

LEGEND

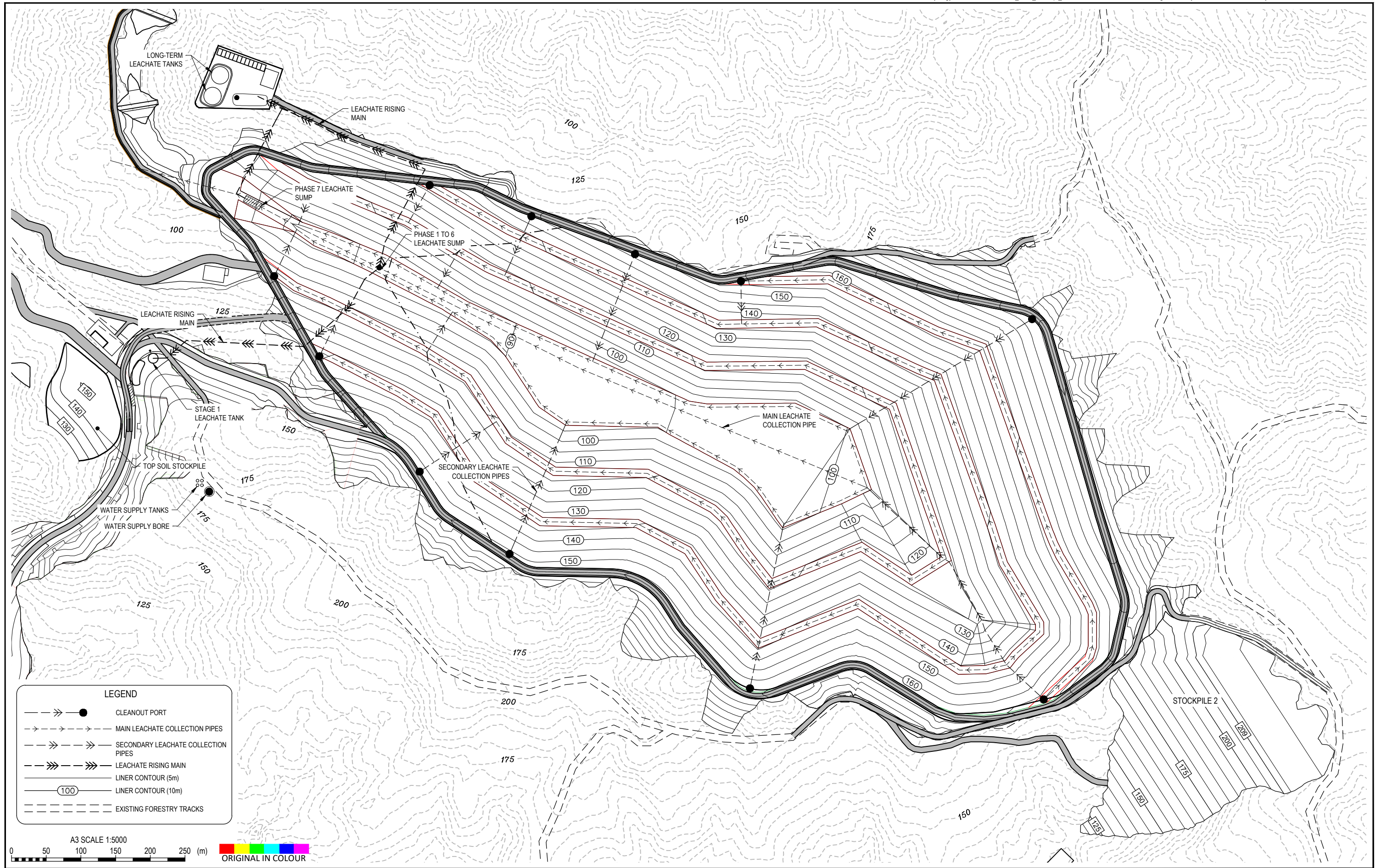
	EXISTING FORESTRY TRACKS
	PROPERTY BOUNDARIES
	INTERMEDIATE CAP CONTOURS
	FINAL CAP CONTOURS
	LINER CONTOUR (5m)
	PROPOSED LANDFILL ROADS



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PROJECT No. 1005069		CLIENT WASTE MANAGEMENT NZ LTD
DESIGNED	AGBB Jun.18	PROJECT AUCKLAND REGIONAL LANDFILL
DRAWN	TORY Aug.18	TITLE LANDFILL
CHECKED	SFE May.19	WASTE FILL CONTOURS AFTER PHASE 6
Simonne F Eldridge May.19		SCALE (A3) 1:5000
APPROVED	DATE	FIG No. ENG-13

REV 1



LEGEND

- >● CLEANOUT PORT
- - - - - MAIN LEACHATE COLLECTION PIPES
- - - - - SECONDARY LEACHATE COLLECTION PIPES
- - - - - LEACHATE RISING MAIN
- LINER CONTOUR (5m)
- (100)--- LINER CONTOUR (10m)
- - - - - EXISTING FORESTRY TRACKS

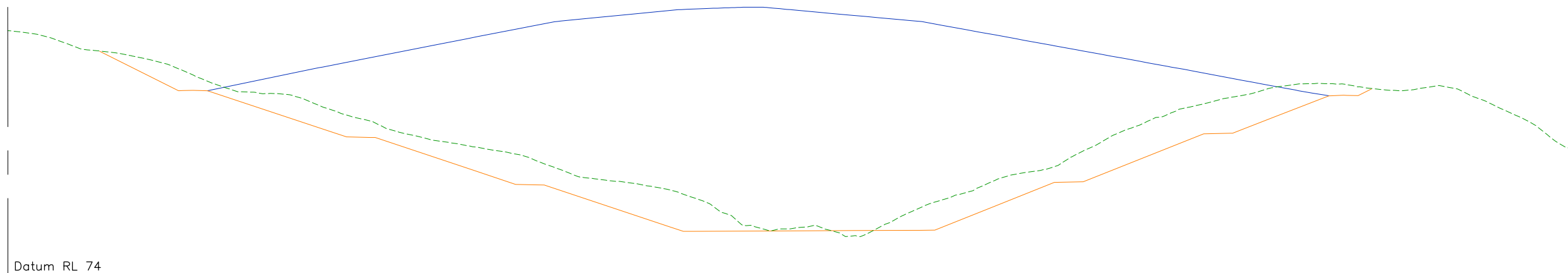


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DESIGNED	AGBB	Jun.18
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Simonne F Eldridge		May.19
APPROVED	DATE	

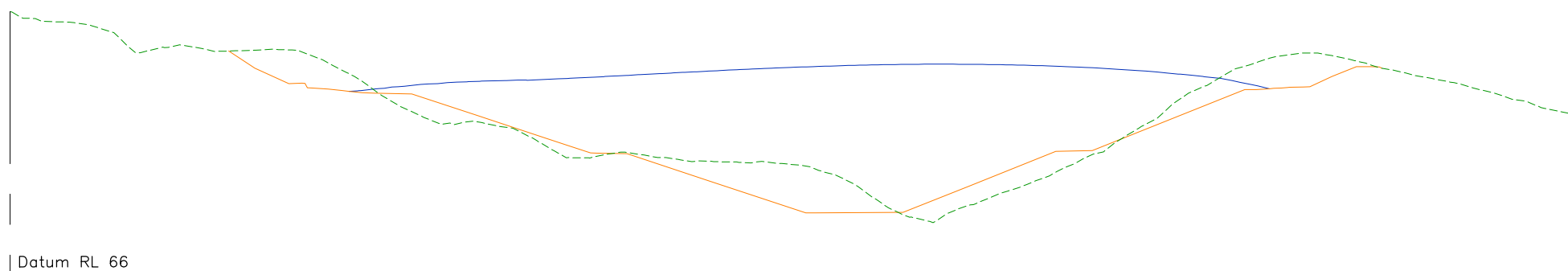
CLIENT	WASTE MANAGEMENT NZ LTD		
PROJECT	AUCKLAND REGIONAL LANDFILL		
TITLE	LANDFILL LEACHATE COLLECTION SYSTEM		
SCALE (A3)	1:5000	FIG No.	ENG-14
REV	1		

LEGEND

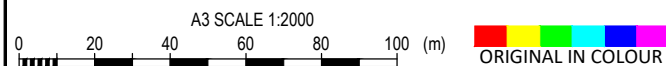
- POST SETTLEMENT CAP
- - - EXISTING GROUND
- DESIGN TOP OF LINER



SECTION 2
SCALE 1: 2000



SECTION 1
SCALE 1: 2000

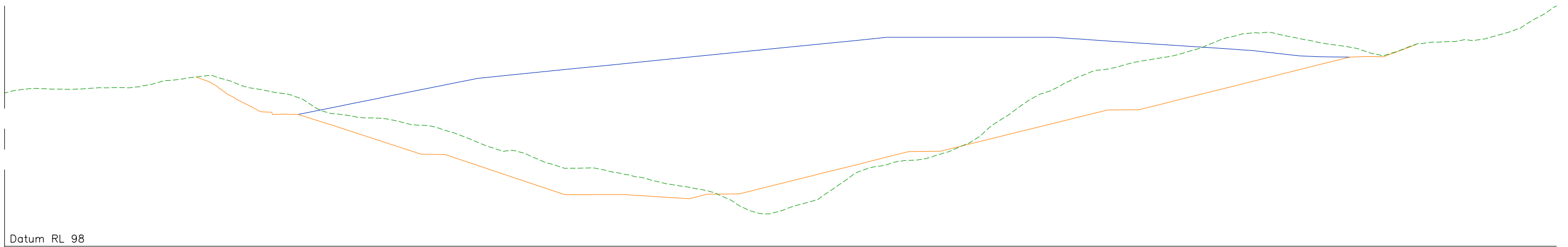


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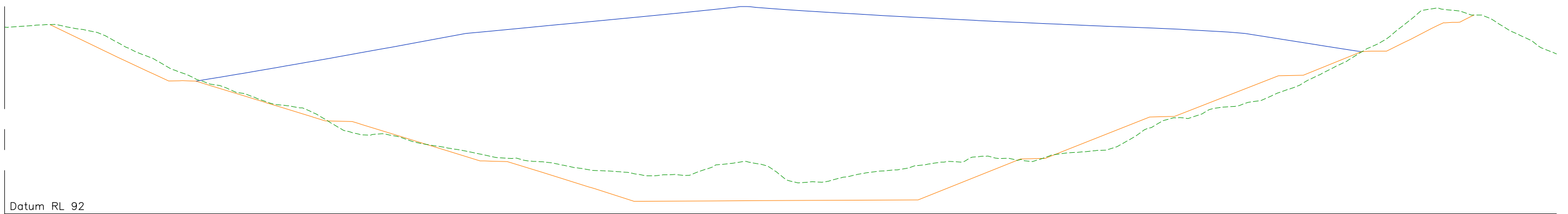
CLIENT	WASTE MANAGEMENT NZ LTD		
PROJECT	AUCKLAND REGIONAL LANDFILL		
TITLE	LANDFILL LANDFILL SECTIONS (SHEET 1 OF 3)		
SCALE (A3)	1:2000	FIG No.	ENG-16
REV	1		

LEGEND

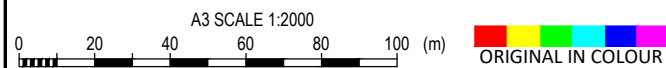
- POST SETTLEMENT CAP
- - - EXISTING GROUND
- DESIGN TOP OF LINER



SECTION 4
SCALE 1: 2000



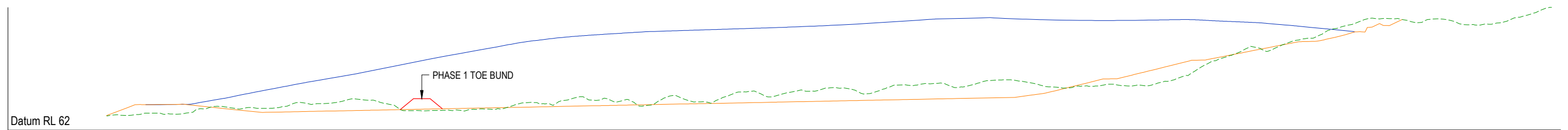
SECTION 3
SCALE 1: 2000



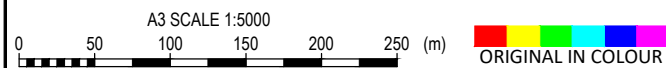
PROJECT No. 1005069			CLIENT	WASTE MANAGEMENT NZ LTD		
DESIGNED	AGBB	Jun.18	PROJECT	AUCKLAND REGIONAL LANDFILL		
DRAWN	TORY	Aug.18	TITLE	LANDFILL		
CHECKED	SFE	May.19		LANDFILL SECTIONS (SHEET 2 OF 3)		
Simonne F Eldridge		May.19	SCALE (A3)	1:2000	FIG No.	ENG-17
APPROVED		DATE				REV 1

LEGEND

- POST SETTLEMENT CAP
- - - EXISTING GROUND
- DESIGN TOP OF LINER

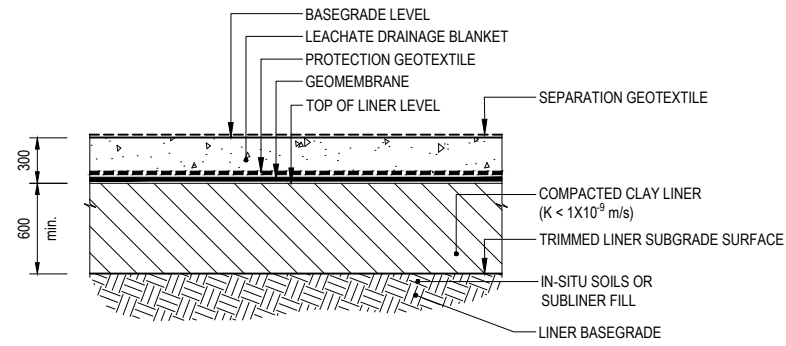


LONGSECTION 5
10
SCALE 1: 5000

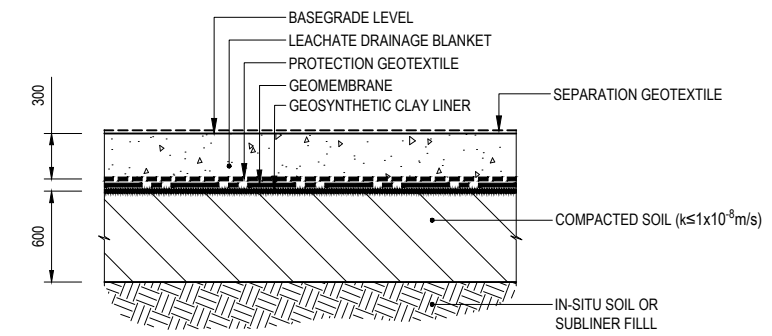


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DESIGNED	AGBB	Jun.18
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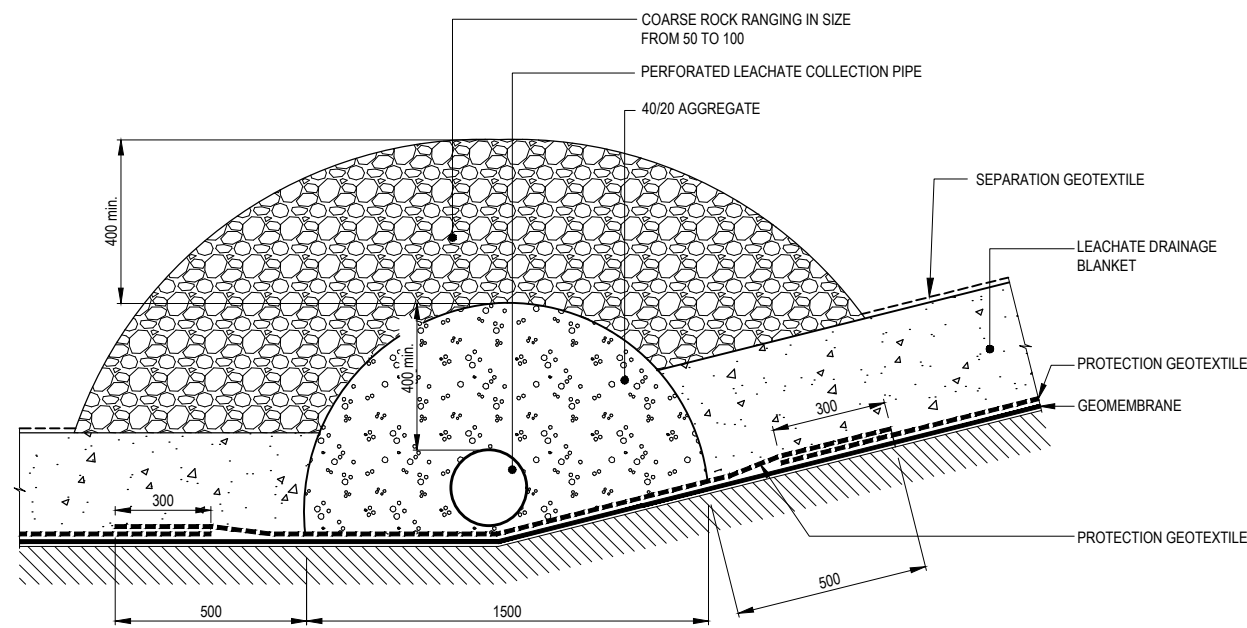
CLIENT	WASTE MANAGEMENT NZ LTD
PROJECT	AUCKLAND REGIONAL LANDFILL
TITLE	LANDFILL LANDFILL SECTIONS (SHEET 3 OF 3)
SCALE (A3)	1:5000
FIG No.	ENG-18
REV	1



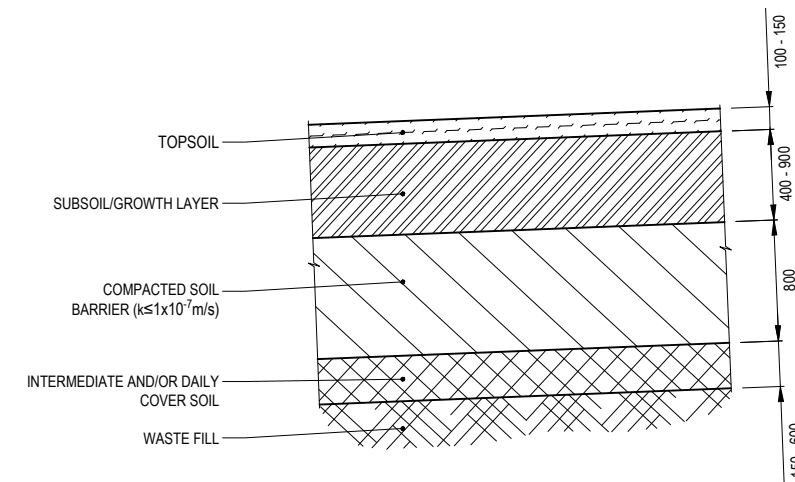
DETAIL TYPE 1 LINING SYSTEM
SCALE 1:50



DETAIL TYPE 2 LINING SYSTEM
SCALE 1:50



SECTION TYPICAL MAIN LEACHATE COLLECTOR PIPE
SCALE 1:20

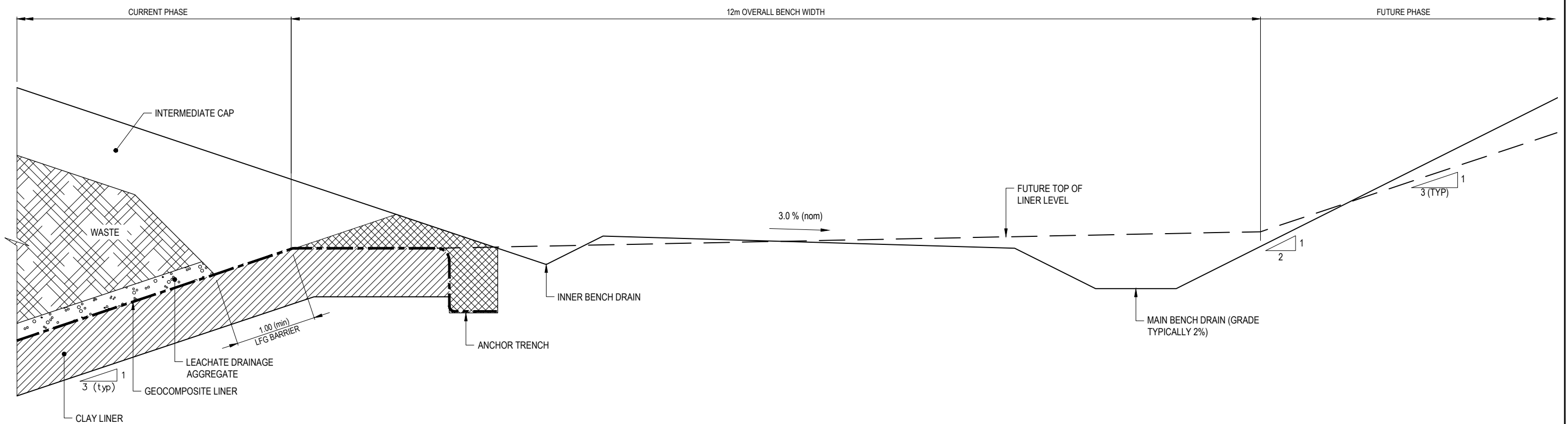


DETAIL FINAL CAP SYSTEM
SCALE 1:50

NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

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CLIENT	WASTE MANAGEMENT NZ LTD
PROJECT	AUCKLAND REGIONAL LANDFILL
TITLE	LANDFILL TYPICAL LINING & CAP DETAILS
SCALE (A3)	AS SHOWN
FIG No.	ENG-20
REV	1



SECTION 1 TYPICAL LANDFILL BENCH
SCALE 1:50

NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.



PROJECT No. 1005069

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CHECKED	SFE	May.19

Simonne F Eldridge May.19

APPROVED DATE

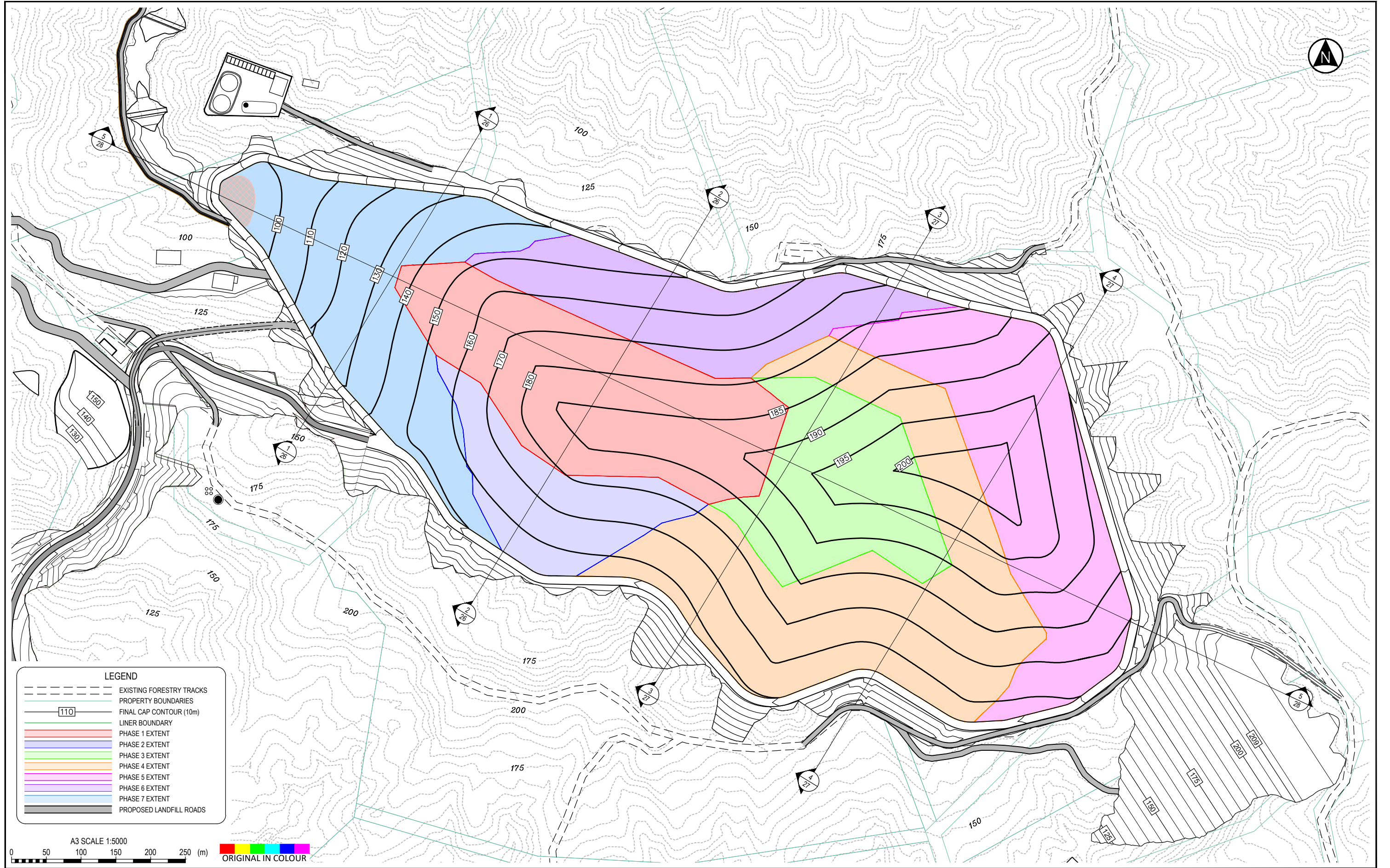
CLIENT WASTE MANAGEMENT NZ LTD
PROJECT AUCKLAND REGIONAL LANDFILL

TITLE LANDFILL
TYPICAL BENCH DETAIL

SCALE (A3) 1:50

FIG No. ENG-21

REV 1



LEGEND








- EXISTING FORESTRY TRACKS
- PROPERTY BOUNDARIES
- FINAL CAP CONTOUR (10m)
- LINER BOUNDARY
- PHASE 1 EXTENT
- PHASE 2 EXTENT
- PHASE 3 EXTENT
- PHASE 4 EXTENT
- PHASE 5 EXTENT
- PHASE 6 EXTENT
- PHASE 7 EXTENT
- PROPOSED LANDFILL ROADS

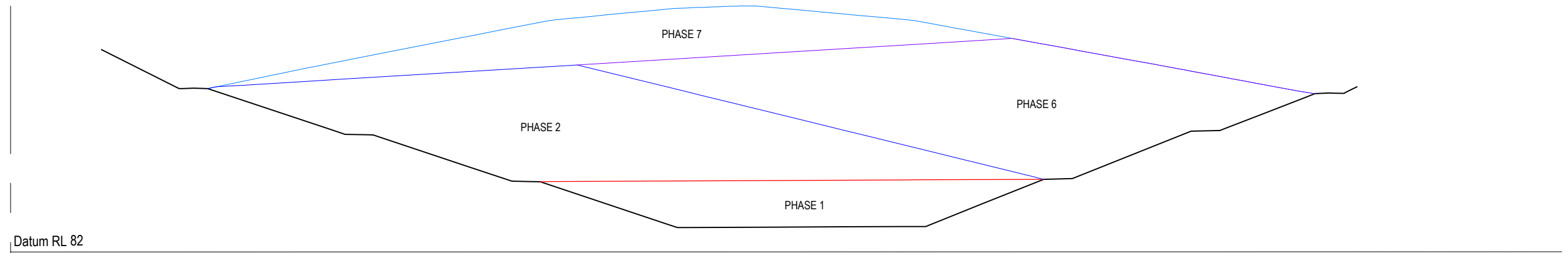


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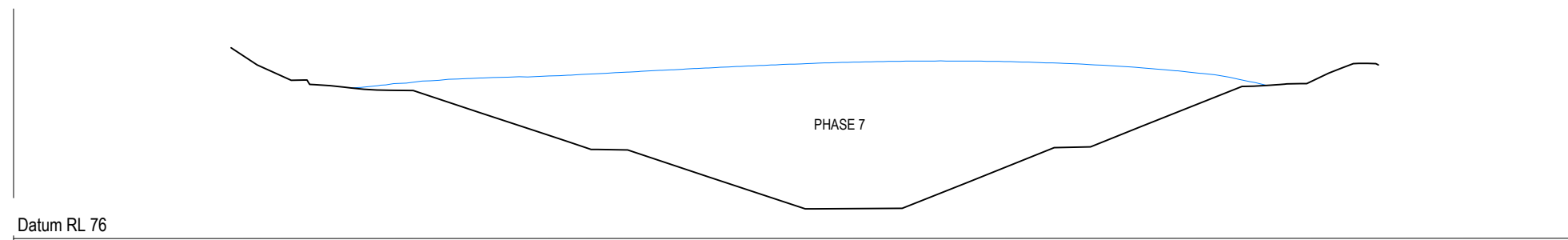
PROJECT No. 1005069		
DESIGNED	AGBB	Jun.18
DRAWN	TORY	Aug.18
CHECKED	SFE	May.19
Simonne F Eldridge		May.19
APPROVED	DATE	

CLIENT	WASTE MANAGEMENT NZ LTD
PROJECT	AUCKLAND REGIONAL LANDFILL
TITLE	LANDFILL PHASE PLAN
SCALE (A3)	1:5000
FIG No.	ENG-25
REV	1

LEGEND	
	DESIGN TOP OF LINER
	PHASE 1 FILL
	PHASE 2 FILL
	PHASE 3 FILL
	PHASE 4 FILL
	PHASE 6 FILL
	PHASE 7 FILL











SECTION 2
SCALE 1: 5000

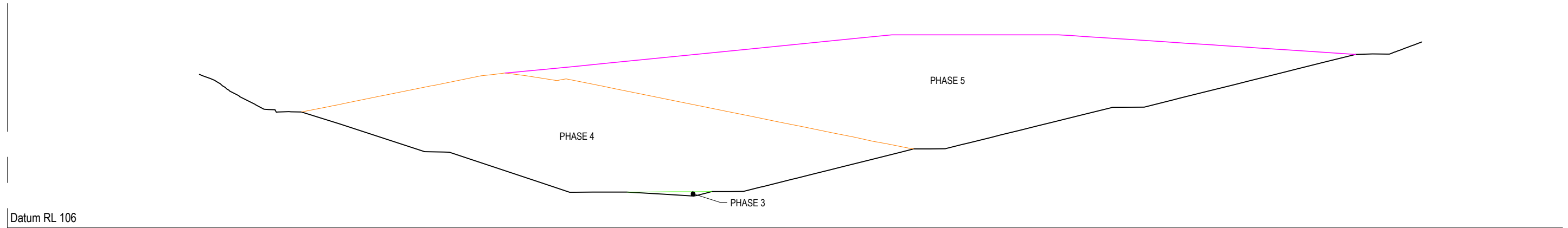


SECTION 1
SCALE 1: 5000

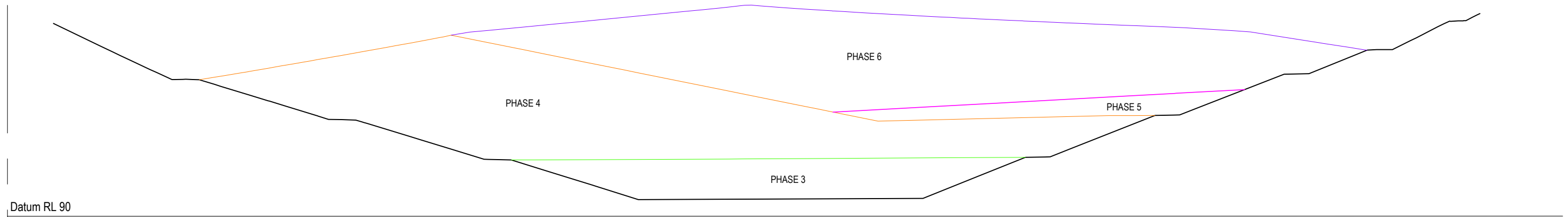


PROJECT No. 1005069			CLIENT WASTE MANAGEMENT NZ LTD
DESIGNED DRAWN CHECKED	AGBB TORY SFE	Jun.18 Aug.18 May.19	PROJECT AUCKLAND REGIONAL LANDFILL
Simonne F Eldridge May.19			TITLE LANDFILL LANDFILL STAGING SECTIONS (SHEET 1 OF 3)
APPROVED	DATE	SCALE (A3) 1:5000	FIG No. ENG-26 REV 1

LEGEND	
	DESIGN TOP OF LINER
	PHASE 1 FILL
	PHASE 2 FILL
	PHASE 3 FILL
	PHASE 4 FILL
	PHASE 5 FILL
	PHASE 6 FILL
	PHASE 7 FILL



SECTION 4
SCALE 1: 5000

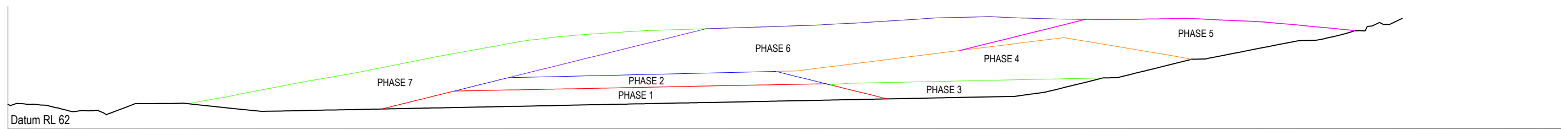


SECTION 3
SCALE 1: 5000



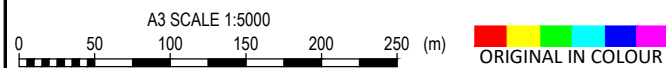
PROJECT No. 1005069		
DESIGNED	AGBB	Jun.18
DRAWN	TORY	Aug.18
CHECKED	SFE	May.19
Simonne F Eldridge		May.19
APPROVED	DATE	

CLIENT	WASTE MANAGEMENT NZ LTD
PROJECT	AUCKLAND REGIONAL LANDFILL
TITLE	LANDFILL LANDFILL STAGING SECTIONS (SHEET 2 OF 3)
SCALE (A3)	1:2000
FIG No.	ENG-27
REV	1



SECTION 5
SCALE 1: 5000





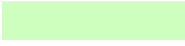

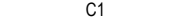
LEGEND	
	DESIGN TOP OF LINER
	PHASE 1 FILL
	PHASE 2 FILL
	PHASE 3 FILL
	PHASE 4 FILL
	PHASE 5 FILL
	PHASE 6 FILL
	PHASE 7 FILL



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Simonne F Eldridge		May.19
APPROVED	DATE	

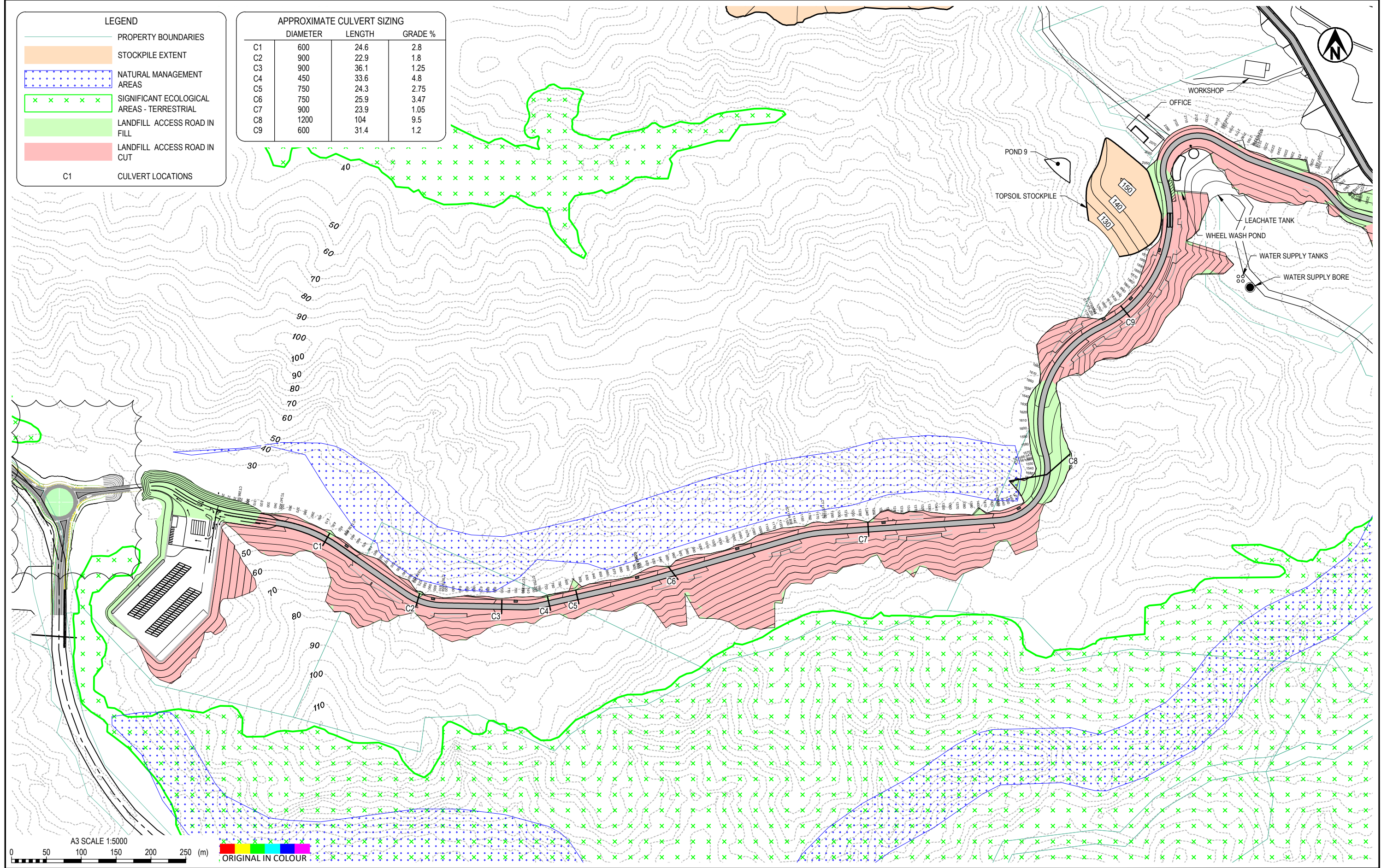
CLIENT	WASTE MANAGEMENT NZ LTD
PROJECT	AUCKLAND REGIONAL LANDFILL
TITLE	LANDFILL LANDFILL STAGING SECTIONS (SHEET 3 OF 3)
SCALE (A3)	1:2000
FIG No.	ENG-28
REV	1

LEGEND

-  PROPERTY BOUNDARIES
-  STOCKPILE EXTENT
-  NATURAL MANAGEMENT AREAS
-  SIGNIFICANT ECOLOGICAL AREAS - TERRESTRIAL
-  LANDFILL ACCESS ROAD IN FILL
-  LANDFILL ACCESS ROAD IN CUT
-  C1 CULVERT LOCATIONS

APPROXIMATE CULVERT SIZING

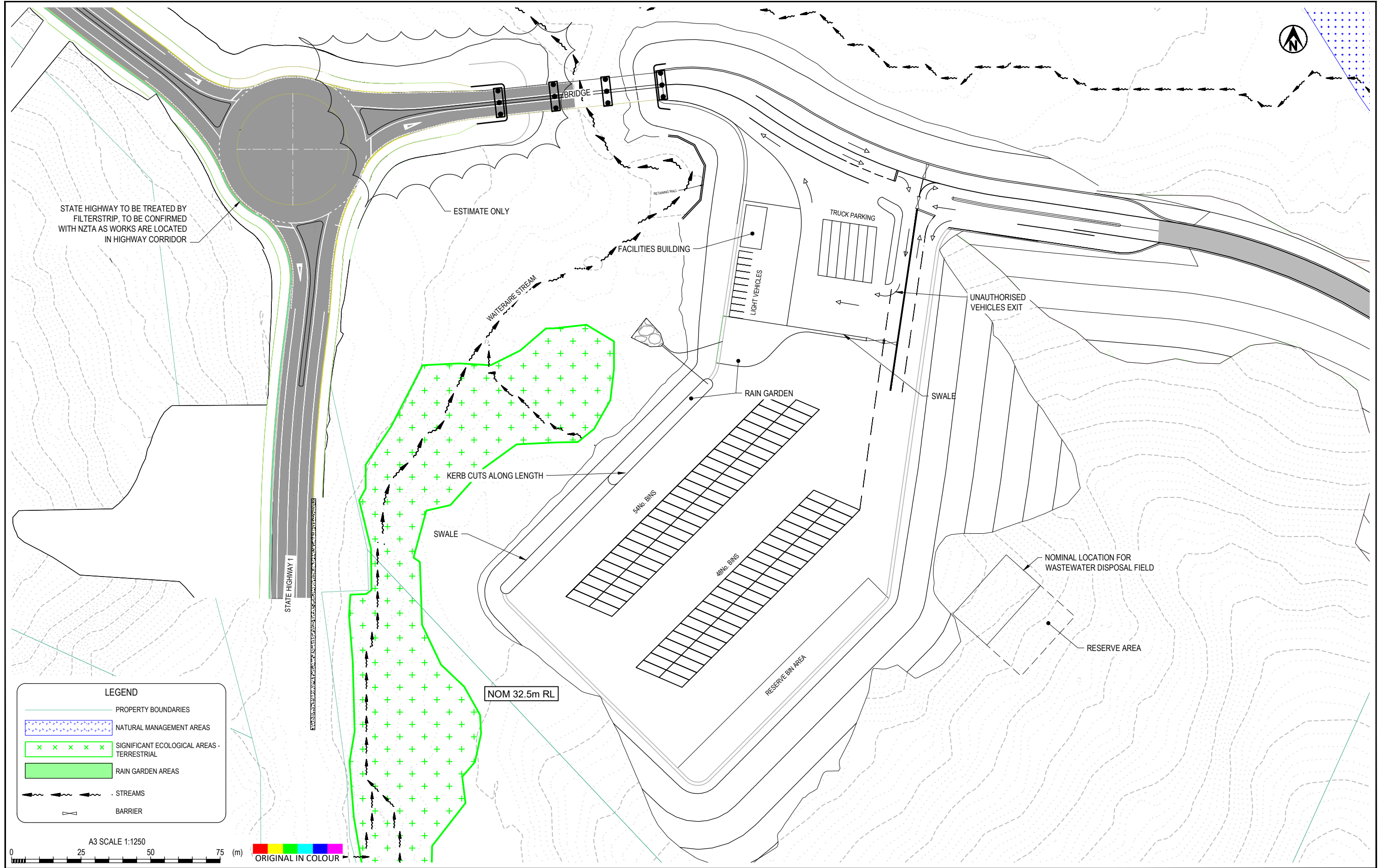
	DIAMETER	LENGTH	GRADE %
C1	600	24.6	2.8
C2	900	22.9	1.8
C3	900	36.1	1.25
C4	450	33.6	4.8
C5	750	24.3	2.75
C6	750	25.9	3.47
C7	900	23.9	1.05
C8	1200	104	9.5
C9	600	31.4	1.2



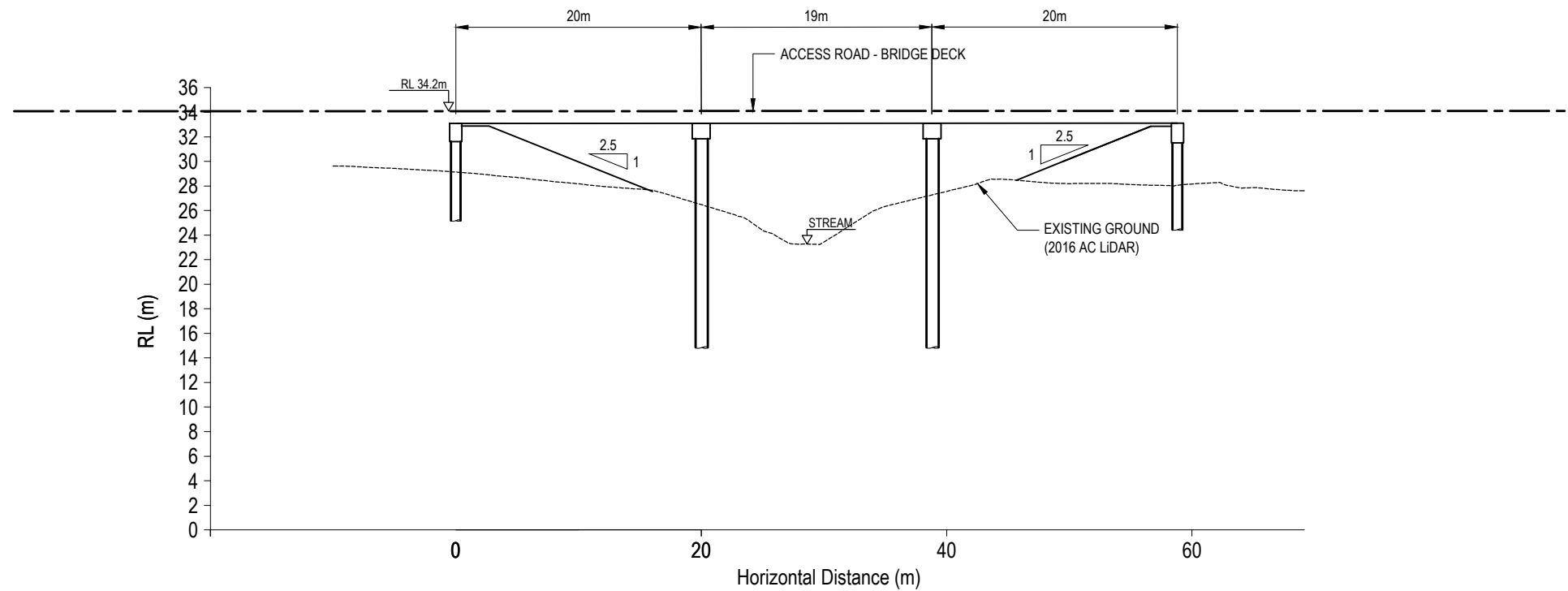
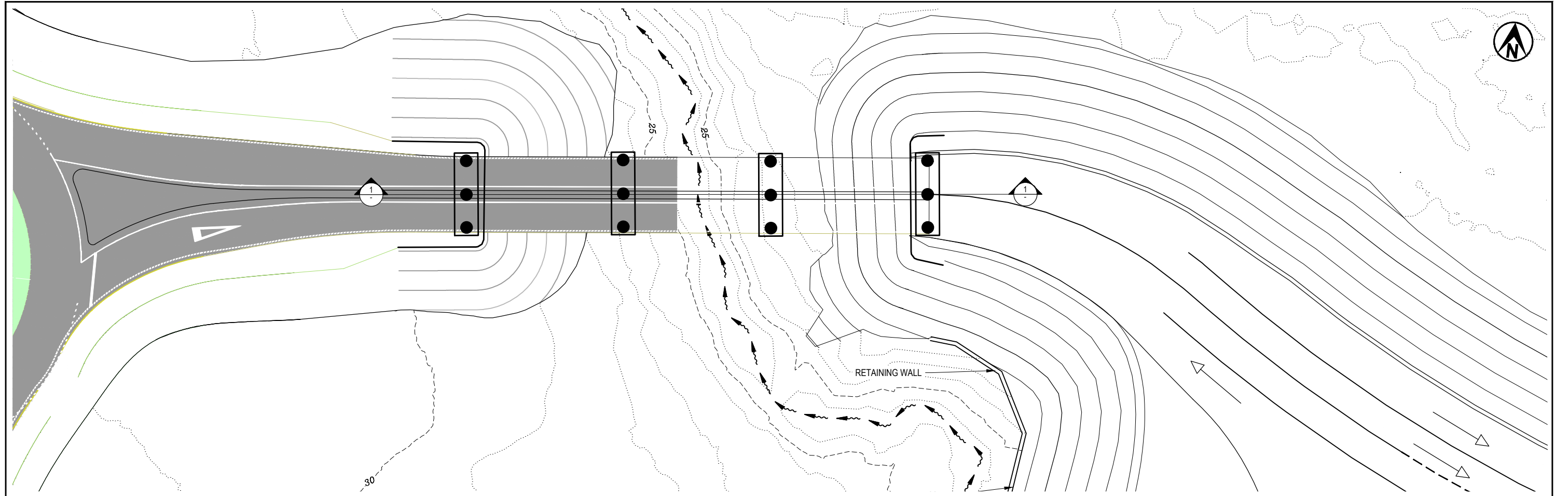

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DESIGNED	AGBB	Jun.18
DRAWN	TORY	Aug.18
CHECKED	SFE	May.19
Simonne F Eldridge		May.19
APPROVED	DATE	

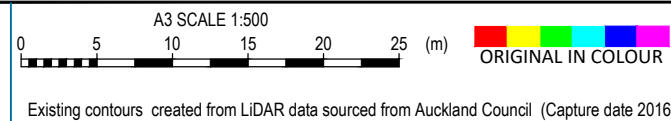
CLIENT	WASTE MANAGEMENT NZ LTD
PROJECT	AUCKLAND REGIONAL LANDFILL
TITLE	BIN EXCHANGE AREA AND LANDFILL ACCESS ROAD OVERALL PLAN
SCALE (A3)	1:5000
FIG No.	ENG-30
REV	1



PROJECT No. 1005069		CLIENT WASTE MANAGEMENT NZ LTD
DESIGNED	AGBB Jun.18	PROJECT AUCKLAND REGIONAL LANDFILL
DRAWN	TORY Aug.18	TITLE BIN EXCHANGE AREA AND LANDFILL ACCESS ROAD
CHECKED	SFE May.19	BIN EXCHANGE AREA
Simonne F Eldridge May.19		SCALE (A3) 1:1250
APPROVED	DATE	FIG No. ENG-31
		REV 1

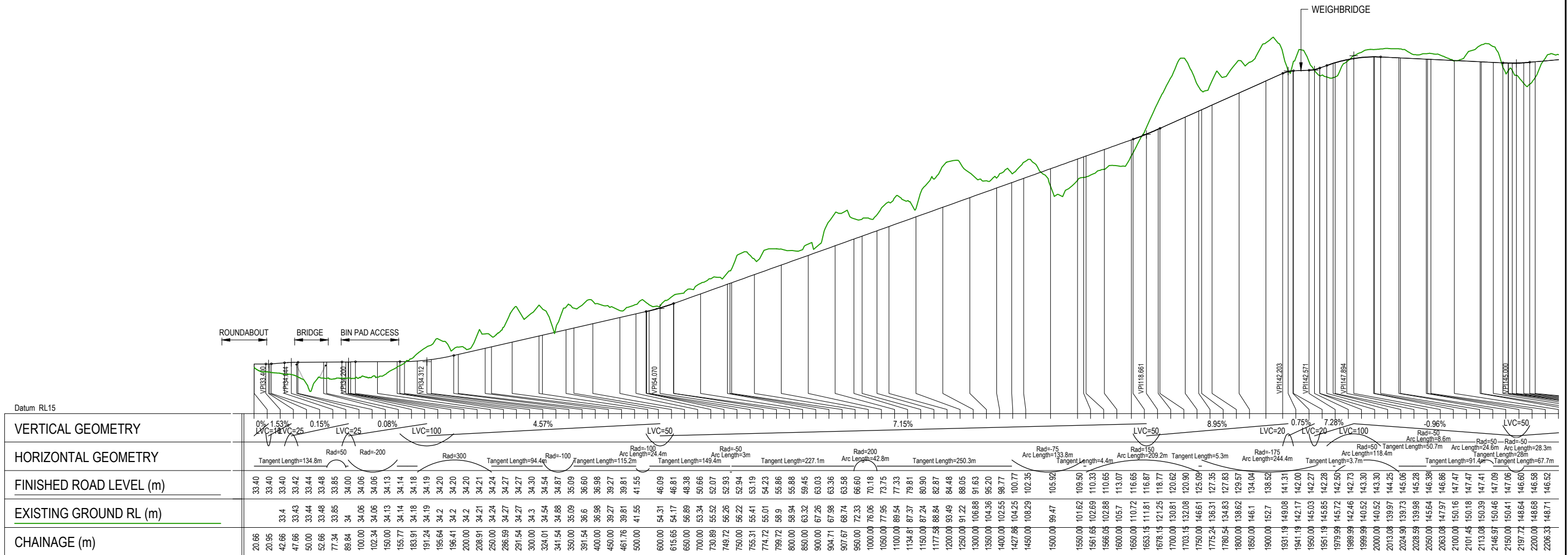


SECTION 1 LANDFILL ACCESS ROADBRIDGE
SCALE 1: 500



PROJECT No. 1005069		
DESIGNED	AGBB	Mar.19
DRAWN	BKD	Mar.19
CHECKED	SFE	May.19
Simonne F Eldridge		May.19
APPROVED	DATE	

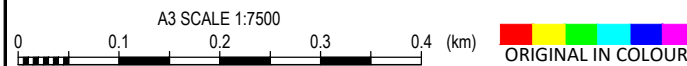
CLIENT	WASTE MANAGEMENT NZ LTD
PROJECT	AUCKLAND REGIONAL LANDFILL
TITLE	BIN EXCHANGE AREA AND LANDFILL ACCESS ROAD WAITERAIRE STREAM BRIDGE
SCALE (A3)	1:500
FIG No.	ENG-32
REV	1



ALIGNMENT RS03 E->RS03 E

Horizontal Scale 1:7500

Vertical Scale 1:1500



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PROJECT No. 1005069

DESIGNED	AGBB	Jun.18
DRAWN	TORY	Aug.18
CHECKED	SFE	May.19

Simonne F Eldridge May.19

APPROVED DATE

CLIENT WASTE MANAGEMENT NZ LTD

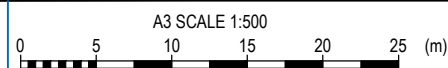
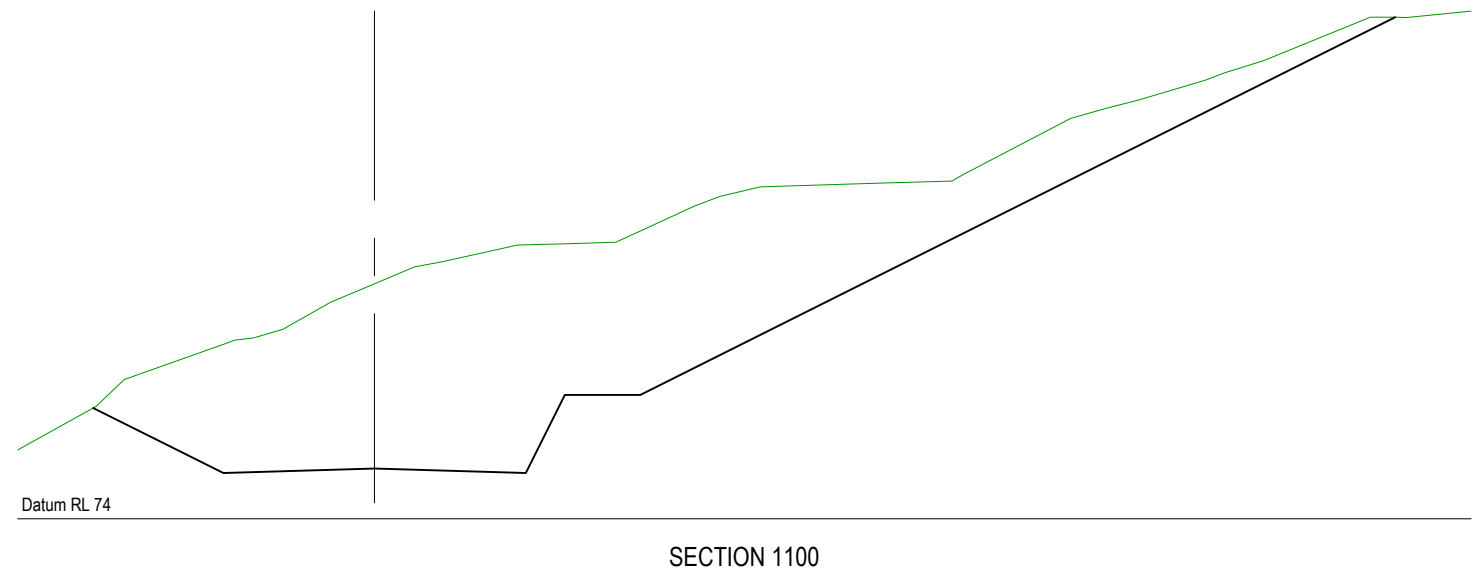
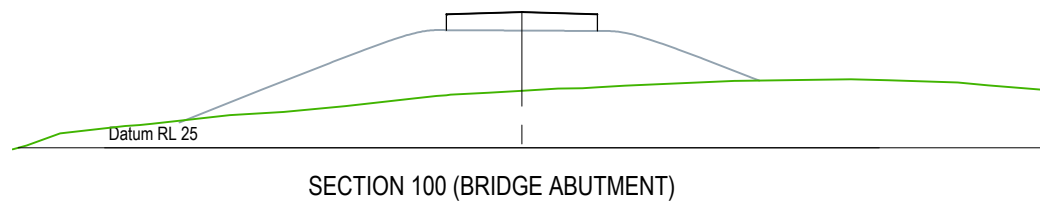
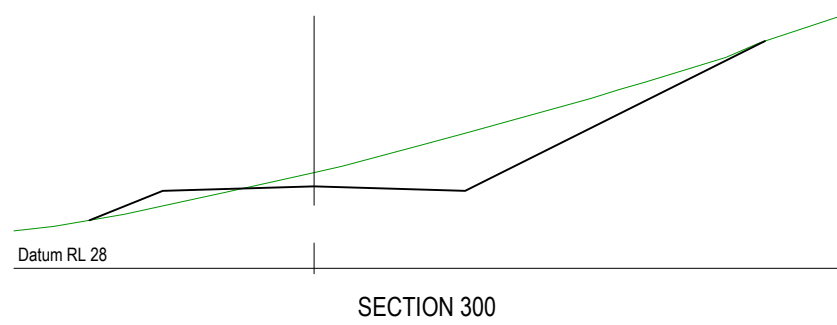
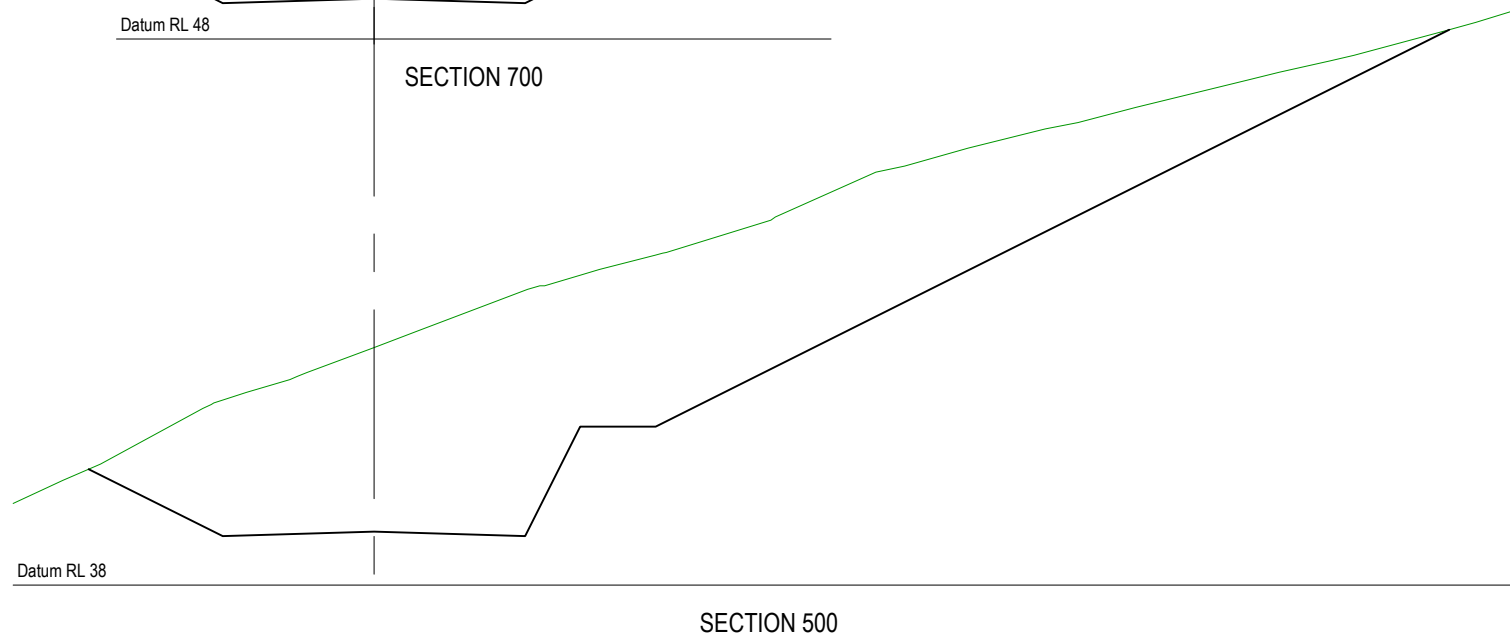
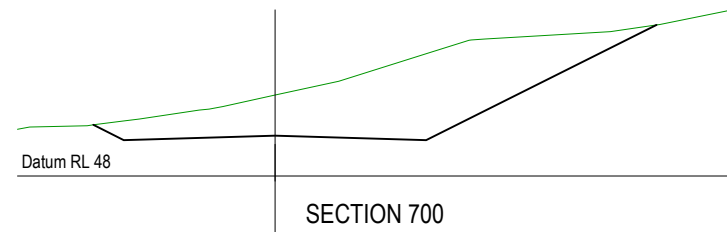
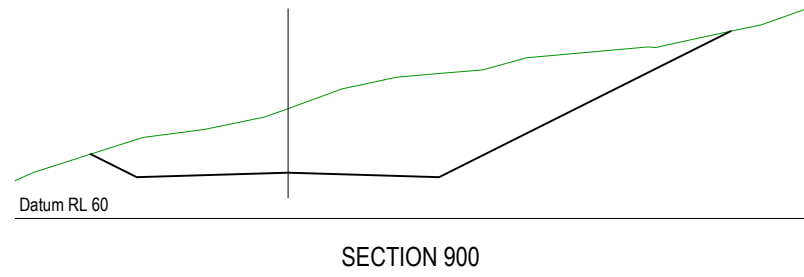
PROJECT AUCKLAND REGIONAL LANDFILL

TITLE BIN EXCHANGE AREA AND LANDFILL ACCESS ROAD ROAD LONG SECTION

SCALE (A3) 1:7500

FIG No. ENG-33

REV 1



ORIGINAL IN COLOUR

PROJECT No. 1005069

DESIGNED	AGBB	Jun.18
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CHECKED	SFE	May.19

Simonne F Eldridge May.19

APPROVED DATE

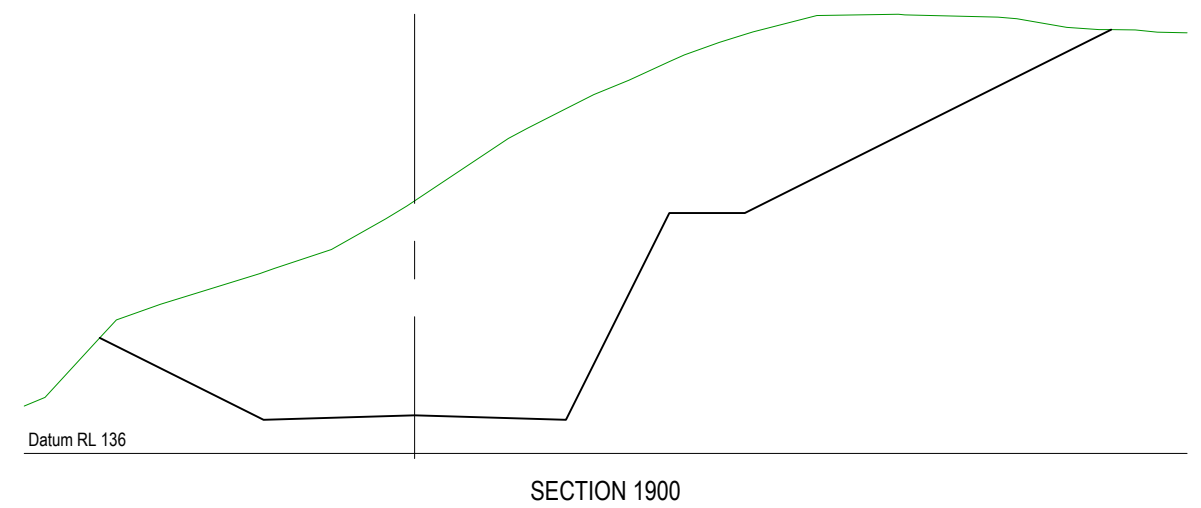
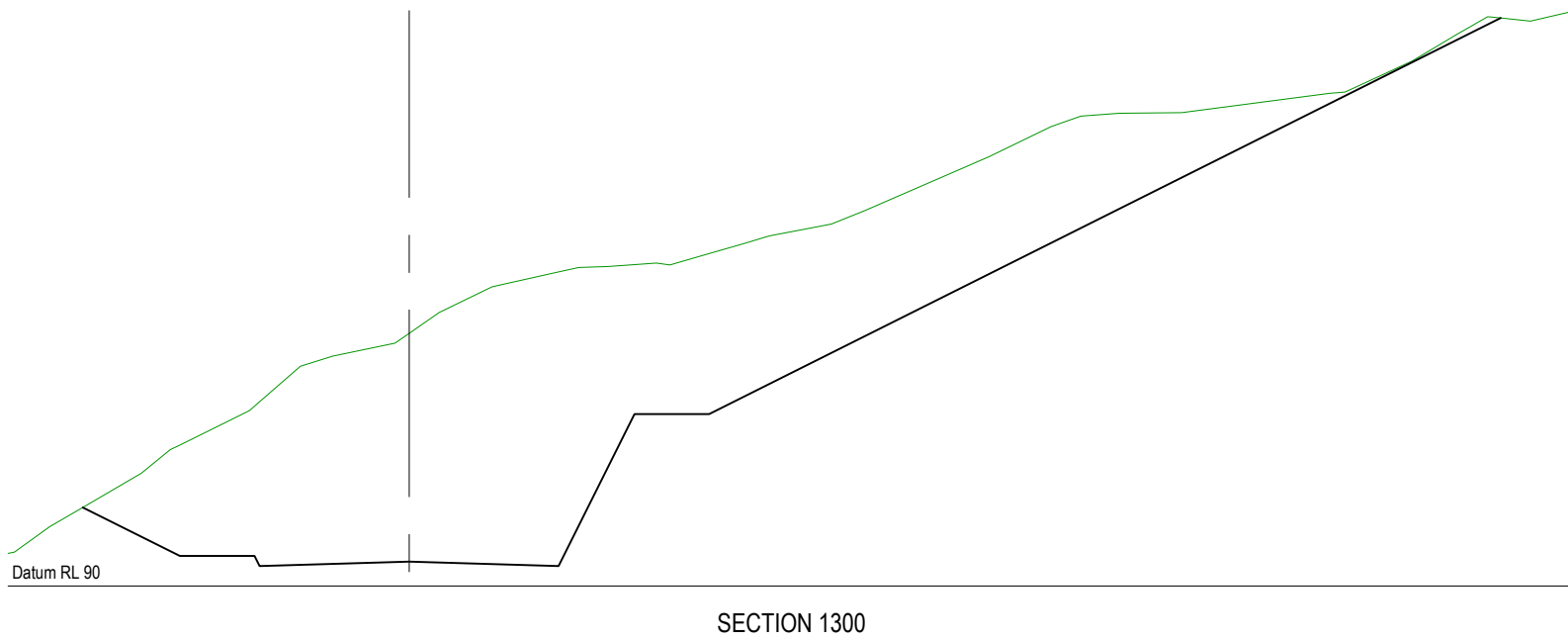
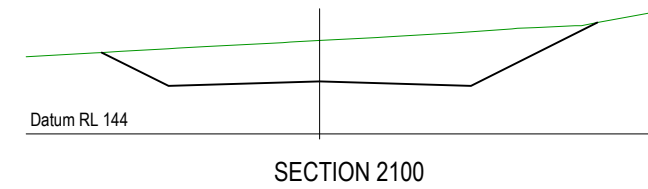
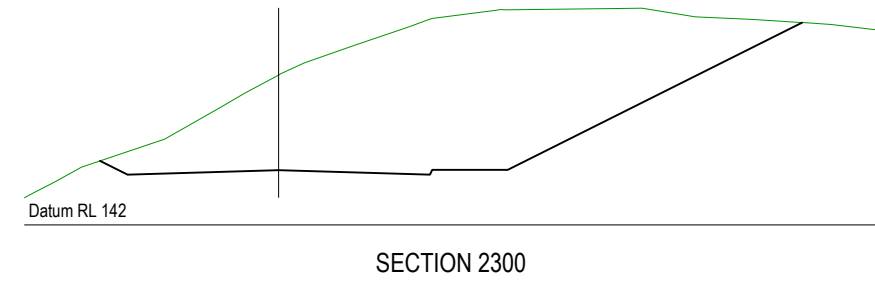
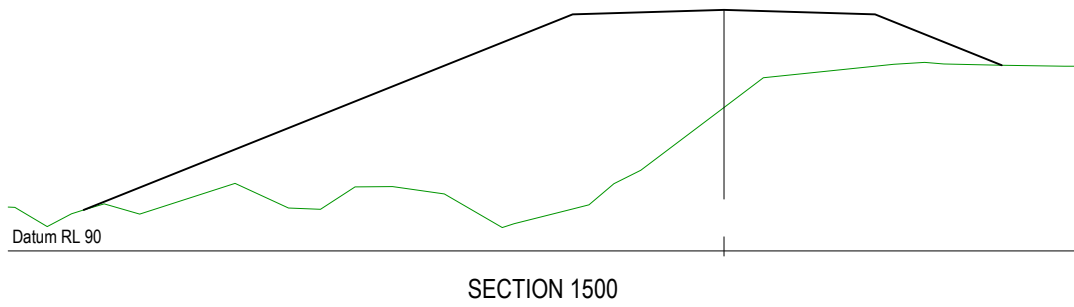
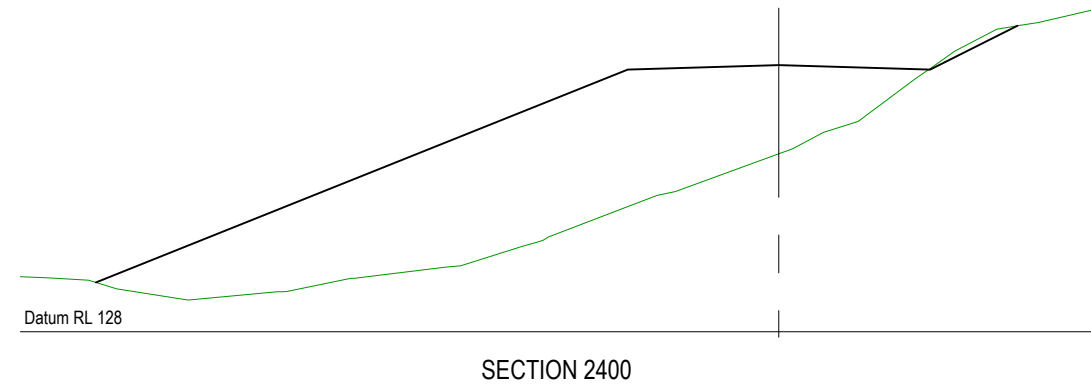
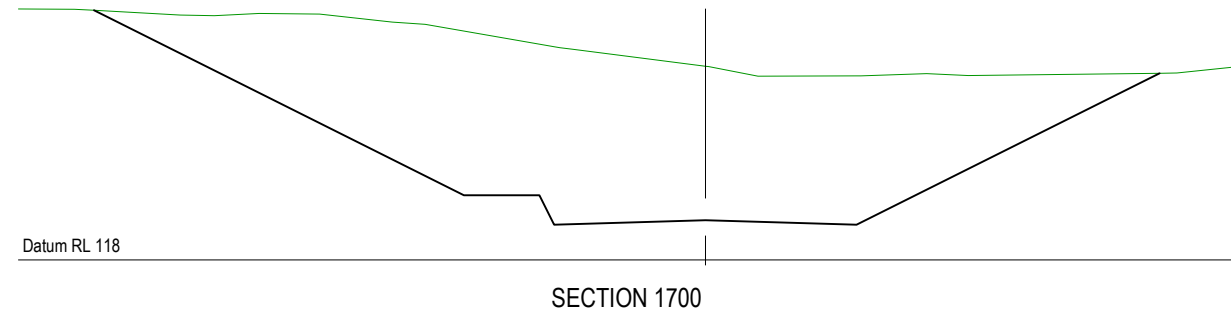
CLIENT WASTE MANAGEMENT NZ LTD
PROJECT AUCKLAND REGIONAL LANDFILL

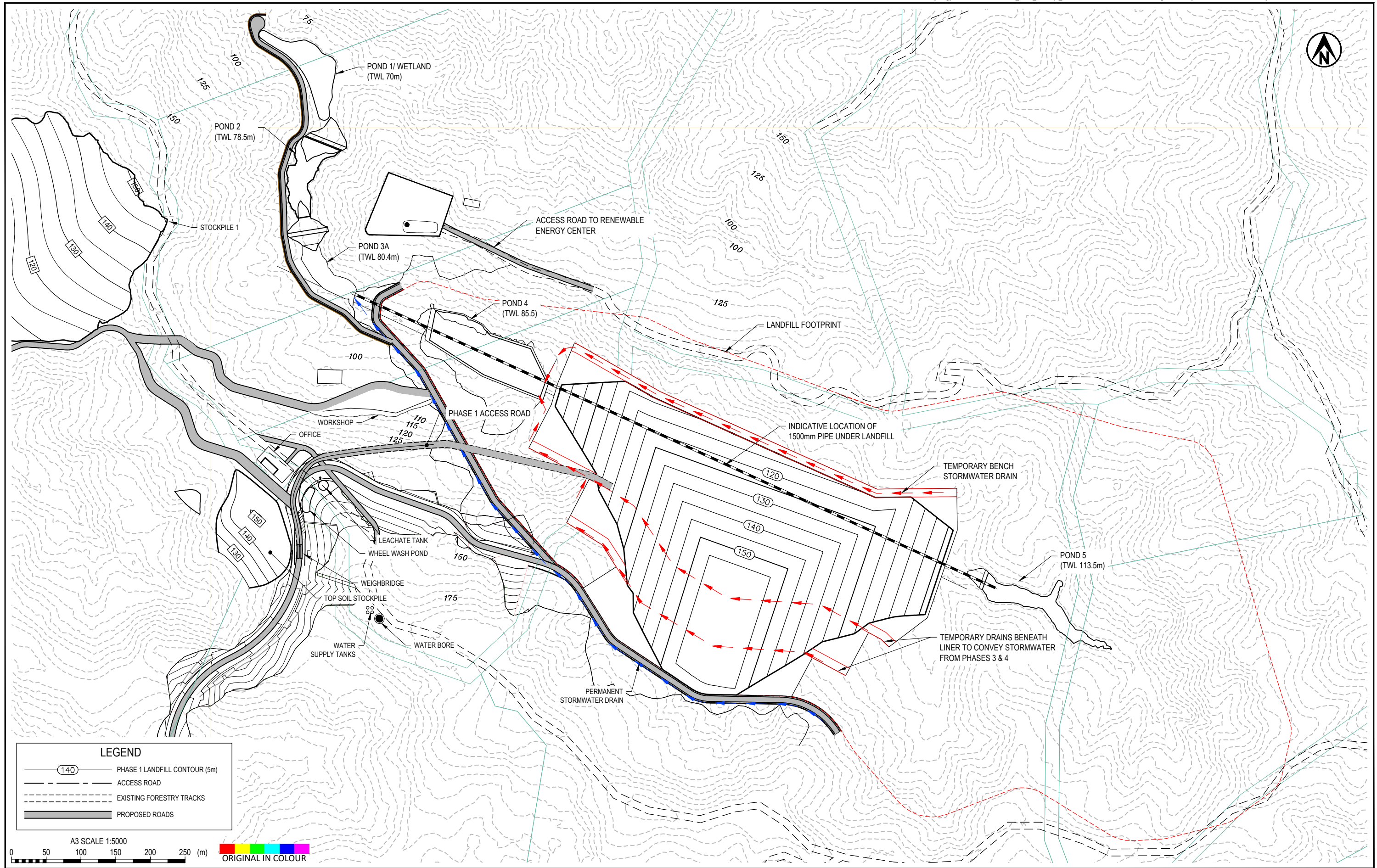
TITLE BIN EXCHANGE AREA AND LANDFILL ACCESS ROAD
ROAD CROSS SECTION (SHEET 1 OF 2)

SCALE (A3) 1:500

FIG No. ENG-34

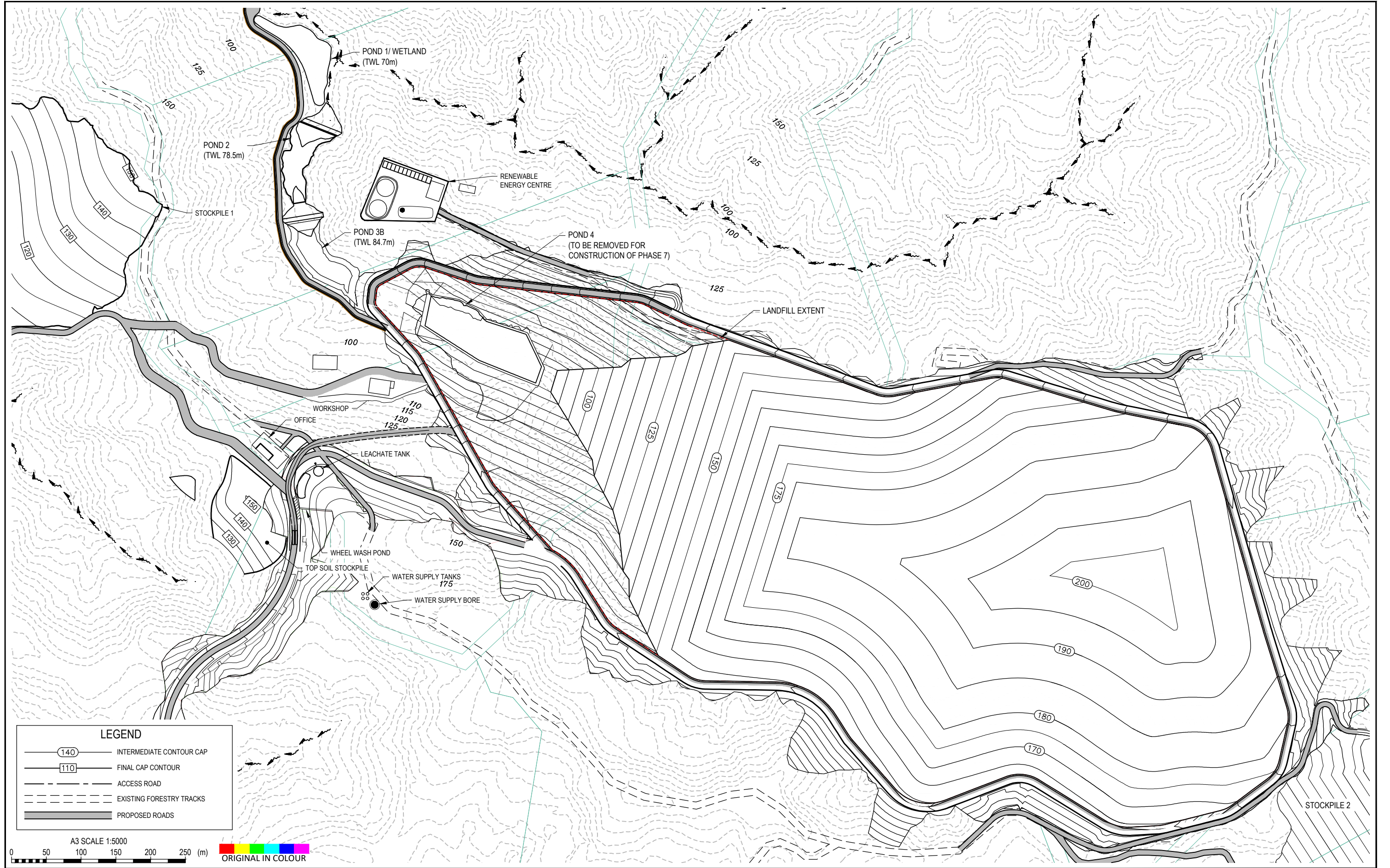
REV 1





PROJECT No. 1005069		
DESIGNED	AGBB	Jun.18
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Simonne F Eldridge		May.19
APPROVED	DATE	

CLIENT	WASTE MANAGEMENT NZ LTD		
PROJECT	AUCKLAND REGIONAL LANDFILL		
TITLE	STORMWATER DRAINAGE STAGE 1 DRAINAGE PLAN		
SCALE (A3)	1:5000	FIG No.	ENG-40
REV	1		

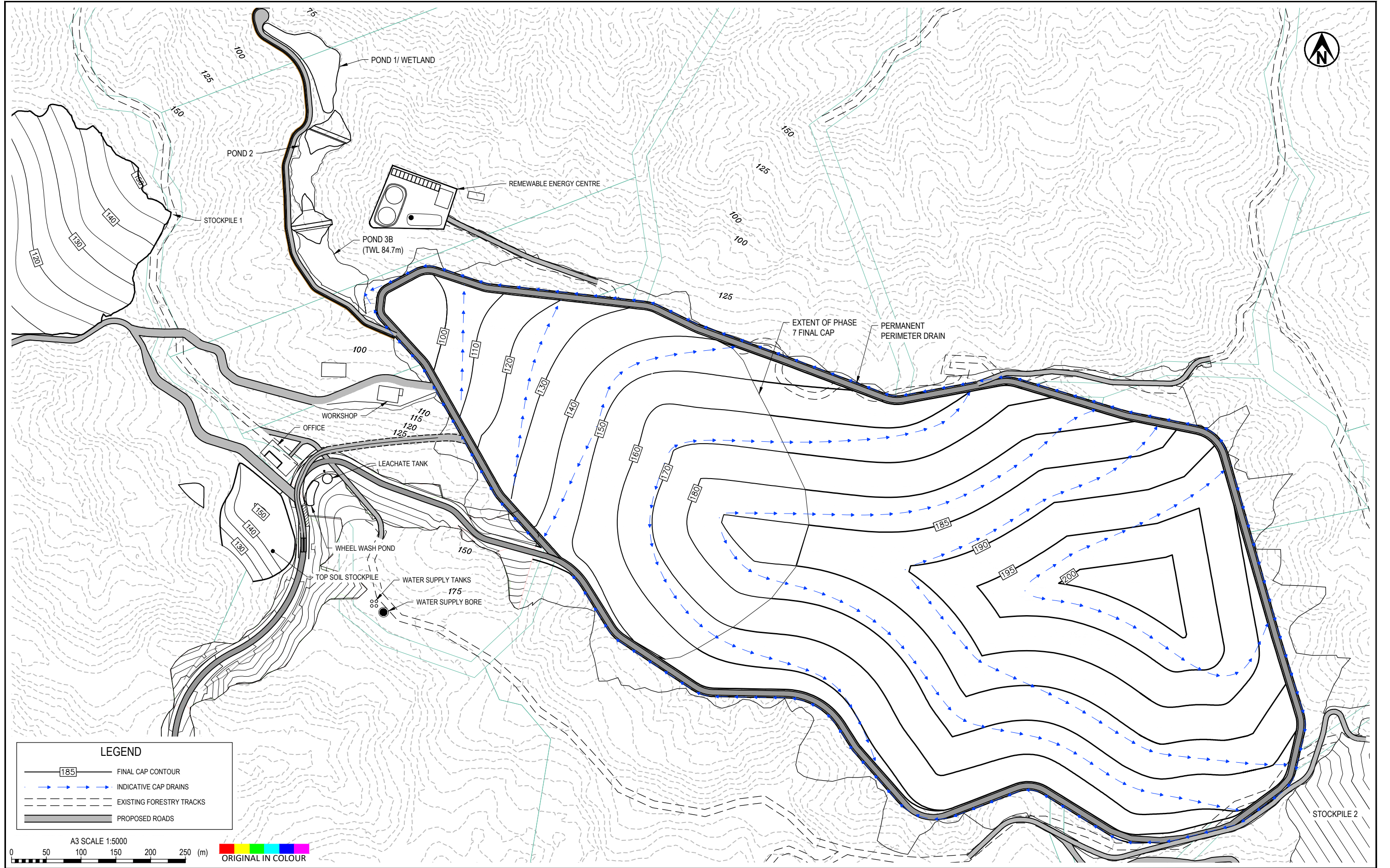


LEGEND

- 140 INTERMEDIATE CONTOUR CAP
- 110 FINAL CAP CONTOUR
- ACCESS ROAD
- - - EXISTING FORESTRY TRACKS
- ▬ PROPOSED ROADS

A3 SCALE 1:5000
 0 50 100 150 200 250 (m) ORIGINAL IN COLOUR

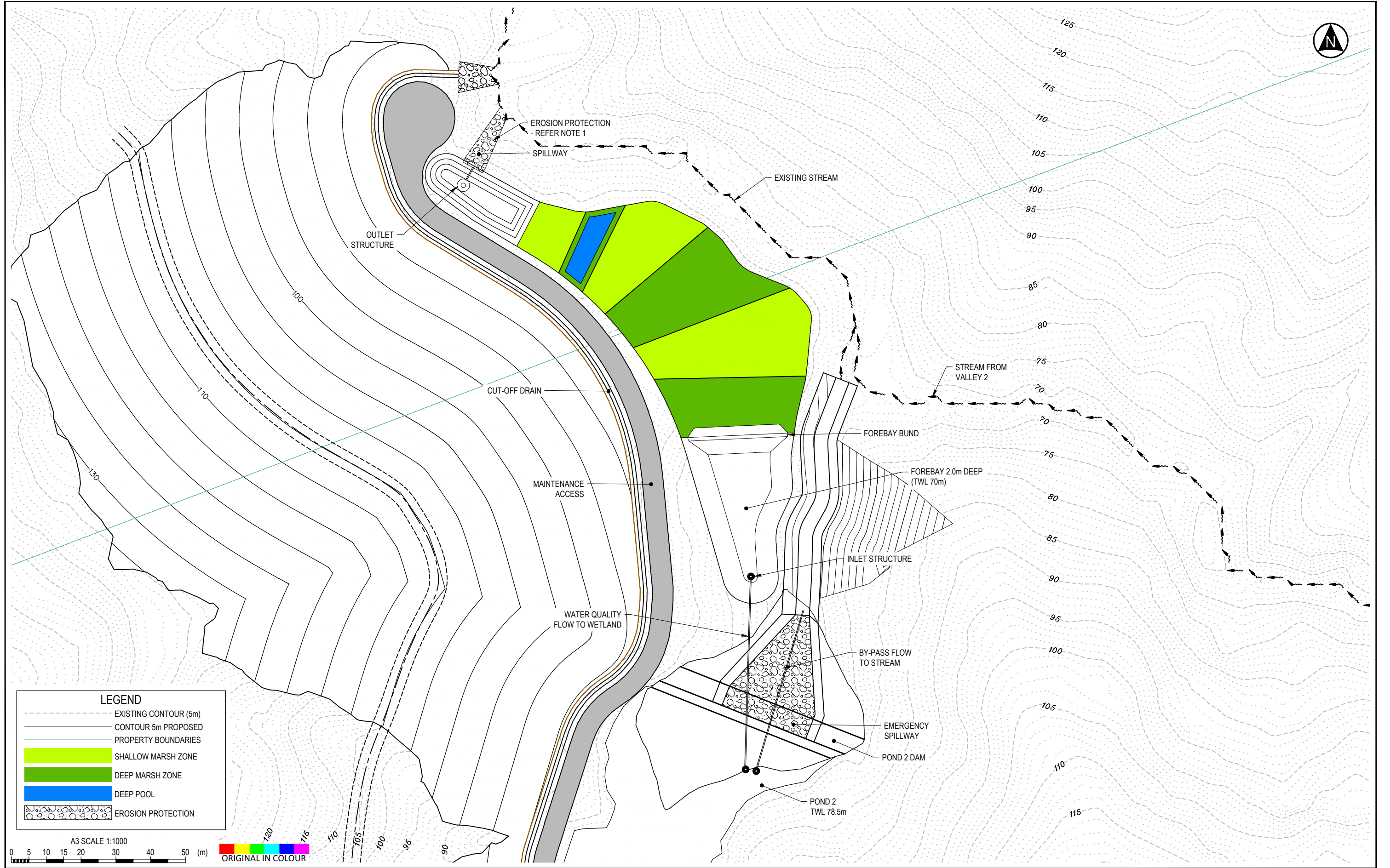
PROJECT No. 1005069			CLIENT WASTE MANAGEMENT NZ LTD		
DESIGNED AGBB Jun.18	DRAWN TORY Aug.18	CHECKED SFE May.19	PROJECT AUCKLAND REGIONAL LANDFILL		
Simonne F Eldridge May.19			TITLE STORMWATER DRAINAGE STAGE 2 DRAINAGE PLAN		
APPROVED		DATE	SCALE (A3) 1:5000	FIG No. ENG-41	REV 1



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Simonne F Eldridge		May.19
APPROVED	DATE	

CLIENT	WASTE MANAGEMENT NZ LTD
PROJECT	AUCKLAND REGIONAL LANDFILL
TITLE	STORMWATER DRAINAGE STAGE 3 DRAINAGE PLAN
SCALE (A3)	1:5000
FIG No.	ENG-42
REV	1



LEGEND

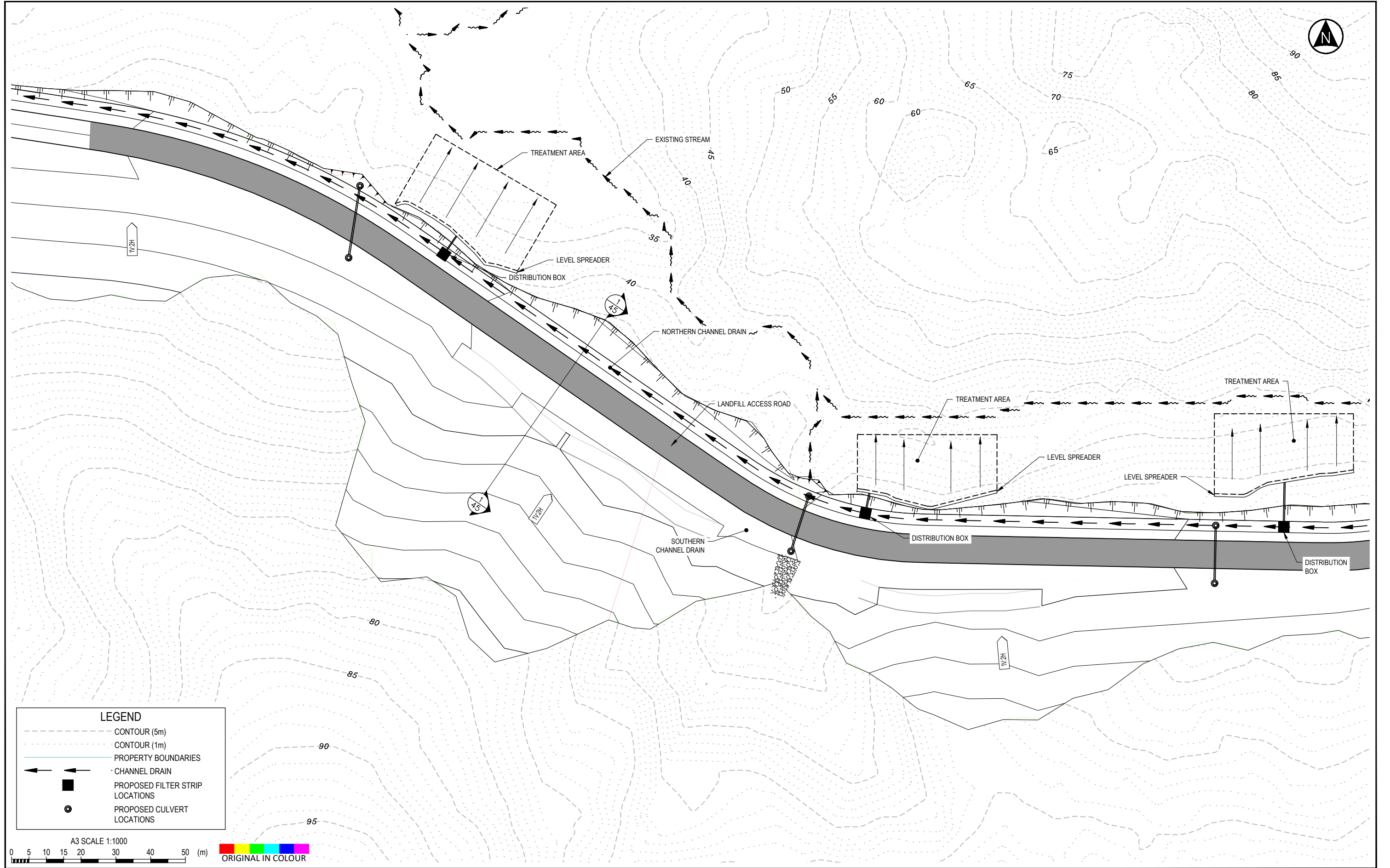
- EXISTING CONTOUR (5m)
- CONTOUR 5m PROPOSED
- - - PROPERTY BOUNDARIES
- SHALLOW MARSH ZONE
- DEEP MARSH ZONE
- DEEP POOL
- ▨ EROSION PROTECTION

A3 SCALE 1:1000
 0 5 10 15 20 30 40 50 (m)
 ORIGINAL IN COLOUR

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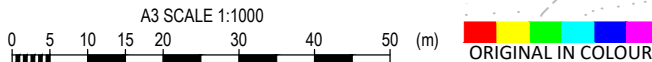
PROJECT No. 1005069		
DESIGNED	AGBB	Jun.18
DRAWN	TORY	Aug.18
CHECKED	SFE	May.19
Simonne F Eldridge		May.19
APPROVED	DATE	

CLIENT	WASTE MANAGEMENT NZ LTD		
PROJECT	AUCKLAND REGIONAL LANDFILL		
TITLE	STORMWATER PROPOSED WETLAND SCHEMATIC		
SCALE (A3)	1:1000	FIG No.	ENG-43
REV	1		

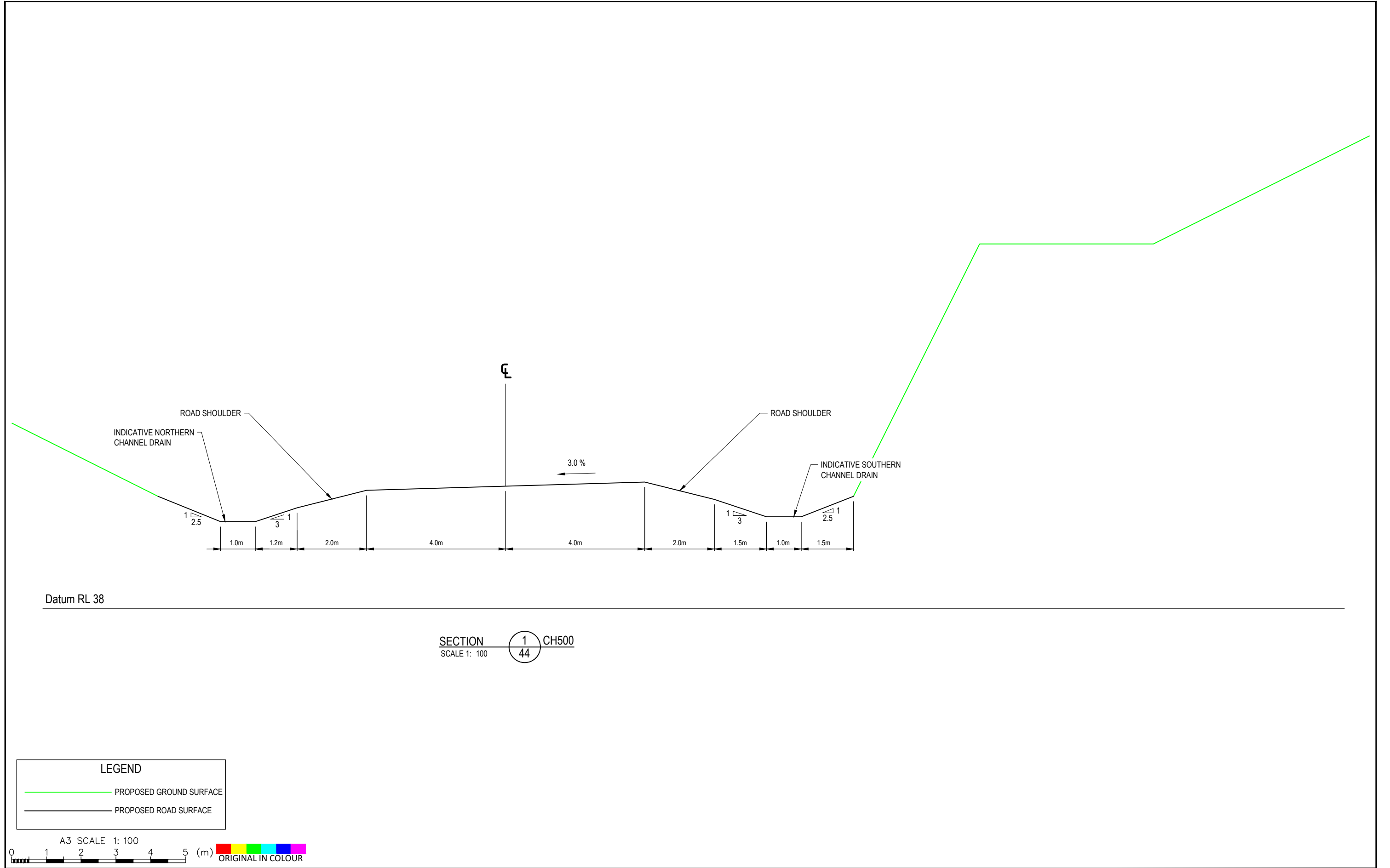


LEGEND

- CONTOUR (5m)
- CONTOUR (1m)
- PROPERTY BOUNDARIES
- CHANNEL DRAIN
- PROPOSED FILTER STRIP LOCATIONS
- PROPOSED CULVERT LOCATIONS



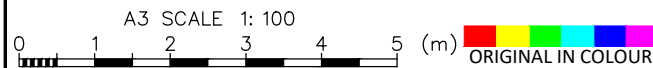
PROJECT No. 1005069			CLIENT WASTE MANAGEMENT NZ LTD
DESIGNED	AGBB	Jun.18	PROJECT AUCKLAND REGIONAL LANDFILL
DRAWN	TORY	Aug.18	
CHECKED	SFE	May.19	
Simonne F Eldridge May.19			TITLE STORMWATER TYPICAL FILTER STRIP DESIGN
APPROVED	DATE	SCALE (A3) 1:1000	FIG No. ENG-44
			REV 1



Datum RL 38

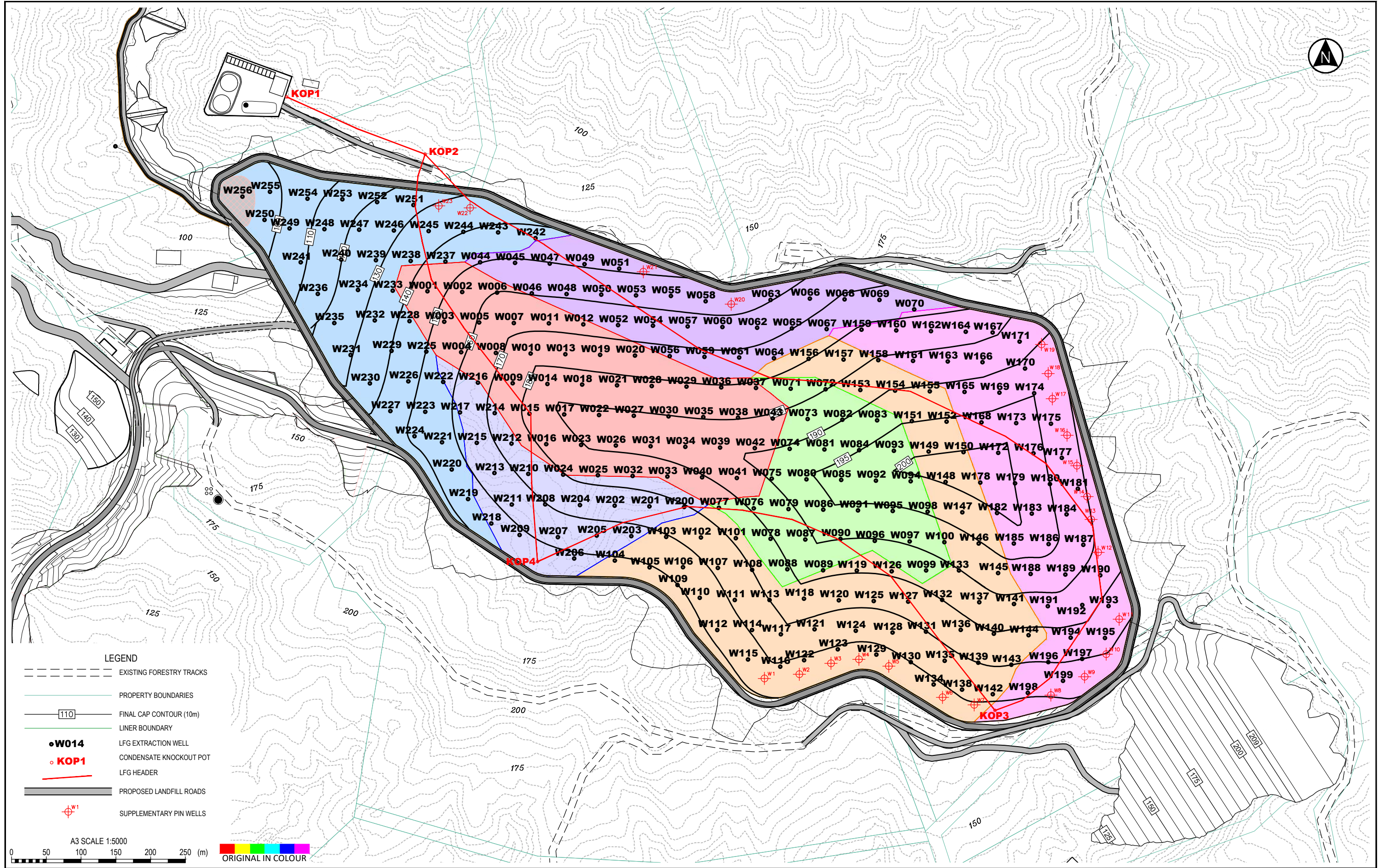
SECTION 1 CH500
SCALE 1: 100

LEGEND	
	PROPOSED GROUND SURFACE
	PROPOSED ROAD SURFACE



PROJECT No. 1005069		
DESIGNED	AFRE	Nov.18
DRAWN	TORY	Nov.18
CHECKED	SFE	May.19
Simonne F Eldridge		May.19
APPROVED	DATE	

CLIENT	WASTE MANAGEMENT NZ LTD	
PROJECT	AUCKLAND REGIONAL LANDFILL	
TITLE	LANDFILL ACCESS ROAD TYPICAL ACCESS ROAD CROSS SECTION	
SCALE (A3)	1:100	FIG No. ENG-45
REV	1	



LEGEND

- EXISTING FORESTRY TRACKS
- PROPERTY BOUNDARIES
- FINAL CAP CONTOUR (10m)
- LINER BOUNDARY
- W014 LFG EXTRACTION WELL
- KOP1 CONDENSATE KNOCKOUT POT
- LFG HEADER
- PROPOSED LANDFILL ROADS
- SUPPLEMENTARY PIN WELLS

A3 SCALE 1:5000



NOTES:

1. LFG LAYOUT PROVIDED BY WMNZ.

PROJECT No. 1005069

DESIGNED	AGBB	Jun.18
DRAWN	TORY	Aug.18
CHECKED	SFE	May.19

Simonne F Eldridge May.19

APPROVED DATE

CLIENT WASTE MANAGEMENT NZ LTD

PROJECT AUCKLAND REGIONAL LANDFILL

TITLE LANDFILL INDICATIVE LFG WELL LAYOUT PLAN

SCALE (A3) 1:5000

FIG No. ENG-60

REV 1



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