



ARATAKI DEVELOPMENT - HAVELOCK NORTH

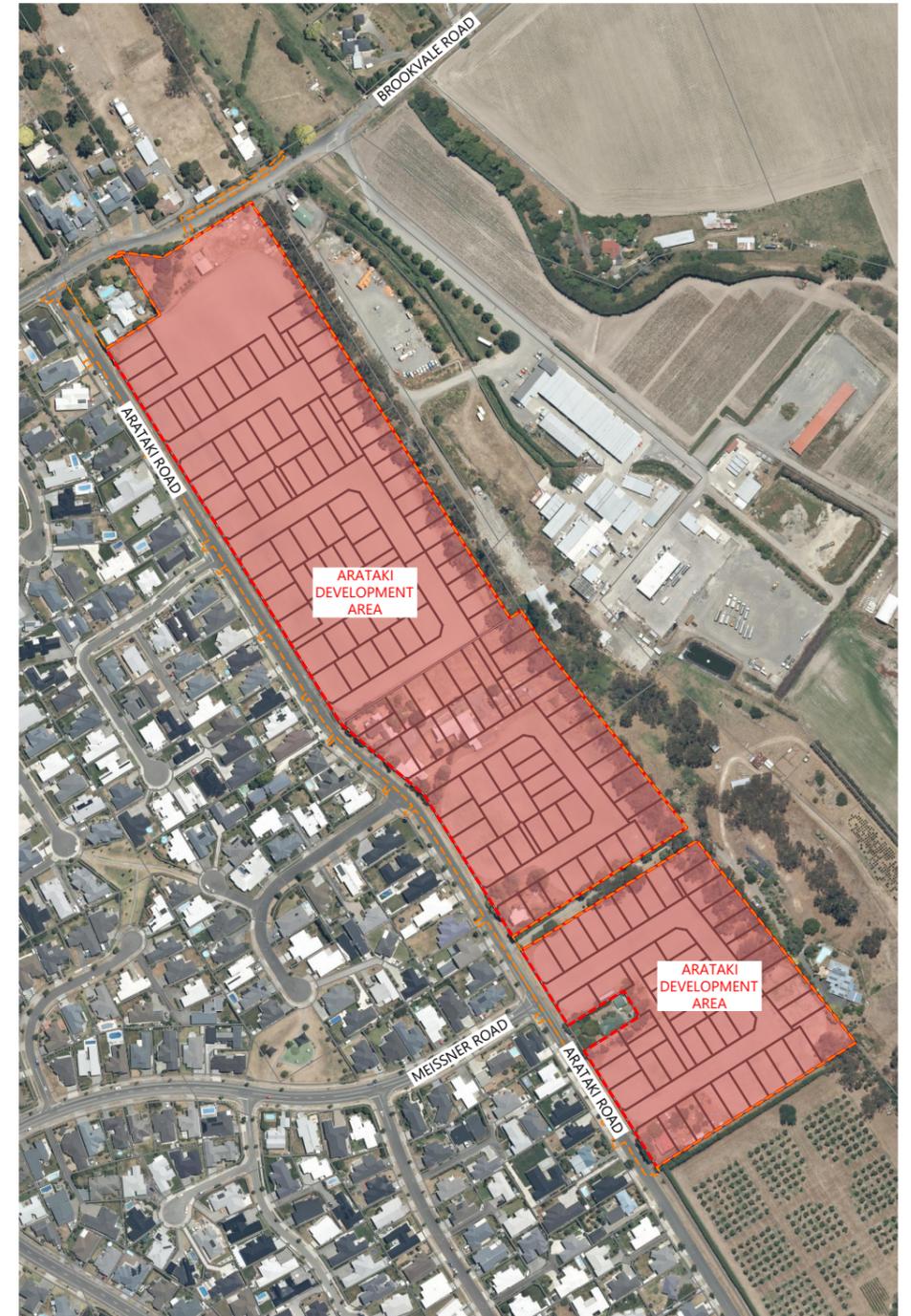
BUILDING B, LEVEL 1
8 NUGENT ST,
GRAFTON, AUCKLAND 1023
+64 9 308 9229
DRAWINGS ISSUED FOR CONSENT
HASTINGS DISTRICT COUNCIL

ARATAKI DEVELOPMENT DRAWINGS FOR CONSENT DRAWINGS INDEX



| DRAWING NUMBER | REV # | DRAWING TITLE |
|--------------------|-------|--|
| P24-244-00-000 | 2 | COVER PAGE |
| P24-244-00-0000-GE | 2 | DRAWING INDEX |
| P24-244-00-0001-SC | 2 | SCHEME PLAN |
| P24-244-00-0002-SC | 2 | SCHEME PLAN |
| P24-244-00-0003-SC | 2 | SCHEME PLAN |
| P24-244-00-0010-GE | 2 | SITE LOCATION PLAN |
| P24-244-00-0011-GE | 2 | EXISTING TITLES PLAN |
| P24-244-00-0020-GE | 2 | EXISTING FEATURES PLAN |
| P24-244-00-0030-GE | 2 | SITE CLEARING PLAN |
| P24-244-00-0100-GE | 2 | DEVELOPMENT CONTROL PLAN |
| P24-244-00-1000-EW | 2 | EXISTING CONTOUR PLAN |
| P24-244-00-1001-EW | 2 | EXISTING CONTOUR PLAN - SHEET 1 |
| P24-244-00-1002-EW | 2 | EXISTING CONTOUR PLAN - SHEET 2 |
| P24-244-00-1003-EW | 2 | EXISTING CONTOUR PLAN - SHEET 3 |
| P24-244-00-1100-EW | 2 | DESIGN CONTOUR PLAN |
| P24-244-00-1101-EW | 2 | DESIGN CONTOUR PLAN - SHEET 1 |
| P24-244-00-1102-EW | 2 | DESIGN CONTOUR PLAN - SHEET 2 |
| P24-244-00-1103-EW | 2 | DESIGN CONTOUR PLAN - SHEET 3 |
| P24-244-00-1200-EW | 2 | CUT FILL PLAN |
| P24-244-00-1201-EW | 2 | CUT FILL PLAN - SHEET 1 |
| P24-244-00-1202-EW | 2 | CUT FILL PLAN - SHEET 2 |
| P24-244-00-1203-EW | 2 | CUT FILL PLAN - SHEET 3 |
| P24-244-00-1210-EW | 2 | STORMWATER OUTLET EARTHWORKS PLAN |
| P24-244-00-1300-RD | 2 | EARTHWORKS SECTIONS PLAN |
| P24-244-00-1301-RD | 2 | EARTHWORKS SECTIONS - SHEET 1 |
| P24-244-00-1302-RD | 2 | EARTHWORKS SECTIONS - SHEET 2 |
| P24-244-00-1303-RD | 2 | EARTHWORKS SECTIONS - SHEET 3 |
| P24-244-00-1304-RD | 2 | EARTHWORKS SECTIONS - SHEET 4 |
| P24-244-00-1305-RD | 2 | EARTHWORKS SECTIONS - SHEET 5 |
| P24-244-00-1400-EW | 2 | RETAINING WALL LAYOUT |
| P24-244-00-1800-EW | 2 | SEDIMENT AND EROSION CONTROL PLAN OVERALL |
| P24-244-00-1801-EW | 2 | SEDIMENT AND EROSION CONTROL PLAN - SHEET 1 |
| P24-244-00-1802-EW | 2 | SEDIMENT AND EROSION CONTROL PLAN - SHEET 2 |
| P24-244-00-1803-EW | 2 | SEDIMENT AND EROSION CONTROL PLAN - SHEET 3 |
| P24-244-00-1805-EW | 2 | SEDIMENT AND EROSION CONTROL PLAN - DRY BASIN |
| P24-244-00-1810-EW | 2 | SEDIMENT AND EROSION CONTROL - STANDARD DETAILS SHEET 1 |
| P24-244-00-1811-EW | 2 | SEDIMENT AND EROSION CONTROL - STANDARD DETAILS SHEET 2 |
| P24-244-00-1812-EW | 2 | SEDIMENT AND EROSION CONTROL - STANDARD DETAILS SHEET 3 |
| P24-244-00-1813-EW | 2 | SEDIMENT AND EROSION CONTROL - STANDARD DETAILS SHEET 4 |
| P24-244-00-1814-EW | 2 | SEDIMENT AND EROSION CONTROL - STANDARD DETAILS SHEET 5 |
| P24-244-00-2000-RD | 2 | ROAD PLAN |
| P24-244-00-2001-RD | 2 | ROAD PLAN - SHEET 1 |
| P24-244-00-2002-RD | 2 | ROAD PLAN - SHEET 2 |
| P24-244-00-2003-RD | 2 | ROAD PLAN - SHEET 3 |
| P24-244-00-2200-RD | 2 | ROAD TYPOLOGY PLAN |
| P24-244-00-2201-RD | 2 | TYPICAL CROSS SECTIONS - ARATAKI ROAD |
| P24-244-00-2202-RD | 2 | TYPICAL CROSS SECTIONS - ACCESS ROAD TYPE 1 & TYPE 2 |
| P24-244-00-2203-RD | 2 | TYPICAL CROSS SECTIONS - ACCESSWAY, JOAL TYPE 2 & TYPE 3 |
| P24-244-00-2204-RD | 2 | TYPICAL CROSS SECTIONS - JOAL TYPE 4 |
| P24-244-00-2205-RD | 2 | TYPICAL CROSS SECTIONS - JOAL TYPE 5 |
| P24-244-00-2206-RD | 2 | TYPICAL CROSS SECTIONS - TYPICAL BERM ARRANGEMENT |
| P24-244-00-2500-RD | 2 | ROAD CENTRELINE PLAN |
| P24-244-00-2501-RD | 2 | ROAD LONGSECTIONS - SHEET 1 |
| P24-244-00-2502-RD | 2 | ROAD LONGSECTIONS - SHEET 2 |
| P24-244-00-2503-RD | 2 | ROAD LONGSECTIONS - SHEET 3 |
| P24-244-00-2504-RD | 2 | ROAD LONGSECTIONS - SHEET 4 |
| P24-244-00-2505-RD | 2 | ROAD LONGSECTIONS - SHEET 5 |
| P24-244-00-2700-RD | 2 | VEHICLE PATHS - RUBBISH TRUCKS THROUGH JOALS |
| P24-244-00-2751-RD | 2 | SAFE INTERSECTION SIGHT DISTANCE PLAN - SHEET 1 |
| P24-244-00-2752-RD | 2 | SAFE INTERSECTION SIGHT DISTANCE PLAN - SHEET 2 |
| P24-244-00-2753-RD | 2 | SAFE INTERSECTION SIGHT DISTANCE PLAN - SHEET 3 |

| DRAWING NUMBER | REV # | DRAWING TITLE |
|--------------------|-------|---|
| P24-244-00-2754-RD | 2 | APPROACH SIGHT DISTANCE PLAN - SHEET 1 |
| P24-244-00-2755-RD | 2 | APPROACH SIGHT DISTANCE PLAN - SHEET 2 |
| P24-244-00-2756-RD | 2 | APPROACH SIGHT DISTANCE PLAN - SHEET 3 |
| P24-244-00-2757-RD | 2 | CROSSING SIGHT DISTANCE PLAN - SHEET 1 |
| P24-244-00-2758-RD | 2 | CROSSING SIGHT DISTANCE PLAN - SHEET 2 |
| P24-244-00-2759-RD | 2 | CROSSING SIGHT DISTANCE PLAN - SHEET 3 |
| P24-244-00-2800-RD | 2 | ROAD DETAILS - HDC ENG COP - C19 & C19A |
| P24-244-00-2801-RD | 2 | ROAD DETAILS - HDC ENG COP - WS 105 |
| P24-244-00-2802-RD | 2 | ROAD DETAILS - HDC ENG COP - WS 106 |
| P24-244-00-3000-DR | 2 | STORMWATER DRAINAGE LAYOUT PLAN |
| P24-244-00-3001-DR | 2 | STORMWATER DRAINAGE LAYOUT PLAN - SHEET 1 |
| P24-244-00-3002-DR | 2 | STORMWATER DRAINAGE LAYOUT PLAN - SHEET 2 |
| P24-244-00-3003-DR | 2 | STORMWATER DRAINAGE LAYOUT PLAN - SHEET 3 |
| P24-244-00-3500-DR | 2 | STORMWATER LONGSECTIONS - SHEET 1 |
| P24-244-00-3501-DR | 2 | STORMWATER LONGSECTIONS - SHEET 2 |
| P24-244-00-3502-DR | 2 | STORMWATER LONGSECTIONS - SHEET 3 |
| P24-244-00-3503-DR | 2 | STORMWATER LONGSECTIONS - SHEET 4 |
| P24-244-00-3504-DR | 2 | STORMWATER LONGSECTIONS - SHEET 5 |
| P24-244-00-3505-DR | 2 | STORMWATER LONGSECTIONS - SHEET 6 |
| P24-244-00-3506-DR | 2 | STORMWATER LONGSECTIONS - SHEET 7 |
| P24-244-00-3507-DR | 2 | STORMWATER LONGSECTIONS - SHEET 8 |
| P24-244-00-3508-DR | 2 | STORMWATER LONGSECTIONS - SHEET 9 |
| P24-244-00-3509-DR | 2 | STORMWATER LONGSECTIONS - SHEET 10 |
| P24-244-00-3510-DR | 2 | STORMWATER LONGSECTIONS - SHEET 11 |
| P24-244-00-3600-DR | 2 | STORMWATER 10 YEAR CATCHMENT PLAN |
| P24-244-00-3800-DR | 2 | STORMWATER STREAM OUTLET DETAIL |
| P24-244-00-3810-DR | 2 | STORMWATER GPT DETAIL |
| P24-244-00-3850-DR | 2 | BASIN LAYOUT PLAN |
| P24-244-00-3851-DR | 2 | STORMWATER BASIN SECTIONS |
| P24-244-00-3852-DR | 2 | WINGWALL OUTLET 02/01 DETAILS |
| P24-244-00-3853-DR | 2 | STORMWATER BASIN OUTLET 01/05 DETAILS |
| P24-244-00-3900-DR | 2 | OVERLAND FLOW PATH - POST DEVELOPMENT PLAN |
| P24-244-00-3901-DR | 2 | OVERLAND FLOW SECTIONS |
| P24-244-00-3902-DR | 2 | OVERLAND FLOW SECTIONS |
| P24-244-00-3903-DR | 2 | OVERLAND FLOW SECTIONS |
| P24-244-00-3904-DR | 2 | OVERLAND FLOW SECTIONS |
| P24-244-00-3905-DR | 2 | OVERLAND FLOW SECTIONS |
| P24-244-00-3906-DR | 2 | OVERLAND FLOW SECTIONS |
| P24-244-00-3907-DR | 2 | OVERLAND FLOW SECTIONS |
| P24-244-00-3908-DR | 2 | OVERLAND FLOW SECTIONS |
| P24-244-00-3909-DR | 2 | OVERLAND FLOW SECTIONS |
| P24-244-00-3950-DR | 2 | TYPICAL RAINGARDEN DETAILS - PLAN AND LONGSECTION |
| P24-244-00-3951-DR | 2 | TYPICAL RAINGARDEN DETAILS - CROSS SECTIONS |
| P24-244-00-4000-DR | 2 | WASTEWATER DRAINAGE LAYOUT PLAN |
| P24-244-00-4001-DR | 2 | WASTEWATER DRAINAGE LAYOUT PLAN - SHEET 1 |
| P24-244-00-4002-DR | 2 | WASTEWATER DRAINAGE LAYOUT PLAN - SHEET 2 |
| P24-244-00-4003-DR | 2 | WASTEWATER DRAINAGE LAYOUT PLAN - SHEET 3 |
| P24-244-00-4500-DR | 2 | WASTEWATER LONGSECTION - SHEET 1 |
| P24-244-00-4501-DR | 2 | WASTEWATER LONGSECTION - SHEET 2 |
| P24-244-00-4502-DR | 2 | WASTEWATER LONGSECTION - SHEET 3 |
| P24-244-00-4503-DR | 2 | WASTEWATER LONGSECTION - SHEET 4 |
| P24-244-00-4504-DR | 2 | WASTEWATER LONGSECTION - SHEET 5 |
| P24-244-00-4505-DR | 2 | WASTEWATER LONGSECTION - SHEET 6 |
| P24-244-00-4506-DR | 2 | WASTEWATER LONGSECTION - SHEET 7 |
| P24-244-00-4507-DR | 2 | WASTEWATER LONGSECTION - SHEET 8 |
| P24-244-00-4600-DR | 2 | WASTEWATER CATCHMENT PLAN |
| P24-244-00-5000-WR | 2 | WATER RETICULATION LAYOUT PLAN |
| P24-244-00-5001-WR | 2 | WATER RETICULATION LAYOUT PLAN - SHEET 1 |
| 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 |

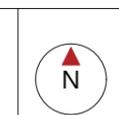


| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
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| 2 ISSUED FOR CONSENT | TB | JUNE 2025 | DESIGNED | TB |
| | | | DRAWN | TB |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |

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ARATAKI DEVELOPMENT - HAVELOCK NORTH
DRAWING INDEX



| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:5000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-0000-GE | |

Plot Date: 4:21:21 pm, 30 June 2025, BRANDONO
File: C:\1205\DATA\WIP-AKI-APP-02\P24-244-ARATAKI-HAVELOCK NORTH_2169002 DRAWINGS\01 ENG\02\24-244-00-0000-DRAWING INDEX.DWG



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 TO LANDSCAPING AND FENCING COVENANTS

| 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 |

LEGEND

- EXISTING BOUNDARIES
- PROPOSED BOUNDARIES
- PROPOSED COVENANT AREAS

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

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.

| 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 |



| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
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| 2 ISSUED FOR CONSENT | KR | JUNE 2025 | DESIGNED | WOODS |
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| | | | APPROVED | KR |

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8 NUGENT ST, GRAFTON,
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ARATAKI DEVELOPMENT - HAVELOCK NORTH

SCHEME PLAN



| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:3000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-0001-SC | |

Plot Date: 13:50:18,29 June 2025, SRV12DSDSYNERGY File: T:\120TEMP\12DSDSYNERGY\SERVER\SERVICE\8080\ET1604EE-AD71-454D-B9C7-1A9EDC7A3D18\P24-244-00-0001-SC.DWG



- EXISTING BOUNDARIES
- PROPOSED BOUNDARIES
- PROPOSED COVENANT AREAS

NOTES

1. SCHEME PLANS SUBJECT TO COUNCIL APPROVAL
2. LOT AREAS AND BOUNDARY DIMENSIONS ARE SUBJECT TO CONFIRMATION UPON FINAL LAND TRANSFER SURVEY.
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
SCHEME PLAN



| STATUS | ISSUED FOR CONSENT | REV |
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| SCALE | 1:1500 @ A3 | 2 |
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| DWG NO | P24-244-00-0002-SC | |



LEGEND

EXISTING BOUNDARIES

PROPOSED BOUNDARIES

PROPOSED COVENANT AREAS

- NOTES**
- SCHEME PLANS SUBJECT TO COUNCIL APPROVAL
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SCHEME PLAN



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ARATAKI DEVELOPMENT - HAVELOCK NORTH

SITE LOCATION PLAN

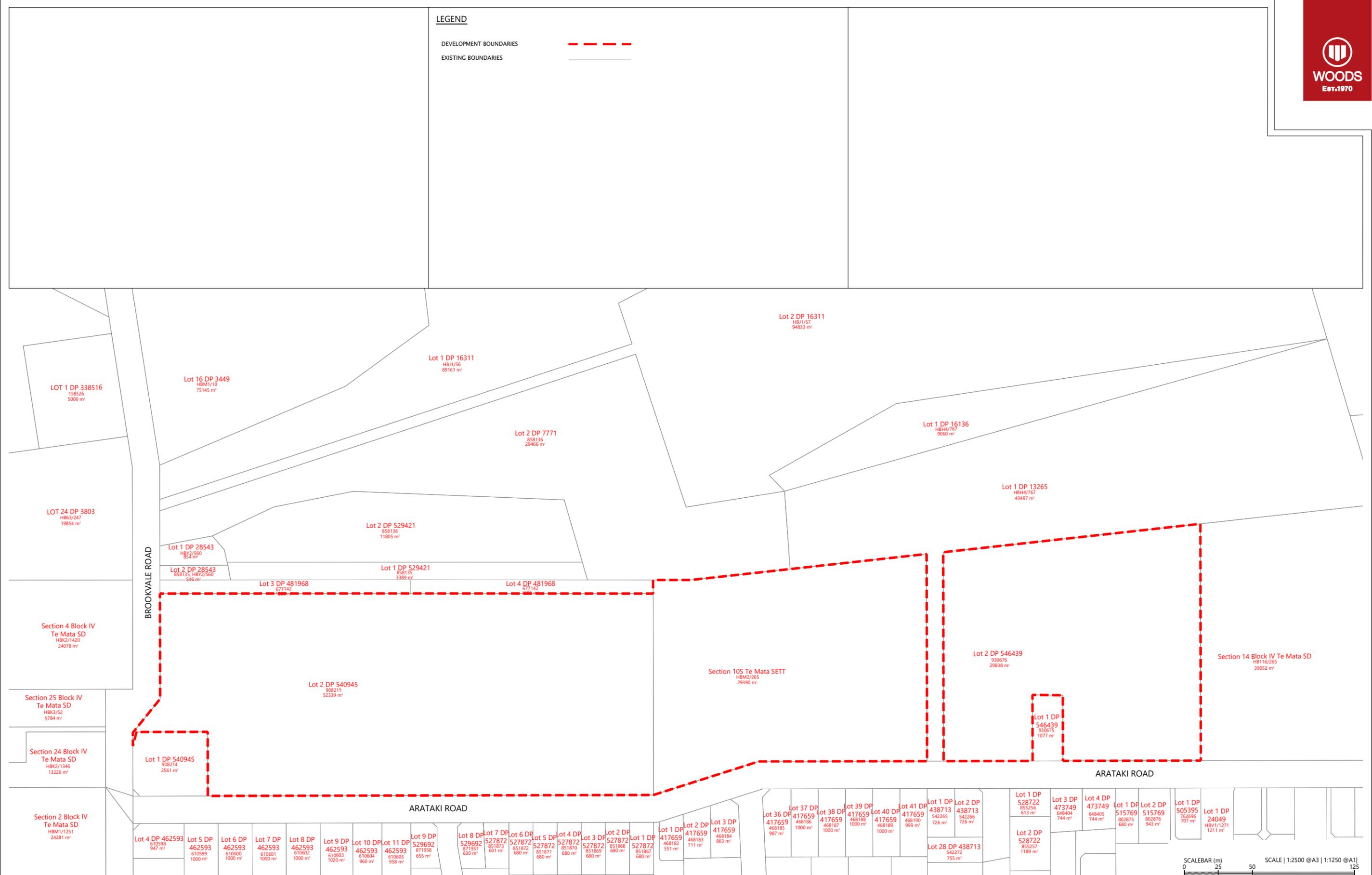


| STATUS | ISSUED FOR CONSENT | REV |
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| SCALE | 1:5000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-0010-GE | |

LEGEND

DEVELOPMENT BOUNDARIES - - - - -

EXISTING BOUNDARIES



BROOKVALE ROAD

ARATAKI ROAD

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 |
| | | | APPROVED | BF |



BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
AUCKLAND 1023
+64 9 308 9229

WOODS.CO.NZ



ARATAKI DEVELOPMENT - HAVELOCK NORTH

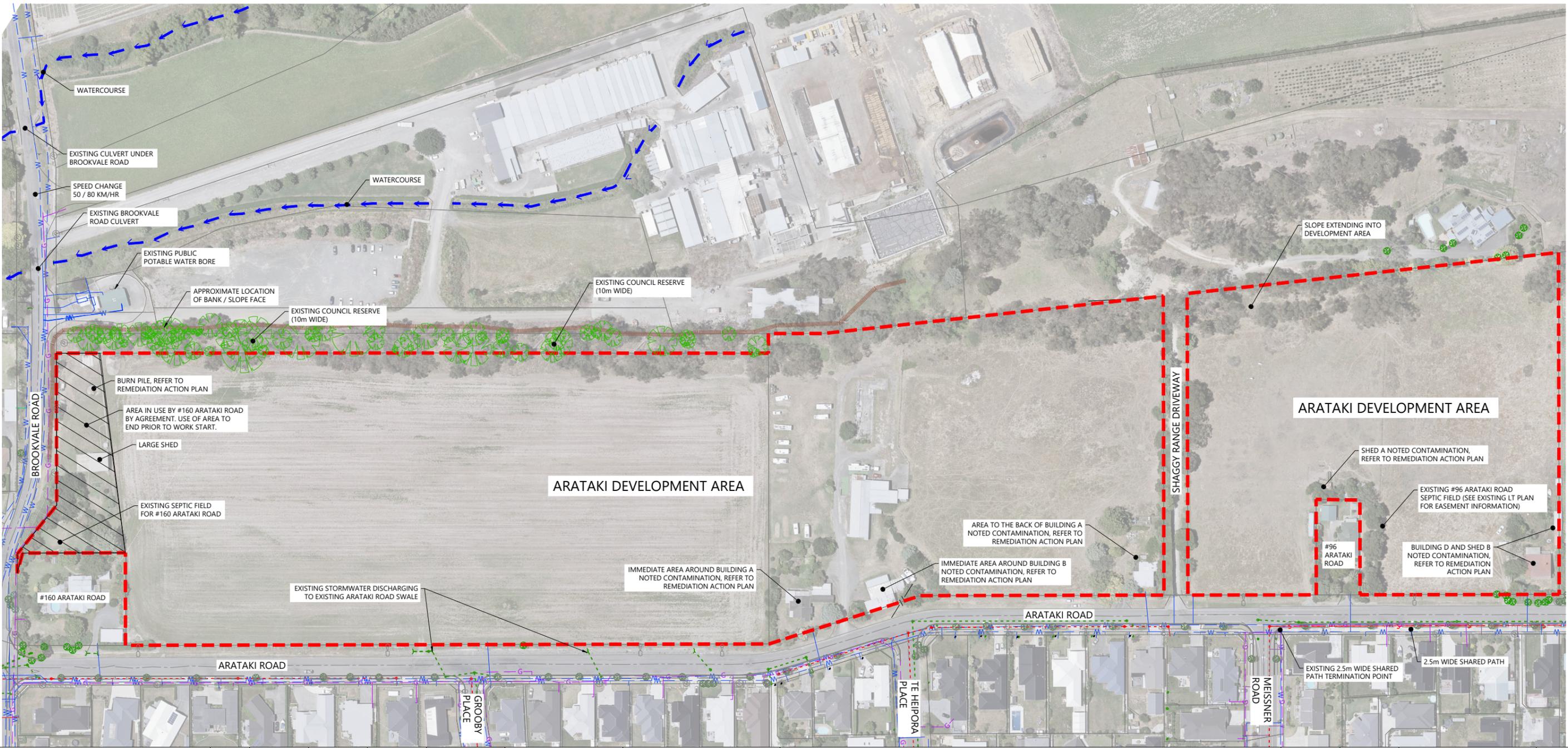
EXISTING TITLES PLAN



| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| 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 |
|-------------------------|-----|-----------|----------|-------|
| 1 ISSUED FOR DISCUSSION | BM | APR 2025 | DESIGNED | BLO |
| 2 ISSUED FOR CONSENT | TB | JUNE 2025 | DRAWN | BM |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |

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



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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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ARATAKI DEVELOPMENT - HAVELOCK NORTH
SITE CLEARING PLAN

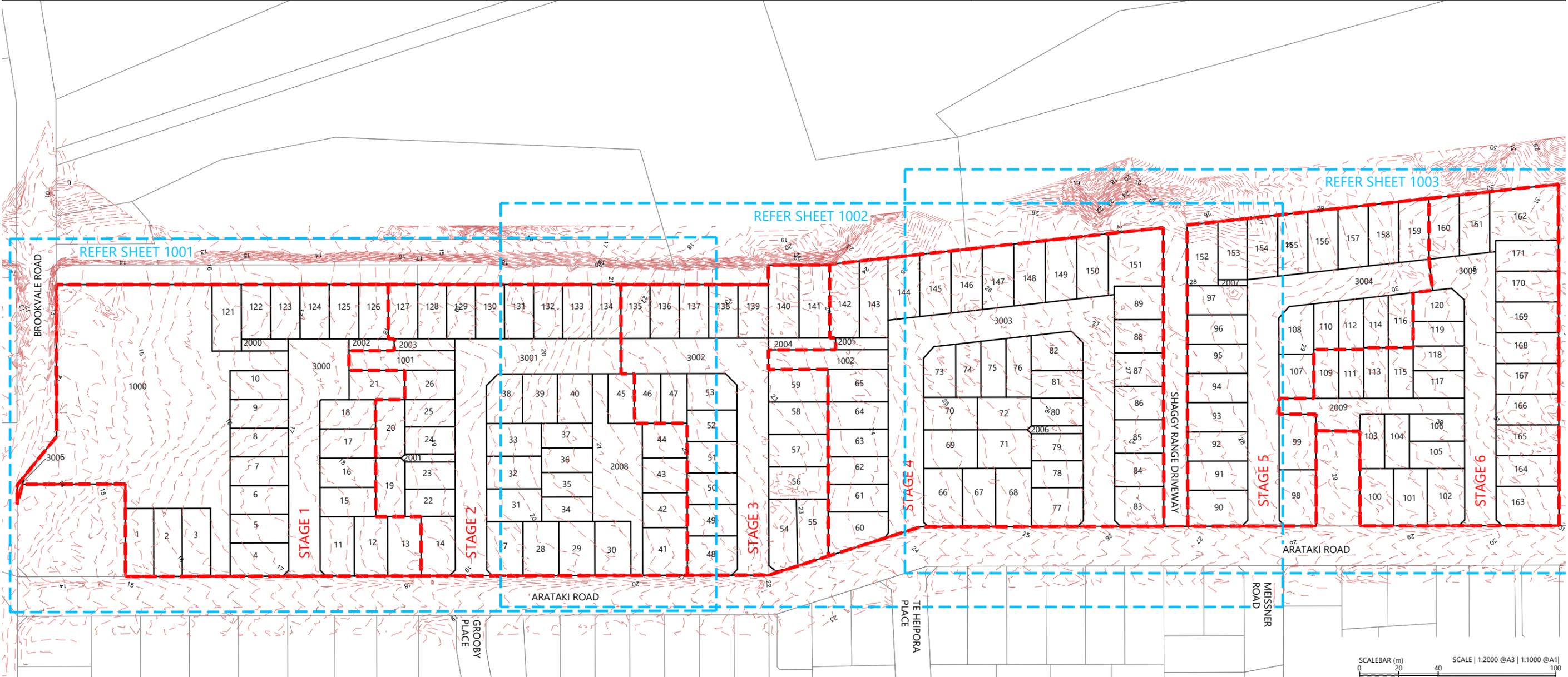


| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:2000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-0030-GE | |

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.
 - 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.



| 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
EXISTING CONTOUR PLAN



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

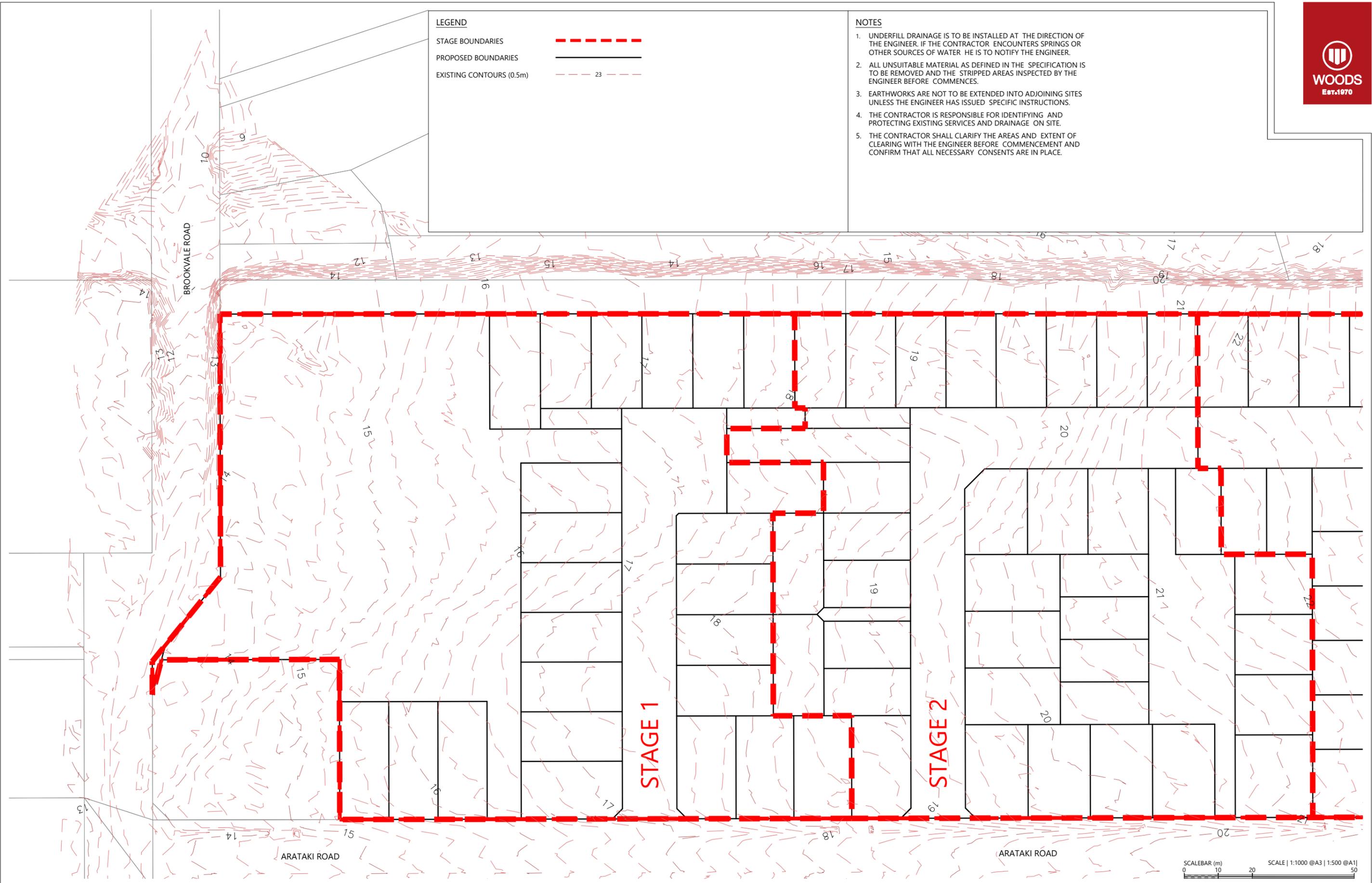
LEGEND

STAGE BOUNDARIES - - - - -

PROPOSED BOUNDARIES

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

- NOTES**
1. 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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| 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
 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 | |

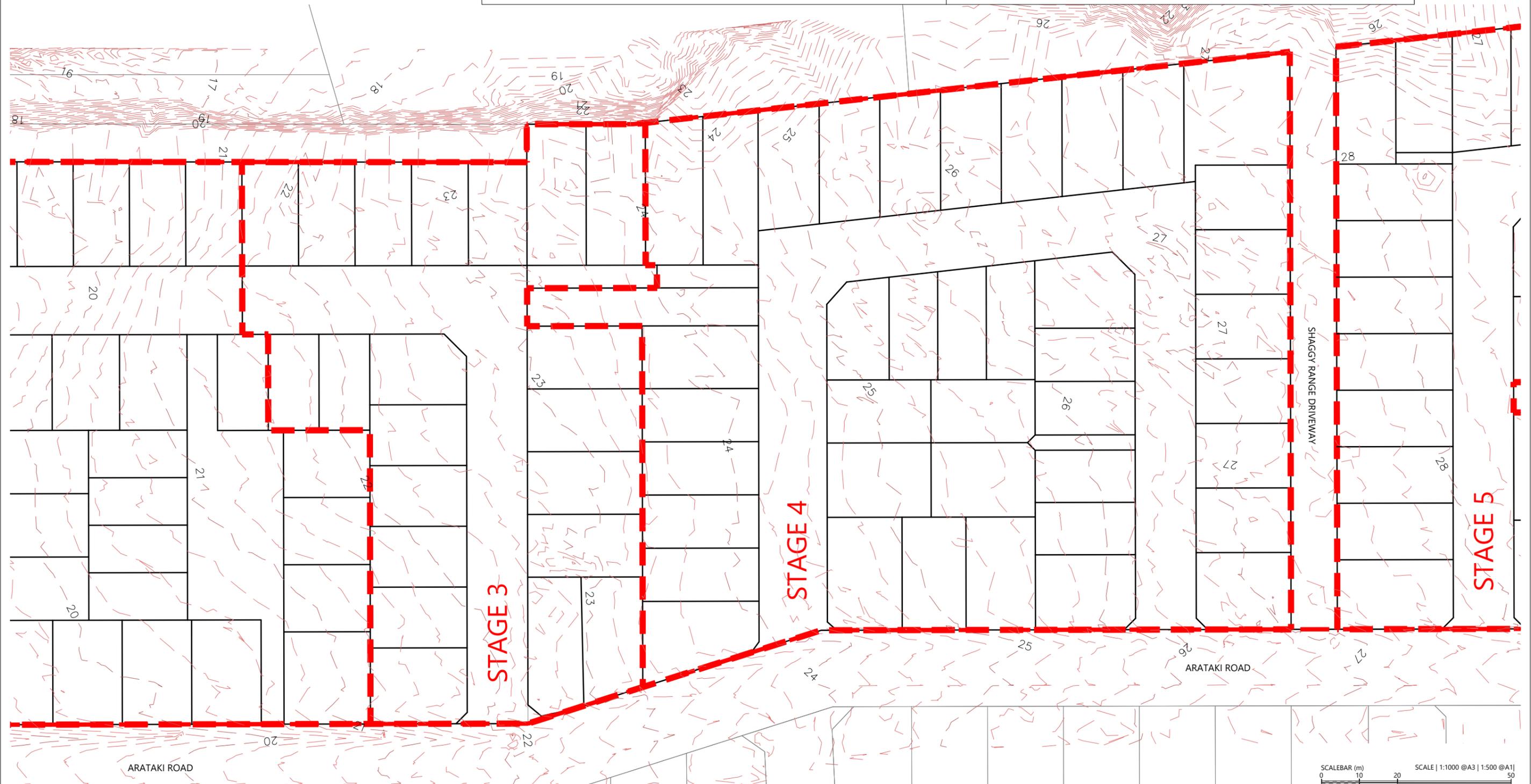
LEGEND

STAGE BOUNDARIES - - - - -

PROPOSED BOUNDARIES

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

- NOTES**
1. 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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| 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
 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 | |

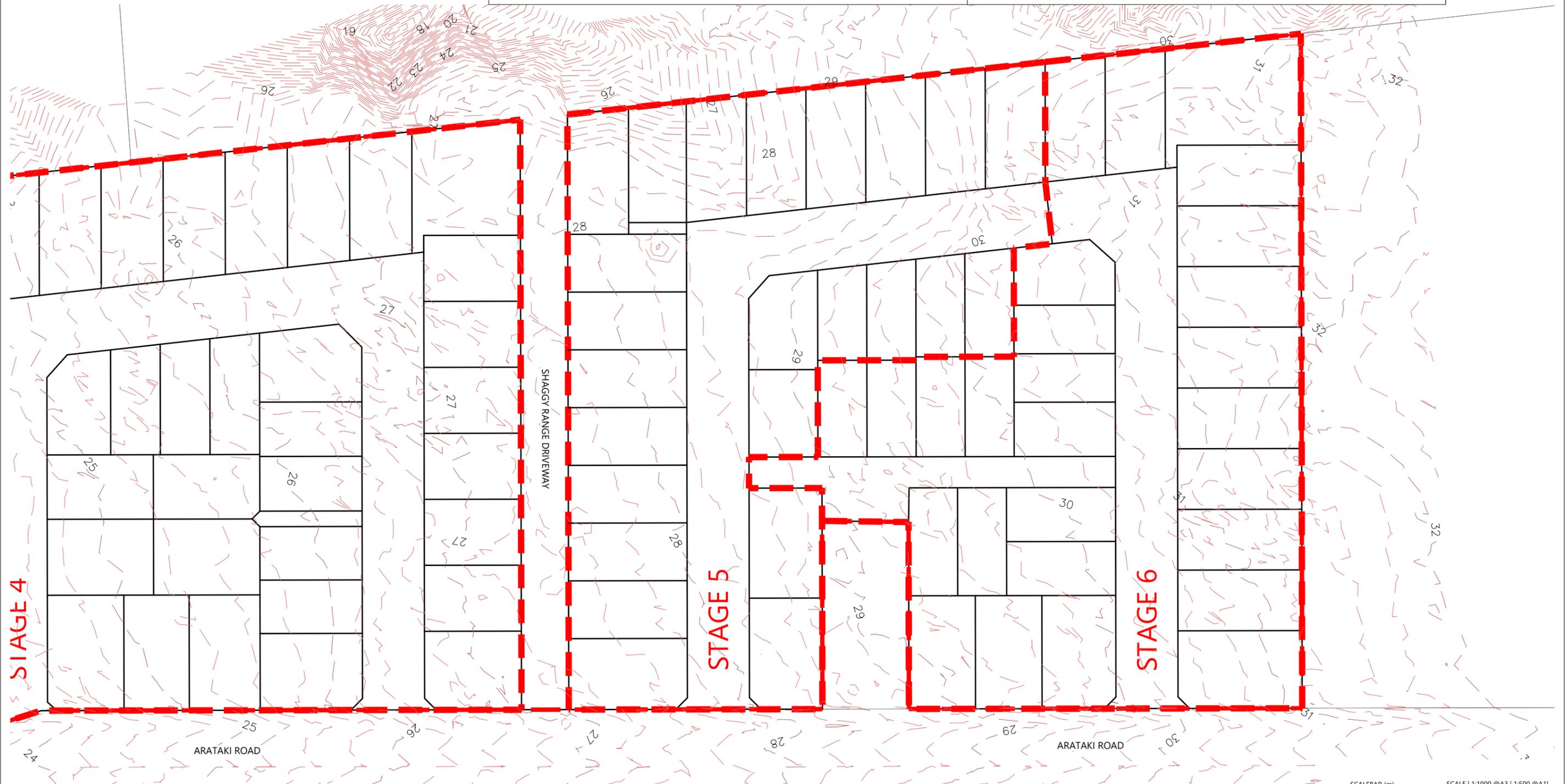
LEGEND

STAGE BOUNDARIES - - - - -

PROPOSED BOUNDARIES — — — — —

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

- 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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| 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
EXISTING CONTOUR PLAN - SHEET 3

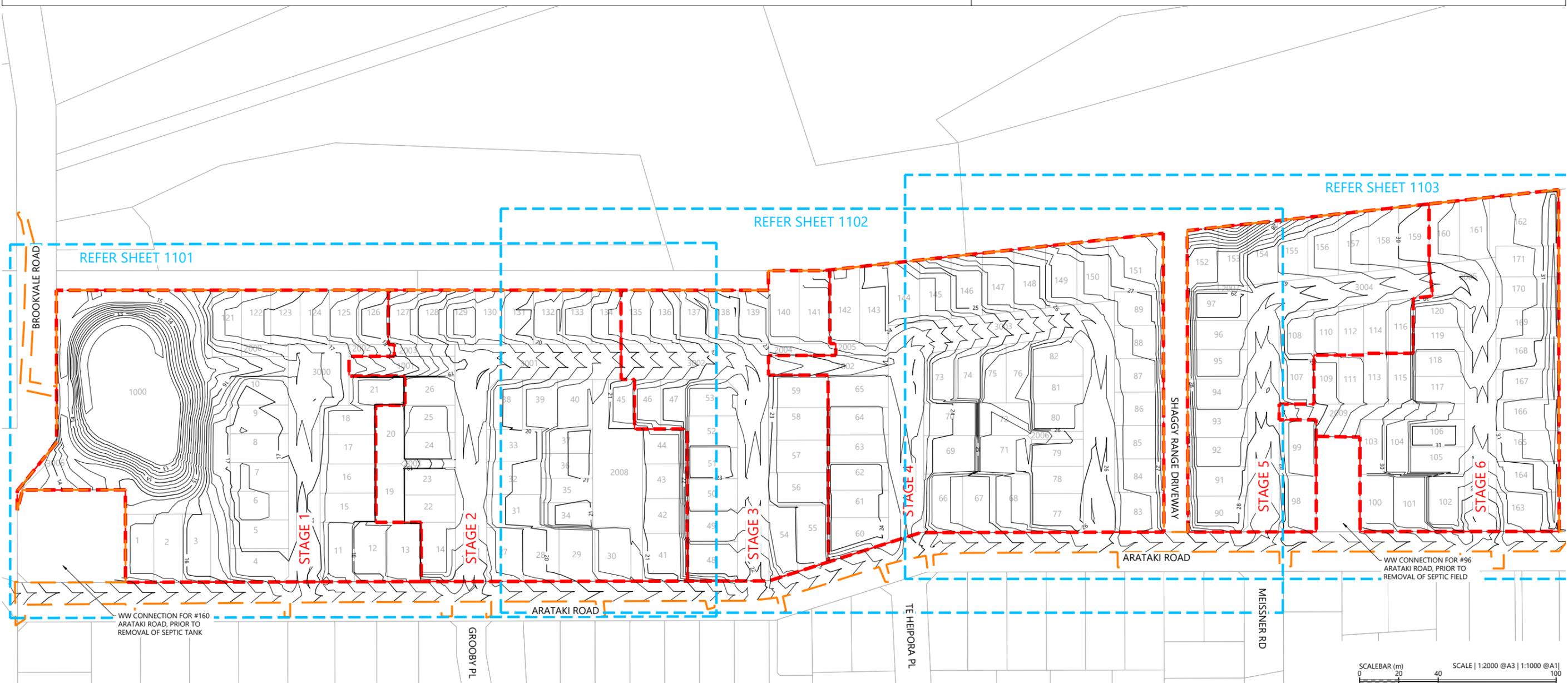


| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-1003-EW | |

- 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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LEGEND

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



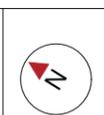
| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
|-------------------------|-----|-----------|----------|-------|
| 1 ISSUED FOR DISCUSSION | TB | APR 2025 | DESIGNED | AB |
| 2 ISSUED FOR CONSENT | TB | JUNE 2025 | DRAWN | TB |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |



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8 NUGENT ST, GRAFTON,
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
DESIGN CONTOUR PLAN



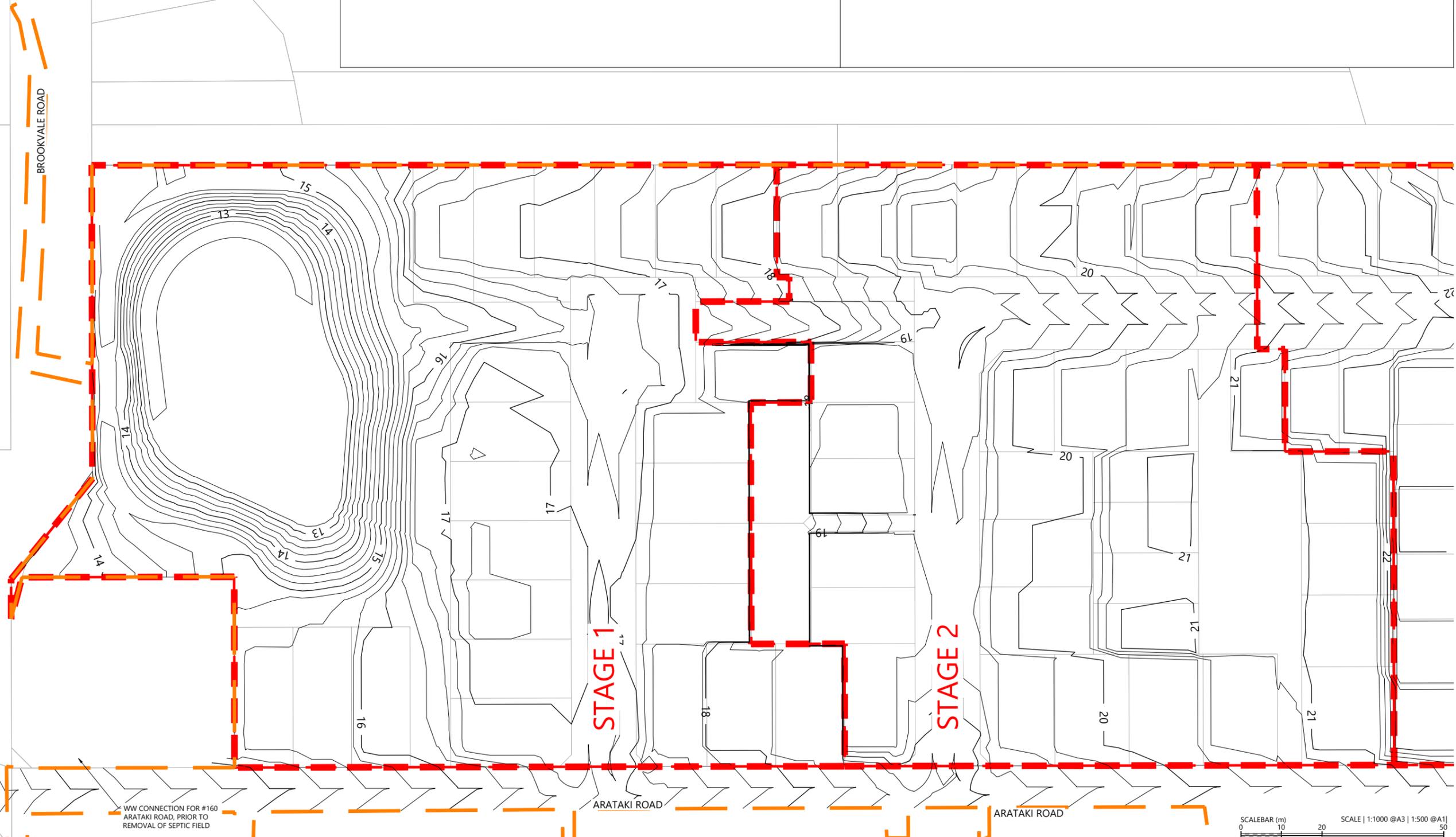
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:2000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-1100-EW | |

LEGEND

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

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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WW CONNECTION FOR #160 ARATAKI ROAD, PRIOR TO REMOVAL OF SEPTIC FIELD

STAGE 1

STAGE 2



| 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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8 NUGENT ST, GRAFTON,
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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 | |

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.
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- THE CONTRACTOR SHALL CLARIFY THE AREAS AND EXTENT OF CLEARING WITH THE ENGINEER BEFORE COMMENCEMENT AND CONFIRM THAT ALL NECESSARY CONSENTS ARE IN PLACE.



Plot Date: 9:21:47 am, 26 June 2025, TIMOTHYB

File: C:\1205\ENERGY\DATA\WP-PEN-APP-01\P24-244 - ARATAKI - HAVELOCK NORTH_2169002 DRAWINGS\01 ENG\P24-244-00-1102-EW_DESIGN CONTOUR PLAN.DWG

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



BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
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+64 9 308 9229

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ARATAKI DEVELOPMENT - HAVELOCK NORTH

DESIGN CONTOUR PLAN - SHEET 2



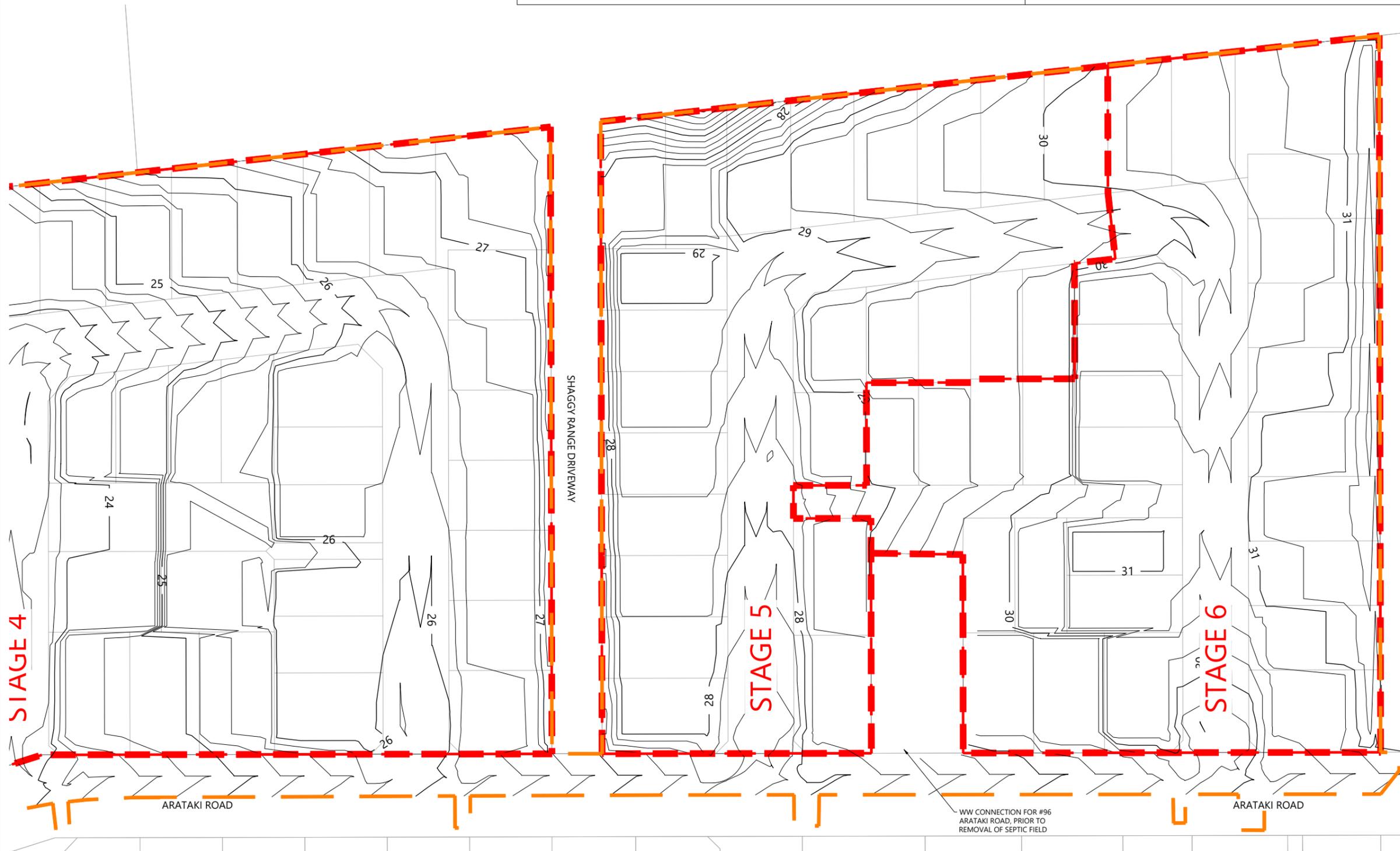
| | |
|--------------|-------------------------------------|
| SCALEBAR (m) | SCALE 1:1000 @A3 1:500 @A1 50 |
| STATUS | ISSUED FOR CONSENT |
| SCALE | 1:1000 @ A3 |
| COUNCIL | HASTINGS DISTRICT COUNCIL |
| DWG NO | P24-244-00-1102-EW |
| REV | 2 |

LEGEND

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

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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| 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 3



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

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.
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- 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.

LEGEND

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

VOLUMES

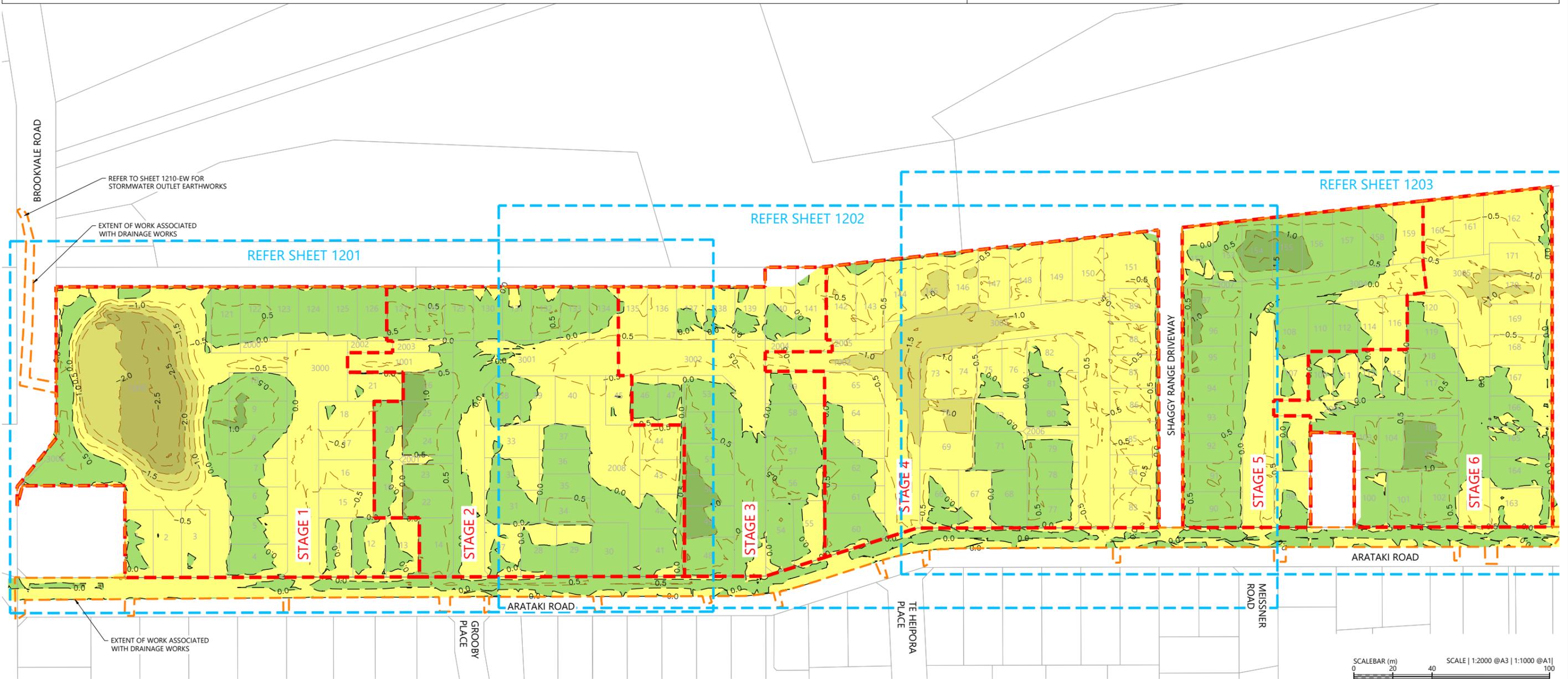
CUT / FILL VOLUMES
 CUT: 35,400 m³,
 FILL: 16,400 m³,
 BALANCE: 19,000 m³, EXCESS CUT TO BE REMOVED FROM SITE

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.



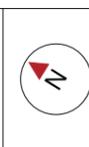
| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
|-------------------------|-----|-----------|----------|-------|
| 1 ISSUED FOR DISCUSSION | TB | APR 2025 | DESIGNED | AB |
| 2 ISSUED FOR CONSENT | TB | JUNE 2025 | DRAWN | TB |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |



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 8 NUGENT ST, GRAFTON,
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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 |

- 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.
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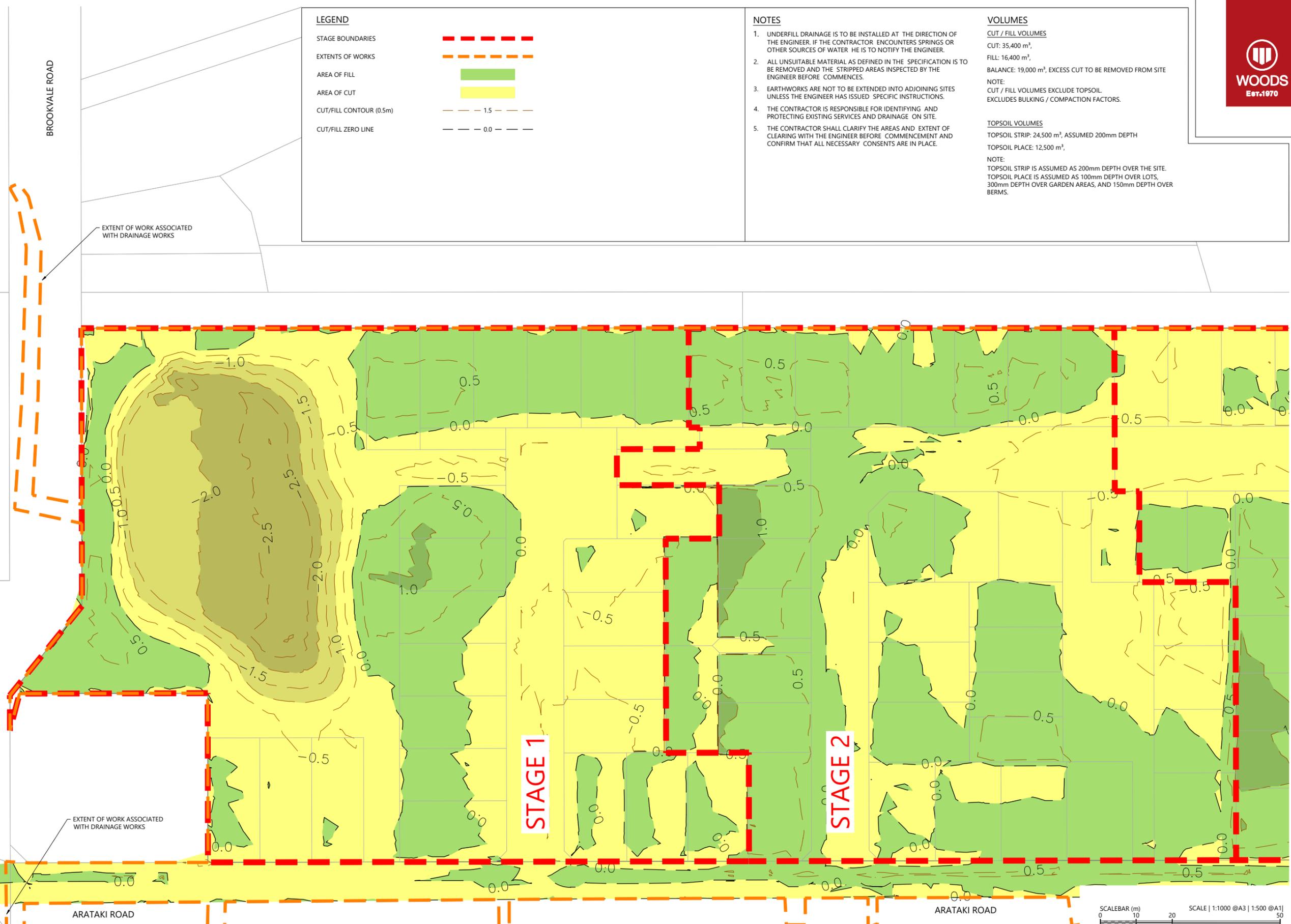
VOLUMES

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

NOTE:
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 EXCLUDES BULKING / COMPACTION FACTORS.

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 TOPSOIL PLACE: 12,500 m³,

NOTE:
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 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 |

BUILDING B, LEVEL 1
 8 NUGENT ST, GRAFTON,
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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) | |
| CUT/FILL ZERO LINE | |

NOTES

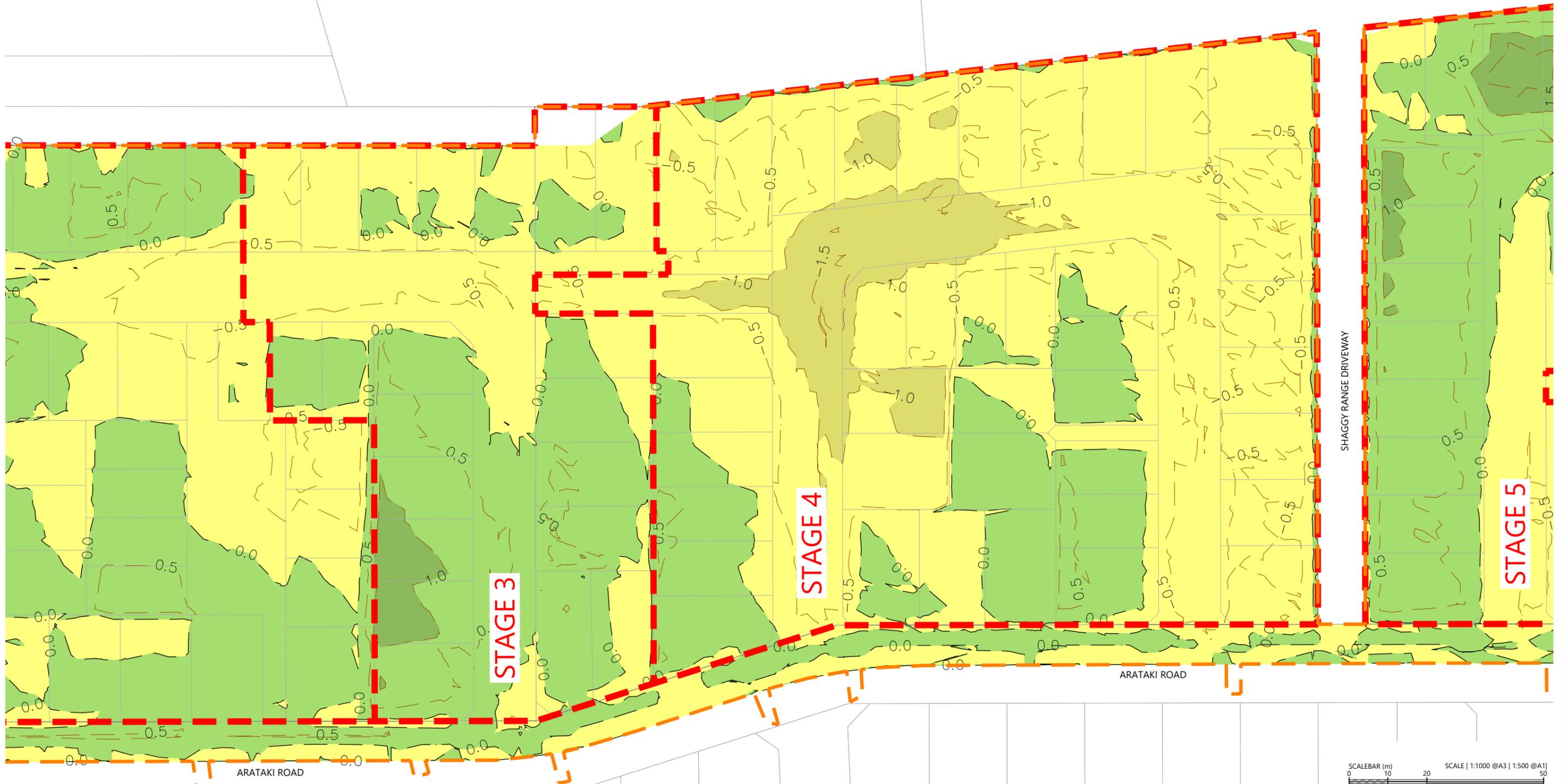
- UNDERFILL DRAINAGE IS TO BE INSTALLED AT THE DIRECTION OF THE ENGINEER. IF THE CONTRACTOR ENCOUNTERS SPRINGS OR OTHER SOURCES OF WATER HE IS TO NOTIFY THE ENGINEER.
- ALL UNSUITABLE MATERIAL AS DEFINED IN THE SPECIFICATION IS TO BE REMOVED AND THE STRIPPED AREAS INSPECTED BY THE ENGINEER BEFORE COMMENCES.
- 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 |



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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 | |

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 |



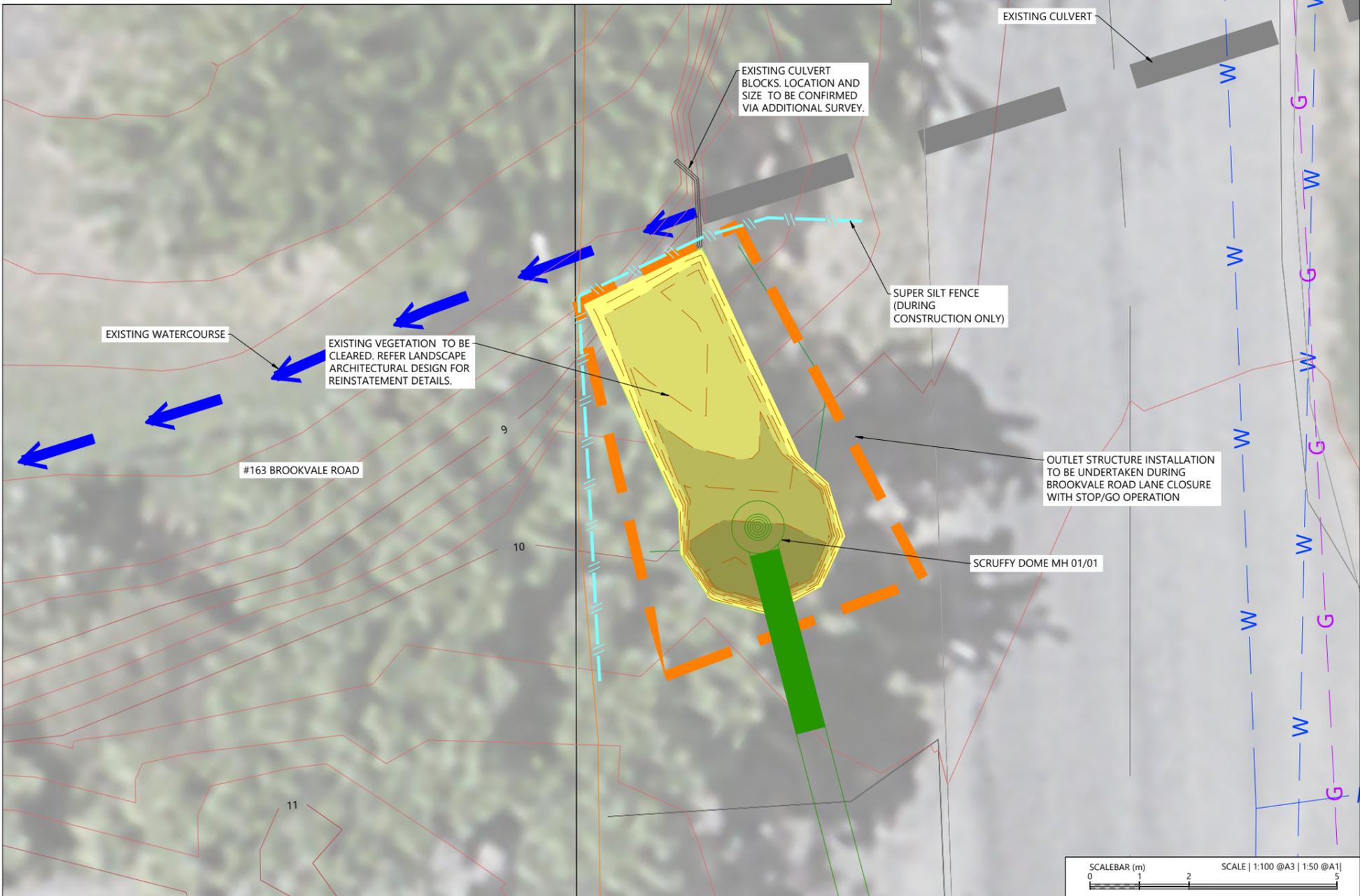
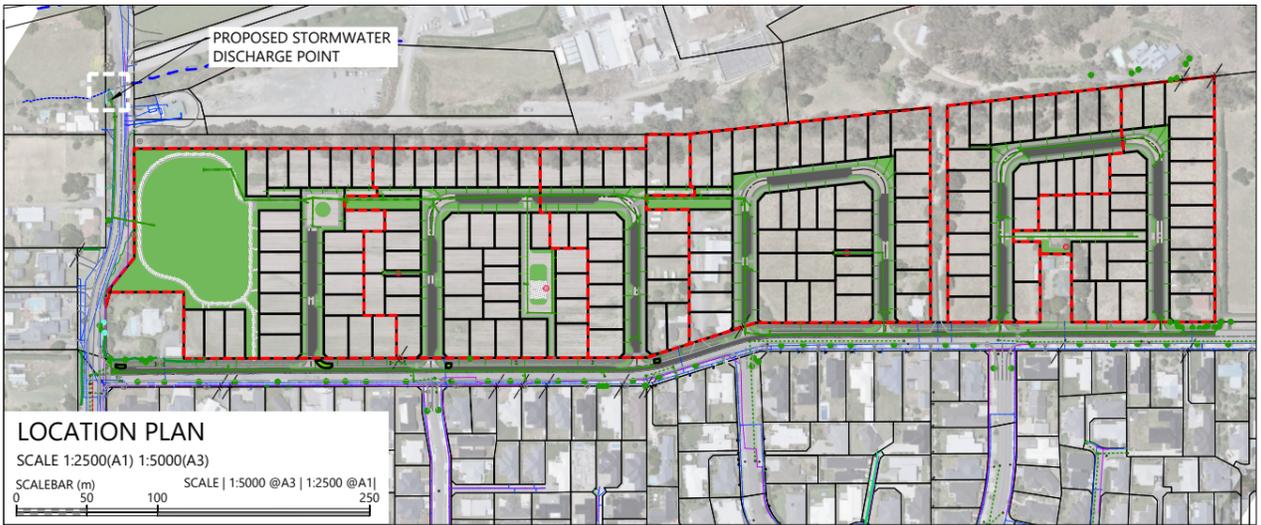
BUILDING B, LEVEL 1
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 AUCKLAND 1023
 +64 9 308 9229
 WOODS.CO.NZ



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.

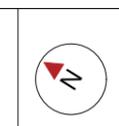
TOPSOIL VOLUMES
 TOPSOIL STRIP: 4m³, ASSUMED 200mm DEPTH

| 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 |

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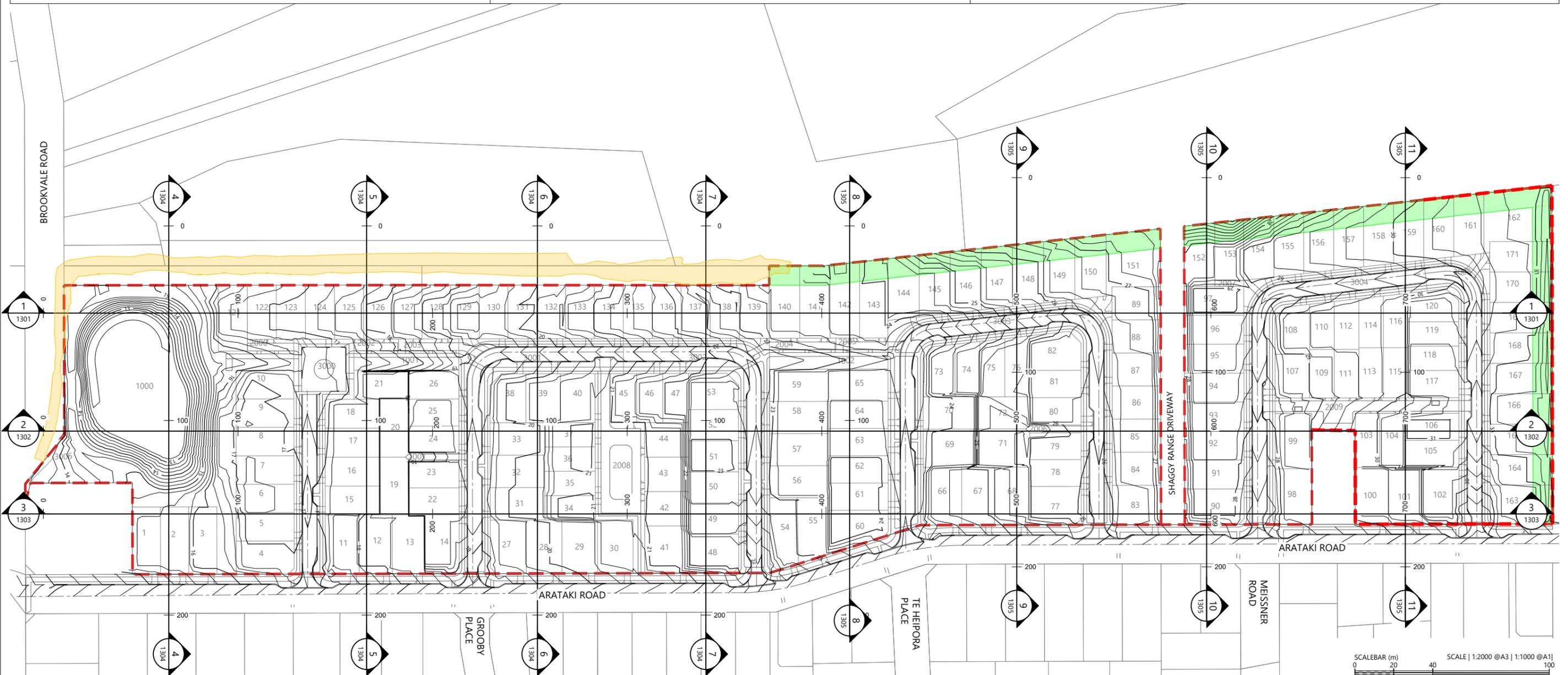
ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER OUTLET EARTHWORKS PLAN



| 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

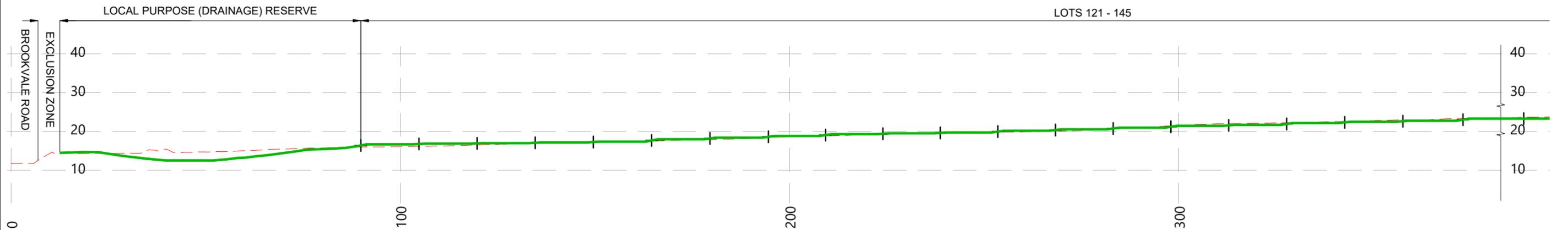
EARTHWORKS SECTIONS PLAN



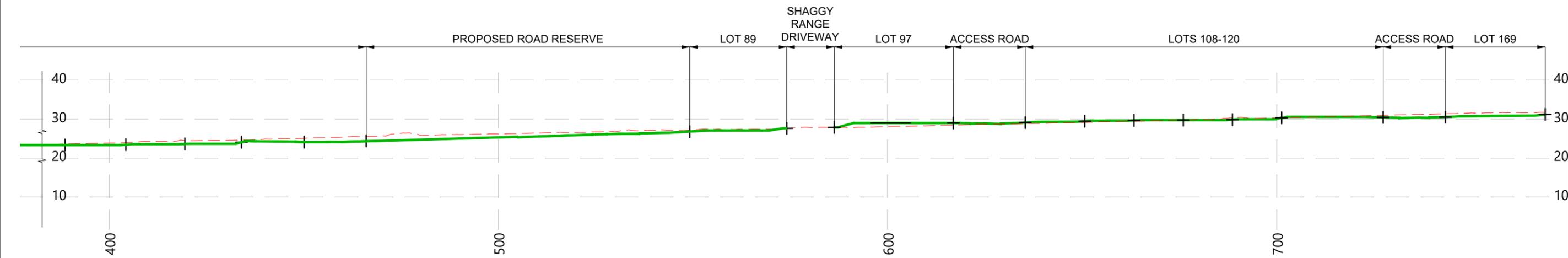
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|---------|---------------------------|-----|
| SCALE | 1:2000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-1300-RD | |

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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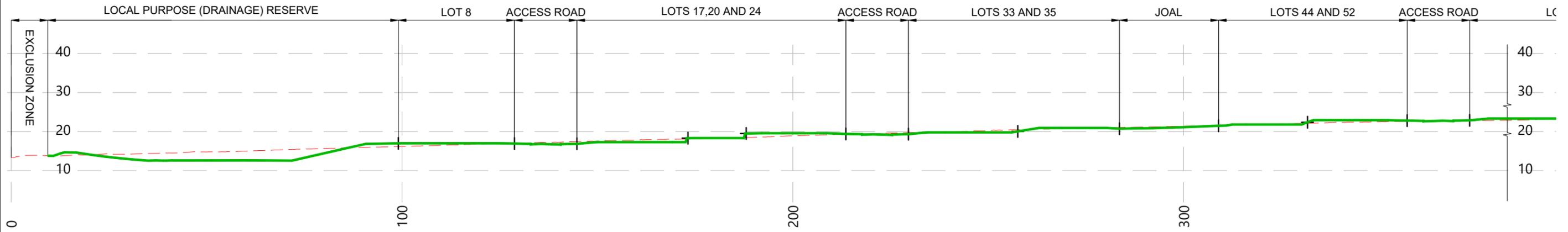
ARATAKI DEVELOPMENT - HAVELOCK NORTH

EARTHWORKS SECTIONS - SHEET 1

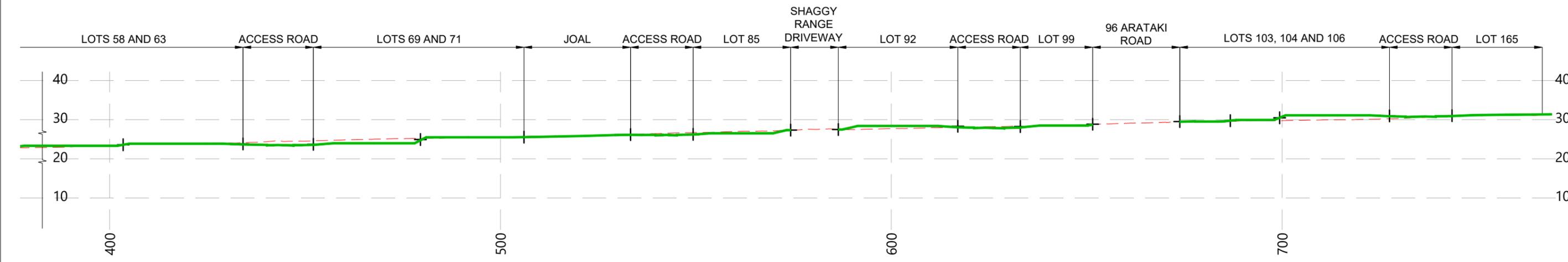
| | | |
|---------|---------------------------|-----|
| STATUS | ISSUED FOR CONSENT | REV |
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-1301-RD | |

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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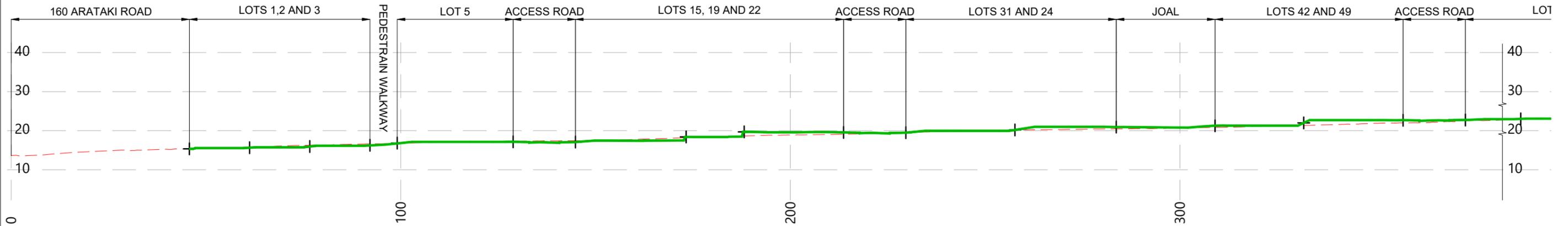
ARATAKI DEVELOPMENT - HAVELOCK NORTH

EARTHWORKS SECTIONS - SHEET 2

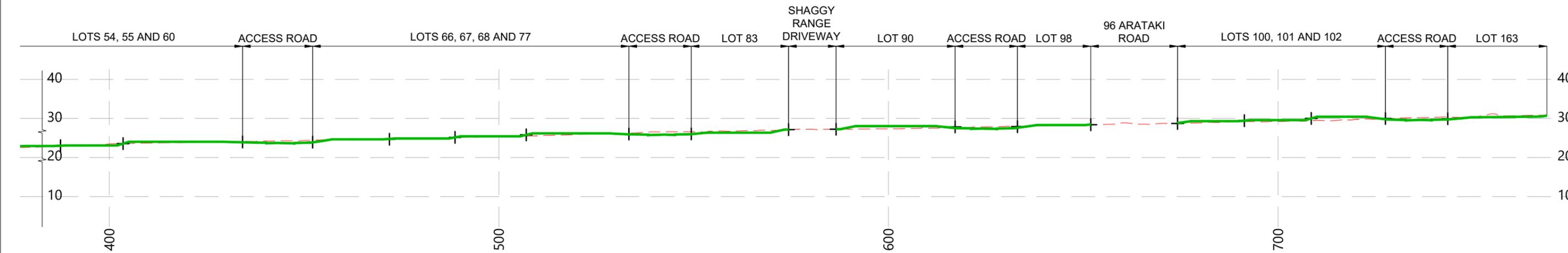
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| STATUS | ISSUED FOR CONSENT | REV |
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-1302-RD | |

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 |



BUILDING B, LEVEL 1
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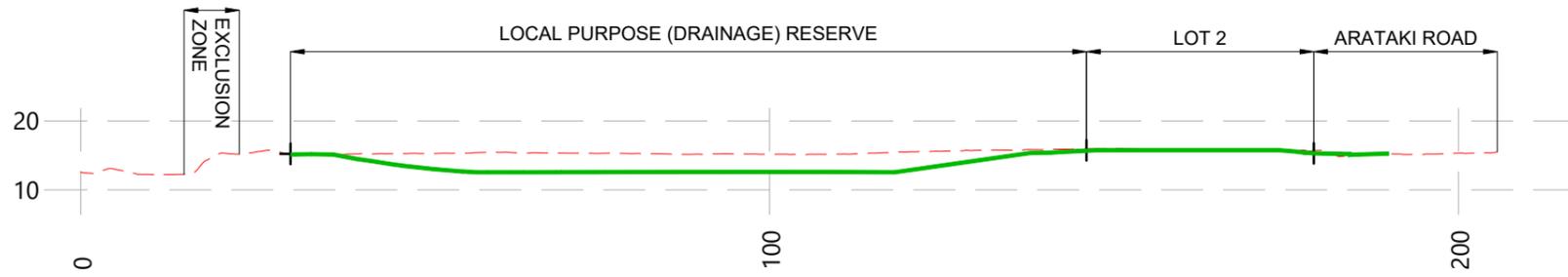


ARATAKI DEVELOPMENT - HAVELOCK NORTH

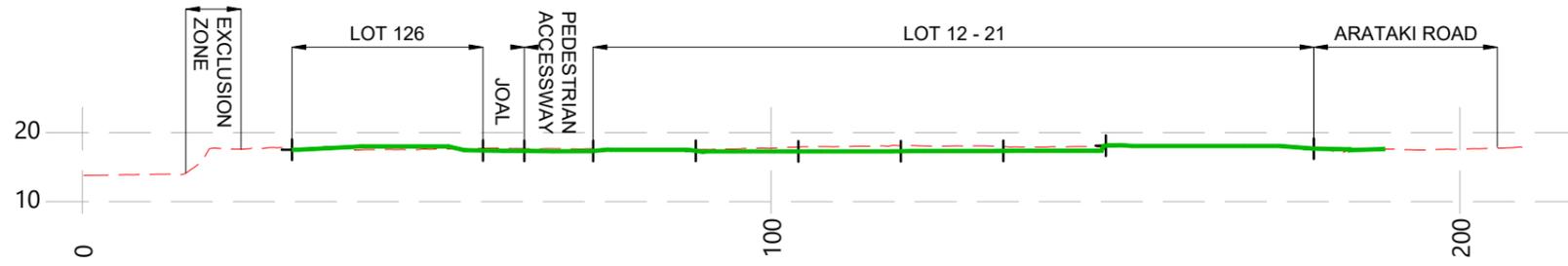
EARTHWORKS SECTIONS - SHEET 3

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

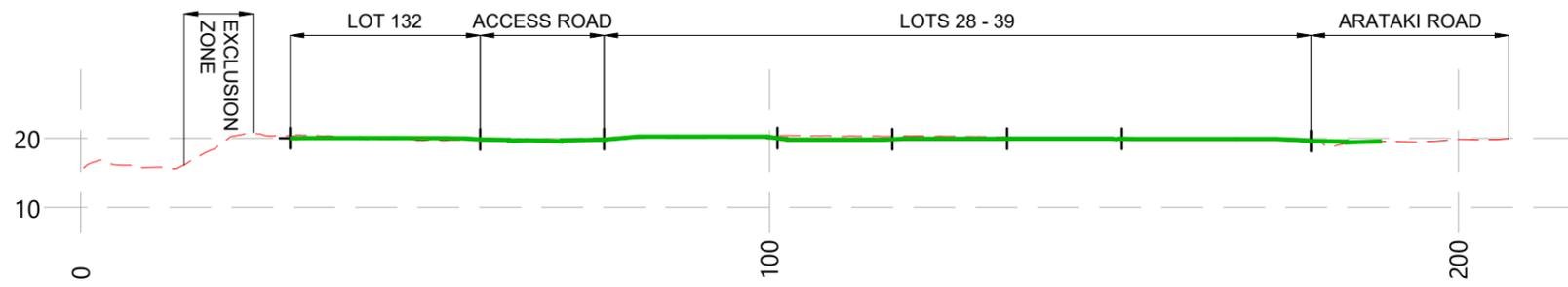
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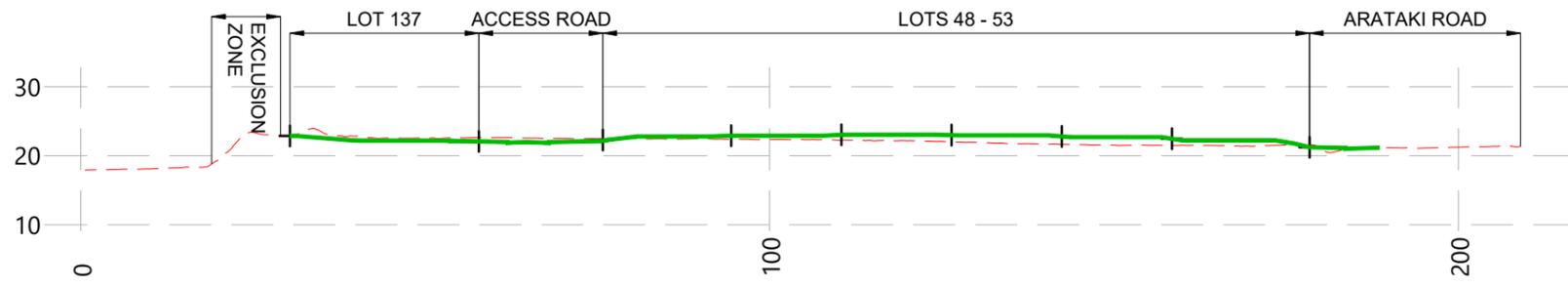
4 PROPOSED SECTION 4
SCALE 1:2000 @ A3



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 |

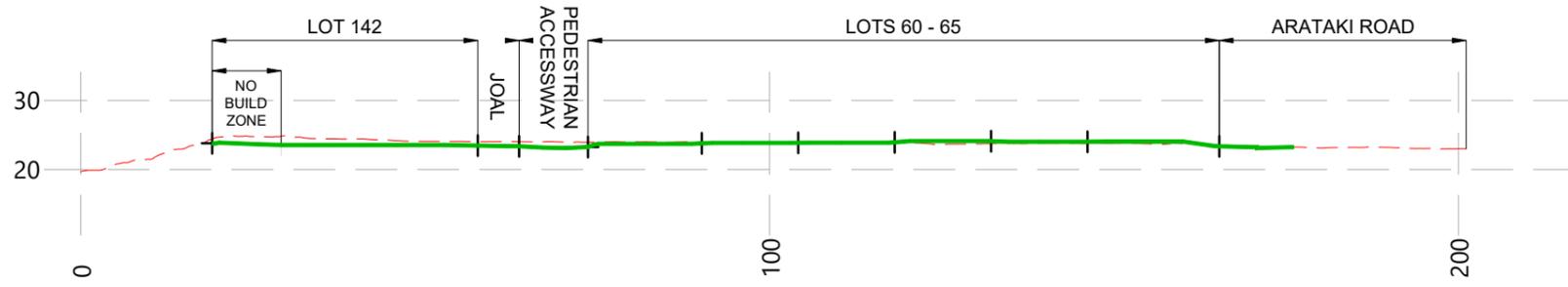


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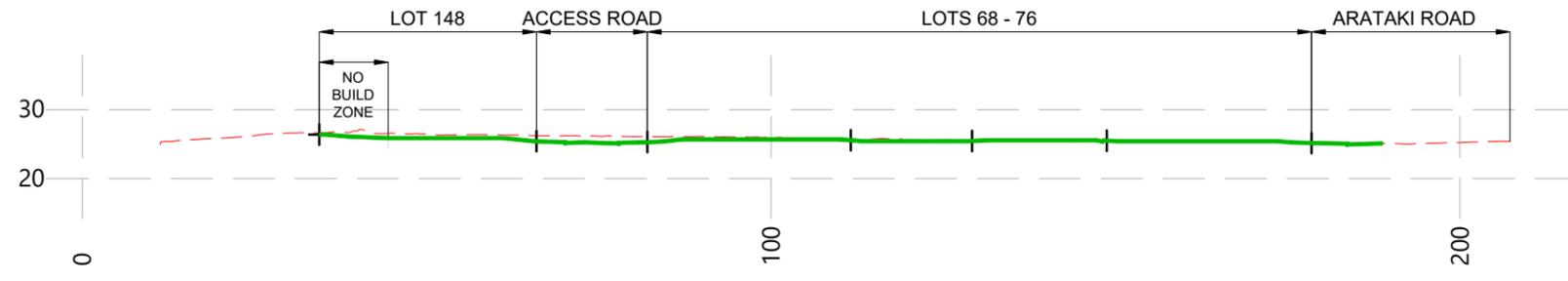


ARATAKI DEVELOPMENT - HAVELOCK NORTH
EARTHWORKS SECTIONS - SHEET 4

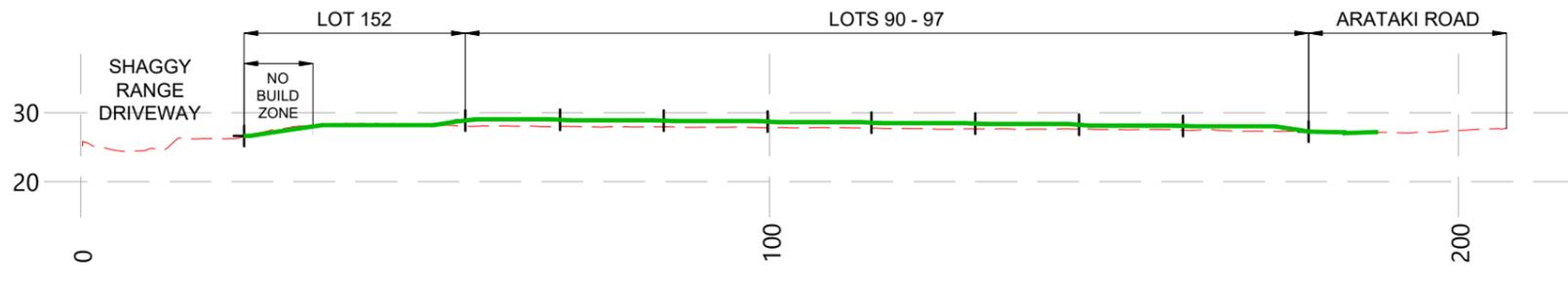
| | | |
|---------|---------------------------|-----|
| STATUS | ISSUED FOR CONSENT | REV |
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-1304-RD | |



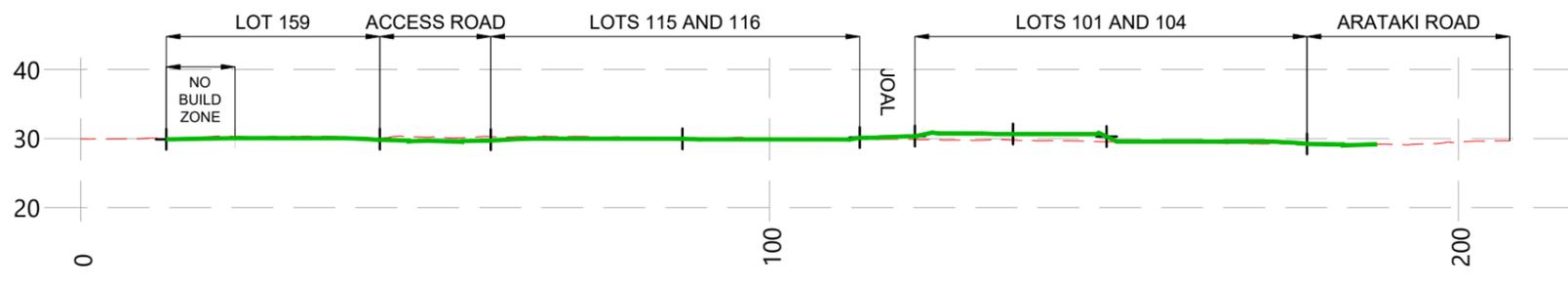
8 PROPOSED SECTION 8
SCALE 1:2000 @ A3



9 PROPOSED SECTION 9
SCALE 1:2000 @ A3



10 PROPOSED SECTION 10
SCALE 1:2000 @ A3



11 PROPOSED SECTION 11
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 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



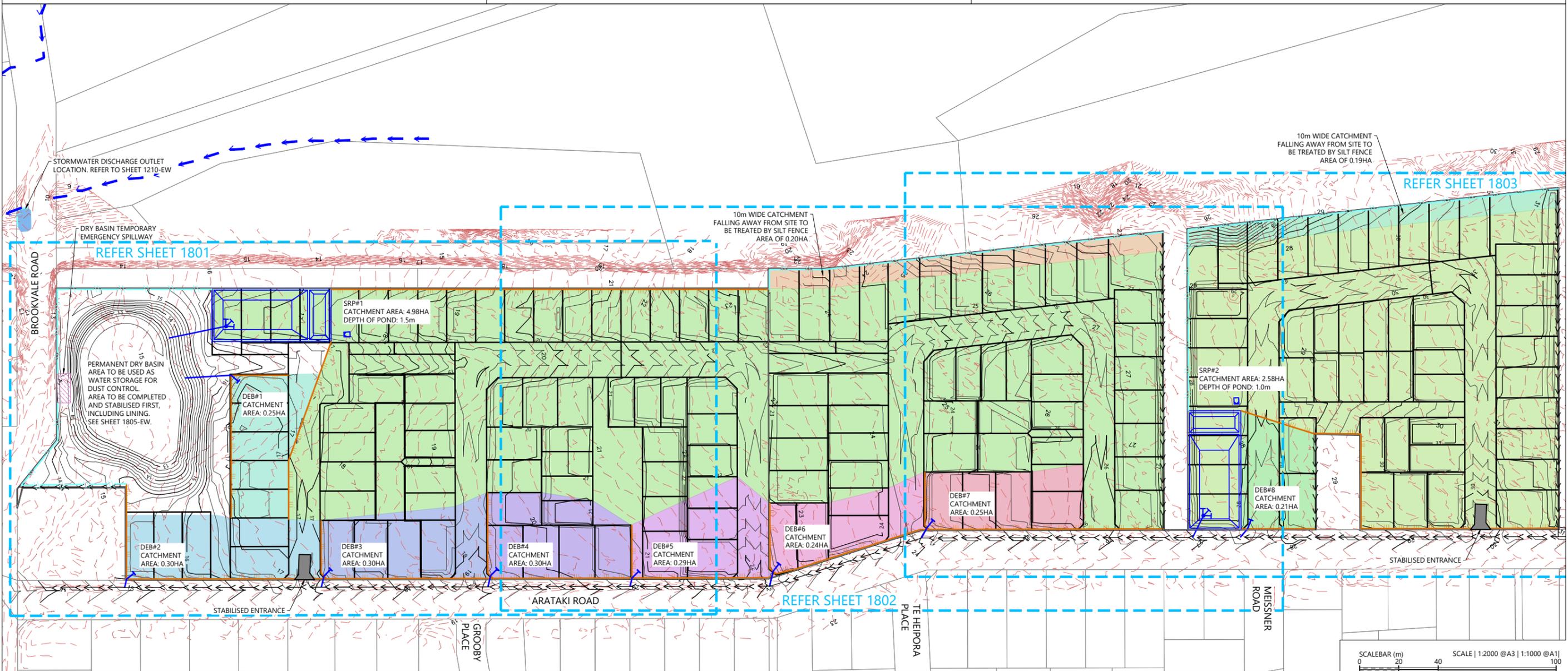
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|---------|---------------------------|-----|
| SCALE | 1:2000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-1400-EW | |

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.



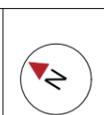
| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
|-------------------------|-----|-----------|----------|-------|
| 1 ISSUED FOR DISCUSSION | BM | APR 2025 | DESIGNED | BLO |
| 2 ISSUED FOR CONSENT | TB | JUNE 2025 | DRAWN | BM |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |



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ARATAKI DEVELOPMENT - HAVELOCK NORTH
SEDIMENT AND EROSION CONTROL PLAN OVERALL



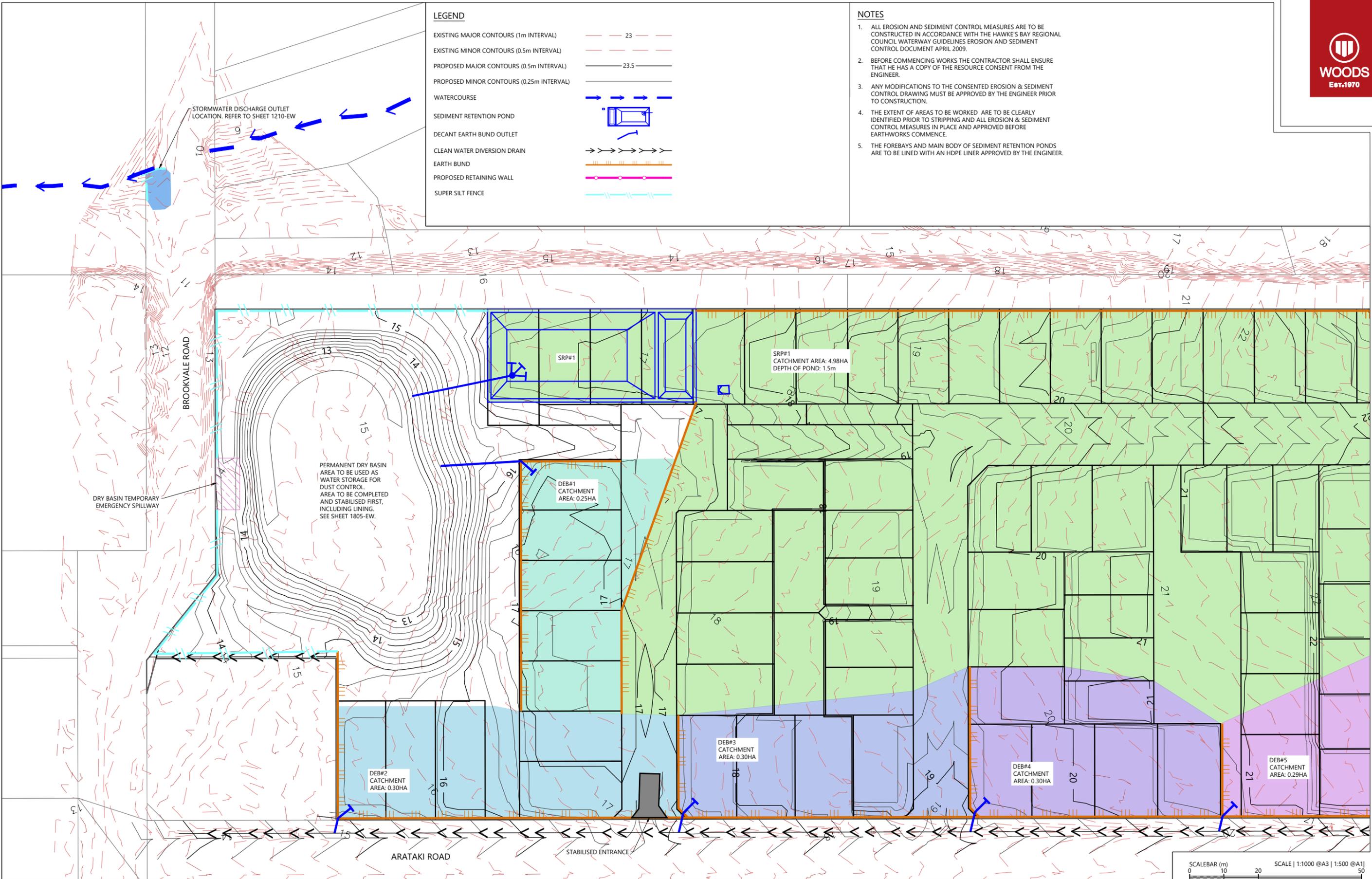
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:2000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-1800-EW | |

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



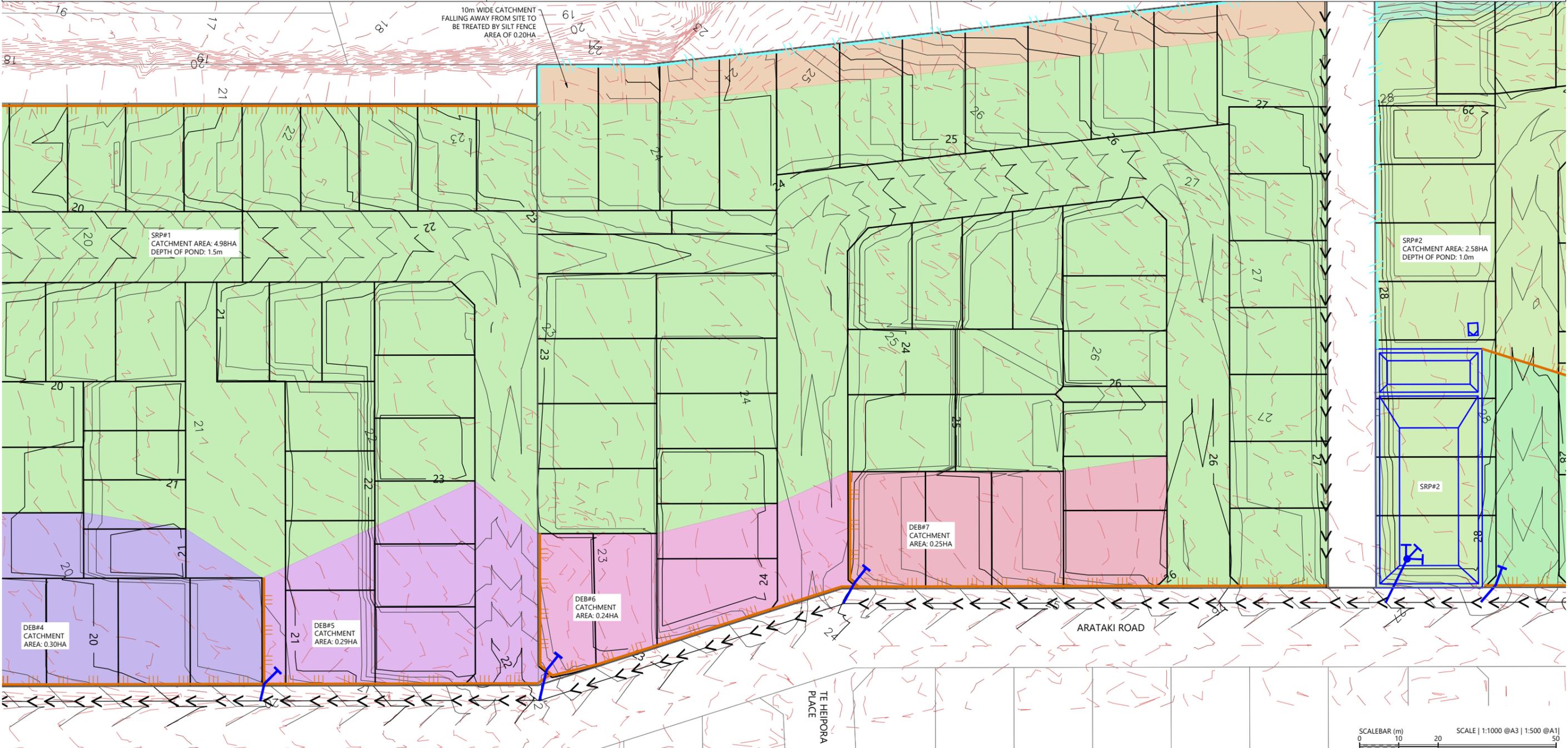
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|---------|---------------------------|-----|
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-1801-EW | |

LEGEND

| | | |
|--|--|------|
| EXISTING MAJOR CONTOURS (1m INTERVAL) | | 23 |
| EXISTING MINOR CONTOURS (0.5m INTERVAL) | | |
| 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 |

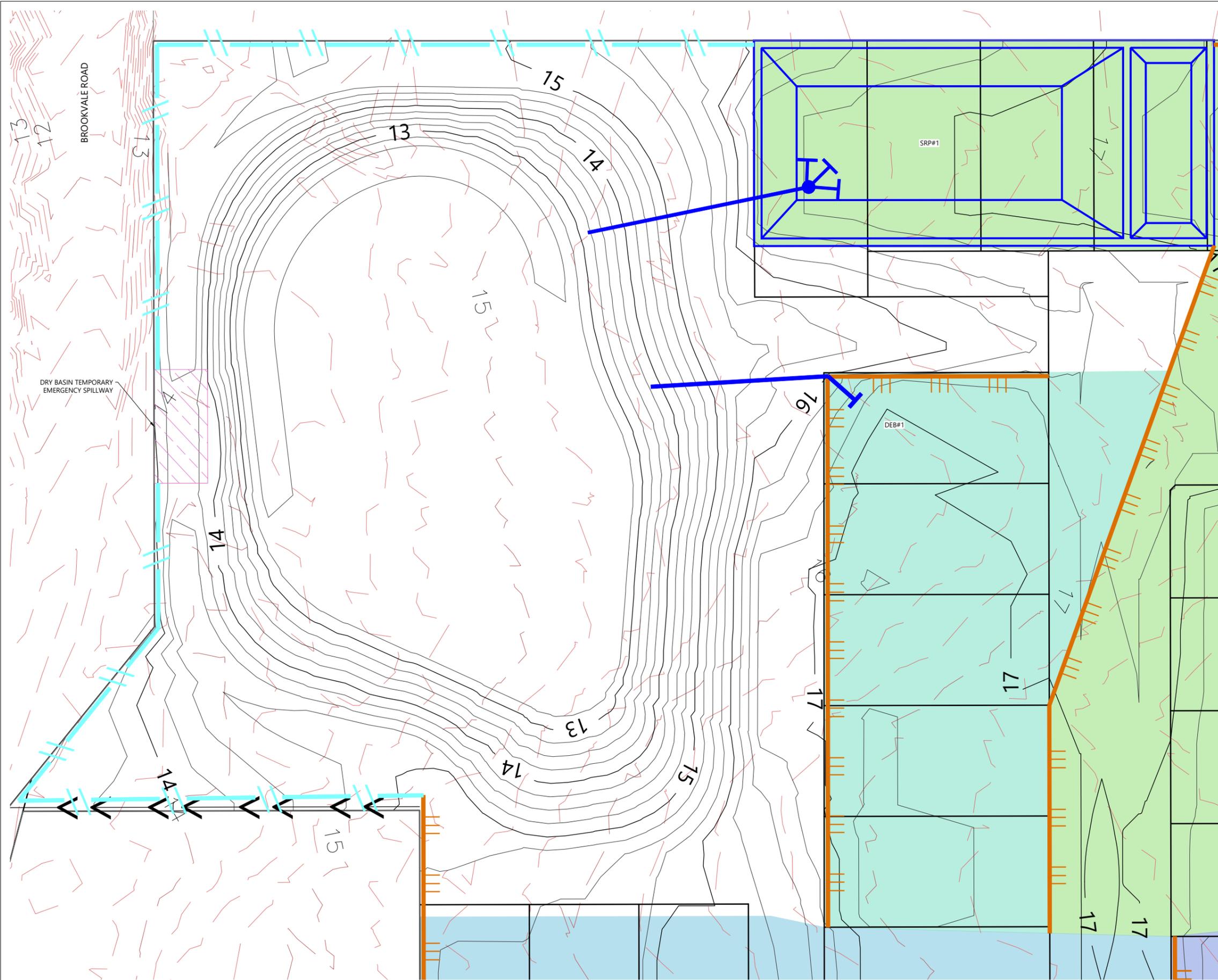
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 SEDIMENT AND EROSION CONTROL PLAN
 SHEET 2



| 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.
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- 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 |



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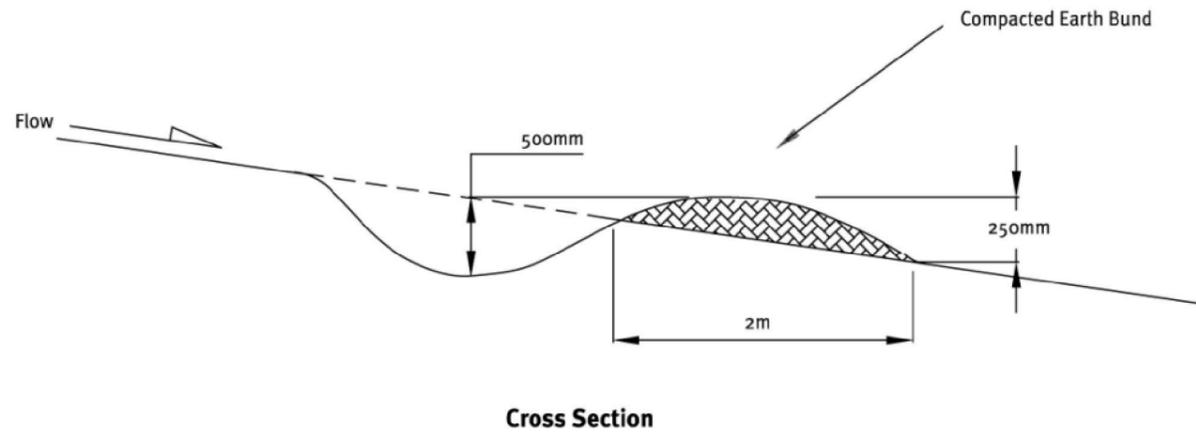


ARATAKI DEVELOPMENT - HAVELOCK NORTH
SEDIMENT AND EROSION CONTROL PLAN
DRY BASIN

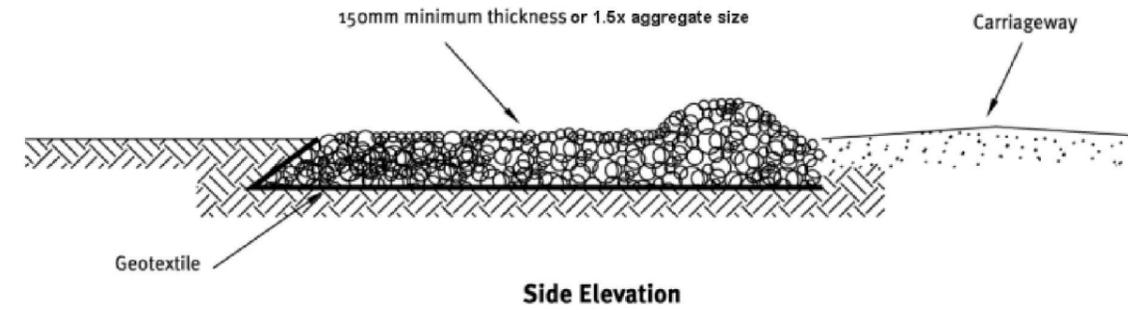


| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
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| DWG NO | P24-244-00-1805-EW | |

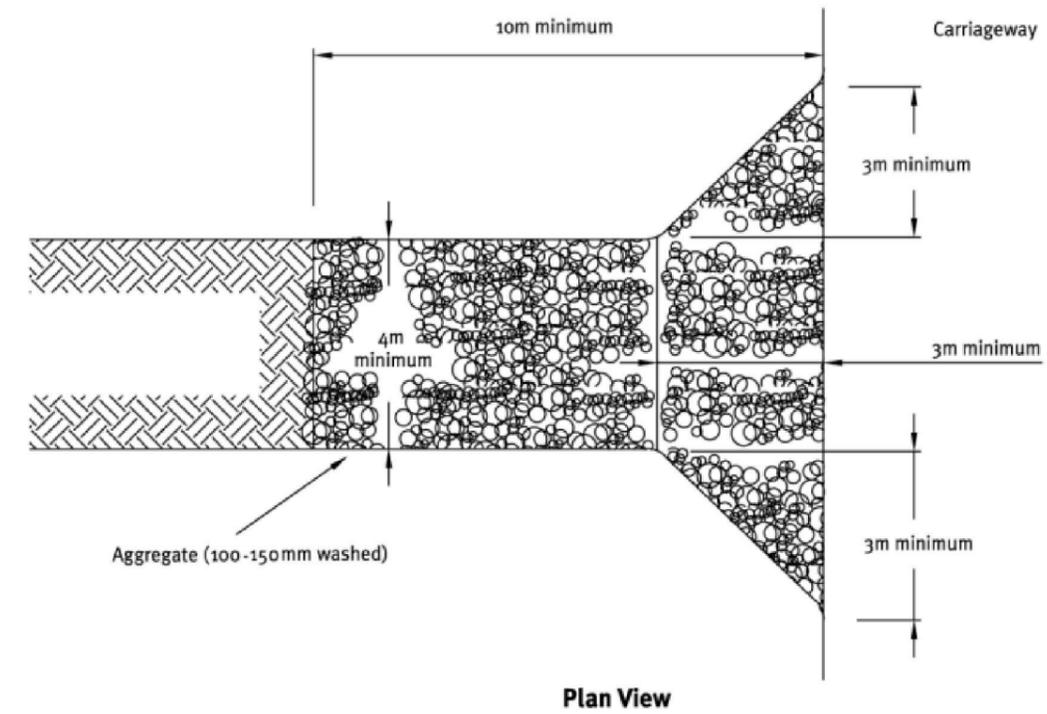
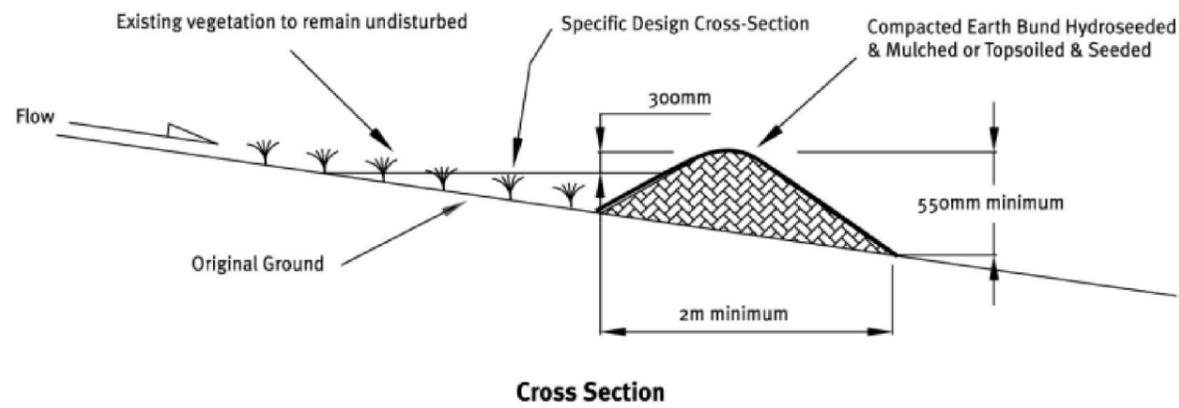
**Figure 5-3
Contour Drain**



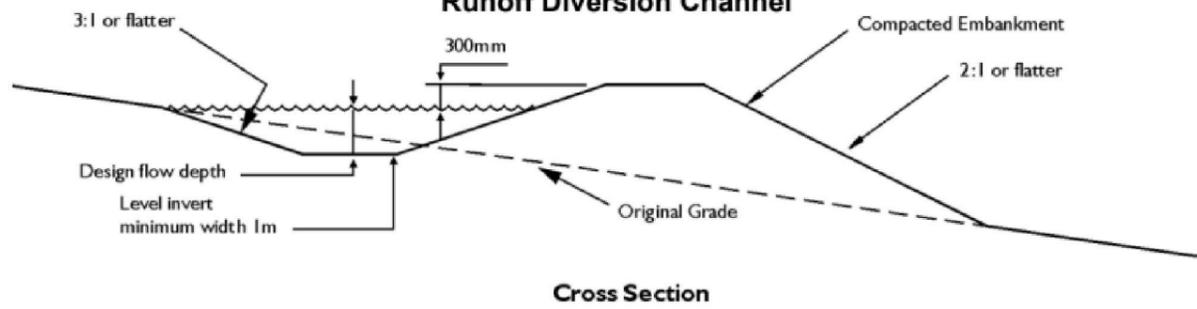
**Figure 5-7
Stabilised Construction Entrance Schematic**



**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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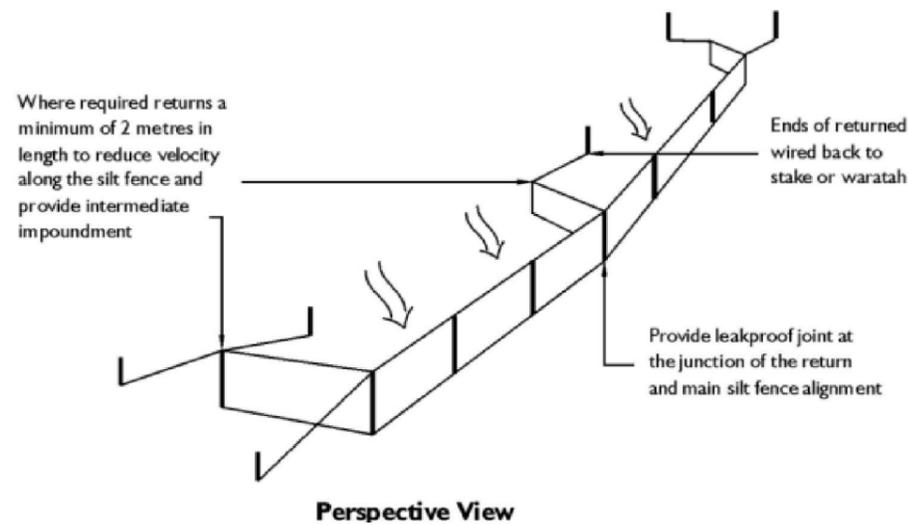
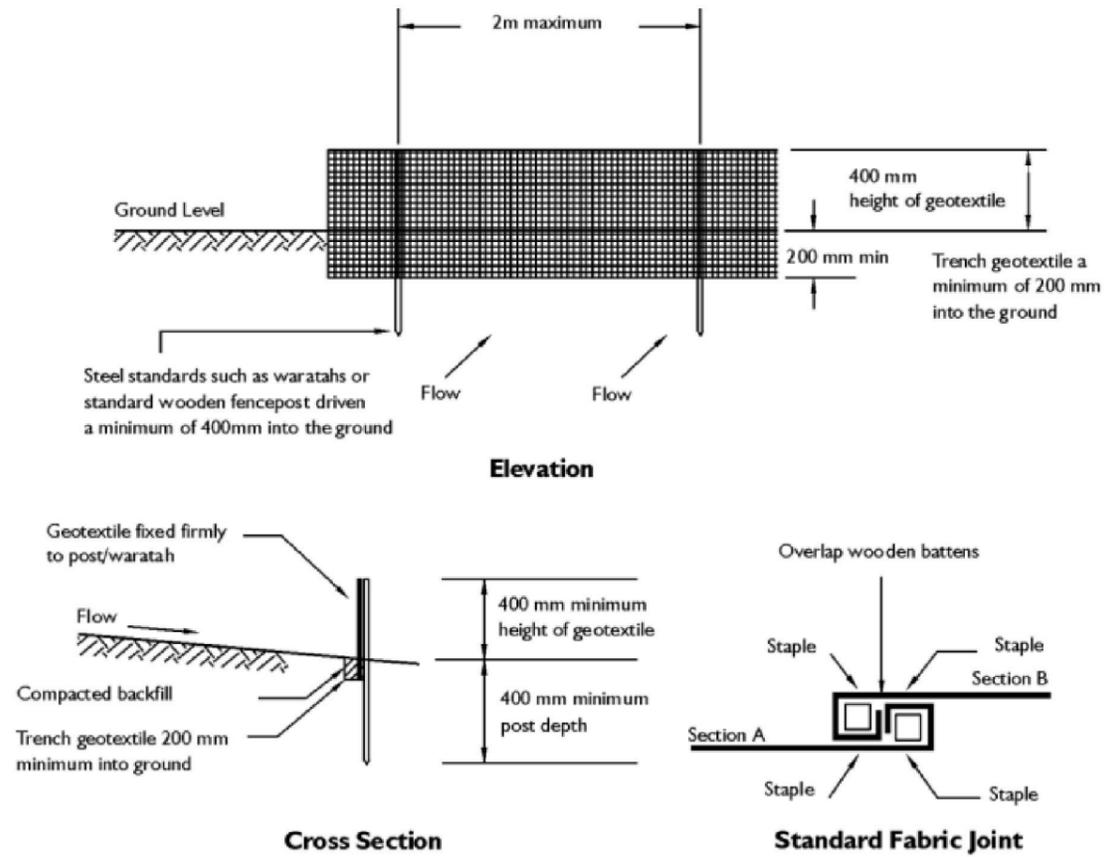


ARATAKI DEVELOPMENT - HAVELOCK NORTH
SEDIMENT AND EROSION CONTROL
STANDARD DETAILS SHEET 1

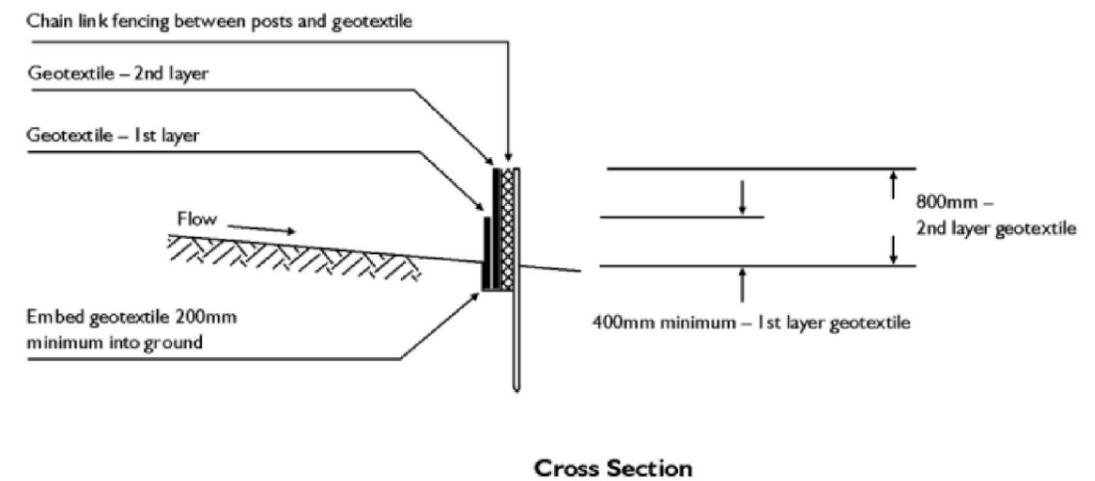
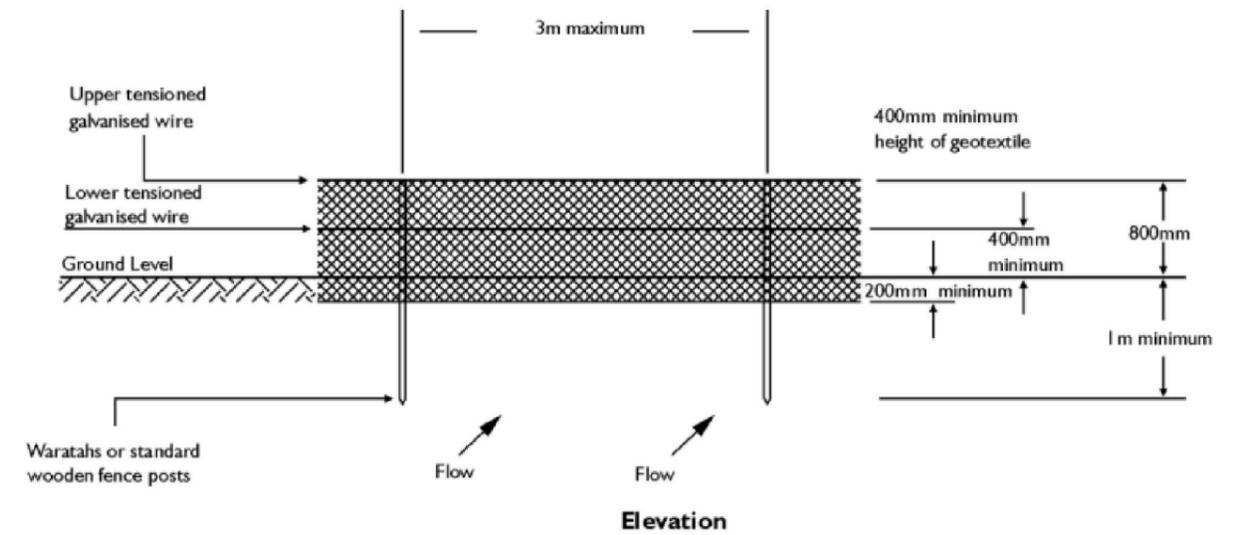
| STATUS | ISSUED FOR CONSENT | REV |
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| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-1810-EW | |

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**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

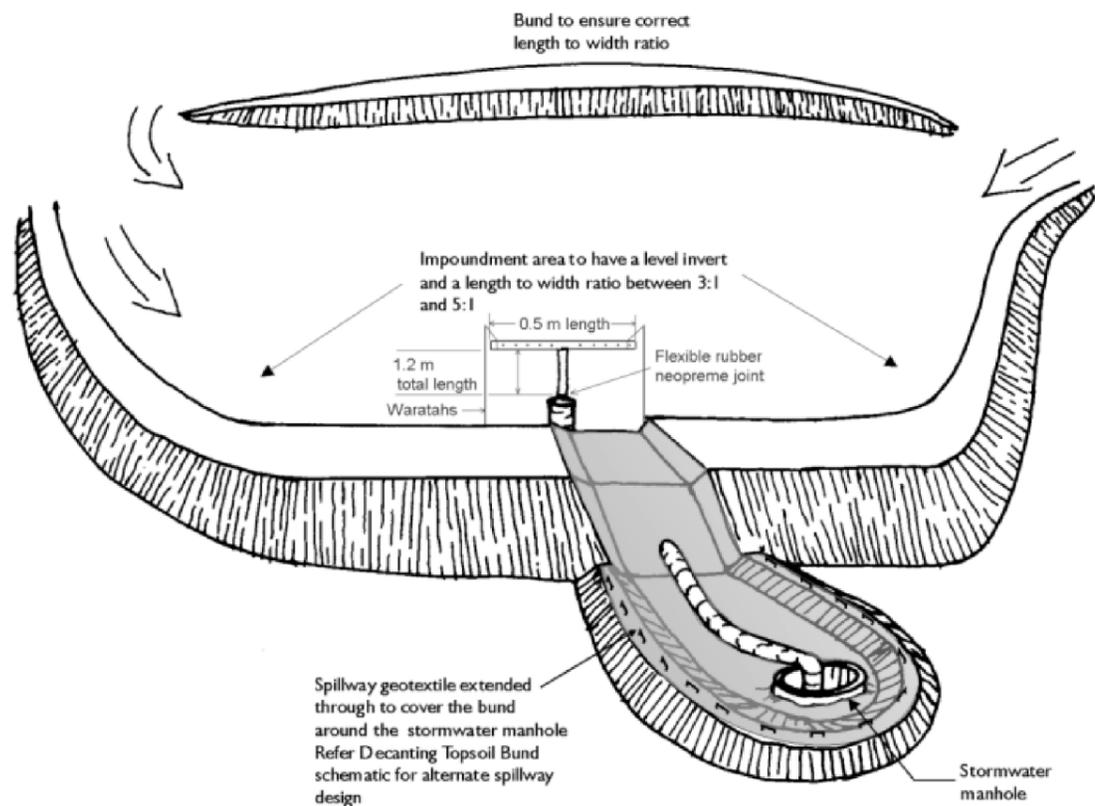


Figure 6-13
Cross-section of a Floating Decant

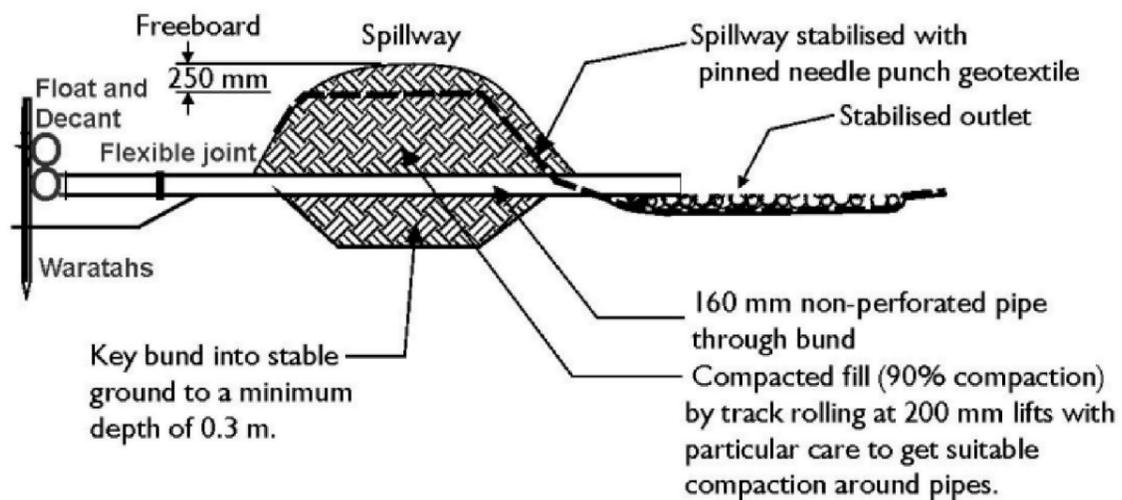
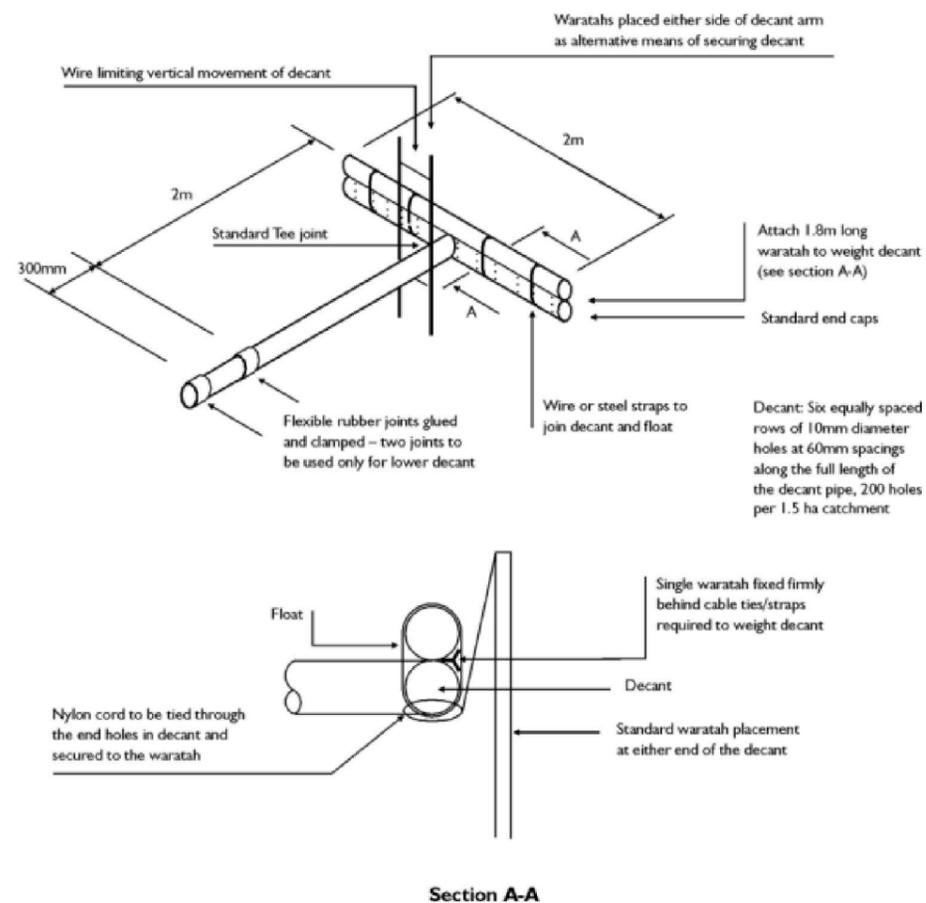


Figure 6-2
Schematic of a T-bar Decant Structure



| 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.

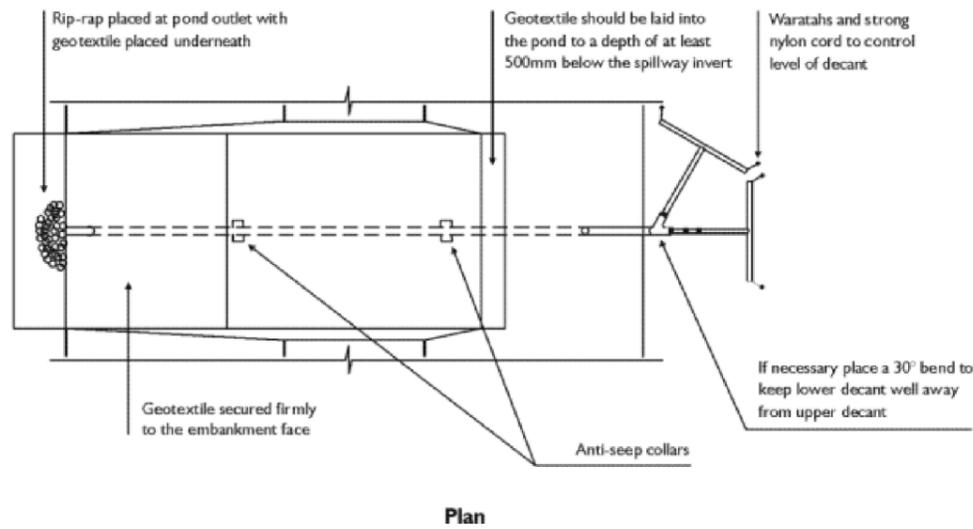
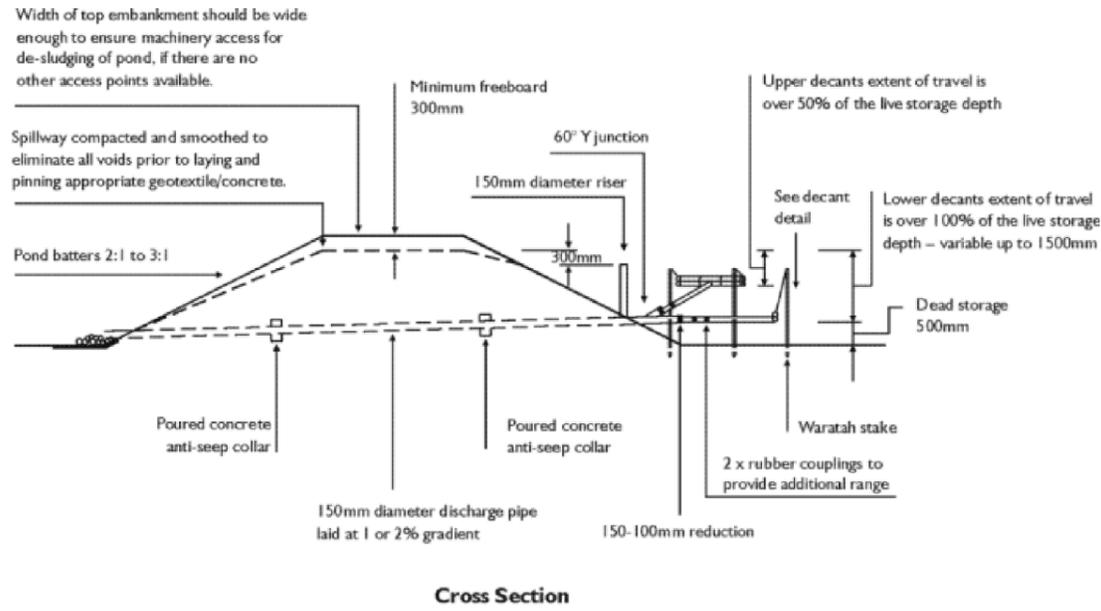
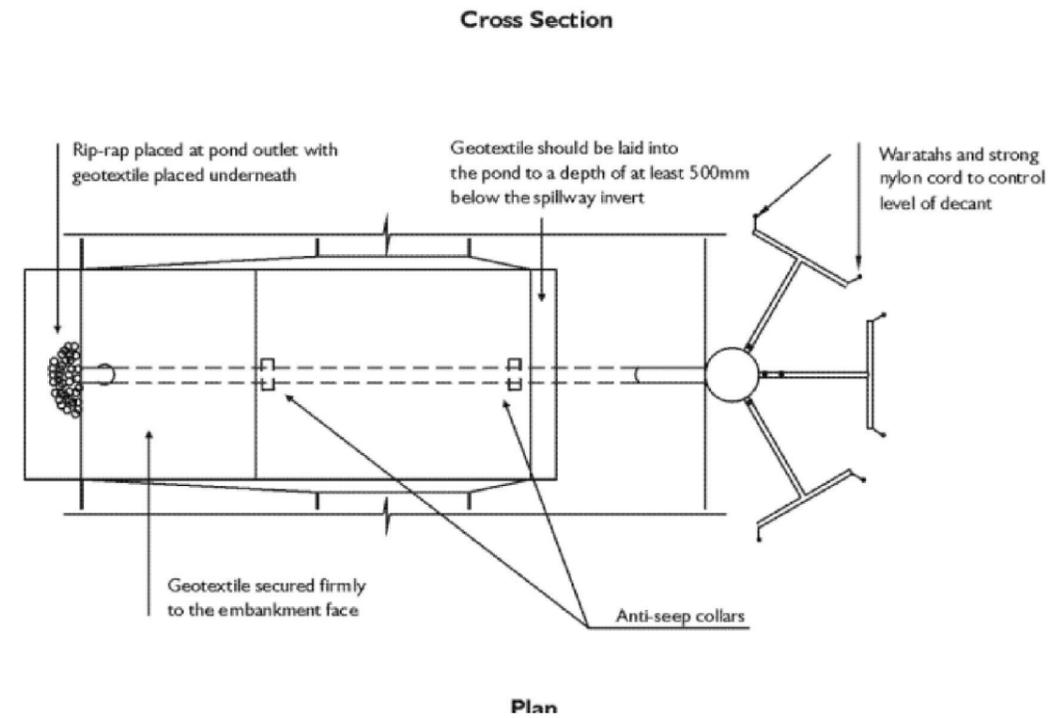
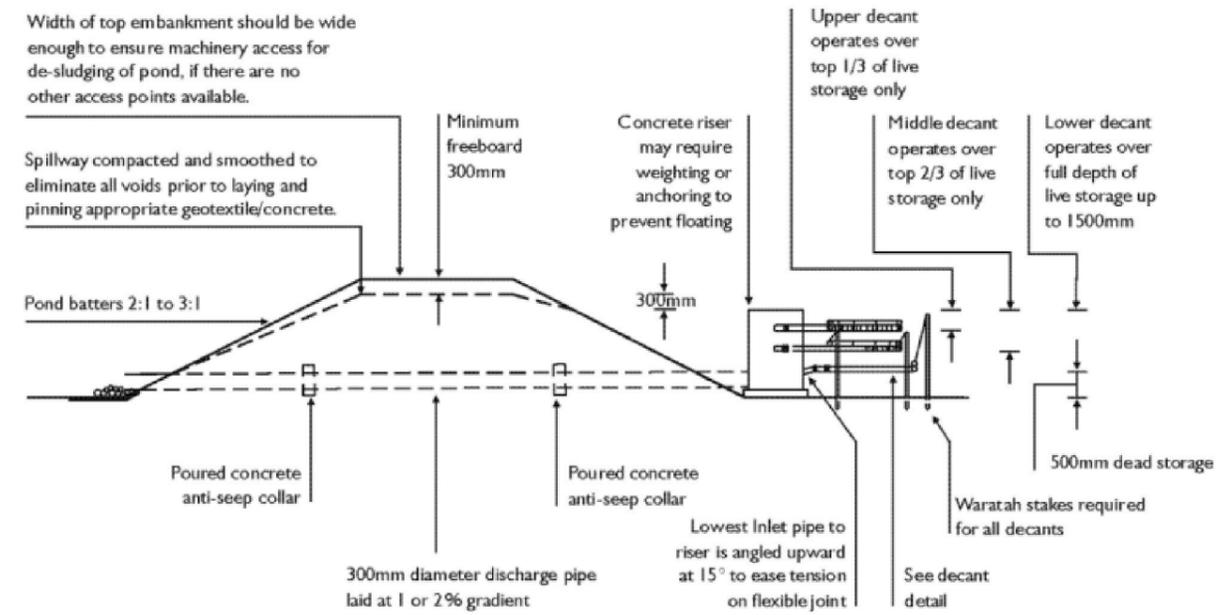


Figure 6-5
Sediment Retention Pond for Catchments Between 3 and 5 ha.



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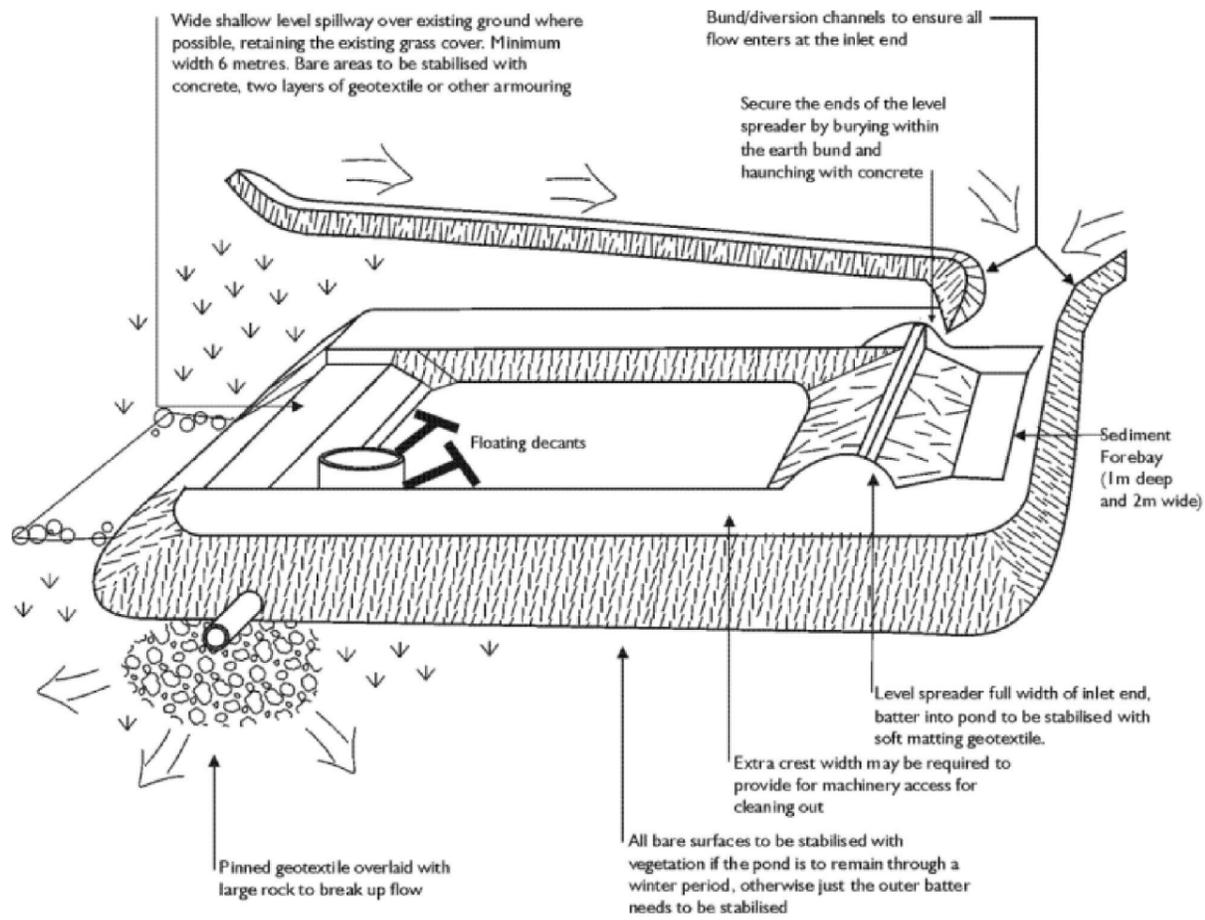
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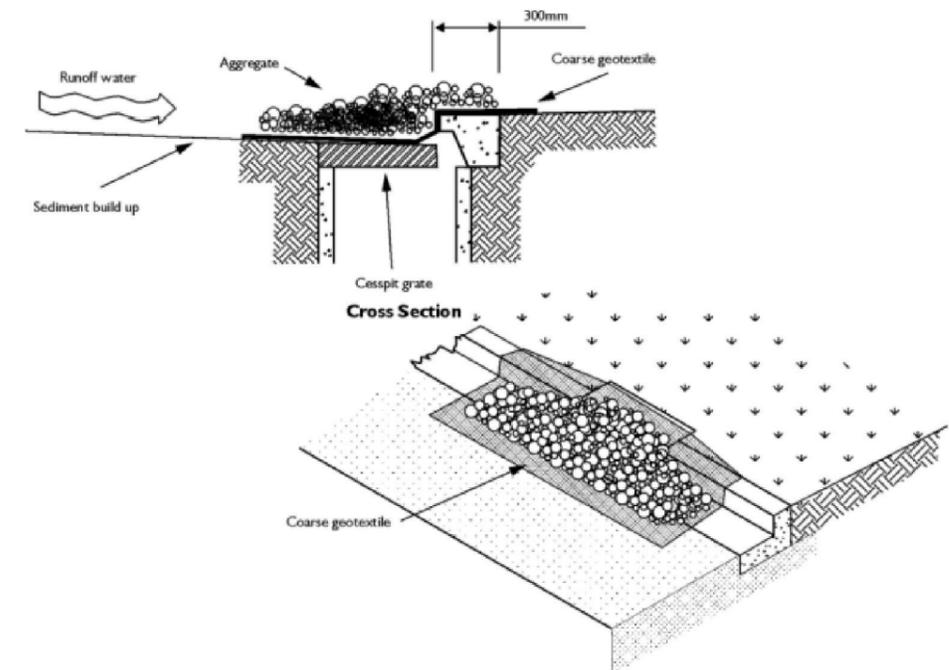
ARATAKI DEVELOPMENT - HAVELOCK NORTH
SEDIMENT AND EROSION CONTROL
STANDARD DETAILS SHEET 4

| 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 |
|---------|---------------------------|-----|
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| 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.
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 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

| | | |
|---------|---------------------------|-----|
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| 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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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 |

BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
AUCKLAND 1023
+64 9 308 9229
WOODS.CO.NZ



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 | |

Plot Date: 9:59:19 am, 26 June 2025, TIMOTHYB
File: C:\1205\ENERGY\DATA\WP-PEN-APP-01\P24-244 - ARATAKI - HAVELOCK NORTH_2169002 DRAWINGS\01 ENG\P24-244-00-2002-RD_ROAD PLAN\DWG

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.
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 |

BUILDING B, LEVEL 1
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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 |



BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
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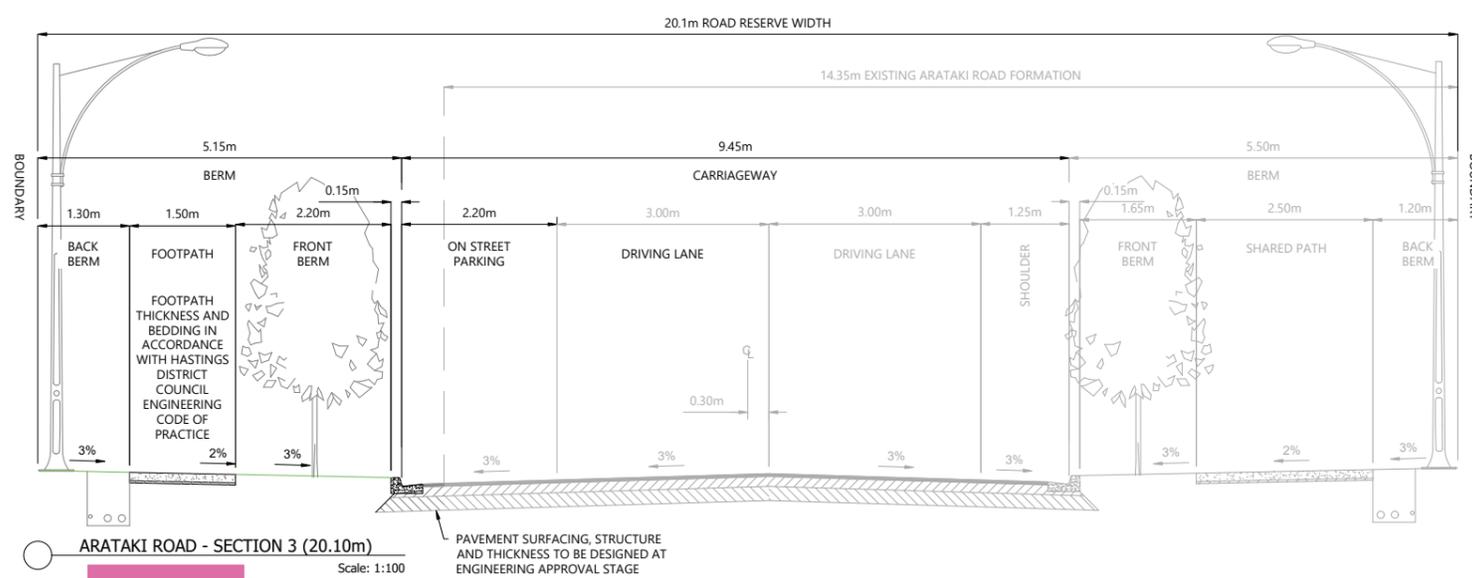
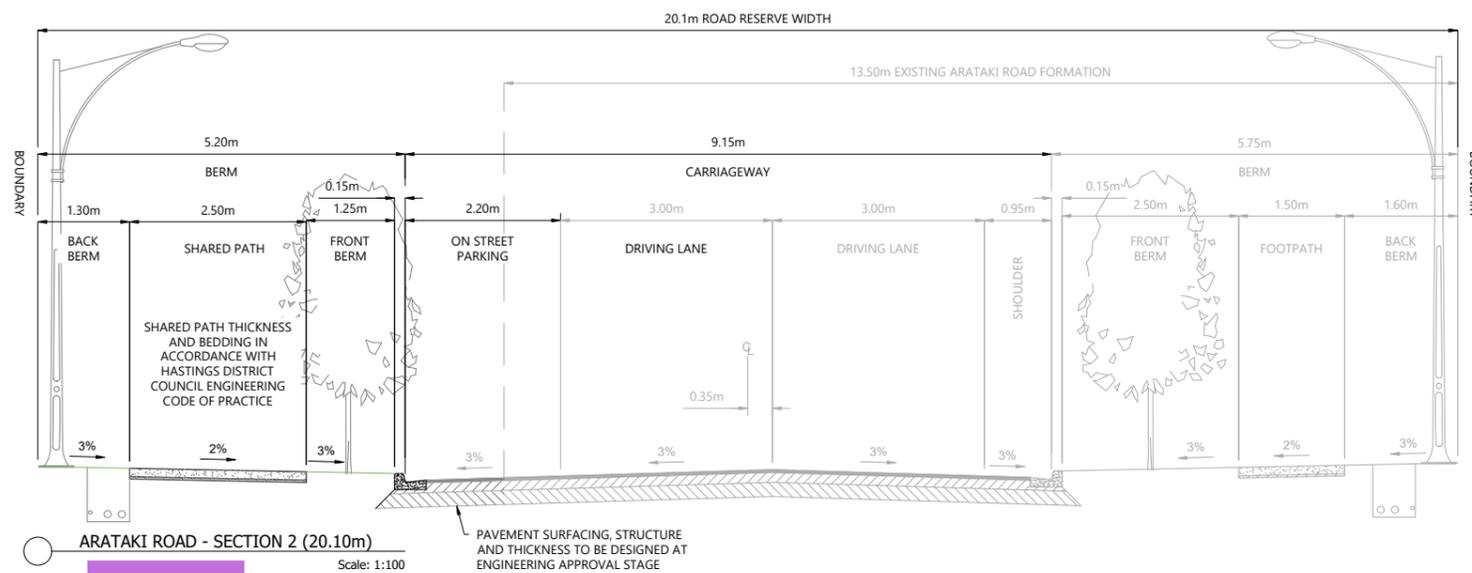
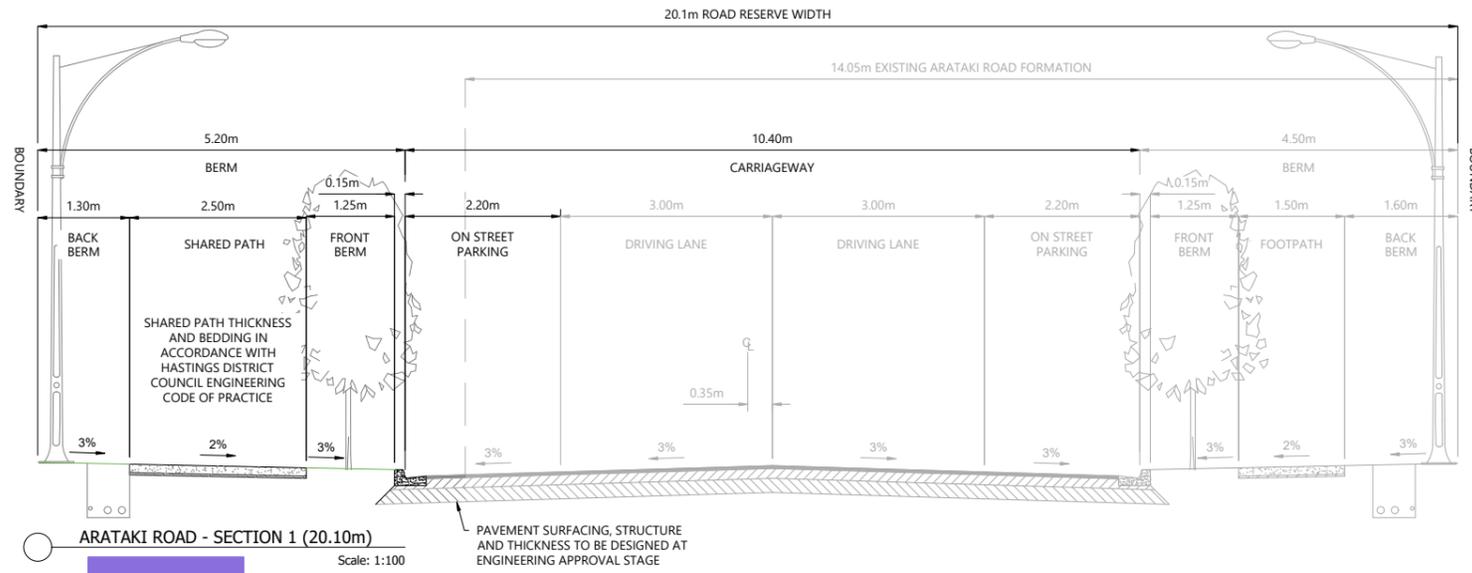


ARATAKI DEVELOPMENT - HAVELOCK NORTH
ROAD TYPOLOGY PLAN



| | | |
|---------|---------------------------|-----|
| 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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| 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 |

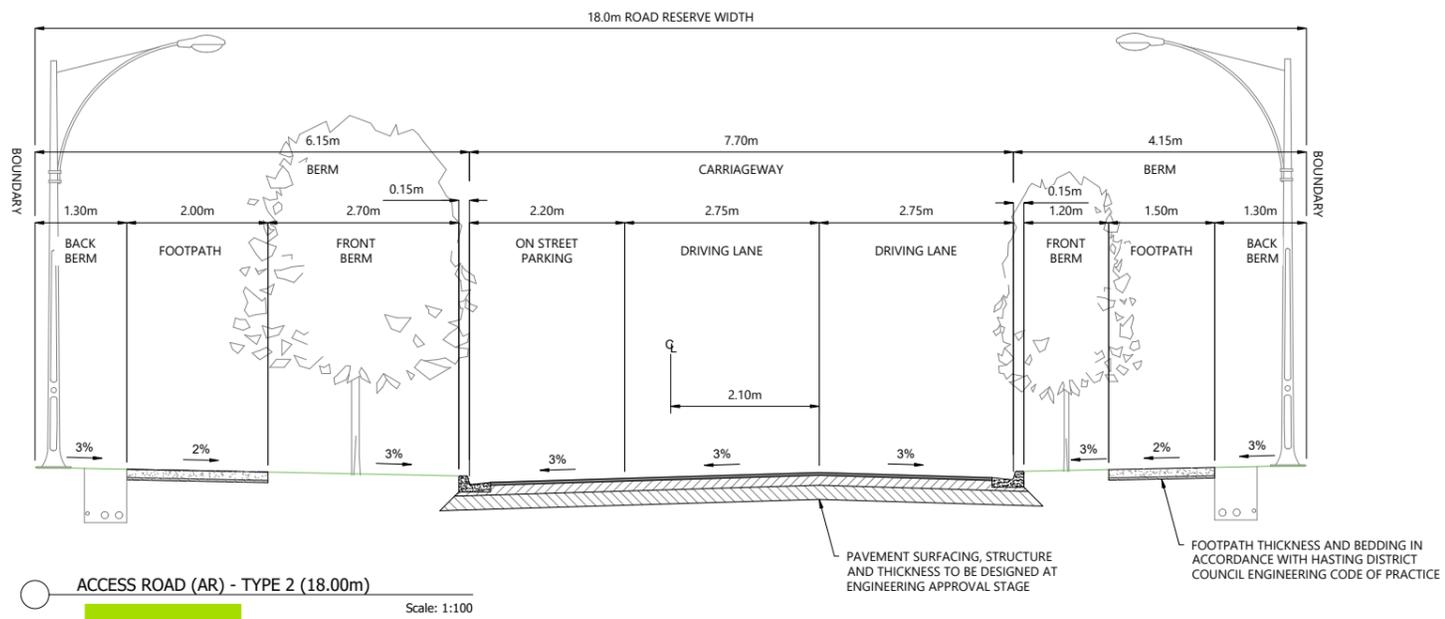
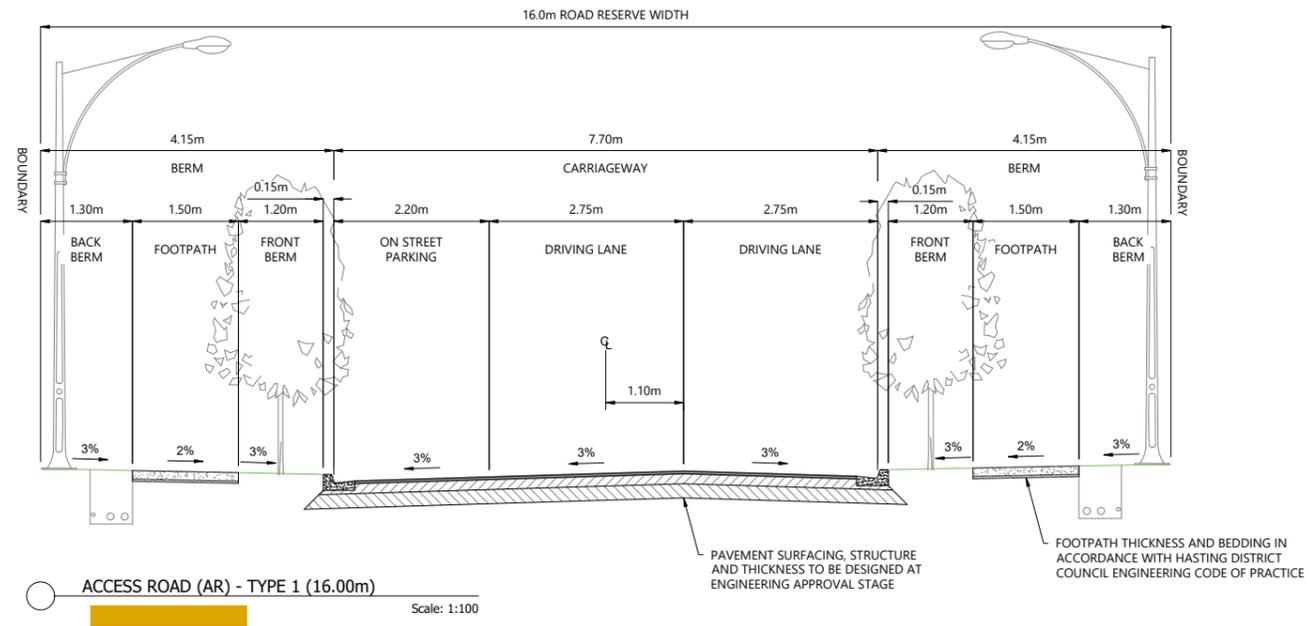


BUILDING B, LEVEL 1
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
TYPICAL CROSS SECTIONS
ARATAKI ROAD

| 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 |

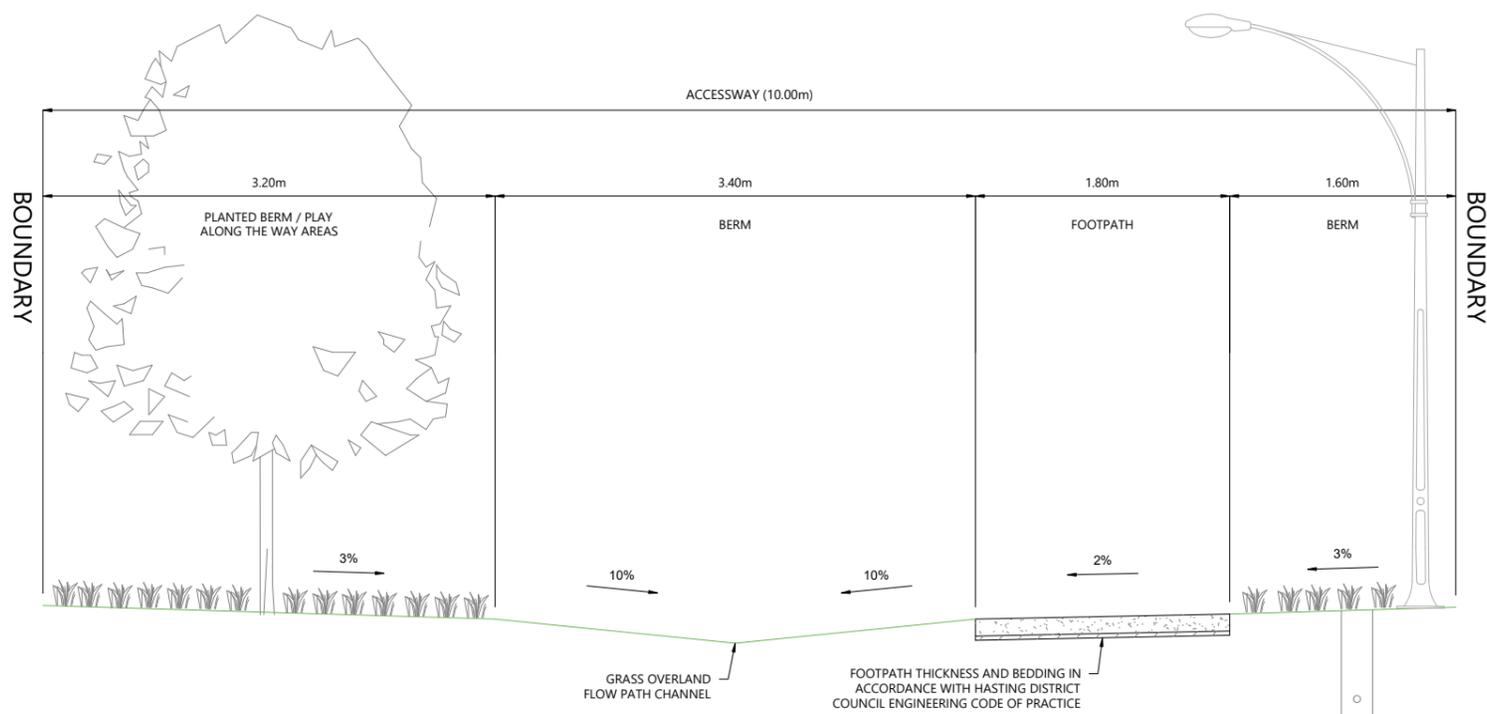


BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
AUCKLAND 1023
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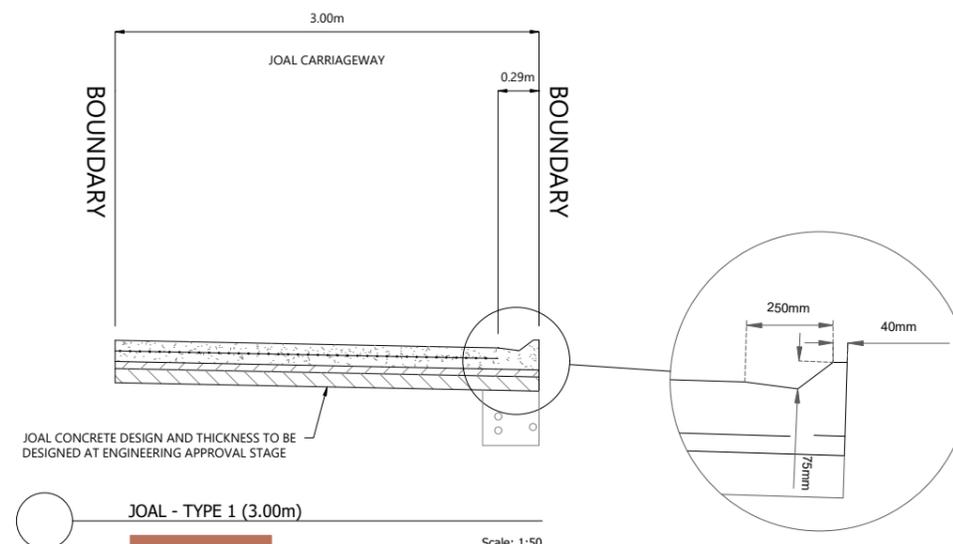


ARATAKI DEVELOPMENT - HAVELOCK NORTH
TYPICAL CROSS SECTIONS
ACCESS ROAD TYPE 1 & TYPE 2

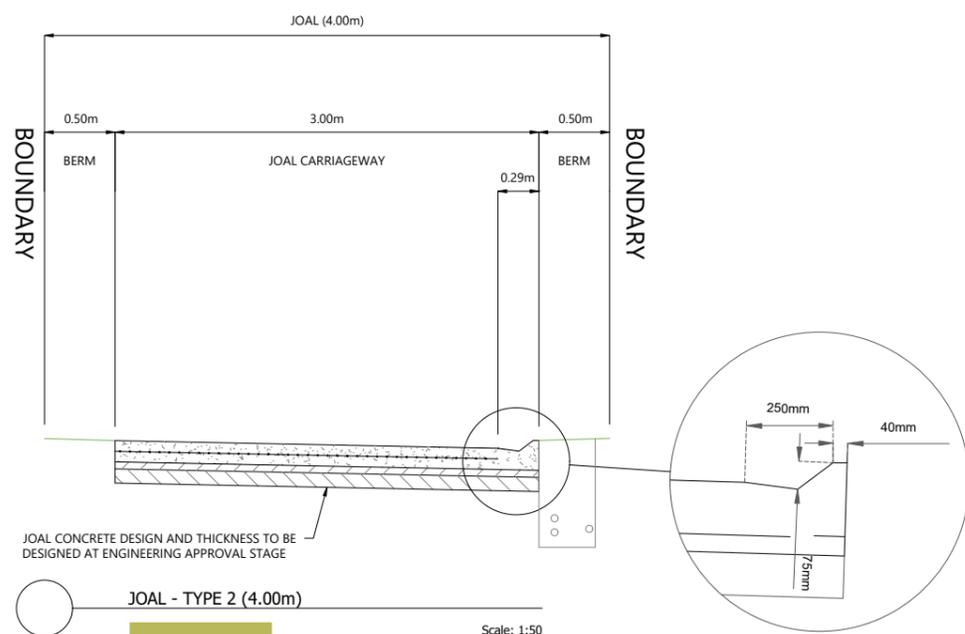
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:100 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-2202-RD | |



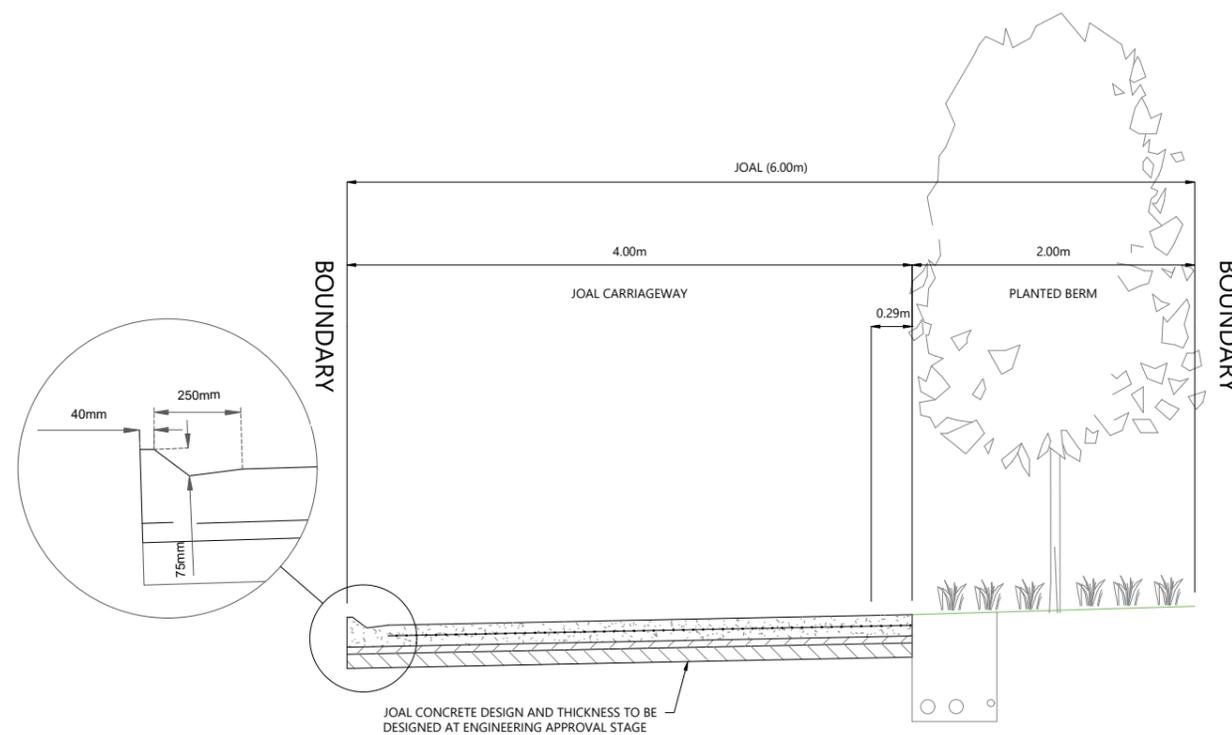
ACCESSWAY (10.00m)
Scale: 1:50



JOAL - TYPE 1 (3.00m)
Scale: 1:50



JOAL - TYPE 2 (4.00m)
Scale: 1:50



JOAL - TYPE 3 (6.00m)
Scale: 1:50

SCALEBAR (m) 0 0.5 1 2.5
SCALE | 1:50 @A3 | 1:25 @A1

| 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 |



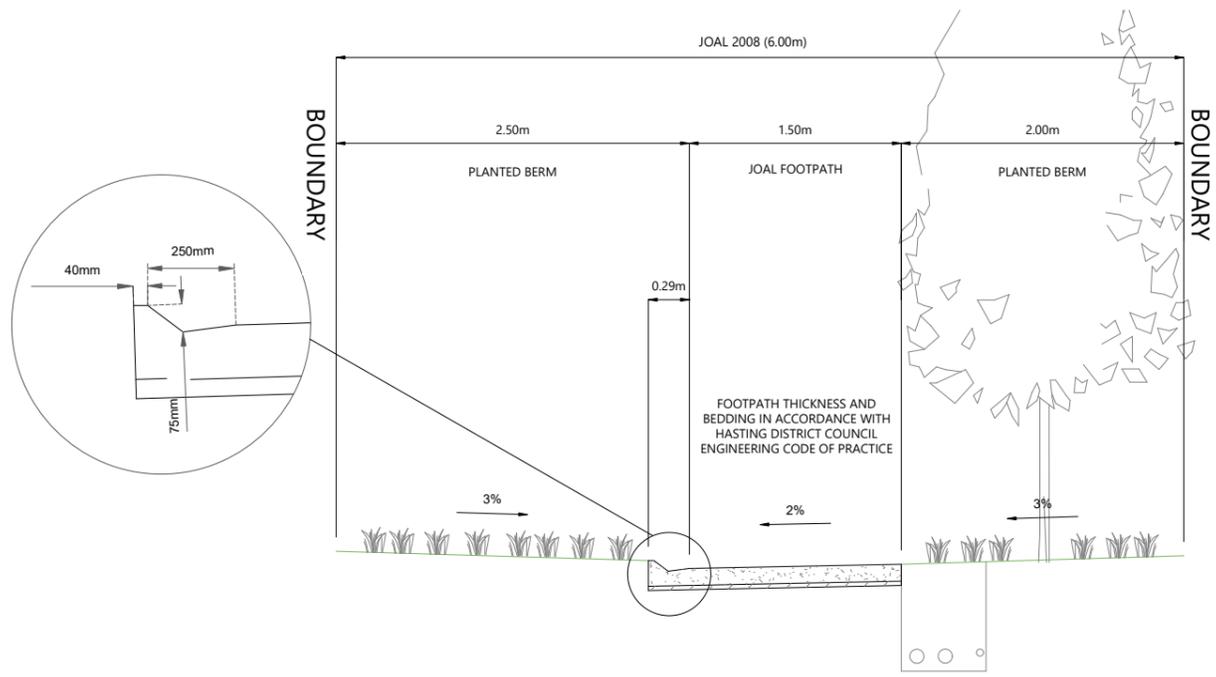
BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
AUCKLAND 1023
+64 9 308 9229

WOODS.CO.NZ

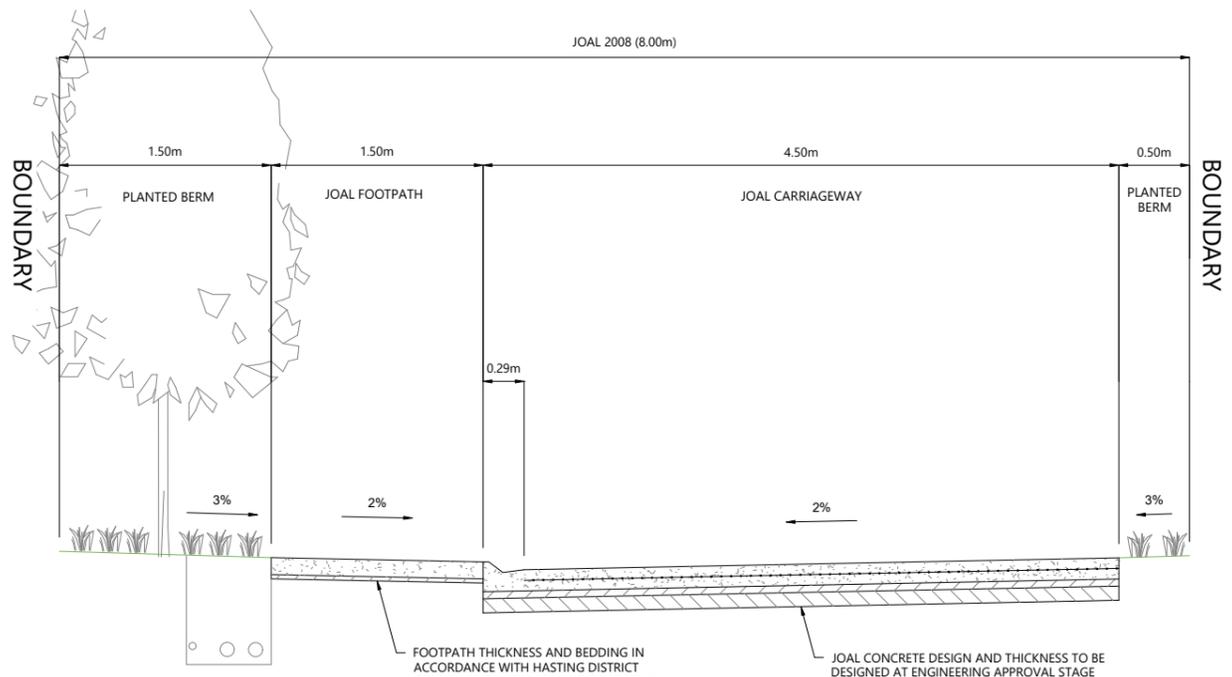


ARATAKI DEVELOPMENT - HAVELOCK NORTH
TYPICAL CROSS SECTIONS
ACCESSWAY, JOAL TYPE 2 & TYPE 3

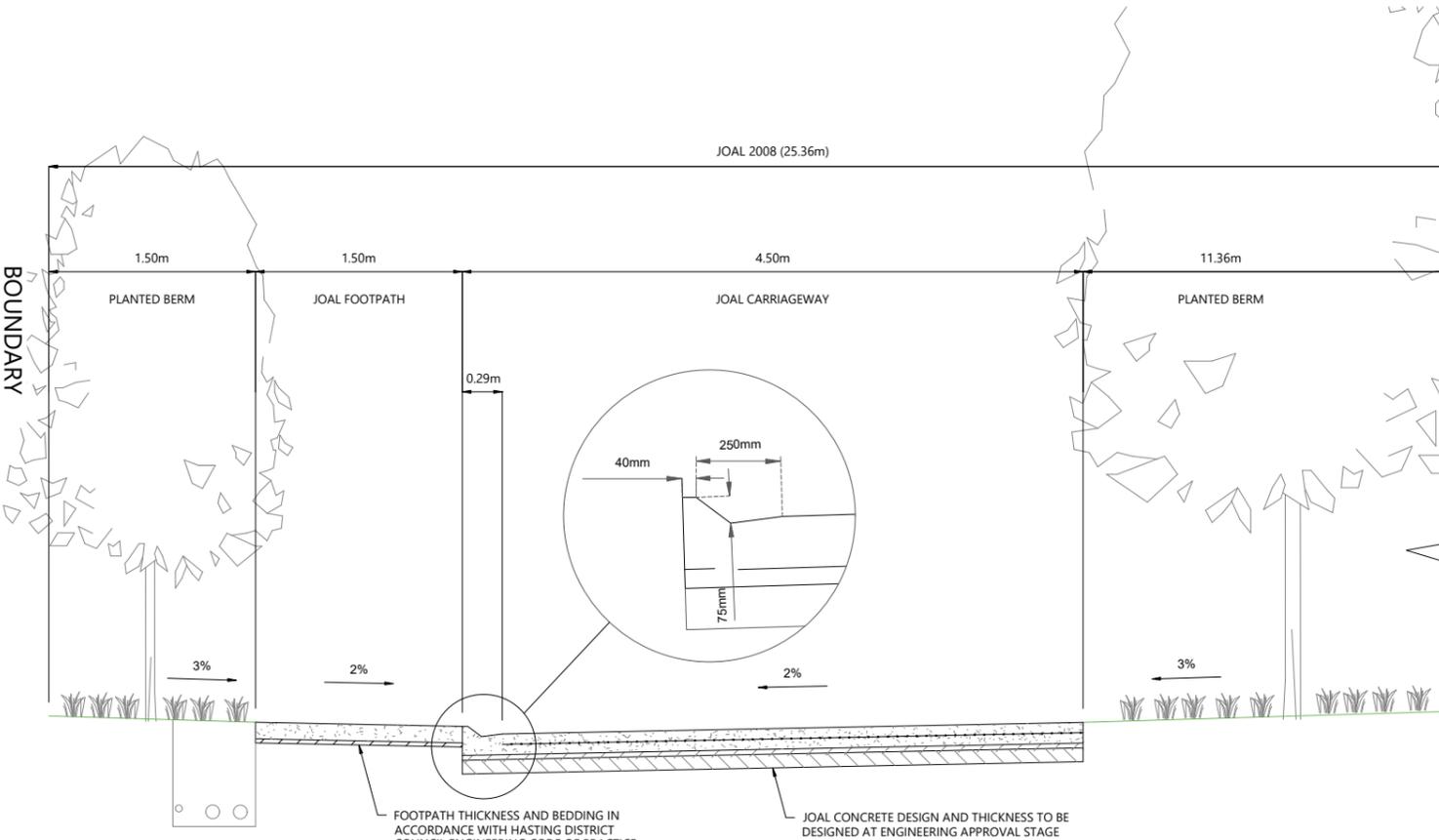
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:50 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-2203-RD | |



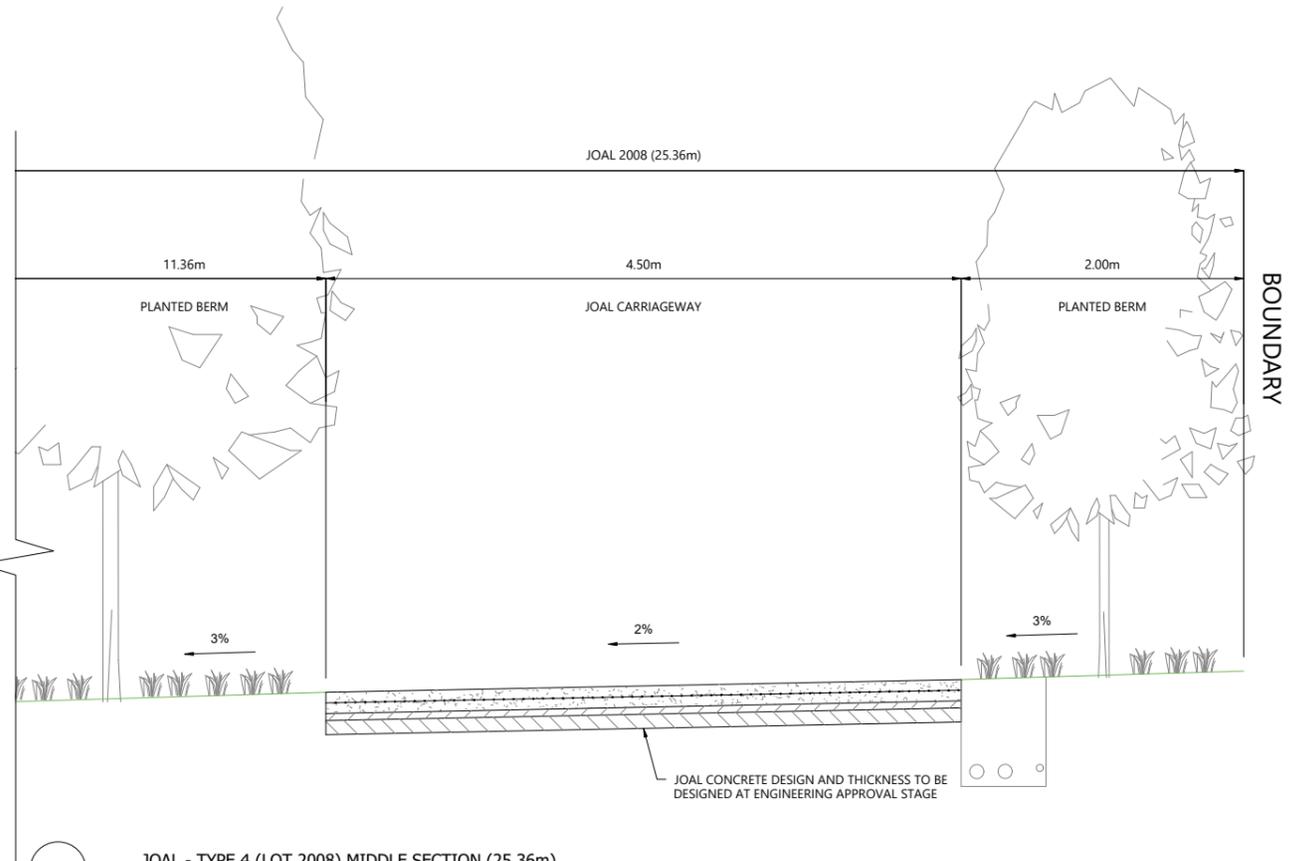
JOAL - TYPE 4 (LOT 2008) WESTERN SECTION (6.00m)
Scale: 1:50



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 |

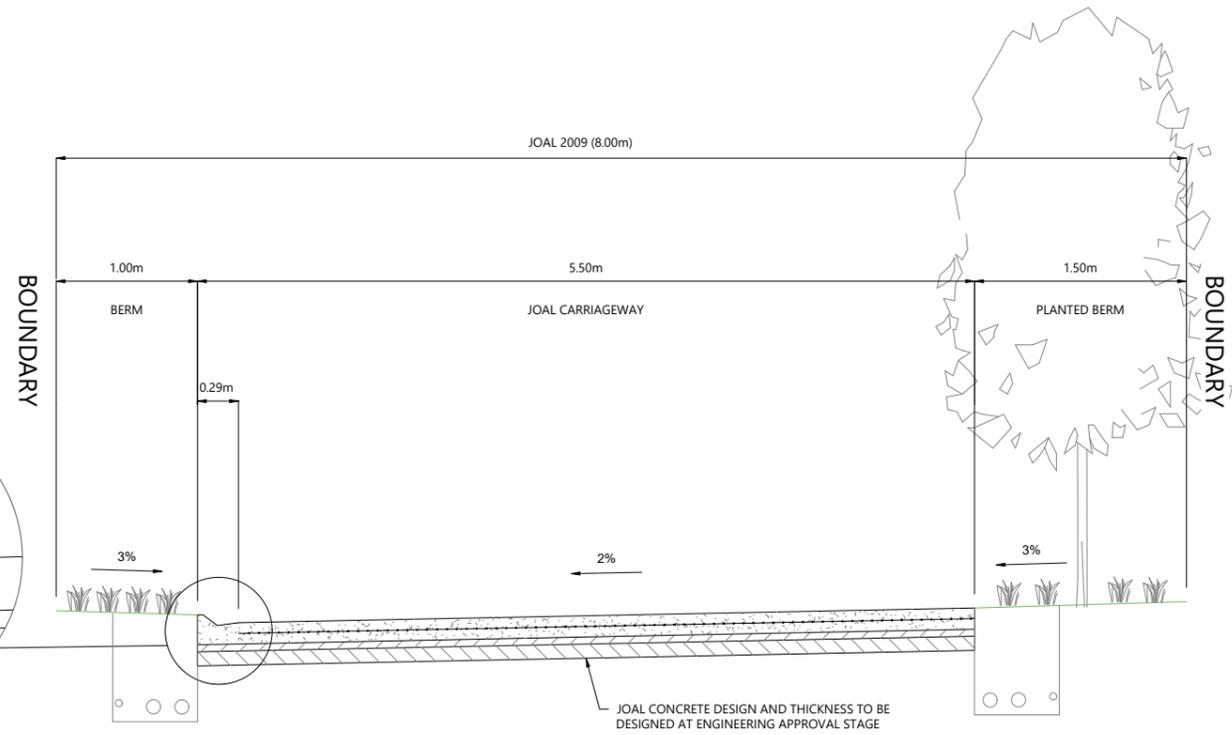


BUILDING B, LEVEL 1
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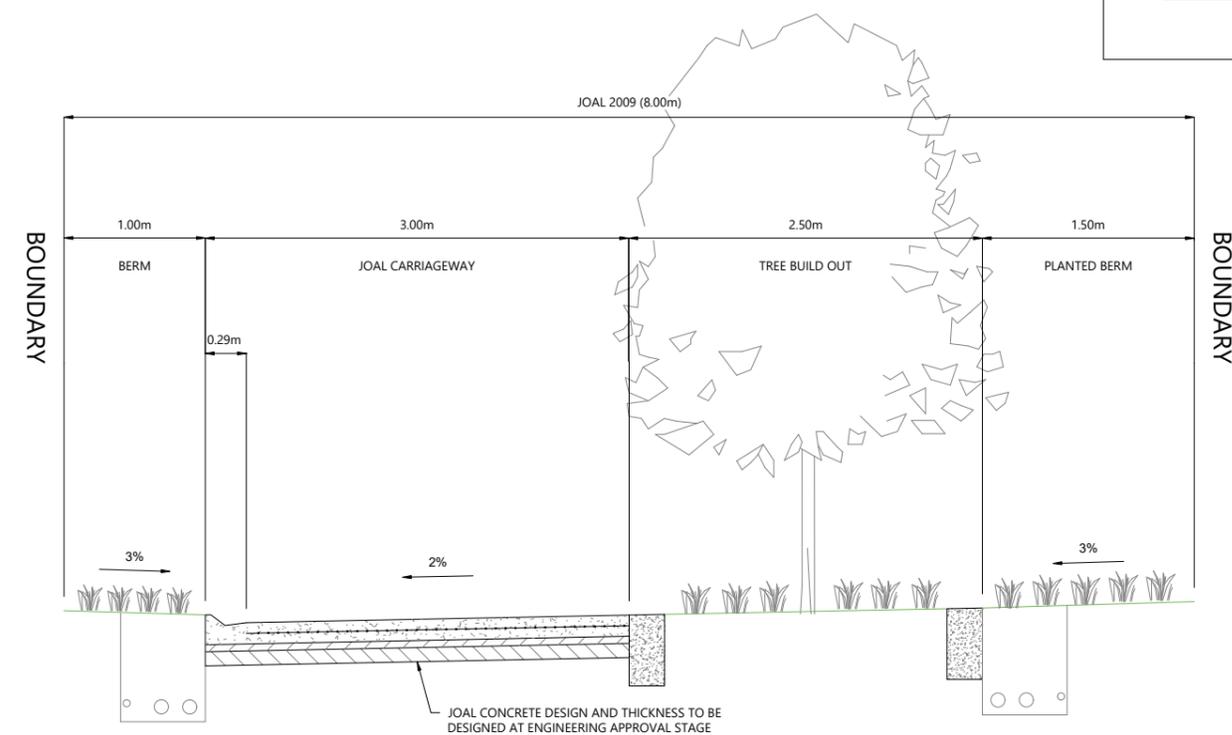


ARATAKI DEVELOPMENT - HAVELOCK NORTH
TYPICAL CROSS SECTIONS
JOAL TYPE 4

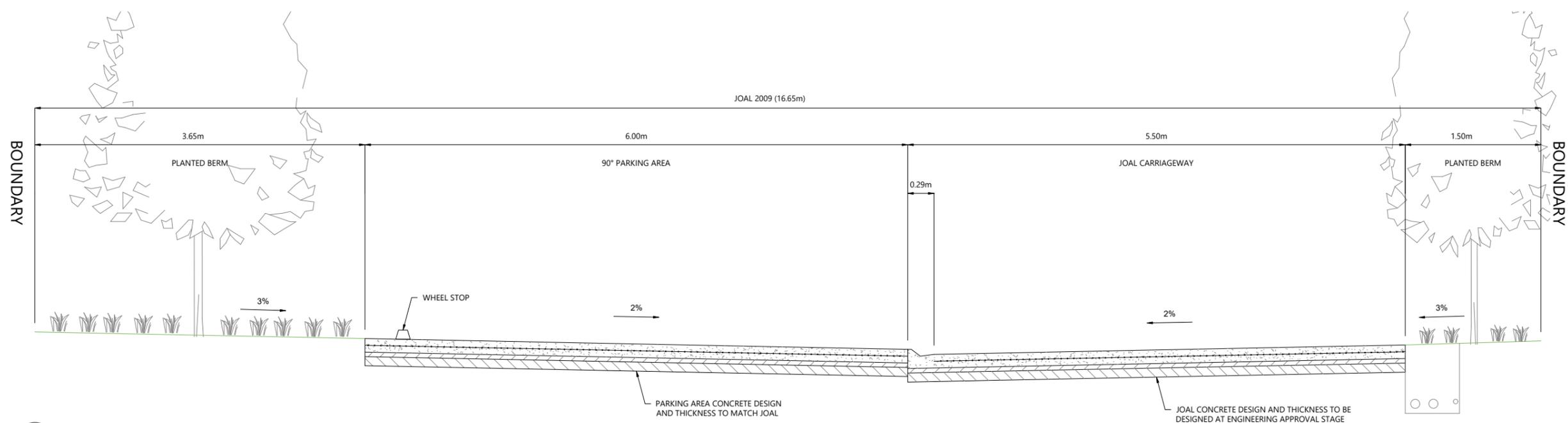
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:50 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-2204-RD | |



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 |

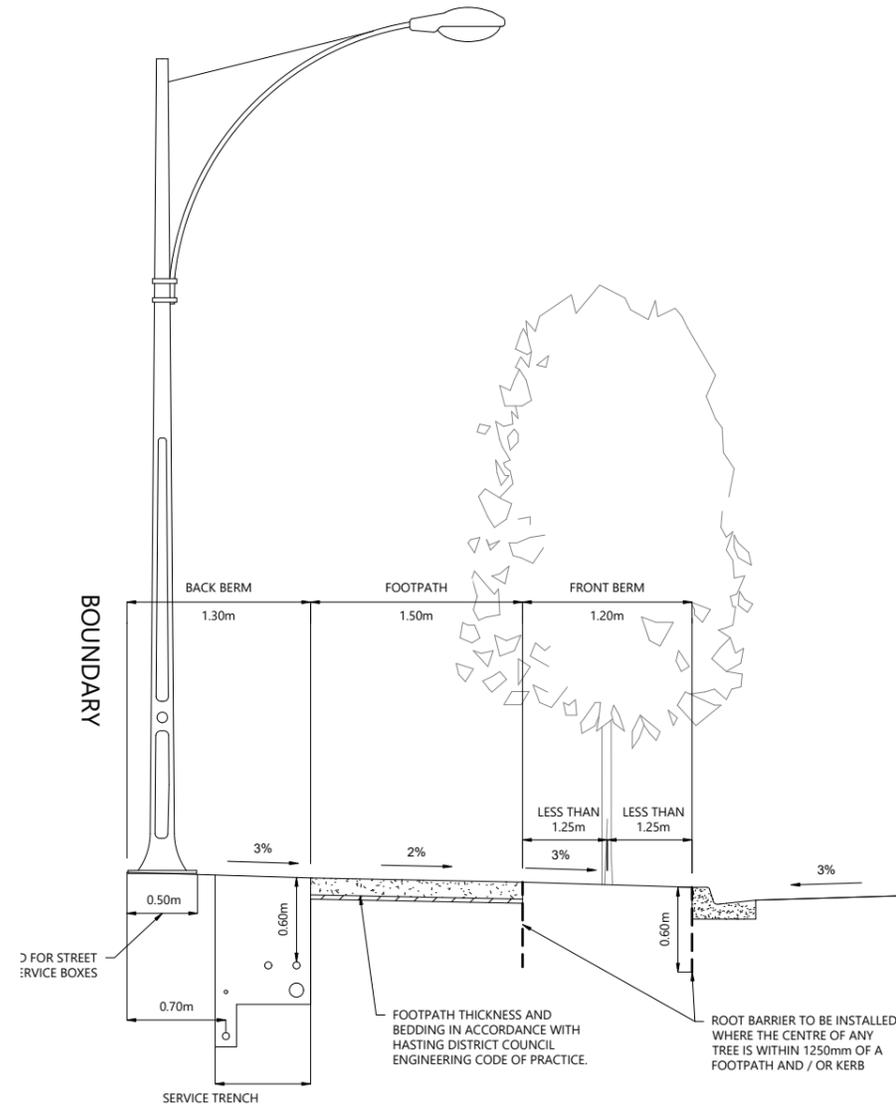


BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
AUCKLAND 1023
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WOODS.CO.NZ

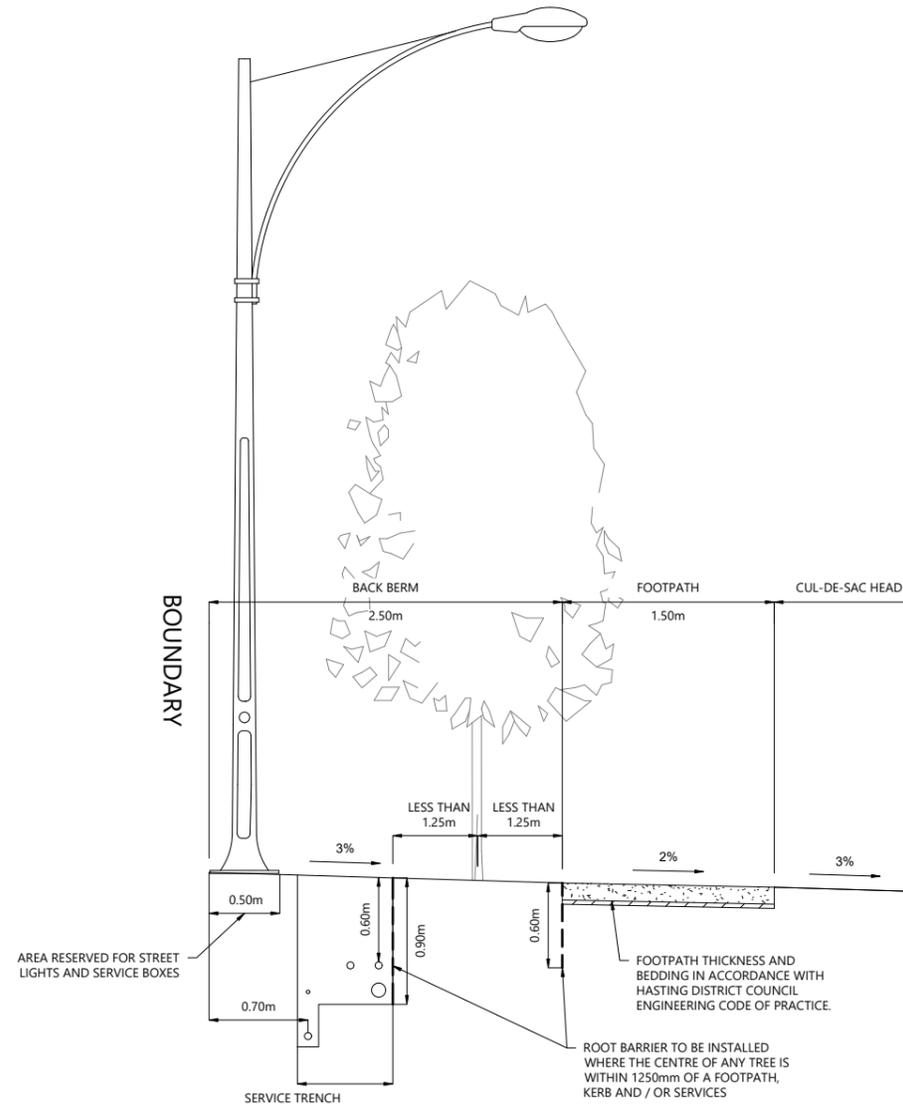


ARATAKI DEVELOPMENT - HAVELOCK NORTH
TYPICAL CROSS SECTIONS
JOAL TYPE 5

| 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 |



BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
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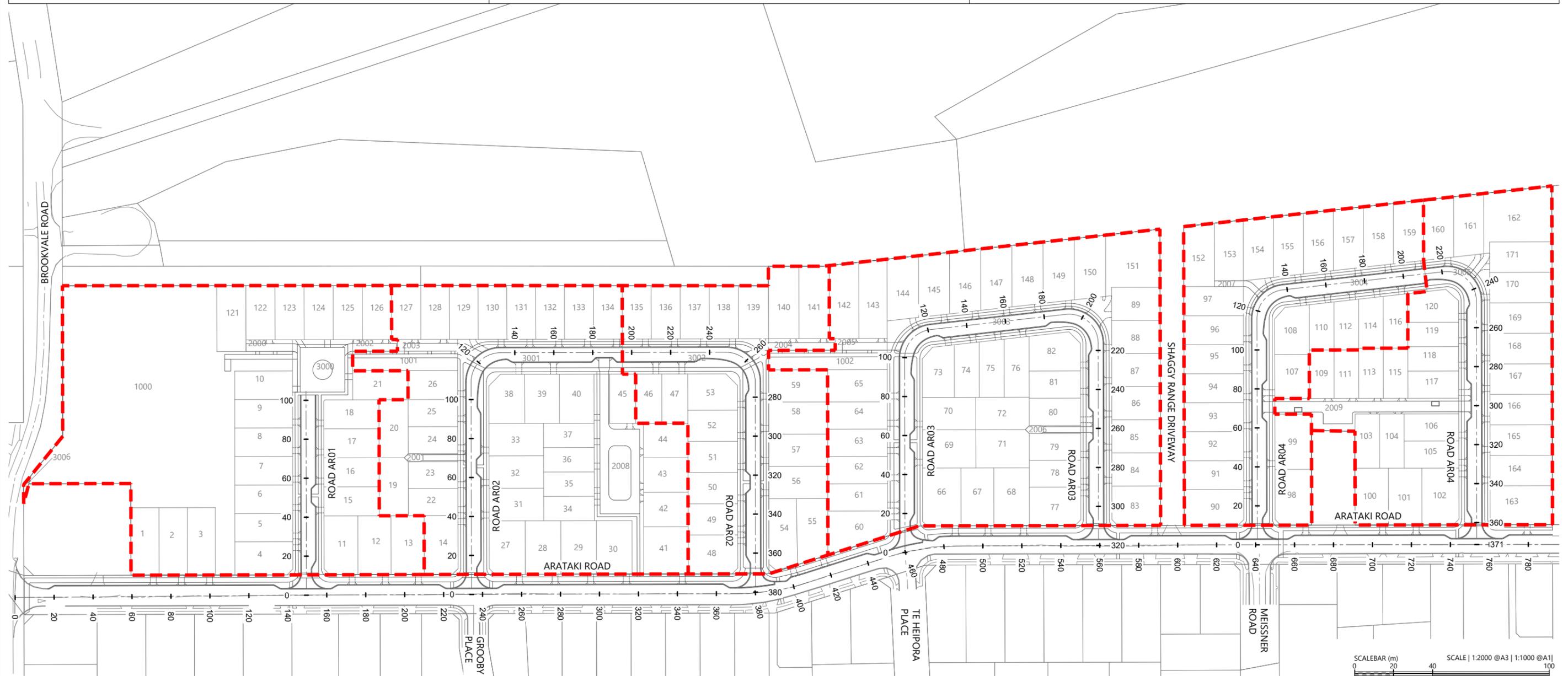


ARATAKI DEVELOPMENT - HAVELOCK NORTH
TYPICAL CROSS SECTIONS
TYPICAL BERM ARRANGEMENT

| 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 |



BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
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+64 9 308 9229

WOODS.CO.NZ

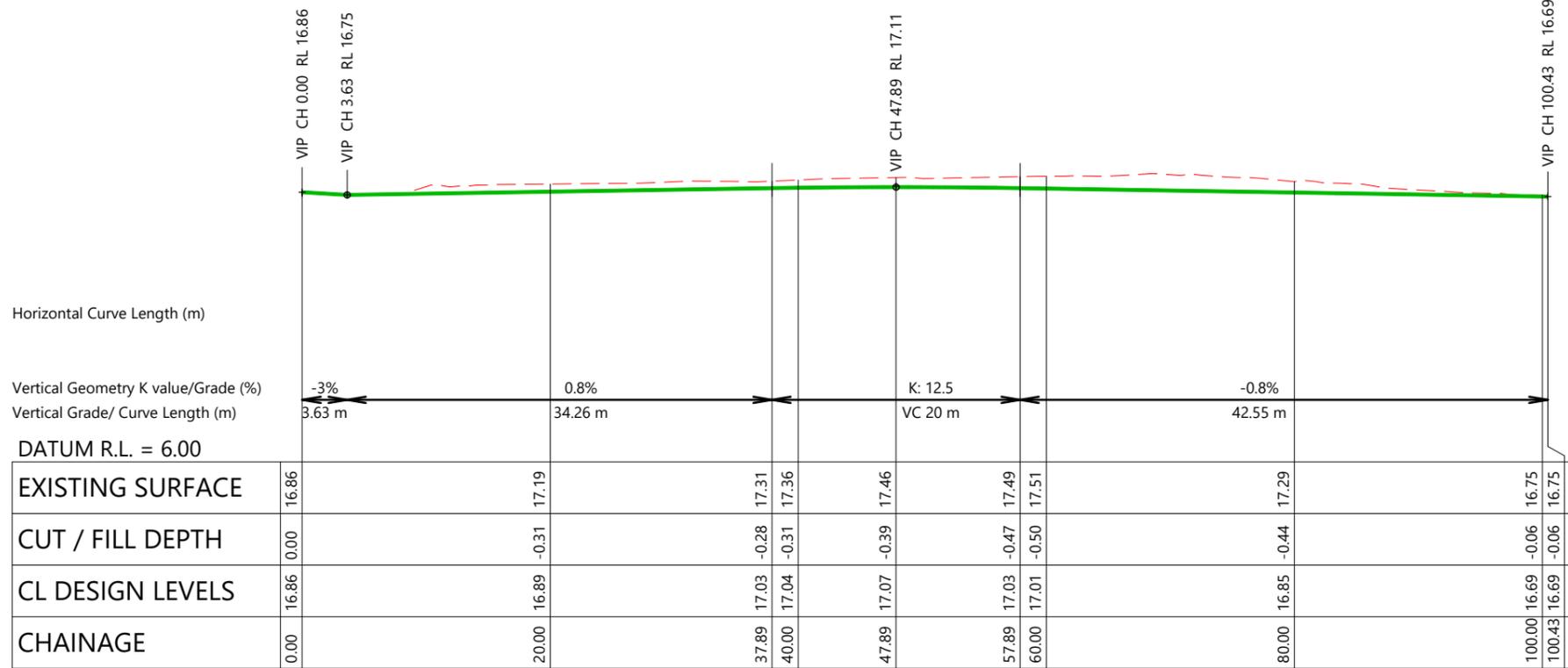


ARATAKI DEVELOPMENT - HAVELOCK NORTH

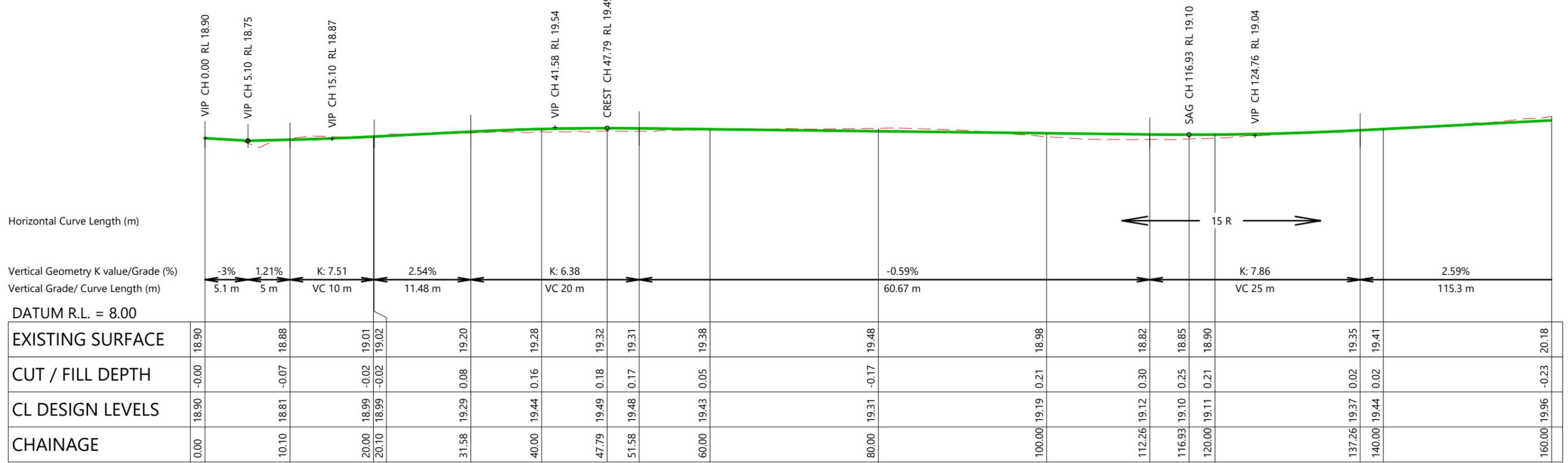
ROAD CENTRELINE PLAN



| 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



| 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 |

BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
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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 | 22.03 | 22.03 | 22.35 | 21.97 | 21.97 | |
| CUT / FILL DEPTH | 0.07 | 0.38 | 0.47 | 0.52 | 0.49 | 0.11 | 0.09 | -0.41 | -0.01 | -0.00 | |
| CL DESIGN LEVELS | 22.78 | 22.88 | 22.90 | 22.90 | 22.67 | 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 |



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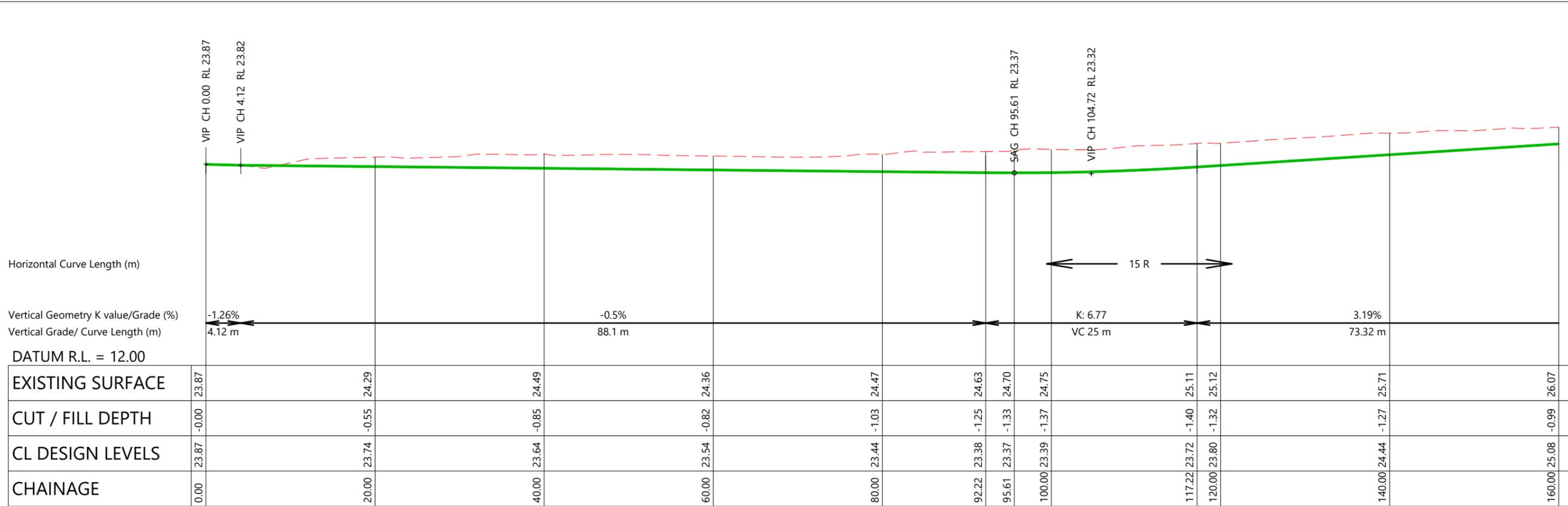
WOODS.CO.NZ



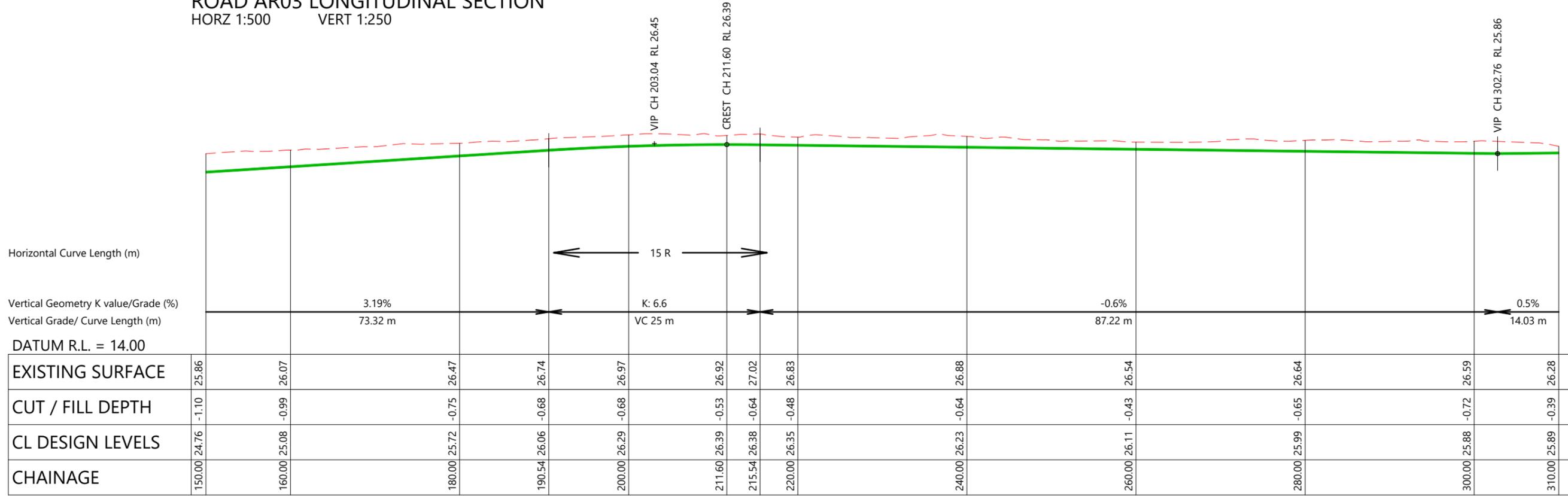
ARATAKI DEVELOPMENT - HAVELOCK NORTH

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



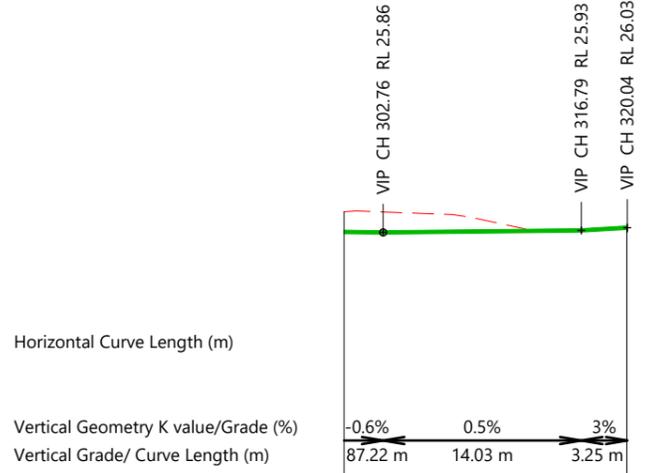
| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
|-------------------------|-----|-----------|----------|-------|
| 1 ISSUED FOR DISCUSSION | TB | APR 2025 | DESIGNED | AB |
| 2 ISSUED FOR CONSENT | TB | JUNE 2025 | DRAWN | TB |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |

BUILDING B, LEVEL 1
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
ROAD LONGSECTIONS - SHEET 3

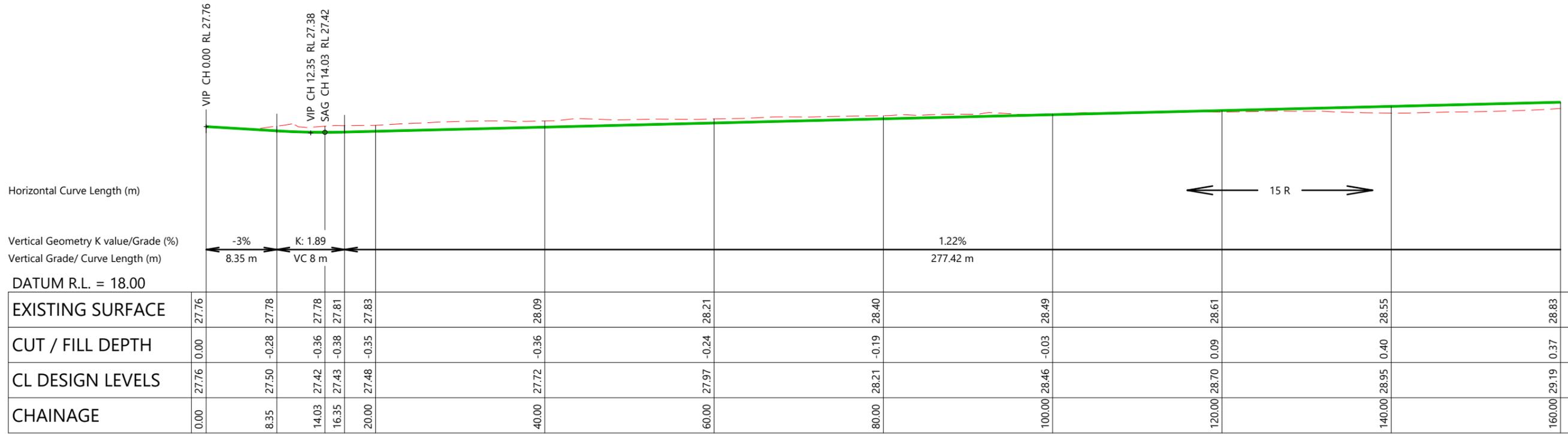
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | AS SHOWN | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-2503-RD | |



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 |

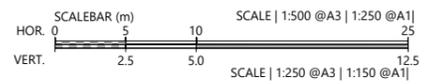
ROAD AR03 LONGITUDINAL SECTION
HORZ 1:500 VERT 1:250



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 |

BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
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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 |



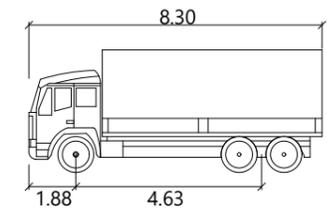
BUILDING B, LEVEL 1
 8 NUGENT ST, GRAFTON,
 AUCKLAND 1023
 +64 9 308 9229
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ARATAKI DEVELOPMENT - HAVELOCK NORTH

ROAD LONGSECTIONS - SHEET 5

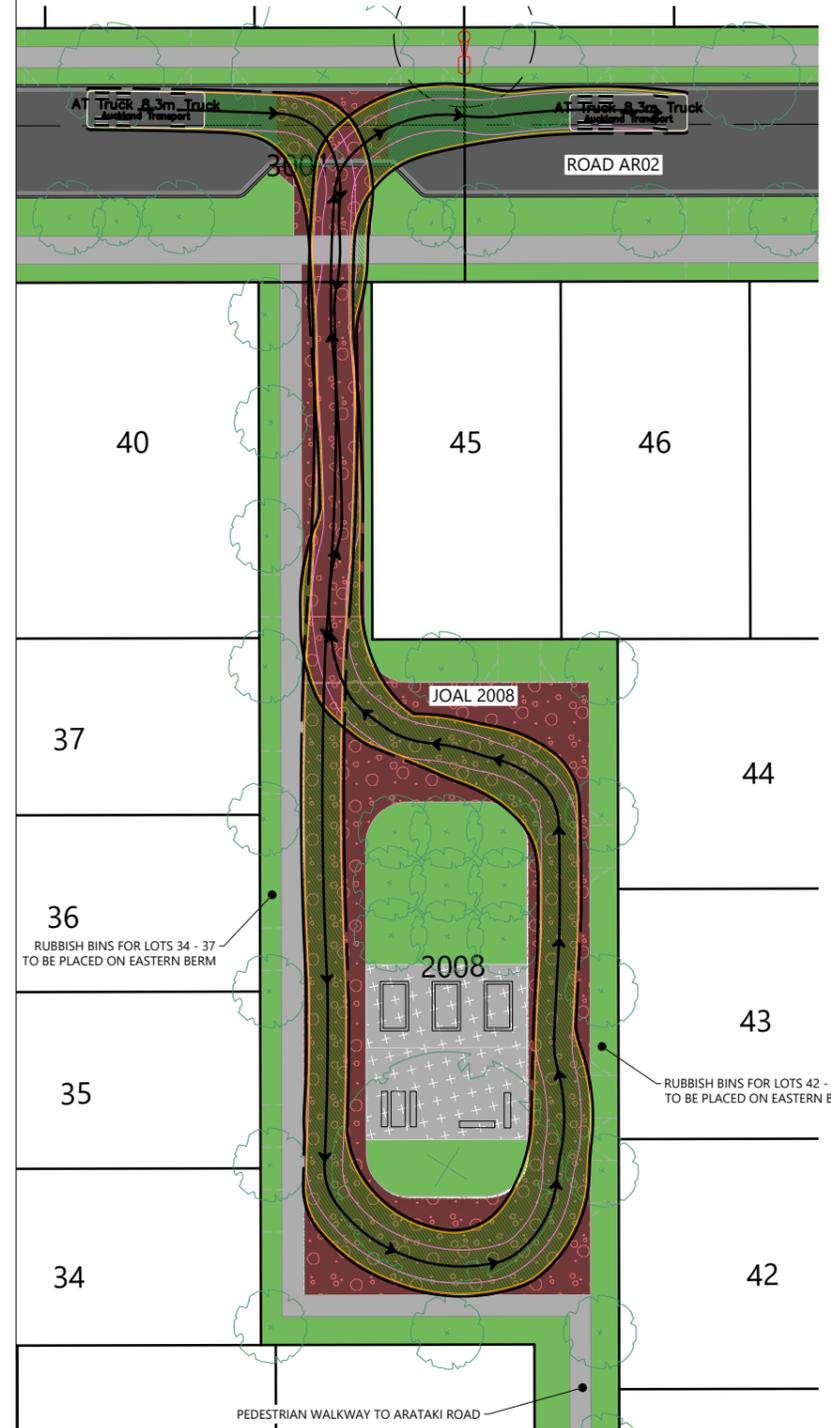
| | | |
|---------|---------------------------|-----|
| STATUS | ISSUED FOR CONSENT | REV |
| SCALE | AS SHOWN | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-2505-RD | |



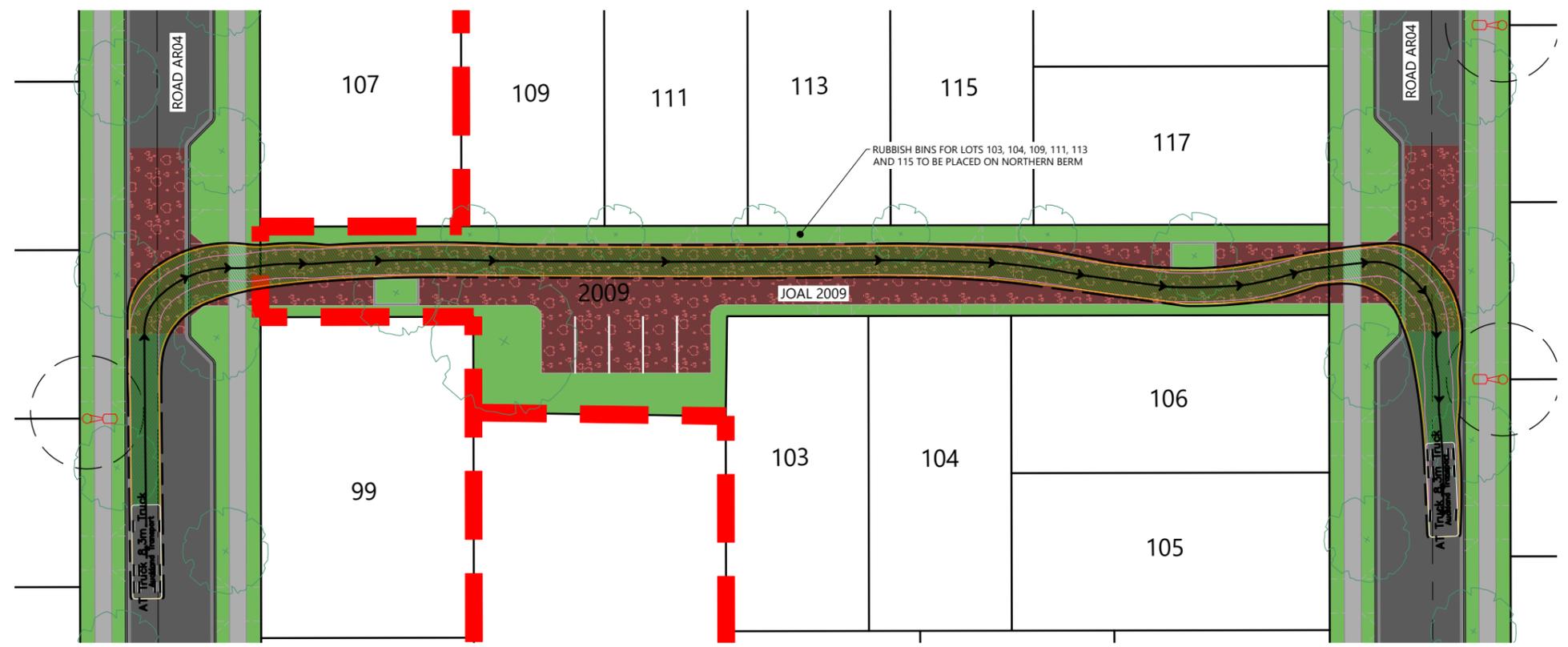
AT Truck 8.3m Truck
 meters
 Width : 2.55
 Track : 2.55
 Lock to Lock Time : 6.0
 Steering Angle : SA1

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



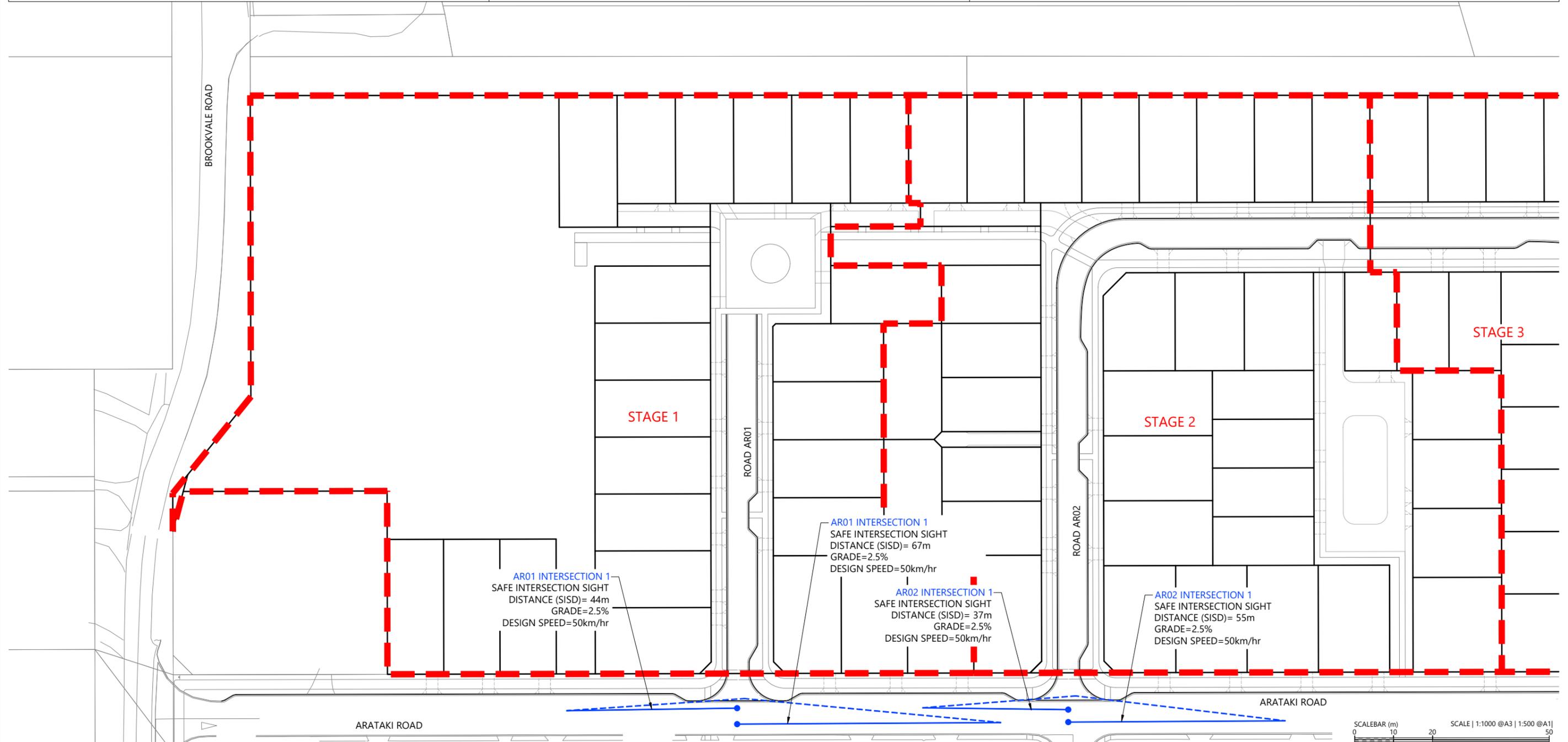
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:500 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-2700-RD | |

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 |

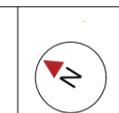
| | | | |
|--------------|-----------|-----------|--------------|
| ARATAKI ROAD | ROAD AR01 | ROAD AR02 | ARATAKI ROAD |
|--------------|-----------|-----------|--------------|



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



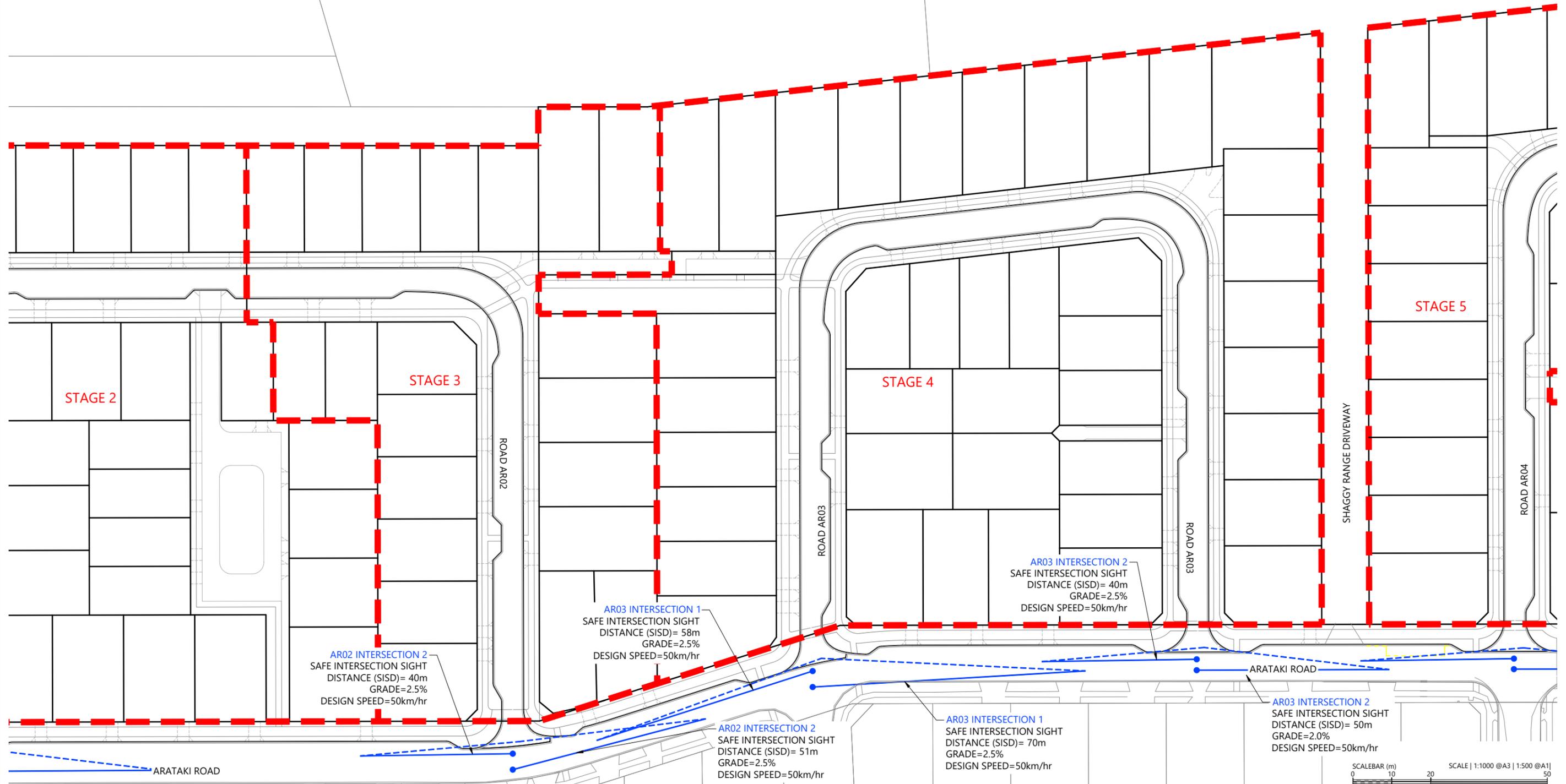
| | | |
|---------|---------------------------|-----|
| STATUS | ISSUED FOR CONSENT | REV |
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-2751-RD | |

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

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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

SAFE INTERSECTION SIGHT DISTANCE PLAN - SHEET 2



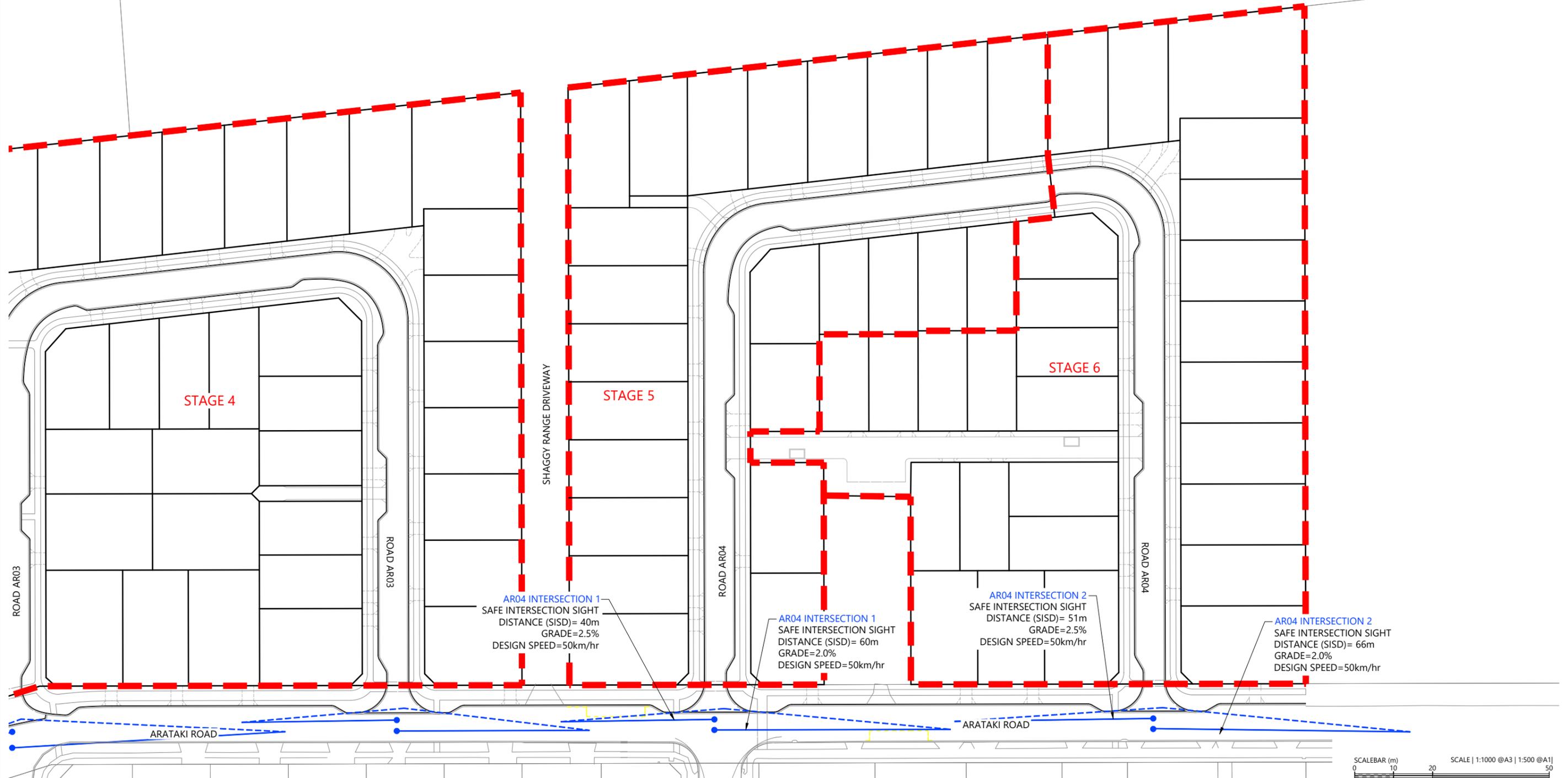
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-2752-RD | |

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

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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

SAFE INTERSECTION SIGHT DISTANCE PLAN - SHEET 3



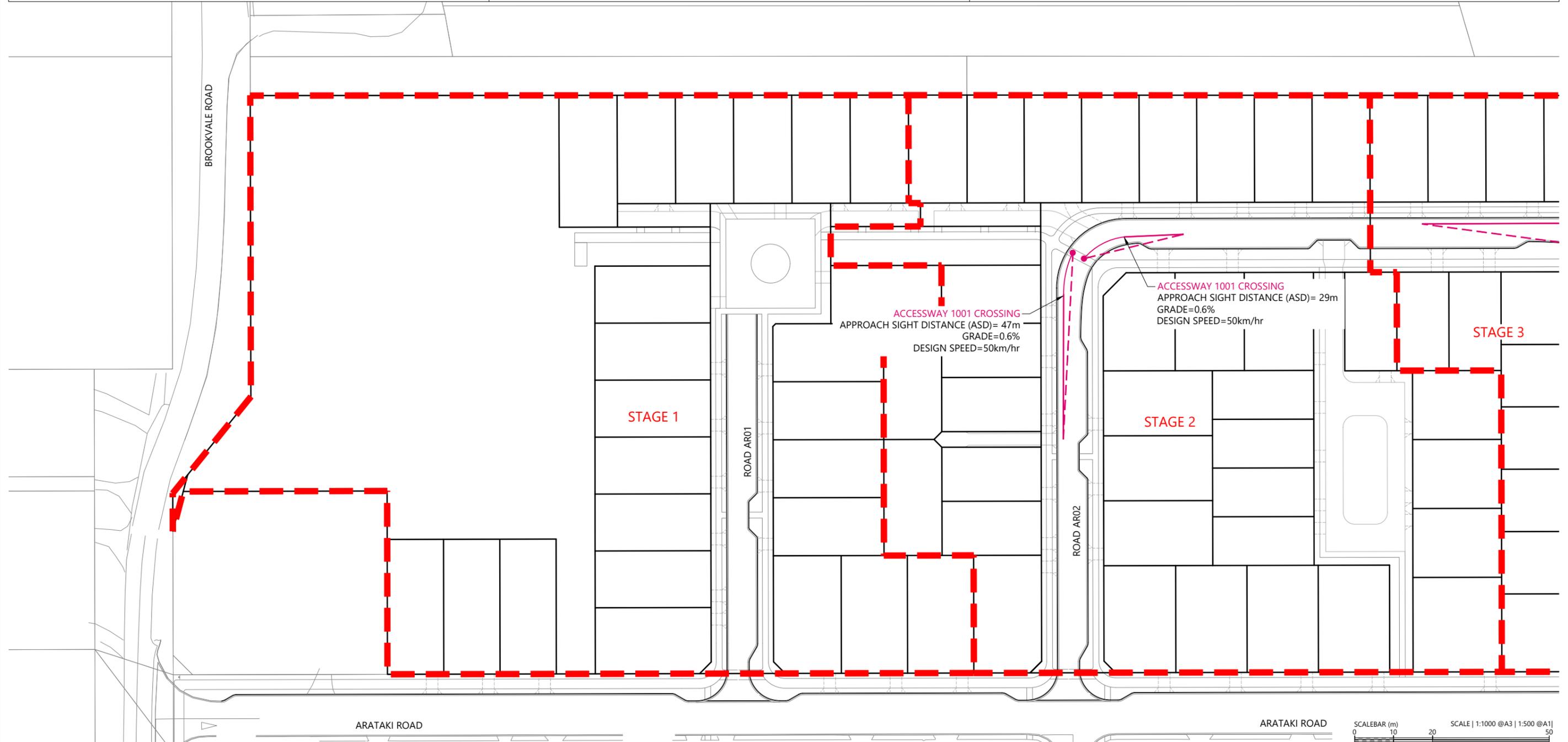
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-2753-RD | |

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

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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

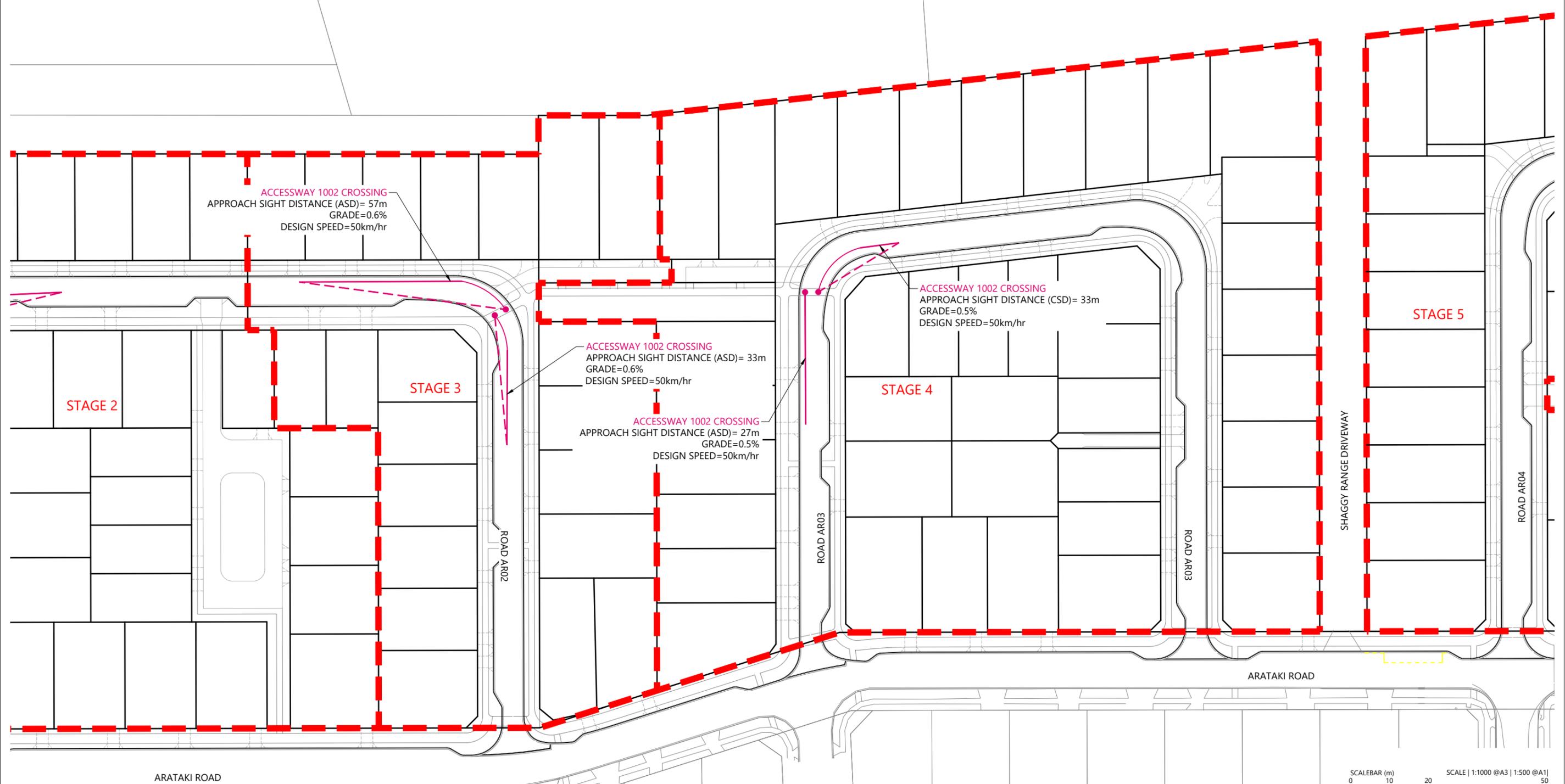
| | | |
|---------|---------------------------|-----|
| STATUS | ISSUED FOR CONSENT | REV |
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-2754-RD | |

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

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ARATAKI ROAD

SCALEBAR (m) 0 10 20 50
SCALE | 1:1000 @A3 | 1:500 @A1 | 1:250 @A2

| 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



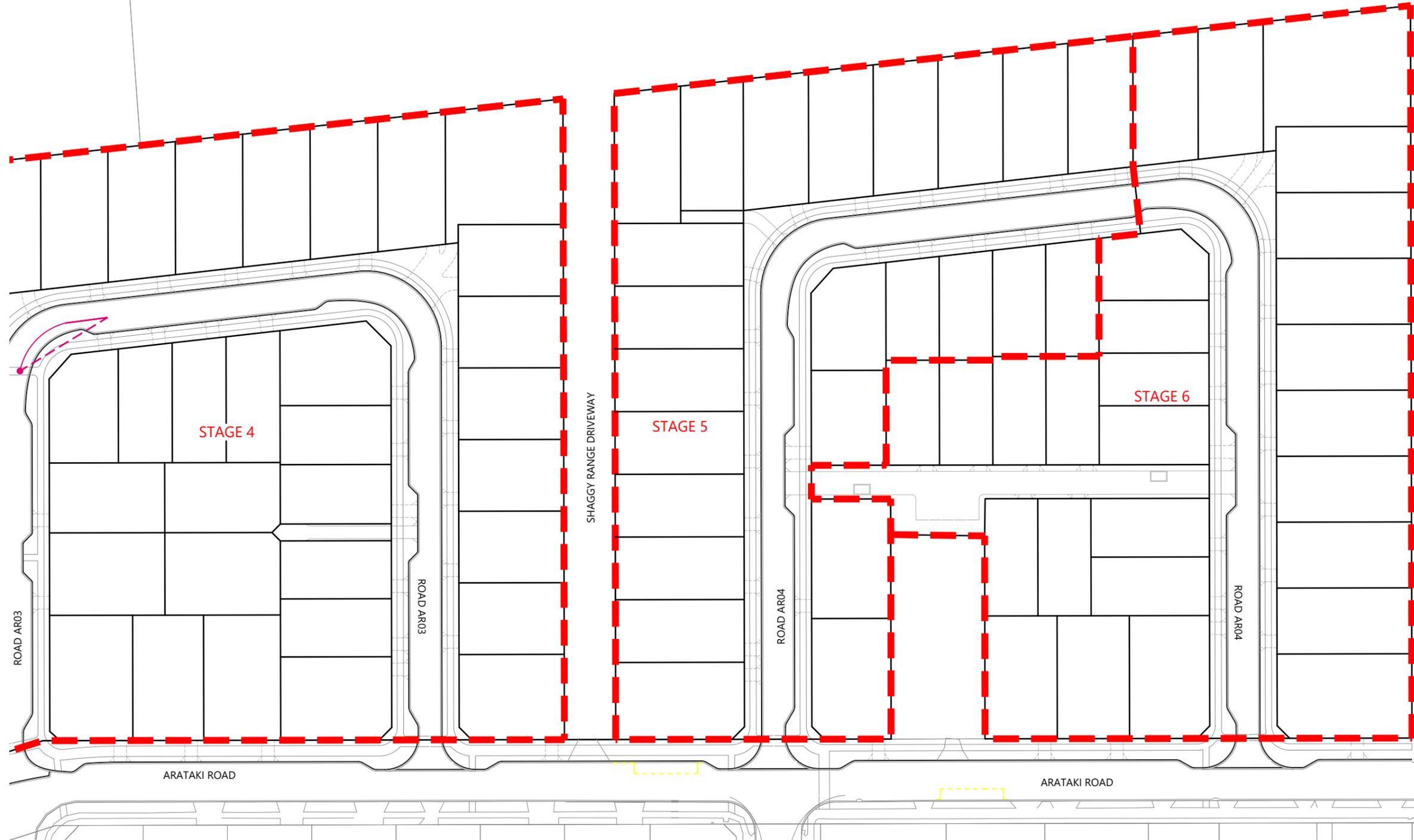
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-2755-RD | |

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

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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



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

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

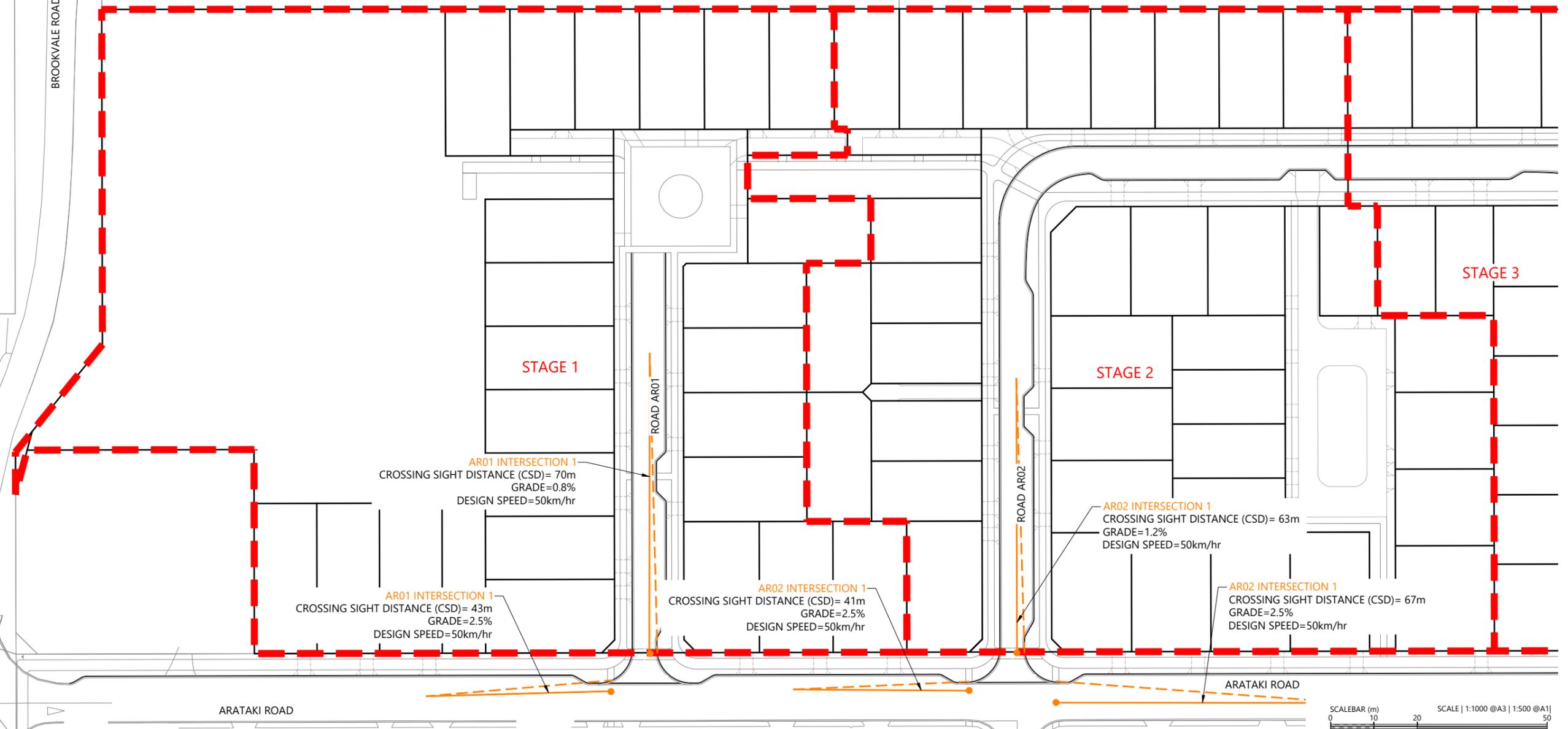
LEGEND

- 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



| 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



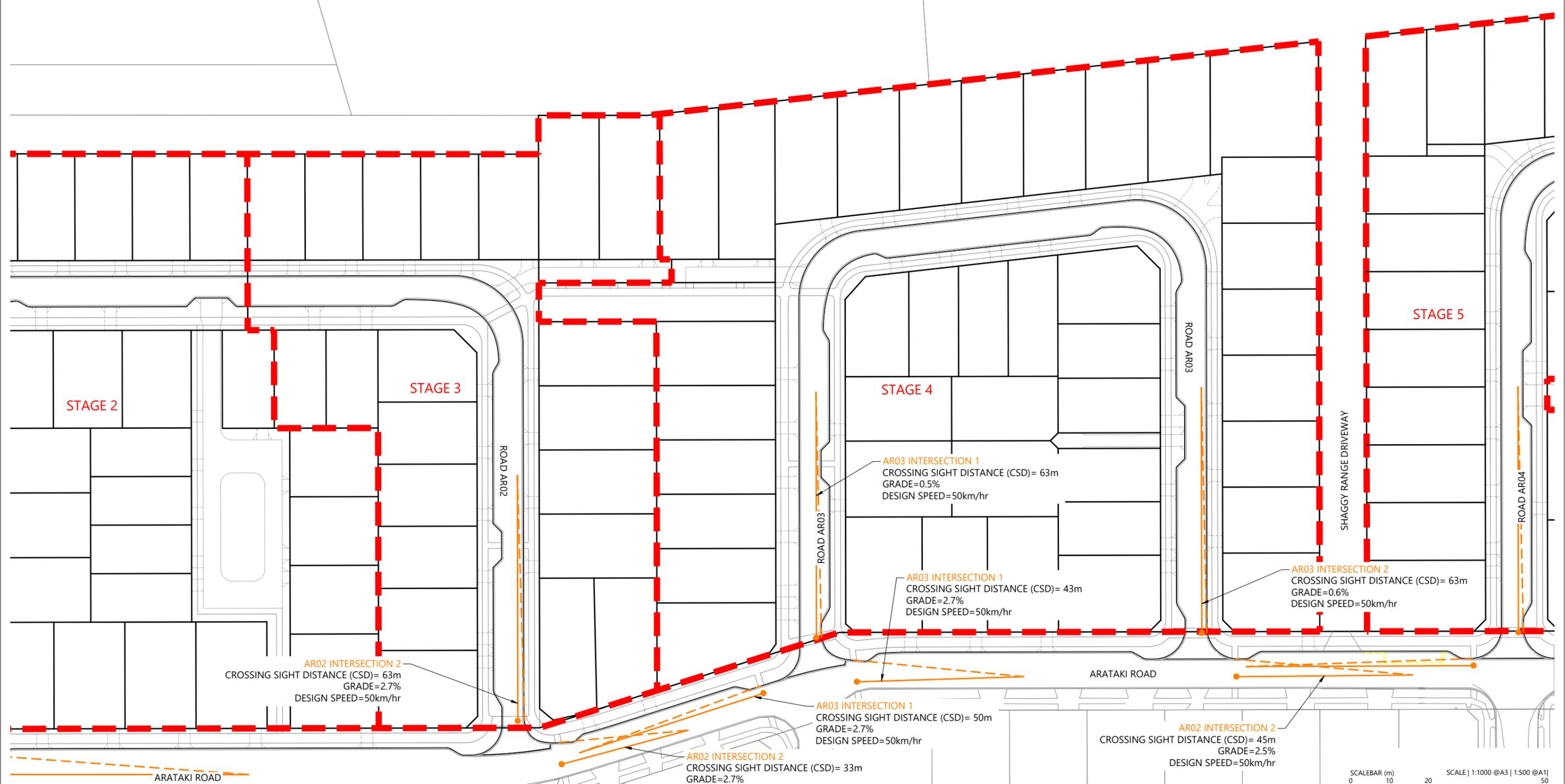
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-2757-RD | |

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

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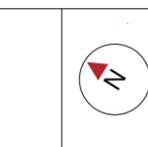


| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
|----------------------|-----|-----------|----------|-------|
| 2 ISSUED FOR CONSENT | TB | JUNE 2025 | DESIGNED | AB |
| | | | DRAWN | TB |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |

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



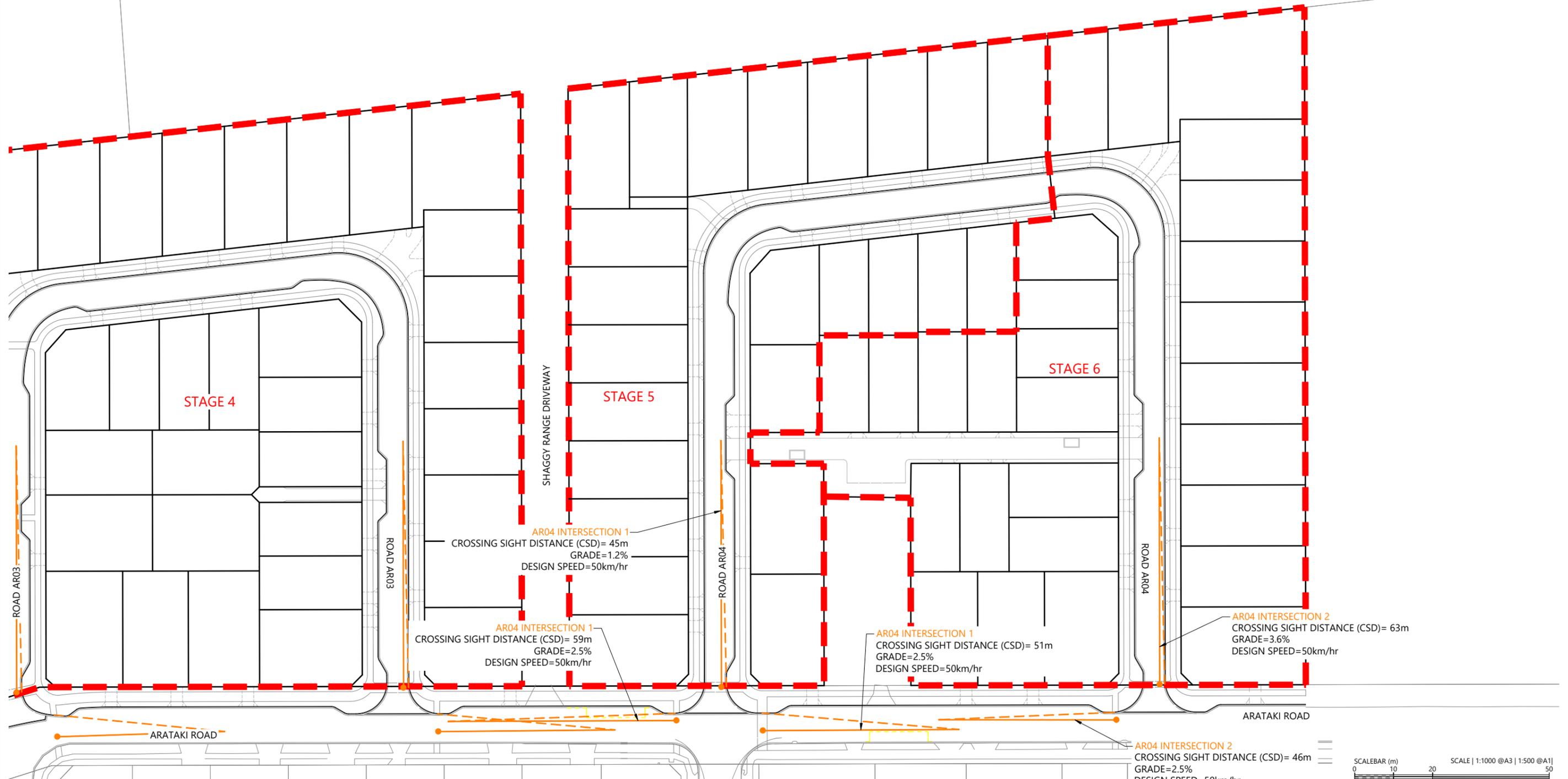
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-2758-RD | |

LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED BERM
- PROPOSED FOOTPATH

NOTES

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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 |



BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
AUCKLAND 1023
+64 9 308 9229
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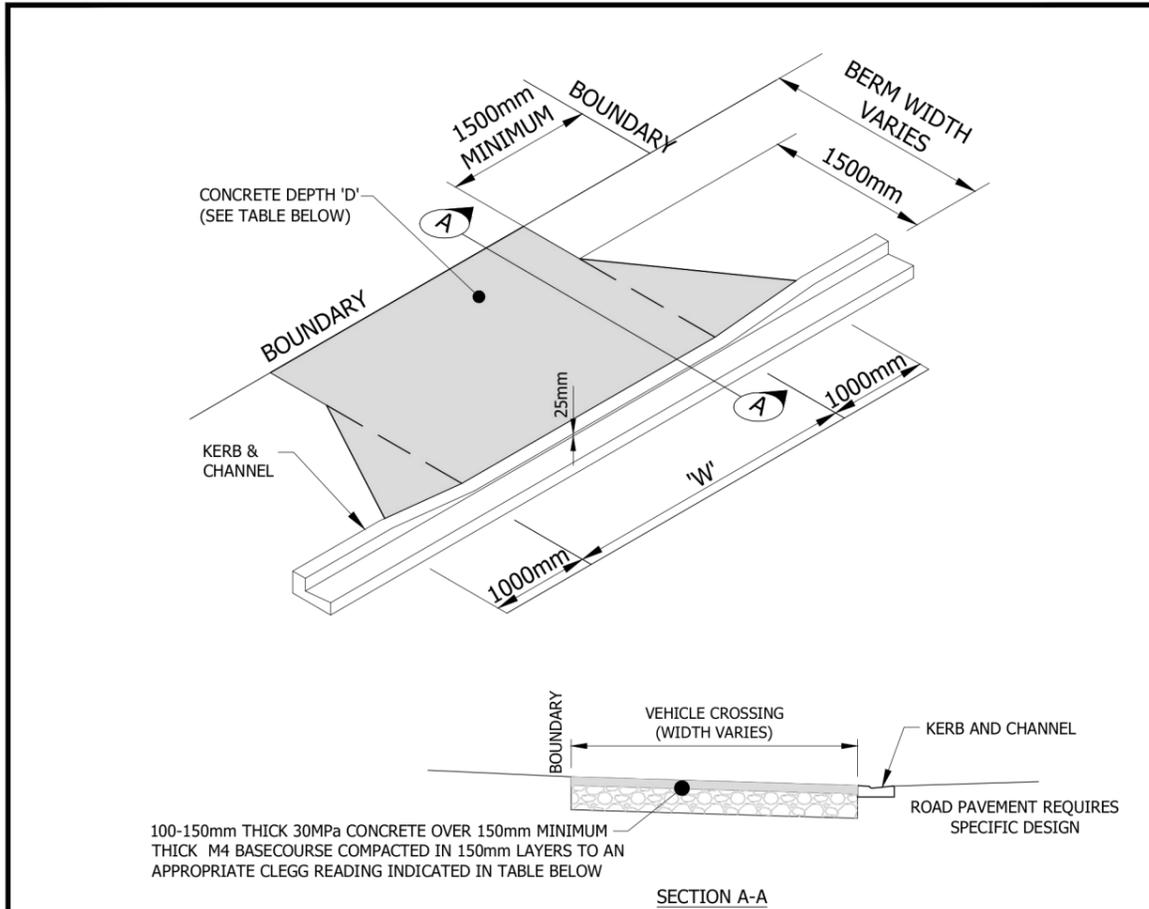


ARATAKI DEVELOPMENT - HAVELOCK NORTH
CROSSING SIGHT DISTANCE PLAN - SHEET 3



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

TRIM Reference :



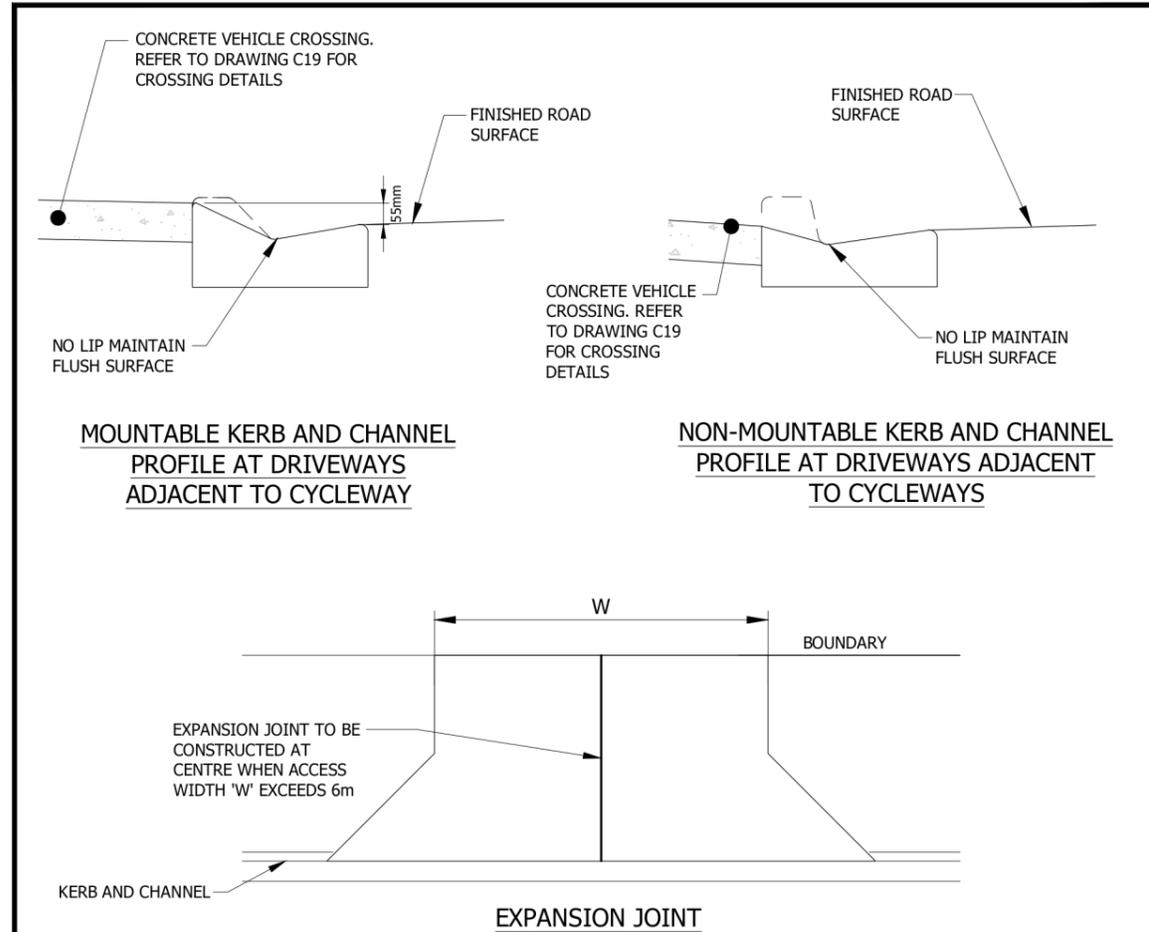
100-150mm THICK 30MPa CONCRETE OVER 150mm MINIMUM THICK M4 BASECOURSE COMPACTED IN 150mm LAYERS TO AN APPROPRIATE CLEGG READING INDICATED IN TABLE BELOW

| 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:
- 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.
 - FOR SUBGRADE STRENGTH BELOW CBR 5% SPECIFIC DESIGNS ARE REQUIRED.
 - CONCRETE STRENGTH TO BE A MINIMUM OF 30MPa AT 28 DAYS.
 - WHERE MOUNTABLE KERBS ARE PRESENT THERE IS TO BE NO CUT DOWN AND THE VEHICLE CROSSING WILL TIE INTO THE TOP OF KERB LEVEL.
 - REFER TO DRAWING C19A FOR DETAILS OF KERB AND CHANNEL PROFILE ADJACENT TO SHARED CYCLEWAY AND FOOTPATH.

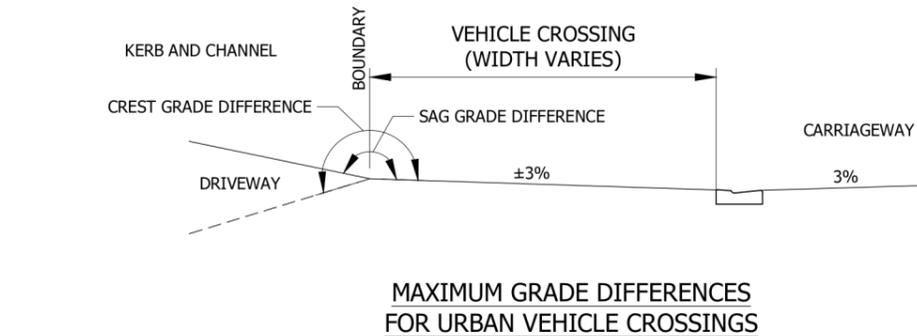
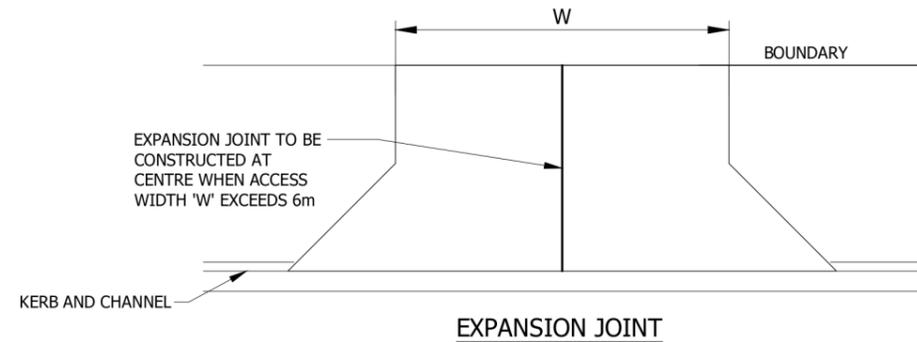
| | | |
|--|--|--------------|
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| | MINIMUM STANDARDS FOR VEHICLE CROSSINGS ONTO URBAN ROADS | C19 |
| | | NOV 2018 |

TRIM Reference :



MOUNTABLE KERB AND CHANNEL PROFILE AT DRIVEWAYS ADJACENT TO CYCLEWAY

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



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

| | | |
|--|--|--------------|
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| | MINIMUM STANDARDS FOR VEHICLE CROSSINGS - TYPICAL SECTIONS | C19A |
| | | NOV 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 |



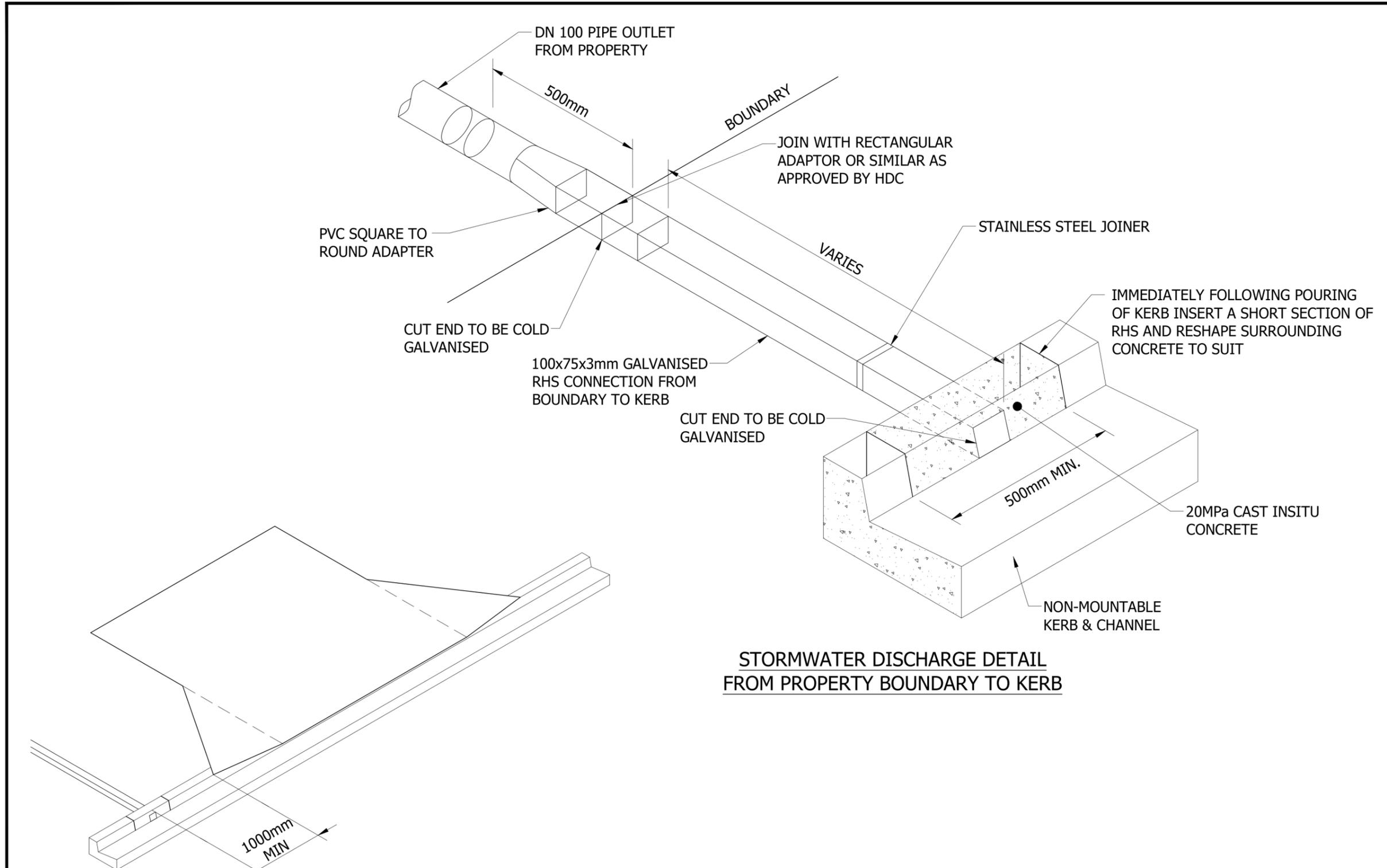
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
ROAD DETAILS
HDC ENG COP - C19 & C19A

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



STORMWATER DISCHARGE DETAIL FROM PROPERTY BOUNDARY TO KERB

STORMWATER DISCHARGE TO KERB AT VEHICLE CROSSING - ISOMETRIC VIEW

| | | |
|--|---------------------------------------|--------------|
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| | STORMWATER PROPERTY DISCHARGE TO KERB | WS 105 |
| | | DEC 2018 |

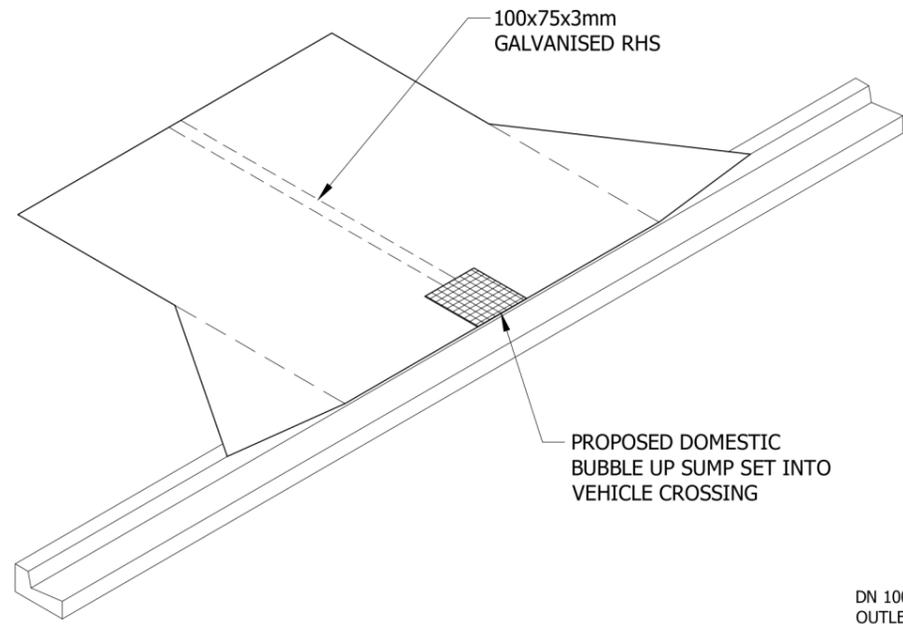
| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
|-----------------------|-----|-----------|----------|------------|
| 1 ISSUED FOR APPROVAL | TB | MAY 2025 | DESIGNED | HASTINGSDC |
| 2 ISSUED FOR CONSENT | TB | JUNE 2025 | DRAWN | TB |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |

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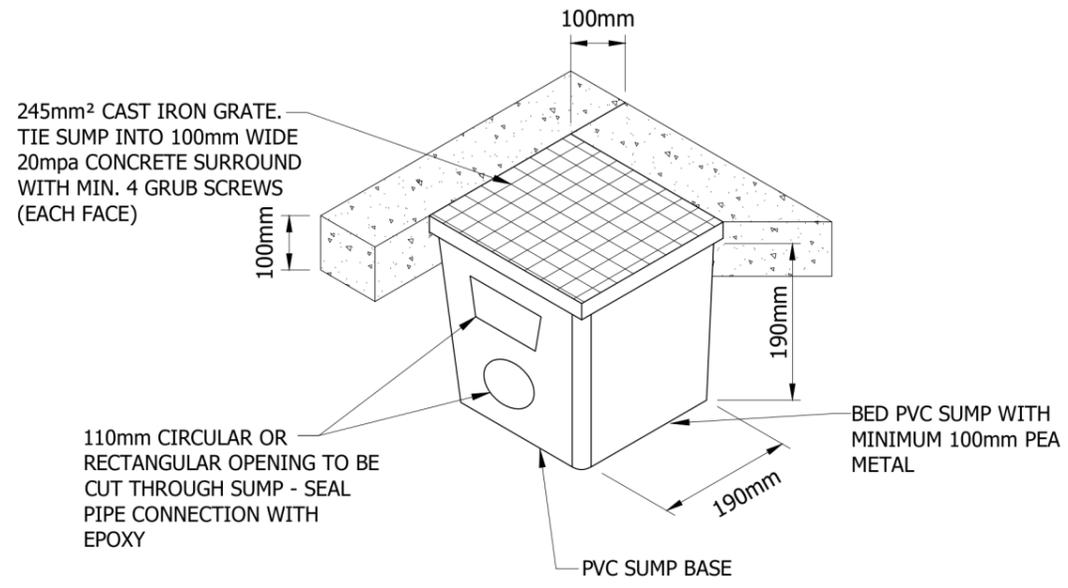
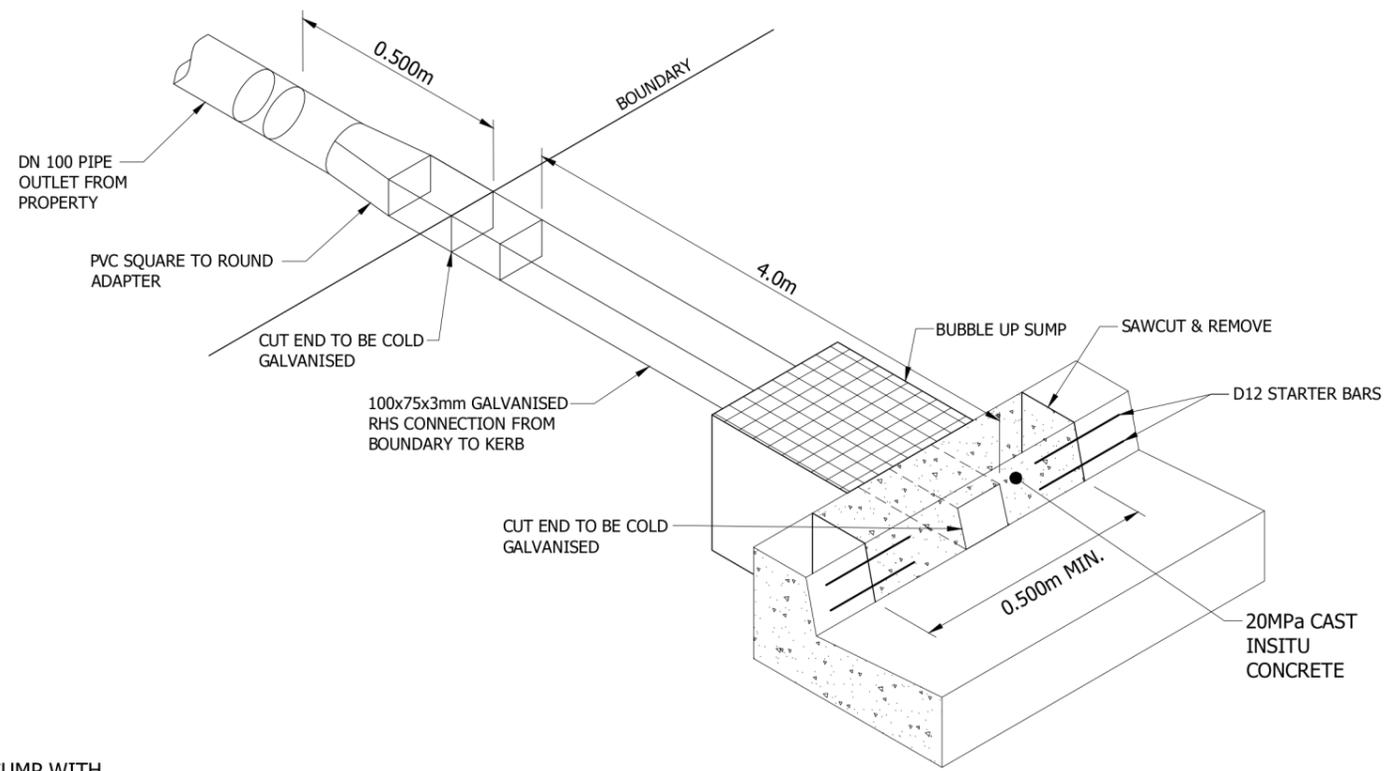


ARATAKI DEVELOPMENT - HAVELOCK NORTH
 ROAD DETAILS
 HDC ENG COP - WS 105

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

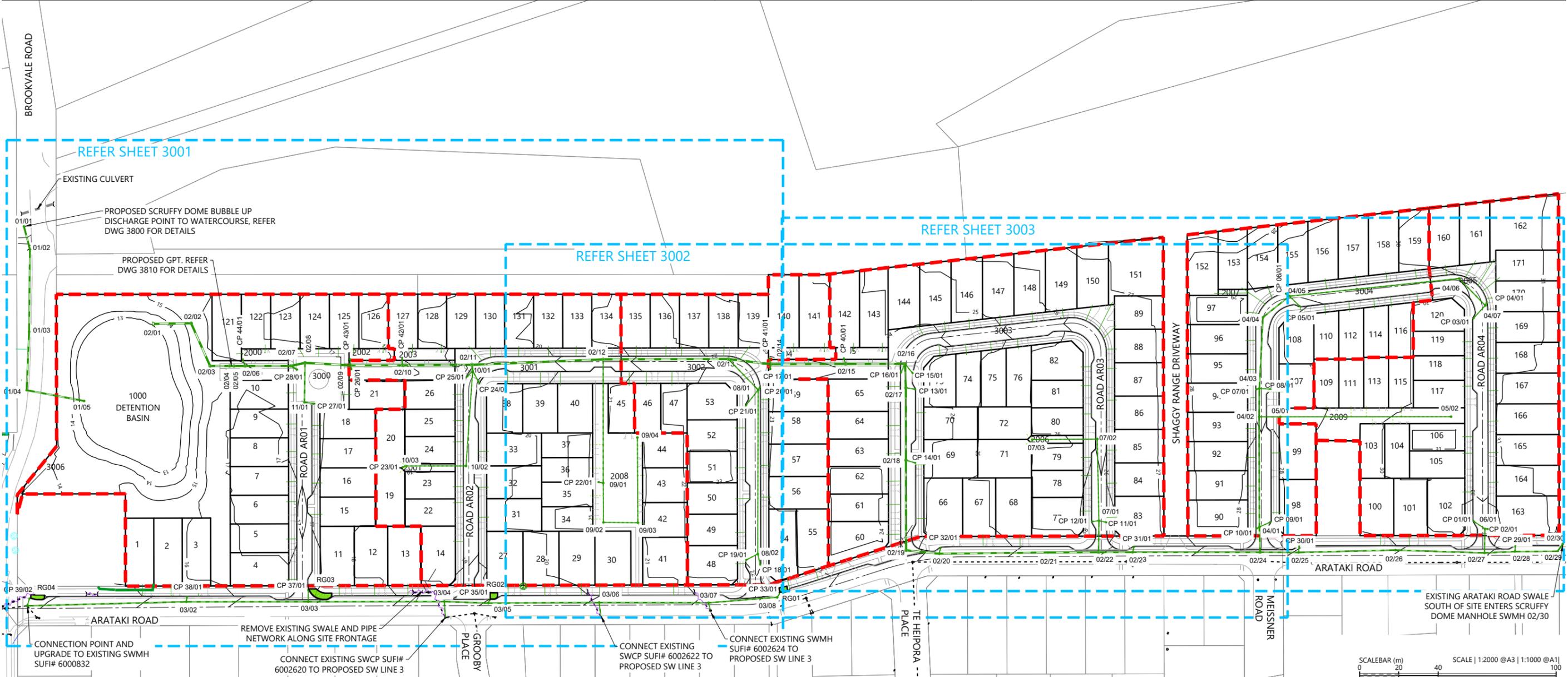
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | NOT TO SCALE | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-2802-RD | |

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.

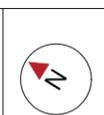


| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
|-------------------------|-----|----------|----------|-------|
| 1 ISSUED FOR DISCUSSION | AS | APR 2025 | DESIGNED | AS |
| 2 ISSUED FOR CONSENT | AS | JUN 2025 | DRAWN | AS |
| | | | CHECKED | BLO |
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER DRAINAGE LAYOUT OVERALL PLAN



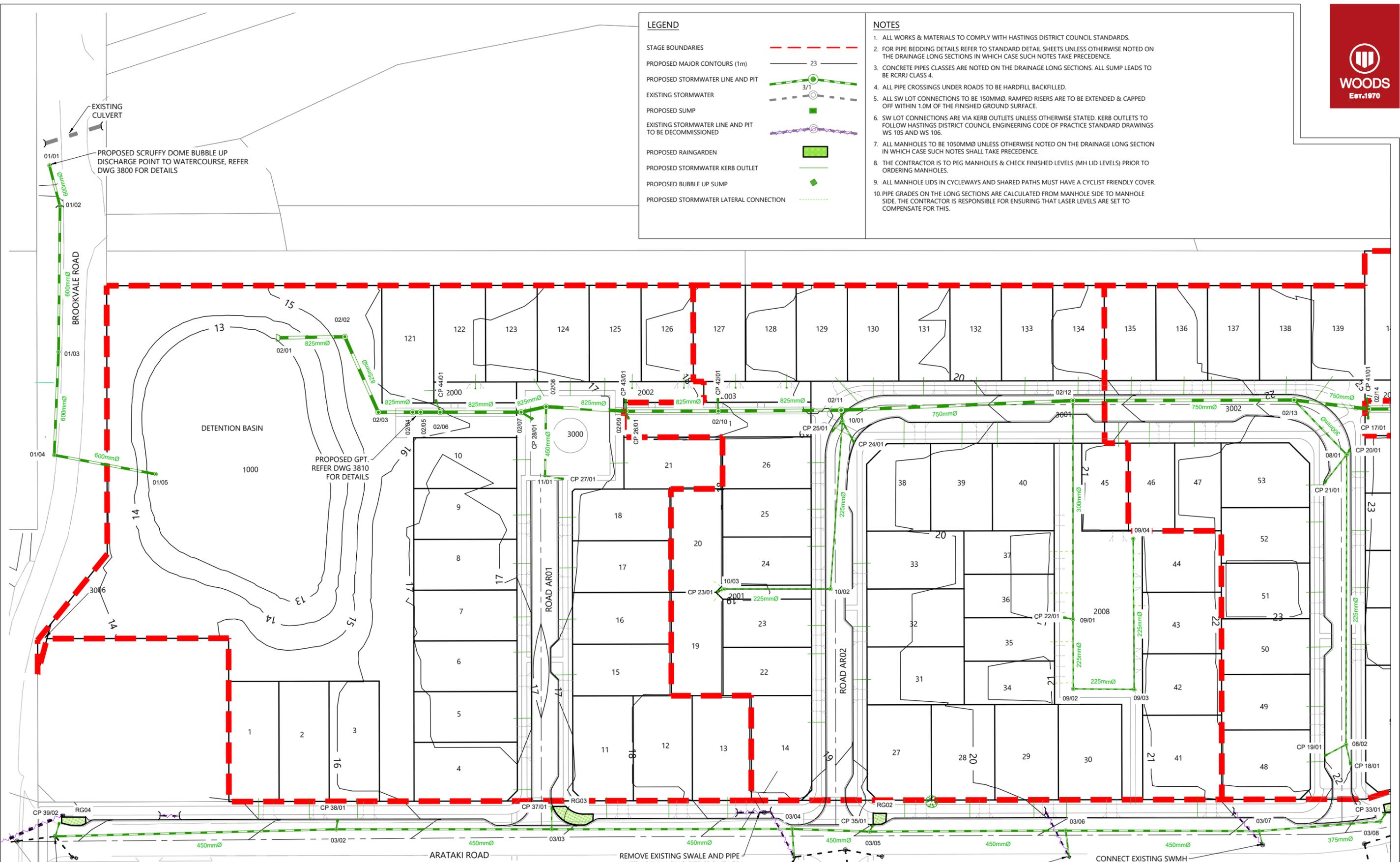
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | 1:2000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-3000-DR | |

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.
 - ALL MANHOLES TO BE 1050MMØ UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTION IN WHICH CASE SUCH NOTES SHALL TAKE PRECEDENCE.
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 - ALL MANHOLE LIDS IN CYCLEWAYS AND SHARED PATHS MUST HAVE A CYCLIST FRIENDLY COVER.
 - 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.



CONNECTION POINT AND UPGRADE TO EXISTING SWMH SUFI# 6000832

REMOVE EXISTING SWALE AND PIPE NETWORK ALONG SITE FRONTAGE

CONNECT 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.
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 INFORMATION | AS | APR 2025 | DESIGNED | AS |
| 2 ISSUED FOR CONSENT | AS | JUN 2025 | DRAWN | AS |
| | | | CHECKED | BLO |
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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 | |

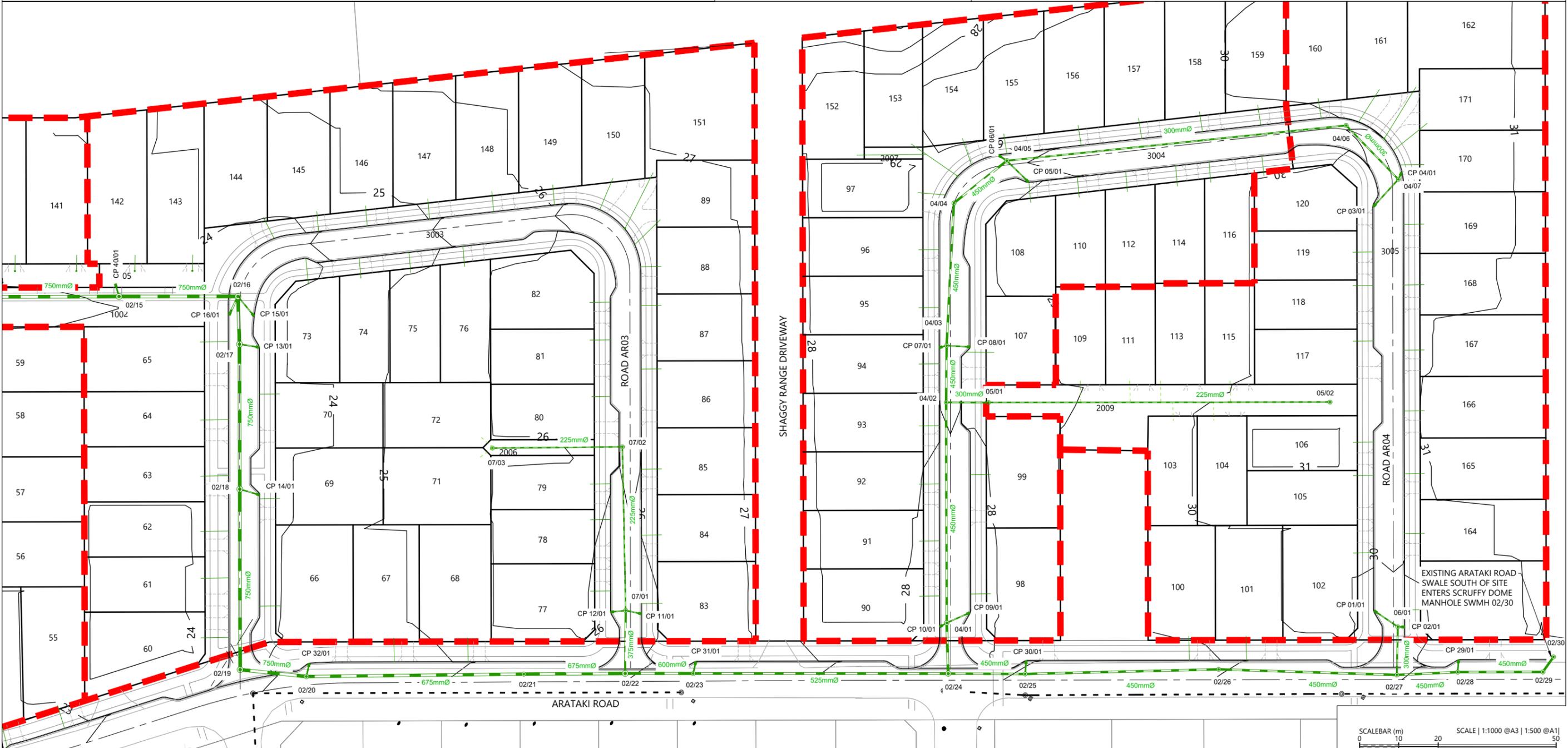
Plot Date: 12:49:57 pm, 26 June 2025, APRILS
File: C:\1205\ENERGY\DATA\WP-AKL-APP-02\P24-244 - ARATAKI - HAVELOCK NORTH_21690\02 DRAWINGS\01 ENG\P24-244-00-3002-DR_STORMWATER DRAINAGE LAYOUT PLAN OVERALL.DWG

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 INFORMATION | AS | APR 2025 | DESIGNED | AS |
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| | | | CHECKED | BLO |
| | | | APPROVED | BF |



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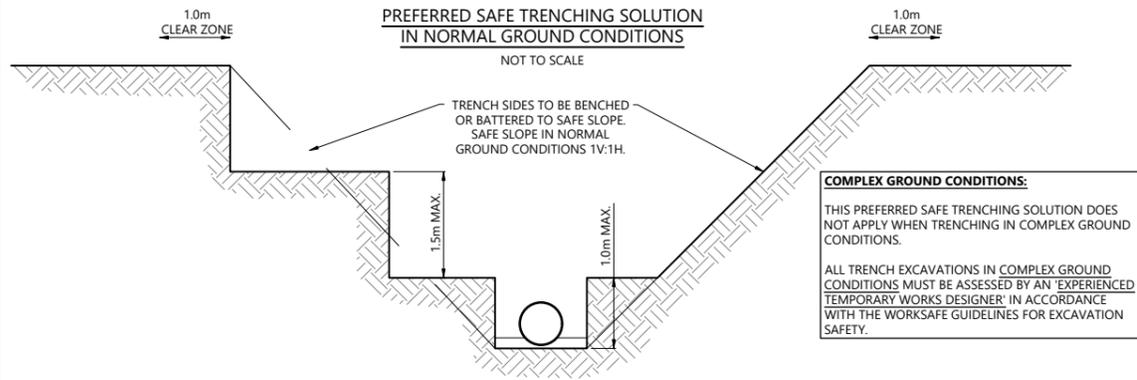


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER DRAINAGE LAYOUT PLAN - SHEET 3



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

Plot Date: 12:49:57 pm, 26 June 2025, APRILS
File: C:\1205\ENERGY\DATA\WP-AKL-APP-02\P24-244 - ARATAKI - HAVELOCK NORTH_21690\02 DRAWINGS\01 ENG\P24-244-00-3003-DR_STORMWATER DRAINAGE LAYOUT PLAN OVERALL.DWG

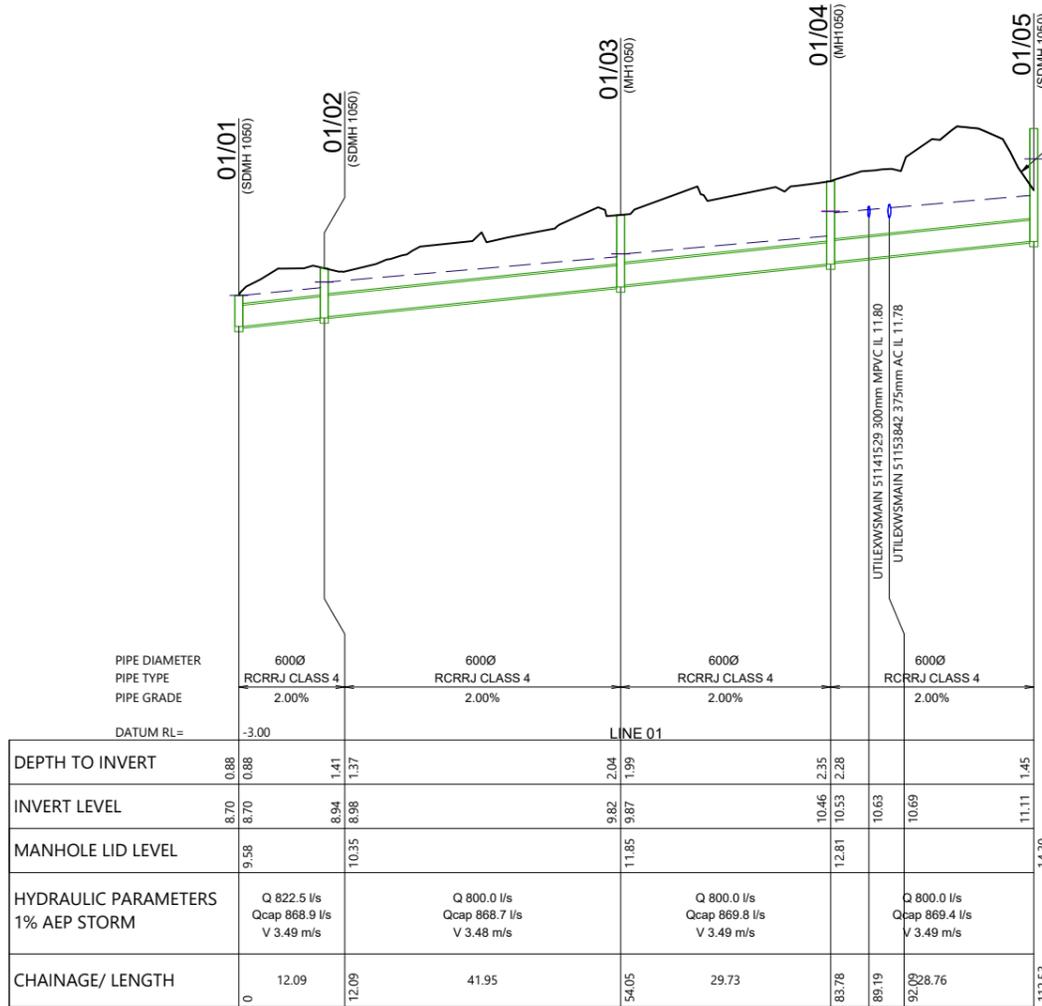


SAFE TRENCHING NOTES:

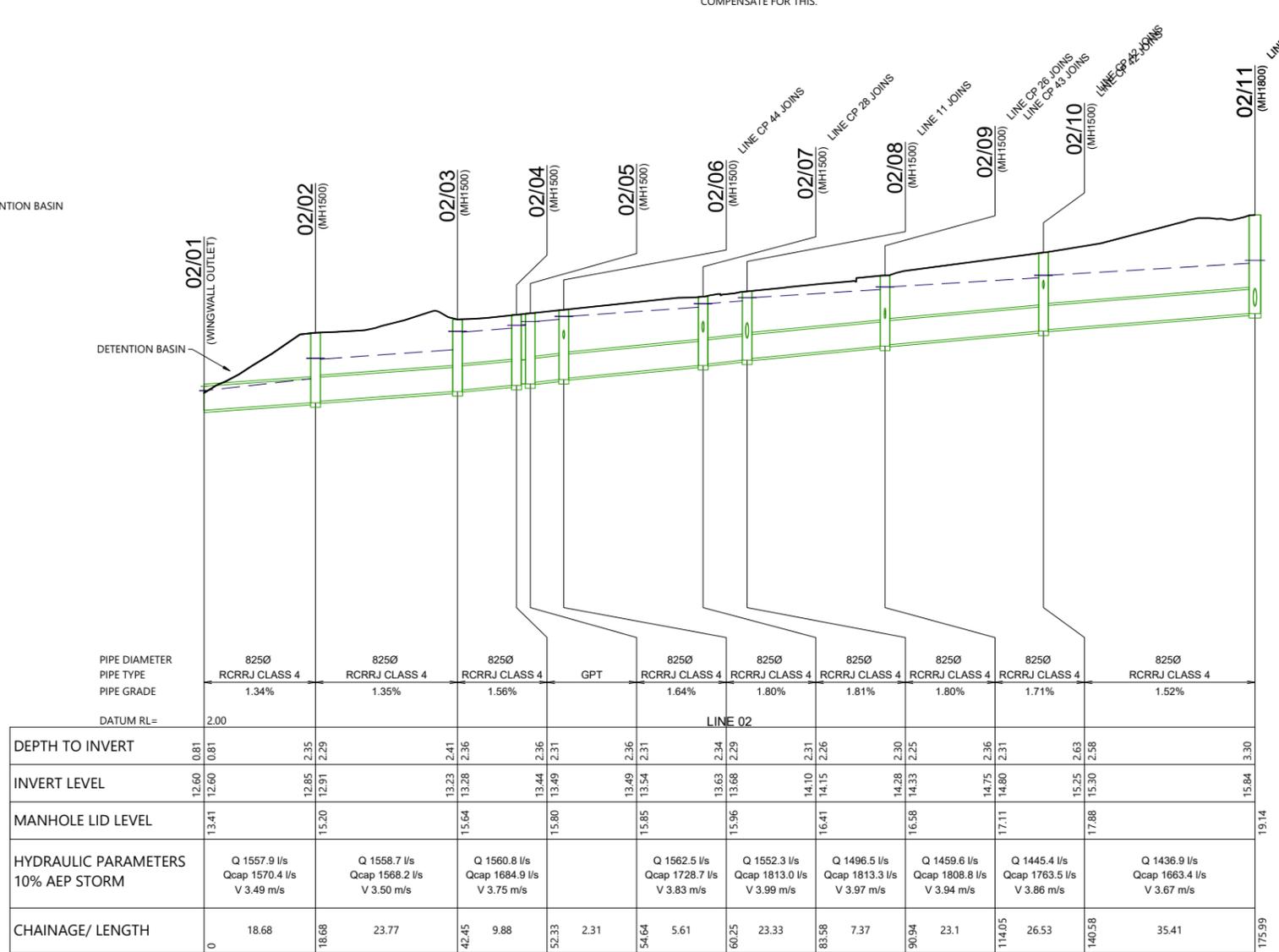
- THIS DIAGRAM SHOWS THE PREFERRED SAFE TRENCHING SOLUTION IN NORMAL GROUND CONDITIONS.
- ALL TRENCH EXCAVATIONS MUST BE ASSESSED BY A 'COMPETENT PERSON' ON SITE IN ACCORDANCE WITH THE WORKSAFE GUIDELINES FOR EXCAVATION SAFETY.
- IF THE PREFERRED TRENCHING SOLUTION IS NOT IMPLEMENTED THE CONTRACTOR MUST 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

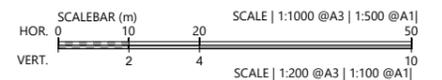
- ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
- FOR PIPE BEDDING DETAILS REFER TO STANDARD DETAIL SHEETS UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTIONS IN WHICH CASE SUCH NOTES TAKE PRECEDENCE.
- CONCRETE PIPES CLASSES ARE NOTED ON THE DRAINAGE LONG SECTIONS. ALL SUMP 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.
- ALL MANHOLES TO BE 1050MMØ UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTION IN WHICH CASE SUCH NOTES SHALL TAKE PRECEDENCE.
- THE CONTRACTOR IS TO PEG MANHOLES & CHECK FINISHED LEVELS (MH LID LEVELS) PRIOR TO ORDERING MANHOLES.
- ALL MANHOLE LIDS IN CYCLEWAYS AND SHARED PATHS MUST HAVE A CYCLIST FRIENDLY COVER.
- 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.



01



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 |

BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
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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 | |

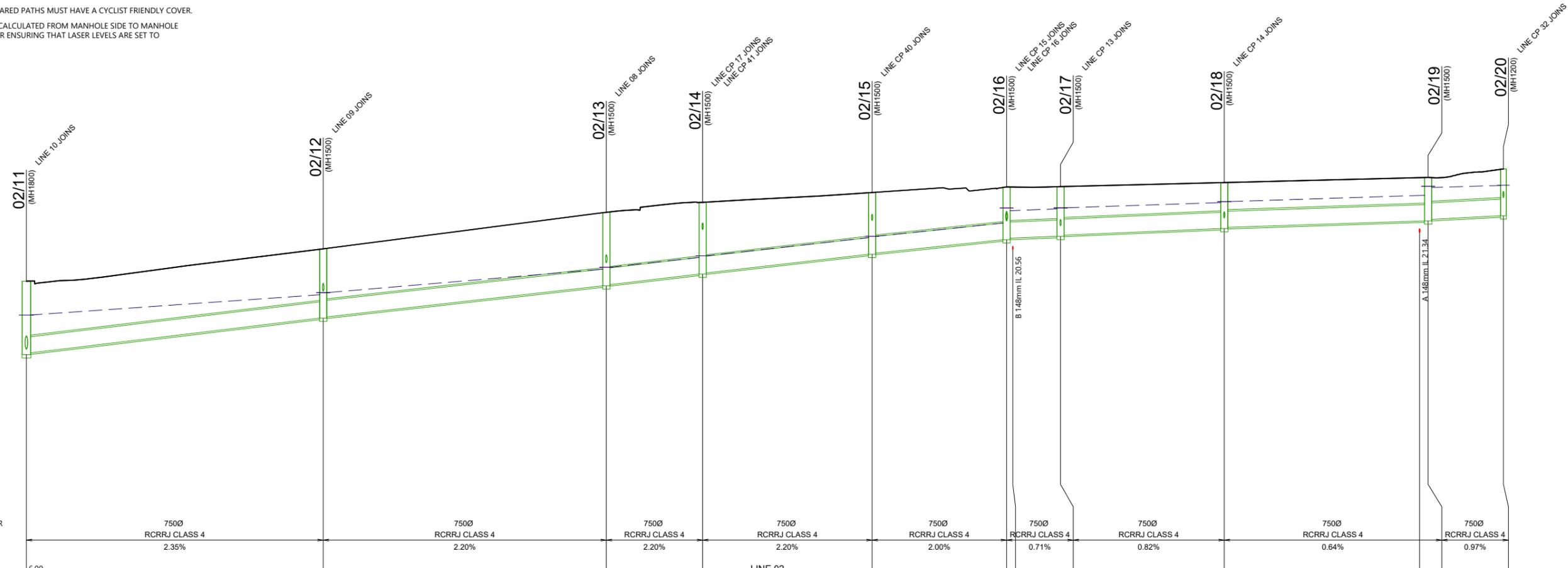
STORMWATER NOTES

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.
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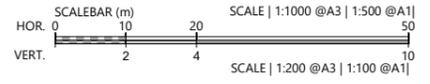
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| PIPE DIAMETER | 750Ø | | 750Ø | | 750Ø | | 750Ø | | 750Ø | | | |
|---------------------------------------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|--|-------|--------|------|
| PIPE TYPE | RCRRJ 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 | 66.81 | 242.8 | 63.72 | 306.52 | 21.68 | 328.2 | 38.14 | 366.34 | 30.27 | 396.61 | 12.14 | 408.75 | 36.85 | 445.6 | 45.87 | 489.56 | 16.96 | 508.44 | |

02



| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
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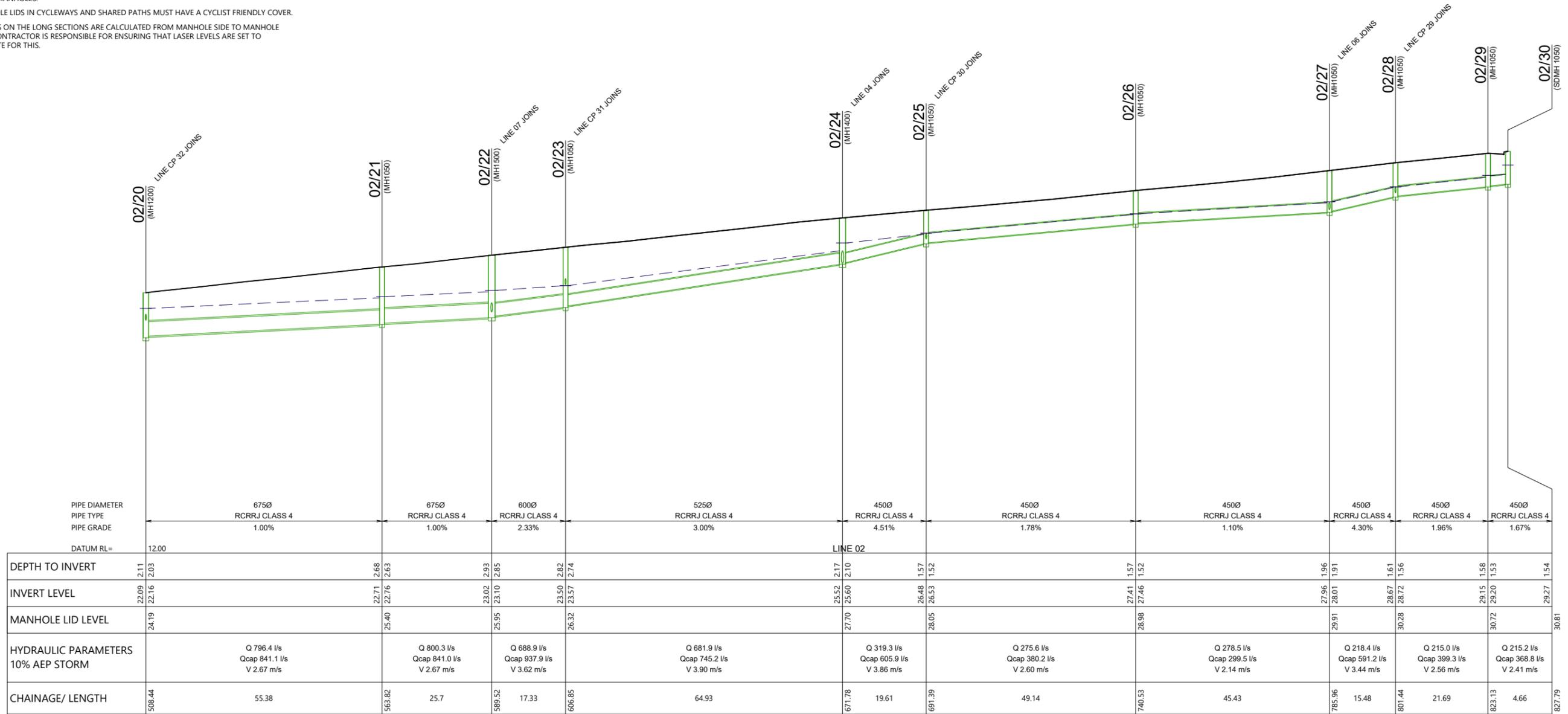


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER LONGSECTIONS
SHEET 2

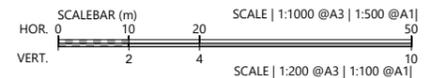
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | H 1:1000 V 1:200 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-3501-DR | |

STORMWATER NOTES

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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02



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| | | | APPROVED | BF |



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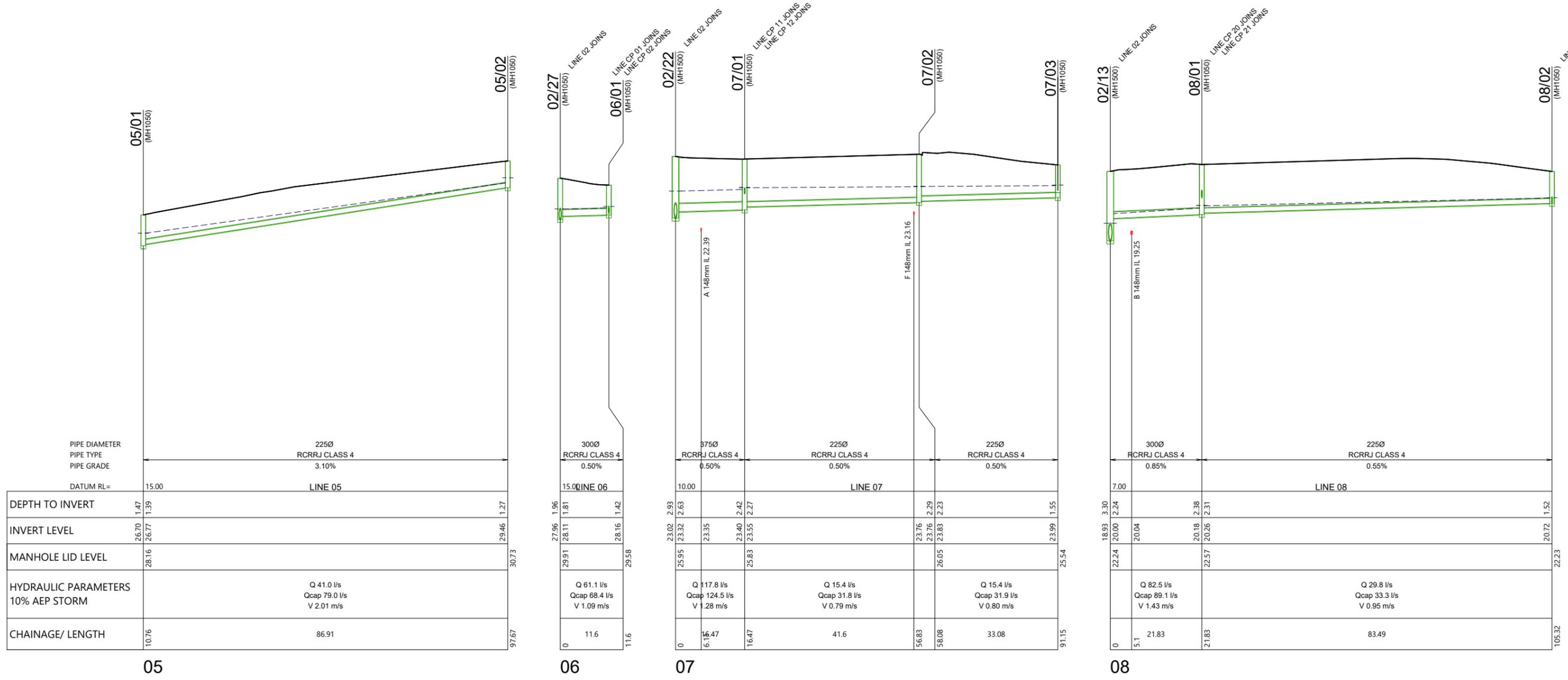


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER LONGSECTIONS
SHEET 3

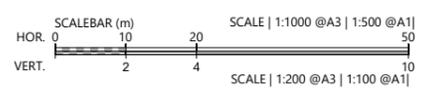
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | H 1:1000 V 1:200 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-3502-DR | |

STORMWATER NOTES

1. ALL WORKS & MATERIALS TO COMPLY WITH HASTINGS DISTRICT COUNCIL STANDARDS.
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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 |
|---------------|---------------|------------|-----------|---------|-----------------|--------------|-------------------|---|-----------------------|
| 2250 | 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 / 86.91 / 97.67 |
| 3000 | RCRRJ CLASS 4 | 0.50% | 15.00 | LINE 06 | 1.96 | 27.96 | 29.91 | Q 61.1 l/s Qcap 68.4 l/s V 1.09 m/s | 11.6 / 11.6 |
| 3750 | RCRRJ CLASS 4 | 0.50% | 10.00 | LINE 07 | 2.03 | 23.02 | 25.95 | Q 117.8 l/s Qcap 124.5 l/s V 1.28 m/s | 16.47 / 16.47 |
| 2250 | RCRRJ CLASS 4 | 0.50% | 10.00 | LINE 07 | 2.63 | 23.32 | 23.35 | Q 15.4 l/s Qcap 31.8 l/s V 0.79 m/s | 41.6 / 56.83 |
| 2250 | RCRRJ CLASS 4 | 0.50% | 10.00 | LINE 07 | 2.27 | 23.40 | 23.55 | Q 15.4 l/s Qcap 31.9 l/s V 0.80 m/s | 33.08 / 58.08 |
| 3000 | RCRRJ CLASS 4 | 0.85% | 7.00 | LINE 08 | 3.30 | 18.93 | 22.24 | Q 82.5 l/s Qcap 89.1 l/s V 1.43 m/s | 21.83 / 21.83 |
| 2250 | RCRRJ CLASS 4 | 0.55% | 7.00 | LINE 08 | 1.52 | 20.00 | 20.18 | Q 29.8 l/s Qcap 33.3 l/s V 0.95 m/s | 83.49 / 105.32 |



| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
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| | | | APPROVED | BF |


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 8 NUGENT ST, GRAFTON,
 AUCKLAND 1023
 +64 9 308 9229
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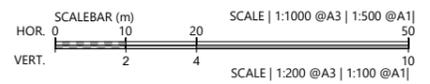
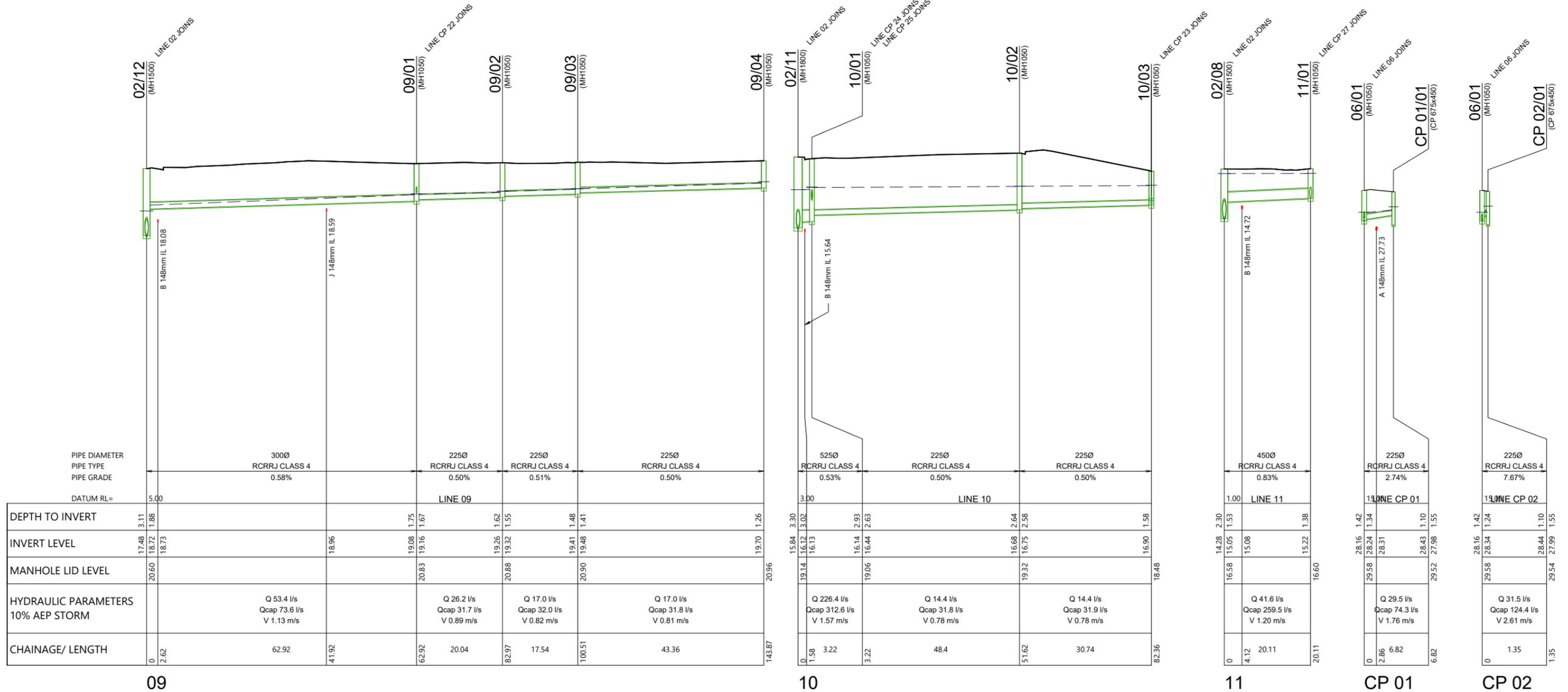


ARATAKI DEVELOPMENT - HAVELOCK NORTH
 STORMWATER LONGSECTIONS
 SHEET 5

| | | |
|---------|---------------------------|-----|
| 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

- 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.
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- ALL PIPE CROSSINGS UNDER ROADS TO BE HARDFILL BACKFILLED.
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| | | | CHECKED | BLO |
| | | | APPROVED | BF |

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8 NUGENT ST, GRAFTON,
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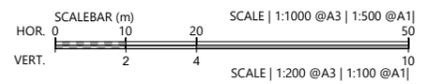
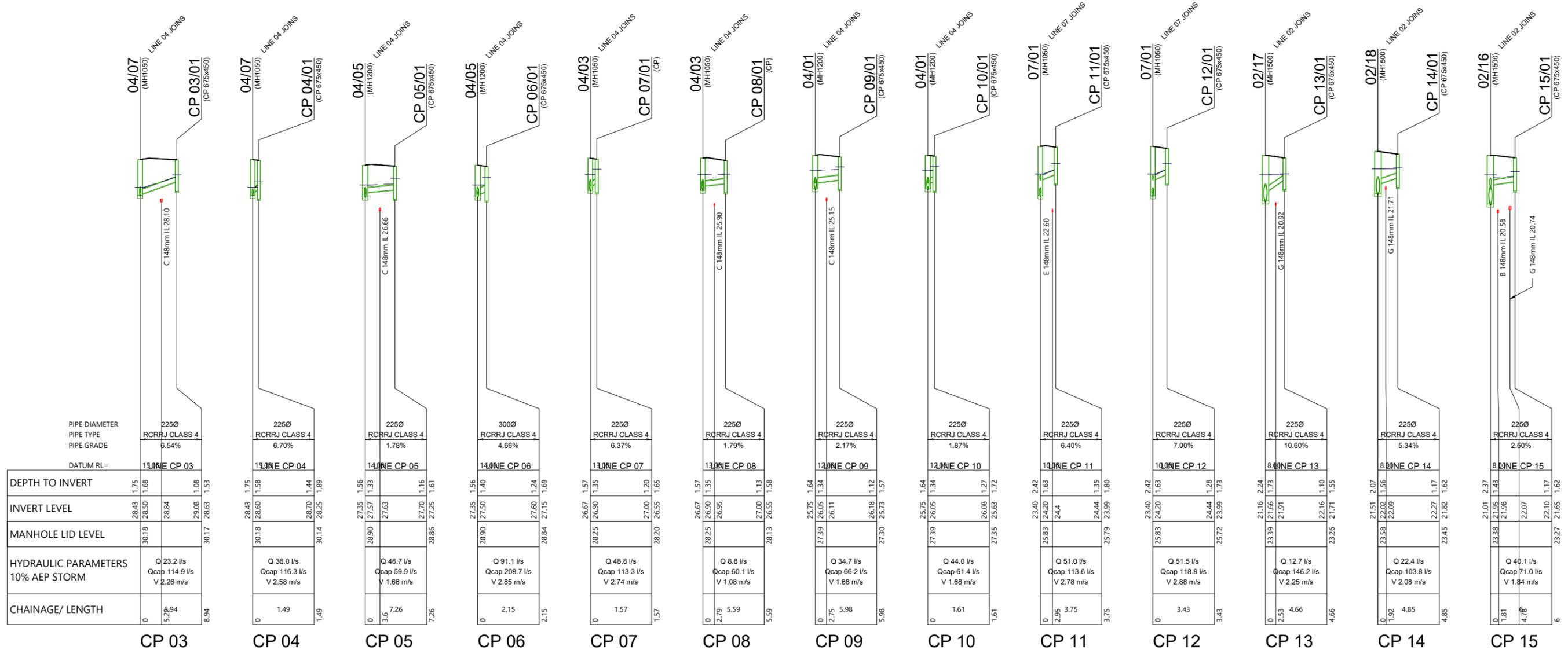


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER LONGSECTIONS
SHEET 6

| 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

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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| | | | CHECKED | BLO |
| | | | APPROVED | BF |

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8 NUGENT ST, GRAFTON,
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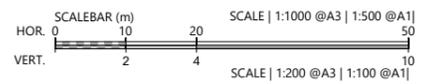
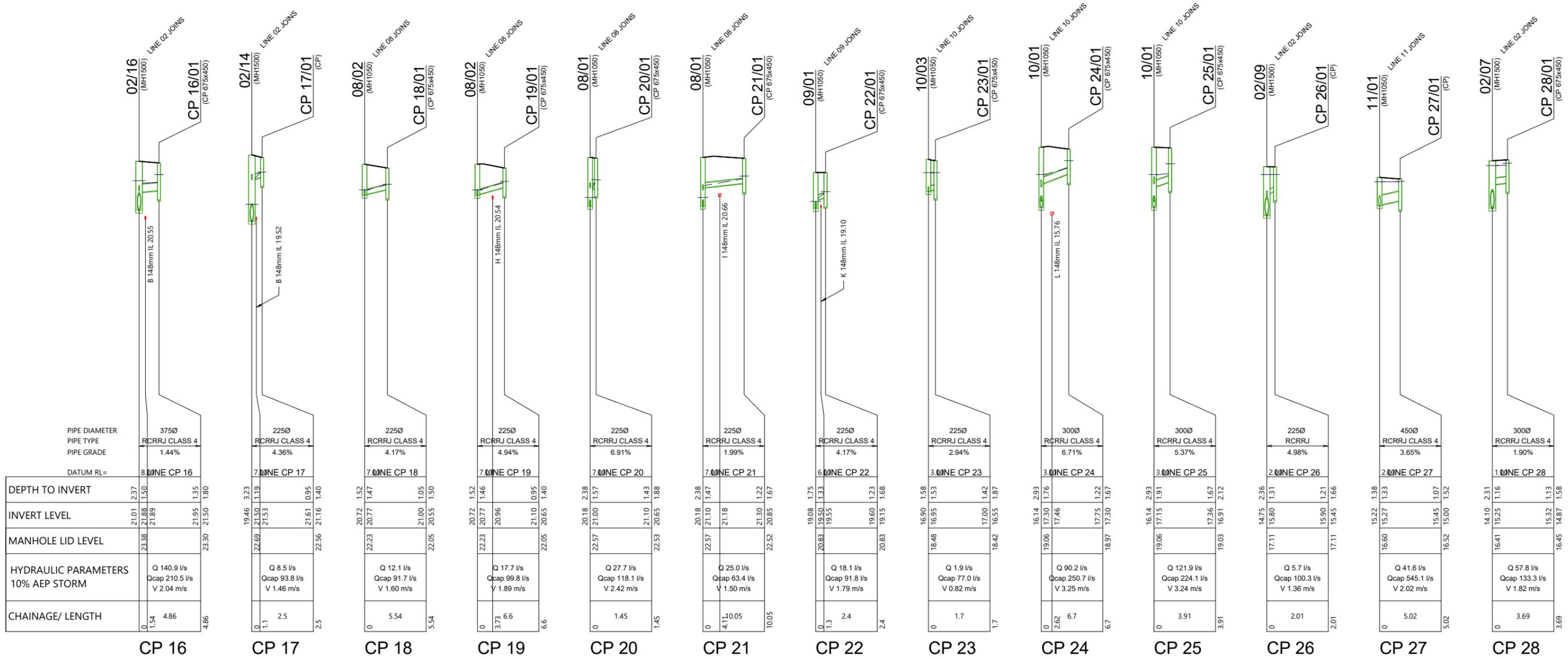


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER LONGSECTIONS
SHEET 7

| 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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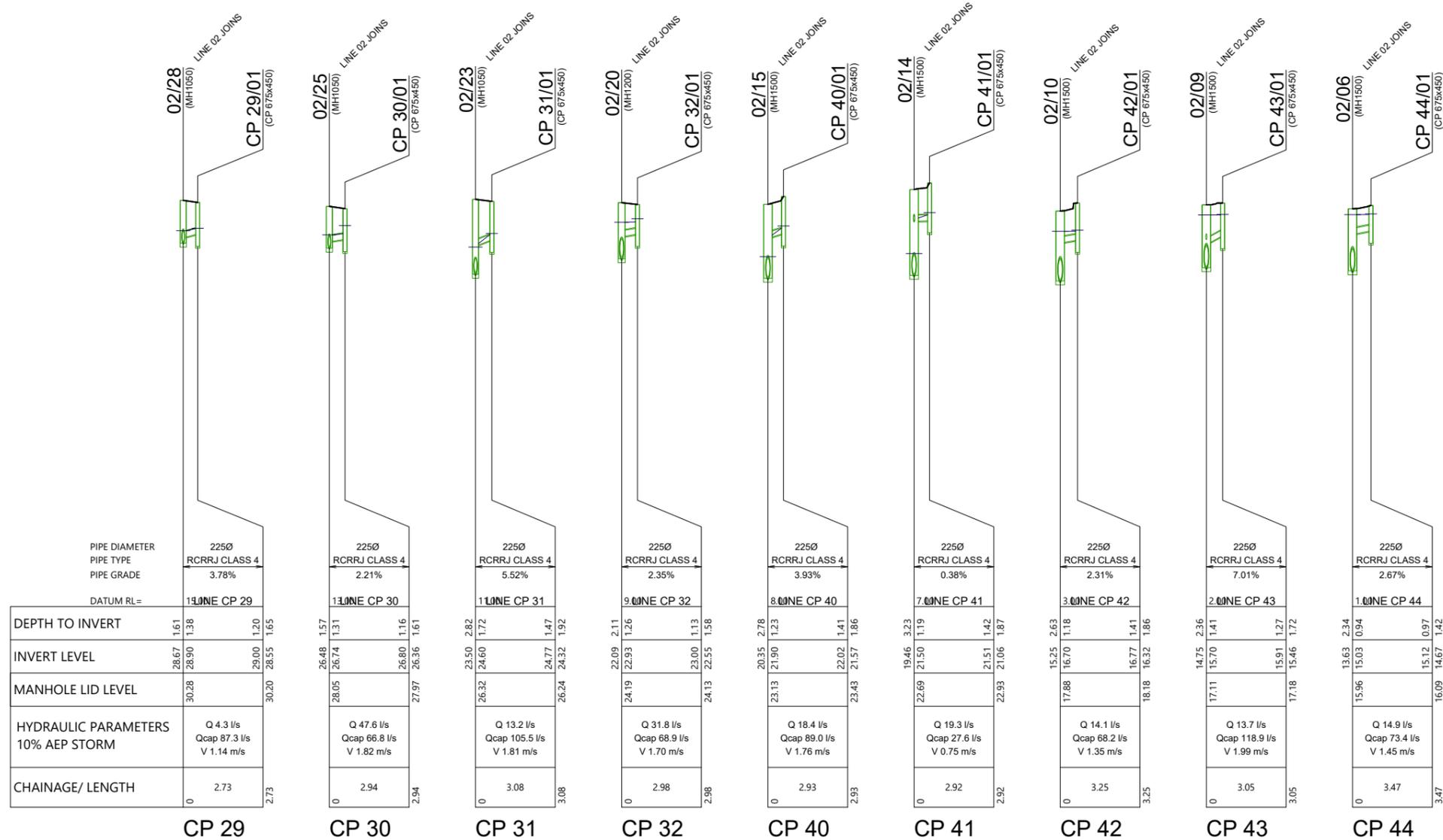


ARATAKI DEVELOPMENT - HAVELOCK NORTH
 STORMWATER LONGSECTIONS
 SHEET 8

| 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

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| | | | CHECKED | BLO |
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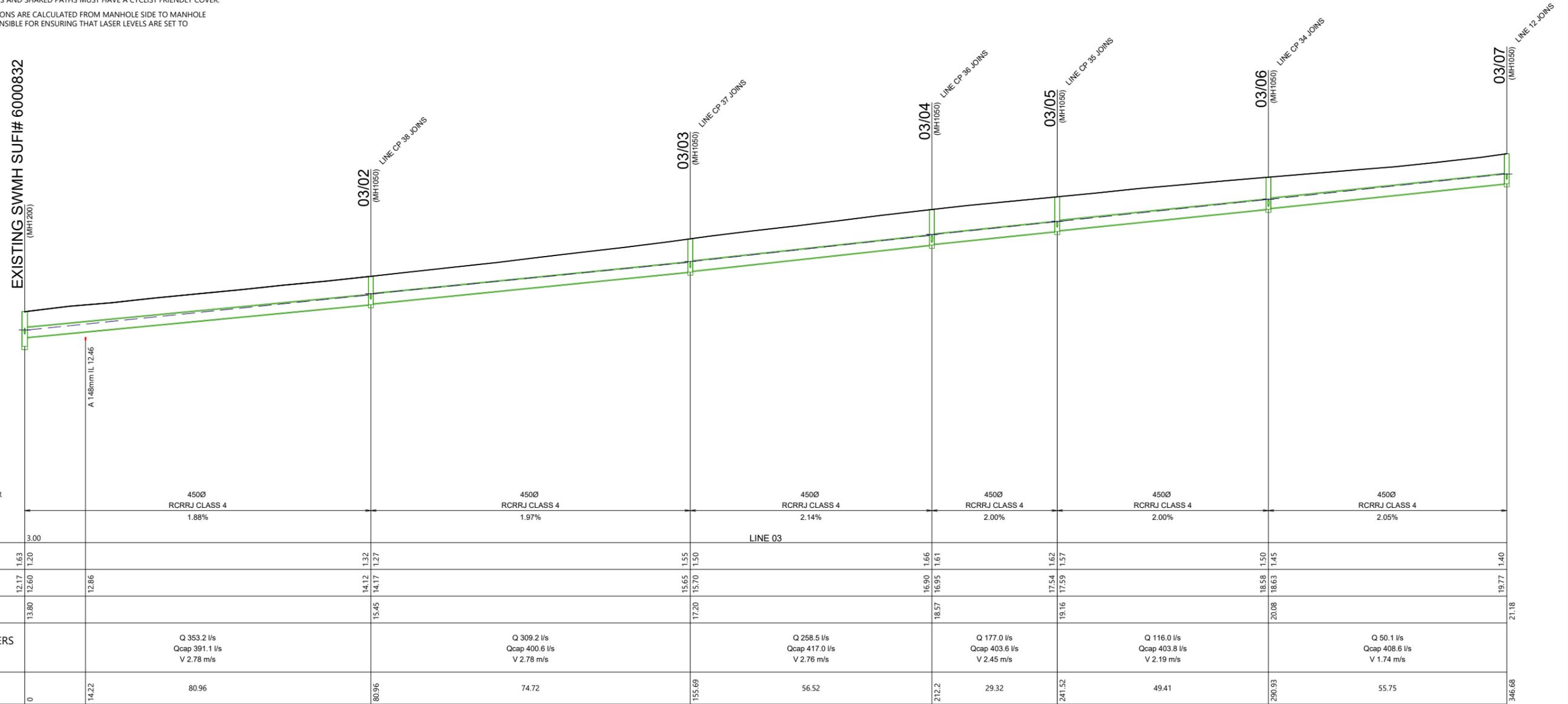


ARATAKI DEVELOPMENT - HAVELOCK NORTH
 STORMWATER LONGSECTIONS
 SHEET 9

| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | H 1:1000 V 1:200 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-3508-DR | |

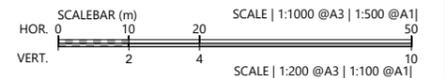
STORMWATER NOTES

- 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.
- ALL MANHOLES TO BE 1050MMØ UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTION IN WHICH CASE SUCH NOTES SHALL TAKE PRECEDENCE.
- THE CONTRACTOR IS TO PEG MANHOLES & CHECK FINISHED LEVELS (MH LID LEVELS) PRIOR TO ORDERING MANHOLES.
- ALL MANHOLE LIDS IN CYCLEWAYS AND SHARED PATHS MUST HAVE A CYCLIST FRIENDLY COVER.
- 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.



| PIPE DIAMETER | 4500 | | 4500 | | 4500 | | 4500 | | 4500 | | 4500 | | | |
|---------------------------------------|---|-------|---|-------|---|-------|---|-------|---|-------|--|-------|--------|------|
| PIPE TYPE | RCRRJ CLASS 4 | | RCRRJ CLASS 4 | | | |
| PIPE GRADE | 1.88% | | 1.97% | | 2.14% | | 2.00% | | 2.00% | | 2.05% | | | |
| DATUM RL= | 3.00 | | | | | | | | | | | | | |
| DEPTH TO INVERT | 12.17 | 1.63 | 14.12 | 1.32 | 15.65 | 1.55 | 16.90 | 1.66 | 17.54 | 1.62 | 18.58 | 1.50 | 19.77 | 1.40 |
| INVERT LEVEL | 12.60 | 1.20 | 14.17 | 1.27 | 15.70 | 1.50 | 16.95 | 1.61 | 17.59 | 1.57 | 18.63 | 1.45 | 19.77 | 1.40 |
| MANHOLE LID LEVEL | 13.80 | | 15.45 | | 17.20 | | 18.57 | | 19.16 | | 20.08 | | 21.18 | |
| HYDRAULIC PARAMETERS 20% AEP STORM | Q 353.2 l/s Qcap 391.1 l/s V 2.78 m/s | | Q 309.2 l/s Qcap 400.6 l/s V 2.78 m/s | | Q 258.5 l/s Qcap 417.0 l/s V 2.76 m/s | | Q 177.0 l/s Qcap 403.6 l/s V 2.45 m/s | | Q 116.0 l/s Qcap 403.8 l/s V 2.19 m/s | | Q 50.1 l/s Qcap 408.6 l/s V 1.74 m/s | | | |
| CHAINAGE/ LENGTH | 0 | 14.22 | 80.96 | 74.72 | 155.69 | 56.52 | 212.2 | 29.32 | 241.52 | 49.41 | 290.93 | 55.75 | 346.68 | |

03



| 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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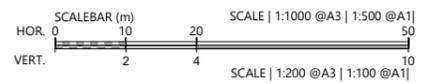
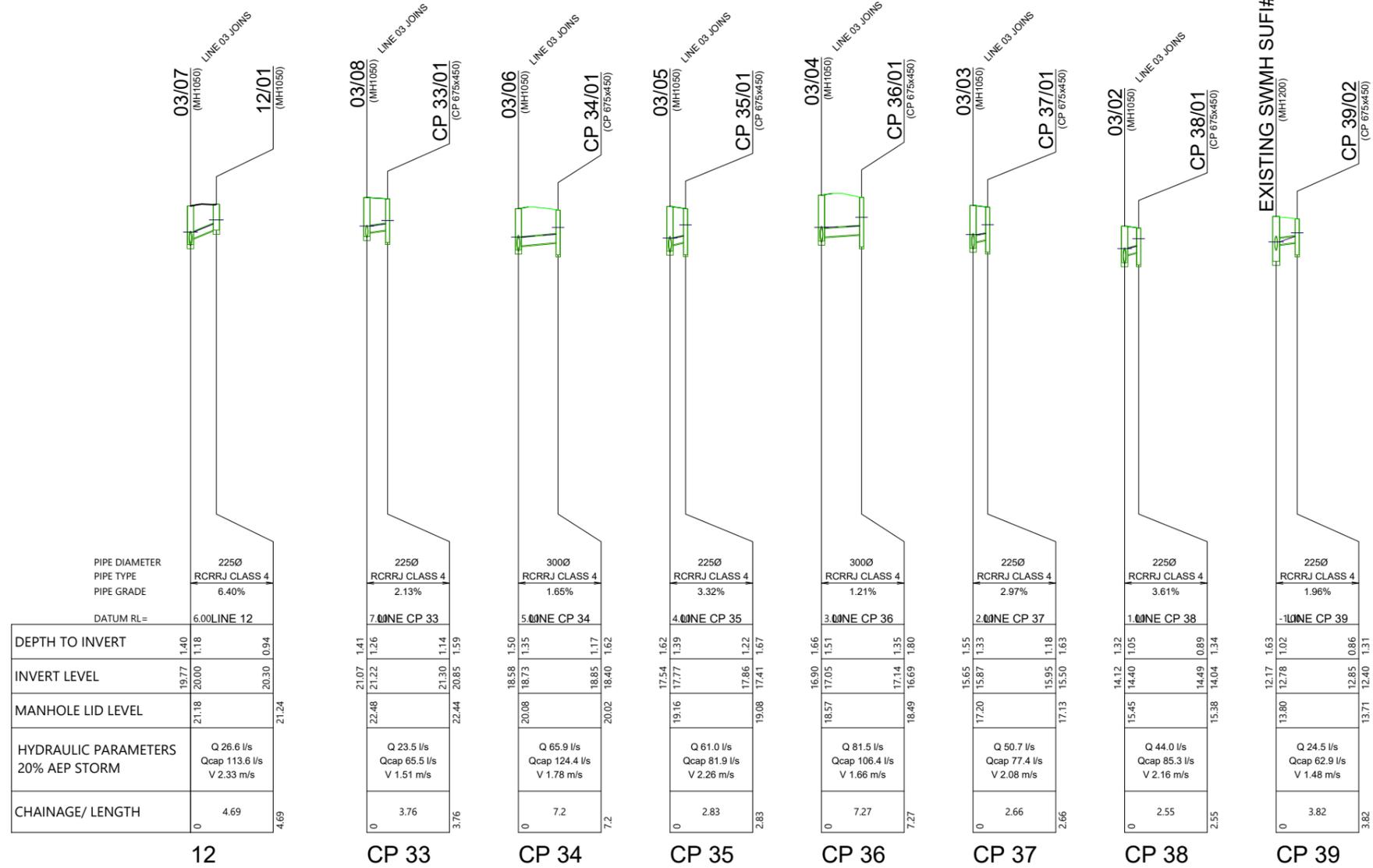


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER LONGSECTIONS
SHEET 10

| 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

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.
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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 |

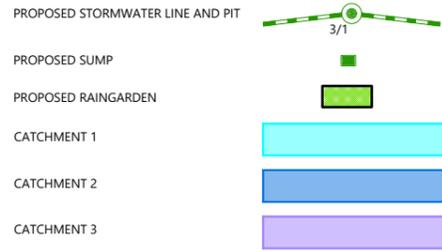

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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 STORMWATER LONGSECTIONS
 SHEET 11

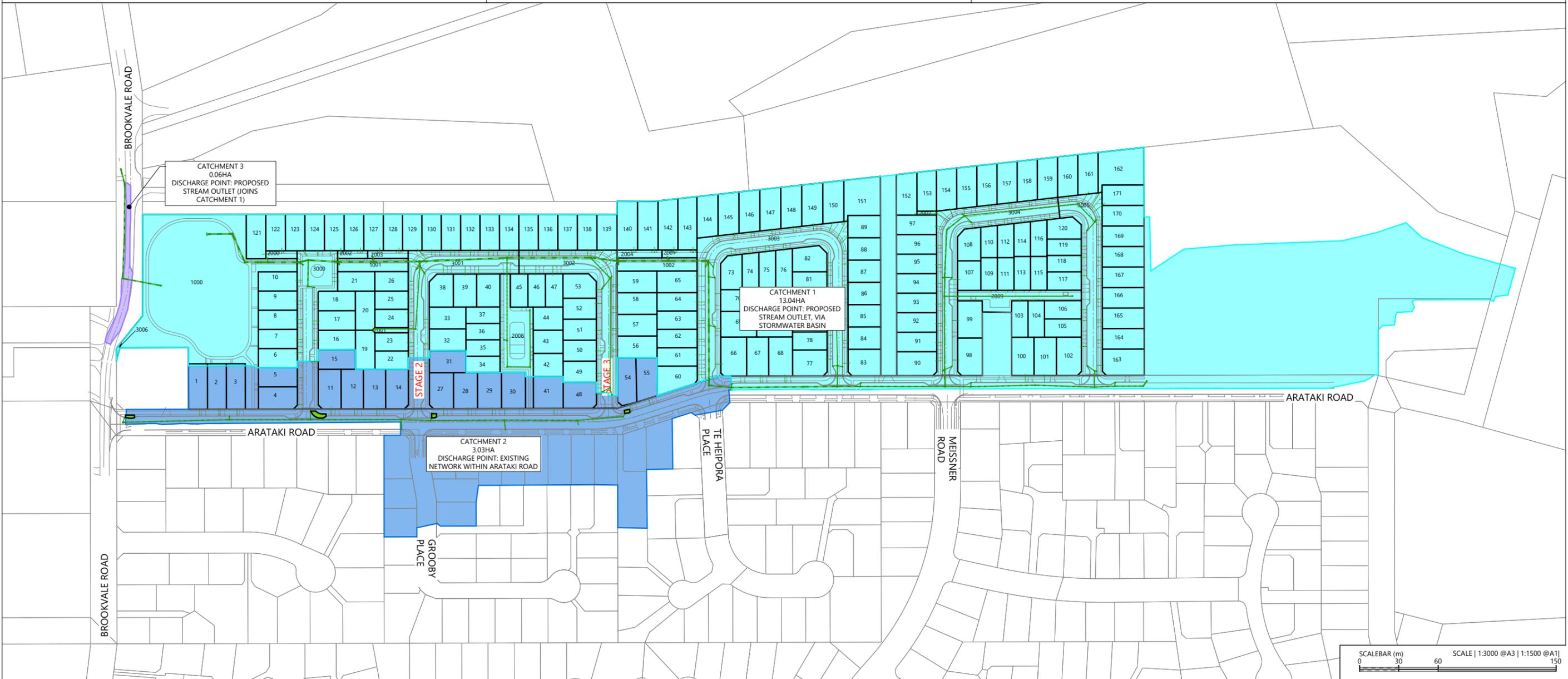
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | H 1:1000 V 1:200 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-3510-DR | |

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.
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|-------------------------|-----|----------|----------|-------|
| 1 ISSUED FOR DISCUSSION | AS | APR 2025 | DESIGNED | AS |
| 2 ISSUED FOR CONSENT | AS | JUN 2025 | DRAWN | AS |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |



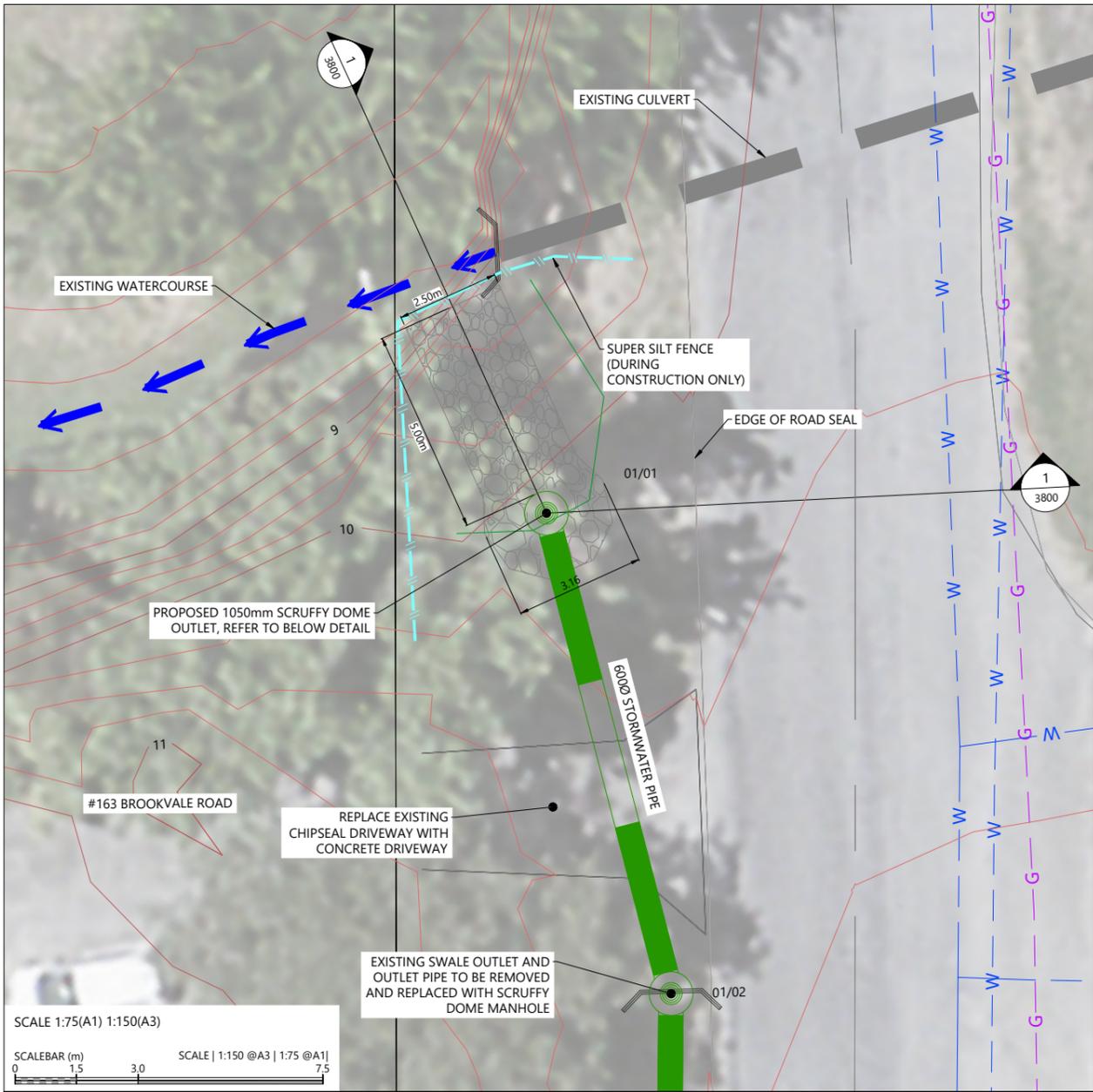
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER 10 YEAR CATCHMENT PLAN



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

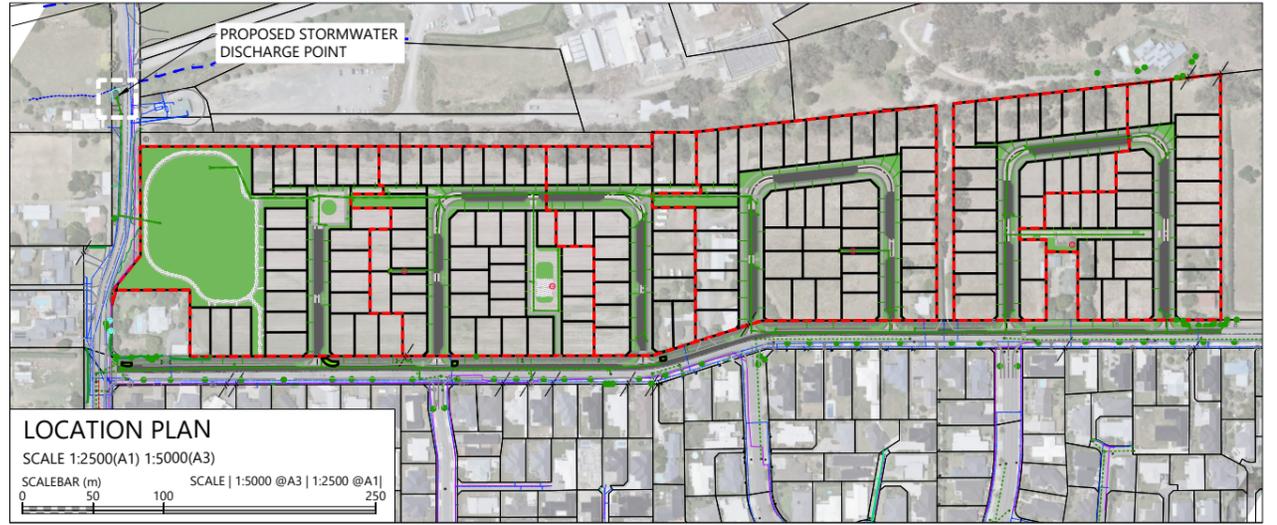


LEGEND

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

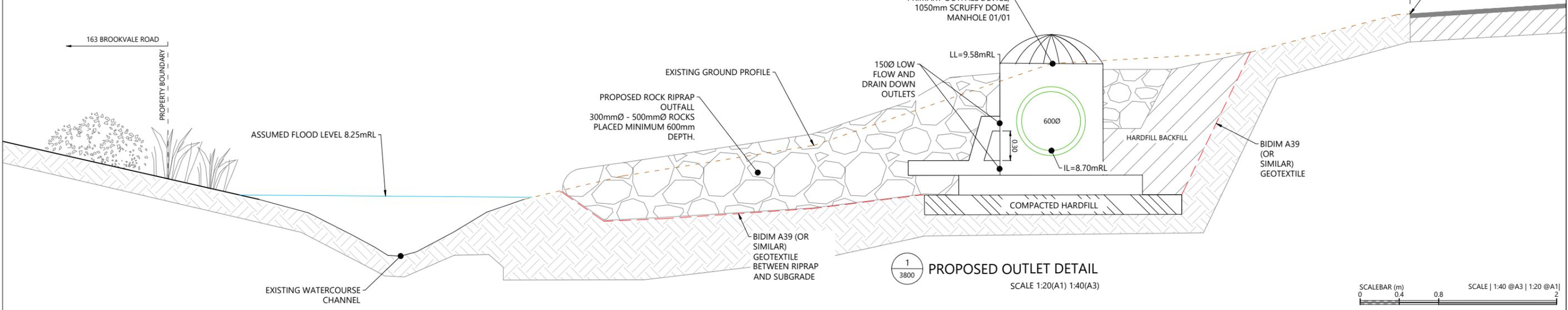
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SUMMARY OF FLOWS FROM ARATAKI DEVELOPMENT TO EXISTING WATERCOURSE

| 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 |
|-----|-----------------------|-----|----------|----------|-------|
| 1 | ISSUED FOR DISCUSSION | AS | APR 2025 | DESIGNED | AS |
| 2 | ISSUED FOR CONSENT | AS | JUN 2025 | DRAWN | AS |
| | | | | CHECKED | BLO |
| | | | | APPROVED | BF |



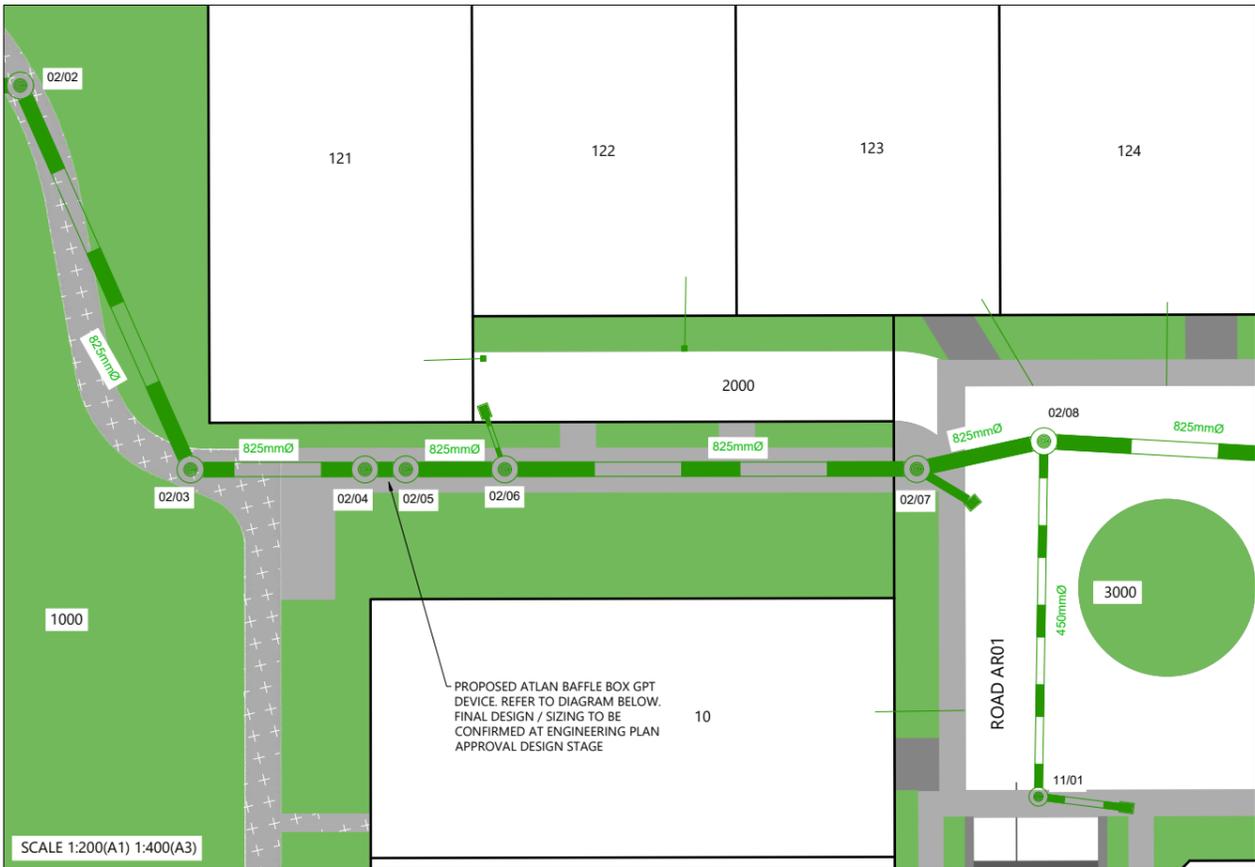
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER STREAM OUTLET DETAIL



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

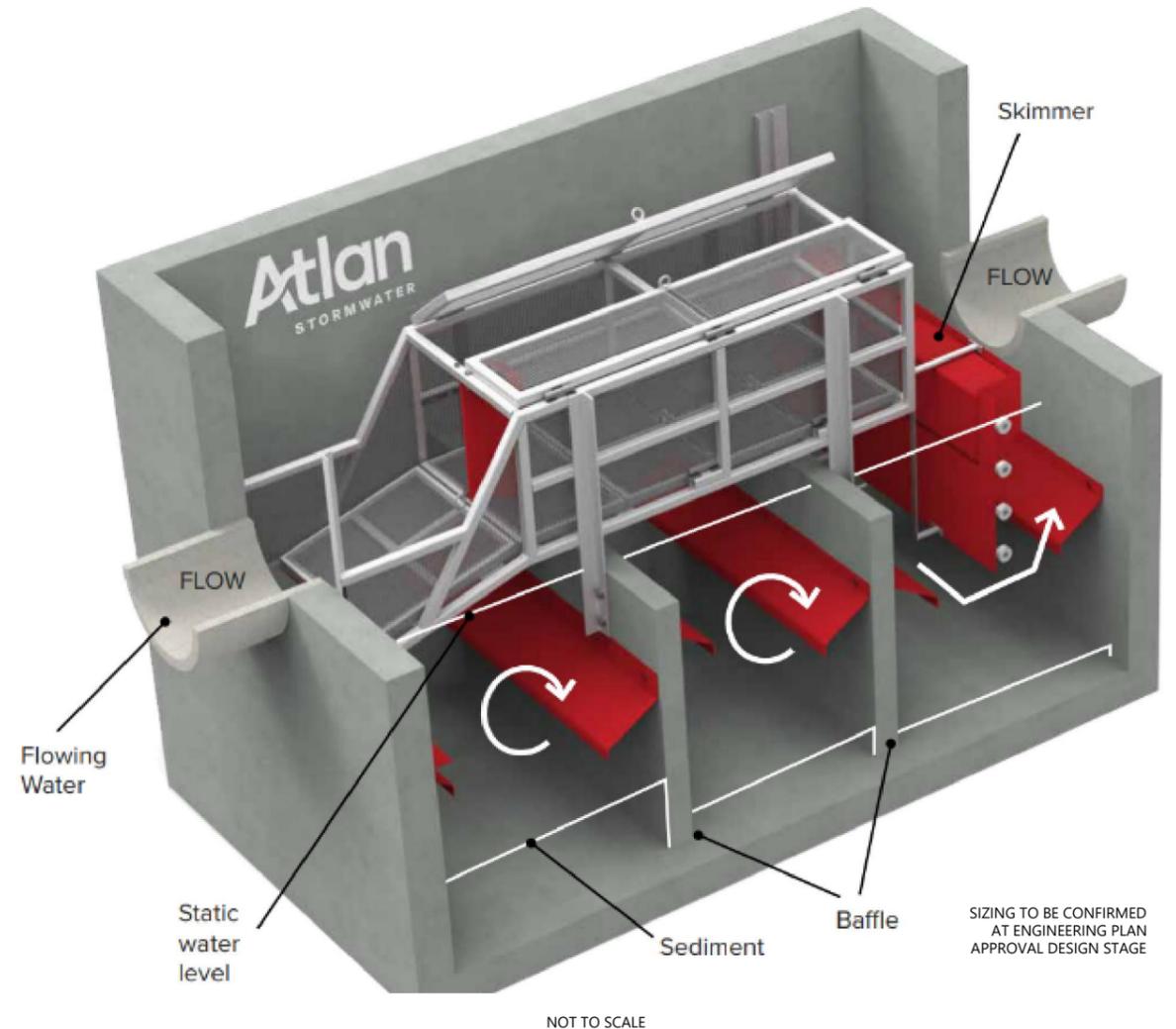
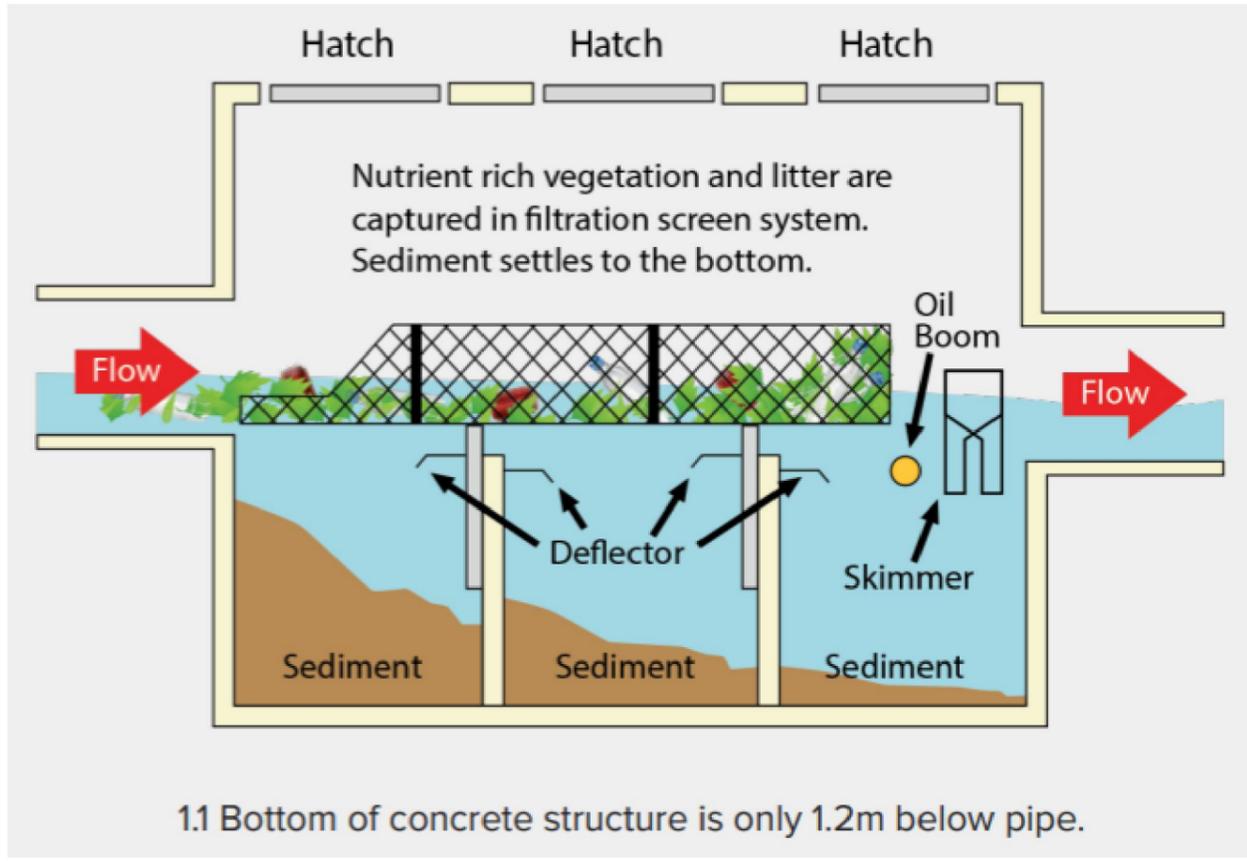


LEGEND

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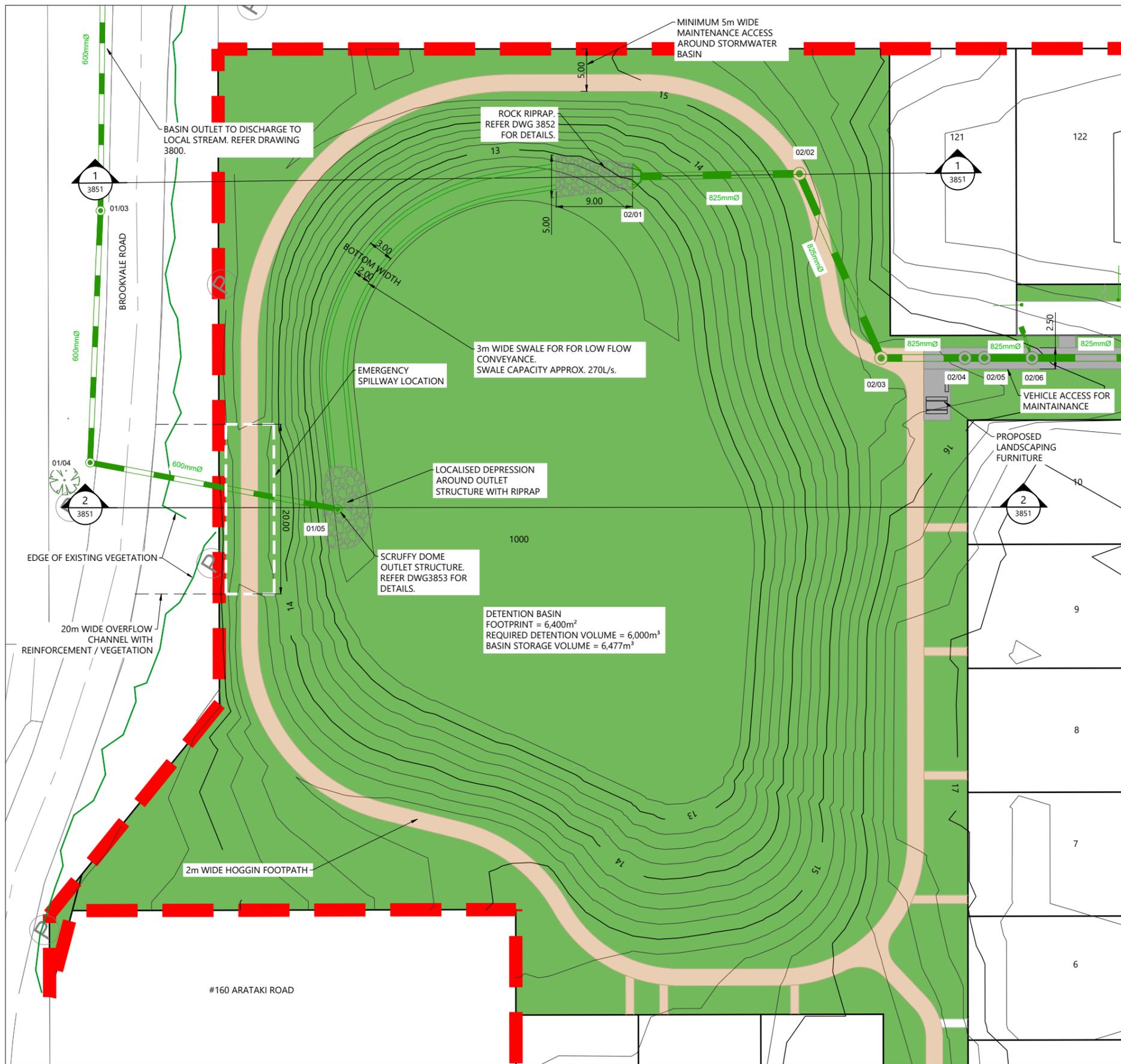
| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
|-------------------------|-----|----------|----------|-------|
| 1 ISSUED FOR DISCUSSION | AS | APR 2025 | DESIGNED | AS |
| 2 ISSUED FOR CONSENT | AS | JUN 2025 | DRAWN | AS |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |

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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.

SCALEBAR (m) SCALE | 1:500 @A3 | 1:250 @A1 | 1:125 @A2

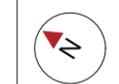
| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
|--------------------------|-----|----------|----------|-------|
| 1 ISSUED FOR INFORMATION | AS | APR 2025 | DESIGNED | AS |
| 2 ISSUED FOR CONSENT | AS | JUN 2025 | DRAWN | AS |
| | | | CHECKED | AB |
| | | | APPROVED | BF |



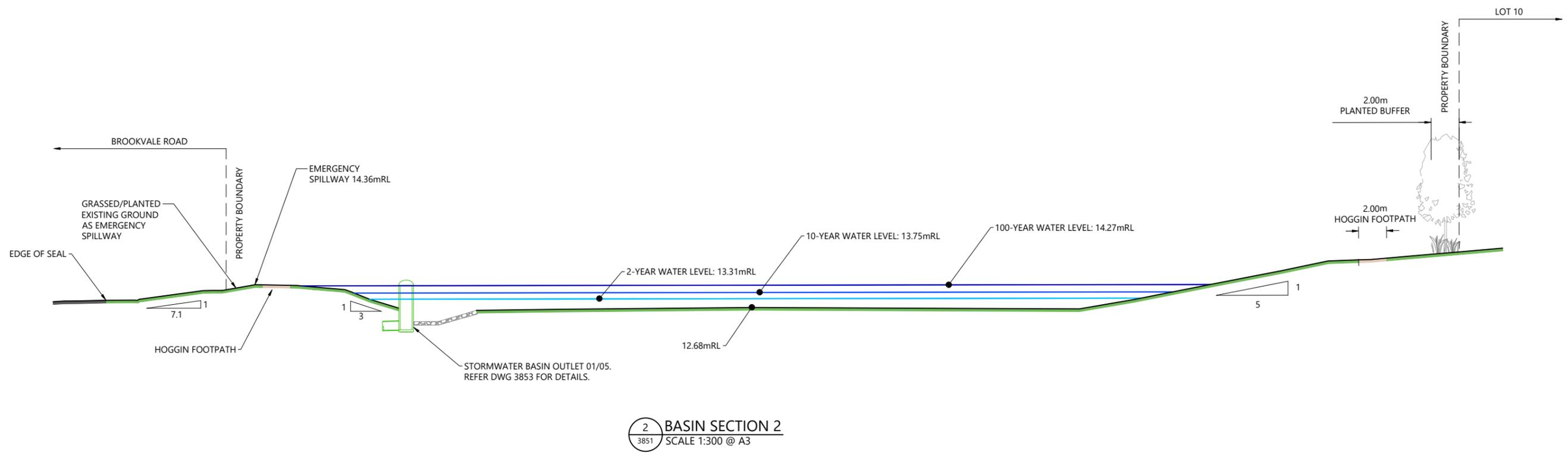
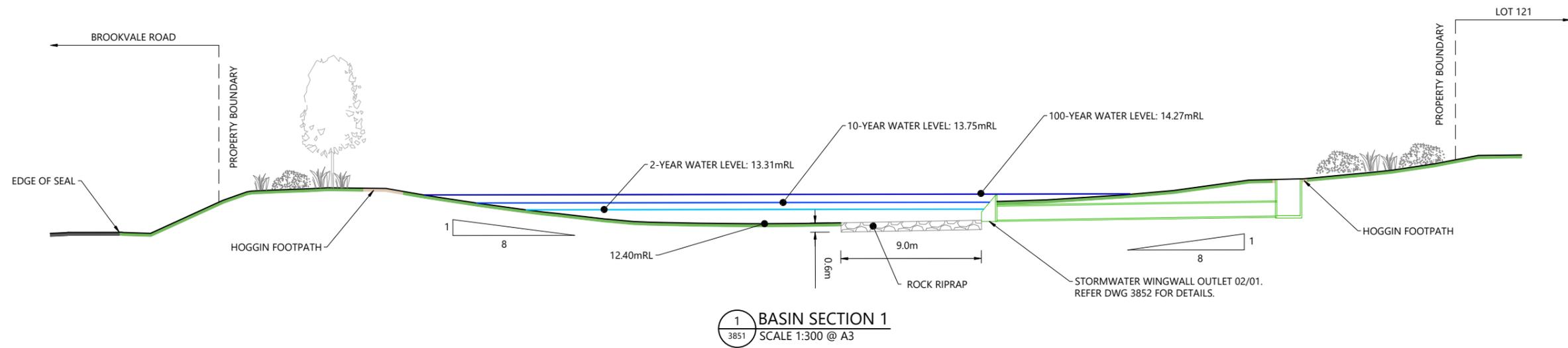
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER BASIN LAYOUT PLAN



| 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 |
|--------------------------|-----|----------|----------|-------|
| 1 ISSUED FOR INFORMATION | AS | APR 2025 | DESIGNED | AS |
| 2 ISSUED FOR CONSENT | AS | JUN 2025 | DRAWN | AS |
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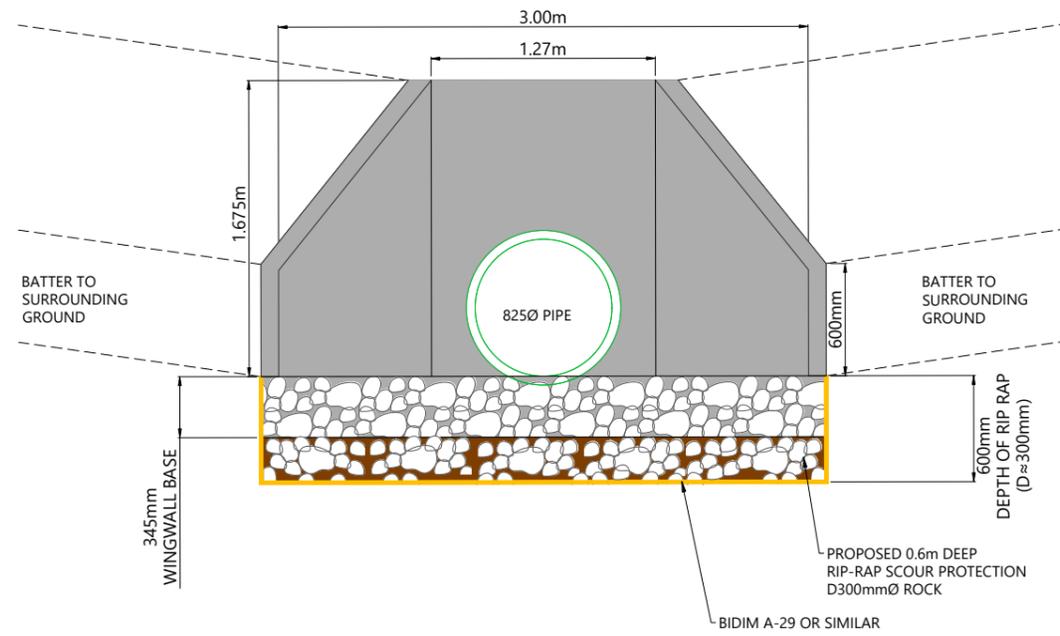


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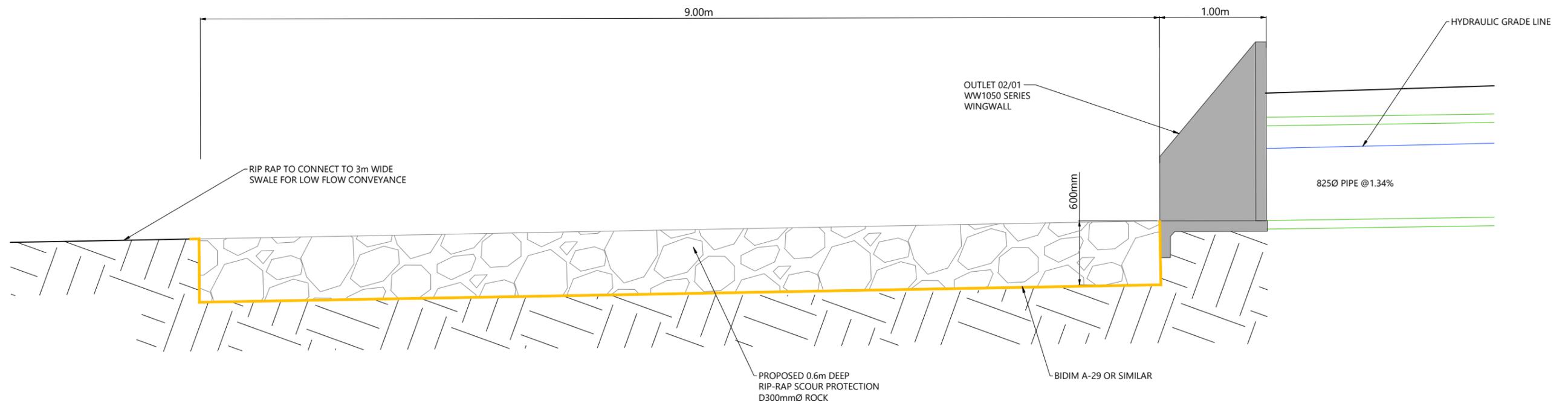


ARATAKI DEVELOPMENT - HAVELOCK NORTH
STORMWATER BASIN SECTIONS

| 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 |
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| | | | APPROVED | BF |



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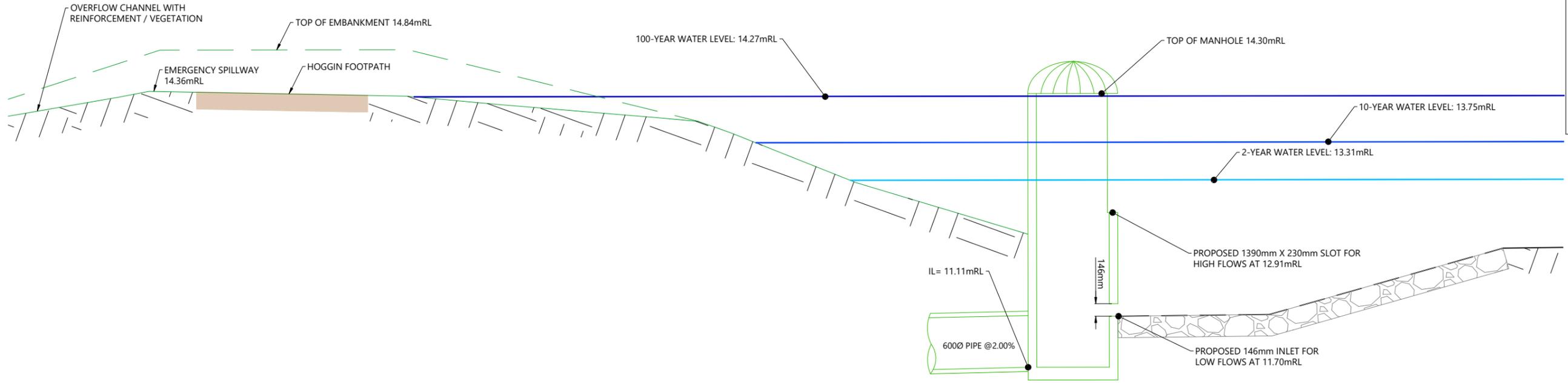
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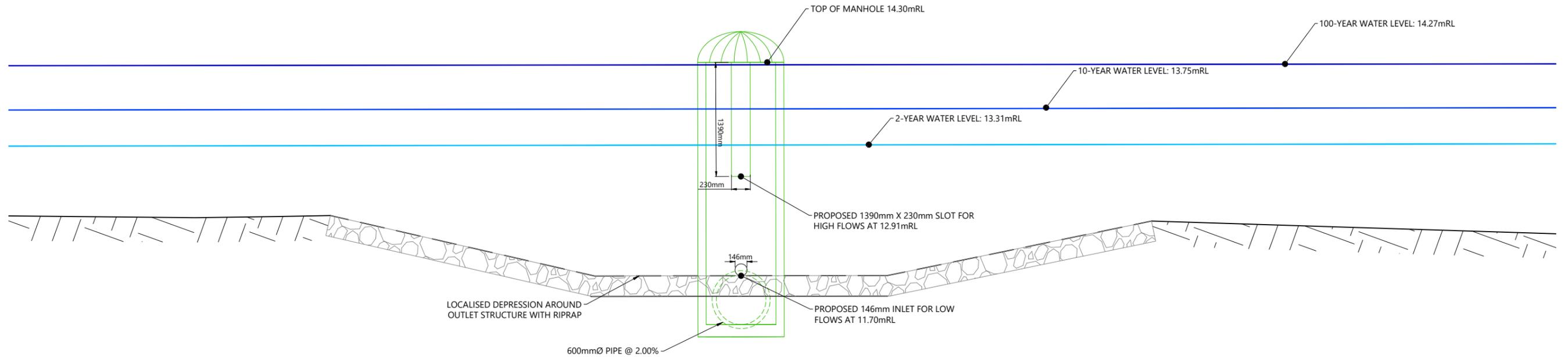
ARATAKI DEVELOPMENT - HAVELOCK NORTH

WINGWALL OUTLET 02/01 DETAILS

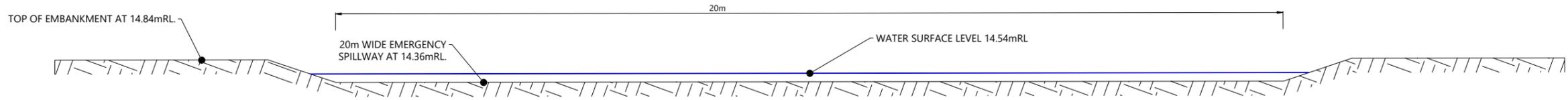
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|---------|---------------------------|-----|
| SCALE | 1:40 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-3852-DR | |



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 | |

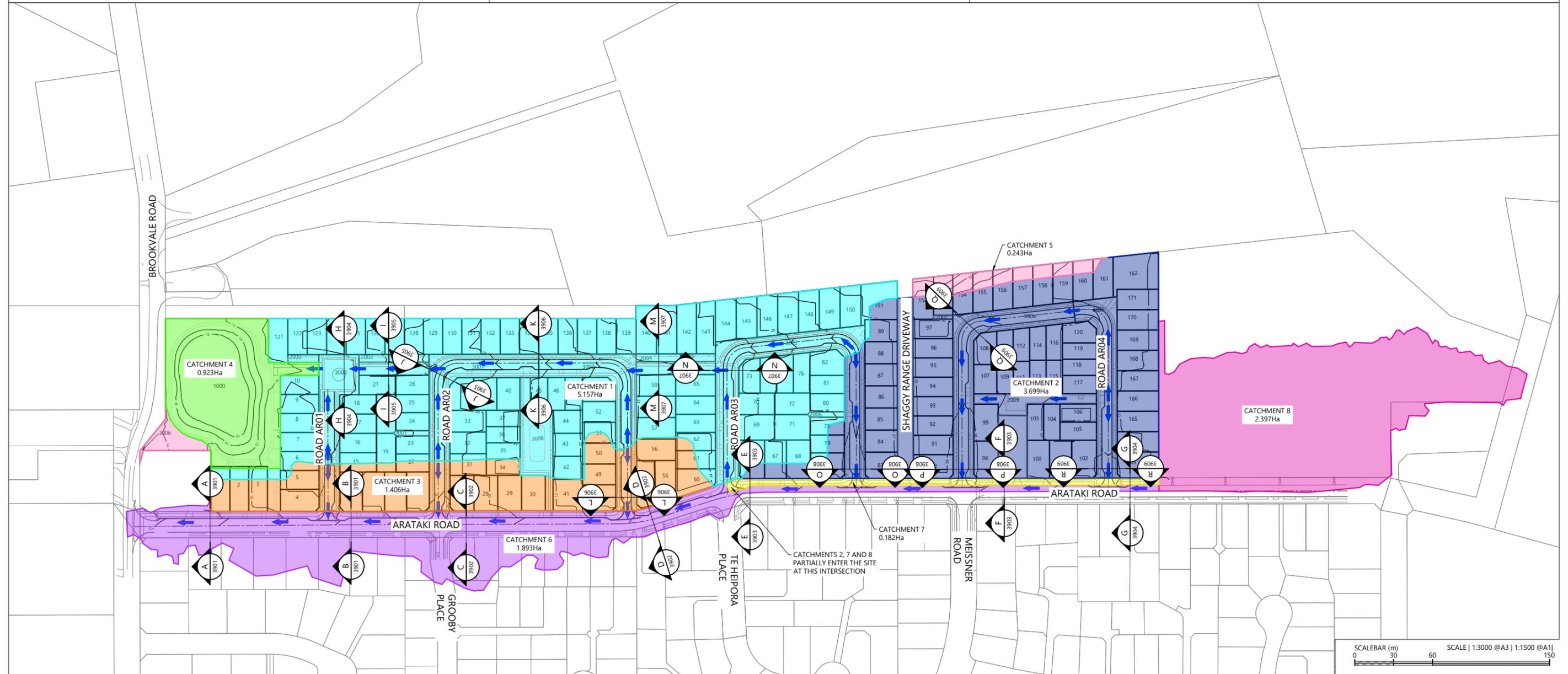
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LEGEND

- 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 $d \times v$ LESS THAN $0.4m^2/s$ AT KERB INVERT.



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



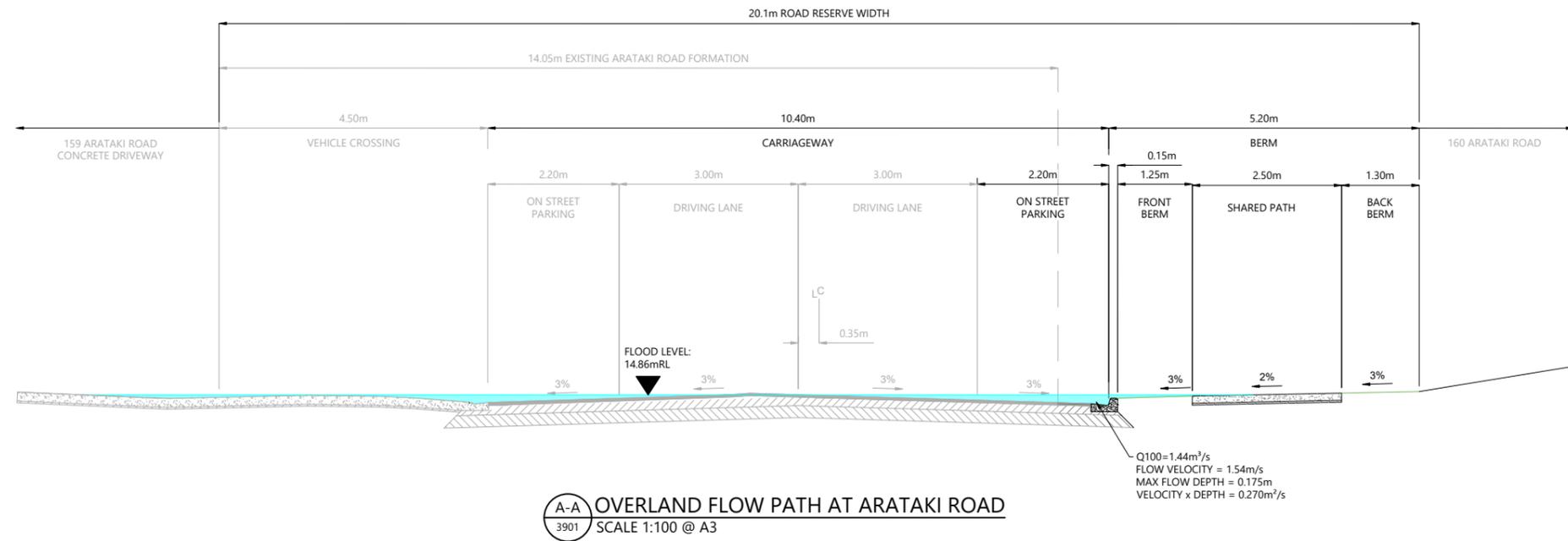
BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
AUCKLAND 1023
+64 9 308 9229
WOODS.CO.NZ



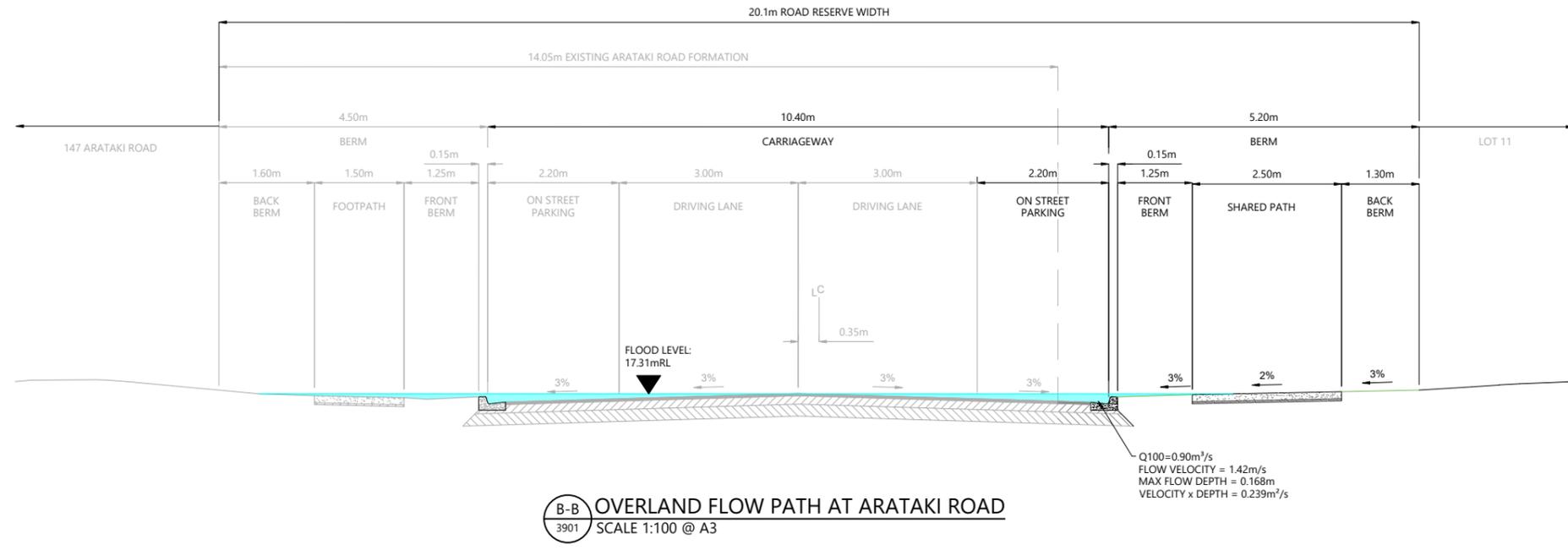
ARATAKI DEVELOPMENT - HAVELOCK NORTH
OVERLAND FLOW PATH
POST-DEVELOPMENT PLAN



| 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 0.4m³/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 |
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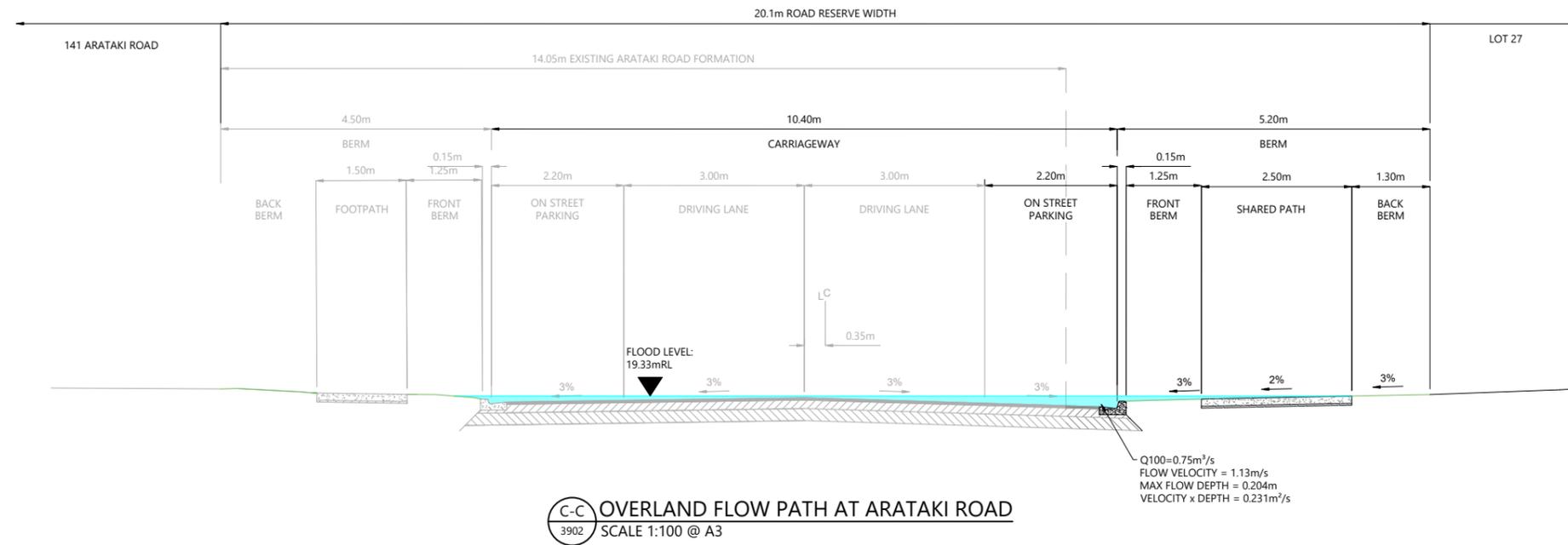


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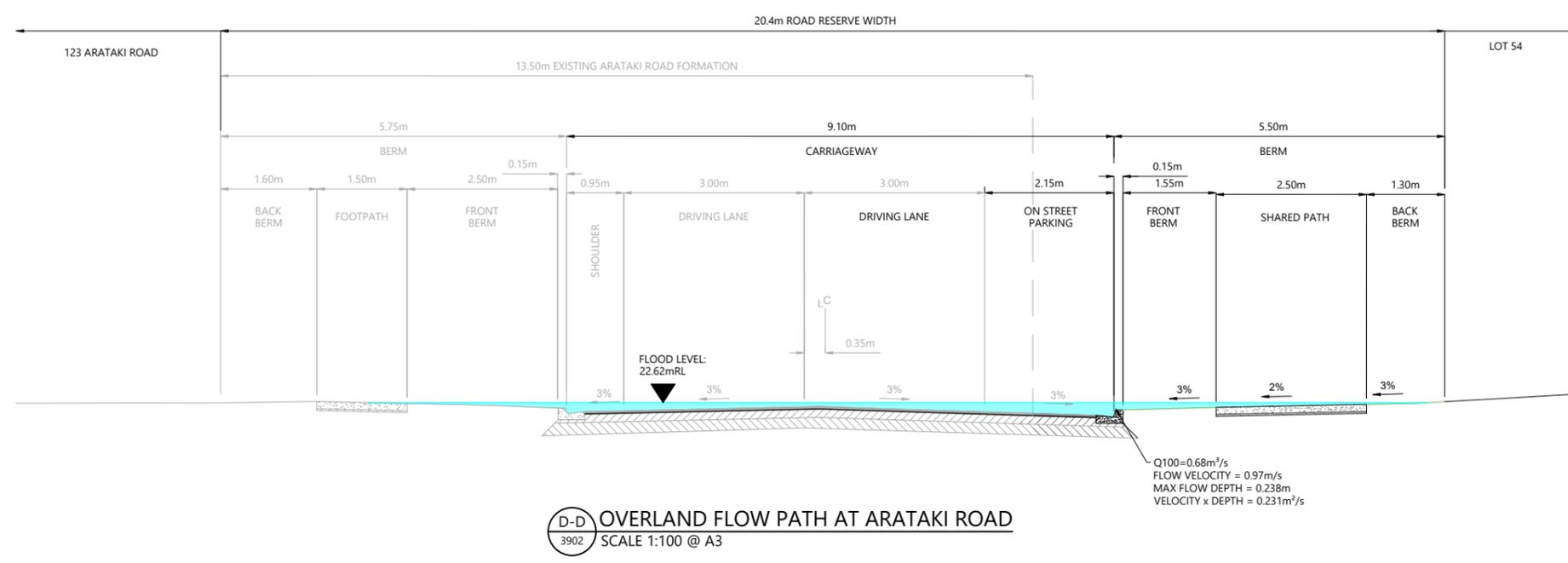


ARATAKI DEVELOPMENT - HAVELOCK NORTH
OVERLAND FLOW SECTIONS

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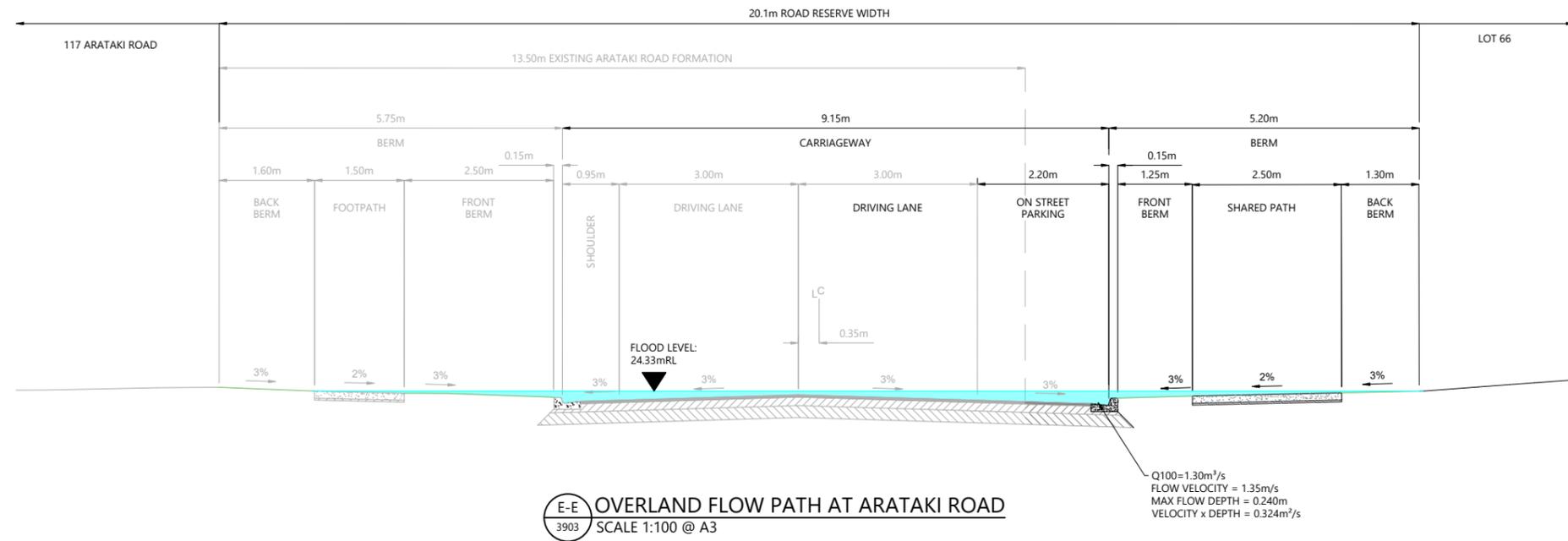


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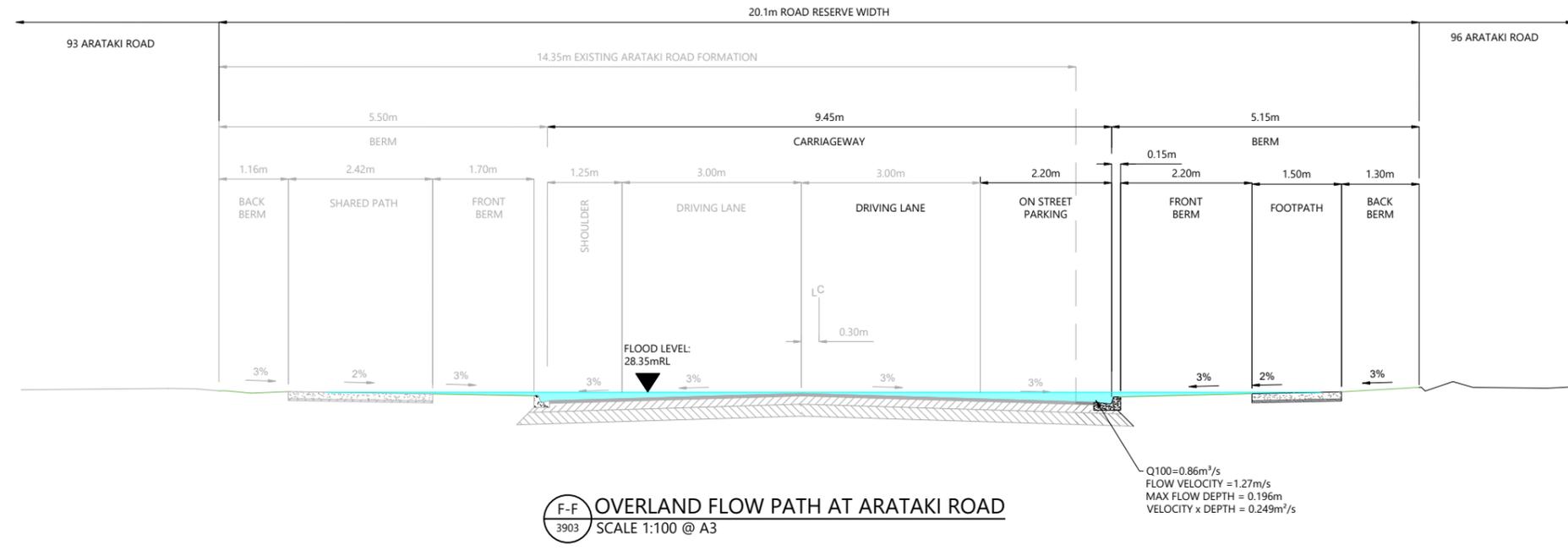


ARATAKI DEVELOPMENT - HAVELOCK NORTH
OVERLAND FLOW SECTIONS

| 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.



| 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 |

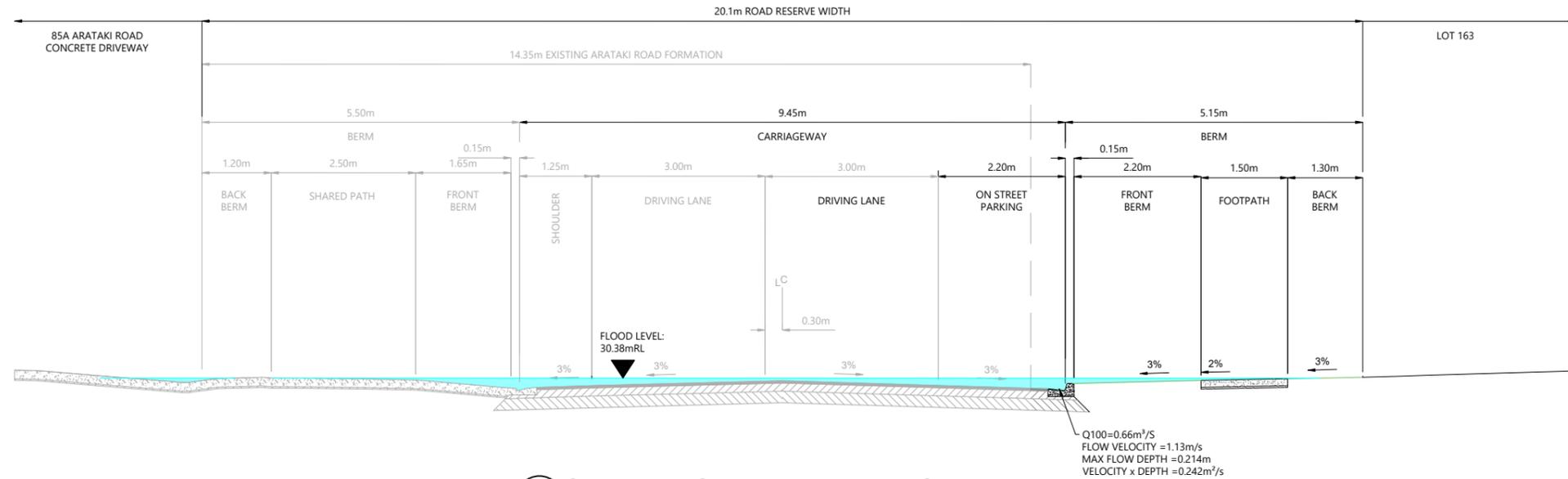


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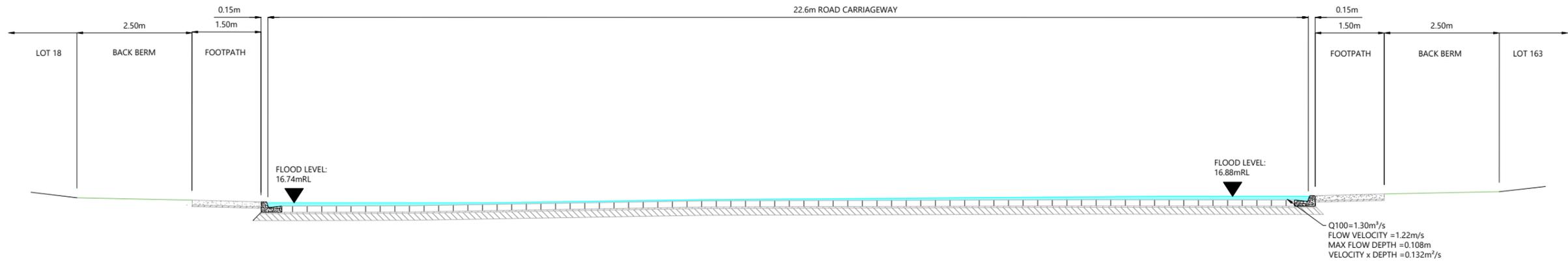
ARATAKI DEVELOPMENT - HAVELOCK NORTH
OVERLAND FLOW SECTIONS

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



- 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.

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



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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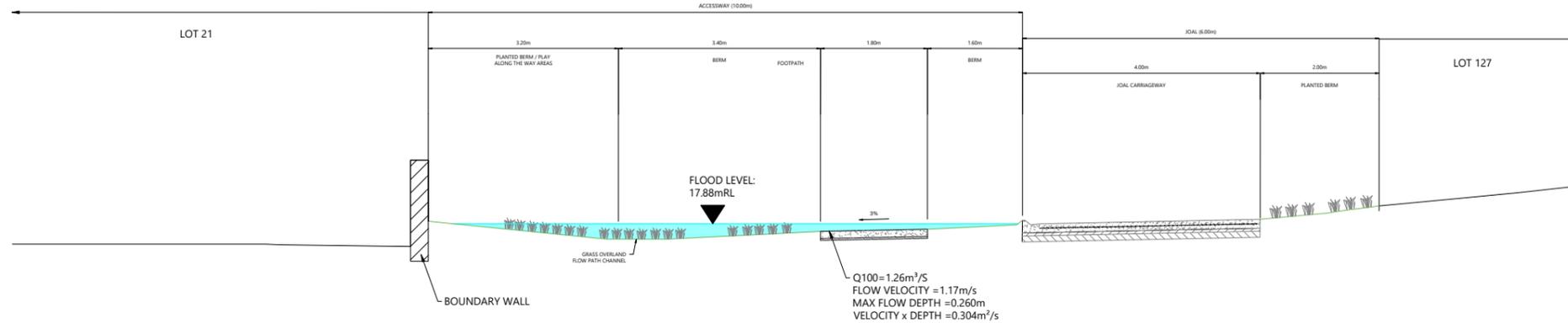


ARATAKI DEVELOPMENT - HAVELOCK NORTH

OVERLAND FLOW SECTIONS

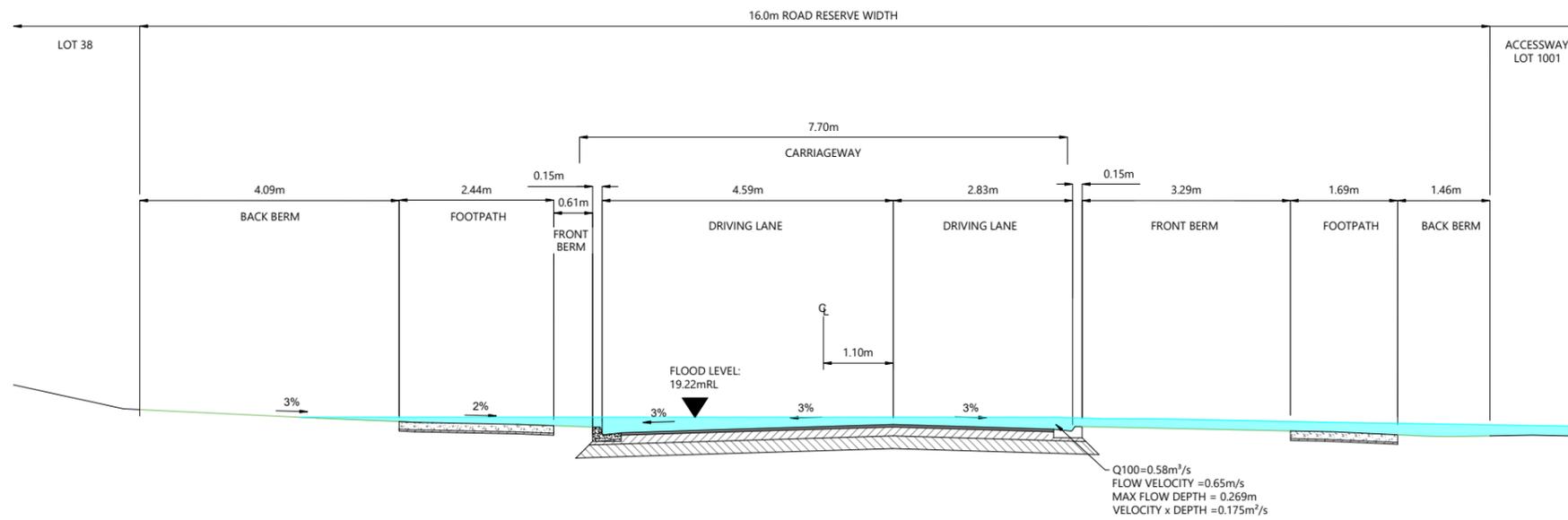
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
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| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-3904-DR | |

Plot Date: 2:19:56 pm, 26 June 2025, APRILS
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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 |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |



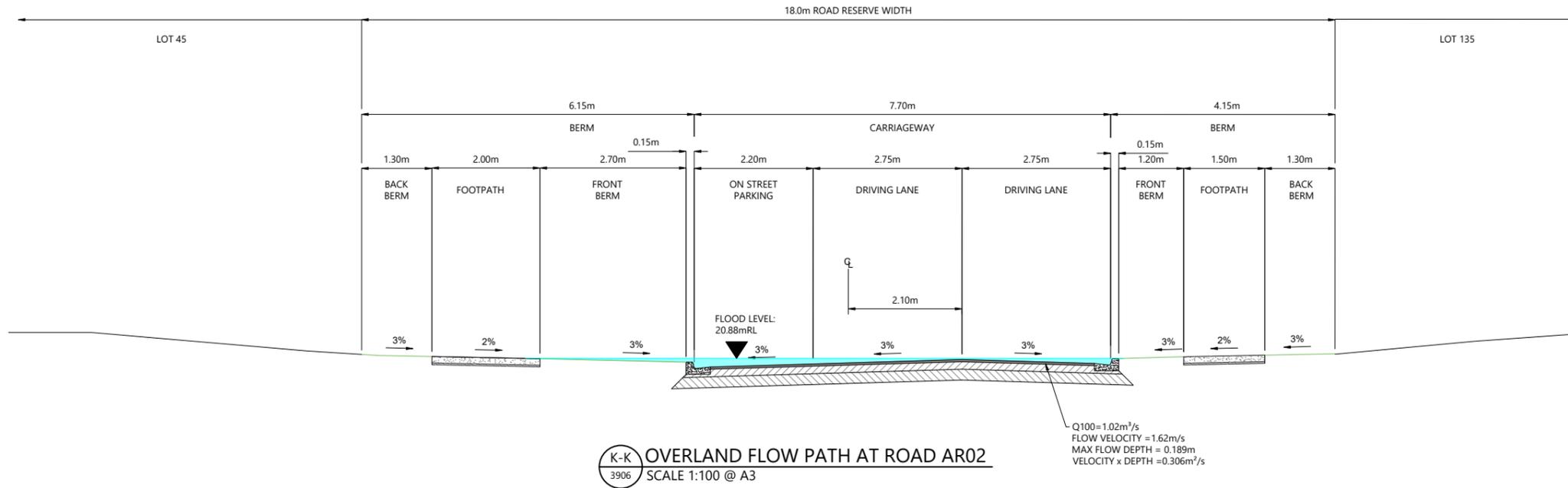
BUILDING B, LEVEL 1
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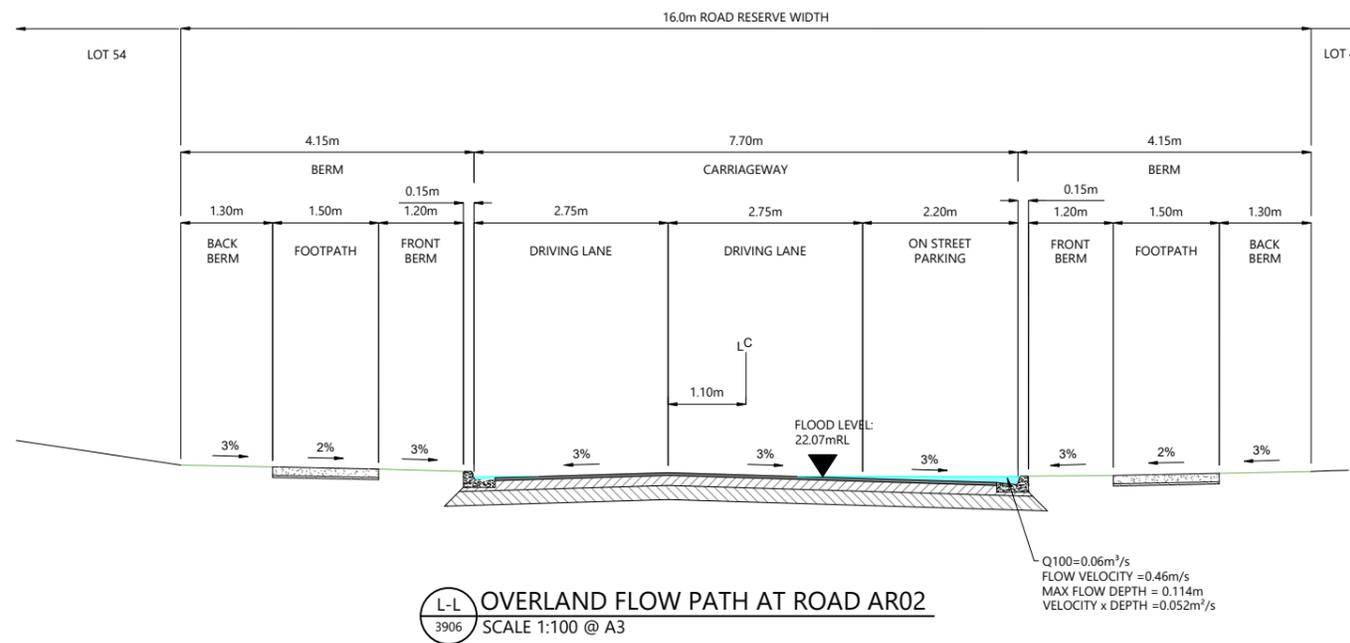


ARATAKI DEVELOPMENT - HAVELOCK NORTH
OVERLAND FLOW SECTIONS

| 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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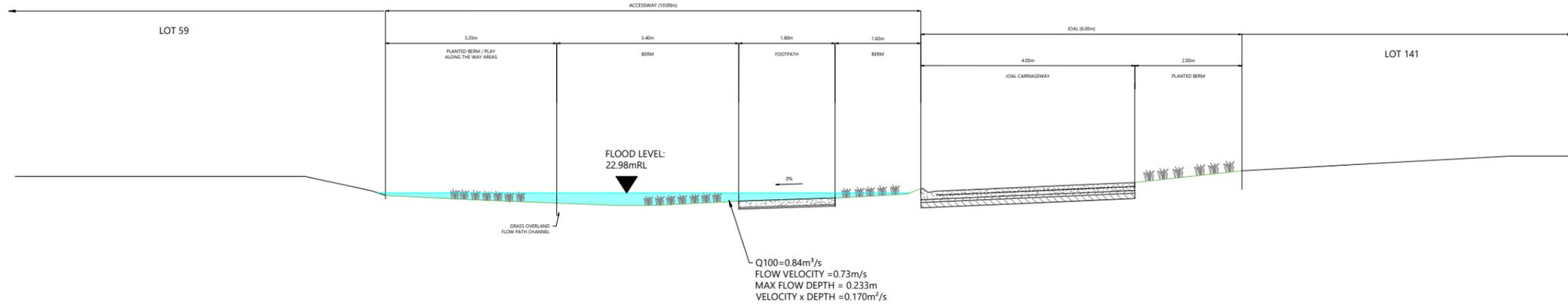


ARATAKI DEVELOPMENT - HAVELOCK NORTH

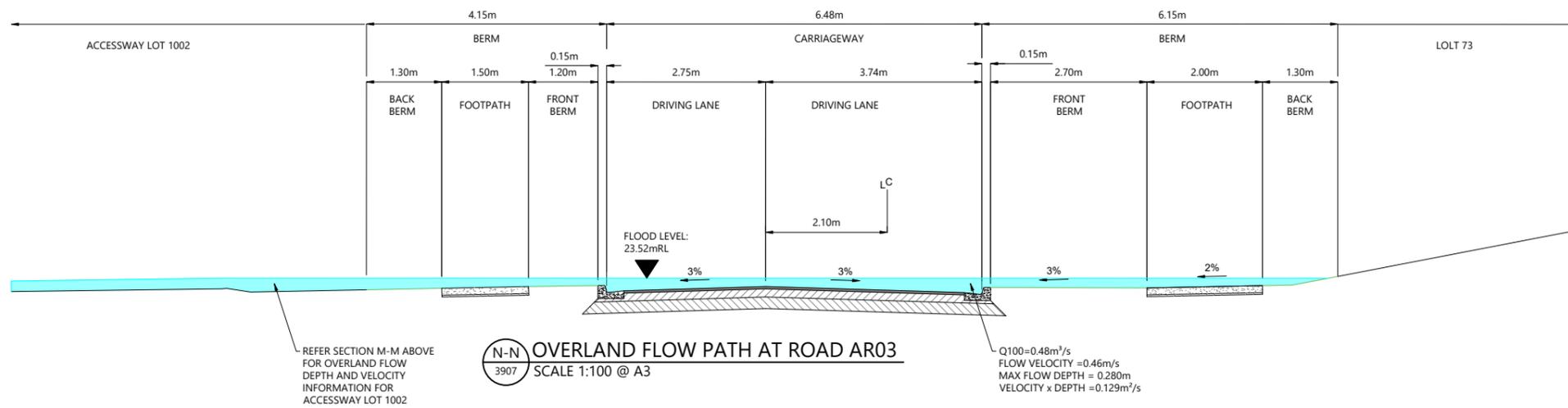
OVERLAND FLOW SECTIONS

| 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

REFER SECTION M-M ABOVE FOR OVERLAND FLOW DEPTH AND VELOCITY INFORMATION FOR ACCESSWAY LOT 1002



| 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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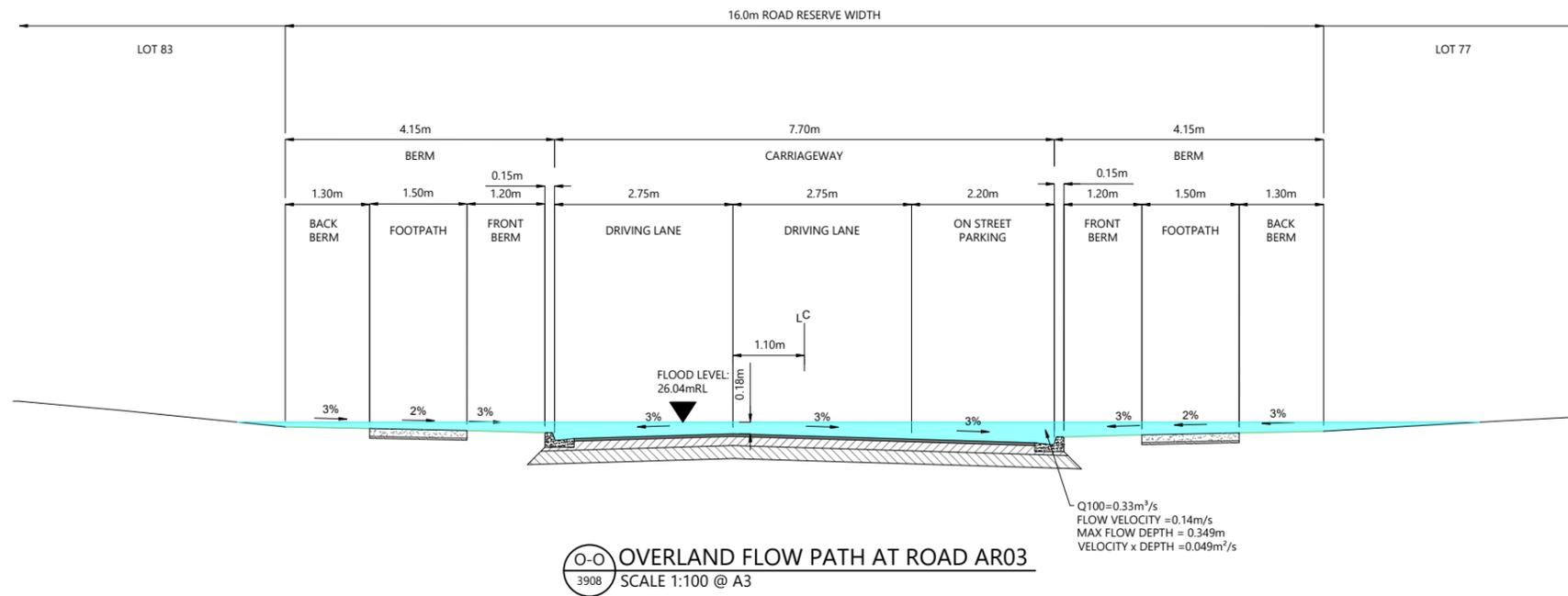
WOODS.CO.NZ



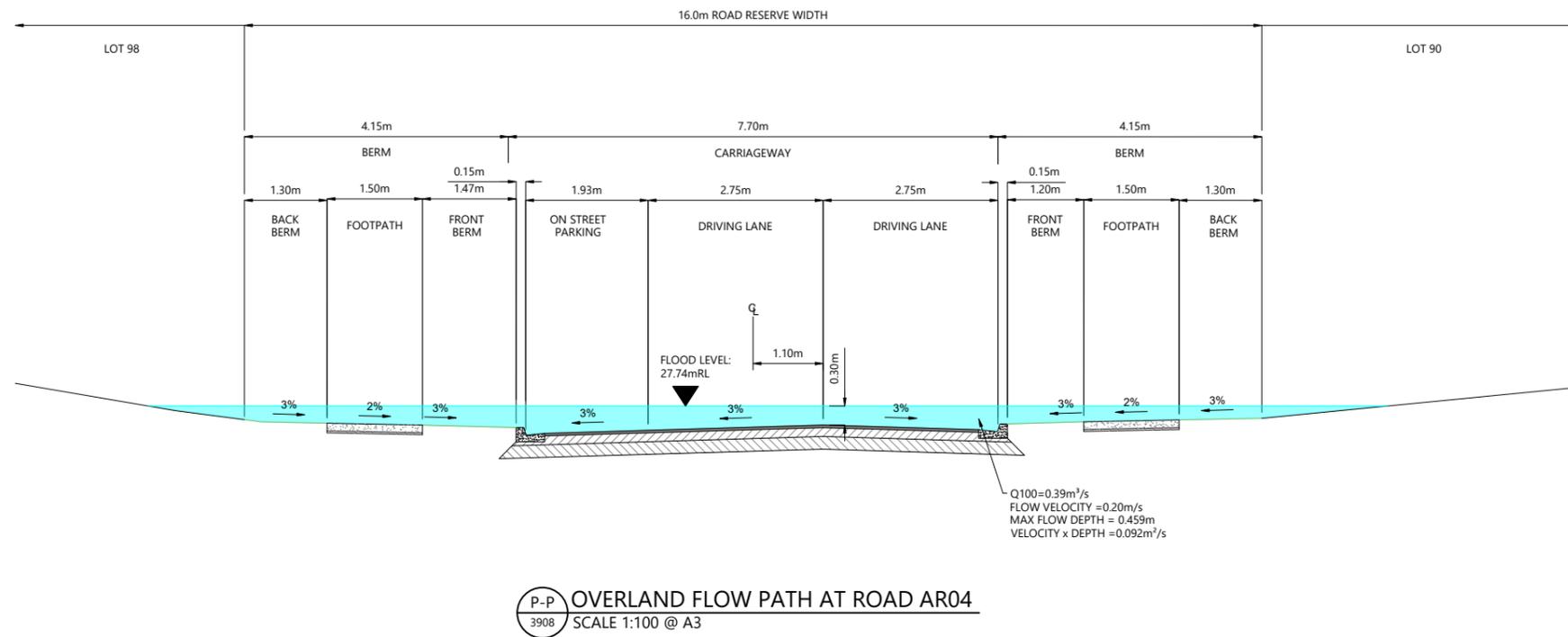
ARATAKI DEVELOPMENT - HAVELOCK NORTH

OVERLAND FLOW SECTIONS

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



- 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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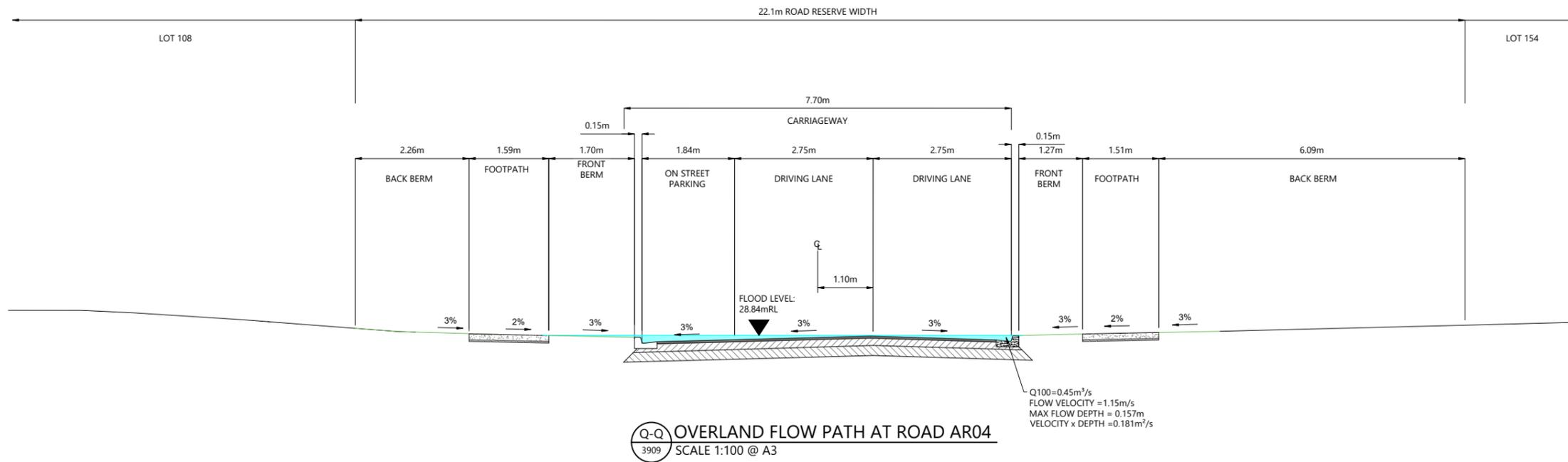


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8 NUGENT ST, GRAFTON,
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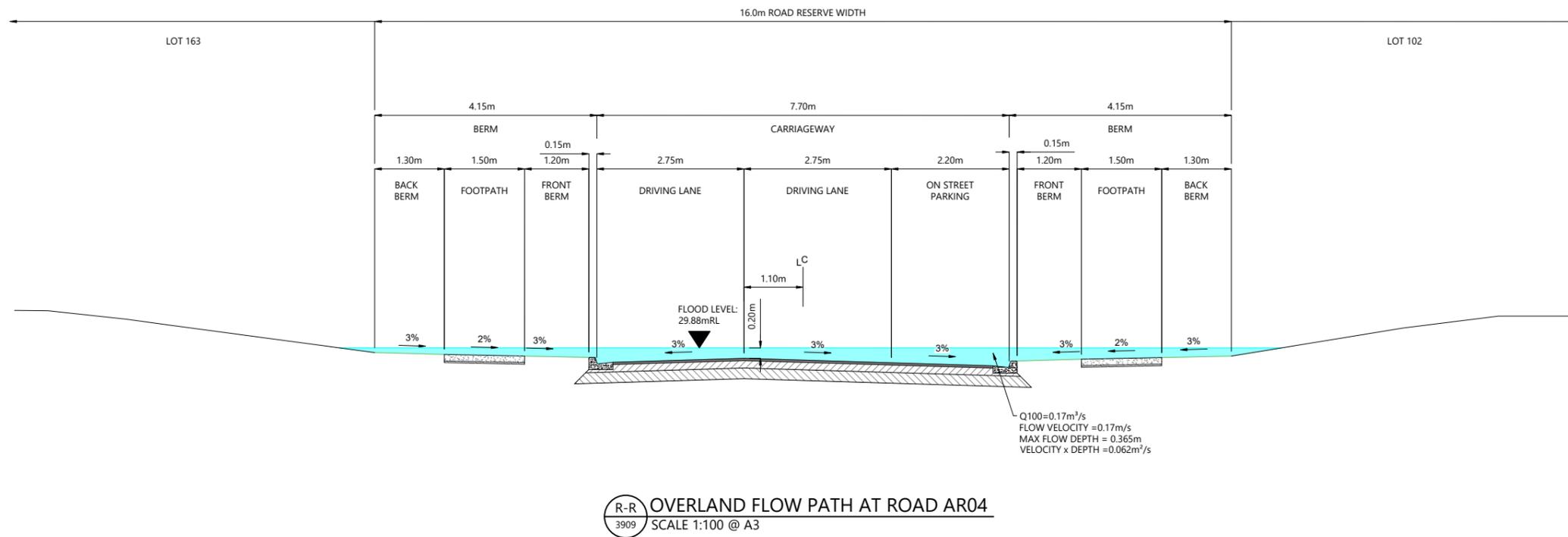


ARATAKI DEVELOPMENT - HAVELOCK NORTH
OVERLAND FLOW SECTIONS

| 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 |
| | | | CHECKED | BLO |
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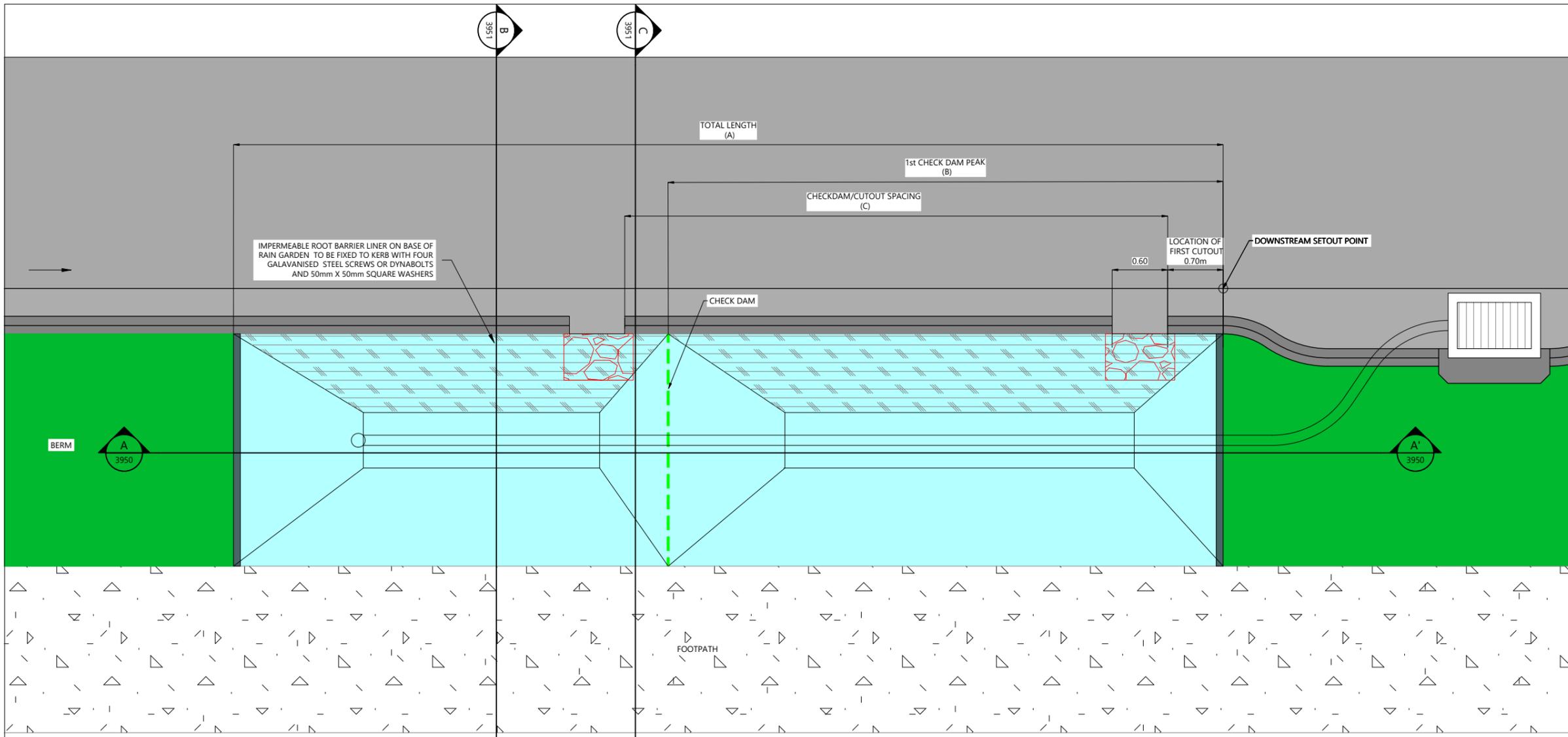


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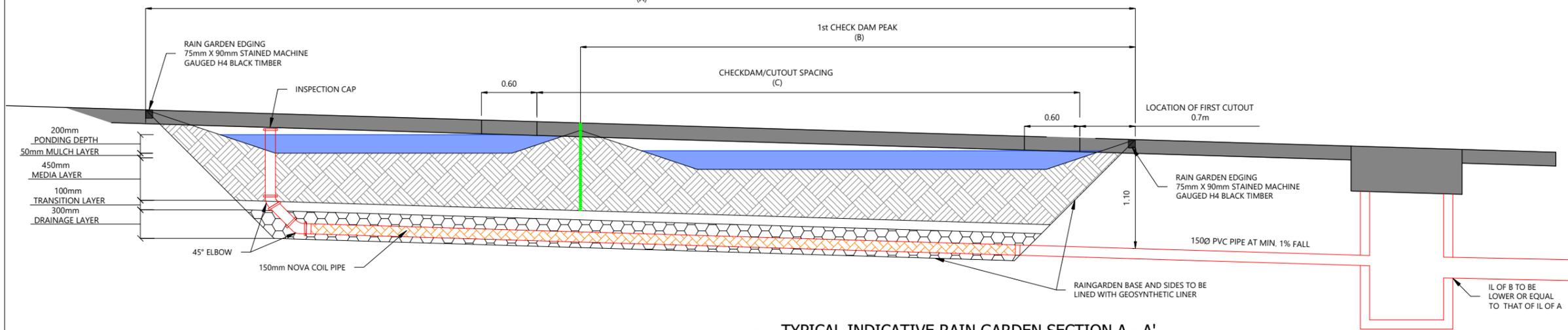


ARATAKI DEVELOPMENT - HAVELOCK NORTH
OVERLAND FLOW SECTIONS

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



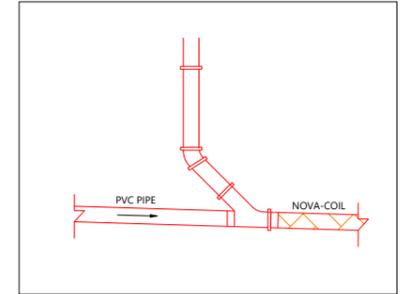
TYPICAL INDICATIVE RAIN GARDEN PLAN VIEW
Scale: 1:50



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

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".



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 |

QR CODE

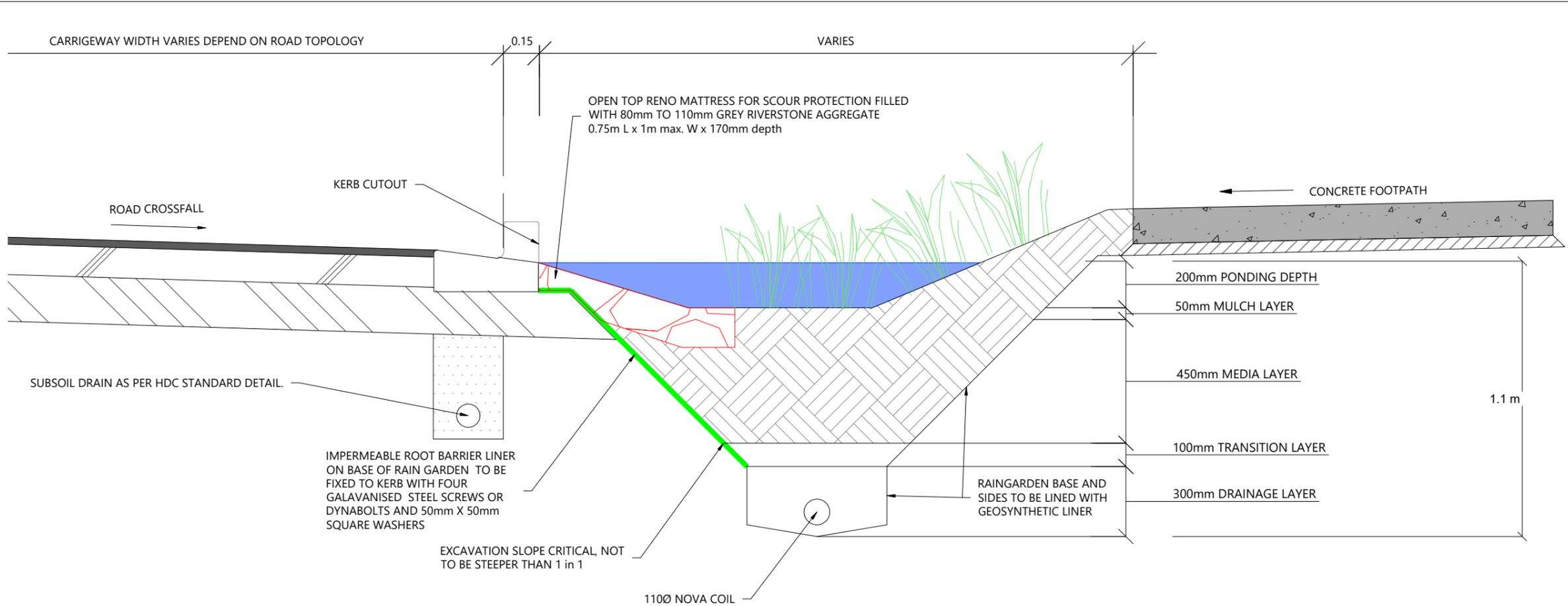
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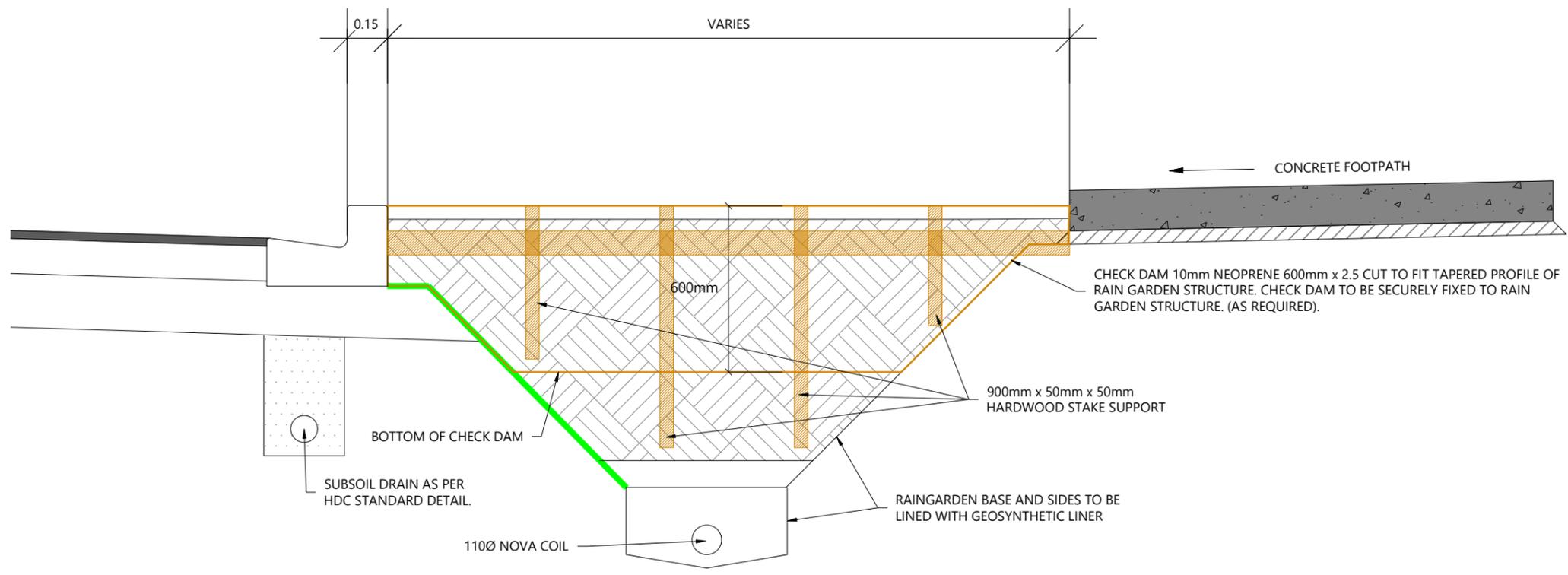
ARATAKI DEVELOPMENT - HAVELOCK NORTH
TYPICAL RAINGARDEN DETAILS
PLAN AND LONGSECTION

| 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 |
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ARATAKI DEVELOPMENT - HAVELOCK NORTH

TYPICAL RAINGARDEN DETAILS CROSS SECTIONS

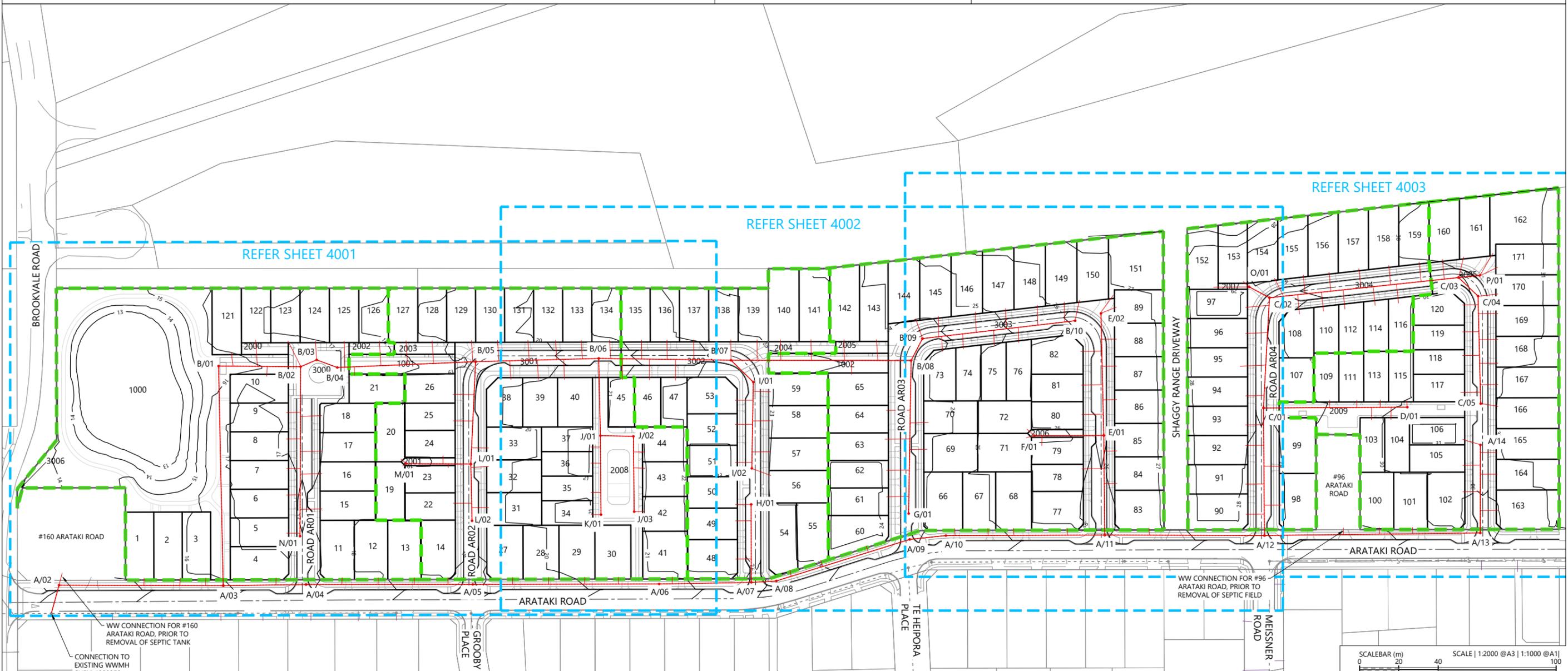
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | AS SHOWN | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-3951-DR | |

Plot Date: 2:08:24 pm, 26 June 2025, TIMOTHYB
File: C:\1205\ENERGY\DATA\WP-PEN-APP-01\P24-244 - ARATAKI - HAVELOCK NORTH_2169002 DRAWINGS\01 ENG\P24-244-00-3951-DR_RAINGARDEN DETAILS.DWG

LEGEND

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

- 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.
 - WW PIPES TO BE 150MMØ UPVC SN16. UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTION IN WHICH CASE SUCH NOTES SHALL TAKE PRECEDENCE.
 - ALL PIPE CROSSINGS UNDER ROADS TO BE HARDFILL BACKFILLED.
 - ALL WW LOT CONNECTIONS TO BE 100MMØ, RAMPED RISERS ARE TO BE EXTENDED & CAPPED OFF 1.0M BELOW THE FINISHED GROUND SURFACE.
 - ALL MANHOLES TO BE 1050MMØ UNLESS OTHERWISE NOTED ON THE DRAINAGE LONG SECTION IN WHICH CASE SUCH NOTES SHALL TAKE PRECEDENCE.
 - THE CONTRACTOR IS TO PEG MANHOLES & CHECK FINISHED EARTHWORKS LEVELS (MH LID LEVELS) PRIOR TO ORDERING MANHOLES.
 - ALL MANHOLE LIDS IN THE CYCLEWAY SHOULD HAVE A CYCLIST FRIENDLY COVER.
 - 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 |
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| | | | 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
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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 |
|----------------------|-----|----------|----------|-------|
| 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 |

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.
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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 |

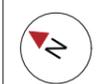


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ARATAKI DEVELOPMENT - HAVELOCK NORTH
WASTEWATER DRAINAGE LAYOUT PLAN - SHEET 2



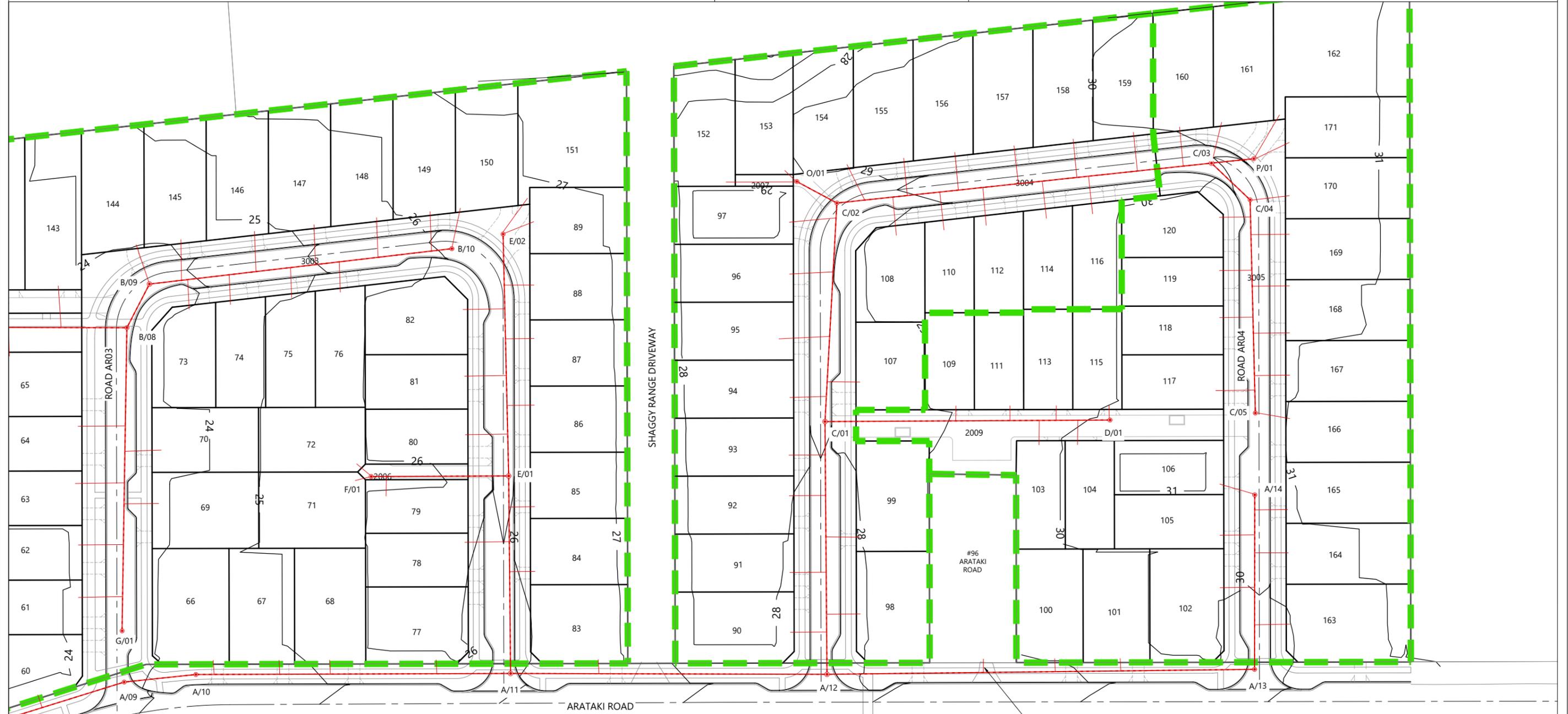
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|---------|---------------------------|-----|
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-4002-DR | |

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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TE HEIPORA PLACE

ARATAKI ROAD

SHAGGY RANGE DRIVEWAY

MEISSNER ROAD

#96 ARATAKI ROAD

SCALEBAR (m) SCALE | 1:1000 @A3 | 1:500 @A1

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

| | | | |
|-----|----------|----------|-------|
| INT | DATE | SURVEYED | WOODS |
| AS | JUN 2025 | DESIGNED | AS |
| | | DRAWN | AS |
| | | CHECKED | BLO |
| | | APPROVED | BF |



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8 NUGENT ST, GRAFTON,
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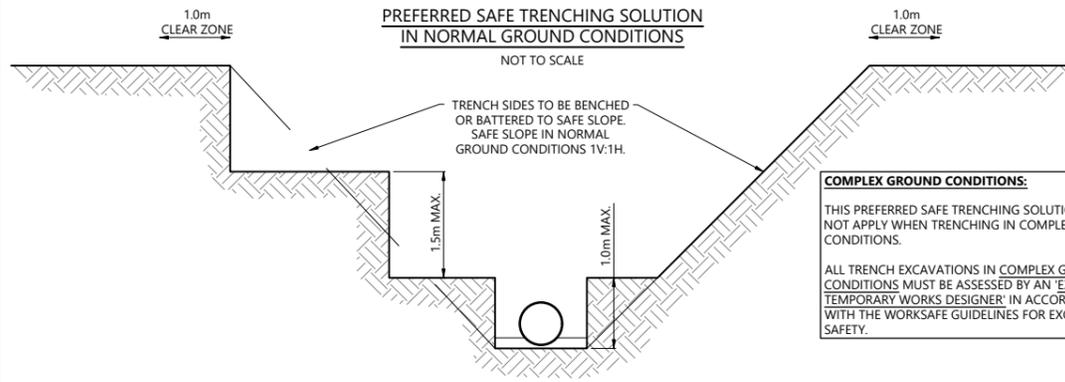


ARATAKI DEVELOPMENT - HAVELOCK NORTH

WASTEWATER DRAINAGE LAYOUT PLAN - SHEET 3

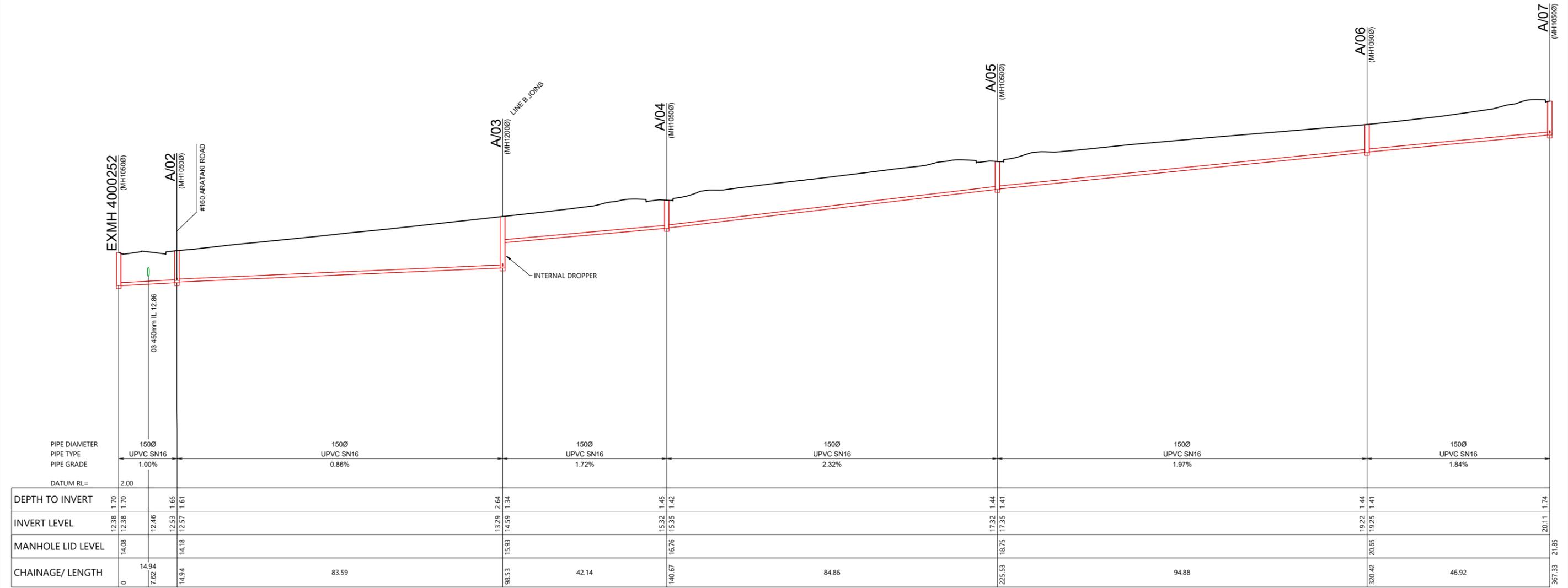


| | | |
|---------|---------------------------|-----|
| STATUS | ISSUED FOR CONSENT | REV |
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-4003-DR | |



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 SET OUT 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.



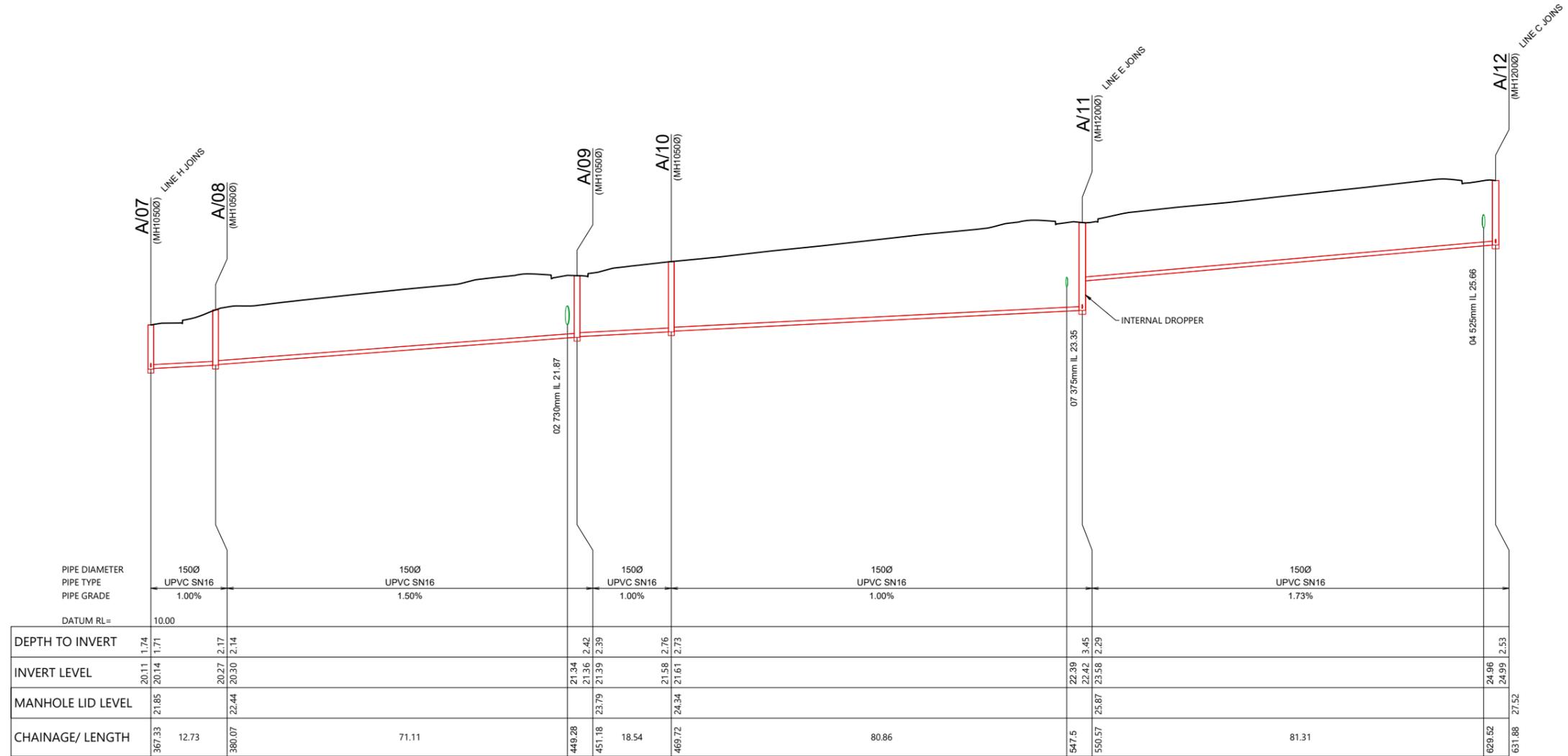
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|-------------------------|-----|-----------|----------|-------|
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| 2 ISSUED FOR CONSENT | TB | JUNE 2025 | DRAWN | AS |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |

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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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+64 9 308 9229

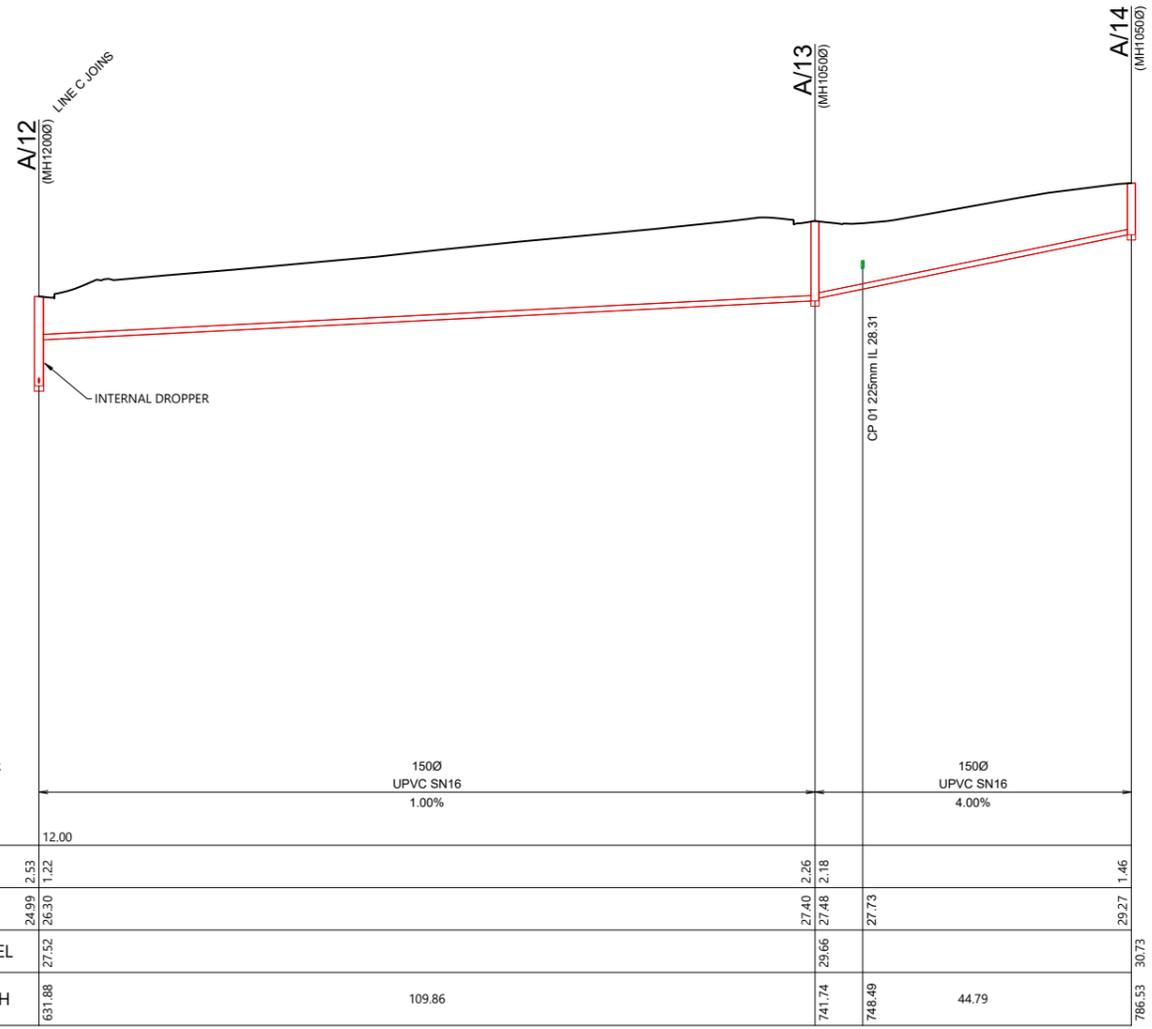
WOODS.CO.NZ



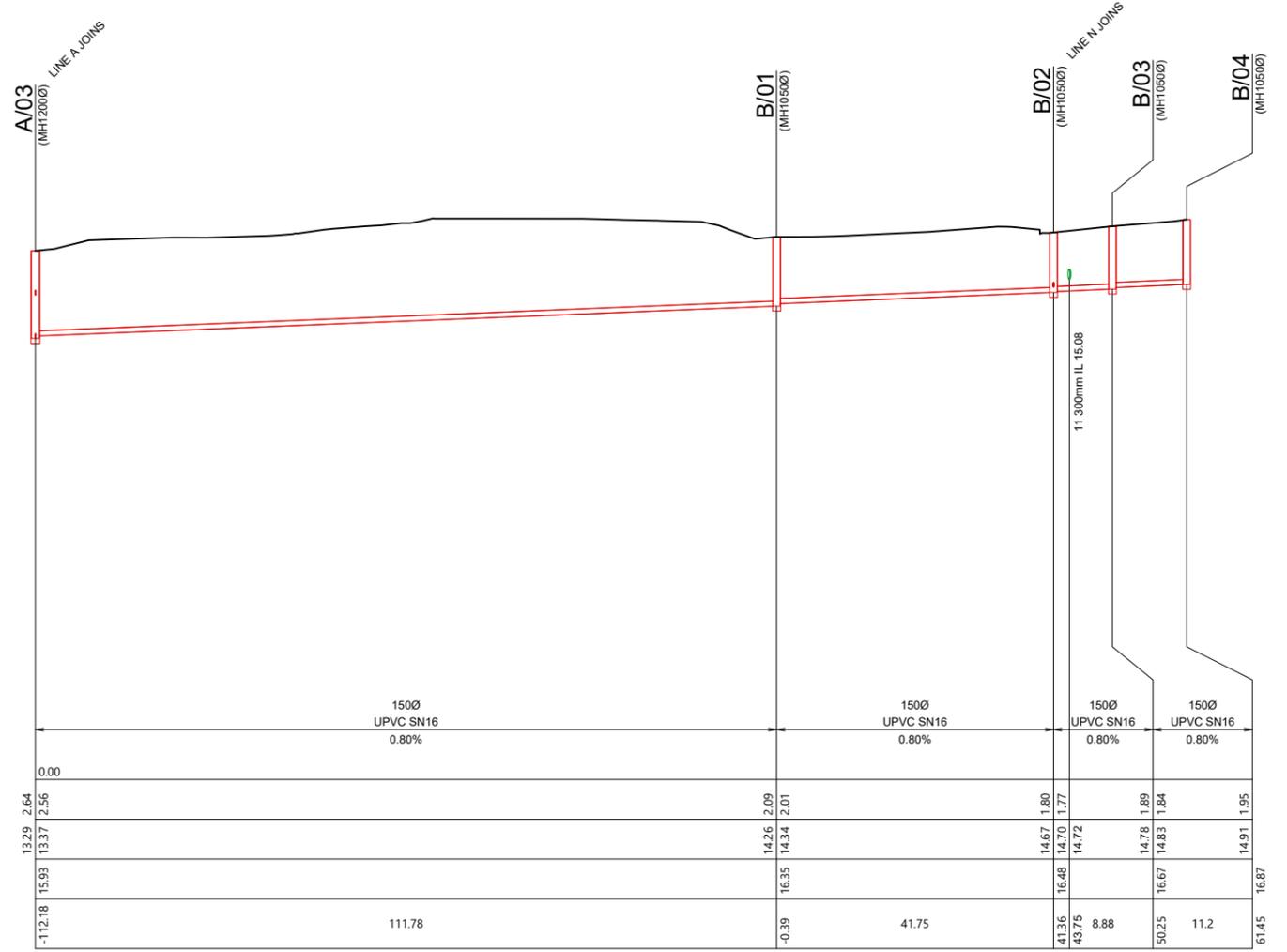
ARATAKI DEVELOPMENT - HAVELOCK NORTH

WASTEWATER LONGSECTION SHEET 2

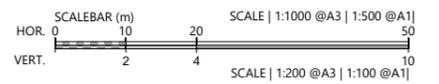
| STATUS | ISSUED FOR CONSENT | REV |
|---------|---------------------------|-----|
| SCALE | H 1:1000 V 1:200 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-4501-DR | |



A



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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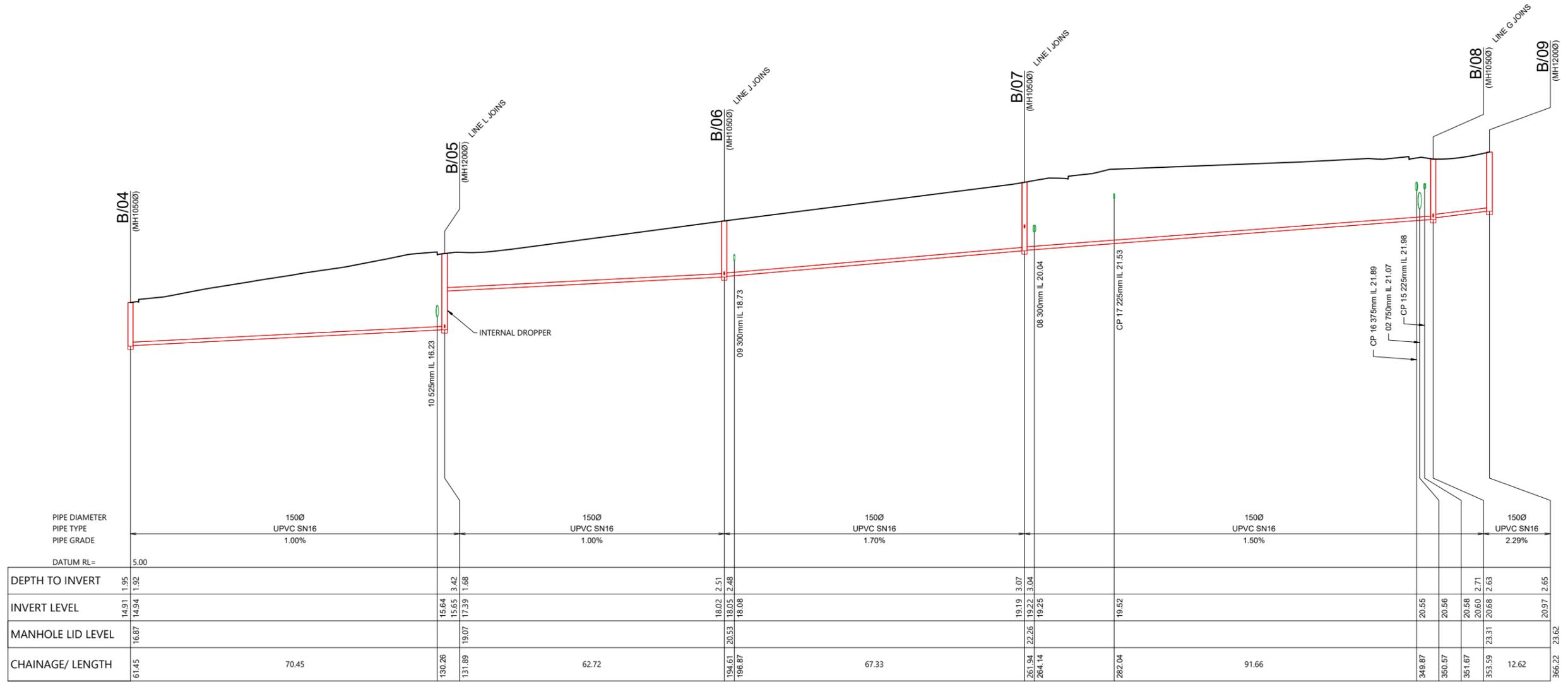
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ARATAKI DEVELOPMENT - HAVELOCK NORTH

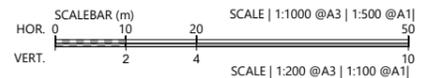
WASTEWATER LONGSECTION SHEET 3

| | | |
|---------|---------------------------|-----|
| 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 | | | | | | 20.97 |
| MANHOLE LID LEVEL | 16.87 | | 19.07 | | | 20.53 | 20.53 | | 22.26 | 22.26 | | | | | | | | 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 |



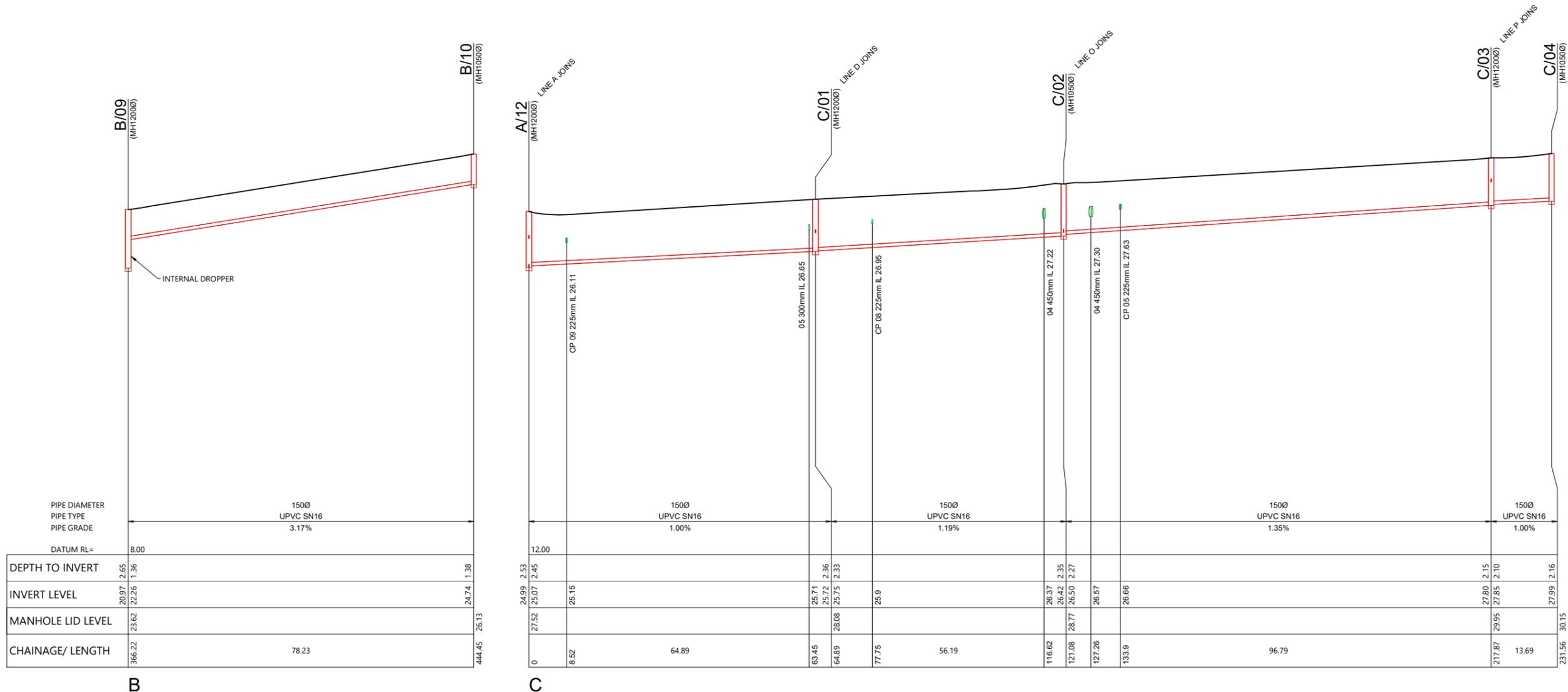
BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
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+64 9 308 9229

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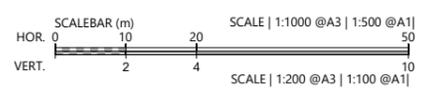
ARATAKI DEVELOPMENT - HAVELOCK NORTH
WASTEWATER LONGSECTION
SHEET 4

| 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 | 24.99 2.53 27.52 2.45 | 24.74 1.38 |
| MANHOLE LID LEVEL | 23.62 | 26.13 |
| CHAINAGE/ LENGTH | 366.22 78.23 | 444.45 |

| | | |
|--|--|------------|
| | 1500 | |
| | UPVC SN16 | |
| | 1.00% | |
| | 12.00 | |
| | 24.99 2.53 27.52 2.45 | 24.74 1.38 |
| | 25.15 | 26.13 |
| | 64.89 | |
| | 63.45 25.71 64.89 25.75 | 25.9 |
| | 77.75 | |
| | 56.19 | |
| | 116.62 26.37 121.08 26.42 127.26 26.50 | 26.27 |
| | 133.9 | 26.66 |
| | 96.79 | |
| | 217.87 27.80 217.87 27.85 | 27.10 |
| | 13.69 | |
| | 231.56 | 30.15 |



| 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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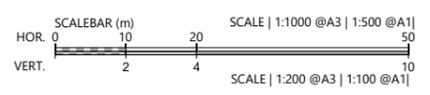
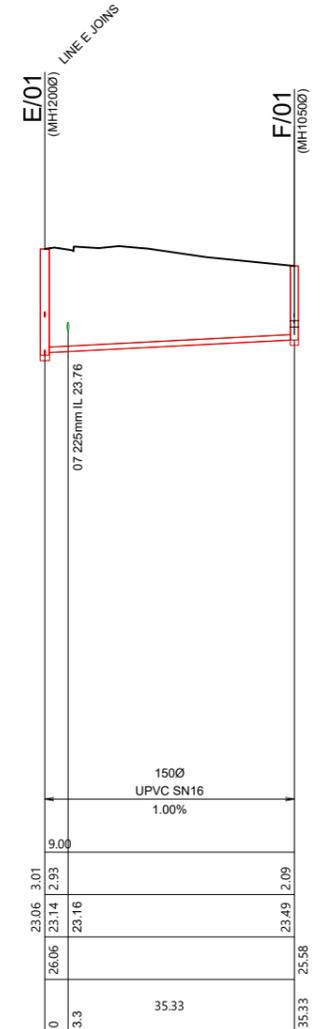
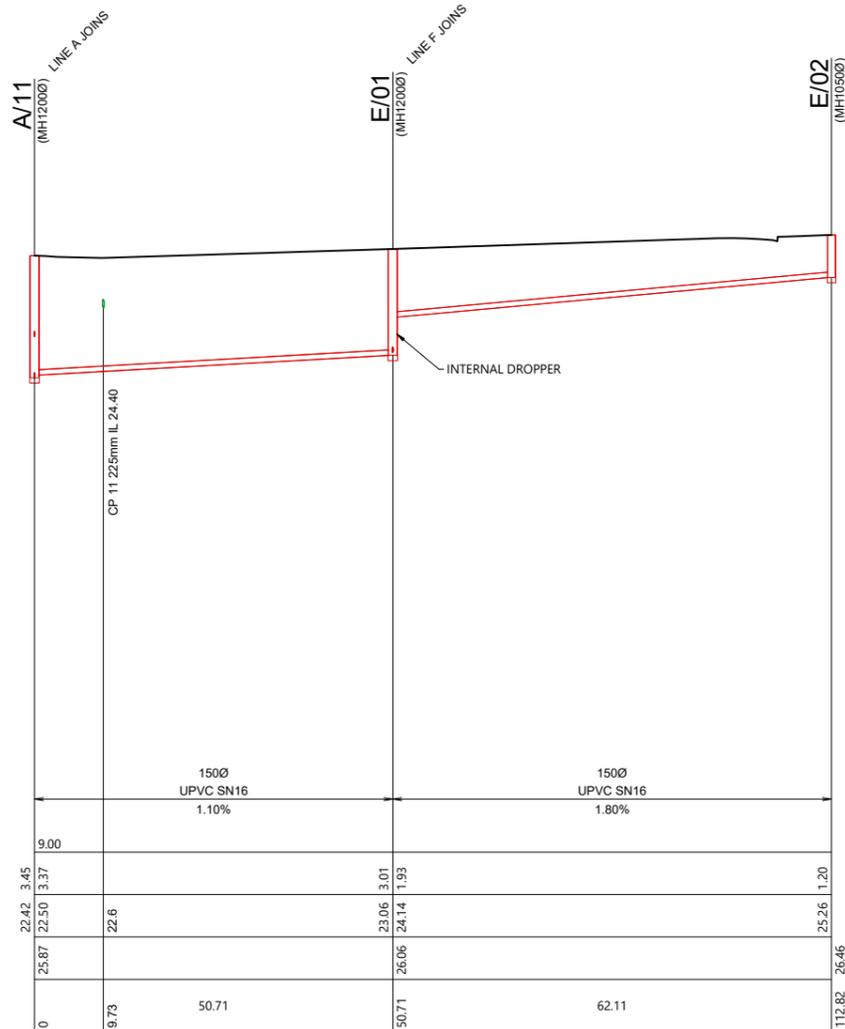
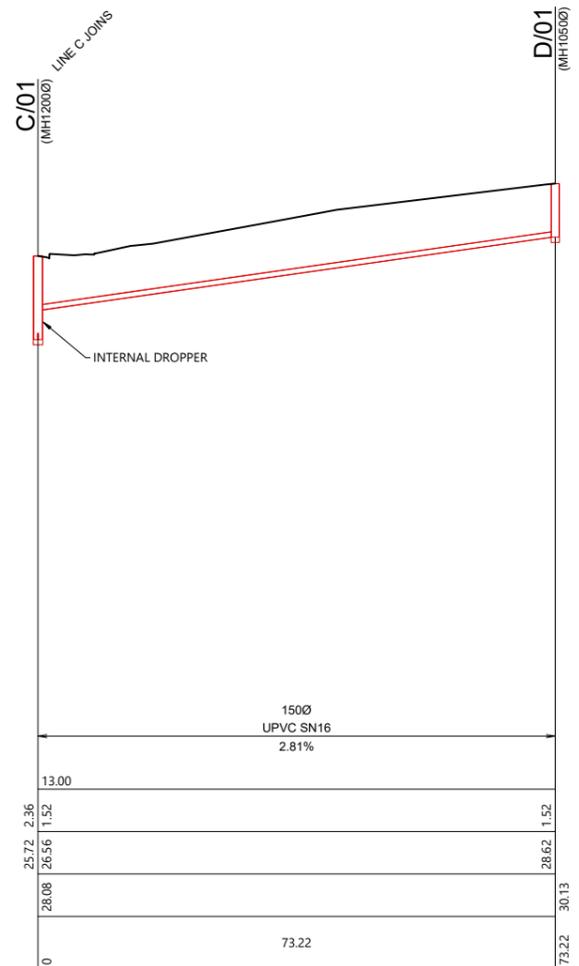


ARATAKI DEVELOPMENT - HAVELOCK NORTH

WASTEWATER LONGSECTION

SHEET 5

| | | |
|---------|---------------------------|-----|
| STATUS | ISSUED FOR CONSENT | REV |
| SCALE | H 1:1000 V 1:200 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-4504-DR | |



| 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 |



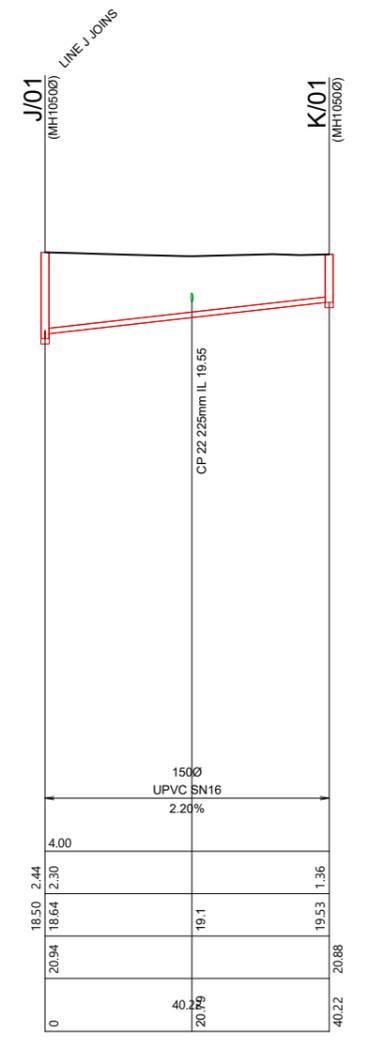
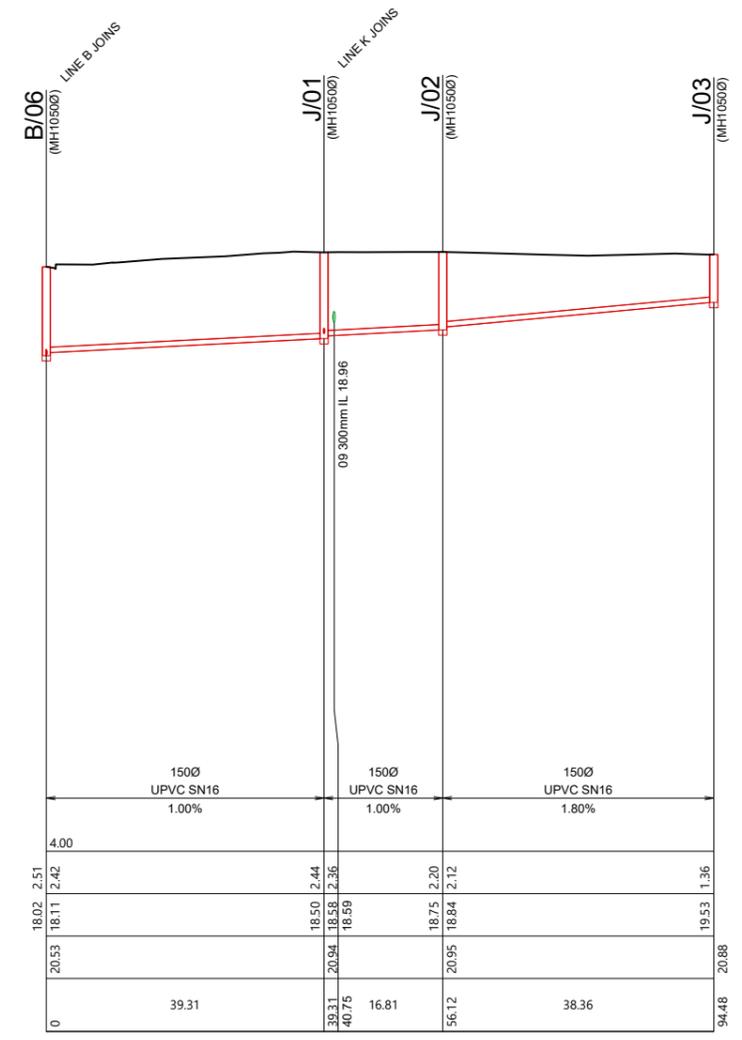
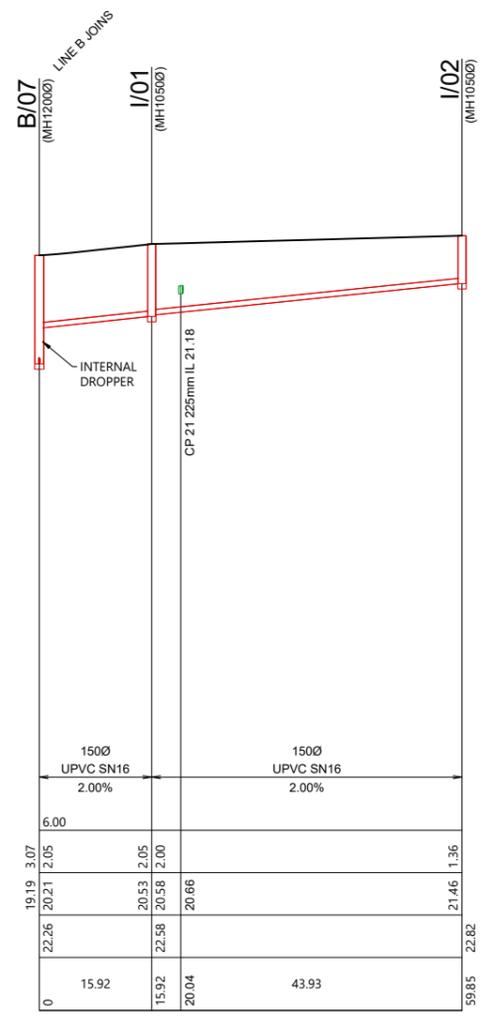
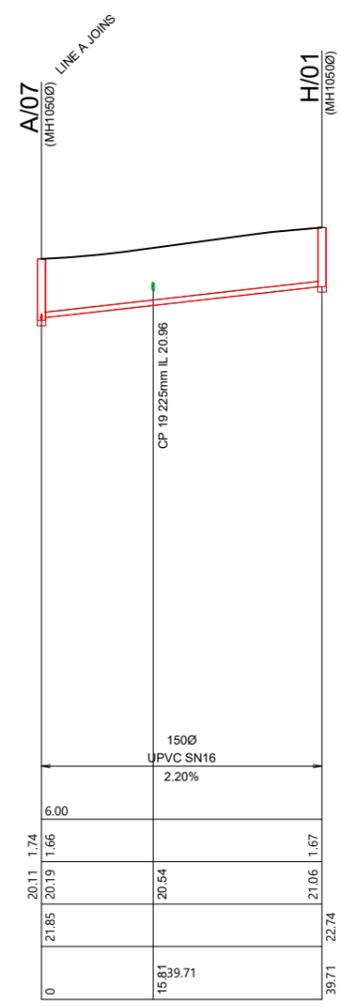
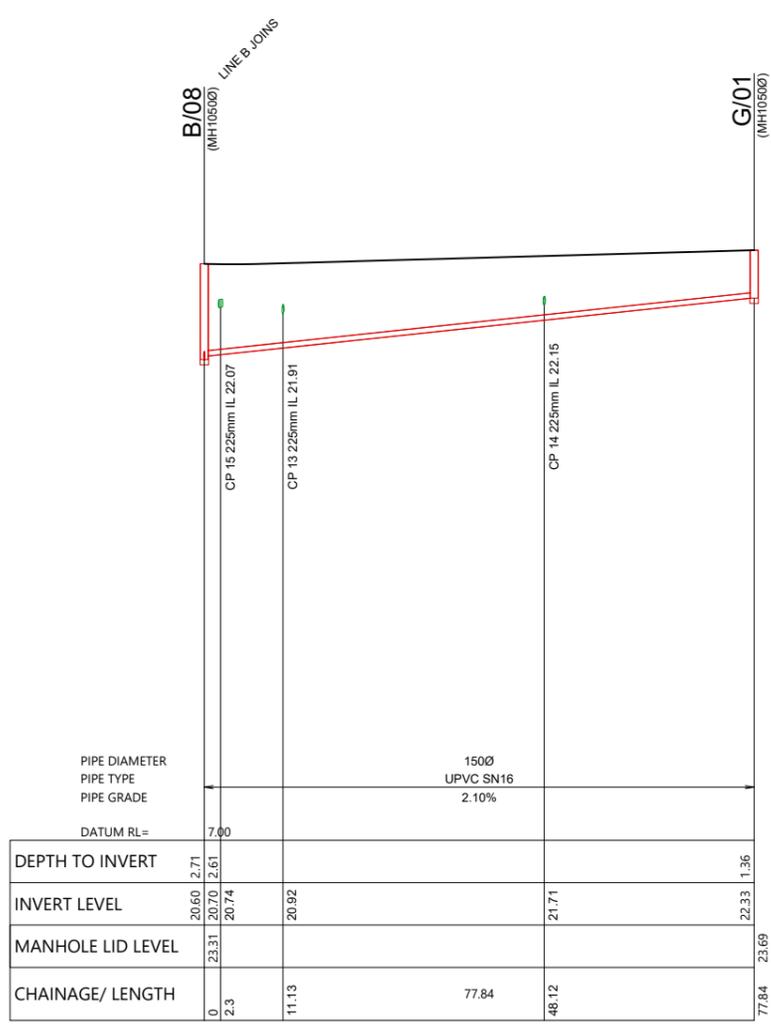
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8 NUGENT ST, GRAFTON,
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ARATAKI DEVELOPMENT - HAVELOCK NORTH

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 | |



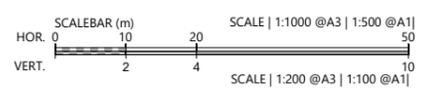
PIPE DIAMETER 1500
 PIPE TYPE UPVC SN16
 PIPE GRADE 2.10%
 DATUM RL= 7.00

PIPE DIAMETER 1500
 PIPE TYPE UPVC SN16
 PIPE GRADE 2.20%

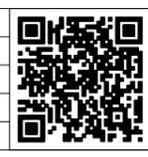
PIPE DIAMETER 1500
 PIPE TYPE UPVC SN16
 PIPE GRADE 2.00%

PIPE DIAMETER 1500
 PIPE TYPE UPVC SN16
 PIPE GRADE 1.00%

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 |

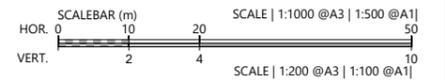
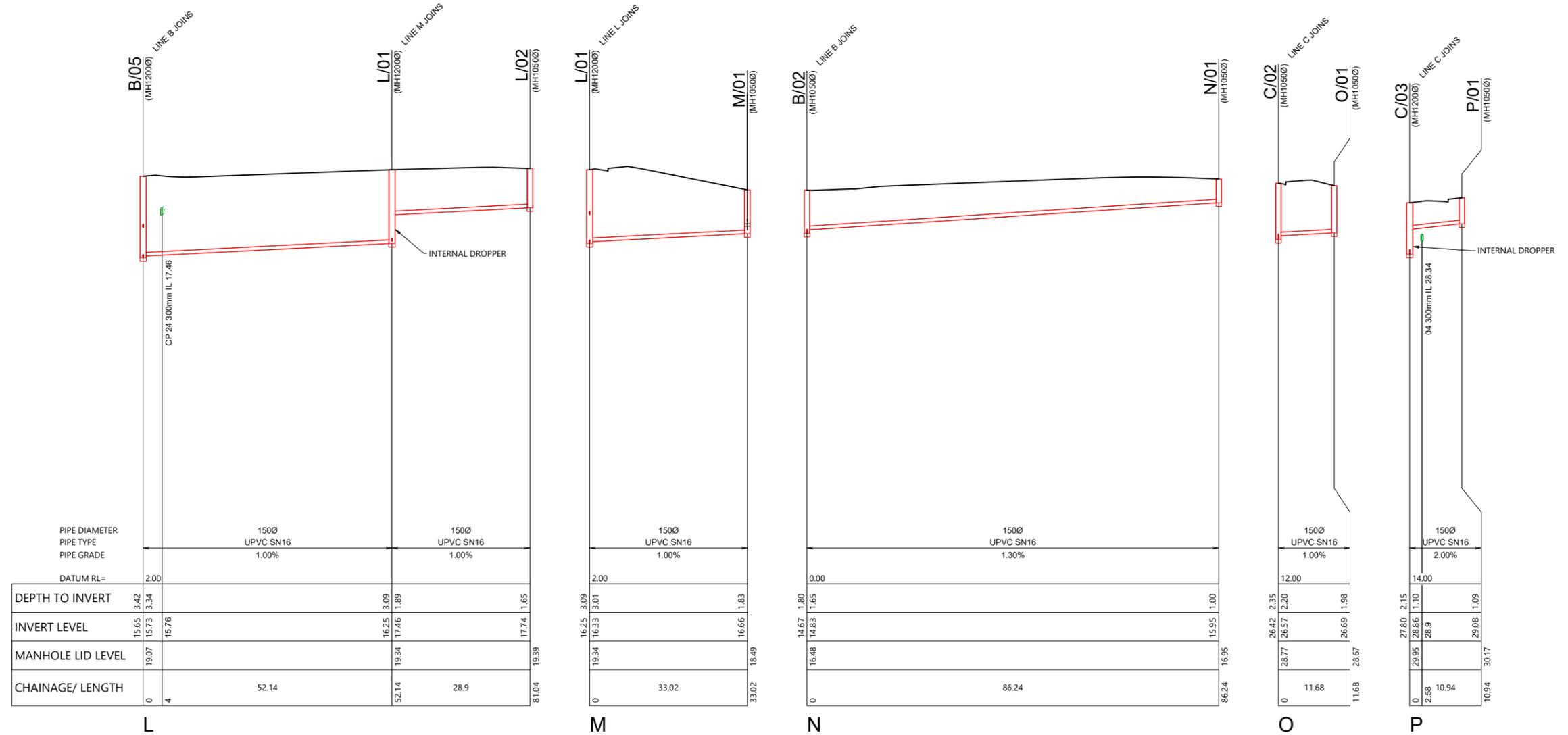


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 8 NUGENT ST, GRAFTON,
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
 WASTEWATER LONGSECTION
 SHEET 7

| 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 | |



| 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

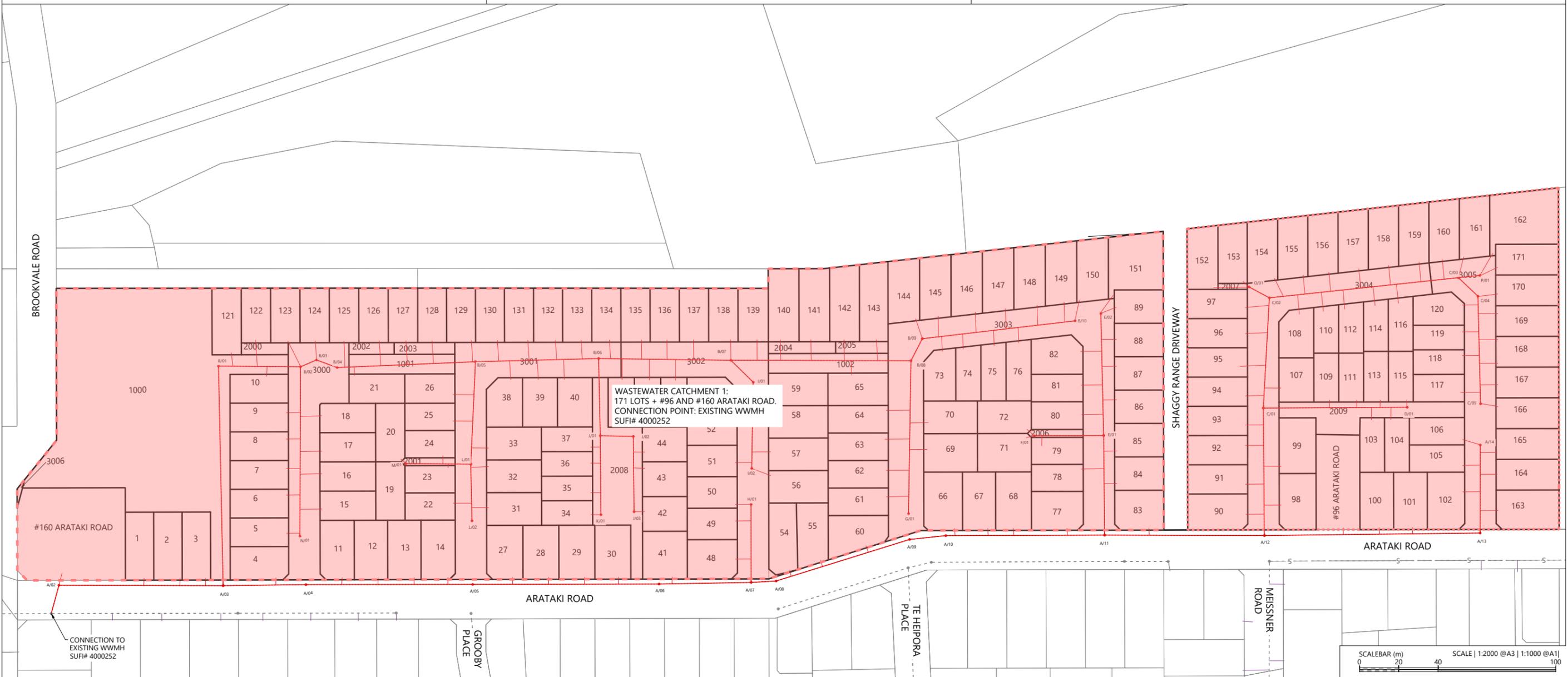
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|---------|---------------------------|-----|
| SCALE | H 1:1000 V 1:200 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-4507-DR | |

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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8 NUGENT ST, GRAFTON,
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
WASTEWATER CATCHMENT PLAN

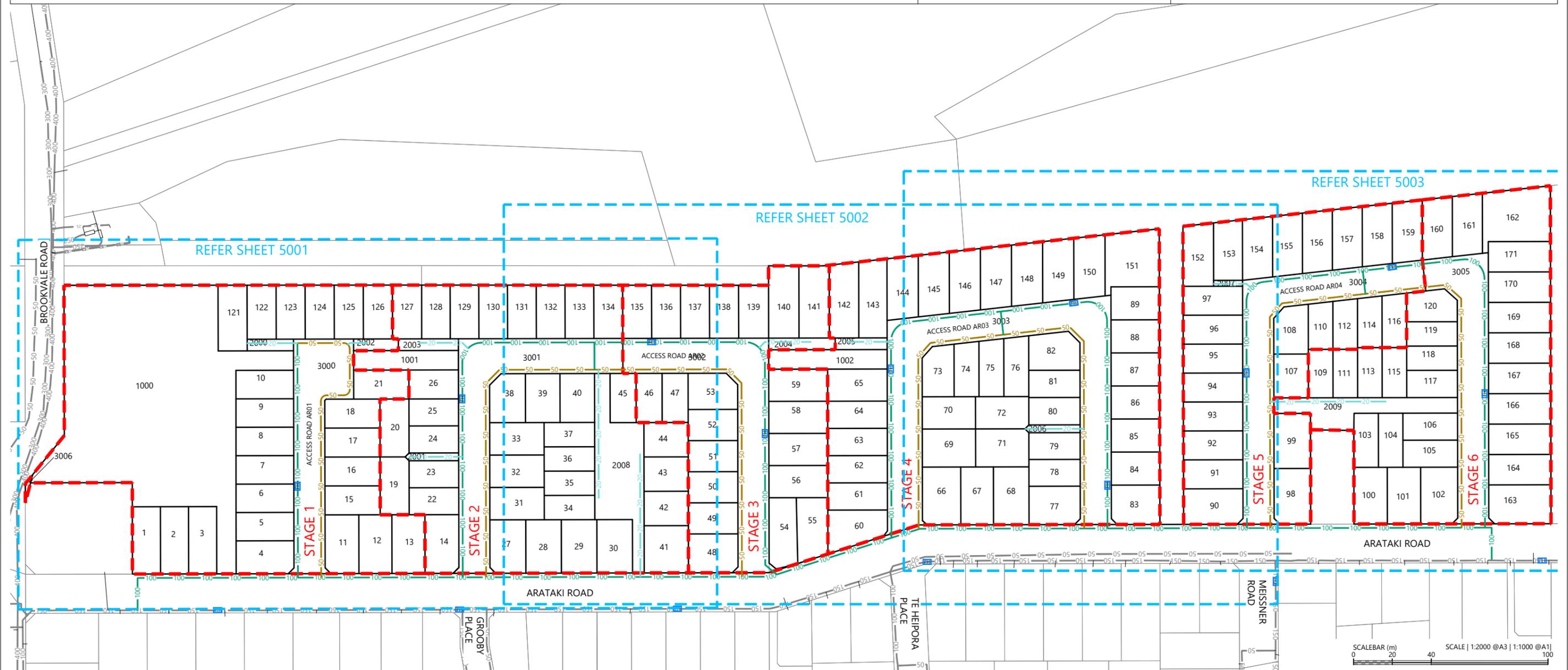
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|---------|---------------------------|-----|
| STATUS | ISSUED FOR CONSENT | REV |
| SCALE | 1:2000 @ A3 | 2 |
| COUNCIL | HASTINGS DISTRICT COUNCIL | |
| DWG NO | P24-244-00-4600-DR | |



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 |

BUILDING B, LEVEL 1
8 NUGENT ST, GRAFTON,
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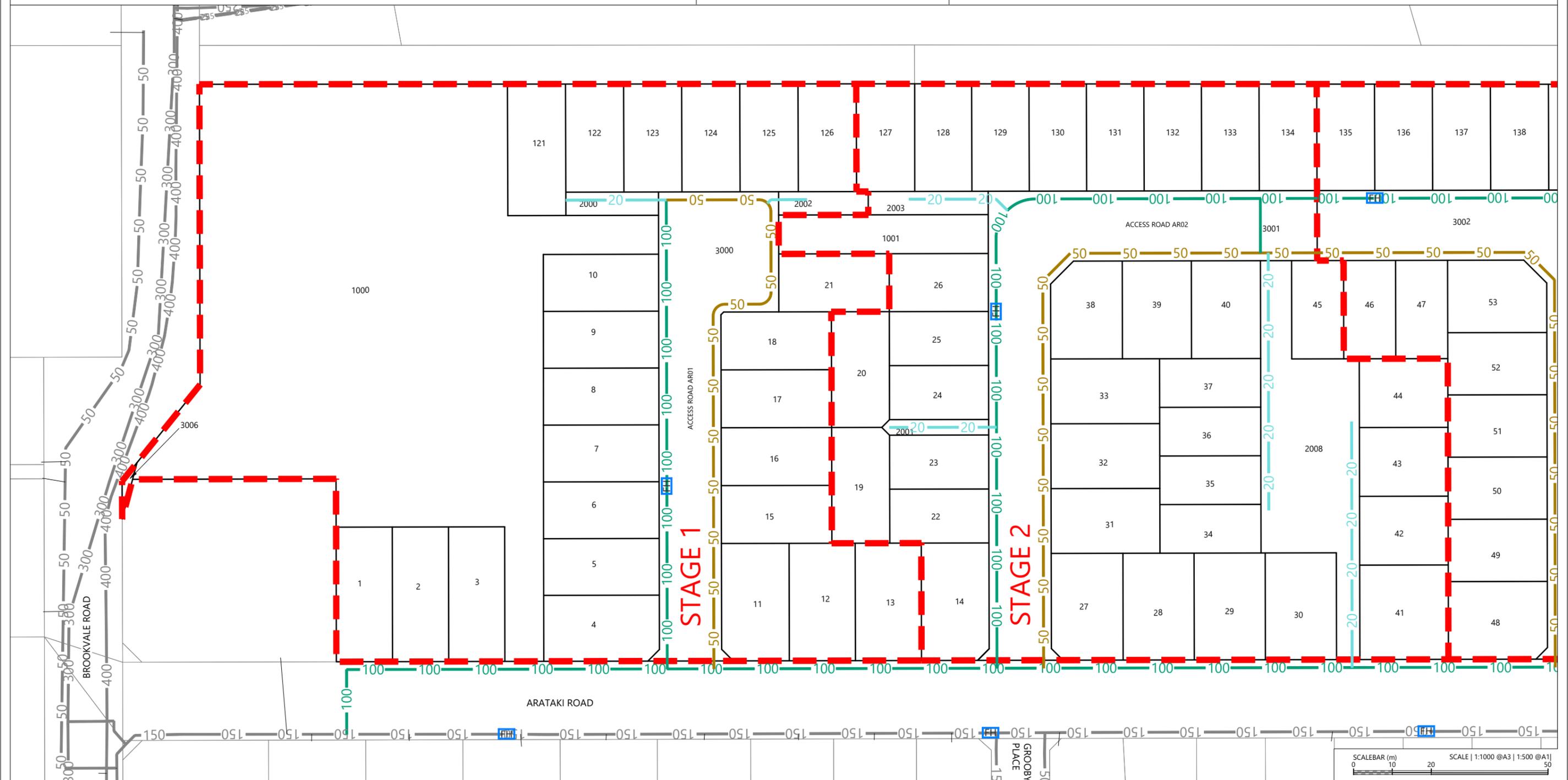
ARATAKI DEVELOPMENT - HAVELOCK NORTH
WATER RETICULATION LAYOUT OVERALL PLAN

| | | |
|---------|--------------------|-----|
| 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.

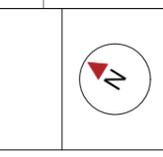


| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
|----------------------|-----|----------|----------|-------|
| 2 ISSUED FOR CONSENT | AS | JUN 2025 | DESIGNED | CJ |
| | | | DRAWN | BM |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |

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 8 NUGENT ST, GRAFTON,
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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 | |

| | |
|--------------------------------------|--|
| 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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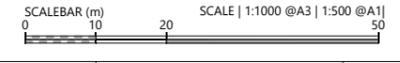


| REVISION DETAILS | INT | DATE | SURVEYED | WOODS |
|----------------------|-----|----------|----------|-------|
| 2 ISSUED FOR CONSENT | AS | JUN 2025 | DESIGNED | CJ |
| | | | DRAWN | BM |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |

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| | BUILDING B, LEVEL 1 8 NUGENT ST, GRAFTON, AUCKLAND 1023 +64 9 308 9229 WOODS.CO.NZ |
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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 | |

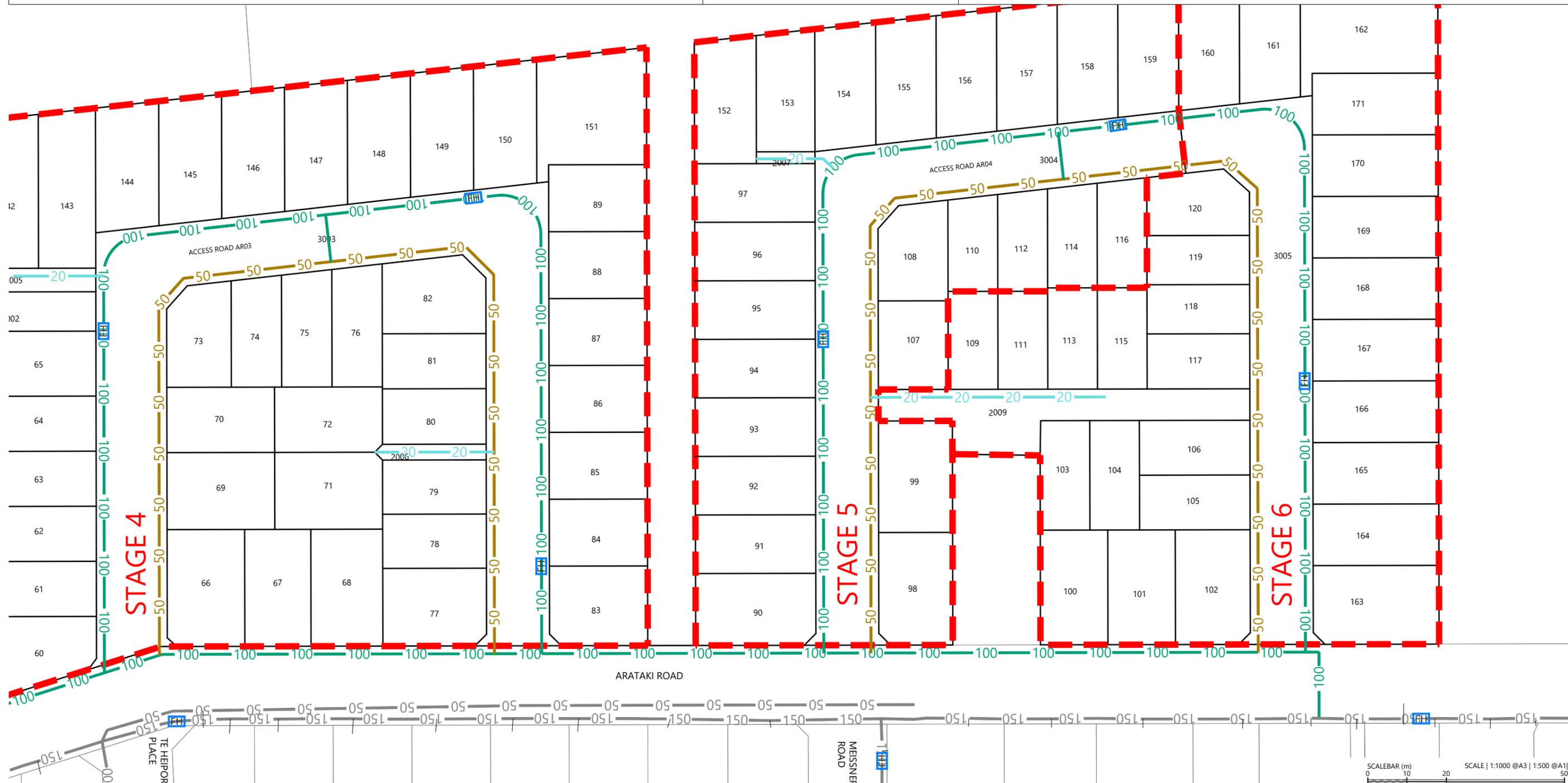


LEGEND

| | |
|--------------------------------------|--|
| 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 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).
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| 2 ISSUED FOR CONSENT | AS | JUN 2025 | DESIGNED | CJ |
| | | | DRAWN | BM |
| | | | CHECKED | BLO |
| | | | APPROVED | BF |



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8 NUGENT ST, GRAFTON,
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ARATAKI DEVELOPMENT - HAVELOCK NORTH
WATER RETICULATION LAYOUT PLAN - SHEET 3



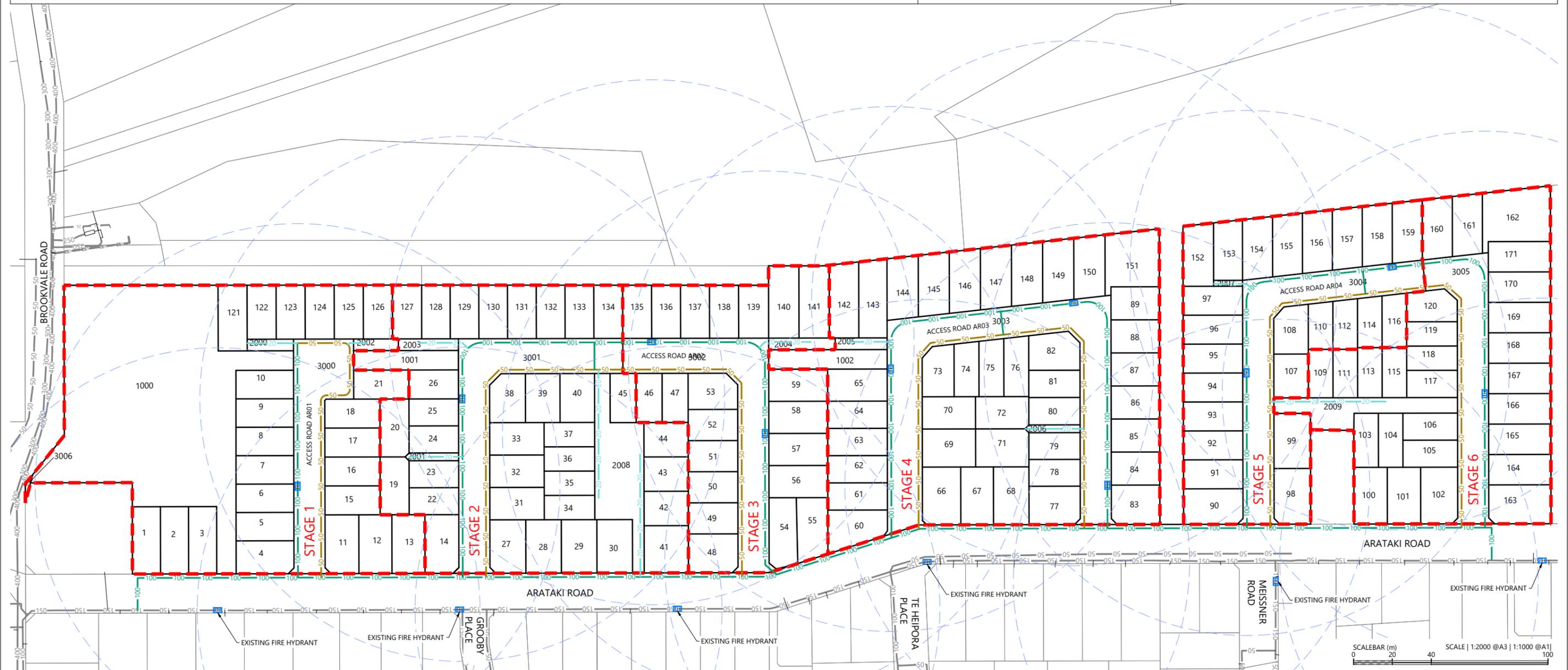
| STATUS | ISSUED FOR CONSENT | REV |
|---------|--------------------|-----|
| SCALE | 1:1000 @ A3 | 2 |
| COUNCIL | AUCKLAND COUNCIL | |
| DWG NO | P24-244-00-5003-WR | |

Plot Date: 1:59:39 pm, 26 June 2025, TIMOTHYB
File: C:\1205\ENERGY\DATA\WPP-PEN-APP-01\P24-244-ARATAKI - HAVELOCK NORTH_2169002 DRAWINGS\01 ENG\P24-244-00-5003-WR-WATER RETICULATION LAYOUT PLAN OVERALL.DWG

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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| REVISION DETAILS | 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 |



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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 | |