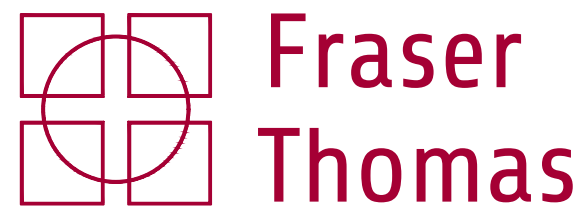


FORMER TOKANUI HOSPITAL

DEMOLITION AND REMEDIATION PROJECT

TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND



33097

FOR RESOURCE CONSENT

ISSUE SET 7

08/10/25

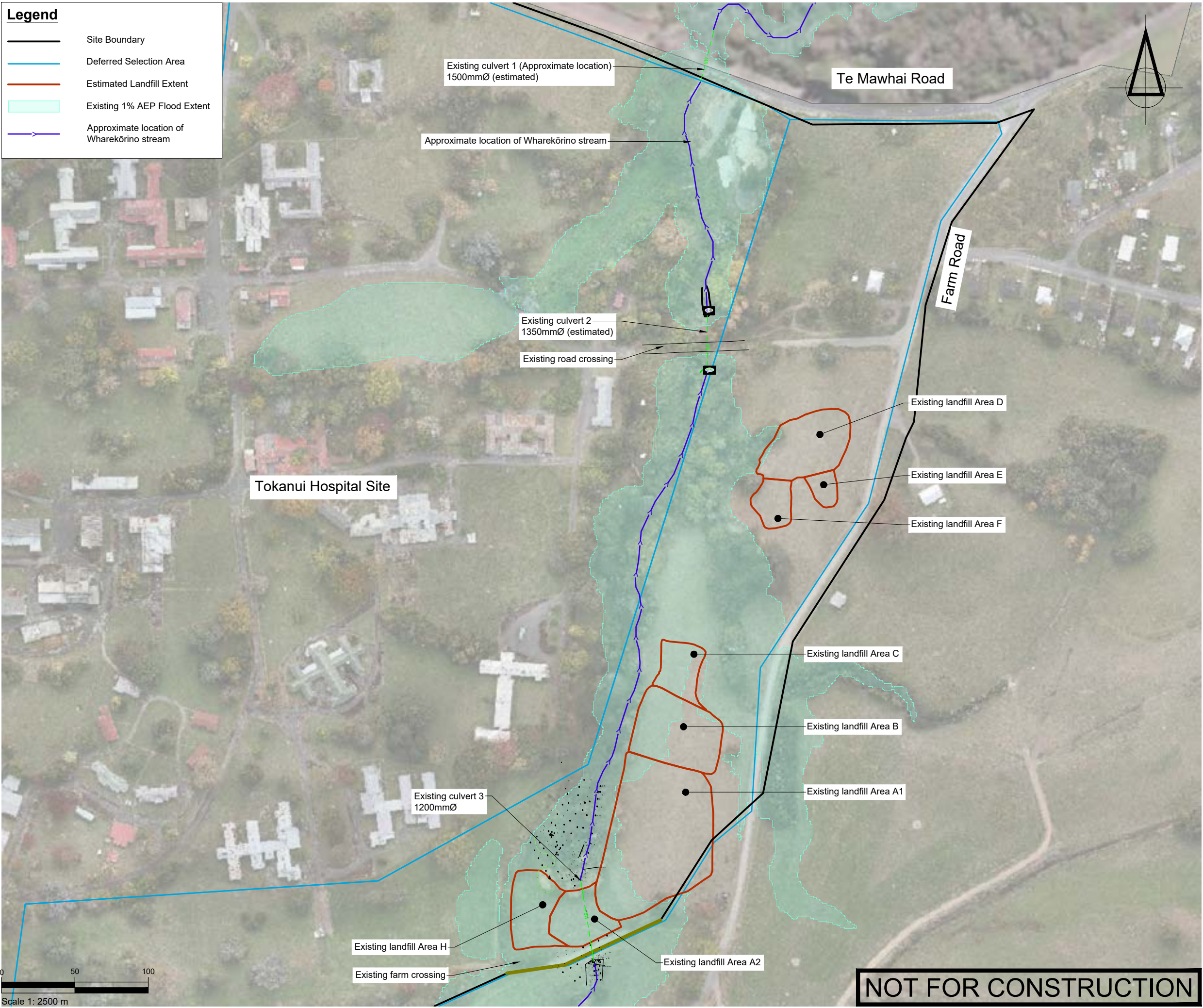
LIST OF DRAWINGS

DRAWING	DRAWING TITLE	ISSUE SET	7/11/2024	8/11/2024	21/11/2024	19/06/2025	30/06/2025	19/08/2025	08/10/2025
			1	2	3	4	5	6	7
33097/LF001	EXISTING LANDFILL OVERVIEW PLAN		-	-	-	A	A	A	A
33097/LF002	INTRUSIVE GROUND INVESTIGATION TEST PIT LOCATION PLAN 1 OF 3		-	-	-	A	A	A	A
33097/LF003	INTRUSIVE GROUND INVESTIGATION TEST PIT LOCATION PLAN 2 OF 3		-	-	-	A	A	A	A
33097/LF004	INTRUSIVE GROUND INVESTIGATION TEST PIT LOCATION PLAN 3 OF 3		-	-	-	A	A	A	A
33097/LF010	PROPOSED LANDFILL REMEDIAL WORKS SITE OVERVIEW PLAN		-	-	A	B	B	C	C
33097/LF100	EXISTING LANDFILL AREAS D, E AND F PLAN		-	-	-	A	A	A	A
33097/LF110	PROPOSED NORTHERN DISPOSAL SITE CELL PROPOSED FINAL DESIGN PLAN		-	-	-	A	A	A	A
33097/LF120	PROPOSED NORTHERN DISPOSAL SITE CELL BASE OF CELL LEVELS PLAN		-	-	-	A	A	A	A
33097/LF121	PROPOSED NORTHERN DISPOSAL SITE CELL FINISHED GROUND LEVELS PLAN		-	-	-	A	A	A	A
33097/LF130	PROPOSED NORTHERN DISPOSAL SITE CELL CROSS SECTIONS		-	-	-	A	A	A	A
33097/LF140	PROPOSED NORTHERN DISPOSAL SITE CELL CELL FORMATION CUT AND FILL PLAN		-	-	-	A	A	A	A
33097/LF141	PROPOSED NORTHERN DISPOSAL SITE CELL FILLING PLAN		-	-	-	A	A	A	A
33097/LF190	PROPOSED NORTHERN DISPOSAL SITE CELL EROSION AND SEDIMENT CONTROL PLAN PHASE 1		-	-	-	A	A	A	A
33097/LF191	PROPOSED NORTHERN DISPOSAL SITE CELL EROSION AND SEDIMENT CONTROL PLAN PHASE 2		-	-	-	A	A	A	A
33097/LF200	EXISTING LANDFILL AREAS A1, B, AND C PLAN		-	-	-	A	A	A	A
33097/LF210	PROPOSED SOUTHERN DISPOSAL SITE CELL PROPOSED FINAL DESIGN PLAN		-	-	A	B	B	B	B
33097/LF219	PROPOSED SOUTHERN DISPOSAL SITE CELL PROPOSED TOE BUND PLAN				-	A	A	A	A
33097/LF220	PROPOSED SOUTHERN DISPOSAL SITE CELL BASE OF CELL LEVELS PLAN		-	-	A	B	B	B	B
33097/LF221	PROPOSED SOUTHERN DISPOSAL SITE CELL FINISHED GROUND LEVELS PLAN		-	-	A	B	B	B	B
33097/LF230	PROPOSED SOUTHERN DISPOSAL SITE CELL CROSS SECTIONS SHEET 1		-	-	A	B	B	B	B
33097/LF231	PROPOSED SOUTHERN DISPOSAL SITE CELL CROSS SECTIONS SHEET 2				-	A	A	A	A
33097/LF238	PROPOSED SOUTHERN DISPOSAL SITE CELL REFUSE EXCAVATION PLAN				-	A	A	A	A
33097/LF239	PROPOSED SOUTHERN DISPOSAL SITE CELL TOE BUND CONSTRUCTION PLAN				-	A	A	A	A
33097/LF240	PROPOSED SOUTHERN DISPOSAL SITE CELL CELL FORMATION CUT AND FILL PLAN		-	-	A	B	B	B	B

33097/LF241	PROPOSED SOUTHERN DISPOSAL SITE CELL REFUSE FILLING PLAN	-	-	A	B	B	B	B	B
33097/LF250	PROPOSED SOUTHERN DISPOSAL SITE CELL GROUNDWATER DRAIN LONG SECTION AND DETAIL	-	-	A	B	B	B	B	B
33097/LF289	PROPOSED SOUTHERN DISPOSAL SITE CELL EROSION AND SEDIMENT CONTROL PLAN PHASE 0			-	A	A	A	A	A
33097/LF290	PROPOSED SOUTHERN DISPOSAL SITE CELL EROSION AND SEDIMENT CONTROL PLAN PHASE 1	-	-	A	B	B	B	B	B
33097/LF291	PROPOSED SOUTHERN DISPOSAL SITE CELL EROSION AND SEDIMENT CONTROL PLAN PHASE 2	-	-	A	B	B	B	B	B
33097/LF300	EXISTING LANDFILL AREAS A2 AND AREA H, AND EXISTING CULVERT 3 PLAN	-	-	-	A	A	A	A	A
33097/LF310	AREAS A2/H & CULVERT 3 PROPOSED FINAL DESIGN PLAN	-	A	A	B	C	D	E	
33097/LF311	INDICATIVE VEGETATION REMOVAL PLAN		-	-	A	A	A	A	A
33097/LF312	INDICATIVE STREAM CONSTRUCTION PLAN 1				-	-	A	A	A
33097/LF313	INDICATIVE STREAM CONSTRUCTION PLAN 2				-	-	A	A	A
33097/LF320	AREAS A2/H & CULVERT 3 REFUSE UNDERCUT PLAN	-	-	-	A	A	A	A	A
33097/LF321	AREAS A2/H & CULVERT 3 FINISHED LEVELS PLAN	-	-	-	A	A	B	C	
33097/LF330	AREAS A2/H & CULVERT 3 CROSS SECTION PLAN 1	-	-	-	A	A	A	A	A
33097/LF331	AREAS A2/H & CULVERT 3 CROSS SECTION PLAN 2				-	-	A	A	A
33097/LF340	AREAS A2/H & CULVERT 3 UNDERCUT STRIP PLAN	-	-	-	A	A	A	A	A
33097/LF341	AREAS A2/H & CULVERT 3 FINAL LEVELS CUT AND FILL PLAN	-	-	-	A	A	A	A	A
33097/LF360	AREAS A2/H & CULVERT 3 CULVERT LONG SECTION PLAN	-	A	A	B	C	D	D	
33097/LF361	AREAS A2/H & CULVERT 3 CULVERT INLET DETAIL				-	-	A	A	A
33097/LF362	AREAS A2/H & CULVERT 3 CULVERT OUTLET DETAIL				-	-	-	-	-
33097/LF390	AREAS A2/H & CULVERT 3 EROSION AND SEDIMENT CONTROL PLAN	-	A	A	B	B	C	C	
33097/LF500	PROPOSED LANDFILL CELL TYPICAL DETAIL	-	-	-	A	A	A	A	A
33097/LF540	DECANTING EARTH BUND DIMENSIONS PLAN	-	-	-	-	-	-	-	-
33097/LF545	DECANTING EARTH BUND DETAILS	-	-	-	-	-	-	-	-
33097/LF550	EROSION AND SEDIMENT CONTROL DETAILS PAGE 1	-	-	-	A	A	A	A	A
33097/LF551	EROSION AND SEDIMENT CONTROL DETAILS PAGE 2	-	-	-	A	A	A	A	A

Legend

Site Boundary

Deferred Selection Area

SURVEYED			APPROVED SF 05/11/24	DATE	
DESIGNED	TB	14/08/24			
DRAWN	TB	15/08/24			
CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
A	COORDINATE SYSTEM CHANGED			SF	23/05/25

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

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TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT
FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE
EXISTING LANDFILL OVERVIEW
PLAN

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CHRISTCHURCH 03 358 5936

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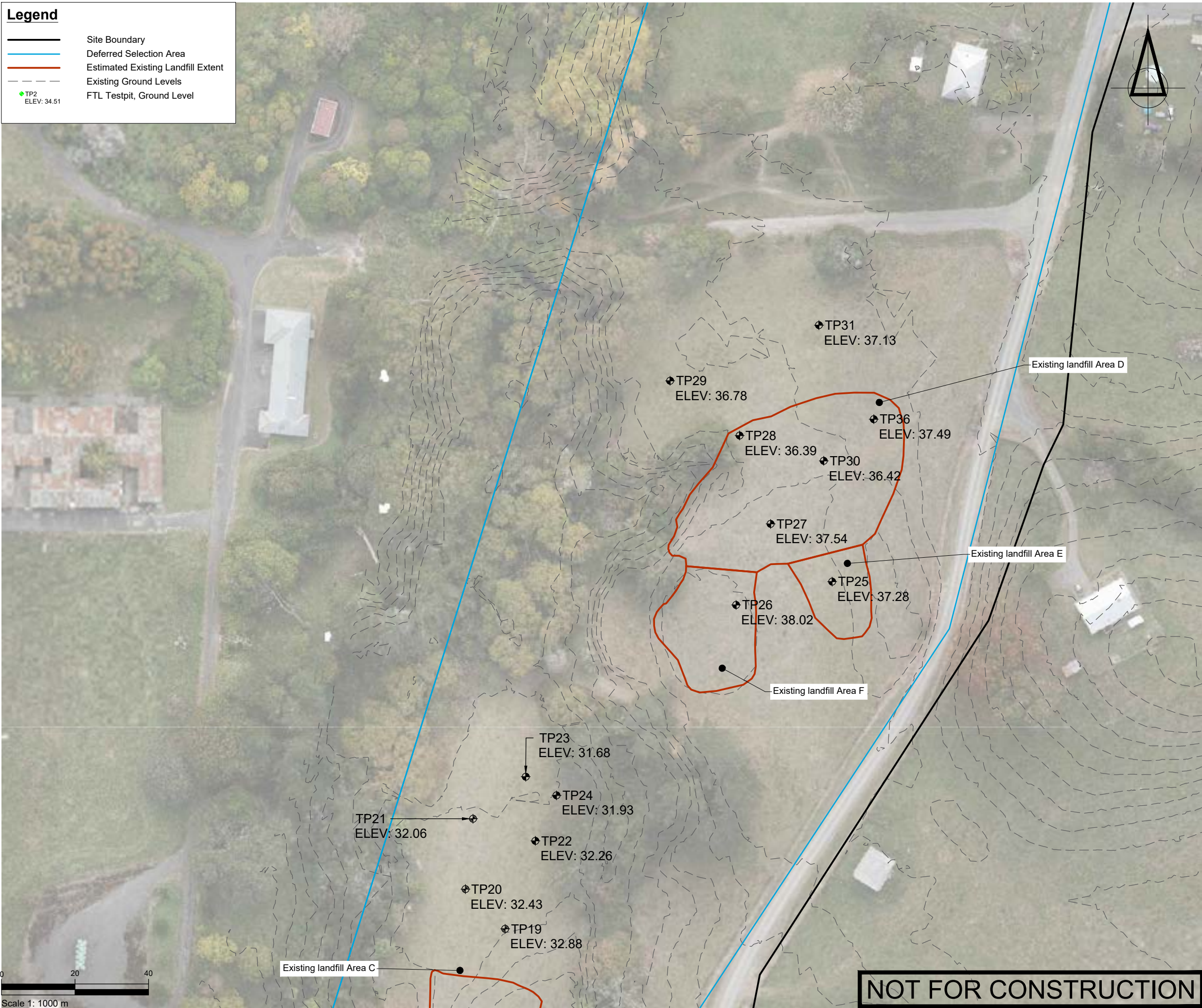
SCALE 1:2500 (A3)

DRAWING No 33097/LF001 REVISION A

Legend

- Site Boundary
- Deferred Selection Area
- Estimated Existing Landfill Extent
- Existing Ground Levels
- FTL Testpit, Ground Level

TP2
ELEV: 34.51



SURVEYED	TB	14/08/24	APPROVED	SF	DATE
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REVISION	CHANGES			CHECKED	DATE
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PROJECT
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TITLE
INTRUSIVE GROUND
INVESTIGATION TEST PIT
LOCATION PLAN 1 OF 3



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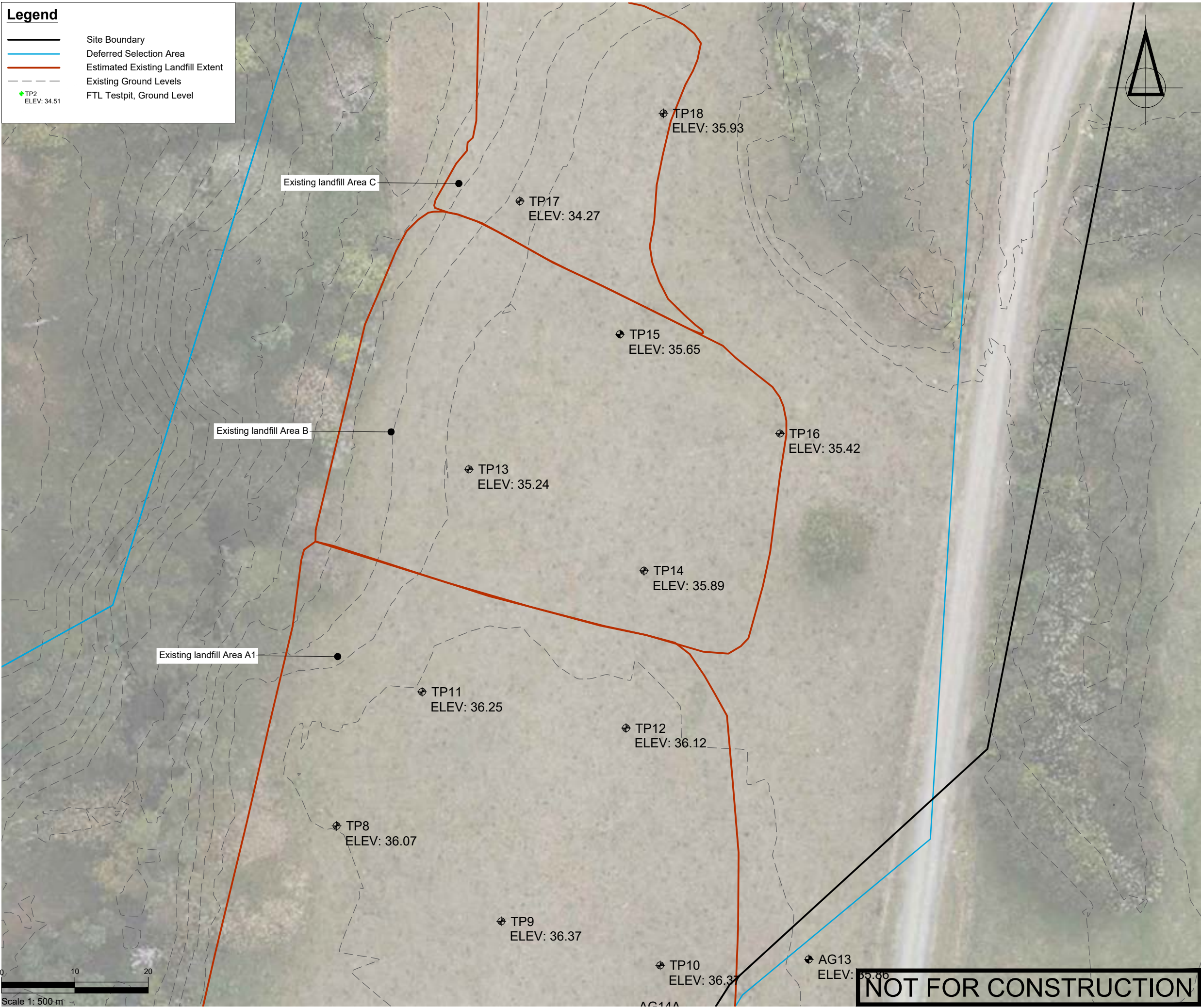
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SCALE	1:1000	(A3)
DRAWING No	33097/LF002	REVISION
		A

Legend

Site Boundary

Deferred Selection AreaTP2
ELEV: 34.51

SURVEYED	TB	14/08/24	APPROVED	SF	DATE
DESIGNED	TB	14/08/24			
DRAWN	TB	15/08/24			
CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
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INFORMATION NEW ZEALAND

PROJECT

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PROJECT

TITLE

INTRUSIVE GROUND
INVESTIGATION TEST PIT
LOCATION PLAN 2 OF 3

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SCALE 1:500 (A3)

DRAWING No 33097/LF003

REVISION A

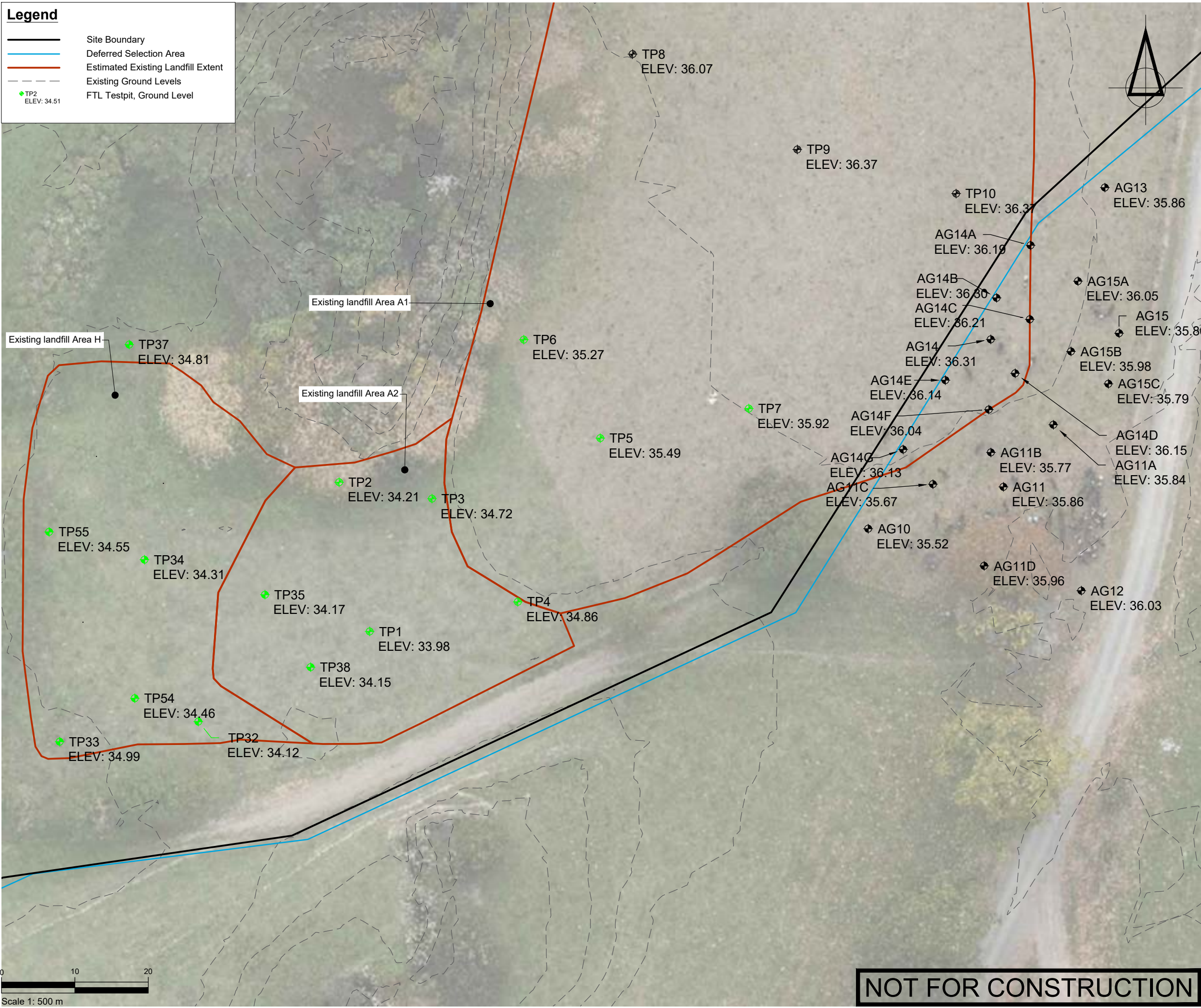
Legend

Site Boundary

Deferred Selection Area

TP2

ELEV: 34.51



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DESIGNED	TB	14/08/24			
DRAWN	TB	15/08/24			
CHECKED	SF	05/11/24			
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A	COORDINATE SYSTEM CHANGED			SF	23/05/25

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INFORMATION NEW ZEALAND

PROJECT

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DEMOLITION AND REMEDIATION
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TITLE

INTRUSIVE GROUND
INVESTIGATION TEST PIT
LOCATION PLAN 3 OF 3

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SCALE 1:500 (A3)

DRAWING No 33097/LF004 REVISION A

NOT FOR CONSTRUCTION

Legend

Site Boundary

Deferred Selection Area

Estimated Existing Landfill Extent

Proposed Ground Levels

Existing Ground Levels

Proposed 1% AEP Flood Extent

Proposed Grass

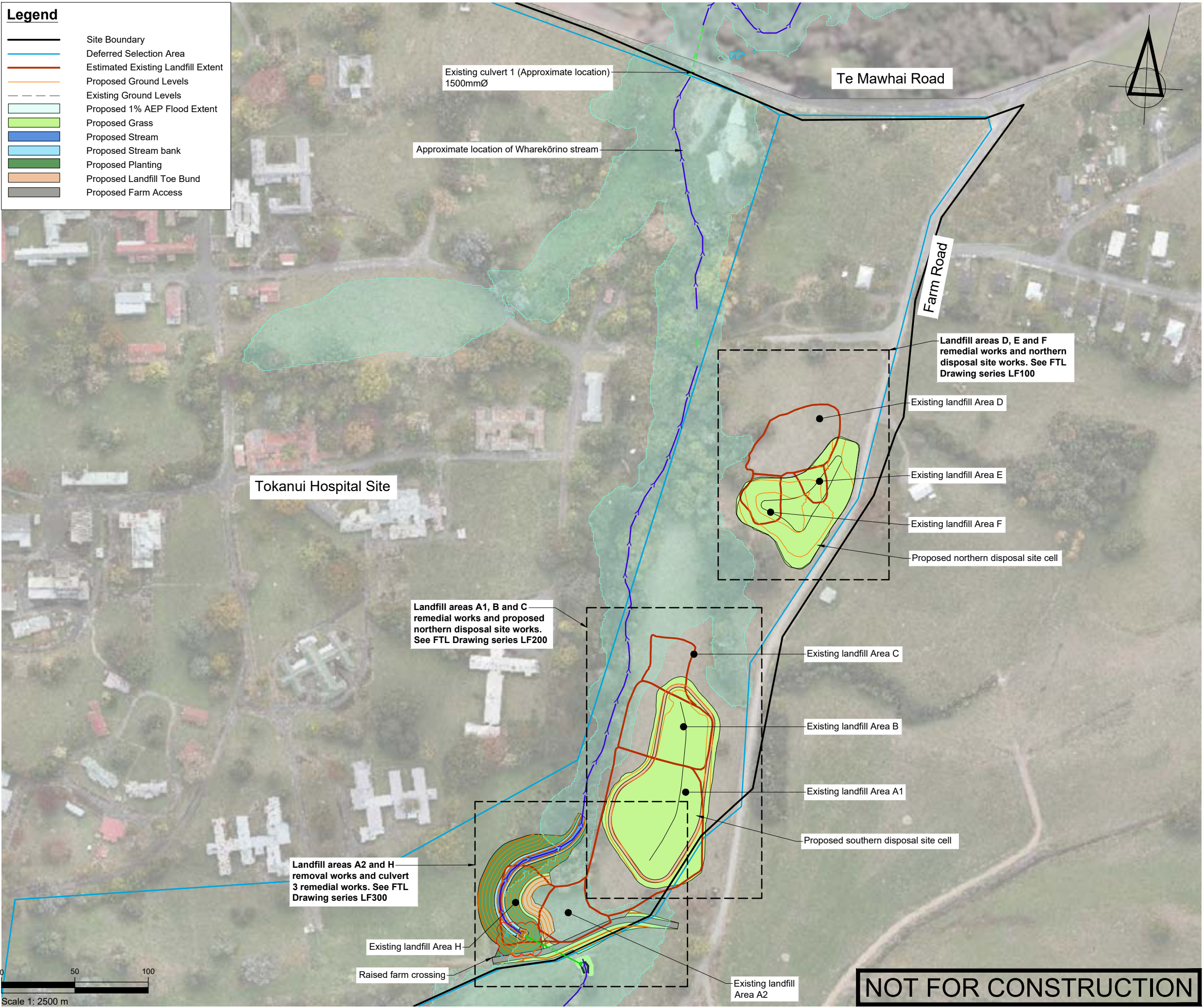
Proposed Stream

Proposed Stream bank

Proposed Planting

Proposed Landfill Toe Bund

Proposed Farm Access



SURVEYED			APPROVED SF 05/11/24	DATE	
DESIGNED	TB	14/08/24			
DRAWN	TB	15/08/24			
CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
A	STH LF TOE BUND ADDED			SF	20/11/24
B	AREA A2/H REDESIGN			SF	23/05/25
C	CULVERT 3 OUTLET CHANGE			SF	20/08/25

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
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TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

PROPOSED LANDFILL REMEDIAL
WORKS SITE OVERVIEW PLAN

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SCALE 1:2500 (A3)

DRAWING No 33097/LF010 REVISION C

NOT FOR CONSTRUCTION

Legend

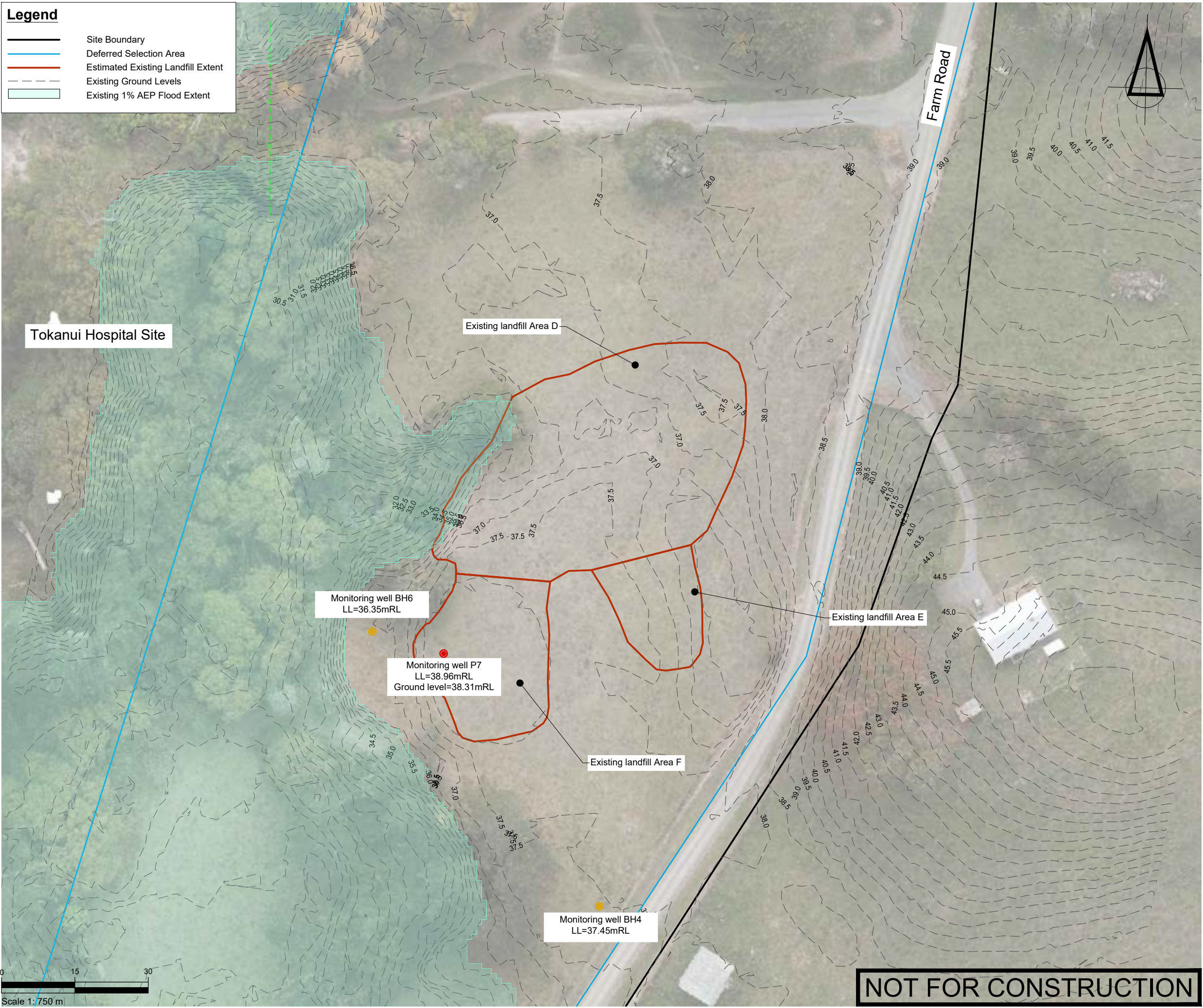
Site Boundary

Deferred Selection Area

Estimated Existing Landfill Extent

Existing Ground Levels

Existing 1% AEP Flood Extent



SURVEYED			APPROVED SF 05/11/24	DATE	
DESIGNED	TB	14/08/24			
DRAWN	TB	15/08/24			
CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
A	COORDINATE SYSTEM CHANGED			SF	23/05/25

NOTES

PROJECT DATUMS:

LEVEL: New Zealand Vertical Datum 2016

COORDINATE: New Zealand Transverse Mercator

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TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT

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DEMOLITION AND REMEDIATION
PROJECT

TITLE

EXISTING LANDFILL AREAS D, E
AND F PLAN

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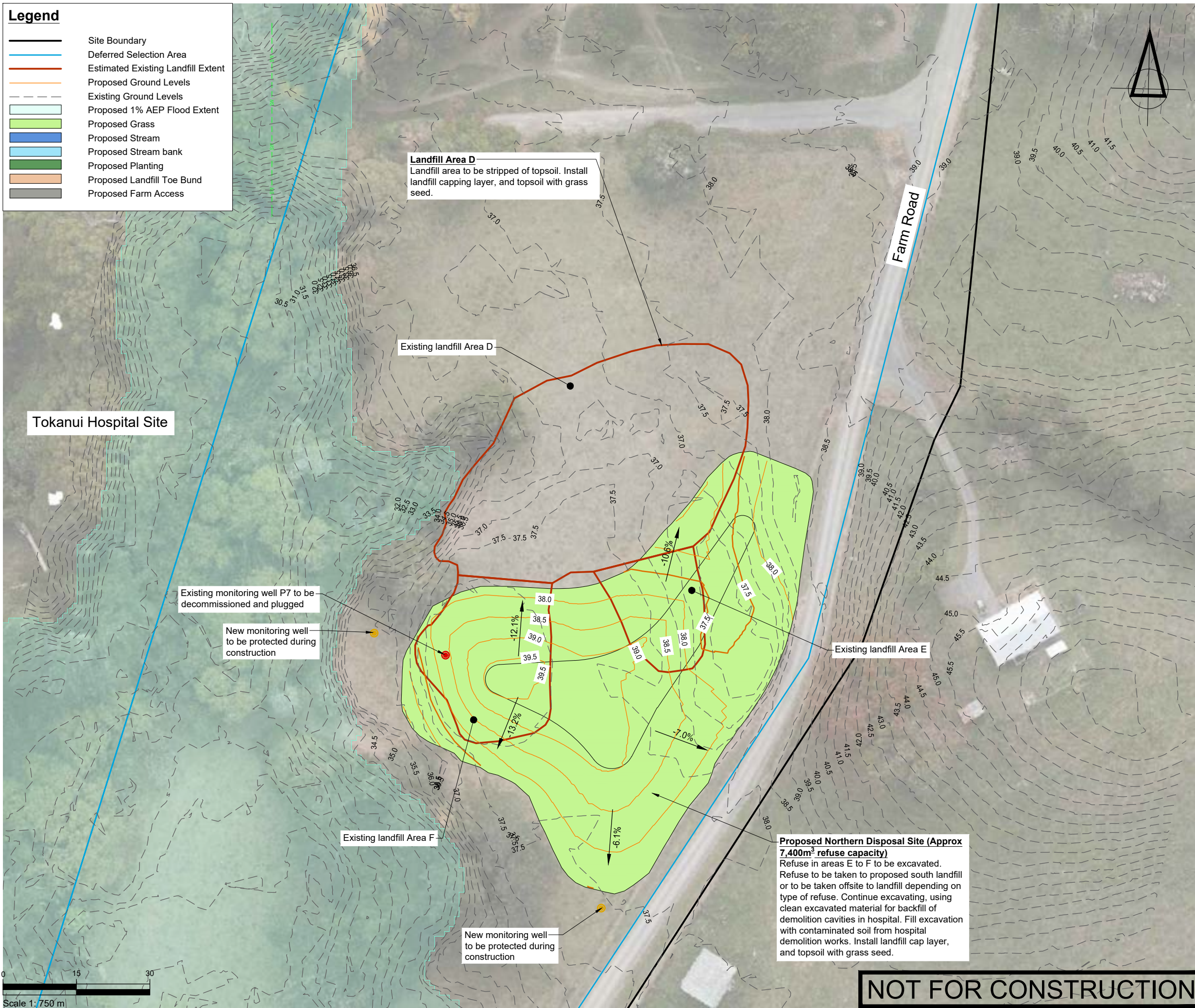
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SCALE 1:750 (A3)

DRAWING No 33097/LF100 REVISION A

	Site Boundary
	Deferred Selection Area
	Estimated Existing Landfill Extent
	Proposed Ground Levels
	Existing Ground Levels
	Proposed 1% AEP Flood Extent
	Proposed Grass
	Proposed Stream
	Proposed Stream bank
	Proposed Planting
	Proposed Landfill Toe Bund
	Proposed Farm Access

[illegible][illegible]

PROJECT DATUMS:
 LEVEL: New Zealand Vertical Datum 2016
 COORDINATE: New Zealand Transverse Mercator

TOITU TE WHENUA LAND INFORMATION NEW ZEALAND

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

PROPOSED NORTHERN
DISPOSAL SITE CELL
PROPOSED FINAL DESIGN PLAN

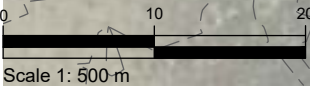
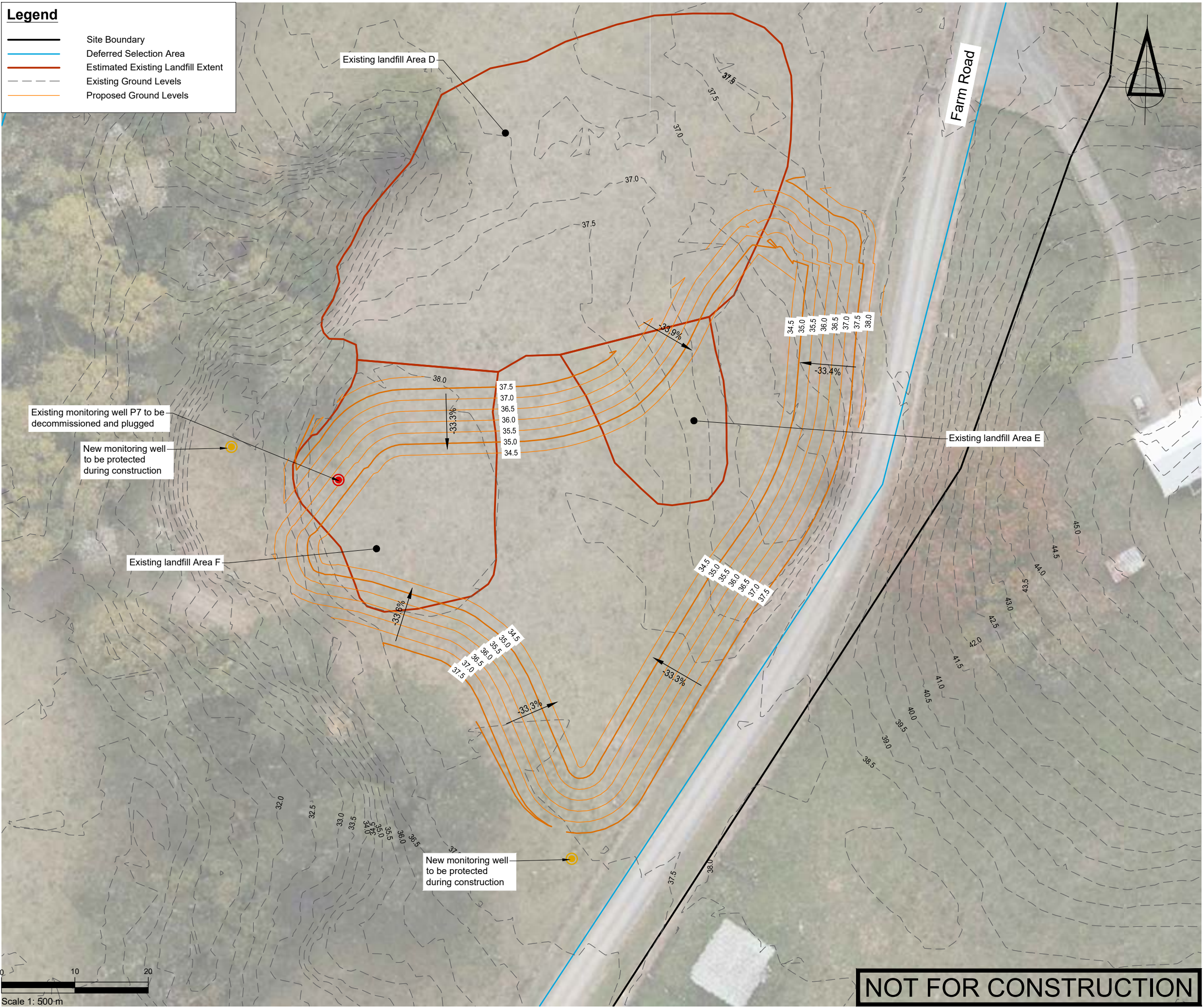
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FOR RESOURCE CONSENT
Construction works shall commence only on receipt of and in accordance with the Council or Council organisation stamped approved drawings, unless otherwise indicated.

SCALE	1:750	(A3)
DRAWING No	33097/LF110	REVISION A

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Legend

- Site Boundary
- Deferred Selection Area
- Estimated Existing Landfill Extent
- Existing Ground Levels
- Proposed Ground Levels



NOT FOR CONSTRUCTION

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REVISION	CHANGES			CHECKED	DATE
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INFORMATION NEW ZEALAND**

PROJECT
**FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT**

TITLE
**PROPOSED NORTHERN
DISPOSAL SITE CELL
BASE OF CELL LEVELS PLAN**



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SCALE	1:500 (A3)
DRAWING No	33097/LF120
REVISION	A

Legend

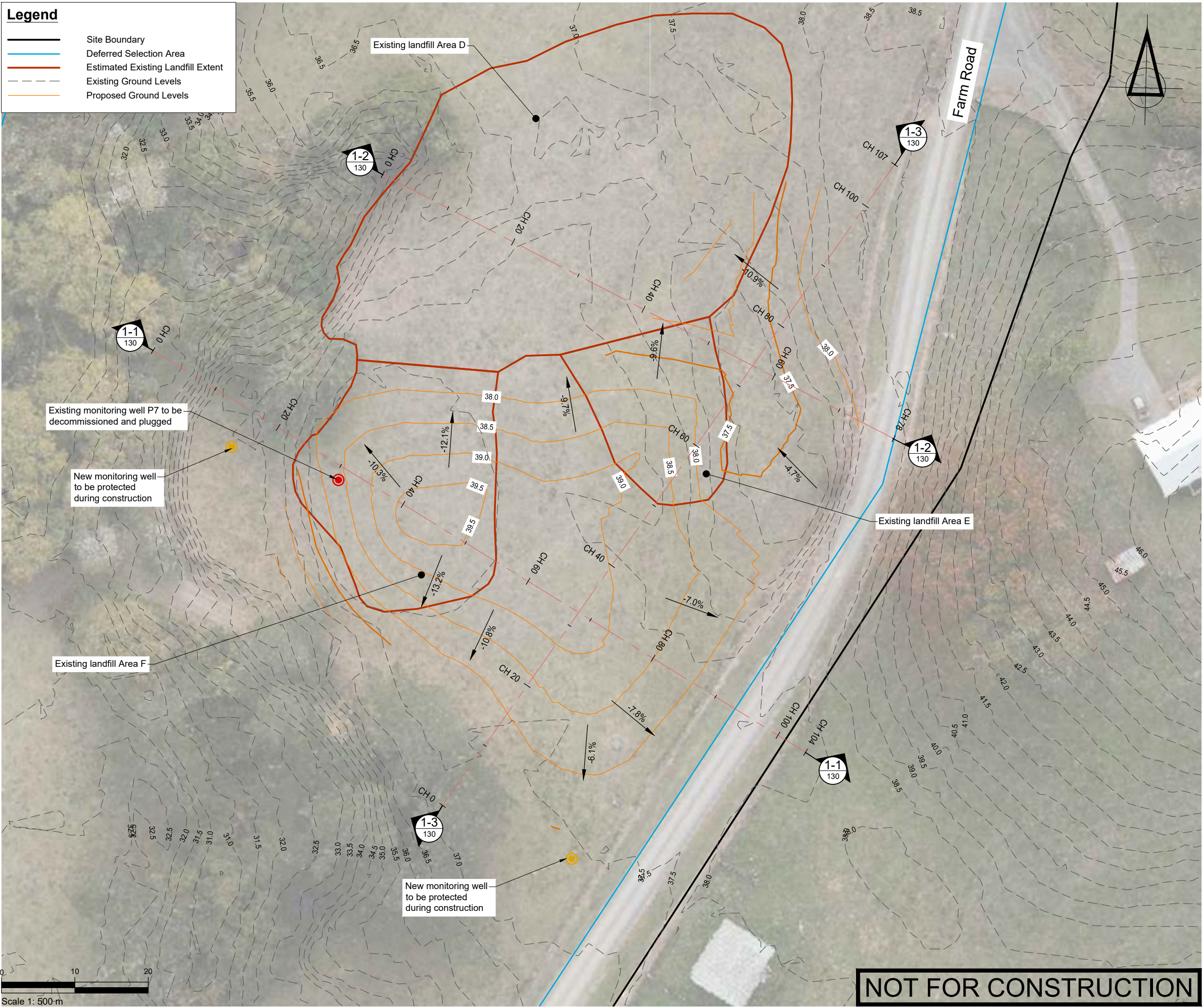
Site Boundary

Deferred Selection Area

Estimated Existing Landfill Extent

Existing Ground Levels

Proposed Ground Levels



SURVEYED	TB	14/08/24	APPROVED	SF	DATE
DRAWN	TB	21/08/24			
CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
A	COORDINATE SYSTEM CHANGED			SF	23/05/25

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**TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND**

PROJECT
**FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT**

TITLE
**PROPOSED NORTHERN
DISPOSAL SITE CELL
FINISHED GROUND LEVELS
PLAN**

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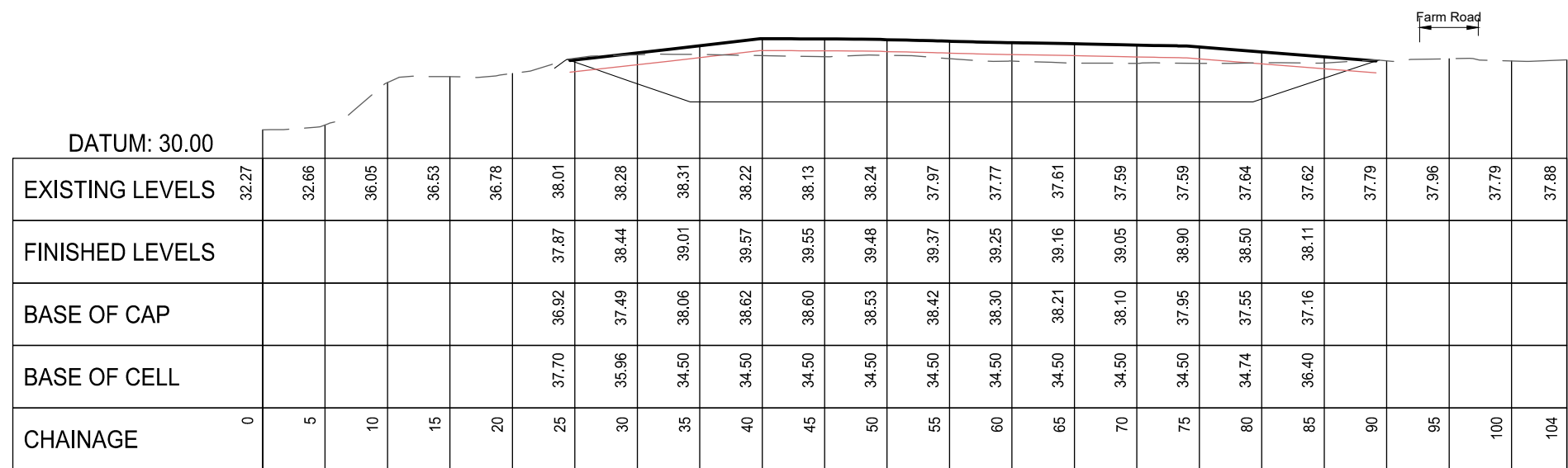
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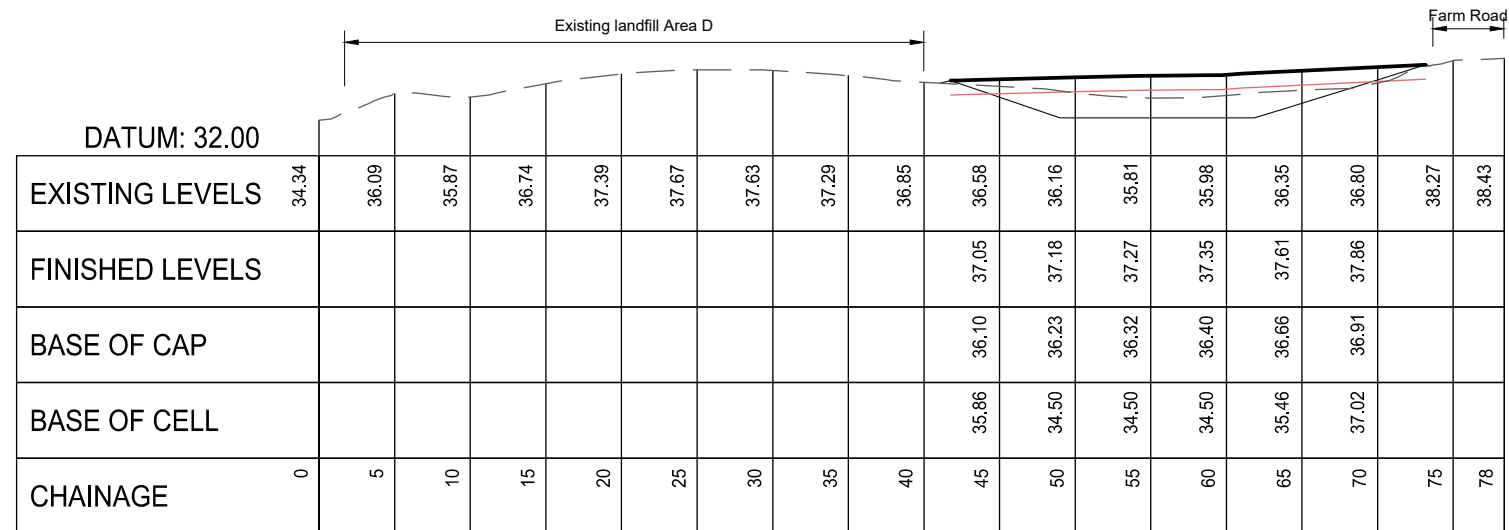
STATUS	
FOR RESOURCE CONSENT	
Construction works shall commence only on receipt of and in accordance with the Council or Council organisation stamped approved drawings, unless otherwise indicated.	
SCALE	1:500 (A3)
DRAWING No	33097/LF121
REVISION	A

NOT FOR CONSTRUCTION

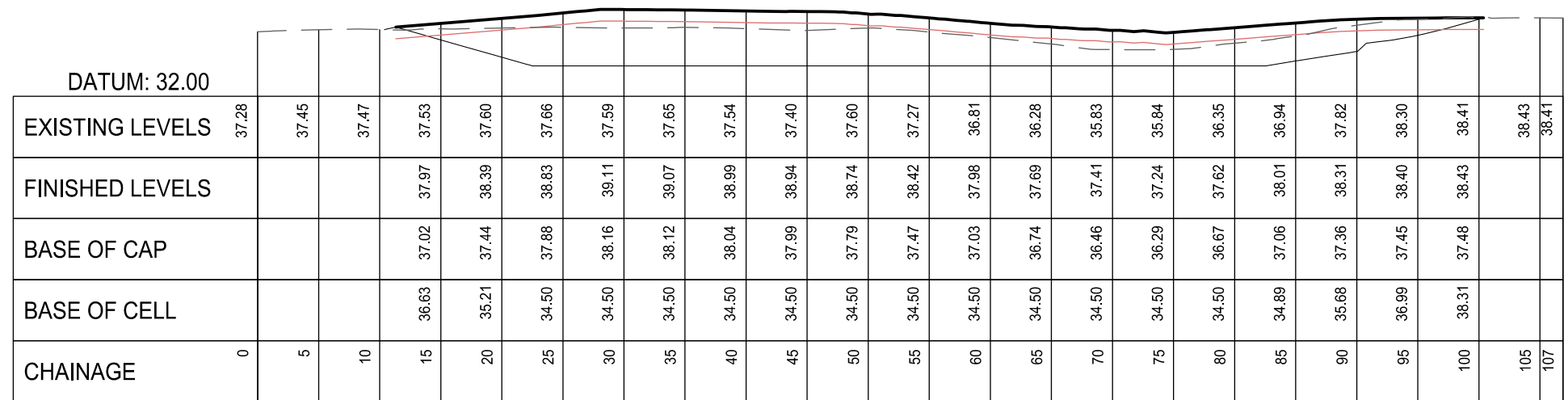
 Existing Ground
 Finished Ground
 Proposed Cap
 Proposed Cell Base



1-1 Cross Section 1-1
121 1:500



1-2 Cross Section 1-2
121 1:500



1-3 Cross Section 1-3
121 1:500

NOT FOR CONSTRUCTION

[illegible]

NOTES

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LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

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TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

PROPOSED NORTHERN DISPOSAL SITE CELL CROSS SECTIONS



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SCALE 1:500 (A3)

DRAWING No	REVISION
------------	----------

33097/LF130	A
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Legend

- Site Boundary
- Deferred Selection Area
- Estimated Existing Landfill Extent
- Existing Ground Levels
- Proposed Ground Levels

Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	-3.76	-1.50	Red
2	-1.50	-0.50	Orange
3	-0.50	6.28	Yellow

Landfill Area D
Landfill area to be stripped of topsoil. Install landfill capping layer, and topsoil with grass seed.

Existing landfill Area D

Existing landfill Area F

Farm Road

Existing landfill Area E

Estimated Earthworks Volumes

Northern Disposal Area:

Area = 4000m²

- Strip volumes:
 - Topsoil = 400m³ (assumed 100mm topsoil)
 - Capping material area E = 132m³
 - Capping material area F = 280m³
 - Landfill material area F = 246m³ (estimate offal pit volume)

- Total cut to fill of subgrade
 - Cut = 5900m³
 - Fill = 0m³
 - Balance = 5900m³ cut

Existing Landfill Area D

Area = 2200m²

- Strip volumes:
 - Topsoil = 300m³ (assumed 140mm topsoil)
 - Capping material area D = 0m³ (minimal existing capping)
- Capping volume:
 - Clay or other suitable material = 1800m³
 - Topsoil = 330m³

SURVEYED			APPROVED SF 05/11/24	DATE	
DESIGNED	TB	14/08/24			
DRAWN	TB	21/08/24			
CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
A	COORDINATE SYSTEM CHANGED			SF	23/05/25

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

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TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT
FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE
PROPOSED NORTHERN
DISPOSAL SITE CELL
CELL FORMATION CUT AND FILL
PLAN



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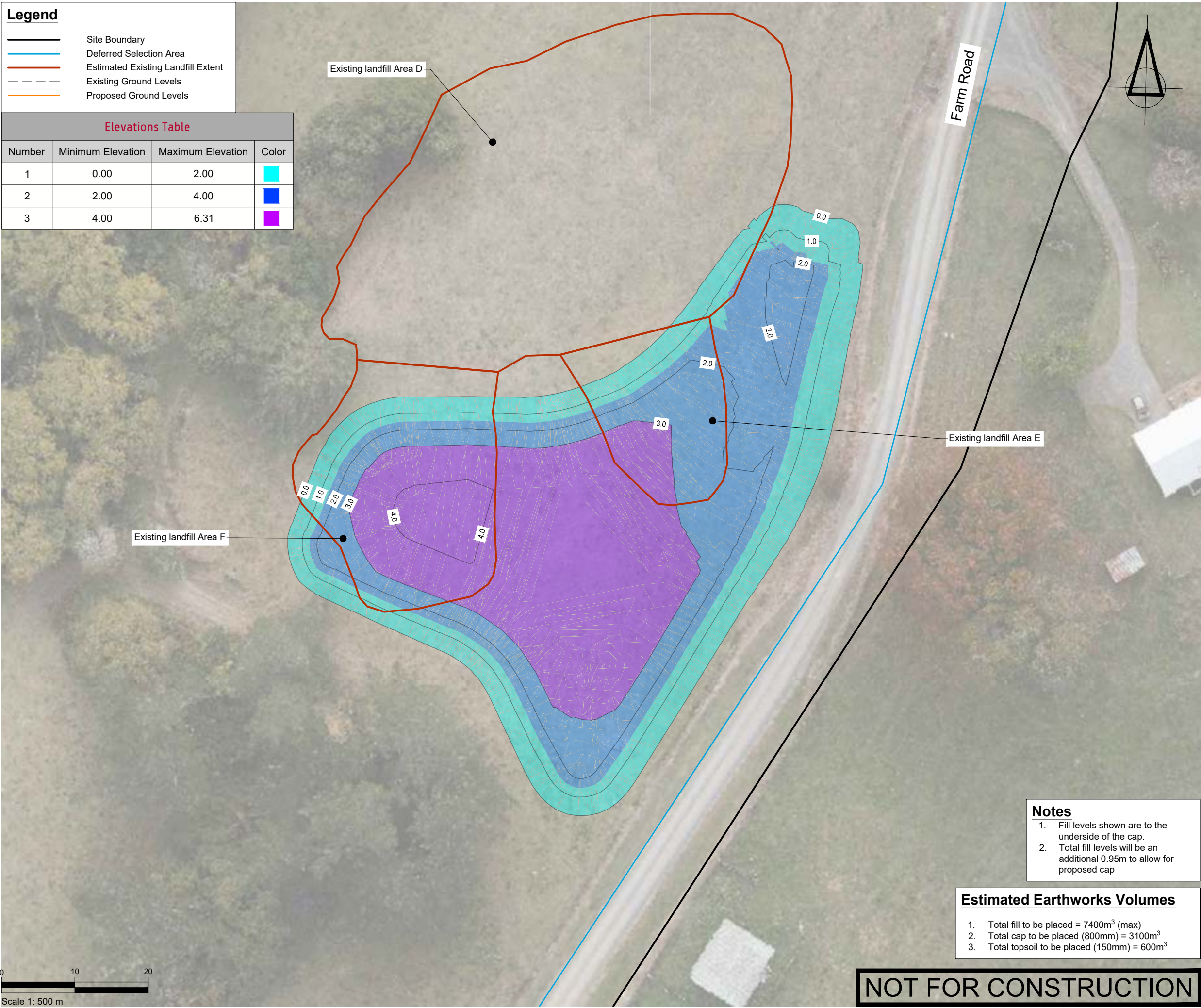
SCALE	1:500	(A3)
DRAWING No	33097/LF140	REVISION
		A

NOT FOR CONSTRUCTION

Legend

- Site Boundary
- Deferred Selection Area
- Estimated Existing Landfill Extent
- Existing Ground Levels
- Proposed Ground Levels

Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	0.00	2.00	
2	2.00	4.00	
3	4.00	6.31	



SURVEYED			APPROVED SF 05/11/24	DATE	
DESIGNED	TB	14/08/24			
DRAWN	TB	21/08/24			
CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
A	COORDINATE SYSTEM CHANGED			SF	23/05/25

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

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INFORMATION NEW ZEALAND

PROJECT
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DEMOLITION AND REMEDIATION
PROJECT

TITLE
PROPOSED NORTHERN
DISPOSAL SITE CELL
FILLING PLAN



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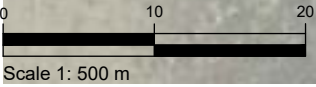
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- Notes**
- Fill levels shown are to the underside of the cap.
 - Total fill levels will be an additional 0.95m to allow for proposed cap

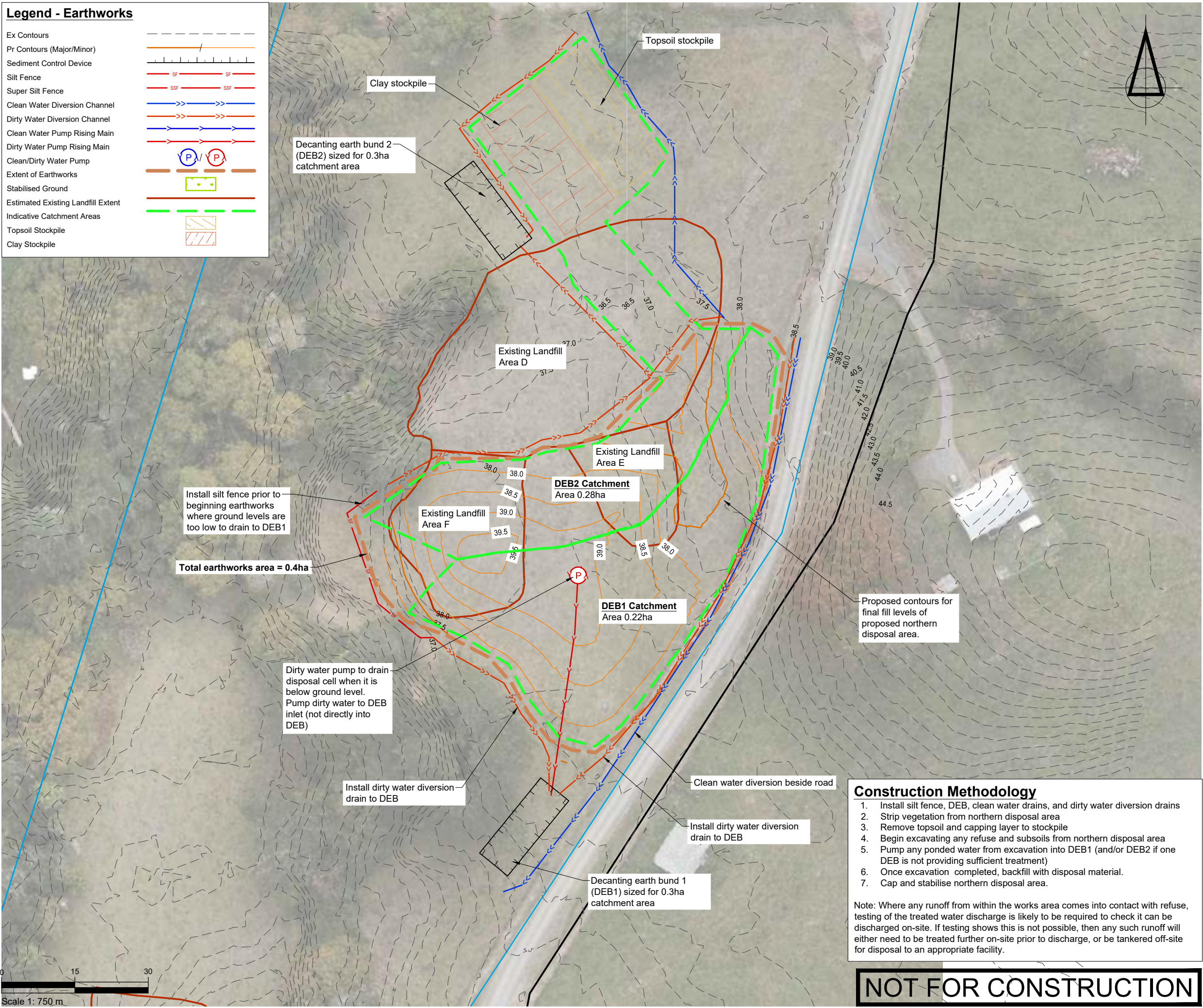
Estimated Earthworks Volumes	
1.	Total fill to be placed = 7400m ³ (max)
2.	Total cap to be placed (800mm) = 3100m ³
3.	Total topsoil to be placed (150mm) = 600m ³

NOT FOR CONSTRUCTION



Legend - Earthworks

Ex Contours	
Pr Contours (Major/Minor)	
Sediment Control Device	
Silt Fence	
Super Silt Fence	
Clean Water Diversion Channel	
Dirty Water Diversion Channel	
Clean Water Pump Rising Main	
Dirty Water Pump Rising Main	
Clean/Dirty Water Pump	
Extent of Earthworks	
Stabilised Ground	
Estimated Existing Landfill Extent	
Indicative Catchment Areas	
Topsoil Stockpile	
Clay Stockpile	



Construction Methodology

1. Install silt fence, DEB, clean water drains, and dirty water diversion drains
2. Strip vegetation from northern disposal area
3. Remove topsoil and capping layer to stockpile
4. Begin excavating any refuse and subsoils from northern disposal area
5. Pump any ponded water from excavation into DEB1 (and/or DEB2 if one DEB is not providing sufficient treatment)
6. Once excavation completed, backfill with disposal material.
7. Cap and stabilise northern disposal area.

Note: Where any runoff from within the works area comes into contact with refuse, testing of the treated water discharge is likely to be required to check it can be discharged on-site. If testing shows this is not possible, then any such runoff will either need to be treated further on-site prior to discharge, or be tankered off-site for disposal to an appropriate facility.

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SURVEYED			APPROVED	DATE
DESIGNED	TB	14/08/24	SF	05/11/24
DRAWN	TB	15/08/24		
CHECKED	SF	05/11/24		
REVISION	CHANGES		CHECKED	DATE
A	COORDINATE SYSTEM CHANGED		SF	23/05/25

NOTES

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INFORMATION NEW ZEALAND

PROJECT
FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE
PROPOSED NORTHERN
DISPOSAL SITE CELL
EROSION AND SEDIMENT
CONTROL PLAN PHASE 1

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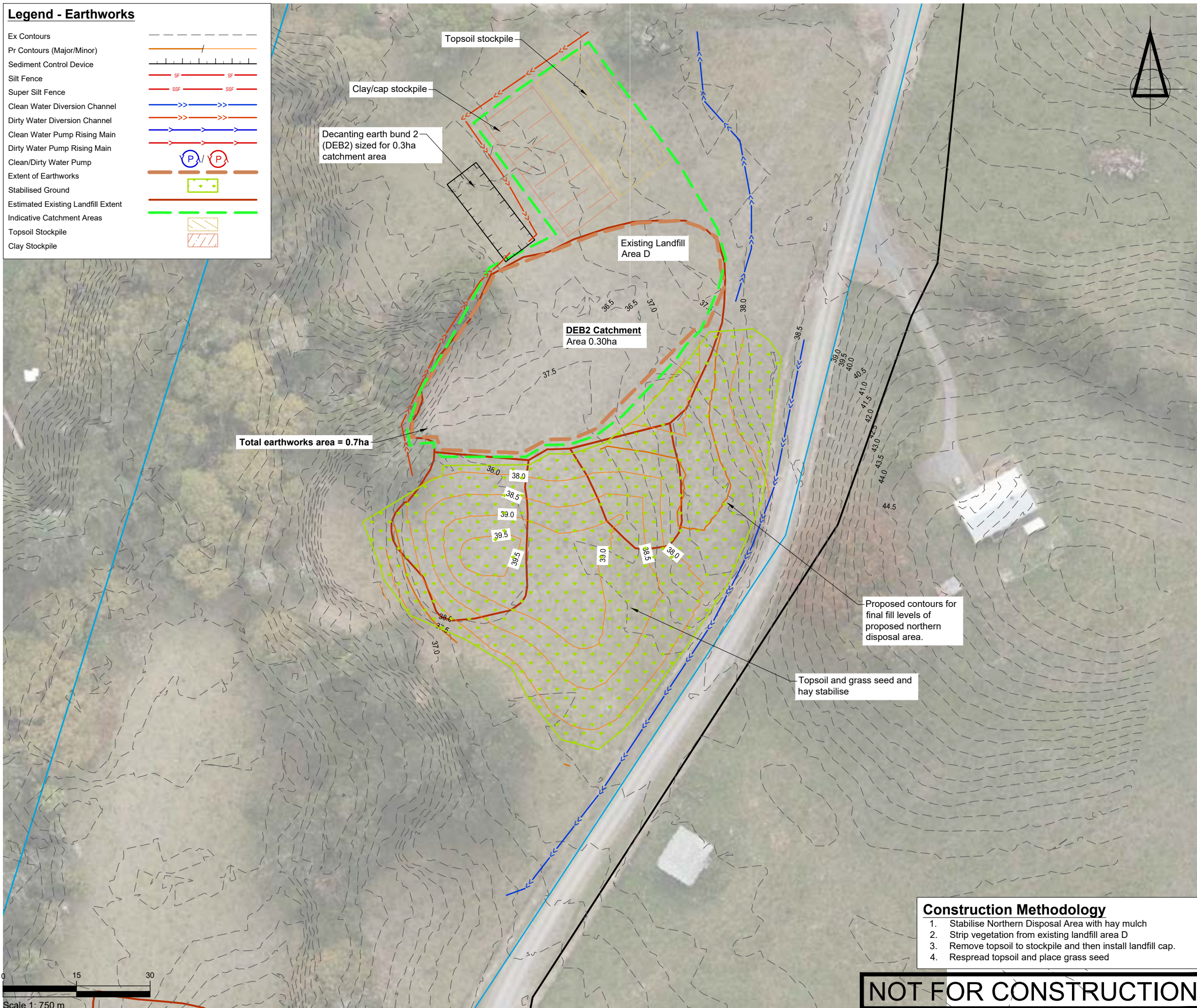
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SCALE	1:750	(A3)
DRAWING No	33097/LF190	REVISION
		A

Ex Contours	
Pr Contours (Major/Minor)	
Sediment Control Device	
Silt Fence	
Super Silt Fence	
Clean Water Diversion Channel	
Dirty Water Diversion Channel	
Clean Water Pump Rising Main	
Dirty Water Pump Rising Main	
Clean/Dirty Water Pump	
Extent of Earthworks	
Stabilised Ground	
Estimated Existing Landfill Extent	
Indicative Catchment Areas	
Topsoil Stockpile	
Clay Stockpile	

[illegible]

NOTES

PROJECT DATUMS:

LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

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TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

PROPOSED NORTHERN DISPOSAL SITE CELL EROSION AND SEDIMENT CONTROL PLAN PHASE 2



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SCALE 1:750 (A3)

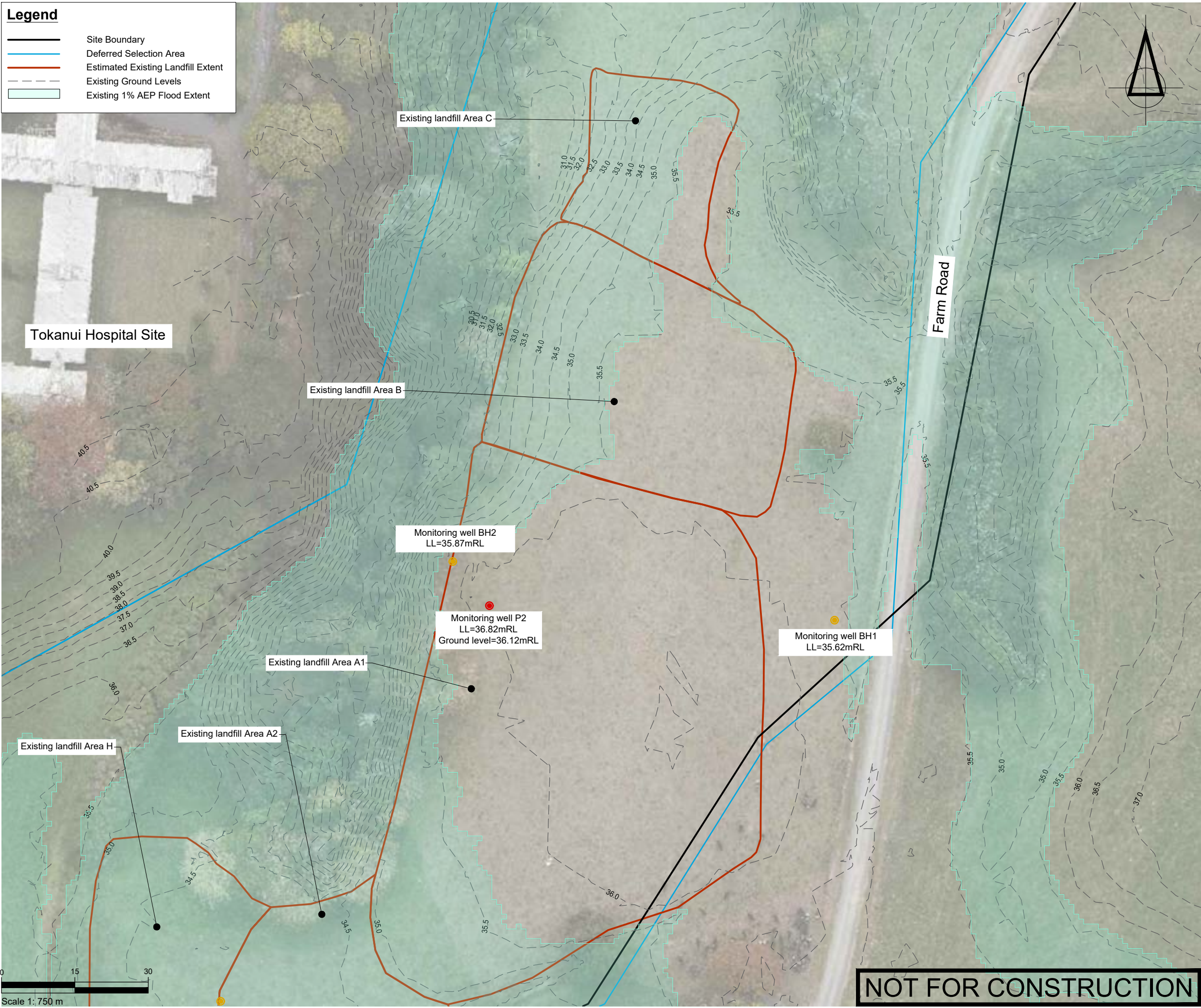
DRAWING No	REVISION
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33097/LF191	A
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Legend

- Site Boundary
- Deferred Selection Area
- Estimated Existing Landfill Extent
- Existing Ground Levels
- Existing 1% AEP Flood Extent



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DESIGNED	TB	14/08/24			
DRAWN	TB	15/08/24			
CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
A	COORDINATE SYSTEM CHANGED			SF	23/05/25

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

CLIENT

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INFORMATION NEW ZEALAND

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

EXISTING LANDFILL AREAS A1,
B, AND C PLAN



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SCALE	1:750	(A3)
DRAWING No	33097/LF200	REVISION
		A

Legend

Site Boundary

Deferred Selection Area

Estimated Existing Landfill Extent

Proposed Ground Levels

Existing Ground Levels

Proposed 1% AEP Flood Extent

Proposed Grass

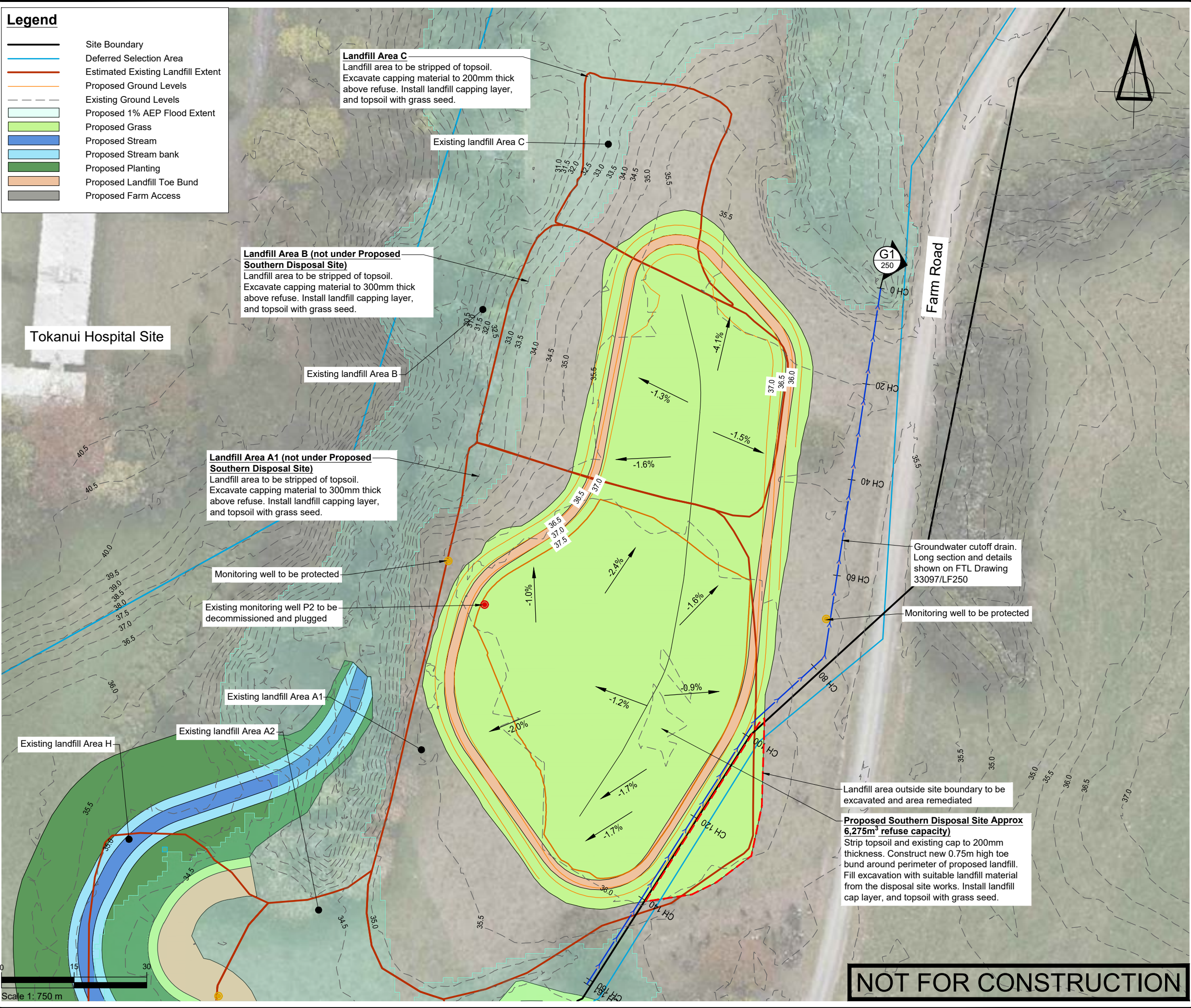
Proposed Stream

Proposed Stream bank

Proposed Planting

Proposed Landfill Toe Bund

Proposed Farm Access



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DESIGNED	TB	14/08/24			
DRAWN	TB	15/08/24			
CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
A	STH LF TOE BUND ADDED			SF	20/11/24
B	AREA A2/H REDESIGN			SF	23/05/25
</					

NOTES

PROJECT DATUMS:

LEVEL: New Zealand Vertical Datum 2016

COORDINATE: New Zealand Transverse Mercator

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INFORMATION NEW ZEALAND

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

PROPOSED SOUTHERN
DISPOSAL SITE CELL
PROPOSED FINAL DESIGN PLAN

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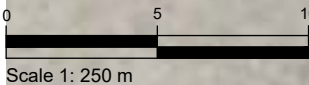
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STATUS	
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SCALE	1:750 (A3)
DRAWING No	33097/LF210
REVISION	B

NOT FOR CONSTRUCTION

	Site Boundary
	Deferred Selection Area
	Estimated Existing Landfill Extent
	Existing Ground Levels
	Proposed Ground Levels
	Proposed clay material
	Landfill material
	Natural ground



NOT FOR CONSTRUCTION

[illegible]

NOTES

PROJECT DATUMS:

LEVEL: New Zealand Vertical Datum 2016

COORDINATE: New Zealand Transverse Mercator

CLIENT

TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

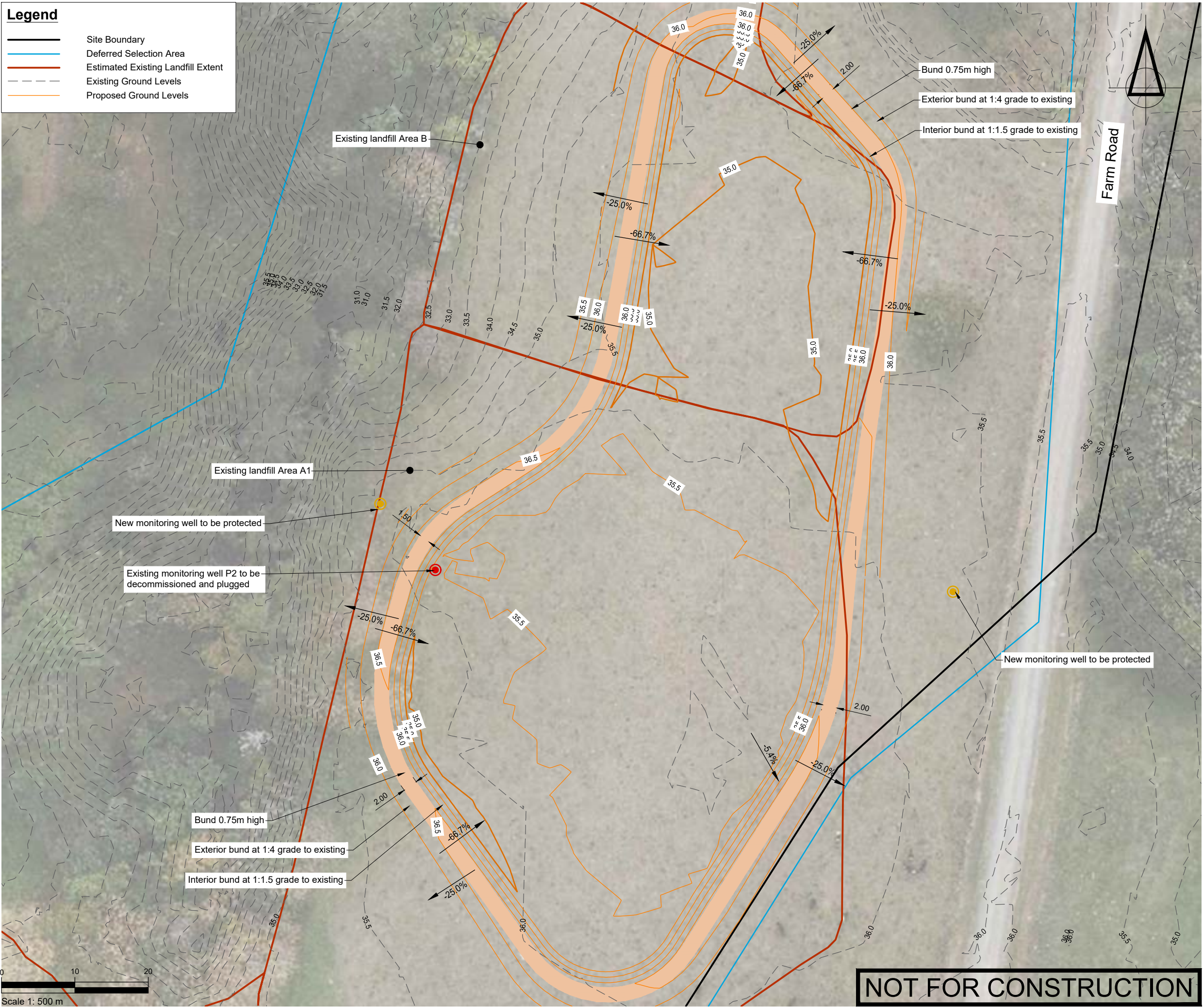
PROJECT FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

PROPOSED SOUTHERN
DISPOSAL SITE CELL
PROPOSED TOE BUND PLAN

STATUS	
FOR RESOURCE CONSENT Construction works shall commence only on receipt of and in accordance with the Council or Council organisation stamped approved drawings, unless otherwise indicated.	
SCALE	1:250 (A3)
DRAWING No	REVISION
33097/LF219	A

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CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
A	STH LF TOE BUND ADDED			SF	20/11/24
B	COORDINATE SYSTEM CHANGED			SF	23/05/25

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

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INFORMATION NEW ZEALAND

PROJECT
FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE
PROPOSED SOUTHERN
DISPOSAL SITE CELL
BASE OF CELL LEVELS PLAN



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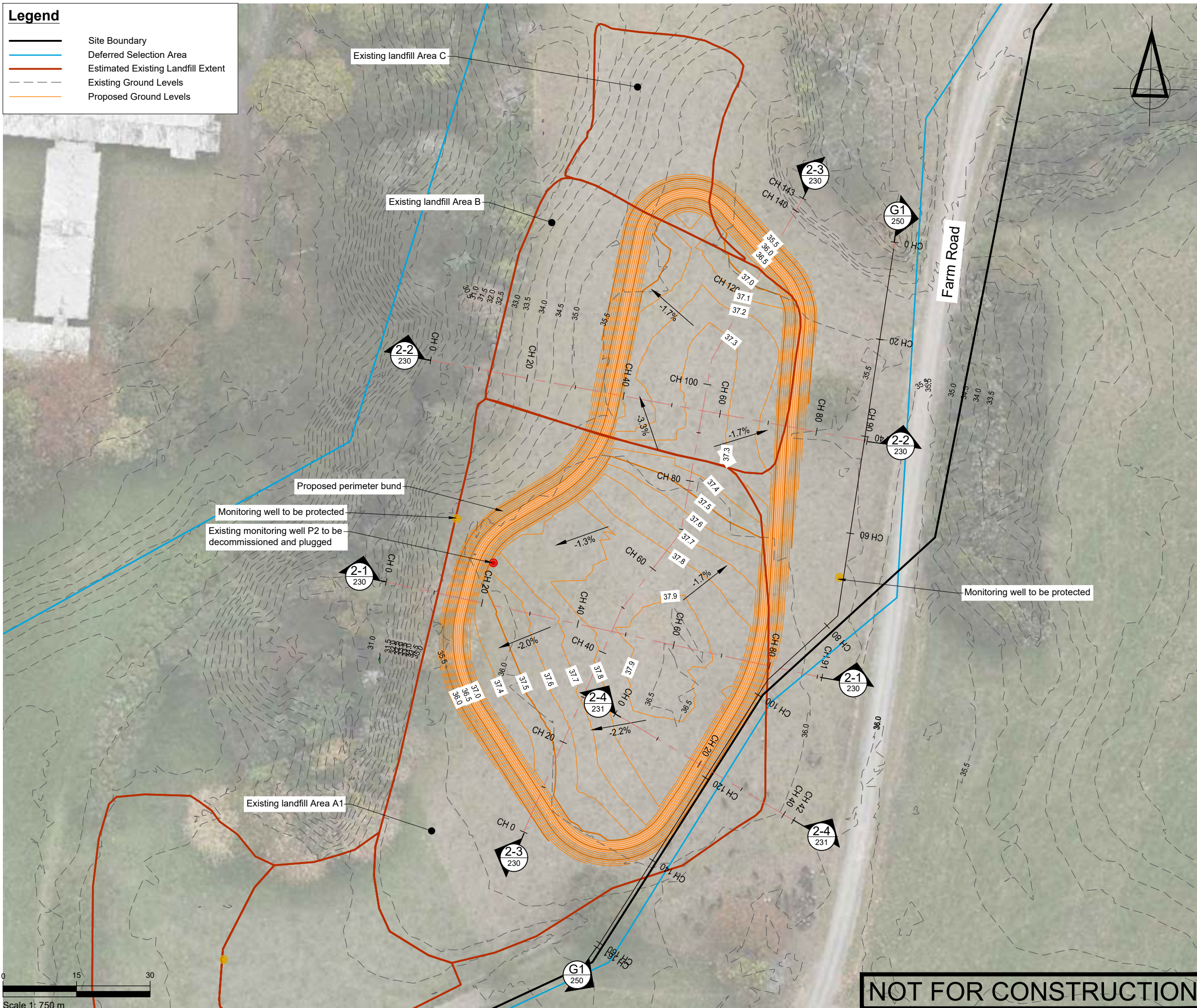
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SCALE 1:500 (A3)

DRAWING No 33097/LF220 REVISION B

 Site Boundary
 Deferred Selection Area
 Estimated Existing Landfill Extent
 Existing Ground Levels
 Proposed Ground Levels

[illegible][illegible]

PROJECT DATUMS:
 LEVEL: New Zealand Vertical Datum 2016
 COORDINATE: New Zealand Transverse Mercator

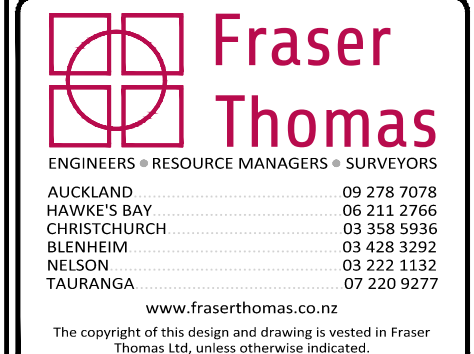
CLIENT
TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

PROPOSED SOUTHERN
DISPOSAL SITE CELL
FINISHED GROUND LEVELS
PLAN



STATUS

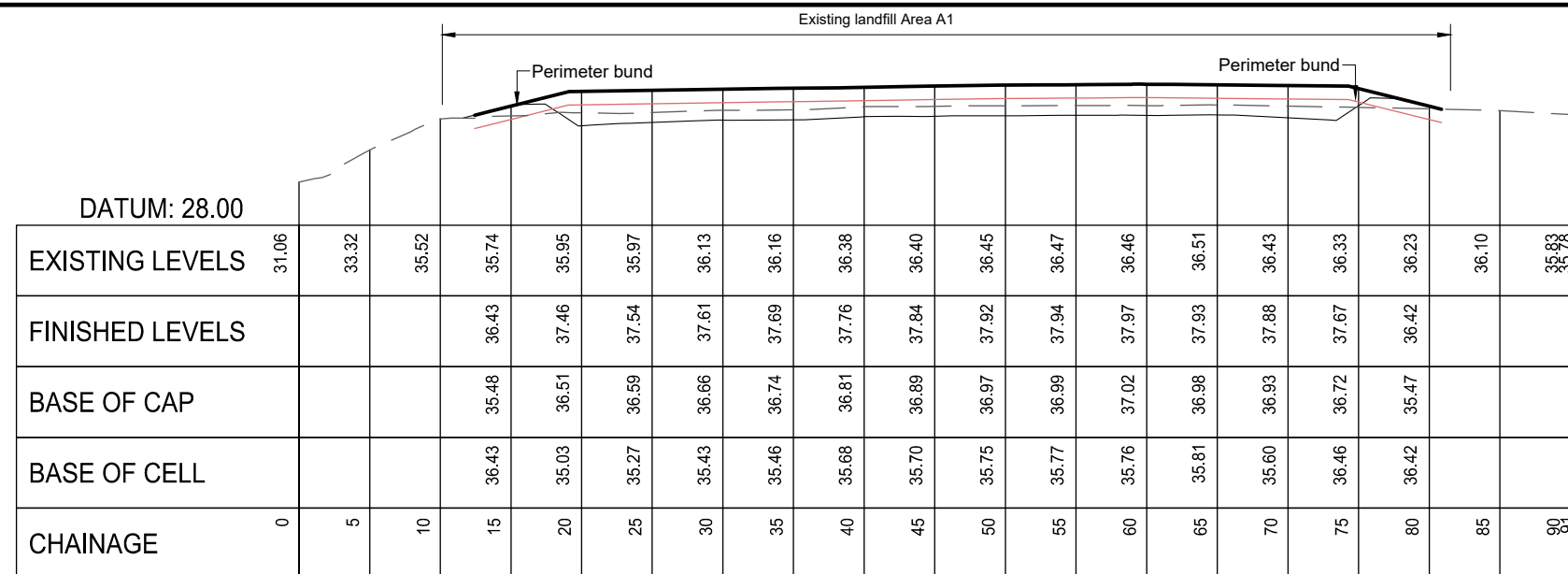
FOR RESOURCE CONSENT

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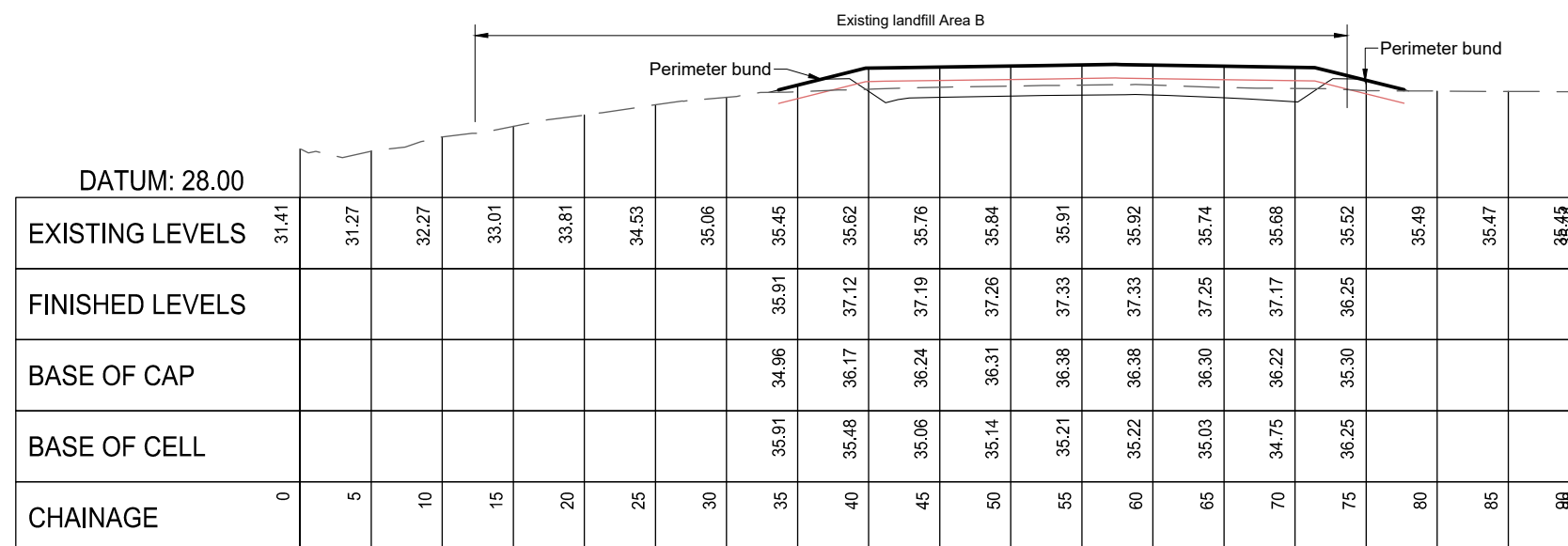
SCALE	1:750	(A3)
DRAWING No	33097/LF221	REVISION
		B

2:\33 series\33097\03 Drawings\33097-LF221 - LF231.dwg, fvhra, 8/10/2025 4:45 pm

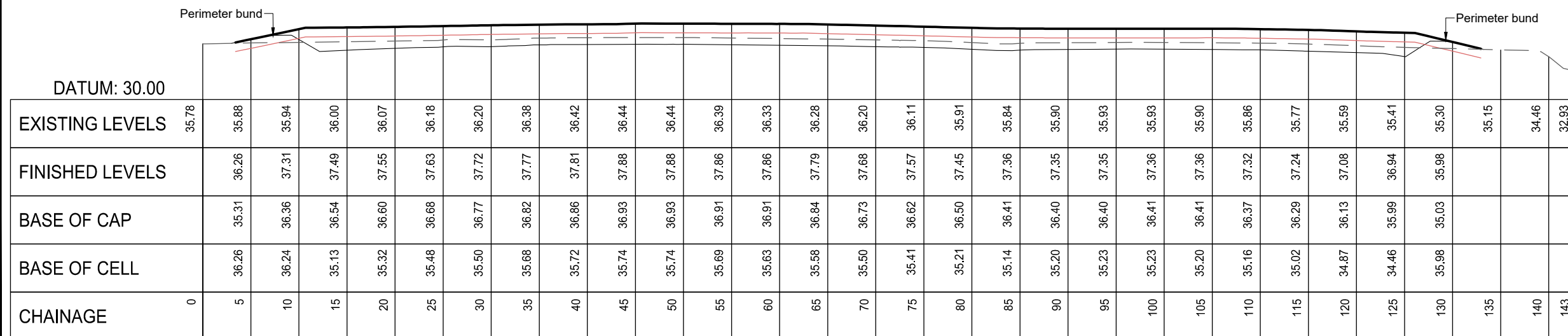
 Existing Ground
 Finished Ground
 Proposed Cap
 Proposed Cell Base



2-1 Cross Section 2-1
221 1:500



2-2 Cross Section 2-2
221 1:500



2-3 Cross Section 2-3
221 1:500

NOT FOR CONSTRUCTION

[illegible]

NOTES

PROJECT DATUMS:

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
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INFORMATION NEW ZEALAND

PROJECT

PROJECT

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DEMOLITION AND REMEDIATION
PROJECT

TITLE

PROPOSED SOUTHERN
DISPOSAL SITE CELL
CROSS SECTIONS SHEET 1



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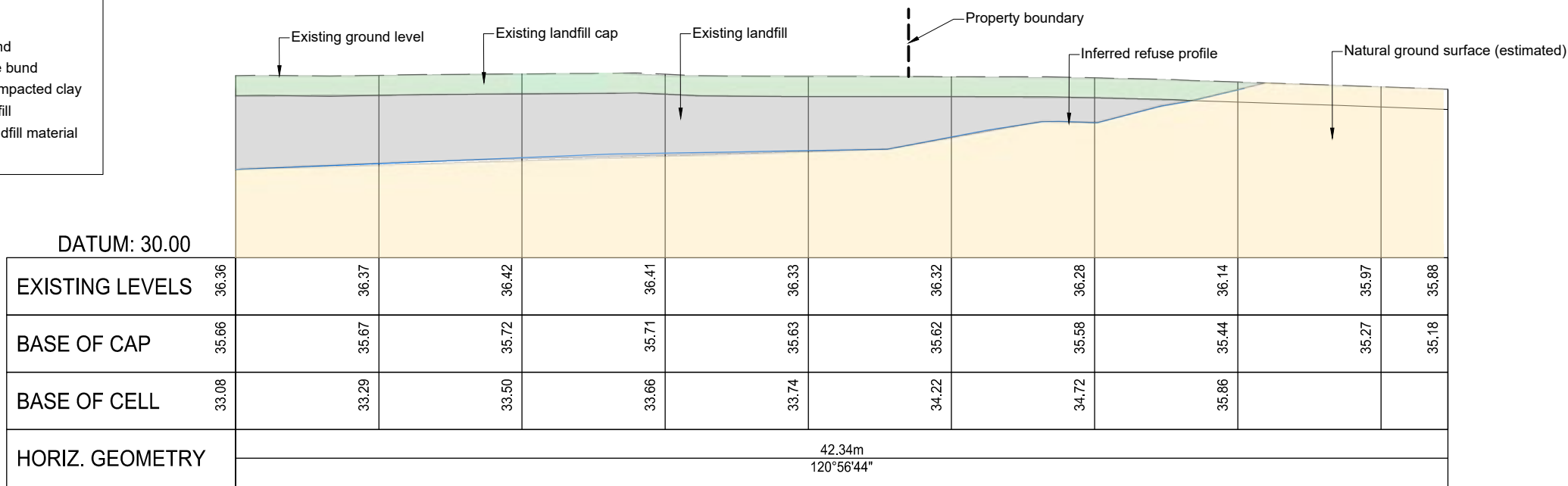
SCALE 1:500 (A3)

DRAWING No	REVISION
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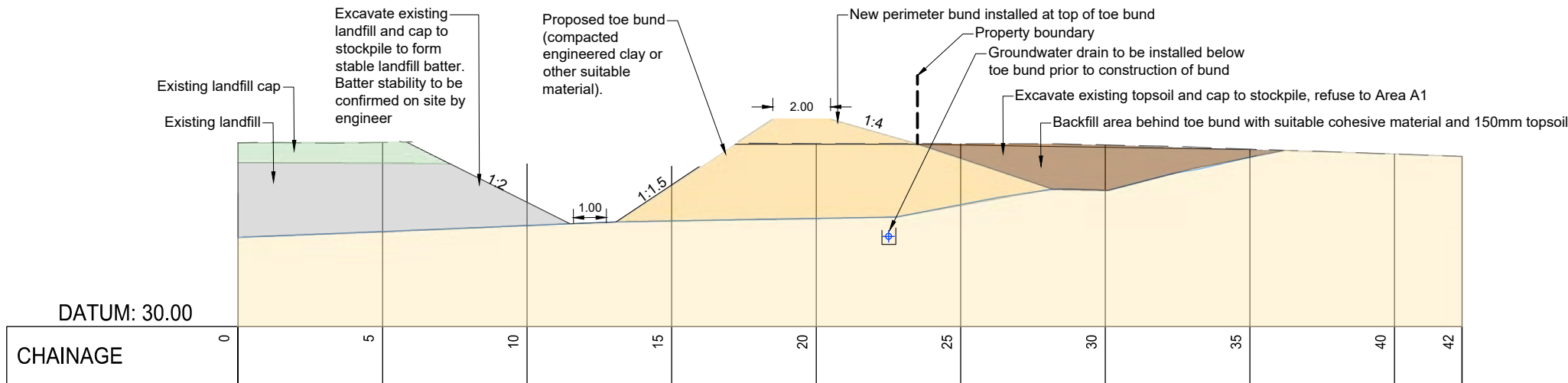
33097/LF230 B

Legend

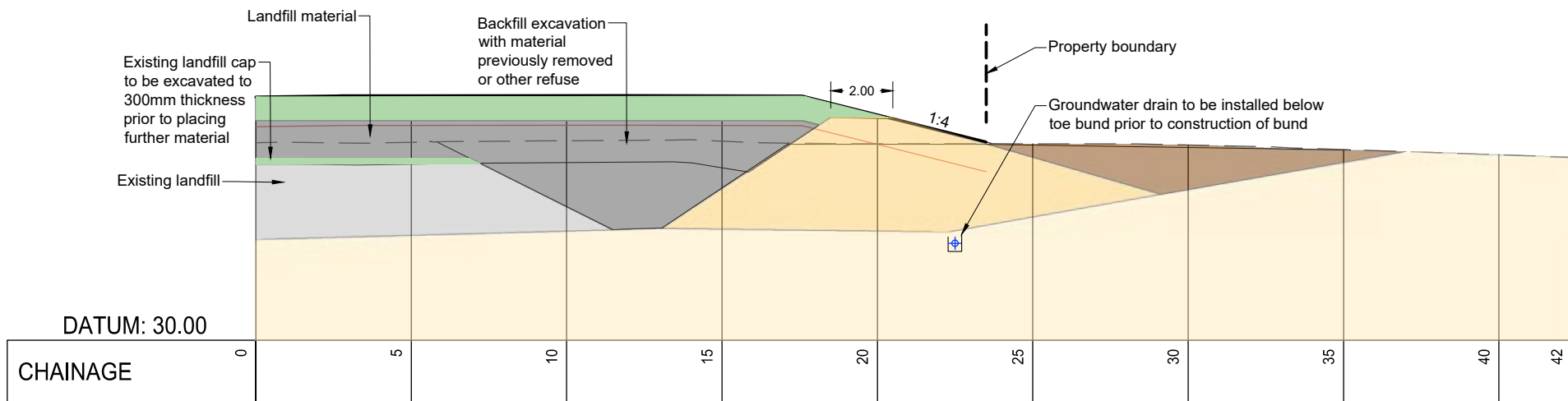
- Natural ground
- Proposed toe bund
- Proposed compacted clay
- Existing landfill
- Proposed landfill material
- Landfill cap



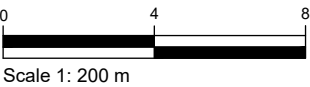
2-4 Cross Section 2-4 - Existing
221 1:200



2-4 Cross Section 2-4 - Stage 1
221 1:200



2-4 Cross Section 2-4 - Stage 2
221 1:200



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DESIGNED	TB	20/11/24	SF	21/11/24
DRAWN	TB	20/11/24		
CHECKED	SF	21/11/24		
REVISION	CHANGES		CHECKED	DATE
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NOTES

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PROJECT
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DEMOLITION AND REMEDIATION
PROJECT

TITLE
PROPOSED SOUTHERN
DISPOSAL SITE CELL
CROSS SECTIONS SHEET 2

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SCALE	1:200	(A3)
DRAWING No	33097/LF231	REVISION
		A

Legend

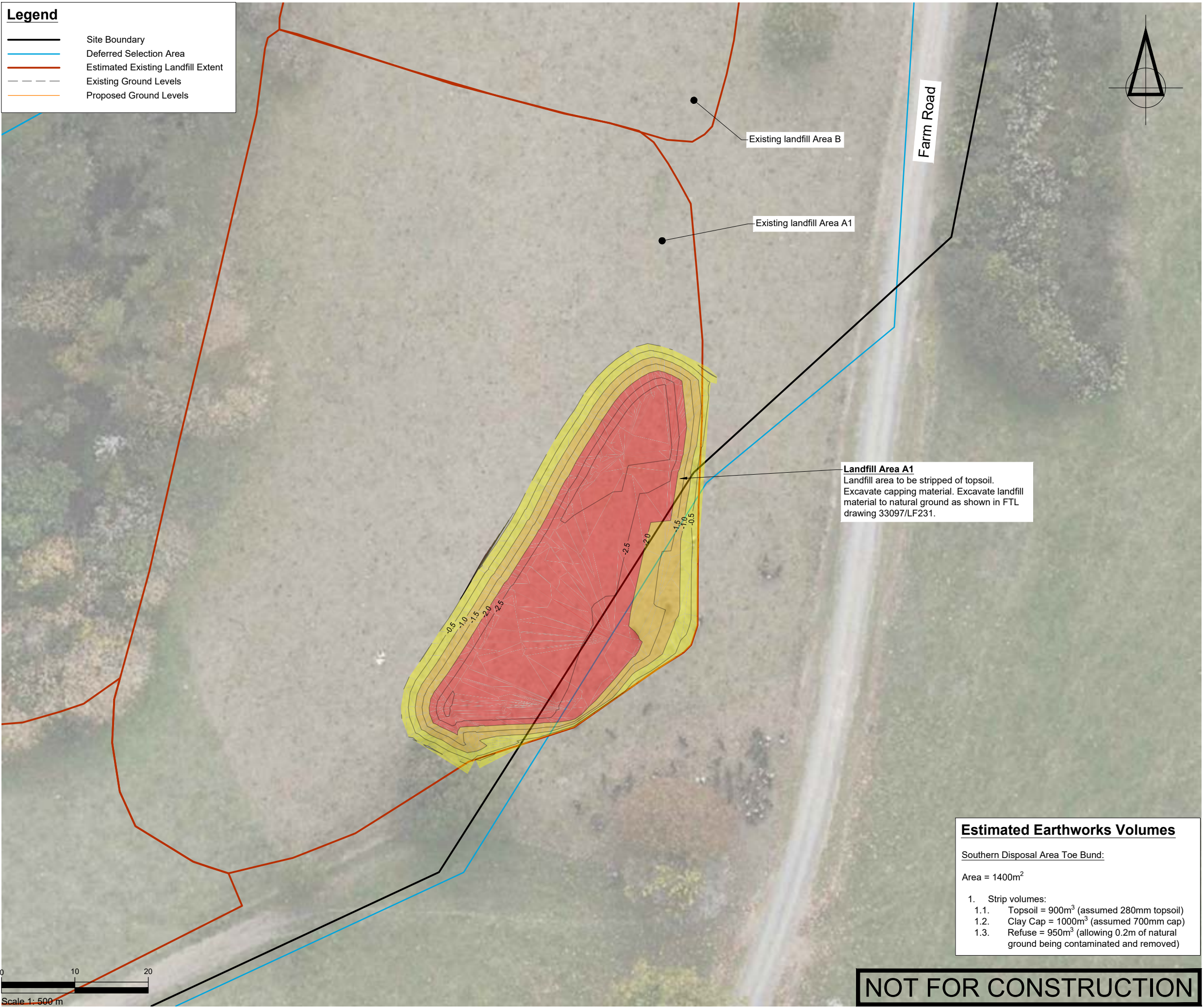
Site Boundary

Deferred Selection Area

Estimated Existing Landfill Extent

Existing Ground Levels

Proposed Ground Levels



Landfill Area A1
Landfill area to be stripped of topsoil. Excavate capping material. Excavate landfill material to natural ground as shown in FTL drawing 33097/LF231.

Estimated Earthworks Volumes

Southern Disposal Area Toe Bund:

Area = 1400m²

1. Strip volumes:

1.1. Topsoil = 900m³ (assumed 280mm topsoil)

1.2. Clay Cap = 1000m³ (assumed 700mm cap)

1.3. Refuse = 950m³ (allowing 0.2m of natural ground being contaminated and removed)

SURVEYED			APPROVED SF 21/11/24	DATE	
DESIGNED	TB	20/11/24			
DRAWN	TB	20/11/24			
CHECKED	SF	21/11/24			
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NOTES

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PROJECT
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DEMOLITION AND REMEDIATION
PROJECT

TITLE
PROPOSED SOUTHERN
DISPOSAL SITE CELL
REFUSE EXCAVATION PLAN

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SCALE 1:500

(A3)

DRAWING No

33097/LF238

REVISION

A

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Legend

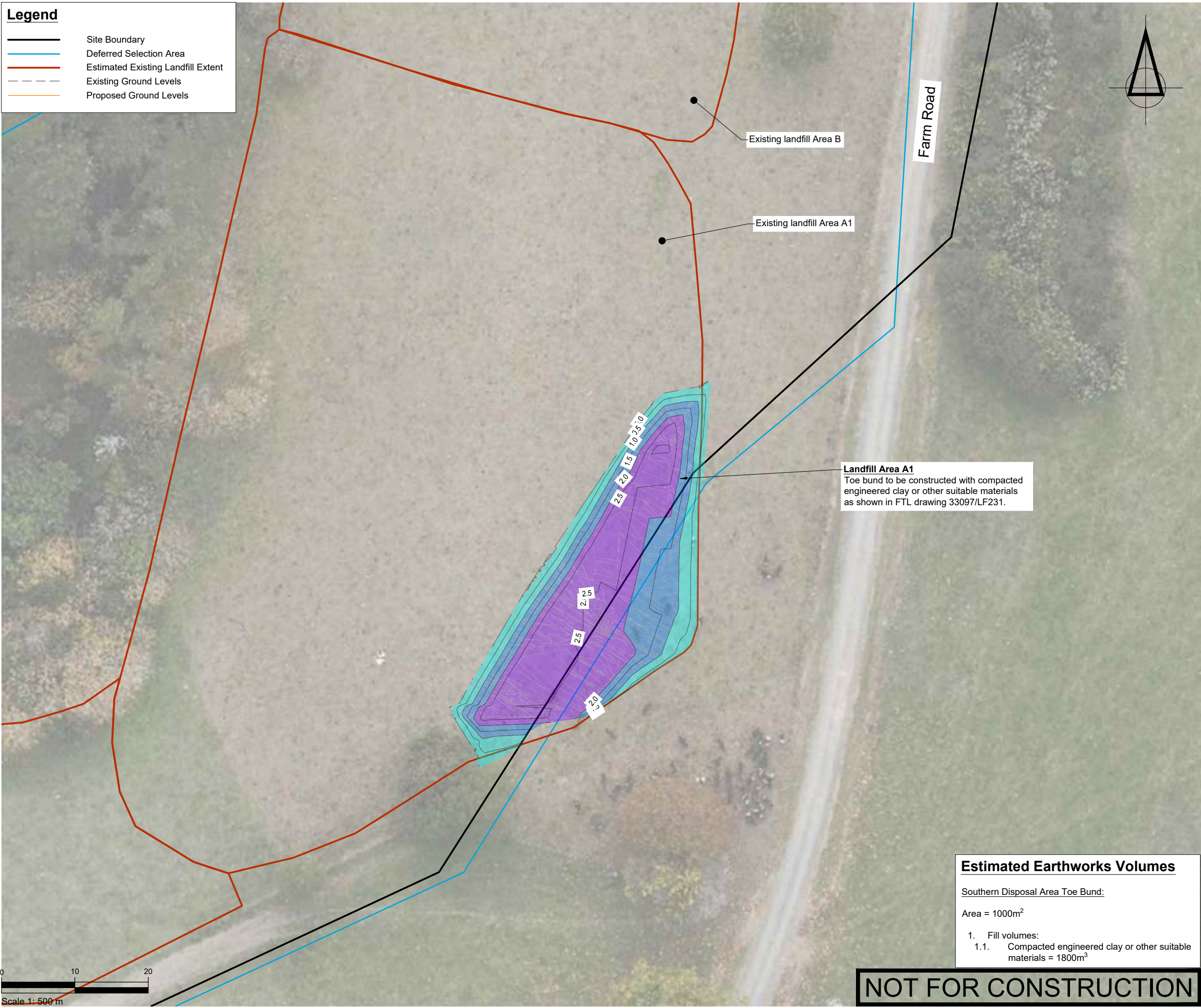
Site Boundary

Deferred Selection Area

Estimated Existing Landfill Extent

Existing Ground Levels

Proposed Ground Levels



Landfill Area A1
Toe bund to be constructed with compacted engineered clay or other suitable materials as shown in FTL drawing 33097/LF231.

Estimated Earthworks Volumes

Southern Disposal Area Toe Bund:

Area = 1000m²

1. Fill volumes:

1.1. Compacted engineered clay or other suitable materials = 1800m³

NOT FOR CONSTRUCTION

SURVEYED			APPROVED SF 21/11/24	DATE	
DESIGNED	TB	20/11/24			
DRAWN	TB	20/11/24			
CHECKED	SF	21/11/24			
REVISION	CHANGES			CHECKED	DATE
A	COORDINATE SYSTEM CHANGED			SF	23/05/25

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

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INFORMATION NEW ZEALAND

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

PROPOSED SOUTHERN
DISPOSAL SITE CELL
TOE BUND CONSTRUCTION
PLAN

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SCALE	1:500	(A3)
DRAWING No	33097/LF239	REVISION
		A

Legend

Site Boundary

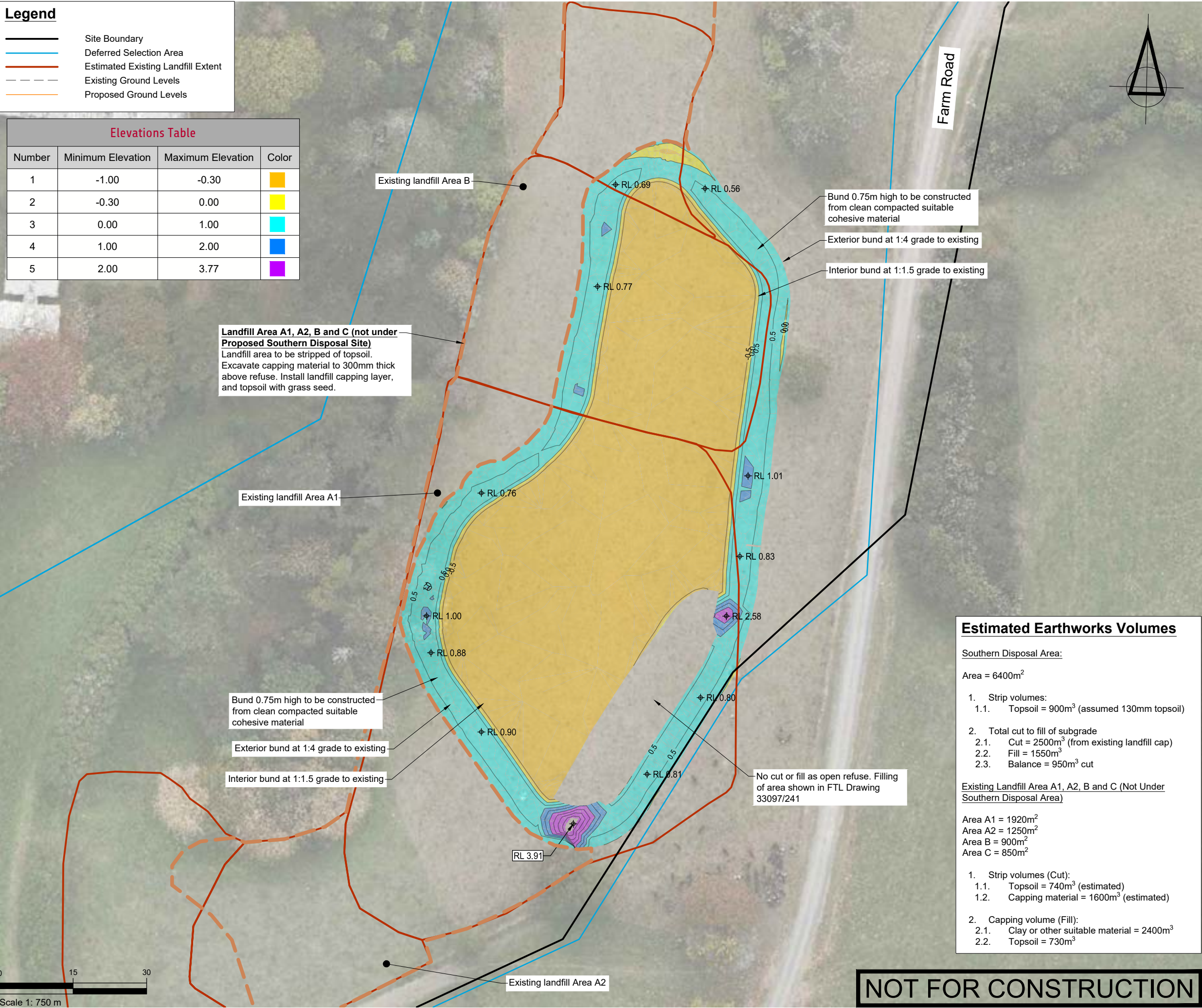
Deferred Selection Area

Estimated Existing Landfill Extent

Existing Ground Levels

Proposed Ground Levels

Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	-1.00	-0.30	
2	-0.30	0.00	
3	0.00	1.00	
4	1.00	2.00	
5	2.00	3.77	



Estimated Earthworks Volumes

Southern Disposal Area:

Area = 6400m²

- Strip volumes:
 - Topsoil = 900m³ (assumed 130mm topsoil)
- Total cut to fill of subgrade
 - Cut = 2500m³ (from existing landfill cap)
 - Fill = 1550m³
 - Balance = 950m³ cut

Existing Landfill Area A1, A2, B and C (Not Under Southern Disposal Area)

Area A1 = 1920m²
Area A2 = 1250m²
Area B = 900m²
Area C = 850m²

- Strip volumes (Cut):
 - Topsoil = 740m³ (estimated)
 - Capping material = 1600m³ (estimated)
- Capping volume (Fill):
 - Clay or other suitable material = 2400m³
 - Topsoil = 730m³

SURVEYED			APPROVED SF 05/11/24	DATE	
DESIGNED	TB	14/08/24			
DRAWN	TB	21/08/24			
CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
A	STH LF TOE BUND ADDED			SF	20/11/24
B	COORDINATE SYSTEM CHANGED			SF	23/05/25
	</				

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

CLIENT
TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT
FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE
PROPOSED SOUTHERN
DISPOSAL SITE CELL
CELL FORMATION CUT AND FILL
PLAN

Fraser
Thomas

ENGINEERS • RESOURCE MANAGERS • SURVEYORS

AUCKLAND 09 278 7078
HAWKE'S BAY 06 211 2766
CHRISTCHURCH 03 358 5936
BLenheim 03 428 3292
NELSON 03 222 1132
TAURANGA 07 220 9277

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STATUS
FOR RESOURCE CONSENT
Construction works shall commence only on receipt of and in accordance with the Council or Council organisation stamped approved drawings, unless otherwise indicated.

SCALE 1:500 (A3)
DRAWING No 33097/LF240
REVISION B

Legend

Site Boundary

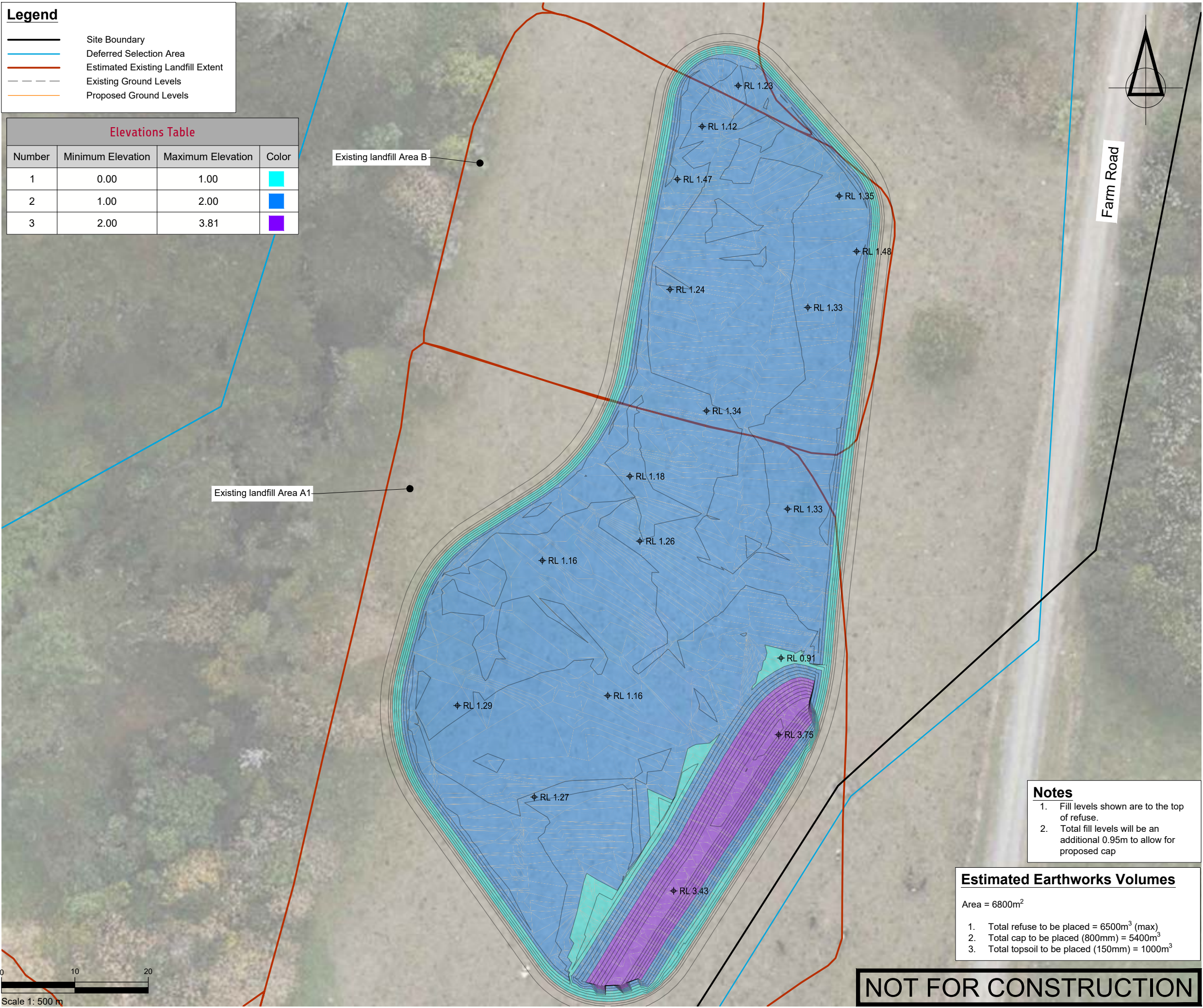
Deferred Selection Area

Estimated Existing Landfill Extent

Existing Ground Levels

Proposed Ground Levels

Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	0.00	1.00	
2	1.00	2.00	
3	2.00	3.81	



- Notes
1.

Fill levels shown are to the top of refuse.
2.

Total fill levels will be an additional 0.95m to allow for proposed cap

Estimated Earthworks Volumes

Area = 6800m²

1.

Total refuse to be placed = 6500m³ (max)

2.

Total cap to be placed (800mm) = 5400m³

3.

Total topsoil to be placed (150mm) = 1000m³

NOT FOR CONSTRUCTION

SURVEYED			APPROVED SF 05/11/24	DATE	
DESIGNED	TB	14/08/24			
DRAWN	TB	21/08/24			
CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
A	STH LF TOE BUND ADDED			SF	20/11/24
B	COORDINATE SYSTEM CHANGED			SF	23/05/25

NOTES

PROJECT DATUMS:

LEVEL: New Zealand Vertical Datum 2016

COORDINATE: New Zealand Transverse Mercator

CLIENT

TOITU TE WHENUA LAND INFORMATION NEW ZEALAND

PROJECT

FORMER TOKANUI HOSPITAL DEMOLITION AND REMEDIATION PROJECT

TITLE

PROPOSED SOUTHERN DISPOSAL SITE CELL REFUSE FILLING PLAN

Fraser Thomas

ENGINEERS • RESOURCE MANAGERS • SURVEYORS

AUCKLAND

09 278 7078

HAWKE'S BAY

06 211 2766

CHRISTCHURCH

03 358 5936

BLLENHEIM

03 428 3292

NELSON

03 222 1132

TAURANGA

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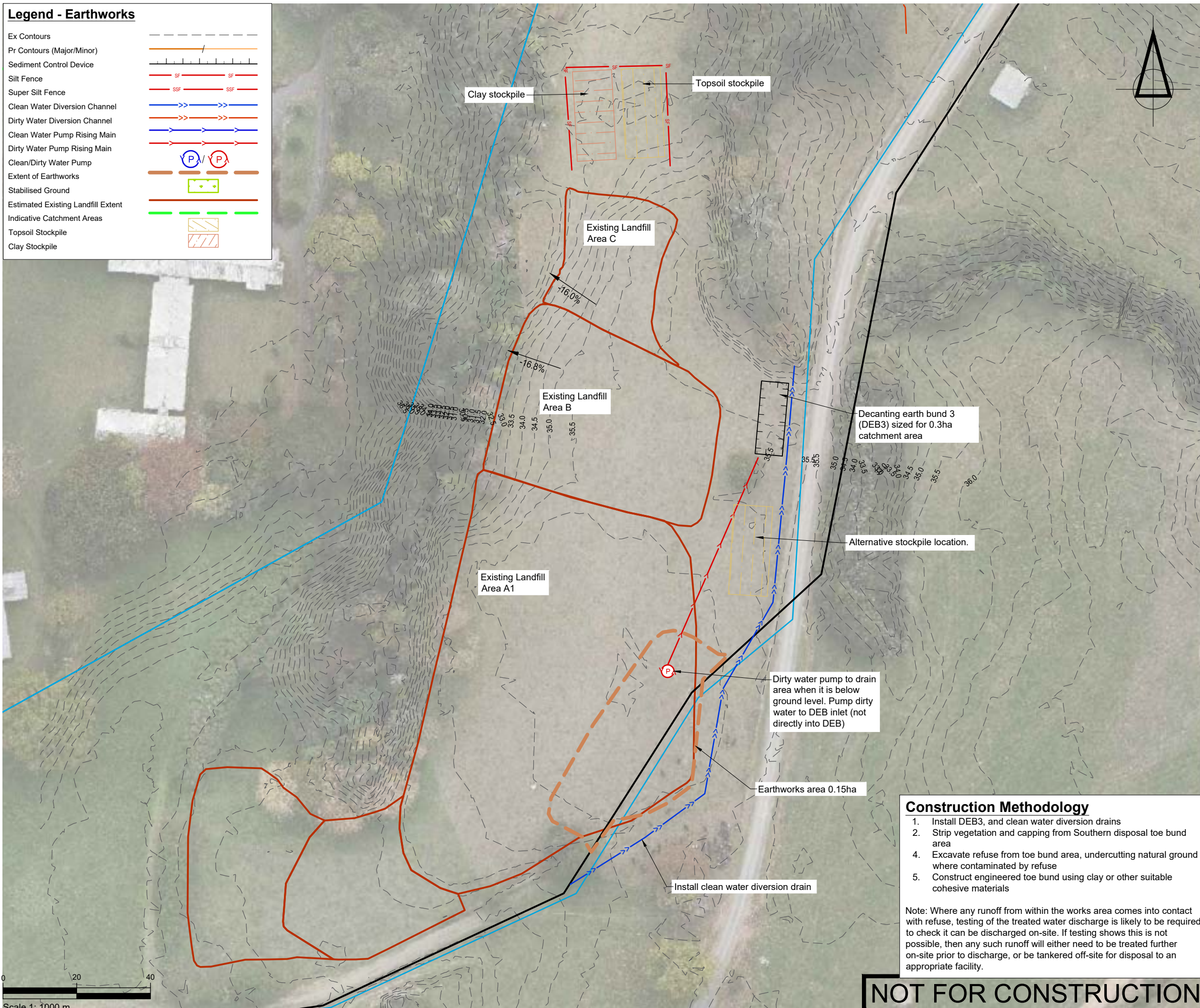
Construction works shall commence only on receipt of and in accordance with the Council or Council organisation stamped approved drawings, unless otherwise indicated.

SCALE 1:500 (A3)

DRAWING No 33097/LF241

REVISION B

Ex Contours	
Pr Contours (Major/Minor)	
Sediment Control Device	
Silt Fence	
Super Silt Fence	
Clean Water Diversion Channel	
Dirty Water Diversion Channel	
Clean Water Pump Rising Main	
Dirty Water Pump Rising Main	
Clean/Dirty Water Pump	
Extent of Earthworks	
Stabilised Ground	
Estimated Existing Landfill Extent	
Indicative Catchment Areas	
Topsoil Stockpile	
Clay Stockpile	

[illegible]

NOTES

PROJECT DATUMS:

LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

CLIENT

TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE	DATE	TIME	LOCATION	STATUS
1. [illegible]	10/10/2010	10:00	101	OK
2. [illegible]	10/10/2010	11:00	101	OK
3. [illegible]	10/10/2010	12:00	101	OK
4. [illegible]	10/10/2010	13:00	101	OK
5. [illegible]	10/10/2010	14:00	101	OK
6. [illegible]	10/10/2010	15:00	101	OK
7. [illegible]	10/10/2010	16:00	101	OK
8. [illegible]	10/10/2010	17:00	101	OK
9. [illegible]	10/10/2010	18:00	101	OK
10. [illegible]	10/10/2010	19:00	101	OK
11. [illegible]	10/10/2010	20:00	101	OK
12. [illegible]	10/10/2010	21:00	101	OK
13. [illegible]	10/10/2010	22:00	101	OK
14. [illegible]	10/10/2010	23:00	101	OK
15. [illegible]	10/10/2010	24:00	101	OK

PROPOSED SOUTHERN DISPOSAL SITE CELL EROSION AND SEDIMENT CONTROL PLAN PHASE 0



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HAWKE'S BAY	06 211 2766
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STATUS

STATUS

FOR RESOURCE CONSENT

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SCALE 1:1000

A3)

DRAWING No.

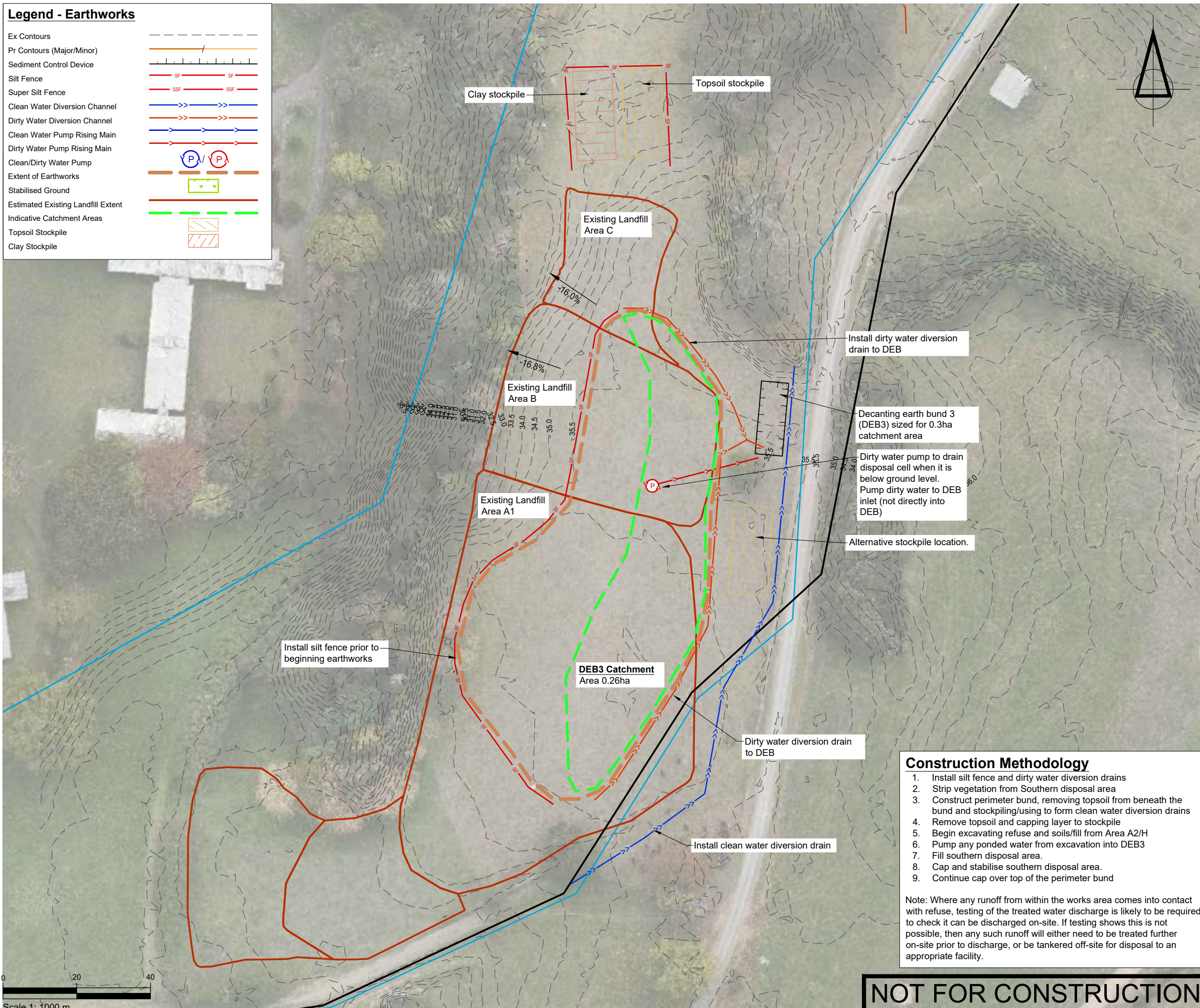
REVISION

33097/LF289

A |

P:\33 series\33097\03 Drawings\33097-LF289.dwg, 8/10/2025 4:46 pm

Ex Contours	
Pr Contours (Major/Minor)	
Sediment Control Device	
Silt Fence	
Super Silt Fence	
Clean Water Diversion Channel	
Dirty Water Diversion Channel	
Clean Water Pump Rising Main	
Dirty Water Pump Rising Main	
Clean/Dirty Water Pump	
Extent of Earthworks	
Stabilised Ground	
Estimated Existing Landfill Extent	
Indicative Catchment Areas	
Topsoil Stockpile	
Clay Stockpile	

[illegible]

NOTES

PROJECT DATUMS:

LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

CLIENT

TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE	DATE	TIME	LOCATION	STATUS
1. [Illegible]	10/10/2023	14:30	Room 101	Completed
2. [Illegible]	10/11/2023	15:00	Room 102	In Progress
3. [Illegible]	10/12/2023	16:00	Room 103	Not Started
4. [Illegible]	10/13/2023	17:00	Room 104	Completed
5. [Illegible]	10/14/2023	18:00	Room 105	In Progress
6. [Illegible]	10/15/2023	19:00	Room 106	Not Started
7. [Illegible]	10/16/2023	20:00	Room 107	Completed
8. [Illegible]	10/17/2023	21:00	Room 108	In Progress
9. [Illegible]	10/18/2023	22:00	Room 109	Not Started
10. [Illegible]	10/19/2023	23:00	Room 110	Completed

PROPOSED SOUTHERN DISPOSAL SITE CELL EROSION AND SEDIMENT CONTROL PLAN PHASE 1



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SCALE 1:1000

(A3)

DRAWING No

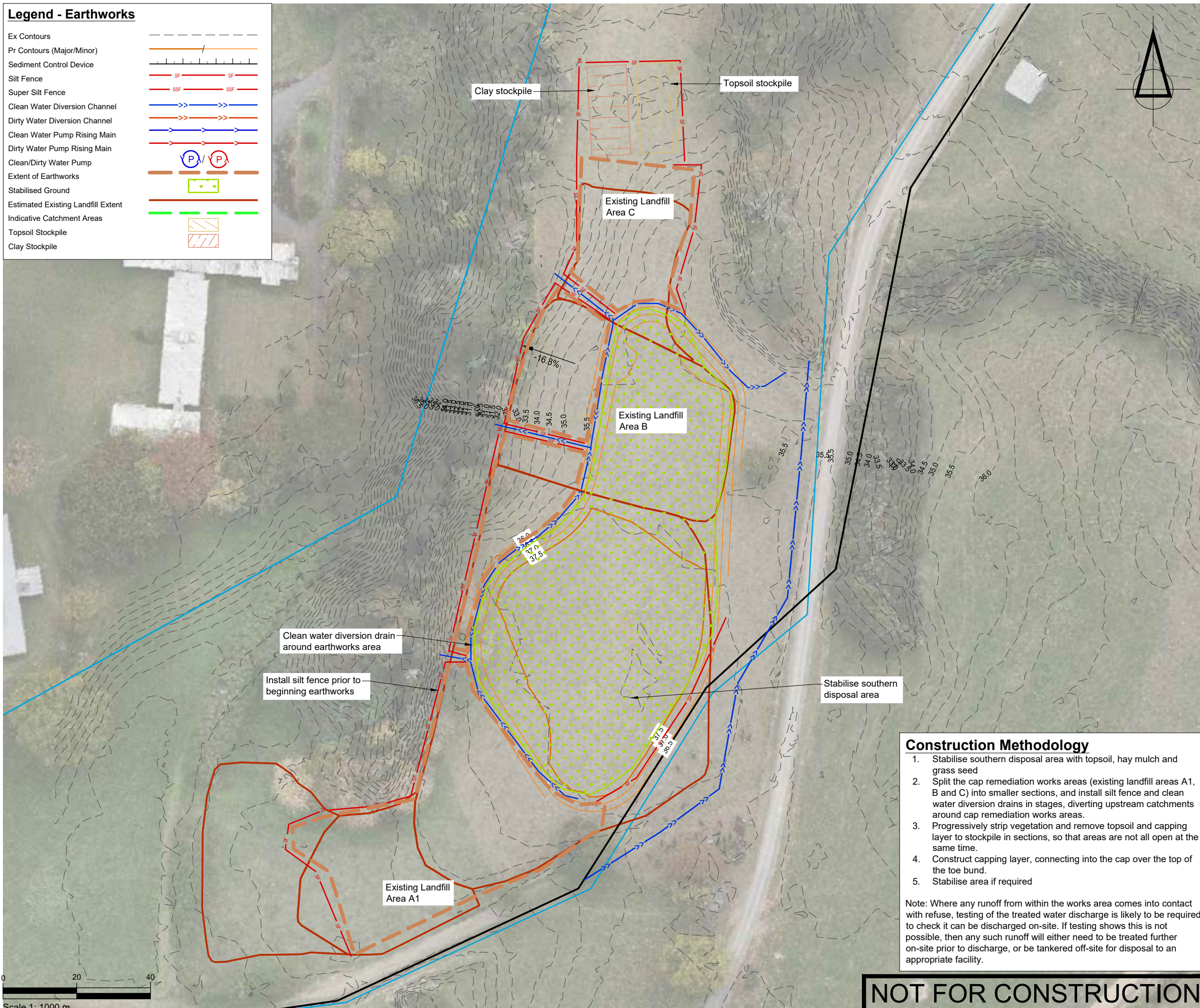
REVISION

33097/LF290

B

P:\33 series\33097\03 Drawings\33097-LF290.dwg, 8/10/2025 4:46 pm

Ex Contours	
Pr Contours (Major/Minor)	
Sediment Control Device	
Silt Fence	
Super Silt Fence	
Clean Water Diversion Channel	
Dirty Water Diversion Channel	
Clean Water Pump Rising Main	
Dirty Water Pump Rising Main	
Clean/Dirty Water Pump	
Extent of Earthworks	
Stabilised Ground	
Estimated Existing Landfill Extent	
Indicative Catchment Areas	
Topsoil Stockpile	
Clay Stockpile	

[illegible]

NOTES

PROJECT DATUMS:

LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

CLIENT

TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

PROPOSED SOUTHERN DISPOSAL SITE CELL EROSION AND SEDIMENT CONTROL PLAN PHASE 2



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NELSON	03 222 1132
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SCALE 1:1000 (A3)

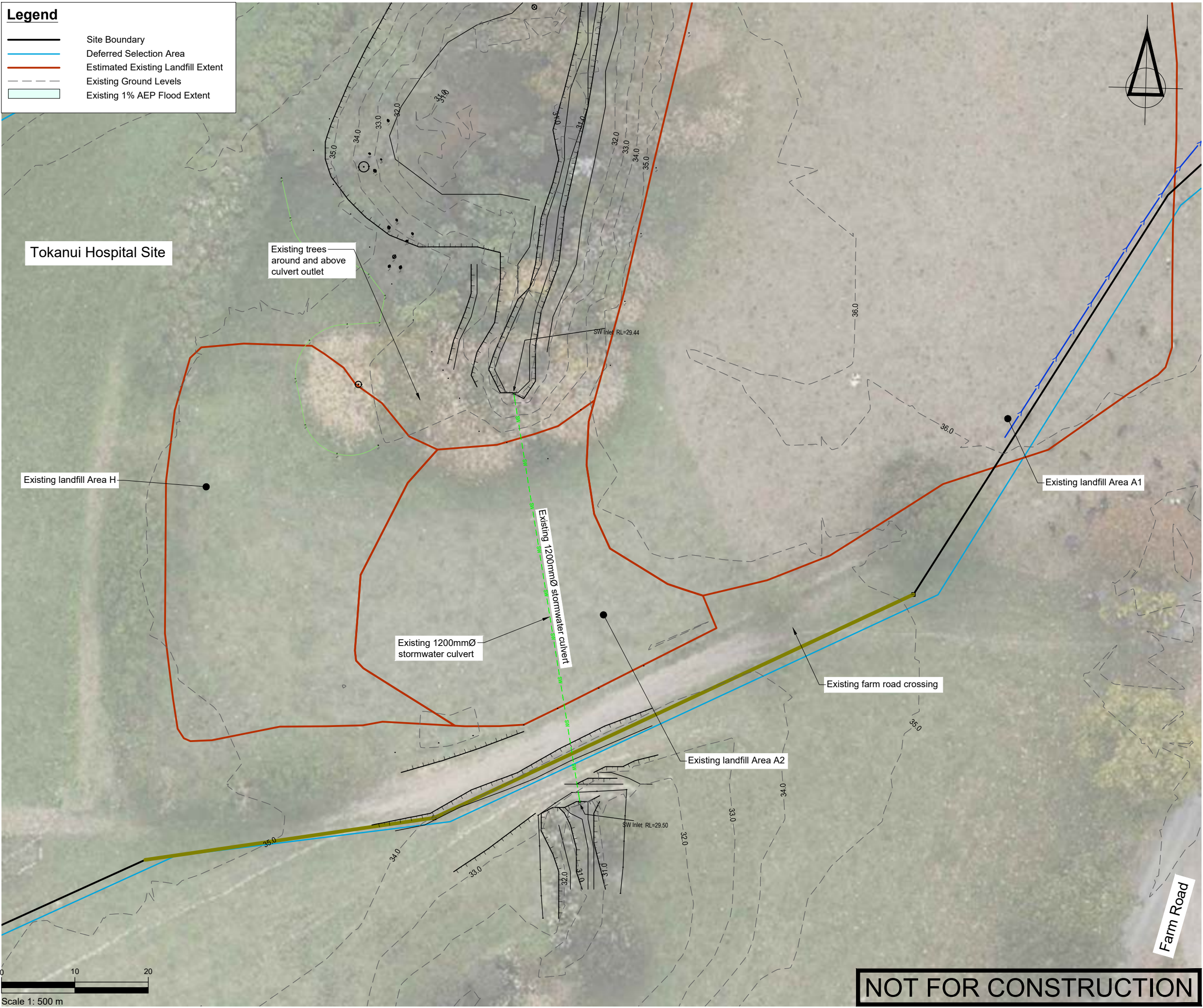
DRAWING No	REVISION
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33097/LF291	B
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P:\33 series\33097\03 Drawings\33097-LF291.dwg, fvhra, 8/10/2025 4:46 pm

Legend

- Site Boundary
- Deferred Selection Area
- Estimated Existing Landfill Extent
- Existing Ground Levels
- Existing 1% AEP Flood Extent



SURVEYED	TB	14/08/24	APPROVED	SF	DATE	05/11/24
DESIGNED	TB	15/08/24				
DRAWN	TB	15/08/24				
CHECKED	SF	05/11/24				
REVISION	CHANGES				CHECKED	DATE
A	AREA A2/H REDESIGN				SF	23/05/25

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

CLIENT
**TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND**

PROJECT
**FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT**

TITLE
**EXISTING LANDFILL AREAS A2
AND AREA H, AND EXISTING
CULVERT 3 PLAN**

**Fraser
Thomas**

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AUCKLAND 09 278 7078
HAWKE'S BAY 06 211 2766
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BLENHEIM 03 428 3292
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STATUS	
FOR RESOURCE CONSENT	
Construction works shall commence only on receipt of and in accordance with the Council or Council organisation stamped approved drawings, unless otherwise indicated.	
SCALE	1:500 (A3)
DRAWING No	33097/LF300
REVISION	A

Legend

Site Boundary

Deferred Selection Area

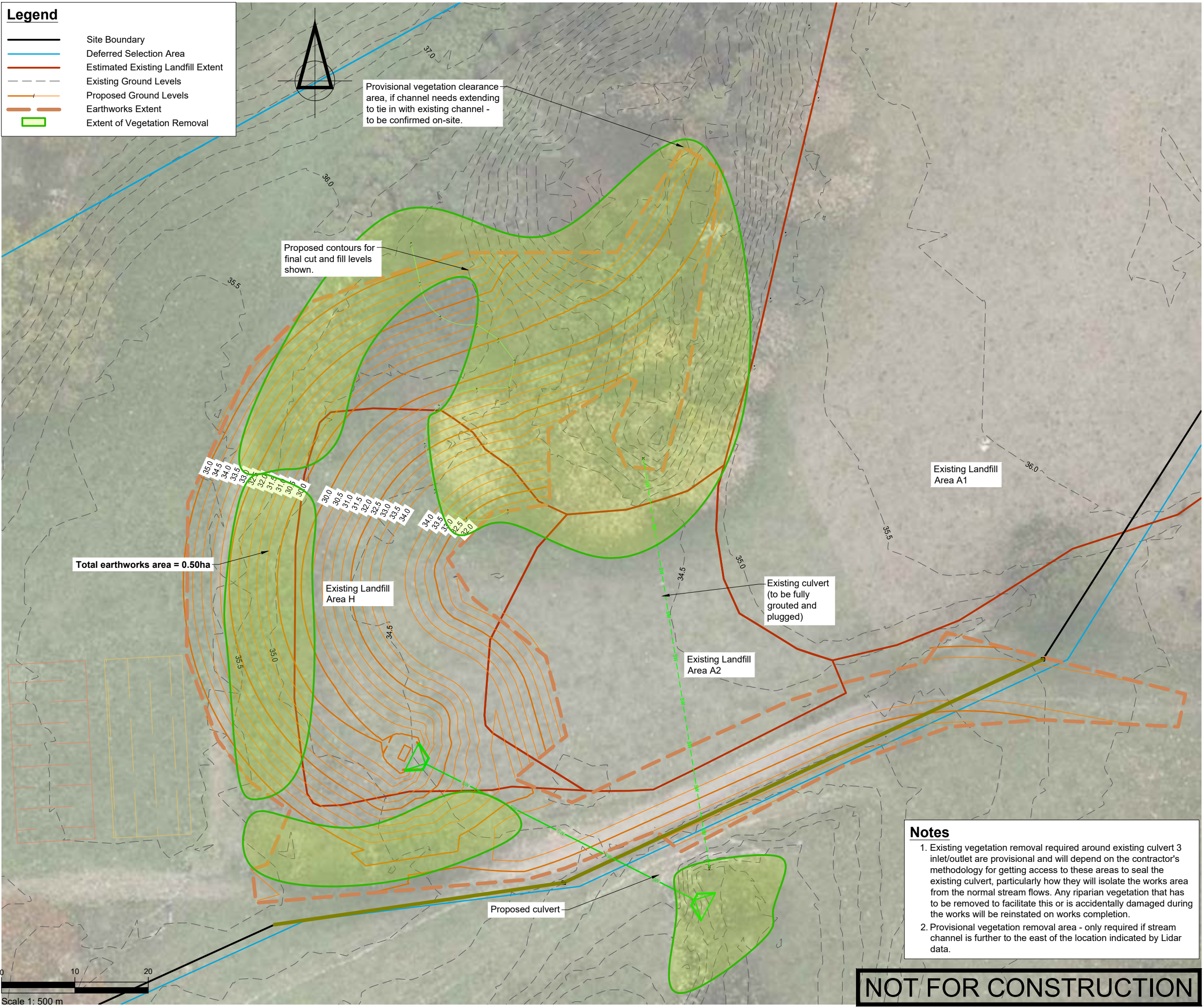
Estimated Existing Landfill Extent

Existing Ground Levels

Proposed Ground Levels

Earthworks Extent

Extent of Vegetation Removal



- Notes
1. Existing vegetation removal required around existing culvert 3 inlet/outlet are provisional and will depend on the contractor's methodology for getting access to these areas to seal the existing culvert, particularly how they will isolate the works area from the normal stream flows. Any riparian vegetation that has to be removed to facilitate this or is accidentally damaged during the works will be reinstated on works completion.

2. Provisional vegetation removal area - only required if stream channel is further to the east of the location indicated by Lidar data.

NOT FOR CONSTRUCTION

SURVEYED			APPROVED SF 05/11/24	DATE	
DESIGNED	TB	14/08/24			
DRAWN	TB	15/08/24			
CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
A	AREA A2/H REDESIGN			SF	23/05/25

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

CLIENT

TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

INDICATIVE VEGETATION
REMOVAL PLAN

Fraser
Thomas

ENGINEERS • RESOURCE MANAGERS • SURVEYORS

AUCKLAND

HAWKE'S BAY

CHRISTCHURCH

BLenheim

Nelson

TAURANGA

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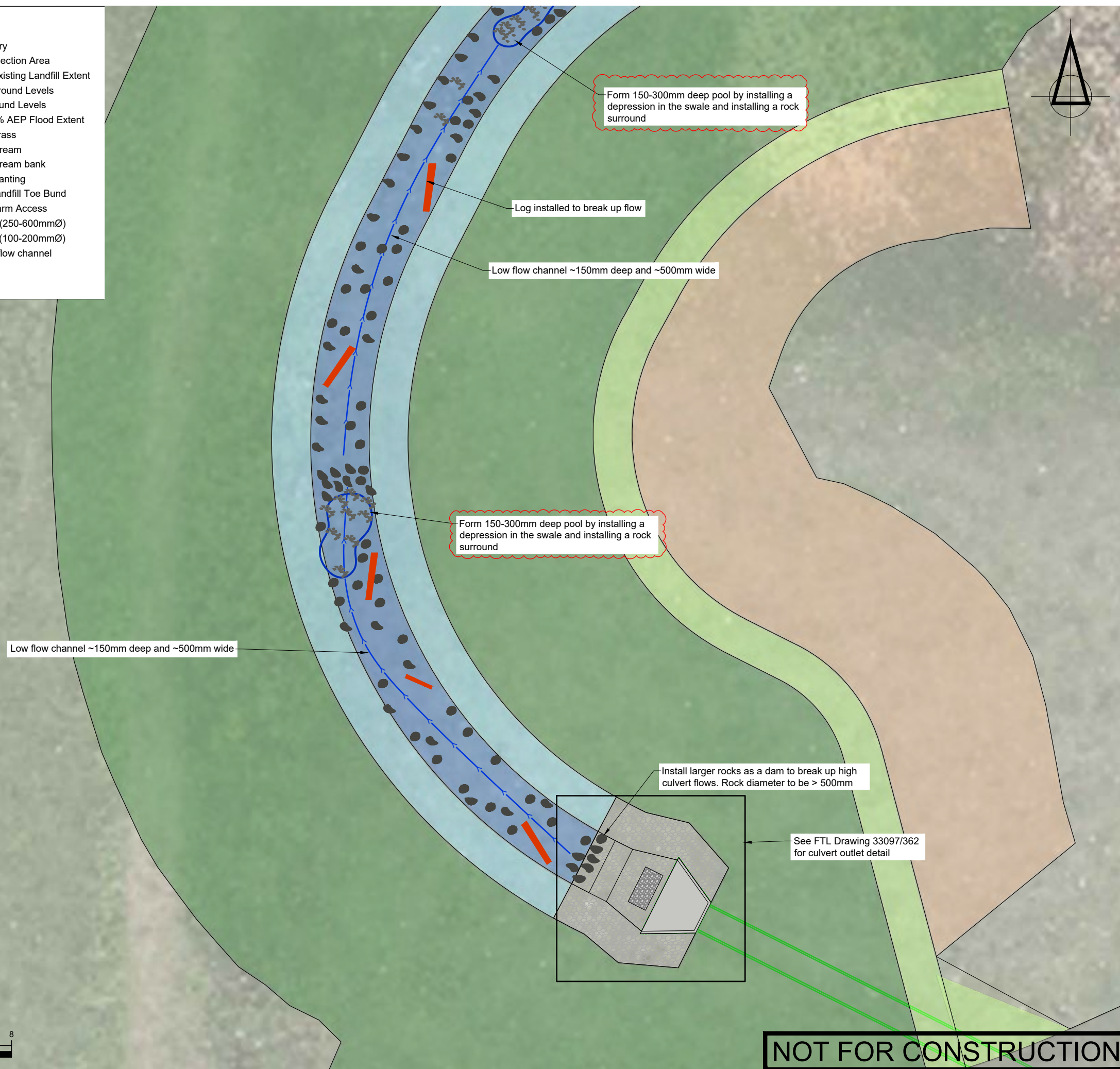
Construction works shall commence only on receipt of and in accordance with the Council or Council organisation stamped approved drawings, unless otherwise indicated.

SCALE 1:500 (A3)

DRAWING No 33097/LF311

REVISION A

	Site Boundary
	Deferred Selection Area
	Estimated Existing Landfill Extent
	Proposed Ground Levels
	Existing Ground Levels
	Proposed 1% AEP Flood Extent
	Proposed Grass
	Proposed Stream
	Proposed Stream bank
	Proposed Planting
	Proposed Landfill Toe Bund
	Proposed Farm Access
	Large rocks (250-600mmØ)
	Small rocks (100-200mmØ)
	Stream low flow channel
	Water pool
	Log

[illegible][illegible]

TOITU TE WHENUA LAND INFORMATION NEW ZEALAND

PROJECT FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

INDICATIVE STREAM
CONSTRUCTION PLAN 1

STATUS	FOR RESOURCE CONSENT Construction works shall commence only on receipt of and in accordance with the Council or Council organisation stamped approved drawings, unless otherwise indicated.
SCALE	1:200 (A3)
DRAWING No	REVISION
33097/LF312	A

NOTES

CLIENT

TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

INDICATIVE STREAM
CONSTRUCTION PLAN 2

FOR RESOURCE CONSENT
Construction works shall commence only on receipt of and in accordance with the Council or Council organisation stamped approved drawings, unless otherwise indicated.

SCALE	1:200	(A3)
DRAWING No	33097/LF313	REVISION A

Legend

Site Boundary

Deferred Selection Area

Estimated Existing Landfill Extent

Existing Ground Levels

Proposed Ground Levels

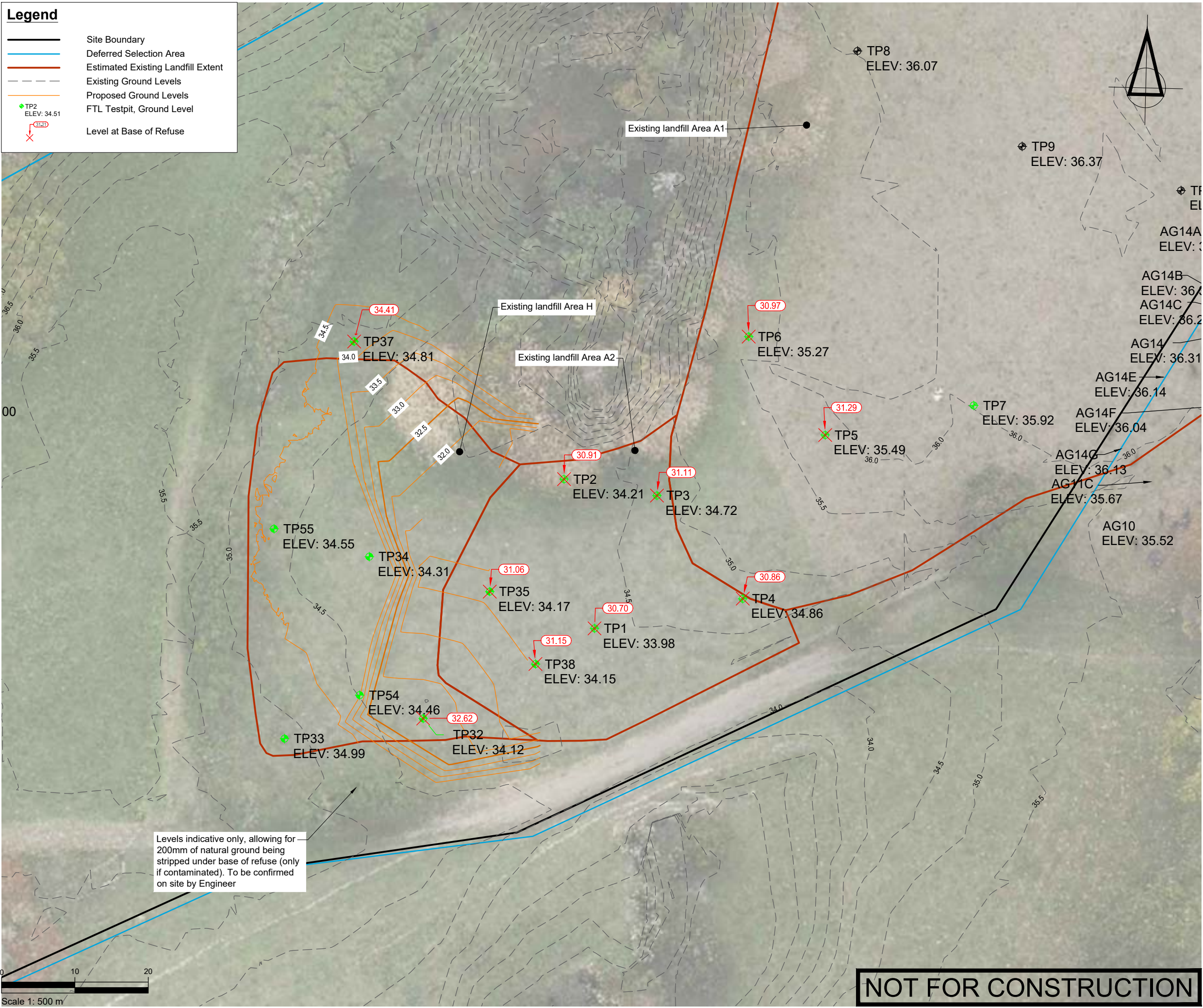
TP2

ELEV: 34.51

X

31.21

Level at Base of Refuse



SURVEYED			APPROVED	DATE
DESIGNED	TB	14/08/24	SF	05/11/24
DRAWN	TB	21/08/24		
CHECKED	SF	05/11/24		
REVISION	CHANGES		CHECKED	DATE
A	AREA A2/H REDESIGN		SF	23/05/25

NOTES

PROJECT DATUMS:

LEVEL: New Zealand Vertical Datum 2016

COORDINATE: New Zealand Transverse Mercator

CLIENT

TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

AREAS A2/H & CULVERT 3
REFUSE UNDERCUT PLAN

Fraser
Thomas

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HAWKE'S BAY 06 211 2766

CHRISTCHURCH 03 358 5936

BLenheim 03 428 3292

NELSON 03 222 1132

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STATUS

FOR RESOURCE CONSENT

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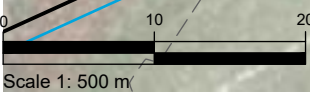
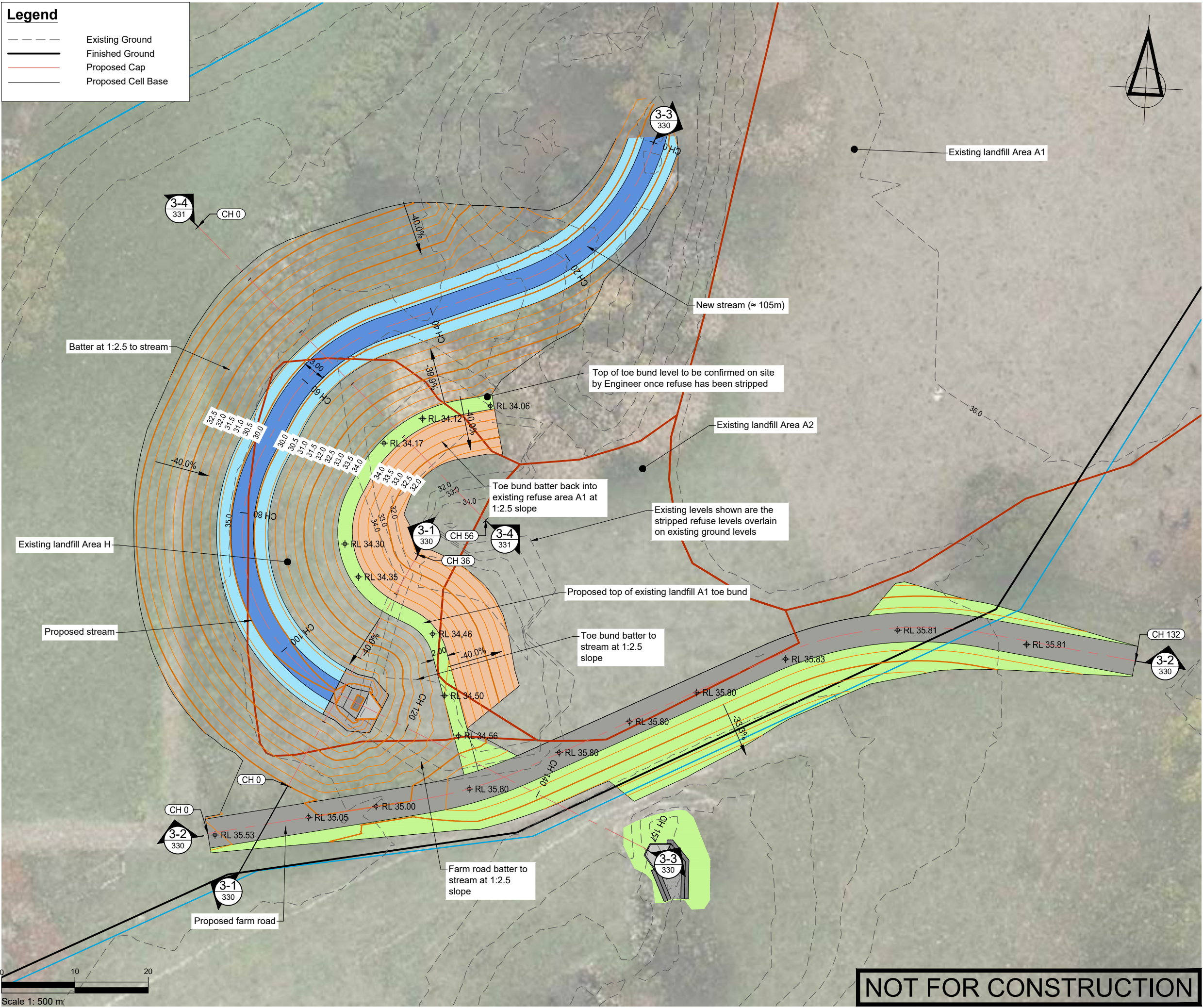
SCALE 1:500 (A3)

DRAWING No 33097/LF320

REVISION A

Legend

- Existing Ground
- Finished Ground
- Proposed Cap
- Proposed Cell Base



NOT FOR CONSTRUCTION

SURVEYED	TB	14/08/24	APPROVED	SF	DATE
DRAWN	TB	21/08/24			
CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
A	AREA A2/H REDESIGN			SF	23/05/25
B	CULVERT 3 OUTLET CHANGE			SF	20/08/25
C	ANNOTATION NOTES ADDED			SF	01/10/25

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

CLIENT
**TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND**

PROJECT
**FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT**

TITLE
**AREAS A2/H & CULVERT 3
FINISHED LEVELS PLAN**



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HAWKE'S BAY 06 211 2766
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STATUS
FOR RESOURCE CONSENT

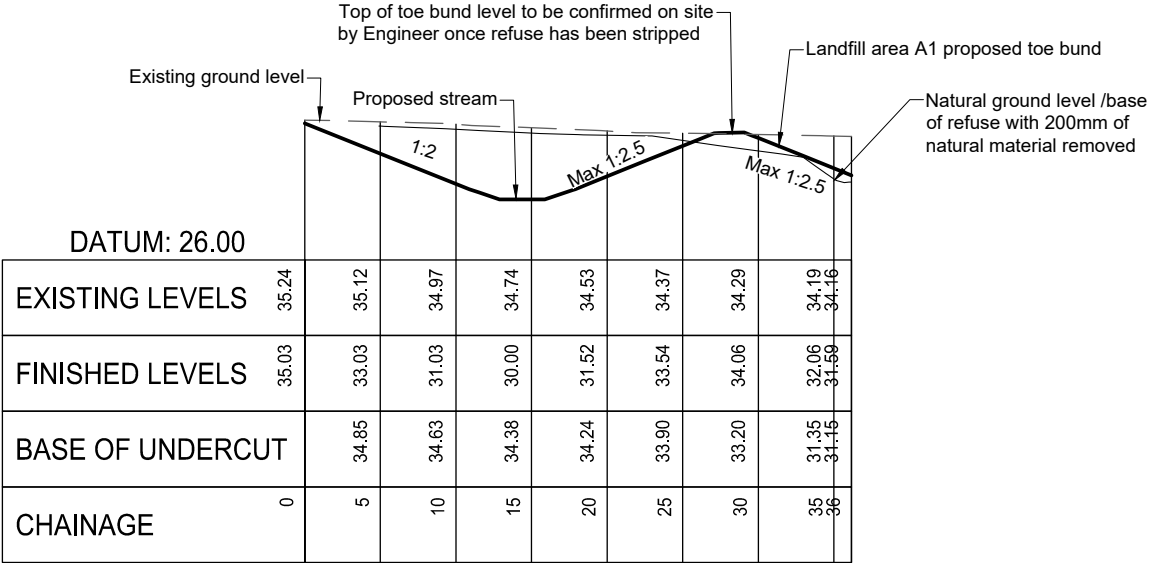
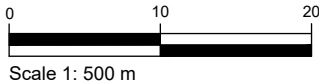
Construction works shall commence only on receipt of and in accordance with the Council or Council organisation stamped approved drawings, unless otherwise indicated.

SCALE 1:500 (A3)

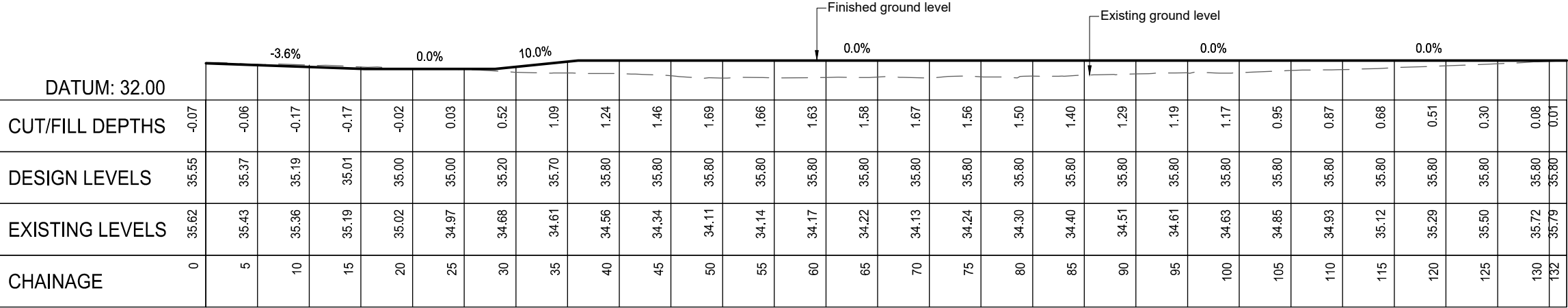
DRAWING No 33097/LF321

REVISION C

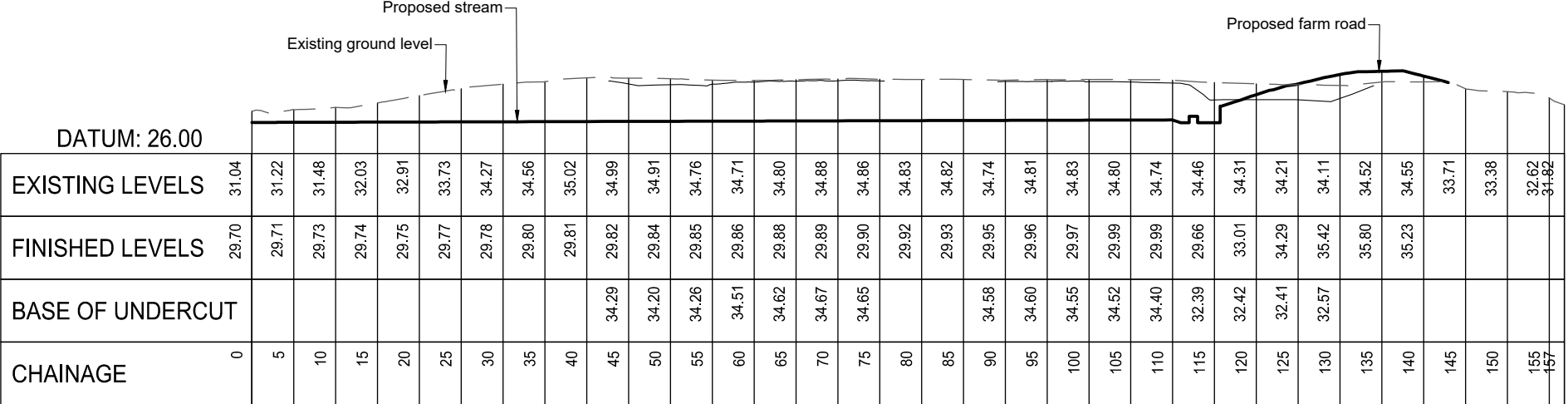
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3-1 Cross Section 3-1
321 1:500



3-2 Cross Section 3-2
321 1:500



3-3 Cross Section 3-3
321 1:750

NOT FOR CONSTRUCTION

SURVEYED			APPROVED	DATE
DESIGNED	TB	14/08/24	SF	05/11/24
DRAWN	TB	21/08/24		
CHECKED	SF	05/11/24		
REVISION	CHANGES		CHECKED	DATE
A	AREA A2/H REDESIGN		SF	23/05/25

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

CLIENT
TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT
FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE
AREAS A2/H & CULVERT 3
CROSS SECTION PLAN 1



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SCALE AS SHOWN (A3)

DRAWING No 33097/LF330 REVISION A

Legend

Natural ground

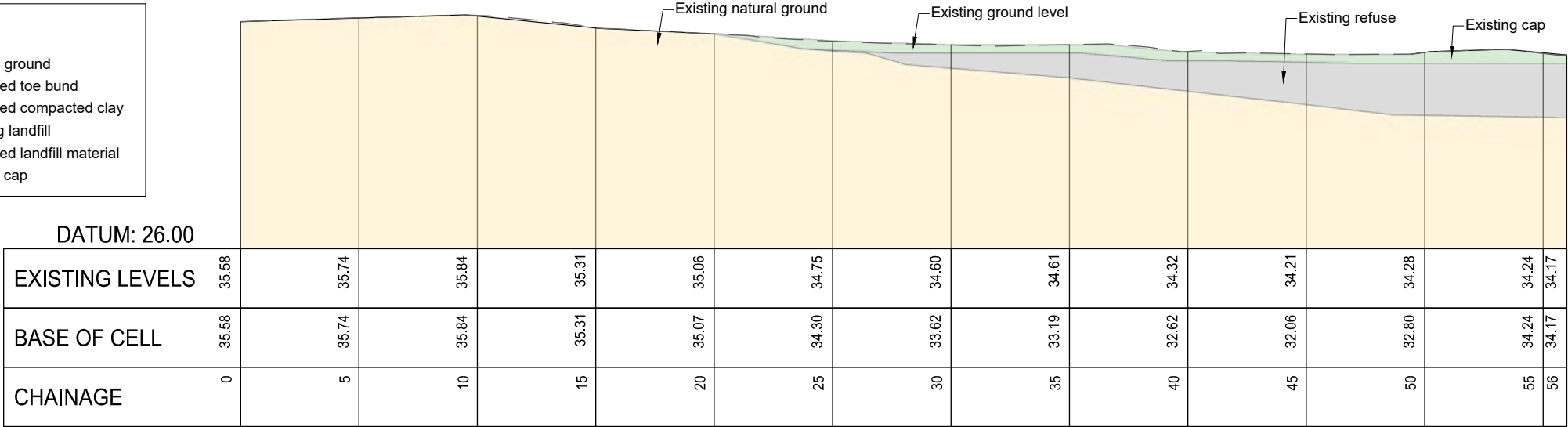
Proposed toe bund

Proposed compacted clay

Existing landfill

Proposed landfill material

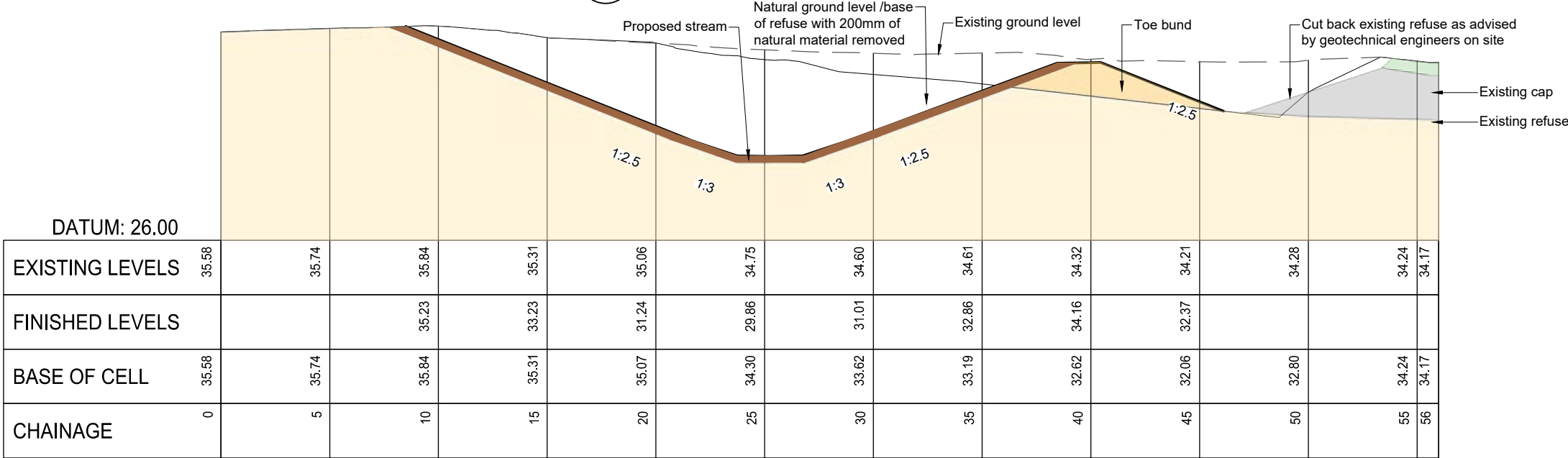
Landfill cap



3-4 Cross Section 3-4 - Existing

321

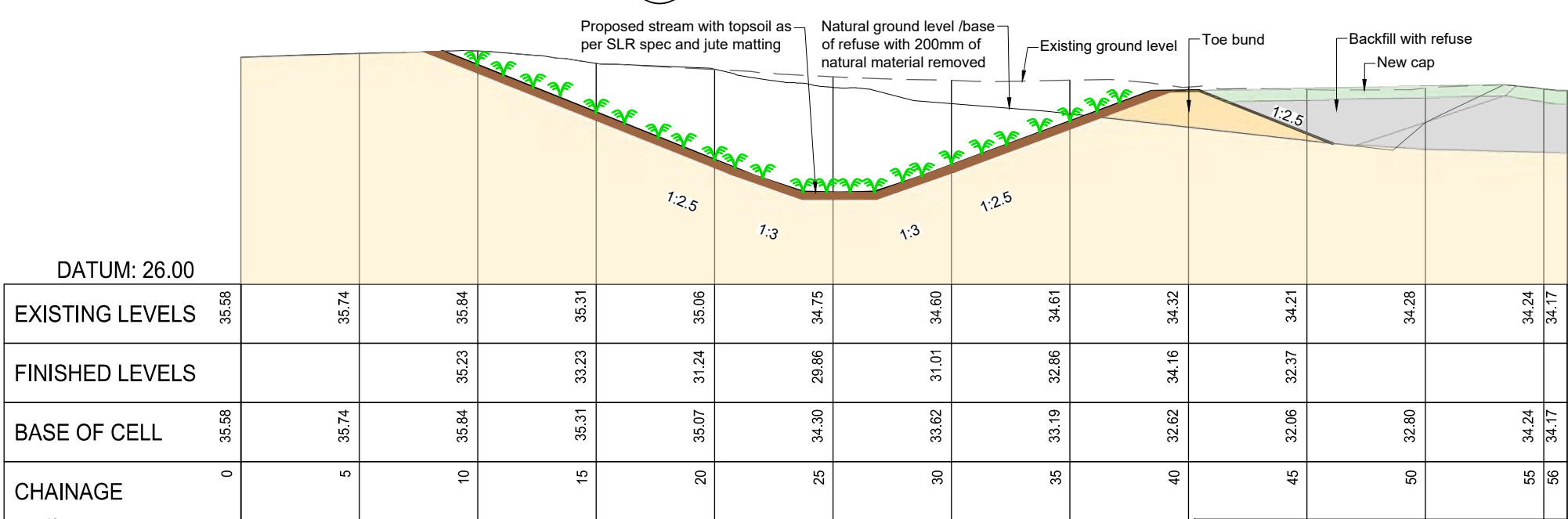
1:250



3-4 Cross Section 3-4 - Existing

321

1:250



3-4 Cross Section 3-4 - Existing

321

1:250

NOT FOR CONSTRUCTION

SURVEYED			APPROVED	DATE
DESIGNED	TB	20/11/24	SF	
DRAWN	TB	23/05/25	23/05/25	
CHECKED	SF	23/05/25		
REVISION	CHANGES		CHECKED	DATE
A	AREA A2/H REDESIGN		SF	23/05/25

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

CLIENT

TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT

FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

AREAS A2/H & CULVERT 3
CROSS SECTION PLAN 2

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STATUS

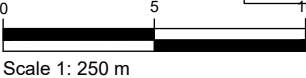
FOR RESOURCE CONSENT

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SCALE 1:250 (A3)

DRAWING No 33097/LF331

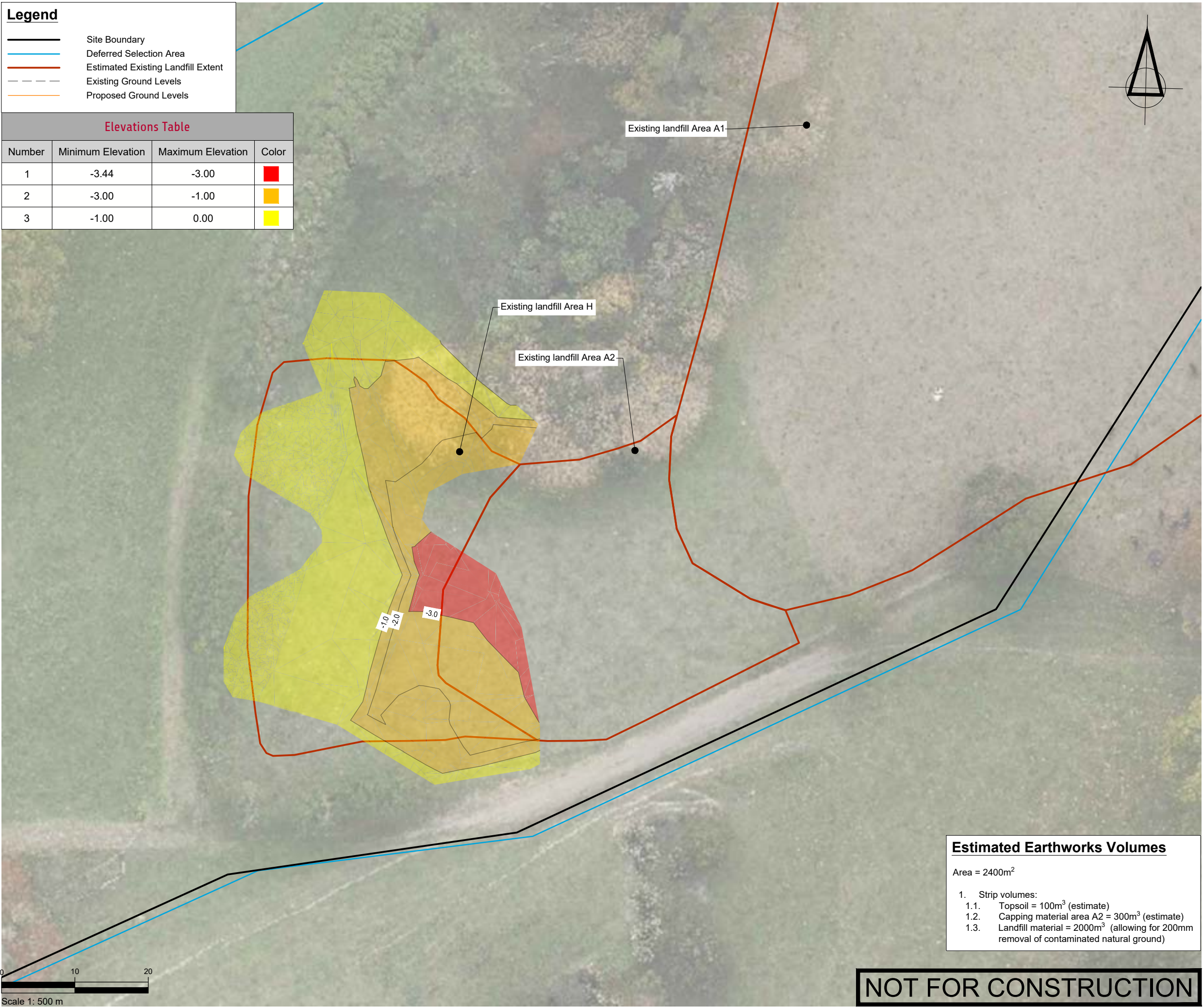
REVISION A



Legend

- Site Boundary
- Deferred Selection Area
- Estimated Existing Landfill Extent
- Existing Ground Levels
- Proposed Ground Levels

Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	-3.44	-3.00	
2	-3.00	-1.00	
3	-1.00	0.00	



Estimated Earthworks Volumes

Area = 2400m²

1. Strip volumes:

- 1.1. Topsoil = 100m³ (estimate)
- 1.2. Capping material area A2 = 300m³ (estimate)
- 1.3. Landfill material = 2000m³ (allowing for 200mm removal of contaminated natural ground)

NOT FOR CONSTRUCTION

SURVEYED			APPROVED SF 05/11/24	DATE
DESIGNED	TB	14/08/24		
DRAWN	TB	21/08/24		
CHECKED	SF	05/11/24		
REVISION	CHANGES		CHECKED	DATE
A	AREA A2/H REDESIGN		SF	23/05/25
			</	

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

CLIENT
TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT
FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE
AREAS A2/H & CULVERT 3
UNDERCUT STRIP PLAN

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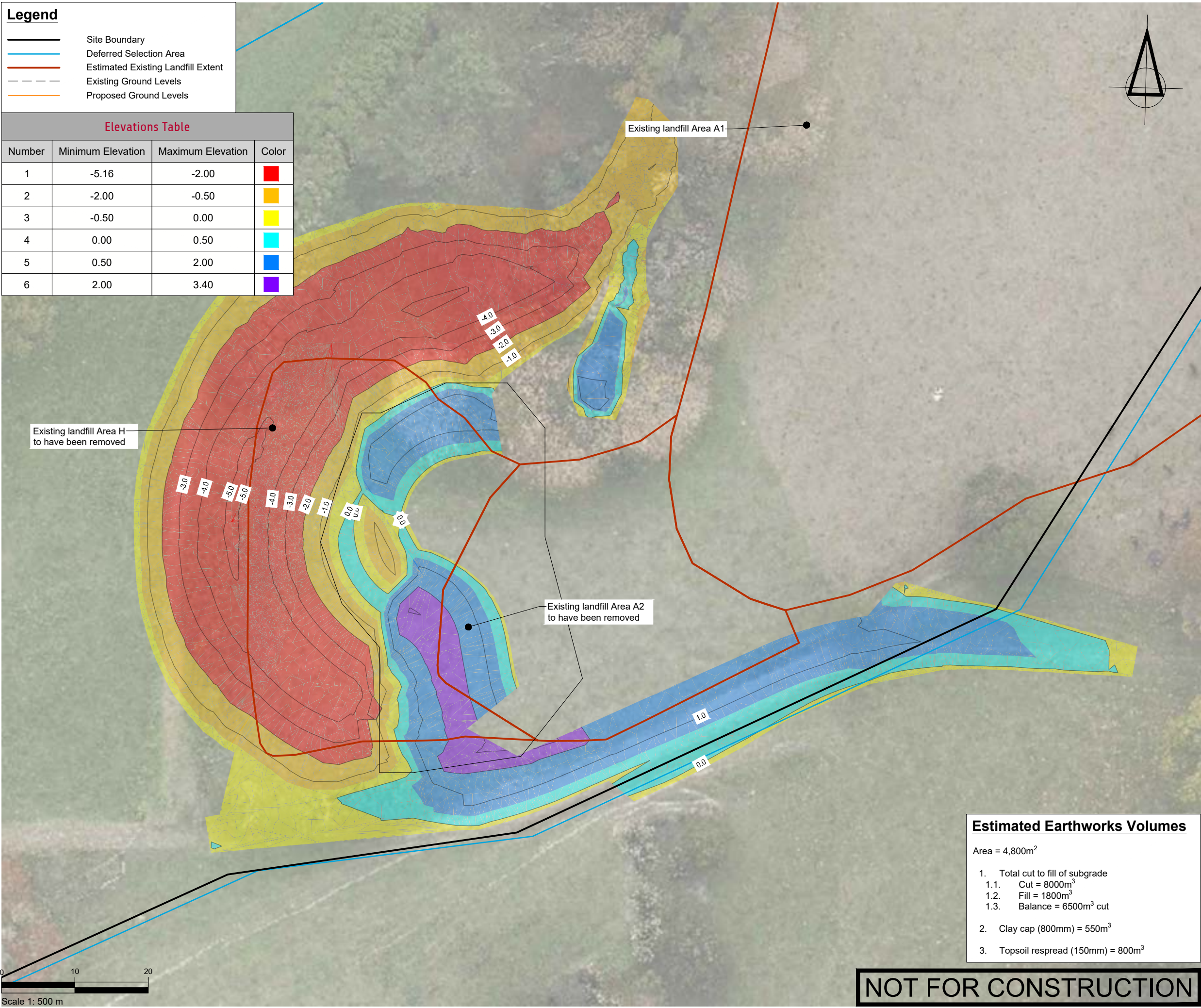
SCALE 1:500 (A3)

DRAWING No 33097/LF340 REVISION A

Legend

- Site Boundary
- Deferred Selection Area
- Estimated Existing Landfill Extent
- Existing Ground Levels
- Proposed Ground Levels

Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	-5.16	-2.00	
2	-2.00	-0.50	
3	-0.50	0.00	
4	0.00	0.50	
5	0.50	2.00	
6	2.00	3.40	



Estimated Earthworks Volumes

Area = 4,800m²

- Total cut to fill of subgrade
 - Cut = 8000m³
 - Fill = 1800m³
 - Balance = 6500m³ cut
- Clay cap (800mm) = 550m³
- Topsoil respread (150mm) = 800m³

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DESIGNED	TB	14/08/24			
DRAWN	TB	21/08/24			
CHECKED	SF	05/11/24			
REVISION	CHANGES			CHECKED	DATE
A	AREA A2/H REDESIGN			SF	23/05/25

NOTES

PROJECT DATUMS:
LEVEL: New Zealand Vertical Datum 2016
COORDINATE: New Zealand Transverse Mercator

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PROJECT
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PROJECT**

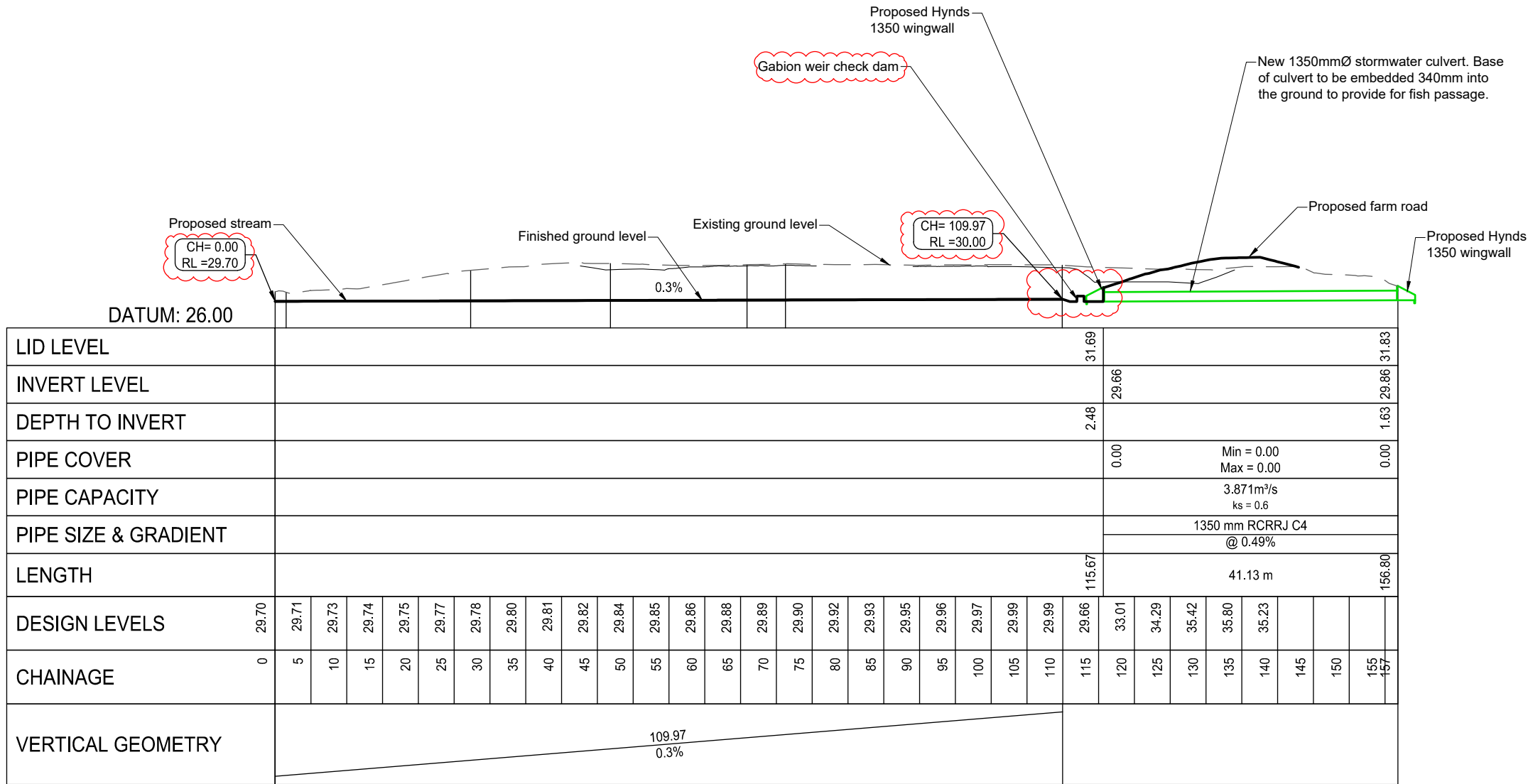
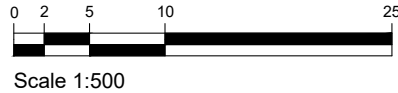
TITLE
**AREAS A2/H & CULVERT 3
FINAL LEVELS CUT AND FILL
PLAN**

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SCALE: 1:500 (A3)
DRAWING No: 33097/LF341
REVISION: A

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L1 Stormwater Long Section 1
360 1:750

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REVISION	CHANGES			CHECKED	DATE
A	ANNOTATION ADDED			SF	08/11/24
B	AREA A2/H REDESIGN			SF	23/05/25
C	UPDATED FISH PASSAGE DETAILS			SF	30/06/25
D	CULVERT 3 OUTLET CHANGE			SF	20/08/25
	</				

NOTES

PROJECT DATUMS:
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TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

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PROJECT

AREAS A2/H & CULVERT 3
CULVERT LONG SECTION PLAN

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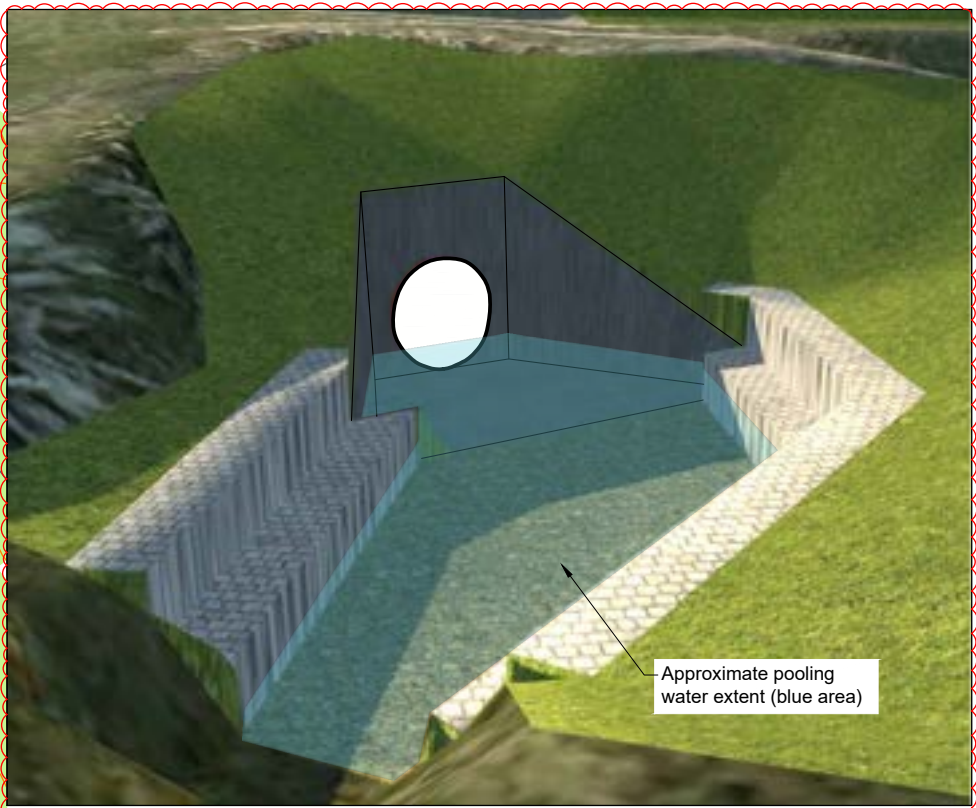
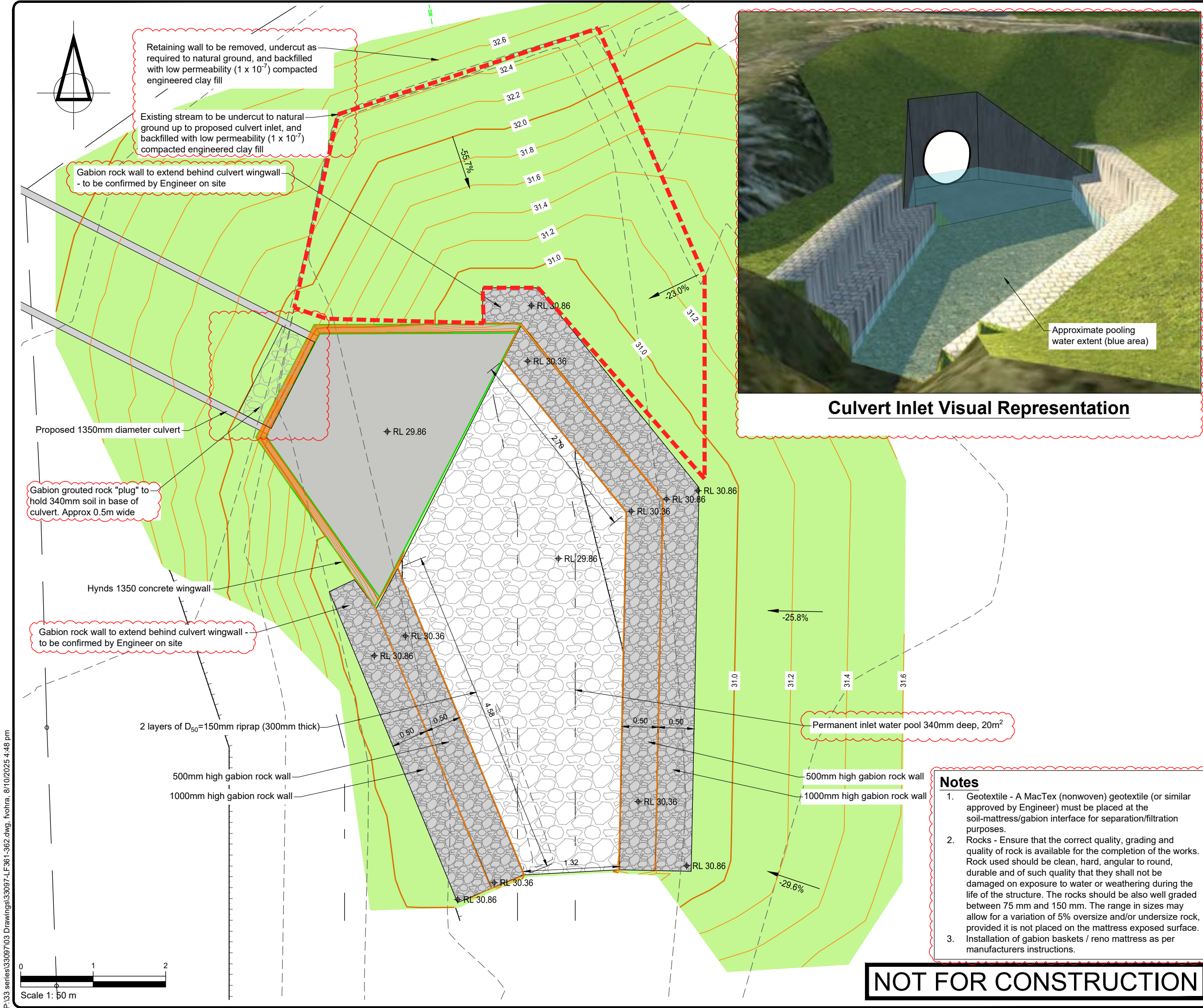
STATUS

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SCALE 1:750 (A3)

DRAWING No 33097/LF360 REVISION D



Culvert Inlet Visual Representation

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DESIGNED	TB	23/05/25			
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CHECKED	SF	23/05/25			
REVISION	CHANGES			CHECKED	DATE
A	CULVERT 3 OUTLET CHANGE			SF	20/08/25

NOTES

PROJECT DATUMS:

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INFORMATION NEW ZEALAND

PROJECT

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DEMOLITION AND REMEDIATION
PROJECT

TITLE

AREAS A2/H & CULVERT 3
CULVERT INLET DETAIL

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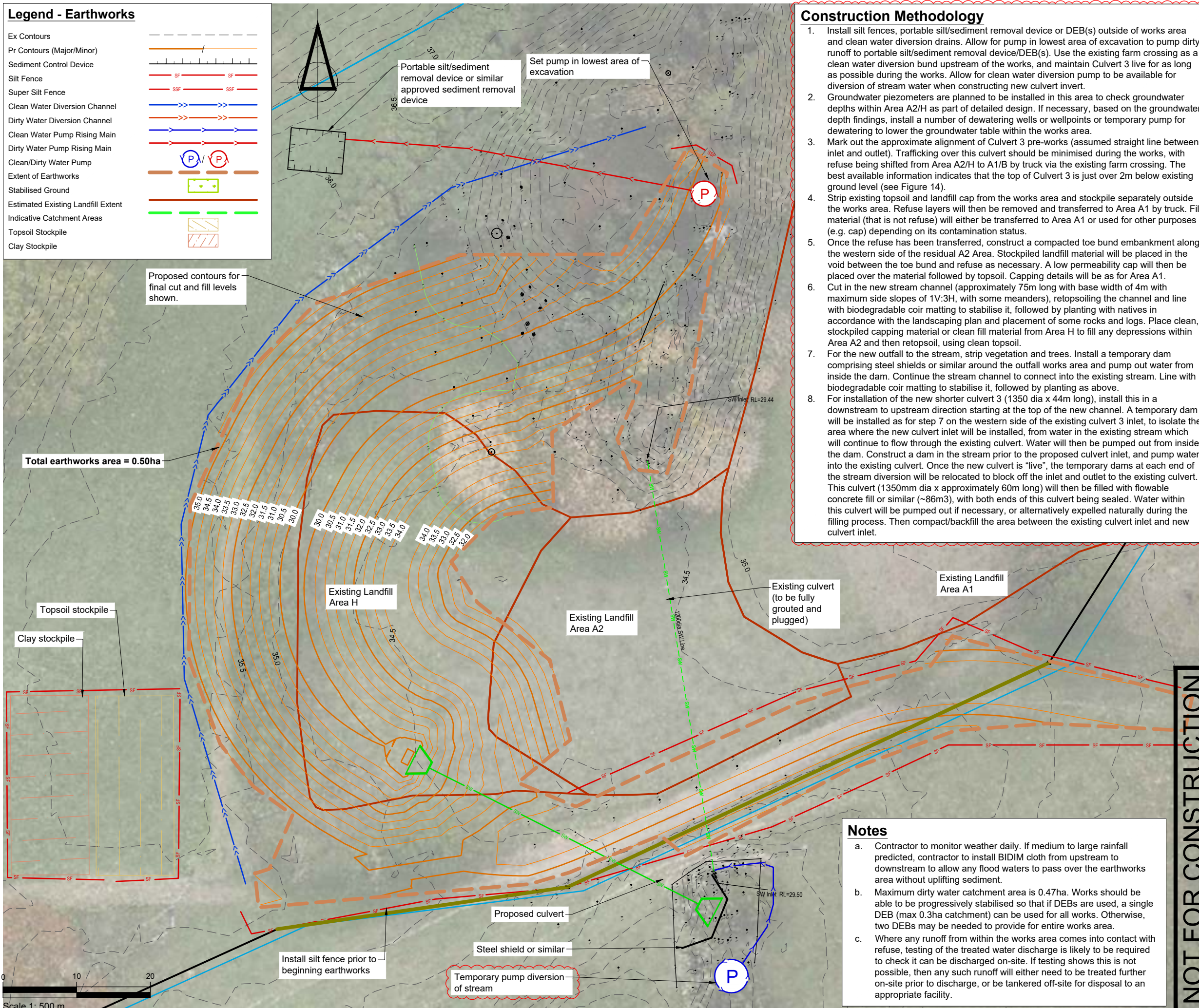
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SCALE 1:50 (A3)

DRAWING No 33097/LF361

REVISION A

Ex Contours	
Pr Contours (Major/Minor)	
Sediment Control Device	
Silt Fence	
Super Silt Fence	
Clean Water Diversion Channel	
Dirty Water Diversion Channel	
Clean Water Pump Rising Main	
Dirty Water Pump Rising Main	
Clean/Dirty Water Pump	
Extent of Earthworks	
Stabilised Ground	
Estimated Existing Landfill Extent	
Indicative Catchment Areas	
Topsoil Stockpile	
Clay Stockpile	



1. Install silt fences, portable silt/sediment removal device or DEB(s) outside of works area and clean water diversion drains. Allow for pump in lowest area of excavation to pump dirty runoff to portable silt/sediment removal device/DEB(s). Use the existing farm crossing as a clean water diversion bund upstream of the works, and maintain Culvert 3 live for as long as possible during the works. Allow for clean water diversion pump to be available for diversion of stream water when constructing new culvert invert.
2. Groundwater piezometers are planned to be installed in this area to check groundwater depths within Area A2/H as part of detailed design. If necessary, based on the groundwater depth findings, install a number of dewatering wells or wellpoints or temporary pump for dewatering to lower the groundwater table within the works area.
3. Mark out the approximate alignment of Culvert 3 pre-works (assumed straight line between inlet and outlet). Trafficking over this culvert should be minimised during the works, with refuse being shifted from Area A2/H to A1/B by truck via the existing farm crossing. The best available information indicates that the top of Culvert 3 is just over 2m below existing ground level (see Figure 14).
4. Strip existing topsoil and landfill cap from the works area and stockpile separately outside the works area. Refuse layers will then be removed and transferred to Area A1 by truck. Fill material (that is not refuse) will either be transferred to Area A1 or used for other purposes (e.g. cap) depending on its contamination status.
5. Once the refuse has been transferred, construct a compacted toe bund embankment along the western side of the residual A2 Area. Stockpiled landfill material will be placed in the void between the toe bund and refuse as necessary. A low permeability cap will then be placed over the material followed by topsoil. Capping details will be as for Area A1.
6. Cut in the new stream channel (approximately 75m long with base width of 4m with maximum side slopes of 1V:3H, with some meanders), retopsoiling the channel and line with biodegradable coir matting to stabilise it, followed by planting with natives in accordance with the landscaping plan and placement of some rocks and logs. Place clean, stockpiled capping material or clean fill material from Area H to fill any depressions within Area A2 and then retopsoil, using clean topsoil.
7. For the new outlet to the stream, strip vegetation and trees. Install a temporary dam comprising steel shields or similar around the outfall works area and pump out water from inside the dam. Continue the stream channel to connect into the existing stream. Line with biodegradable coir matting to stabilise it, followed by planting as above.
8. For installation of the new shorter culvert 3 (1350 dia x 44m long), install this in a downstream to upstream direction starting at the top of the new channel. A temporary dam will be installed as for step 7 on the western side of the existing culvert 3 inlet, to isolate the area where the new culvert inlet will be installed, from water in the existing stream which will continue to flow through the existing culvert. Water will then be pumped out from inside the dam. Construct a dam in the stream prior to the proposed culvert inlet, and pump water into the existing culvert. Once the new culvert is "live", the temporary dams at each end of the stream diversion will be relocated to block off the inlet and outlet to the existing culvert. This culvert (1350mm dia x approximately 60m long) will then be filled with flowable concrete fill or similar (~86m³), with both ends of this culvert being sealed. Water within this culvert will be pumped out if necessary, or alternatively expelled naturally during the filling process. Then compact/backfill the area between the existing culvert inlet and new culvert inlet.

- a. Contractor to monitor weather daily. If medium to large rainfall predicted, contractor to install BIDIM cloth from upstream to downstream to allow any flood waters to pass over the earthworks area without uplifting sediment.
- b. Maximum dirty water catchment area is 0.47ha. Works should be able to be progressively stabilised so that if DEBs are used, a single DEB (max 0.3ha catchment) can be used for all works. Otherwise, two DEBs may be needed to provide for entire works area.
- c. Where any runoff from within the works area comes into contact with refuse, testing of the treated water discharge is likely to be required to check it can be discharged on-site. If testing shows this is not possible, then any such runoff will either need to be treated further on-site prior to discharge, or be tankered off-site for disposal to an appropriate facility.

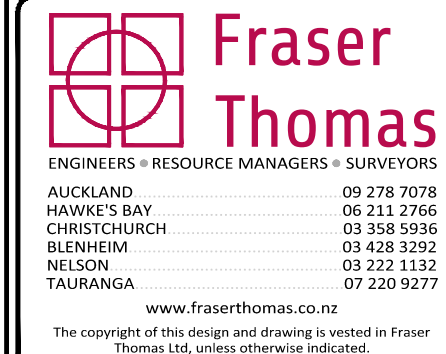
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LEVEL: New Zealand Vertical Datum 2016
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INFORMATION NEW ZEALAND

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PROJECT

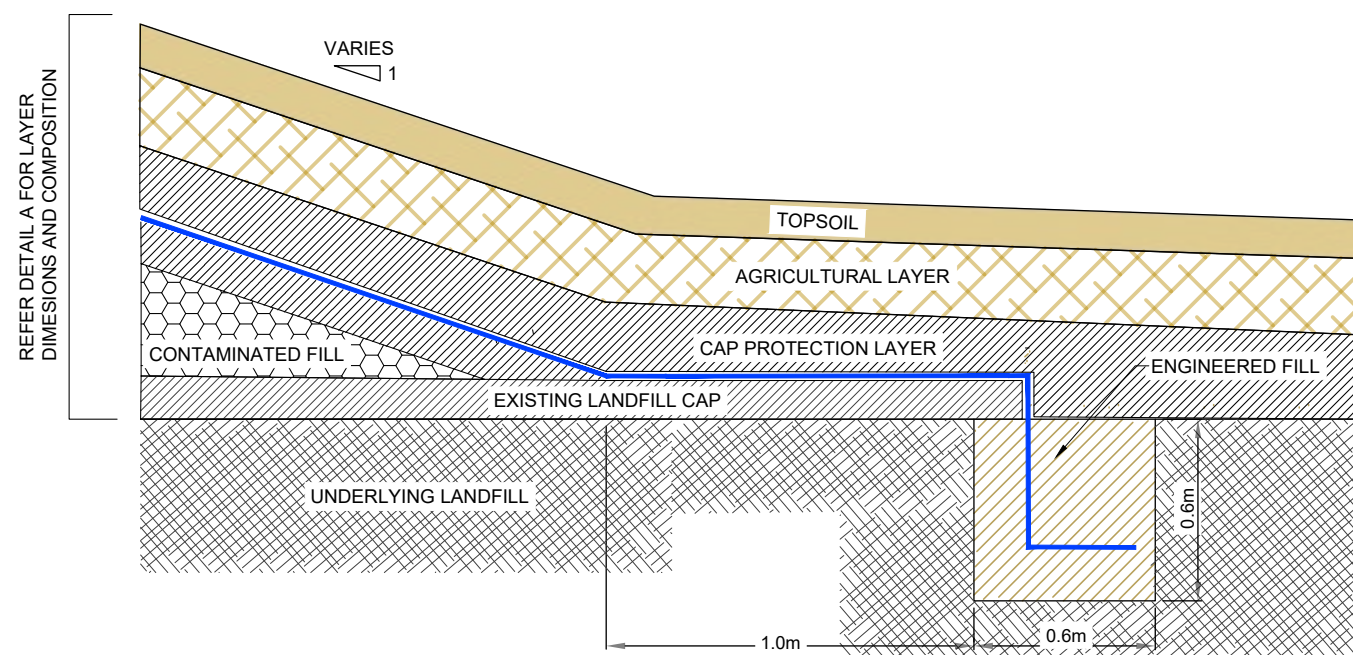
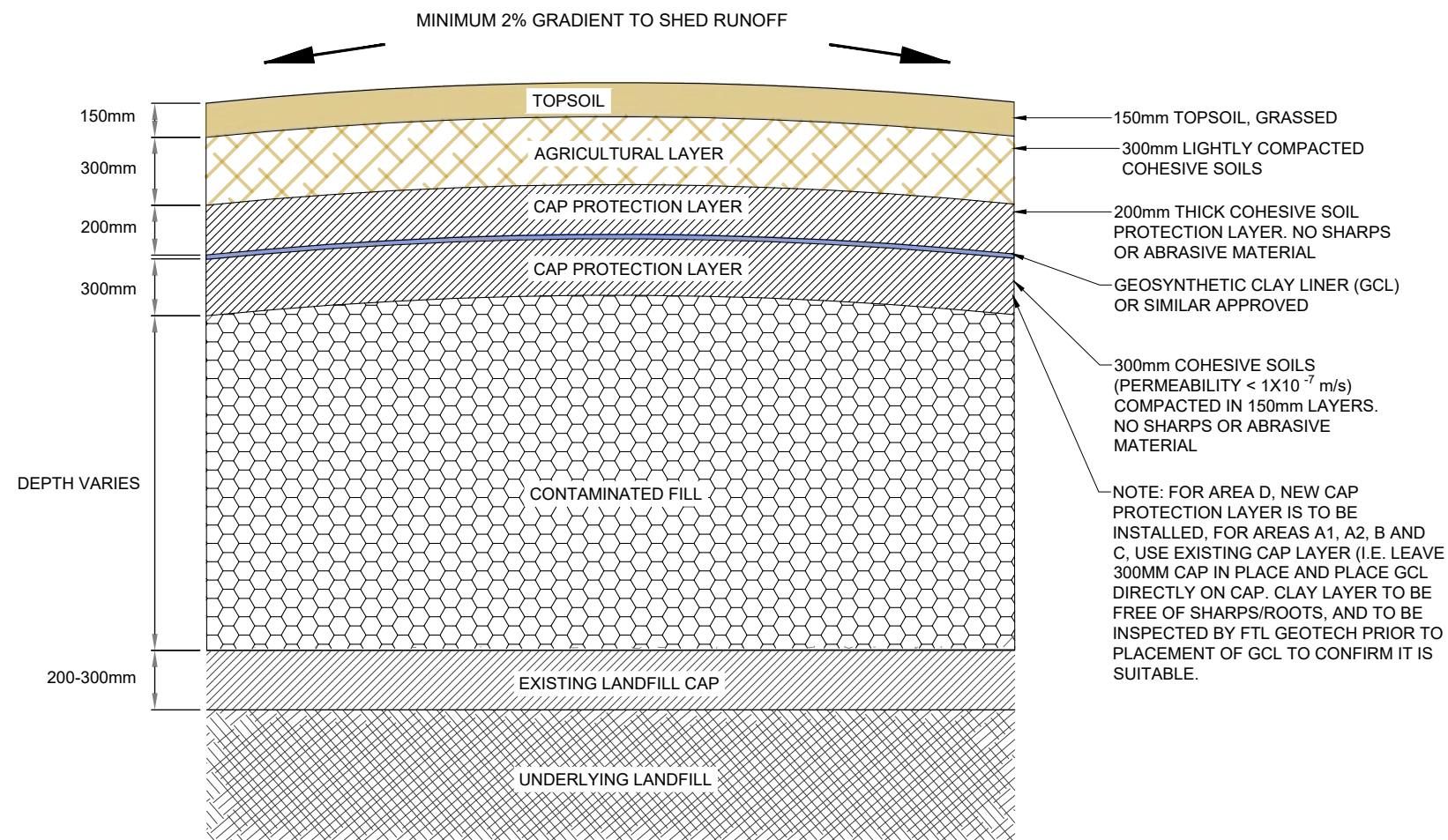
AREAS A2/H & CULVERT 3 EROSION AND SEDIMENT CONTROL PLAN



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DRAWING No	REVISION
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NOTES	
PROJECT DATUMS: LEVEL: New Zealand Vertical Datum 2016 COORDINATE: New Zealand Transverse Mercator	

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TOITU TE WHENUA LAND
INFORMATION NEW ZEALAND

PROJECT
FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
PROJECT

TITLE

PROPOSED LANDFILL CELL
TYPICAL DETAIL

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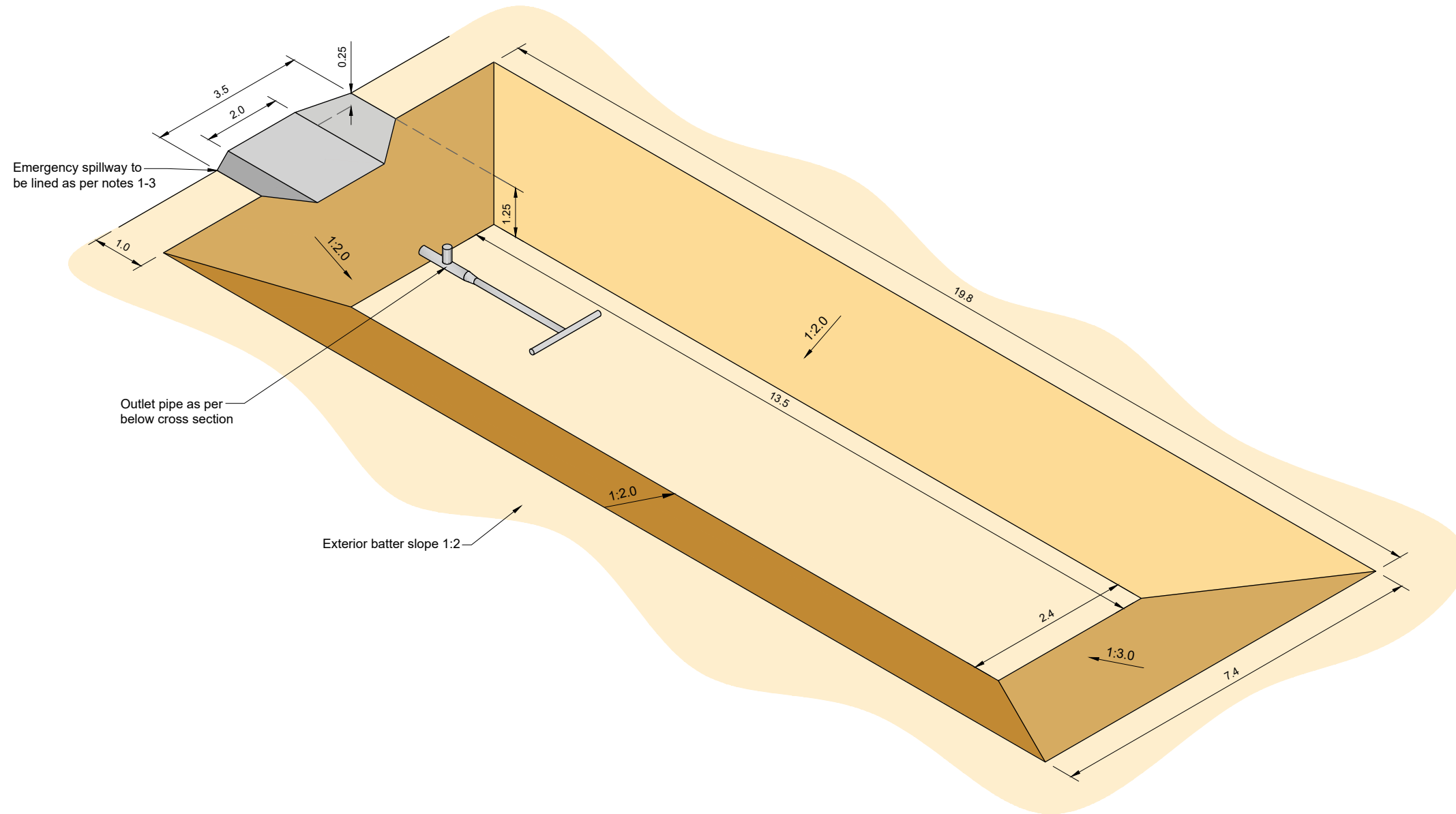
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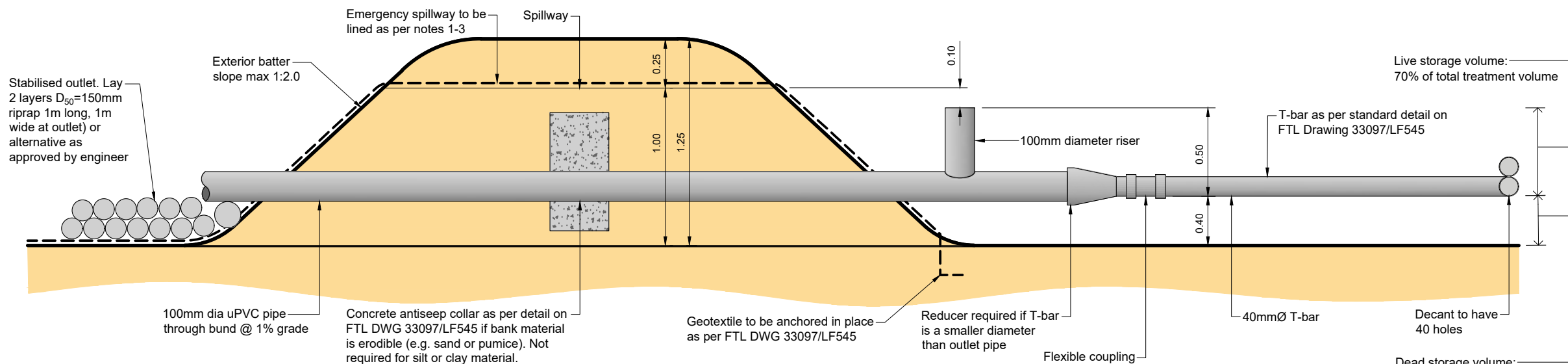
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SCALE	NTS		(A3)
DRAWING No	33097/LF500		REVISION
33097/LF500			A

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Decanting Earth Bund Layout
NTS



Cross Section
NTS

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DESIGNED	TB	14/08/24	SF	05/11/24
DRAWN	TB	20/08/24		
CHECKED	SF	05/11/24		
REVISION	CHANGES		CHECKED	DATE

- Notes
- Emergency spillway lined with strong woven low permeability geotextile (Bidim A14 or Duraforce AS240 or approved equivalent) overlaid with soft non-woven needle punched geotextile (Tencate Mirafi HP 280a, Duraforce WG30/30 or approved equivalent).
 - Emergency spillway to be secured with pins every 0.5m,
 - If the emergency spillway embankment is constructed with sand, pumice or other erodable material under the spillway lining, install waterproof layer underneath geotextile. Do not secure spillway with pins, instead follow alternative methodology provided in FTL Drawing 33097/LF545 based on Waikato Regional Council Earthworks series – erosion and sediment control factsheet 2019.

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INFORMATION NEW ZEALAND

PROJECT
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PROJECT

TITLE
DECANTING EARTH BUND
DIMENSIONS PLAN



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SCALE NTS	(A3)
DRAWING No 33097/LF540	REVISION -

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PROJECT FORMER TOKANUI HOSPITAL
DEMOLITION AND REMEDIATION
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SCALE	(A3)
DRAWING No	
33097/LF545	
REVISION	
-	



Geotextile Edge Anchoring Detail



NOT FOR CONSTRUCTION



Super Silt Fence Elevation

SUPER SILT FENCE DESIGN CRITERIA			
Slope %	Slope Length (m)	Spacing of Returns (m)	Length (m)
0-10	Unlimited	60	Unlimited
10-20	60	50	450
20-33	30	40	300
33-50	30	30	150
>50	15	20	75

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PROJECT DATUMS:
 LEVEL: New Zealand Vertical Datum 2016
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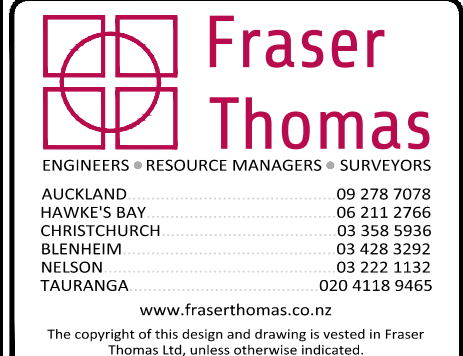
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PROJECT

TITLE

EROSION AND SEDIMENT
CONTROL DETAILS PAGE 1



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SCALE	NTS	(A3)
DRAWING No	33097/LF550	REVISION
		A

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