL OPERATE FREELY AND KEEPERS SHALL BE SET FIRMLY INTO EITHER CONCRETE PAVEMENT OR CONCRETE FOOTINGS OF NOT LESS THAN 150mm DIAMETER AND NOT LESS THAN 350mm DEEP. THE CLEARANCE UNDER THE GATES, WHEN IN CLOSED POSITION, SHALL BE SUFFICIENTLY SMALL TO CLEAR THE SURFACE AND MAINTAIN SECURITY.

EARTHING

43. WHERE REQUIRED FENCES SHALL BE EARTHED IN ACCORDANCE WITH THE FOLLOWING STANDARD DRAWINGS:
A1-15518-001 (STANDARD EARTHING TYPICAL EARTH GRID CONNECTIONS)
A1-15518-002 (STANDARD EARTHING TYPICAL FENCE CONNECTIONS)

REPAIR

44. FOR OBJECTS GALVANIZED AFTER FABRICATION, THE SUM TOTAL OF THE DAMAGED OR UNCOATED AREAS SHALL NOT EXCEED 0.5% OF THE TOAL SURFACE AREA OR 250cm^2, WHICHEVER IS THE LESSER, AND NO INDIVIDUAL DAMAGED OR UNCOATED AREA SHALL EXCEED 40cm^2.

REPAIR REQUIREMENTS

45. SURFACES THAT REMAIN UNCOATED DURING THE GALVANIZING PROCESS AS OUTLINED ABOVE & REQUIRE REPAIR, SHALL BE REPAIRED BY THE APPLICATION OF ONE OF THE FOLLOWING COATINGS:
(1. ORGANIC ZINC RICH EPOXY PAINT COMPLYING WITH AS/NZS3750.9. THIS IS TO BE APPLIED TO THE REPAIR AREAS IN TWO COATS. EACH COAT SHALL HAVE A MINIMUM DRY FILM THICKNESS OF 50µm
(2. INORGANIC ZINC SILICATE PAINT COMPLYING TO AS/NZS3750.15. THIS SHALL HAVE A MINIMUM DRY FILM THICKNESS OF 100µm.
(3. ZINC METAL SPRAY TO ISO2063 OR AS/NZS2312
(4. ZINC ALLOY SOLDER STICK
46. ALL OF THE ABOVE TREATMENTS SHALL BE APPLIED AS PER MANUFACTURERS REQUIREMENTS AND SHALL INCLUDE NECESSARY PRE-TREATMENT TO ENSURE GOOD ADHESION TO THE SUBSTRATE. THE COATING THICKNESS ON THE RENOVATED AREAS SHALL BE A MINIMUM OF 30µm MORE THAN THE LOCAL COATING THICKNESS. THE SELECTED COATING ON THE RENOVATED AREA SHALL BE CAPABLE OF GIVING SACRIFICIAL PROTECTION TO THE STEEL TO WHICH IT IS APPLIED.

REPAIR AFTER SITE HANDLING AND INSTALLATION

THE SAME PROCEDURE AND QUALITY OF REPAIR PRODUCTS SHALL APPLY AS FOR GALVANIZING PROCESS WORKS. GIVEN THE LESS SPECIFIC FACILITIES AVAILABLE ON SITE, PARTICULAR CARE IS REQUIRED WITH SURFACE PREPARATION AND ENSURING THE MOST SUITABLE METHOD NEEDED WITH THE MINIMUM 100µm DRY FILM THICKNESS DESCRIBED.

SITE REPAIR

47. GALVANIZING RECTIFICATION DESCRIBED (IN REPAIR REQUIREMENTS) AS PART OF A PLANT PROCESS, SHALL ALSO APPLY TO SITE WORK FOR THE REPAIR OF DAMAGE FROM STEEL HANDLING IMPACT, ERECTION DAMAGE OR SITE WELDING.

ALTERATIONS

REFERENCES
A1-16659-001 TO 014 STANDARD FENCE DRAWINGS

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DESIGNED	LF
CHECKED	MB
APPROVED	MB
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CLIENT ACCEPTED	XX
DATE	XX

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TITLE STANDARD FENCE DRAWING
STANDARD FENCE NOTES

SCALE

DRAWING A1-16659 | SHT 002 | REV. X1 | SIZE A1

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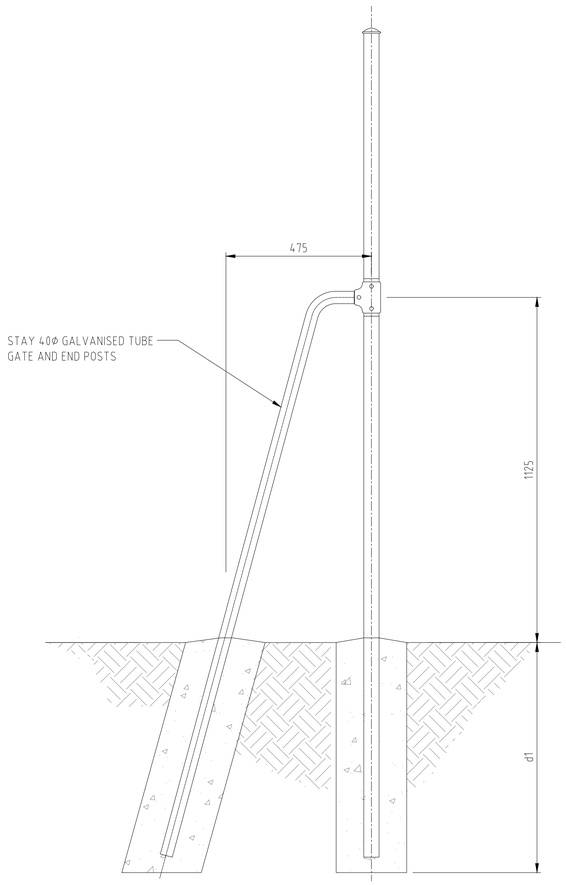
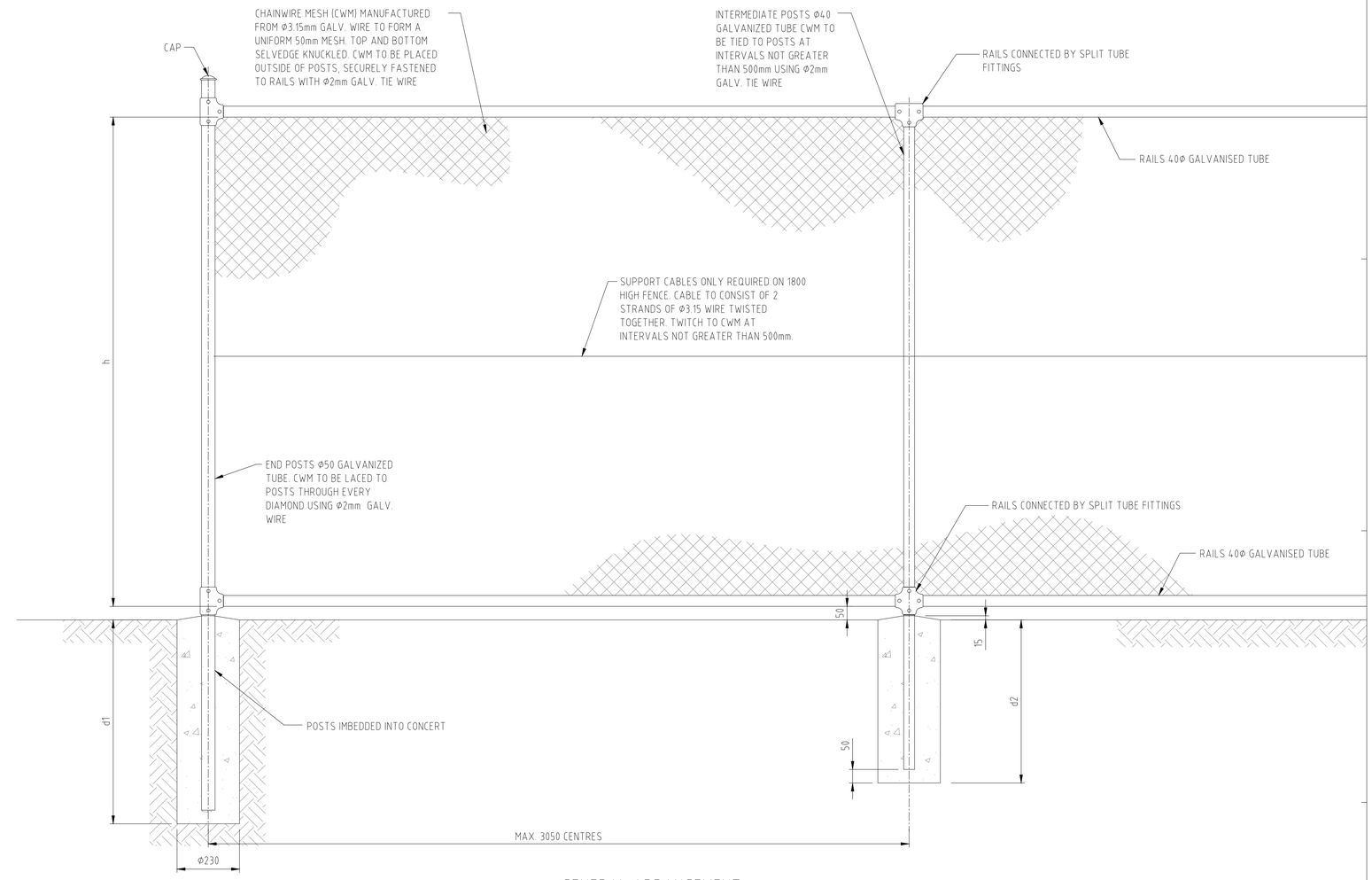


STAY DETAILS

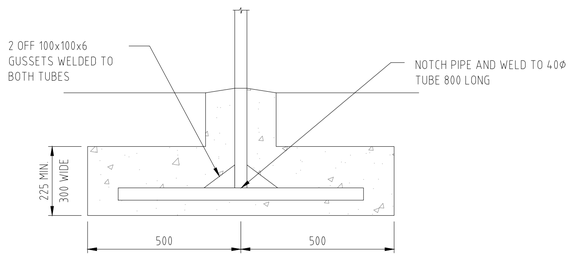
(1800 FENCE ONLY)

SCALE 1:10



GENERAL ARRANGEMENT

SCALE 1:10



ALTERNATIVE FOOTING DETAIL

(WHEN ROCK IS NEAR SURFACE)

SCALE 1:10

FENCE HEIGHT & FOOTING DEPTH DETAILS

HEIGHT -h	900	1200	1800
DEPTH - d1	600	600	750
DEPTH - d2	450	450	600

200 100 0 200 400 600mm

SCALE 1:10

ALTERATIONS

REFERENCES

A1-16659-001 TO 014 STANDARD FENCE DRAWINGS

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CHECKED	MB
APPROVED	MB
DATE	16/8/22
CLIENT ACCEPTED	XX
DATE	XX

Hydro Tasmania

CLIENT

TITLE STANDARD FENCE DRAWING
CHAIN MESH FENCE - TYPE 1
DETAILS
SHEET 1 OF 2

SCALE AS SHOWN

DRAWING A1-16659 SHT 003 REV. X1 SIZE A1

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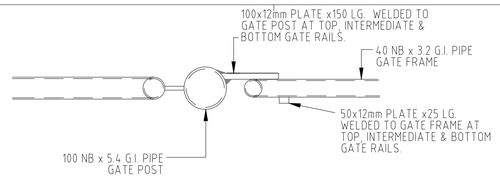
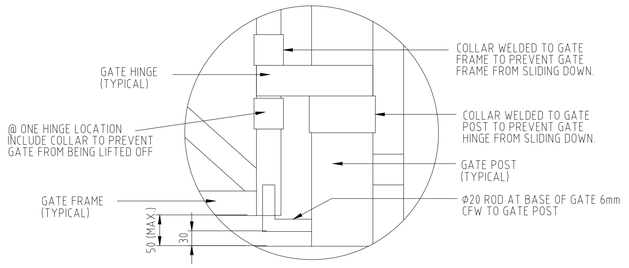


TYPICAL GATE STOP DETAIL

SCALE 1:10

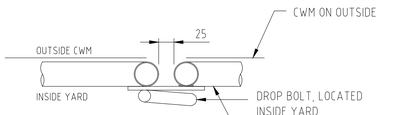
NOTES:

1. TWO WELDED PLATES TO TOUCH WHEN GATES ARE IN A CLOSED POSITION. PLATES MUST BE INSTALLED AFTER GATES ARE HUNG IN FINAL POSITION.
2. PLATES INSTALLED ON ALL HORIZONTAL GATE FRAME MEMBERS. TYPICALLY 3 PER GATE LEAF.



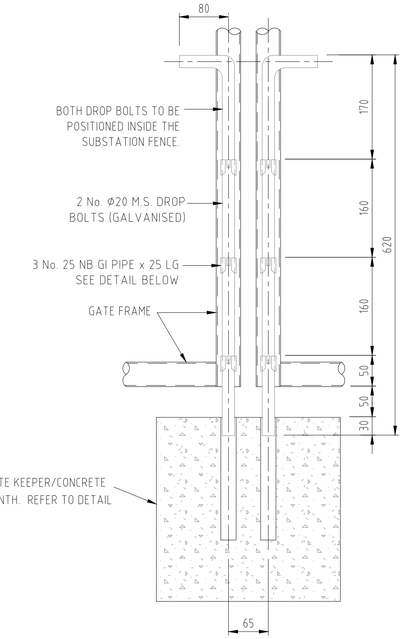
TYPICAL GATE HINGE DETAIL

N.T.S.



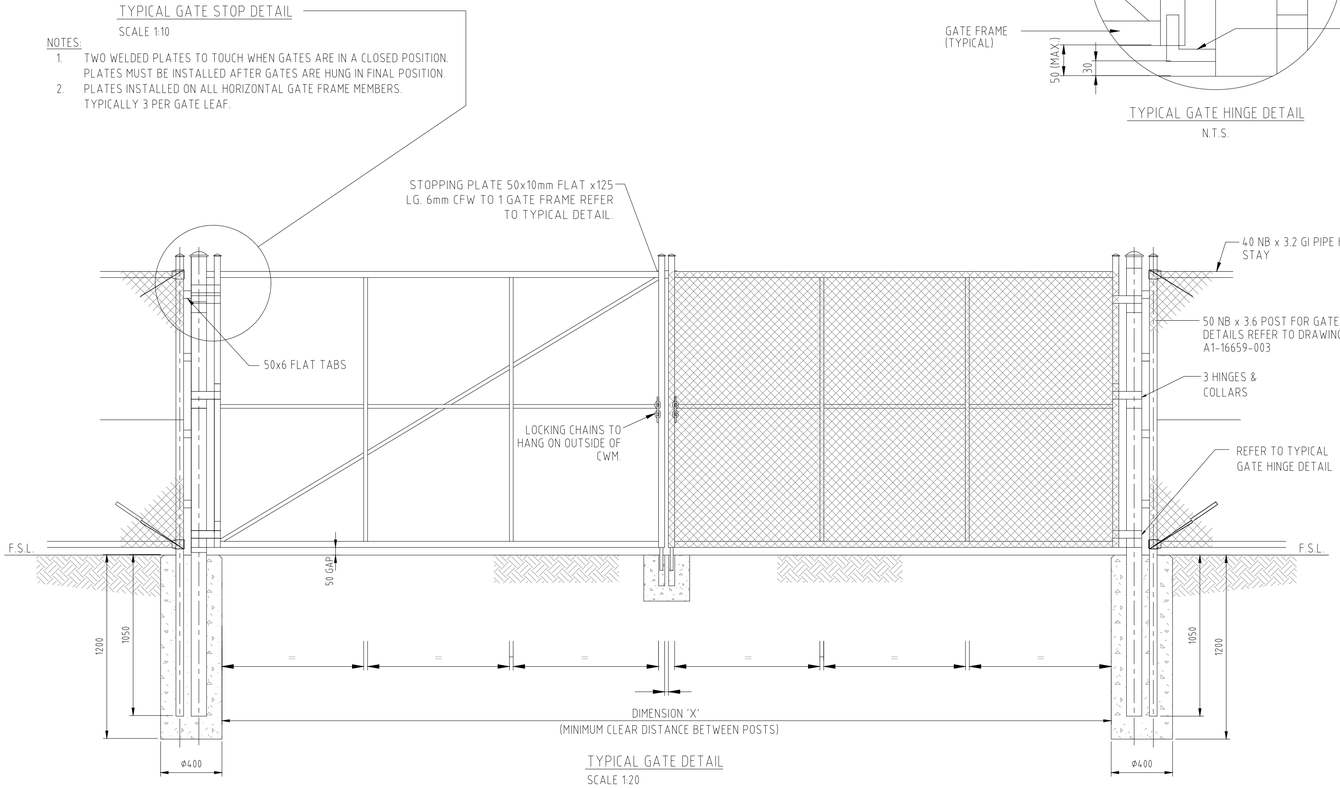
TYPICAL ACCESS TRACK GATE STOP DETAIL

SCALE 1:5



TYPICAL DROP BOLT DETAIL

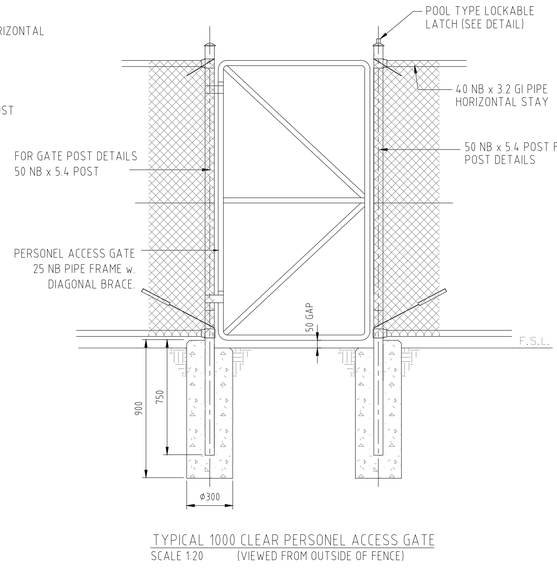
SCALE 1:5



TYPICAL GATE DETAIL

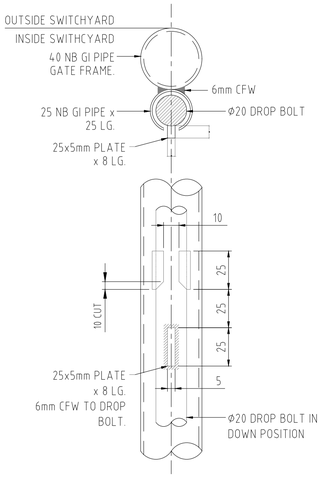
SCALE 1:20

NOTE: ALL MAIN ACCESS GATES TO OPEN OUT OF YARD U.N.O.



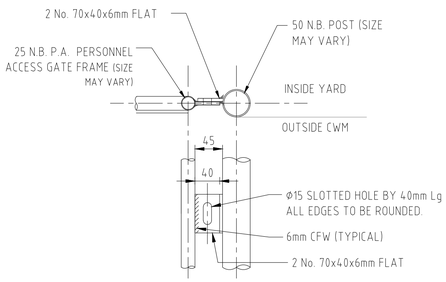
TYPICAL 1000 CLEAR PERSONEL ACCESS GATE

SCALE 1:20 (VIEWED FROM OUTSIDE OF FENCE)



TYPICAL DROP BOLT SLEEVE DETAIL

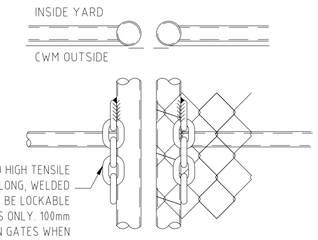
SCALE 1:2



TYPICAL P.A. GATE LOCK DETAIL

SCALE 1:5

NOTE: ALL PA GATES TO OPEN OUT OF YARD U.N.O.

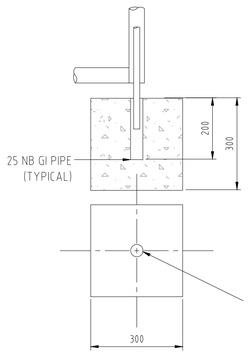


MAIN ACCESS GATES LOCKING CHAINS

SCALE 1:5

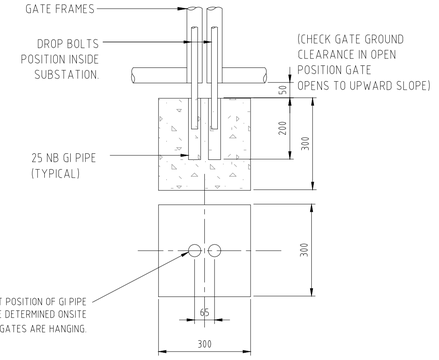
POOL TYPE LATCH (PULL TOP WITH KEY OPENING)

(AS SHOWN OR APPROVED EQUIVALENT)



TYPICAL DOUBLE GATE STOP DETAIL OPEN POSITION 1 No. PER GATE LEAF

SCALE 1:10



TYPICAL DOUBLE GATE STOP DETAIL CLOSED POSITION 1 No. PER GATE.

SCALE 1:10

TABLE 1 - GATE DETAILS

DIMENSION 'X'	TYPE OF POST (G.I. PIPE)	OUTER FRAME (G.I. PIPE)	INNER FRAME-V× STAYS (G.I. PIPE)	No.	INNER FRAME-H×× STAYS (G.I. PIPE)	No.	INNER FRAME-BRACING (G.I. PIPE)	No.
UP TO 3000	50 NB x 4.5	32 NB x 3.2	25 NB x 3.2	1	25 NB x 3.2	1	25 NB x 3.2	0
3000 TO 4900	80 NB x 4.8	32 NB x 3.2	25 NB x 3.2	1	25 NB x 3.2	1	25 NB x 3.2	1
4900 TO 6700	100 NB x 5.4	40 NB x 3.2	32 NB x 3.2	2	32 NB x 3.2	1	32 NB x 3.2	1
6700 TO 7500	150 NB x 5.4	40 NB x 3.2	32 NB x 3.2	2	32 NB x 3.2	1	32 NB x 3.2	1
						1		1

V× = VERTICAL H×× = HORIZONTAL

ALTERATIONS

REFERENCES

A1-16659-001 TO 014 STANDARD FENCE DRAWINGS

REPR'D FROM REV

DRAWN	EM
CHECKED	LF
DESIGNED	LF
CHECKED	MB
APPROVED	MB
DATE	16/8/22
CLIENT ACCEPTED	XX
DATE	XX

Hydro Tasmania

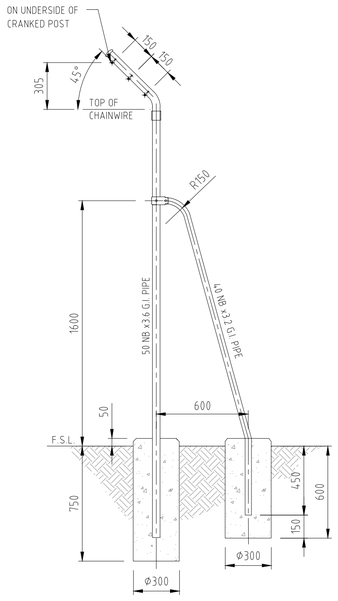
CLIENT

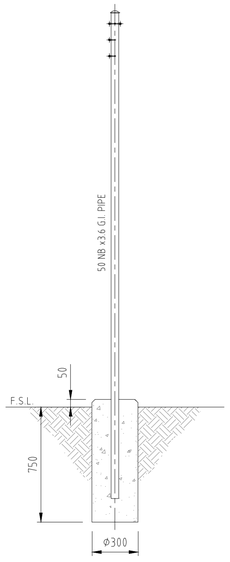
TITLE STANDARD FENCE DRAWING CHAIN MESH FENCE - TYPE 1 DETAILS SHEET 2 OF 2

SCALE AS SHOWN

DRAWING A1-16659 SHT 004 REV. X1 SIZE A1

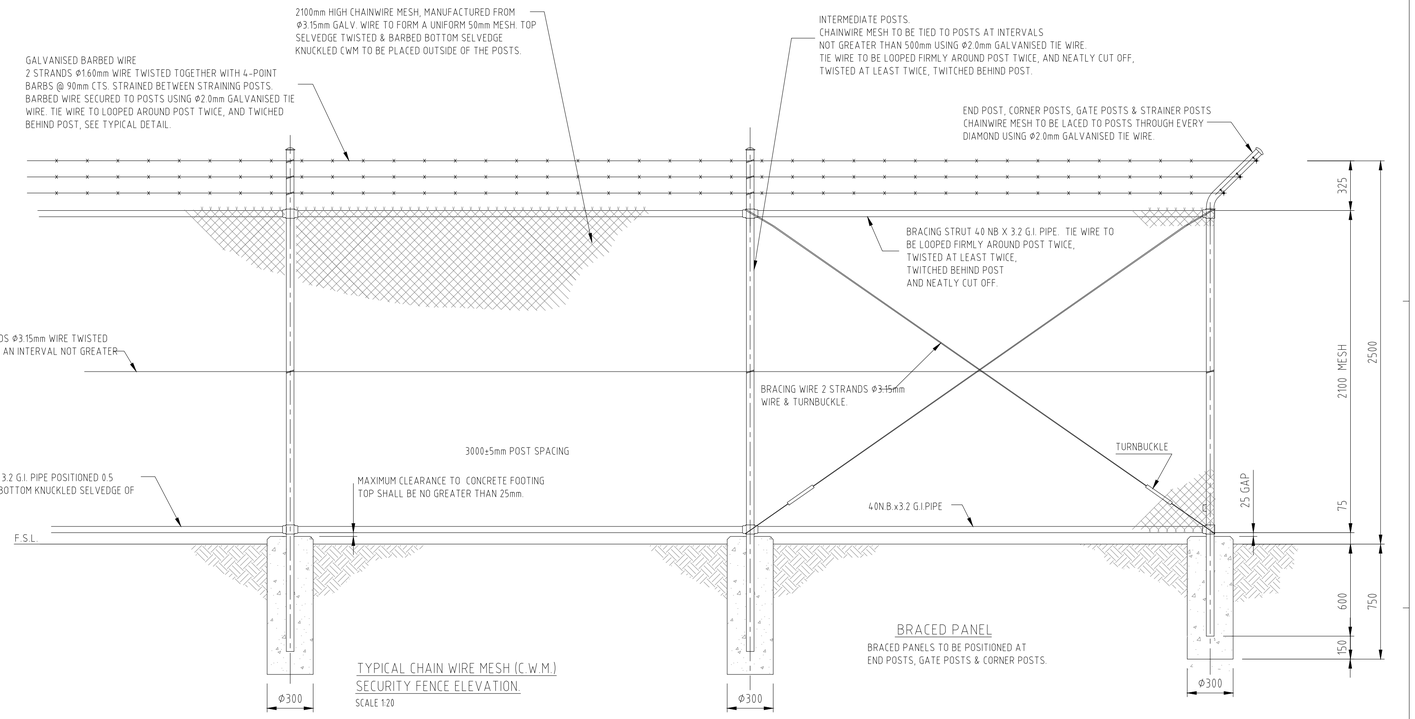
FILENAME: C:\USERS\YOUDA\ONEDRIVE - HYDRO TASMANIA\PROJECTS\E310111 HYDRO STANDARD FENCE DRAWINGS\A1-16659-003-004.DWG





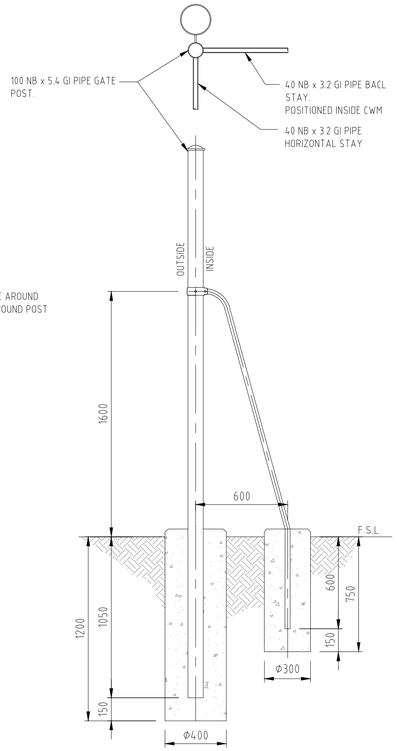
INTERMEDIATE POST WITH / WITHOUT BACK STAY
SCALE 1:20

BACK STAYS TO BE POSITIONED AT END POSTS, GATE POSTS, STRAINER POSTS & INTERMEDIATE POSTS AT INTERVALS NOT GREATER THAN 15m.

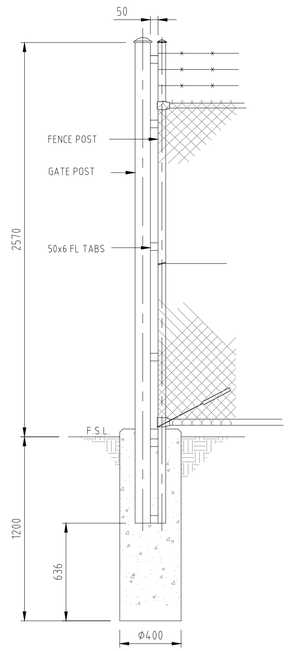


TYPICAL CHAIN WIRE MESH (C.W.M.) SECURITY FENCE ELEVATION.
SCALE 1:20

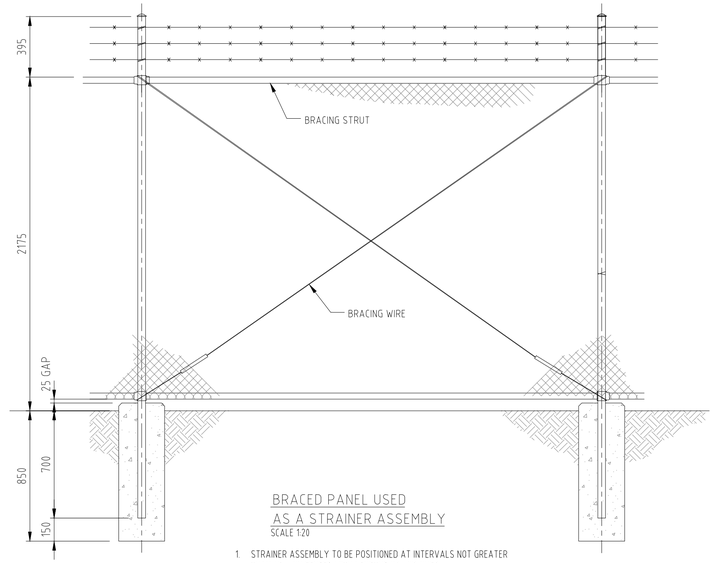
BRACED PANEL
BRACED PANELS TO BE POSITIONED AT END POSTS, GATE POSTS & CORNER POSTS.



TYPICAL GATE POST WITH BACK STAY
SCALE 1:20

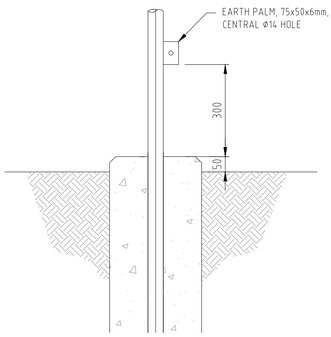


TYPICAL GATE POST DETAIL
SCALE 1:20

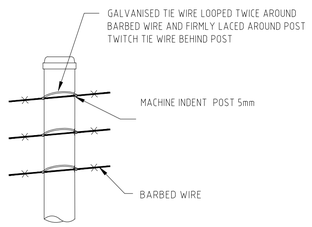


BRACED PANEL USED AS A STRAINER ASSEMBLY
SCALE 1:20

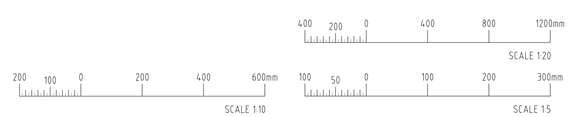
1. STRAINER ASSEMBLY TO BE POSITIONED AT INTERVALS NOT GREATER THAN 45m, ON FENCES WITH LENGTHS 90m OR OVER.
2. STRAINER ASSEMBLY TO BE POSITIONED AT ANY SIGNIFICANT CHANGE OF FENCE LINE DIRECTION, ON ALL FENCES, REGARDLESS OF LENGTH.



EARTHING LUG DETAIL
SCALE 1:10



TYPICAL POST-BARBED WIRE CONNECTION DETAIL
SCALE 1:5



ALTERATIONS	REFERENCES		
	A1-16659-001 TO 014 STANDARD FENCE DRAWINGS	DRAWN	EM
		CHECKED	LF
		DESIGNED	LF
		CHECKED	MB
		APPROVED	MB
		DATE	16/8/22
		CLIENT ACCEPTED	XX
	REPR'D FROM REV	DATE	XX

Hydro Tasmania

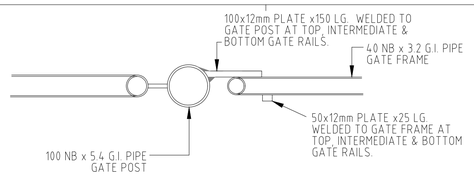
CLIENT

TITLE: STANDARD FENCE DRAWING
CHAIN MESH FENCE - TYPE 2
DETAILS
SHEET 1 OF 3

SCALE: AS SHOWN

DRAWING: A1-16659 | SHT: 005 | REV: X1 | SIZE: A1

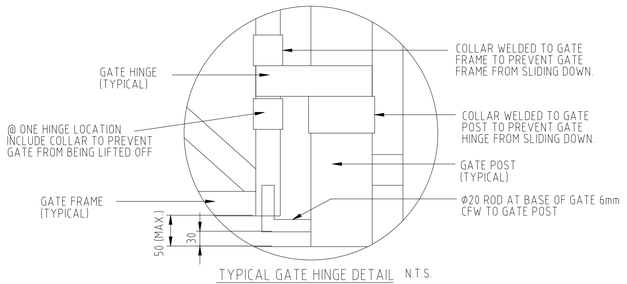
FILENAME: C:\USERS\YOUDA\ONEDRIVE - HYDRO TASMANIA\PROJECTS\E310111 HYDRO STANDARD FENCE DRAWINGS\A1-16659-005-006-007.DWG



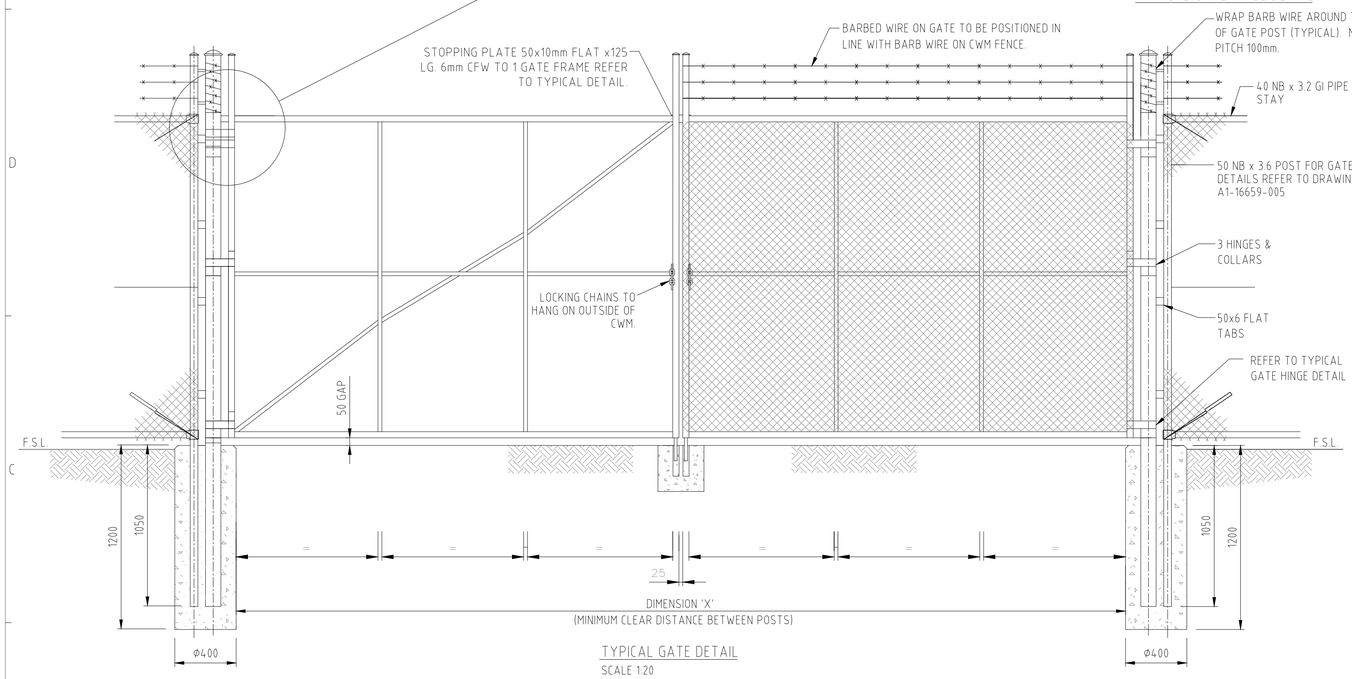
TYPICAL GATE STOP DETAIL

SCALE 1:10

NOTES:
1. TWO WELDED PLATES TO TOUCH WHEN GATES ARE IN A CLOSED POSITION. PLATES MUST BE INSTALLED AFTER GATES ARE HUNG IN FINAL POSITION.
2. PLATES INSTALLED ON ALL HORIZONTAL GATE FRAME MEMBERS. TYPICALLY 3 PER GATE LEAF.



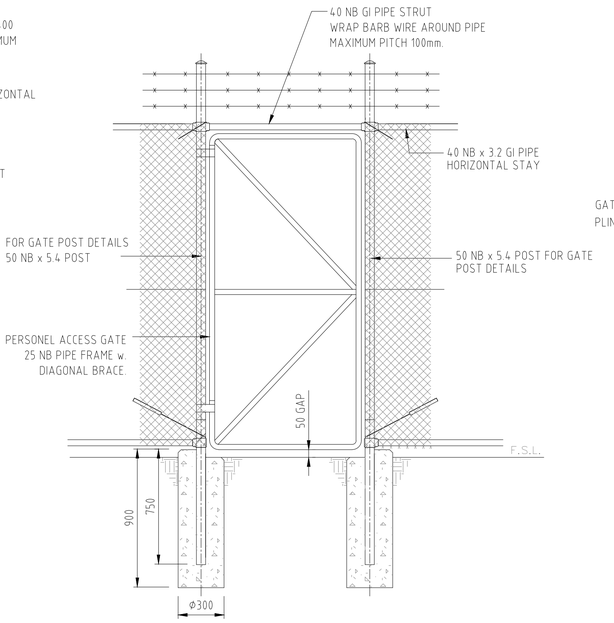
TYPICAL GATE HINGE DETAIL N.T.S.



TYPICAL GATE DETAIL

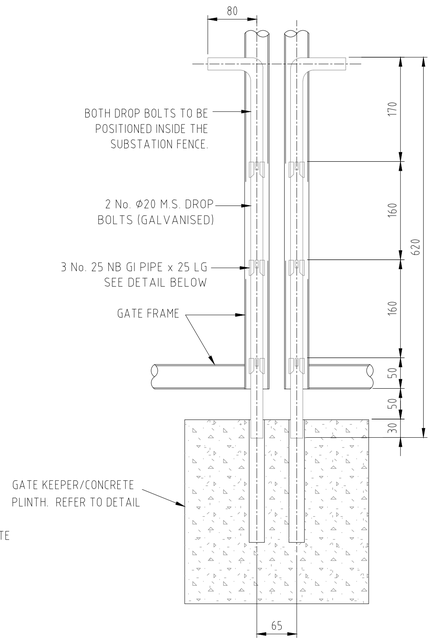
SCALE 1:20

NOTE: ALL MAIN ACCESS GATES TO OPEN OUT OF YARD U.N.O.



TYPICAL 1000 CLEAR PERSONEL ACCESS GATE

SCALE 1:20 VIEWED FROM OUTSIDE SWITCHYARD



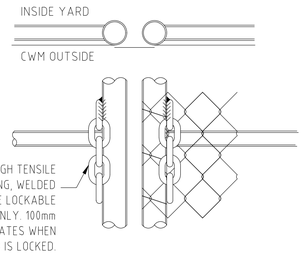
TYPICAL DROP BOLT DETAIL

SCALE 1:5

TYPICAL P.A. GATE LOCK DETAIL

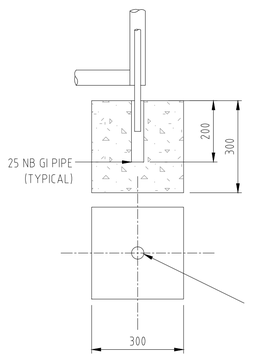
SCALE 1:5

NOTE: ALL PA GATES TO OPEN OUT OF YARD U.N.O.



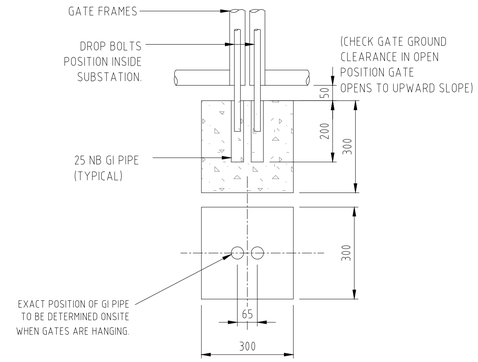
MAIN ACCESS GATES LOCKING CHAINS

SCALE 1:5



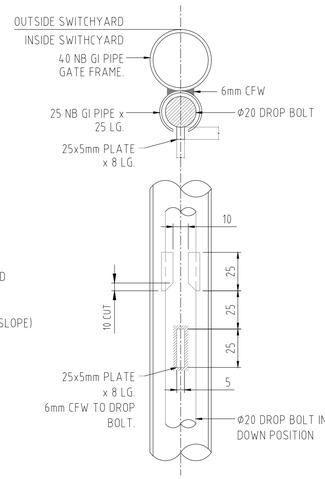
TYPICAL DOUBLE GATE STOP DETAIL OPEN POSITION 1 No. PER GATE LEAF

SCALE 1:10



TYPICAL DOUBLE GATE STOP DETAIL CLOSED POSITION 1 No. PER GATE.

SCALE 1:10



TYPICAL DROP BOLT SLEEVE DETAIL

SCALE 1:2

TABLE 2 - GATE DETAILS								
DIMENSION 'X'	TYPE OF POST (G.I. PIPE)	OUTER FRAME (G.I. PIPE)	INNER FRAME-V× STAYS		INNER FRAME-H×× STAYS		INNER FRAME-BRACING	
			(G.I. PIPE)	No.	(G.I. PIPE)	No.	(G.I. PIPE)	No.
UP TO 3000	50 NB x 4.5	32 NB x 3.2	25 NB x 3.2	1	25 NB x 3.2	1	25 NB x 3.2	0
3000 TO 4900	80 NB x 4.8	32 NB x 3.2	25 NB x 3.2	1	25 NB x 3.2	1	25 NB x 3.2	1
4900 TO 6700	100 NB x 5.4	40 NB x 3.2	32 NB x 3.2	2	32 NB x 3.2	1	32 NB x 3.2	1
6700 TO 7500	150 NB x 5.4	40 NB x 3.2	32 NB x 3.2	2	32 NB x 3.2	1	32 NB x 3.2	1
						1		1

V× = VERTICAL H×× = HORIZONTAL

ALTERATIONS

REFERENCES

A1-16659-001 TO 014 STANDARD FENCE DRAWINGS

REPR'D FROM REV

DRAWN	EM
CHECKED	LF
DESIGNED	LF
CHECKED	MB
APPROVED	MB
DATE	16/8/22
CLIENT ACCEPTED	XX
DATE	XX

Hydro Tasmania

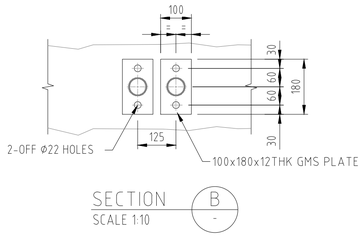
CLIENT

TITLE STANDARD FENCE DRAWING
CHAIN MESH FENCE - TYPE 2
DETAILS
SHEET 2 OF 3

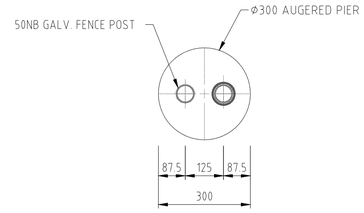
SCALE AS SHOWN

DRAWING A1-16659 SHT. 006 REV. X1 SIZE A1

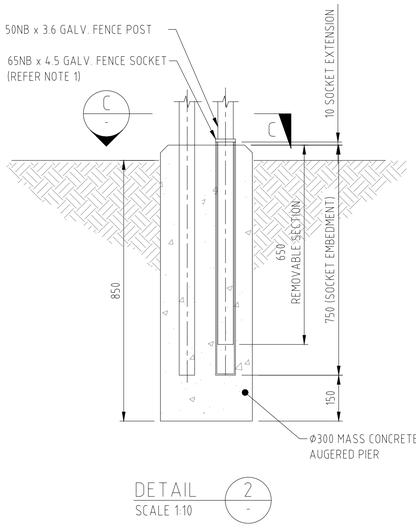
FILENAME: C:\USERS\YOUDA\ONEDRIVE - HYDRO TASMANIA\PROJECTS\E310111 HYDRO STANDARD FENCE DRAWINGS\A1-16659-005-006-007.DWG



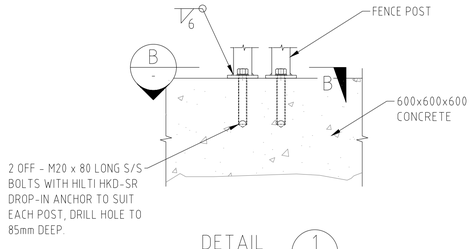
SECTION B
SCALE 1:10



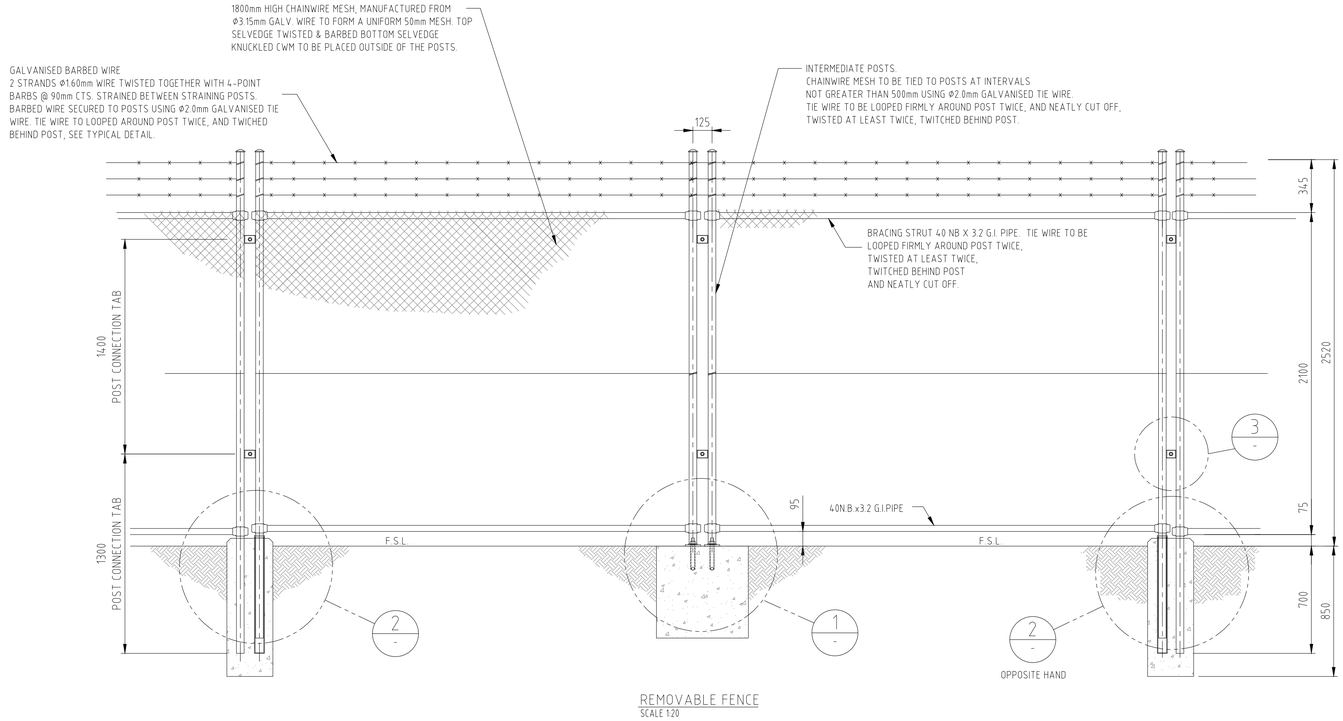
SECTION C
SCALE 1:10



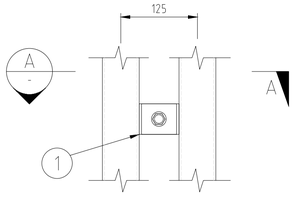
DETAIL 2
SCALE 1:10



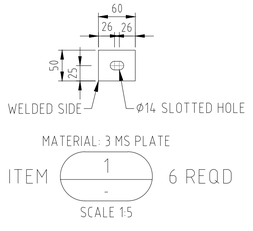
DETAIL 1
SCALE 1:10



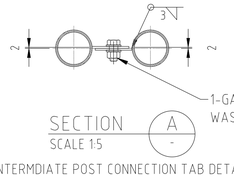
REMOVABLE FENCE
SCALE 1:20



DETAIL 3
SCALE 1:5



SCALE 1:5



SECTION A
SCALE 1:5

INTERMDIATE POST CONNECTION TAB DETAIL

NOTES:

1. WELD 65NB x 10 HIGH GALV. TUBE, 660mm FROM BOTTOM OF 50NB REMOVABLE POSTS WITH 6mm CFW TO SET POST HEIGHT.

400 200 0 400 800 1200mm
SCALE 1:20

200 100 0 200 400 600mm
SCALE 1:10

100 50 0 100 200 300mm
SCALE 1:5

ALTERATIONS

REFERENCES
A1-16659-001 TO 014 STANDARD FENCE DRAWINGS

REPR'D FROM | REV

DRAWN	EM
CHECKED	LF
DESIGNED	LF
CHECKED	MB
APPROVED	MB
DATE	16/8/22
CLIENT ACCEPTED	XX
DATE	XX

Hydro Tasmania

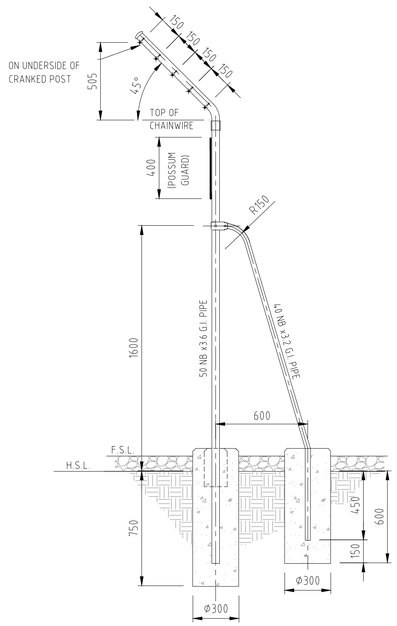
CLIENT

TITLE: STANDARD FENCE DRAWING
CHAIN MESH FENCE - TYPE 2
DETAILS
SHEET 3 OF 3

SCALE: AS SHOWN

DRAWING: A1-16659 | SHT: 007 | REV: X1 | SIZE: A1

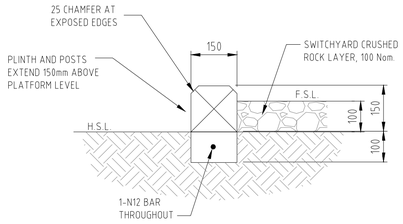
FILENAME: C:\USERS\YOUDA\ONEDRIVE - HYDRO TASMANIA\PROJECTS\E310111 HYDRO STANDARD FENCE DRAWINGS\A1-16659-005-006-007.DWG



INTERMEDIATE POST WITH BACK STAY

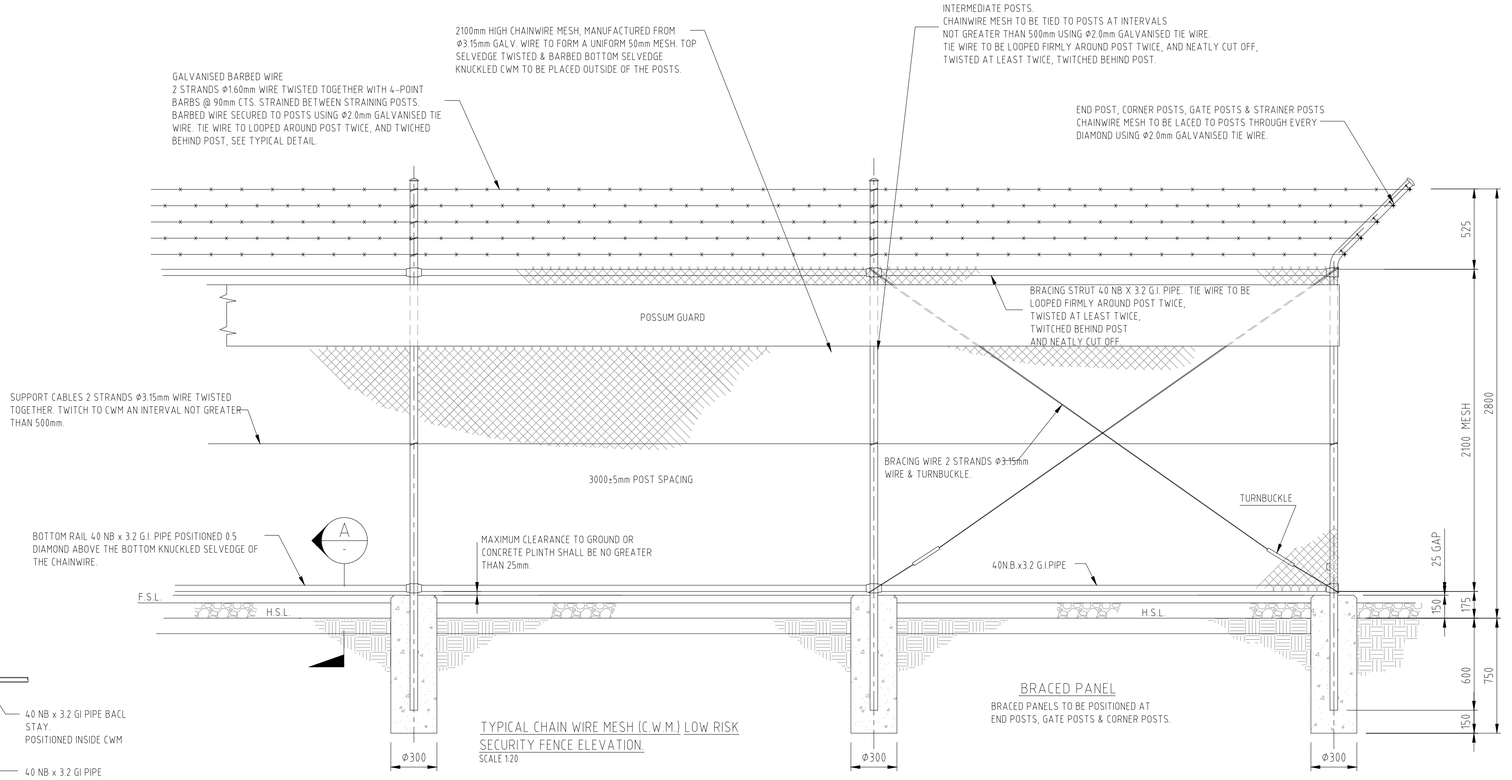
SCALE 1:20

BACK STAYS TO BE POSITIONED AT END POSTS, GATE POSTS, STRAINER POSTS & INTERMEDIATE POSTS AT INTERVALS NOT GREATER THAN 15m.



SECTION A-A

SCALE 1:10

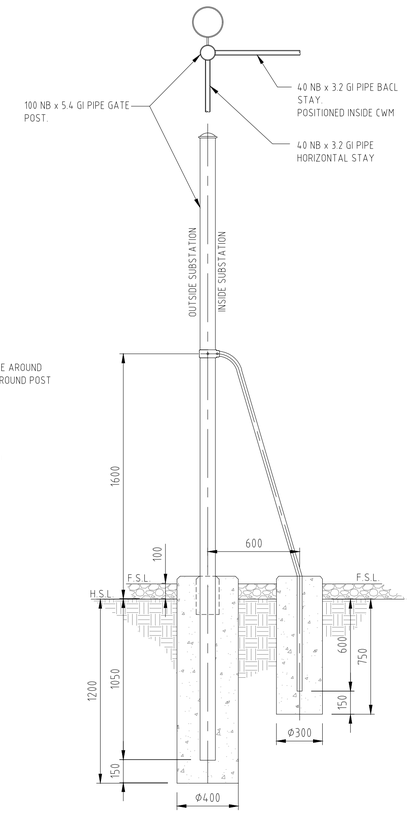


TYPICAL CHAIN WIRE MESH (C.W.M.) LOW RISK SECURITY FENCE ELEVATION.

SCALE 1:20

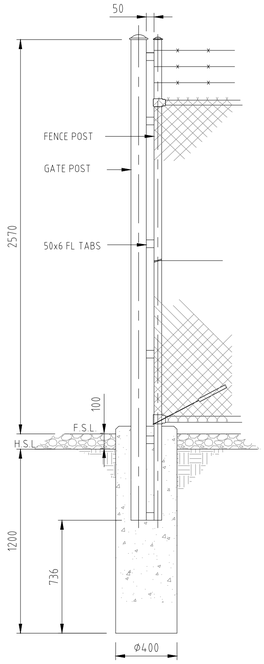
BRACED PANEL

BRACED PANELS TO BE POSITIONED AT END POSTS, GATE POSTS & CORNER POSTS.



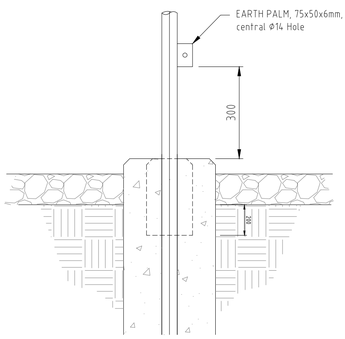
TYPICAL GATE POST WITH BACK STAY

SCALE 1:20



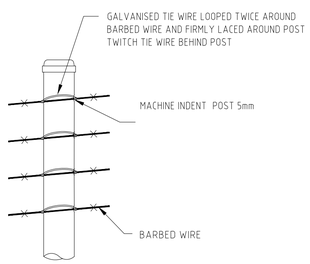
TYPICAL GATE POST DETAIL

SCALE 1:20



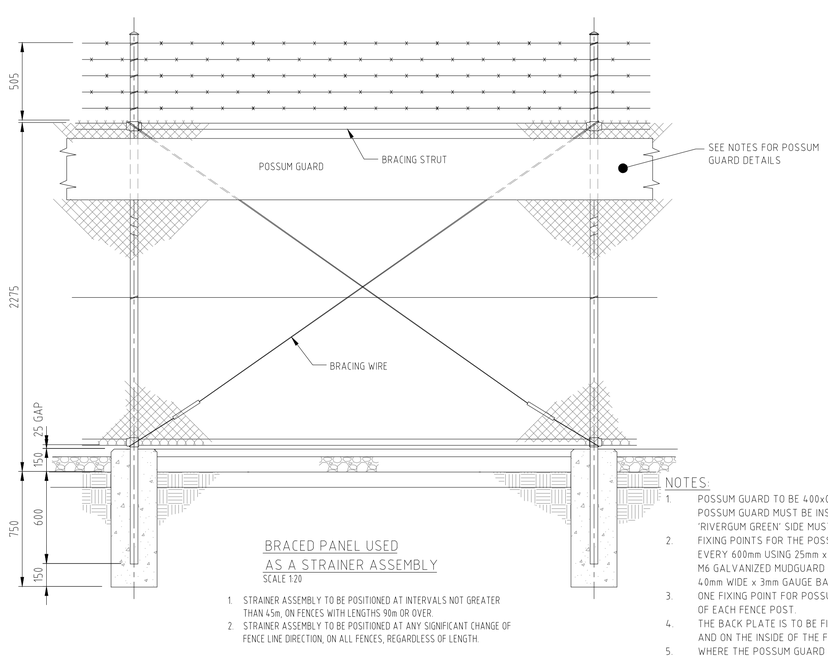
EARTHING LUG DETAIL

SCALE 1:10



TYPICAL POST-BARBED WIRE CONNECTION DETAIL

SCALE 1:5



BRACED PANEL USED AS A STRAINER ASSEMBLY

SCALE 1:20

1. STRAINER ASSEMBLY TO BE POSITIONED AT INTERVALS NOT GREATER THAN 45m, ON FENCES WITH LENGTHS 90m OR OVER.
2. STRAINER ASSEMBLY TO BE POSITIONED AT ANY SIGNIFICANT CHANGE OF FENCE LINE DIRECTION, ON ALL FENCES, REGARDLESS OF LENGTH.

NOTES:

1. POSSUM GUARD TO BE 400x0.4mm COLOURBOND STEEL 'RIVERGUM GREEN'. THE POSSUM GUARD MUST BE INSTALLED ON THE OUTSIDE OF THE FENCE. THE 'RIVERGUM GREEN' SIDE MUST FACE OUTWARDS FROM THE SUBSTATION.
2. FIXING POINTS FOR THE POSSUM GUARD TO FENCE PANELS MUST BE AT LEAST EVERY 600mm USING 25mm x M6 GALVANIZED GUTTER BOLTS COMPLETE WITH M6 GALVANIZED MUDGUARD WASHER, M6 NYLON NUT & TWO 100mm LONG x 40mm WIDE x 3mm GAUGE BACK PLATES.
3. ONE FIXING POINT FOR POSSUM GUARD MUST BE AT LEAST 400mm EITHER SIDE OF EACH FENCE POST.
4. THE BACK PLATE IS TO BE FITTED TOP AND BOTTOM OF THE POSSUM GUARD AND ON THE INSIDE OF THE FENCE.
5. WHERE THE POSSUM GUARD IS NOT CONTINUOUS RUN OR WHERE THE POSSUM GUARDS STOPS AT CORNER POSTS, GATE POSTS AND GATE EDGES, THE END OF THE POSSUM GUARD MUST BE LACED WITH GALVANIZED TIE WIRE.
6. POSSUM GUARD MUST NOT BE FIXED TO FENCE POSTS AND ALL SECTION JOINS MUST OVERLAP BY AT LEAST 50mm.

ALTERATIONS

REFERENCES

A1-16659-001 TO 014 STANDARD FENCE DRAWINGS

DRAWN	EM
CHECKED	LF
DESIGNED	LF
CHECKED	MB
APPROVED	MB
DATE	16/8/22
CLIENT ACCEPTED	XX
DATE	XX

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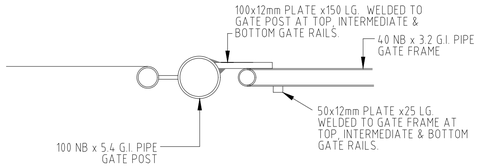
TITLE STANDARD FENCE DRAWING
CHAIN MESH FENCE - TYPE 3
DETAILS
SHEET 1 OF 3

SCALE AS SHOWN

DRAWING A1-16659 SHT 008 REV X1 SIZE A1

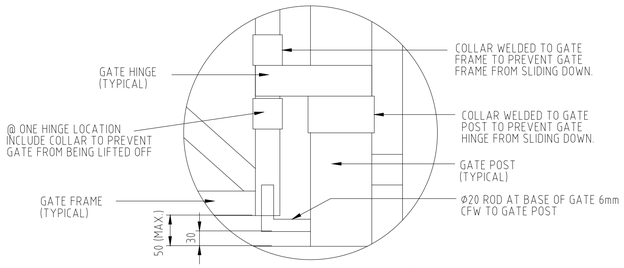
FILENAME: C:\USERS\YOUDA\ONEDRIVE - HYDRO TASMANIA\PROJECTS\E310111 HYDRO STANDARD FENCE DRAWINGS\A1-16659-008-009-010.DWG



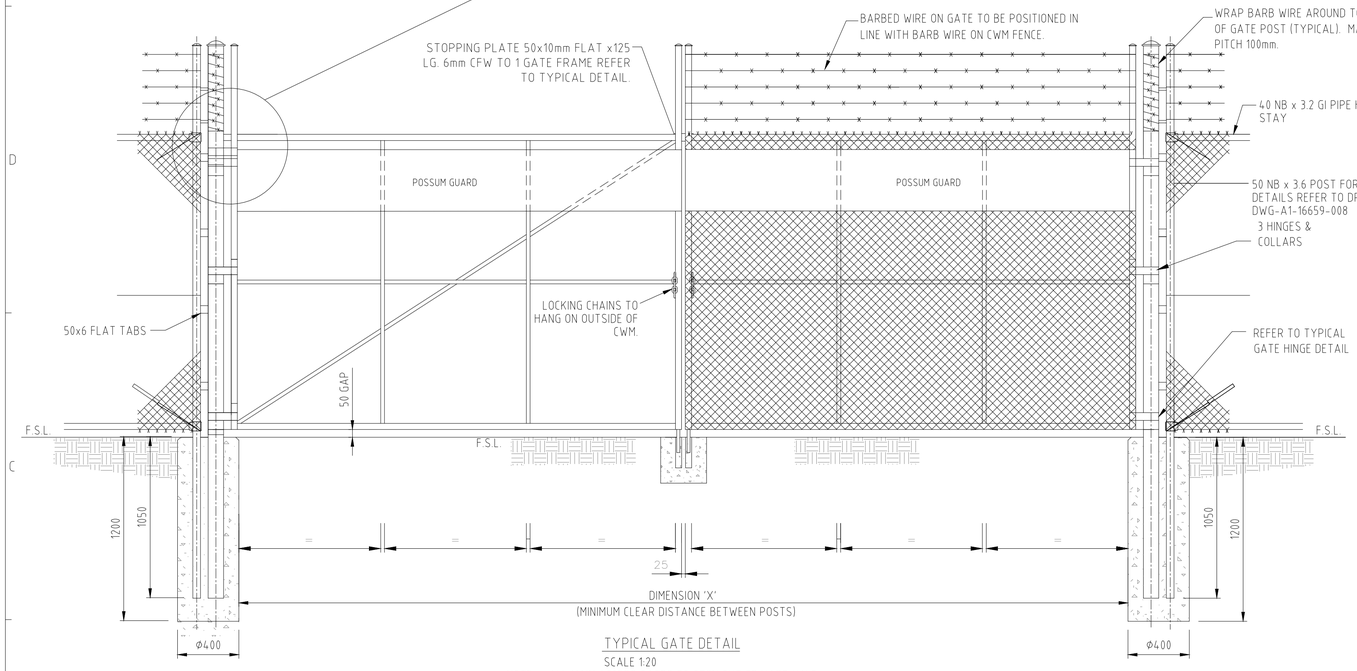
TYPICAL GATE STOP DETAIL

SCALE 1:10

NOTES:
1. TWO WELDED PLATES TO TOUCH WHEN GATES ARE IN A CLOSED POSITION. PLATES MUST BE INSTALLED AFTER GATES ARE HUNG IN FINAL POSITION.
2. PLATES INSTALLED ON ALL HORIZONTAL GATE FRAME MEMBERS. TYPICALLY 3 PER GATE LEAF.



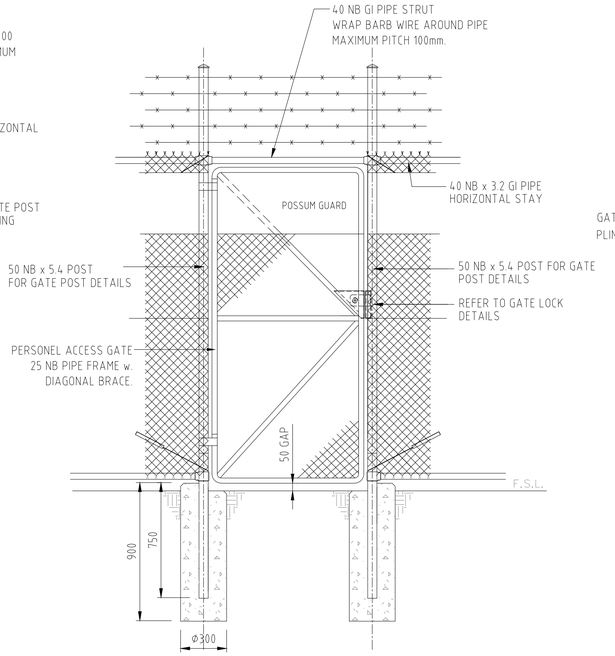
TYPICAL GATE HINGE DETAIL N.T.S.



TYPICAL GATE DETAIL

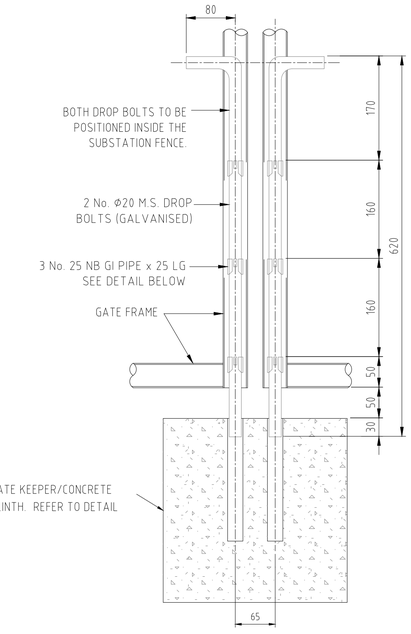
SCALE 1:20

NOTE: ALL MAIN ACCESS GATES TO OPEN OUT OF YARD U.N.O.



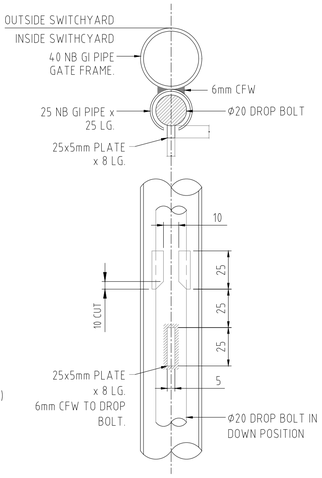
TYPICAL 1000 CLEAR PERSONEL ACCESS GATE

SCALE 1:20 VIEWED FROM OUTSIDE SWITCHYARD



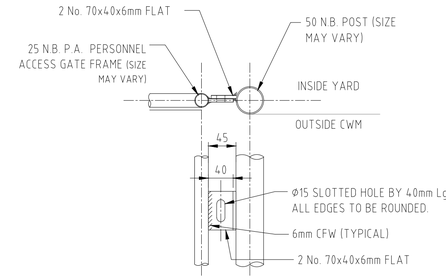
TYPICAL DROP BOLT DETAIL

SCALE 1:5



TYPICAL DROP BOLT SLEEVE DETAIL

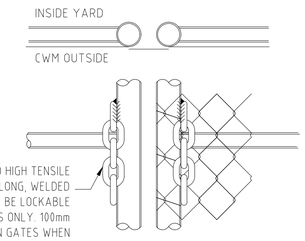
SCALE 1:2



TYPICAL P.A. GATE LOCK DETAIL

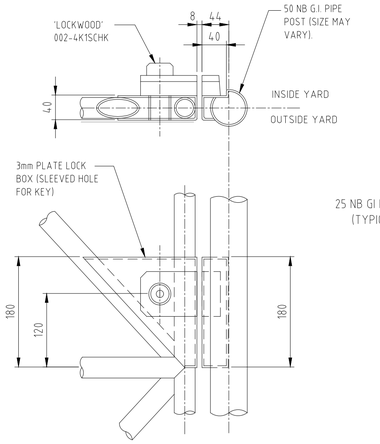
SCALE 1:5

NOTE: ALL PA GATES TO OPEN OUT OF YARD U.N.O.



MAIN ACCESS GATES LOCKING CHAINS

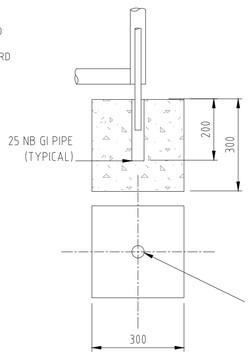
SCALE 1:5



TYPICAL P.A. GATE LOCK DETAIL

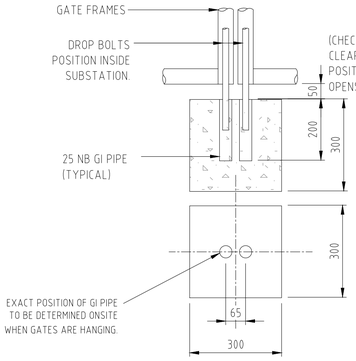
SCALE 1:5

NOTE: ALL P.A. GATES TO OPEN INTO YARD U.N.O. LOCK KEY ACCESS FROM OUTSIDE. LOCK READILY OPENED & EXIT FROM IN YARD.



TYPICAL DOUBLE GATE STOP DETAIL OPEN POSITION 1 No. PER GATE LEAF

SCALE 1:10



TYPICAL DOUBLE GATE STOP DETAIL CLOSED POSITION 1 No. PER GATE.

SCALE 1:10

TABLE 1 - GATE DETAILS

DIMENSION 'X'	TYPE OF POST (G.I. PIPE)	OUTER FRAME (G.I. PIPE)	INNER FRAME-Vx STAYS (G.I. PIPE)	No.	INNER FRAME-Hxx STAYS (G.I. PIPE)	No.	INNER FRAME-BRACING (G.I. PIPE)	No.
UP TO 3000	50 NB x 4.5	32 NB x 3.2	25 NB x 3.2	1	25 NB x 3.2	1	25 NB x 3.2	0
3000 TO 4900	80 NB x 4.8	32 NB x 3.2	25 NB x 3.2	1	25 NB x 3.2	1	25 NB x 3.2	1
4900 TO 6700	100 NB x 5.4	40 NB x 3.2	32 NB x 3.2	2	32 NB x 3.2	1	32 NB x 3.2	1
6700 TO 7500	150 NB x 5.4	40 NB x 3.2	32 NB x 3.2	2	32 NB x 3.2	1	32 NB x 3.2	1
						1		1

Vx = VERTICAL Hxx = HORIZONTAL

ALTERATIONS

REFERENCES
A1-16659-001 TO 014 STANDARD FENCE DRAWINGS

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DATE	XX

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TITLE STANDARD FENCE DRAWING
CHAIN MESH FENCE - TYPE 3
DETAILS
SHEET 2 OF 3

SCALE AS SHOWN

DRAWING A1-16659 SHT 009 REV. X1 SIZE A1

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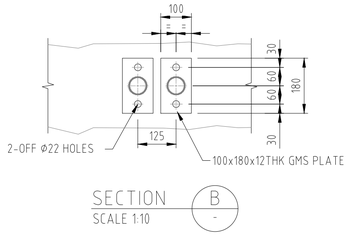
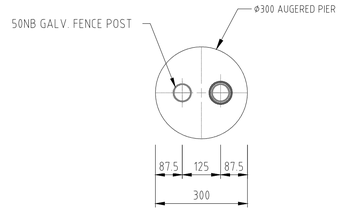
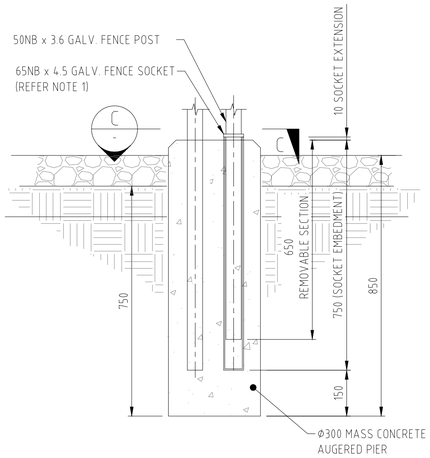


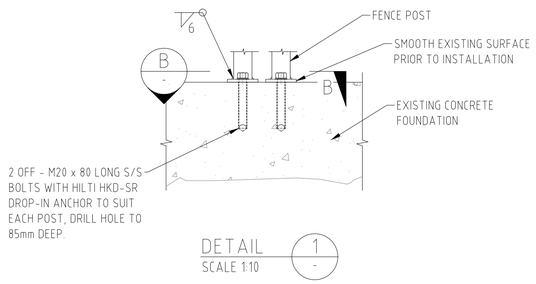
SECTION B
SCALE 1:10



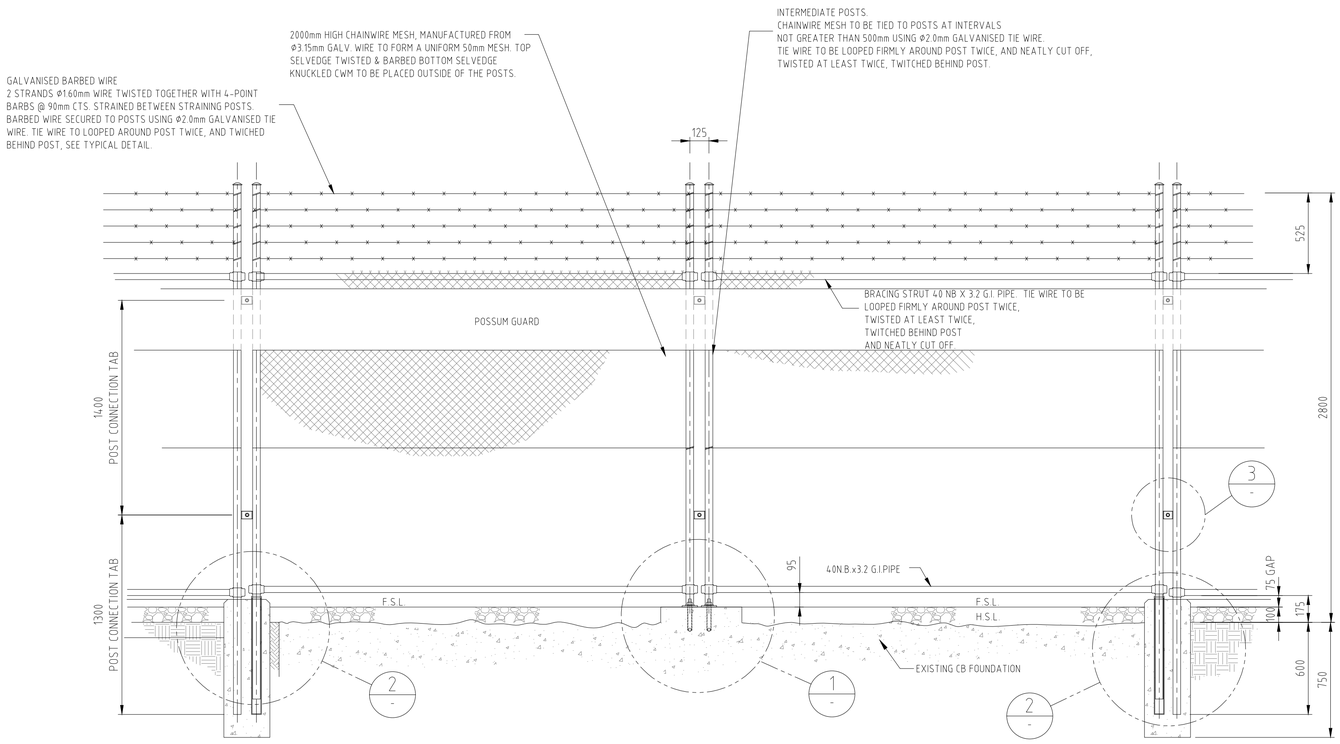
SECTION C
SCALE 1:10



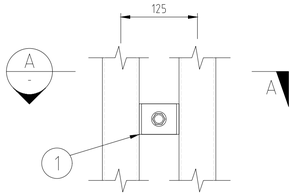
DETAIL 2
SCALE 1:10



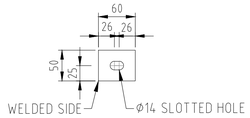
DETAIL 1
SCALE 1:10



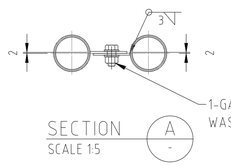
REMOVABLE FENCE
SCALE 1:20



DETAIL 3
SCALE 1:5



MATERIAL: 3 MS PLATE
ITEM 1 6 REQD
SCALE 1:5



SECTION A
SCALE 1:5

INTERMDIATE POST CONNECTION TAB DETAIL

NOTES:

1. WELD 65NB x 10 HIGH GALV. TUBE, 660mm FROM BOTTOM OF 50NB REMOVABLE POSTS WITH 6mm CFW TO SET POST HEIGHT.

400 200 0 400 800 1200mm
SCALE 1:20

200 100 0 200 400 600mm
SCALE 1:10

100 50 0 100 200 300mm
SCALE 1:5

ALTERATIONS

REFERENCES
A1-16659-001 TO 014 STANDARD FENCE DRAWINGS

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APPROVED	MB
DATE	16/8/22
CLIENT ACCEPTED	XX
DATE	XX

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TITLE: STANDARD FENCE DRAWING
CHAIN MESH FENCE - TYPE 3
DETAILS
SHEET 3 OF 3

SCALE: AS SHOWN

DRAWING: A1-16659 | SHT: 010 | REV: X1 | SIZE: A1

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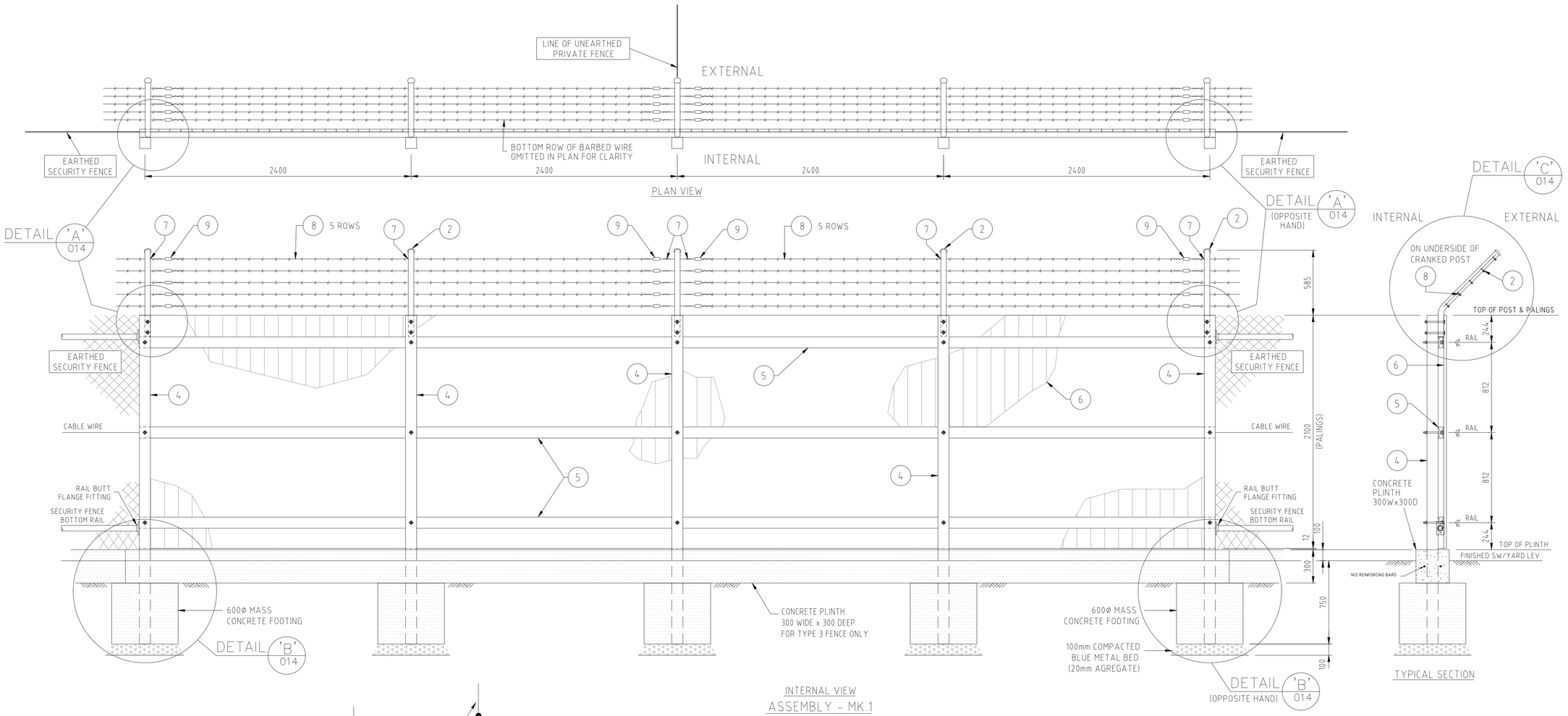
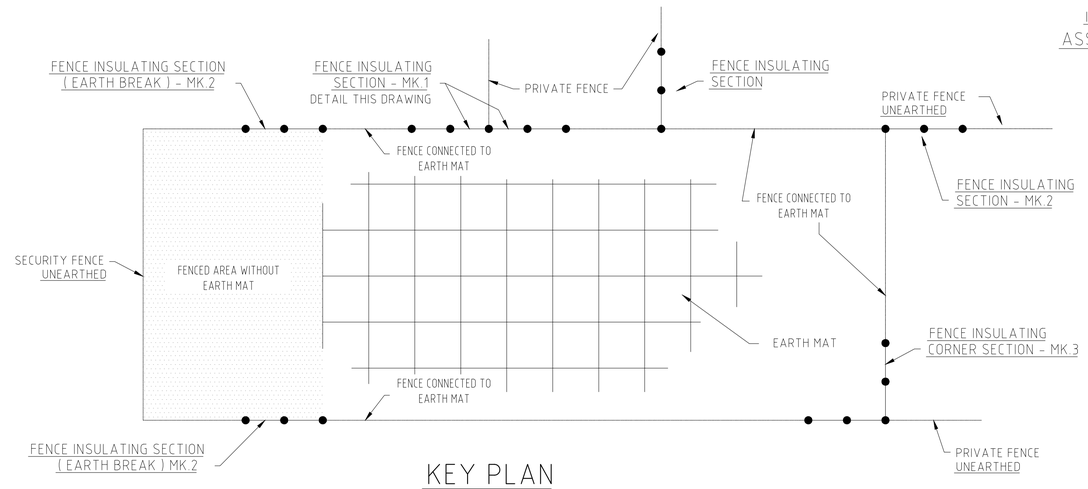


INTERNAL VIEW
ASSEMBLY - MK.1
SCALE 1 : 20



KEY PLAN

TYPICAL LOCATION OF FENCE INSULATING SECTIONS

NOT TO SCALE

IMPORTANT - ALL GAPS AROUND AND UNDER FENCE AND GATES NOT TO EXCEED 25mm

400 200 0 400 800 1200mm

SCALE 1:20

ALTERATIONS

REFERENCES		
A1-16659-001 TO 014 STANDARD FENCE DRAWINGS	DRAWN	EM
	CHECKED	LF
	DESIGNED	LF
	CHECKED	MB
	APPROVED	MB
	DATE	16/8/22
	CLIENT ACCEPTED	XX
REPR'D FROM REV	DATE	XX

Hydro Tasmania

CLIENT

TITLE: STANDARD FENCE DRAWING
INSULATED FENCE
PLAN AND SECTIONS
DETAILS - SHEET 1 OF 4

SCALE: AS SHOWN

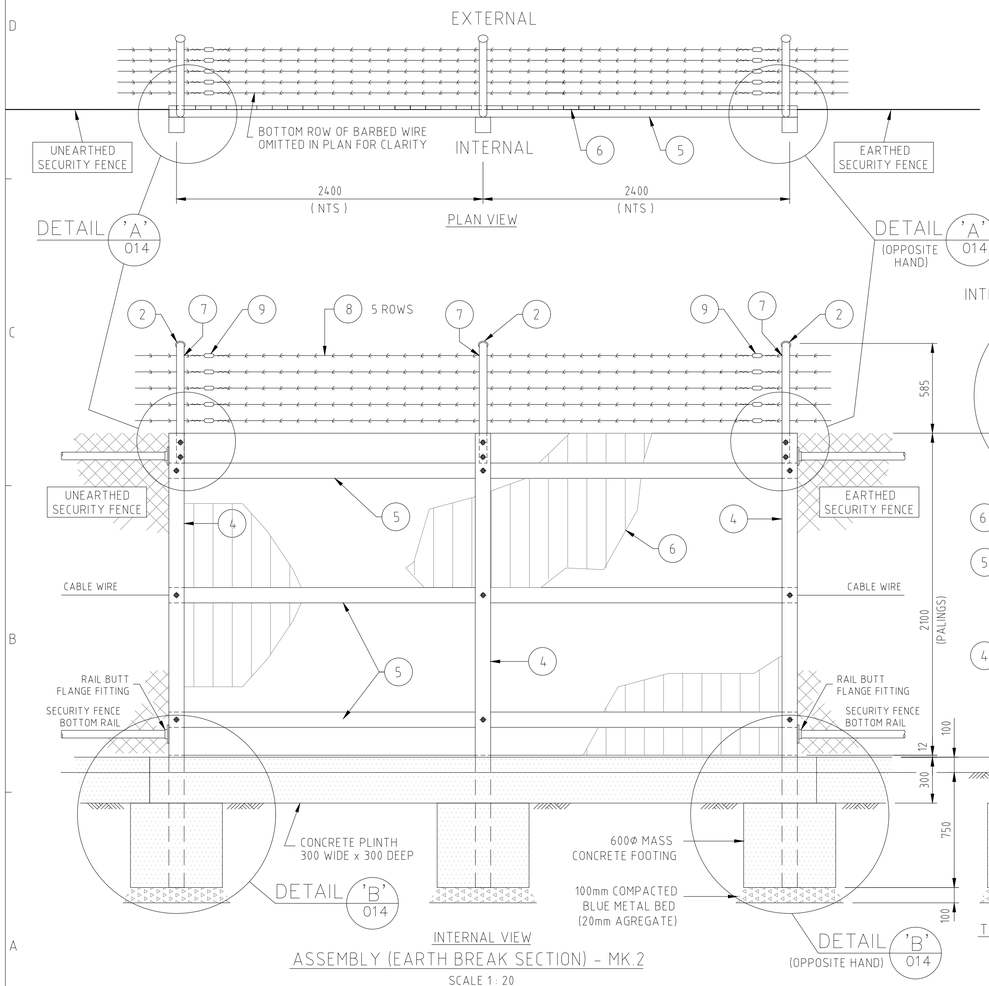
DRAWING: A1-16659 | SHT: 011 | REV: X1 | SIZE: A1

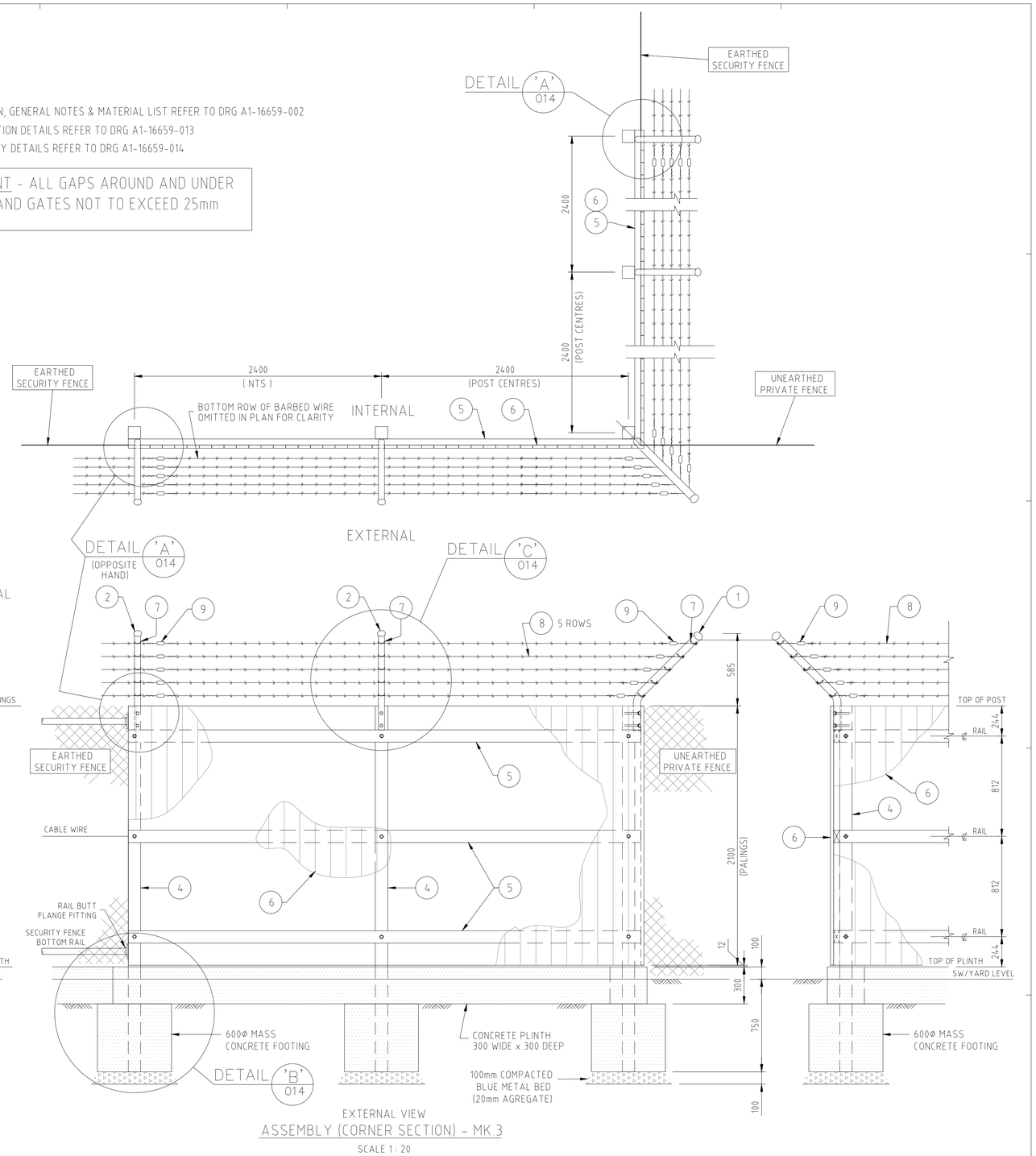
FILENAME: C:\USERS\YOUDA\ONEDRIVE - HYDRO TASMANIA\PROJECTS\E310111 HYDRO STANDARD FENCE DRAWINGS\A1-16659-011-012-013-014.DWG

NOTE:

1. FOR KEY PLAN, GENERAL NOTES & MATERIAL LIST REFER TO DRG A1-16659-002
2. FOR FABRICATION DETAILS REFER TO DRG A1-16659-013
3. FOR ASSEMBLY DETAILS REFER TO DRG A1-16659-014

IMPORTANT - ALL GAPS AROUND AND UNDER FENCE AND GATES NOT TO EXCEED 25mm





400 200 0 400 800 1200mm
SCALE 1:20

ALTERATIONS

REFERENCES		
A1-16659-001 TO 014 STANDARD FENCE DRAWINGS	DRAWN	EM
	CHECKED	LF
	DESIGNED	LF
	CHECKED	MB
	APPROVED	MB
	DATE	16/8/22
	CLIENT ACCEPTED	XX
REPR'D FROM REV	DATE	XX

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TITLE: STANDARD FENCE DRAWING
INSULATED FENCE
PLAN AND SECTIONS
DETAILS - SHEET 2 OF 4

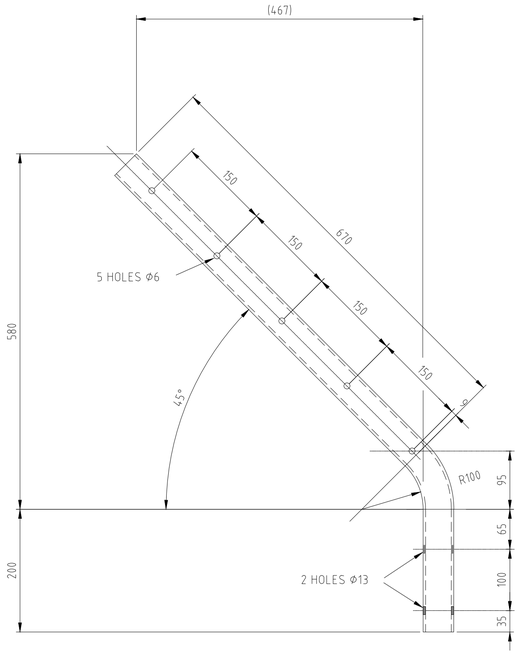
SCALE: AS SHOWN

DRAWING: A1-16659 | SHT. 012 | REV. X1 | SIZE A1

FILENAME: C:\USERS\YOUDA\ONEDRIVE - HYDRO TASMANIA\PROJECTS\E310111 HYDRO STANDARD FENCE DRAWINGS\A1-16659-011-012-013-014.DWG

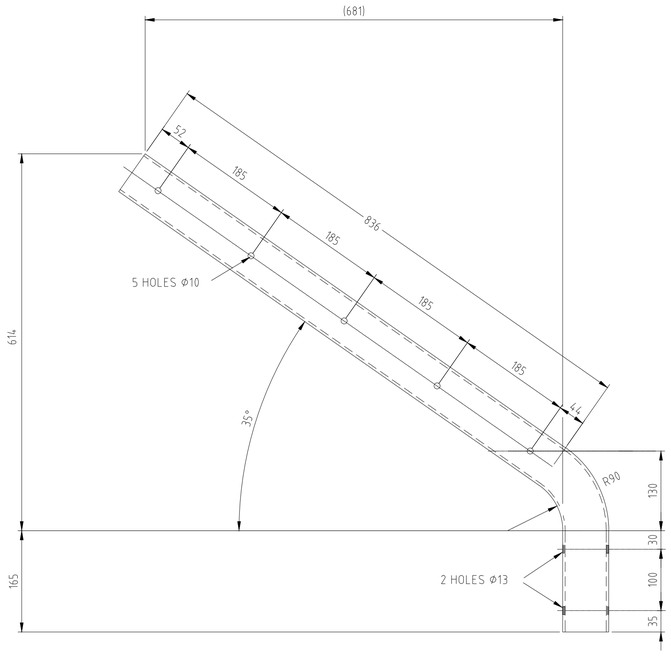
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS U.N.O.
2. FINISH: HOT DIP GALVANISED TO AS 4791-1999 & AS 4792-1999.
   ALL FABRICATED ITEMS HOT DIP GALVANISED TO AS/NZS 4680-1999.
3. ALL POSTS TO BE FITTED WITH GALVANIZED CAPS.



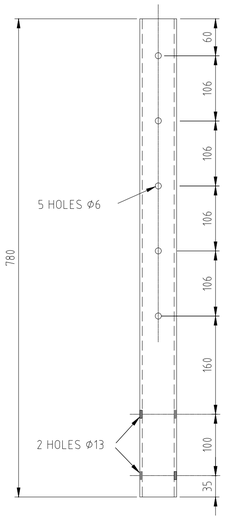
INSULATED FENCE - CRANKED POST SECTION PART 2

MATERIAL: 40NB MEDIUM DUTY TUBE
FINISH: HOT DIP GALVANISED
MARK: INT POST
SCALE 1 : 5



INSULATED FENCE - CORNER CRANKED POST PART 1

MATERIAL: 65NB MEDIUM DUTY TUBE
FINISH: HOT DIP GALVANISED
MARK: CNR POST
SCALE 1 : 5



EARTH BREAK FENCE STRAIGHT POST SECTION

MATERIAL: 50NB MEDIUM DUTY TUBE
FINISH: HOT DIP GALVANISED
MARK: INT POST
SCALE 1 : 5

100 50 0 100 200 300mm
SCALE 1:5

ALTERATIONS

REFERENCES
A1-16659-001 TO 014 STANDARD FENCE DRAWINGS

REPR'D FROM
REV

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CHECKED	LF
DESIGNED	LF
CHECKED	MB
APPROVED	MB
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CLIENT ACCEPTED	XX
DATE	XX

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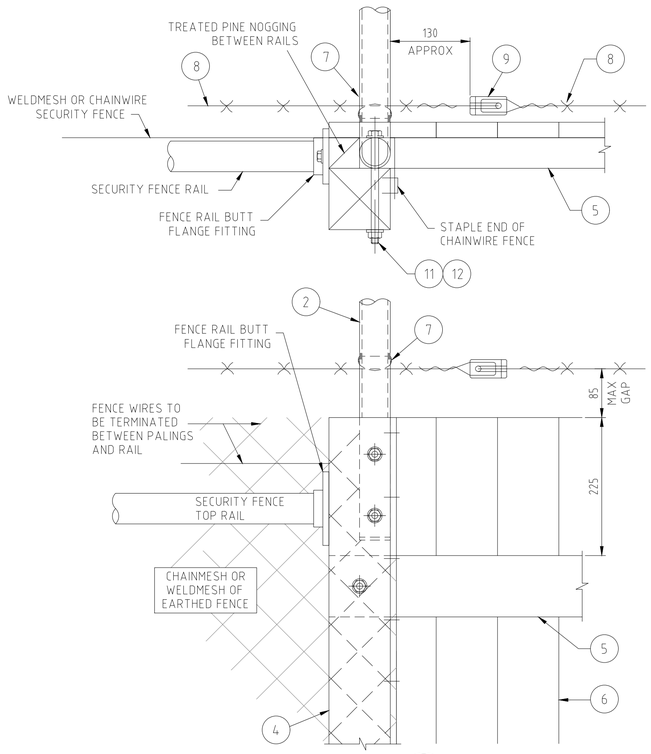
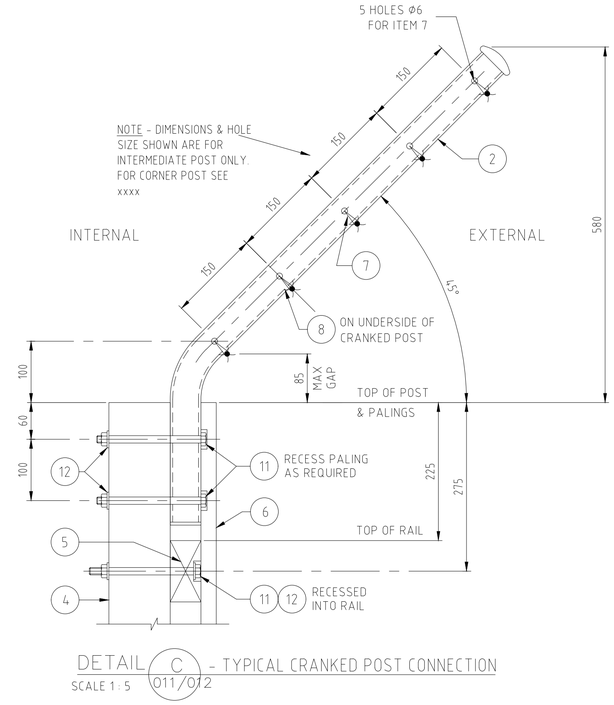
TITLE STANDARD FENCE DRAWING INSULATED FENCE FABRICATION DETAILS - SHEET 3 OF 4
SCALE AS SHOWN
DRAWING A1-16659 | SHT 013 | REV X1 | SIZE A1

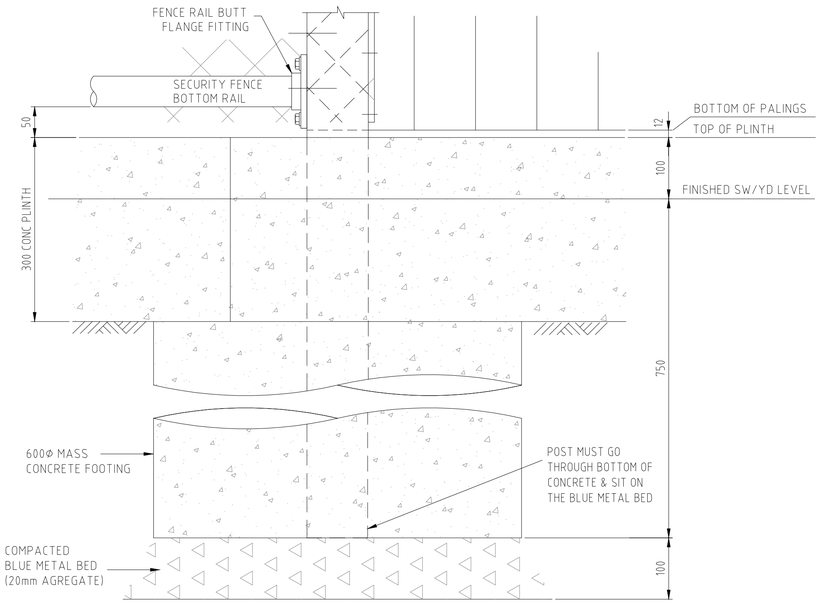
FILENAME: C:\USERS\YOUDA\ONEDRIVE - HYDRO TASMANIA\PROJECTS\E310111 HYDRO STANDARD FENCE DRAWINGS\A1-16659-011-012-013-014.DWG



DETAIL A (011/012)
SCALE 1 : 5



DETAIL C (011/012) - TYPICAL CRANKED POST CONNECTION
SCALE 1 : 5



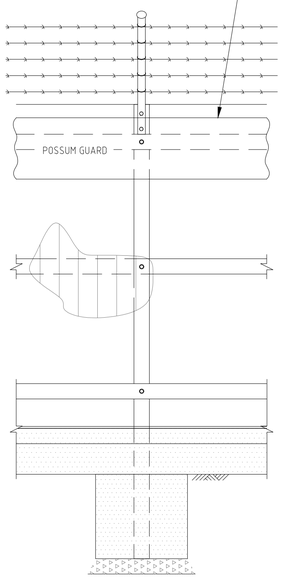
DETAIL B (011/012) - TYPICAL FOOTING
SCALE 1 : 5

NOTES:

1. WHERE RAIL LENGTH EXCEEDS 4.8m, PROVIDE HALF JOINT TO RAILS.
2. LENGTH OF PANEL(S) MUST ENSURE A MINIMUM DISTANCE OF 4.8m BETWEEN END OF EXTERNAL FENCE AND EARTH MAT.
3. A POSSUM GUARD SHALL BE INSTALLED ON OUTSIDE OF THE FENCE. REFER TO STANDARD FOR DETAILS AND FIXING.
4. ALL POST CRANKED SECTIONS TO BE FITTED WITH GALVANIZED CAPS.

IMPORTANT - ALL GAPS AROUND AND UNDER FENCE AND GATES NOT TO EXCEED 25mm

POSSUM GUARD TO BE POLYCARBONATE SHEETING 400mm HIGH WITH A GUAGE OF 3.5mm. POSSUM GUARD TO BE FIXED TO PALINGS USING FLAT HEAD NON-CORROSIVE SCREWS AT MAXIMUM SPACING OF 600mm.



EXTERNAL VIEW
POSSUM GUARD DETAIL

PART	MATERIAL	DESCRIPTION	REMARKS
12	GMS	WASHER, LARGE FLAT M12	-
11	GMS	BOLT, M12 x 170 Long	-
10	-	-	-
9	PORCELAIN	INSULATOR, GUY	GALLAGHER G675
8	GALV HTS	WIRE, BARBED 2xΦ1.6	-
7	GMS	LACING & TIE WIRE, Φ2	-
6	TREATED PINE	PALING, 25mm	-
5	TREATED PINE	RAIL, 100x50	-
4	TREATED PINE	POST, SQUARE. 100mm	-
3	-	-	-
2	GMS	CRANKED POST TOP, Intermediate, 40NB MED Duty Tube	SEE DETAIL 'C'
1	GMS	CRANKED POST TOP, Corner, 65NB MED Duty Tube	-

100 50 0 100 200 300mm
SCALE 1:5

ALTERATIONS

REFERENCES
A1-16659-001 TO 014 STANDARD FENCE DRAWINGS

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APPROVED	MB
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CLIENT ACCEPTED	XX
DATE	XX

Hydro Tasmania

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TITLE: STANDARD FENCE DRAWING
INSULATED FENCE
ASSEMBLY
DETAILS - SHEET 4 OF 4

SCALE: AS SHOWN

DRAWING: A1-16659 | SHT: 014 | REV: X1 | SIZE: A1

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