



INDEX

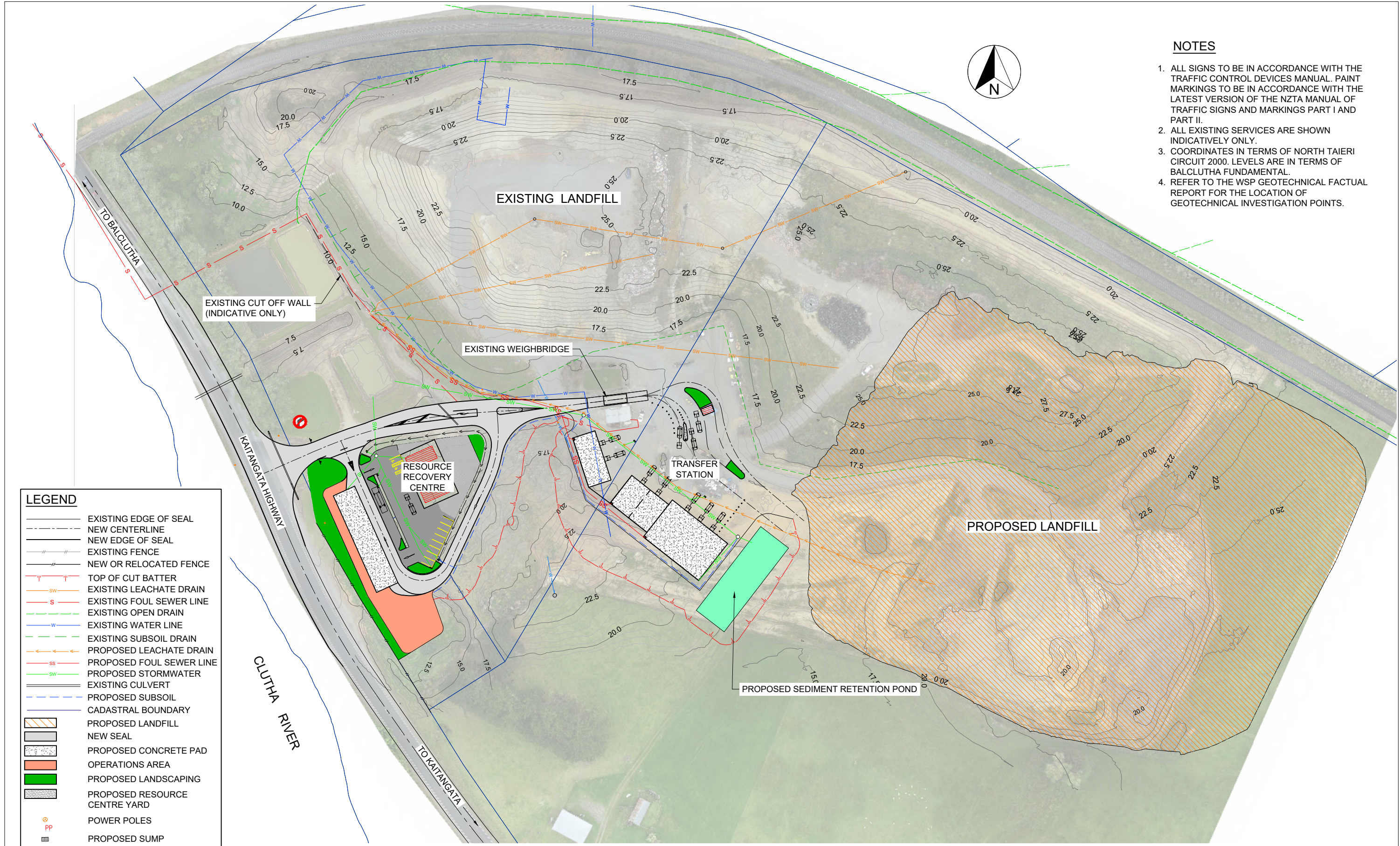
- C101 - OVERALL SITE PLAN
- C102 - TRANSFER STATION & RESOURCE RECOVERY CENTRE OVERALL SITE PLAN
- C103 - RESOURCE RECOVERY CENTRE PLAN
- C104 - TRANSFER STATION PLAN
- C105 - MAIN ACCESS ROAD PLAN AND PROFILE
- C106 - RESOURCE RECOVERY CENTRE ACCESS ROAD PLAN AND PROFILE
- C107 - TYPICAL CROSS SECTIONS
- C108 - MAIN ACCESS ROAD CROSS SECTIONS 10.0 - 50.0
- C109 - MAIN ACCESS ROAD CROSS SECTIONS 60.0 - 90.0
- C110 - MAIN ACCESS ROAD CROSS SECTIONS 100.0 - 130.0
- C111 - MAIN ACCESS ROAD CROSS SECTIONS 140.0 - 170.0
- C112 - MAIN ACCESS ROAD CROSS SECTIONS 180.0 - 210.0
- C113 - MAIN ACCESS ROAD CROSS SECTIONS 220.0 - 240.0
- C114 - RESOURCE CENTRE ACCESS CROSS SECTIONS 10.0 - 40.0
- C115 - RESOURCE CENTRE ACCESS CROSS SECTIONS 50.0 - 80.0
- C116 - RESOURCE CENTRE ACCESS CROSS SECTIONS 90.0 - 110.0
- C117 - RESOURCE CENTRE ACCESS CROSS SECTIONS 120.0 - 140.0
- C199 - LANDFILL EXPANSION FLOOR CONTOUR PLAN
- C200 - LANDFILL EXPANSION STAGE 01 FLOOR DESIGN
- C201 - LANDFILL EXPANSION LANDFILL STAGE 01 AND EXCAVATION STAGE 02
- C202 - LANDFILL EXPANSION LANDFILL STAGE 02 AND EXCAVATION STAGE 03
- C203 - LANDFILL EXPANSION LANDFILL STAGE 03
- C204 - LANDFILL EXPANSION LANDFILL STAGE 04
- C205 - LANDFILL EXPANSION LANDFILL STAGE 05
- C206 - LANDFILL EXPANSION SECTION LAYOUT PLAN
- C207 - LANDFILL EXPANSION EAST-WEST SECTIONS 01 AND 04
- C208 - LANDFILL EXPANSION NORTH-SOUTH SECTIONS 02 AND 03
- C209 - LANDFILL EXPANSION LEACHATE DRAINAGE LAYOUT PLAN AND TOE OF FILL PROFILE
- C210 - LANDFILL EXPANSION LEACHATE DETAILS
- C211 - LANDFILL EXPANSION TOE BUND DETAIL AND PIGGYBACK LINER AND GAS VENTING DETAIL
- C212 - LANDFILL EXPANSION SECTIONS 05(B-B), 06(A-A) AND 07
- C501 - FLOOD RISK BOUNDARY



CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT

CIVIL CONSENT

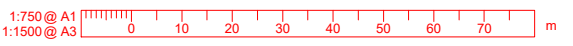
Project No: CO082.00
Date: 2024_04_08



- NOTES**
1. ALL SIGNS TO BE IN ACCORDANCE WITH THE TRAFFIC CONTROL DEVICES MANUAL. PAINT MARKINGS TO BE IN ACCORDANCE WITH THE LATEST VERSION OF THE NZTA MANUAL OF TRAFFIC SIGNS AND MARKINGS PART I AND PART II.
 2. ALL EXISTING SERVICES ARE SHOWN INDICATIVELY ONLY.
 3. COORDINATES IN TERMS OF NORTH TAIERI CIRCUIT 2000. LEVELS ARE IN TERMS OF BALCLUTHA FUNDAMENTAL.
 4. REFER TO THE WSP GEOTECHNICAL FACTUAL REPORT FOR THE LOCATION OF GEOTECHNICAL INVESTIGATION POINTS.

LEGEND

	EXISTING EDGE OF SEAL
	NEW CENTERLINE
	NEW EDGE OF SEAL
	EXISTING FENCE
	NEW OR RELOCATED FENCE
	TOP OF CUT BATTER
	EXISTING LEACHATE DRAIN
	EXISTING FOUL SEWER LINE
	EXISTING OPEN DRAIN
	EXISTING WATER LINE
	EXISTING SUBSOIL DRAIN
	PROPOSED LEACHATE DRAIN
	PROPOSED FOUL SEWER LINE
	PROPOSED STORMWATER
	EXISTING CULVERT
	PROPOSED SUBSOIL
	CADASTRAL BOUNDARY
	PROPOSED LANDFILL
	NEW SEAL
	PROPOSED CONCRETE PAD
	OPERATIONS AREA
	PROPOSED LANDSCAPING
	PROPOSED RESOURCE CENTRE YARD
	POWER POLES
	PROPOSED SUMP
	PROPOSED MANHOLE



NOTE:
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REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



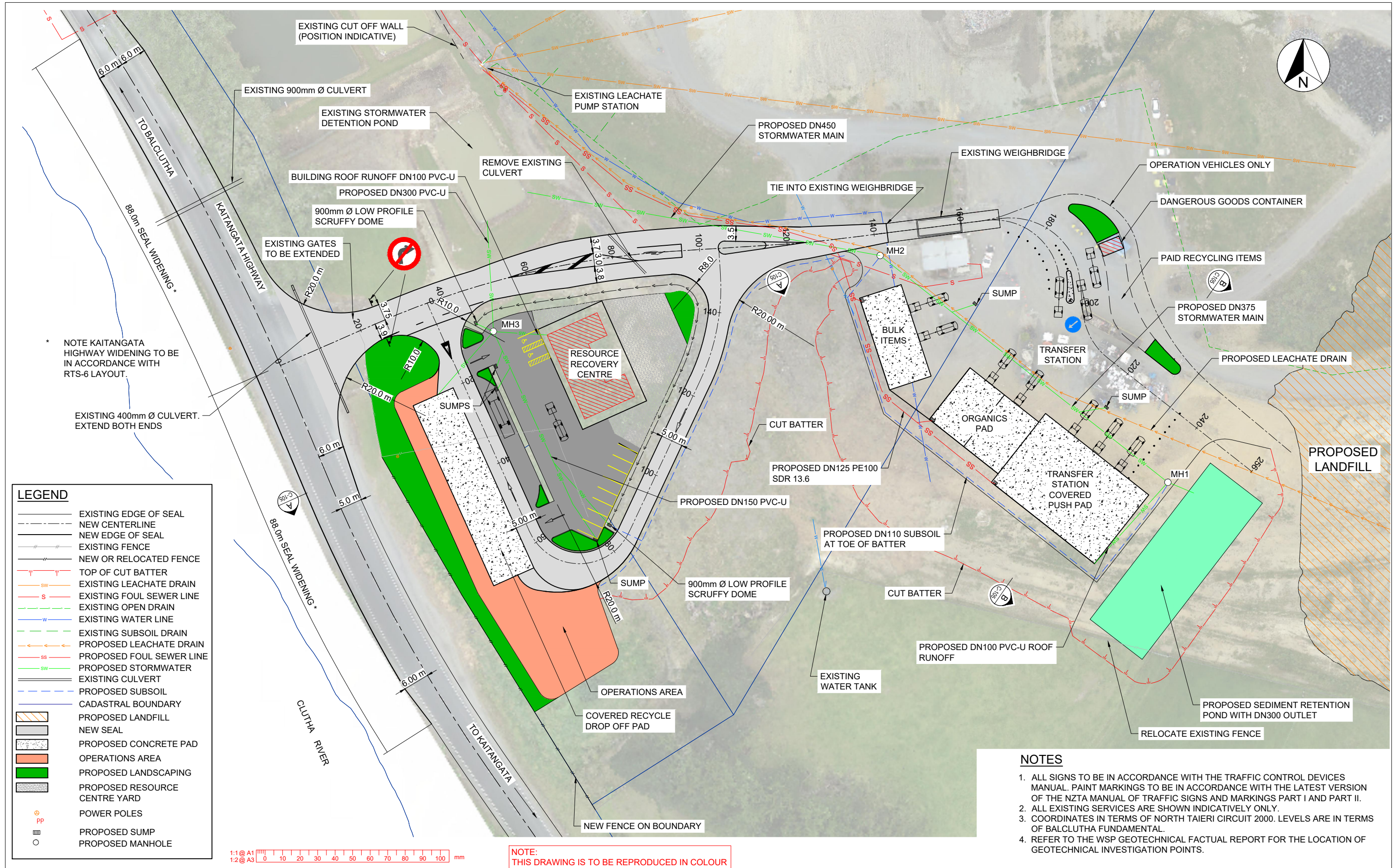
wsp
Invercargill Office
+64 3 211 3580
PO Box 647
Invercargill 9840
New Zealand

CIVIL

SCALES	DESIGNED	APPROVED	ORIGINAL SIZE
1:750@A1, 1:1500@A3	J.L. BOYDE	CHRIS FOX	A1
DRAWN	DESIGN VERIFIED	APPROVED DATE	
J.L. BOYDE	ROWAN LATHAM	2023-04-06	
DRAWING VERIFIED			
CALLUM FEELY			

PRELIMINARY

PROJECT	TITLE	WSP PROJECT NO. (SUB-PROJECT)	SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT	LANDFILL, TRANSFER STATION & RESOURCE RECOVERY CENTRE OVERALL SITE PLAN	6-CO082.00	C101	A



NOTE:
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A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



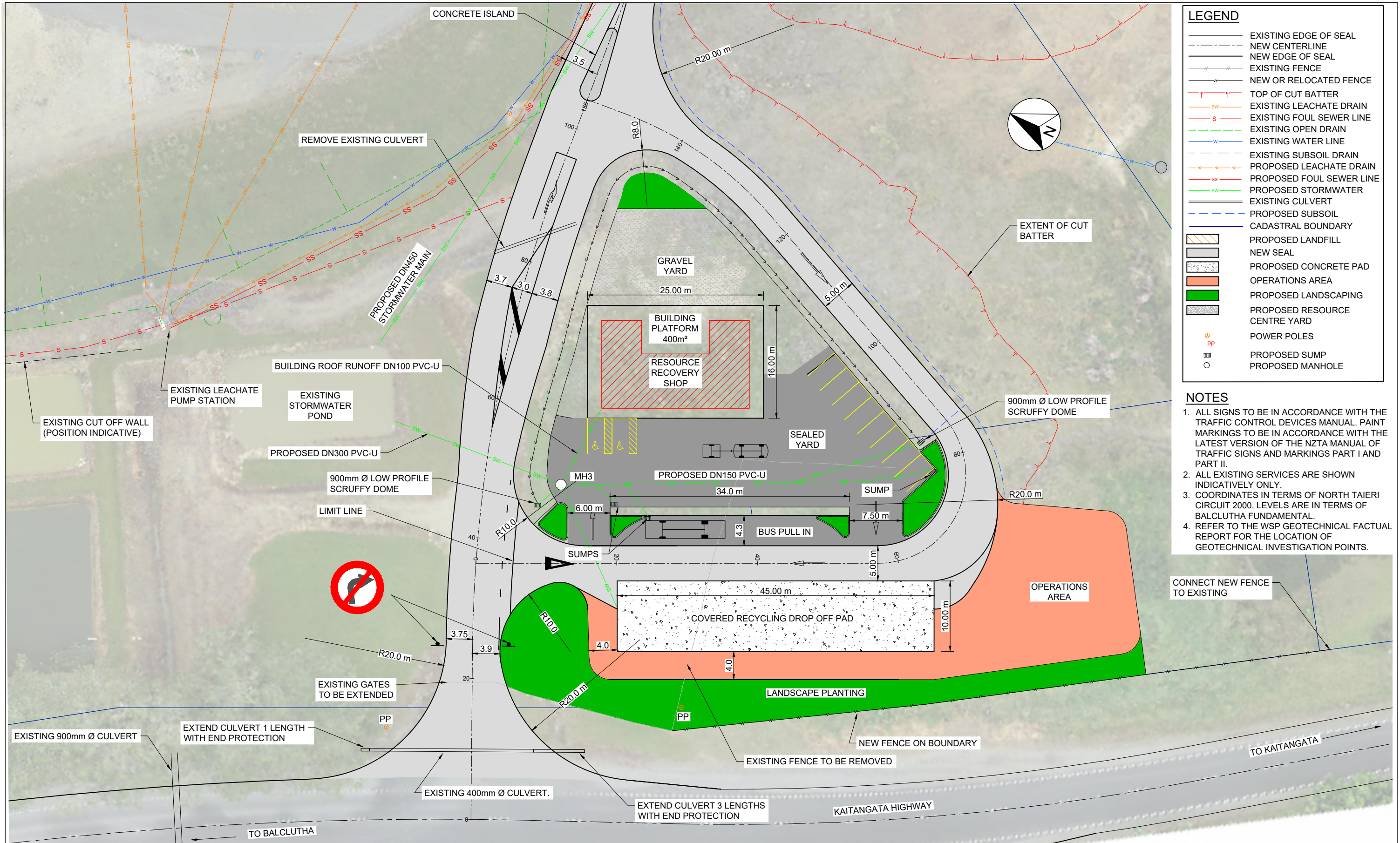
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New Zealand

CIVIL

SCALES	DESIGNED	APPROVED	ORIGINAL SIZE
1:400@ A1, 1:800@A3	J.L. BOYDE	CHRIS FOX	A1
DRAWN	J.L. BOYDE	APPROVED DATE	
CALLUM FEELY	ROWAN LATHAM	2023-04-06	

PRELIMINARY

PROJECT	TITLE	WSP PROJECT NO. (SUB-PROJECT)	SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT	TRANSFER STATION & RESOURCE RECOVERY CENTRE OVERALL SITE PLAN	6-CO082.00	C102	A



1:250@ A1
1:500@ A3

NOTE:
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A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023_04_06



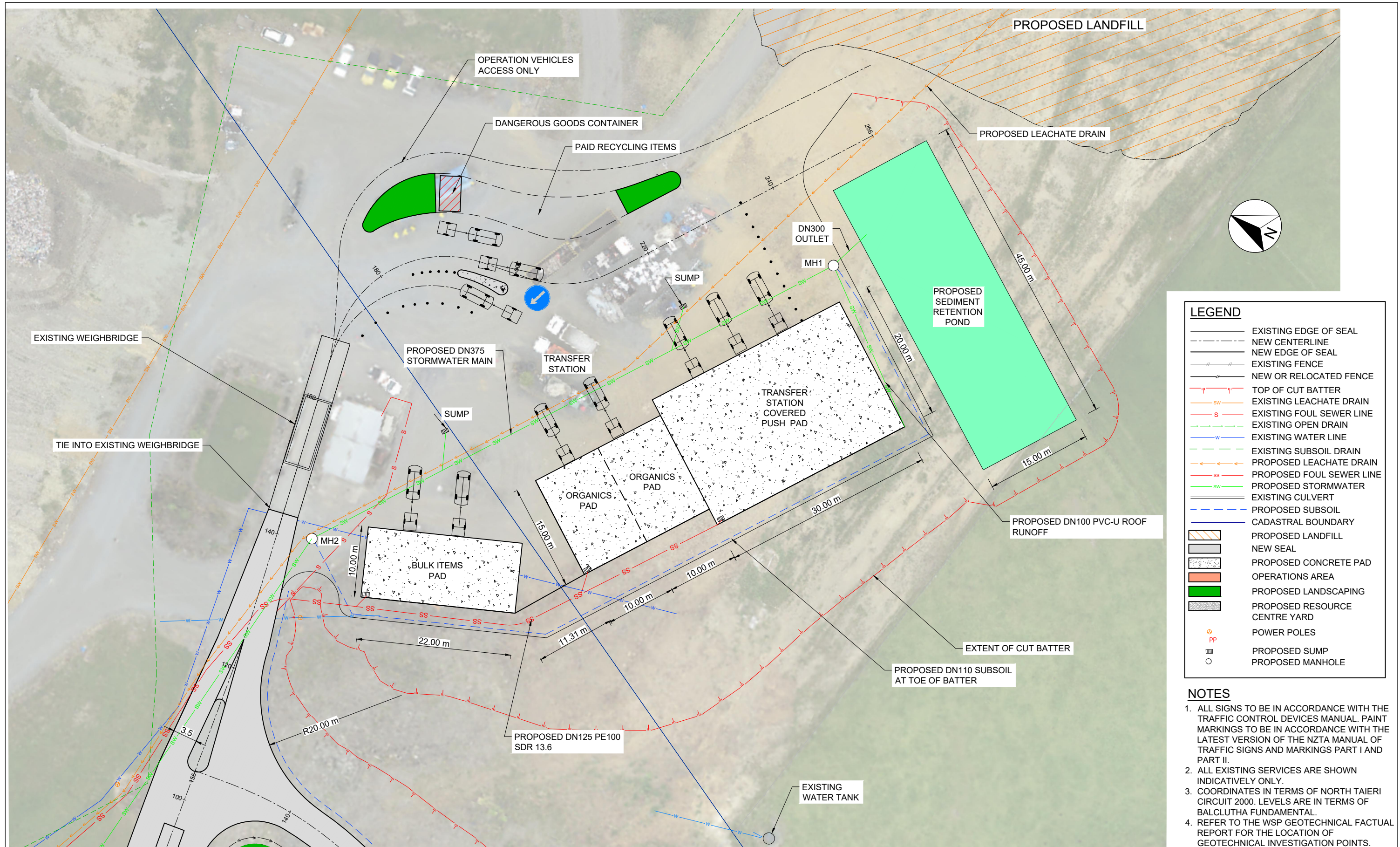
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PO Box 647
Invercargill 9840
New Zealand

CIVIL

SCALES	DESIGNED	APPROVED	ORIGINAL SIZE
1:250@ A1, 1:500@A3	J. L. BOYDE	CHRIS FOX	A1
DRAWN	DESIGNED	APPROVED	
J.L. BOYDE	J. L. BOYDE	CHRIS FOX	
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE	
CALLUM FEELY	ROWAN LATHAM	2023-04-06	

PRELIMINARY

PROJECT	TITLE	WSP PROJECT NO. (SUB-PROJECT)	SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT	RESOURCE RECOVERY CENTRE PLAN	6-CO082.00	C103	A



LEGEND

- EXISTING EDGE OF SEAL
- - - NEW CENTERLINE
- NEW EDGE OF SEAL
- - - EXISTING FENCE
- - - NEW OR RELOCATED FENCE
- TOP OF CUT BATTER
- SW --- EXISTING LEACHATE DRAIN
- S --- EXISTING FOUL SEWER LINE
- EXISTING OPEN DRAIN
- W --- EXISTING WATER LINE
- EXISTING SUBSOIL DRAIN
- PROPOSED LEACHATE DRAIN
- SS --- PROPOSED FOUL SEWER LINE
- SW --- PROPOSED STORMWATER
- EXISTING CULVERT
- PROPOSED SUBSOIL
- CADASTRAL BOUNDARY
- PROPOSED LANDFILL
- NEW SEAL
- PROPOSED CONCRETE PAD
- OPERATIONS AREA
- PROPOSED LANDSCAPING
- PROPOSED RESOURCE CENTRE YARD
- POWER POLES
- PROPOSED SUMP
- PROPOSED MANHOLE

- NOTES**
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 4. REFER TO THE WSP GEOTECHNICAL FACTUAL REPORT FOR THE LOCATION OF GEOTECHNICAL INVESTIGATION POINTS.

1:250 @ A1
1:500 @ A3

NOTE:
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REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR REVIEW	C.FOX.	2023_04_06



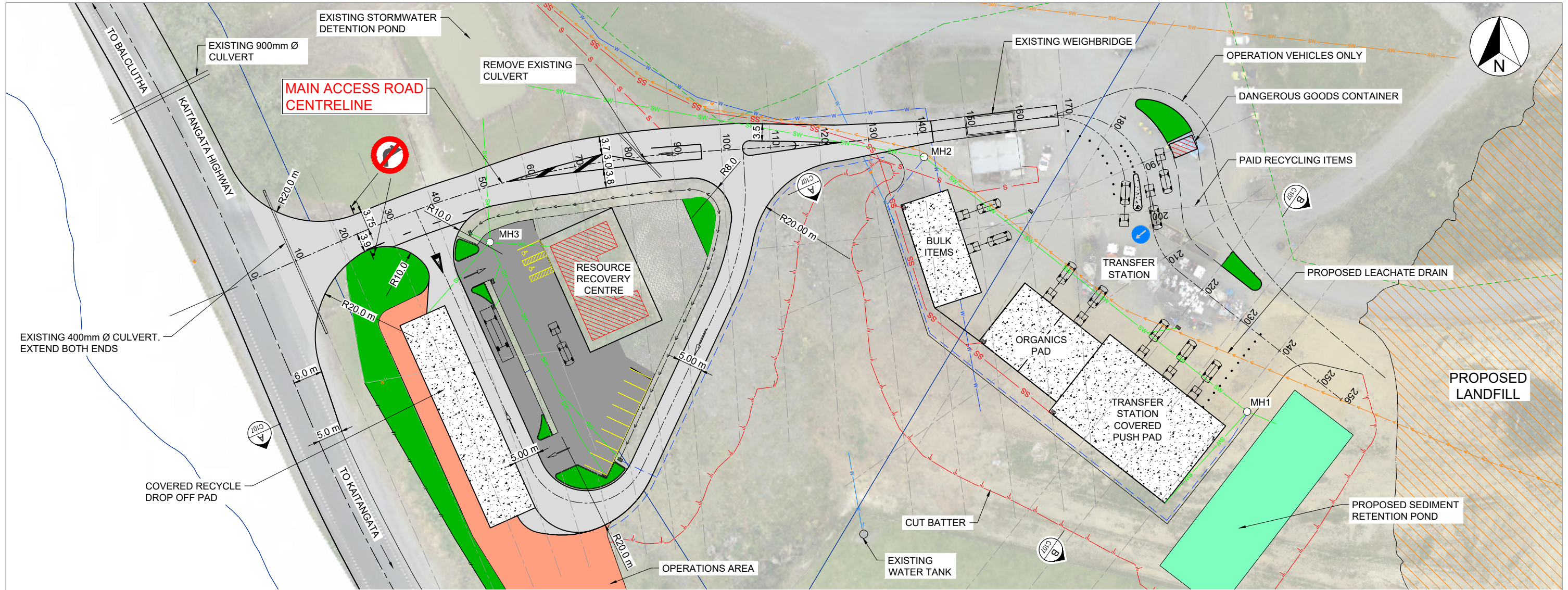
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New Zealand

CIVIL

SCALES	DESIGNED	APPROVED	ORIGINAL SIZE
1:250 @ A1, 1:500 @ A3	J.L. BOYDE	CHRIS FOX	A1
DRAWN	J.L. BOYDE	APPROVED DATE	
CALLUM FEELY	ROWAN LATHAM	2023-04-06	

PRELIMINARY

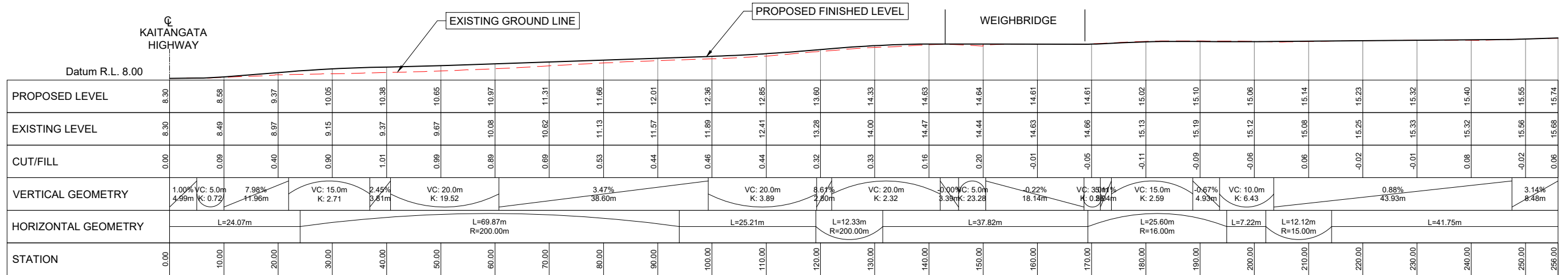
PROJECT	TITLE	WSP PROJECT NO. (SUB-PROJECT)	SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT	TRANSFER STATION PLAN	6-CO082.00	C104	A



MAIN ACCESS ROAD PLAN

SCALE: 1:400 @ A1
1:800 @ A3

300 mm
200
100
50
0 10 mm



PROFILE ALONG CENTRELINE OF MAIN ACCESS ROAD

SCALE: 1:400 @ A1
1:800 @ A3

1:1 @ A1
1:2 @ A3

NOTE:
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A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



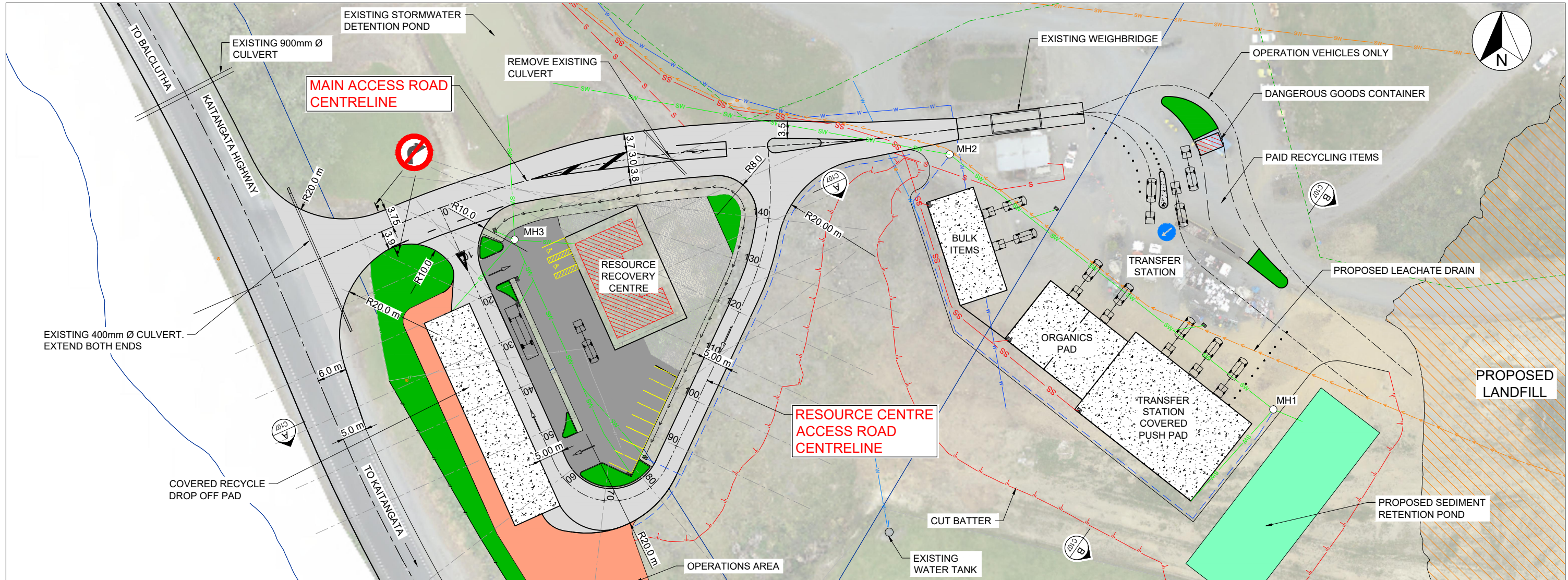
Invercargill Office
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PO Box 647
Invercargill 9840
New Zealand

CIVIL

SCALES		ORIGINAL SIZE
1:400@ A1, 1:800@A3		A1
DRAWN	DESIGNED	APPROVED
J. L. BOYDE	J. L. BOYDE	CHRIS FOX
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
CALLUM FEELY	ROWAN LATHAM	2023-04-06

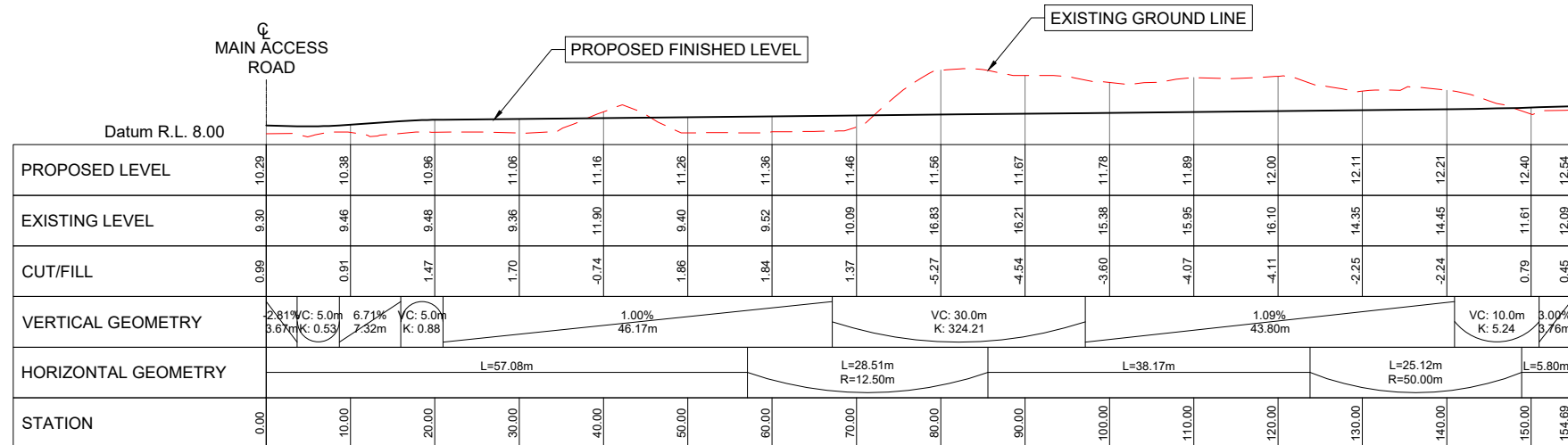
PRELIMINARY

PROJECT		SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT		C105	A
TITLE			
MAIN ACCESS ROAD PLAN AND PROFILE			
WSP PROJECT NO. (SUB-PROJECT)			
6-CO082.00			



RESOURCE RECOVERY CENTRE ACCESS ROAD PLAN

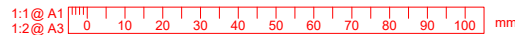
SCALE: 1:400 @ A1
 1:800 @ A3



PROFILE ALONG CENTRELINE OF RESOURCE RECOVERY CENTRE ACCESS ROAD

SCALE: 1:400 @ A1
 1:800 @ A3

NOTE:
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A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



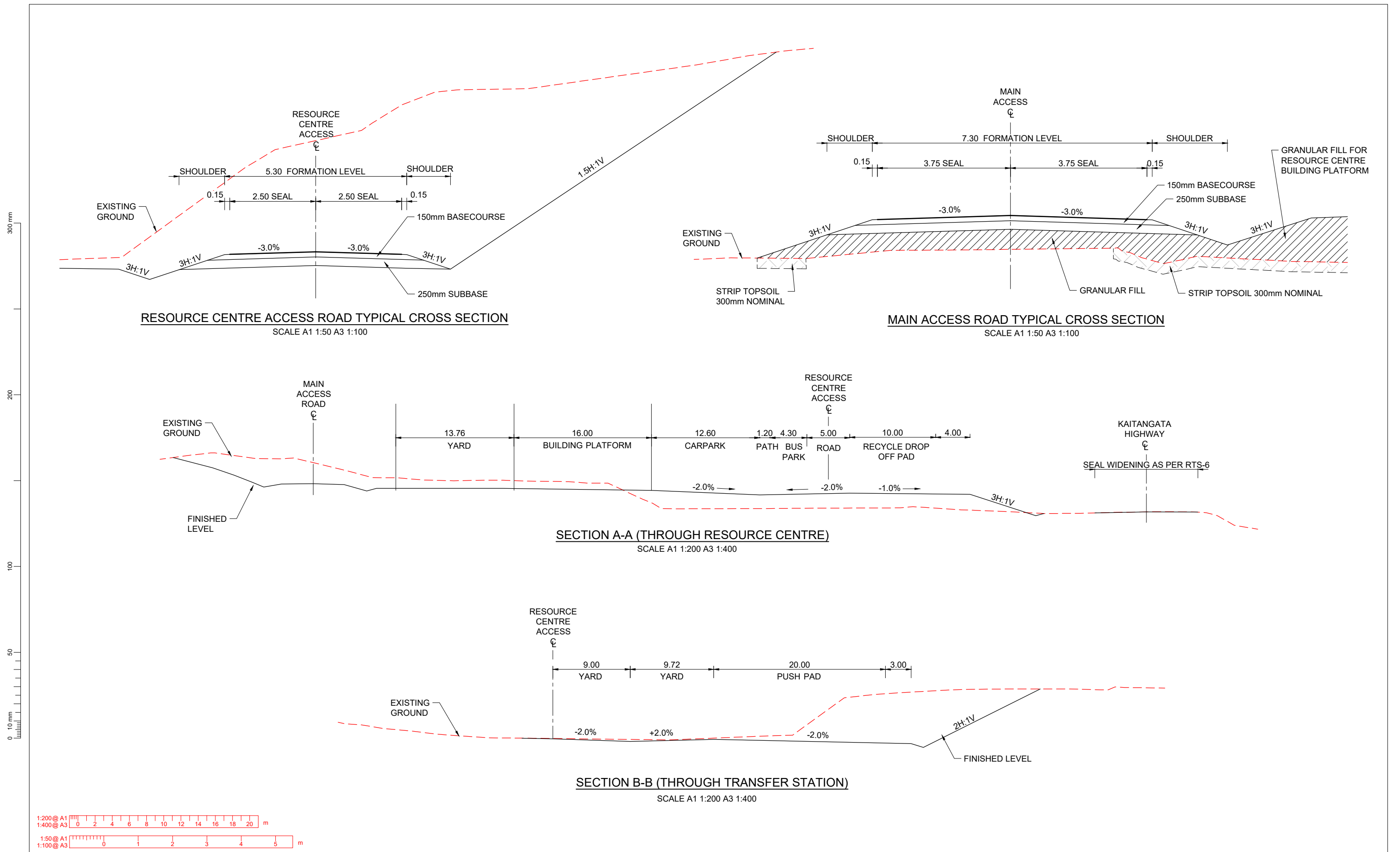
Invercargill Office
 +64 3 211 3580

CIVIL

SCALES	DESIGNED	APPROVED
1:400@ A1, 1:800@A3	J.L. BOYDE	CHRIS FOX
ORIGINAL SIZE A1	APPROVED DATE	
	2023-04-06	

PRELIMINARY

PROJECT	TITLE	WSP PROJECT NO. (SUB-PROJECT)	SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT	RESOURCE RECOVERY CENTRE ACCESS ROAD PLAN AND PROFILE	6-CO082.00	C106	A

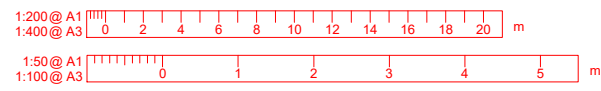


RESOURCE CENTRE ACCESS ROAD TYPICAL CROSS SECTION
SCALE A1 1:50 A3 1:100

MAIN ACCESS ROAD TYPICAL CROSS SECTION
SCALE A1 1:50 A3 1:100

SECTION A-A (THROUGH RESOURCE CENTRE)
SCALE A1 1:200 A3 1:400

SECTION B-B (THROUGH TRANSFER STATION)
SCALE A1 1:200 A3 1:400



REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



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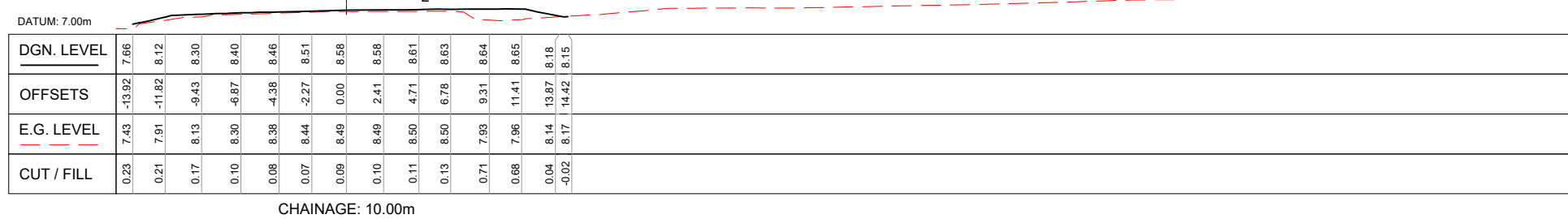
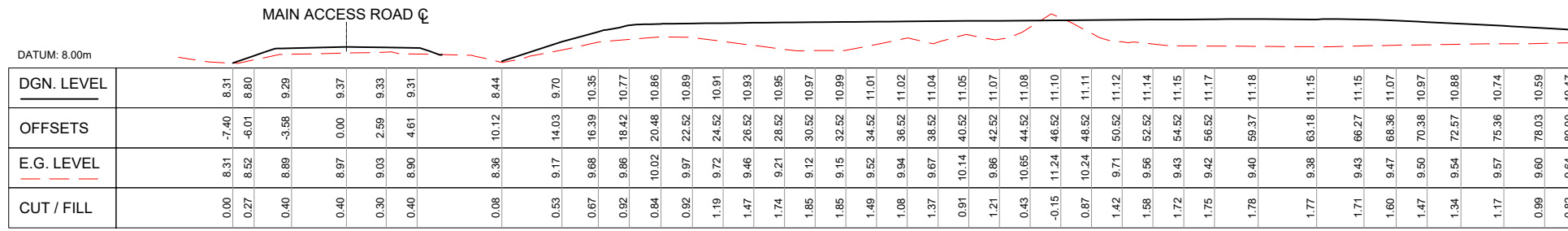
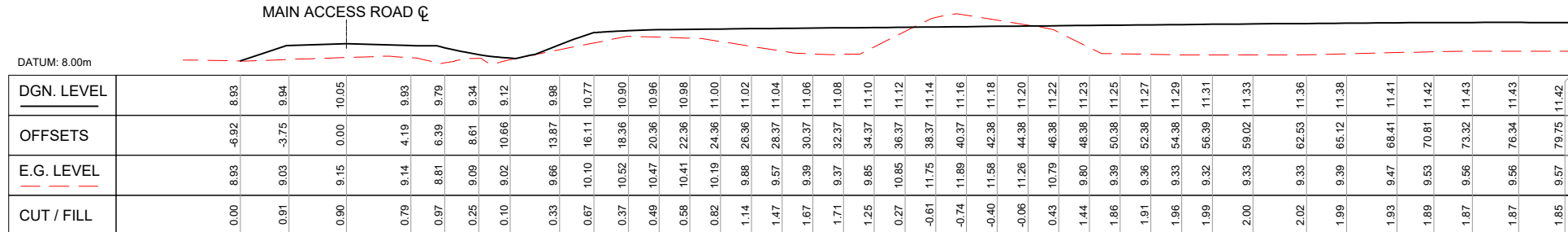
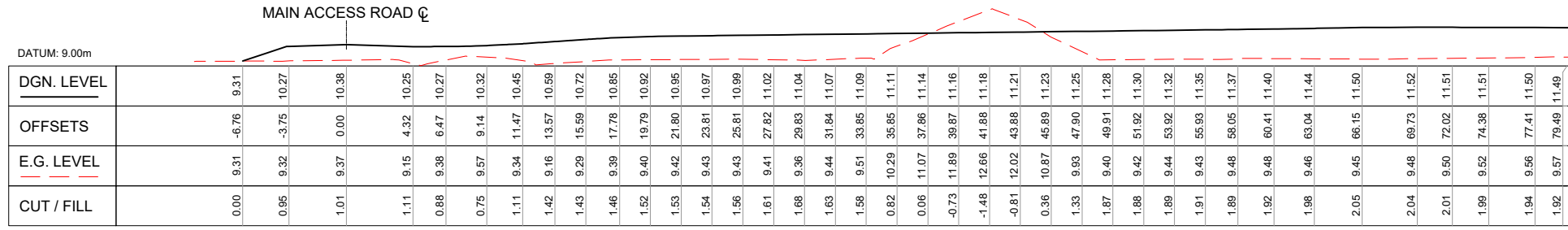
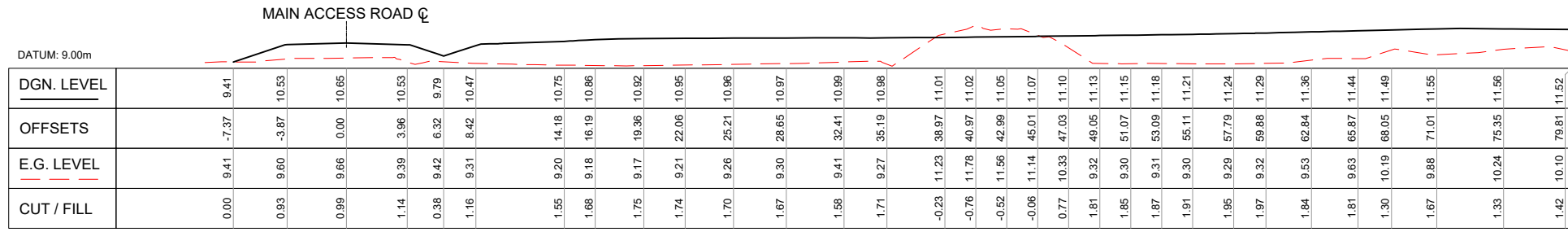
CIVIL

SCALES	DESIGNED	APPROVED	ORIGINAL SIZE
AS SHOWN	J.L. BOYDE	CHRIS FOX	A1
DRAWN	J.L. BOYDE	CHRIS FOX	
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE	
CALLUM FEELY	ROWAN LATHAM	2023-04-06	

PRELIMINARY

PROJECT	TITLE	SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT	TYPICAL SECTIONS	C107	A
WSP PROJECT NO. (SUB-PROJECT)			
6-CO082.00			

300 mm
200
100
50
0 10 mm



1:200 @ A1
1:400 @ A3

REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



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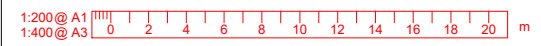
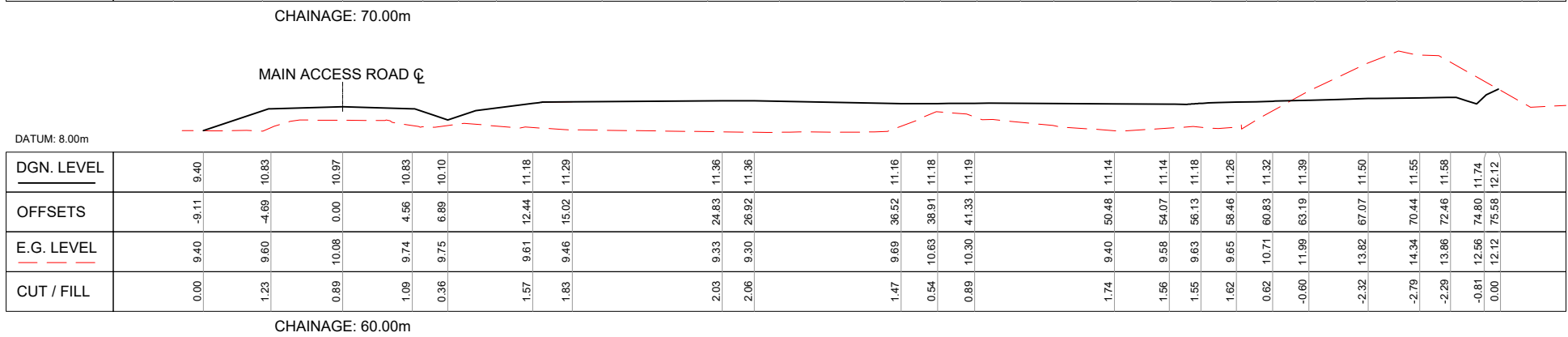
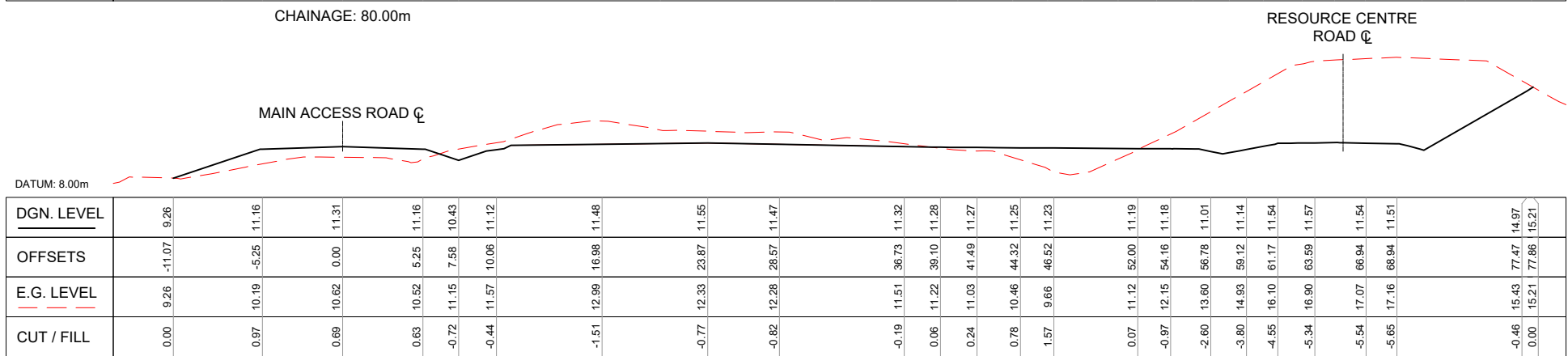
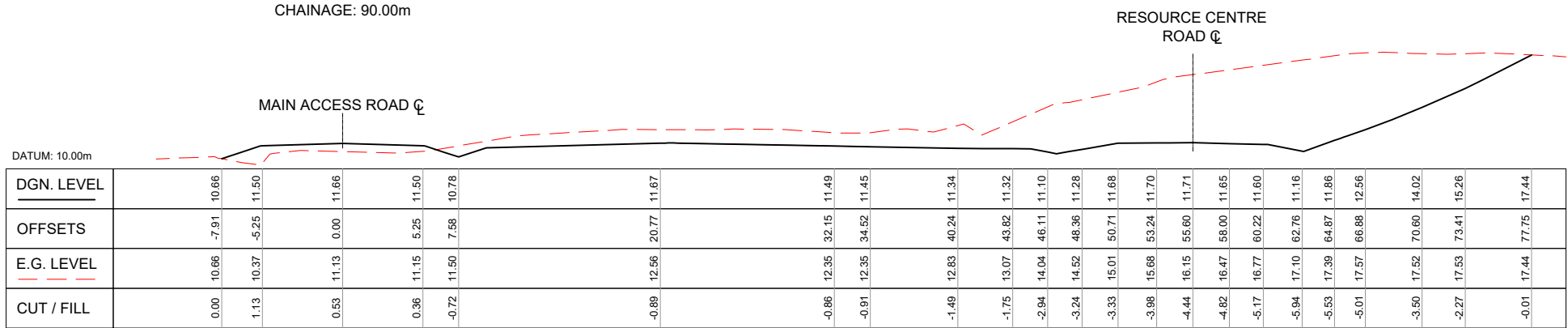
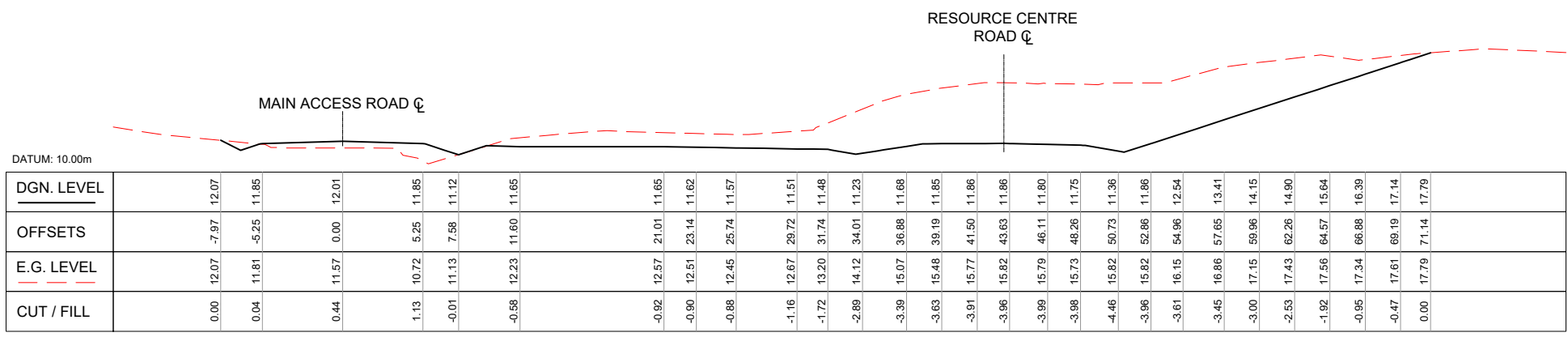
CIVIL

SCALES	DESIGNED	APPROVED	ORIGINAL SIZE
1:200@A1, 1:400@A3	J.L. BOYDE	CHRIS FOX	A1
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE	
CALLUM FEELY	ROWAN LATHAM	2023-04-06	

PRELIMINARY

PROJECT	TITLE	WSP PROJECT NO. (SUB-PROJECT)	SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT	MAIN ROAD ACCESS CROSS SECTIONS 10.0 - 50.0	6-CO082.00	C108	A

300 mm
200
100
50
0 10 mm



REVISION	AMENDMENT	APPROVED	DATE
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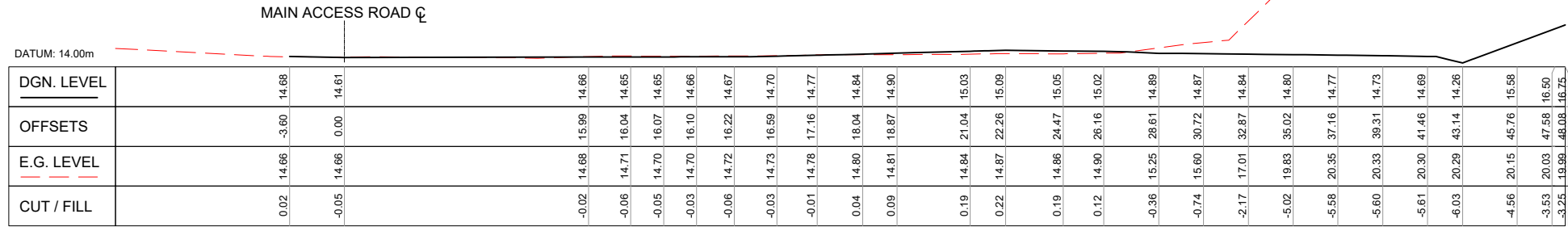
CIVIL

SCALES	DESIGNED	APPROVED	ORIGINAL SIZE
1:200@A1, 1:400@A3	J.L. BOYDE	CHRIS FOX	A1

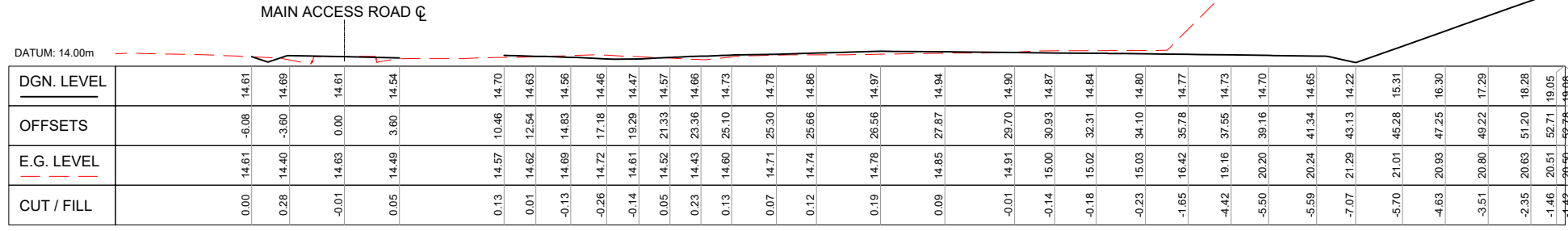
PRELIMINARY

PROJECT	TITLE	SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT	MAIN ROAD ACCESS CROSS SECTIONS 60.0 - 90.0	C109	A
WSP PROJECT NO. (SUB-PROJECT) 6-CO082.00			

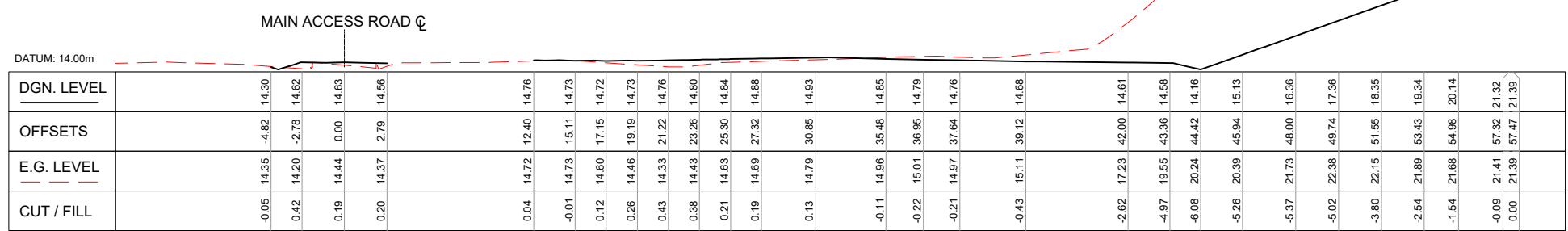
300 mm
200
100
50
0 10 mm



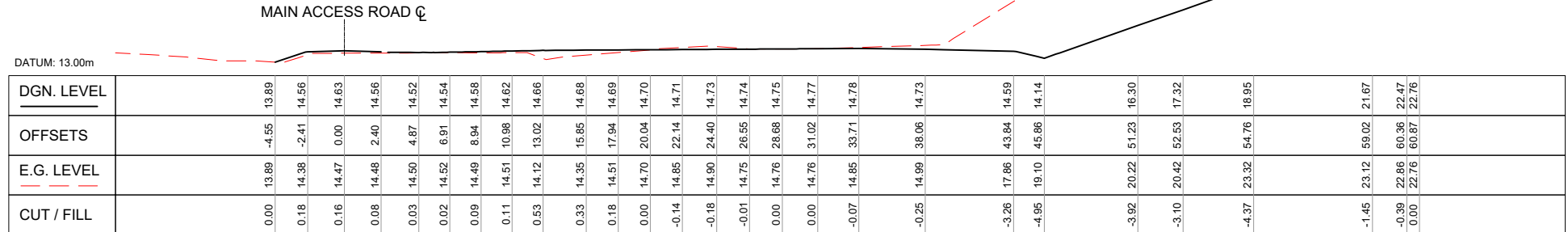
CHAINAGE: 170.00m



CHAINAGE: 160.00m



CHAINAGE: 150.00m



CHAINAGE: 140.00m



REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



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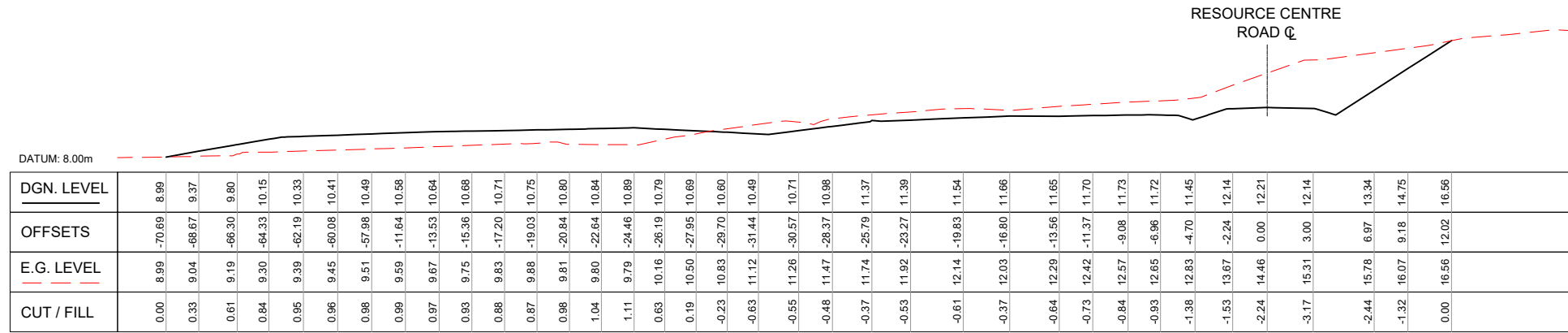
CIVIL

SCALES	DESIGNED	APPROVED	ORIGINAL SIZE
1:200@ A1, 1:400@A3	J.L. BOYDE	CHRIS FOX	A1
DRAWN	J.L. BOYDE	APPROVED DATE	
CALLUM FEELY	ROWAN LATHAM	2023-04-06	

PRELIMINARY

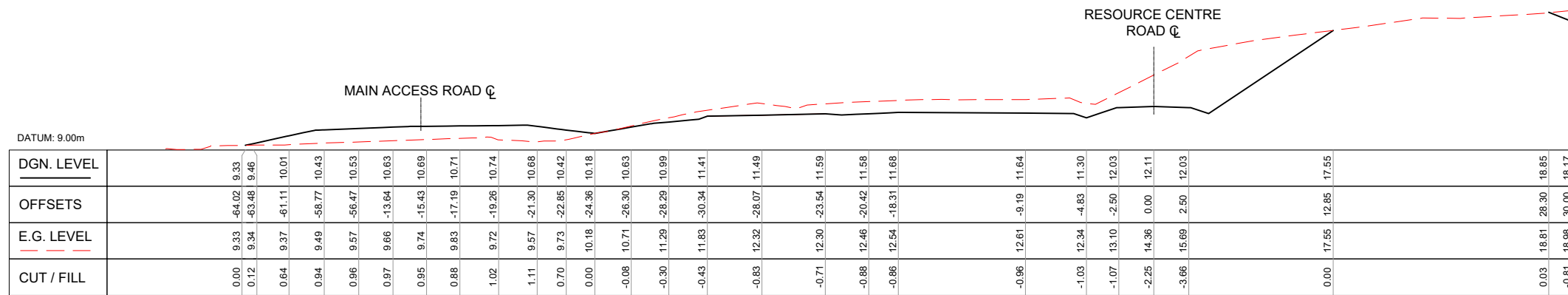
PROJECT	TITLE	WSP PROJECT NO. (SUB-PROJECT)	SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT	MAIN ROAD ACCESS CROSS SECTIONS 140.0 - 170.0	6-CO082.00	C111	A

300 mm
200
100
50
0 10 mm



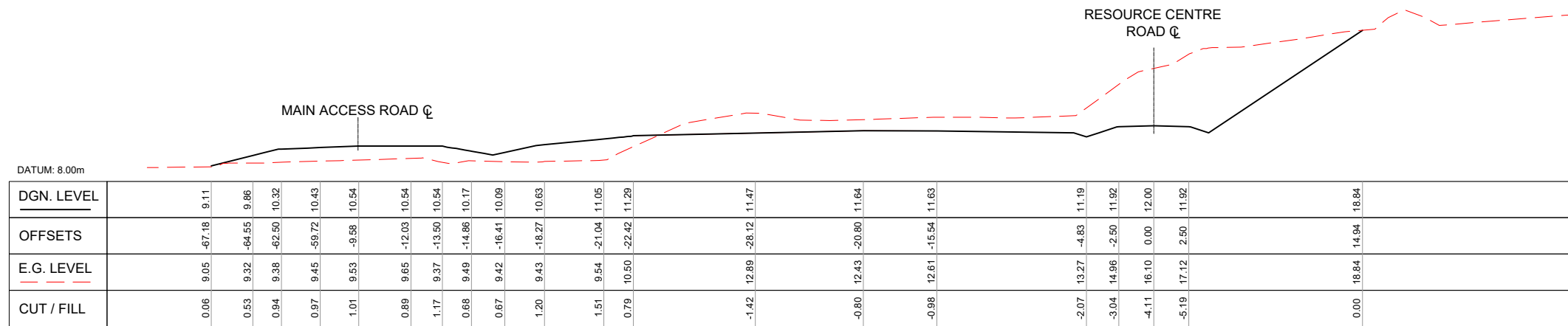
DGN. LEVEL	OFFSETS	E.G. LEVEL	CUT / FILL
8.99	-70.69	8.99	0.00
9.04	-68.67	9.37	0.33
9.19	-66.30	9.80	0.61
9.30	-64.33	10.15	0.84
9.39	-62.19	10.33	0.95
9.45	-60.08	10.41	0.96
9.51	-57.98	10.49	0.98
9.59	-11.64	10.58	0.99
9.67	-13.53	10.64	0.97
9.75	-15.36	10.68	0.93
9.83	-17.20	10.71	0.88
9.88	-19.03	10.75	0.87
9.81	-20.84	10.80	0.98
9.80	-22.64	10.84	1.04
9.79	-24.46	10.89	1.11
10.16	-26.19	10.79	0.63
10.50	-27.95	10.69	0.19
10.83	-29.70	10.60	-0.23
11.12	-31.44	10.49	-0.63
11.26	-30.57	10.71	-0.55
11.47	-28.37	10.98	-0.48
11.74	-25.79	11.37	-0.37
11.92	-23.27	11.39	-0.53
12.14	-19.83	11.54	-0.61
12.03	-16.80	11.66	-0.37
12.29	-13.56	11.65	-0.64
12.42	-11.37	11.70	-0.73
12.57	-9.08	11.73	-0.84
12.65	-6.96	11.72	-0.93
12.83	-4.70	11.45	-1.38
13.67	-2.24	12.14	-1.53
14.46	0.00	12.21	-2.24
15.31	3.00	12.14	-3.17
15.78	6.97	13.34	-2.44
16.07	9.18	14.75	-1.32
16.56	12.02	16.56	0.00

CHAINAGE: 140.00m



DGN. LEVEL	OFFSETS	E.G. LEVEL	CUT / FILL
9.33	-64.02	9.33	0.00
9.34	-63.48	9.46	0.12
9.37	-61.11	10.01	0.64
9.49	-58.77	10.43	0.94
9.57	-56.47	10.53	0.96
9.66	-13.64	10.63	0.97
9.74	-15.43	10.69	0.95
9.83	-17.19	10.71	0.88
9.72	-19.26	10.74	1.02
9.57	-21.30	10.68	1.11
9.73	-22.85	10.42	0.70
10.18	-24.36	10.18	0.00
10.71	-26.30	10.63	-0.08
11.29	-28.29	10.99	-0.30
11.83	-30.34	11.41	-0.43
12.32	-28.07	11.49	-0.83
12.30	-23.54	11.59	-0.71
12.46	-20.42	11.58	-0.88
12.54	-18.31	11.68	-0.86
12.61	-9.19	11.64	-0.96
12.34	-4.83	11.30	-1.03
13.10	-2.50	12.03	-1.07
14.36	0.00	12.11	-2.25
15.69	2.50	12.03	-3.66
17.55	12.85	17.55	0.00
18.85	26.30	18.85	0.03
18.98	30.00	18.17	-0.81

CHAINAGE: 130.00m



DGN. LEVEL	OFFSETS	E.G. LEVEL	CUT / FILL
9.11	-67.18	9.11	0.06
9.86	-64.55	9.86	0.53
10.32	-62.50	10.32	0.94
10.43	-59.72	10.43	0.97
10.54	-9.58	10.54	1.01
10.54	-12.03	10.54	0.89
10.54	-13.50	10.54	1.17
10.17	-14.86	10.17	0.68
10.09	-16.41	10.09	0.67
10.63	-18.27	10.63	1.20
11.05	-21.04	11.05	1.51
11.29	-22.42	11.29	0.79
11.47	-28.12	11.47	-1.42
11.64	-20.80	11.64	-0.80
11.63	-15.54	11.63	-0.98
11.19	-4.83	11.19	-2.07
11.92	-2.50	11.92	-3.04
12.00	0.00	12.00	-4.11
11.92	2.50	11.92	-5.19
18.84	14.94	18.84	0.00

CHAINAGE: 120.00m

1:200@A1
1:400@A3

REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



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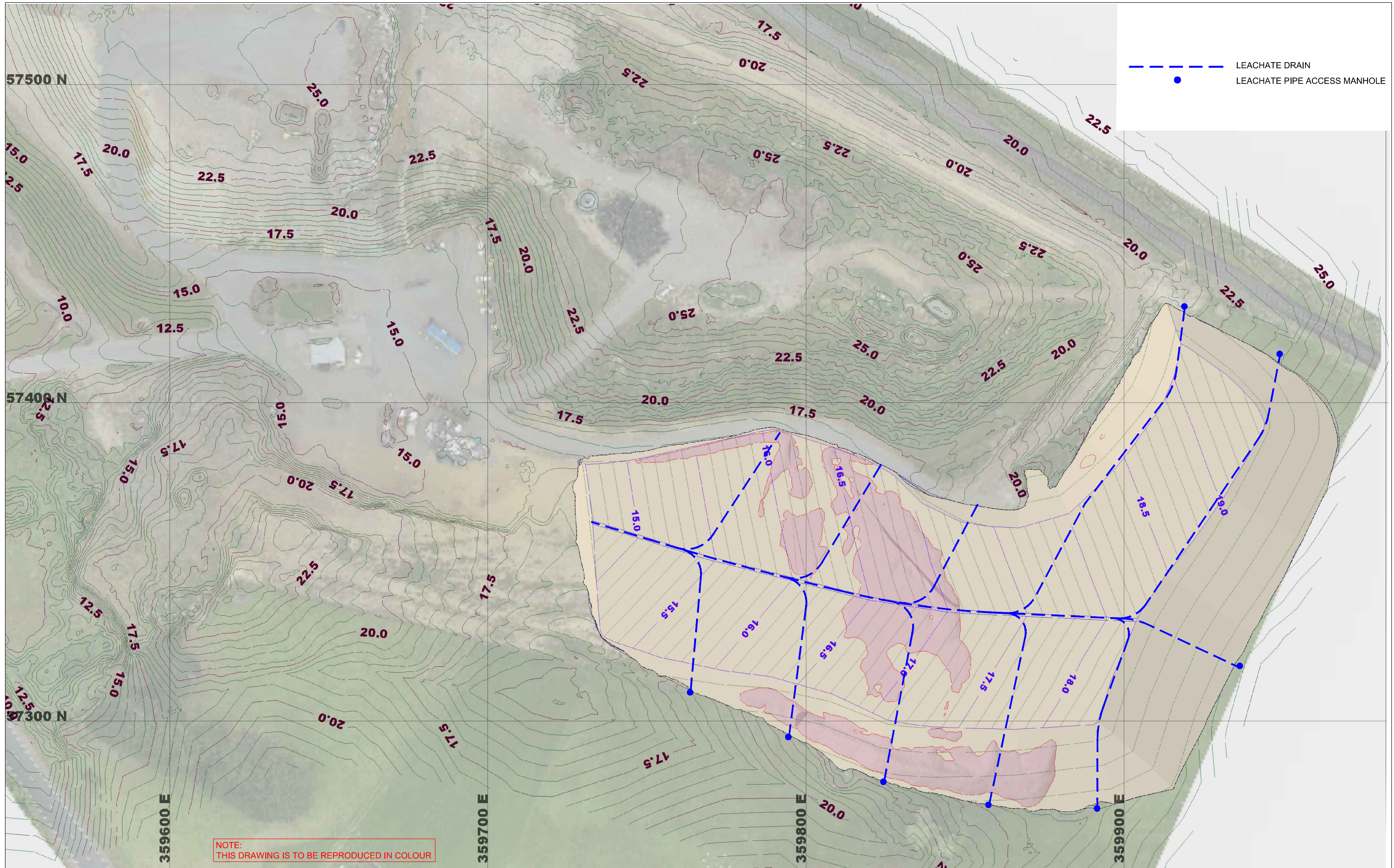
CIVIL

SCALES	DESIGNED	APPROVED
1:200@A1, 1:400@A3	J.L. BOYDE	CHRIS FOX
ORIGINAL SIZE	DESIGN VERIFIED	APPROVED DATE
A1	ROWAN LATHAM	2023-04-06

PRELIMINARY

PROJECT
CLUTHA DISTRICT COUNCIL
KAITANGATA HIGHWAY BALCLUTHA
MT COOEE LANDFILL DEVELOPMENT
TITLE
RESOURCE CENTRE ACCESS
CROSS SECTIONS 120.0 - 140.0
WSP PROJECT NO. (SUB-PROJECT)
6-CO082.00

SHEET NO. C117
REVISION A



REVISION	AMENDMENT	APPROVED	DATE
A	NEW SHEET ADDED	C. FOX	2023-03-25



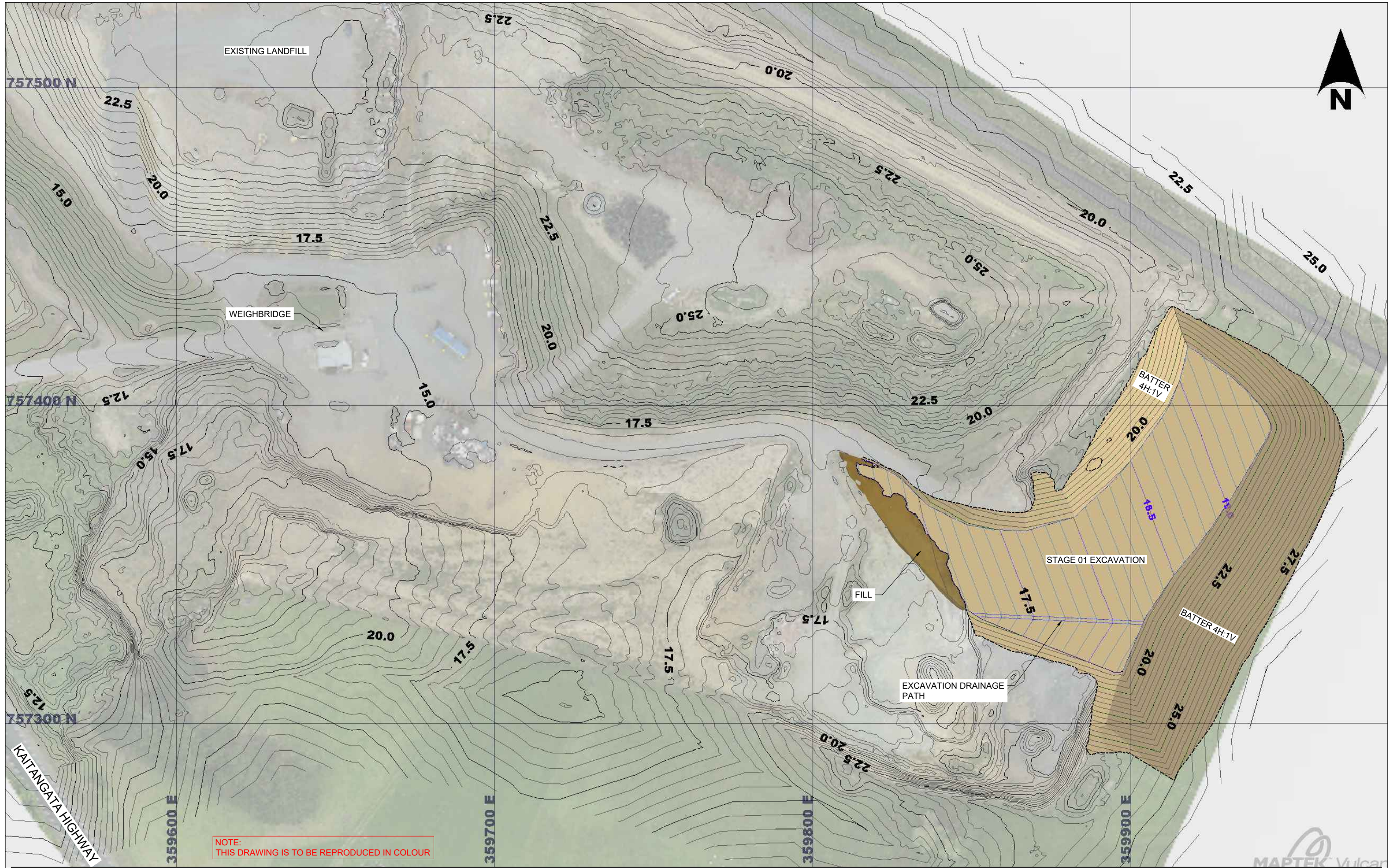
wsp
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 PO Box 647
 Invercargill 9840
 New Zealand

CIVIL

SCALES	DESIGNED	APPROVED	ORIGINAL SIZE
N.T.S	R.GOLDSMITH	CHRIS FOX	A1

PRELIMINARY

PROJECT		SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT		C199	A
TITLE			
LANDFILL EXPANSION FLOOR CONTOUR PLAN			
WSP PROJECT NO. (SUB-PROJECT) 6-CO082.00			



REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



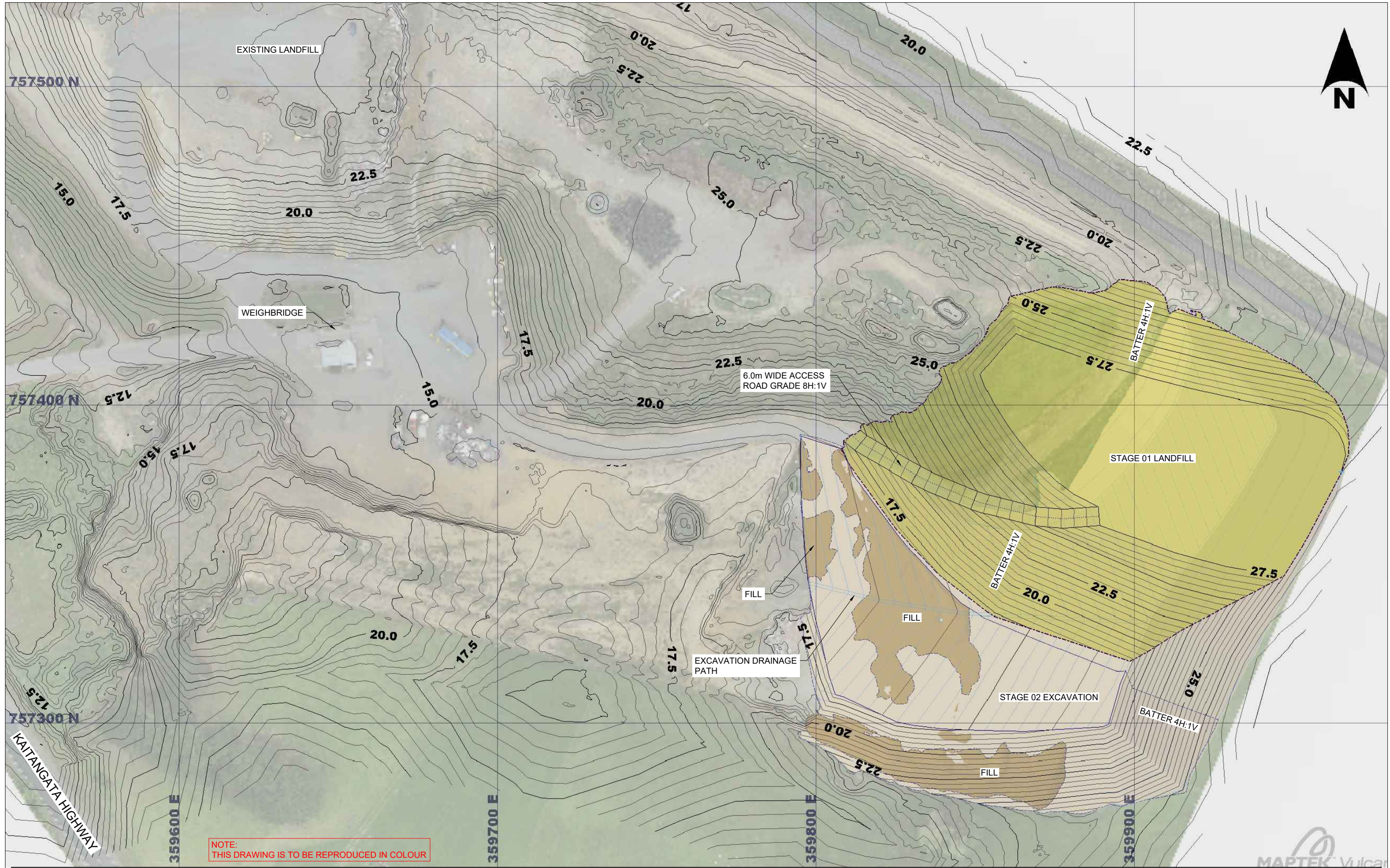
wsp
 Invercargill Office
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 PO Box 647
 Invercargill 9840
 New Zealand

CIVIL

SCALES	ORIGINAL SIZE	
N.T.S	A1	
DRAWN	DESIGNED	APPROVED
R.GOLDSMITH	R.GOLDSMITH	CHRIS FOX
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
CALLUM FEELY	PETER ASKEY	2023-04-06

PRELIMINARY

PROJECT	CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT
TITLE	LANDFILL EXPANSION STAGE 01 FLOOR DESIGN
WSP PROJECT NO. (SUB-PROJECT)	6-CO082.00
SHEET NO.	C200
REVISION	A



NOTE:
THIS DRAWING IS TO BE REPRODUCED IN COLOUR

REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



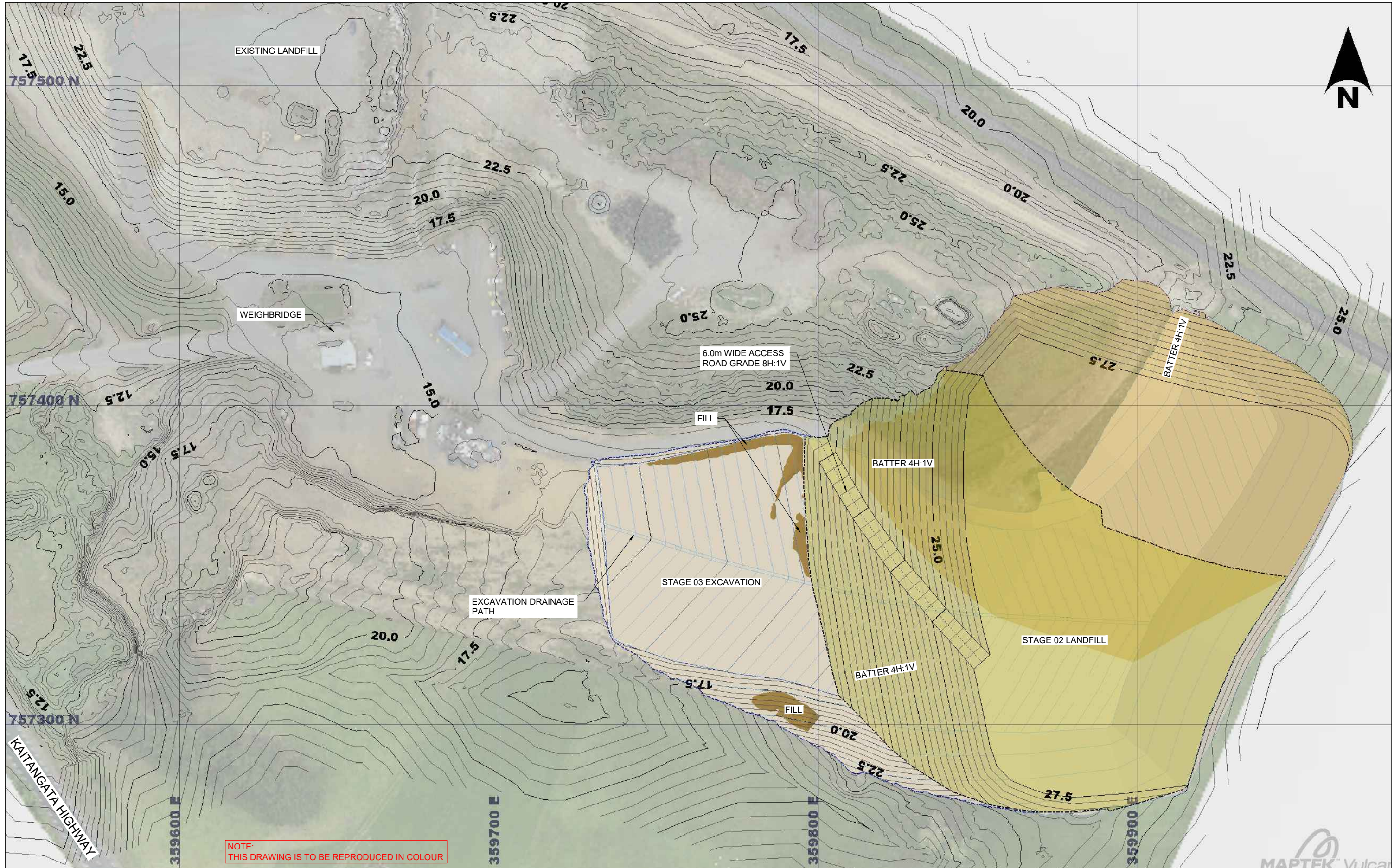
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Invercargill 9840
New Zealand

CIVIL

SCALES		ORIGINAL SIZE
N.T.S		A1
DRAWN	DESIGNED	APPROVED
R.GOLDSMITH	R.GOLDSMITH	CHRIS FOX
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
CALLUM FEELY	PETER ASKEY	2023-04-06

PRELIMINARY

PROJECT		SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT		C201	A
TITLE			
LANDFILL EXPANSION LANDFILL STAGE 01 AND EXCAVATION STAGE 02			
WSP PROJECT NO. (SUB-PROJECT)			
6-CO082.00			



0 10 50 100 200 300 mm



NOTE:
THIS DRAWING IS TO BE REPRODUCED IN COLOUR

REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



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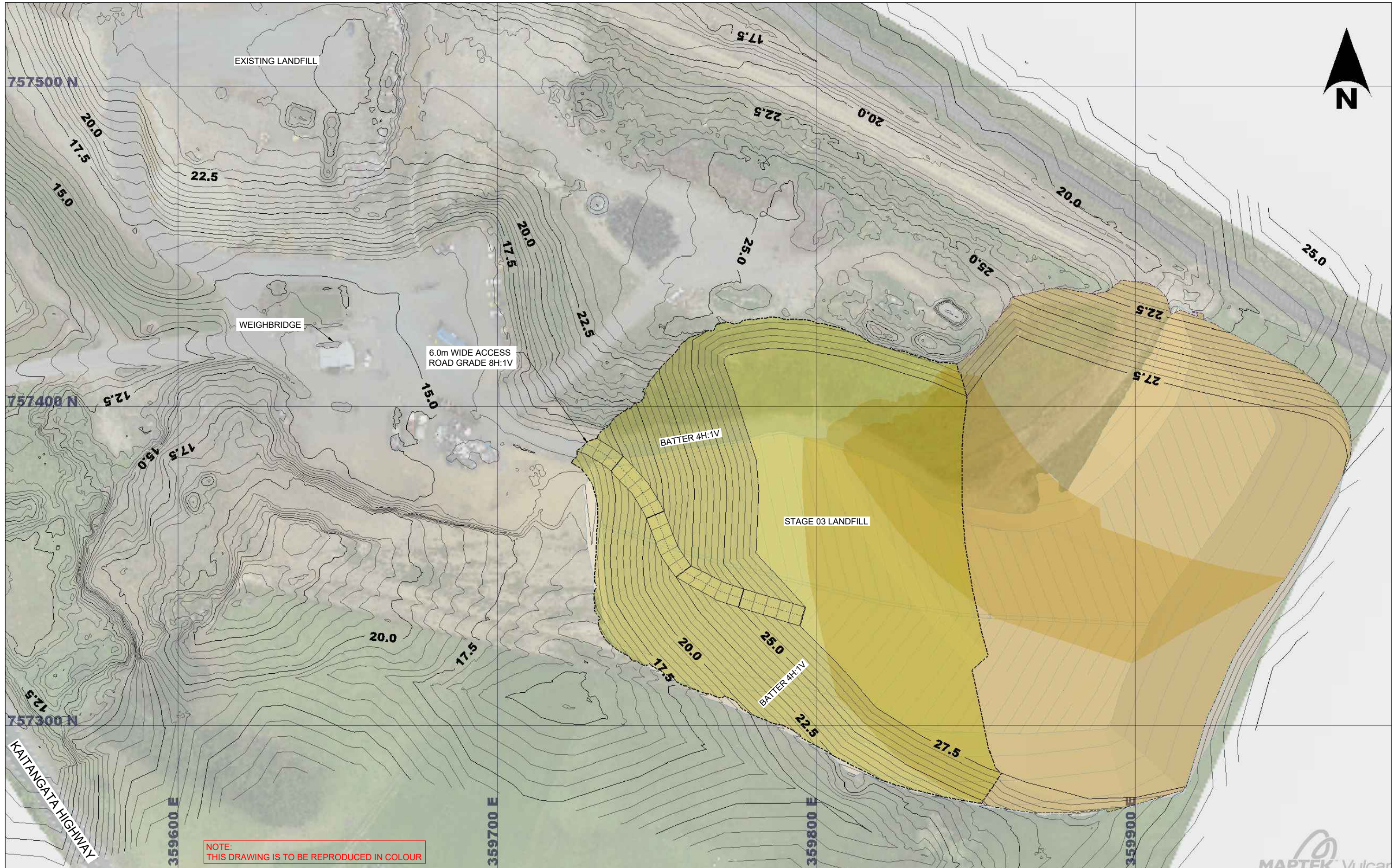
CIVIL

SCALES		ORIGINAL SIZE
N.T.S		A1
DRAWN	DESIGNED	APPROVED
R.GOLDSMITH	R.GOLDSMITH	CHRIS FOX
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
CALLUM FEELY	PETER ASKEY	2023-04-06

PRELIMINARY

PROJECT	CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT
TITLE	LANDFILL EXPANSION LANDFILL STAGE 02 AND EXCAVATION STAGE 03
WSP PROJECT NO. (SUB-PROJECT)	6-CO082.00
SHEET NO.	C202
REVISION	A





NOTE:
THIS DRAWING IS TO BE REPRODUCED IN COLOUR

REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



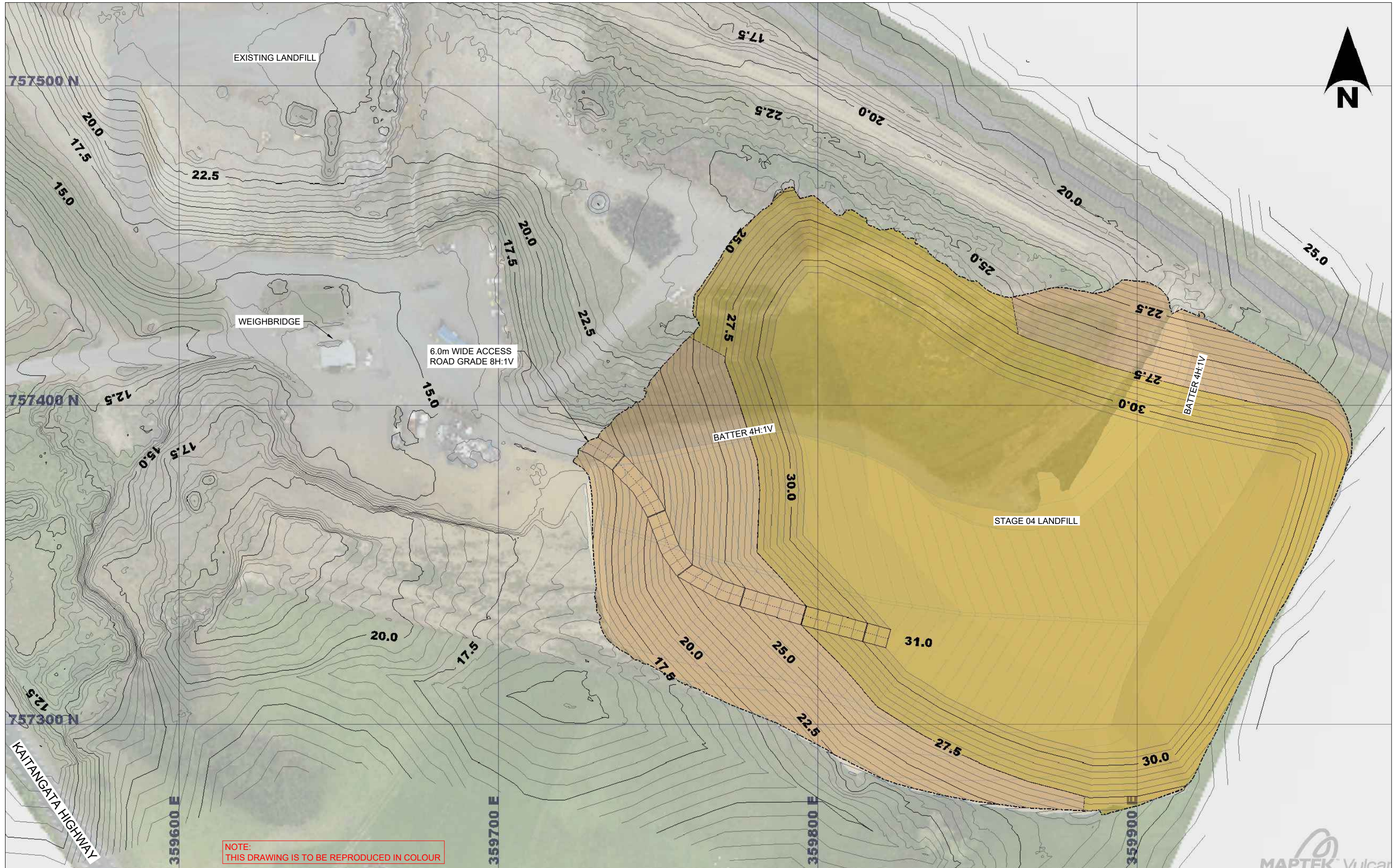
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Invercargill 9840
New Zealand

CIVIL

SCALES		ORIGINAL SIZE
N.T.S		A1
DRAWN	DESIGNED	APPROVED
R.GOLDSMITH	R.GOLDSMITH	CHRIS FOX
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
CALLUM FEELY	PETER ASKEY	2023-04-06

PRELIMINARY

PROJECT	CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT
TITLE	LANDFILL EXPANSION LANDFILL STAGE 03
WSP PROJECT NO. (SUB-PROJECT)	6-CO082.00
SHEET NO.	C203
REVISION	A



REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



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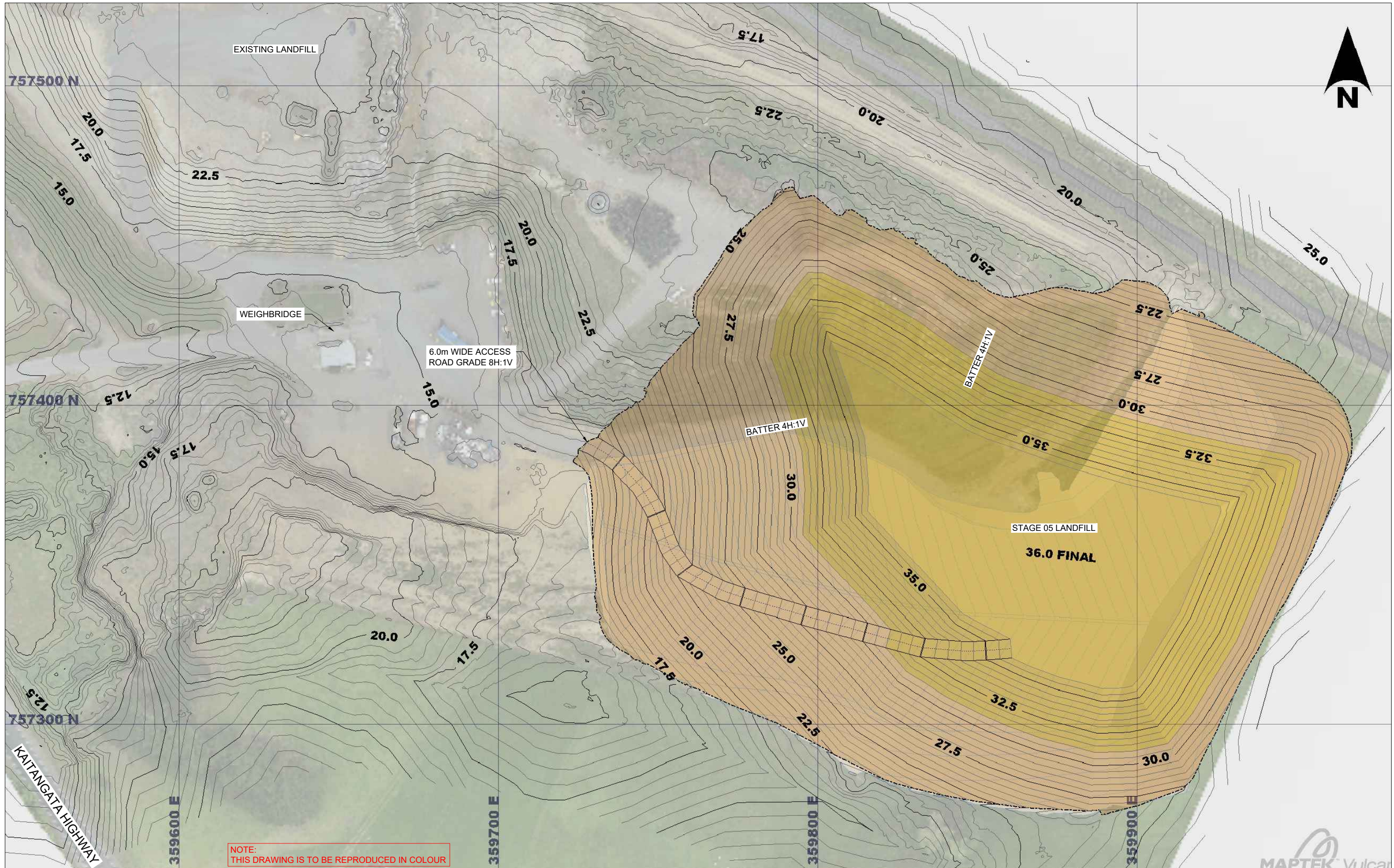
PO Box 647
Invercargill 9840
New Zealand

CIVIL

SCALES	ORIGINAL SIZE	
N.T.S	A1	
DRAWN	DESIGNED	APPROVED
R.GOLDSMITH	R.GOLDSMITH	CHRIS FOX
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
CALLUM FEELY	PETER ASKEY	2023-04-06

PRELIMINARY

PROJECT	CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT
TITLE	LANDFILL EXPANSION LANDFILL STAGE 04
WSP PROJECT NO. (SUB-PROJECT)	6-CO082.00
SHEET NO.	C204
REVISION	A



NOTE:
THIS DRAWING IS TO BE REPRODUCED IN COLOUR



REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



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CIVIL

SCALES	ORIGINAL SIZE	
N.T.S	A1	
DRAWN	DESIGNED	APPROVED
R.GOLDSMITH	R.GOLDSMITH	CHRIS FOX
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
CALLUM FEELY	PETER ASKEY	2023-04-06

PRELIMINARY

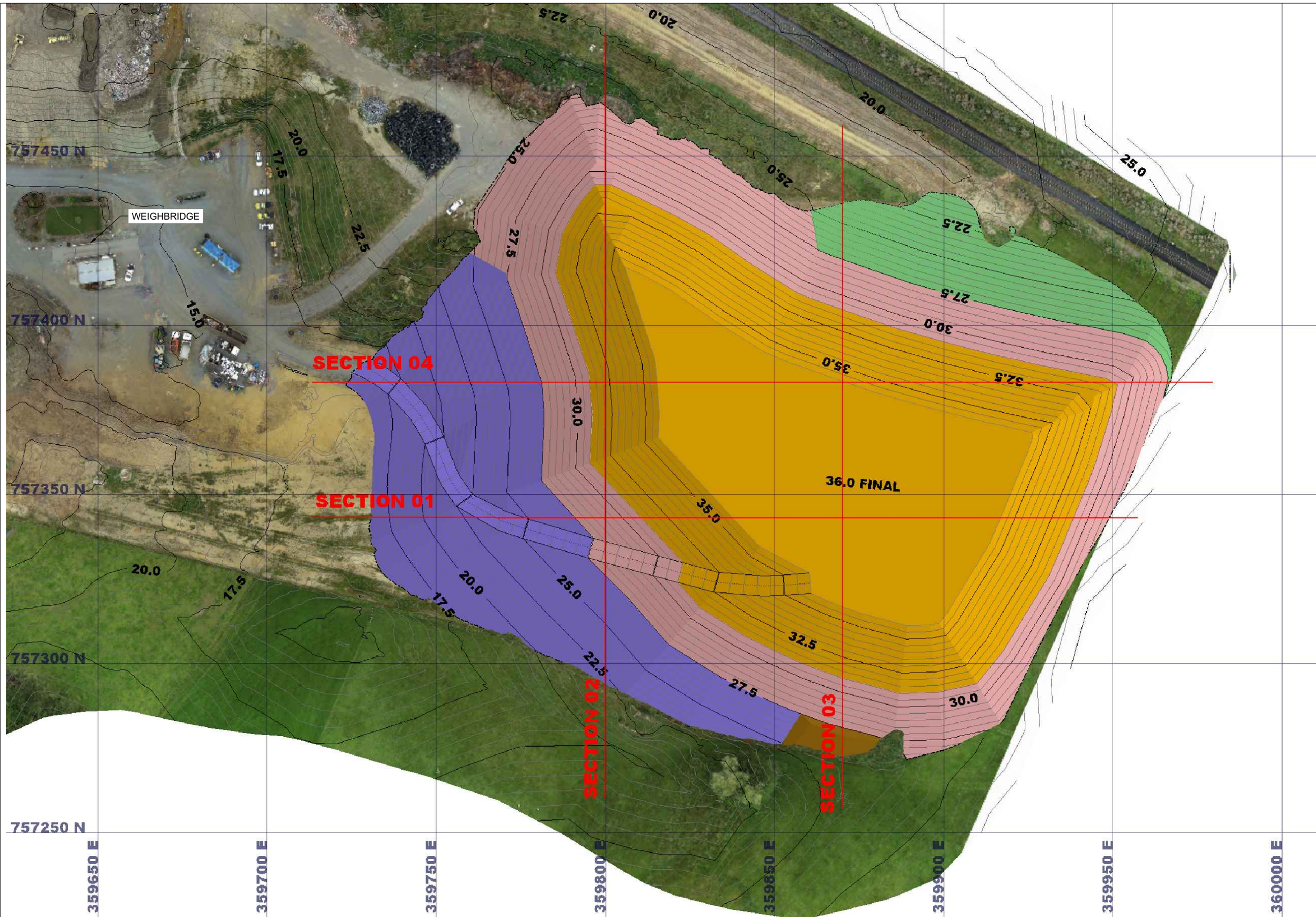
PROJECT
CLUTHA DISTRICT COUNCIL
KAITANGATA HIGHWAY BALCLUTHA
MT COOEE LANDFILL DEVELOPMENT

TITLE
LANDFILL EXPANSION
LANDFILL STAGE 05

WSP PROJECT NO. (SUB-PROJECT)
6-CO082.00

SHEET NO.
C205

REVISION
A



LEGEND:

- LANDFILL STAGE 01
- LANDFILL STAGE 02
- LANDFILL STAGE 03
- LANDFILL STAGE 04
- LANDFILL STAGE 05

NOTE:
THIS DRAWING IS TO BE REPRODUCED IN COLOUR

REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR REVIEW	C. FOX	2023-04-06



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CIVIL

SCALES	DESIGNED	APPROVED	ORIGINAL SIZE
N.T.S	R.GOLDSMITH	CHRIS FOX	A1
DRAWN	DESIGN VERIFIED	APPROVED DATE	
R.GOLDSMITH	PETER ASKEY	2023-04-06	

PRELIMINARY

PROJECT
CLUTHA DISTRICT COUNCIL
KAITANGATA HIGHWAY BALCLUTHA
MT COOEE LANDFILL DEVELOPMENT

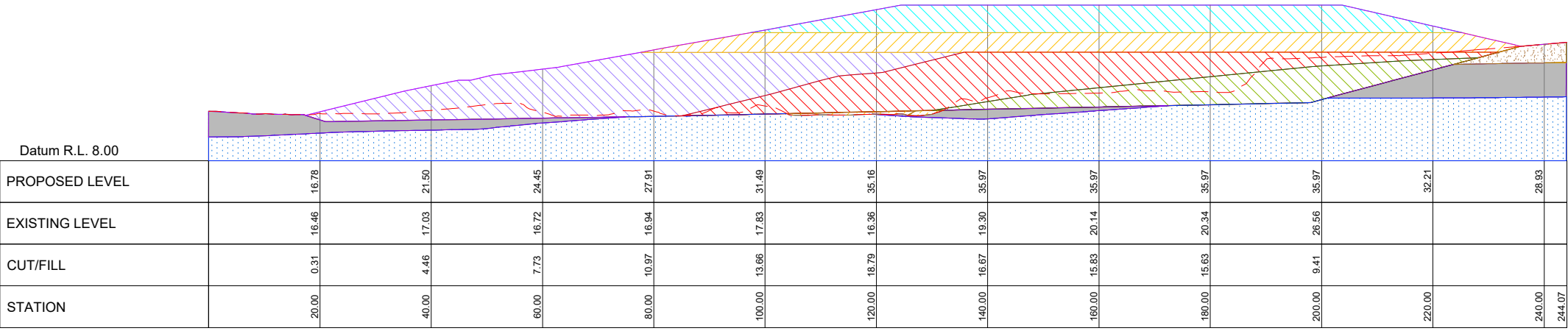
TITLE
LANDFILL EXPANSION
SECTION LAYOUT PLAN

WSP PROJECT NO. (SUB-PROJECT)
6-CO082.00

SHEET NO.
C206

REVISION
A

NOTE:
GROUND CONDITIONS ARE INDICATIVE
ONLY AND TO BE CONFIRMED ON SITE.

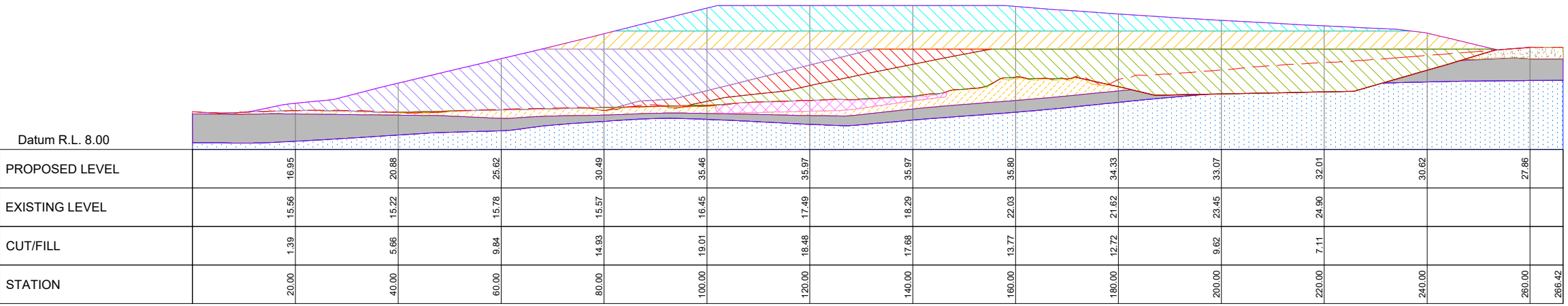


Datum R.L. 8.00																	
PROPOSED LEVEL		16.78	21.50	24.45	27.91	31.49	35.16	35.97	35.97	35.97	35.97	32.21	28.93				
EXISTING LEVEL		16.46	17.03	16.72	16.94	17.83	16.36	19.30	20.14	20.34	26.56						
CUT/FILL		0.31	4.46	7.73	10.97	13.66	18.79	16.67	15.63	15.63	9.41						
STATION		20.00	40.00	60.00	80.00	100.00	120.00	140.00	160.00	180.00	200.00	220.00	240.00	244.07			

SECTION 01

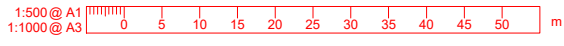
LEGEND:

- TOPSOIL (UNIT 1)
- LANDFILL STAGE 01
- LANDFILL STAGE 02
- LANDFILL STAGE 03
- LANDFILL STAGE 04
- LANDFILL STAGE 05
- HISTORIC LANDFILL
- ALLUVIAL (UNIT 2)
- HIGHLY TO MODERATELY WEATHERED GREYWACKE, VERY WEAK TO WEAK SANDSTONE/SILTSTONE (UNIT 3b)
- SLIGHTLY WEATHERED TO FRESH, MODERATELY STRONG TO STRONG SANDSTONE/SILTSTONE (UNIT 3c)
- PROPOSED TOP OF PIT
- EXISTING GROUND



Datum R.L. 8.00																	
PROPOSED LEVEL		16.95	20.88	25.62	30.49	35.46	35.97	35.97	35.80	34.33	33.07	32.01	30.62	27.86			
EXISTING LEVEL		15.56	15.22	15.78	15.57	16.45	17.49	18.29	22.03	21.62	23.45	24.90					
CUT/FILL		1.39	5.66	9.84	14.93	19.01	18.48	17.68	13.77	12.72	9.62	7.11					
STATION		20.00	40.00	60.00	80.00	100.00	120.00	140.00	160.00	180.00	200.00	220.00	240.00	260.00	266.42		

SECTION 04



NOTE:
THIS DRAWING IS TO BE REPRODUCED IN COLOUR

REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR COMMENT	C. FOX	2023-04-06



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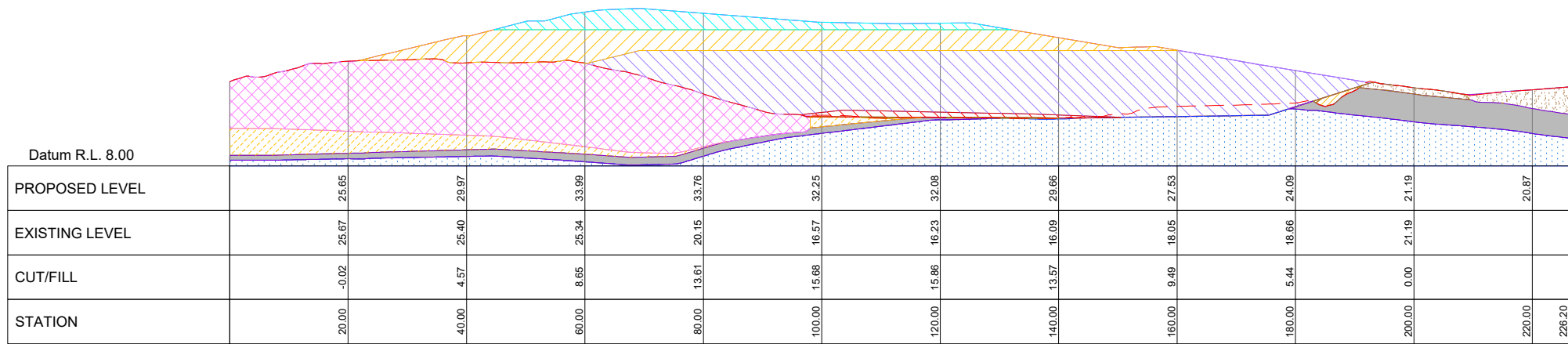
CIVIL

SCALES		ORIGINAL SIZE
A1 1:500	A3 1:1000	A1
DRAWN	DESIGNED	APPROVED
R.GOLDSMITH	R.GOLDSMITH	CHRIS FOX
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
CALLUM FEELY	PETER ASKEY	2023-04-06

PRELIMINARY

PROJECT		SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT		C207	A
TITLE			
LANDFILL EXPANSION EAST - WEST SECTIONS 01 AND 04			
WSP PROJECT NO. (SUB-PROJECT)			
6-CO082.00			

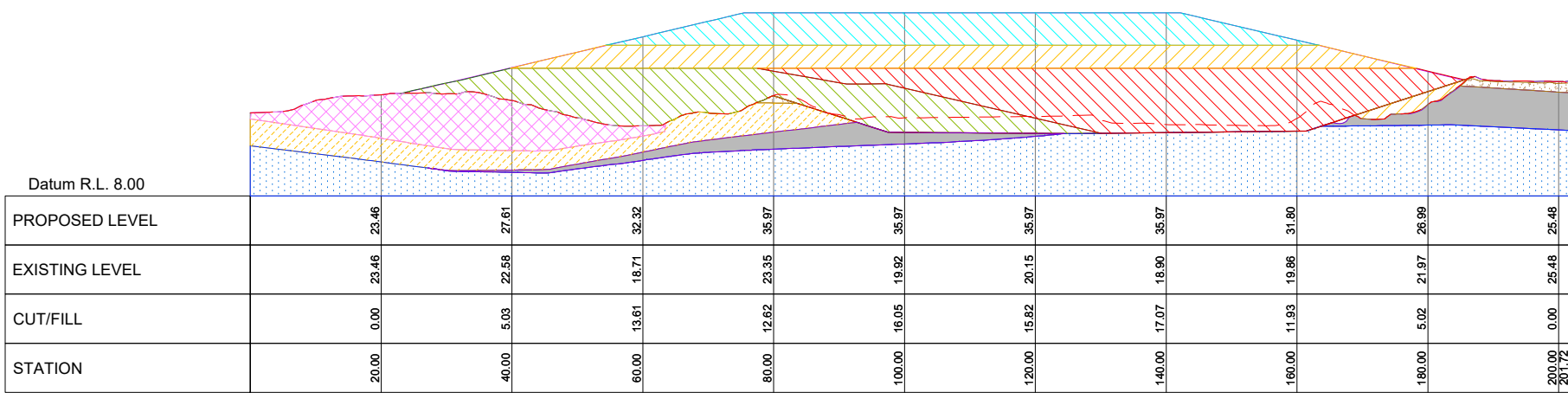
NOTE:
GROUND CONDITIONS ARE INDICATIVE
ONLY AND TO BE CONFIRMED ON SITE.



SECTION 02

LEGEND:

- TOPSOIL (UNIT 1)
- LANDFILL STAGE 01
- LANDFILL STAGE 02
- LANDFILL STAGE 03
- LANDFILL STAGE 04
- LANDFILL STAGE 05
- HISTORIC LANDFILL
- ALLUVIAL (UNIT 2)
- HIGHLY TO MODERATELY WEATHERED GREYWACKE, VERY WEAK TO WEAK SANDSTONE/SILTSTONE (UNIT 3b)
- SLIGHTLY WEATHERED TO FRESH, MODERATELY STRONG TO STRONG SANDSTONE/SILTSTONE (UNIT 3c)
- PROPOSED TOP OF PIT
- EXISTING GROUND



SECTION 03

NOTE:
THIS DRAWING IS TO BE REPRODUCED IN COLOUR

REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR COMMENT	C. FOX	2023-04-06



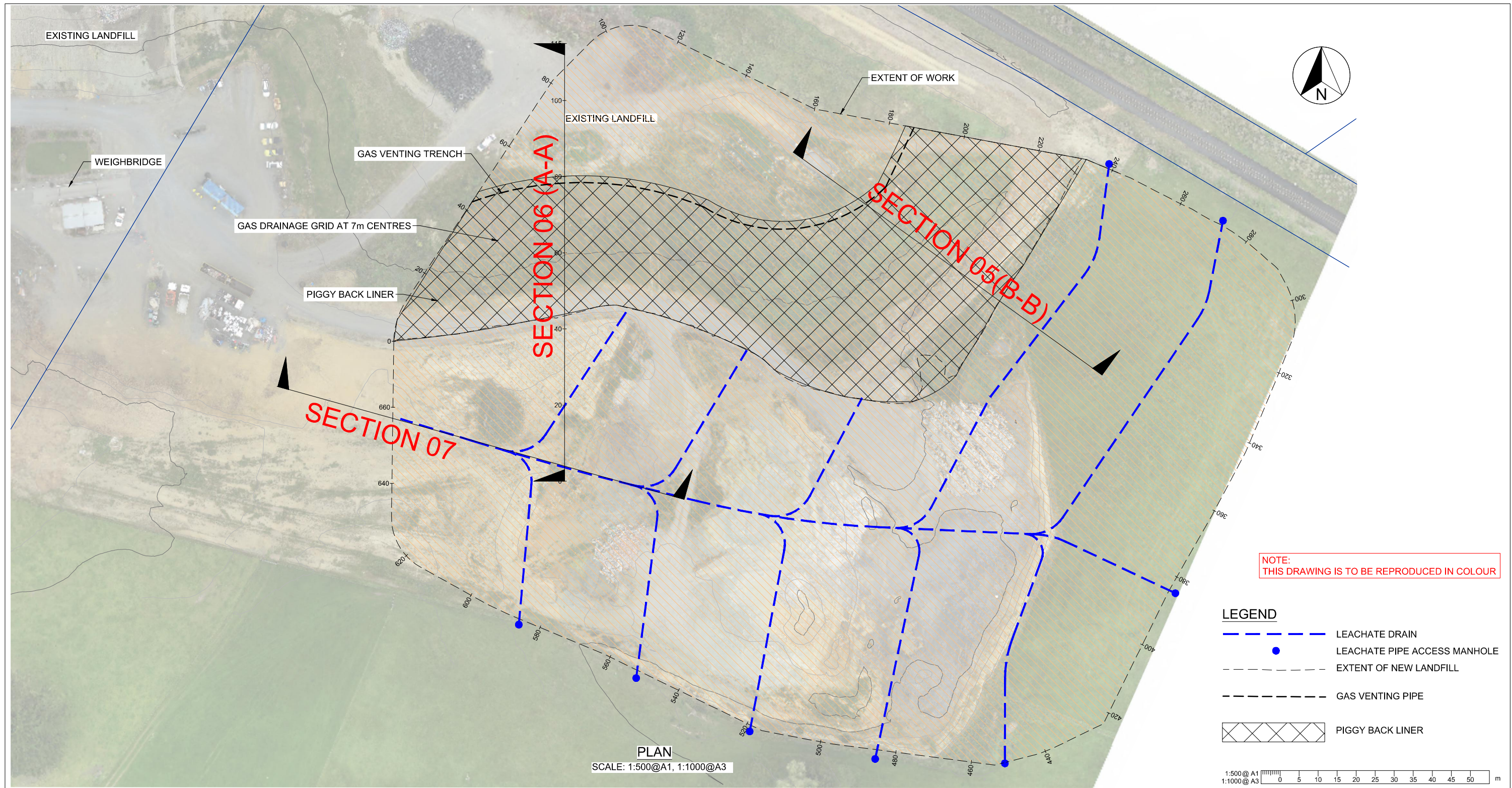
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CIVIL

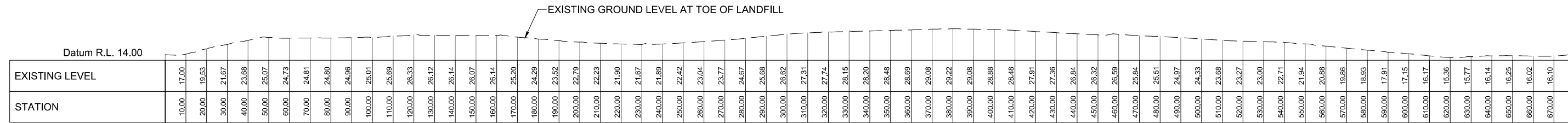
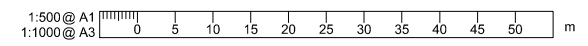
SCALES		ORIGINAL SIZE
A1 1:500, A3 1:1000		A1
DRAWN	DESIGNED	APPROVED
R.GOLDSMITH	R.GOLDSMITH	CHRIS FOX
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
CALLUM FEELY	PETER ASKEY	2023-04-06

PRELIMINARY

PROJECT		SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT		C208	A
TITLE		LANDFILL EXPANSION NORTH - SOUTH SECTIONS 02 AND 03	
WSP PROJECT NO. (SUB-PROJECT)		6-CO082.00	



PLAN
SCALE: 1:500@A1, 1:1000@A3



REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR COMMENT	C. FOX	2023-10-17
B	GAS VENTING AND PIGGYBACK LINER ADDED	C.FOX	2024-03-25



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CIVIL

SCALES	DESIGNED	APPROVED
A1 1:500, A3 1:1000	R.GOLDSMITH	CHRIS FOX
ORIGINAL SIZE A1		
DRAWN	DESIGN VERIFIED	APPROVED DATE
J.L. BOYDE	PETER ASKEY	2023-10-17
DRAWING VERIFIED		
CALLUM FEELY		

PRELIMINARY

PROJECT
**CLUTHA DISTRICT COUNCIL
KAITANGATA HIGHWAY BALCLUTHA
MT COOEE LANDFILL DEVELOPMENT**

TITLE
**LANDFILL EXPANSION
LEACHATE DRAINAGE LAYOUT PLAN AND TOE OF FILL PROFILE**

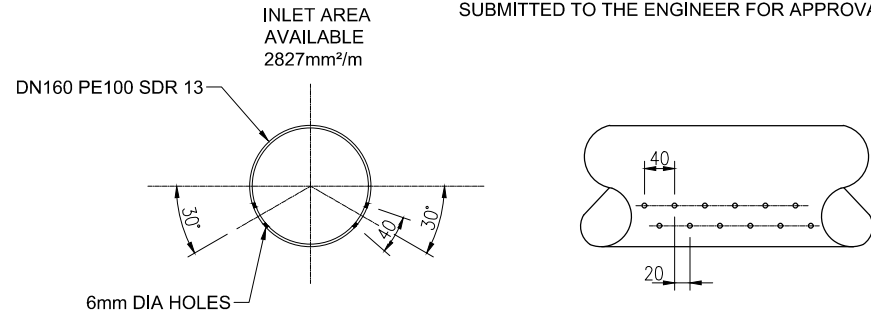
WSP PROJECT NO. (SUB-PROJECT)
6-CO082.00

SHEET NO.
C209

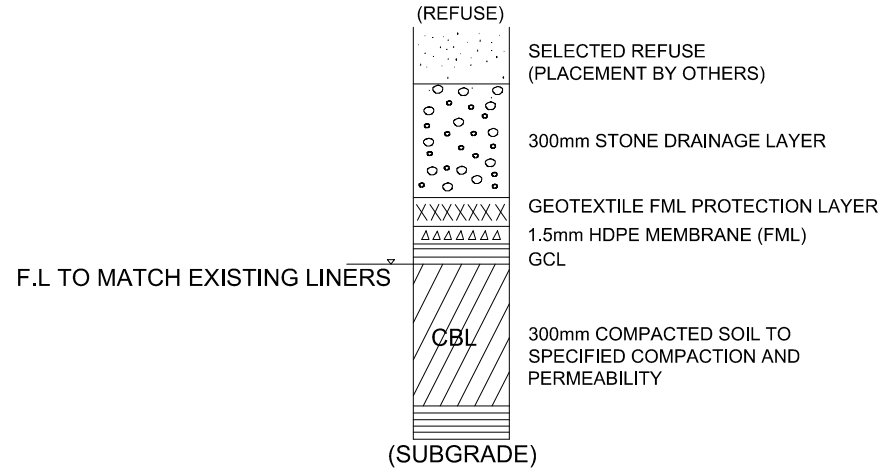
REVISION
B

NOTE

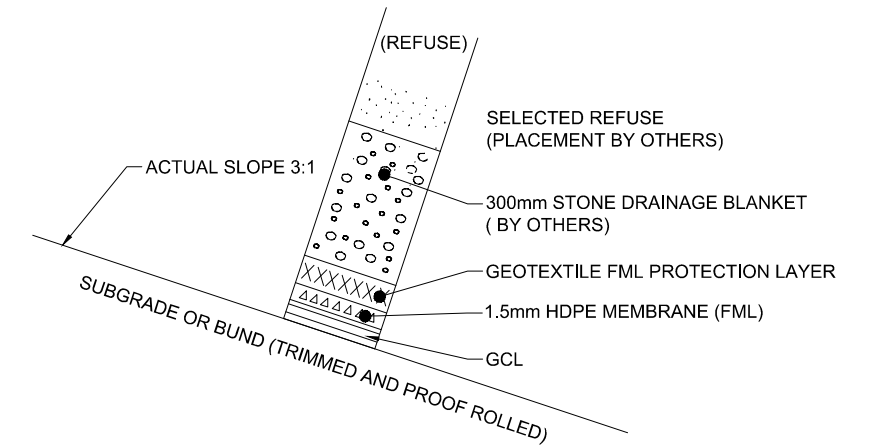
OTHER DRILLING OR SLOTTING CONFIGURATIONS THAT PRODUCE AN INLET AREA OF AT LEAST 2800 mm²/m WITHOUT AFFECTING THE STRUCTURAL CAPACITY OF THE PIPE CAN BE SUBMITTED TO THE ENGINEER FOR APPROVAL.



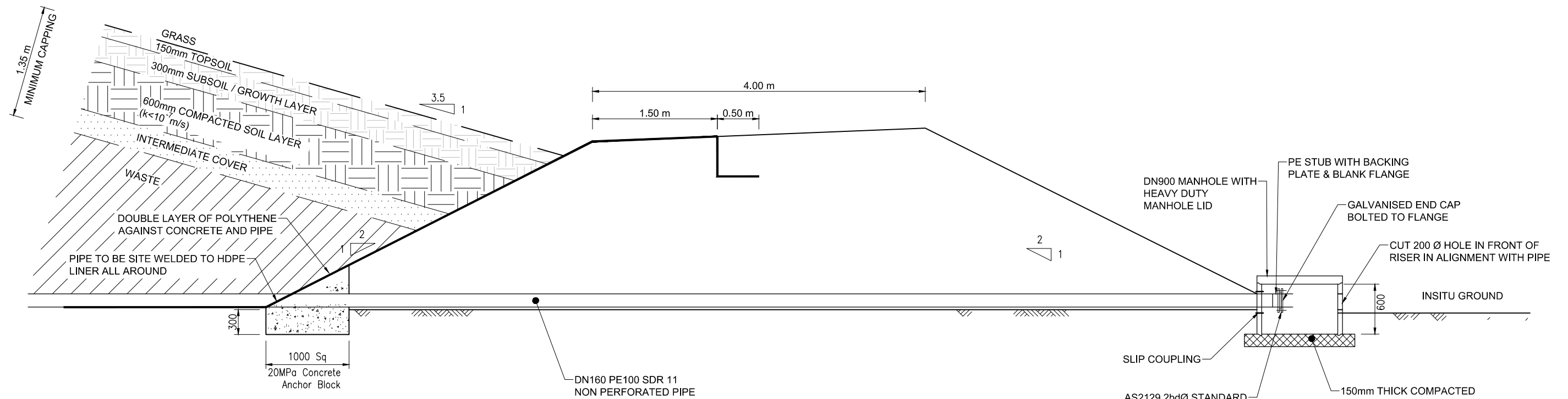
TYPICAL LEACHATE PIPE DETAIL
Scale 1:5 (A1) 1:10 (A3)



TYPICAL FLOOR DETAIL
(N.T.S)



TYPICAL DETAIL FOR LINER PLACED AGAINST BUND
(N.T.S)



LEACHATE COLLECTOR - UPSTREAM CAPPING
SCALE: 1:25 @ A1, 1:50 @ A3

NOTE:
THIS DRAWING IS TO BE REPRODUCED IN COLOUR

REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR COMMENT	C. FOX	2023-10-17



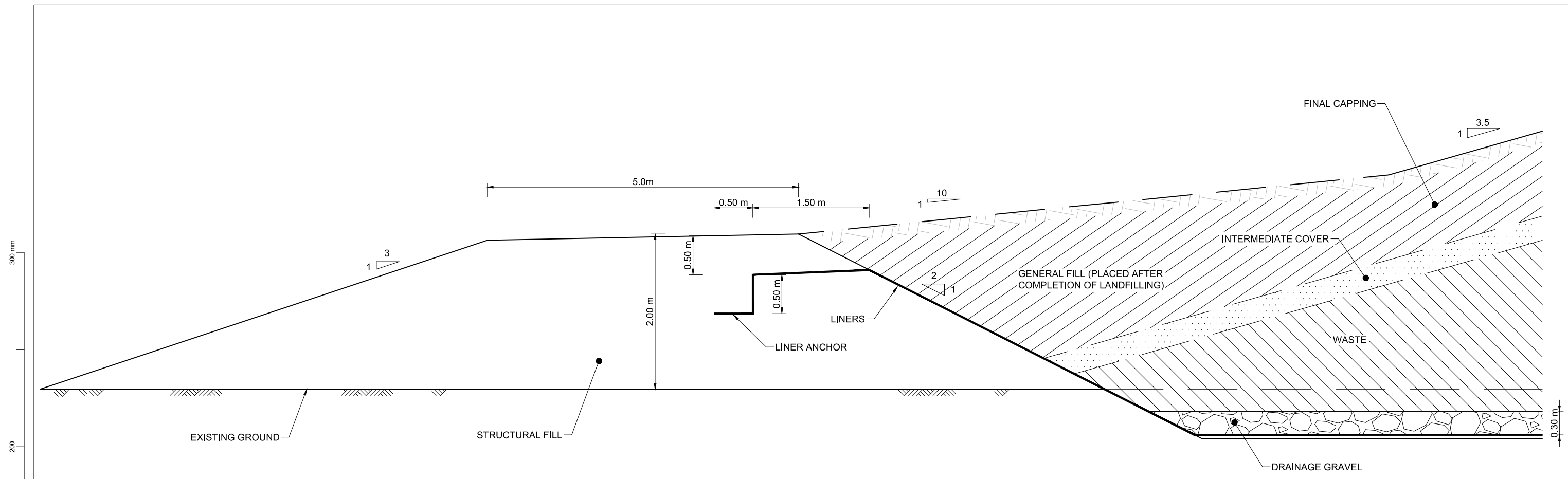
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New Zealand

CIVIL

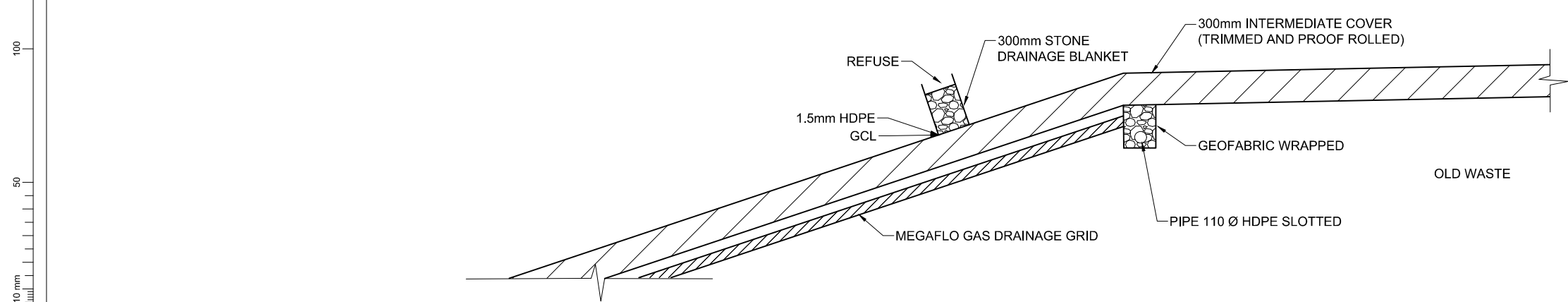
SCALES	DESIGNED	APPROVED	ORIGINAL SIZE
AS SHOWN	R.GOLDSMITH	CHRIS FOX	A1
DRAWN	DESIGN VERIFIED	APPROVED DATE	
J.L. BOYDE	PETER ASKEY	2023-10-17	
DRAWING VERIFIED			
CALLUM FEELY			

PRELIMINARY

PROJECT	TITLE	WSP PROJECT NO. (SUB-PROJECT)	SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT	LANDFILL EXPANSION LEACHATE DETAILS	6-CO082.00	C210	A



TOE BUND DETAIL
SCALE: 1:25 @ A1, 1:50 @ A3



PIGGYBACK LINER AND GAS VENTING DETAIL
SCALE: 1:25 @ A1, 1:50 @ A3

NOTE:
THIS DRAWING IS TO BE REPRODUCED IN COLOUR

REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR COMMENT	C. FOX	2023-10-17
B	PIGGYBANK LINER AND GAS VENTING DETAIL ADDED	C.FOX	2024-03-25



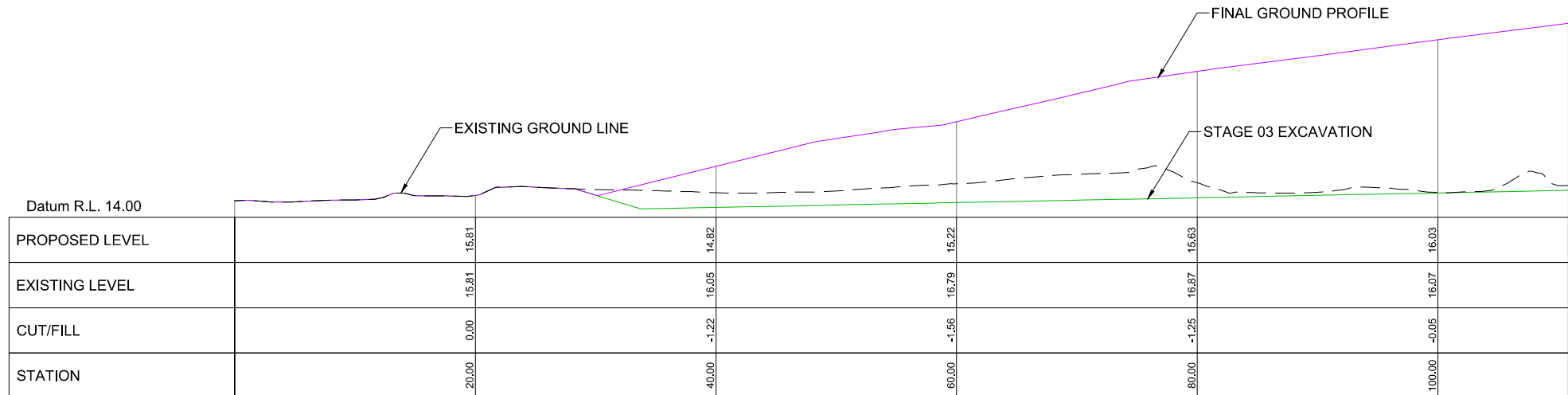
CIVIL

SCALES	DESIGNED	APPROVED	ORIGINAL SIZE
AS SHOWN	R.GOLDSMITH	CHRIS FOX	A1
DRAWN	DESIGN VERIFIED	APPROVED DATE	
J.L. BOYDE	PETER ASKEY	2023-10-17	
DRAWING VERIFIED			
CALLUM FEELY			

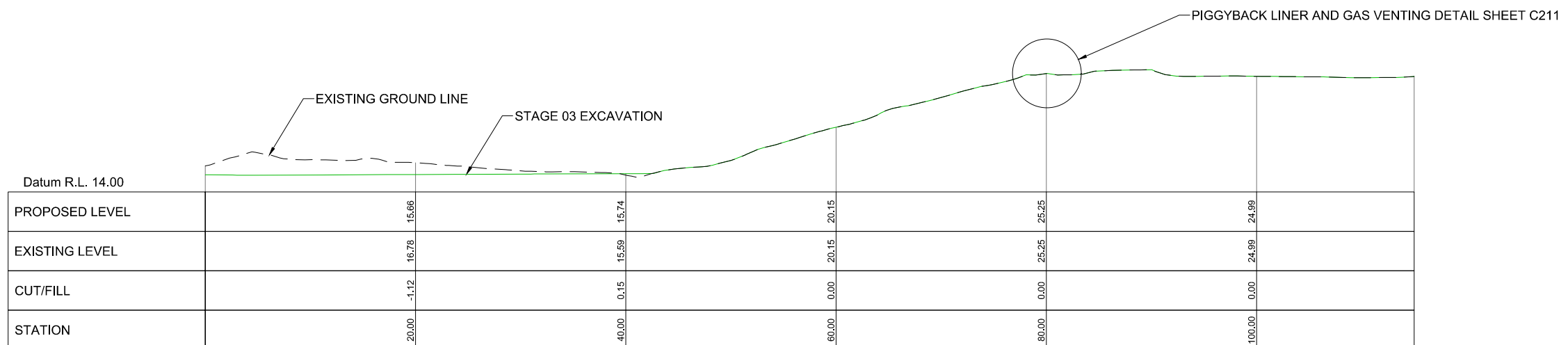
PRELIMINARY

PROJECT	TITLE	WSP PROJECT NO. (SUB-PROJECT)	SHEET NO.	REVISION
CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT	LANDFILL EXPANSION DETAILS	6-CO082.00	C211	B

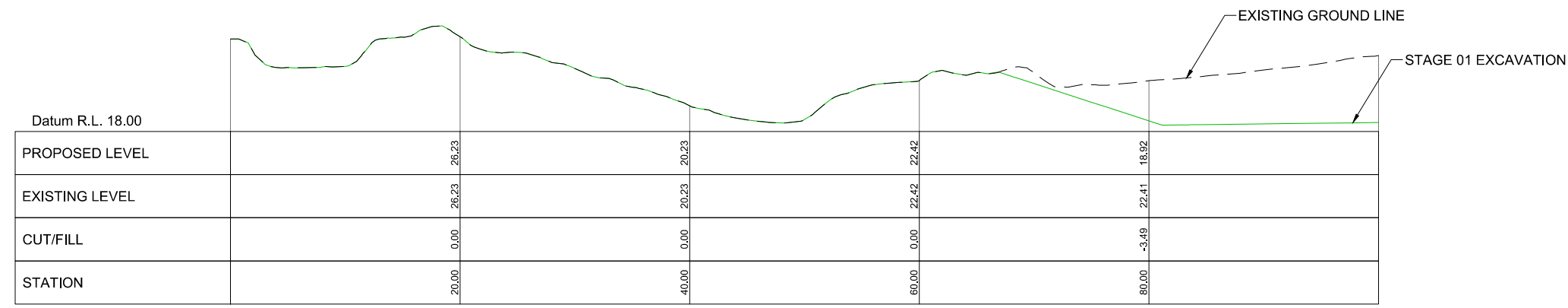
300 mm
200
100
0 10 mm



SECTION 07
SECTION BETWEEN CH: 0.00 AND 110.83



SECTION 06
SECTION BETWEEN CH: 0.00 AND 115.00



SECTION 05 (B-B)
SECTION BETWEEN CH: 0.00 AND 100.00

NOTE:
THIS DRAWING IS TO BE REPRODUCED IN COLOUR

NOTE:
GROUND CONDITIONS ARE INDICATIVE
ONLY AND TO BE CONFIRMED ON SITE.

REVISION	AMENDMENT	APPROVED	DATE
A	PLANS ISSUED TO CLIENT FOR COMMENT	C. FOX	2023-10-17
B	DETAIL LOCATION SHOWN	C.FOX	2024-03-25

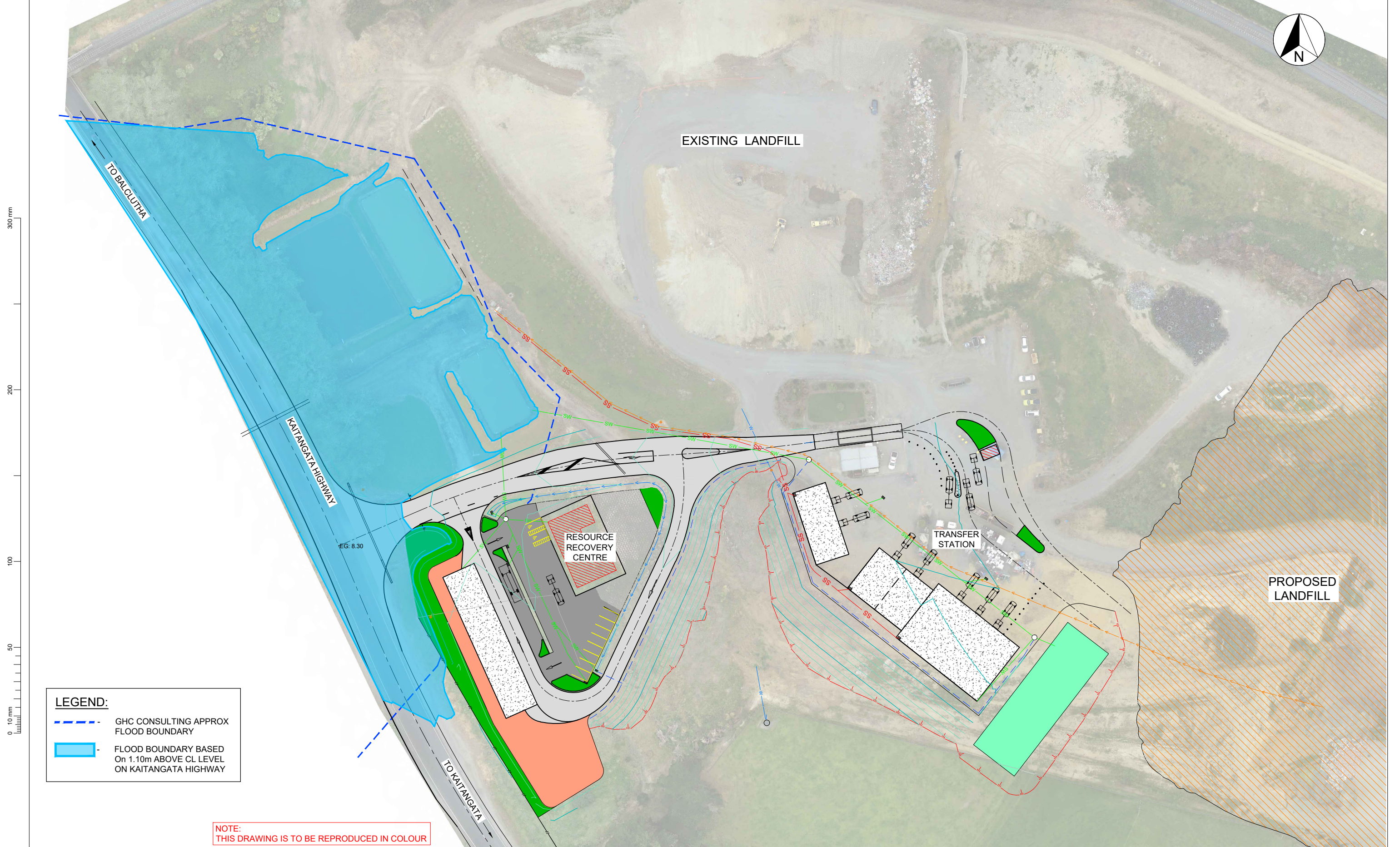


wsp
Invercargill Office
+64 3 211 3580
PO Box 647
Invercargill 9840
New Zealand

CIVIL

SCALES A1 1:250, A3 1:500	ORIGINAL SIZE A1	
DRAWN J.L. BOYDE	DESIGNED R.GOLDSMITH	APPROVED CHRIS FOX
DRAWING VERIFIED CALLUM FEELY	DESIGN VERIFIED PETER ASKEY	APPROVED DATE 2023-10-17
PRELIMINARY		

PROJECT CLUTHA DISTRICT COUNCIL KAITANGATA HIGHWAY BALCLUTHA MT COOEE LANDFILL DEVELOPMENT
TITLE LANDFILL EXPANSION SECTIONS 05 (B-B), 06(A-A) AND 07
WSP PROJECT NO. (SUB-PROJECT) 6-CO082.00
SHEET NO. C212
REVISION B



LEGEND:

- GHC CONSULTING APPROX FLOOD BOUNDARY
- FLOOD RISK BOUNDARY

NOTE:
THIS DRAWING IS TO BE REPRODUCED IN COLOUR

REVISION	AMENDMENT	APPROVED	DATE
A	DRAFT FOR COMMENT		
B	BOUNDARY REVISED		



wsp
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Invercargill 9840
New Zealand

CIVIL

SCALES
1:500@A1, 1:1000@A3 ORIGINAL SIZE
A1

DRAWN DESIGNED APPROVED
S. HILTON
DRAWING VERIFIED DESIGN VERIFIED APPROVED DATE
J.L. BOYDE

FOR INFORMATION

PROJECT
**CLUTHA DISTRICT COUNCIL
KAITANGATA HIGHWAY BALCLUTHA
MT COOEE LANDFILL DEVELOPMENT**

TITLE
**LANDFILL, RESOURCE RECOVERY CENTRE & TRANSFER STATION
FLOOD RISK BOUNDARY**

WSP PROJECT NO. (SUB-PROJECT) SHEET NO. REVISION
6-CO082.00 C501 B