



ARATAKI DEVELOPMENT - HAVELOCK NORTH

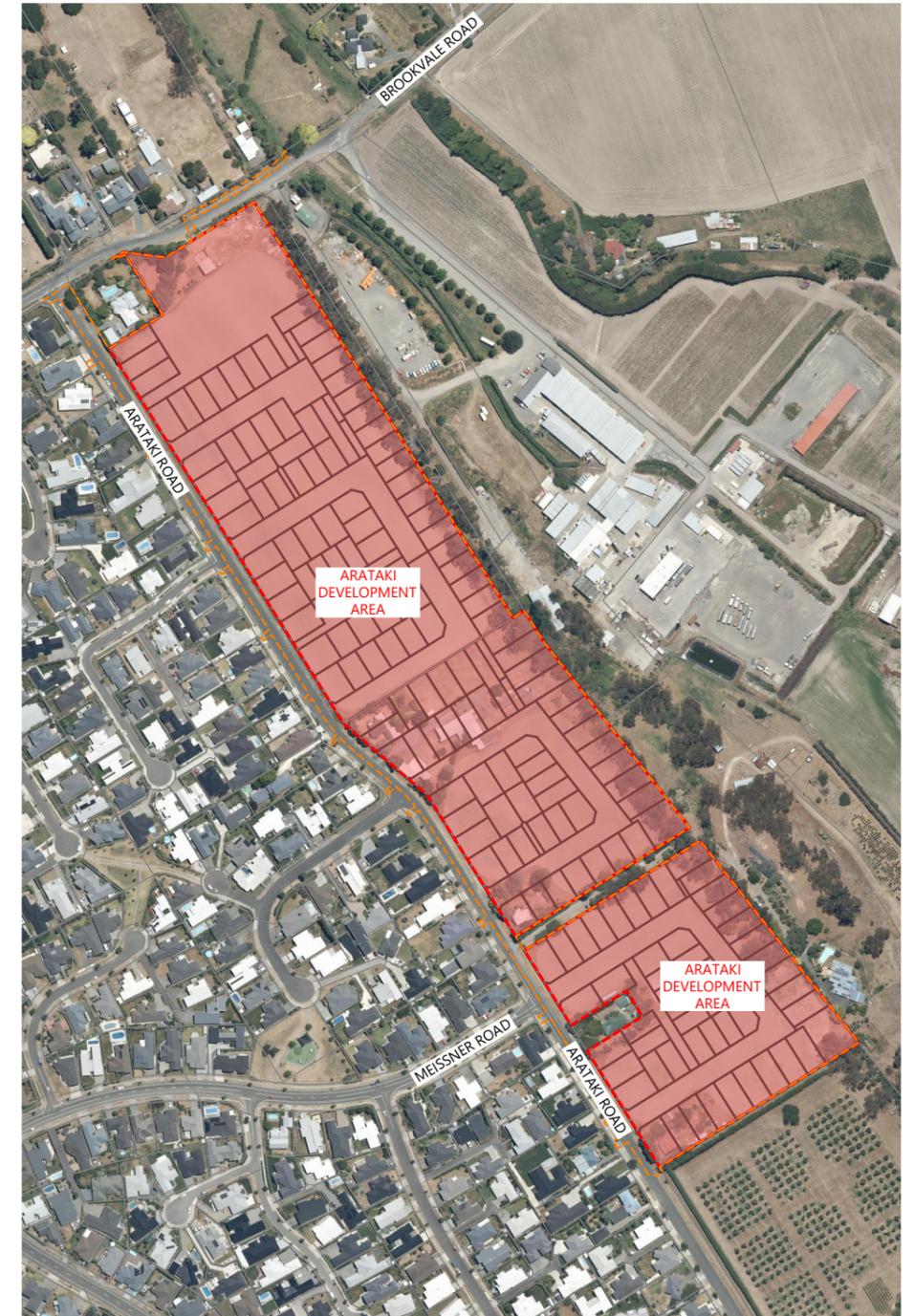
BUILDING B, LEVEL 1
8 NUGENT ST,
GRAFTON, AUCKLAND 1023
+64 9 308 9229
DRAWINGS ISSUED FOR CONSENT
HASTINGS DISTRICT COUNCIL

ARATAKI DEVELOPMENT DRAWINGS FOR CONSENT DRAWINGS INDEX



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DRAWING NUMBER	REV #	DRAWING TITLE
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P24-244-00-5002-WR	2	WATER RETICULATION LAYOUT PLAN - SHEET 2
P24-244-00-5003-WR	2	WATER RETICULATION LAYOUT PLAN - SHEET 3
P24-244-00-5500-WR	2	FIRE HYDRANT SPACING PLAN



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	TB
3 SCHEME PLAN UPDATED	BLO	NOV 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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8 NUGENT ST, GRAFTON,
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ARATAKI DEVELOPMENT - HAVELOCK NORTH

DRAWING INDEX



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:5000 @ A3	3
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-0000-GE	



SHEET 0002



PROPOSED EASEMENTS IN GROSS			
PURPOSE	SHOWN AS	BURDENED LAND	GRANTEE
RIGHT TO DRAIN WATER AND SEWAGE	A	LOT 2001	HASTINGS DISTRICT COUNCIL
RIGHT TO DRAIN WATER AND SEWAGE	B	LOT 2006	HASTINGS DISTRICT COUNCIL
RIGHT TO DRAIN WATER AND SEWAGE	C	LOT 2008	HASTINGS DISTRICT COUNCIL
RIGHT TO DRAIN WATER AND SEWAGE	D	LOT 2009	HASTINGS DISTRICT COUNCIL
RIGHT TO DRAIN WATER	LOTS 2000 & 2002-2005		HASTINGS DISTRICT COUNCIL

AREAS WILL BE SUBJECT PROPOSED CONSENT NOTICE (BUFFER INTERFACE).

EXISTING EASEMENTS TO BE SURRENDERED				
PURPOSE	SHOWN AS	BURDENED LAND	BENEFITED LAND	CREATED BY
RIGHT TO DRAIN SEWAGE	AREA A DP 540945	LOT 2 DP 540945	LOT 1 DP 540945	11544178.6
RIGHT TO CONVEY ELECTRICITY AND TELECOMMUNICATIONS	AREA A DP 546439	LOT 2 DP 546439	LOT 1 DP 546439	11791202.6
RIGHT TO DRAIN SEWAGE	AREA B DP 546439	LOT 2 DP 546439	LOT 1 DP 546439	11791202.6

EXISTING CONSENT NOTICES TO BE CANCELLED
11544178.5 AND 11791202.5

AMALGAMATION CONDITIONS

LOT 2000 (LEGAL ACCESS) IS TO BE HELD AS 2 UNDIVIDED HALF SHARES BY THE OWNERS OF LOTS 121-122 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

LOT 2001 (LEGAL ACCESS) IS TO BE HELD AS 2 UNDIVIDED HALF SHARES BY THE OWNERS OF LOTS 19-20 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

LOT 2002 (LEGAL ACCESS) IS TO BE HELD AS 2 UNDIVIDED HALF SHARES BY THE OWNERS OF LOTS 125-126 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

LOT 2003 (LEGAL ACCESS) IS TO BE HELD AS 2 UNDIVIDED HALF SHARES BY THE OWNERS OF LOTS 127-128 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

LOT 2004 (LEGAL ACCESS) IS TO BE HELD AS 2 UNDIVIDED HALF SHARES BY THE OWNERS OF LOTS 140-141 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

LOT 2005 (LEGAL ACCESS) IS TO BE HELD AS 2 UNDIVIDED HALF SHARES BY THE OWNERS OF LOTS 142-143 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

LOT 2006 (LEGAL ACCESS) IS TO BE HELD AS 2 UNDIVIDED HALF SHARES BY THE OWNERS OF LOTS 71-72 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

LOT 2007 (LEGAL ACCESS) IS TO BE HELD AS 2 UNDIVIDED HALF SHARES BY THE OWNERS OF LOTS 152-153 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

LOT 2008 (LEGAL ACCESS) IS TO BE HELD AS 9 UNDIVIDED ONE-NINTH SHARES BY THE OWNERS OF LOTS 34-37, 40 & 42-45 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

LOT 2009 (LEGAL ACCESS) IS TO BE HELD AS 6 UNDIVIDED ONE-SIXTH SHARES BY THE OWNERS OF LOTS 103-104, 109,111, 113 & 115 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

Comprised In Appellation	RT	Area (ha)
LOT 2 DP 540945	908215	5.2339
SECTION 105 SO 1781	HBM2/265	2.9390
LOT 2 DP 546439	930676	2.9838

Stage	Area (Ha)
Stage 1	
Residential Lots	
Lots 1-13, 15-18, 21 & 121-126	1.0846
Road to Vest	
Lot 3000, 3006	0.2418
Jointly Owned Access Lots	
Lots 2000, 2002	0.0281
Local Purpose (Drainage) Reserve	
Lot 1000	1.0197
Stage Total	2.3742
Stage 2	
Residential Lots	
Lots 14, 19-20, 22-45, 127-134	1.4611
Road to Vest	
Lot 3001	0.3191
Jointly Owned Access Lots	
Lots 2001, 2003 & 2008	0.1923
Accessway to Vest	
Lot 1001	0.0539
Stage Total	2.0264
Stage 3	
Residential Lots	
Lots 46-59 & 135-141	0.9486
Road to Vest	
Lot 3002	0.3028
Jointly Owned Access Lots	
Lot 2004	0.0205
Stage Total	1.2719
Stage 4	
Residential Lots	
Lots 60-89 & 142-151	1.8922
Road to Vest	
Lot 3003	0.5180
Jointly Owned Access Lots	
Lots 2005-2006	0.0269
To Vest As Accessway	
Lot 1002	0.0610
Total	2.4981
Stage 5	
Residential Lots	
Lots 90-99, 107-108, 110, 112, 114, 116 & 152-159	1.0750
Road to Vest	
Lot 3004	0.3290
Jointly Owned Access Lots	
Lot 2007	0.0045
Total	1.4085
Stage 6	
Residential Lots	
Lots 100-106, 109, 111, 113, 115, 117-120 & 160-171	1.2281
Road to Vest	
Lot 3005	0.2522
Jointly Owned Access Lots	
Lot 2009	0.0949
Total	1.5752

LEGEND

- EXISTING BOUNDARIES
- PROPOSED BOUNDARIES
- AREA SUBJECT TO PROPOSED CONSENT NOTICE (BUFFER INTERFACE)

NOTES

- SCHEME PLANS SUBJECT TO COUNCIL APPROVAL.
- LOT AREAS AND BOUNDARY DIMENSIONS ARE SUBJECT TO CONFIRMATION UPON FINAL LAND TRANSFER SURVEY.
- ALL ROADS AND ACCESSWAYS ARE TO VEST IN COUNCIL.
- LOTS 140-171 TO BE SUBJECT TO FURTHER LAND COVENANTS.

DISCLAIMER:
THIS DRAWING IS INTENDED TO BE SOLELY USED AS THE BASE DATA FOR THE PURPOSES OF THE CLIENT. WOODS ACCEPT NO RESPONSIBILITY FOR ANY SUBSEQUENT CHANGES MADE TO THIS DRAWING FILE, THAT ARE DIFFERENT TO THOSE ATTACHED IN THE PDF FORMATTED VERSION SHOWN IN OUR ELECTRONIC CORRESPONDENCE.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	KR	JUNE 2025	DESIGNED	WOODS
3 RFI RESPONSE	CC	20/11/2025	DRAWN	CC
			CHECKED	CH
			APPROVED	BLO

BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
AUCKLAND 1023
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ARATAKI DEVELOPMENT - HAVELOCK NORTH

SCHEME PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:3000 @ A3	3
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-0001-SC	

Plot Date: 4:09:13 pm, 19 November 2025. CHRISTOPHER File: C:\1205\DATA\WP-AKI-APP-02\P24-244-00-0001-SC.DWG



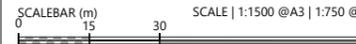
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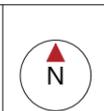
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
SCHEME PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1500 @ A3	3
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-0002-SC	



LEGEND

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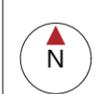
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ARATAKI DEVELOPMENT - HAVELOCK NORTH

SCHEME PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1500 @ A3	3
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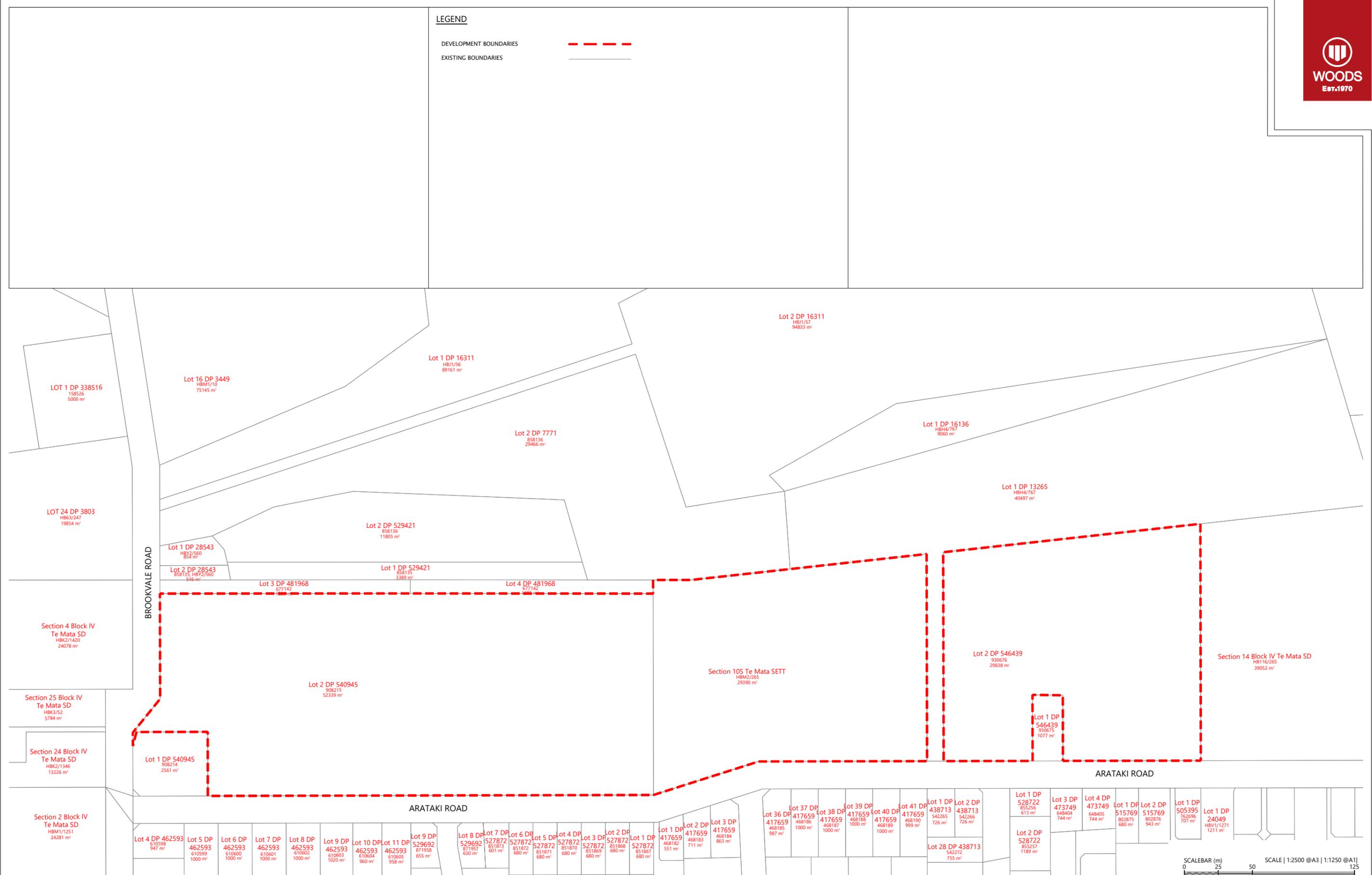
ARATAKI DEVELOPMENT - HAVELOCK NORTH

SITE LOCATION PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:5000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-0010-GE	

LEGEND
 DEVELOPMENT BOUNDARIES
 EXISTING BOUNDARIES



BROOKVALE ROAD

ARATAKI ROAD



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
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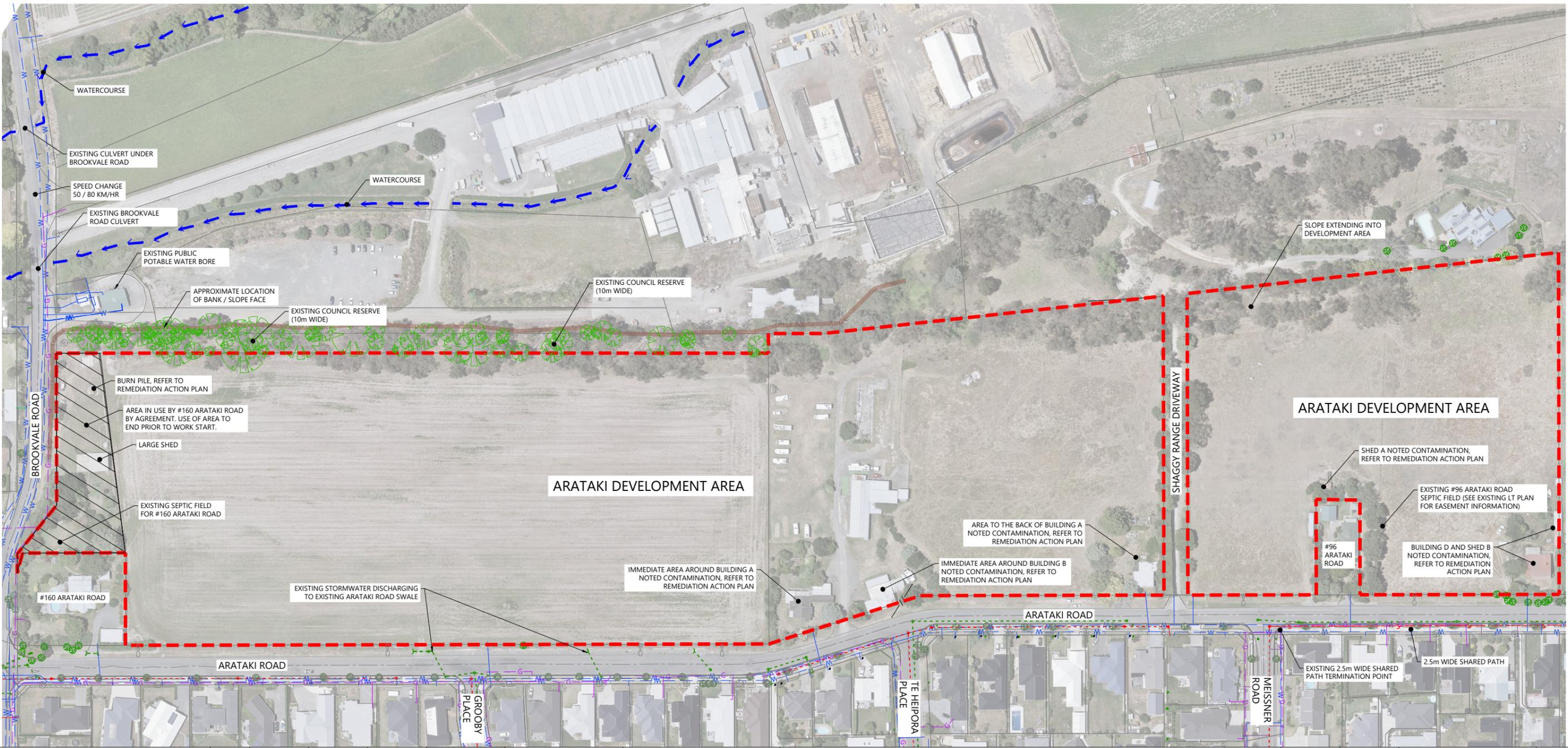
ARATAKI DEVELOPMENT - HAVELOCK NORTH
 EXISTING TITLES PLAN



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SCALE	1:2500 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-0011-GE	

LEGEND

DEVELOPMENT BOUNDARIES	
BOUNDARY	
WATERCOURSE	
BANK/SLOPE FACE	
EXISTING TREE TO BE KEPT	



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
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2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
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BM	APR 2025	DESIGNED	BLO
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
EXISTING FEATURES PLAN



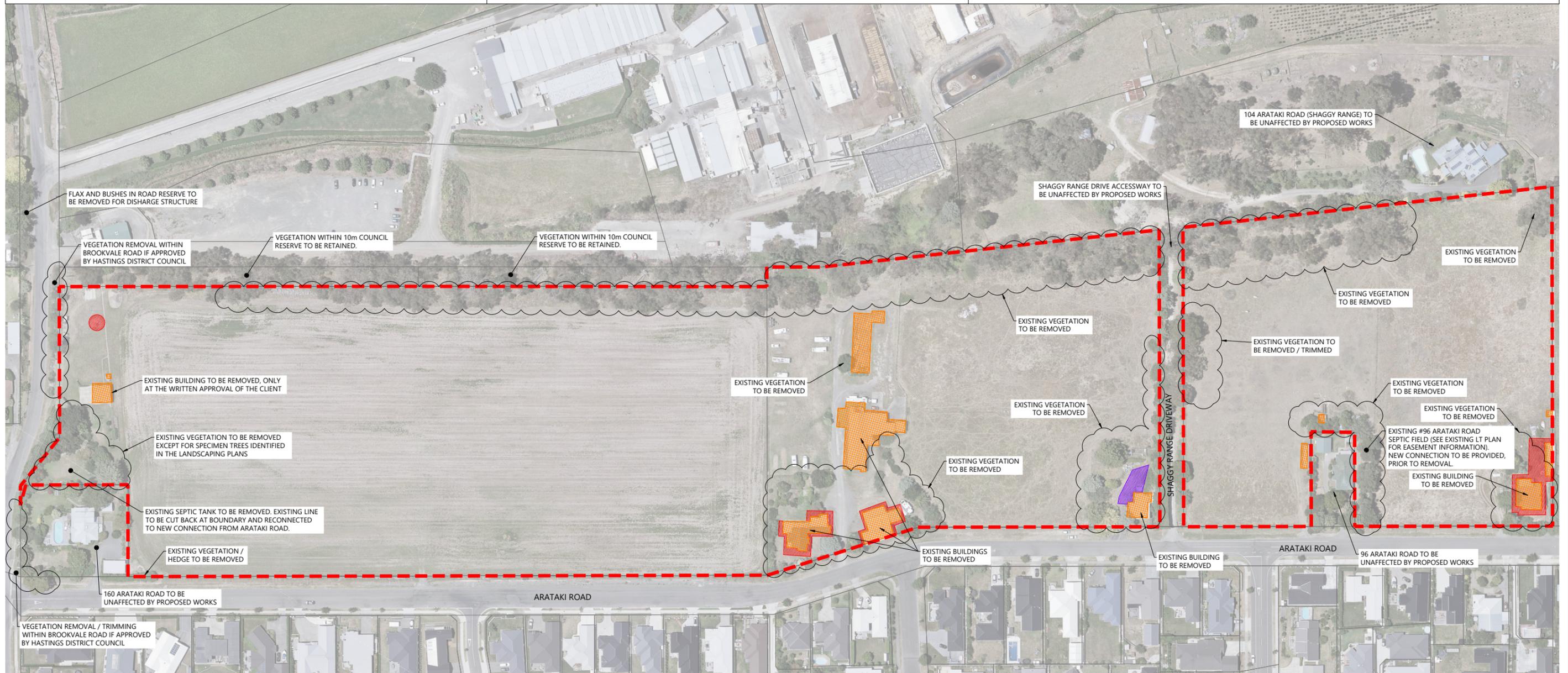
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-0020-GE	

LEGEND

- DEVELOPMENT BOUNDARY
- EXISTING BOUNDARIES
- EXISTING BUILDING TO BE REMOVED
- EXISTING CONTAMINATION - ASBESTOS
- EXISTING CONTAMINATION - HEAVY METALS

NOTES

1. ALL BUILDINGS ON SITE TO HAVE A BUILDING SURVEY COMPLETED PRIOR TO DEMOLITION/REMOVAL TO CONFIRM CONTAMINATION STATUS AND WHETHER FIBRE CEMENT OR ASBESTOS CONTAINING MATERIALS ARE PRESENT.
2. REFER TO SQN CONTAMINATION REPORTS: PSI, DSI AND RAP PRIOR TO COMMENCEMENT OF CLEARING.
3. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND PROTECTING EXISTING SERVICES AND DRAINAGE ON SITE.
4. THE CONTRACTOR SHALL CLARIFY THE AREAS AND EXTENT OF CLEARING WITH THE ENGINEER BEFORE COMMENCEMENT AND CONFIRM THAT ALL NECESSARY CONSENTS ARE IN PLACE.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	BLO
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF



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8 NUGENT ST, GRAFTON,
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
SITE CLEARING PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-0030-GE	

ARATAKI DEVELOPMENT STANDALONE LOTS	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	TOTAL
	24	35	21	40	24	27	171

LEGEND

- STAGE BOUNDARIES: - - - - -
- BOUNDARIES: ————
- ROAD CARRIAGEWAY: █
- PEDESTRIAN PATHS: █
- INFORMAL PEDESTRIAN PATHS: █
- SHARED PATHS: █
- JOINT OWNED ACCESS LOTS (JOAL): █
- LOT TYPE 1: █
- LOT TYPE 2: █
- PROPOSED DRAINAGE RESERVE: █
- COVENANT AREA OVER LOT TYPE 1: █



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF

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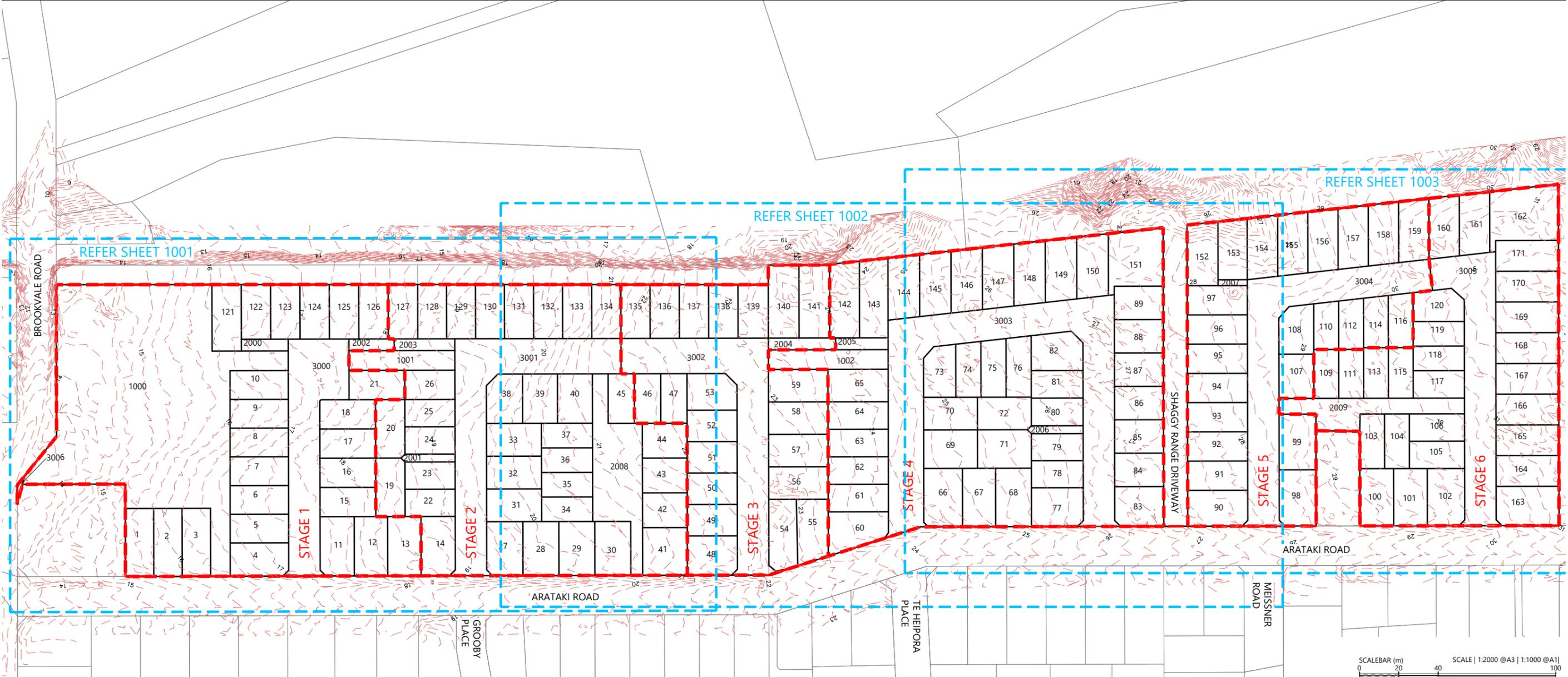
ARATAKI DEVELOPMENT - HAVELOCK NORTH
DEVELOPMENT CONTROL PLAN

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-0100-GE	

LEGEND

STAGE BOUNDARIES	
PROPOSED BOUNDARIES	
EXISTING CONTOURS (0.5m)	

- NOTES**
- UNDERFILL DRAINAGE IS TO BE INSTALLED AT THE DIRECTION OF THE ENGINEER. IF THE CONTRACTOR ENCOUNTERS SPRINGS OR OTHER SOURCES OF WATER HE IS TO NOTIFY THE ENGINEER.
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			CHECKED	BLO
			APPROVED	BF



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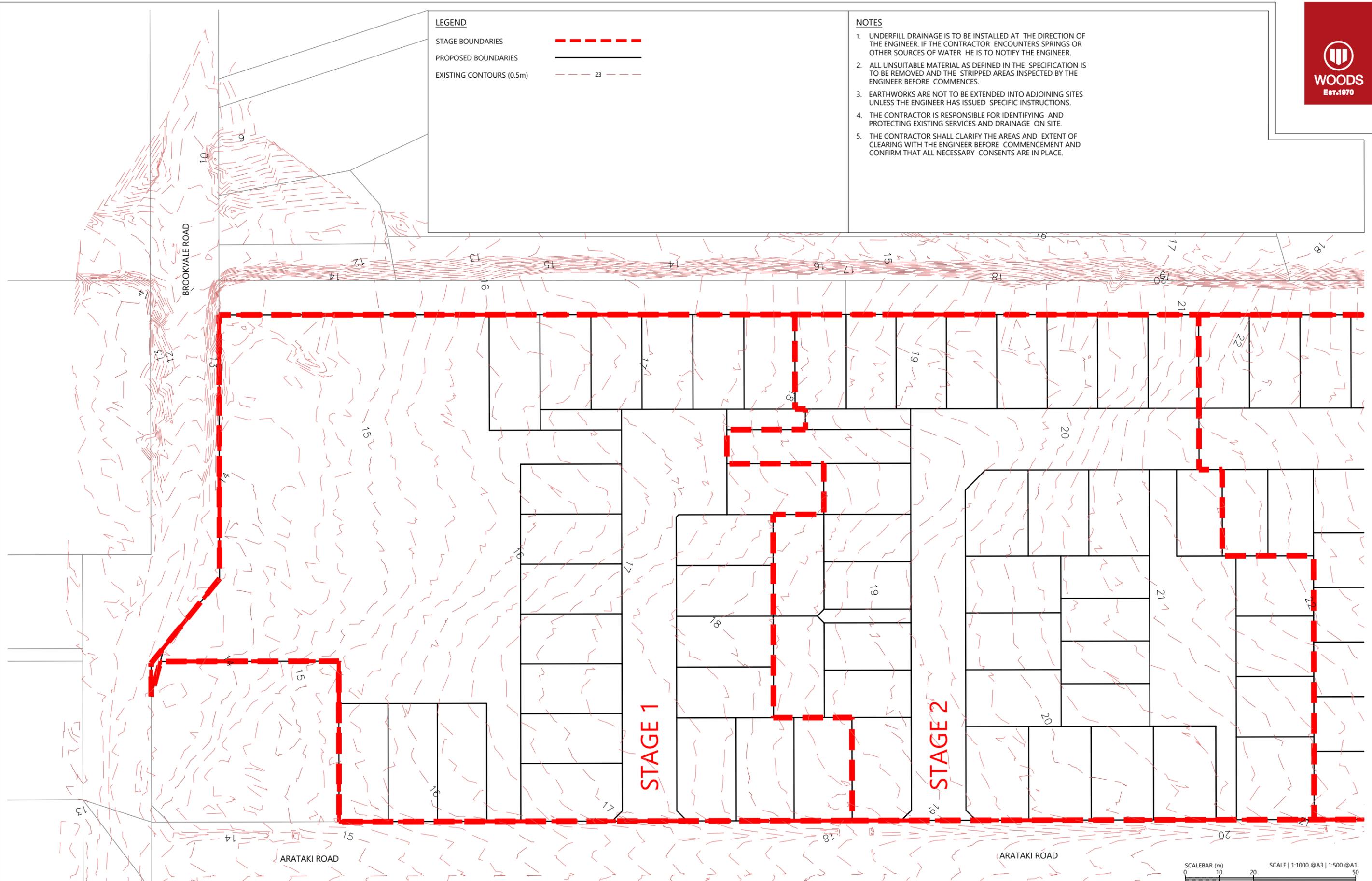
ARATAKI DEVELOPMENT - HAVELOCK NORTH
EXISTING CONTOUR PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1000-EW	

LEGEND	
STAGE BOUNDARIES	
PROPOSED BOUNDARIES	
EXISTING CONTOURS (0.5m)	

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			DRAWN	TB
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ARATAKI DEVELOPMENT - HAVELOCK NORTH

EXISTING CONTOUR PLAN - SHEET 1



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1001-EW	

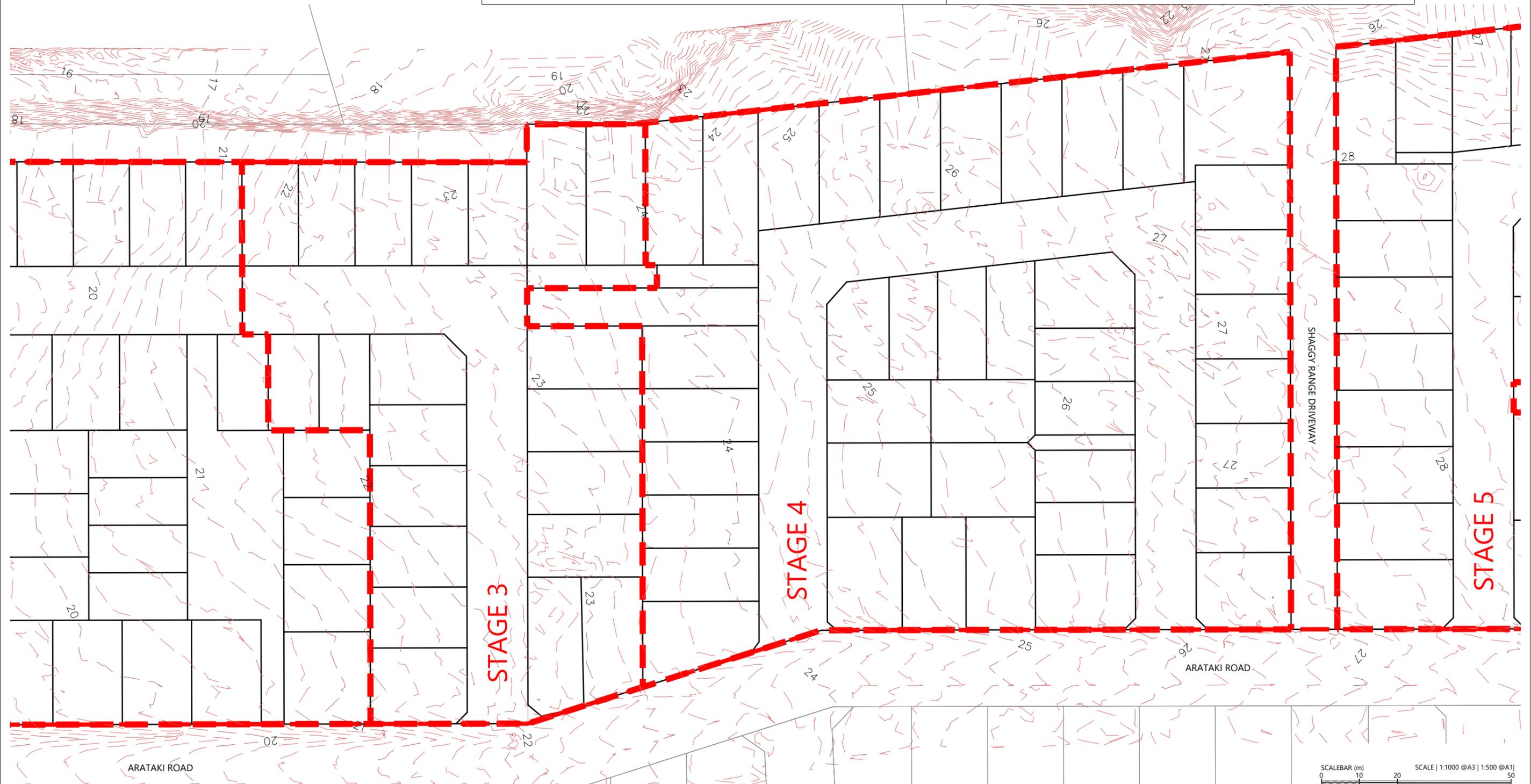
LEGEND

STAGE BOUNDARIES - - - - -

PROPOSED BOUNDARIES

EXISTING CONTOURS (0.5m) - - - - - 23

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			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
EXISTING CONTOUR PLAN - SHEET 2



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1002-EW	

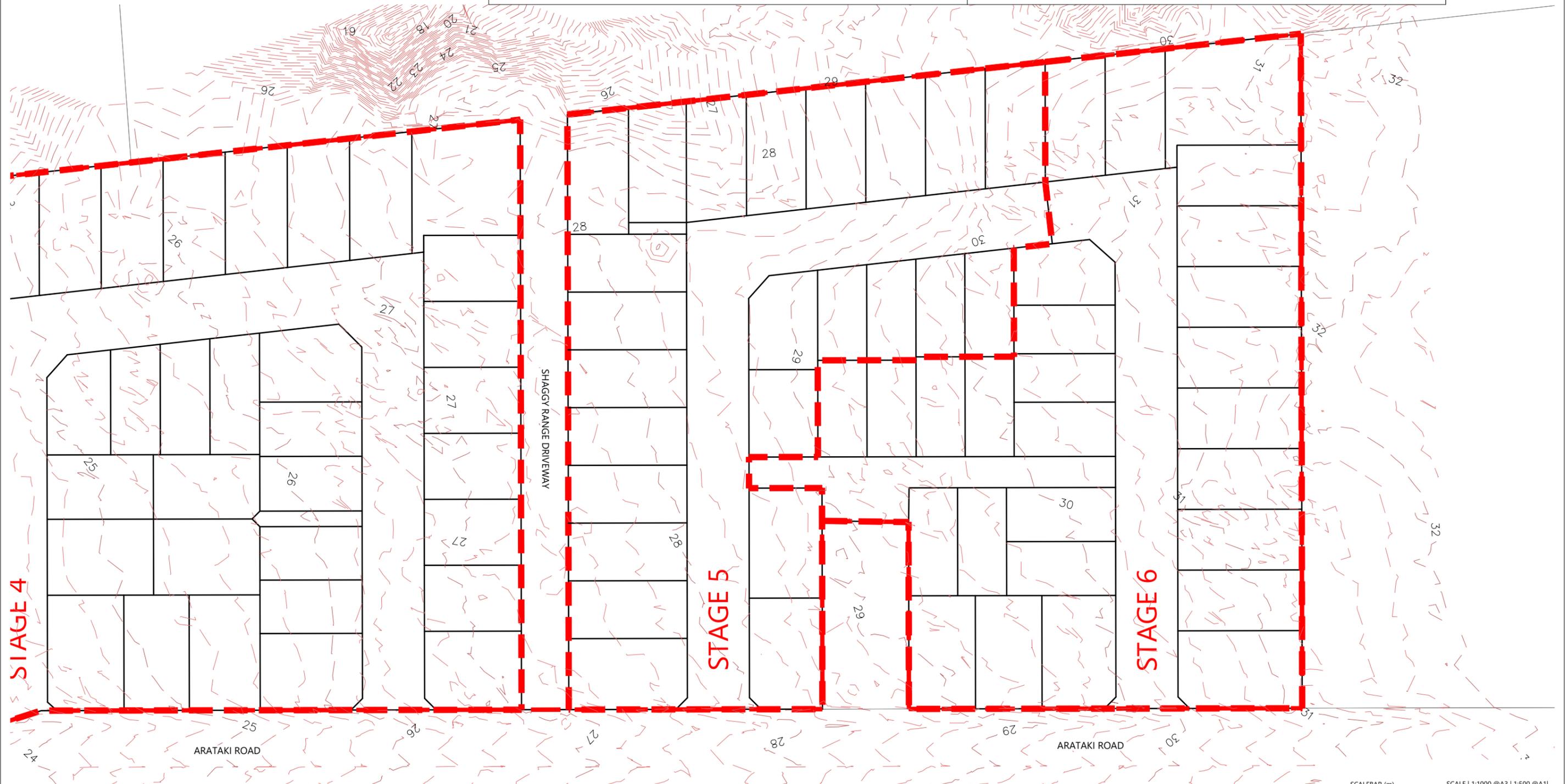
LEGEND

STAGE BOUNDARIES - - - - -

PROPOSED BOUNDARIES — — — — —

EXISTING CONTOURS (0.5m) - - - - - 23

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			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF

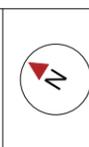
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ARATAKI DEVELOPMENT - HAVELOCK NORTH

EXISTING CONTOUR PLAN - SHEET 3

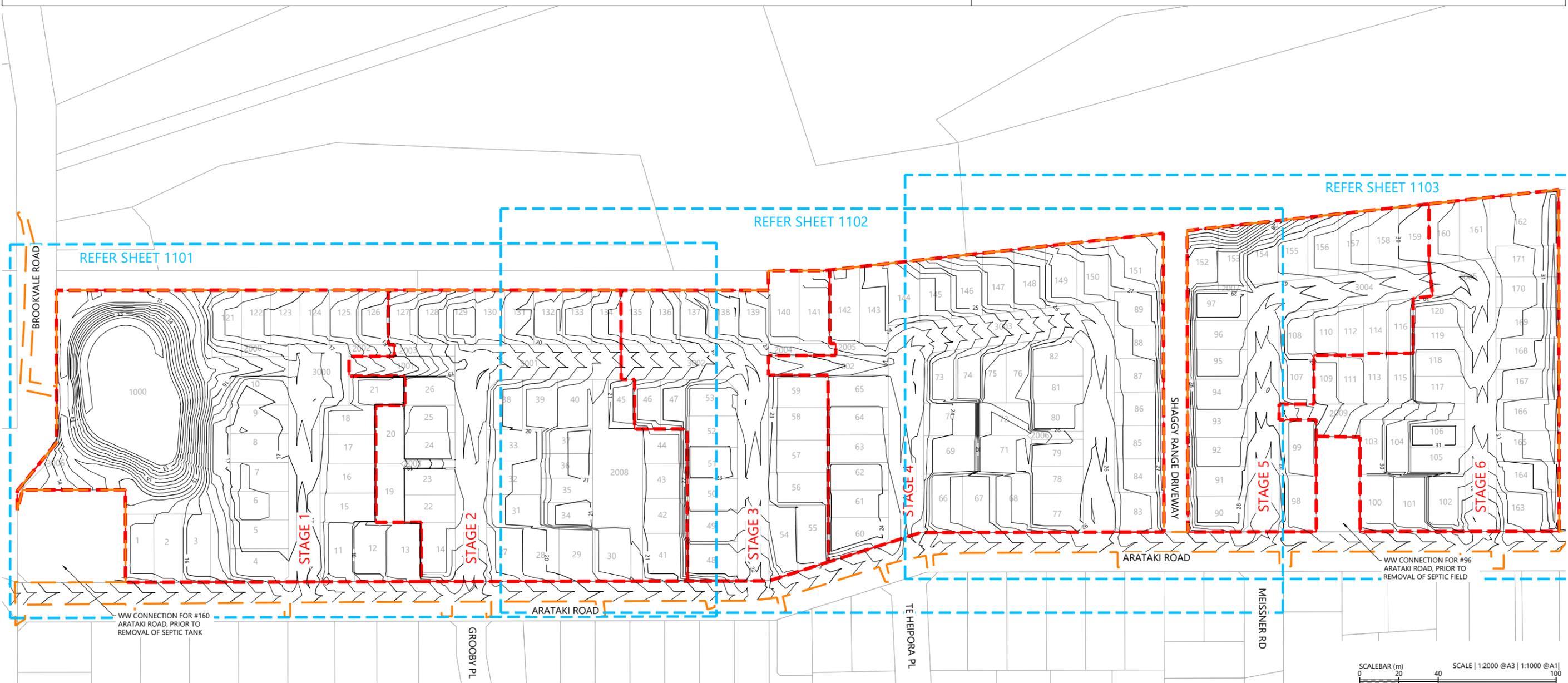


STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1003-EW	

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LEGEND

STAGE BOUNDARIES	
PROPOSED MAJOR CONTOURS (1m)	23
PROPOSED MINOR CONTOURS (0.25m)	
EXTENTS OF WORKS	



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
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2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
DESIGN CONTOUR PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1100-EW	

LEGEND

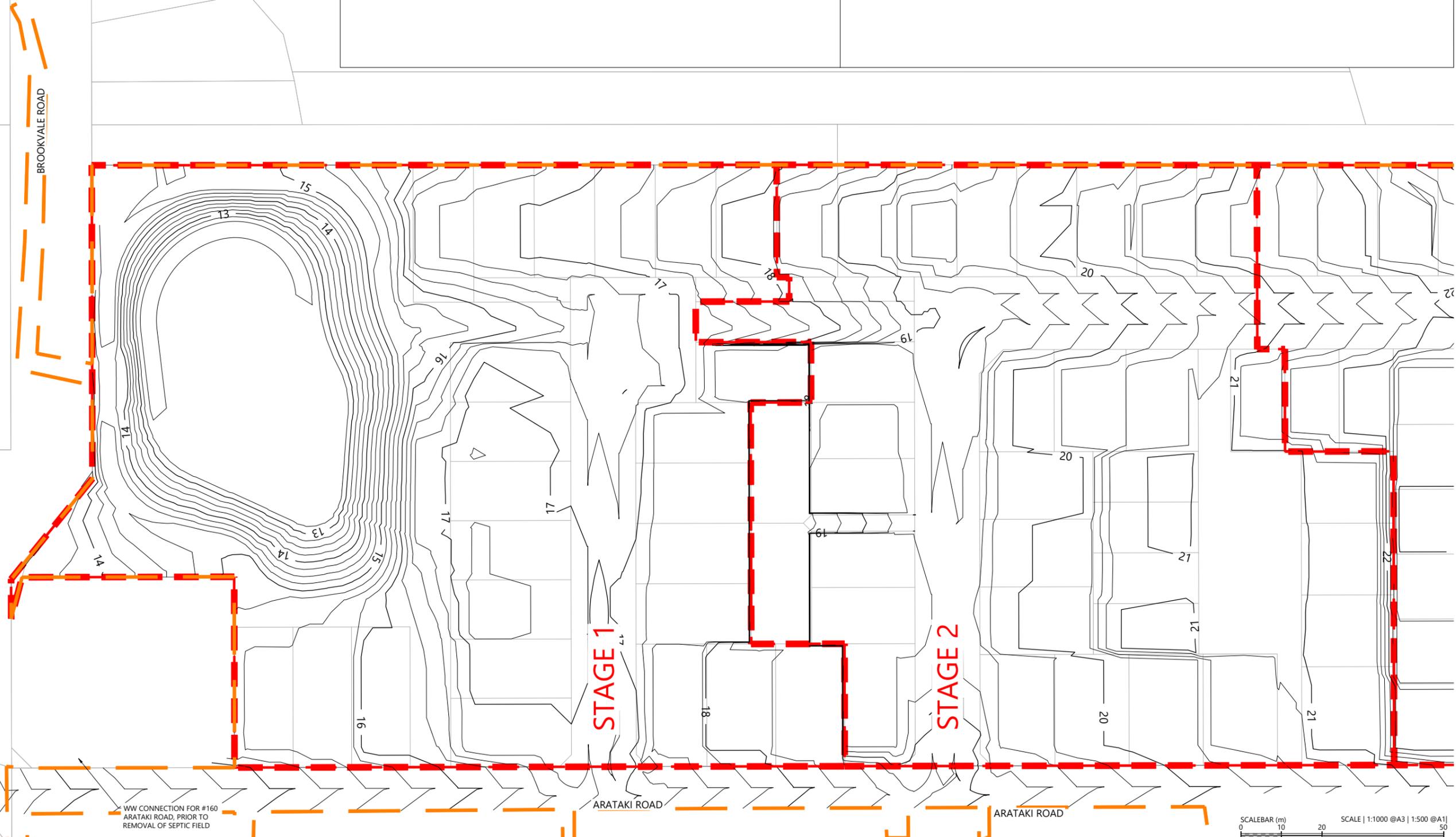
STAGE BOUNDARIES - - - - -

PROPOSED MAJOR CONTOURS (1m) — 23 —

PROPOSED MINOR CONTOURS (0.25m) — — — — —

EXTENTS OF WORKS - - - - -

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			DRAWN	TB
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			APPROVED	BF

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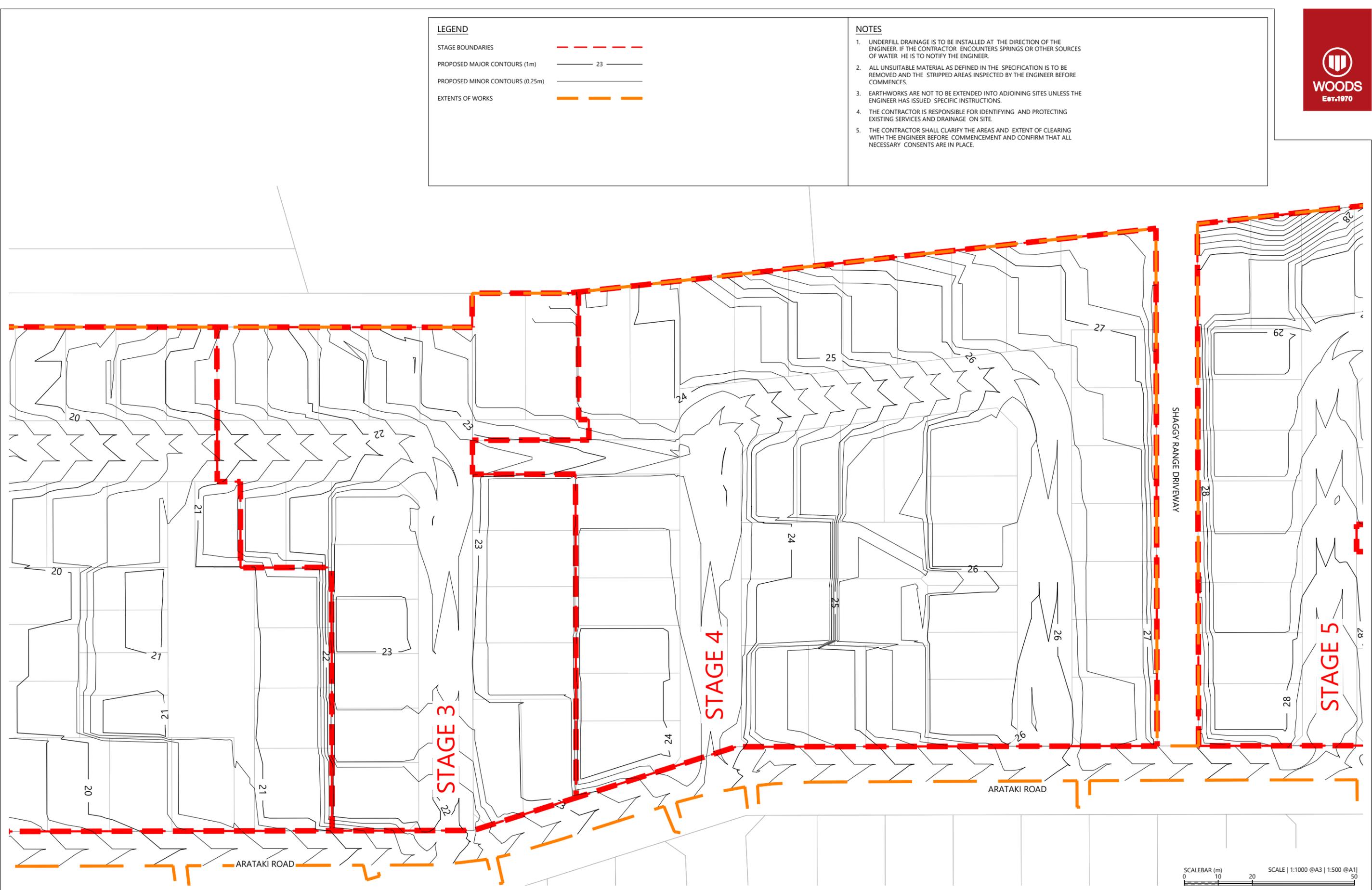
ARATAKI DEVELOPMENT - HAVELOCK NORTH
DESIGN CONTOUR PLAN - SHEET 1

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1101-EW	

LEGEND

STAGE BOUNDARIES	
PROPOSED MAJOR CONTOURS (1m)	23
PROPOSED MINOR CONTOURS (0.25m)	
EXTENTS OF WORKS	

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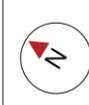


REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF

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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 DESIGN CONTOUR PLAN - SHEET 2



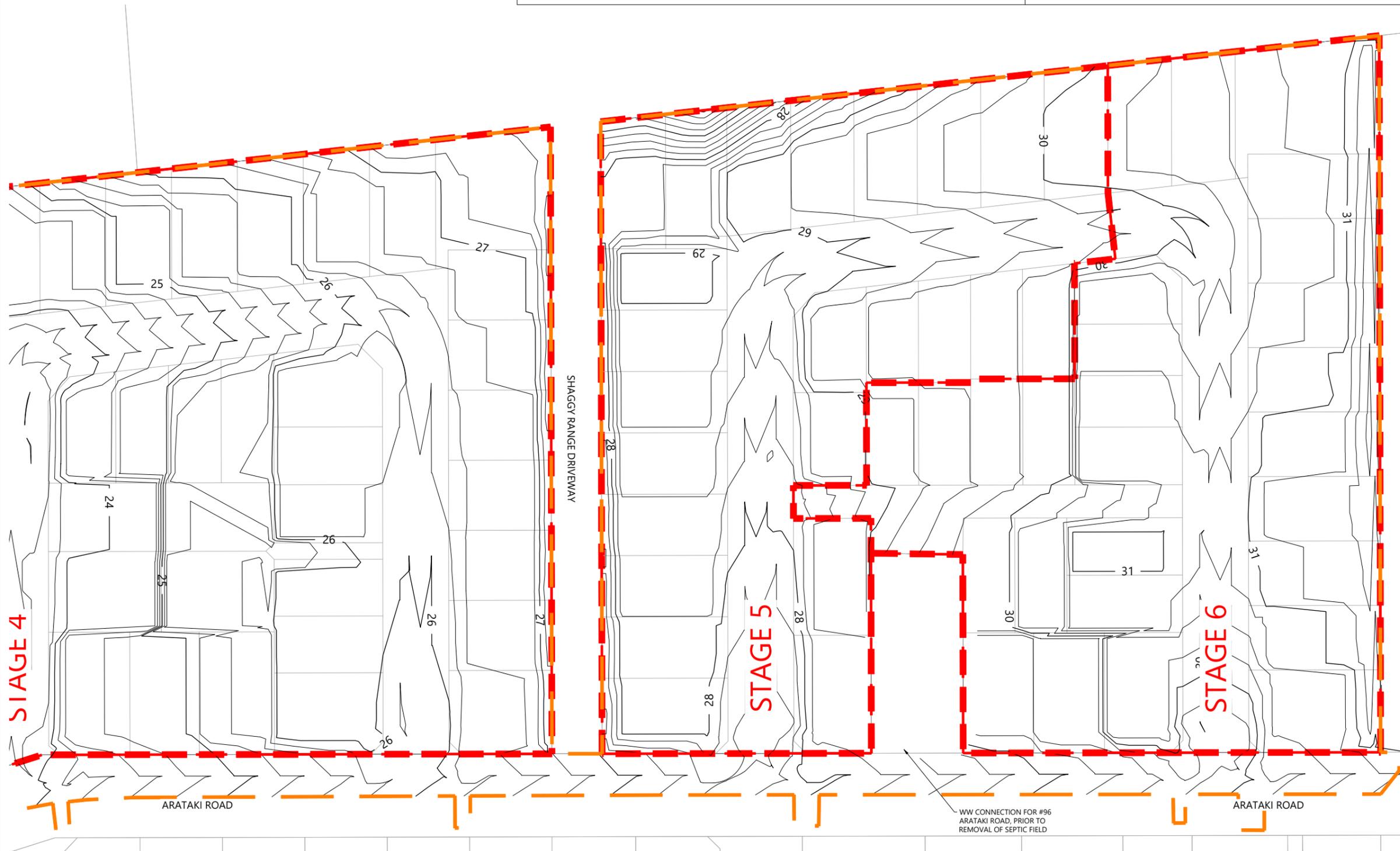
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SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1102-EW	

LEGEND

STAGE BOUNDARIES	
PROPOSED MAJOR CONTOURS (1m)	23
PROPOSED MINOR CONTOURS (0.25m)	
EXTENTS OF WORKS	

NOTES

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			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
DESIGN CONTOUR PLAN - SHEET 3



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1103-EW	

NOTES

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LEGEND

- STAGE BOUNDARIES - - - - -
- EXTENTS OF WORKS - - - - -
- AREA OF FILL
- AREA OF CUT
- CUT/FILL CONTOUR (0.5m) - - - - - 1.5
- CUT/FILL ZERO LINE - - - - - 0.0

VOLUMES

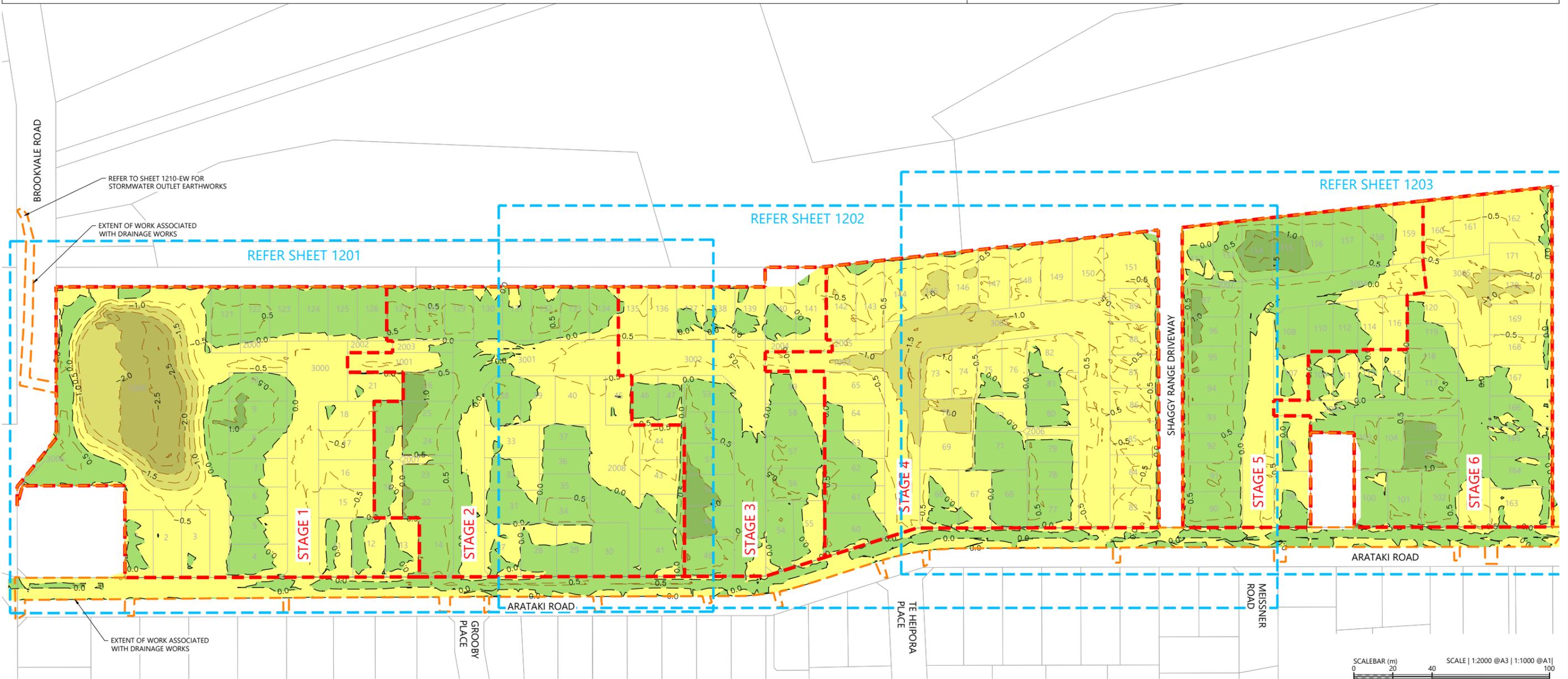
CUT / FILL VOLUMES
 CUT: 35,400 m³,
 FILL: 16,400 m³,
 BALANCE: 19,000 m³, EXCESS CUT TO BE REMOVED FROM SITE

NOTE:
 CUT / FILL VOLUMES EXCLUDE TOPSOIL.
 EXCLUDES BULKING / COMPACTION FACTORS.

TOPSOIL VOLUMES

TOPSOIL STRIP: 24,500 m³, ASSUMED 200mm DEPTH
 TOPSOIL PLACE: 12,500 m³,

NOTE:
 TOPSOIL STRIP IS ASSUMED AS 200mm DEPTH OVER THE SITE.
 TOPSOIL PLACE IS ASSUMED AS 100mm DEPTH OVER LOTS,
 300mm DEPTH OVER GARDEN AREAS, AND 150mm DEPTH OVER BERMS.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 CUT FILL PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1200-EW	

LEGEND

STAGE BOUNDARIES	
EXTENTS OF WORKS	
AREA OF FILL	
AREA OF CUT	
CUT/FILL CONTOUR (0.5m)	- 0.5
CUT/FILL ZERO LINE	- 0.0

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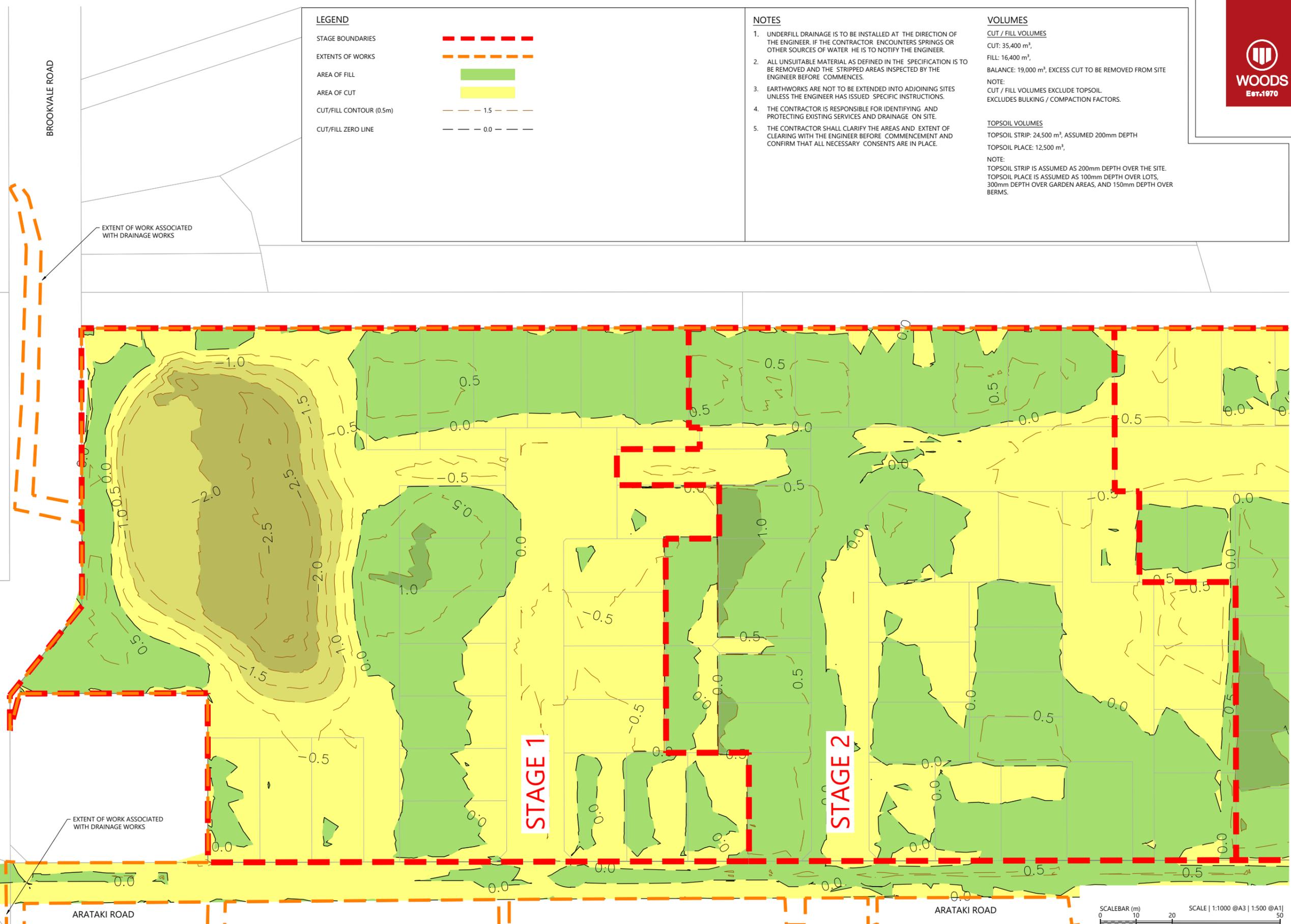
VOLUMES

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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 CUT FILL PLAN - SHEET 1



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1201-EW	



LEGEND

STAGE BOUNDARIES 

EXTENTS OF WORKS 

AREA OF FILL 

AREA OF CUT 

CUT/FILL CONTOUR (0.5m)  - 1.5

CUT/FILL ZERO LINE  - 0.0

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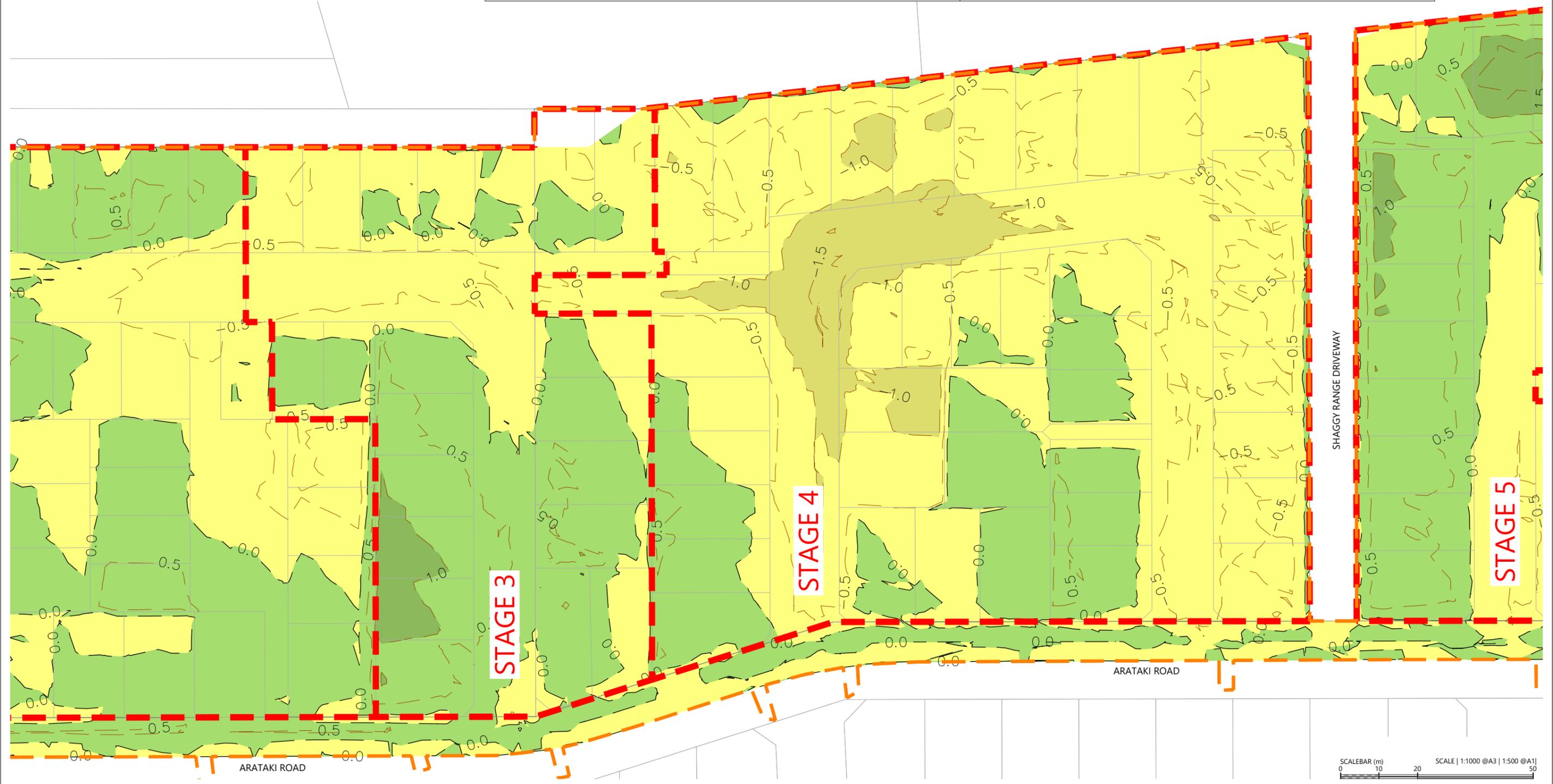
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			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF

BUILDING B, LEVEL 1
 8 NUGENT ST, GRAFTON,
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 CUT FILL PLAN - SHEET 2

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1202-EW	

Plot Date: 9:25:40 am, 26 June 2025, TIMOTHYB
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LEGEND

STAGE BOUNDARIES

EXTENTS OF WORKS

AREA OF FILL

AREA OF CUT

CUT/FILL CONTOUR (0.5m) 1.5

CUT/FILL ZERO LINE 0.0

- NOTES**
- UNDERFILL DRAINAGE IS TO BE INSTALLED AT THE DIRECTION OF THE ENGINEER. IF THE CONTRACTOR ENCOUNTERS SPRINGS OR OTHER SOURCES OF WATER HE IS TO NOTIFY THE ENGINEER.
 - ALL UNSUITABLE MATERIAL AS DEFINED IN THE SPECIFICATION IS TO BE REMOVED AND THE STRIPPED AREAS INSPECTED BY THE ENGINEER BEFORE COMMENCES.
 - EARTHWORKS ARE NOT TO BE EXTENDED INTO ADJOINING SITES UNLESS THE ENGINEER HAS ISSUED SPECIFIC INSTRUCTIONS.
 - THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND PROTECTING EXISTING SERVICES AND DRAINAGE ON SITE.
 - THE CONTRACTOR SHALL CLARIFY THE AREAS AND EXTENT OF CLEARING WITH THE ENGINEER BEFORE COMMENCEMENT AND CONFIRM THAT ALL NECESSARY CONSENTS ARE IN PLACE.

VOLUMES

CUT / FILL VOLUMES

CUT: 35,400 m³,
 FILL: 16,400 m³,
 BALANCE: 19,000 m³, EXCESS CUT TO BE REMOVED FROM SITE

NOTE:
 CUT / FILL VOLUMES EXCLUDE TOPSOIL.
 EXCLUDES BULKING / COMPACTION FACTORS.

TOPSOIL VOLUMES

TOPSOIL STRIP: 24,500 m³, ASSUMED 200mm DEPTH
 TOPSOIL PLACE: 12,500 m³,

NOTE:
 TOPSOIL STRIP IS ASSUMED AS 200mm DEPTH OVER THE SITE.
 TOPSOIL PLACE IS ASSUMED AS 100mm DEPTH OVER LOTS, 300mm DEPTH OVER GARDEN AREAS, AND 150mm DEPTH OVER BERMS.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF

QR CODE

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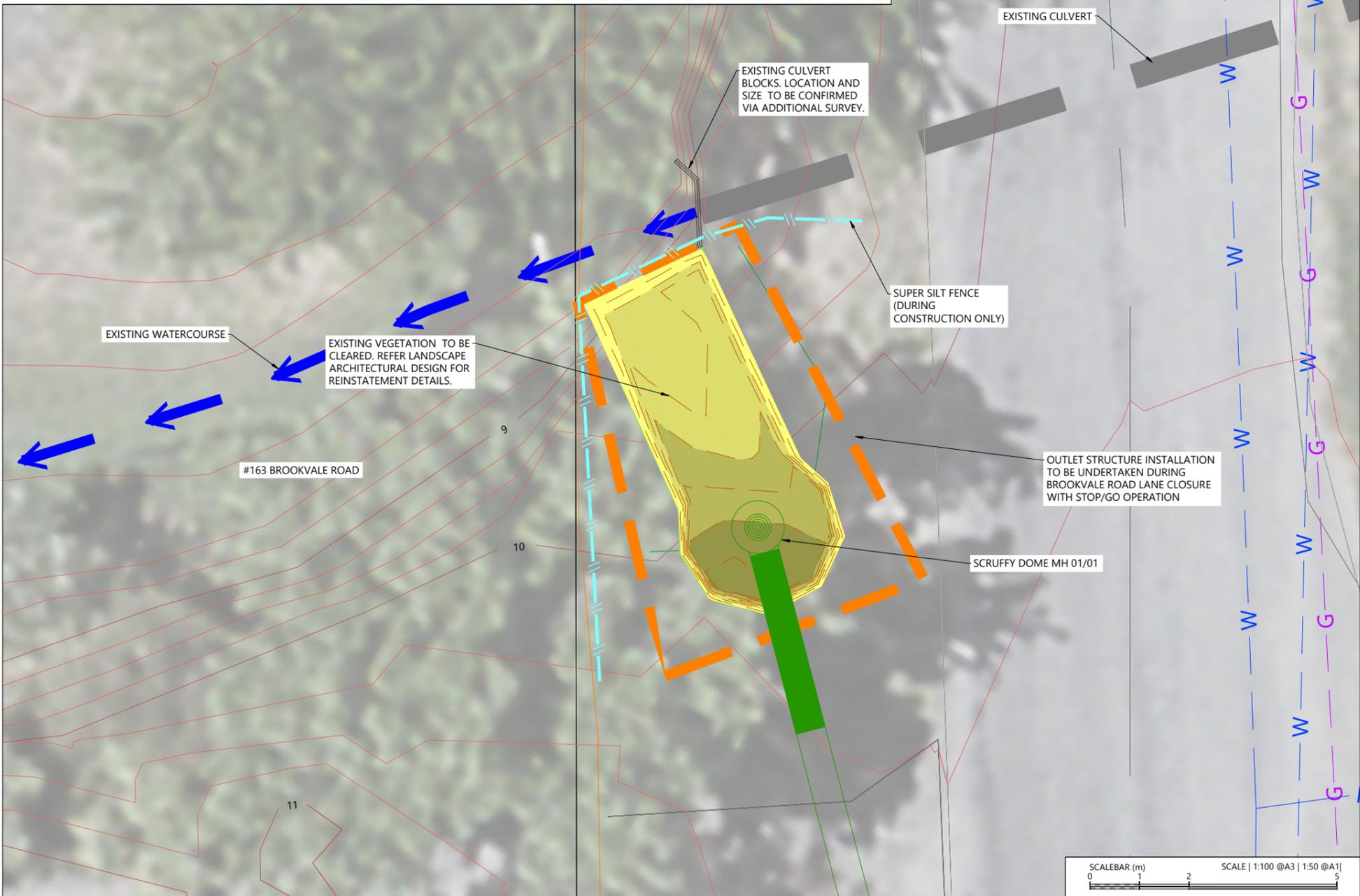
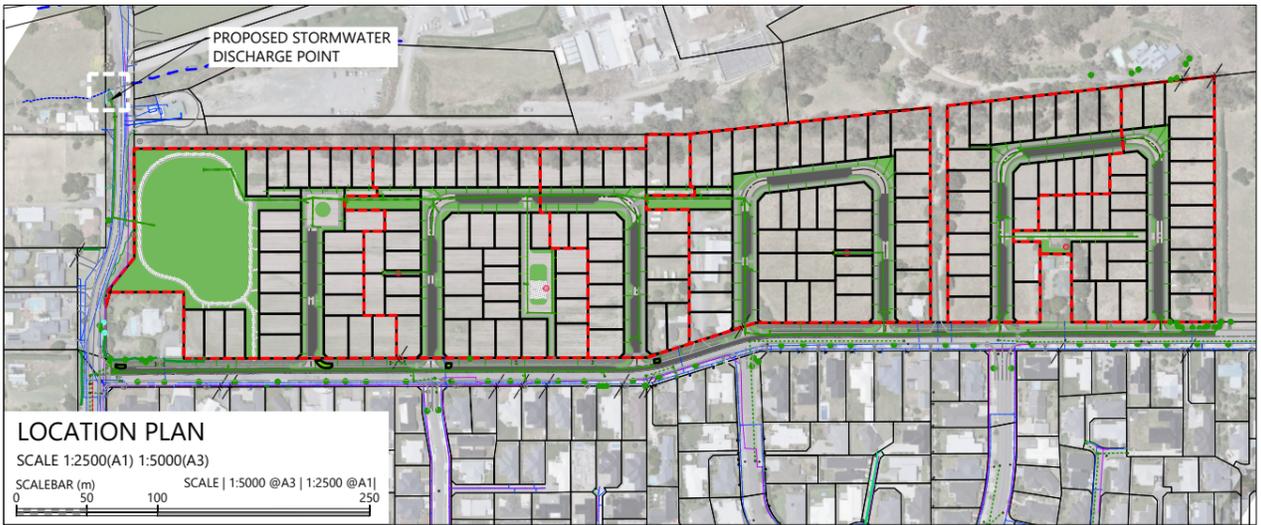
WOODS.CO.NZ



ARATAKI DEVELOPMENT - HAVELOCK NORTH

CUT FILL PLAN - SHEET 3

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1203-EW	



NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
2. FOR PIPE BEDDING DETAILS REFER TO STANDARD DETAIL SHEETS UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTIONS IN WHICH CASE SUCH NOTES TAKE PRECEDENCE.
3. CONCRETE PIPES CLASSES ARE NOTED ON THE DRAINAGE LONG SECTIONS. ALL SUMP LEADS TO BE RCRRJ CLASS 4.
4. ALL PIPE CROSSINGS UNDER ROADS TO BE HARDFILL BACKFILLED.
5. ALL SW LOT CONNECTIONS TO BE 150MMØ. RAMPED RISERS ARE TO BE EXTENDED & CAPPED OFF WITHIN 1.0M OF THE FINISHED GROUND SURFACE.
6. SW LOT CONNECTIONS ARE VIA KERB OUTLETS UNLESS OTHERWISE STATED. KERB OUTLETS TO FOLLOW HASTINGS DISTRICT COUNCIL ENGINEERING CODE OF PRACTICE STANDARD DRAWINGS WS 105 AND WS 106.
7. ALL MANHOLES TO BE 1050MMØ UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTION IN WHICH CASE SUCH NOTES SHALL TAKE PRECEDENCE.
8. THE CONTRACTOR IS TO PEG MANHOLES & CHECK FINISHED LEVELS (MH LID LEVELS) PRIOR TO ORDERING MANHOLES.
9. ALL MANHOLE LIDS IN CYCLEWAYS AND SHARED PATHS MUST HAVE A CYCLIST FRIENDLY COVER.
10. PIPE GRADES ON THE LONG SECTIONS ARE CALCULATED FROM MANHOLE SIDE TO MANHOLE SIDE. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT LASER LEVELS ARE SET TO COMPENSATE FOR THIS.

LEGEND

- PROPOSED STORMWATER LINE AND PIT
- EXISTING STORMWATER INLET/OUTLET
- EXISTING FENCE
- EXISTING VEGETATION EDGE
- EXISTING WATERMAIN
- EXISTING GAS
- EXISTING CONTOURS (1m)
- EXISTING MINOR CONTOURS (0.25m)
- EXTENTS OF WORKS
- CUT/FILL CONTOUR (0.25m)
- CUT/FILL ZERO LINE
- CUT > 1.5m
- CUT 1.5m - 1.0m
- CUT 1.0m - 0.5m
- CUT 0.5m - 0.0m
- FILL 0.0m - 0.5m

VOLUMES

CUT / FILL VOLUMES
 CUT: 15 m³,
 FILL: 0,
 BALANCE: 15 m³, EXCESS CUT TO BE REMOVED FROM SITE
 MAX CUT: 1.8m
 NOTE:
 CUT / FILL VOLUMES EXCLUDE TOPSOIL.
 EXCLUDES BULKING / COMPACTION FACTORS.

TOPSOIL VOLUMES
 TOPSOIL STRIP: 4m³, ASSUMED 200mm DEPTH

REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR INFORMATION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF

BUILDING B, LEVEL 1
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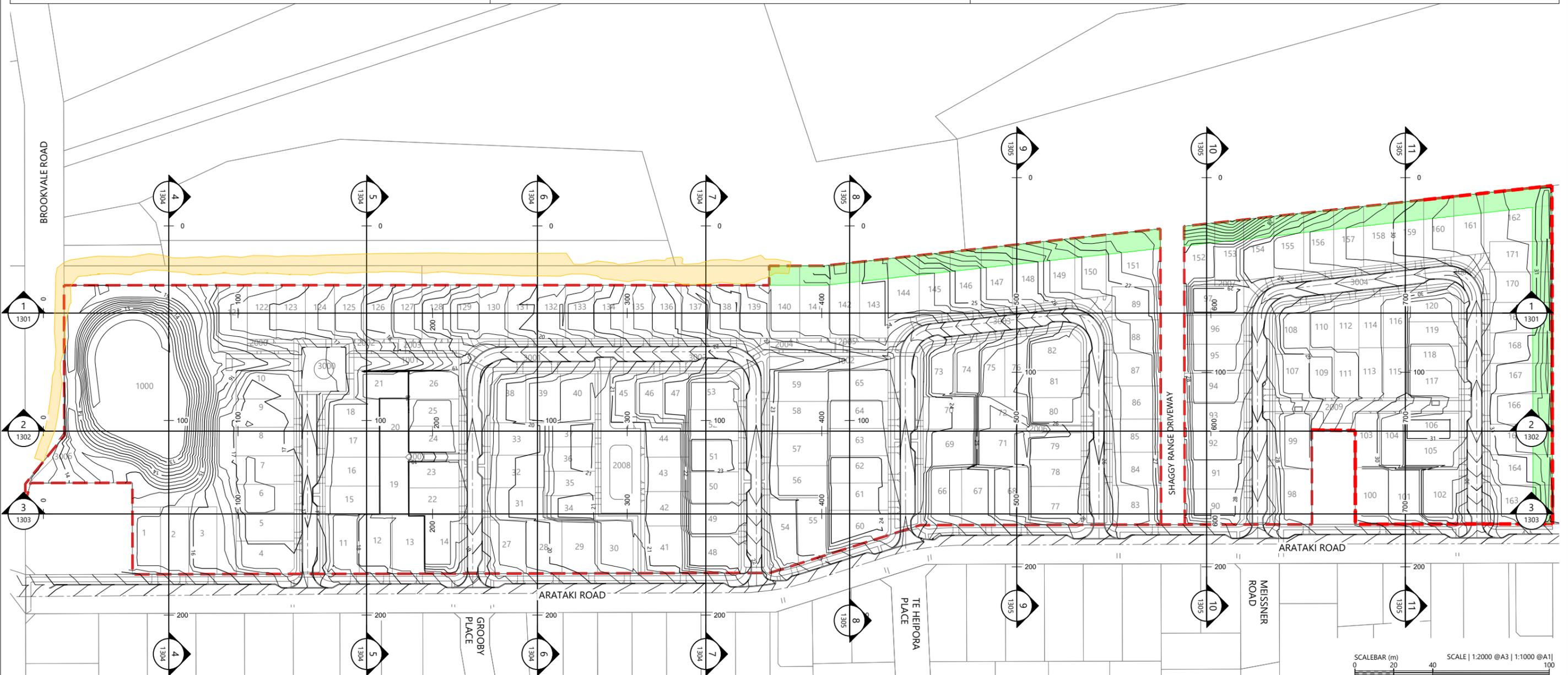


ARATAKI DEVELOPMENT - HAVELOCK NORTH
 STORMWATER OUTLET EARTHWORKS PLAN

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:100 (A3)	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1210-DR	

LEGEND

- PROPOSED LOT BOUNDARY
- DEVELOPMENT BOUNDARIES
- DESIGN CONTOURS 23.0
- NO BUILD ZONE
- GEOTECHNICAL EXCLUSION ZONE/
BANK 1.25 OFFSET FROM BASE



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH

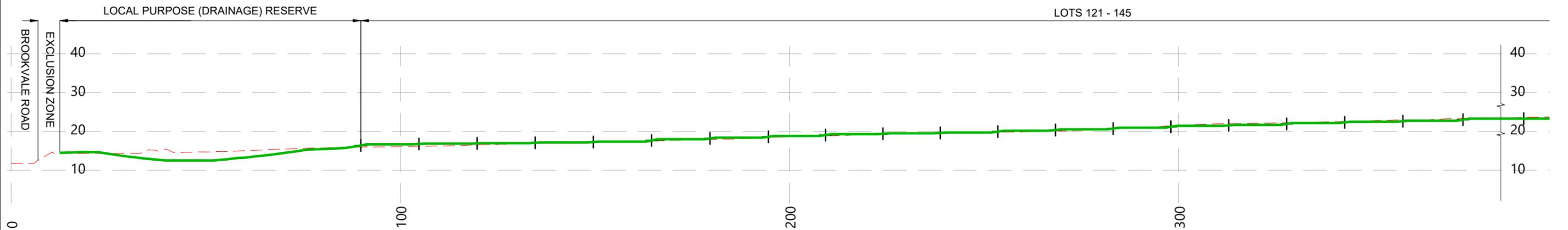
EARTHWORKS SECTIONS PLAN



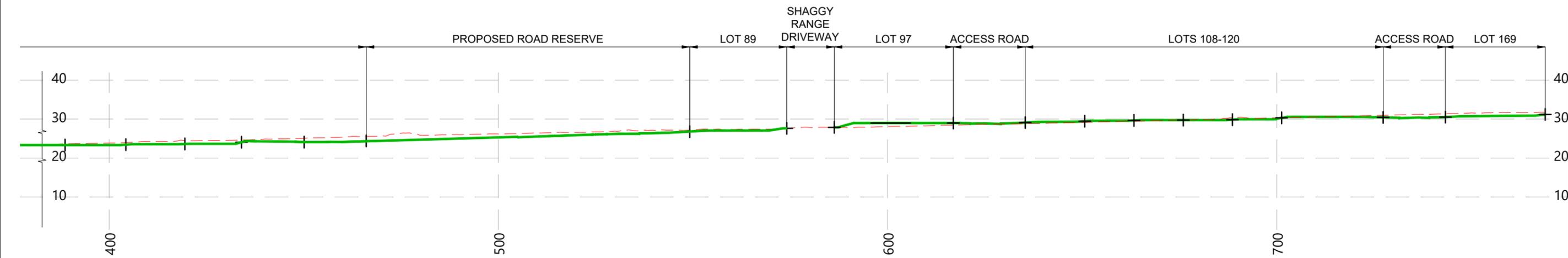
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1300-RD	

LEGEND

- EXISTING SURFACE - - - - -
- PROPOSED GROUND —————
- BOUNDARY LOCATION +



1 PROPOSED SECTION 1
1300 SCALE 1:2000 @ A3



1 PROPOSED SECTION 1
1300 SCALE 1:2000 @ A3



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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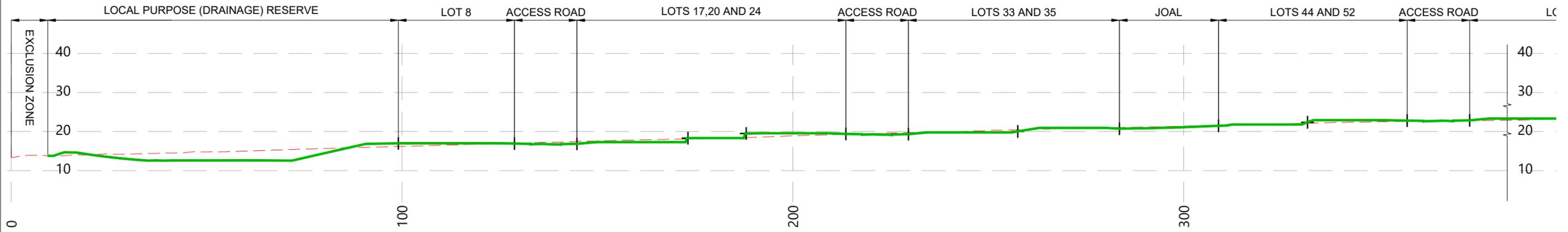
ARATAKI DEVELOPMENT - HAVELOCK NORTH

EARTHWORKS SECTIONS - SHEET 1

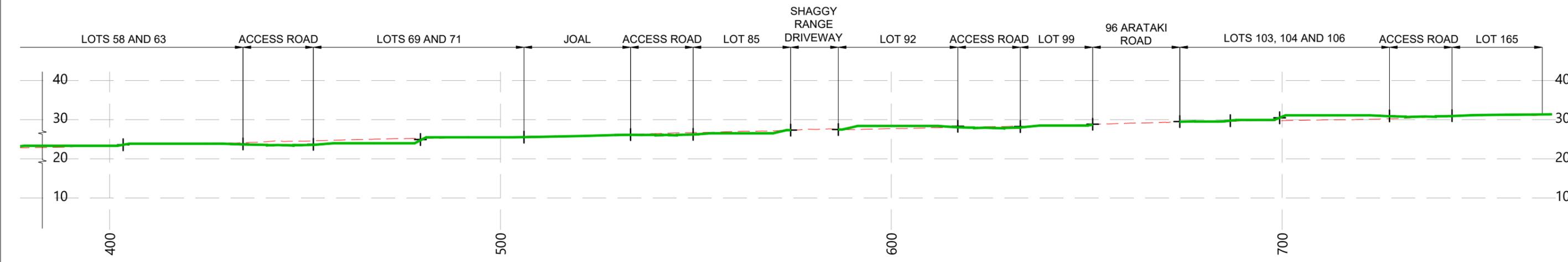
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SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1301-RD	

LEGEND

- EXISTING SURFACE - - - - -
- PROPOSED GROUND —————
- BOUNDARY LOCATION +



2 PROPOSED SECTION 2
1300 SCALE 1:2000 @ A3



2 PROPOSED SECTION 2
1300 SCALE 1:2000 @ A3



REVISION DETAILS		INT	DATE	SURVEYED	WOODS
1	ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2	ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
				CHECKED	BLO
				APPROVED	BF



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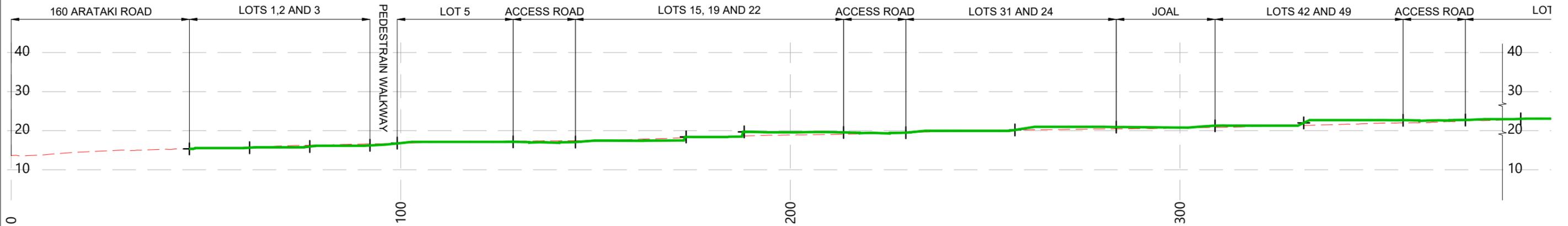
ARATAKI DEVELOPMENT - HAVELOCK NORTH

EARTHWORKS SECTIONS - SHEET 2

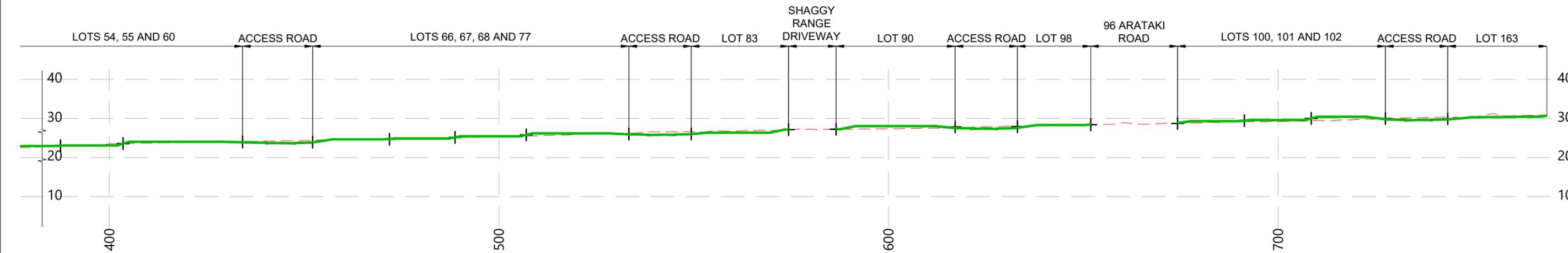
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1302-RD	

LEGEND

- EXISTING SURFACE - - - - -
- PROPOSED GROUND —————
- BOUNDARY LOCATION +



3 PROPOSED SECTION 3
1300 SCALE 1:2000 @ A3



3 PROPOSED SECTION 3
1300 SCALE 1:2000 @ A3



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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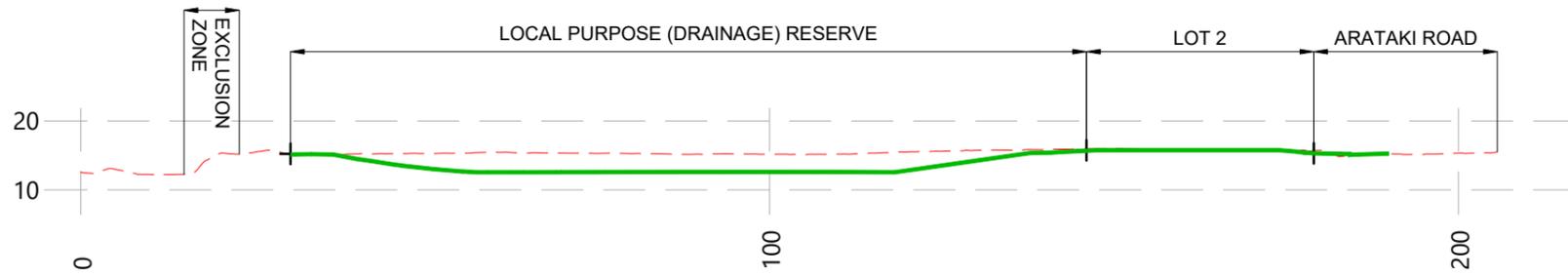


ARATAKI DEVELOPMENT - HAVELOCK NORTH

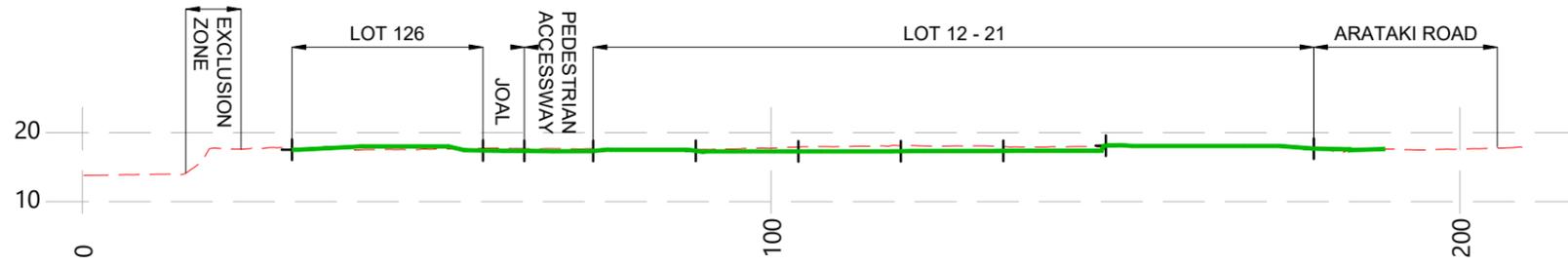
EARTHWORKS SECTIONS - SHEET 3

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1303-RD	

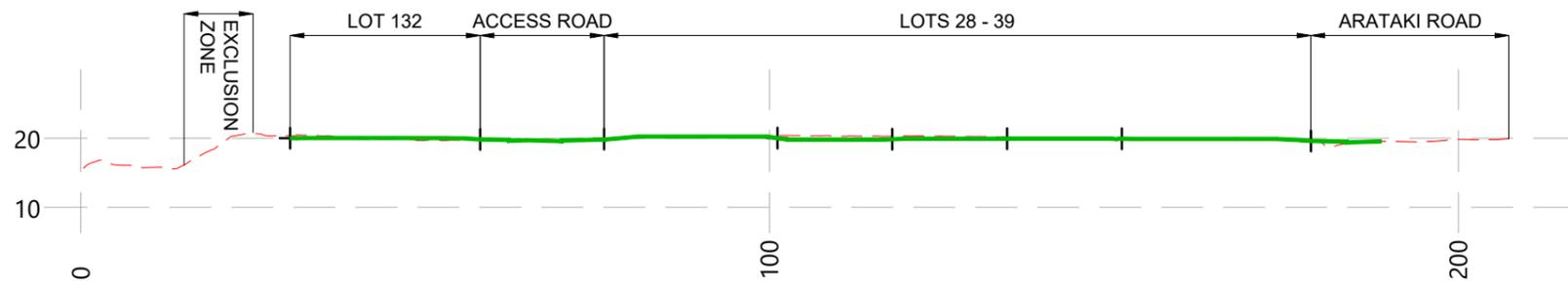
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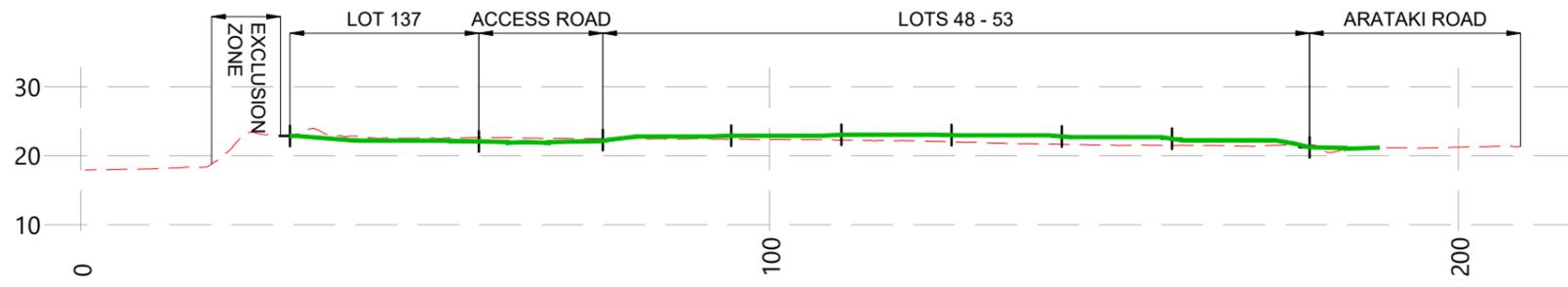
4 PROPOSED SECTION 4
SCALE 1:2000 @ A3



5 PROPOSED SECTION 5
SCALE 1:2000 @ A3



6 PROPOSED SECTION 6
SCALE 1:2000 @ A3



7 PROPOSED SECTION 7
SCALE 1:2000 @ A3

LEGEND

- EXISTING SURFACE - - - - -
- PROPOSED GROUND —————
- BOUNDARY LOCATION +



REVISION DETAILS		INT	DATE	SURVEYED	WOODS
1	ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2	ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
				CHECKED	BLO
				APPROVED	BF

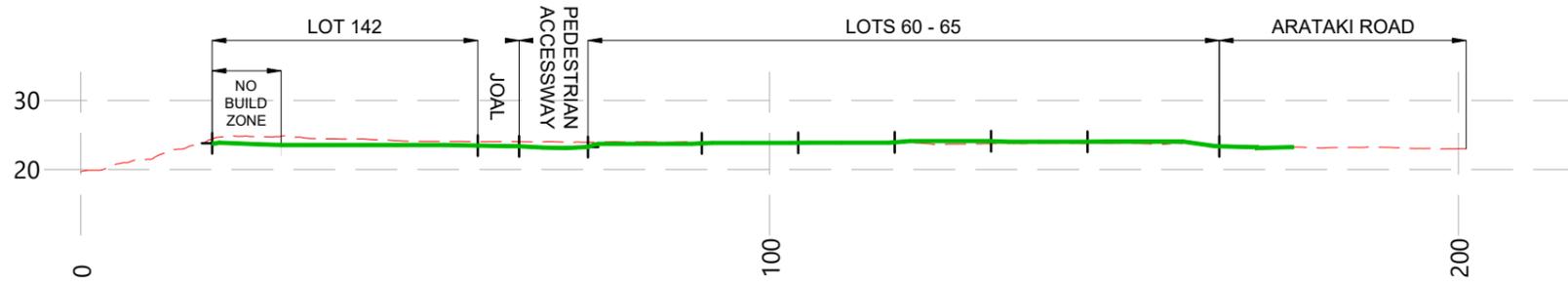


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ARATAKI DEVELOPMENT - HAVELOCK NORTH
EARTHWORKS SECTIONS - SHEET 4

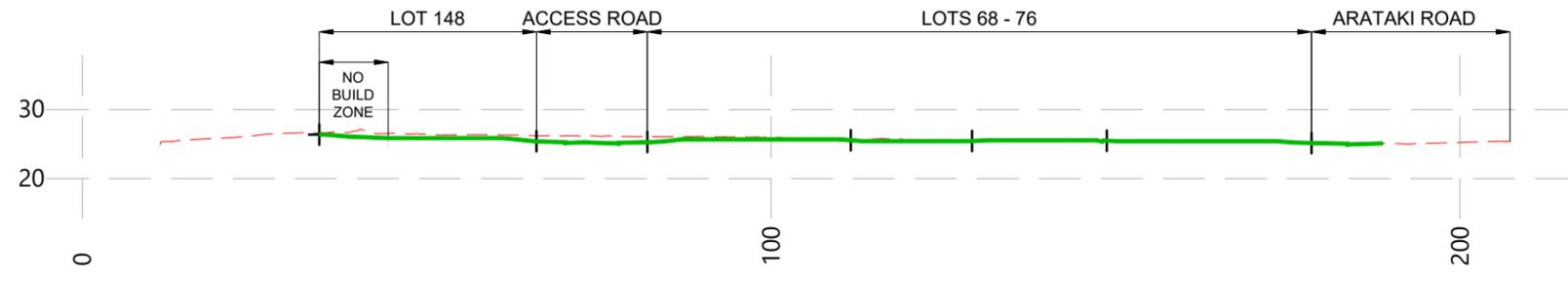
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SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1304-RD	



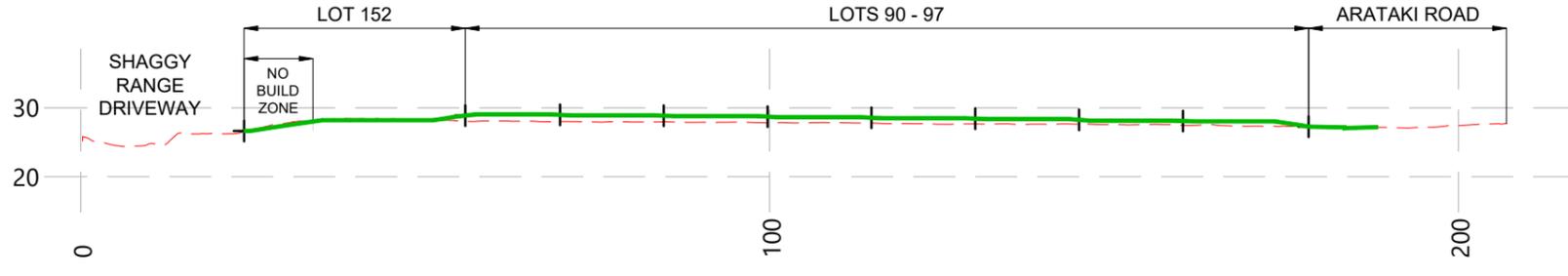
8 PROPOSED SECTION 8
SCALE 1:2000 @ A3

LEGEND

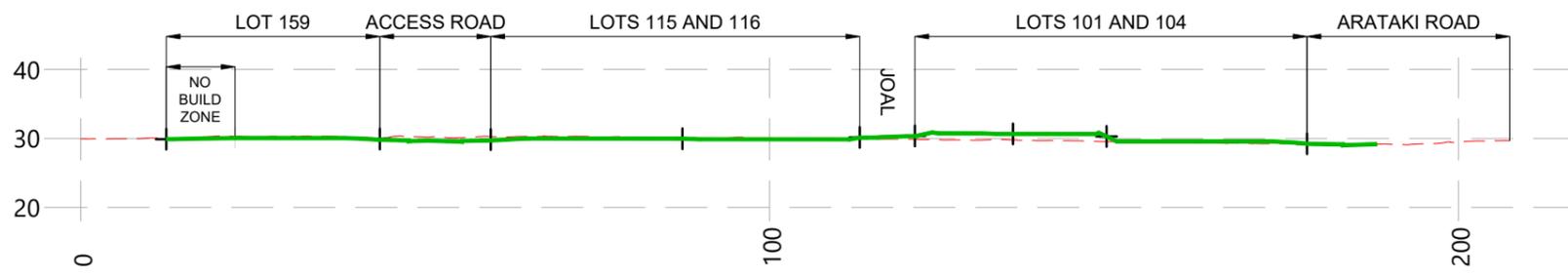
- EXISTING SURFACE - - - - -
- PROPOSED GROUND —————
- BOUNDARY LOCATION +



9 PROPOSED SECTION 9
SCALE 1:2000 @ A3



10 PROPOSED SECTION 10
SCALE 1:2000 @ A3



11 PROPOSED SECTION 11
SCALE 1:2000 @ A3



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
EARTHWORKS SECTIONS - SHEET 5

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1305-RD	

LEGEND

- EXTENTS OF WORKS
- BOUNDARIES
- PROPOSED CONTOURS (0.25m) 23
- RETAINING WALL HEIGHT UNDER 1.0m
- RETAINING WALL HEIGHT 1.0m-1.5m
- RETAINING WALL HEIGHT 1.5m-2.0m

NOTES

1. RETAINING WALLS SHOWN ON THIS PLAN ARE SUBJECT TO DETAILED DESIGN AND BUILDING CONSENT APPROVAL.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
RETAINING WALL LAYOUT



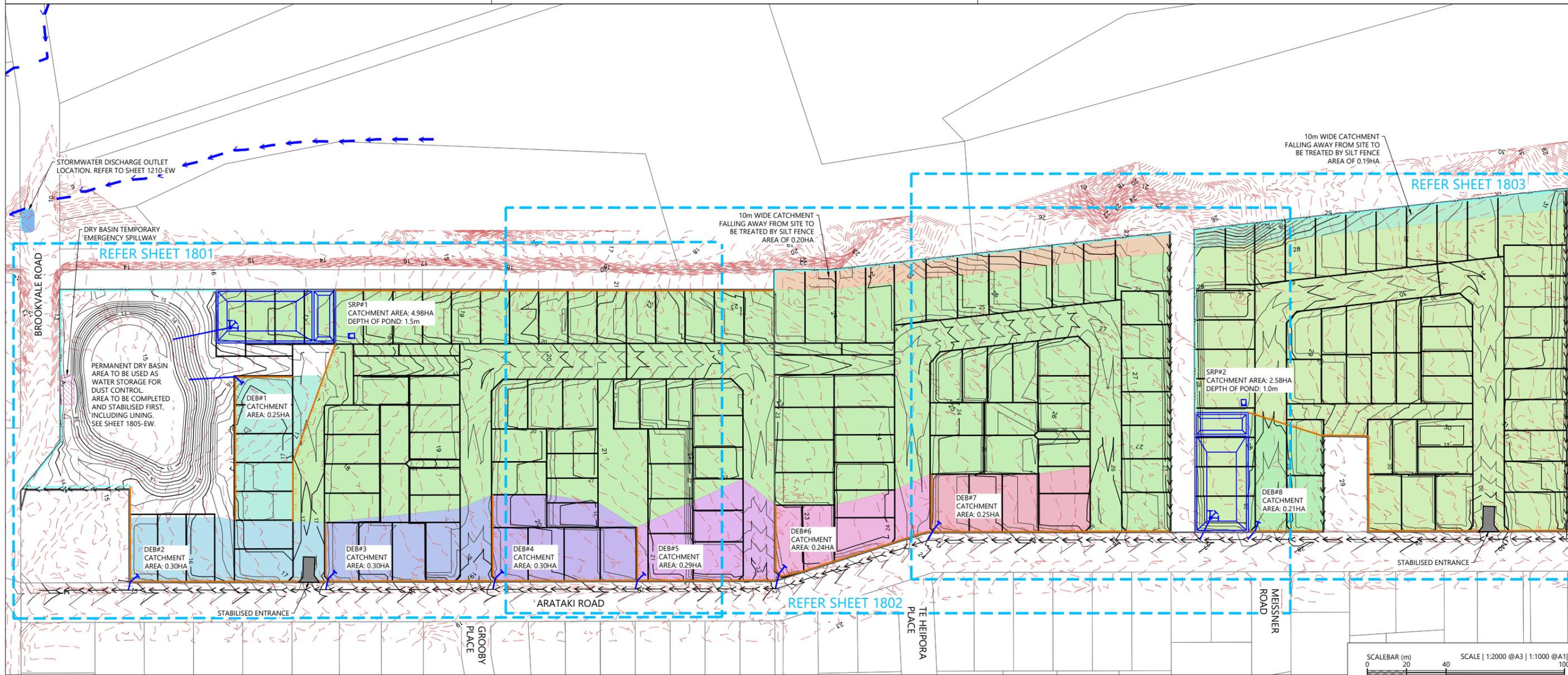
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SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1400-EW	

LEGEND

EXISTING MAJOR CONTOURS (1m INTERVAL)		23
EXISTING MINOR CONTOURS (0.5m INTERVAL)		
PROPOSED MAJOR CONTOURS (0.5m INTERVAL)		23.5
PROPOSED MINOR CONTOURS (0.25m INTERVAL)		
WATERCOURSE		
SEDIMENT RETENTION POND		
DECANT EARTH BUND OUTLET		
CLEAN WATER DIVERSION DRAIN		
EARTH BUND		
PROPOSED RETAINING WALL		
SUPER SILT FENCE		

NOTES

1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE HAWKE'S BAY REGIONAL COUNCIL WATERWAY GUIDELINES EROSION AND SEDIMENT CONTROL DOCUMENT APRIL 2009.
2. BEFORE COMMENCING WORKS THE CONTRACTOR SHALL ENSURE THAT HE HAS A COPY OF THE RESOURCE CONSENT FROM THE ENGINEER.
3. ANY MODIFICATIONS TO THE CONSENTED EROSION & SEDIMENT CONTROL DRAWING MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
4. THE EXTENT OF AREAS TO BE WORKED ARE TO BE CLEARLY IDENTIFIED PRIOR TO STRIPPING AND ALL EROSION & SEDIMENT CONTROL MEASURES IN PLACE AND APPROVED BEFORE EARTHWORKS COMMENCE.
5. THE FOREBAYS AND MAIN BODY OF SEDIMENT RETENTION PONDS ARE TO BE LINED WITH AN HDPE LINER APPROVED BY THE ENGINEER.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	BLO
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
SEDIMENT AND EROSION CONTROL PLAN OVERALL



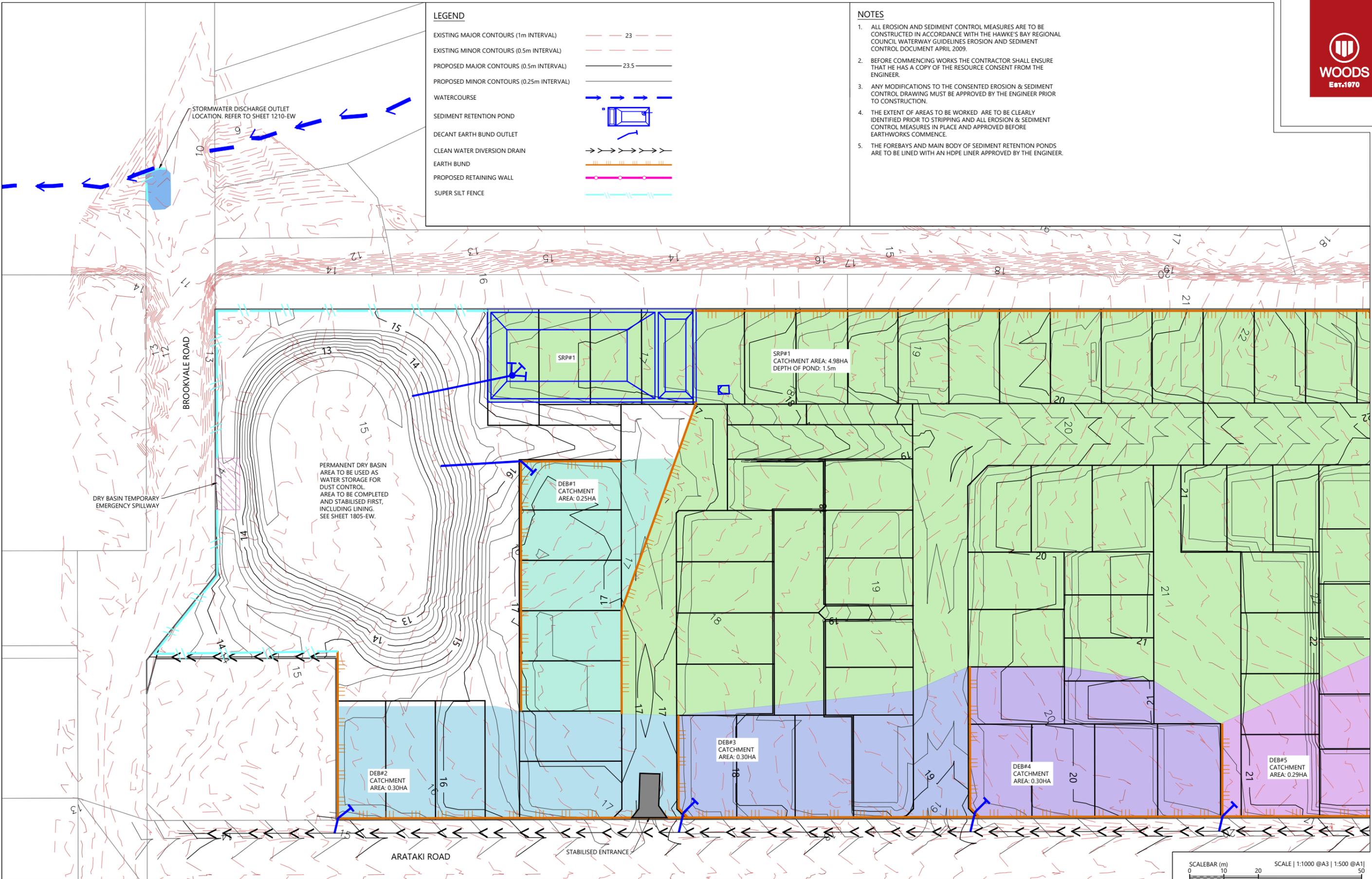
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SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1800-EW	

LEGEND

EXISTING MAJOR CONTOURS (1m INTERVAL)		23
EXISTING MINOR CONTOURS (0.5m INTERVAL)		
PROPOSED MAJOR CONTOURS (0.5m INTERVAL)		23.5
PROPOSED MINOR CONTOURS (0.25m INTERVAL)		
WATERCOURSE		
SEDIMENT RETENTION POND		
DECANT EARTH BUND OUTLET		
CLEAN WATER DIVERSION DRAIN		
EARTH BUND		
PROPOSED RETAINING WALL		
SUPER SILT FENCE		

NOTES

1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE HAWKE'S BAY REGIONAL COUNCIL WATERWAY GUIDELINES EROSION AND SEDIMENT CONTROL DOCUMENT APRIL 2009.
2. BEFORE COMMENCING WORKS THE CONTRACTOR SHALL ENSURE THAT HE HAS A COPY OF THE RESOURCE CONSENT FROM THE ENGINEER.
3. ANY MODIFICATIONS TO THE CONSENTED EROSION & SEDIMENT CONTROL DRAWING MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
4. THE EXTENT OF AREAS TO BE WORKED ARE TO BE CLEARLY IDENTIFIED PRIOR TO STRIPPING AND ALL EROSION & SEDIMENT CONTROL MEASURES IN PLACE AND APPROVED BEFORE EARTHWORKS COMMENCE.
5. THE FOREBAYS AND MAIN BODY OF SEDIMENT RETENTION PONDS ARE TO BE LINED WITH AN HDPE LINER APPROVED BY THE ENGINEER.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	BLO	JUNE 2025	DESIGNED	BLO
			DRAWN	BLO
			CHECKED	BF
			APPROVED	BF

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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 SEDIMENT AND EROSION CONTROL PLAN
 SHEET 1

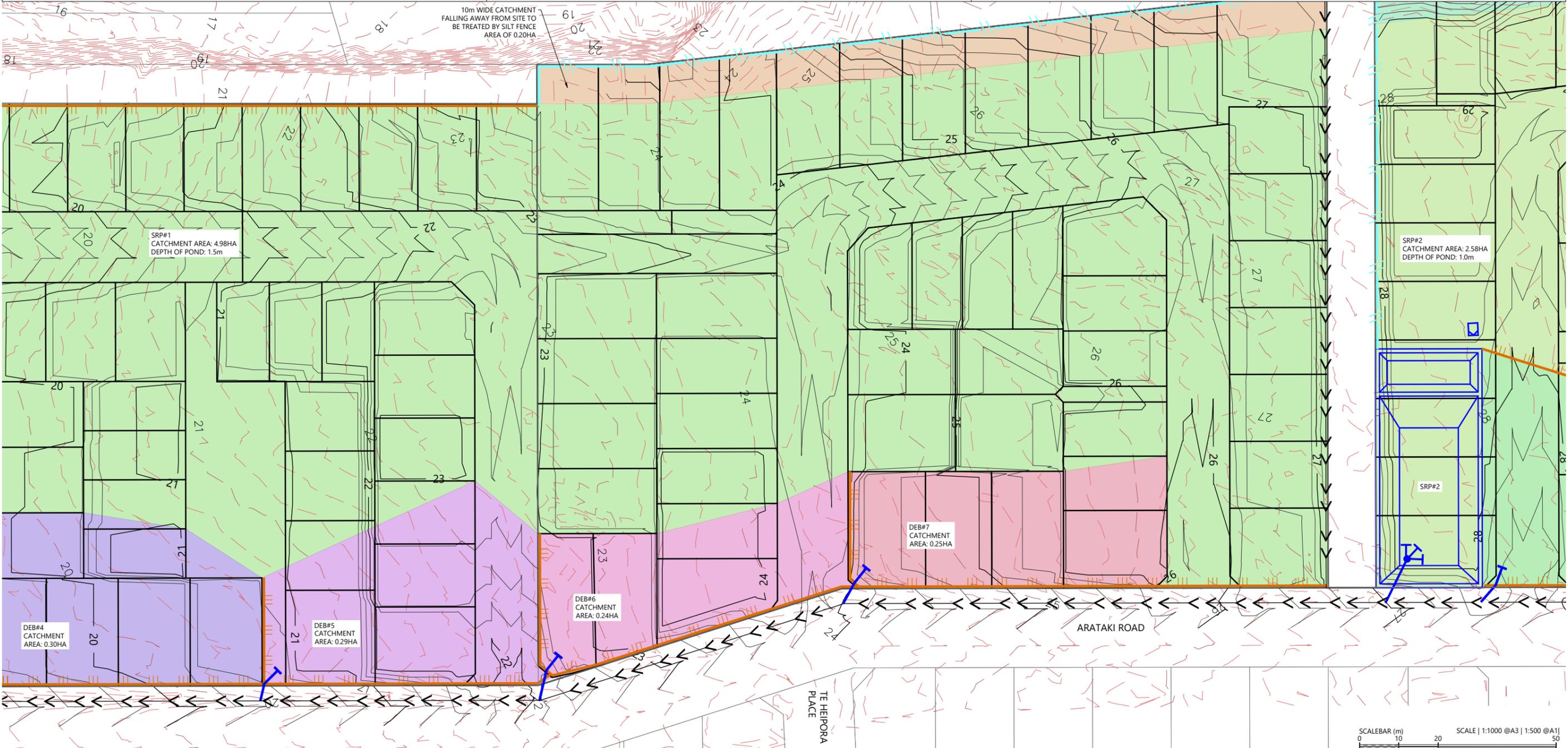
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1801-EW	

LEGEND

- EXISTING MAJOR CONTOURS (1m INTERVAL) - - - - 23
- EXISTING MINOR CONTOURS (0.5m INTERVAL) - - - - 23.5
- PROPOSED MAJOR CONTOURS (0.5m INTERVAL) —————
- PROPOSED MINOR CONTOURS (0.25m INTERVAL) —————
- WATERCOURSE
- SEDIMENT RETENTION POND
- DECANT EARTH BUND OUTLET
- CLEAN WATER DIVERSION DRAIN
- EARTH BUND
- PROPOSED RETAINING WALL
- SUPER SILT FENCE

NOTES

1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE HAWKE'S BAY REGIONAL COUNCIL WATERWAY GUIDELINES EROSION AND SEDIMENT CONTROL DOCUMENT APRIL 2009.
2. BEFORE COMMENCING WORKS THE CONTRACTOR SHALL ENSURE THAT HE HAS A COPY OF THE RESOURCE CONSENT FROM THE ENGINEER.
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5. THE FOREBAYS AND MAIN BODY OF SEDIMENT RETENTION PONDS ARE TO BE LINED WITH AN HDPE LINER APPROVED BY THE ENGINEER.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	BLO	JUNE 2025	DESIGNED	BLO
			DRAWN	BLO
			CHECKED	BF
			APPROVED	BF

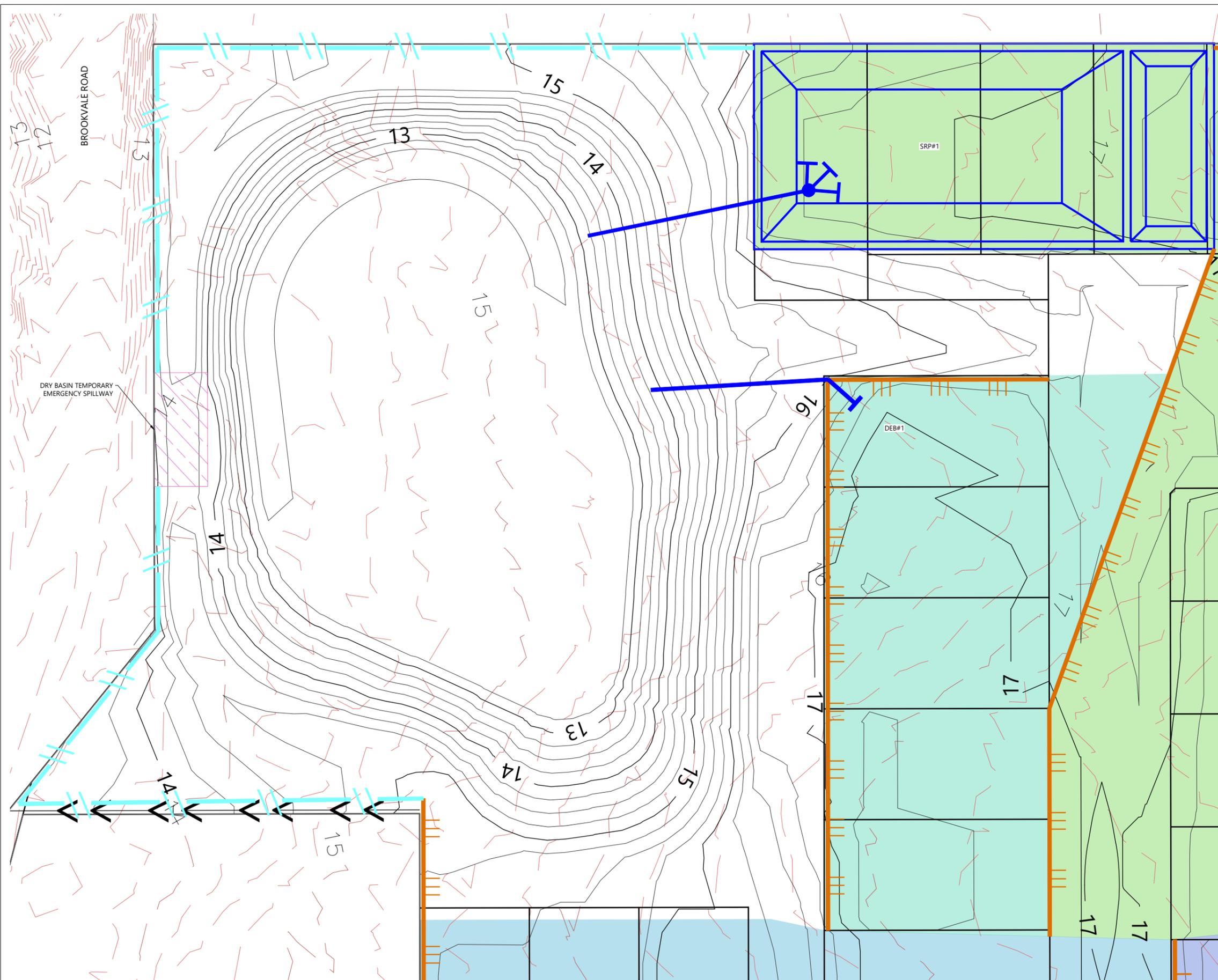
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 SEDIMENT AND EROSION CONTROL PLAN
 SHEET 2



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1802-EW	



- WORKS METHODOLOGY NOTES**
- WORKS ARE TO BE UNDERTAKEN DURING A PERIOD OF FORECASTED DRY WEATHER.
 - ESTABLISHMENT OF SILT FENCES, SRP#1, DEB#1 AND THEIR RESPECTIVE BUNDS TO BE COMPLETED SUCH THAT THESE CATCHMENTS ARE CONTROLLED. TEE BARS FROM SRP#1 AND DEB#1 ARE TO BE LIFTED SUCH THAT WATER DOES NOT ESCAPE THESE DEVICES UNTIL THE DRY BASIN LINING IS INSTALLED.
 - ONCE THE ABOVE EROSION AND SEDIMENT CONTROLS ARE ESTABLISHED AND AS BUILT'S CONFIRMED BY THE ENGINEER AND COUNCIL INSPECTOR, CUT / FILL OF THE DRY BASIN CAN COMMENCE.
 - CUT MATERIAL FROM THE DRY BASIN IS TO BE PLACED IN FILL WITHIN THE DRY BASIN AREA OR THE CATCHMENT OF SRP#1.
 - ONCE THE DRY BASIN SUBGRADE IS TRIMMED, TESTED, AND PASSED BY THE GEOTECHNICAL ENGINEER THE GEOSYNTHETIC LINER IS TO BE INSTALLED ON THE BASE OF THE DRY BASIN AND UP THE BANKS TO RL=14.9m.
 - NO PENETRATIONS IN THE LINER ARE ALLOWED FOR DURING THE EARTHWORKS PHASE. LATER CONSTRUCTION OF THE CIVIL WORKS STORMWATER INLET AND OUTLET WILL REQUIRE REMOVAL AND REPLACEMENT OF THE LINER IN TWO ISOLATED LOCATIONS.
 - OUTLETS FROM SRP#1 AND DEB#1 ARE TO BE LAID OVER THE LINER AND DIRECTED TO THE BASE OF THE DRY BASIN. THESE OUTLET PIPES ARE TO DISCHARGE TO AN AREA OF RIP RAP.
 - WATER IMPOUNDED BY THE DRY BASIN IS TO BE PUMPED TO WATER CARTS AND USED AS DUST CONTROL FOR THE BULK EARTHWORKS.

- NOTES**
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE HAWKE'S BAY REGIONAL COUNCIL WATERWAY GUIDELINES EROSION AND SEDIMENT CONTROL DOCUMENT APRIL 2009.
 - BEFORE COMMENCING WORKS THE CONTRACTOR SHALL ENSURE THAT HE HAS A COPY OF THE RESOURCE CONSENT FROM THE ENGINEER.
 - ANY MODIFICATIONS TO THE CONSENTED EROSION & SEDIMENT CONTROL DRAWING MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
 - THE EXTENT OF AREAS TO BE WORKED ARE TO BE CLEARLY IDENTIFIED PRIOR TO STRIPPING AND ALL EROSION & SEDIMENT CONTROL MEASURES IN PLACE AND APPROVED BEFORE EARTHWORKS COMMENCE.
 - THE FOREBAYS AND MAIN BODY OF SEDIMENT RETENTION PONDS ARE TO BE LINED WITH AN HDPE LINER APPROVED BY THE ENGINEER.

LEGEND

STAGE BOUNDARY	
DESIGN MAJOR CONTOURS (1m INTERVAL)	
DESIGN MINOR CONTOURS (0.5m INTERVAL)	
PROPOSED MAJOR CONTOURS (0.5m INTERVAL)	
PROPOSED MINOR CONTOURS (0.25m INTERVAL)	
CONTOUR DRAINS	
SEDIMENT RETENTION POND	
DECANT EARTH BUND OUTLET	
CLEAN WATER DIVERSION DRAIN	
EARTH BUND	
PROPOSED RETAINING WALL	
SUPER SILT FENCE	
SILT FENCE	



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	BLO
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF



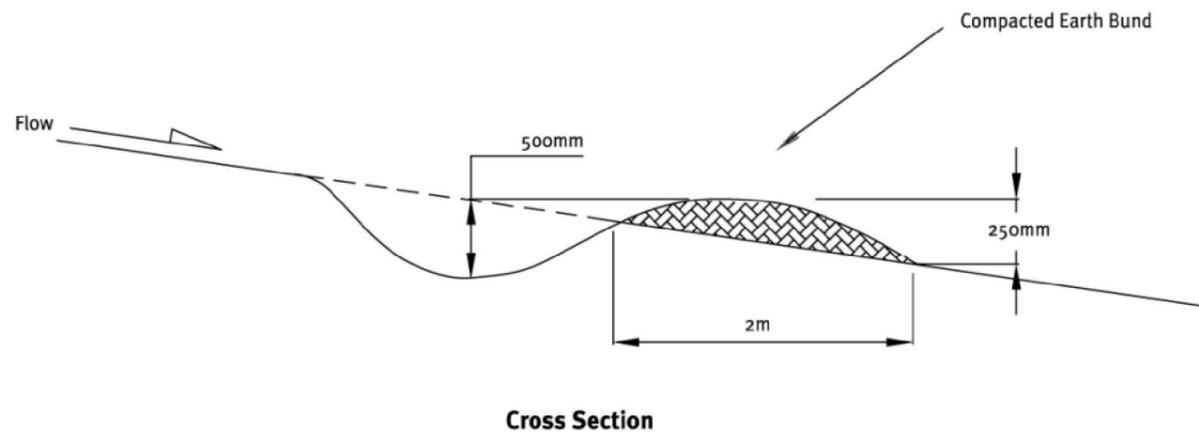
BUILDING B, LEVEL 1
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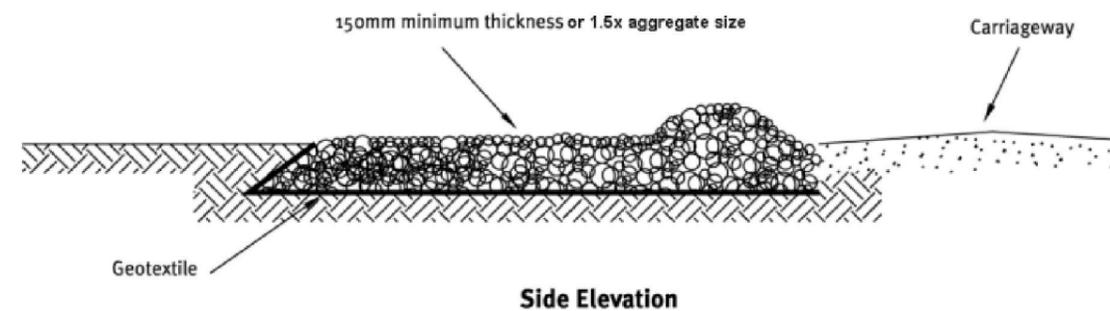
ARATAKI DEVELOPMENT - HAVELOCK NORTH
SEDIMENT AND EROSION CONTROL PLAN
DRY BASIN

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:500 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1805-EW	

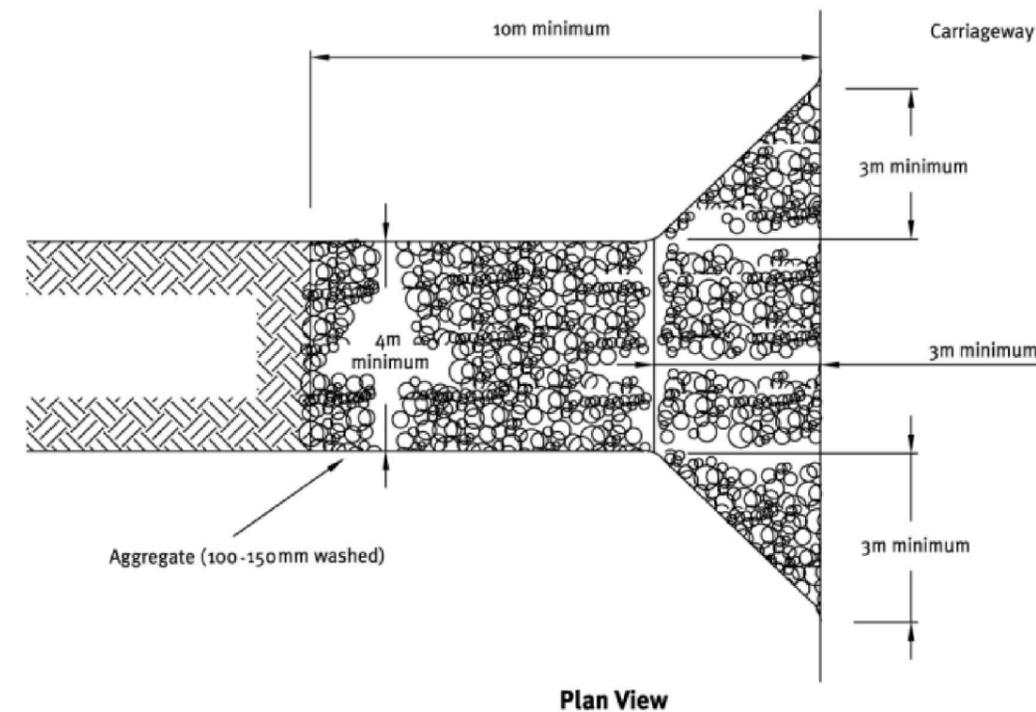
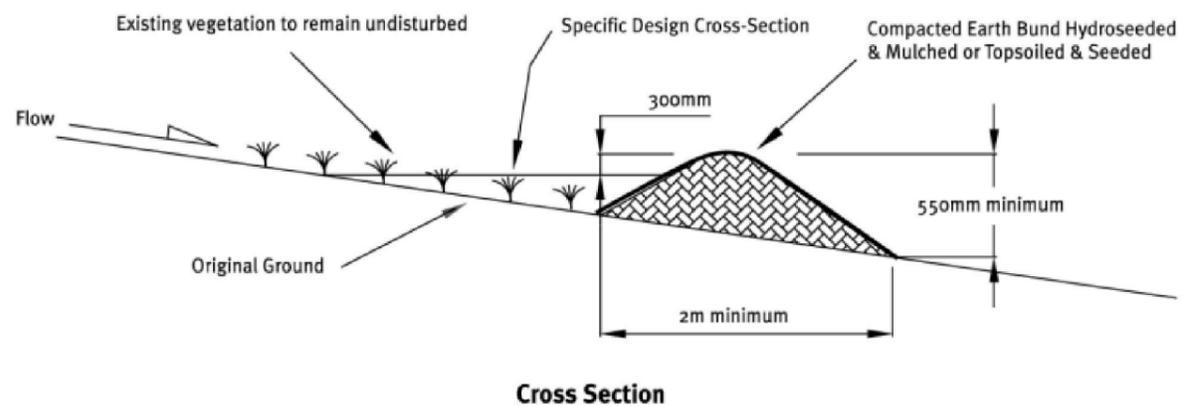
**Figure 5-3
Contour Drain**



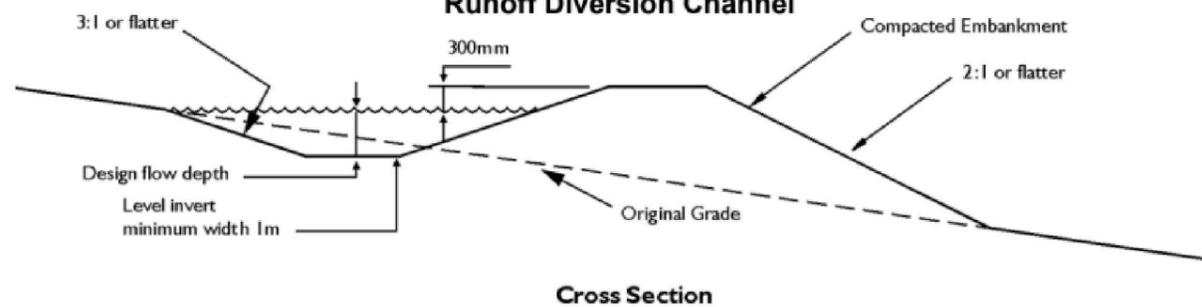
**Figure 5-7
Stabilised Construction Entrance Schematic**



**Figure 5-1
Cleanwater Runoff Diversion Bund**



**Figure 5-2
Runoff Diversion Channel**



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF



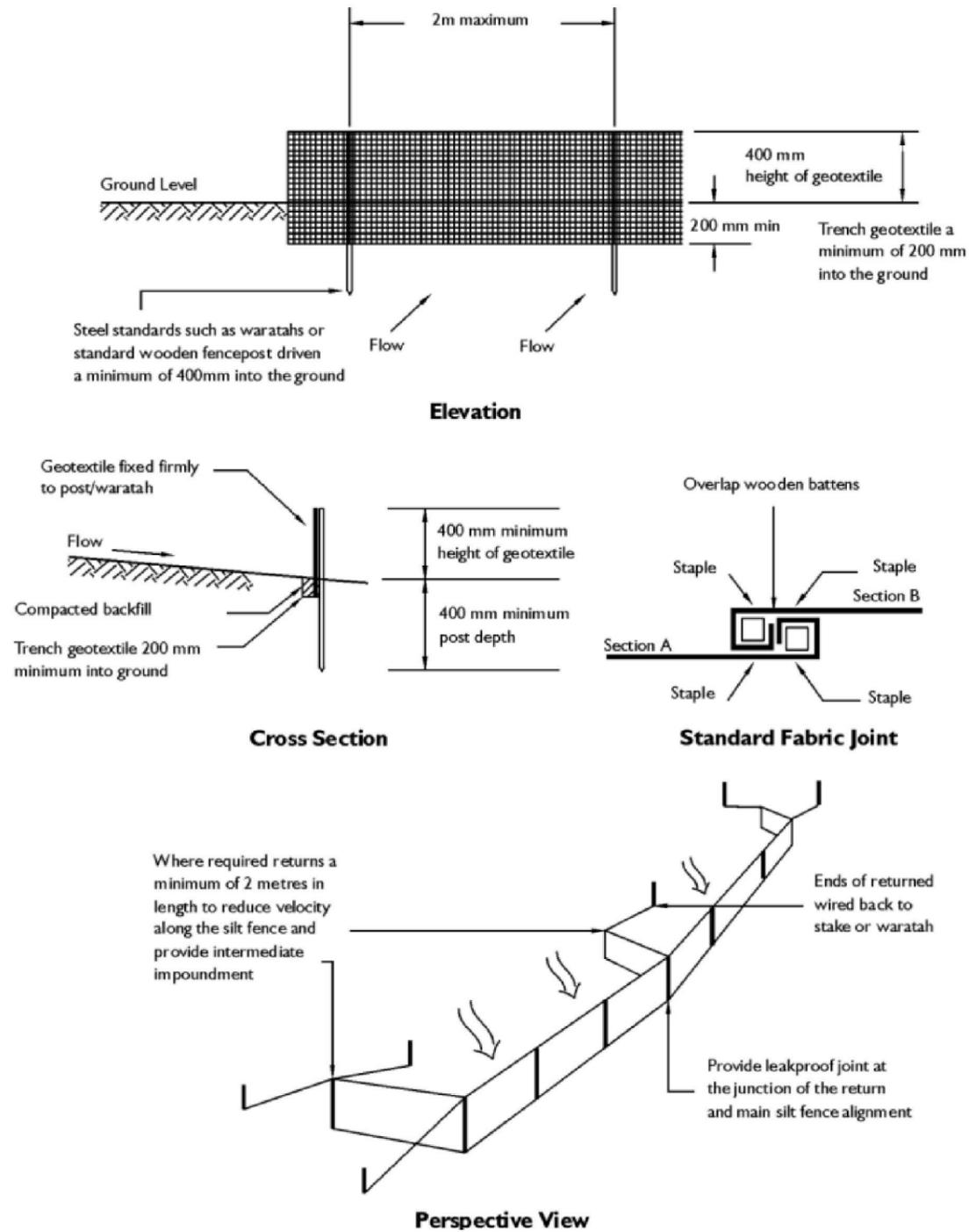
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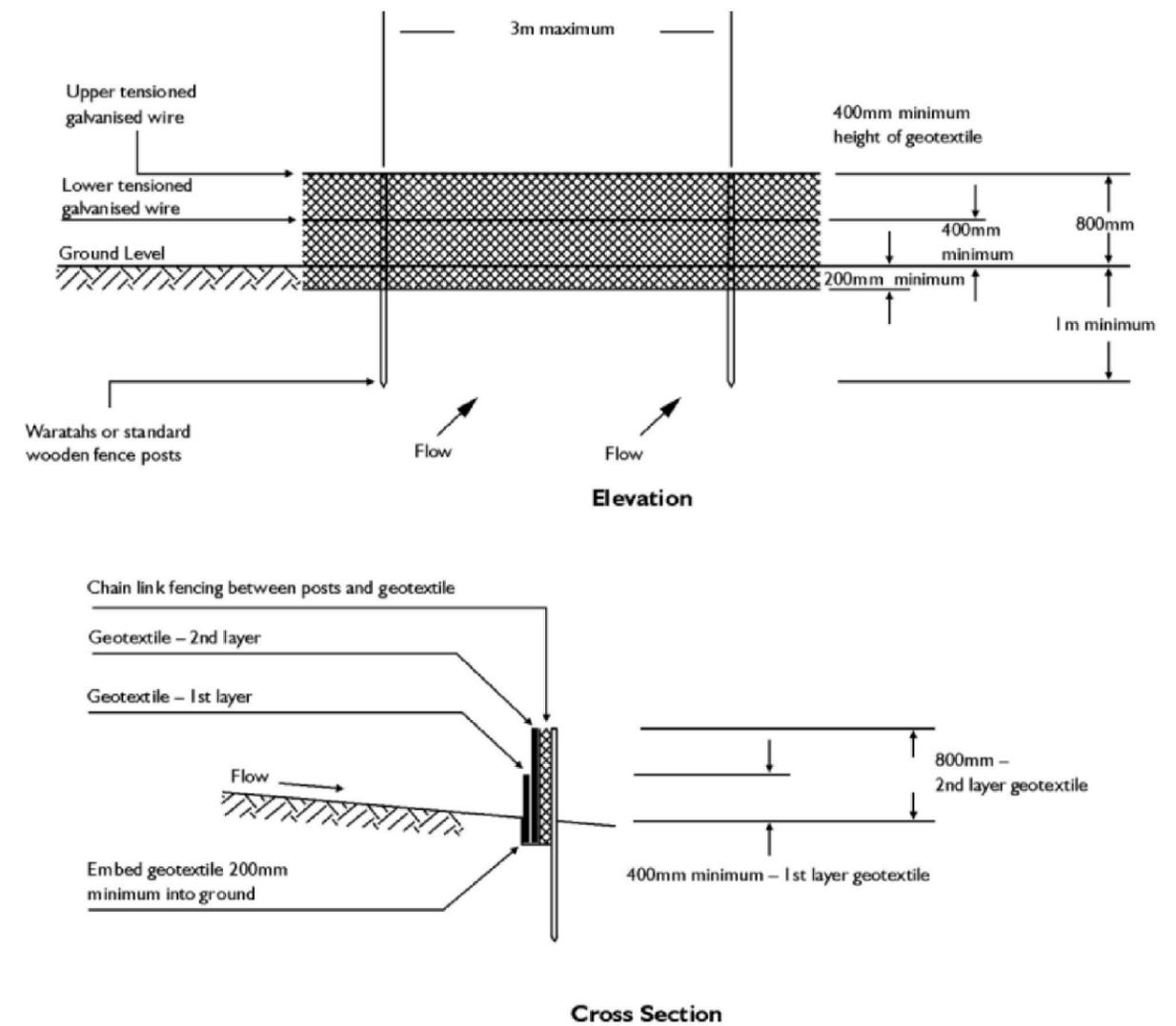
ARATAKI DEVELOPMENT - HAVELOCK NORTH
SEDIMENT AND EROSION CONTROL
STANDARD DETAILS SHEET 1

STATUS	ISSUED FOR CONSENT	REV
SCALE	N.T.S	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1810-EW	

**Figure 6-9
Schematic of Silt Fence**



**Figure 6-10
Super Silt Fence Schematic**



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH

SEDIMENT AND EROSION CONTROL
STANDARD DETAILS SHEET 2

STATUS	ISSUED FOR CONSENT	REV
SCALE	N.T.S	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1811-EW	

Figure 6-12
Decanting Earth Bund with a Floating Decant

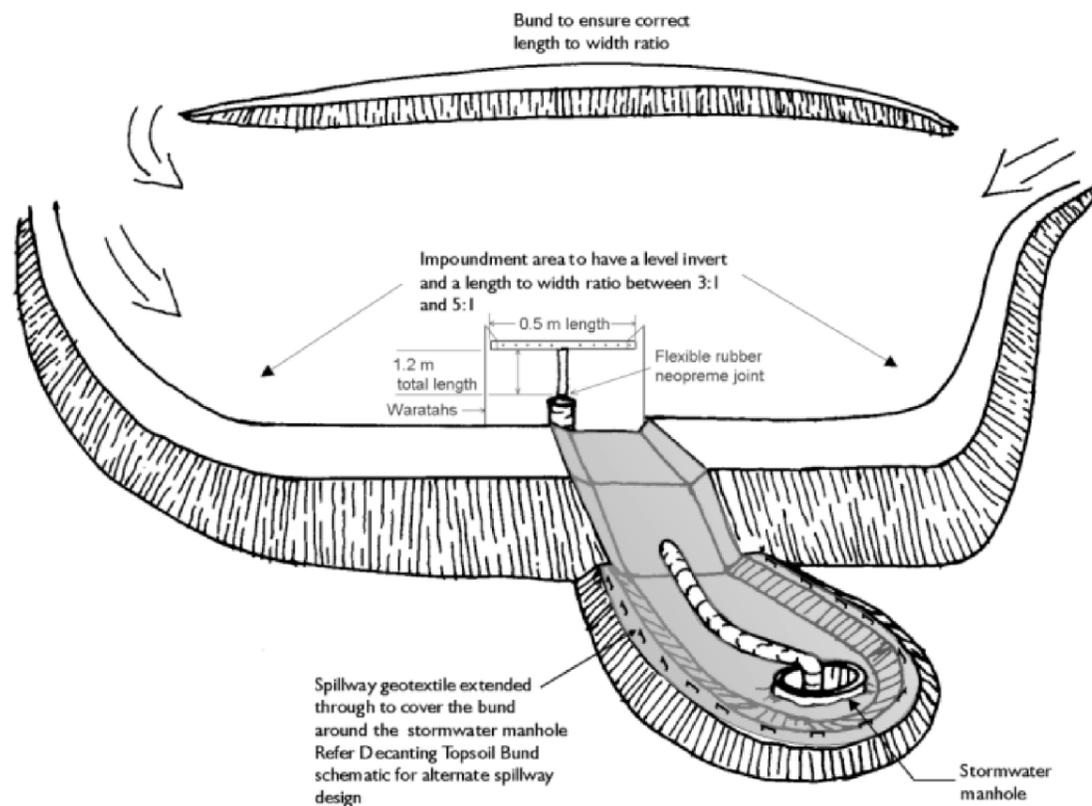


Figure 6-2
Schematic of a T-bar Decant Structure

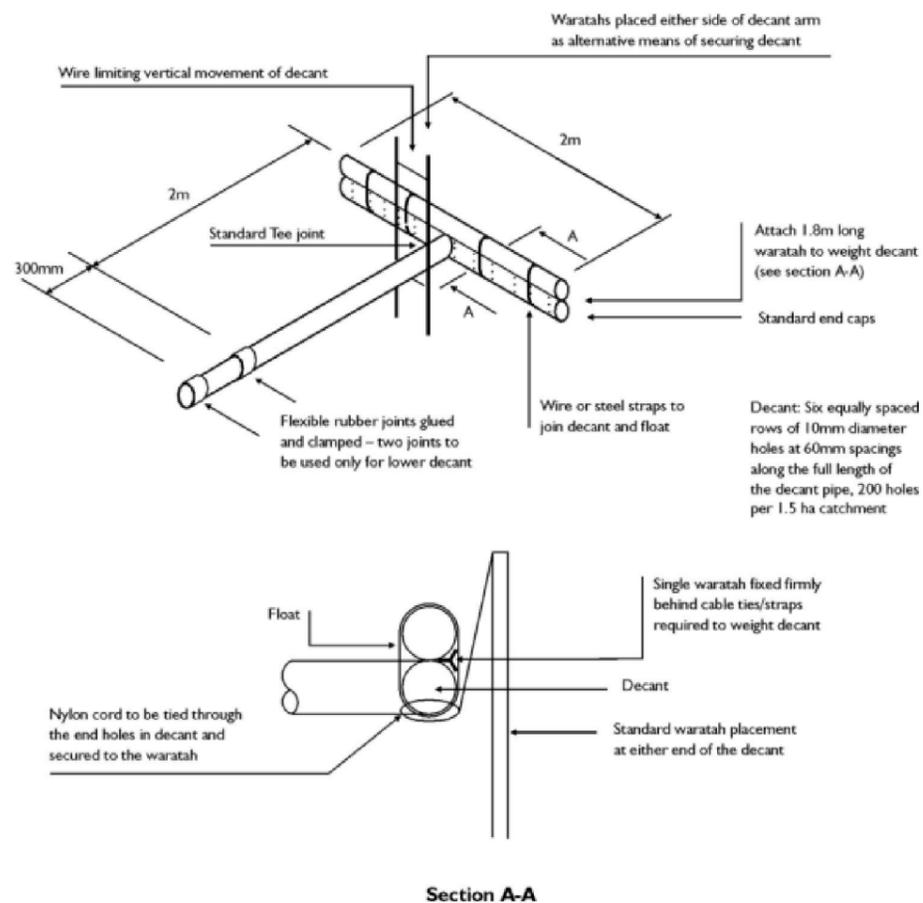
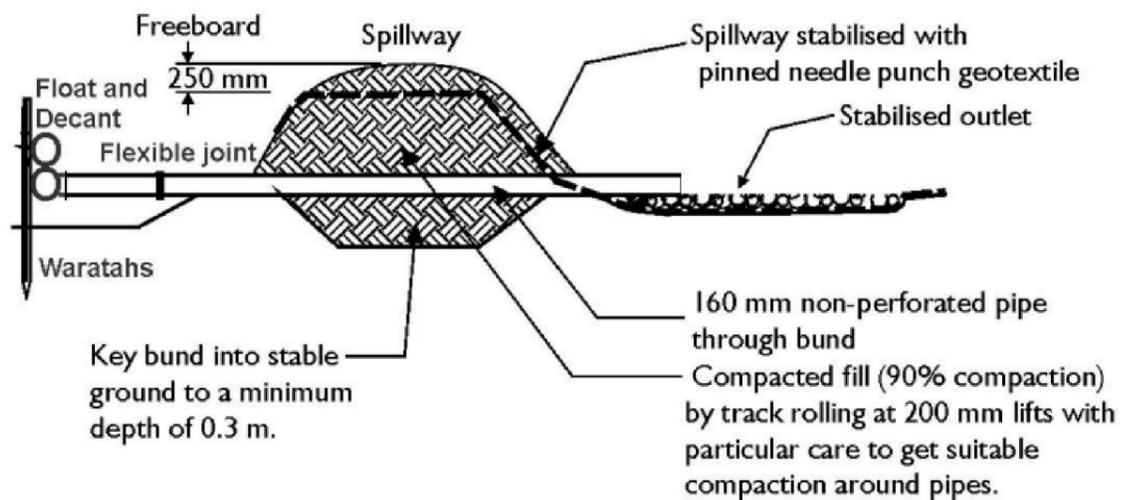


Figure 6-13
Cross-section of a Floating Decant



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH

SEDIMENT AND EROSION CONTROL
STANDARD DETAILS SHEET 3

STATUS	ISSUED FOR CONSENT	REV
SCALE	N.T.S	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1812-EW	

Figure 6-4
Sediment Retention Pond for Catchments Between 1.5 - 3 ha.

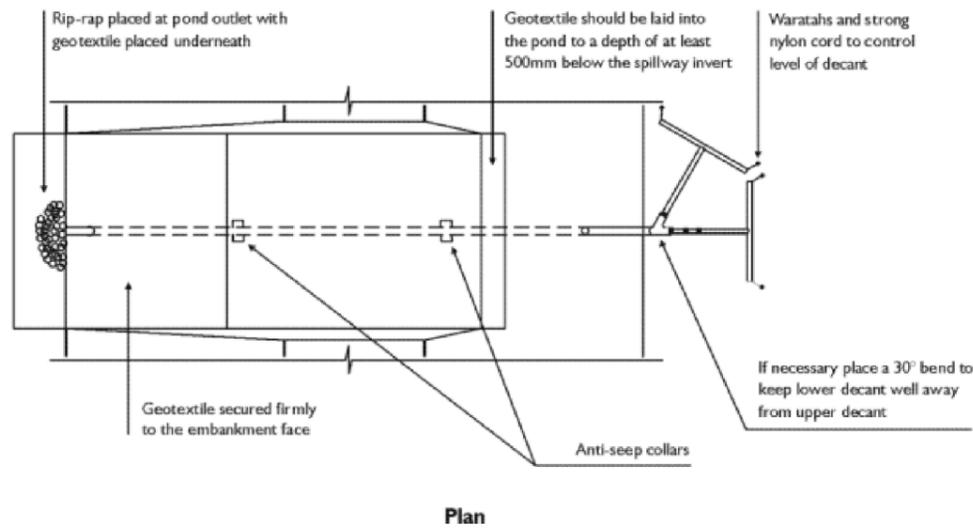
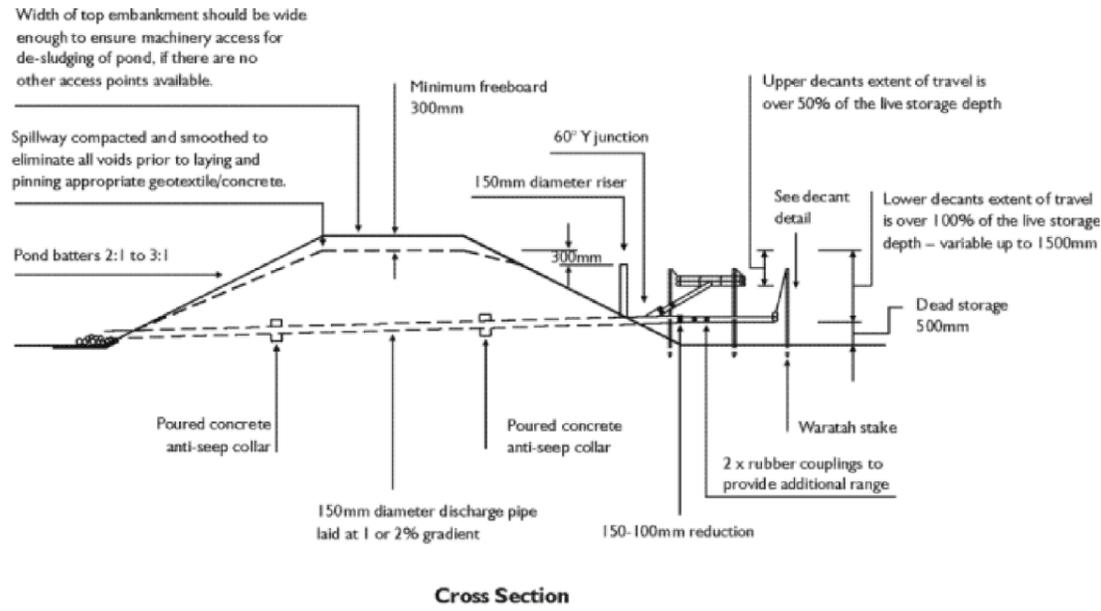
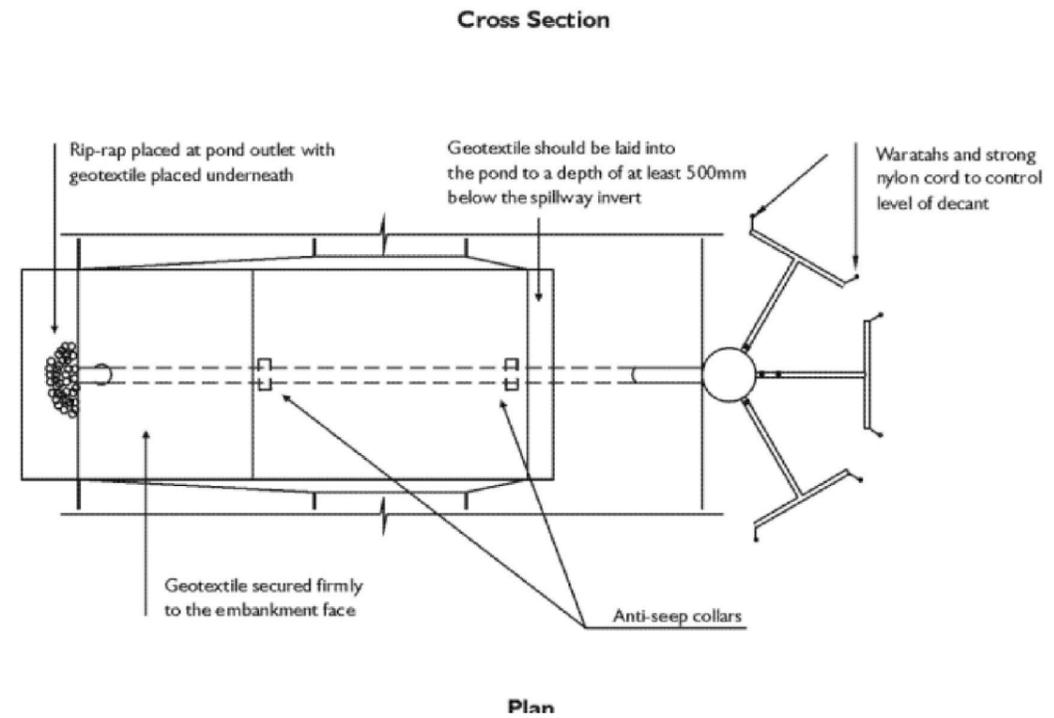
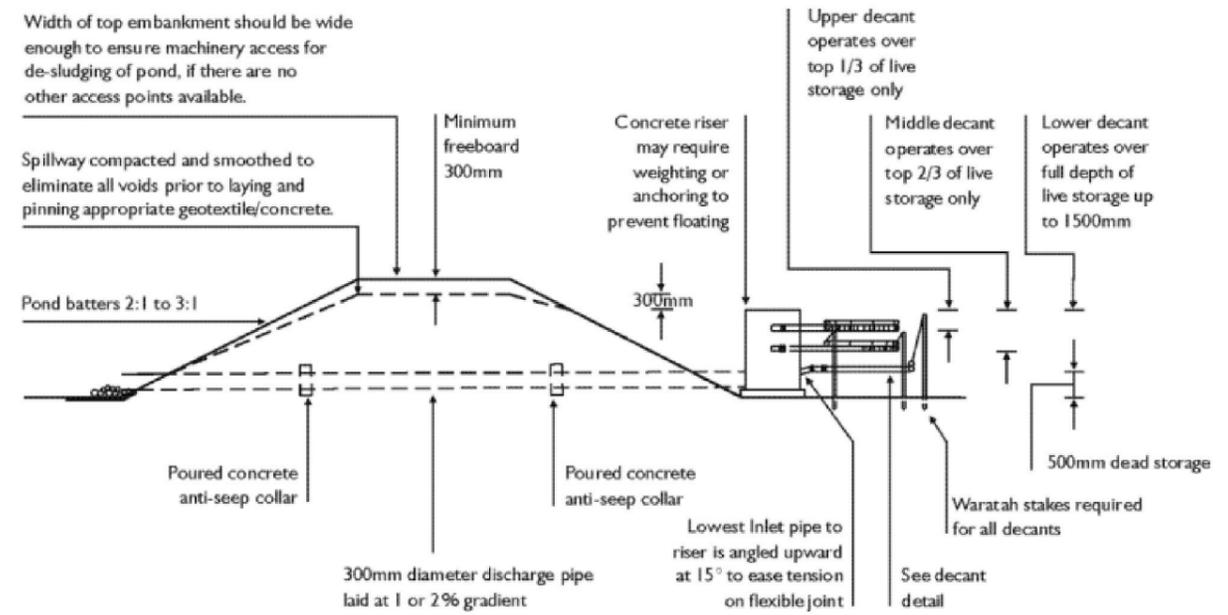


Figure 6-5
Sediment Retention Pond for Catchments Between 3 and 5 ha.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF



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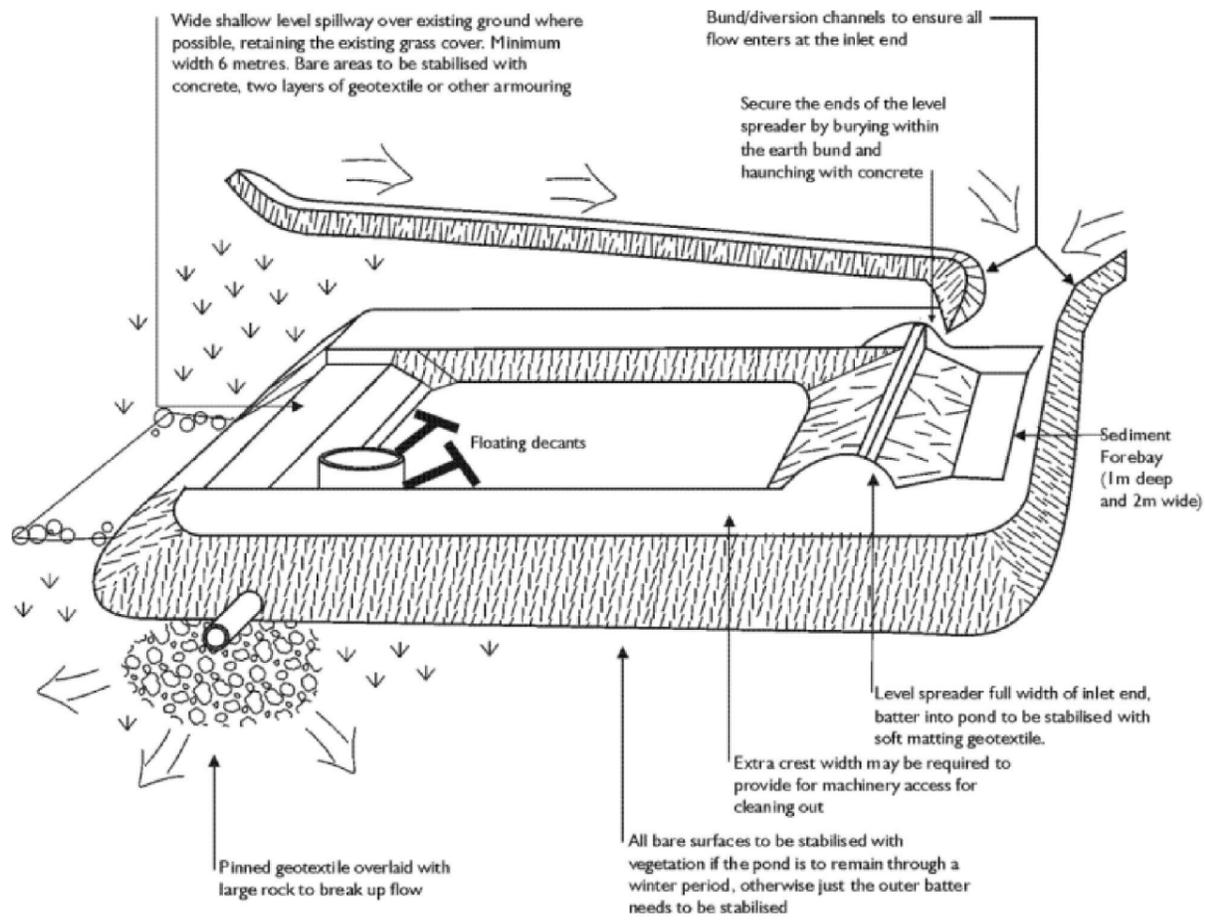
WOODS.CO.NZ



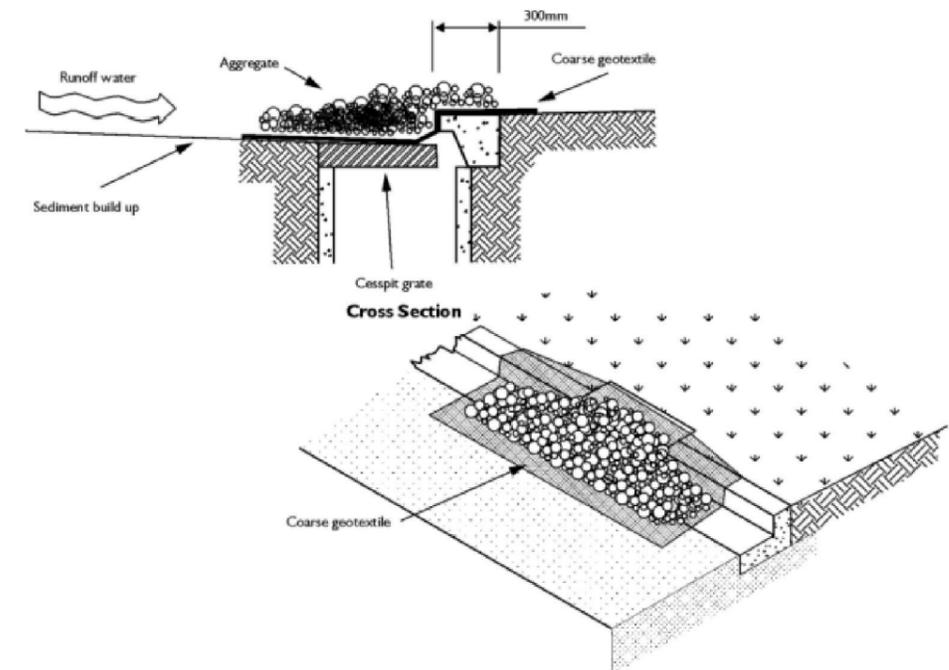
ARATAKI DEVELOPMENT - HAVELOCK NORTH
SEDIMENT AND EROSION CONTROL
STANDARD DETAILS SHEET 4

STATUS	ISSUED FOR CONSENT	REV
SCALE	N.T.S	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1813-EW	

**Figure 6-1
Schematic of a Sediment Retention Pond**



**Figure 6-11
Schematic of Inlet Protection**



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH

SEDIMENT AND EROSION CONTROL
STANDARD DETAILS SHEET 5

STATUS	ISSUED FOR CONSENT	REV
SCALE	N.T.S	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-1814-EW	

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH
- PROPOSED INFORMAL PATH
- PROPOSED SHARED PATH
- PROPOSED DECORATIVE CONCRETE
- EXISTING STREETLIGHT AND 5m SEPARATION
- RELOCATED STREETLIGHT AND 5m SEPARATION
- PROPOSED STREETLIGHT AND 5m SEPARATION
- PROPOSED TREE
- EXISTING TREES TO BE RETAINED

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL ENGINEERING COP STANDARDS. ANY AMBIGUITY BETWEEN THESE DRAWINGS & THE STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
2. ALL KERB & CHANNEL / NIB TO BE SLIP-FORM, 25MPA FIBRE REINFORCED.
3. ALL SUMPS TO BE SEMI-RECESSED 800X500 WITH 1.2M LINTEL UNLESS SPECIFIED OTHERWISE.
4. FOOTPATHS TO BE CONSTRUCTED AS PER THE TYPICAL CROSS SECTIONS.
5. PRAM CROSSINGS TO BE CONSTRUCTED AS PER HASTINGS DISTRICT COUNCIL ENGINEERING COP STANDARDS.
6. VEHICLE CROSSINGS SHOWN ON THIS PLAN ARE FOR PLANNING PURPOSES ONLY & WILL NOT BE CONSTRUCTED UNLESS OTHERWISE NOTED.
7. ALL LINE MARKING & ROAD SIGNAGE IS TO BE CONSTRUCTED AS PER NEW ZEALAND TRANSPORT AGENCY MANUAL OF SIGNS & MARKINGS.
8. REFER TO LIGHTING DESIGN FOR STREETLIGHT TYPES AND DETAILS.
9. REFER TO LANDSCAPING PLAN FOR LANDSCAPING DETAILS AND TREE TYPES.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
ROAD PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2000-RD	

LEGEND

PROPOSED ASPHALT PAVING	
PROPOSED BERM	
PROPOSED FOOTPATH	
PROPOSED INFORMAL PATH	
PROPOSED SHARED PATH	
PROPOSED DECORATIVE CONCRETE	
EXISTING STREETLIGHT AND 5m SEPARATION	
RELOCATED STREETLIGHT AND 5m SEPARATION	
PROPOSED STREETLIGHT AND 5m SEPARATION	
PROPOSED TREE	
EXISTING TREES TO BE RETAINED	

- NOTES**
1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL ENGINEERING COP STANDARDS. ANY AMBIGUITY BETWEEN THESE DRAWINGS & THE STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
 2. ALL KERB & CHANNEL / NIB TO BE SLIP-FORM, 25MPA FIBRE REINFORCED.
 3. ALL SUMPS TO BE SEMI-RECESSED 800X500 WITH 1.2M LINTEL UNLESS SPECIFIED OTHERWISE.
 4. FOOTPATHS TO BE CONSTRUCTED AS PER THE TYPICAL CROSS SECTIONS.
 5. PRAM CROSSINGS TO BE CONSTRUCTED AS PER HASTINGS DISTRICT COUNCIL ENGINEERING COP STANDARDS.
 6. VEHICLE CROSSINGS SHOWN ON THIS PLAN ARE FOR PLANNING PURPOSES ONLY & WILL NOT BE CONSTRUCTED UNLESS OTHERWISE NOTED.
 7. ALL LINE MARKING & ROAD SIGNAGE IS TO BE CONSTRUCTED AS PER NEW ZEALAND TRANSPORT AGENCY MANUAL OF SIGNS & MARKINGS.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF

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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 ROAD PLAN - SHEET 1

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2001-RD	

LEGEND

PROPOSED ASPHALT PAVING		EXISTING STREETLIGHT AND 5m SEPARATION	
PROPOSED BERM		RELOCATED STREETLIGHT AND 5m SEPARATION	
PROPOSED FOOTPATH		PROPOSED STREETLIGHT AND 5m SEPARATION	
PROPOSED INFORMAL PATH		PROPOSED TREE	
PROPOSED SHARED PATH		EXISTING TREES TO BE RETAINED	
PROPOSED DECORATIVE CONCRETE			

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL ENGINEERING COP STANDARDS. ANY AMBIGUITY BETWEEN THESE DRAWINGS & THE STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
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4. FOOTPATHS TO BE CONSTRUCTED AS PER THE TYPICAL CROSS SECTIONS.
5. PRAM CROSSINGS TO BE CONSTRUCTED AS PER HASTINGS DISTRICT COUNCIL ENGINEERING COP STANDARDS.
6. VEHICLE CROSSINGS SHOWN ON THIS PLAN ARE FOR PLANNING PURPOSES ONLY & WILL NOT BE CONSTRUCTED UNLESS OTHERWISE NOTED.
7. ALL LINE MARKING & ROAD SIGNAGE IS TO BE CONSTRUCTED AS PER NEW ZEALAND TRANSPORT AGENCY MANUAL OF SIGNS & MARKINGS.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF

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ARATAKI DEVELOPMENT - HAVELOCK NORTH
ROAD PLAN - SHEET 2

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2002-RD	

LEGEND

PROPOSED ASPHALT PAVING		EXISTING STREETLIGHT AND 5m SEPARATION	
PROPOSED BERM		RELOCATED STREETLIGHT AND 5m SEPARATION	
PROPOSED FOOTPATH		PROPOSED STREETLIGHT AND 5m SEPARATION	
PROPOSED INFORMAL PATH		PROPOSED TREE	
PROPOSED SHARED PATH		EXISTING TREES TO BE RETAINED	
PROPOSED DECORATIVE CONCRETE			

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL ENGINEERING COP STANDARDS. ANY AMBIGUITY BETWEEN THESE DRAWINGS & THE STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
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3. ALL SUMPS TO BE SEMI-RECESSED 800X500 WITH 1.2M LINTEL UNLESS SPECIFIED OTHERWISE.
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5. PRAM CROSSINGS TO BE CONSTRUCTED AS PER HASTINGS DISTRICT COUNCIL ENGINEERING COP STANDARDS.
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REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF

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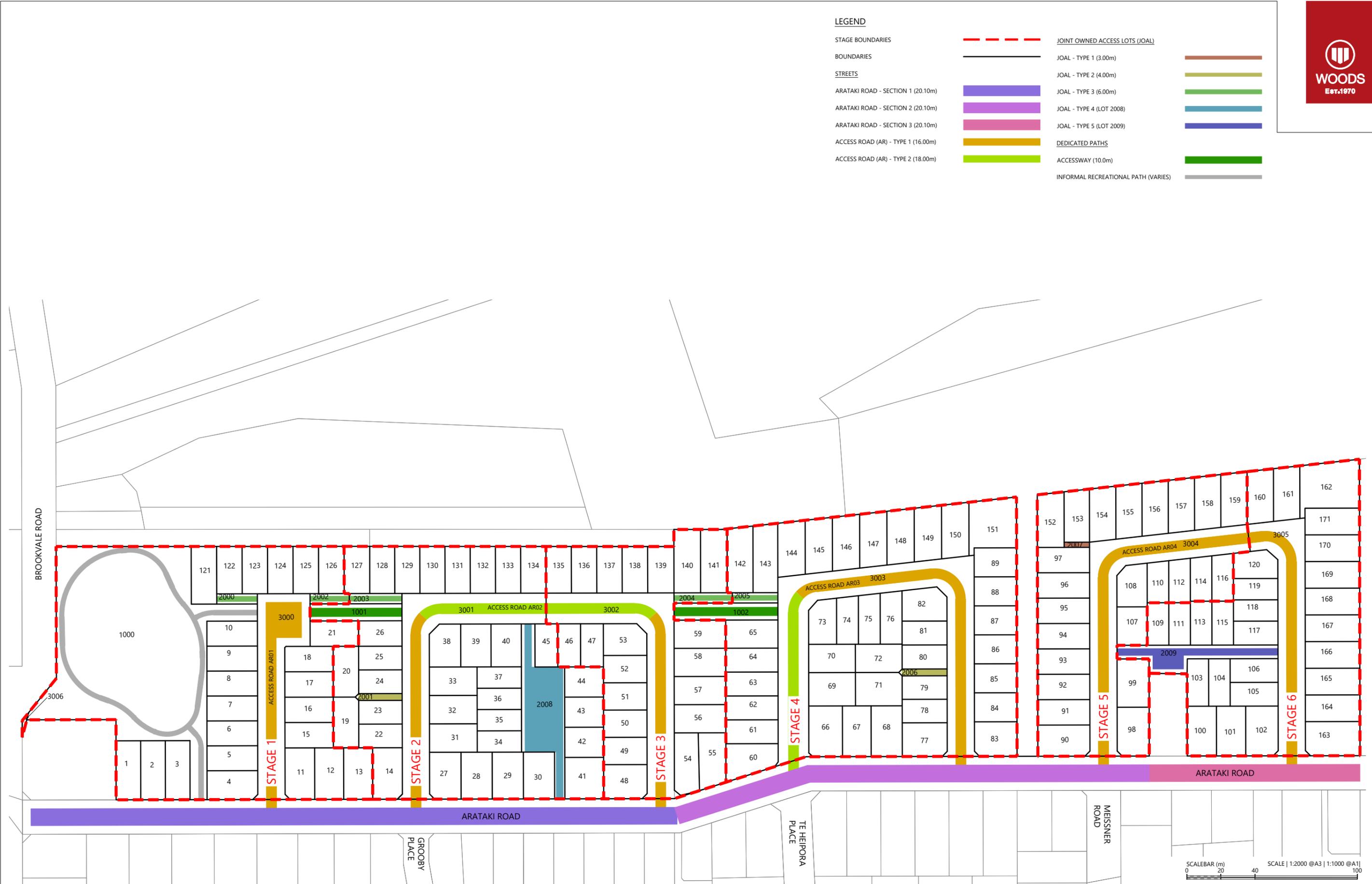
ARATAKI DEVELOPMENT - HAVELOCK NORTH
ROAD PLAN - SHEET 3

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2003-RD	



LEGEND

STAGE BOUNDARIES		JOINT OWNED ACCESS LOTS (JOAL)
BOUNDARIES		JOAL - TYPE 1 (3.00m)
STREETS		JOAL - TYPE 2 (4.00m)
ARATAKI ROAD - SECTION 1 (20.10m)		JOAL - TYPE 3 (6.00m)
ARATAKI ROAD - SECTION 2 (20.10m)		JOAL - TYPE 4 (LOT 2008)
ARATAKI ROAD - SECTION 3 (20.10m)		JOAL - TYPE 5 (LOT 2009)
ACCESS ROAD (AR) - TYPE 1 (16.00m)		DEDICATED PATHS
ACCESS ROAD (AR) - TYPE 2 (18.00m)		ACCESSWAY (10.0m)
		INFORMAL RECREATIONAL PATH (VARIES)



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF



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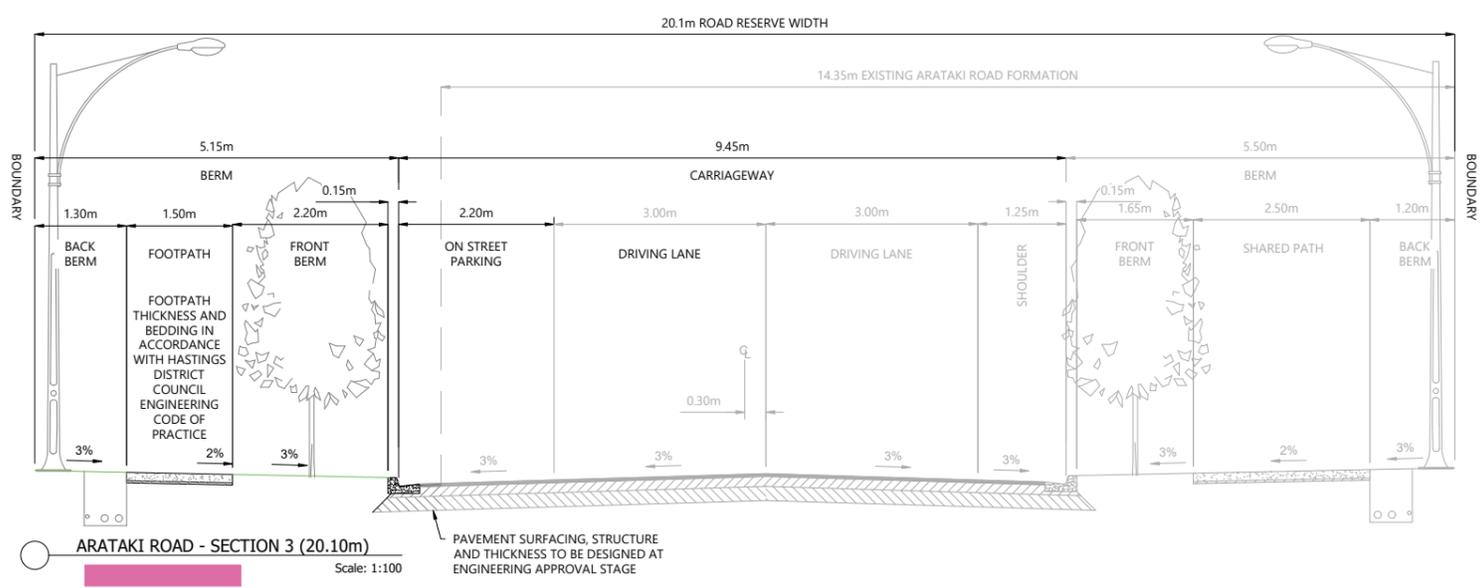
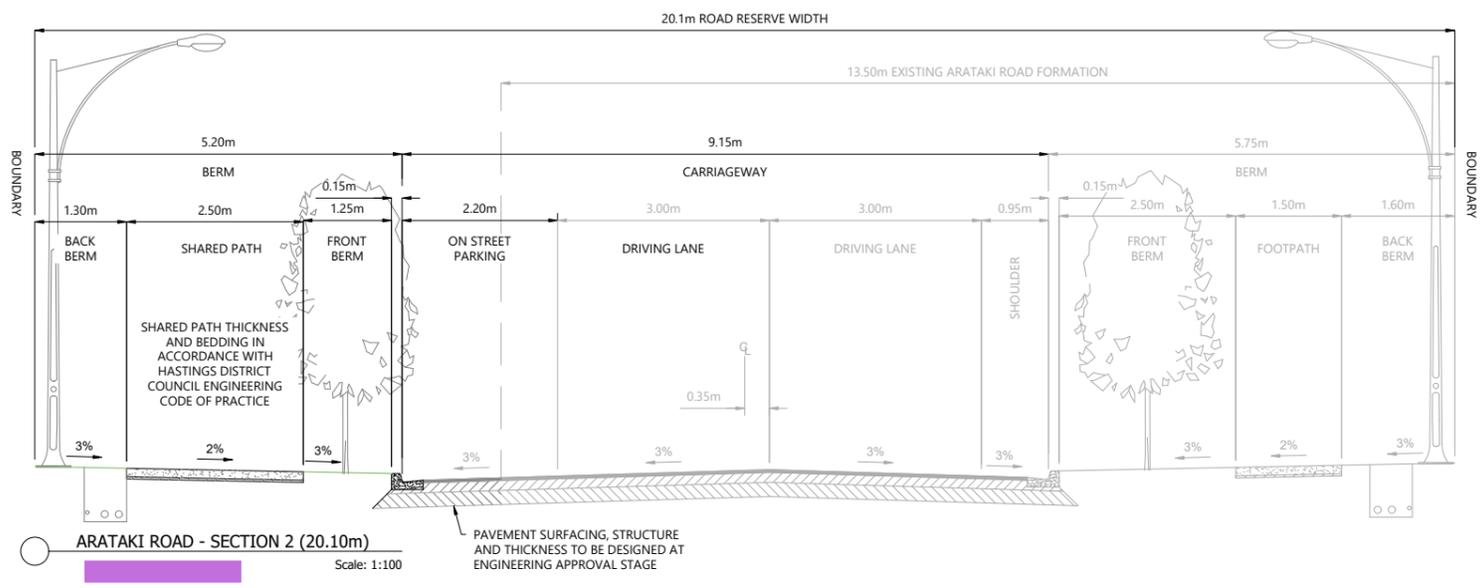
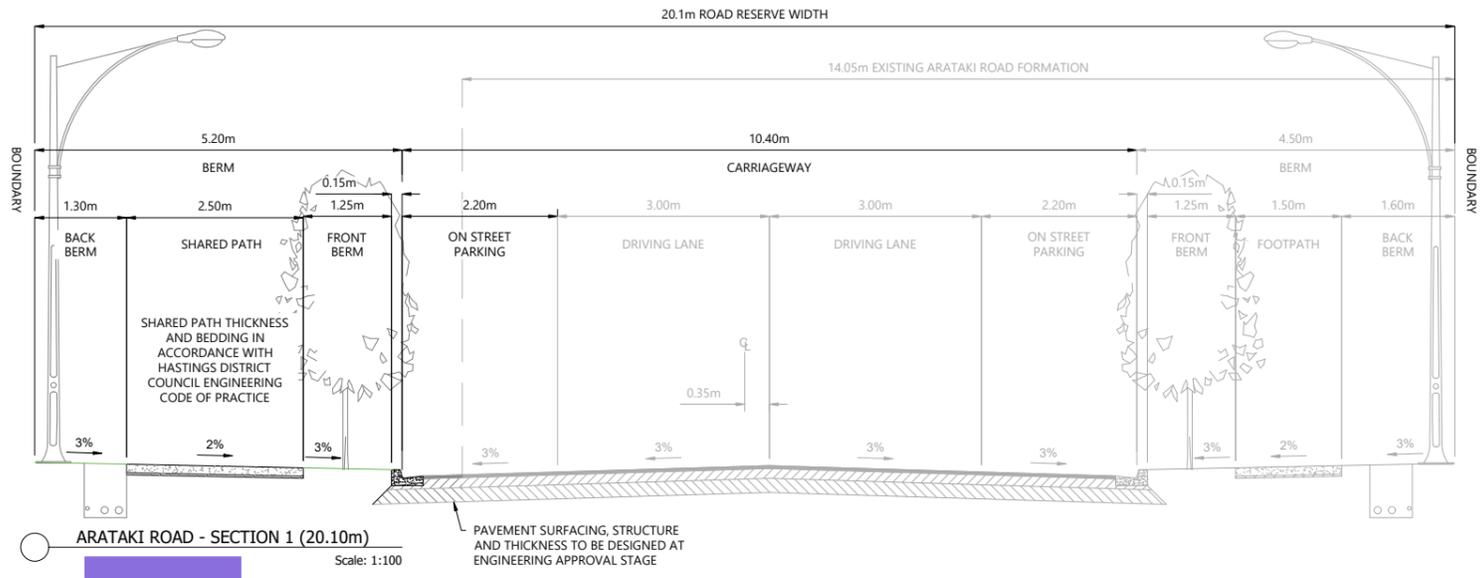


ARATAKI DEVELOPMENT - HAVELOCK NORTH
ROAD TYPOLOGY PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2200-RD	

Plot Date: 10:03:30 am, 26 June 2025, TIMOTHYB
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1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF



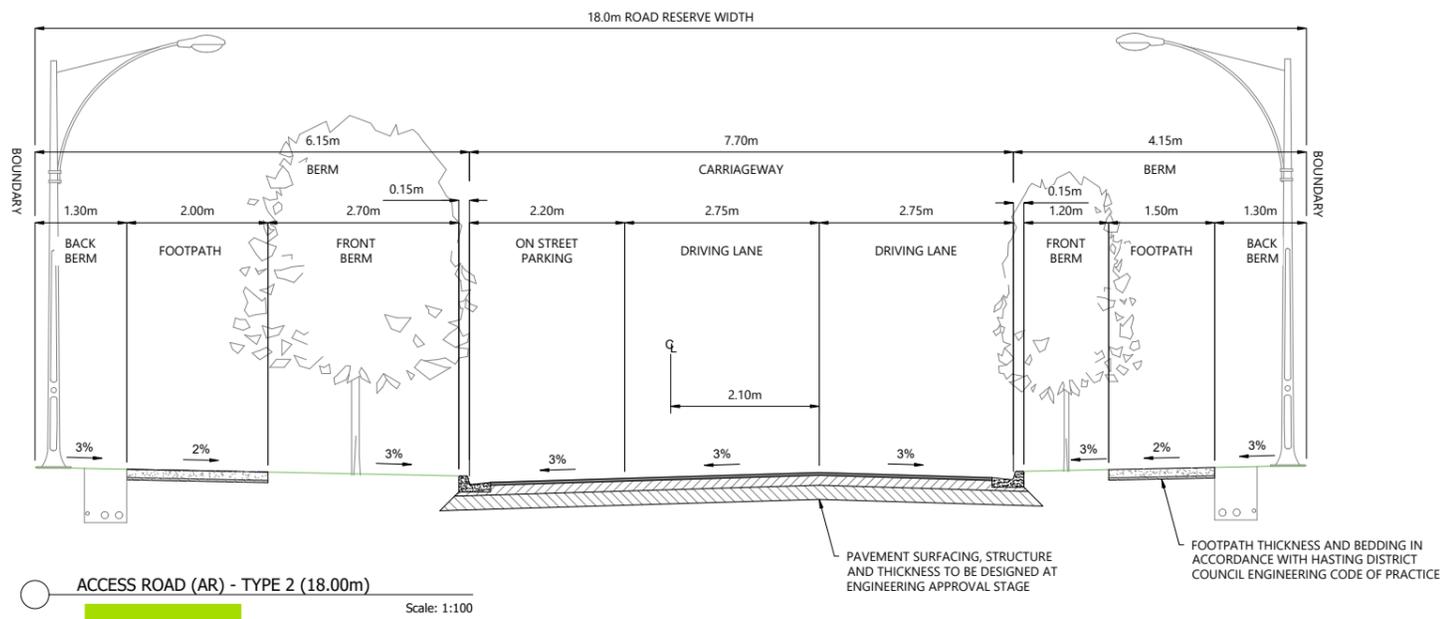
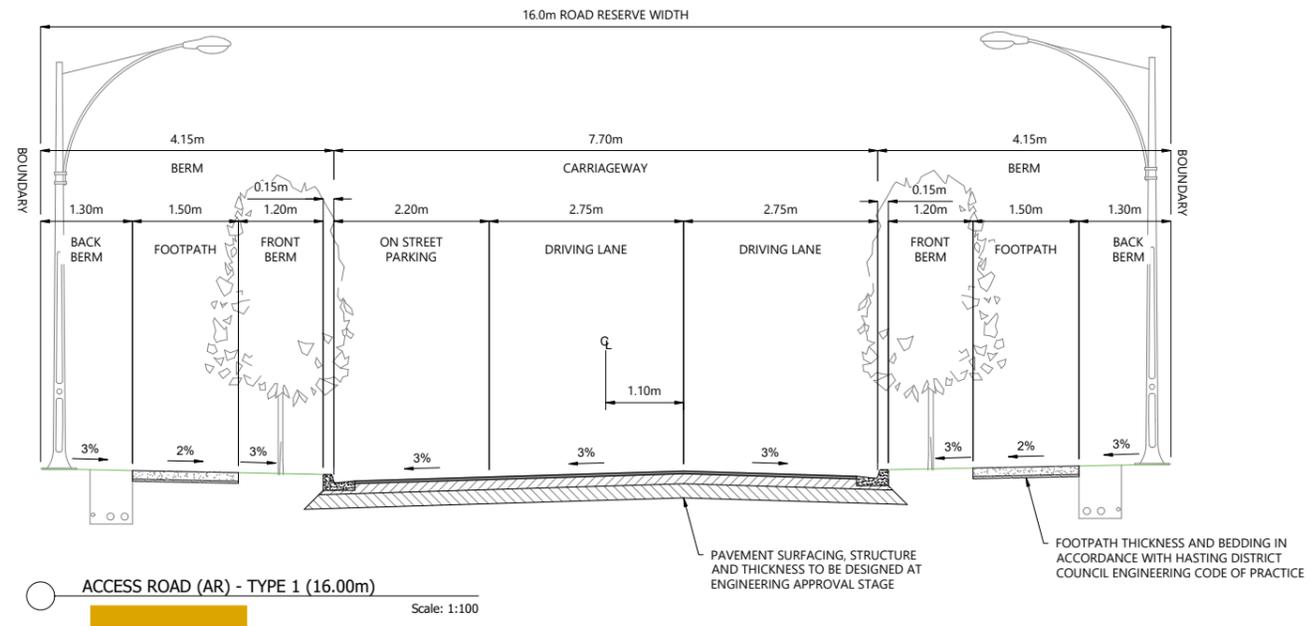
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ARATAKI DEVELOPMENT - HAVELOCK NORTH

TYPICAL CROSS SECTIONS ARATAKI ROAD

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:100 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2201-RD	



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF

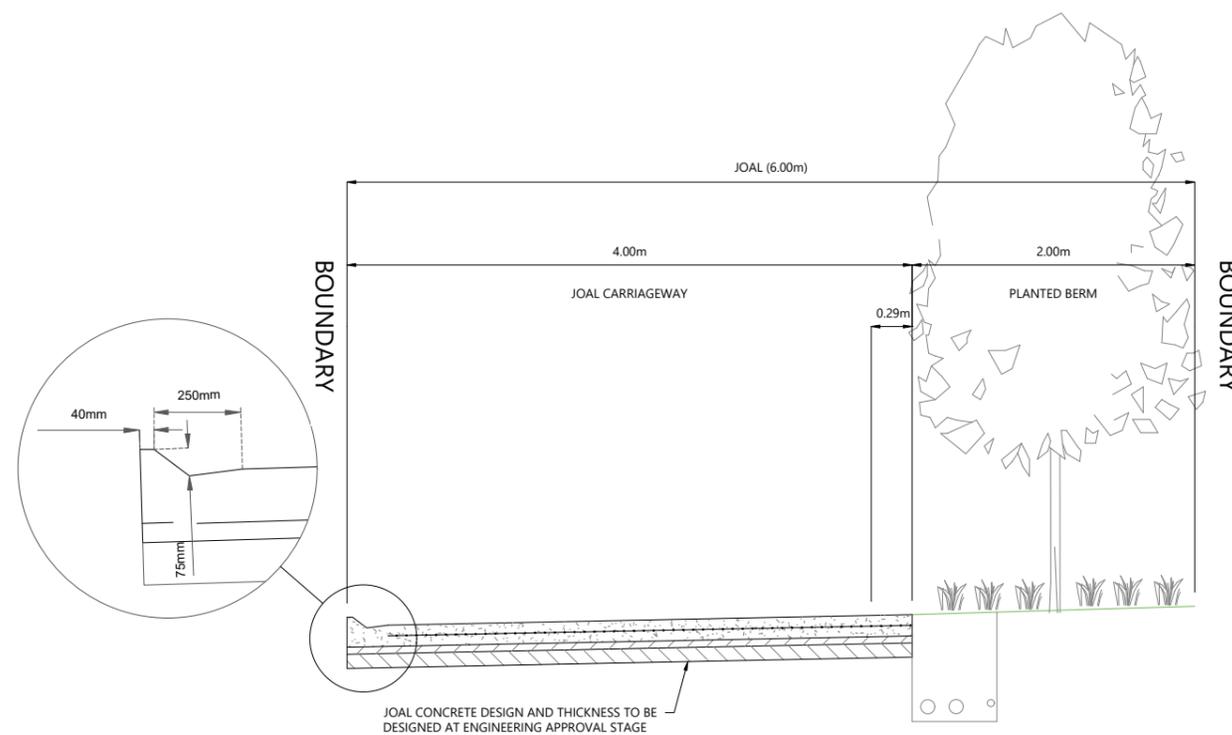
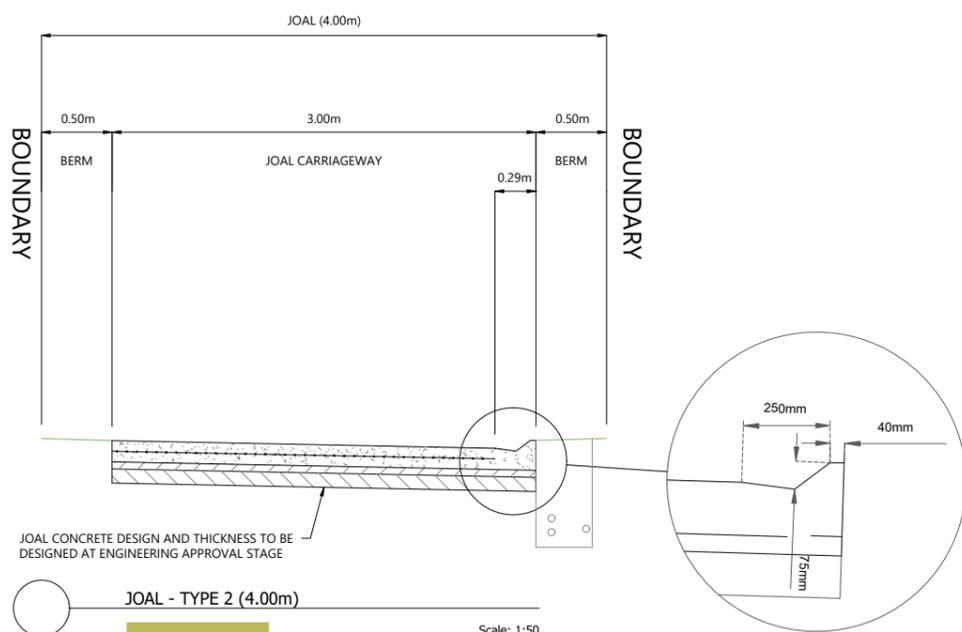
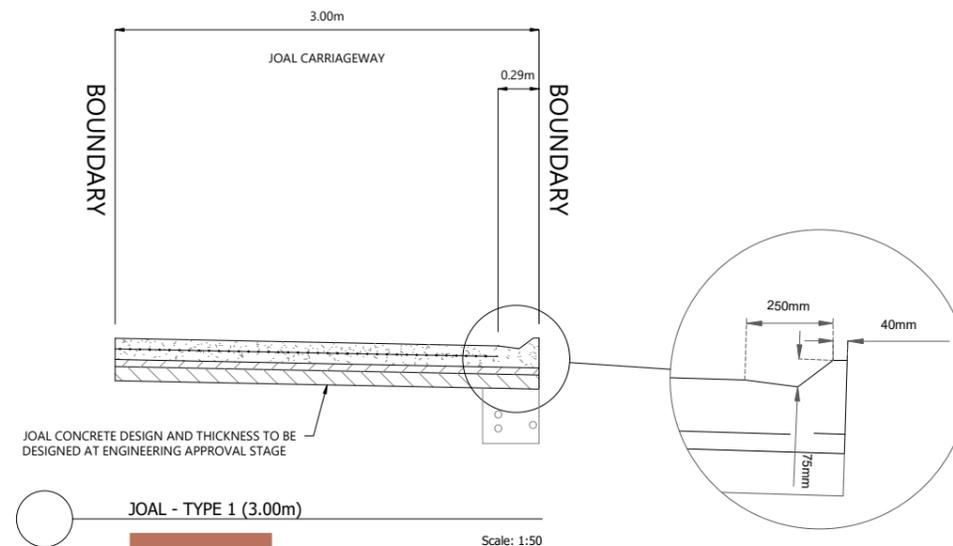
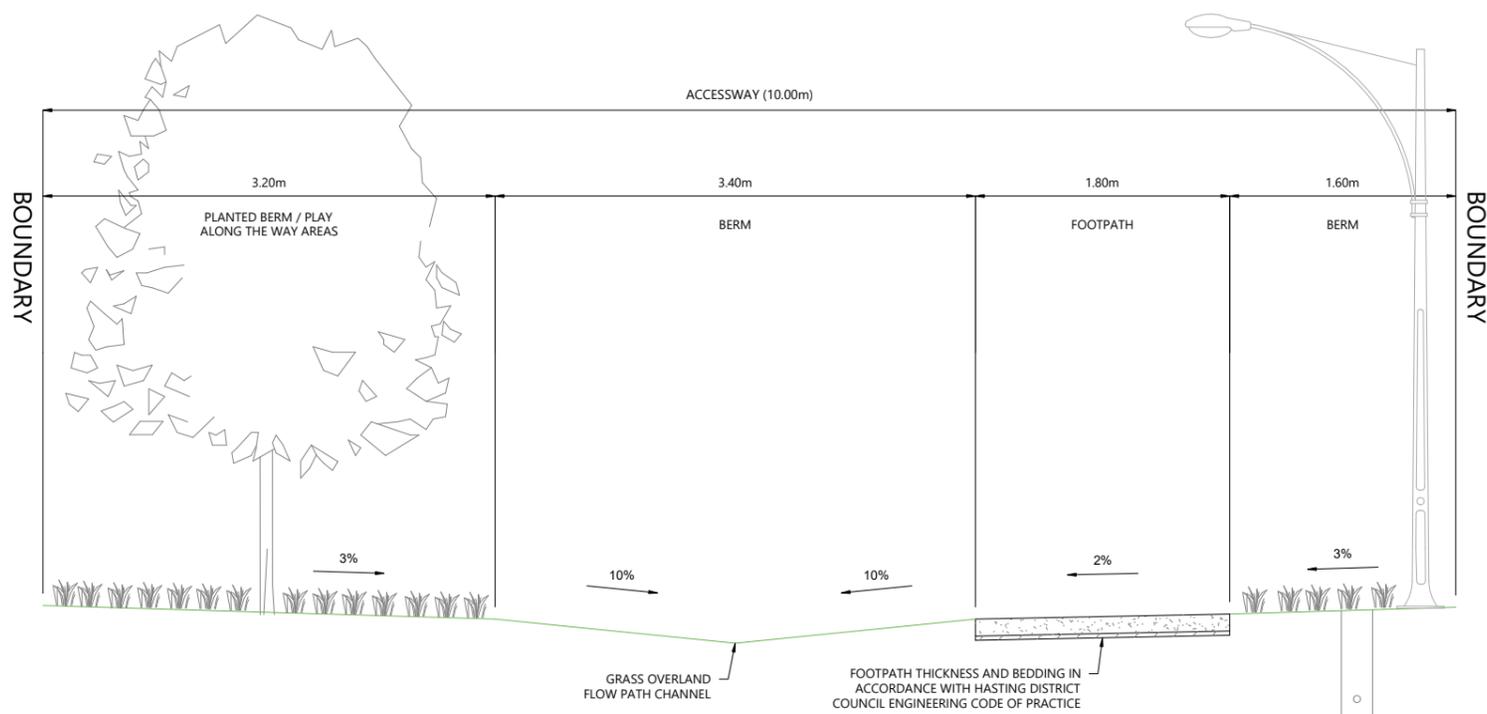


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ARATAKI DEVELOPMENT - HAVELOCK NORTH
TYPICAL CROSS SECTIONS
ACCESS ROAD TYPE 1 & TYPE 2

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:100 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2202-RD	



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF



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8 NUGENT ST, GRAFTON,
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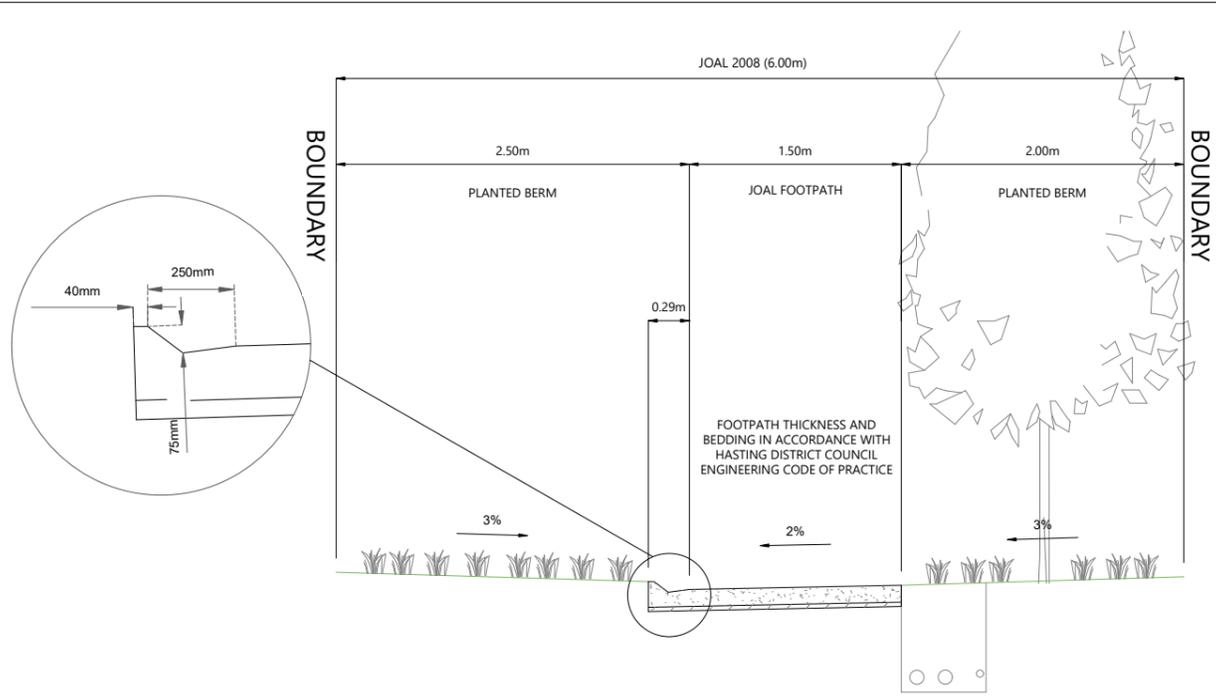
WOODS.CO.NZ



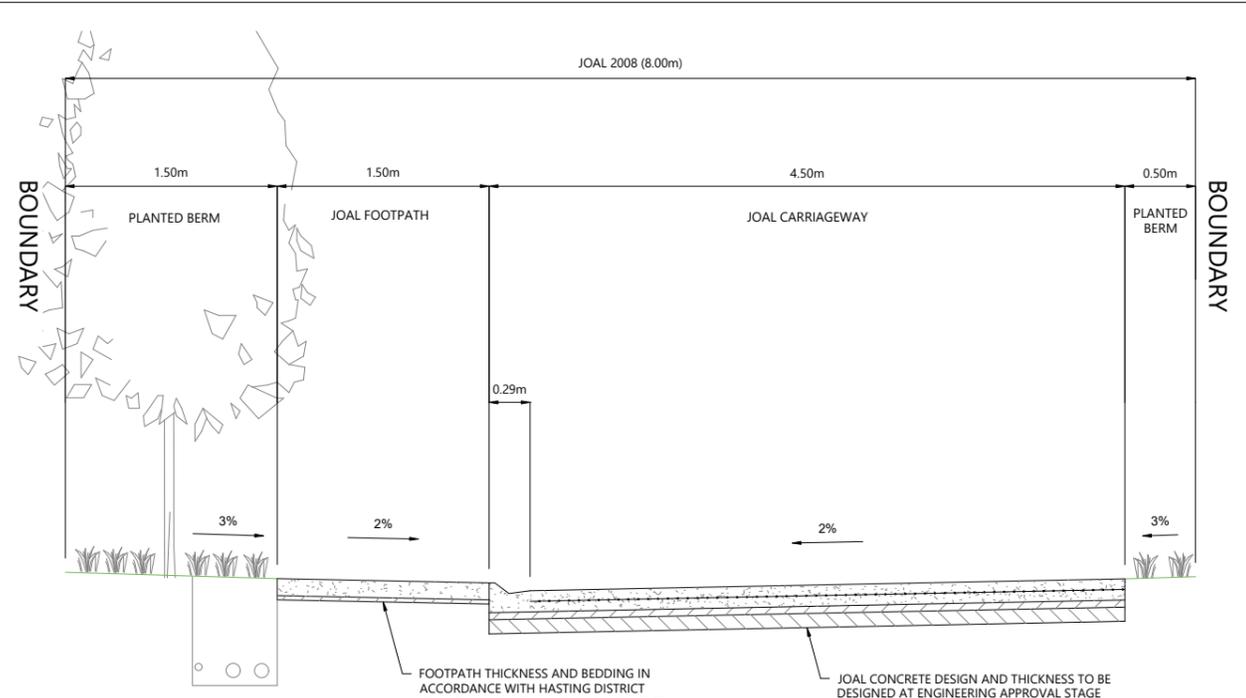
ARATAKI DEVELOPMENT - HAVELOCK NORTH

TYPICAL CROSS SECTIONS ACCESSWAY, JOAL TYPE 2 & TYPE 3

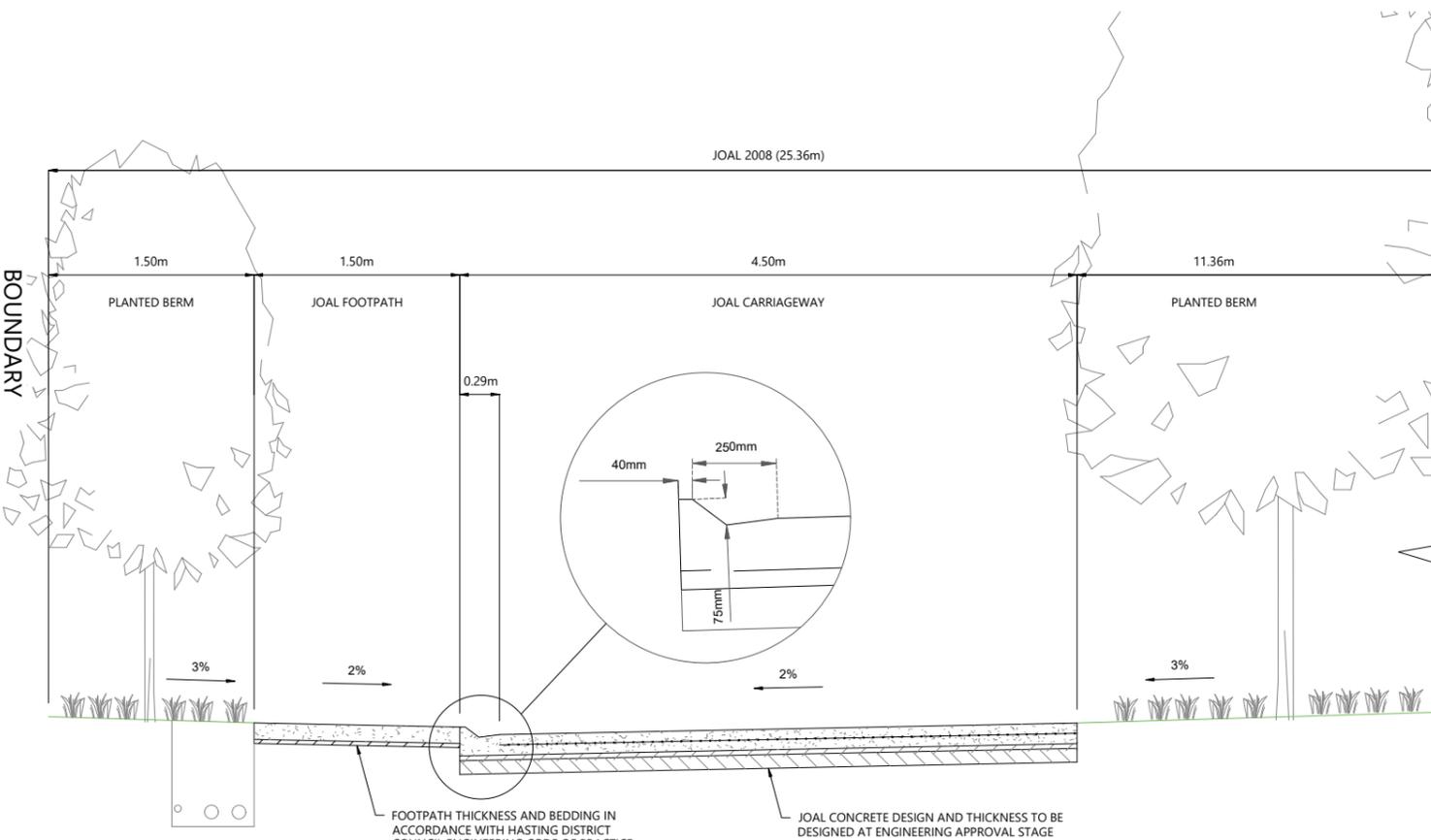
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SCALE	1:50 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2203-RD	



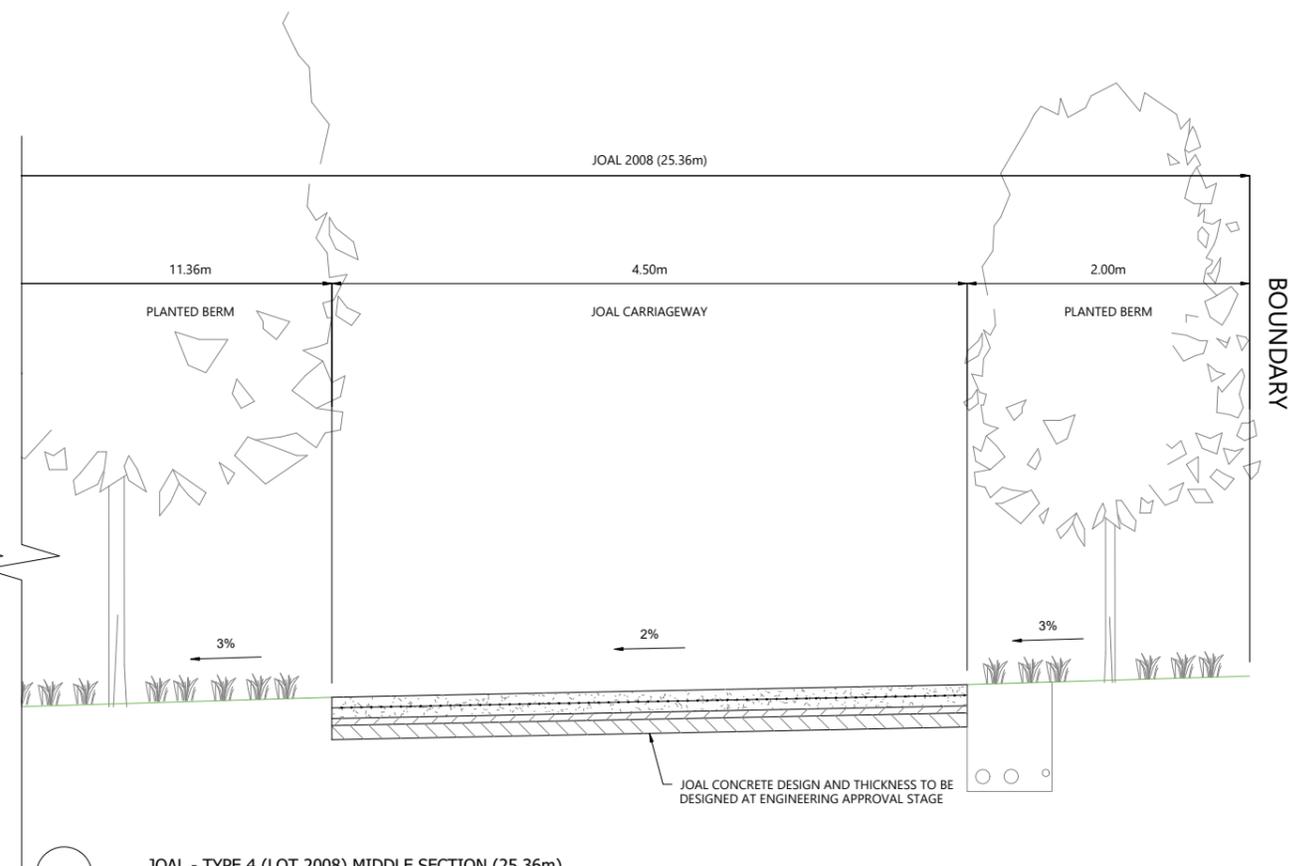
JOAL - TYPE 4 (LOT 2008) WESTERN SECTION (6.00m)
Scale: 1:50



JOAL - TYPE 4 (LOT 2008) EASTERN SECTION (8.00m)
Scale: 1:50



JOAL - TYPE 4 (LOT 2008) MIDDLE SECTION (25.36m)
Scale: 1:50



JOAL - TYPE 4 (LOT 2008) MIDDLE SECTION (25.36m)
Scale: 1:50



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF

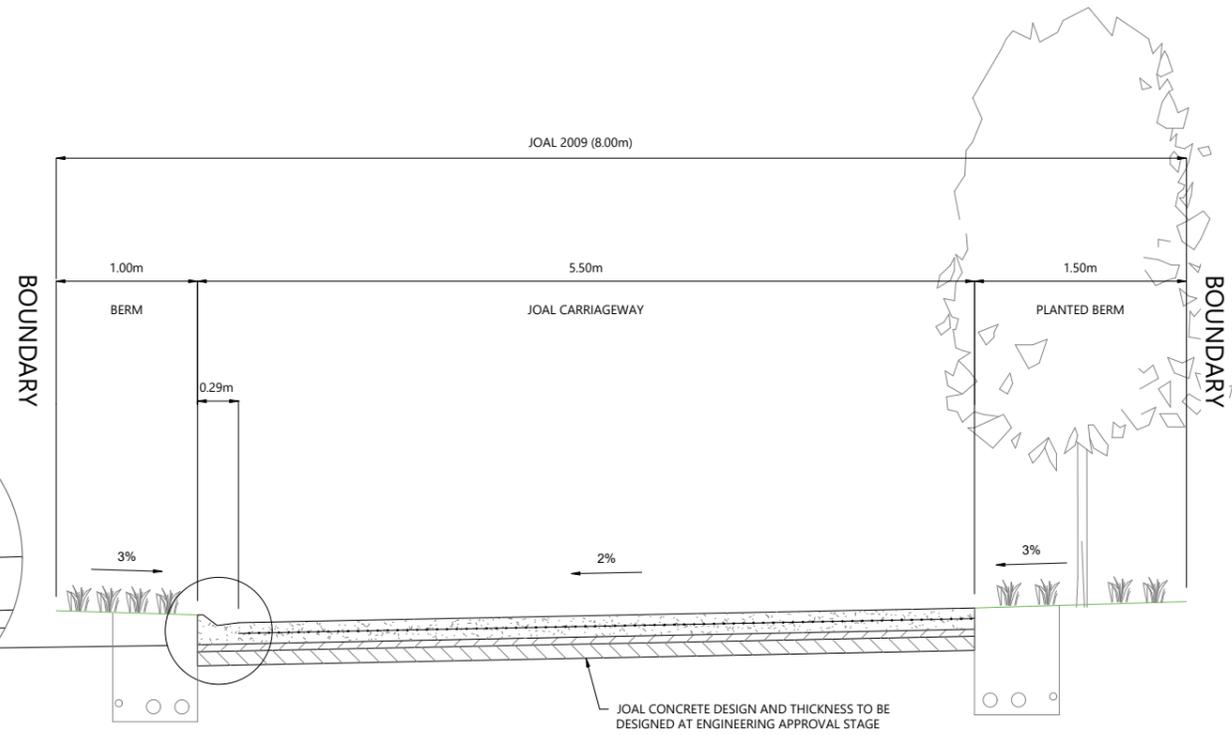


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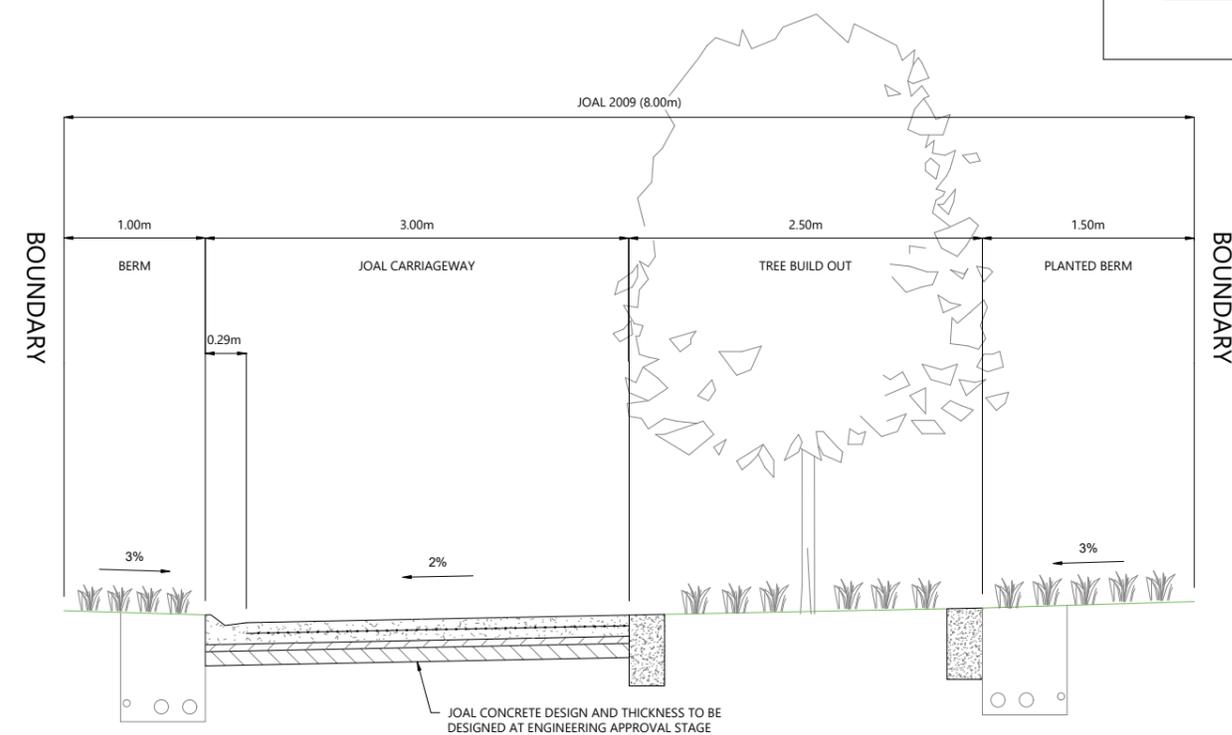


ARATAKI DEVELOPMENT - HAVELOCK NORTH
TYPICAL CROSS SECTIONS
JOAL TYPE 4

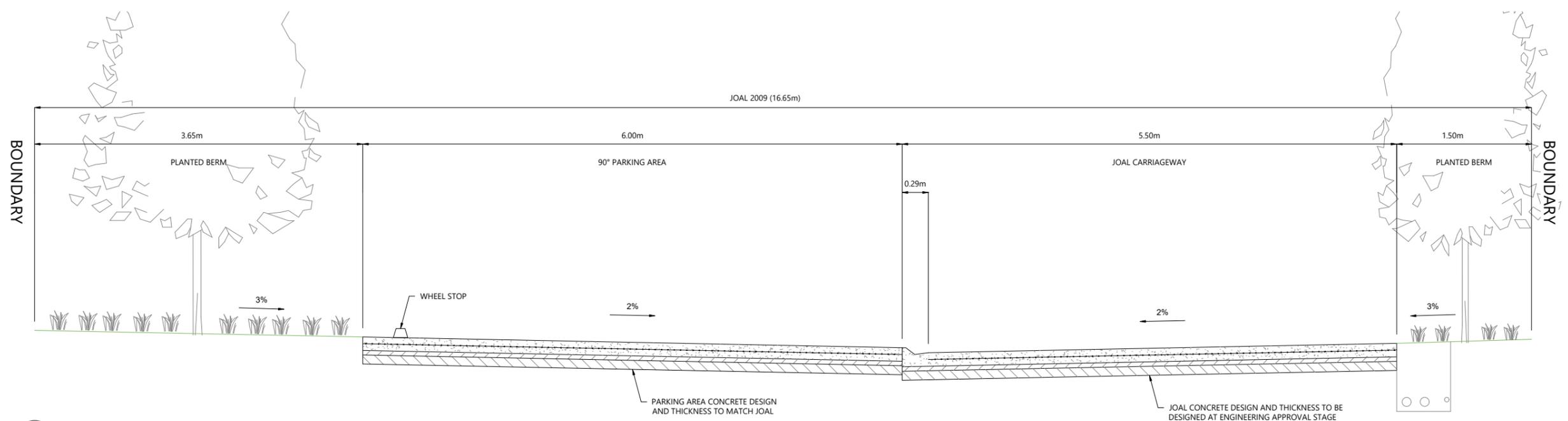
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:50 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2204-RD	



JOAL - TYPE 5 (LOT 2009)
Scale: 1:50



JOAL - TYPE 5 (LOT 2009) TREE BUILD OUT (8.00m)
Scale: 1:50



JOAL - TYPE 5 (LOT 2009) PARKING AREA (16.65m)
Scale: 1:50



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF

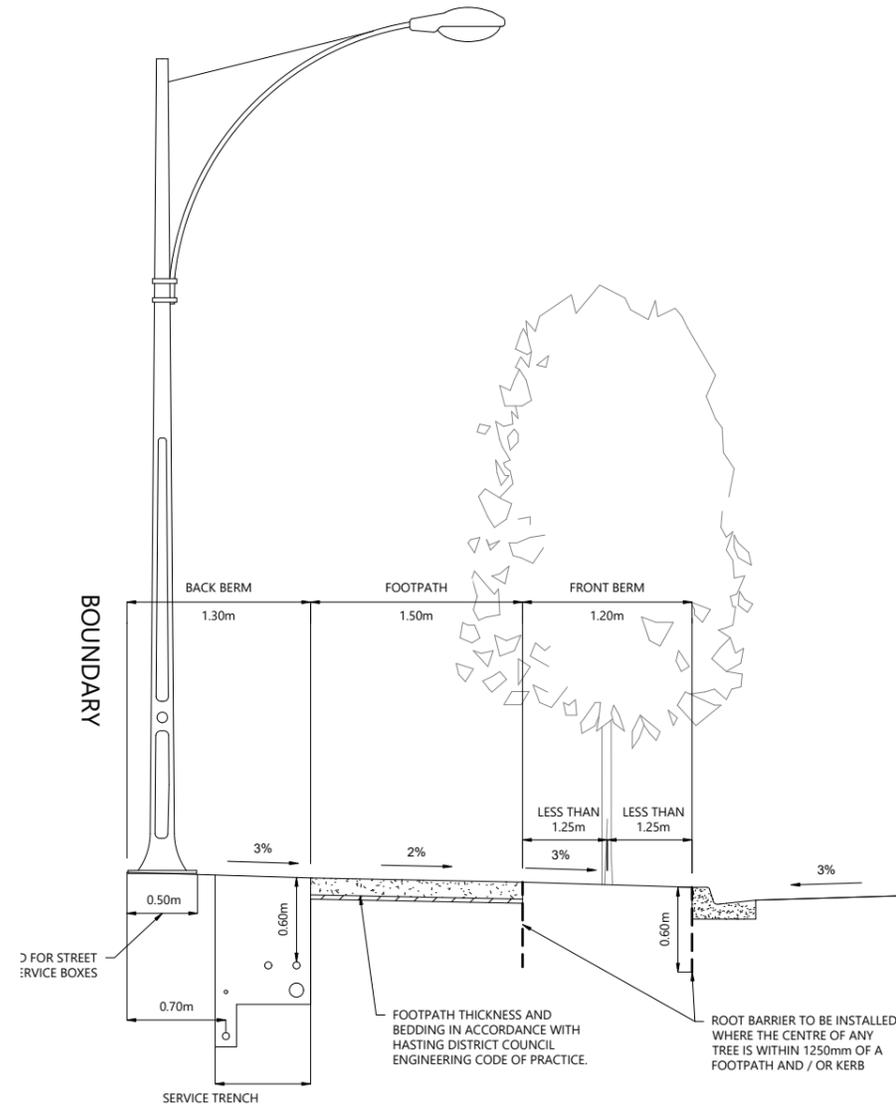


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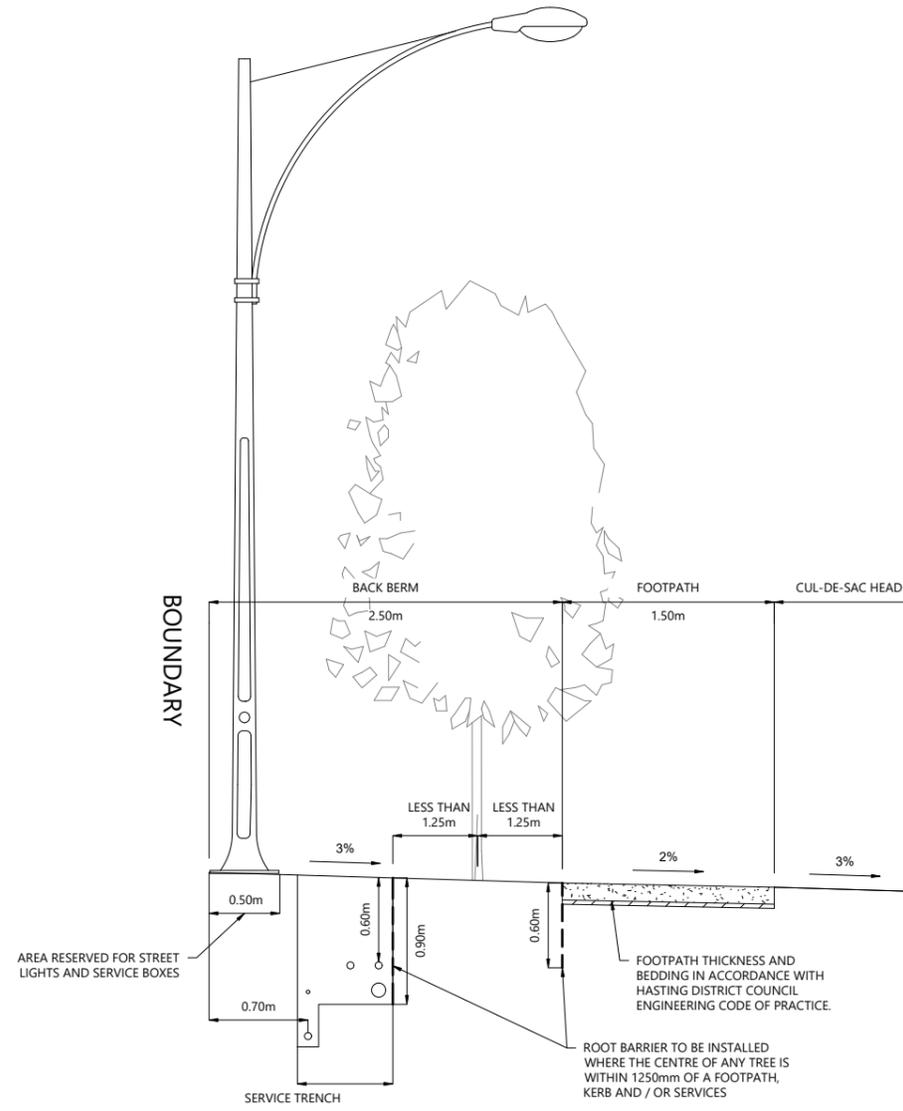


ARATAKI DEVELOPMENT - HAVELOCK NORTH
TYPICAL CROSS SECTIONS
JOAL TYPE 5

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:50 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2205-RD	



TYPICAL BERM ARRANGEMENT
Scale: 1:50



TYPICAL BERM ARRANGEMENT AT CUL-DE-SAC HEAD
Scale: 1:50



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
TYPICAL CROSS SECTIONS
TYPICAL BERM ARRANGEMENT

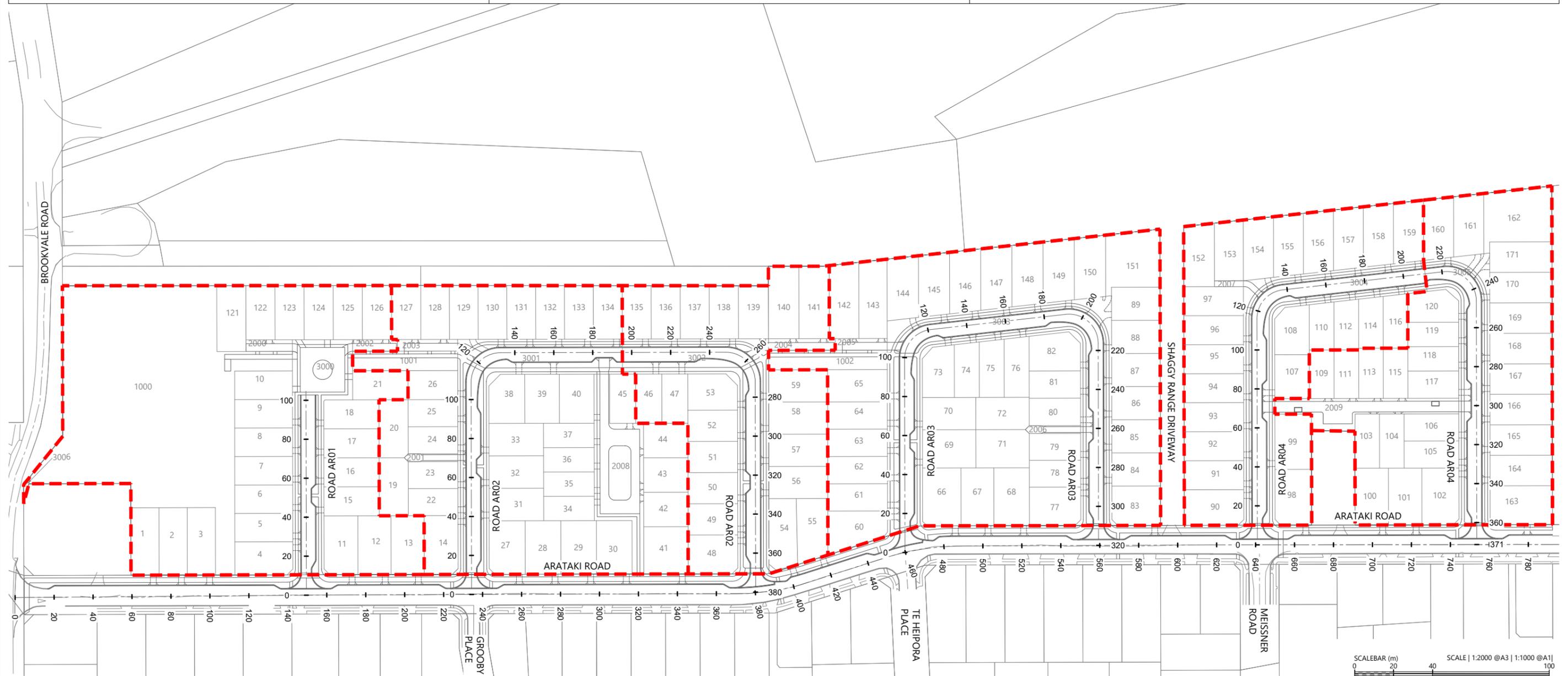
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:50 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2206-RD	

LEGEND

STAGE BOUNDARIES

PROPOSED BOUNDARIES

ROAD CENTRELINE



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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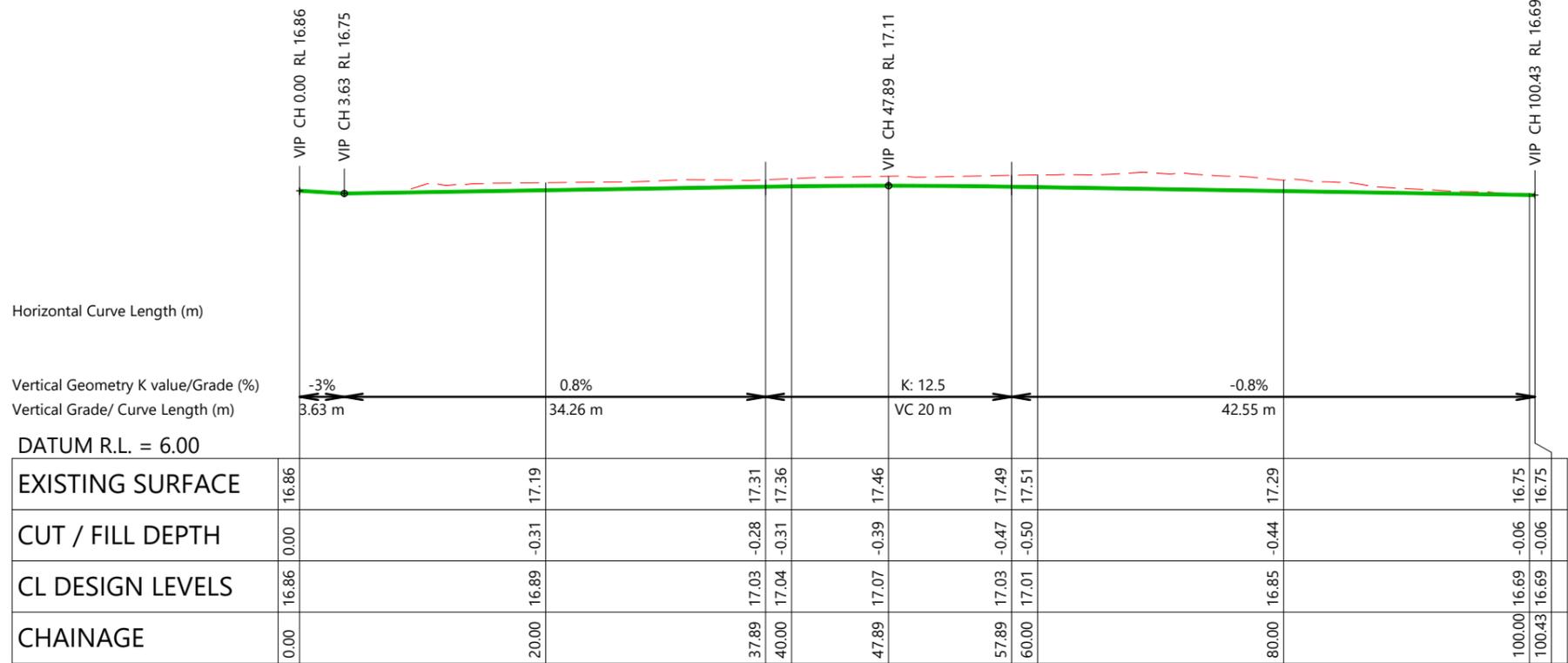


ARATAKI DEVELOPMENT - HAVELOCK NORTH

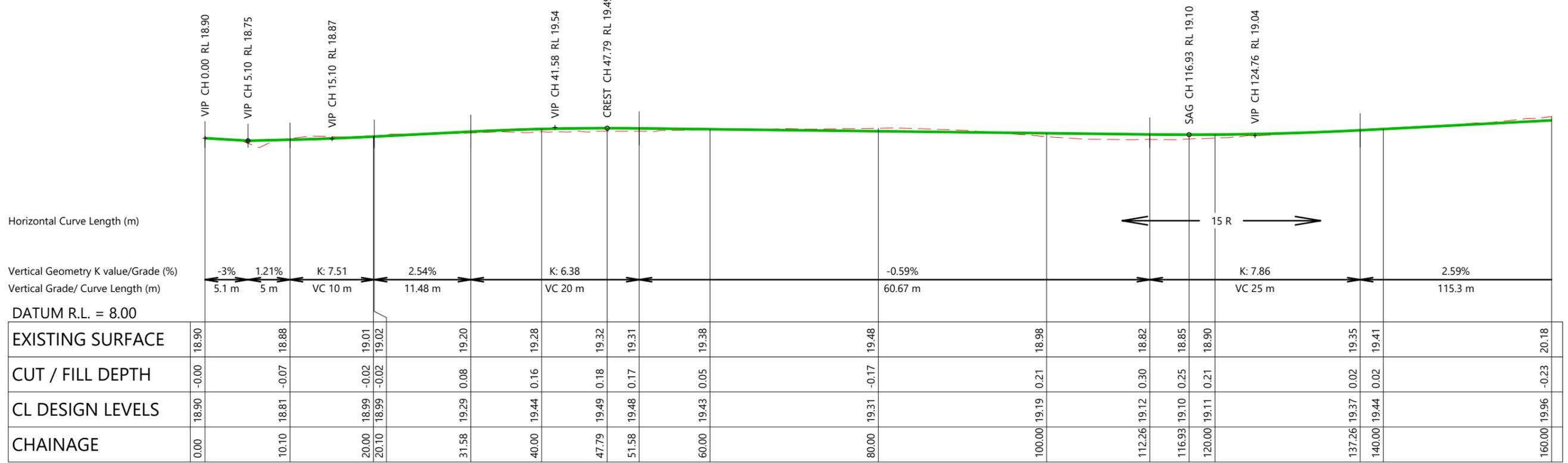
ROAD CENTRELINE PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2500-RD	



ROAD AR01 LONGITUDINAL SECTION
HORZ 1:500 VERT 1:250



ROAD AR02 LONGITUDINAL SECTION
HORZ 1:500 VERT 1:250

EXISTING SURFACE	16.86		17.19		17.31	17.36	17.46		17.49	17.51		17.29		16.75	16.75
CUT / FILL DEPTH	0.00		-0.31		-0.28	-0.31	-0.39		-0.47	-0.50		-0.44		-0.06	-0.06
CL DESIGN LEVELS	16.86		16.89		17.03	17.04	17.07		17.03	17.01		16.85		16.69	16.69
CHAINAGE	0.00		20.00		37.89	40.00	47.89		57.89	60.00		80.00		100.00	100.43

EXISTING SURFACE	18.90		18.88		19.01	19.02		19.20		19.28		19.32	19.31		19.38		19.48		18.98		18.82	18.85	18.90		19.35	19.41		20.18
CUT / FILL DEPTH	-0.00		-0.07		-0.02	-0.02		0.08		0.16		0.18	0.17		0.05		-0.17		0.21		0.30	0.25	0.21		0.02	0.02		-0.23
CL DESIGN LEVELS	18.90		18.81		18.99	18.99		19.29		19.44		19.49	19.48		19.43		19.31		19.19		19.12	19.10	19.11		19.37	19.44		19.96
CHAINAGE	0.00		10.10		20.00	20.10		31.58		40.00		47.79	51.58		60.00		80.00		100.00		112.26	116.93	120.00		137.26	140.00		160.00



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF

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ARATAKI DEVELOPMENT - HAVELOCK NORTH
ROAD LONGSECTIONS - SHEET 1

STATUS	ISSUED FOR CONSENT	REV
SCALE	AS SHOWN	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2501-RD	

Horizontal Curve Length (m)

Vertical Geometry K value/Grade (%)

Vertical Grade/ Curve Length (m)

DATUM R.L. = 10.00

EXISTING SURFACE	19.76	20.18	21.27	21.77	22.13	22.62	22.90	22.87	22.87	22.79	22.71	22.58
CUT / FILL DEPTH	-0.06	-0.23	-0.80	-0.78	-0.62	-0.60	-0.55	-0.36	-0.28	-0.13	0.07	0.26
CL DESIGN LEVELS	19.70	19.96	20.47	20.99	21.51	22.03	22.35	22.51	22.59	22.66	22.78	22.84
CHAINAGE	150.00	160.00	180.00	200.00	220.00	240.00	252.56	260.00	267.56	280.00	300.00	310.00

ROAD AR02 LONGITUDINAL SECTION
HORZ 1:500 VERT 1:250

Horizontal Curve Length (m)

Vertical Geometry K value/Grade (%)

Vertical Grade/ Curve Length (m)

DATUM R.L. = 12.00

EXISTING SURFACE	22.71	22.50	22.42	22.38	22.18	22.15	22.03	22.03	22.35	21.97	21.97
CUT / FILL DEPTH	0.07	0.38	0.47	0.52	0.49	0.47	0.11	0.09	-0.41	-0.01	-0.00
CL DESIGN LEVELS	22.78	22.88	22.90	22.90	22.67	22.62	22.13	22.12	21.94	21.96	21.97
CHAINAGE	300.00	316.95	320.00	321.47	340.00	341.95	360.00	360.46	370.46	380.00	380.37

ROAD AR02 LONGITUDINAL SECTION
HORZ 1:500 VERT 1:250



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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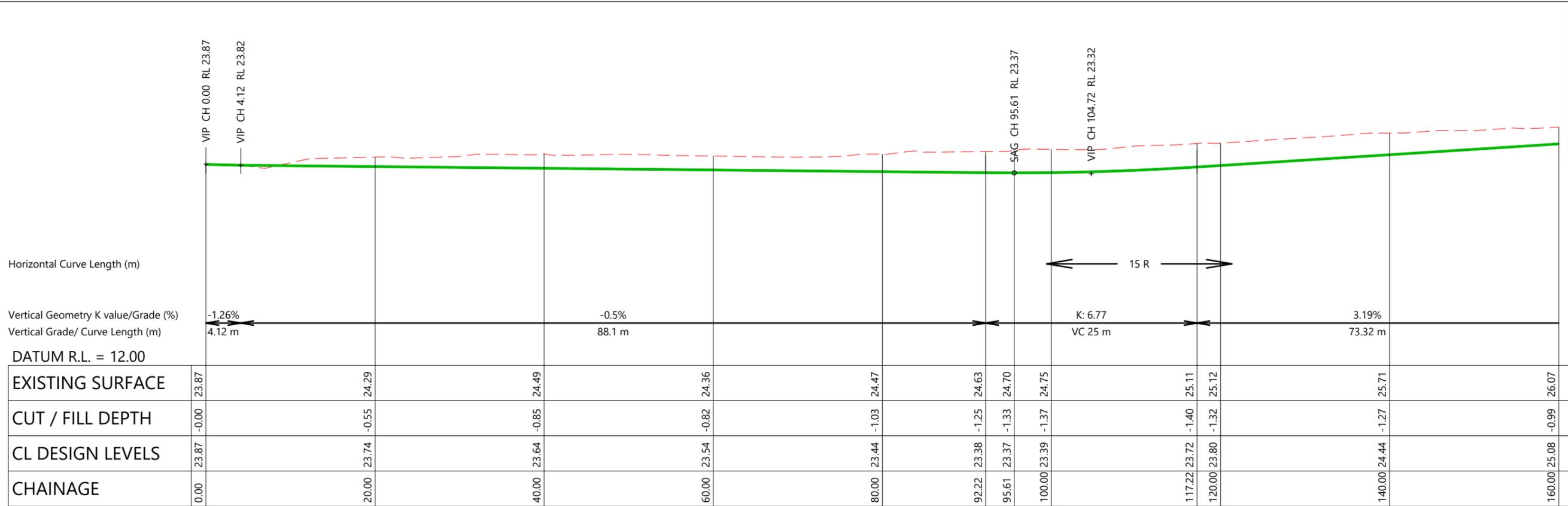
WOODS.CO.NZ



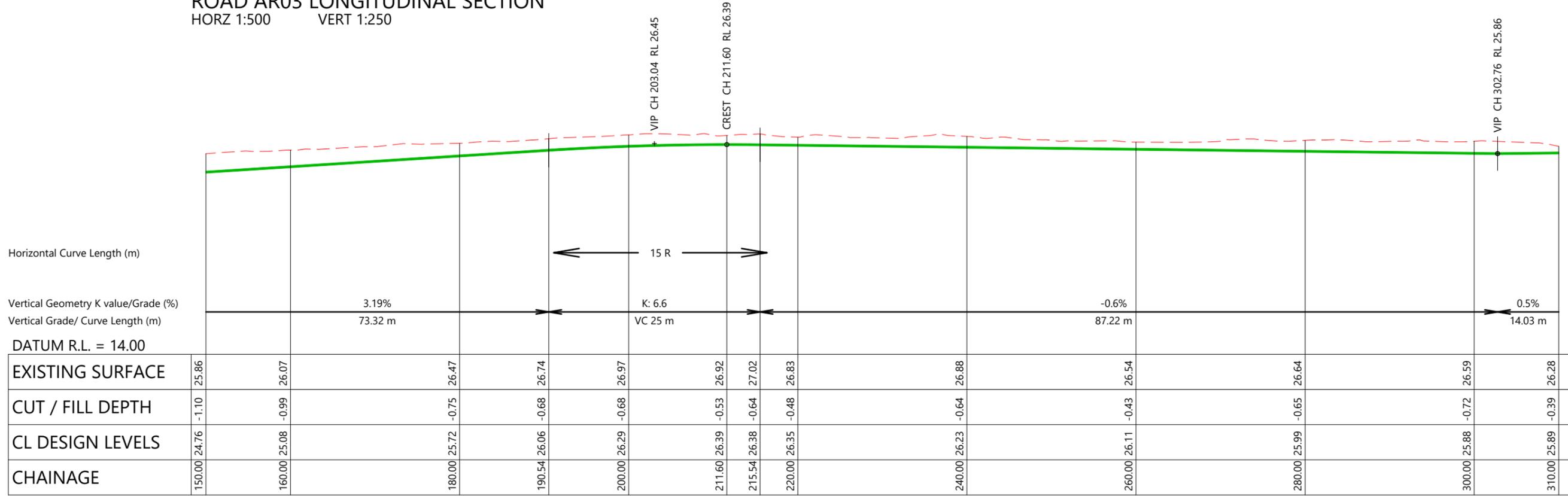
ARATAKI DEVELOPMENT - HAVELOCK NORTH

ROAD LONGSECTIONS - SHEET 2

STATUS	ISSUED FOR CONSENT	REV
SCALE	AS SHOWN	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2502-RD	



ROAD AR03 LONGITUDINAL SECTION
 HORZ 1:500 VERT 1:250



ROAD AR03 LONGITUDINAL SECTION
 HORZ 1:500 VERT 1:250



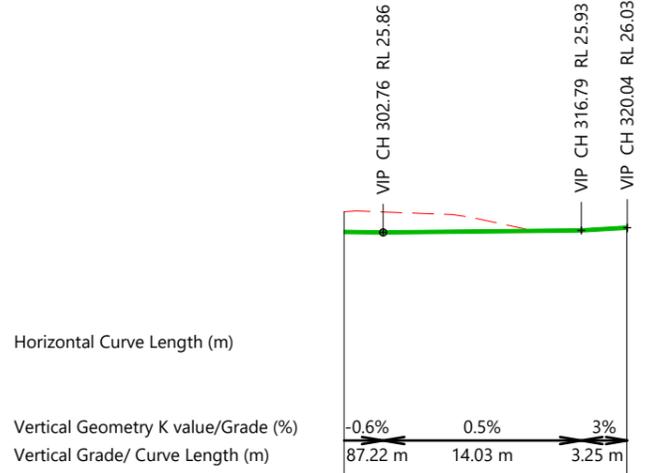
REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF

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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 ROAD LONGSECTIONS - SHEET 3

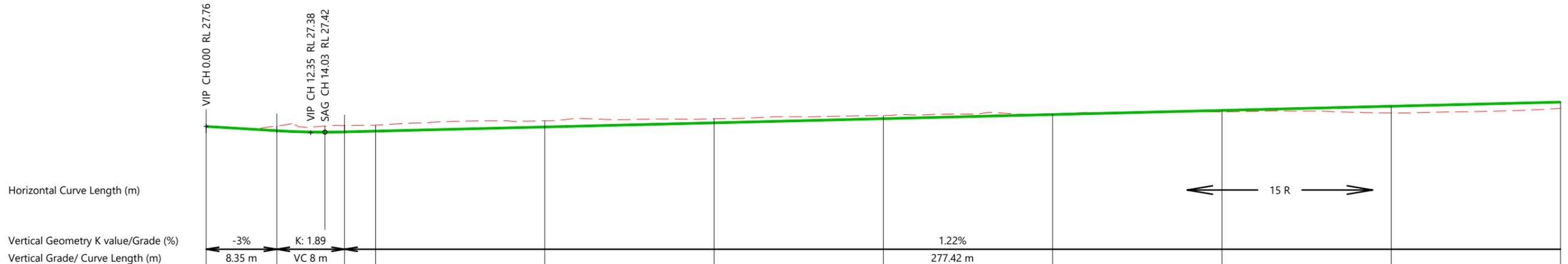
STATUS	ISSUED FOR CONSENT	REV
SCALE	AS SHOWN	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2503-RD	



DATUM R.L. = 16.00

EXISTING SURFACE	26.59	26.03	26.03
CUT / FILL DEPTH	-0.72	-0.00	-0.00
CL DESIGN LEVELS	25.88	26.03	26.03
CHAINAGE	300.00	320.00	320.04

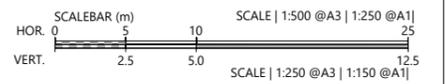
ROAD AR03 LONGITUDINAL SECTION
HORZ 1:500 VERT 1:250



DATUM R.L. = 18.00

EXISTING SURFACE	27.76	27.78	27.78	27.81	27.83	28.09	28.21	28.40	28.49	28.61	28.55	28.83
CUT / FILL DEPTH	0.00	-0.28	-0.36	-0.38	-0.35	-0.36	-0.24	-0.19	-0.03	0.09	0.40	0.37
CL DESIGN LEVELS	27.76	27.50	27.42	27.43	27.48	27.72	27.97	28.21	28.46	28.70	28.95	29.19
CHAINAGE	0.00	8.35	14.03	16.35	20.00	40.00	60.00	80.00	100.00	120.00	140.00	160.00

ROAD AR04 LONGITUDINAL SECTION
HORZ 1:500 VERT 1:250



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF

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ARATAKI DEVELOPMENT - HAVELOCK NORTH
ROAD LONGSECTIONS - SHEET 4

STATUS	ISSUED FOR CONSENT	REV
SCALE	AS SHOWN	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2504-RD	

Horizontal Curve Length (m)

Vertical Geometry K value/Grade (%)

Vertical Grade/ Curve Length (m)

DATUM R.L. = 18.00

EXISTING SURFACE	28.63	28.83	29.25	30.31	30.59	31.19	31.07	30.79	30.56	30.58	30.60	30.57
CUT / FILL DEPTH	0.44	0.37	0.19	-0.62	-0.66	-1.02	-0.65	-0.12	0.27	0.31	0.30	0.30
CL DESIGN LEVELS	29.07	29.19	29.44	29.68	29.93	30.17	30.42	30.66	30.83	30.88	30.89	30.87
CHAINAGE	150.00	160.00	180.00	200.00	220.00	240.00	260.00	280.00	293.76	300.00	303.99	310.00

ROAD AR04 LONGITUDINAL SECTION
 HORZ 1:500 VERT 1:250

Horizontal Curve Length (m)

Vertical Geometry K value/Grade (%)

Vertical Grade/ Curve Length (m)

DATUM R.L. = 20.00

EXISTING SURFACE	30.58	30.60	30.47	30.25	30.27	30.28	30.18	30.16	29.96	29.93
CUT / FILL DEPTH	0.31	0.30	0.27	0.11	-0.13	-0.56	-0.57	-0.52	-0.27	0.02
CL DESIGN LEVELS	30.88	30.89	30.74	30.36	30.14	29.72	29.62	29.63	29.69	29.95
CHAINAGE	300.00	303.99	320.00	333.76	340.00	351.73	357.70	360.00	362.73	371.27

ROAD AR04 LONGITUDINAL SECTION
 HORZ 1:500 VERT 1:250



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	TB	APR 2025	DESIGNED	AB
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



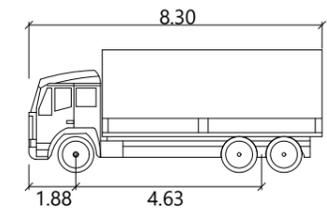
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ARATAKI DEVELOPMENT - HAVELOCK NORTH

ROAD LONGSECTIONS - SHEET 5

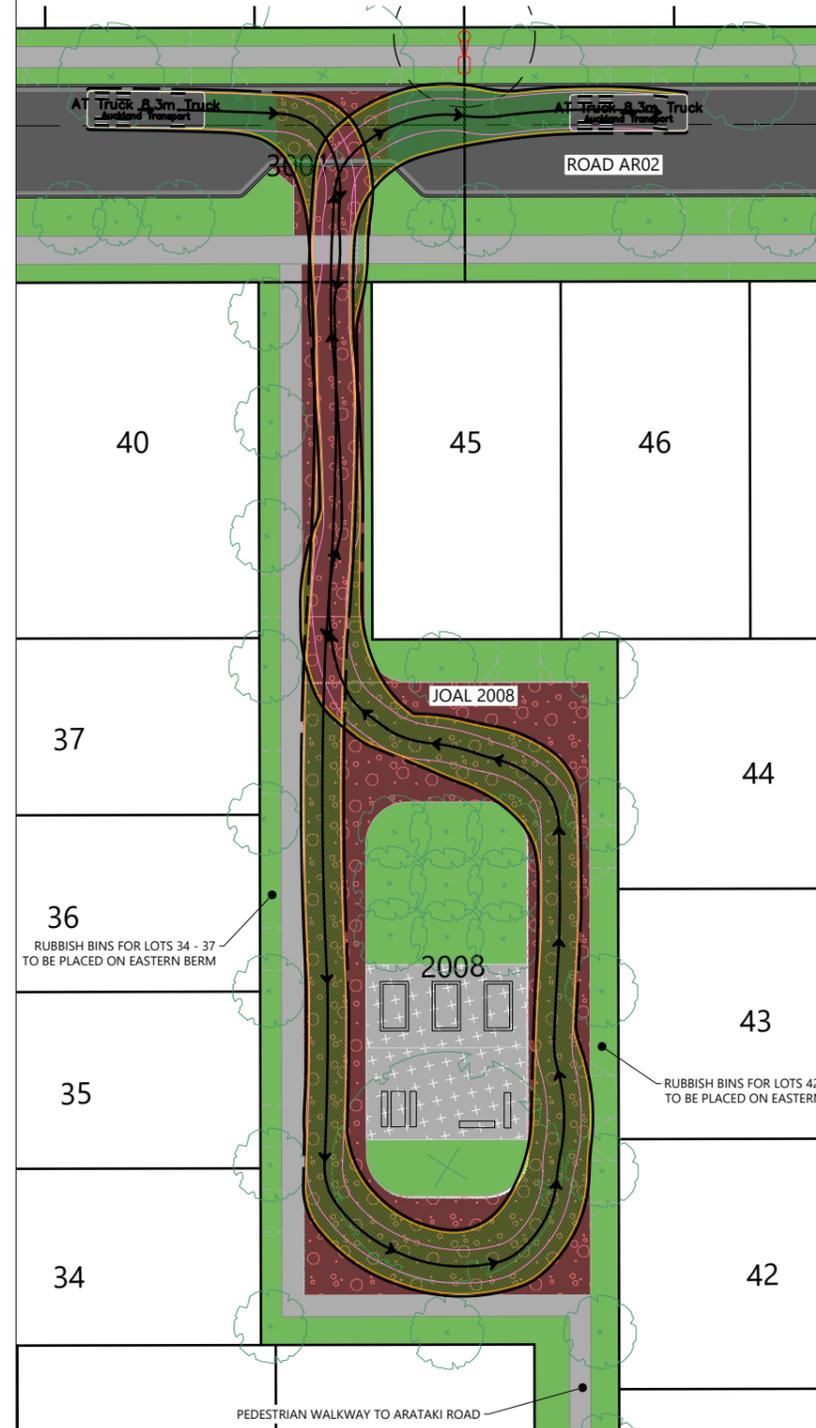
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SCALE	AS SHOWN	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2505-RD	



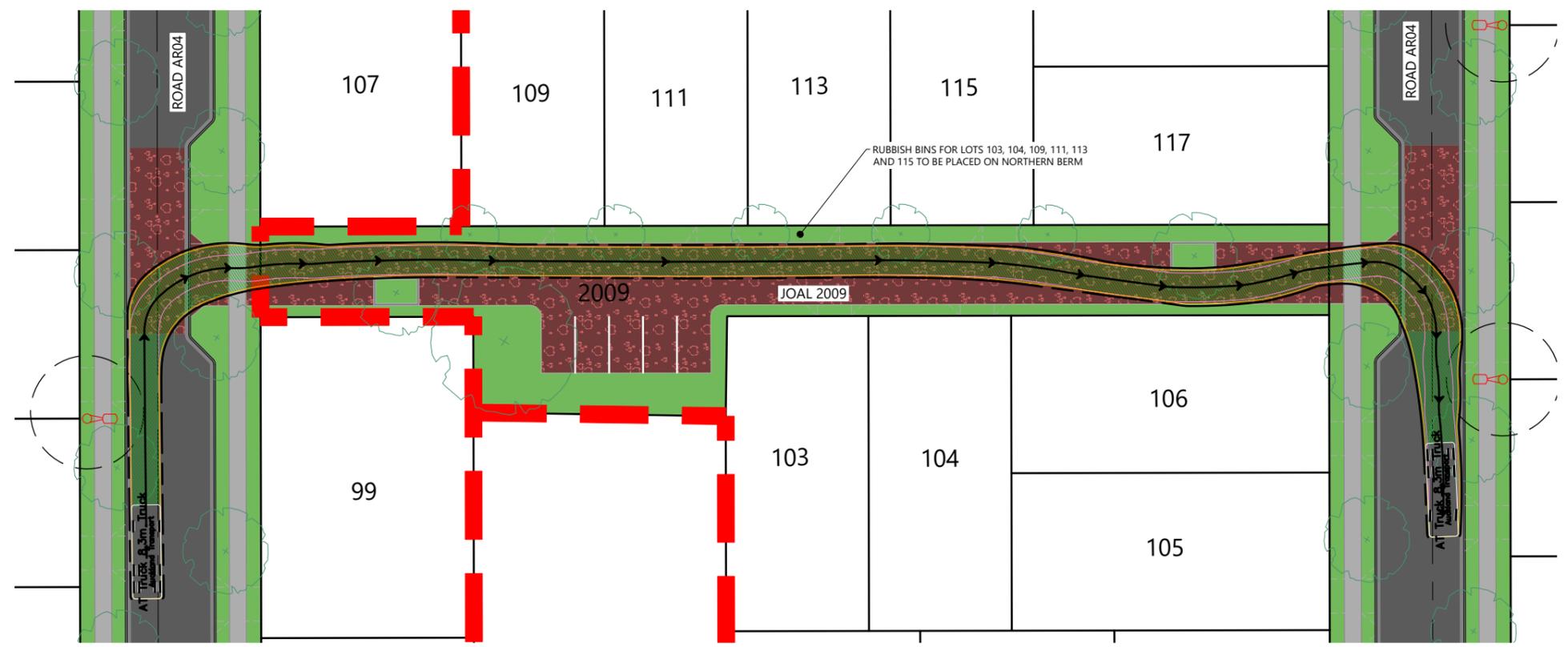
AT Truck 8.3m Truck
 meters
 Width : 2.55
 Track : 2.55
 Lock to Lock Time : 6.0
 Steering Angle : SA1

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH
- PROPOSED INFORMAL PATH
- PROPOSED SHARED PATH
- PROPOSED DECORATIVE CONCRETE
- EXISTING STREETLIGHT AND 5m SEPARATION
- RELOCATED STREETLIGHT AND 5m SEPARATION
- PROPOSED STREETLIGHT AND 5m SEPARATION
- PROPOSED TREE
- EXISTING TREES TO BE RETAINED



RUBBISH TRUCK TRACKING THROUGH JOAL 2008
 SCALE 1:250(A1) 1:500(A3)



RUBBISH TRUCK TRACKING THROUGH JOAL 2009
 SCALE 1:250(A1) 1:500(A3)



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 VEHICLE PATHS - RUBBISH TRUCKS THROUGH JOALS



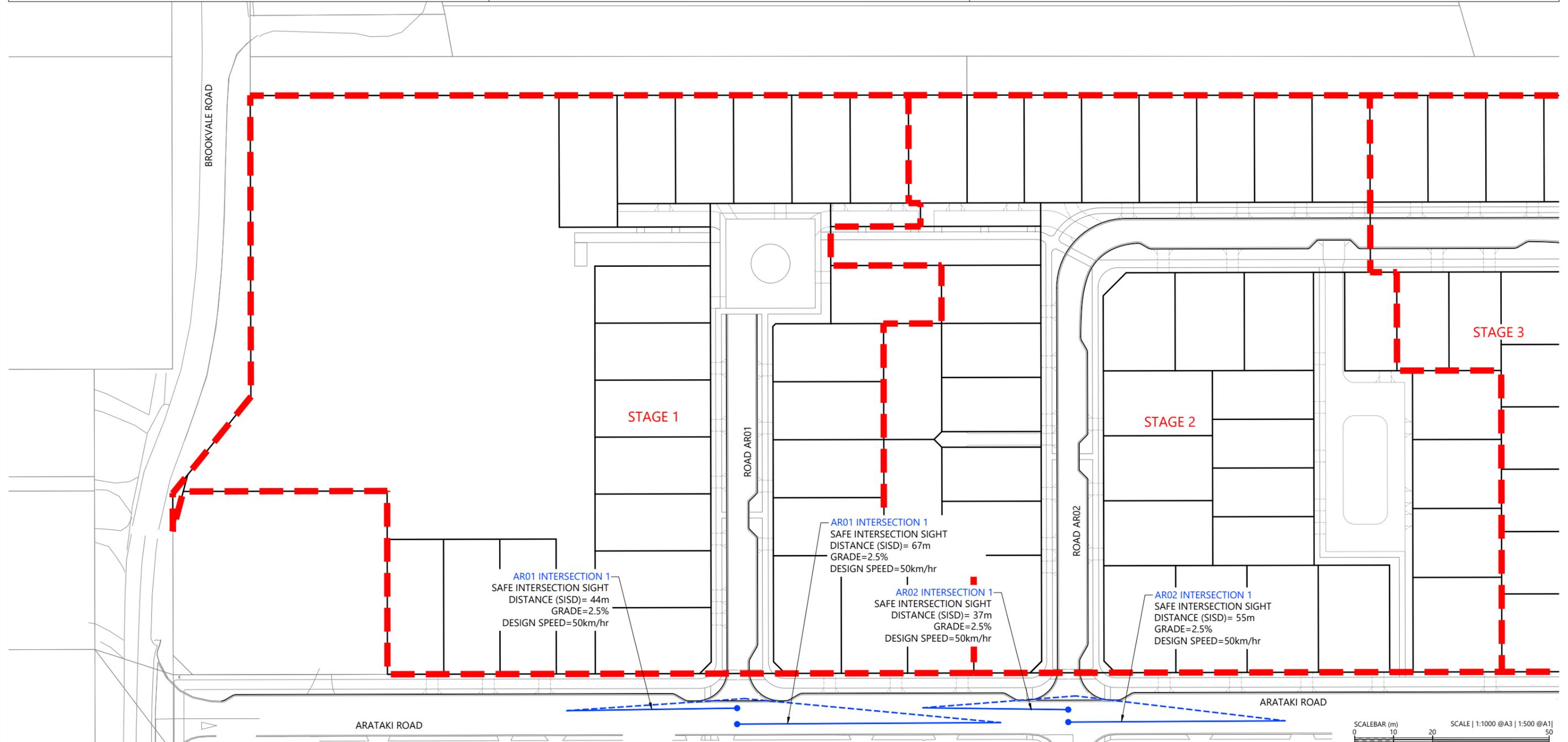
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:500 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2700-RD	

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH AUCKLAND TRANSPORT STANDARDS. ANY AMBIGUITY BETWEEN THESE DRAWINGS & THE STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
2. ALL KERB & CHANNEL / NIB TO BE SLIP-FORM, 25MPA FIBRE REINFORCED.
3. ALL CATCHPITS TO BE SEMI-RECESSED 800X500 WITH 1.2M LINTEL UNLESS SPECIFIED OTHERWISE.
4. FOOTPATHS TO BE CONSTRUCTED AS PER THE TYPICAL CROSS SECTIONS.
5. PRAM CROSSINGS TO BE CONSTRUCTED AS PER AUCKLAND TRANSPORT STANDARDS.
6. VEHICLE CROSSINGS SHOWN ON THIS PLAN ARE FOR PLANNING PURPOSES ONLY & WILL NOT BE CONSTRUCTED UNLESS OTHERWISE NOTED.
7. ALL LINE MARKING & ROAD SIGNAGE IS TO BE CONSTRUCTED AS PER NEW ZEALAND TRANSPORT AGENCY MANUAL OF SIGNS & MARKINGS.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF

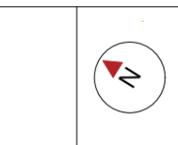
ARATAKI ROAD	ROAD AR01	ROAD AR02	ARATAKI ROAD
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
SAFE INTERSECTION SIGHT DISTANCE PLAN - SHEET 1



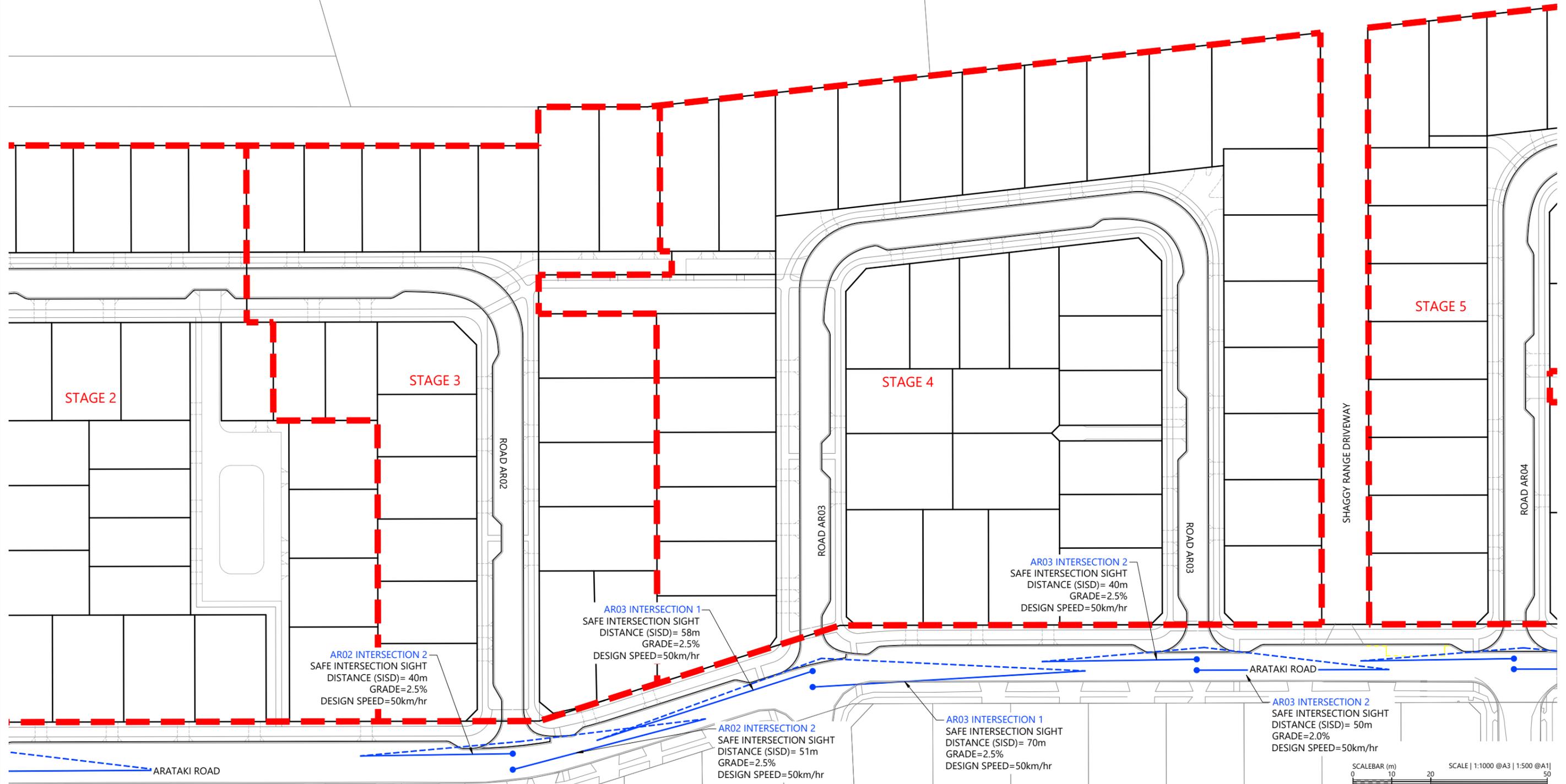
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2751-RD	

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH AUCKLAND TRANSPORT STANDARDS. ANY AMBIGUITY BETWEEN THESE DRAWINGS & THE STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
2. ALL KERB & CHANNEL / NIB TO BE SLIP-FORM, 25MPA FIBRE REINFORCED.
3. ALL CATCHPITS TO BE SEMI-RECESSED 800X500 WITH 1.2M LINTEL UNLESS SPECIFIED OTHERWISE.
4. FOOTPATHS TO BE CONSTRUCTED AS PER THE TYPICAL CROSS SECTIONS.
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7. ALL LINE MARKING & ROAD SIGNAGE IS TO BE CONSTRUCTED AS PER NEW ZEALAND TRANSPORT AGENCY MANUAL OF SIGNS & MARKINGS.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH

SAFE INTERSECTION SIGHT DISTANCE PLAN - SHEET 2



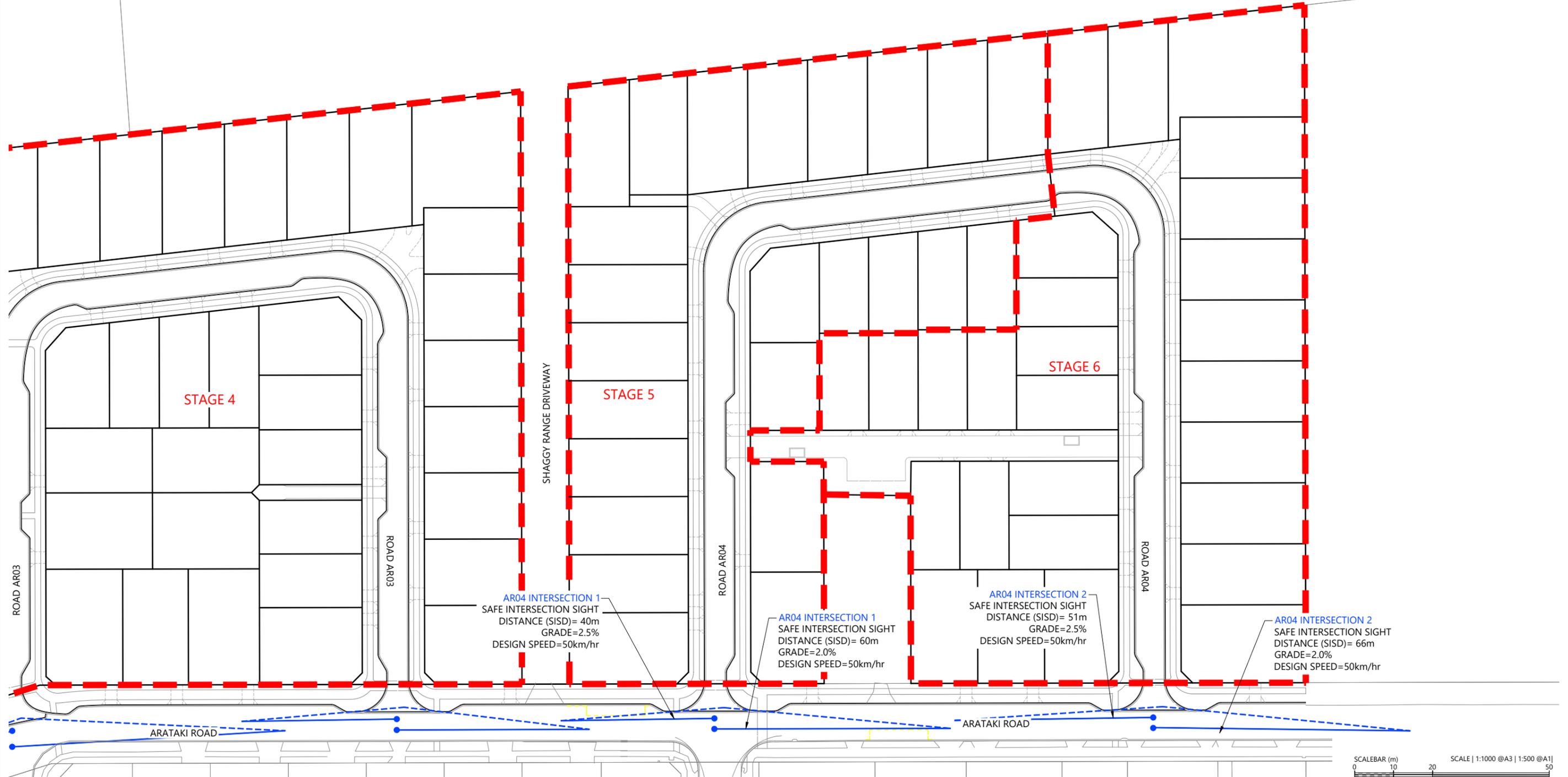
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SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2752-RD	

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH AUCKLAND TRANSPORT STANDARDS. ANY AMBIGUITY BETWEEN THESE DRAWINGS & THE STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
2. ALL KERB & CHANNEL / NIB TO BE SLIP-FORM, 25MPA FIBRE REINFORCED.
3. ALL CATCHPITS TO BE SEMI-RECESSED 800X500 WITH 1.2M LINTEL UNLESS SPECIFIED OTHERWISE.
4. FOOTPATHS TO BE CONSTRUCTED AS PER THE TYPICAL CROSS SECTIONS.
5. PRAM CROSSINGS TO BE CONSTRUCTED AS PER AUCKLAND TRANSPORT STANDARDS.
6. VEHICLE CROSSINGS SHOWN ON THIS PLAN ARE FOR PLANNING PURPOSES ONLY & WILL NOT BE CONSTRUCTED UNLESS OTHERWISE NOTED.
7. ALL LINE MARKING & ROAD SIGNAGE IS TO BE CONSTRUCTED AS PER NEW ZEALAND TRANSPORT AGENCY MANUAL OF SIGNS & MARKINGS.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH

SAFE INTERSECTION SIGHT DISTANCE PLAN - SHEET 3



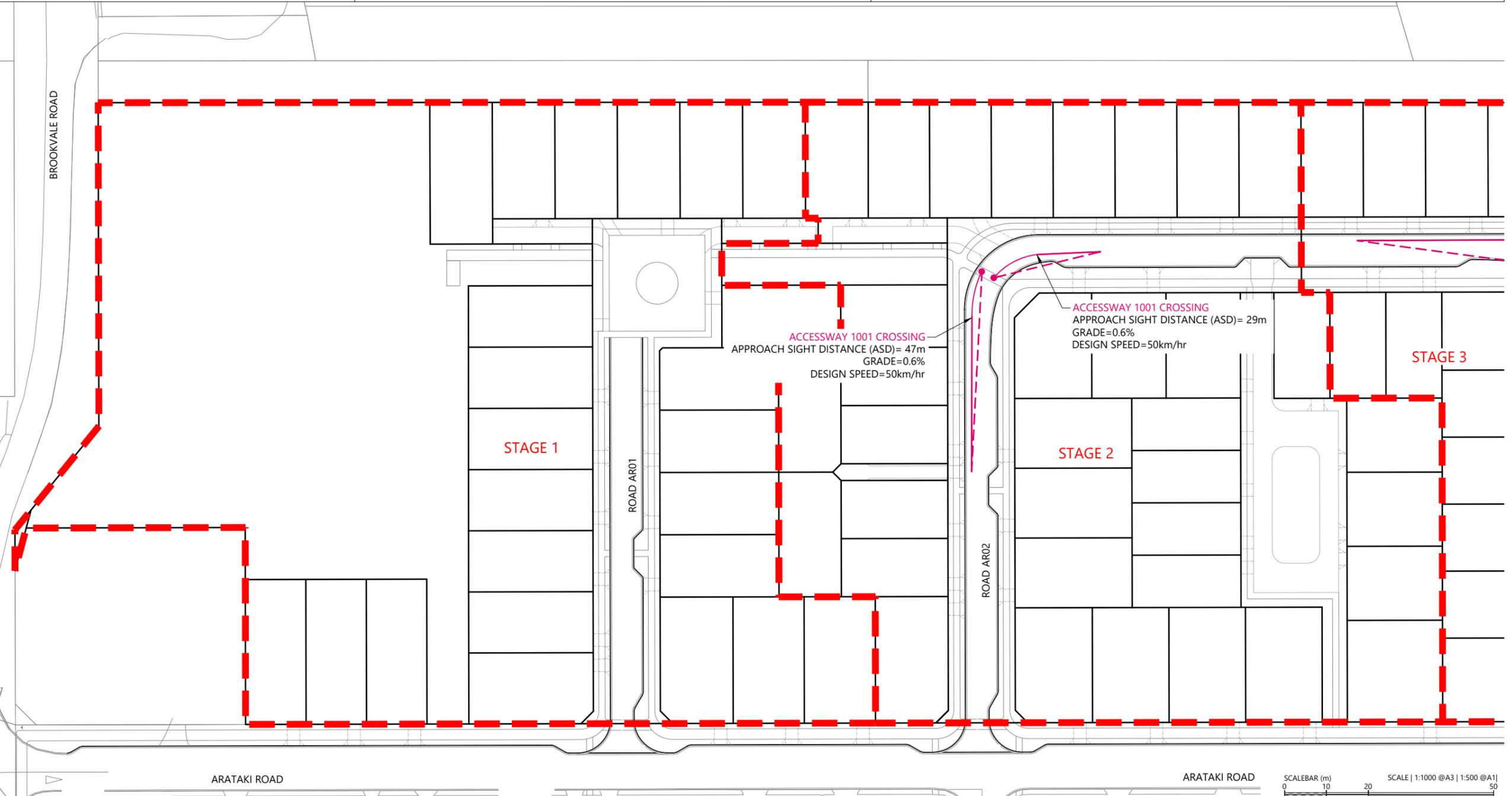
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2753-RD	

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH AUCKLAND TRANSPORT STANDARDS. ANY AMBIGUITY BETWEEN THESE DRAWINGS & THE STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
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REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
APPROACH SIGHT DISTANCE PLAN - SHEET 1



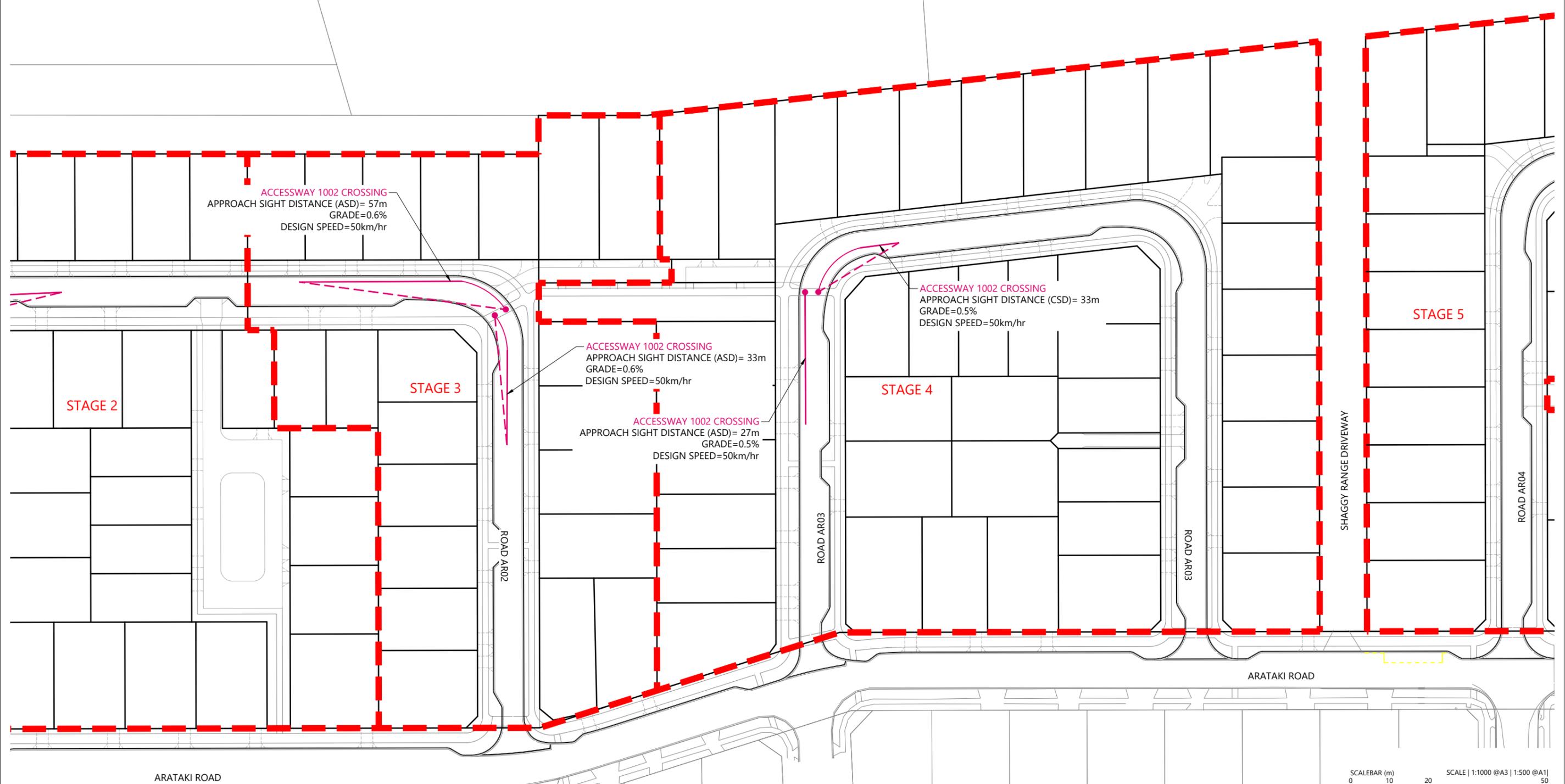
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2754-RD	

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

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REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
APPROACH SIGHT DISTANCE PLAN - SHEET 2



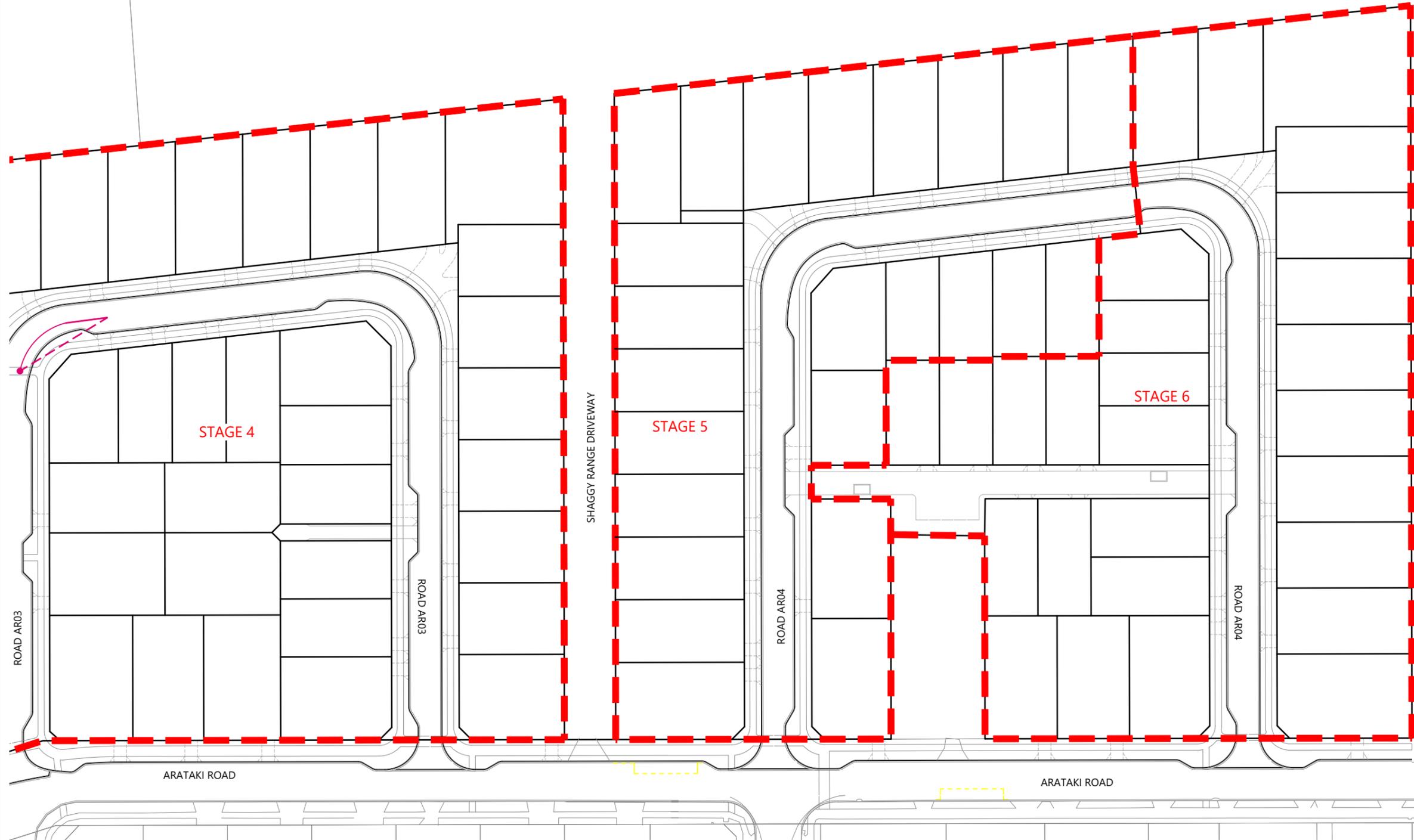
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2755-RD	

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH AUCKLAND TRANSPORT STANDARDS. ANY AMBIGUITY BETWEEN THESE DRAWINGS & THE STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
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REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH

APPROACH SIGHT DISTANCE PLAN - SHEET 3



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2756-RD	

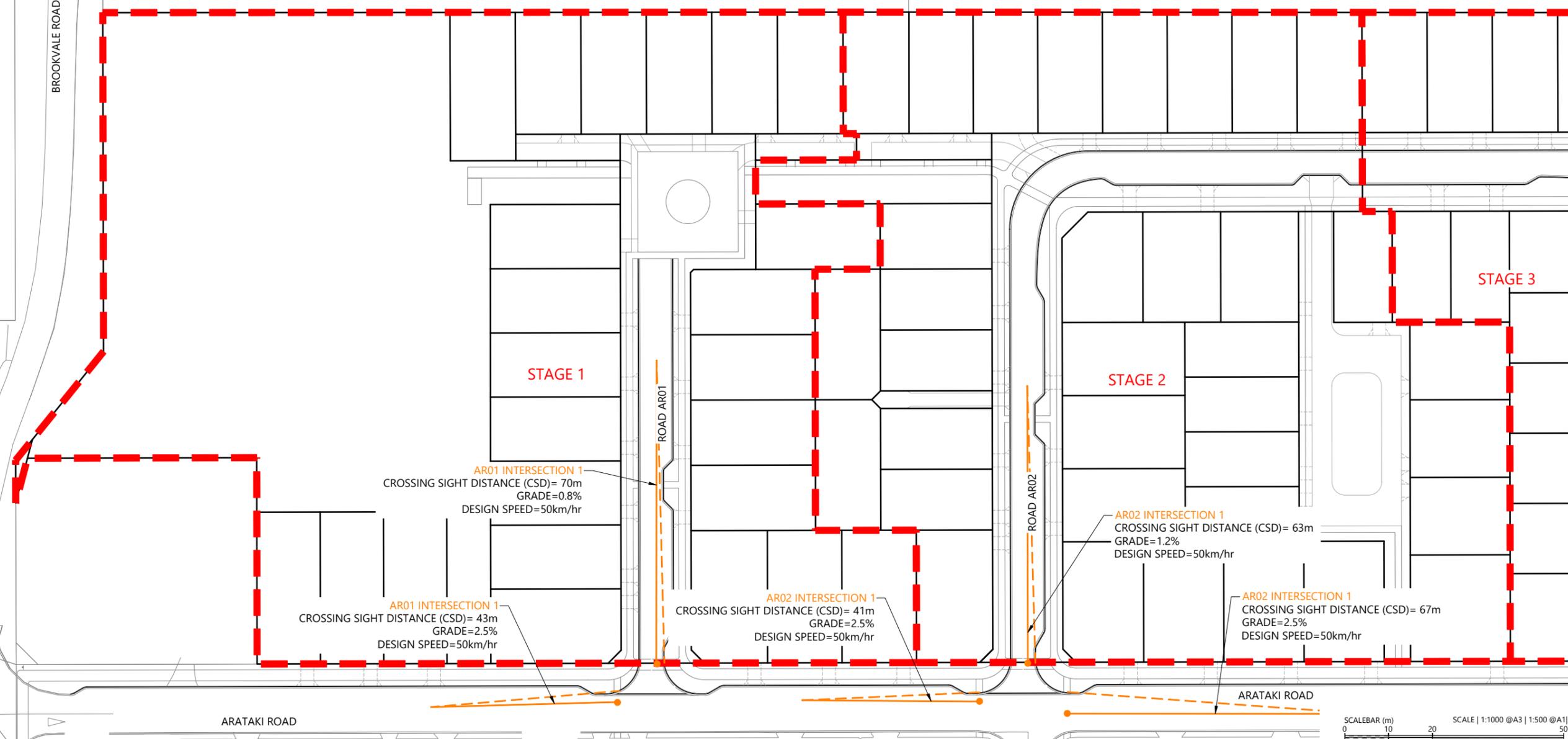
LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH AUCKLAND TRANSPORT STANDARDS. ANY AMBIGUITY BETWEEN THESE DRAWINGS & THE STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
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BROOKVALE ROAD



ARATAKI ROAD

ARATAKI ROAD

SCALEBAR (m) 0 10 20 50
SCALE | 1:1000 @A3 | 1:500 @A1 | 1:250 @A1

REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH

CROSSING SIGHT DISTANCE PLAN - SHEET 1



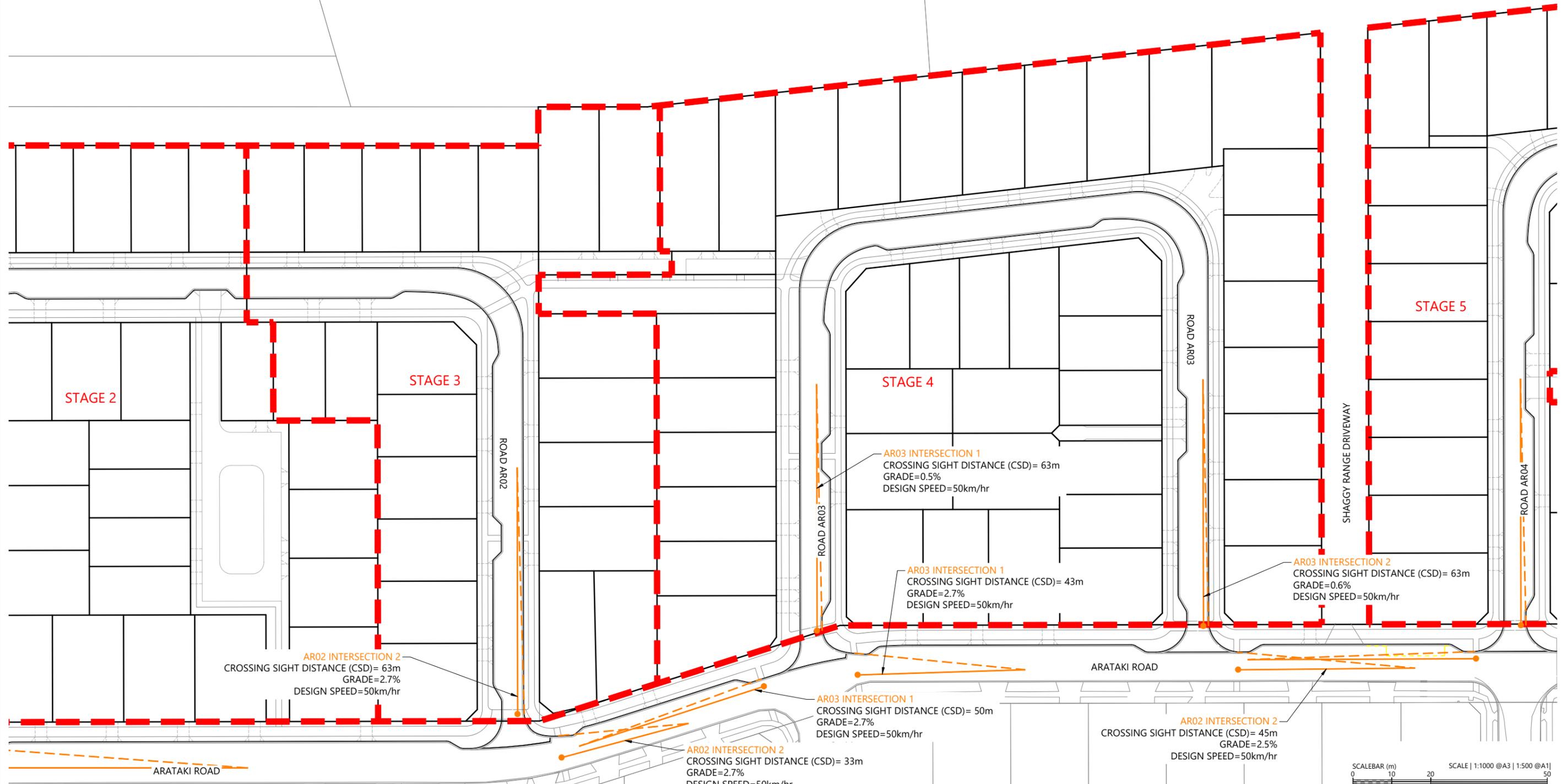
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2757-RD	

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH AUCKLAND TRANSPORT STANDARDS. ANY AMBIGUITY BETWEEN THESE DRAWINGS & THE STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
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REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH

CROSSING SIGHT DISTANCE PLAN - SHEET 2



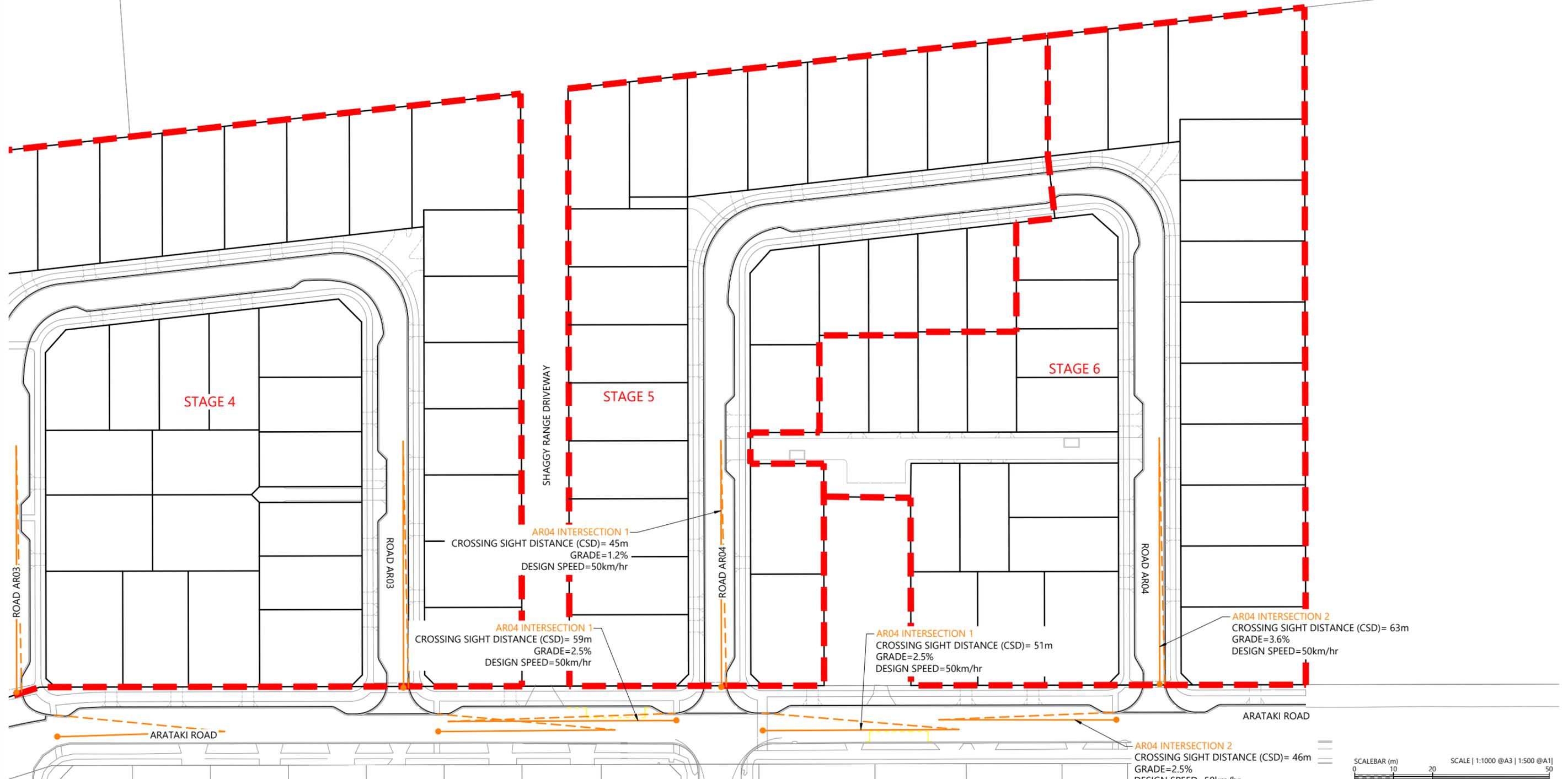
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2758-RD	

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

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REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	AB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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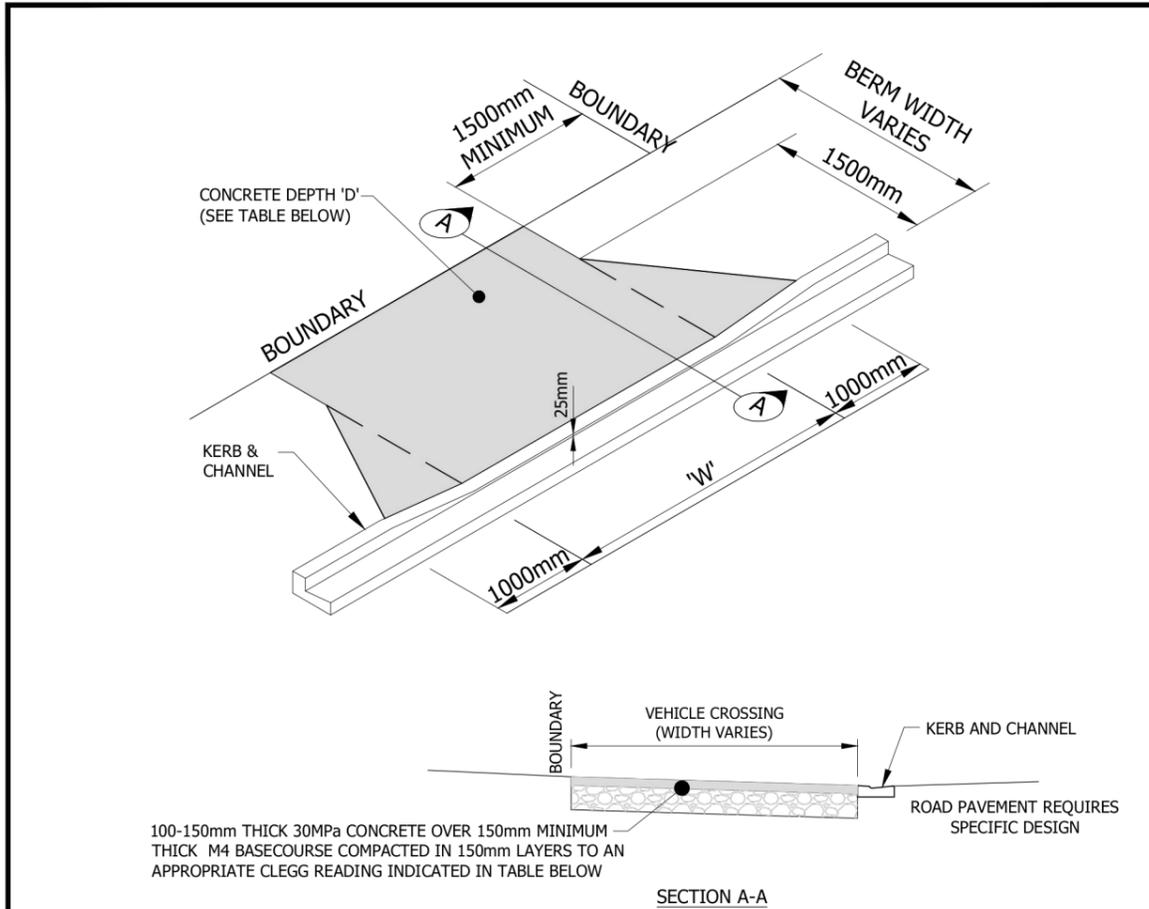
ARATAKI DEVELOPMENT - HAVELOCK NORTH

CROSSING SIGHT DISTANCE PLAN - SHEET 3



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2759-RD	

TRIM Reference :



100-150mm THICK 30MPa CONCRETE OVER 150mm MINIMUM THICK M4 BASECOURSE COMPACTED IN 150mm LAYERS TO AN APPROPRIATE CLEGG READING INDICATED IN TABLE BELOW

SECTION A-A

Property Description	Min. Width 'W'	Max. Width 'W'	Concrete Depth 'D'	Mesh Reinforcing	Basecourse Thickness	Target Clegg Reading	
Residential	1-2 Dwellings	3m	4.8m	100mm	No	150mm	25
	3-4 Dwellings	4m	4.8m	125mm	No	150mm	25
	5+ Dwellings	6m	6m	150mm	1 Layer 665	200mm	35
Light Commercial (not requiring specific design).	4m	6m	150mm	1 Layer 665	200mm	35	
Industrial (not requiring specific design).	6m	9m	150mm	1 Layer 665	200mm	35	

- NOTES:
1. DEPTH OF BASECOURSE WILL DEPEND ON SUBGRADE STRENGTH. THE DEPTHS SHOWN ASSUME A SUBGRADE CBR > 5%. BASECOURSE IS TO BE COMPACTED TO 95% STANDARD COMPACTION.
 2. FOR SUBGRADE STRENGTH BELOW CBR 5% SPECIFIC DESIGNS ARE REQUIRED.
 3. CONCRETE STRENGTH TO BE A MINIMUM OF 30MPa AT 28 DAYS.
 4. WHERE MOUNTABLE KERBS ARE PRESENT THERE IS TO BE NO CUT DOWN AND THE VEHICLE CROSSING WILL TIE INTO THE TOP OF KERB LEVEL.
 5. REFER TO DRAWING C19A FOR DETAILS OF KERB AND CHANNEL PROFILE ADJACENT TO SHARED CYCLEWAY AND FOOTPATH.

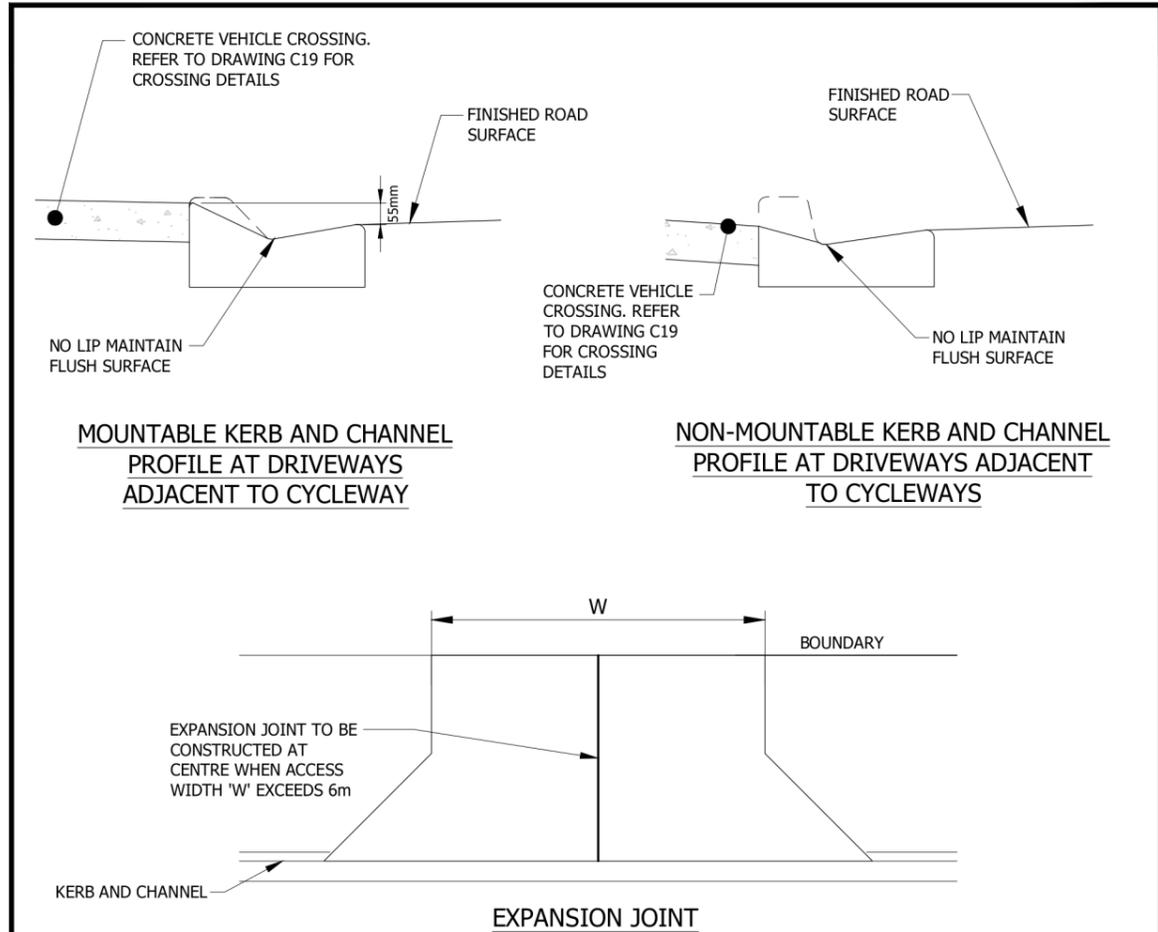


HASTINGS DISTRICT COUNCIL
MINIMUM STANDARDS FOR VEHICLE CROSSINGS ONTO URBAN ROADS

NOT TO SCALE
C19
 NOV 2018

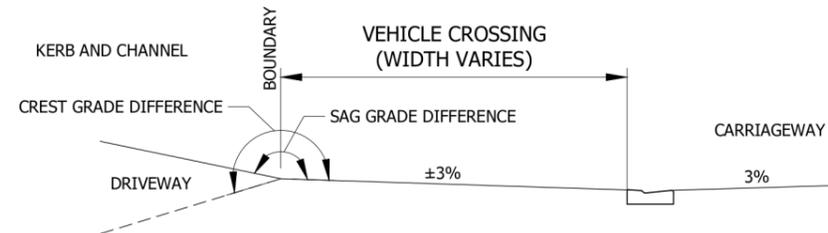
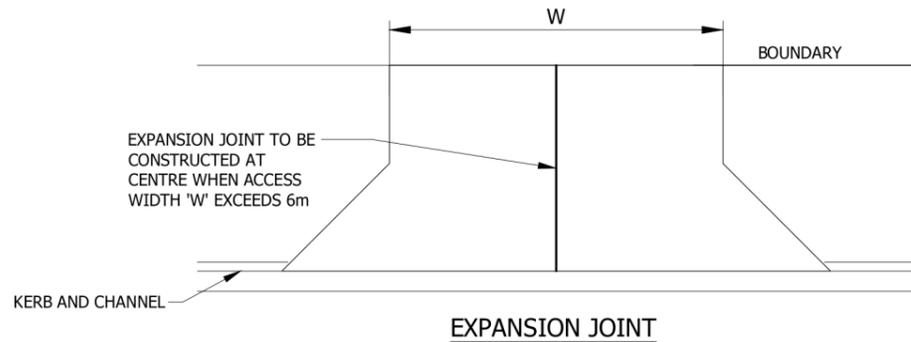
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TRIM Reference :



MOUNTABLE KERB AND CHANNEL PROFILE AT DRIVEWAYS ADJACENT TO CYCLEWAY

NON-MOUNTABLE KERB AND CHANNEL PROFILE AT DRIVEWAYS ADJACENT TO CYCLEWAYS



MAXIMUM GRADE DIFFERENCES FOR URBAN VEHICLE CROSSINGS

- NOTES:
1. MAXIMUM CREST GRADE DIFFERENCE IS 10%
 2. MAXIMUM SAG GRADE DIFFERENCE IS 17%



HASTINGS DISTRICT COUNCIL
MINIMUM STANDARDS FOR VEHICLE CROSSINGS - TYPICAL SECTIONS

NOT TO SCALE
C19A
 NOV 2018

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REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR APPROVAL	TB	MAY 2025	DESIGNED	HASTINGSDC
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF

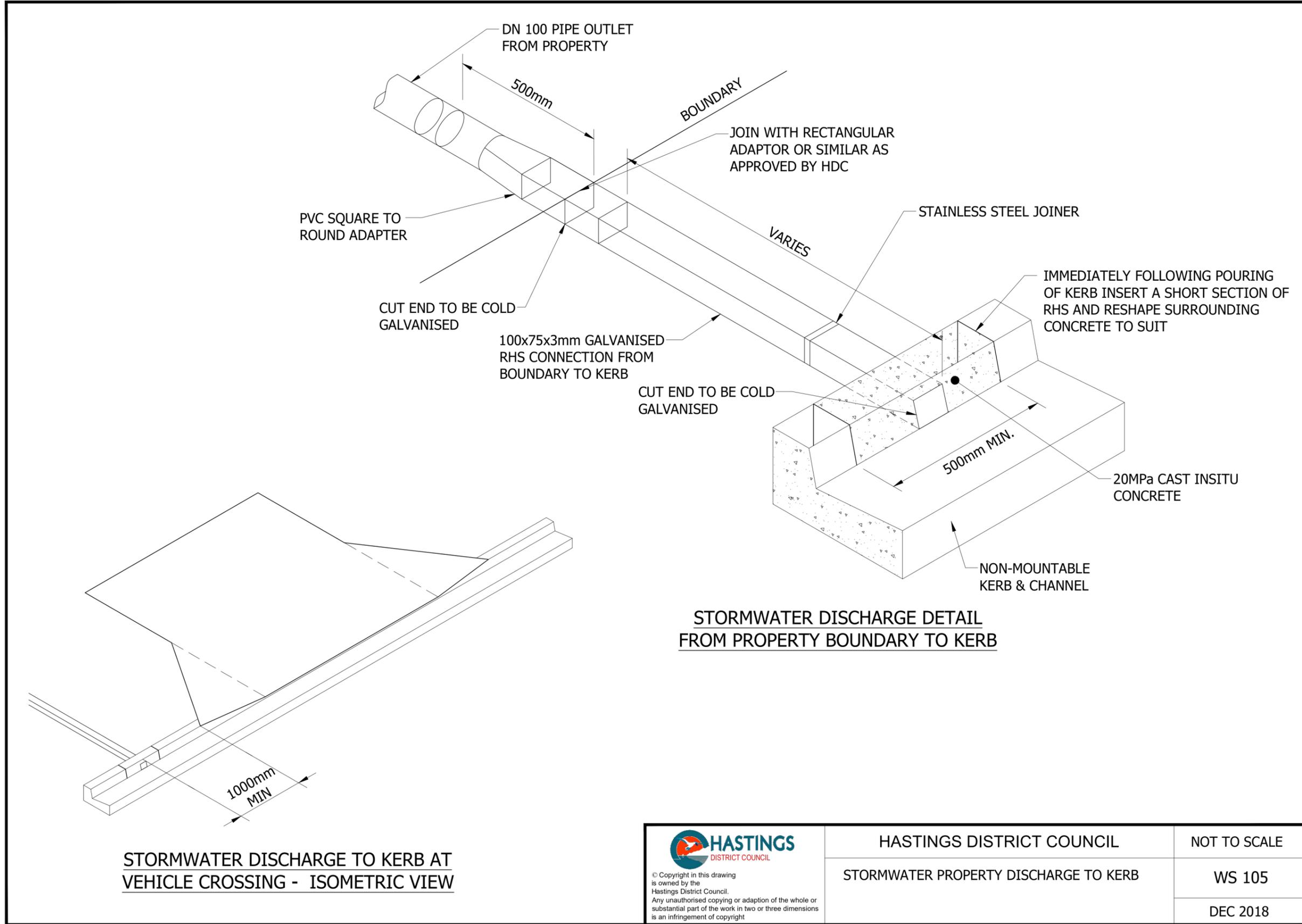


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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 ROAD DETAILS
 HDC ENG COP - C19 & C19A

STATUS	ISSUED FOR CONSENT	REV
SCALE	NOT TO SCALE	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2800-RD	



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	STORMWATER PROPERTY DISCHARGE TO KERB	WS 105
		DEC 2018

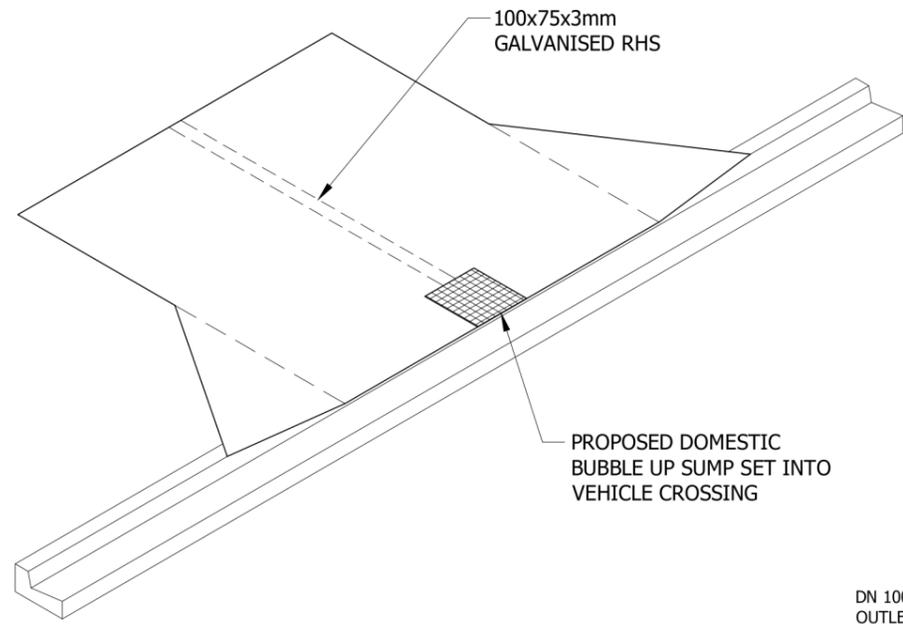
REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR APPROVAL	TB	MAY 2025	DESIGNED	HASTINGSDC
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF

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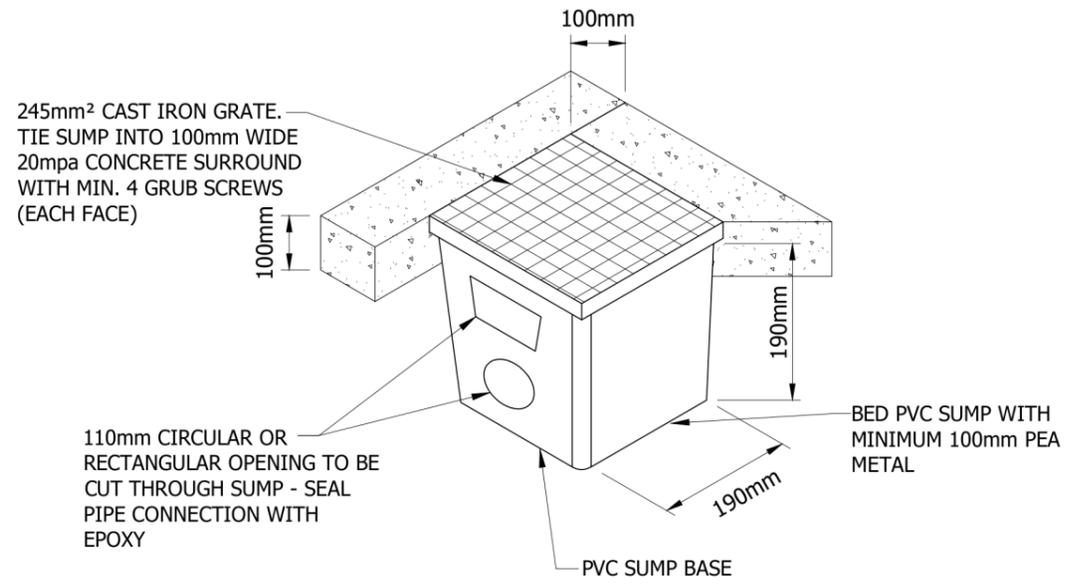
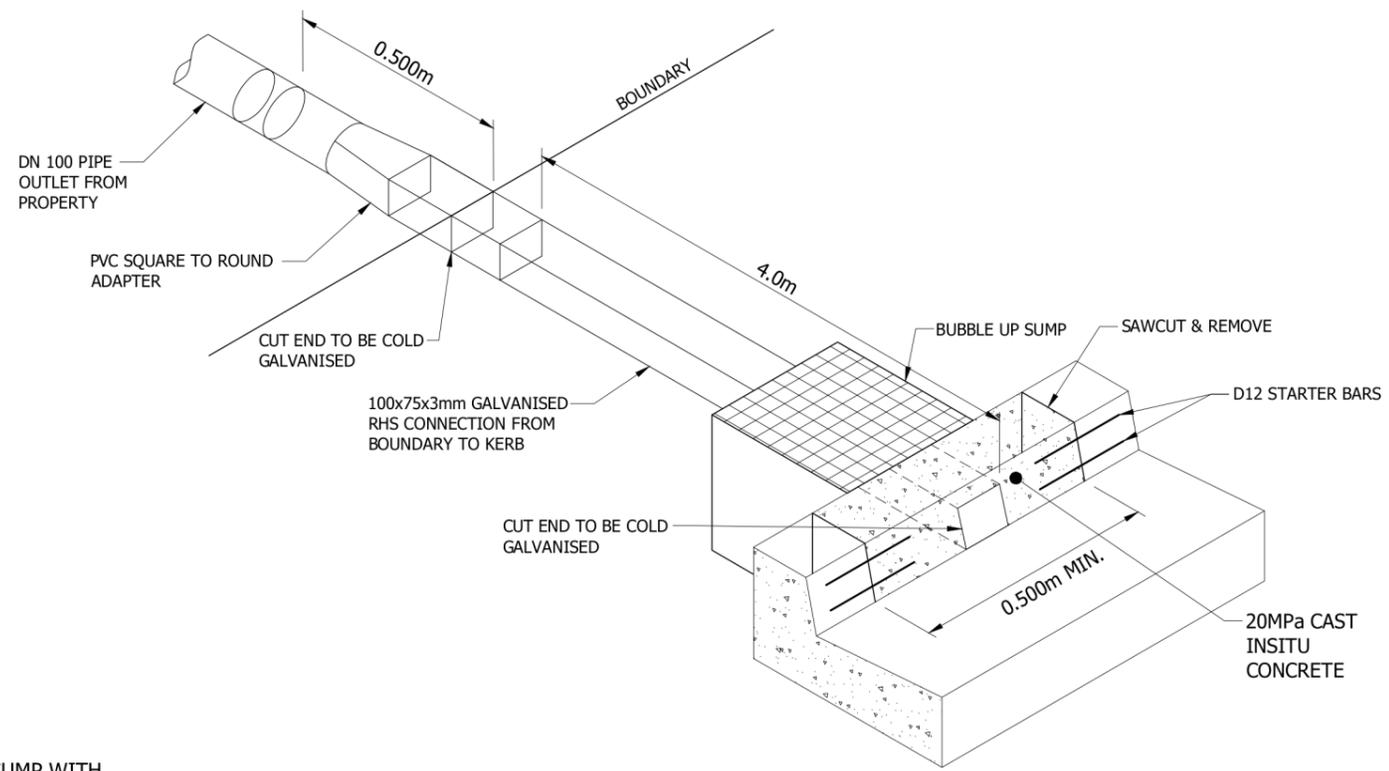


ARATAKI DEVELOPMENT - HAVELOCK NORTH
 ROAD DETAILS
 HDC ENG COP - WS 105

STATUS	ISSUED FOR CONSENT	REV
SCALE	NOT TO SCALE	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2801-RD	



DOMESTIC BUBBLE UP SUMP AT VEHICLE CROSSING



DOMESTIC BUBBLE UP SUMP

GENERAL NOTE:
THIS DETAIL IS ONLY TO BE USED WHERE DISCHARGE TO KERB BEYOND VEHICLE CROSSING IS NOT PRACTICAL

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	DOMESTIC PROPERTY DISCHARGE BUBBLE UP SUMP	WS 106
		DEC 2018

REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR APPROVAL	TB	MAY 2025	DESIGNED	HASTINGSDC
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
ROAD DETAILS
HDC ENG COP - WS 106

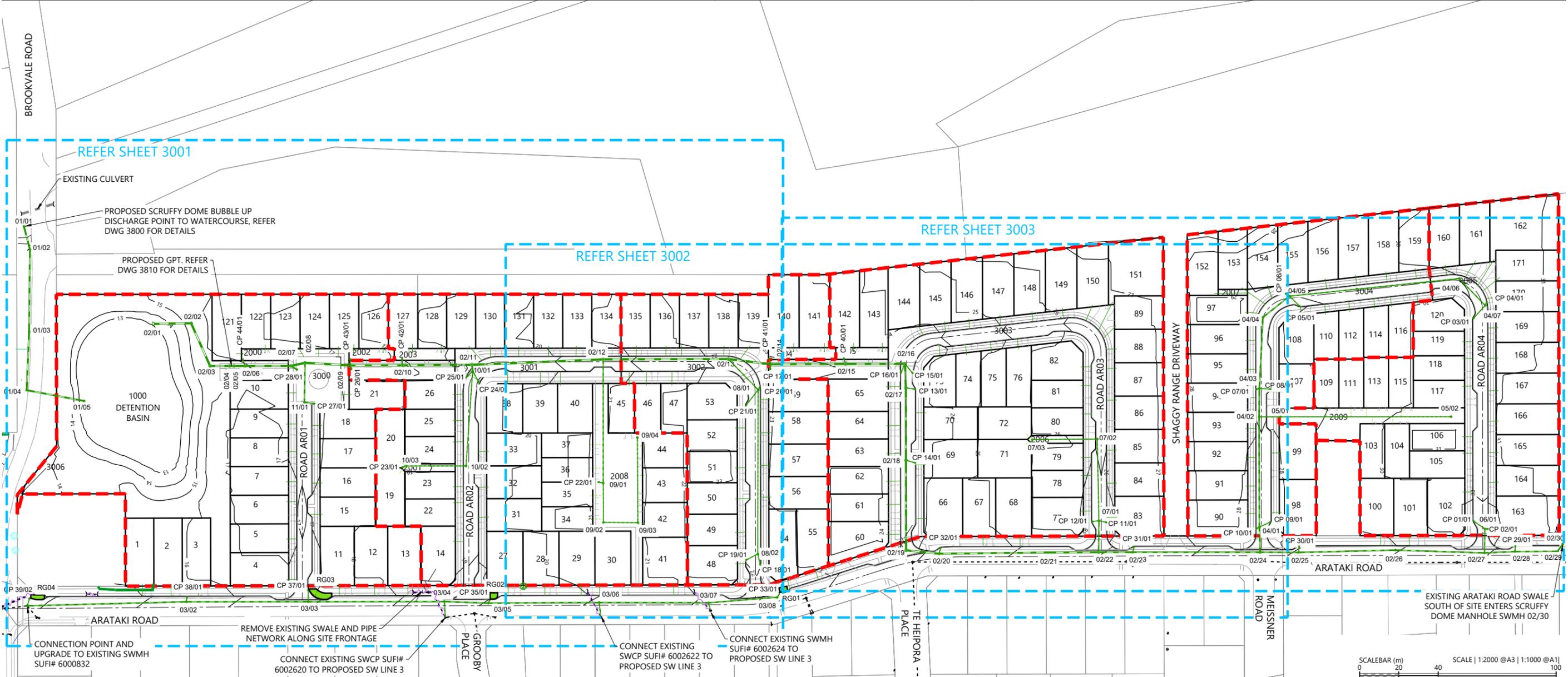
STATUS	ISSUED FOR CONSENT	REV
SCALE	NOT TO SCALE	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-2802-RD	

LEGEND

- STAGE BOUNDARIES
- PROPOSED MAJOR CONTOURS (1m)
- PROPOSED STORMWATER LINE AND PIT
- EXISTING STORMWATER
- PROPOSED SUMP
- EXISTING STORMWATER LINE AND PIT TO BE DECOMMISSIONED
- PROPOSED RAINGARDEN
- PROPOSED STORMWATER KERB OUTLET
- PROPOSED BUBBLE UP SUMP
- PROPOSED STORMWATER LATERAL CONNECTION

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
2. FOR PIPE BEDDING DETAILS REFER TO STANDARD DETAIL SHEETS UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTIONS IN WHICH CASE SUCH NOTES TAKE PRECEDENCE.
3. CONCRETE PIPES CLASSES ARE NOTED ON THE DRAINAGE LONG SECTIONS. ALL SUMP LEADS TO BE RCRRJ CLASS 4.
4. ALL PIPE CROSSINGS UNDER ROADS TO BE HARDFILL BACKFILLED.
5. ALL SW LOT CONNECTIONS TO BE 150MMØ. RAMPED RISERS ARE TO BE EXTENDED & CAPPED OFF WITHIN 1.0M OF THE FINISHED GROUND SURFACE.
6. SW LOT CONNECTIONS ARE VIA KERB OUTLETS UNLESS OTHERWISE STATED. KERB OUTLETS TO FOLLOW HASTINGS DISTRICT COUNCIL ENGINEERING CODE OF PRACTICE STANDARD DRAWINGS WS 105 AND WS 106.
7. ALL MANHOLES TO BE 1050MMØ UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTION IN WHICH CASE SUCH NOTES SHALL TAKE PRECEDENCE.
8. THE CONTRACTOR IS TO PEG MANHOLES & CHECK FINISHED LEVELS (MH LID LEVELS) PRIOR TO ORDERING MANHOLES.
9. ALL MANHOLE LIDS IN CYCLEWAYS AND SHARED PATHS MUST HAVE A CYCLIST FRIENDLY COVER.
10. PIPE GRADES ON THE LONG SECTIONS ARE CALCULATED FROM MANHOLE SIDE TO MANHOLE SIDE. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT LASER LEVELS ARE SET TO COMPENSATE FOR THIS.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF

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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 STORMWATER DRAINAGE LAYOUT OVERALL PLAN

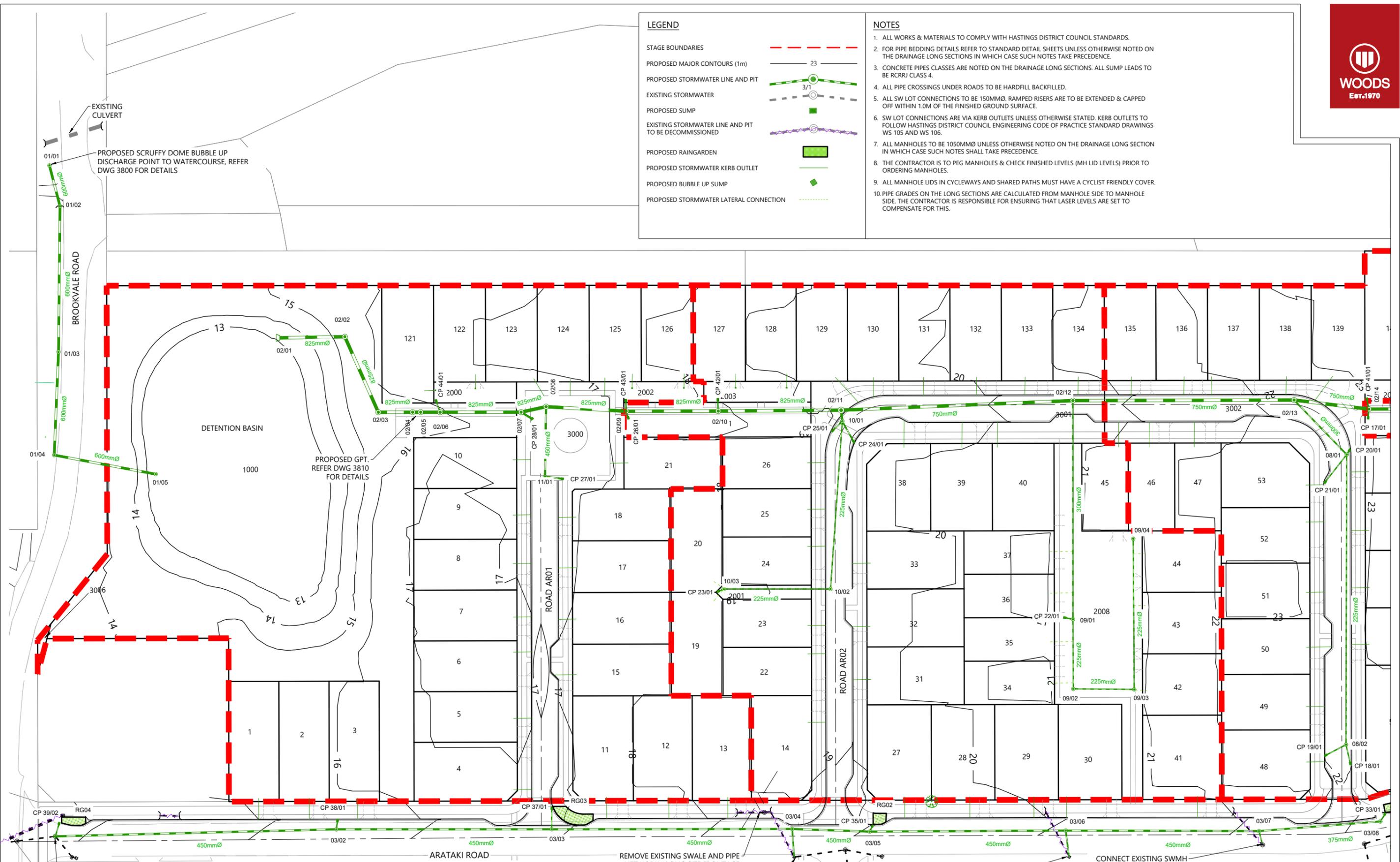
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3000-DR	

Plot Date: 12:49:56 pm, 26 June 2025, APRILS
File: C:\1205\ENERGY\DATA\WP-APL-APP-02\P24-244 - ARATAKI - HAVELOCK NORTH_2169002 DRAWINGS\01 ENG\P24-244-00-3000-DR_STORMWATER DRAINAGE LAYOUT PLAN OVERALL.DWG

LEGEND

- STAGE BOUNDARIES: - - - - -
- PROPOSED MAJOR CONTOURS (1m): ——— 23
- PROPOSED STORMWATER LINE AND PIT: ——— 3/1
- EXISTING STORMWATER: - - - - -
- PROPOSED SUMP: ■
- EXISTING STORMWATER LINE AND PIT TO BE DECOMMISSIONED: - - - - -
- PROPOSED RAINGARDEN: ■
- PROPOSED STORMWATER KERB OUTLET: ———
- PROPOSED BUBBLE UP SUMP: ◆
- PROPOSED STORMWATER LATERAL CONNECTION: - · - · -

- NOTES**
- ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
 - FOR PIPE BEDDING DETAILS REFER TO STANDARD DETAIL SHEETS UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTIONS IN WHICH CASE SUCH NOTES TAKE PRECEDENCE.
 - CONCRETE PIPES CLASSES ARE NOTED ON THE DRAINAGE LONG SECTIONS. ALL SUMP LEADS TO BE RCRRJ CLASS 4.
 - ALL PIPE CROSSINGS UNDER ROADS TO BE HARDFILL BACKFILLED.
 - ALL SW LOT CONNECTIONS TO BE 150MMØ. RAMPED RISERS ARE TO BE EXTENDED & CAPPED OFF WITHIN 1.0M OF THE FINISHED GROUND SURFACE.
 - SW LOT CONNECTIONS ARE VIA KERB OUTLETS UNLESS OTHERWISE STATED. KERB OUTLETS TO FOLLOW HASTINGS DISTRICT COUNCIL ENGINEERING CODE OF PRACTICE STANDARD DRAWINGS WS 105 AND WS 106.
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CONNECTION POINT AND UPGRADE TO EXISTING SWMH SUFI# 6000832

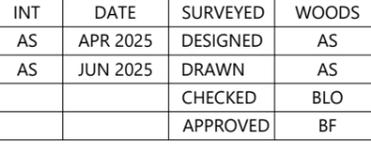
CONNECTION EXISTING SWCP SUFI# 6002620 TO PROPOSED SW LINE 3

CONNECT EXISTING SWCP SUFI# 6002622 TO PROPOSED SW LINE 3

CONNECT EXISTING SWMH SUFI# 6002624 TO PROPOSED SW LINE 3

SCALEBAR (m) 0 10 20 SCALE | 1:1000 @A3 | 1:500 @A1 | 1:250 @A2

REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR INFORMATION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER DRAINAGE LAYOUT PLAN - SHEET 1

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3001-DR	

LEGEND

- STAGE BOUNDARIES
- PROPOSED MAJOR CONTOURS (1m)
- PROPOSED STORMWATER LINE AND PIT
- EXISTING STORMWATER
- PROPOSED SUMP
- EXISTING STORMWATER LINE AND PIT TO BE DECOMMISSIONED
- PROPOSED RAINGARDEN
- PROPOSED STORMWATER KERB OUTLET
- PROPOSED BUBBLE UP SUMP
- PROPOSED STORMWATER LATERAL CONNECTION

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
2. FOR PIPE BEDDING DETAILS REFER TO STANDARD DETAIL SHEETS UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTIONS IN WHICH CASE SUCH NOTES TAKE PRECEDENCE.
3. CONCRETE PIPES CLASSES ARE NOTED ON THE DRAINAGE LONG SECTIONS. ALL SUMP LEADS TO BE RCRRJ CLASS 4.
4. ALL PIPE CROSSINGS UNDER ROADS TO BE HARDFILL BACKFILLED.
5. ALL SW LOT CONNECTIONS TO BE 150MMØ. RAMPED RISERS ARE TO BE EXTENDED & CAPPED OFF WITHIN 1.0M OF THE FINISHED GROUND SURFACE.
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2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER DRAINAGE LAYOUT PLAN - SHEET 2



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3002-DR	

Plot Date: 12:49:57 pm, 26 June 2025, APRILS
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LEGEND

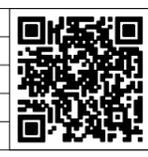
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- PROPOSED MAJOR CONTOURS (1m)
- PROPOSED STORMWATER LINE AND PIT
- EXISTING STORMWATER
- PROPOSED SUMP
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			CHECKED	BLO
			APPROVED	BF



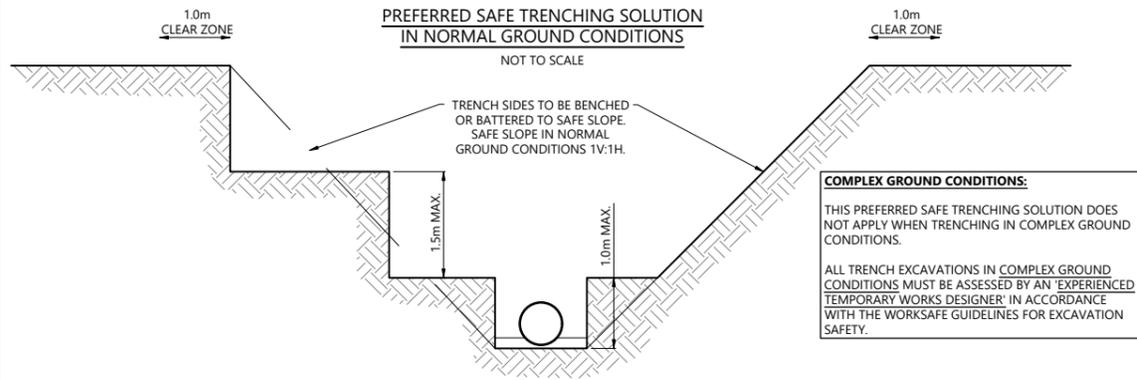
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER DRAINAGE LAYOUT PLAN - SHEET 3



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3003-DR	

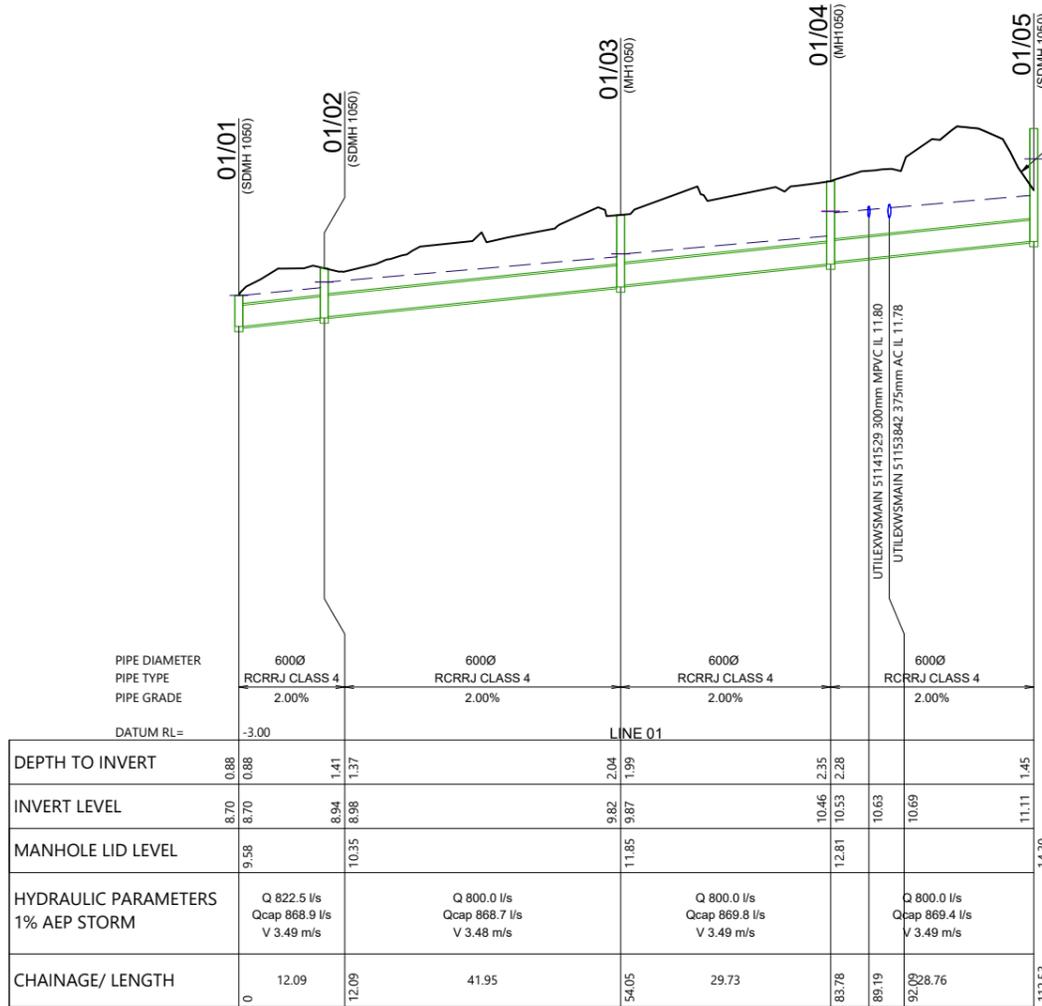


SAFE TRENCHING NOTES:

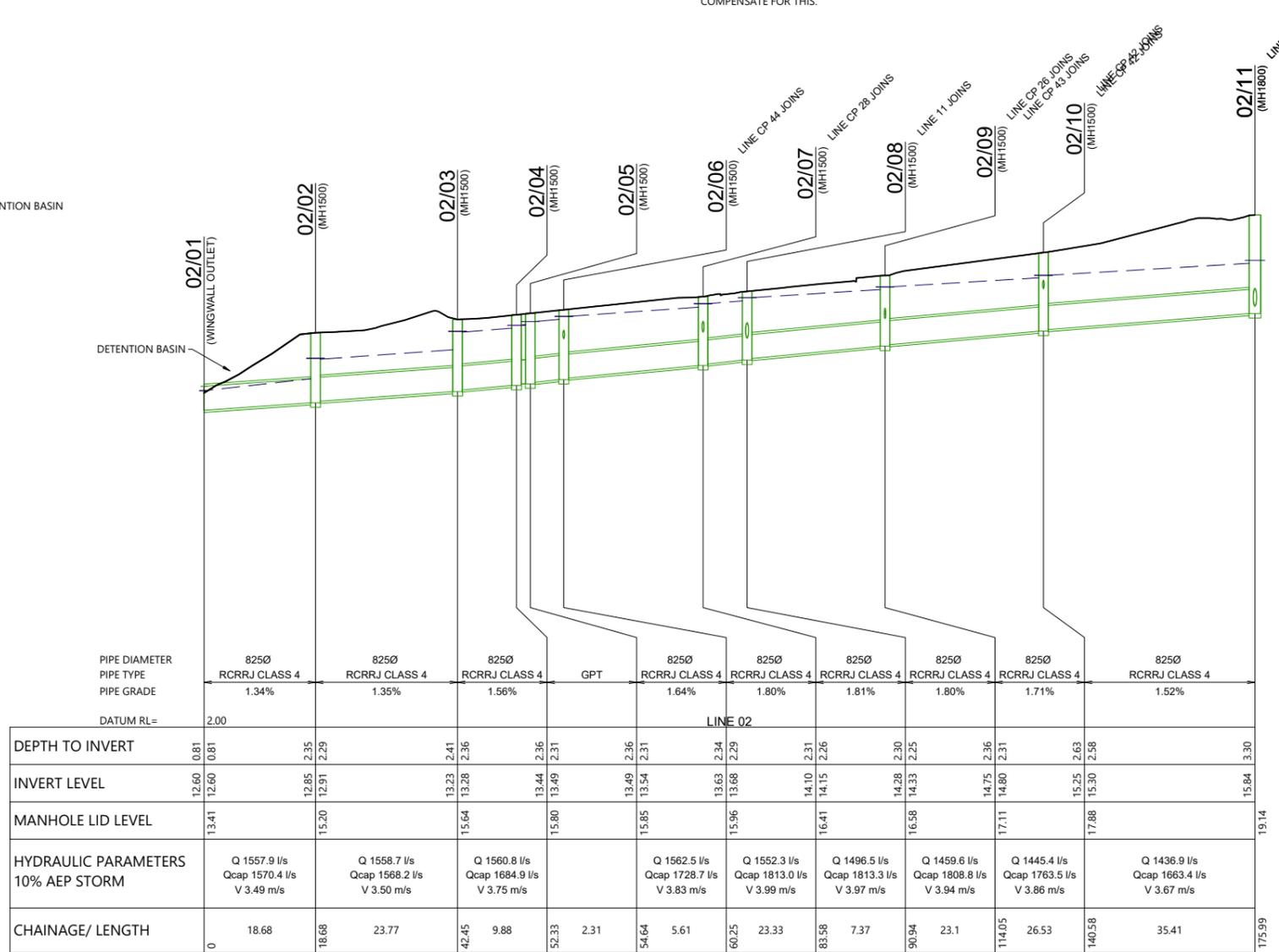
- THIS DIAGRAM SHOWS THE PREFERRED SAFE TRENCHING SOLUTION IN NORMAL GROUND CONDITIONS.
- ALL TRENCH EXCAVATIONS MUST BE ASSESSED BY A 'COMPETENT PERSON' ON SITE IN ACCORDANCE WITH THE WORKSAFE GUIDELINES FOR EXCAVATION SAFETY.
- IF THE PREFERRED TRENCHING SOLUTION IS NOT IMPLEMENTED THE CONTRACTOR MUST PROVIDE RECORDS OF THE SAFE TRENCHING ASSESSMENT COMPLETED BY THE 'COMPETENT PERSON'.
- TABLES 1 AND 2 OF THE WORKSAFE GUIDELINES SETOUT THE RECOMMENDED COMPETENCIES FOR THE 'COMPETENT PERSON'.
- GROUND CONDITIONS AS DEFINED IN TABLES 1 AND 2 OF THE WORKSAFE GUIDELINES:
 - NORMAL GROUND CONDITIONS:** GENERALLY FLAT OPEN GROUND, WITH LITTLE OR NO SURCHARGE LOADING, FAVOURABLE GROUND CONDITIONS, OFF SET FROM NEARBY STRUCTURES AND SENSITIVE INFRASTRUCTURE. GROUNDWATER CAN BE CONTROLLED WITH SIMPLE METHODS, SUCH AS A SUMP PUMP ARRANGEMENT.
 - COMPLEX GROUND CONDITIONS:** THE GROUND CONDITIONS INCLUDE VERY WEAK OR SENSITIVE SOILS, GROUNDWATER THAT REQUIRES SPECIALIST DEWATERING, OR LOCATIONS NEAR STRUCTURES AND SENSITIVE INFRASTRUCTURE. THESE CONDITIONS WOULD RESULT IN AN ELEVATED RISK WHEN CONSTRUCTING THE EXCAVATION.

STORMWATER NOTES

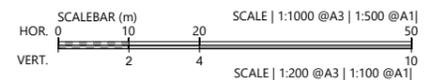
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01



02



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2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF

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ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER LONGSECTIONS
SHEET 1

STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3500-DR	

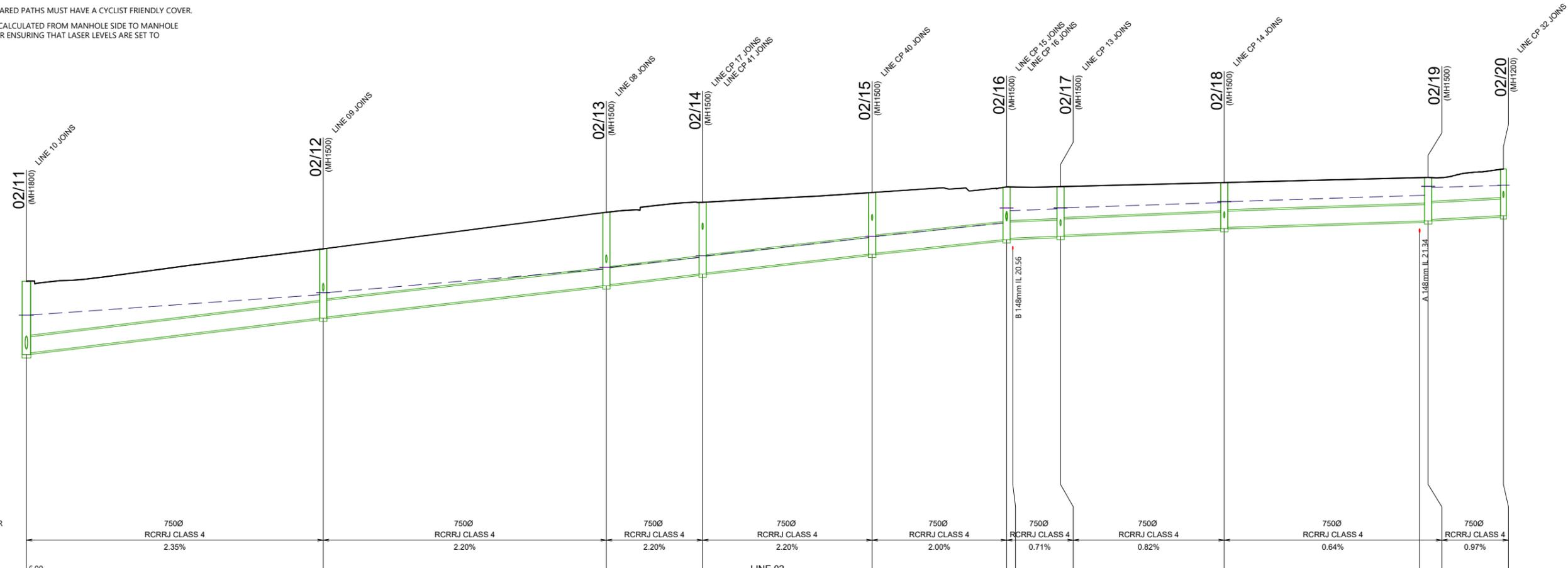
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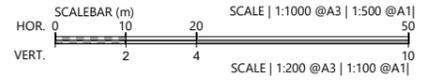
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PIPE DIAMETER	750Ø		750Ø		750Ø		750Ø		750Ø											
PIPE TYPE	RCRRJ CLASS 4		RCRRJ CLASS 4		RCRRJ CLASS 4		RCRRJ CLASS 4		RCRRJ CLASS 4											
PIPE GRADE	2.35%		2.20%		2.20%		2.20%		2.00%		0.71%		0.82%		0.64%		0.97%			
DATUM RL=	6.00																			
DEPTH TO INVERT	15.84	3.30	17.48	3.11	18.93	3.30	19.46	3.23	20.35	2.78	21.01	2.37	21.16	2.24	21.51	2.07	21.85	1.95	22.09	2.11
INVERT LEVEL	15.92	3.23	17.53	3.06	18.98	3.25	19.51	3.18	20.40	2.73	21.07	2.31	21.16	2.19	21.56	2.02	21.86	1.89	22.09	2.11
MANHOLE LID LEVEL	19.14		20.60		22.24		22.69		23.13		23.38		23.39		23.58		23.81		24.19	
HYDRAULIC PARAMETERS 10% AEP STORM	Q 1211.5 l/s Qcap 1587.6 l/s V 4.18 m/s		Q 1158.1 l/s Qcap 1652.0 l/s V 4.05 m/s		Q 1075.6 l/s Qcap 1652.1 l/s V 3.98 m/s		Q 1047.9 l/s Qcap 1652.9 l/s V 3.96 m/s		Q 1029.4 l/s Qcap 1575.9 l/s V 3.80 m/s		Q 848.5 l/s Qcap 872.1 l/s V 2.37 m/s		Q 835.8 l/s Qcap 936.6 l/s V 2.53 m/s		Q 815.3 l/s Qcap 831.0 l/s V 2.26 m/s		Q 818.0 l/s Qcap 1098.6 l/s V 2.72 m/s			
CHAINAGE/ LENGTH	175.99		242.8		306.52		328.2		366.34		396.61		408.75		445.6		489.56		508.44	

02



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



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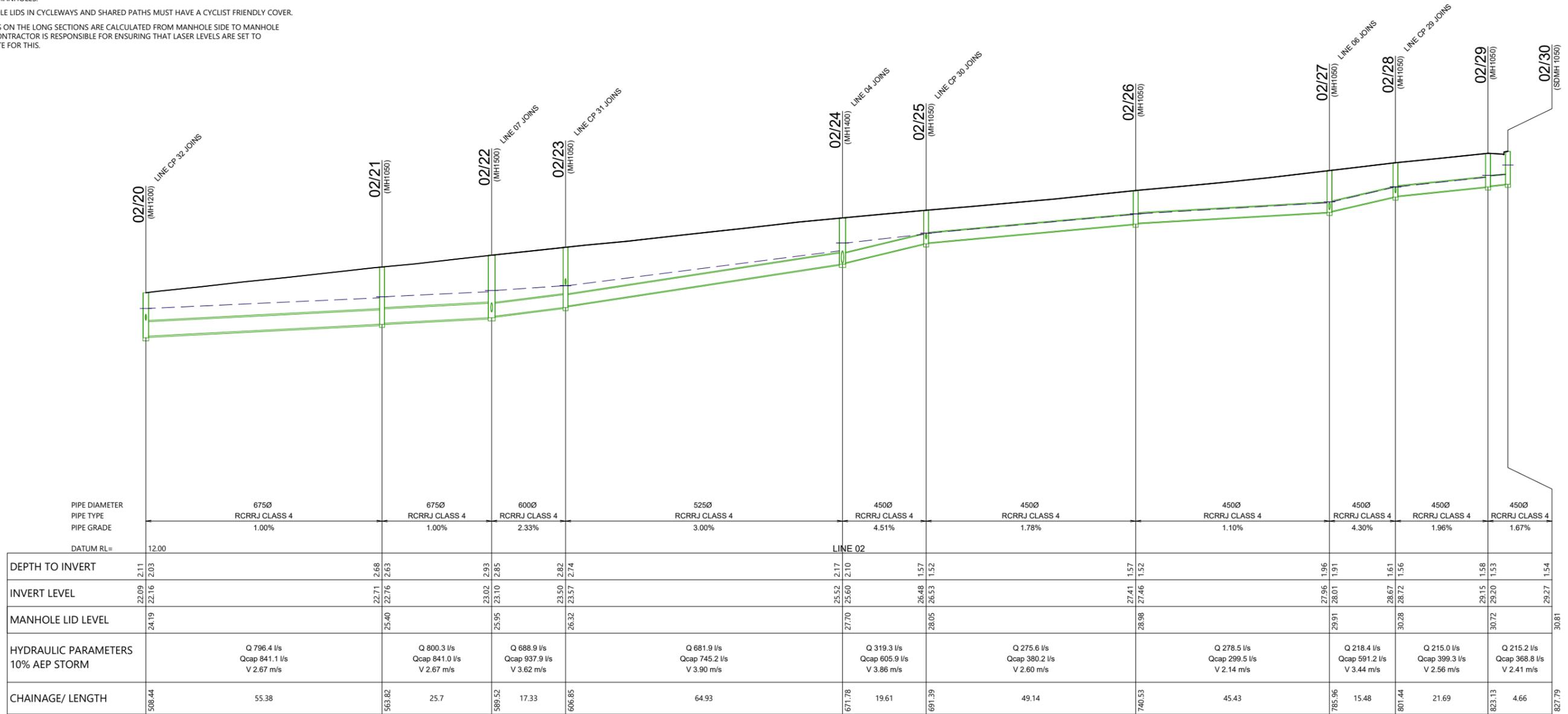


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER LONGSECTIONS
SHEET 2

STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3501-DR	

STORMWATER NOTES

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02



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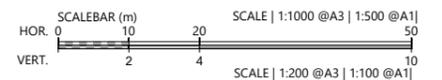
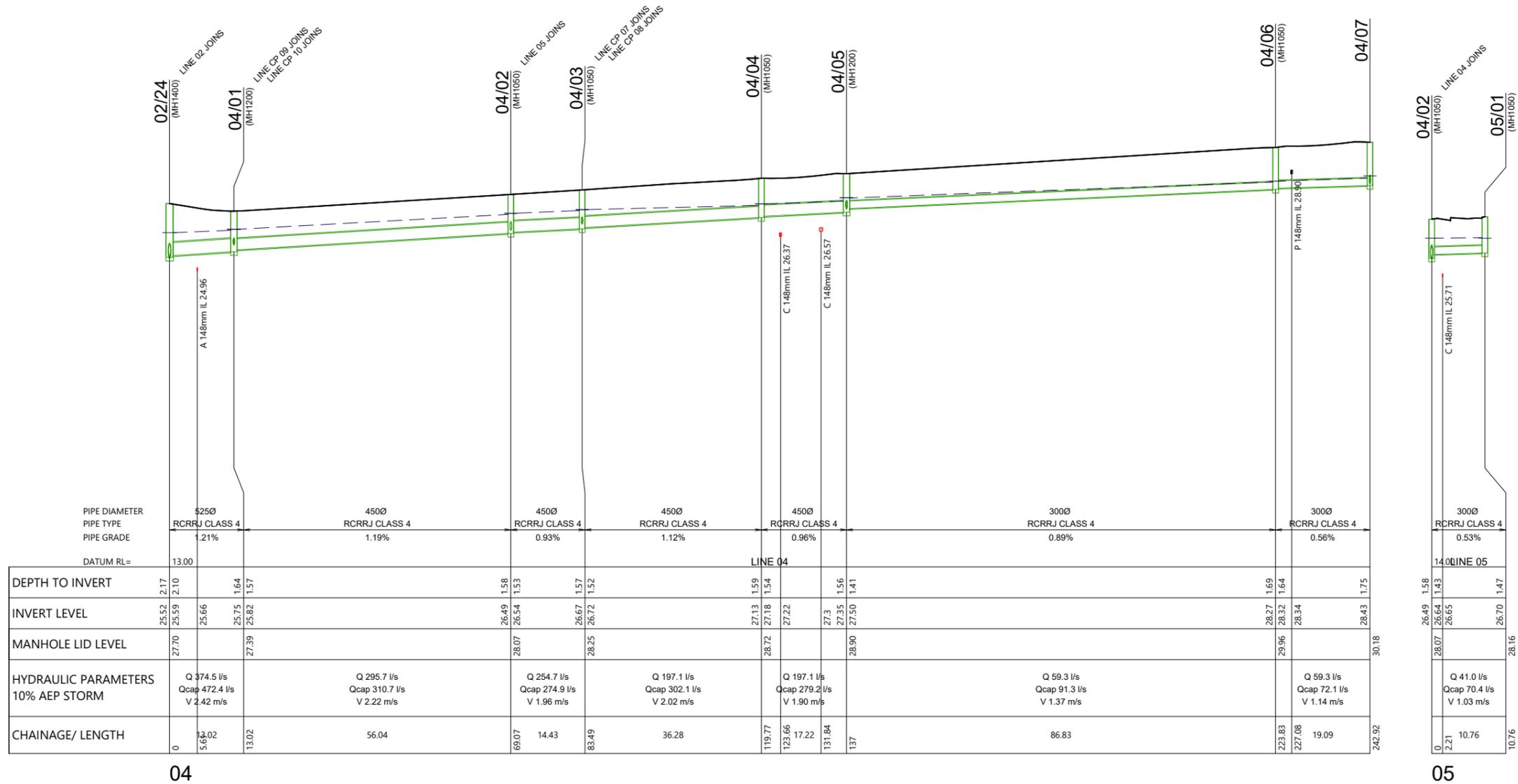


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER LONGSECTIONS
SHEET 3

STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3502-DR	

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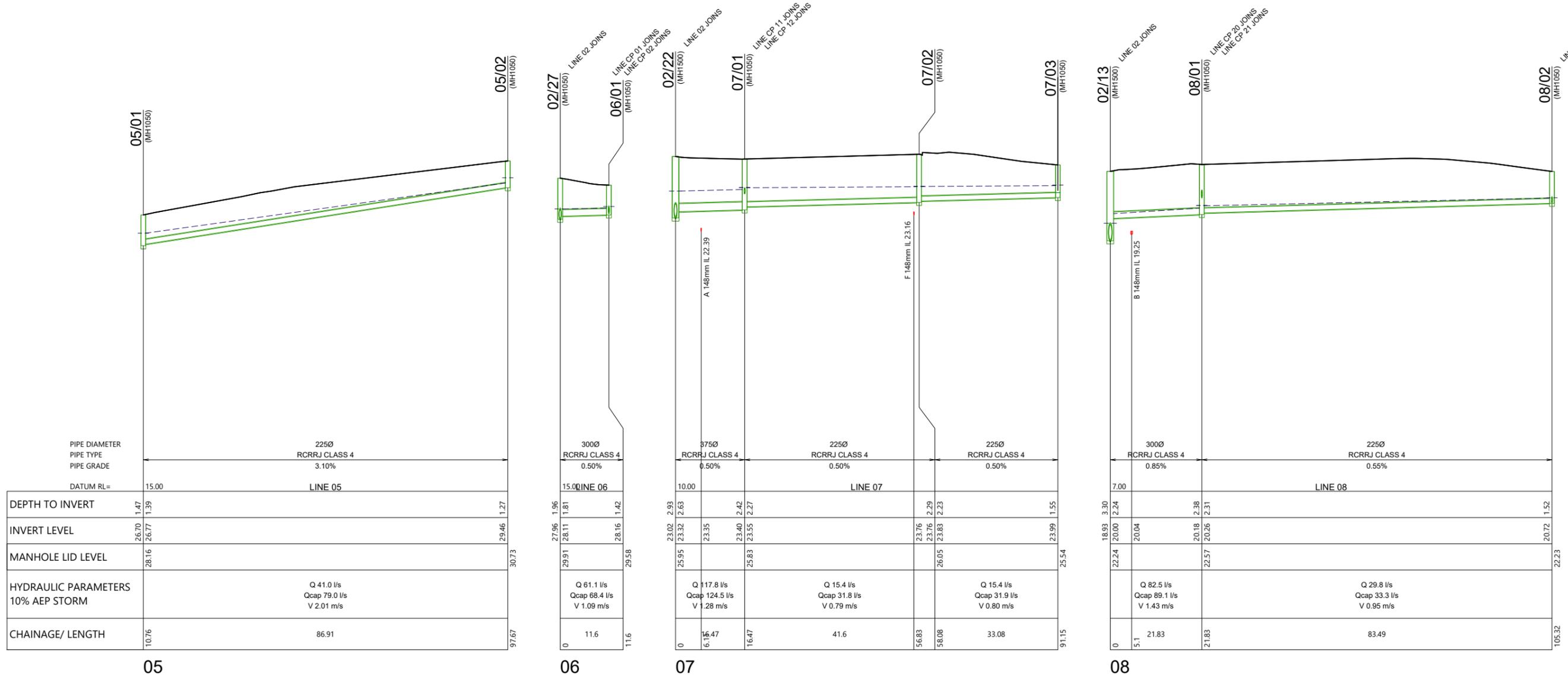


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER LONGSECTIONS
SHEET 4

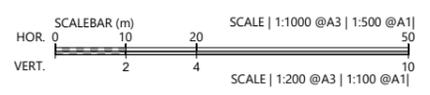
STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3503-DR	

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PIPE DIAMETER	PIPE TYPE	PIPE GRADE	DATUM RL=	LINE	DEPTH TO INVERT	INVERT LEVEL	MANHOLE LID LEVEL	HYDRAULIC PARAMETERS 10% AEP STORM	CHAINAGE/ LENGTH
225Ø	RCRRJ CLASS 4	3.10%	15.00	LINE 05	1.47	26.70	28.16	Q 41.0 l/s Qcap 79.0 l/s V 2.01 m/s	10.76
300Ø	RCRRJ CLASS 4	0.50%	15.00	LINE 06	1.81	27.96	29.91	Q 61.1 l/s Qcap 68.4 l/s V 1.09 m/s	11.6
375Ø	RCRRJ CLASS 4	0.50%	10.00	LINE 07	2.63	23.02	25.95	Q 117.8 l/s Qcap 124.5 l/s V 1.28 m/s	16.47
225Ø	RCRRJ CLASS 4	0.50%	10.00	LINE 07	2.27	23.40	25.83	Q 15.4 l/s Qcap 31.8 l/s V 0.79 m/s	41.6
225Ø	RCRRJ CLASS 4	0.50%	10.00	LINE 07	1.55	23.76	26.05	Q 15.4 l/s Qcap 31.9 l/s V 0.80 m/s	33.08
300Ø	RCRRJ CLASS 4	0.85%	7.00	LINE 08	2.31	18.93	22.24	Q 82.5 l/s Qcap 89.1 l/s V 1.43 m/s	21.83
225Ø	RCRRJ CLASS 4	0.55%	7.00	LINE 08	1.52	20.00	22.57	Q 29.8 l/s Qcap 33.3 l/s V 0.95 m/s	83.49



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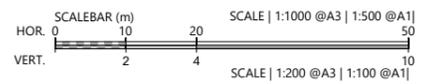
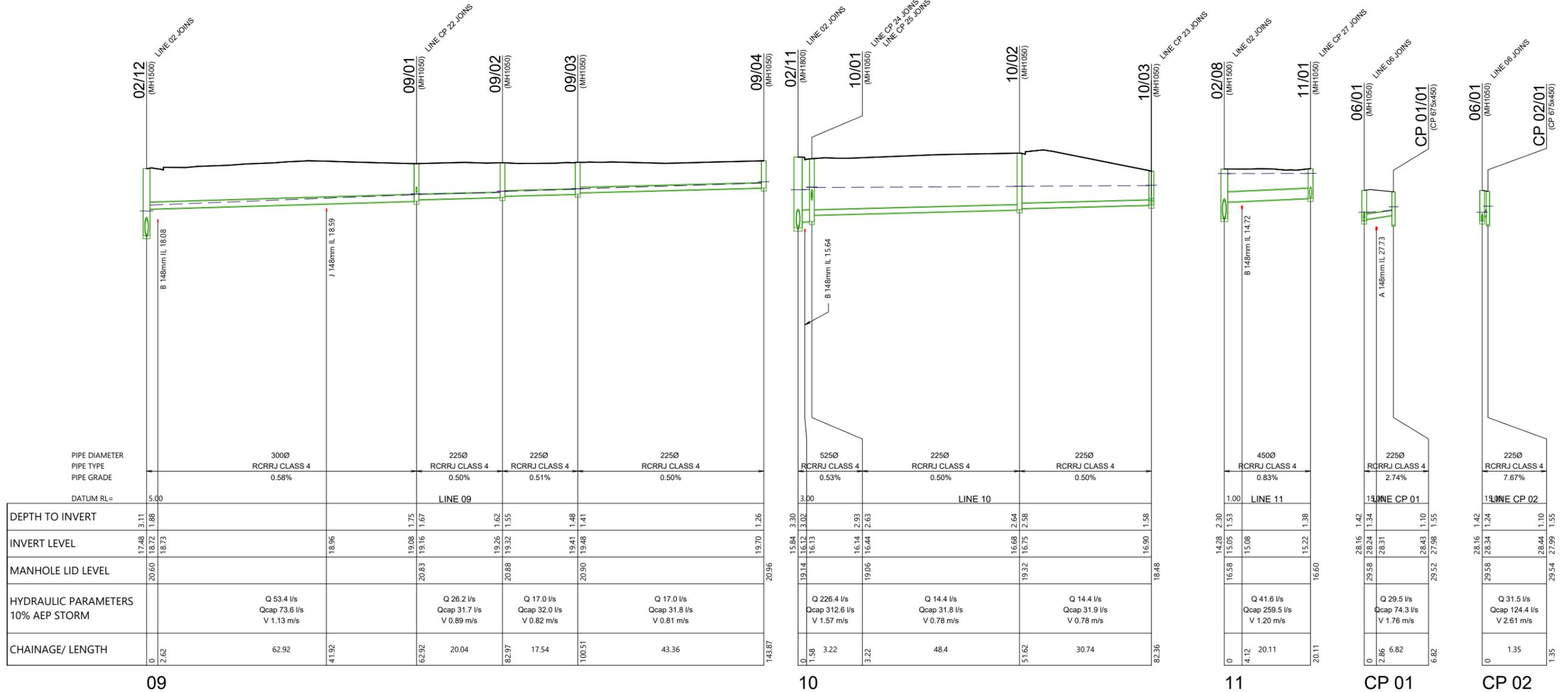


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER LONGSECTIONS
SHEET 5

STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3504-DR	

STORMWATER NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
2. FOR PIPE BEDDING DETAILS REFER TO STANDARD DETAIL SHEETS UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTIONS IN WHICH CASE SUCH NOTES TAKE PRECEDENCE.
3. CONCRETE PIPES CLASSES ARE NOTED ON THE DRAINAGE LONG SECTIONS. ALL SUMP LEADS TO BE RCRRJ CLASS 4.
4. ALL PIPE CROSSINGS UNDER ROADS TO BE HARDFILL BACKFILLED.
5. ALL SW LOT CONNECTIONS TO BE 150MMØ. RAMPED RISERS ARE TO BE EXTENDED & CAPPED OFF WITHIN 1.0M OF THE FINISHED GROUND SURFACE.
6. SW LOT CONNECTIONS ARE VIA KERB OUTLETS UNLESS OTHERWISE STATED. KERB OUTLETS TO FOLLOW HASTINGS DISTRICT COUNCIL ENGINEERING CODE OF PRACTICE STANDARD DRAWINGS WS 105 AND WS 106.
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REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF

BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
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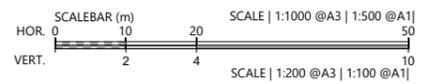
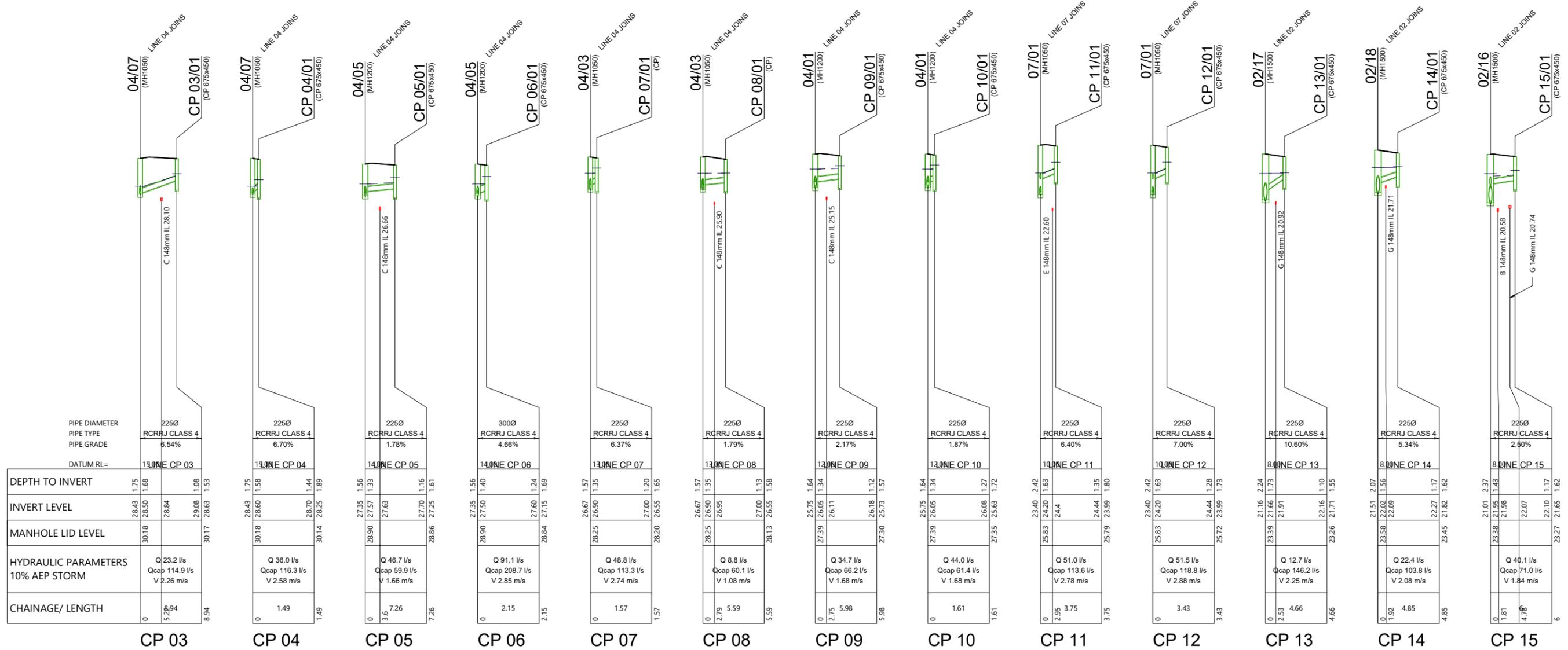


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER LONGSECTIONS
SHEET 6

STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3505-DR	

STORMWATER NOTES

- ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
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			APPROVED	BF

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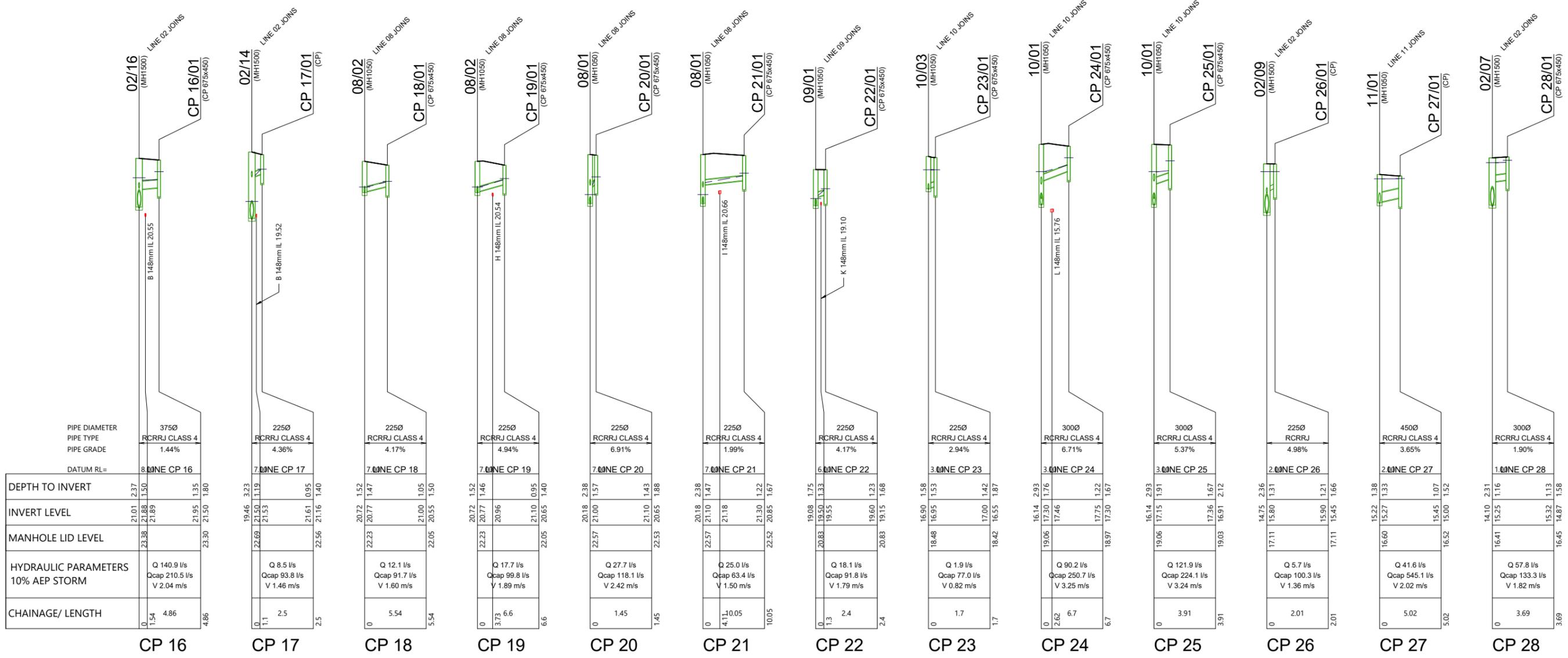


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER LONGSECTIONS
SHEET 7

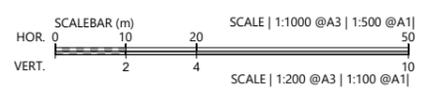
STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3506-DR	

STORMWATER NOTES

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PIPE DIAMETER	PIPE TYPE	PIPE GRADE	DATUM RL=	DEPTH TO INVERT	INVERT LEVEL	MANHOLE LID LEVEL	HYDRAULIC PARAMETERS 10% AEP STORM	CHAINAGE/ LENGTH
375Ø	RCRRJ CLASS 4	1.44%	8.00	2.37	21.01	23.38	Q 140.9 l/s Qcap 210.5 l/s V 2.04 m/s	0 1.54 4.86
225Ø	RCRRJ CLASS 4	4.36%	7.00	3.23	19.46	22.69	Q 8.5 l/s Qcap 93.8 l/s V 1.46 m/s	0 1.1 2.5
225Ø	RCRRJ CLASS 4	4.17%	7.00	1.52	20.72	22.23	Q 12.1 l/s Qcap 91.7 l/s V 1.60 m/s	0 5.54
225Ø	RCRRJ CLASS 4	4.94%	7.00	1.46	20.72	22.23	Q 17.7 l/s Qcap 99.8 l/s V 1.89 m/s	0 3.7 6.6
225Ø	RCRRJ CLASS 4	6.91%	7.00	2.38	20.18	22.57	Q 27.7 l/s Qcap 118.1 l/s V 2.42 m/s	0 1.45
225Ø	RCRRJ CLASS 4	1.99%	7.00	1.47	20.18	22.57	Q 25.0 l/s Qcap 63.4 l/s V 1.50 m/s	0 4.1 10.05
225Ø	RCRRJ CLASS 4	4.17%	6.00	1.75	19.08	20.83	Q 18.1 l/s Qcap 91.8 l/s V 1.79 m/s	0 1.3 2.4
225Ø	RCRRJ CLASS 4	2.94%	3.00	1.58	16.90	18.48	Q 1.9 l/s Qcap 77.0 l/s V 0.82 m/s	0 1.7
300Ø	RCRRJ CLASS 4	6.71%	3.00	2.93	16.14	19.06	Q 90.2 l/s Qcap 250.7 l/s V 3.25 m/s	0 2.62 6.7
300Ø	RCRRJ CLASS 4	5.37%	3.00	1.91	16.14	19.06	Q 121.9 l/s Qcap 224.1 l/s V 3.24 m/s	0 3.91
225Ø	RCRRJ CLASS 4	4.98%	2.00	1.31	14.75	17.11	Q 5.7 l/s Qcap 100.3 l/s V 1.36 m/s	0 2.01
450Ø	RCRRJ CLASS 4	3.65%	2.00	1.38	15.22	16.60	Q 41.6 l/s Qcap 545.1 l/s V 2.02 m/s	0 5.02
300Ø	RCRRJ CLASS 4	1.90%	1.00	2.31	14.10	16.41	Q 57.8 l/s Qcap 133.3 l/s V 1.82 m/s	0 3.69



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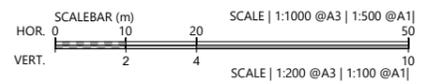
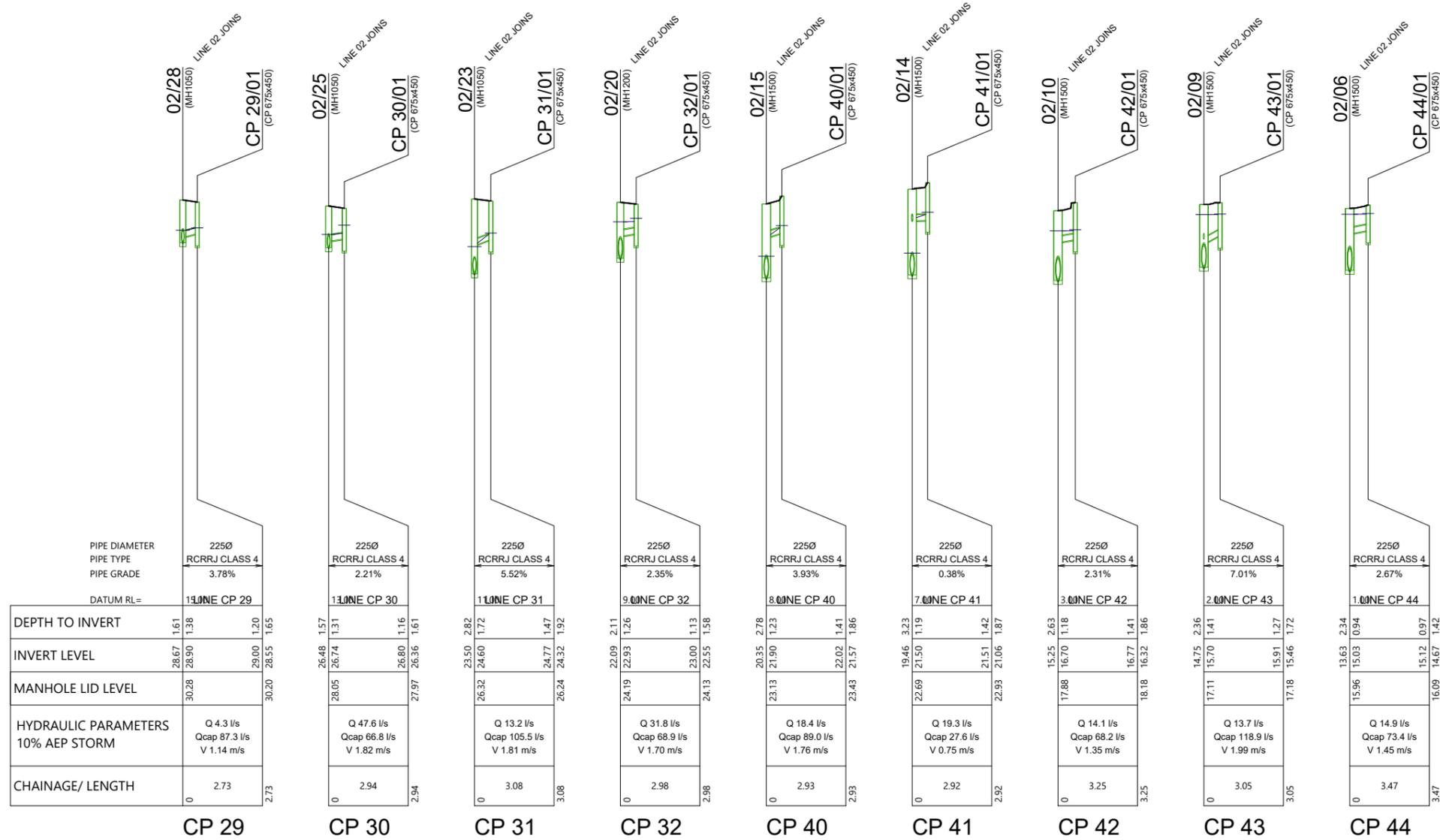


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER LONGSECTIONS
SHEET 8

STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3507-DR	

STORMWATER NOTES

- ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
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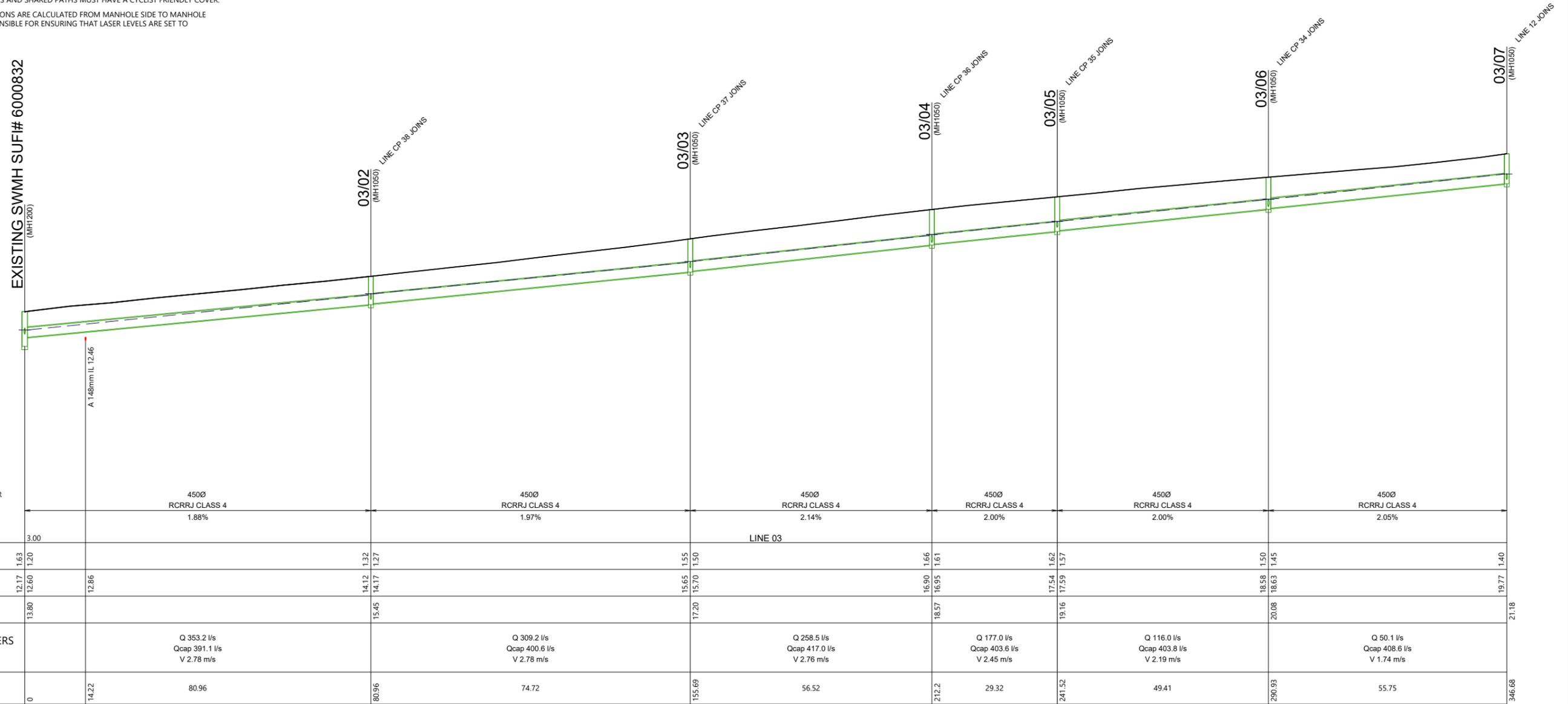


ARATAKI DEVELOPMENT - HAVELOCK NORTH
 STORMWATER LONGSECTIONS
 SHEET 9

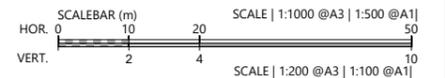
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SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3508-DR	

STORMWATER NOTES

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03



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
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2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



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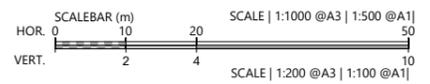
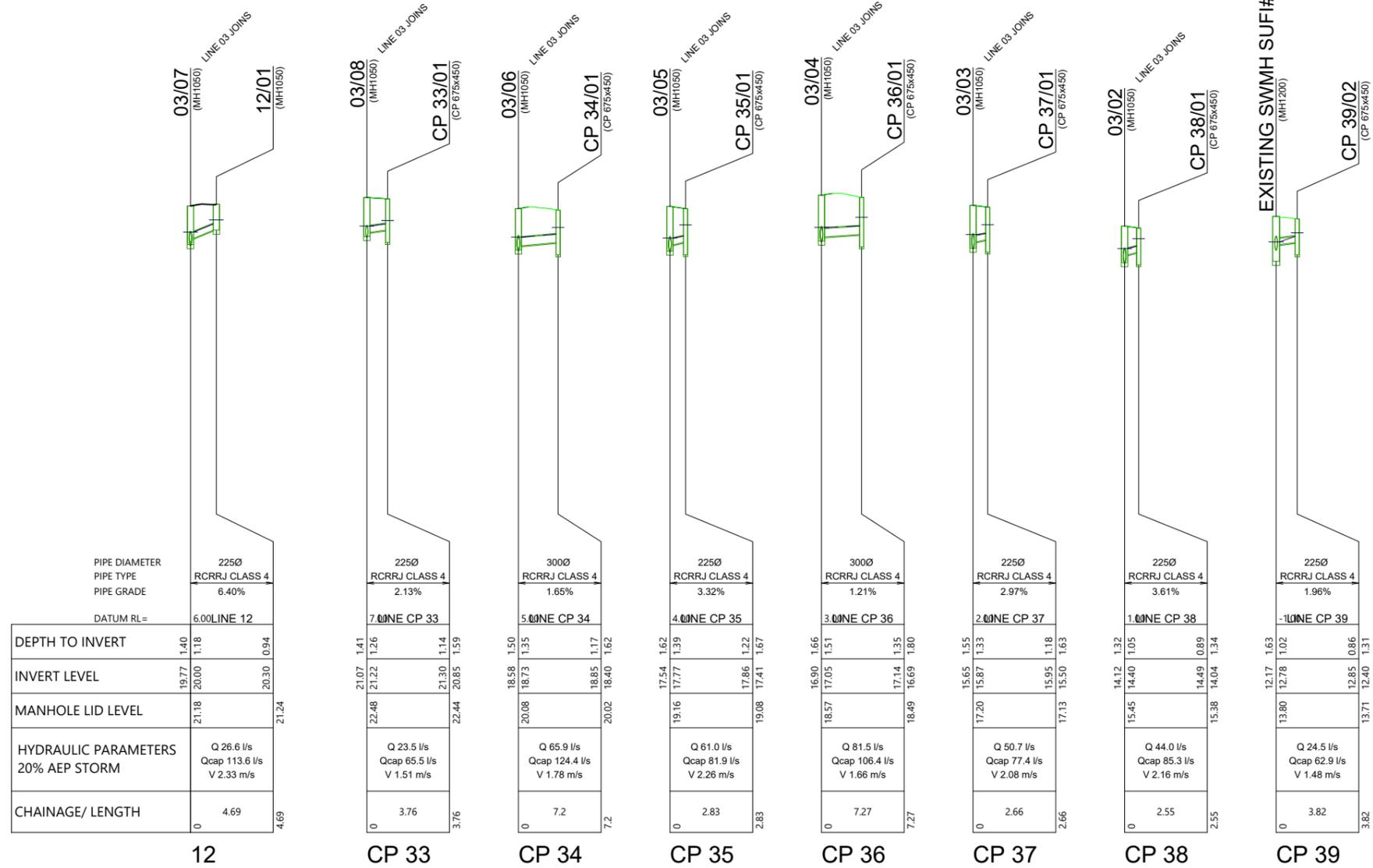


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER LONGSECTIONS
SHEET 10

STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3509-DR	

STORMWATER NOTES

- ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 STORMWATER LONGSECTIONS
 SHEET 11

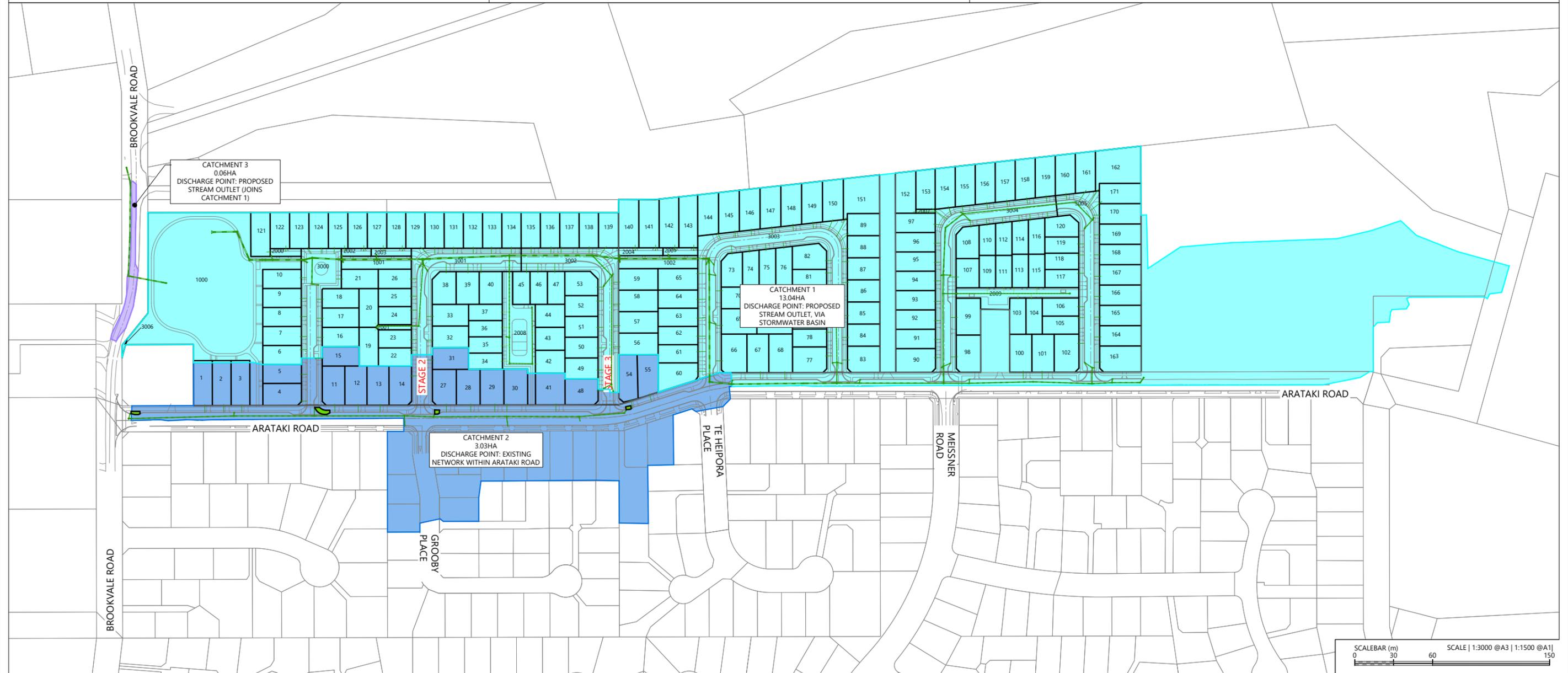
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SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3510-DR	

LEGEND

- PROPOSED STORMWATER LINE AND PIT
- PROPOSED SUMP
- PROPOSED RAINGARDEN
- CATCHMENT 1
- CATCHMENT 2
- CATCHMENT 3

NOTES

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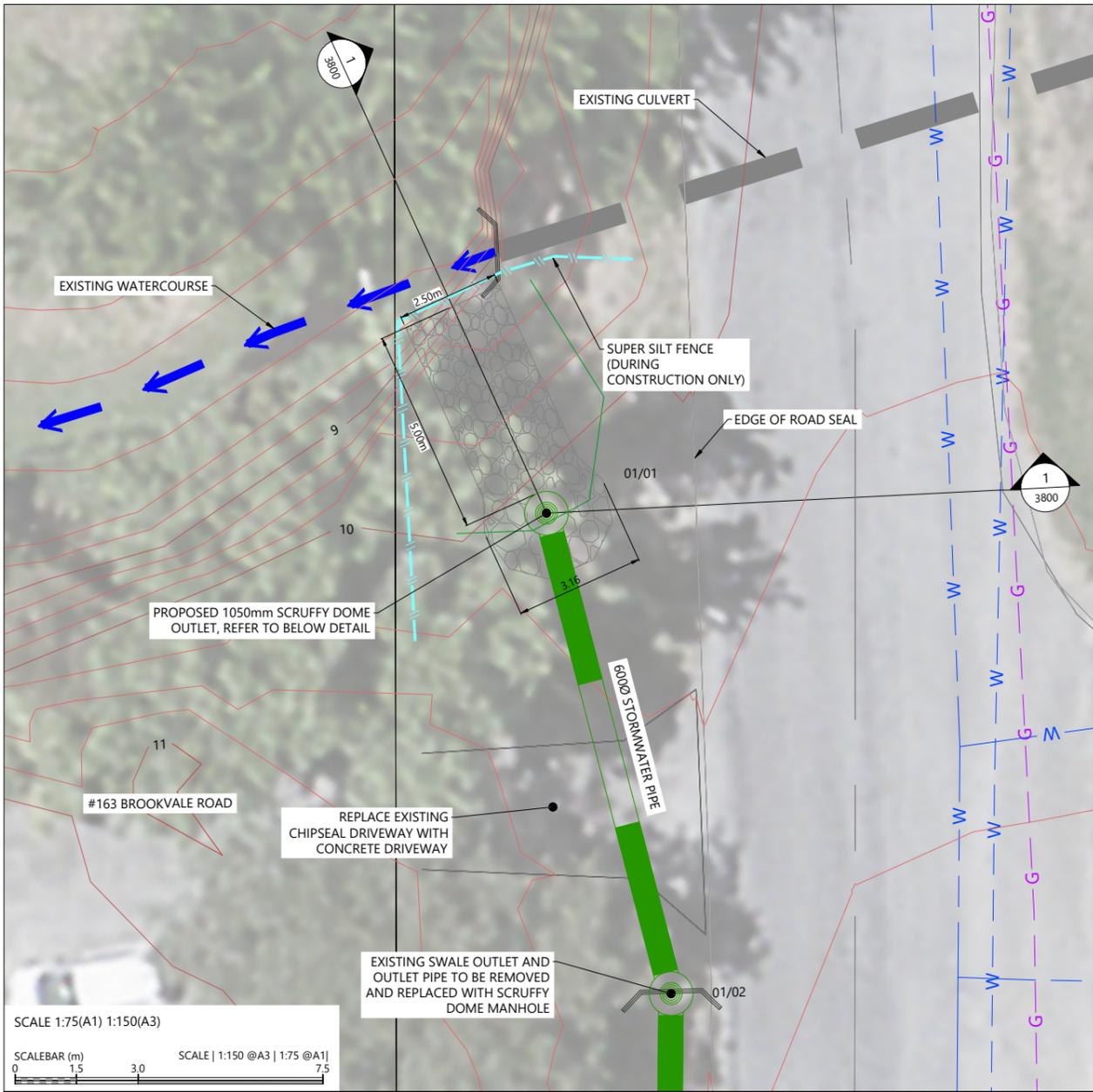


ARATAKI DEVELOPMENT - HAVELOCK NORTH

STORMWATER 10 YEAR CATCHMENT PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:3000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3600-DR	

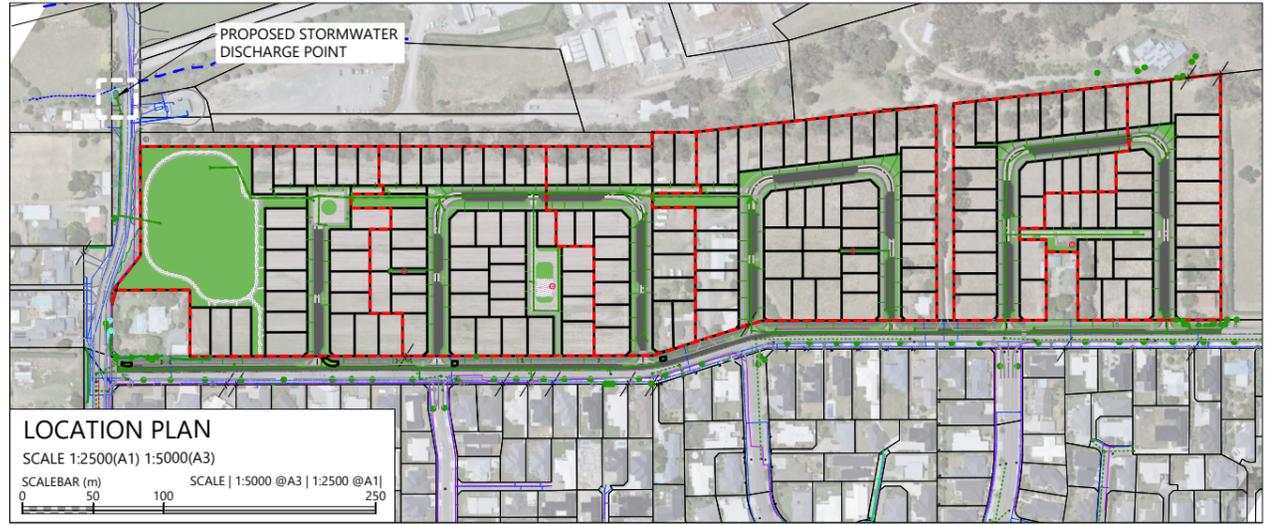


LEGEND

- PROPOSED STORMWATER LINE AND PIT
- PROPOSED RIPRAP
- EXISTING CONTOURS (1m)
- EXISTING MINOR CONTOURS (0.25m)
- EXISTING WATERMAIN
- EXISTING GAS

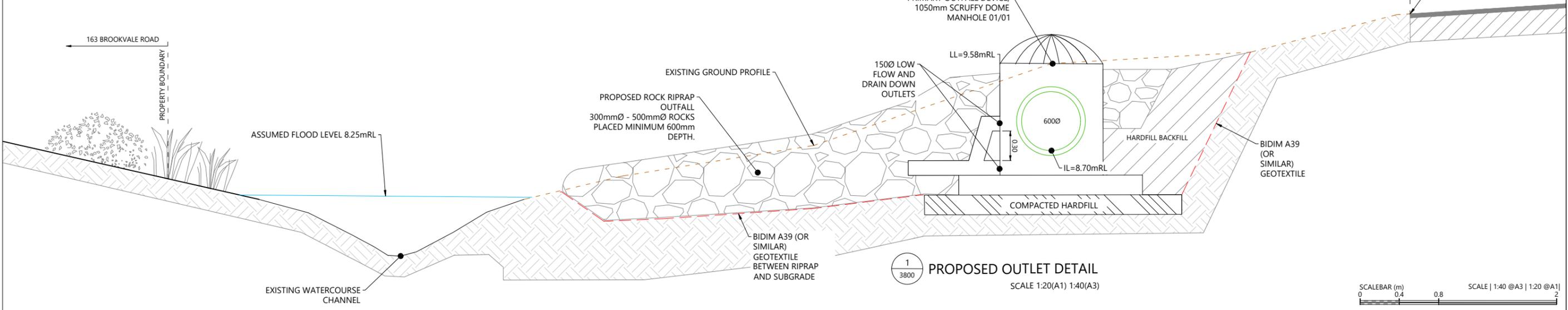
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SUMMARY OF FLOWS FROM ARATAKI DEVELOPMENT TO EXISTING WATERCOURSE

STORM EVENT	PRE-DEVELOPMENT FLOW (L/s)	POST-DEVELOPMENT FLOW (L/s)
2-YR	200	137
10-YR	447	348
100-YR	900 (ATTENUATION REQUIREMENT: 80% OF PRE-DEVELOPMENT LEVEL = 720L/S)	690



REVISION DETAILS

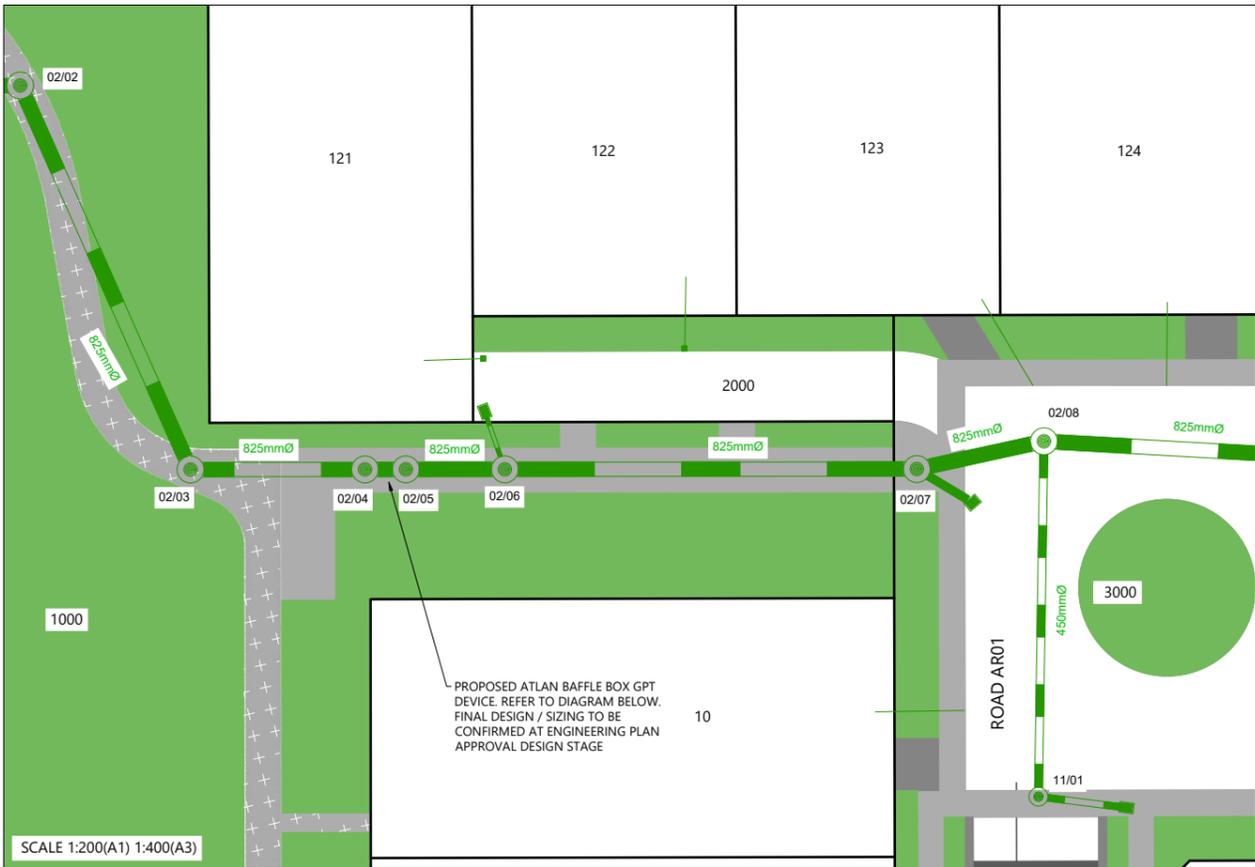
NO.	DESCRIPTION	INT	DATE	SURVEYED	WOODS
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER STREAM OUTLET DETAIL

STATUS	ISSUED FOR CONSENT	REV
SCALE	AS SHOWN	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3800-DR	

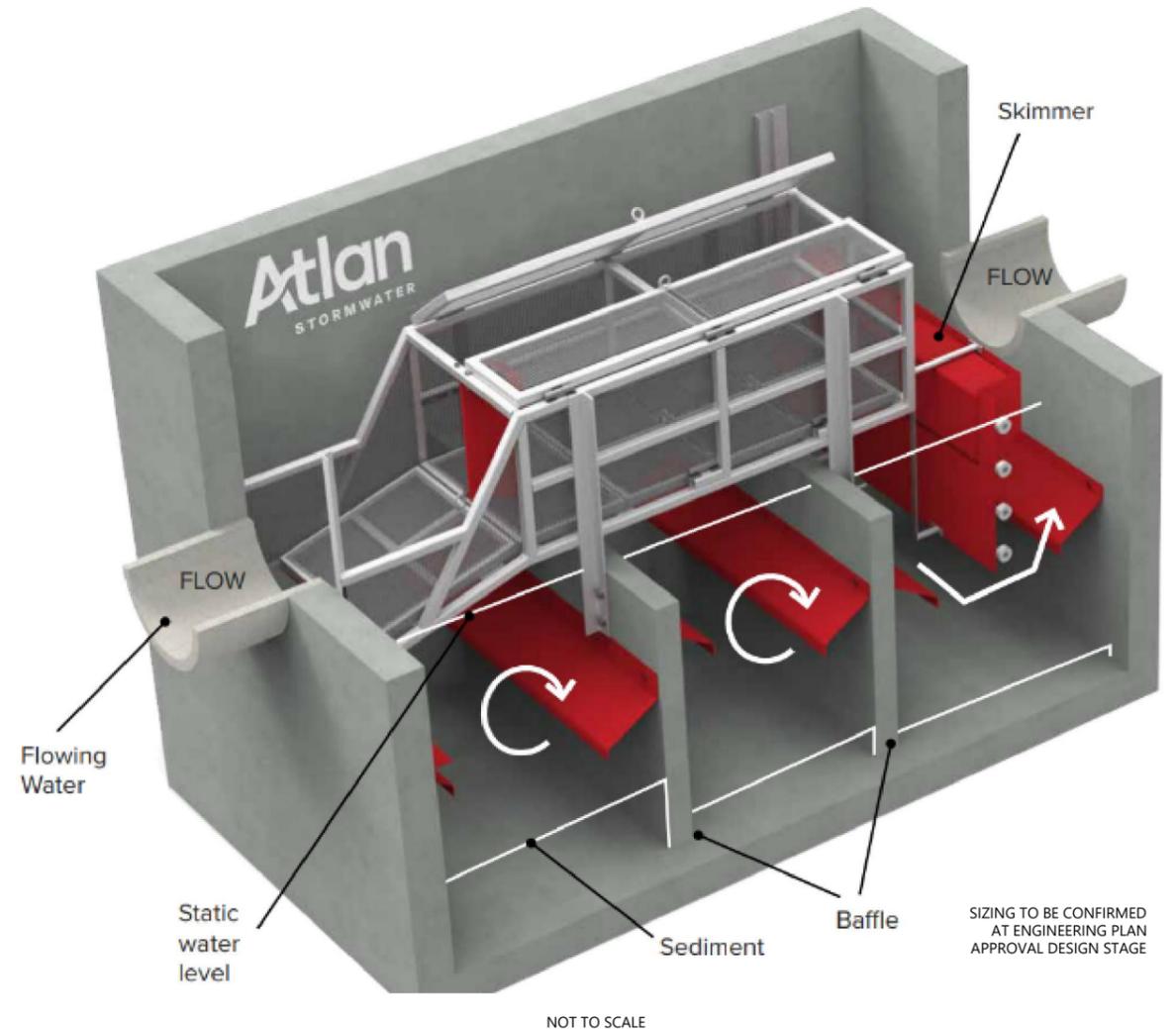
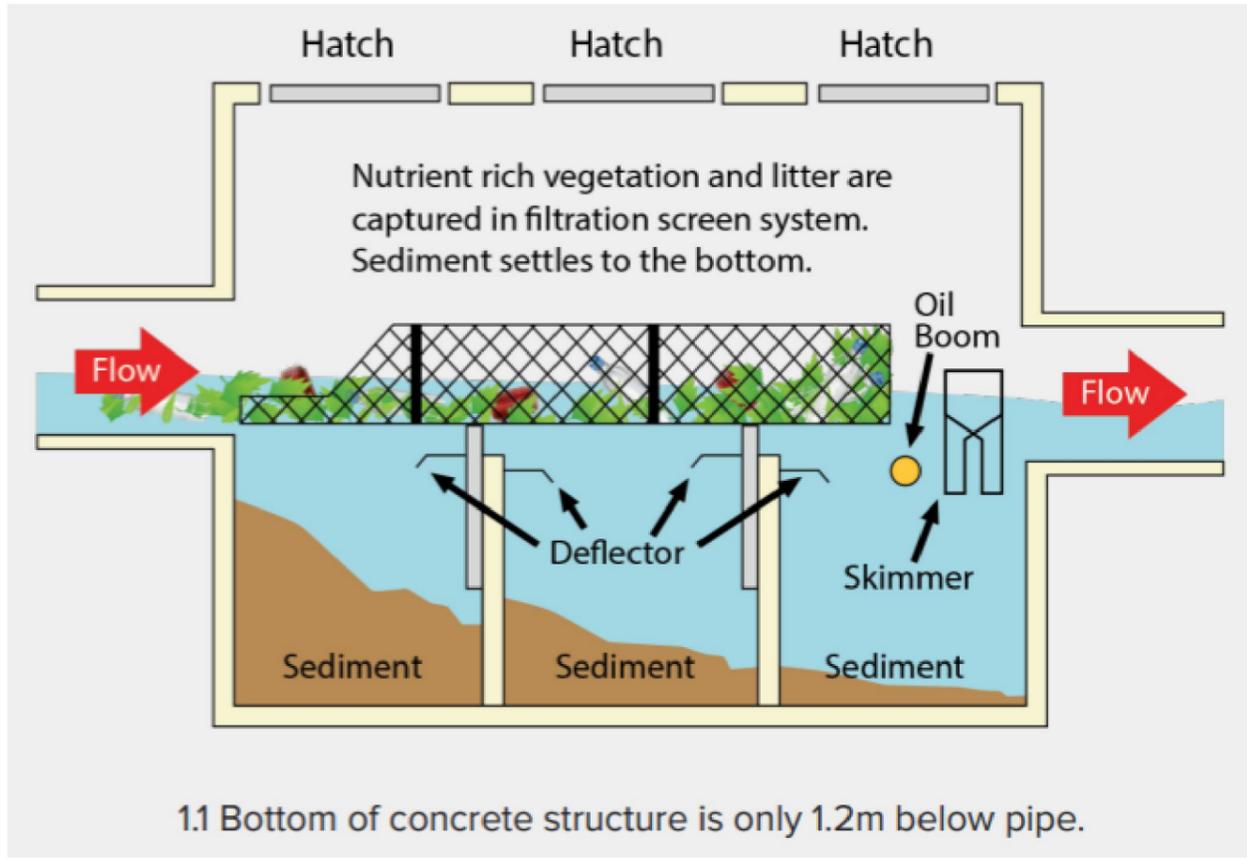


LEGEND

- PROPOSED STORMWATER LINE AND PIT
- PROPOSED SUMP
- PROPOSED STORMWATER KERB OUTLET
- PROPOSED BUBBLE UP SUMP
- PROPOSED STORMWATER LATERAL CONNECTION

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
2. FOR PIPE BEDDING DETAILS REFER TO STANDARD DETAIL SHEETS UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTIONS IN WHICH CASE SUCH NOTES TAKE PRECEDENCE.
3. CONCRETE PIPES CLASSES ARE NOTED ON THE DRAINAGE LONG SECTIONS. ALL SUMP LEADS TO BE RCRRJ CLASS 4.
4. ALL PIPE CROSSINGS UNDER ROADS TO BE HARDFILL BACKFILLED.
5. ALL SW LOT CONNECTIONS TO BE 150MMØ. RAMPED RISERS ARE TO BE EXTENDED & CAPPED OFF WITHIN 1.0M OF THE FINISHED GROUND SURFACE.
6. SW LOT CONNECTIONS ARE VIA KERB OUTLETS UNLESS OTHERWISE STATED. KERB OUTLETS TO FOLLOW HASTINGS DISTRICT COUNCIL ENGINEERING CODE OF PRACTICE STANDARD DRAWINGS WS 105 AND WS 106.
7. ALL MANHOLES TO BE 1050MMØ UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTION IN WHICH CASE SUCH NOTES SHALL TAKE PRECEDENCE.
8. THE CONTRACTOR IS TO PEG MANHOLES & CHECK FINISHED LEVELS (MH LID LEVELS) PRIOR TO ORDERING MANHOLES.
9. ALL MANHOLE LIDS IN CYCLEWAYS AND SHARED PATHS MUST HAVE A CYCLIST FRIENDLY COVER.
10. PIPE GRADES ON THE LONG SECTIONS ARE CALCULATED FROM MANHOLE SIDE TO MANHOLE SIDE. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT LASER LEVELS ARE SET TO COMPENSATE FOR THIS.



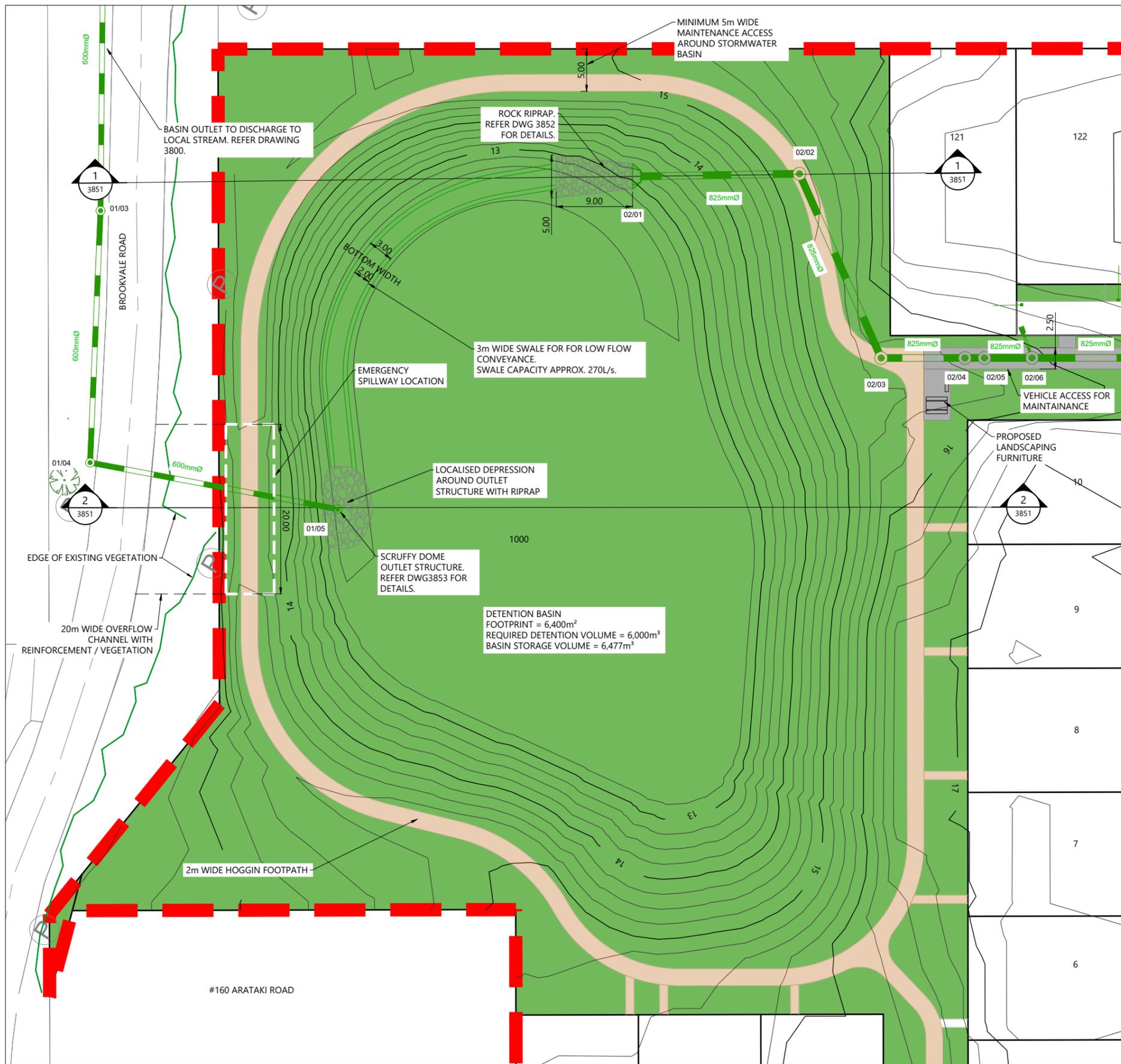
REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF

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ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER GPT DETAIL

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:400 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3810-DR	



LEGEND

- STAGE BOUNDARIES
- PROPOSED MAJOR CONTOURS (1m)
- PROPOSED STORMWATER LINE AND PIT
- PROPOSED SUMP
- PROPOSED STORMWATER WINGWALL OUTLET
- PROPOSED ROCK RIPRAP

NOTES

1. STORMWATER DETENTION DRY BASIN TO BE LINED WITH IMPERMEABLE LINER AND DRAINED VIA SUBSOIL DRAINS. DETAILED DESIGN TO BE UNDERTAKEN AT ENGINEERING PLAN APPROVAL STAGE.
2. REFER APPENDIX D OF STORMWATER MANAGEMENT PLAN FOR DRY BASIN DESIGN DETAILS.
3. REFER LANDSCAPE DESIGN FOR PLANTING DETAILS.



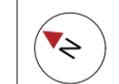
REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR INFORMATION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	AB
			APPROVED	BF



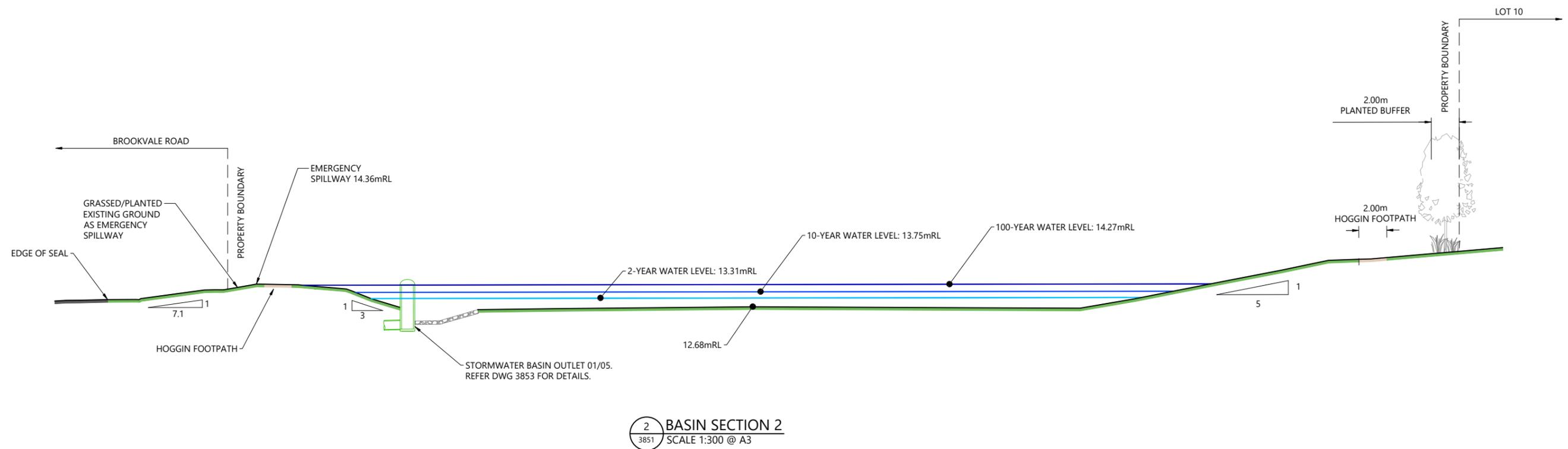
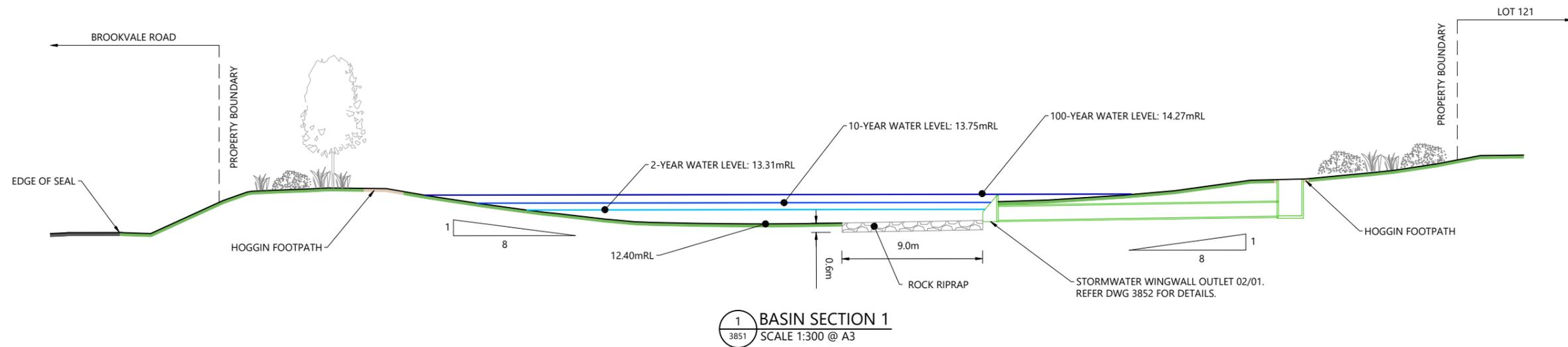
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER BASIN LAYOUT PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:500 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3850-DR	



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
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2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
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			APPROVED	BF

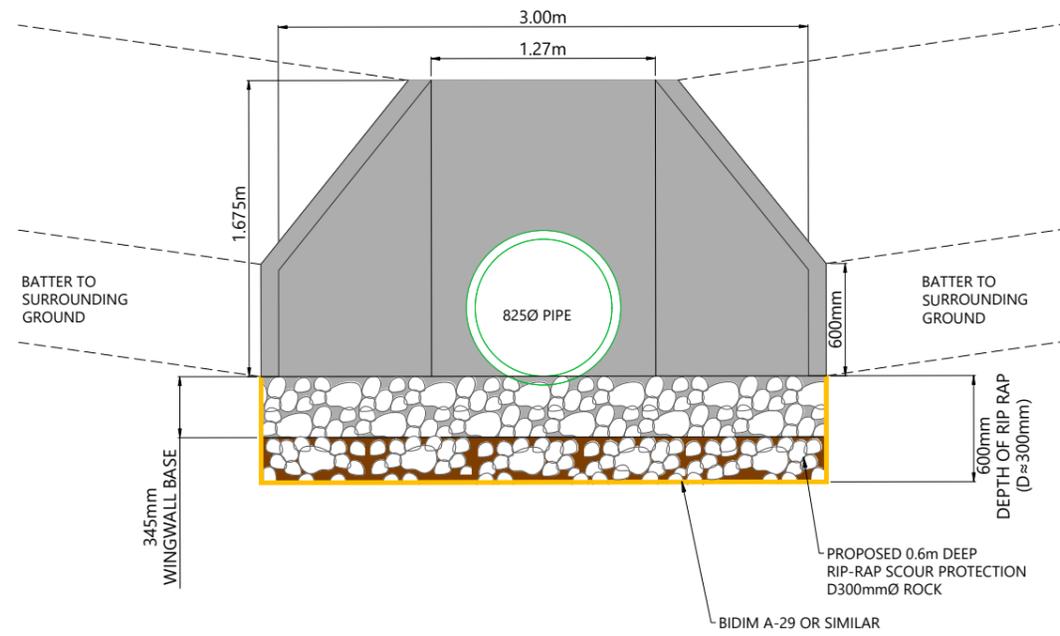


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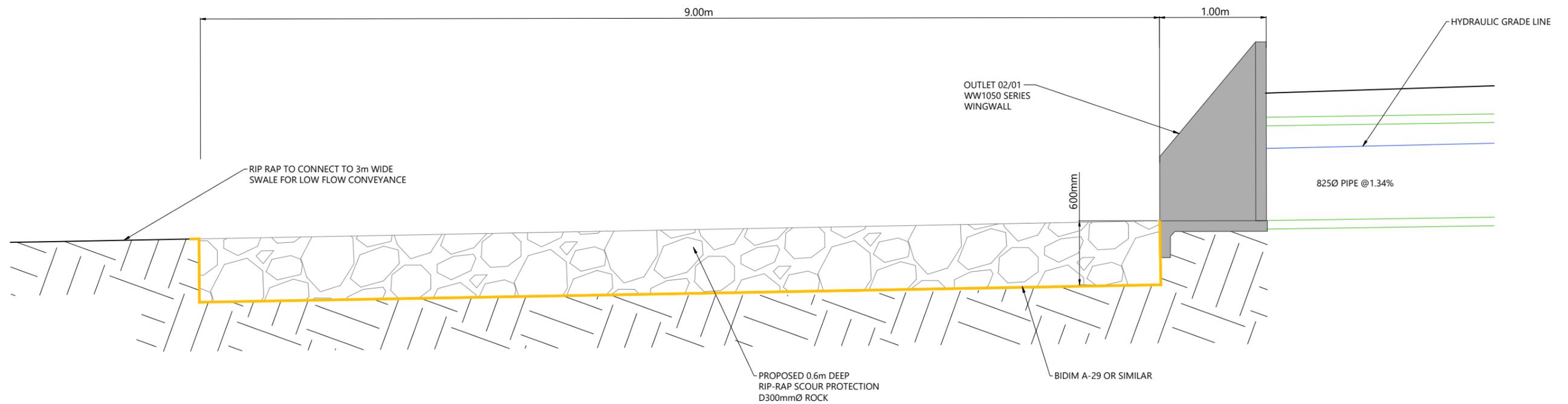


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER BASIN SECTIONS

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:300 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3851-DR	



WINGWALL SECTION AT OUTLET 02/01



RIPRAP SECTION AT OUTLET 02/01

SCALEBAR (m) 0 0.4 0.8 SCALE | 1:40 @A3 | 1:20 @A1

REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR INFORMATION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	AB
			APPROVED	BF



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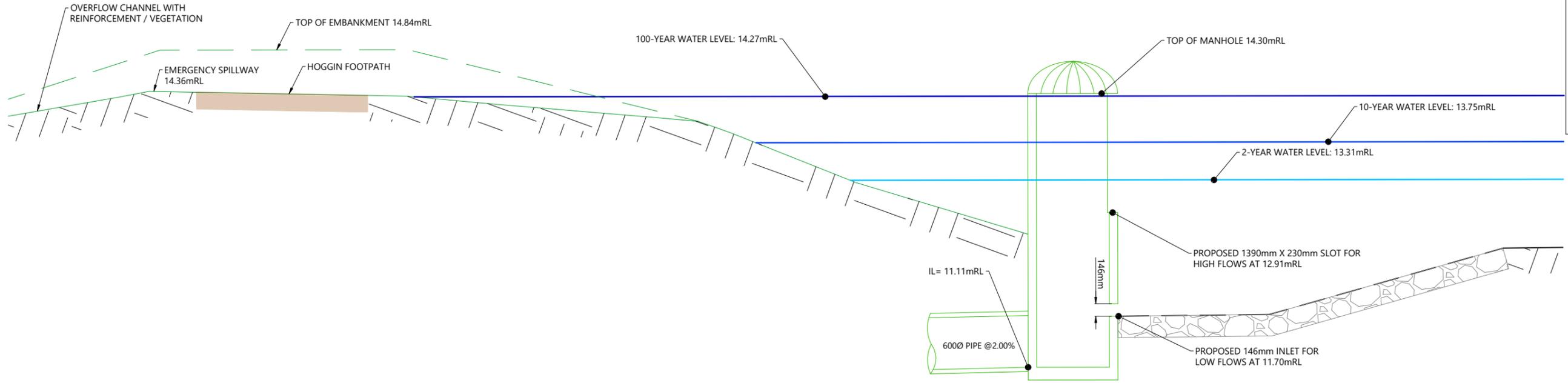
WOODS.CO.NZ



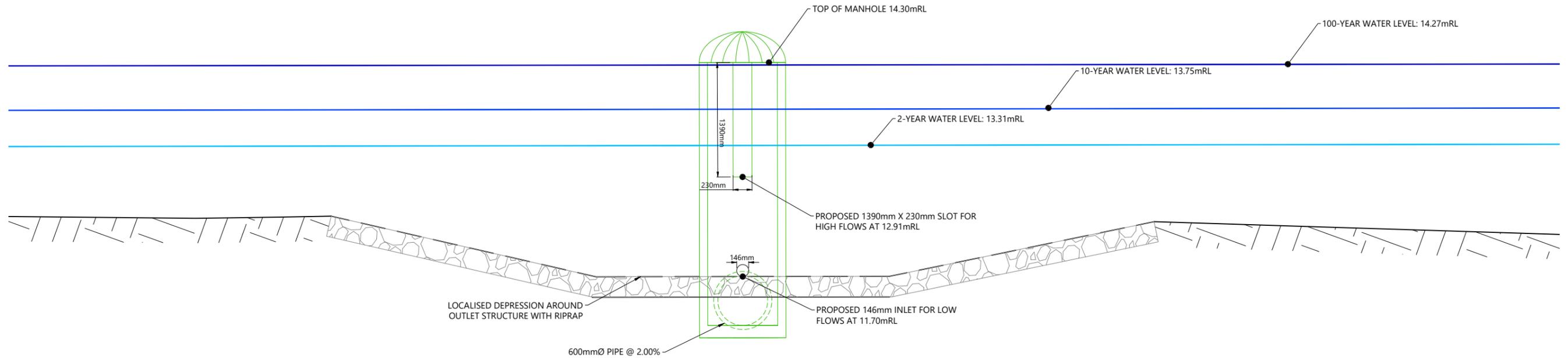
ARATAKI DEVELOPMENT - HAVELOCK NORTH

WINGWALL OUTLET 02/01 DETAILS

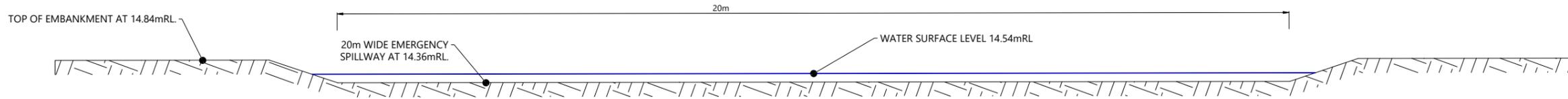
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SCALE	1:40 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3852-DR	



OUTLET STRUCTURE 01/05 SECTION 1
SCALE 1:50 @ A3



OUTLET STRUCTURE 01/05 SECTION 2
SCALE 1:50 @ A3



EMERGENCY SPILLWAY SECTION
SCALE 1:100 @ A3



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR INFORMATION	AS	APR 2025	DESIGNED	BK
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	AB
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER BASIN OUTLET 01/05 DETAILS

STATUS	ISSUED FOR CONSENT	REV
SCALE	AS SHOWN	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3853-DR	

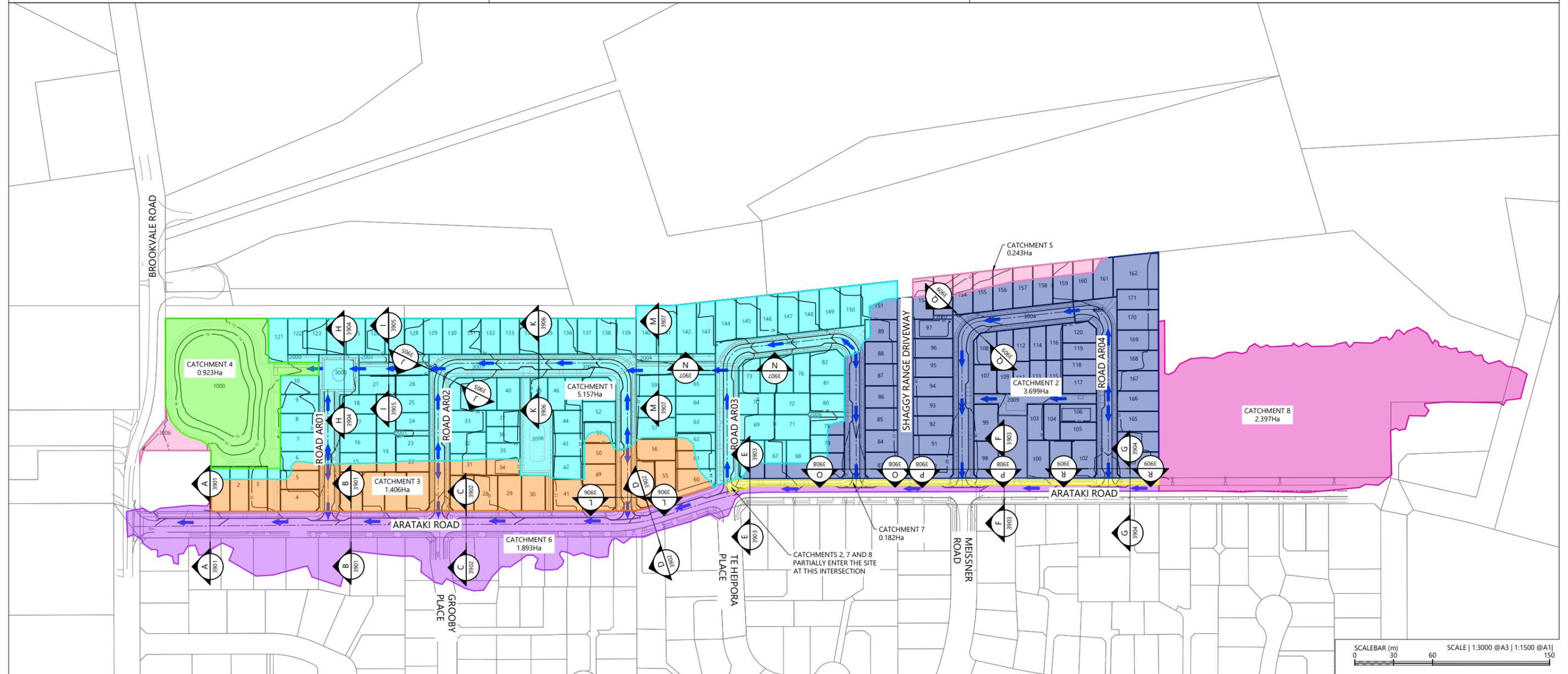
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LEGEND

- PROPOSED OVERLAND FLOW PATH
- PROPOSED MAJOR CONTOURS (1m) 23
- CATCHMENT 1 - SITE AREA DISCHARGING TO DRY POND
- CATCHMENT 2 - SITE AREA PARTIALLY DISCHARGING TO DRY POND
- CATCHMENT 3 - SITE AREA DISCHARGING TO ARATAKI ROAD
- CATCHMENT 4 - SITE RESERVE AREA DISCHARGING TO DRY POND
- CATCHMENT 5 - SITE AREA SHEETFLOWING TO SURROUNDING PROPERTIES
- CATCHMENT 6 - ARATAKI ROAD CATCHMENT
- CATCHMENT 7 - ARATAKI ROAD PARTIALLY DISCHARGING TO DRY POND
- CATCHMENT 8 - UPSTREAM CATCHMENT PARTIALLY DISCHARGING TO DRY POND

NOTES

1. REFER DRAWINGS 3901-3909 FOR OVERLAND FLOW PATH CROSS SECTIONS.
2. OVERLAND FLOWS, DEPTHS AND VELOCITIES HAVE BEEN EXTRACTED FROM HEC-RAS 2D MODEL.
3. ALL ROADS CALCULATED TO HAVE A d x v LESS THAN 0.4m²/S AT KERB INVERT.



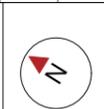
REVISION DETAILS	INT	DATE	SURVEYED	WOODS
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2 ISSUED FOR CONSENT	AS	MAY 2025	DRAWN	AS
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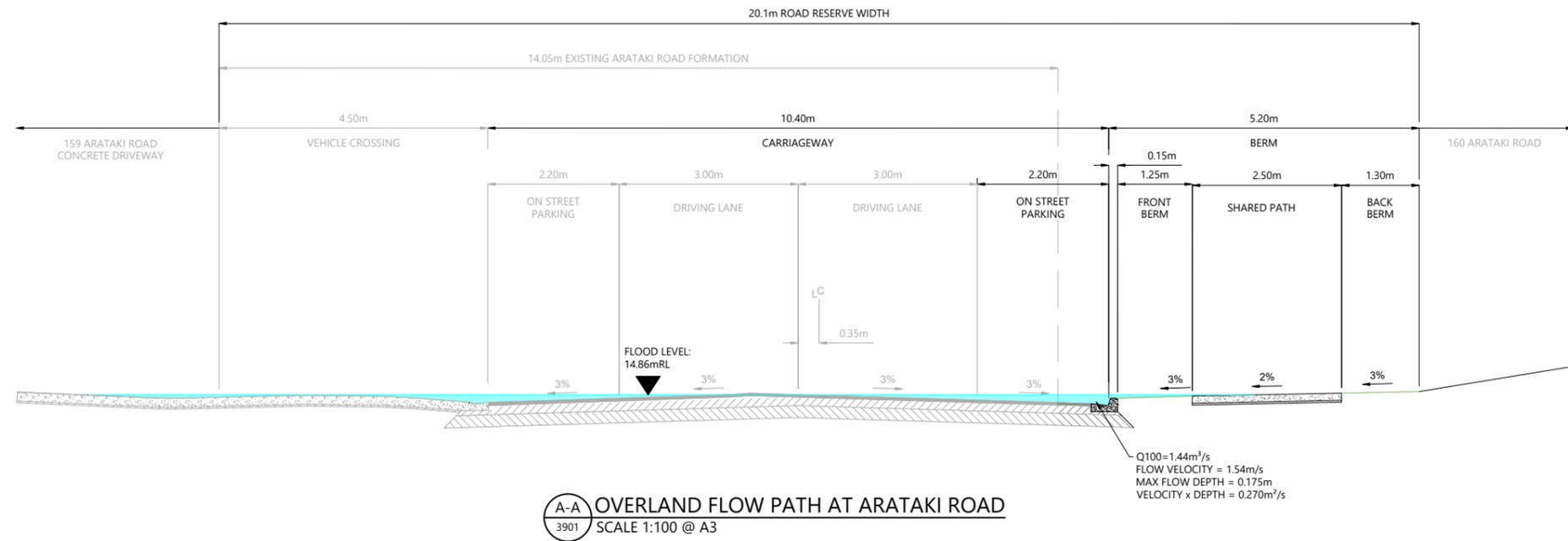
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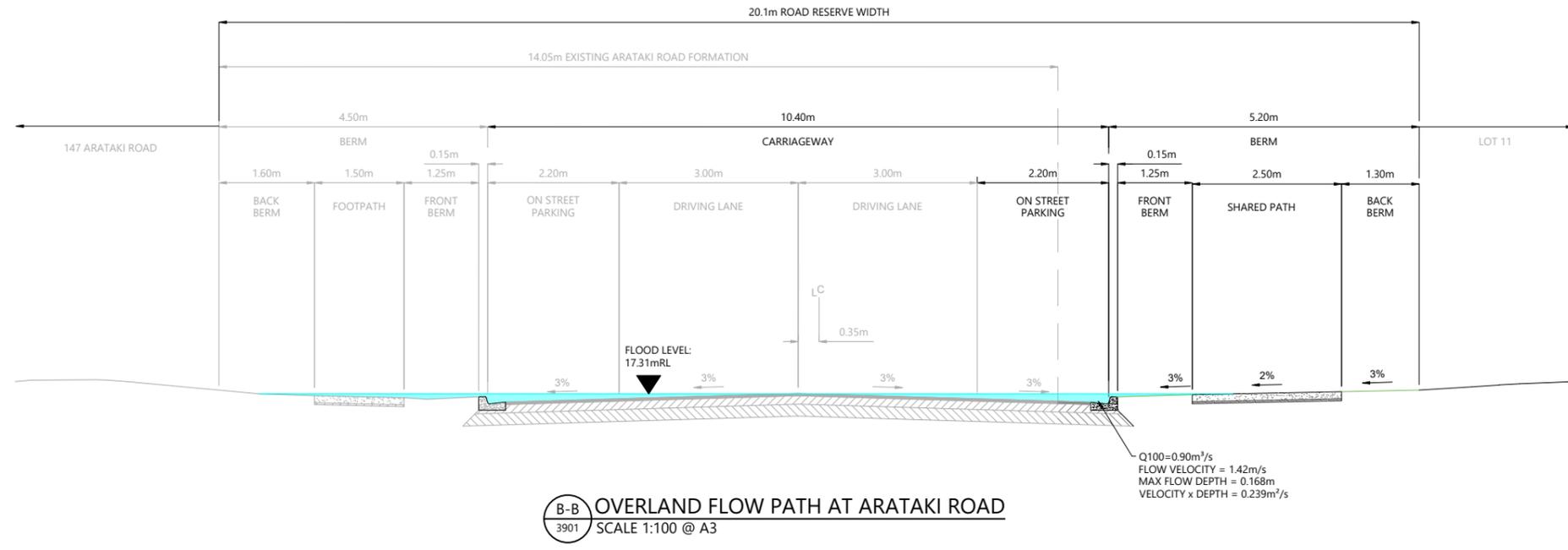
ARATAKI DEVELOPMENT - HAVELOCK NORTH
OVERLAND FLOW PATH
POST-DEVELOPMENT PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:3000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3900-DR	



- NOTES**
- OVERLAND FLOWS, DEPTHS AND VELOCITIES HAVE BEEN EXTRACTED FROM HEC-RAS 2D MODEL.
 - ALL ROADS CALCULATED TO HAVE A d x v LESS THAN 0.4m²/S AT KERB INVERT.



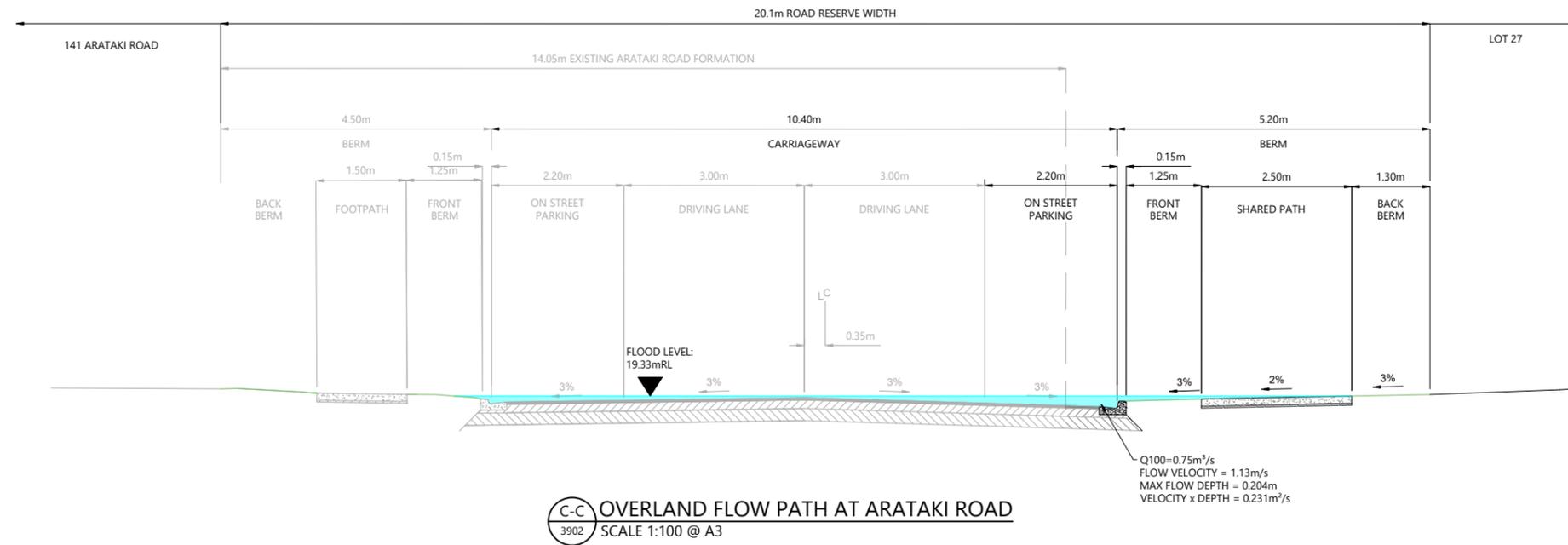
REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR INFORMATION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF

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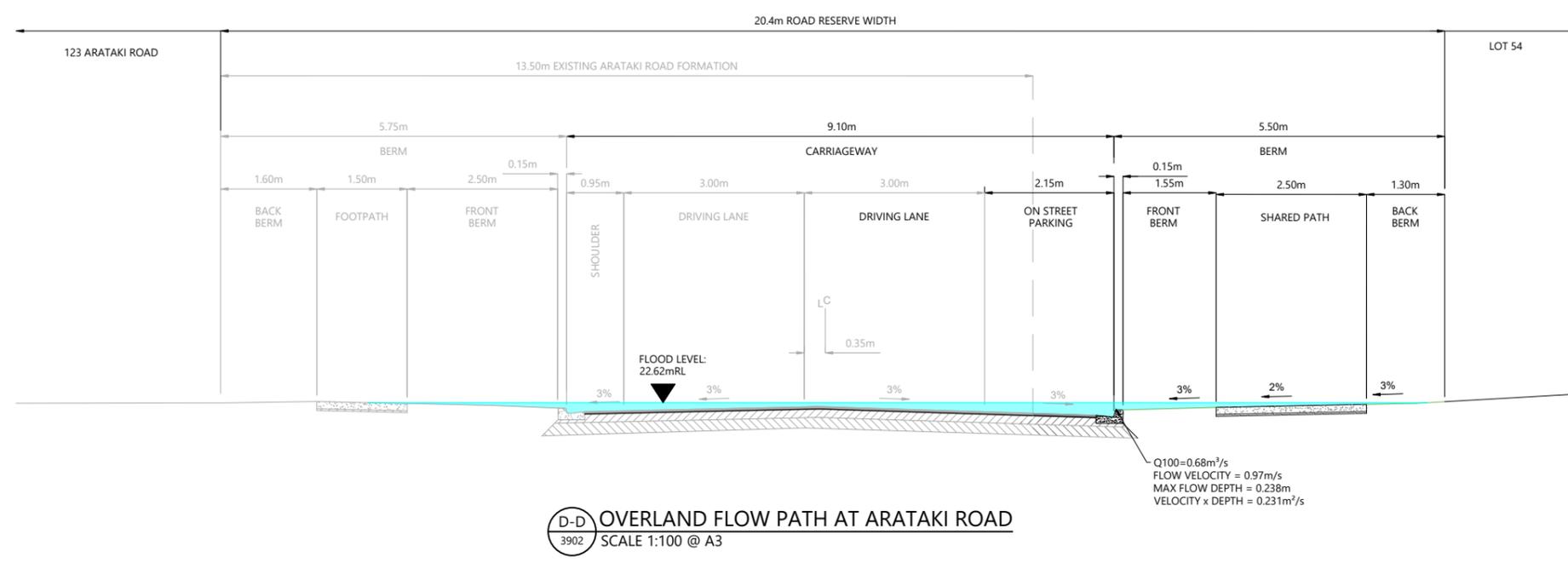


ARATAKI DEVELOPMENT - HAVELOCK NORTH
OVERLAND FLOW SECTIONS

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:100 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3901-DR	



- NOTES**
1. OVERLAND FLOWS, DEPTHS AND VELOCITIES HAVE BEEN EXTRACTED FROM HEC-RAS 2D MODEL.
 2. ALL ROADS CALCULATED TO HAVE A d x v LESS THAN 0.4m²/s AT KERB INVERT.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR INFORMATION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
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			APPROVED	BF



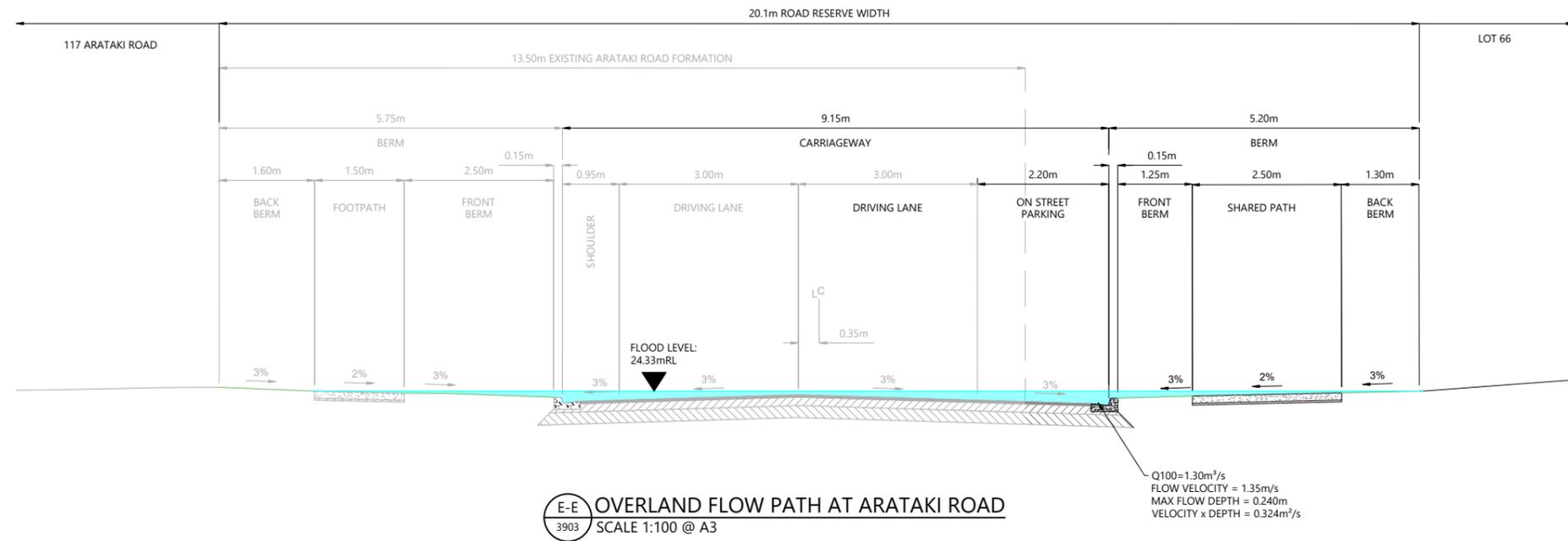
BUILDING B, LEVEL 1
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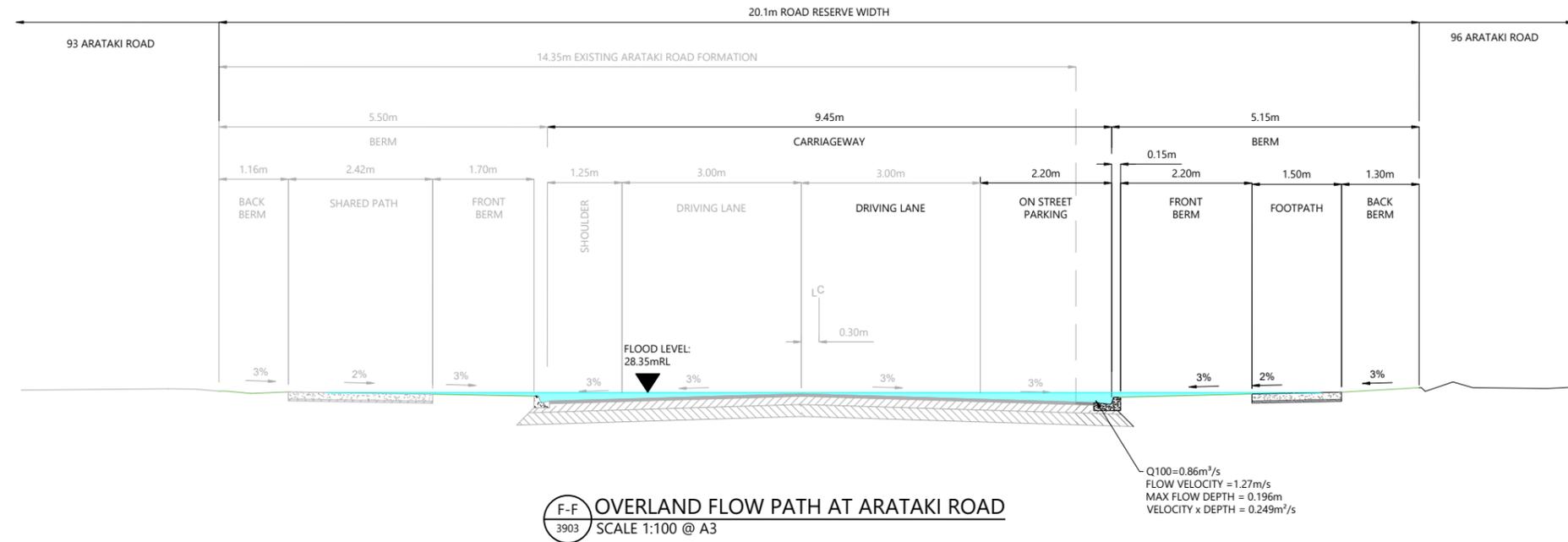
ARATAKI DEVELOPMENT - HAVELOCK NORTH

OVERLAND FLOW SECTIONS

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:100 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3902-DR	



- NOTES**
1. OVERLAND FLOWS, DEPTHS AND VELOCITIES HAVE BEEN EXTRACTED FROM HEC-RAS 2D MODEL.
 2. ALL ROADS CALCULATED TO HAVE A d x v LESS THAN 0.4m²/s AT KERB INVERT.



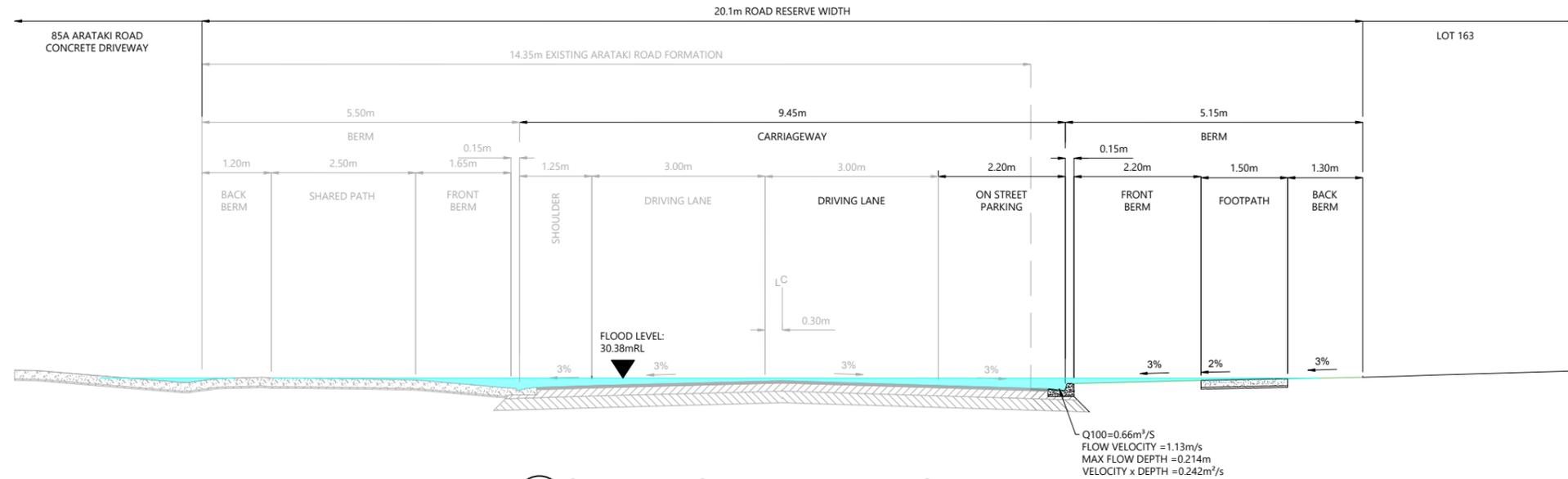
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1 ISSUED FOR INFORMATION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF

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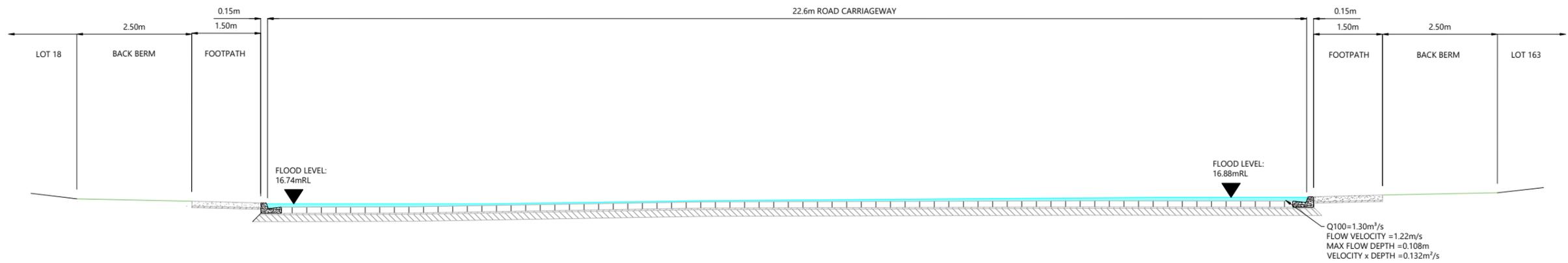
ARATAKI DEVELOPMENT - HAVELOCK NORTH
OVERLAND FLOW SECTIONS

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:100 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3903-DR	



G-G OVERLAND FLOW PATH AT ARATAKI ROAD
SCALE 1:100 @ A3

- NOTES**
1. OVERLAND FLOWS, DEPTHS AND VELOCITIES HAVE BEEN EXTRACTED FROM HEC-RAS 2D MODEL.
 2. ALL ROADS CALCULATED TO HAVE A $d \times v$ LESS THAN $0.4m^2/s$ AT KERB INVERT.



H-H OVERLAND FLOW PATH AT ROAD AR01
SCALE 1:100 @ A3



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR INFORMATION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



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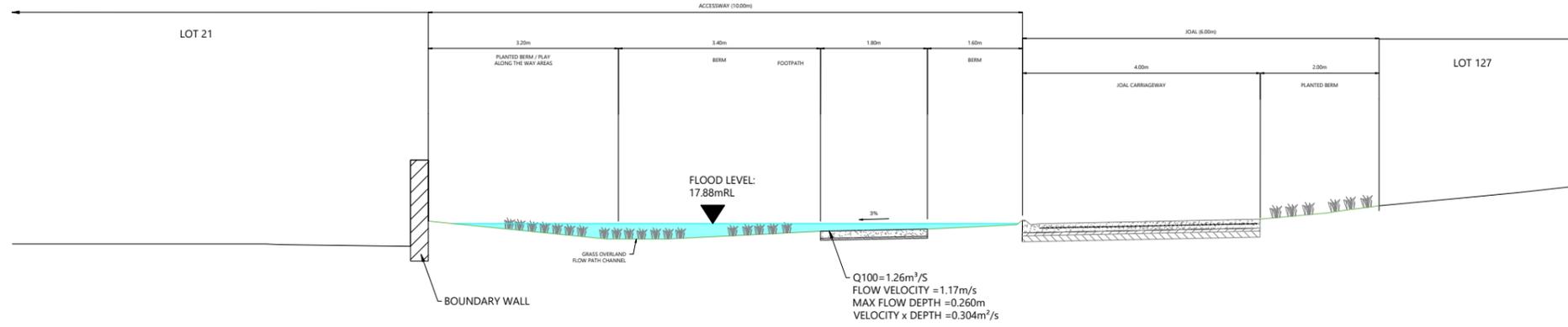


ARATAKI DEVELOPMENT - HAVELOCK NORTH

OVERLAND FLOW SECTIONS

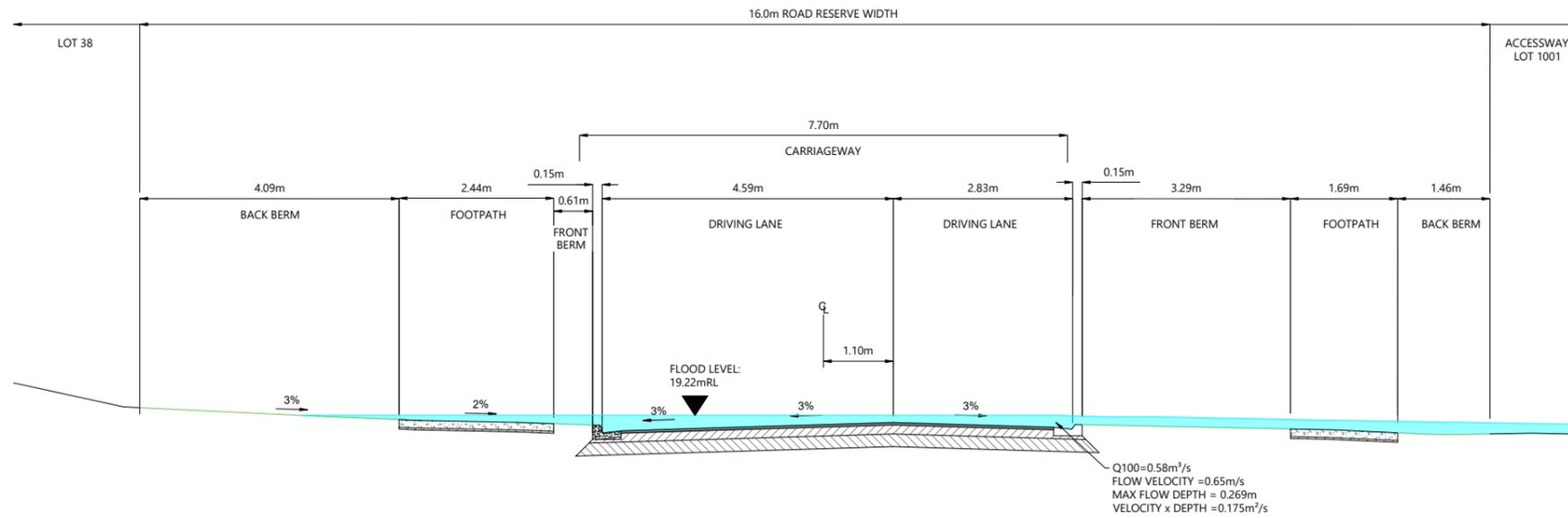
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:100 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3904-DR	

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- NOTES**
- OVERLAND FLOWS, DEPTHS AND VELOCITIES HAVE BEEN EXTRACTED FROM HEC-RAS 2D MODEL.
 - ALL ROADS CALCULATED TO HAVE A $d \times v$ LESS THAN $0.4m^2/s$ AT KERB INVERT.

I-I OVERLAND FLOW PATH AT ACCESSWAY LOT 1001
SCALE 1:100 @ A3



J-J OVERLAND FLOW PATH AT ROAD AR02
SCALE 1:100 @ A3



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR INFORMATION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
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			APPROVED	BF



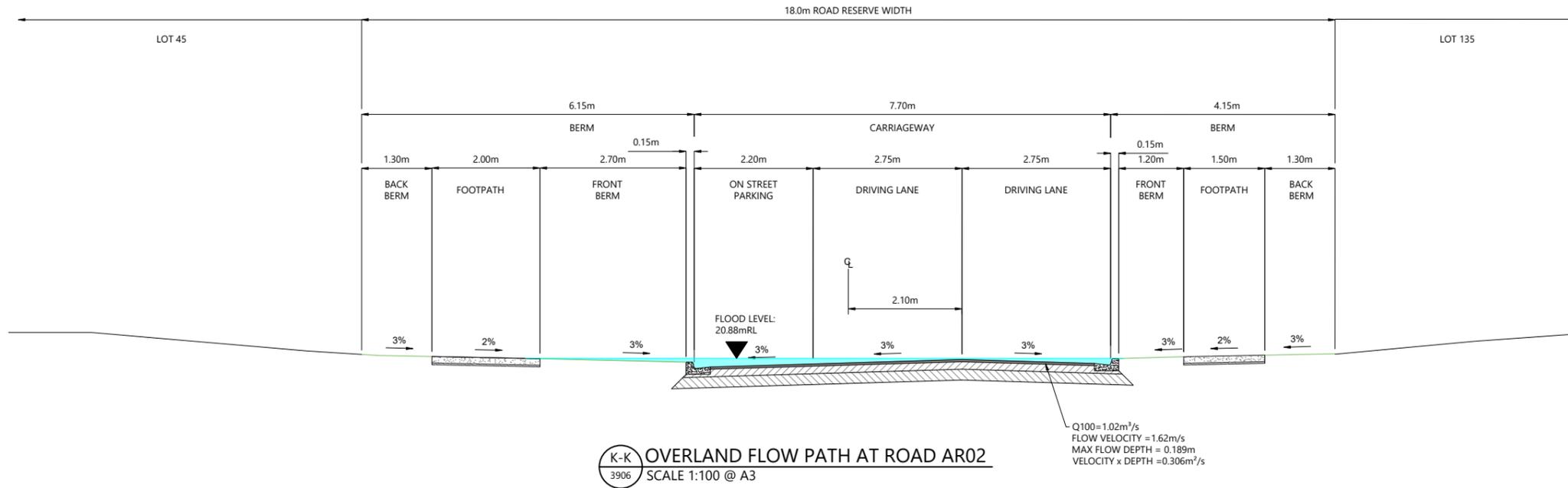
BUILDING B, LEVEL 1
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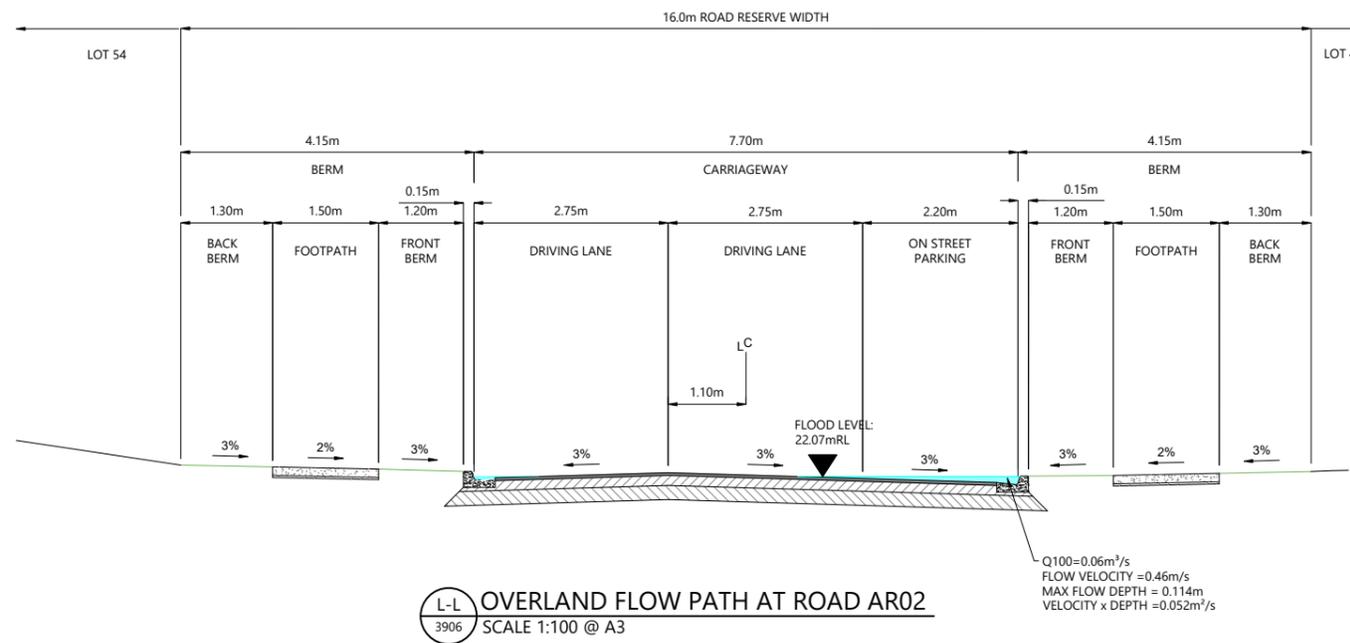


ARATAKI DEVELOPMENT - HAVELOCK NORTH
OVERLAND FLOW SECTIONS

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:100 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3905-DR	



- NOTES**
1. OVERLAND FLOWS, DEPTHS AND VELOCITIES HAVE BEEN EXTRACTED FROM HEC-RAS 2D MODEL.
 2. ALL ROADS CALCULATED TO HAVE A d x v LESS THAN 0.4m²/s AT KERB INVERT.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR INFORMATION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



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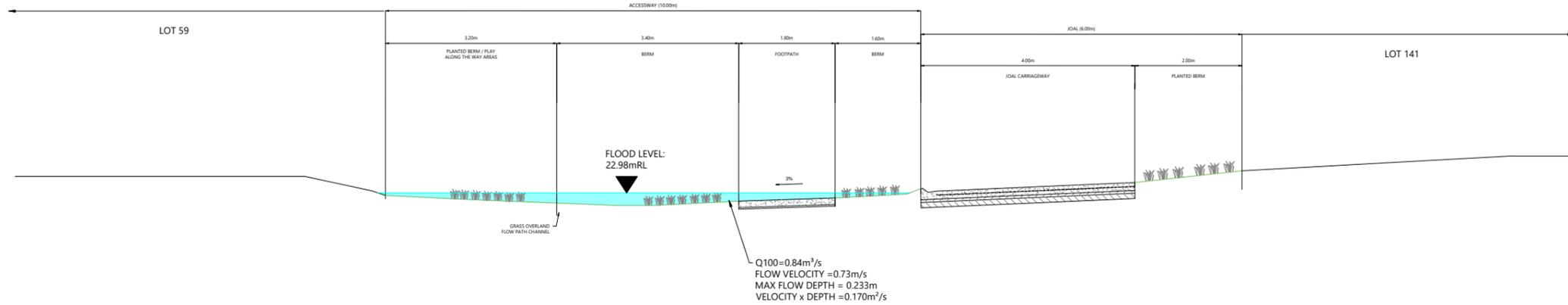


ARATAKI DEVELOPMENT - HAVELOCK NORTH

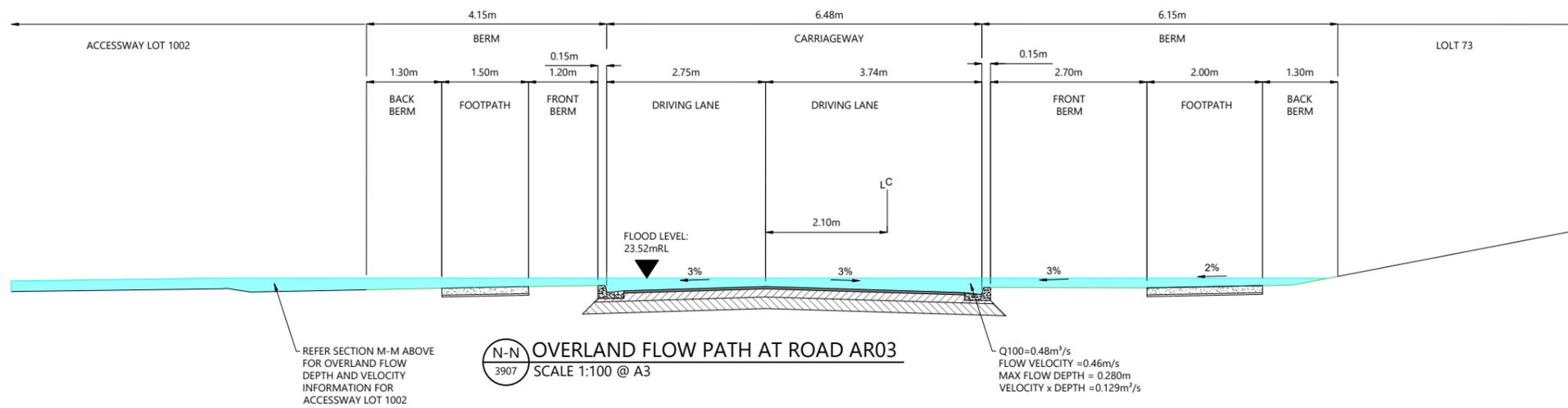
OVERLAND FLOW SECTIONS

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:100 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3906-DR	

- NOTES**
- OVERLAND FLOWS, DEPTHS AND VELOCITIES HAVE BEEN EXTRACTED FROM HEC-RAS 2D MODEL.
 - ALL ROADS CALCULATED TO HAVE A d x V LESS THAN 0.4m²/S AT KERB INVERT.



M-M OVERLAND FLOW PATH AT ACCESSWAY LOT 1002
SCALE 1:100 @ A3



N-N OVERLAND FLOW PATH AT ROAD AR03
SCALE 1:100 @ A3



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR INFORMATION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



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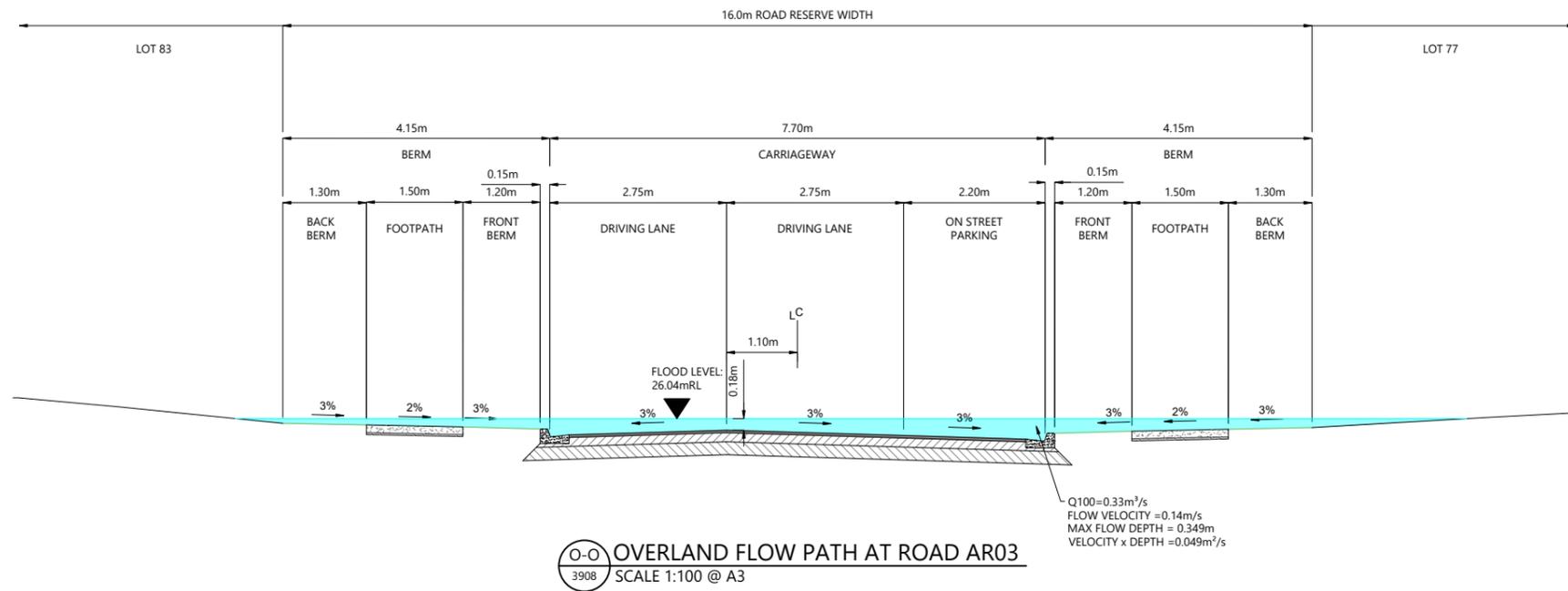


ARATAKI DEVELOPMENT - HAVELOCK NORTH

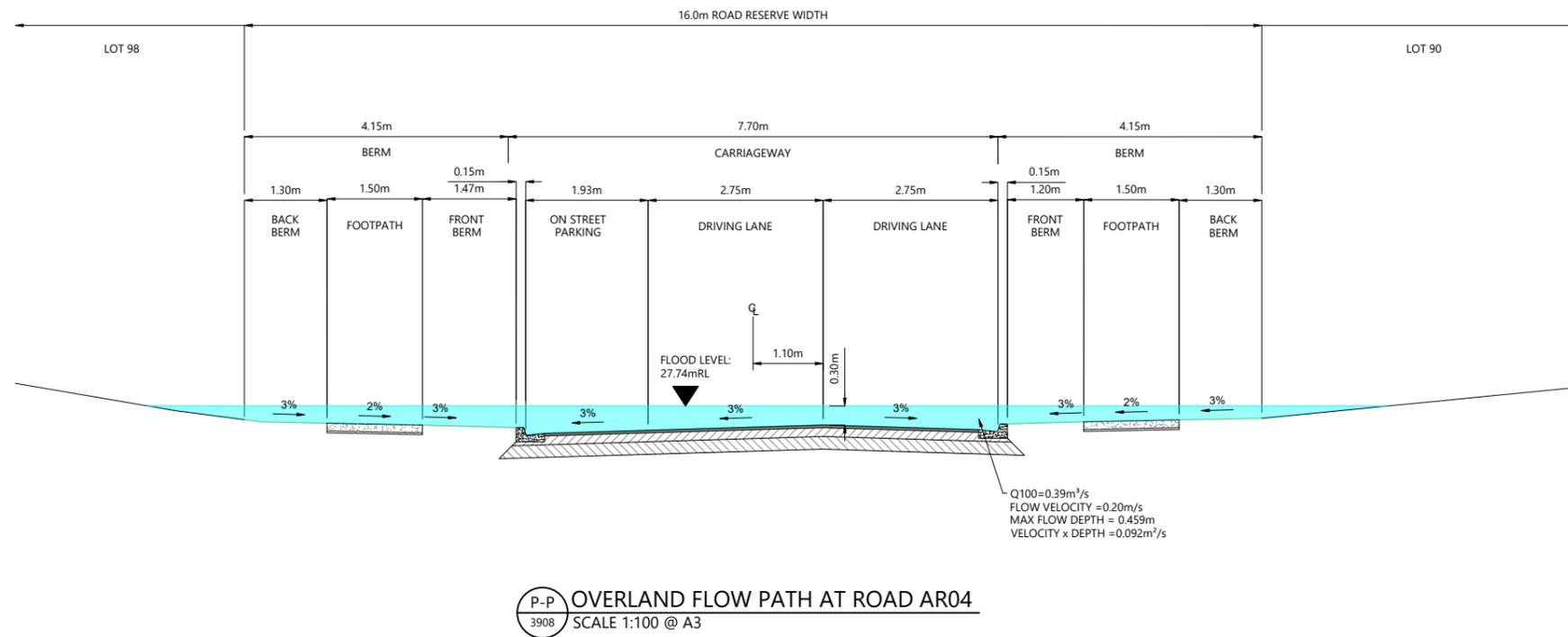
OVERLAND FLOW SECTIONS

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:100 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3907-DR	

Plot Date: 2:19:58 pm, 26 June 2025, APRILS
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- NOTES
1. OVERLAND FLOWS, DEPTHS AND VELOCITIES HAVE BEEN EXTRACTED FROM HEC-RAS 2D MODEL.
 2. ALL ROADS CALCULATED TO HAVE A d x v LESS THAN 0.4m²/S AT KERB INVERT.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR INFORMATION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
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			APPROVED	BF



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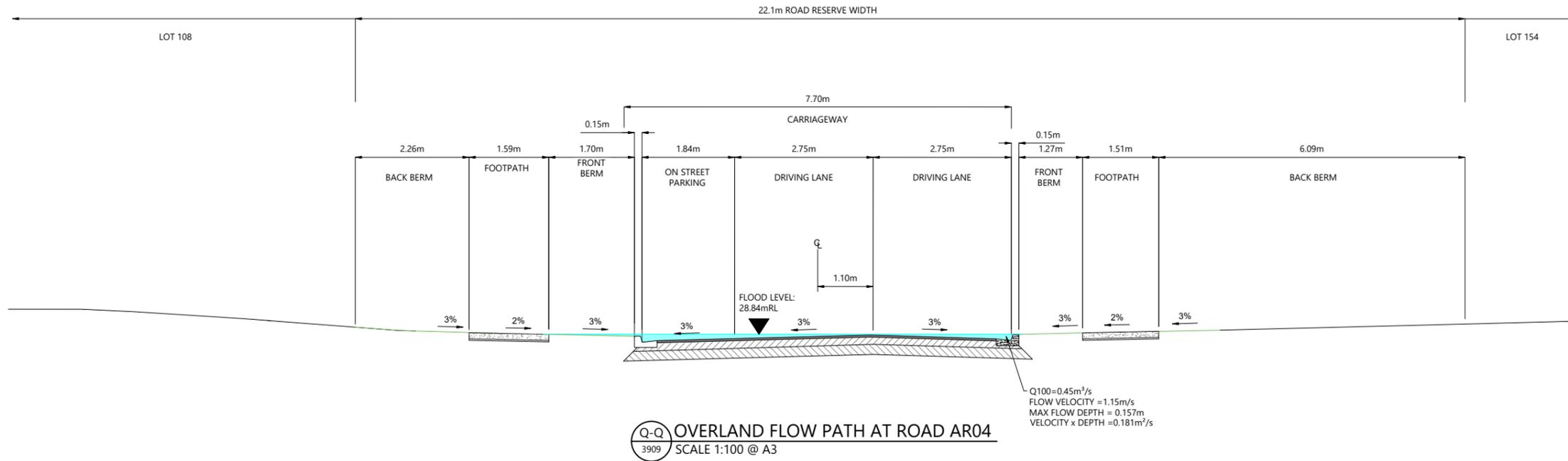
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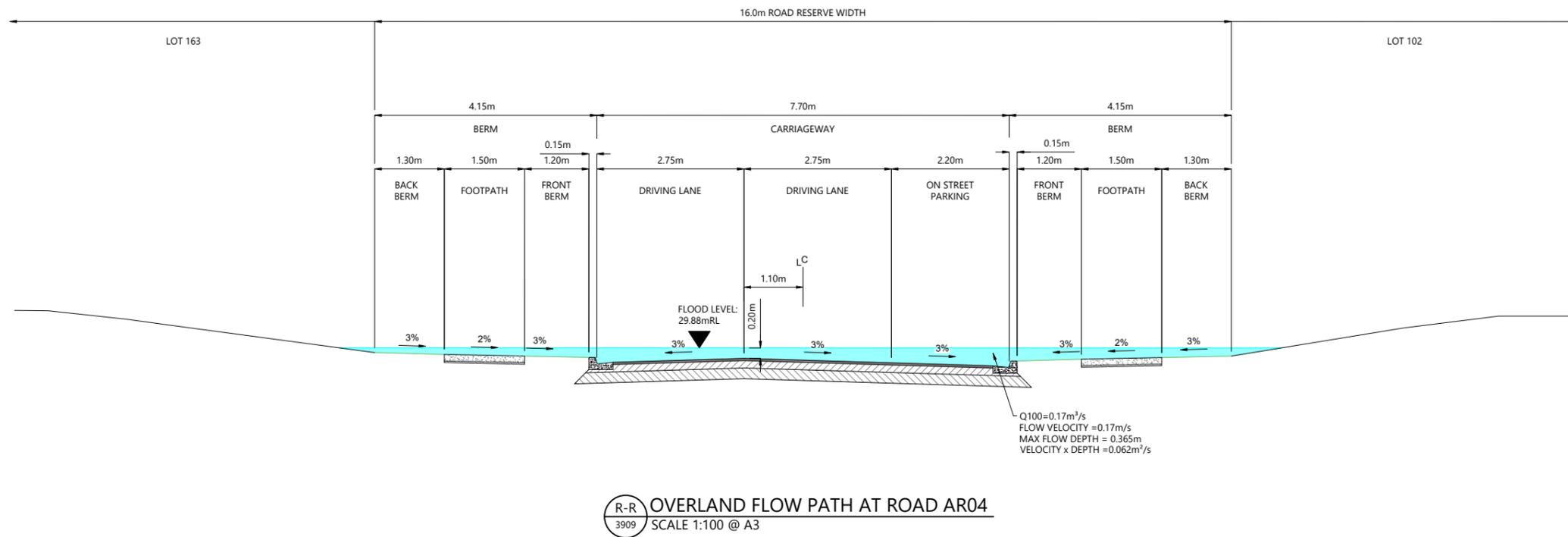
ARATAKI DEVELOPMENT - HAVELOCK NORTH

OVERLAND FLOW SECTIONS

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:100 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3908-DR	



- NOTES**
- OVERLAND FLOWS, DEPTHS AND VELOCITIES HAVE BEEN EXTRACTED FROM HEC-RAS 2D MODEL.
 - ALL ROADS CALCULATED TO HAVE A d x v LESS THAN 0.4m²/s AT KERB INVERT.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR INFORMATION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
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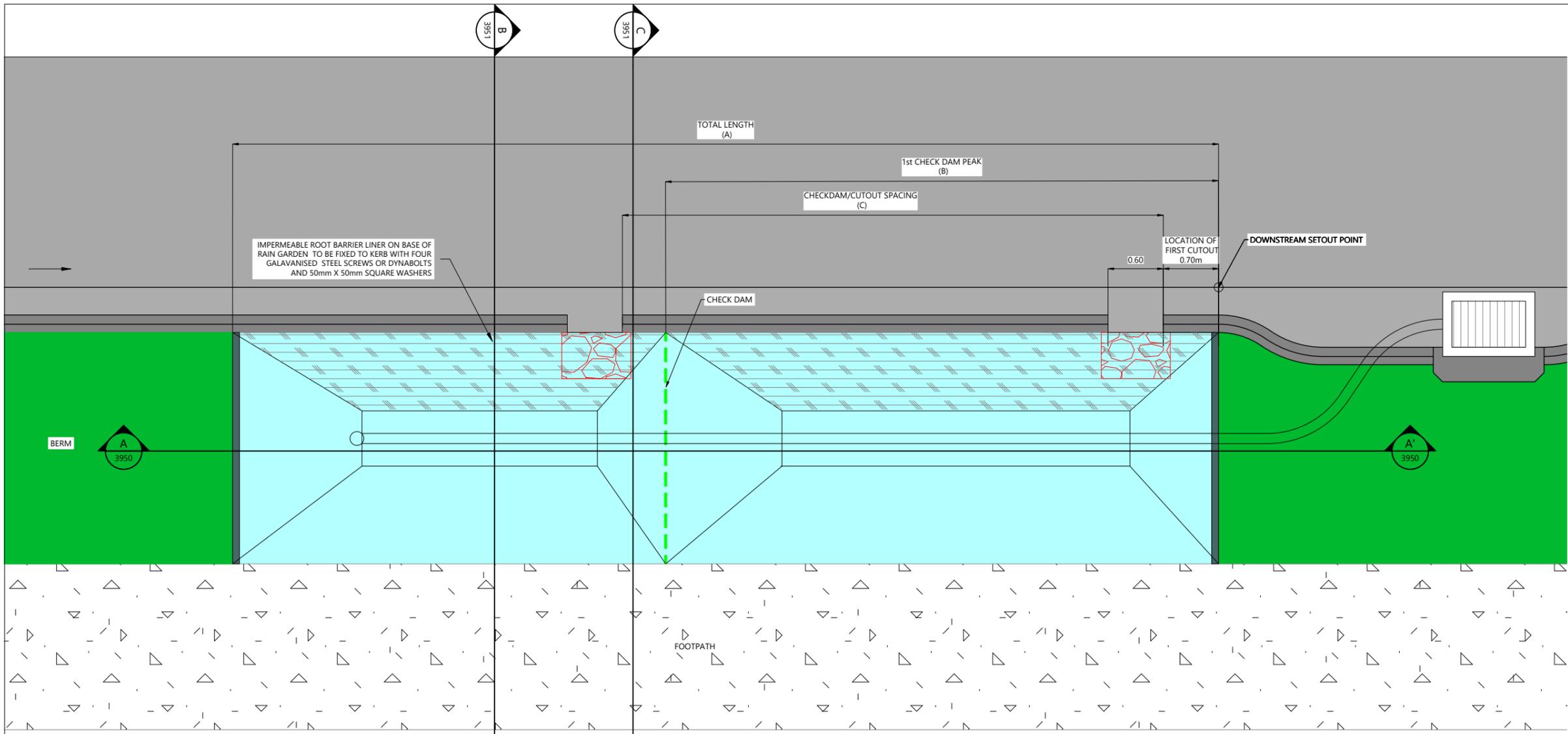
BUILDING B, LEVEL 1
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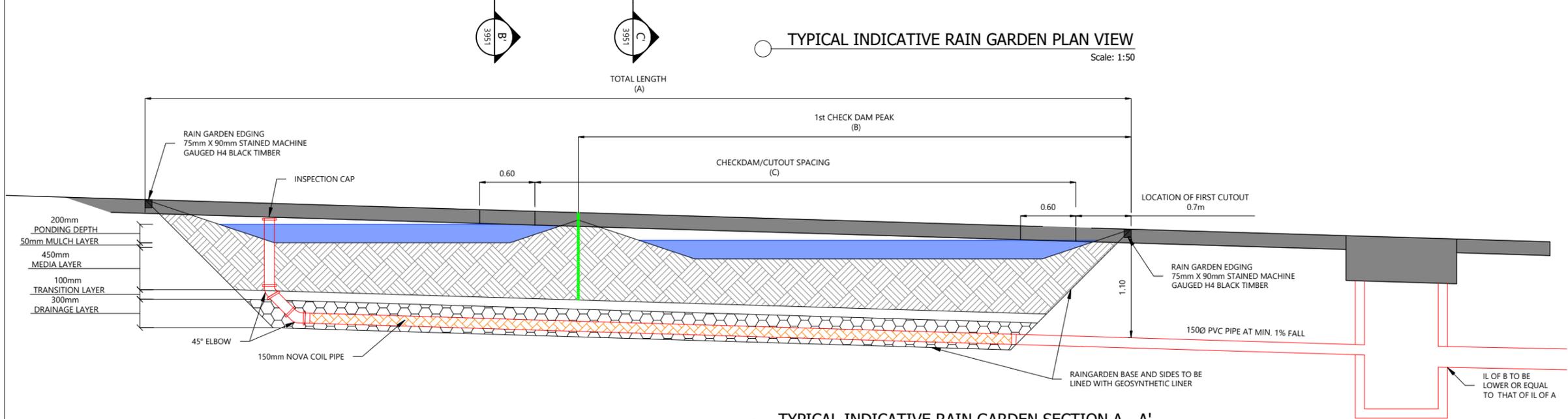
ARATAKI DEVELOPMENT - HAVELOCK NORTH
OVERLAND FLOW SECTIONS

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:100 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3909-DR	

Plot Date: 2:19:59 pm, 26 June 2025, APRILS
File: C:\1205\ENERGY\DATA\WP-AKL-APP-02\P24-244-ARATAKI-HAVELOCK NORTH_21690\02 DRAWINGS\01 ENG\P24-244-00-3909-DR_OVERLAND FLOWPATH POST-DEVELOPMENT PLAN OVERALL DWG



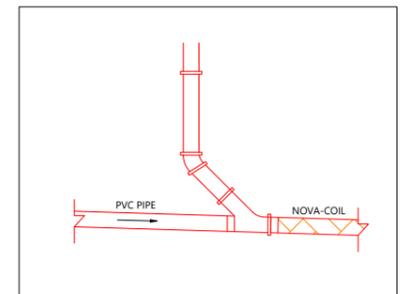
TYPICAL INDICATIVE RAIN GARDEN PLAN VIEW
Scale: 1:50



TYPICAL INDICATIVE RAIN GARDEN SECTION A - A'
Scale: 1:50

GENERAL NOTES

1. ALL WORKS AND MATERIALS SHALL COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION. ANY AMBIGUITY BETWEEN THESE DRAWINGS AND COUNCIL STANDARDS SHALL BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
2. ALL RAINGARDEN CONNECTIONS TO BE CCTV'D AND ASBUILT.
3. ALL RAINGARDEN CONNECTIONS TO BE CONSTRUCTED TO PUBLIC DRAINAGE STANDARDS. CONNECTIONS CROSSING UNDER ROADS TO BE HARDFILL BACKFILLED WITH MINIMUM 1M COVER.
4. THE CONTRACTOR IS RESPONSIBLE TO SUPPLY WOODS ENGINEERS WITH THREE IMAGES OF EACH RAINGARDEN WITH THE IDENTIFYING NUMBER CLEARLY SHOWN AS FOLLOWS:
- POST EXCAVATION WITH ALL PLUMBING IN PLACE
- POST PLACEMENT OF DRAINAGE AGGREGATE;
- POST PLACEMENT OF TRANSITION LAYER.
5. TRANSITION LAYER IS TO CONSIST OF 50MM #3 SAND ON 50MM G6 CHIP.
6. A MINIMUM OF 50MM BEDDING LAYER IS TO BE PROVIDED FOR THE UNDER DRAIN PIPE AND THE UNDER DRAIN MEDIA IS TO BE SAP20/7".



RAIN GARDEN TO RAIN GARDEN CONNECTION DETAIL



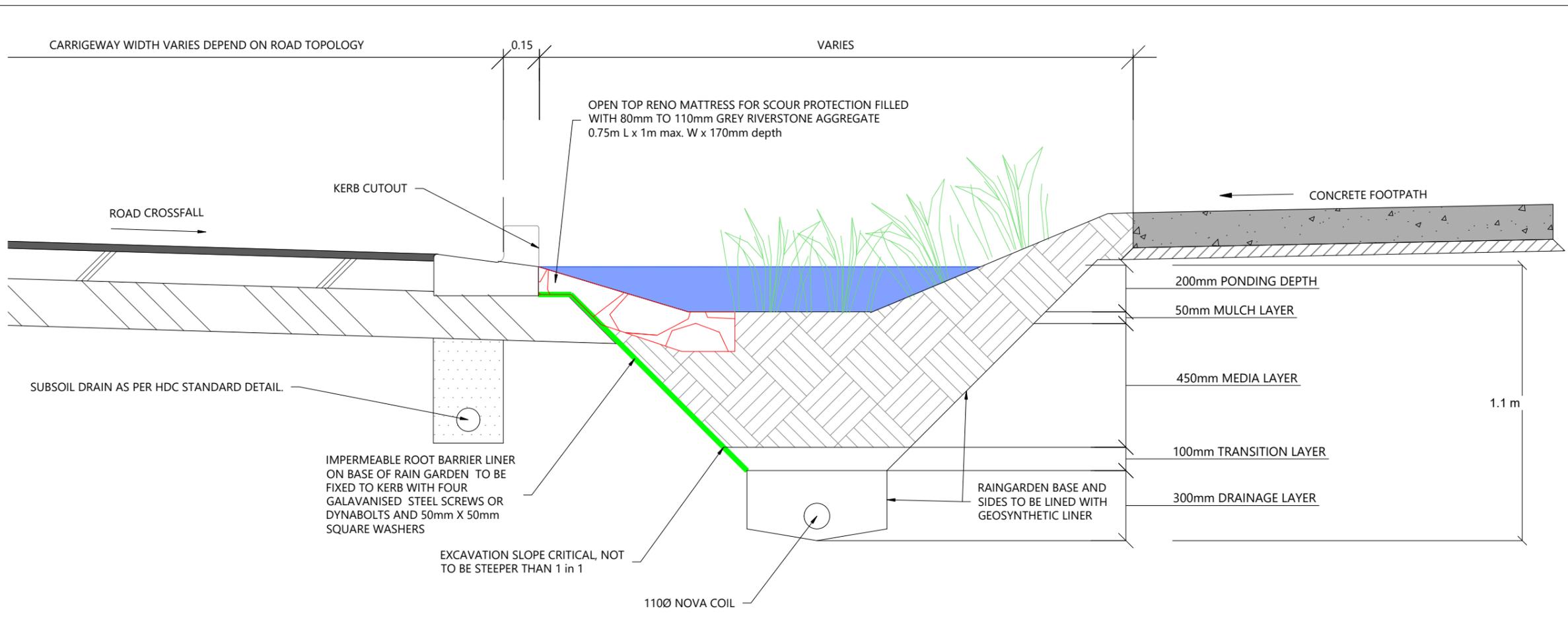
REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	TB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF

BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
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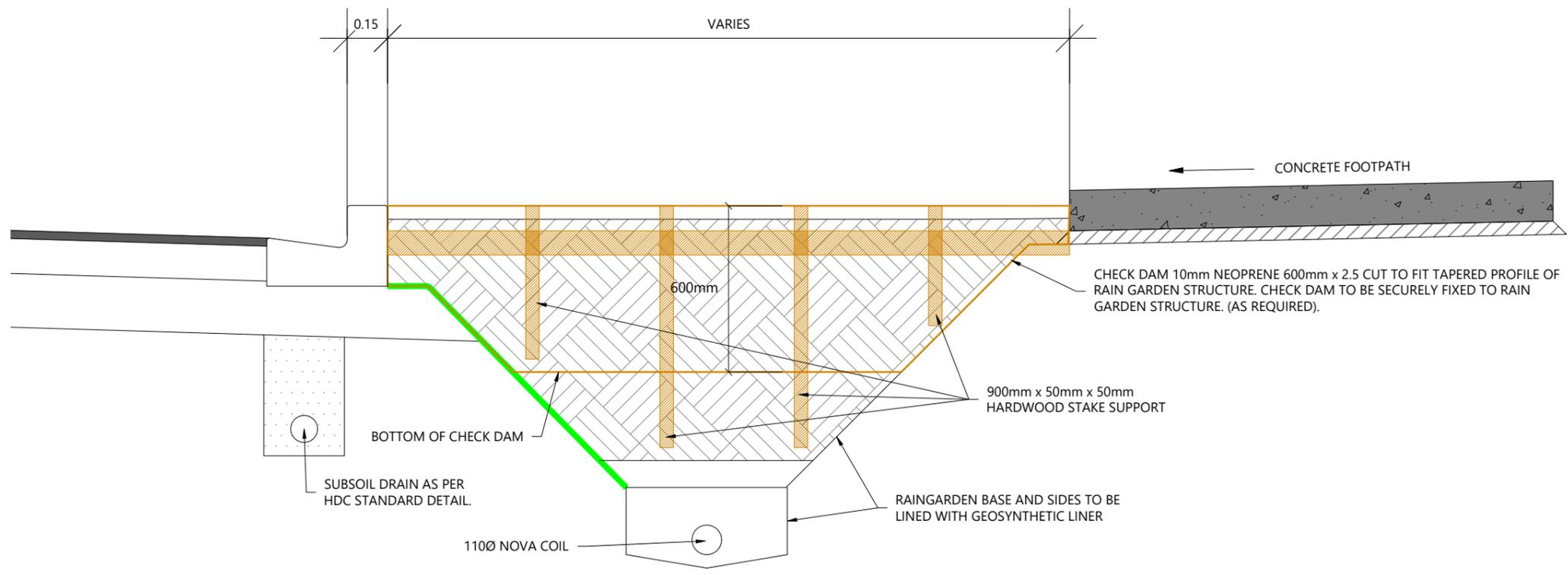
ARATAKI DEVELOPMENT - HAVELOCK NORTH
TYPICAL RAINGARDEN DETAILS
PLAN AND LONGSECTION

STATUS	ISSUED FOR CONSENT	REV
SCALE	AS SHOWN	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3950-DR	



TYPICAL INDICATIVE RAIN GARDEN SECTION B - B' Scale: 1:20

- ### GENERAL NOTES
- ALL WORKS AND MATERIALS SHALL COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION. ANY AMBIGUITY BETWEEN THESE DRAWINGS AND COUNCIL STANDARDS SHALL BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
 - ALL RAINGARDEN CONNECTIONS TO BE CCTV'D AND ASBUILT.
 - ALL RAINGARDEN CONNECTIONS TO BE CONSTRUCTED TO PUBLIC DRAINAGE STANDARDS. CONNECTIONS CROSSING UNDER ROADS TO BE HARDFILL BACKFILLED WITH MINIMUM 1M COVER.
 - THE CONTRACTOR IS RESPONSIBLE TO SUPPLY WOODS ENGINEERS WITH THREE IMAGES OF EACH RAINGARDEN WITH THE IDENTIFYING NUMBER CLEARLY SHOWN AS FOLLOWS:
 - POST EXCAVATION WITH ALL PLUMBING IN PLACE
 - POST PLACEMENT OF DRAINAGE AGGREGATE;
 - POST PLACEMENT OF TRANSITION LAYER.
 - TRANSITION LAYER IS TO CONSIST OF 50MM #3 SAND ON 50MM G6 CHIP.
 - A MINIMUM OF 50MM BEDDING LAYER IS TO BE PROVIDED FOR THE UNDER DRAIN PIPE AND THE UNDER DRAIN MEDIA IS TO BE SAP20/7".



TYPICAL INDICATIVE RAIN GARDEN SECTION C - C' Scale: 1:20



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DESIGNED	TB
			DRAWN	TB
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH

TYPICAL RAINGARDEN DETAILS CROSS SECTIONS

STATUS	ISSUED FOR CONSENT	REV
SCALE	AS SHOWN	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-3951-DR	

Plot Date: 2:08:24 pm, 26 June 2025, TIMOTHYB
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LEGEND

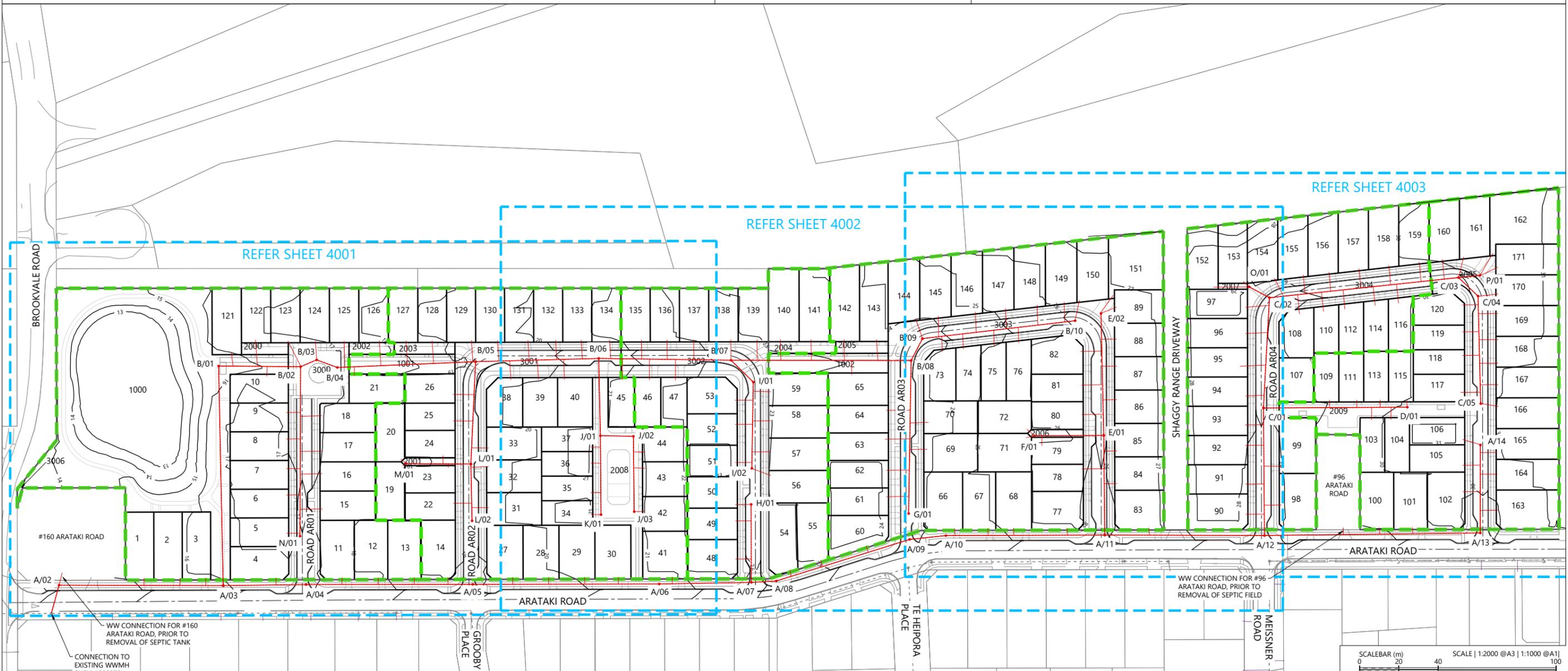
STAGE BOUNDARIES

PROPOSED MAJOR CONTOURS (0.5m)

PROPOSED WASTEWATER LINE AND PIT

EXISTING WASTEWATER LINE AND PIT

- NOTES**
1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
 2. FOR PIPE BEDDING DETAILS REFER TO STANDARD DETAIL SHEETS UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTIONS IN WHICH CASE SUCH NOTES TAKE PRECEDENCE.
 3. WW PIPES TO BE 150MMØ UPVC SN16. UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTION IN WHICH CASE SUCH NOTES SHALL TAKE PRECEDENCE.
 4. ALL PIPE CROSSINGS UNDER ROADS TO BE HARDFILL BACKFILLED.
 5. ALL WW LOT CONNECTIONS TO BE 100MMØ, RAMPED RISERS ARE TO BE EXTENDED & CAPPED OFF 1.0M BELOW THE FINISHED GROUND SURFACE.
 6. ALL MANHOLES TO BE 1050MMØ UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTION IN WHICH CASE SUCH NOTES SHALL TAKE PRECEDENCE.
 7. THE CONTRACTOR IS TO PEG MANHOLES & CHECK FINISHED EARTHWORKS LEVELS (MH LID LEVELS) PRIOR TO ORDERING MANHOLES.
 8. ALL MANHOLE LIDS IN THE CYCLEWAY SHOULD HAVE A CYCLIST FRIENDLY COVER.
 9. PIPE GRADES ON THE LONG SECTIONS ARE CALCULATED FROM MANHOLE SIDE TO MANHOLE SIDE. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT LASER LEVELS ARE SET TO COMPENSATE FOR THIS.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF

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ARATAKI DEVELOPMENT - HAVELOCK NORTH

WASTEWATER DRAINAGE LAYOUT OVERALL PLAN

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-4000-DR	

Plot Date: 2:02:48 pm, 26 June 2025, TIMOTHYB
File: C:\1205\ENERGY\DATA\WPP-PEN-APP-01\P24-244-ARATAKI - HAVELOCK NORTH_2169002 DRAWINGS\01 ENG\P24-244-00-4000-DR_WASTEWATER DRAINAGE LAYOUT PLAN OVERALL.DWG

LEGEND

- STAGE BOUNDARIES ---
- PROPOSED MAJOR CONTOURS (0.5m) — 23 —
- PROPOSED WASTEWATER LINE AND PIT C/1
- EXISTING WASTEWATER LINE AND PIT ---

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
2. FOR PIPE BEDDING DETAILS REFER TO STANDARD DETAIL SHEETS UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTIONS IN WHICH CASE SUCH NOTES TAKE PRECEDENCE.
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REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	AS	JUN 2025	DESIGNED	AS
			DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
WASTEWATER DRAINAGE LAYOUT PLAN - SHEET 1



SCALEBAR (m)	SCALE 1:1000 @A3 1:500 @A1
STATUS	ISSUED FOR CONSENT
SCALE	1:1000 @ A3
COUNCIL	HASTINGS DISTRICT COUNCIL
DWG NO	P24-244-00-4001-DR
REV	2

Plot Date: 2:02:48 pm, 26 June 2025, TIMOTHYB
File: C:\1205\ENERGY\DATA\WPP-PEN-APP-01\P24-244 - ARATAKI - HAVELOCK NORTH_2169002 DRAWINGS\01 ENG\P24-244-00-4001-DR_WASTEWATER DRAINAGE LAYOUT PLAN OVERALL.DWG

LEGEND

- STAGE BOUNDARIES ---
- PROPOSED MAJOR CONTOURS (0.5m) — 23 —
- PROPOSED WASTEWATER LINE AND PIT
- EXISTING WASTEWATER LINE AND PIT

NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
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REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	AS	JUN 2025	DESIGNED	AS
			DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
WASTEWATER DRAINAGE LAYOUT PLAN - SHEET 2



SCALEBAR (m)	SCALE	SCALE
0 10 20	1:1000 @A3	1:500 @A1
	1:1000 @ A3	
	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-4002-DR	

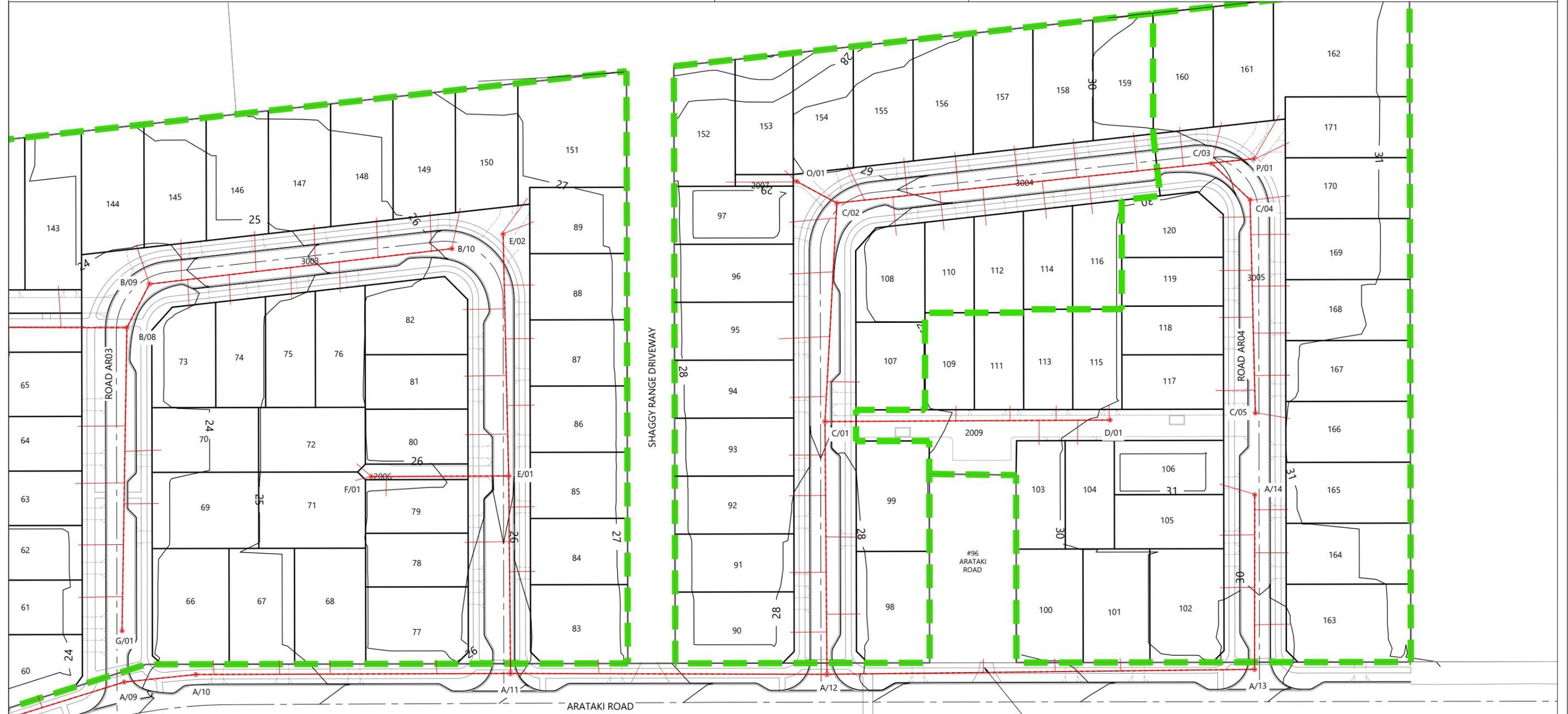
STATUS	ISSUED FOR CONSENT	REV
		2

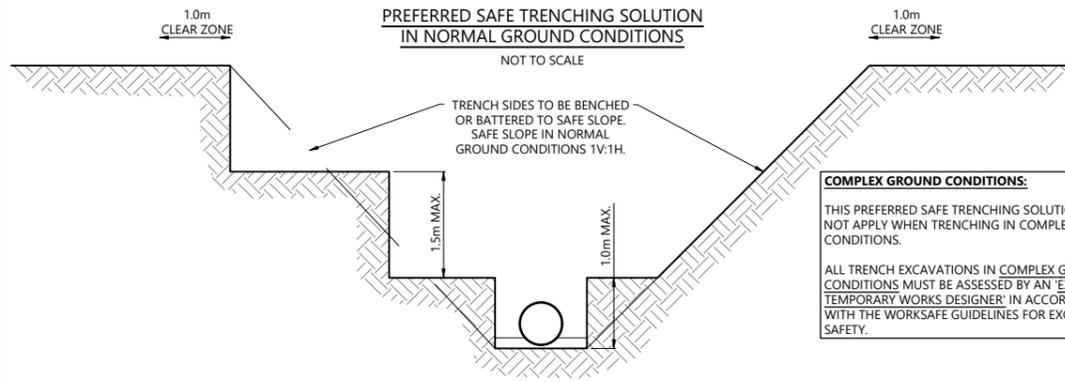
LEGEND

- STAGE BOUNDARIES
- PROPOSED MAJOR CONTOURS (0.5m)
- PROPOSED WASTEWATER LINE AND PIT
- EXISTING WASTEWATER LINE AND PIT

NOTES

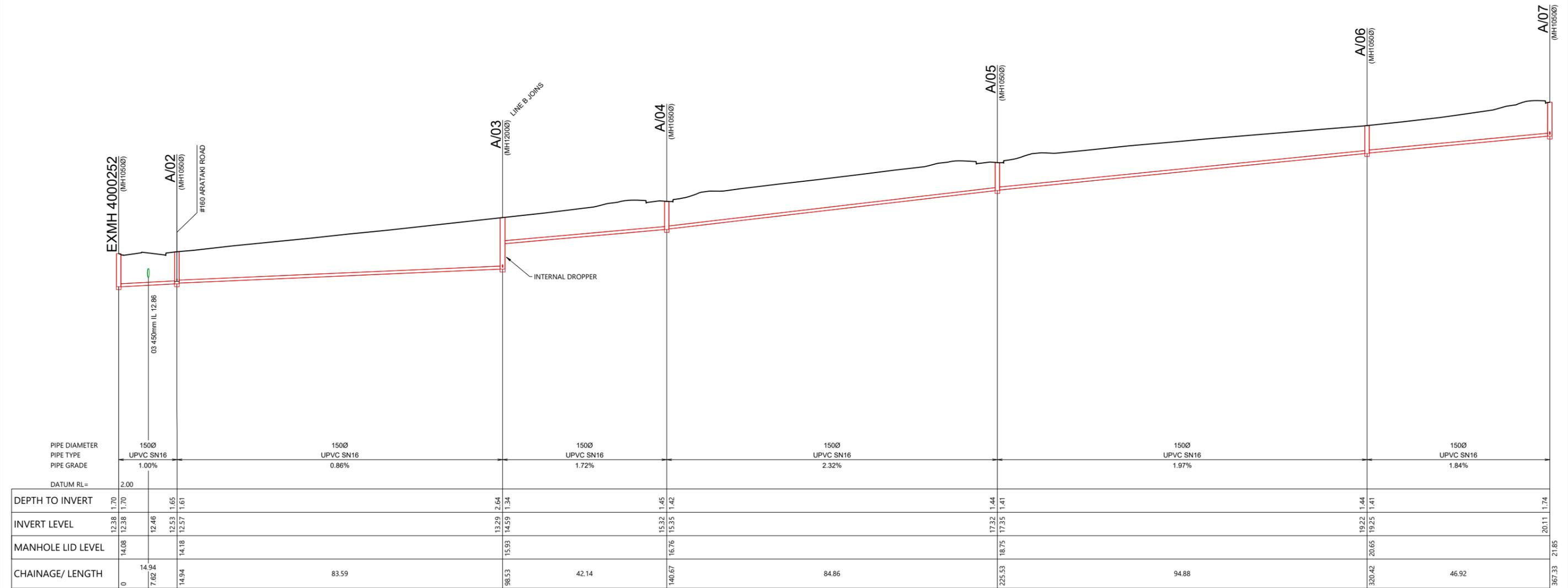
1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
2. FOR PIPE BEDDING DETAILS REFER TO STANDARD DETAIL SHEETS UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTIONS IN WHICH CASE SUCH NOTES TAKE PRECEDENCE.
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SAFE TRENCHING NOTES:

- THIS DIAGRAM SHOWS THE PREFERRED SAFE TRENCHING SOLUTION IN NORMAL GROUND CONDITIONS.
- ALL TRENCH EXCAVATIONS MUST BE ASSESSED BY A 'COMPETENT PERSON' ON SITE IN ACCORDANCE WITH THE WORKSAFE GUIDELINES FOR EXCAVATION SAFETY.
- IF THE PREFERRED TRENCHING SOLUTION IS NOT IMPLEMENTED THE CONTRACTOR MUST PROVIDE RECORDS OF THE SAFE TRENCHING ASSESSMENT COMPLETED BY THE 'COMPETENT PERSON'.
- TABLES 1 AND 2 OF THE WORKSAFE GUIDELINES SETOUT THE RECOMMENDED COMPETENCIES FOR THE 'COMPETENT PERSON'.
- GROUND CONDITIONS AS DEFINED IN TABLES 1 AND 2 OF THE WORKSAFE GUIDELINES:
 - NORMAL GROUND CONDITIONS:** GENERALLY FLAT OPEN GROUND, WITH LITTLE OR NO SURCHARGE LOADING, FAVOURABLE GROUND CONDITIONS, OFF SET FROM NEARBY STRUCTURES AND SENSITIVE INFRASTRUCTURE. GROUNDWATER CAN BE CONTROLLED WITH SIMPLE METHODS, SUCH AS A SUMP PUMP ARRANGEMENT.
 - COMPLEX GROUND CONDITIONS:** THE GROUND CONDITIONS INCLUDE VERY WEAK OR SENSITIVE SOILS, GROUNDWATER THAT REQUIRES SPECIALIST DEWATERING, OR LOCATIONS NEAR STRUCTURES AND SENSITIVE INFRASTRUCTURE. THESE CONDITIONS WOULD RESULT IN AN ELEVATED RISK WHEN CONSTRUCTING THE EXCAVATION.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF

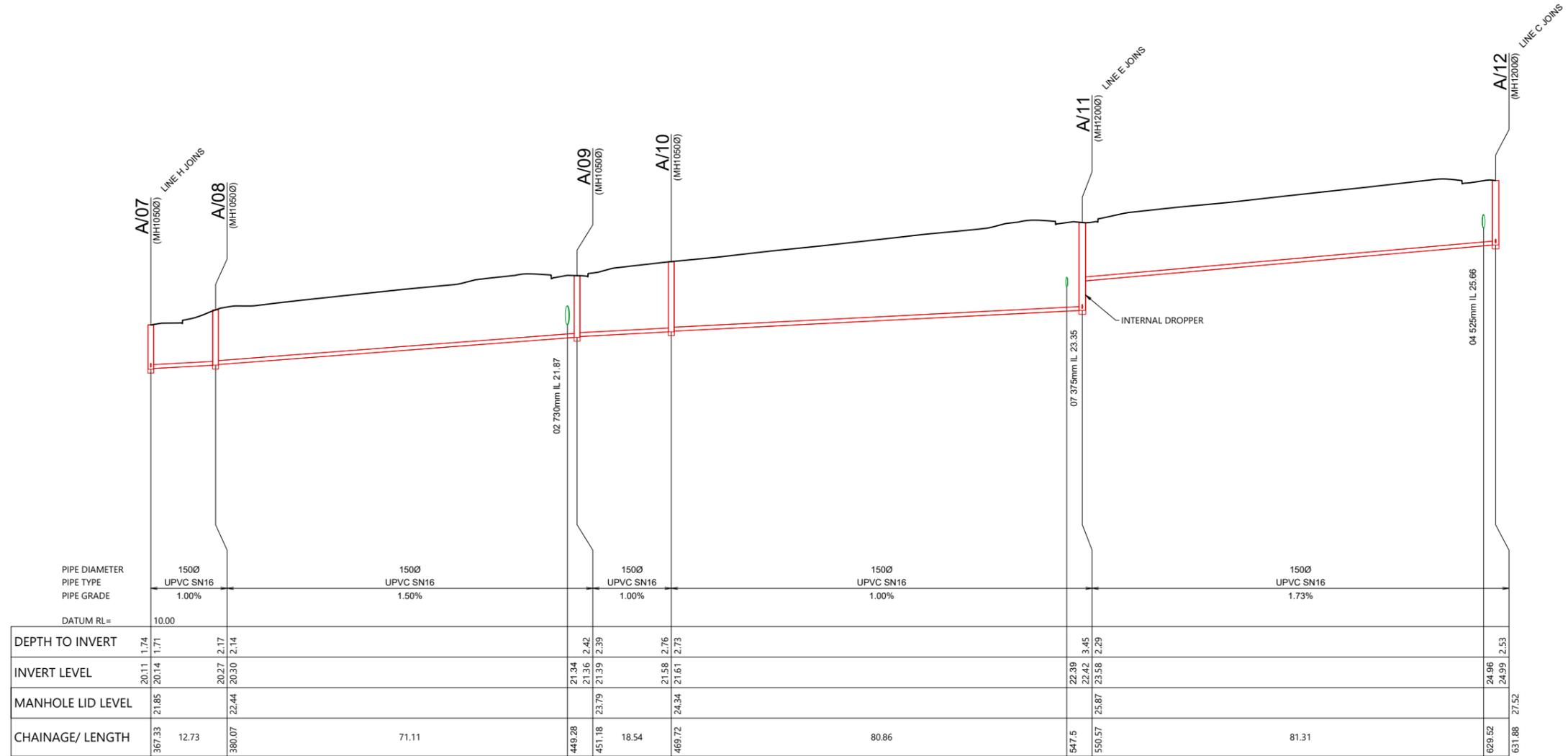


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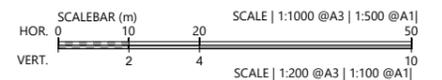


ARATAKI DEVELOPMENT - HAVELOCK NORTH
WASTEWATER LONGSECTION
SHEET 1

STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-4500-DR	



A



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



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8 NUGENT ST, GRAFTON,
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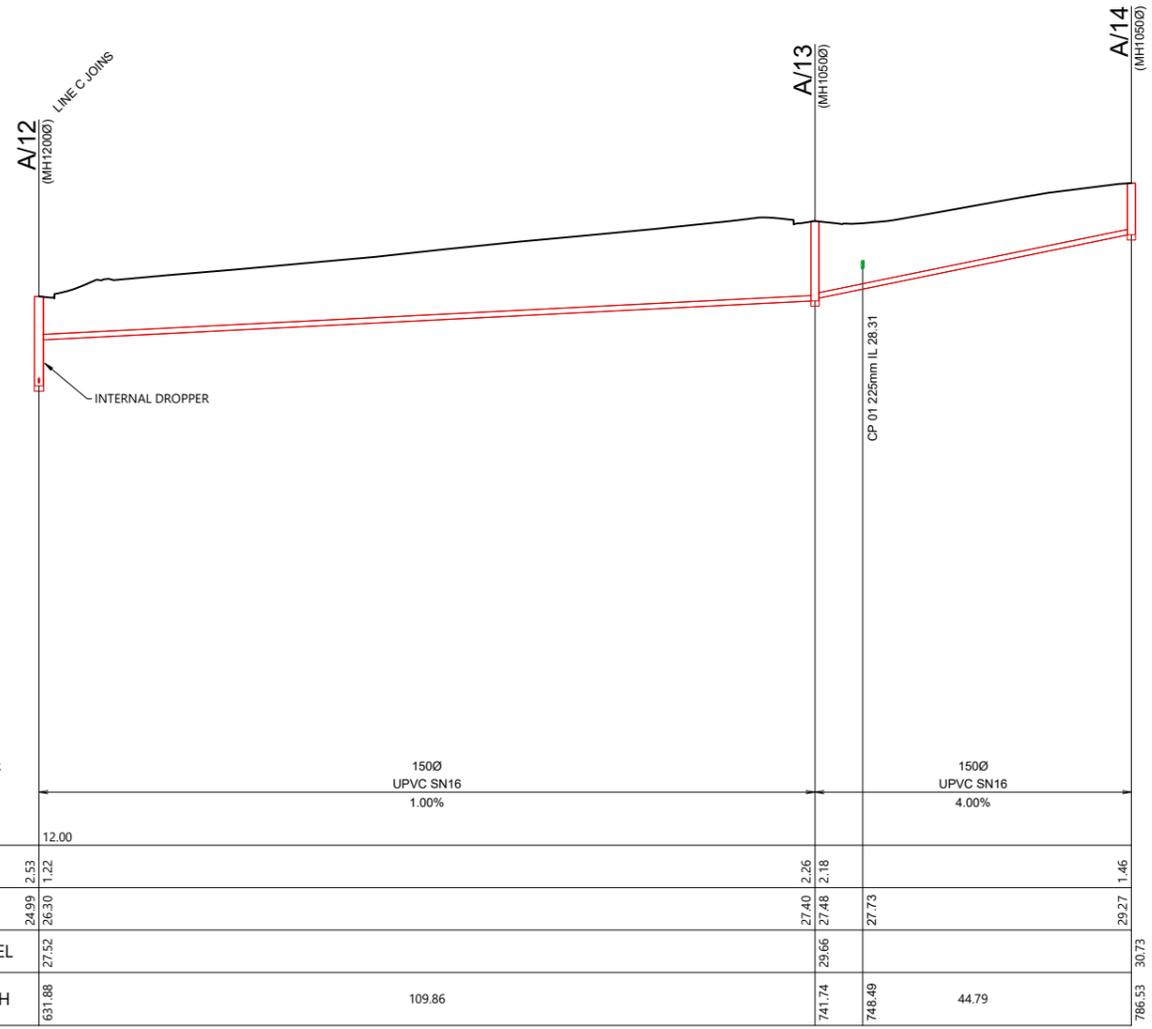
WOODS.CO.NZ



ARATAKI DEVELOPMENT - HAVELOCK NORTH

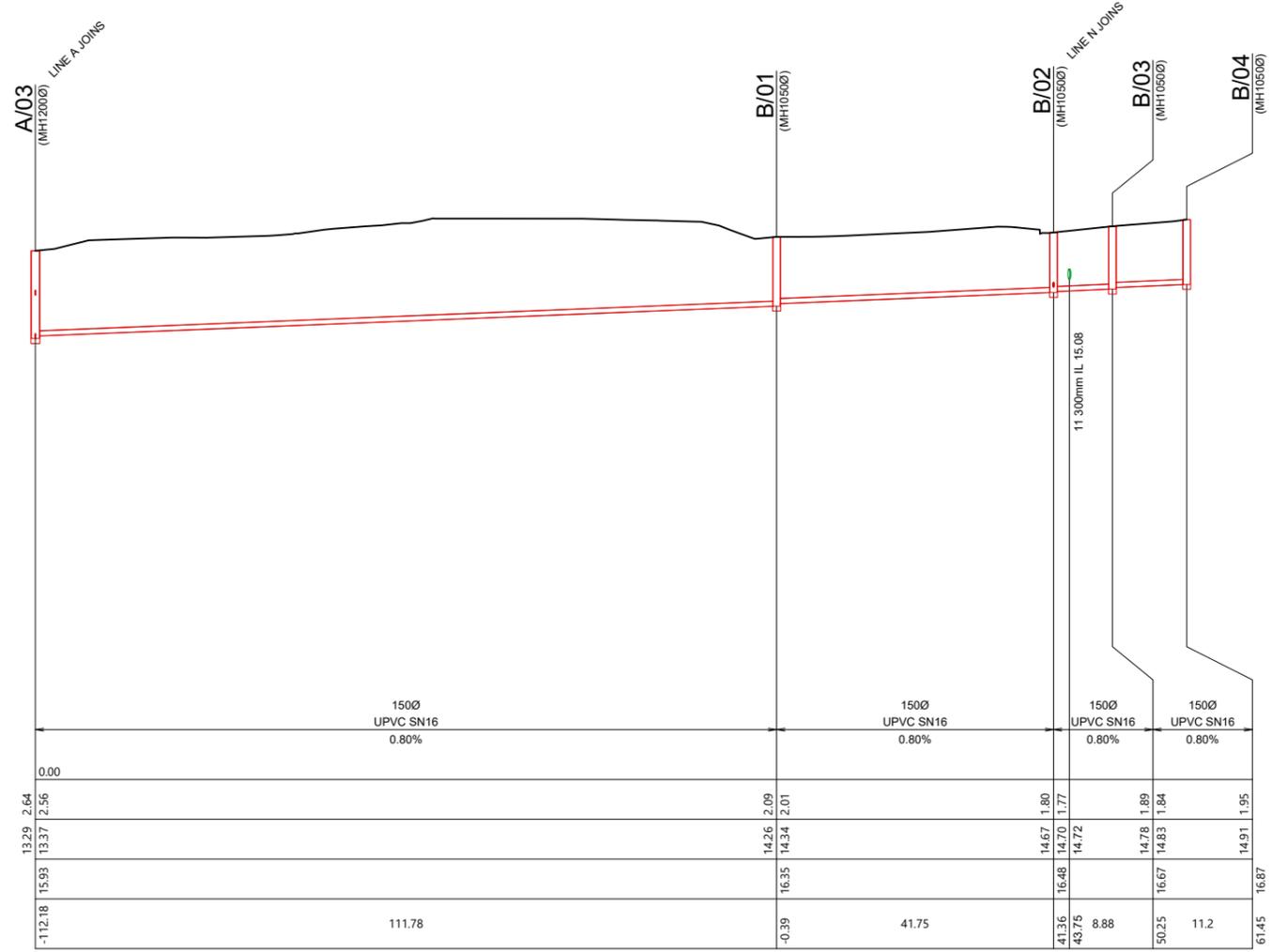
WASTEWATER LONGSECTION SHEET 2

STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-4501-DR	



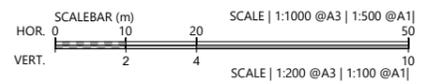
PIPE DIAMETER	1500		1500	
PIPE TYPE	UPVC SN16		UPVC SN16	
PIPE GRADE	1.00%		4.00%	
DATUM RL=	12.00			
DEPTH TO INVERT	24.99	2.53	27.40	2.26
	26.30	1.22	27.48	2.18
INVERT LEVEL			27.73	
MANHOLE LID LEVEL	27.52			29.27
	29.66			30.73
CHAINAGE/ LENGTH	631.88	109.86	741.74	44.79
			748.49	786.53

A



PIPE DIAMETER	1500		1500		1500		1500	
PIPE TYPE	UPVC SN16		UPVC SN16		UPVC SN16		UPVC SN16	
PIPE GRADE	0.80%		0.80%		0.80%		0.80%	
DATUM RL=	0.00							
DEPTH TO INVERT	13.29	2.64	14.26	2.09	14.67	1.80	14.78	1.89
	112.18	15.93	13.37	2.56	14.70	1.77	14.83	1.84
INVERT LEVEL			14.72		14.72		14.83	
MANHOLE LID LEVEL			16.35		16.48		16.67	
			15.93		14.72		14.83	
CHAINAGE/ LENGTH			111.78		41.36	8.88	50.25	11.2
					0.39	41.75	61.45	16.87

B



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



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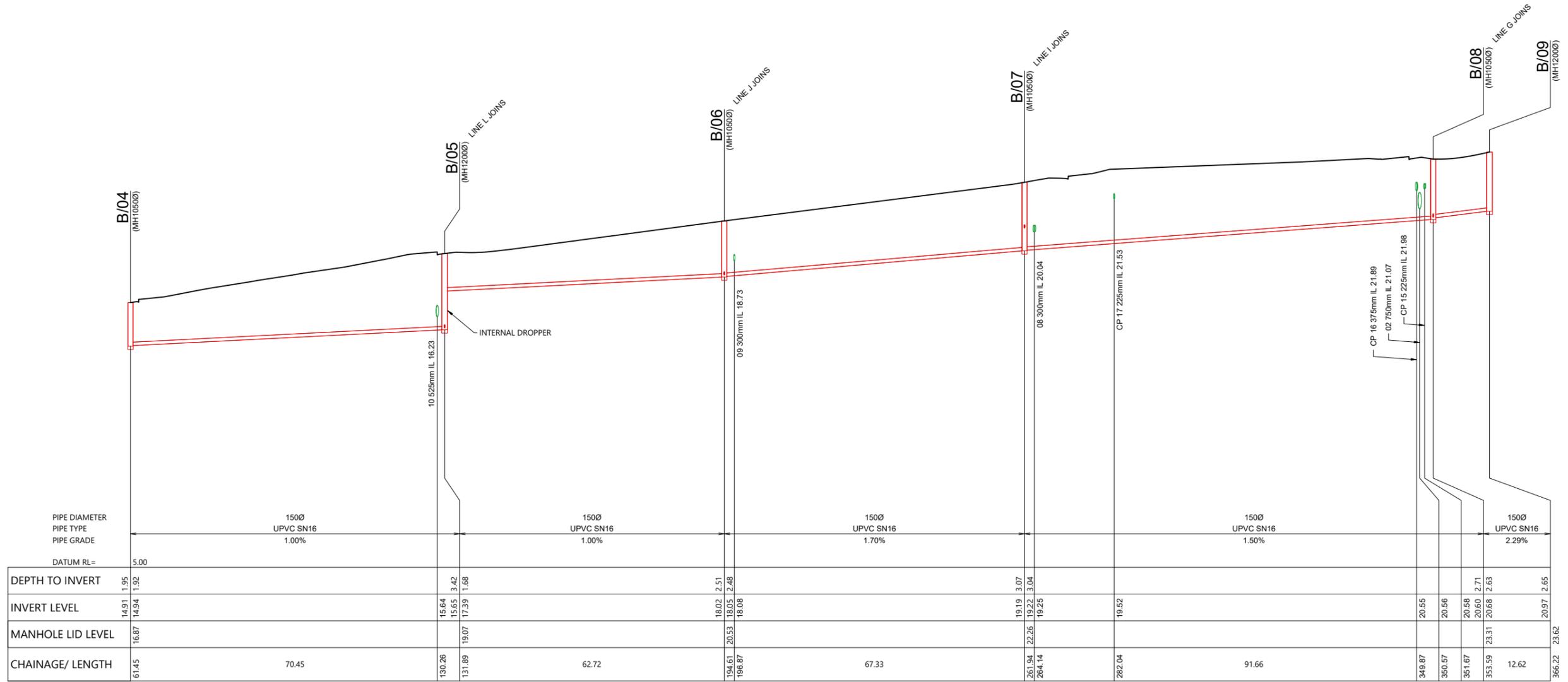
WOODS.CO.NZ



ARATAKI DEVELOPMENT - HAVELOCK NORTH

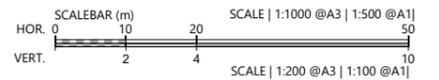
WASTEWATER LONGSECTION SHEET 3

STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-4502-DR	



	61.45	70.45	130.26	131.89	62.72	194.61	196.87	67.33	261.94	264.14	282.04	91.66	349.87	350.57	351.67	353.59	12.62	366.22
DEPTH TO INVERT	1.95	1.92	1.64	1.68		2.51	2.48		3.07	3.04			20.55	20.56	20.58	20.60	20.63	2.65
INVERT LEVEL	14.91	14.94	15.65	17.39		18.02	18.05		19.19	19.22		19.52	20.55	20.56	20.58	20.60	20.63	20.97
MANHOLE LID LEVEL	16.87		19.07			20.53			22.26				23.31					23.62
CHAINAGE/ LENGTH		70.45	130.26	131.89	62.72	194.61	196.87	67.33	261.94	264.14	282.04	91.66	349.87	350.57	351.67	353.59	12.62	366.22

B



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



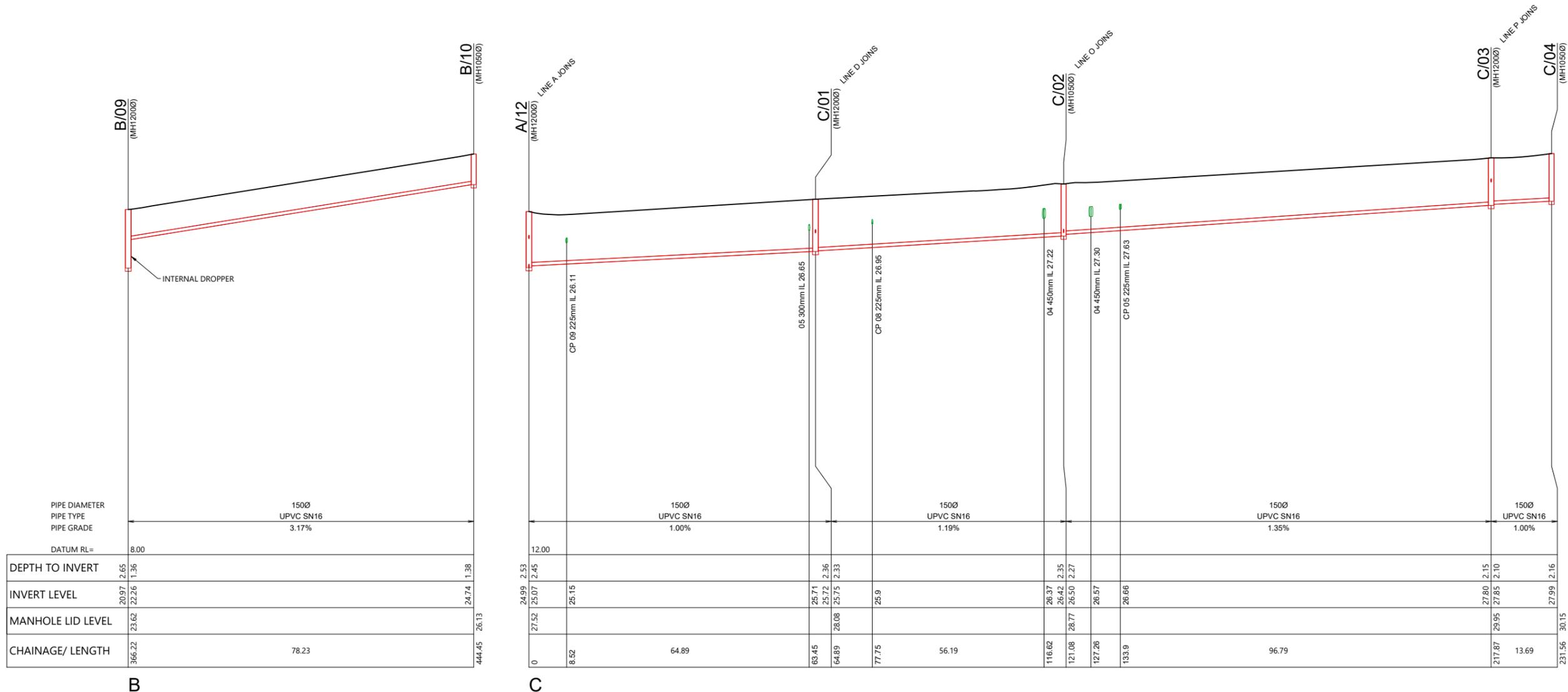
BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
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WOODS.CO.NZ



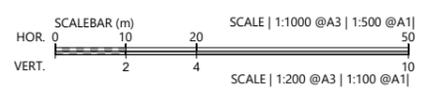
ARATAKI DEVELOPMENT - HAVELOCK NORTH
WASTEWATER LONGSECTION
SHEET 4

STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-4503-DR	



PIPE DIAMETER	1500	
PIPE TYPE	UPVC SN16	
PIPE GRADE	3.17%	
DATUM RL=	8.00	
DEPTH TO INVERT	20.97 2.65 22.26 1.36	24.74 1.38
INVERT LEVEL	20.97 2.65 22.26 1.36	24.74 1.38
MANHOLE LID LEVEL	23.62	26.13
CHAINAGE/ LENGTH	366.22 78.23	444.45

	24.99 2.53 27.52 2.45	25.07 2.45	24.99 2.53 27.52 2.45	25.07 2.45	25.15	64.89	63.45 25.71 64.89 25.75	25.72 2.36 25.75 2.33	25.9	56.19	116.62 26.37 121.08 26.50	26.42 2.35 26.50 2.27	127.26 26.57	133.9 26.66	96.79	217.87 27.80 219.95 2.10	27.85 2.10	231.56 27.99 30.15 2.16
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REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF

QR CODE

BUILDING B, LEVEL 1
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WOODS.CO.NZ



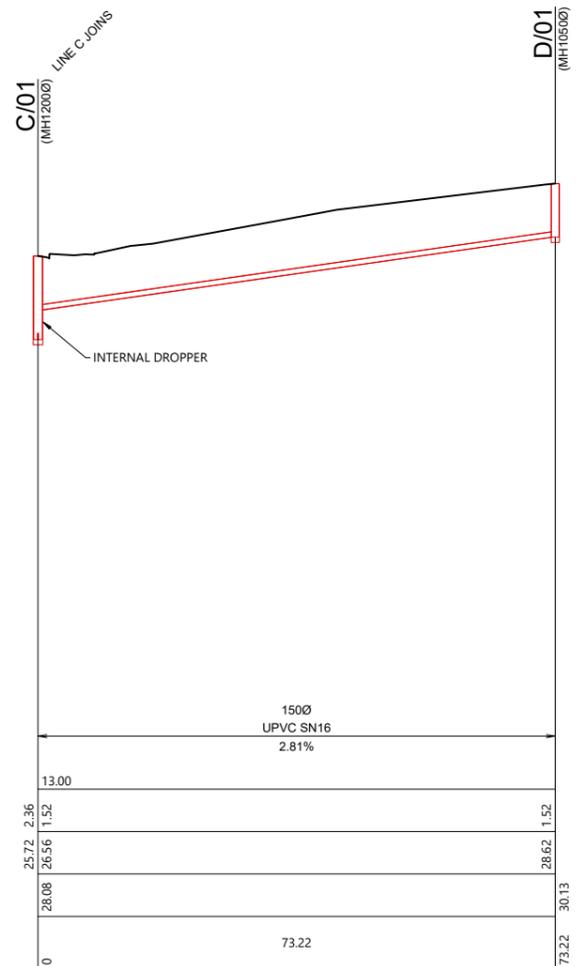
ARATAKI DEVELOPMENT - HAVELOCK NORTH

WASTEWATER LONGSECTION SHEET 5

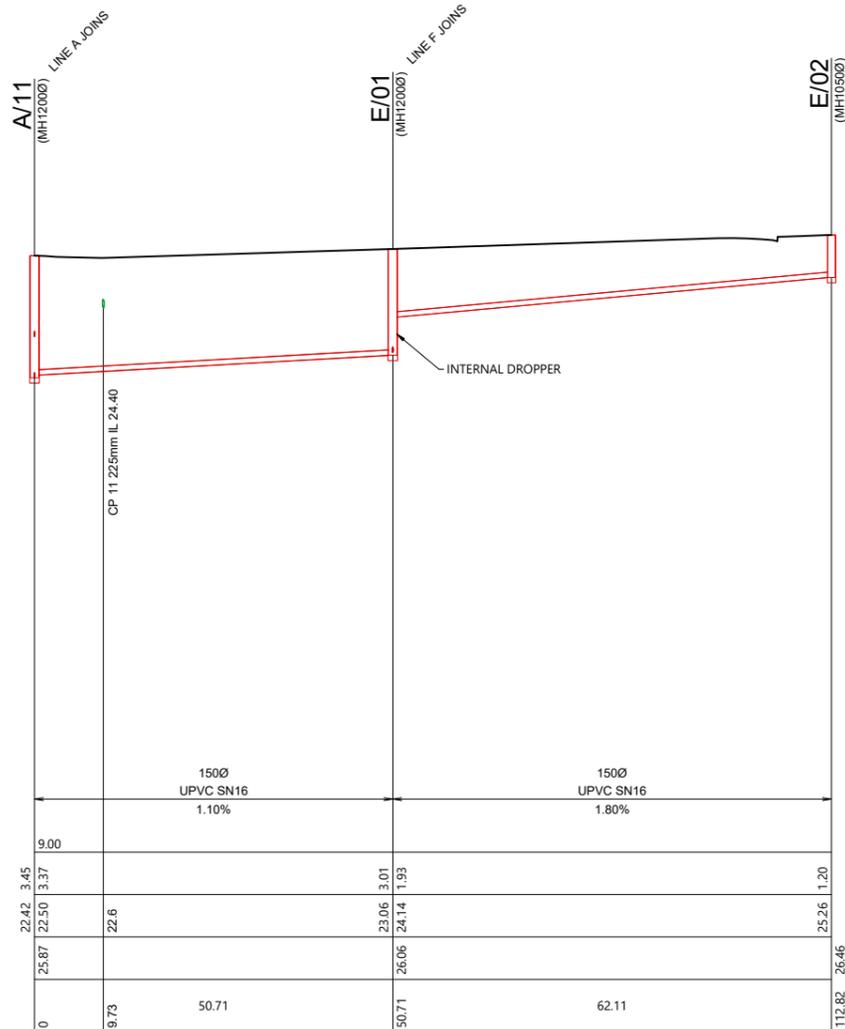
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SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-4504-DR	



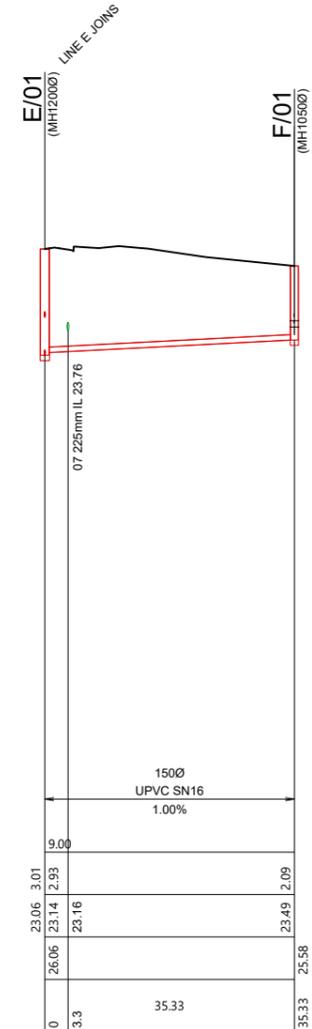
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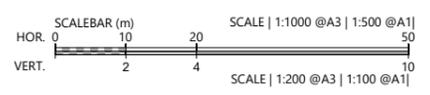
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REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



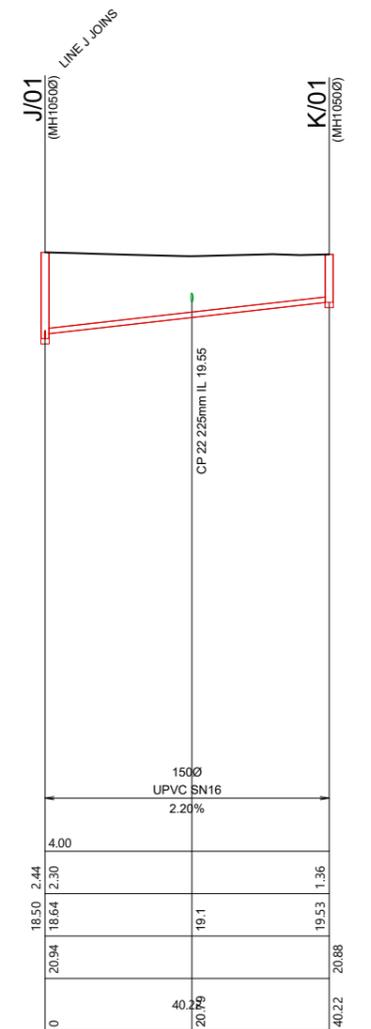
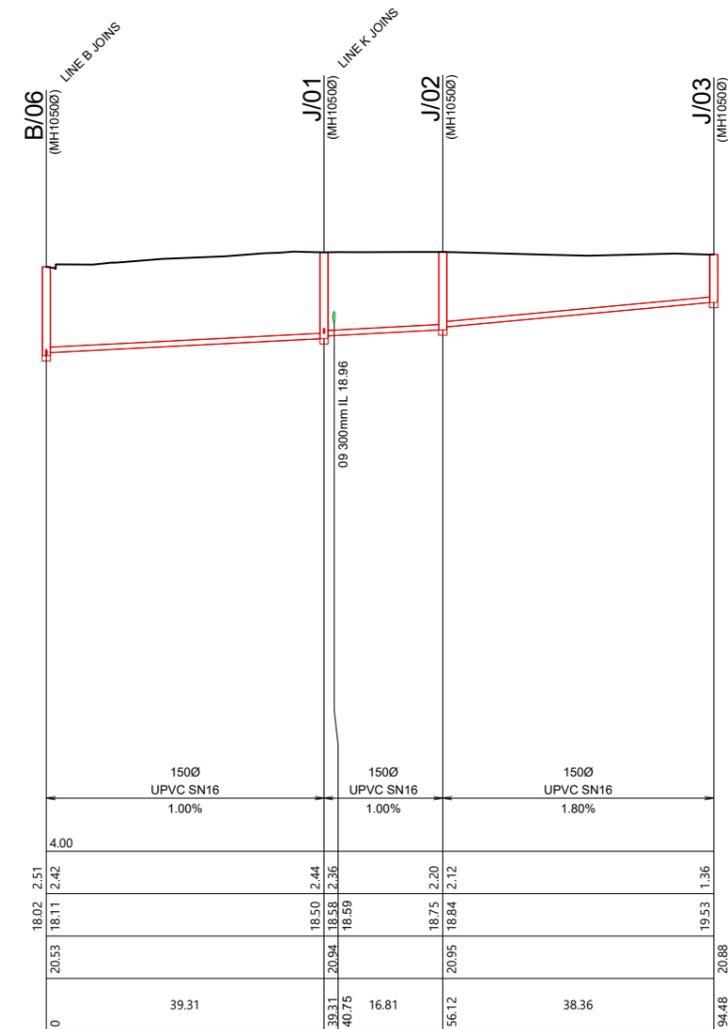
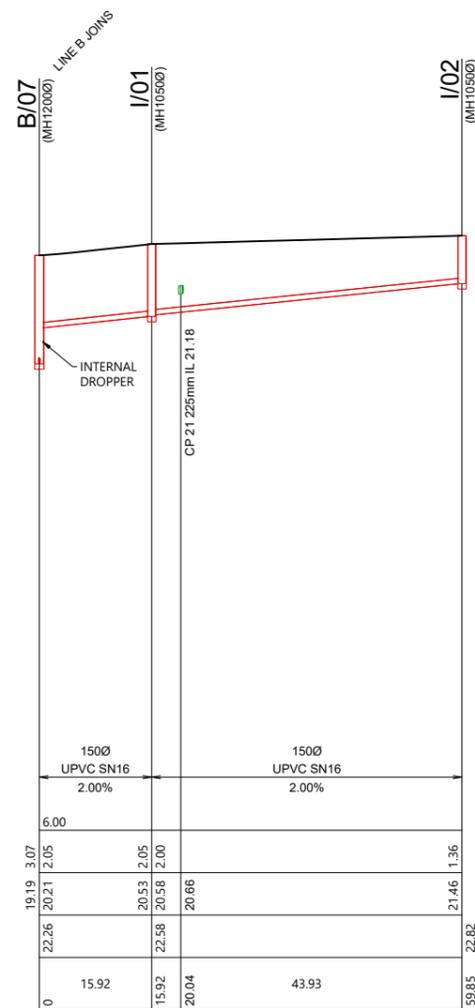
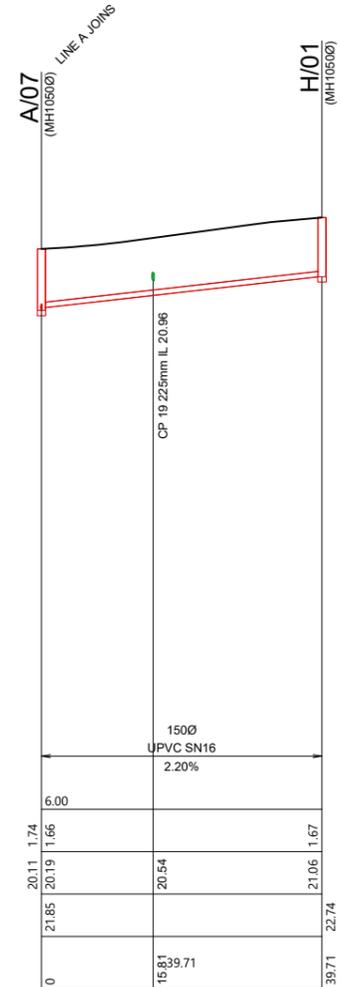
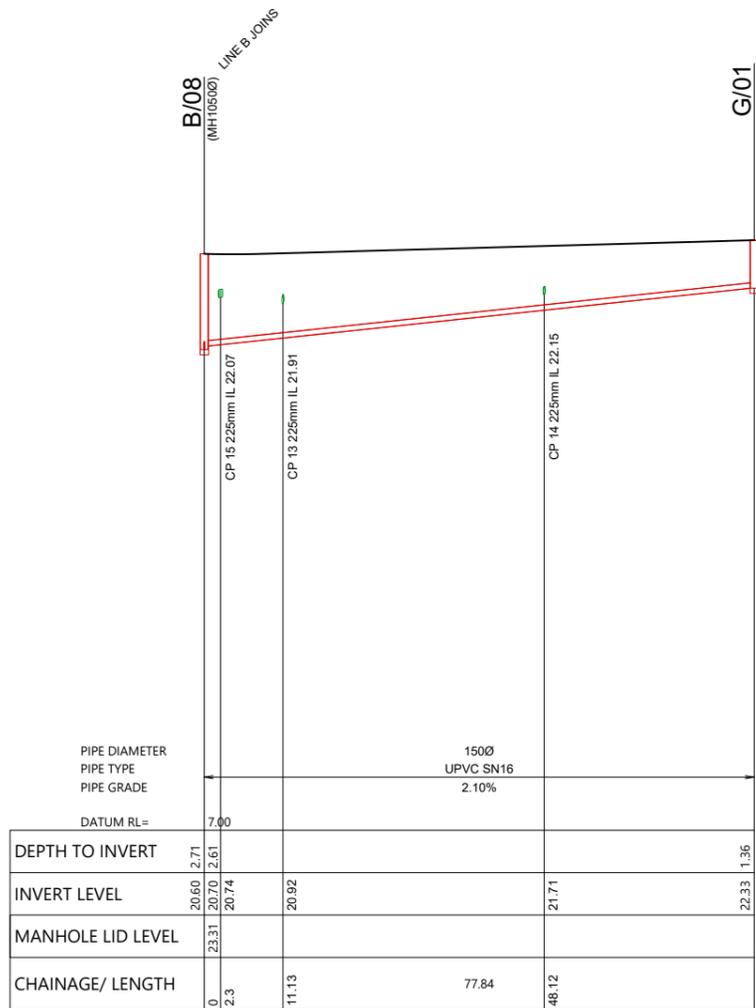
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ARATAKI DEVELOPMENT - HAVELOCK NORTH

WASTEWATER LONGSECTION SHEET 6

STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-4505-DR	



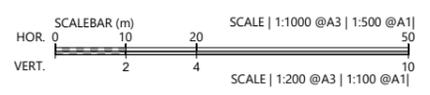
PIPE DIAMETER 1500
 PIPE TYPE UPVC SN16
 PIPE GRADE 2.10%
 DATUM RL= 7.00

PIPE DIAMETER 1500
 PIPE TYPE UPVC SN16
 PIPE GRADE 2.20%

PIPE DIAMETER 1500
 PIPE TYPE UPVC SN16
 PIPE GRADE 2.00%

PIPE DIAMETER 1500
 PIPE TYPE UPVC SN16
 PIPE GRADE 1.00% 1.00% 1.80%

PIPE DIAMETER 1500
 PIPE TYPE UPVC SN16
 PIPE GRADE 2.20%



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF

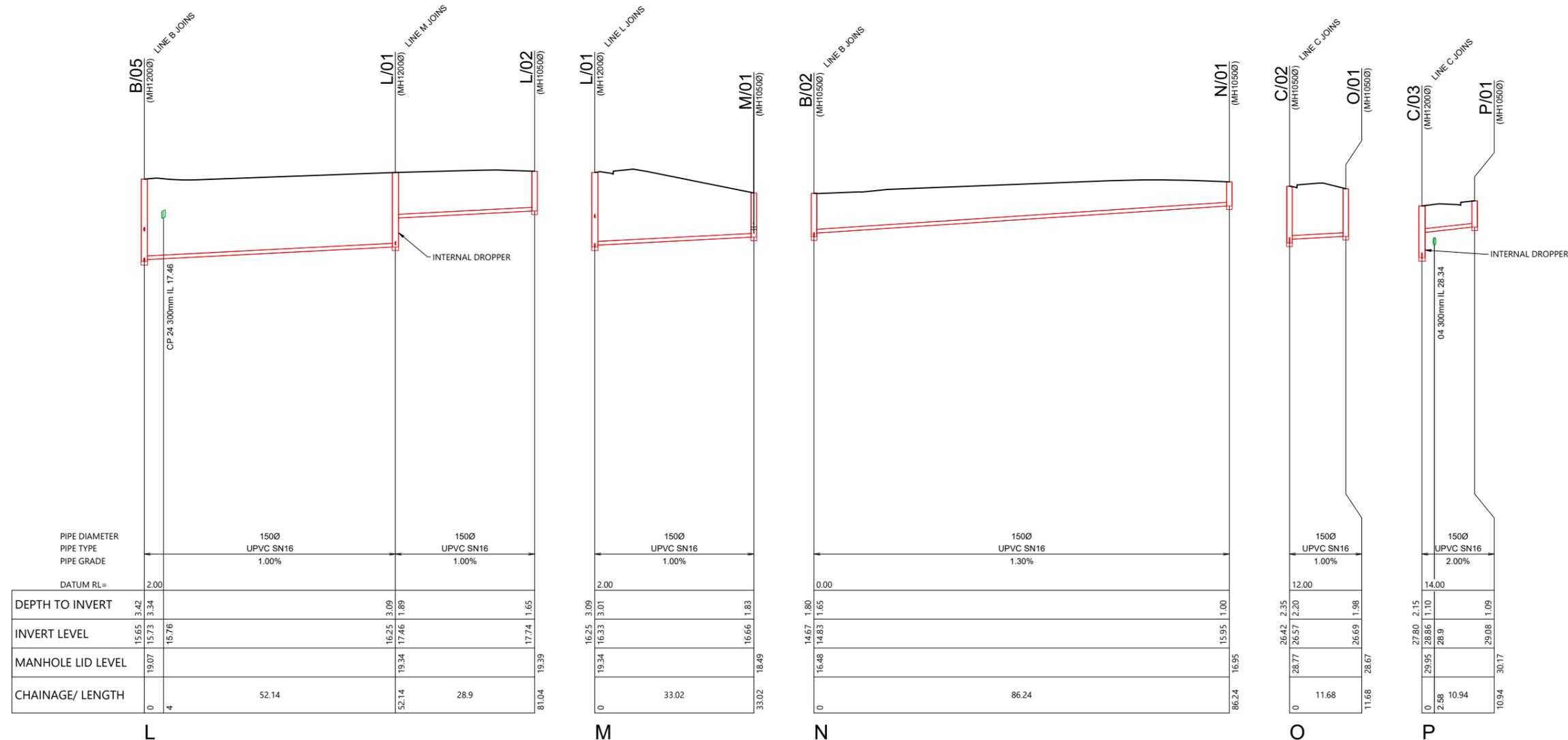


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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 WASTEWATER LONGSECTION
 SHEET 7

STATUS	ISSUED FOR CONSENT	REV
SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-4506-DR	



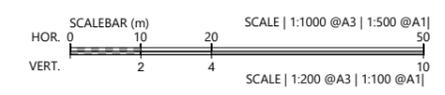
DEPTH TO INVERT	INVERT LEVEL	MANHOLE LID LEVEL	CHAINAGE/ LENGTH
15.65 3.42	16.25 3.09	19.07	0
15.73 3.34	17.46 1.89	19.34	4
15.76	17.74 1.65		52.14
			28.9
			81.04 19.39

DEPTH TO INVERT	INVERT LEVEL	MANHOLE LID LEVEL	CHAINAGE/ LENGTH
16.25 3.09	16.66 1.83	19.34	0
16.33 3.01			33.02
			33.02 18.49

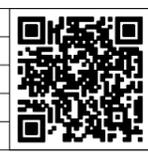
DEPTH TO INVERT	INVERT LEVEL	MANHOLE LID LEVEL	CHAINAGE/ LENGTH
14.67 1.80	15.95 1.00	16.48	0
14.83 1.65			86.24
			86.24 16.95

DEPTH TO INVERT	INVERT LEVEL	MANHOLE LID LEVEL	CHAINAGE/ LENGTH
26.42 2.35	26.69 1.98	28.77	0
26.57 2.20			11.68
			11.68 28.67

DEPTH TO INVERT	INVERT LEVEL	MANHOLE LID LEVEL	CHAINAGE/ LENGTH
27.80 2.15	29.08 1.09	29.95	0
28.86 1.10			10.94
			10.94 30.17



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
WASTEWATER LONGSECTION
SHEET 8

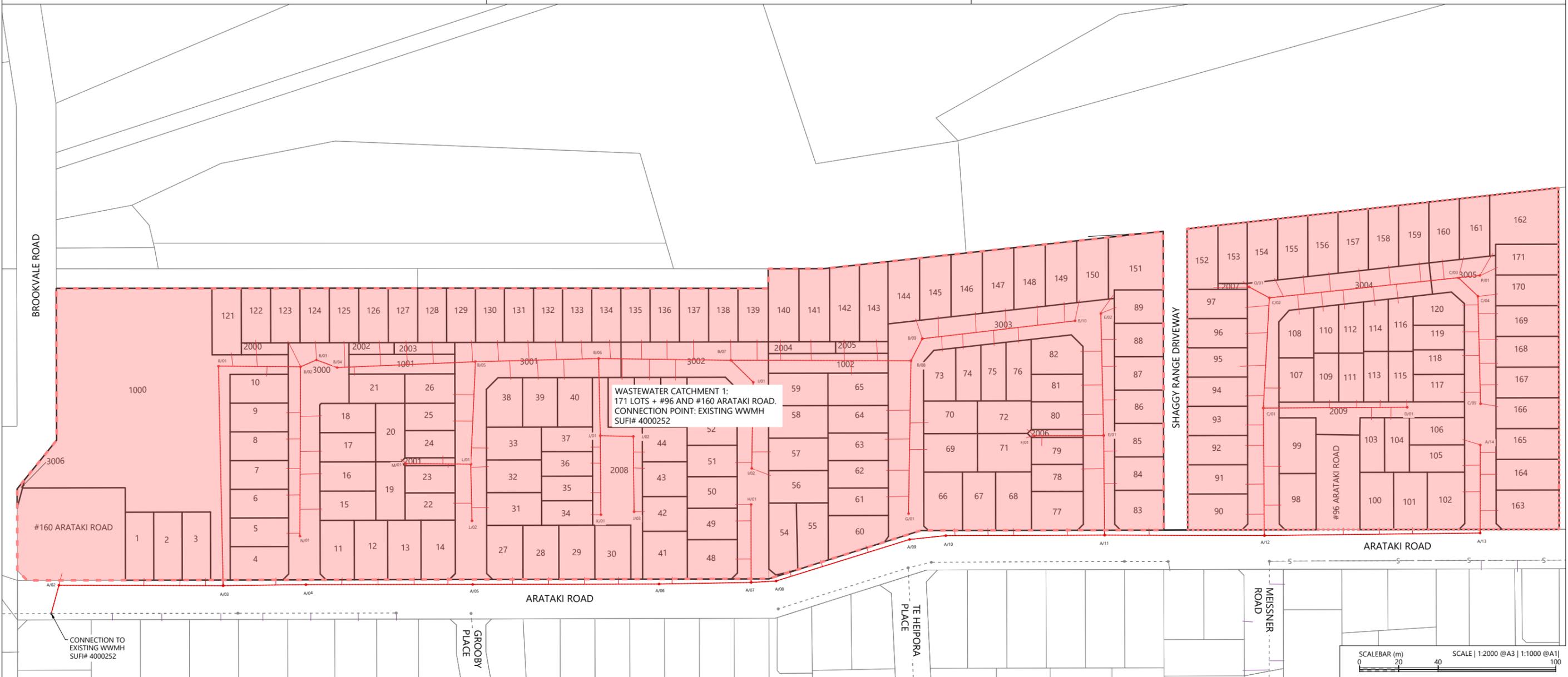
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SCALE	H 1:1000 V 1:200 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-4507-DR	

LEGEND



NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
2. FOR PIPE BEDDING DETAILS REFER TO STANDARD DETAIL SHEETS UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTIONS IN WHICH CASE SUCH NOTES TAKE PRECEDENCE.
3. WW PIPES TO BE 150MMØ UPVC SN16. UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTION IN WHICH CASE SUCH NOTES SHALL TAKE PRECEDENCE.
4. ALL PIPE CROSSINGS UNDER ROADS TO BE HARDFILL BACKFILLED.
5. ALL WW LOT CONNECTIONS TO BE 100MMØ. RAMPED RISERS ARE TO BE EXTENDED & CAPPED OFF 1.0M BELOW THE FINISHED GROUND SURFACE.
6. ALL MANHOLES TO BE 1050MMØ UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTION IN WHICH CASE SUCH NOTES SHALL TAKE PRECEDENCE.
7. THE CONTRACTOR IS TO PEG MANHOLES & CHECK FINISHED EARTHWORKS LEVELS (MH LID LEVELS) PRIOR TO ORDERING MANHOLES.
8. ALL MANHOLE LIDS IN SHARED PATHS AND CYCLEWAYS TO HAVE A CYCLIST FRIENDLY COVER.
9. PIPE GRADES ON THE LONG SECTIONS ARE CALCULATED FROM MANHOLE SIDE TO MANHOLE SIDE. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT LASER LEVELS ARE SET TO COMPENSATE FOR THIS.



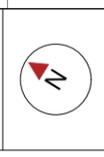
REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	AS	APR 2025	DESIGNED	AS
2 ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	AS
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
WASTEWATER CATCHMENT PLAN



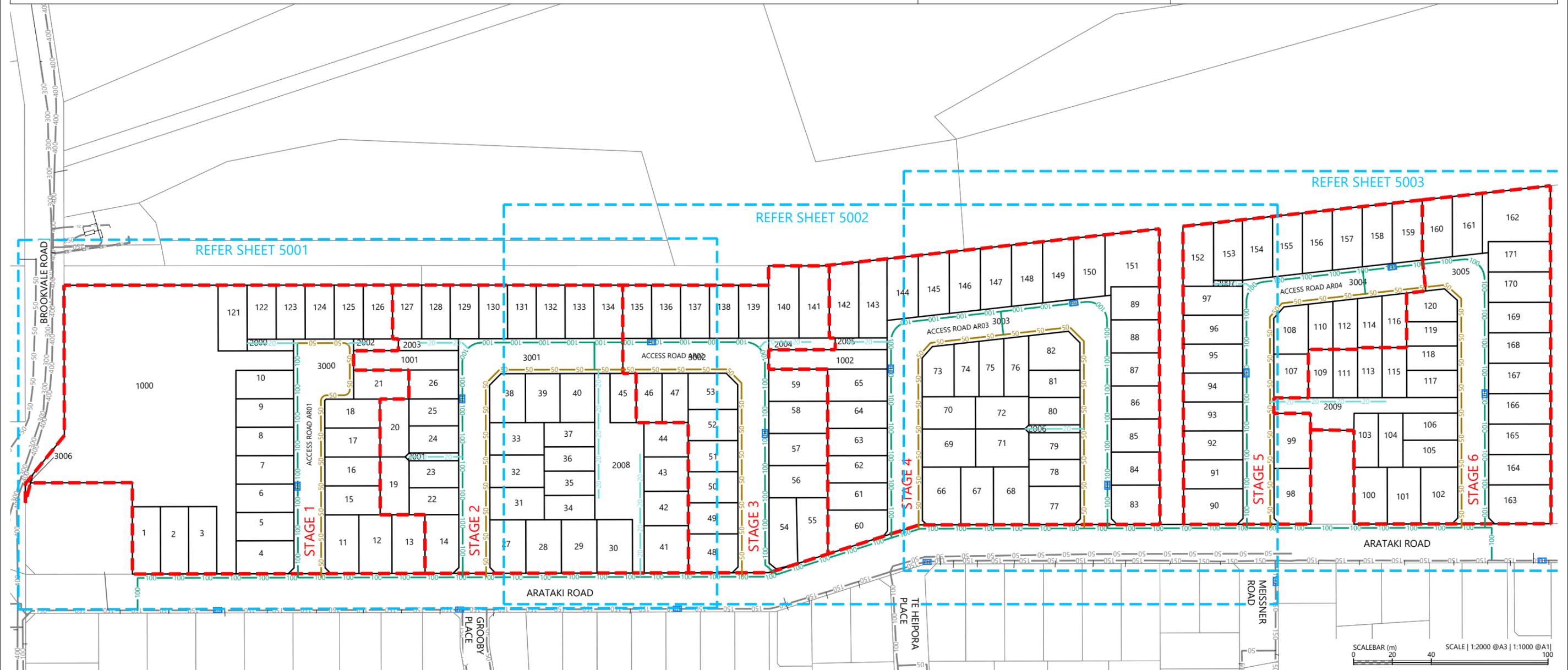
STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	HASTINGS DISTRICT COUNCIL	
DWG NO	P24-244-00-4600-DR	



LEGEND

STAGE BOUNDARIES	
PROPOSED PRIVATE WATER RETICULATION	
PROPOSED 50mm ID WATER RETICULATION	
PROPOSED 100mm ID WATER RETICULATION	
PROPOSED 150mm ID WATER RETICULATION	
EXISTING 50mm ID WATER RETICULATION	
EXISTING 100mm ID WATER RETICULATION	
EXISTING 150mm ID WATER RETICULATION	
FIRE HYDRANT	

- NOTES**
1. ALL WORKS AND MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL ENGINEERING COP. ANY AMBIGUITY BETWEEN THESE DRAWINGS AND COUNCIL STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
 2. ALL WATERMAIN TO HAVE MIN. COVER OF 600mm UNDER BERM & 900mm UNDER CARRIAGEWAY. ALL ROAD CROSSINGS ARE TO BE HARDFILL BACKFILLED WITH MIN. 900mm COVER.
 3. CONNECTIONS TO EXISTING COUNCIL WATERMANS ARE TO BE MADE ONLY AFTER TESTING, STERILISATION AND ACCEPTANCE BY HASTINGS DISTRICT COUNCIL. CONNECTIONS TO BE MADE IN ACCORDANCE WITH COUNCIL'S WATER SUPPLY CONNECTION POLICY.
 4. ALL PIPE MATERIAL TO BE PE100 WITH PRESSURE RATING OF PN12.5. UNLESS INDICATED OTHERWISE. ALL PIPE TO INCLUDE TRACER WIRE.
 5. ALL PIPES ARE SHOWN AS NOMINAL INTERNAL DIAMETER (ID).
 6. PE80 SDR11 PIPES ARE NOT TO BE WELDED TO A PE100 SDR 13.6 PIPE OF THE SAME NOMINAL DIAMETER.
 7. ALL 20mmOD SERVICE LINES (PRIVATE) ARE TO BE INSTALLED AS PER HASTINGS DISTRICT COUNCIL ENGINEERING COP WS 509.
 8. ALL BENDS ARE TO BE PROVIDED WITH A 45° FITTINGS AND THRUST BLOCKS TO DISTRICT COUNCIL ENGINEERING COP.
 9. NO VALVES OR FITTINGS ARE SHOWN ON THIS PLAN. THE NUMBER AND LOCATION OF ALL VALVES AND FITTINGS ARE TO BE DESIGNED AT ENGINEERING APPROVAL PHASE.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
1 ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	CJ
2 ISSUED FOR CONSENT	AS	JUN 2025	DRAWN	BM
			CHECKED	BLO
			APPROVED	BF

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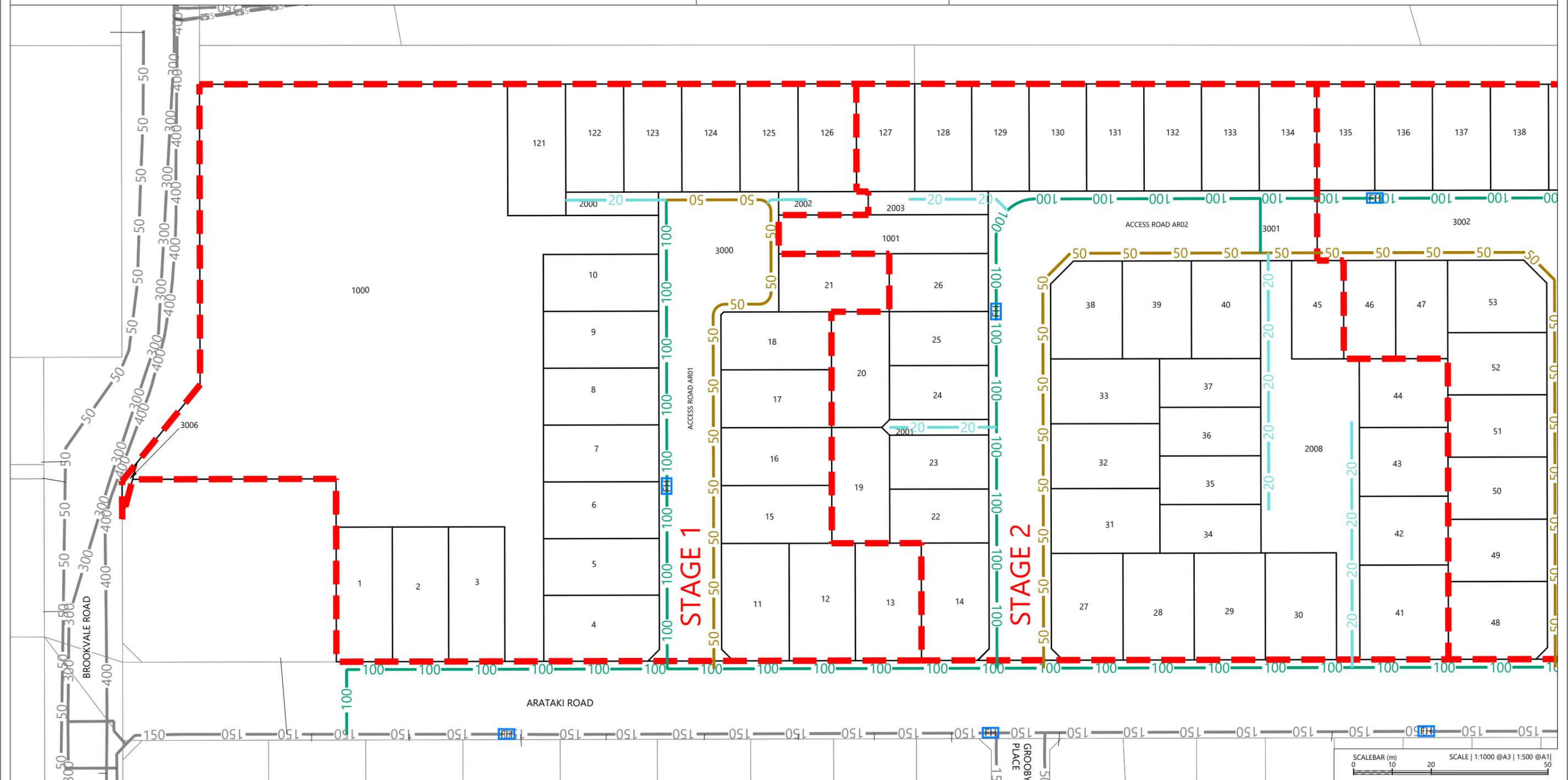
ARATAKI DEVELOPMENT - HAVELOCK NORTH
WATER RETICULATION LAYOUT OVERALL PLAN

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P24-244-00-5000-WR	

Plot Date: 1:59:38 pm, 26 June 2025, TIMOTHYB
 File: C:\1205\ENERGY\DATA\WP-PEN-APP-01\P24-244 - ARATAKI - HAVELOCK NORTH_2169002 DRAWINGS\01 ENG\P24-244-00-5000-WR WATER RETICULATION LAYOUT PLAN OVERALL.DWG

STAGE BOUNDARIES	
PROPOSED PRIVATE WATER RETICULATION	
PROPOSED 50mm ID WATER RETICULATION	
PROPOSED 100mm ID WATER RETICULATION	
PROPOSED 150mm ID WATER RETICULATION	
EXISTING 50mm ID WATER RETICULATION	
EXISTING 100mm ID WATER RETICULATION	
EXISTING 150mm ID WATER RETICULATION	
FIRE HYDRANT	

- NOTES**
1. ALL WORKS AND MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL ENGINEERING COP. ANY AMBIGUITY BETWEEN THESE DRAWINGS AND COUNCIL STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
 2. ALL WATERMAIN TO HAVE MIN. COVER OF 600mm UNDER BERM & 900mm UNDER CARRIAGEWAY. ALL ROAD CROSSINGS ARE TO BE HARDFILL BACKFILLED WITH MIN. 900mm COVER.
 3. CONNECTIONS TO EXISTING COUNCIL WATERMANS ARE TO BE MADE ONLY AFTER TESTING, STERILISATION AND ACCEPTANCE BY HASTINGS DISTRICT COUNCIL. CONNECTIONS TO BE MADE IN ACCORDANCE WITH COUNCIL'S WATER SUPPLY CONNECTION POLICY.
 4. ALL PIPE MATERIAL TO BE PE100 WITH PRESSURE RATING OF PN12.5. UNLESS INDICATED OTHERWISE. ALL PIPE TO INCLUDE TRACER WIRE.
 5. ALL PIPES ARE SHOWN AS NOMINAL INTERNAL DIAMETER (ID).
 6. PE80 SDR11 PIPES ARE NOT TO BE WELDED TO A PE100 SDR 13.6 PIPE OF THE SAME NOMINAL DIAMETER.
 7. ALL 20mmOD SERVICE LINES (PRIVATE) ARE TO BE INSTALLED AS PER HASTINGS DISTRICT COUNCIL ENGINEERING COP WS 509.
 8. ALL BENDS ARE TO BE PROVIDED WITH A 45° FITTINGS AND THRUST BLOCKS TO DISTRICT COUNCIL ENGINEERING COP.
 9. NO VALVES OR FITTINGS ARE SHOWN ON THIS PLAN. THE NUMBER AND LOCATION OF ALL VALVES AND FITTINGS ARE TO BE DESIGNED AT ENGINEERING APPROVAL PHASE.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	AS	JUN 2025	DESIGNED	CJ
			DRAWN	BM
			CHECKED	BLO
			APPROVED	BF

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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 WATER RETICULATION LAYOUT PLAN - SHEET 1

STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P24-244-00-5001-WR	

Plot Date: 1:59:38 pm, 26 June 2025, TIMOTHYB
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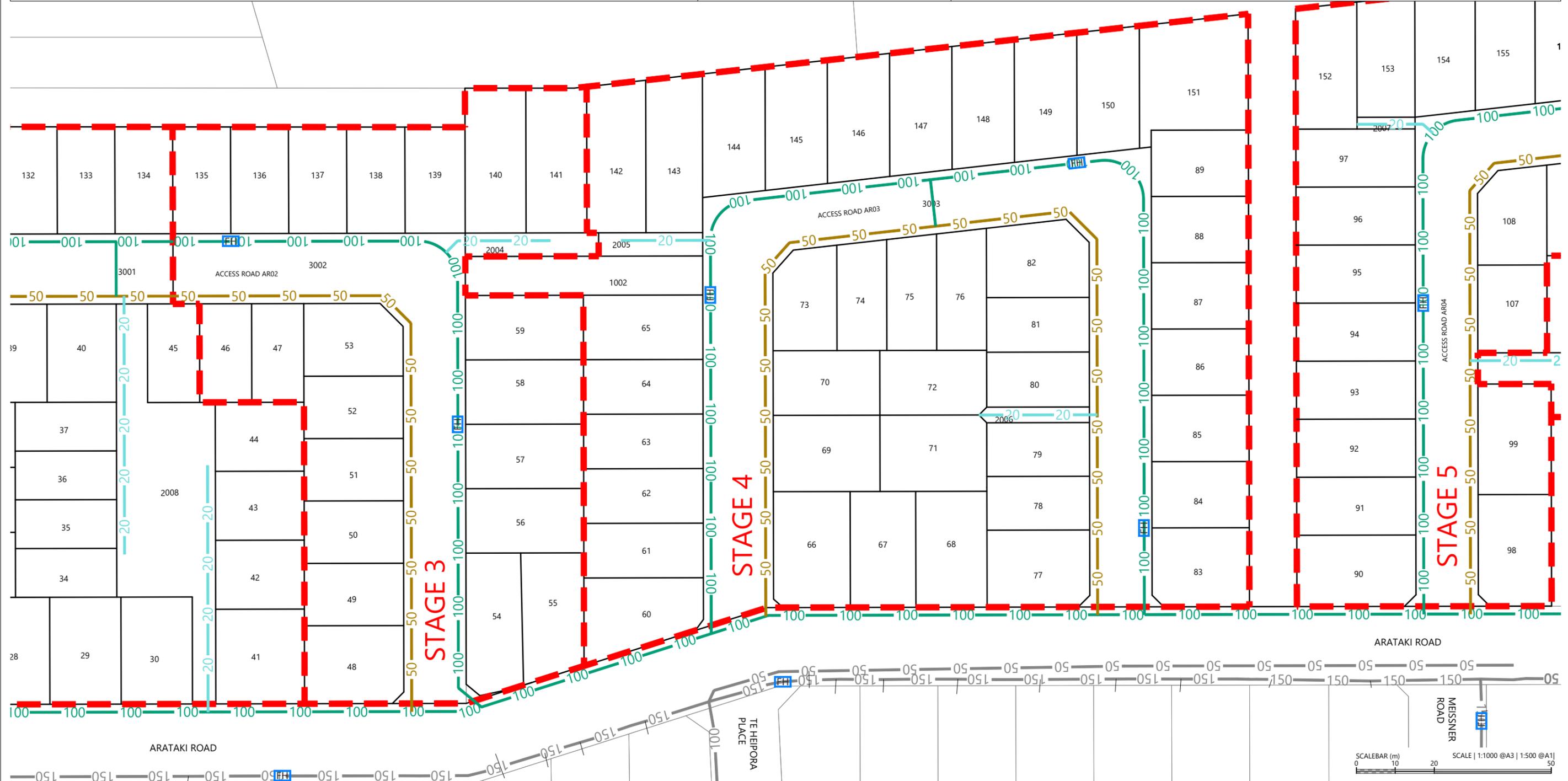
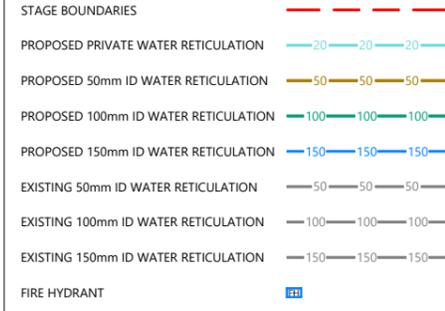


Plot Date: 1:59:39 pm, 26 June 2025, TIMOTHYB

File: C:\1205\ENERGY\DATA\WP-PEN-APP-01\P24-244 - ARATAKI - HAVELOCK NORTH_2169002 DRAWINGS\01 ENG\P24-244-00-5000-WR-WATER RETICULATION LAYOUT PLAN OVERALL.DWG

NOTES

1. ALL WORKS AND MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL ENGINEERING COP. ANY AMBIGUITY BETWEEN THESE DRAWINGS AND COUNCIL STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
2. ALL WATERMAIN TO HAVE MIN. COVER OF 600mm UNDER BERM & 900mm UNDER CARRIAGEWAY. ALL ROAD CROSSINGS ARE TO BE HARDFILL BACKFILLED WITH MIN. 900mm COVER.
3. CONNECTIONS TO EXISTING COUNCIL WATERMAINS ARE TO BE MADE ONLY AFTER TESTING, STERILISATION AND ACCEPTANCE BY HASTINGS DISTRICT COUNCIL. CONNECTIONS TO BE MADE IN ACCORDANCE WITH COUNCIL'S WATER SUPPLY CONNECTION POLICY.
4. ALL PIPE MATERIAL TO BE PE100 WITH PRESSURE RATING OF PN12.5. UNLESS INDICATED OTHERWISE. ALL PIPE TO INCLUDE TRACER WIRE.
5. ALL PIPES ARE SHOWN AS NOMINAL INTERNAL DIAMETER (ID).
6. PE80 SDR11 PIPES ARE NOT TO BE WELDED TO A PE100 SDR 13.6 PIPE OF THE SAME NOMINAL DIAMETER.
7. ALL 20mmOD SERVICE LINES (PRIVATE) ARE TO BE INSTALLED AS PER HASTINGS DISTRICT COUNCIL ENGINEERING COP WS 509.
8. ALL BENDS ARE TO BE PROVIDED WITH A 45° FITTINGS AND THRUST BLOCKS TO DISTRICT COUNCIL ENGINEERING COP.
9. NO VALVES OR FITTINGS ARE SHOWN ON THIS PLAN. THE NUMBER AND LOCATION OF ALL VALVES AND FITTINGS ARE TO BE DESIGNED AT ENGINEERING APPROVAL PHASE.



REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	AS	JUN 2025	DESIGNED	CJ
			DRAWN	BM
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
WATER RETICULATION LAYOUT PLAN - SHEET 2



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P24-244-00-5002-WR	

LEGEND

STAGE BOUNDARIES	
PROPOSED PRIVATE WATER RETICULATION	
PROPOSED 50mm ID WATER RETICULATION	
PROPOSED 100mm ID WATER RETICULATION	
PROPOSED 150mm ID WATER RETICULATION	
EXISTING 50mm ID WATER RETICULATION	
EXISTING 100mm ID WATER RETICULATION	
EXISTING 150mm ID WATER RETICULATION	
FIRE HYDRANT	

NOTES

1. ALL WORKS AND MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL ENGINEERING COP. ANY AMBIGUITY BETWEEN THESE DRAWINGS AND COUNCIL STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
2. ALL WATERMAIN TO HAVE MIN. COVER OF 600mm UNDER BERM & 900mm UNDER CARRIAGEWAY. ALL ROAD CROSSINGS ARE TO BE HARDFILL BACKFILLED WITH MIN. 900mm COVER.
3. CONNECTIONS TO EXISTING COUNCIL WATERMAINS ARE TO BE MADE ONLY AFTER TESTING, STERILISATION AND ACCEPTANCE BY HASTINGS DISTRICT COUNCIL. CONNECTIONS TO BE MADE IN ACCORDANCE WITH COUNCIL'S WATER SUPPLY CONNECTION POLICY.
4. ALL PIPE MATERIAL TO BE PE100 WITH PRESSURE RATING OF PN12.5. UNLESS INDICATED OTHERWISE. ALL PIPE TO INCLUDE TRACER WIRE.
5. ALL PIPES ARE SHOWN AS NOMINAL INTERNAL DIAMETER (ID).
6. PE80 SDR11 PIPES ARE NOT TO BE WELDED TO A PE100 SDR 13.6 PIPE OF THE SAME NOMINAL DIAMETER.
7. ALL 20mmOD SERVICE LINES (PRIVATE) ARE TO BE INSTALLED AS PER HASTINGS DISTRICT COUNCIL ENGINEERING COP WS 509.
8. ALL BENDS ARE TO BE PROVIDED WITH A 45° FITTINGS AND THRUST BLOCKS TO DISTRICT COUNCIL ENGINEERING COP.
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REVISION DETAILS	INT	DATE	SURVEYED	WOODS
2 ISSUED FOR CONSENT	AS	JUN 2025	DESIGNED	CJ
			DRAWN	BM
			CHECKED	BLO
			APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH

WATER RETICULATION LAYOUT PLAN - SHEET 3

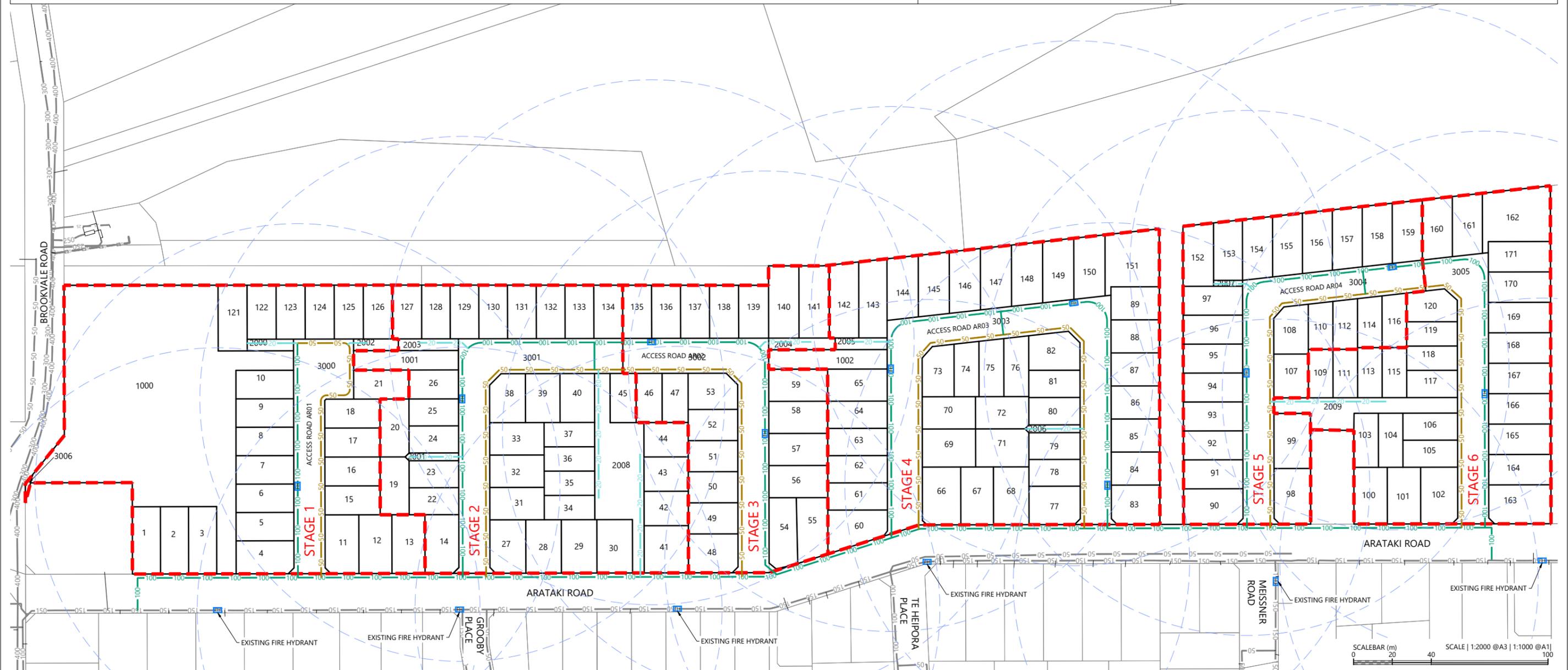


STATUS	ISSUED FOR CONSENT	REV
SCALE	1:1000 @ A3	2
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P24-244-00-5003-WR	

LEGEND

STAGE BOUNDARIES	
PROPOSED PRIVATE WATER RETICULATION	
PROPOSED 50mm ID WATER RETICULATION	
PROPOSED 100mm ID WATER RETICULATION	
PROPOSED 150mm ID WATER RETICULATION	
EXISTING 50mm ID WATER RETICULATION	
EXISTING 100mm ID WATER RETICULATION	
EXISTING 150mm ID WATER RETICULATION	
PROPOSED FIRE HYDRANT WITH 135m RADIUS	

- NOTES**
1. ALL WORKS AND MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL ENGINEERING COP. ANY AMBIGUITY BETWEEN THESE DRAWINGS AND COUNCIL STANDARDS IS TO BE REFERRED TO THE ENGINEER FOR CLARIFICATION.
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 4. ALL PIPE MATERIAL TO BE PE100 WITH PRESSURE RATING OF PN12.5. UNLESS INDICATED OTHERWISE. ALL PIPE TO INCLUDE TRACER WIRE.
 5. ALL PIPES ARE SHOWN AS NOMINAL INTERNAL DIAMETER (ID).
 6. PE80 SDR11 PIPES ARE NOT TO BE WELDED TO A PE100 SDR 13.6 PIPE OF THE SAME NOMINAL DIAMETER.
 7. ALL 20mmOD SERVICE LINES (PRIVATE) ARE TO BE INSTALLED AS PER HASTINGS DISTRICT COUNCIL ENGINEERING COP WS 509.
 8. ALL BENDS ARE TO BE PROVIDED WITH A 45° FITTINGS AND THRUST BLOCKS TO DISTRICT COUNCIL ENGINEERING COP.
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REVISION DETAILS

NO	DESCRIPTION	INT	DATE	SURVEYED	WOODS
1	ISSUED FOR DISCUSSION	BM	APR 2025	DESIGNED	CJ
2	ISSUED FOR CONSENT	TB	JUNE 2025	DRAWN	BM
				CHECKED	BLO
				APPROVED	BF

INT	DATE	SURVEYED	WOODS
BM	APR 2025	DESIGNED	CJ
TB	JUNE 2025	DRAWN	BM
		CHECKED	BLO
		APPROVED	BF



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
FIRE HYDRANT SPACING PLAN



STATUS	ISSUED FOR CONSENT	REV
SCALE	1:2000 @ A3	2
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P24-244-00-5500-WR	