

DRAWING NOTE
 DRAWING SET IS INTENDED TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING 001 FOR DRAWING SCHEDULE. REFER TO DRAWING 002 FOR APPLICABLE NOTES AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

LEGEND	
AREA TYPE	SHOWN
PERMANENT STREAMS	
INTERMITTENT STREAMS	
OVERGROWN TRACK	
10m WETLAND SETBACK	
REGENERATING KANUKA FOREST	
EXOTIC - INDIGENOUS REGENERATING VEGETATION	

CUT/FILL DEPTHS TABLE		
LOWER RANGE (m)	UPPER RANGE (m)	COLOUR
-6.00	-5.00	
-5.00	-4.00	
-4.00	-3.00	
-3.00	-2.00	
-2.00	-1.00	
-1.00	0.00	
0.00	1.00	
1.00	2.00	
2.00	3.00	
3.00	4.00	
4.00	5.00	
5.00	6.00	

AREA OF EARTHWORKS: 14124m²

EARTHWORK VOLUMES (m ³)		
CUT	FILL	NET (CUT)
8687	7260	1427

EARTHWORKS VOLUMES WITHIN 10m STREAM SET BACK

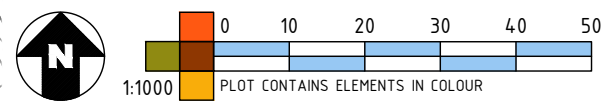
275	44	
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OPUA RECREATION AREA
 RECREATION RESERVE
 SECTION 4 BLOCK VIII
 KAWAKAWA SD

Rev	Date	Amendments	VR By
0	31/05/24	INITIAL ISSUE	

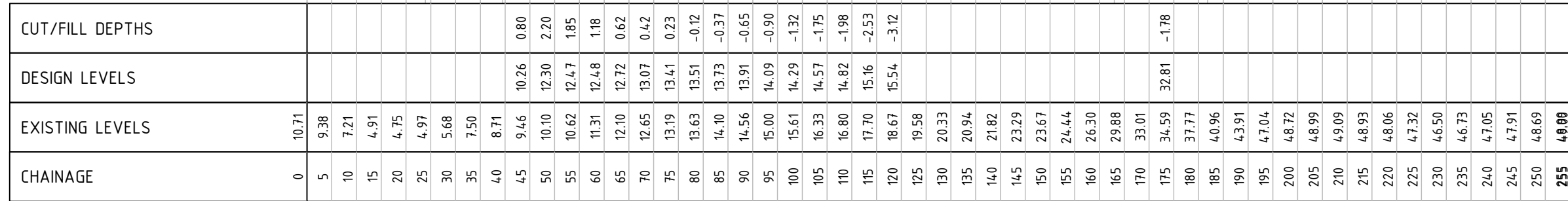
Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHTAHI RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: EARTHWORKS PLAN

Drawing: 200 Rev: 0
 Scale: 1:1000 @ A3
 Project: 15569
 Issue: CONSENT



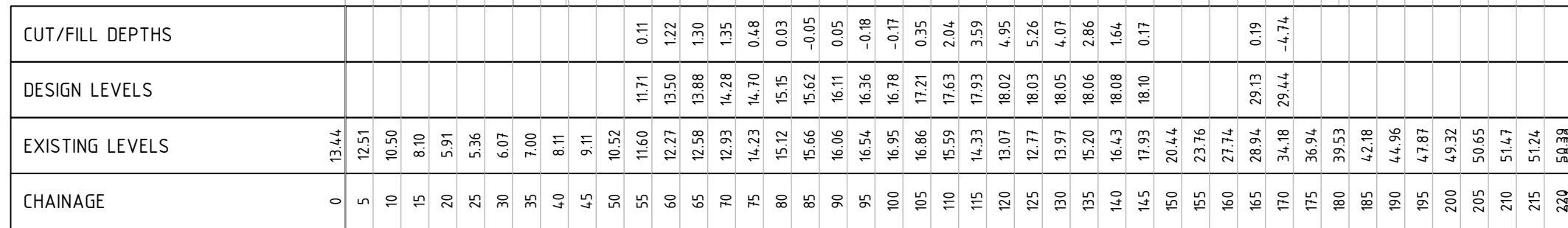
LONGSECTION LEGEND	
EXISTING GROUND	
PROPOSED GROUND	
ALL MEASUREMENTS IN METRES	

1
DATUM: 2.00
VERT. EXAGGERATION 1:1

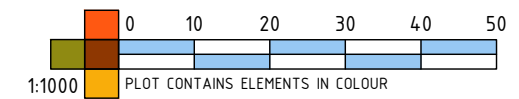


INDICATIVE SHEAR KEY AND
GEOGRID REINFORCED BUTTRESS
FILL

2
DATUM: 2.00
VERT. EXAGGERATION 1:1



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Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

Drafter: V. RIVIER

Designer: N. JULL

Checker: J. CHEN

Date: 31/05/2024

Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION

Client: HERON POINT LIMITED

Address: 45 & 47 HIHITAHU RISE, PAIHIA.

Drawing Title: BULK EARTHWORKS LS 01

Drawing: 201 Rev: 0

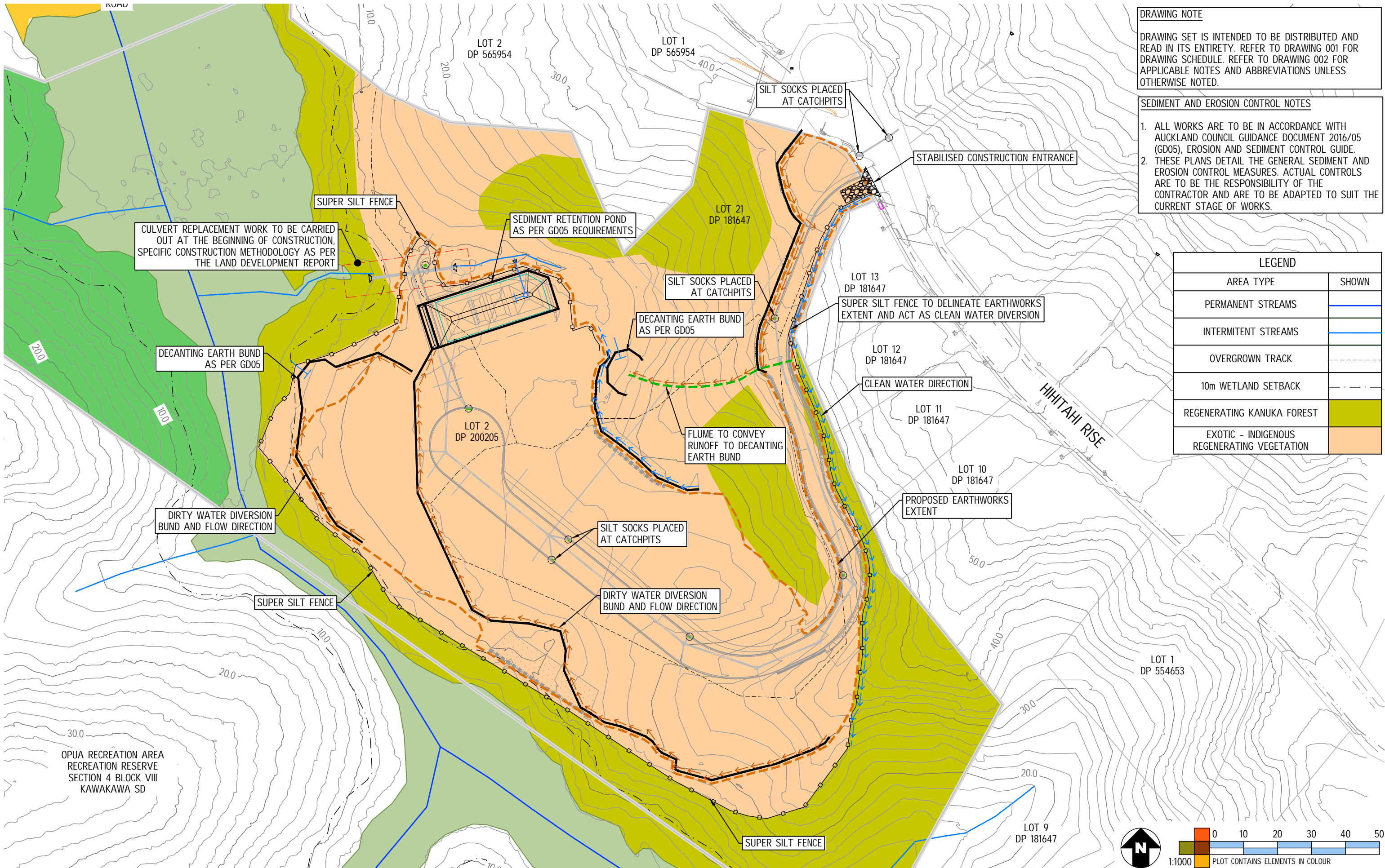
Scale: 1:1000 @ A3

Project: 15569

Issue: CONSENT



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DRAWING NOTE
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SEDIMENT AND EROSION CONTROL NOTES

- ALL WORKS ARE TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL GUIDANCE DOCUMENT 2016/05 (GD05), EROSION AND SEDIMENT CONTROL GUIDE.
- THESE PLANS DETAIL THE GENERAL SEDIMENT AND EROSION CONTROL MEASURES. ACTUAL CONTROLS ARE TO BE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE ADAPTED TO SUIT THE CURRENT STAGE OF WORKS.

LEGEND	
AREA TYPE	SHOWN
PERMANENT STREAMS	
INTERMITENT STREAMS	
OVERGROWN TRACK	
10m WETLAND SETBACK	
REGENERATING KANUKA FOREST	
EXOTIC - INDIGENOUS REGENERATING VEGETATION	

CULVERT REPLACEMENT WORK TO BE CARRIED OUT AT THE BEGINNING OF CONSTRUCTION, SPECIFIC CONSTRUCTION METHODOLOGY AS PER THE LAND DEVELOPMENT REPORT

SEDIMENT RETENTION POND AS PER GD05 REQUIREMENTS

SILT SOCKS PLACED AT CATCHPITS

DECANTING EARTH BUND AS PER GD05

DECANTING EARTH BUND AS PER GD05

SUPER SILT FENCE TO DELINEATE EARTHWORKS EXTENT AND ACT AS CLEAN WATER DIVERSION

CLEAN WATER DIRECTION

FLUME TO CONVEY RUNOFF TO DECANTING EARTH BUND

DIRTY WATER DIVERSION BUND AND FLOW DIRECTION

SILT SOCKS PLACED AT CATCHPITS

DIRTY WATER DIVERSION BUND AND FLOW DIRECTION

SUPER SILT FENCE

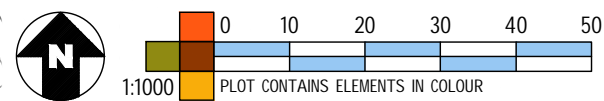
SUPER SILT FENCE

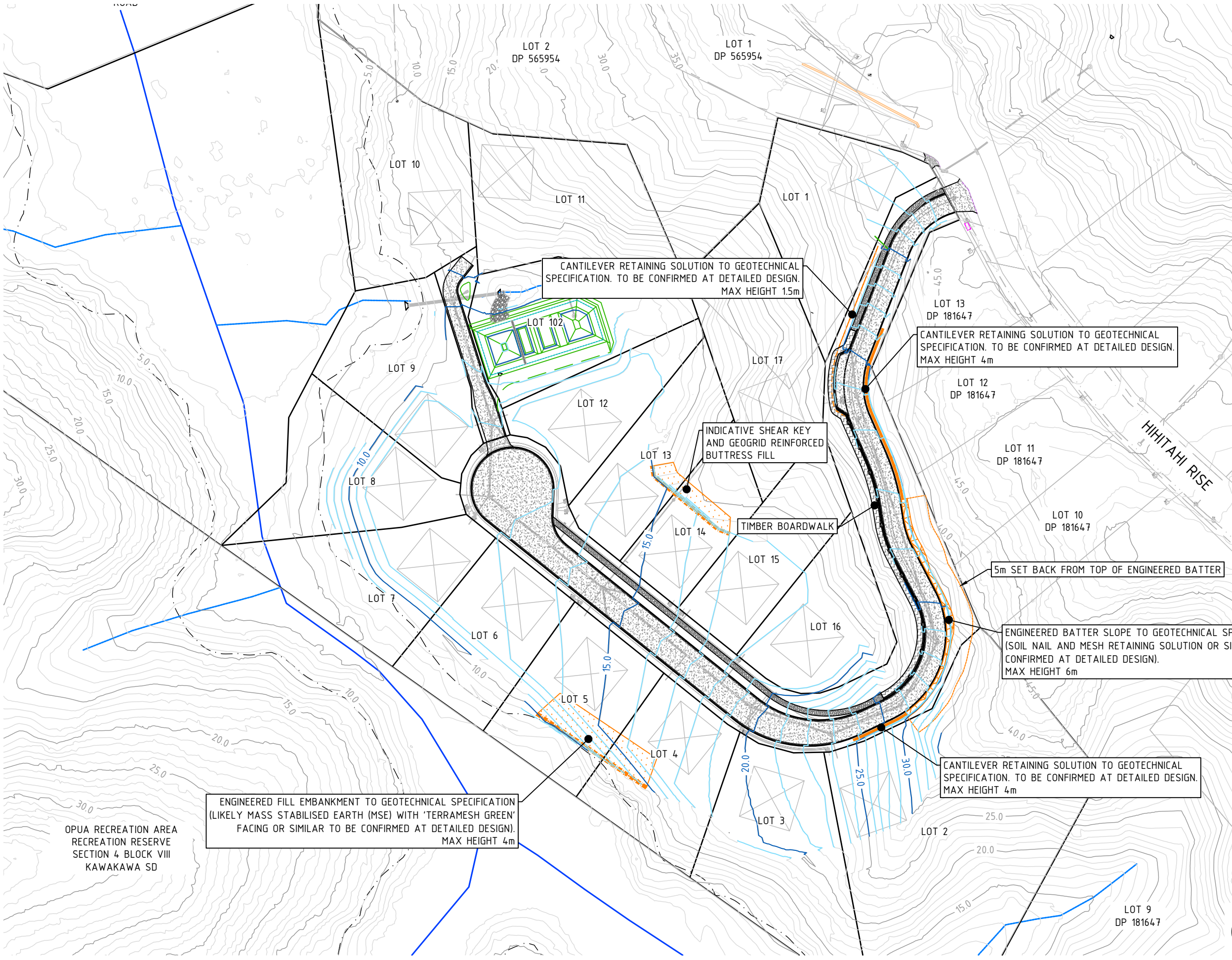
OPUA RECREATION AREA
 RECREATION RESERVE
 SECTION 4 BLOCK VIII
 KAWAKAWA SD

Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: EROSION AND SEDIMENT CONTROL PLAN

Drawing: 210 Rev: 0
 Scale: 1:1000 @ A3
 Project: 15569
 Issue: CONSENT





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THREE WATERS LEGEND	
EX / PROP PRIV. SW PIPE	— / —
EX / PROP PRIV. WW PIPE	— / —
EX / PROP PUBLIC SW PIPE	— / —
EX / PROP PUBLIC WW PIPE	— / —
EX / PROP SWIC	○ / ○
EX / PROP SWCP	□ / □
EX / PROP WWIC	○ / ○
CONNECTION DIRECTION	N,NE,E,SE,S,SW,W,NW
EX / PROP WS PIPE	— / —

ALL MEASUREMENTS IN METRES

ENGINEERED FILL EMBANKMENT TO GEOTECHNICAL SPECIFICATION (LIKELY MASS STABILISED EARTH (MSE) WITH 'TERRAMESH GREEN' FACING OR SIMILAR TO BE CONFIRMED AT DETAILED DESIGN). MAX HEIGHT 4m

CANTILEVER RETAINING SOLUTION TO GEOTECHNICAL SPECIFICATION. TO BE CONFIRMED AT DETAILED DESIGN. MAX HEIGHT 1.5m

CANTILEVER RETAINING SOLUTION TO GEOTECHNICAL SPECIFICATION. TO BE CONFIRMED AT DETAILED DESIGN. MAX HEIGHT 4m

INDICATIVE SHEAR KEY AND GEOGRID REINFORCED BUTTRESS FILL

TIMBER BOARDWALK

5m SET BACK FROM TOP OF ENGINEERED BATTER

ENGINEERED BATTER SLOPE TO GEOTECHNICAL SPECIFICATION (SOIL NAIL AND MESH RETAINING SOLUTION OR SIMILAR TO BE CONFIRMED AT DETAILED DESIGN). MAX HEIGHT 6m

CANTILEVER RETAINING SOLUTION TO GEOTECHNICAL SPECIFICATION. TO BE CONFIRMED AT DETAILED DESIGN. MAX HEIGHT 4m

- RETAINING NOTES**
1. RETAINING WALLS SHOWN IN PLANS ARE INDICATIVE TO ILLUSTRATE LOCATIONS AND EXTENTS.
 2. SPECIFIC RETAINING WALL TYPE AND DESIGN PER STRUCTURAL AND GEOTECHNICAL ENGINEERS.

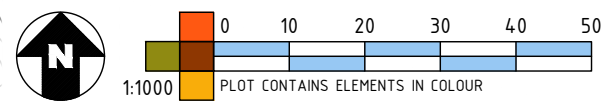
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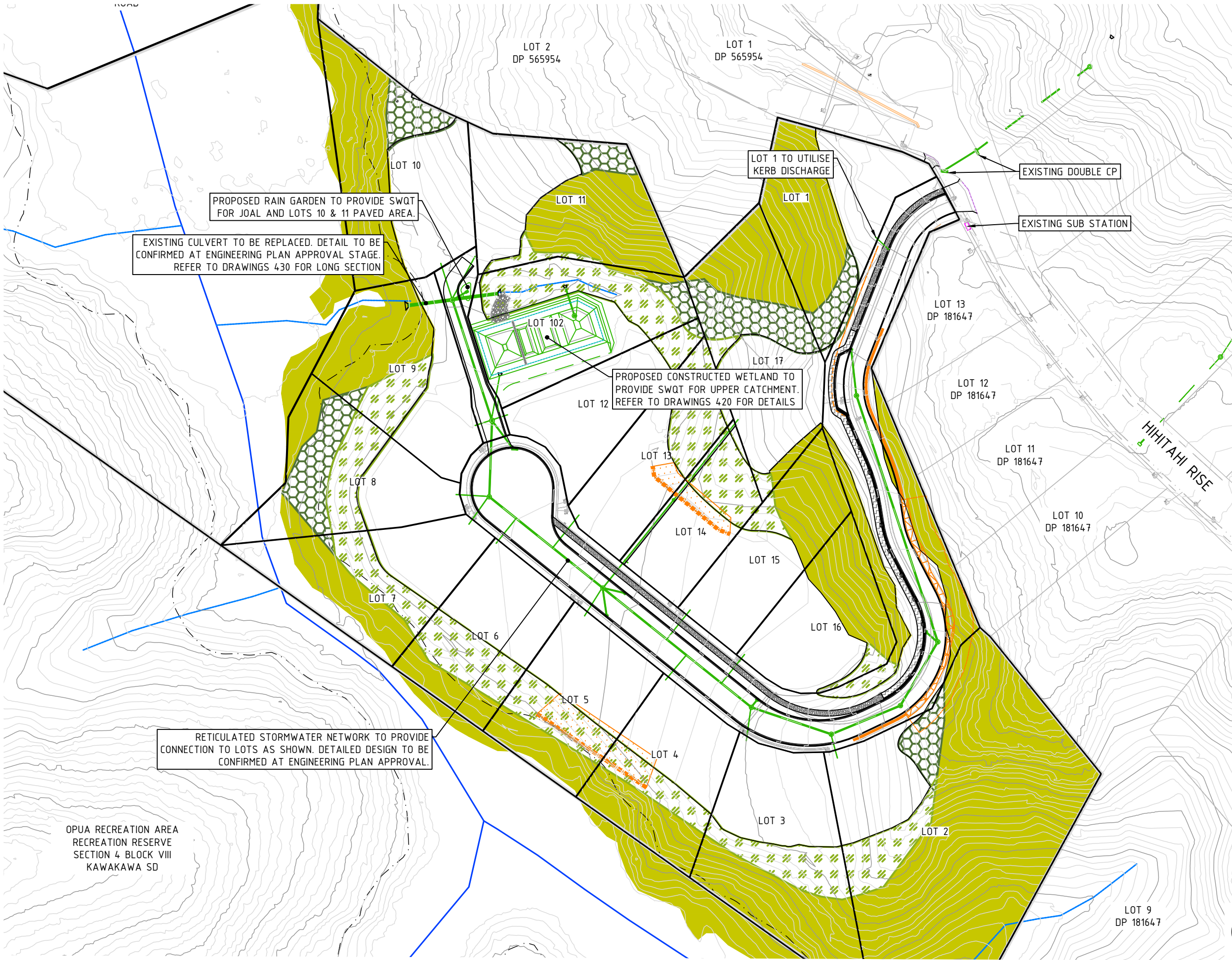
Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

Drafter: V. RIVIER
 Designer: N. JULL
 Checker: J. CHEN
 Date: 31/05/2024

Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Client: HERON POINT LIMITED
 Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Drawing Title: RETAINING WALL PLAN

Drawing: 300 Rev: 0
 Scale: 1:1000 @ A3
 Project: 15569
 Issue: CONSENT





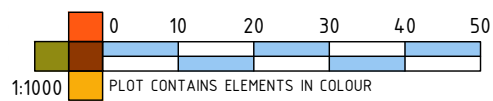
DRAWING NOTE
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THREE WATERS LEGEND	
EX / PROP PRIV. SW PIPE	
EX / PROP PRIV. WW PIPE	
EX / PROP PUBLIC SW PIPE	
EX / PROP PUBLIC WW PIPE	
EX / PROP SWIC	
EX / PROP SWCP	
EX / PROP WWIC	
CONNECTION DIRECTION	N,NE,E,SE,S,SW,W,NW
EX / PROP WS PIPE	

ALL MEASUREMENTS IN METRES

LEGEND	
AREA TYPE	SHOWN
PERMANENT STREAMS	
INTERMITTENT STREAMS	
10m WETLAND SETBACK	
REGENERATING KANUKA FOREST	

PLANTING LEGEND	
AREA TYPE	SHOWN
MIXED NATIVE RETAINED/PLANTED	
FIRE RETARDANT NATIVE SPECIES PLANTING	



Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

Drafter: V. RIVIER **Job Title:** CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
Designer: N. JULL **Client:** HERON POINT LIMITED
Checker: J. CHEN **Address:** 45 & 47 HIHTAHI RISE, PAIHIA.
Date: 31/05/2024 **Drawing Title:** STORMWATER LAYOUT PLAN

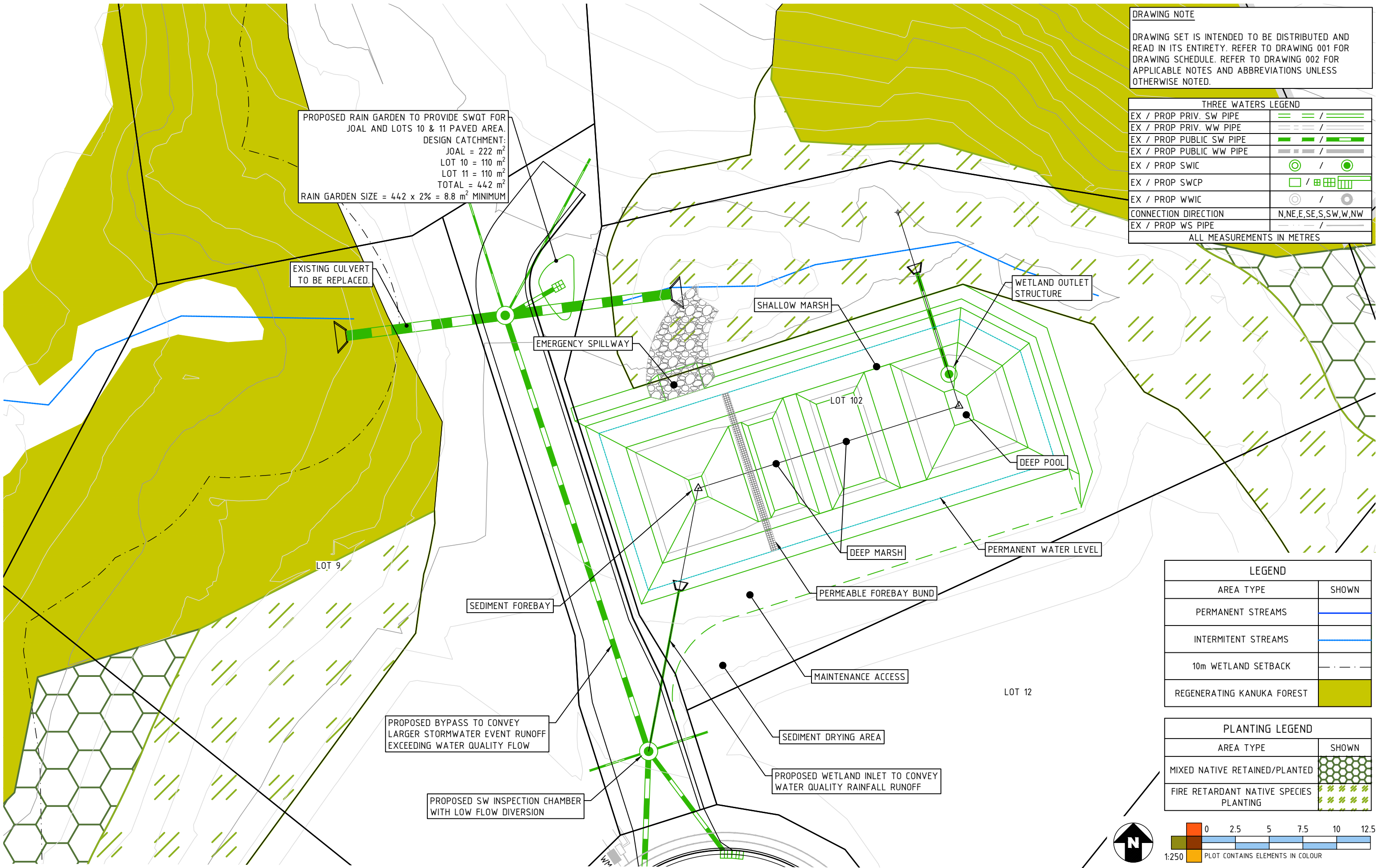
Drawing: 400 **Rev:** 0
Scale: 1:1000 @ A3
Project: 15569
Issue: CONSENT

DRAWING NOTE
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THREE WATERS LEGEND	
EX / PROP PRIV. SW PIPE	
EX / PROP PRIV. WW PIPE	
EX / PROP PUBLIC SW PIPE	
EX / PROP PUBLIC WW PIPE	
EX / PROP SWIC	
EX / PROP SWCP	
EX / PROP WWIC	
CONNECTION DIRECTION	N,NE,E,SE,S,SW,W,NW
EX / PROP WS PIPE	

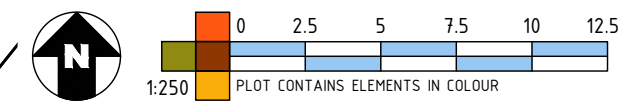
ALL MEASUREMENTS IN METRES

PROPOSED RAIN GARDEN TO PROVIDE SWQT FOR JOAL AND LOTS 10 & 11 PAVED AREA.
 DESIGN CATCHMENT:
 JOAL = 222 m²
 LOT 10 = 110 m²
 LOT 11 = 110 m²
 TOTAL = 442 m²
 RAIN GARDEN SIZE = 442 x 2% = 8.8 m² MINIMUM



LEGEND	
AREA TYPE	SHOWN
PERMANENT STREAMS	
INTERMITENT STREAMS	
10m WETLAND SETBACK	
REGENERATING KANUKA FOREST	

PLANTING LEGEND	
AREA TYPE	SHOWN
MIXED NATIVE RETAINED/PLANTED	
FIRE RETARDANT NATIVE SPECIES PLANTING	



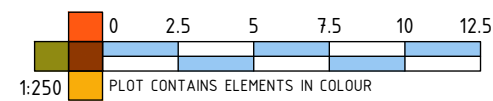
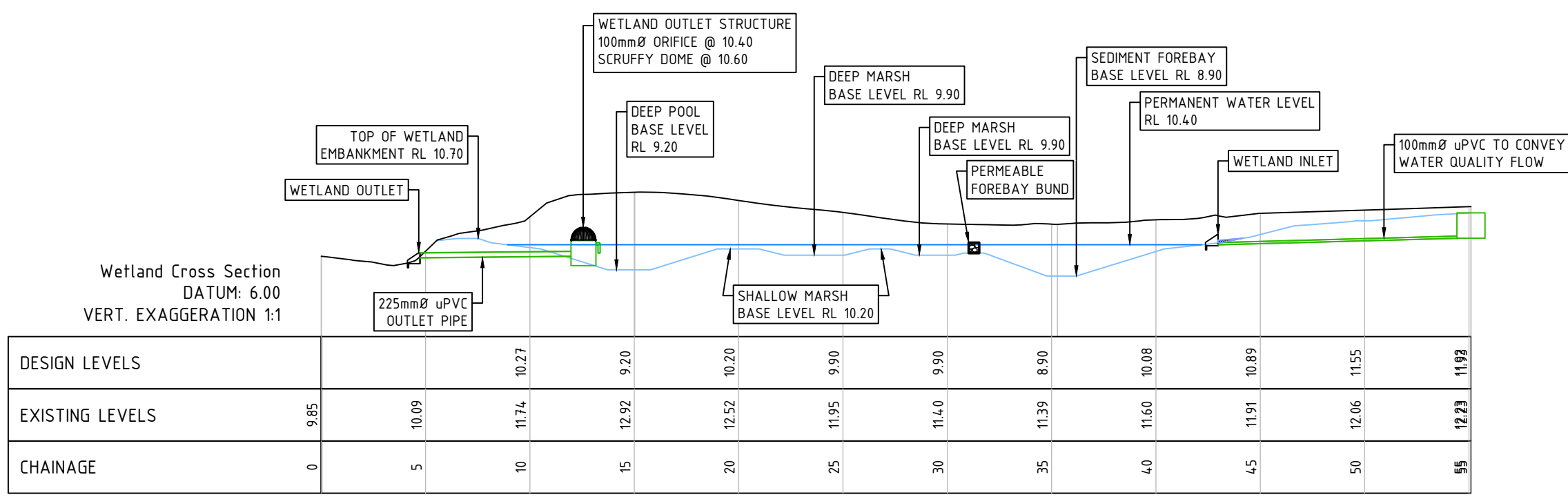
Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: PROPOSED WETLAND PLAN

Drawing: 420 Rev: 0
 Scale: 1:250 @ A3
 Project: 15569
 Issue: CONSENT

DRAWING NOTE
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LONGSECTION LEGEND	
EXISTING GROUND	
PROPOSED GROUND	
ALL MEASUREMENTS IN METRES	



Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: WETLAND CROSS SECTION

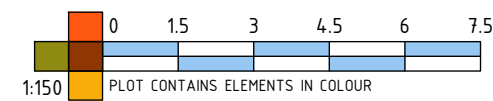
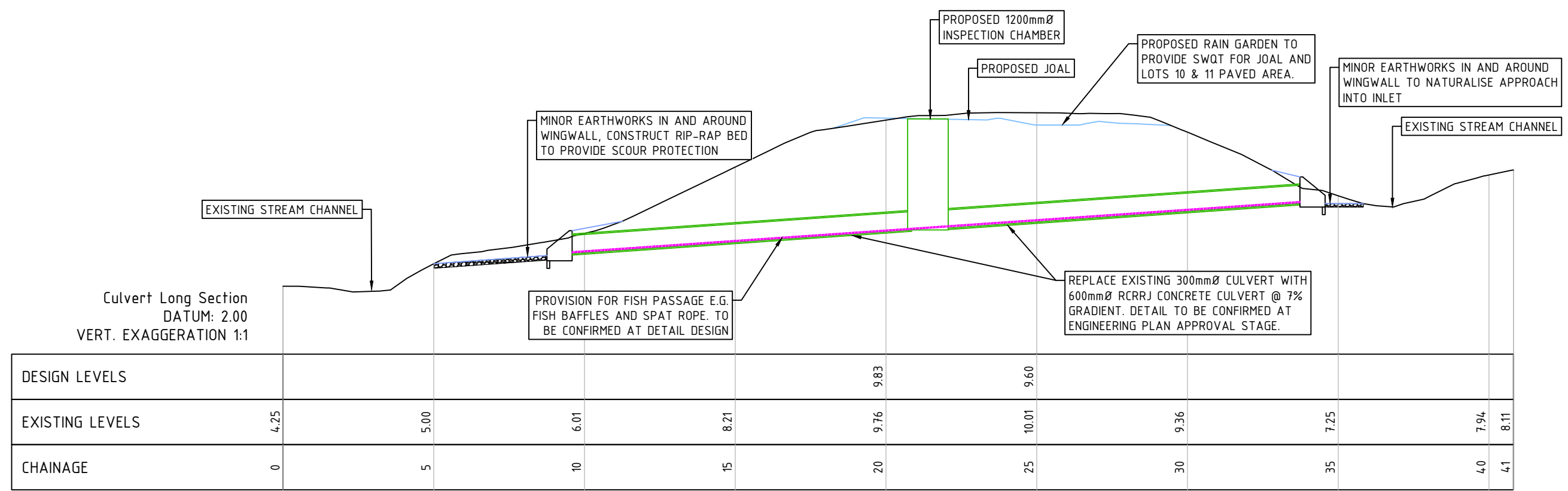
Drawing: 421 Rev: 0
 Scale: 1:250 @ A3
 Project: 15569
 Issue: CONSENT



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LONGSECTION LEGEND	
EXISTING GROUND	
PROPOSED GROUND	
ALL MEASUREMENTS IN METRES	



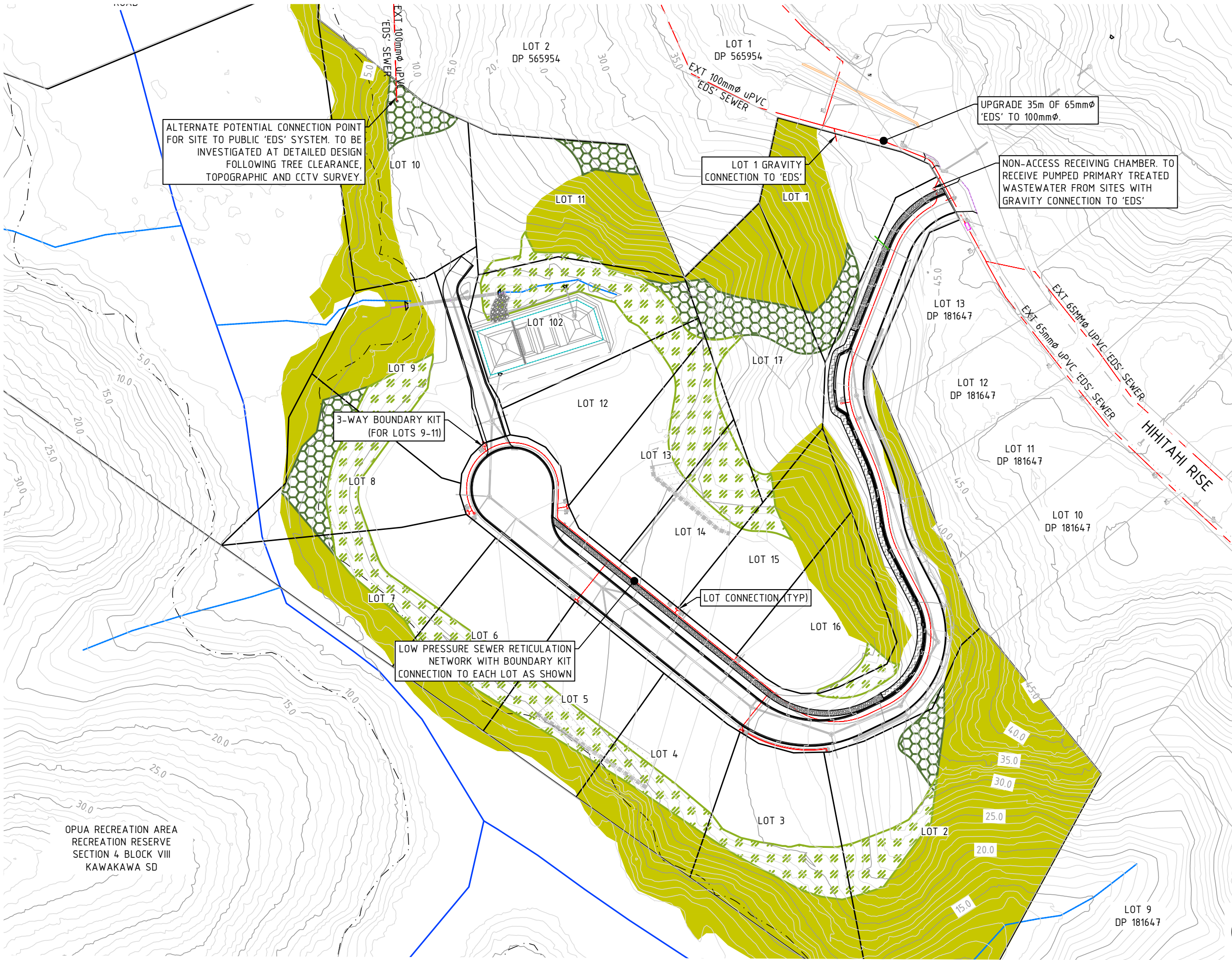
Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: CULVERT LONG SECTION

Drawing: 430 Rev: 0
 Scale: 1:150 @ A3
 Project: 15569
 Issue: CONSENT

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DRAWING NOTE

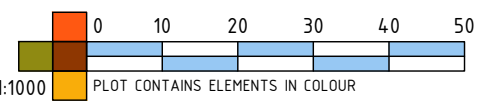
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THREE WATERS LEGEND	
EX / PROP PRIV. SW PIPE	
EX / PROP PRIV. WW PIPE	
EX / PROP PUBLIC SW PIPE	
EX / PROP PUBLIC WW PIPE	
EX / PROP SWIC	
EX / PROP SWCP	
EX / PROP WWIC	
CONNECTION DIRECTION	N,NE,E,SE,S,SW,W,NW
EX / PROP WS PIPE	

ALL MEASUREMENTS IN METRES

LEGEND	
AREA TYPE	SHOWN
PERMANENT STREAMS	
INTERMITTENT STREAMS	
10m WETLAND SETBACK	
REGENERATING KANUKA FOREST	

PLANTING LEGEND	
AREA TYPE	SHOWN
MIXED NATIVE RETAINED/PLANTED	
FIRE RETARDANT NATIVE SPECIES PLANTING	

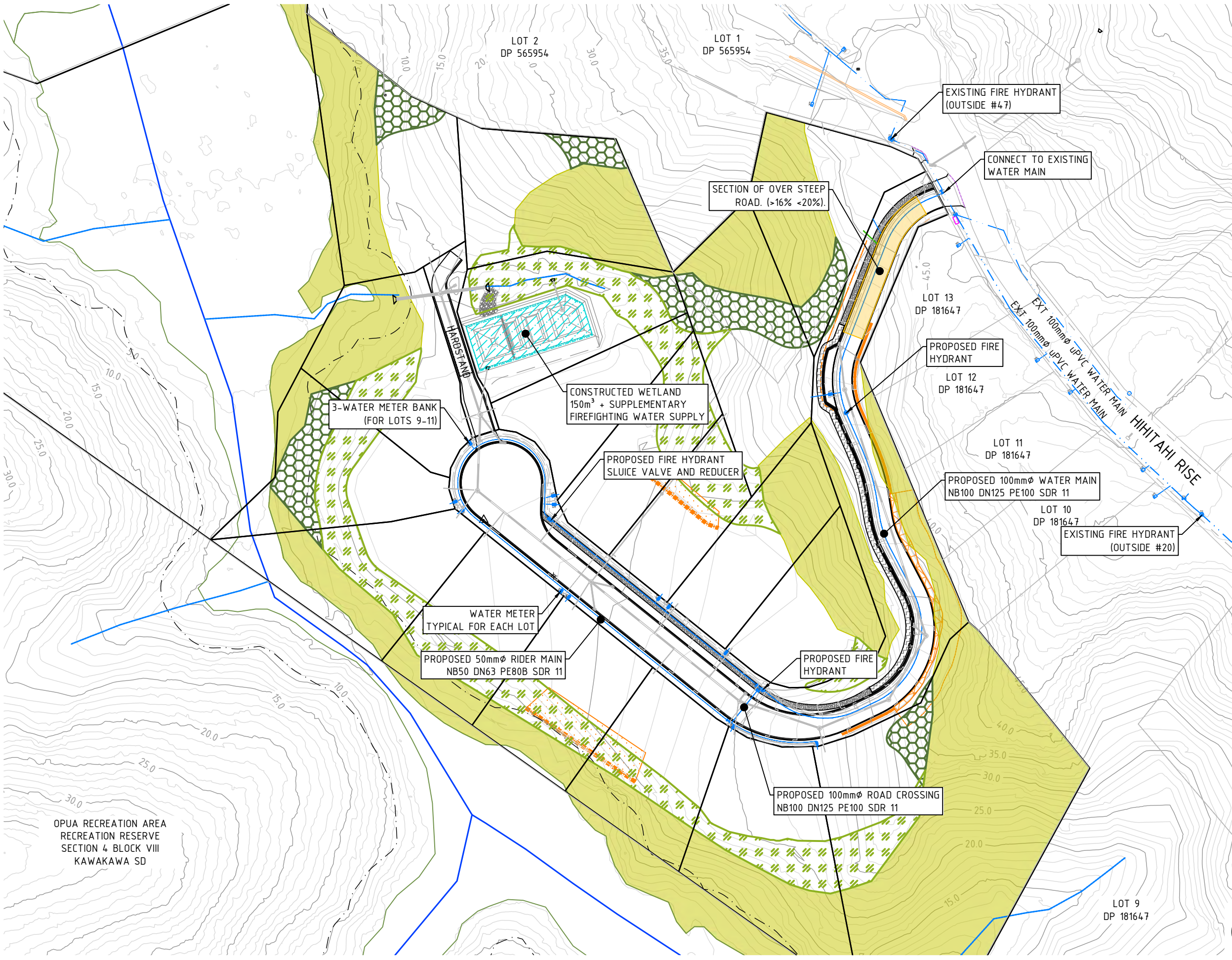


0	31/05/24	INITIAL ISSUE	VR
Rev	Date	Amendments	By

Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: WASTEWATER LAYOUT PLAN

Drawing: 500 Rev: 0
 Scale: 1:1000 @ A3
 Project: 15569
 Issue: CONSENT

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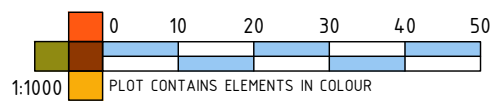
DRAWING NOTE
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THREE WATERS LEGEND	
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EX / PROP PRIV. WW PIPE	
EX / PROP PUBLIC SW PIPE	
EX / PROP PUBLIC WW PIPE	
EX / PROP SWIC	
EX / PROP SWCP	
EX / PROP WWIC	
CONNECTION DIRECTION	N,NE,E,SE,S,SW,W,NW
EX / PROP WS PIPE	

ALL MEASUREMENTS IN METRES

LEGEND	
AREA TYPE	SHOWN
PERMANENT STREAMS	
INTERMITTENT STREAMS	
10m WETLAND SETBACK	
REGENERATING KANUKA FOREST	

PLANTING LEGEND	
AREA TYPE	SHOWN
MIXED NATIVE RETAINED/PLANTED	
FIRE RETARDANT NATIVE SPECIES PLANTING	

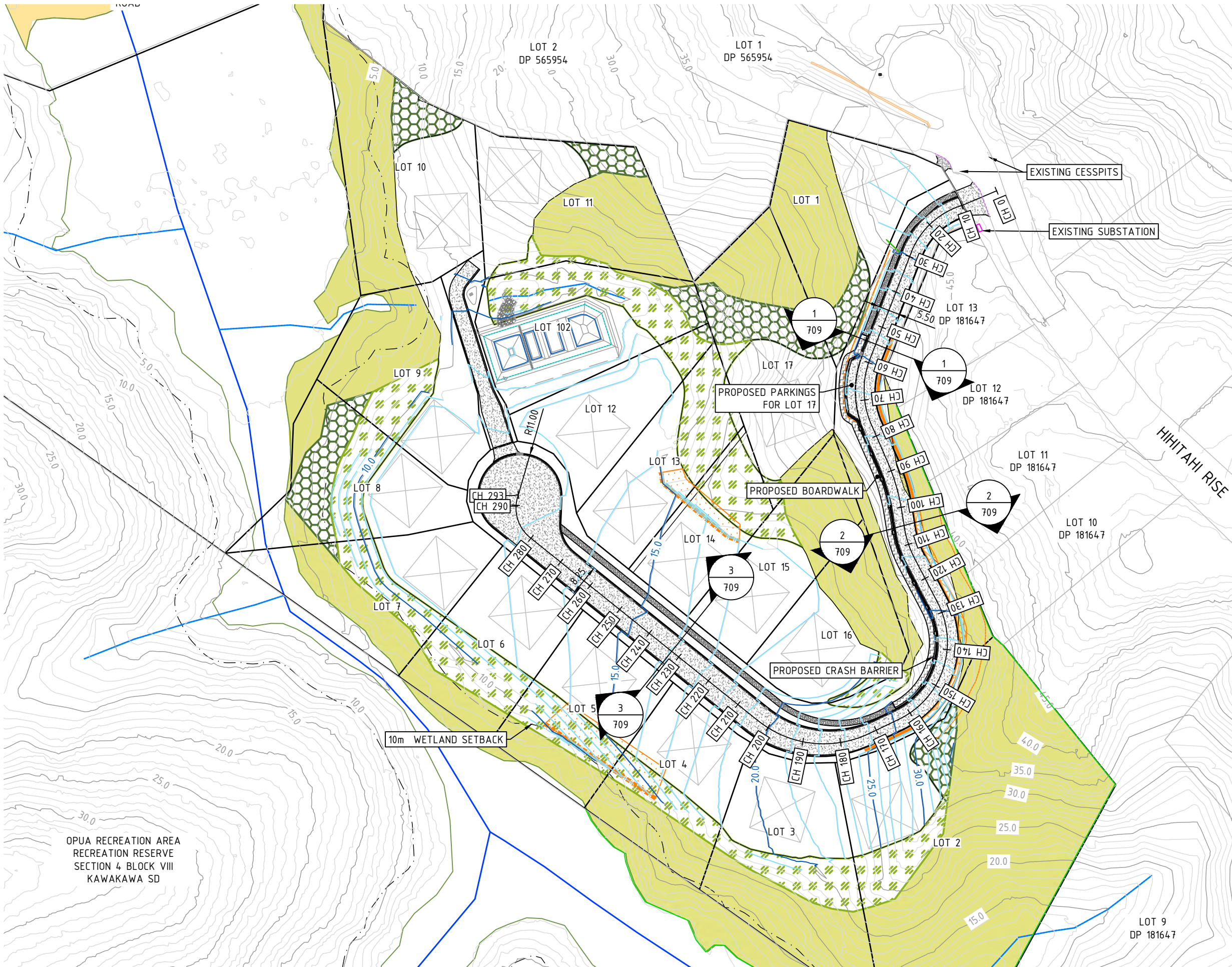


OPUA RECREATION AREA
 RECREATION RESERVE
 SECTION 4 BLOCK VIII
 KAWAKAWA SD

Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: WATER SUPPLY LAYOUT PLAN

Drawing: 600 Rev: 0
 Scale: 1:1000 @ A3
 Project: 15569
 Issue: CONSENT



DRAWING NOTE
 DRAWING SET IS INTENDED TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING 001 FOR DRAWING SCHEDULE. REFER TO DRAWING 002 FOR APPLICABLE NOTES AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

LEGEND	
AREA TYPE	SHOWN
PERMANENT STREAMS	
INTERMITTENT STREAMS	
10m WETLAND SETBACK	
REGENERATING KANUKA FOREST	

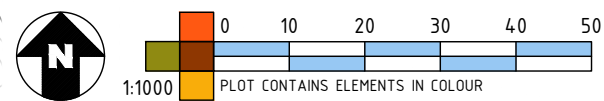
PLANTING LEGEND	
AREA TYPE	SHOWN
MIXED NATIVE RETAINED/PLANTED	
FIRE RETARDANT NATIVE SPECIES PLANTING	

OPUA RECREATION AREA
 RECREATION RESERVE
 SECTION 4 BLOCK VIII
 KAWAKAWA SD

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Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHTAHI RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: ROADING PLAN

Drawing: 700 Rev: 0
 Scale: 1:1000 @ A3
 Project: 15569
 Issue: CONSENT

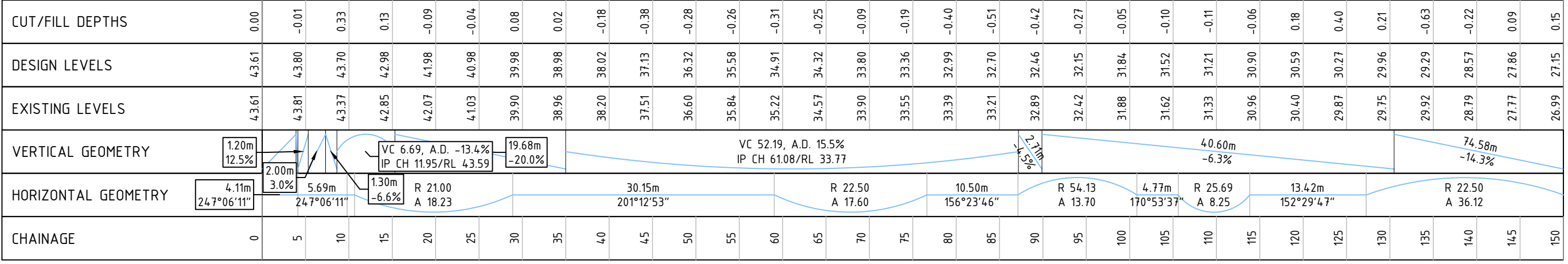


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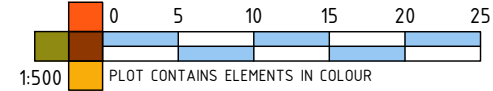
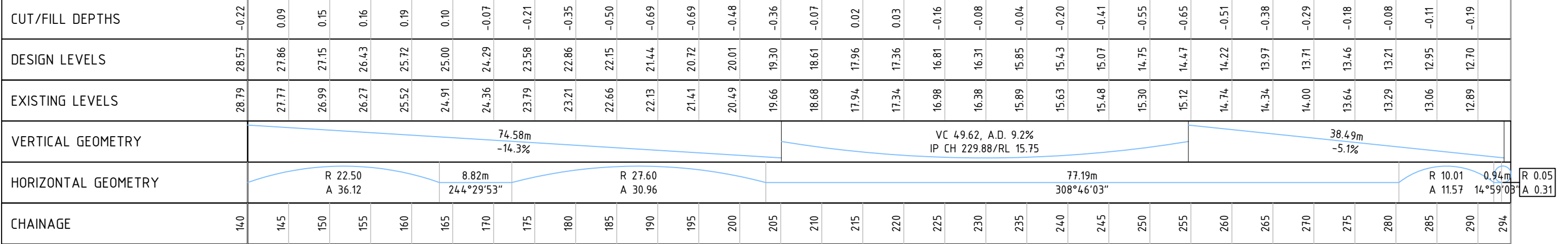
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LONGSECTION LEGEND	
EXISTING GROUND	
PROPOSED GROUND	
ALL MEASUREMENTS IN METRES	

CL-ROAD
DATUM: 10.00
VERT. EXAGGERATION 1:1



CL-ROAD
DATUM: 10.00
VERT. EXAGGERATION 1:1



0	31/05/24	INITIAL ISSUE	VR
Rev	Date	Amendments	By

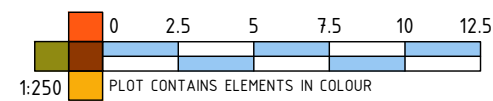
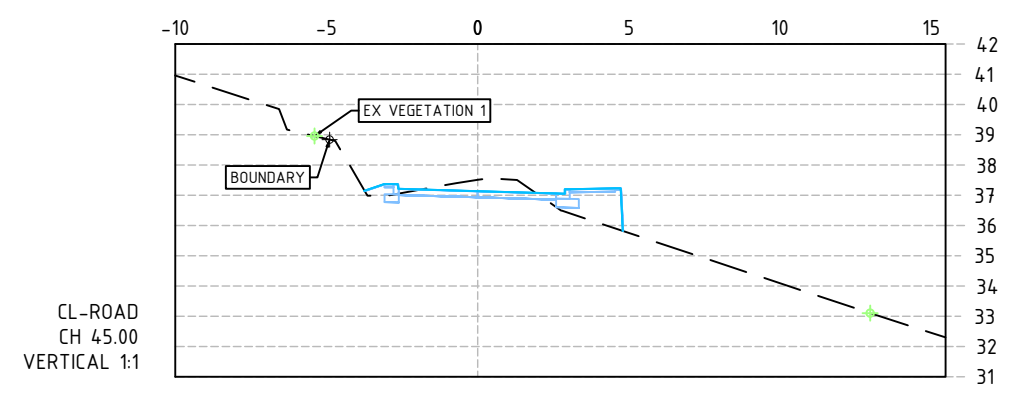
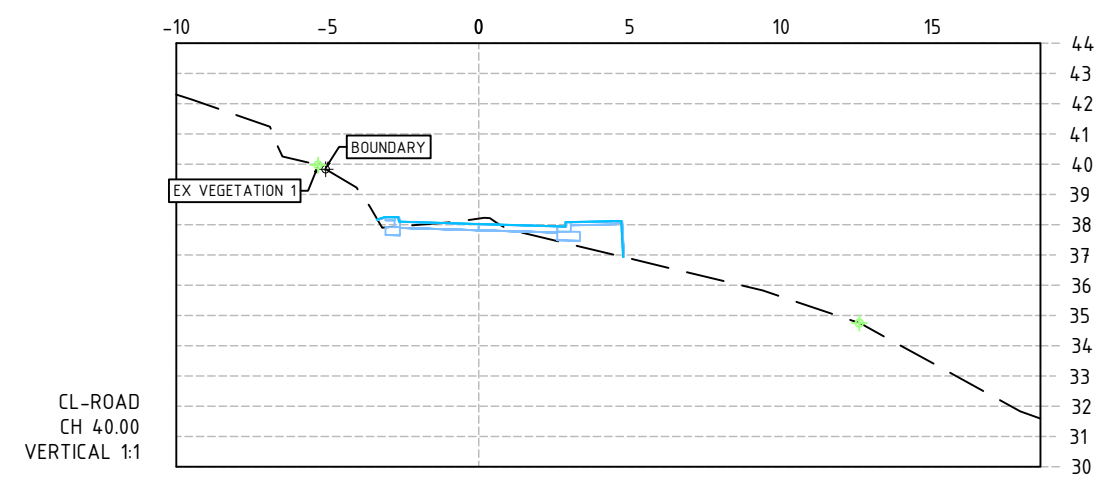
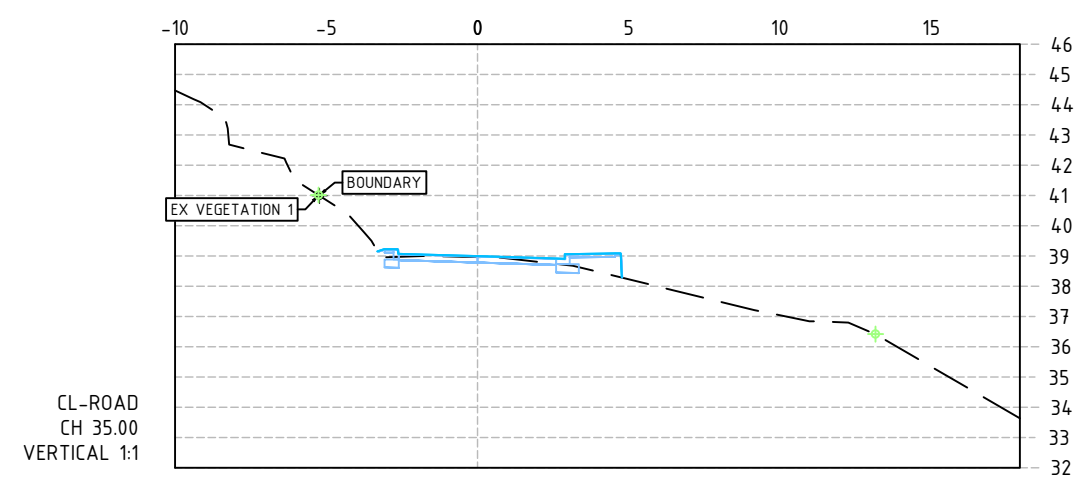
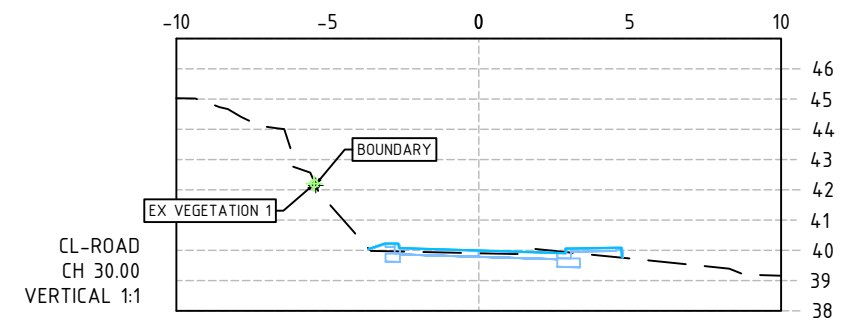
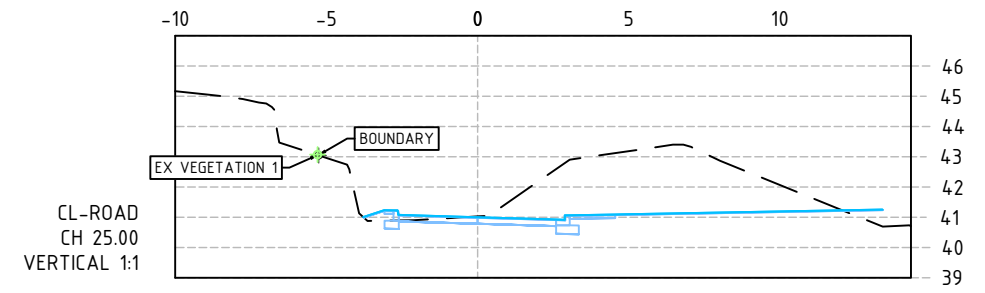
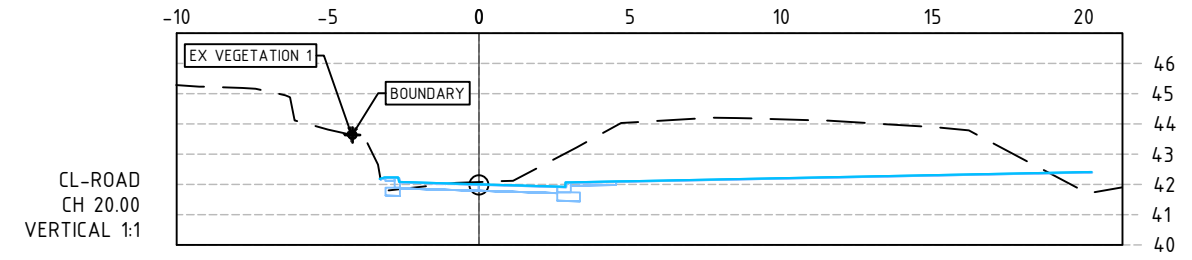
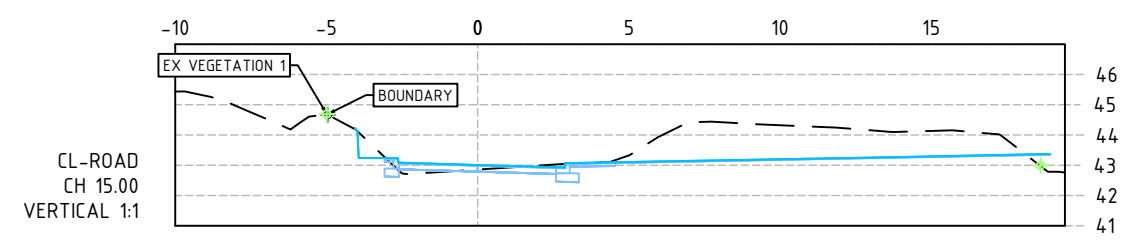
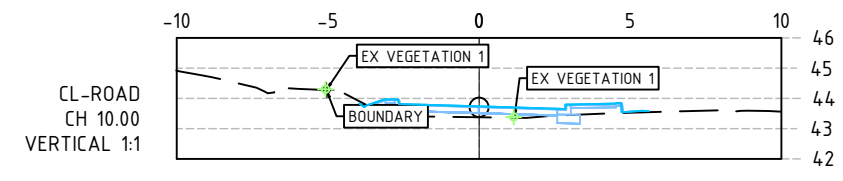
Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: ROAD LONG SECTION

Drawing: 701 Rev: 0
 Scale: 1:500 @ A3
 Project: 15569
 Issue: CONSENT



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LONGSECTION LEGEND	
EXISTING GROUND	
PROPOSED GROUND	
ALL MEASUREMENTS IN METRES	



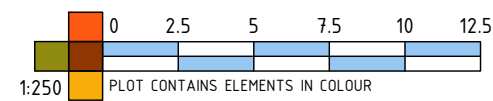
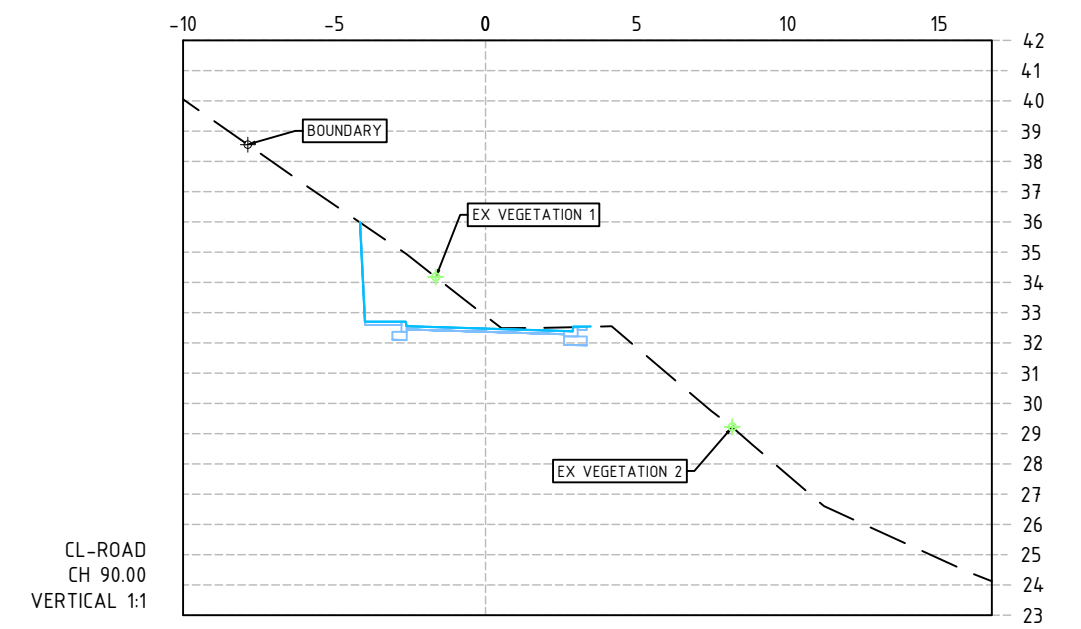
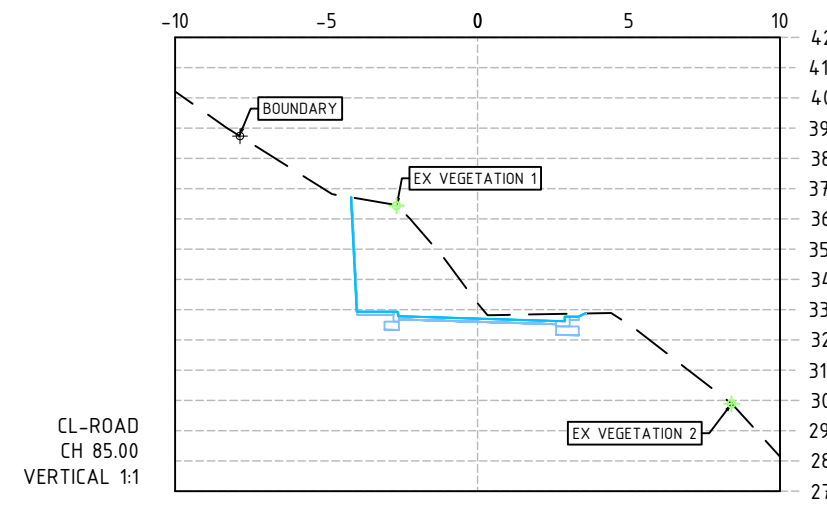
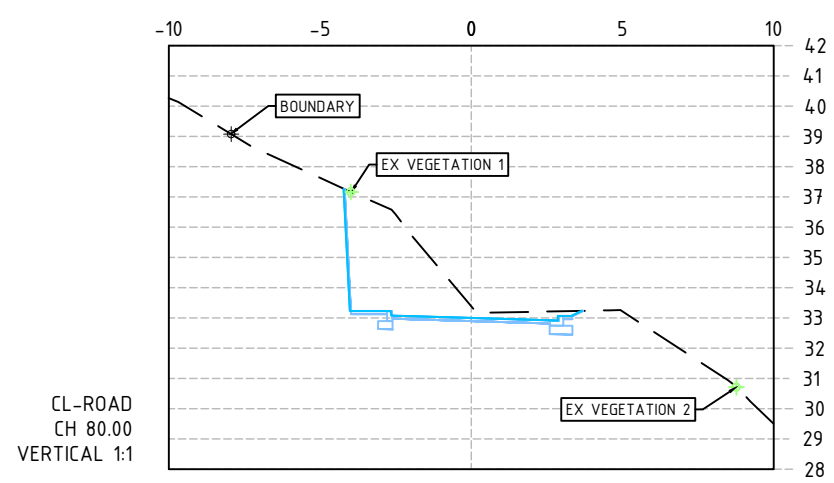
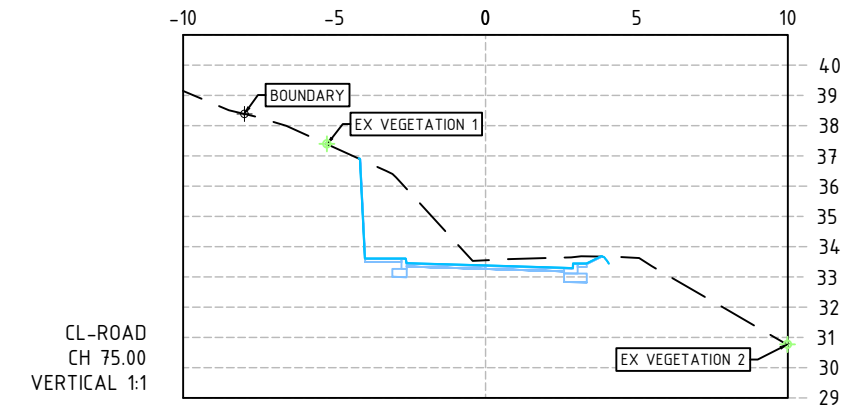
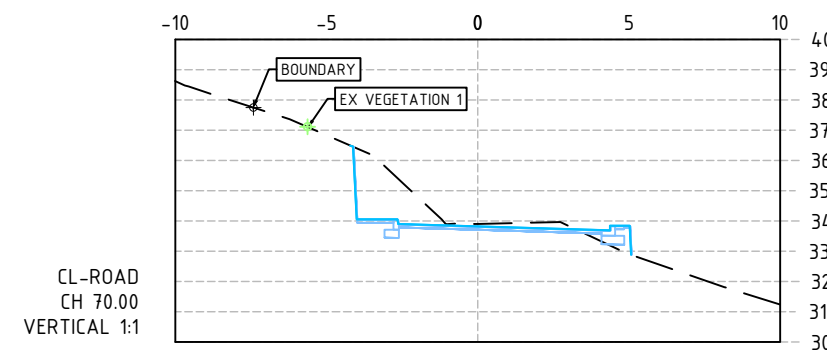
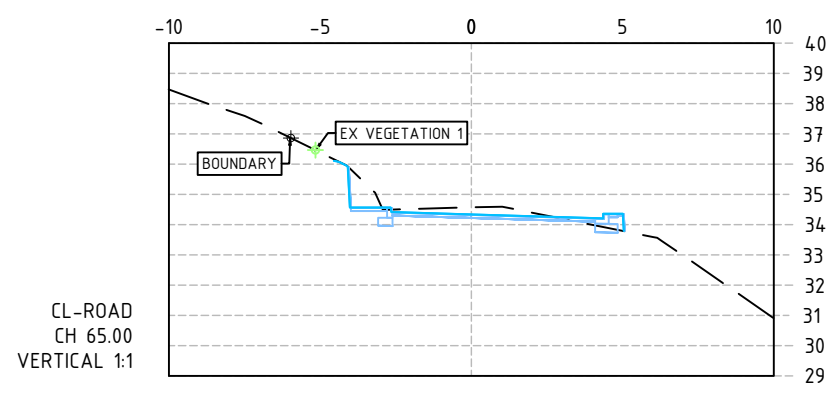
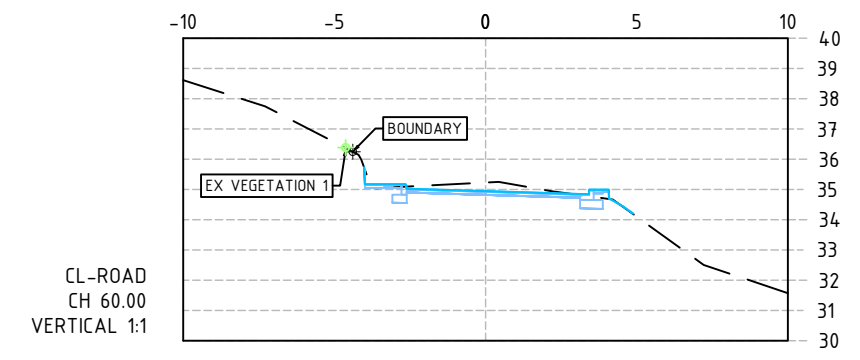
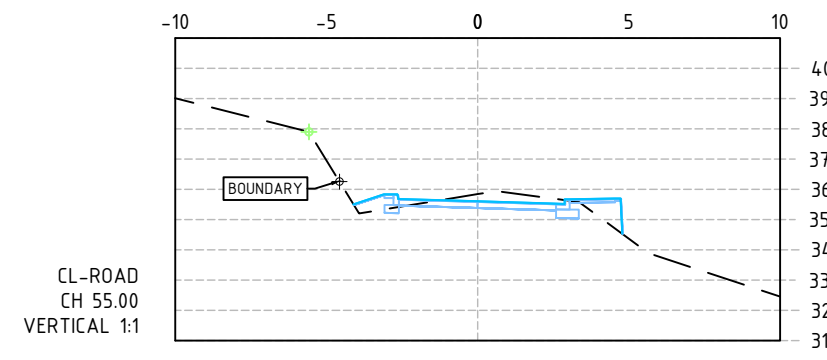
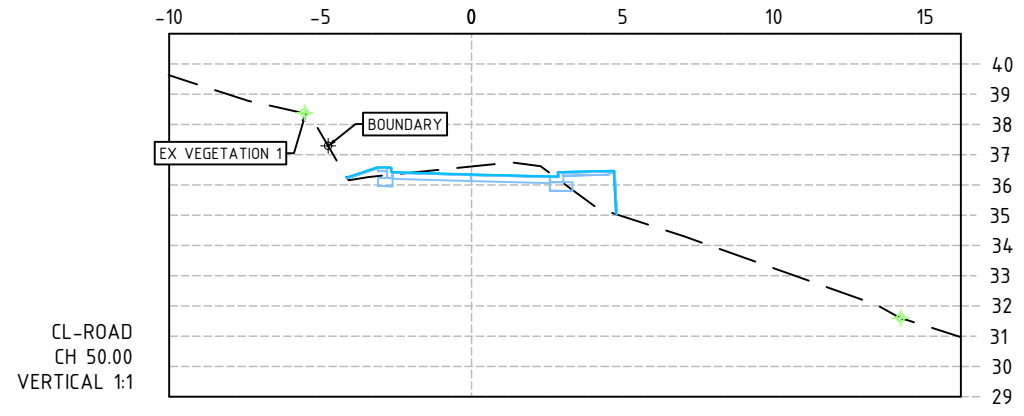
Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: ROAD XS 01

Drawing: 702 Rev: 0
 Scale: 1:250 @ A3
 Project: 15569
 Issue: CONSENT

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LONGSECTION LEGEND	
EXISTING GROUND	
PROPOSED GROUND	
ALL MEASUREMENTS IN METRES	

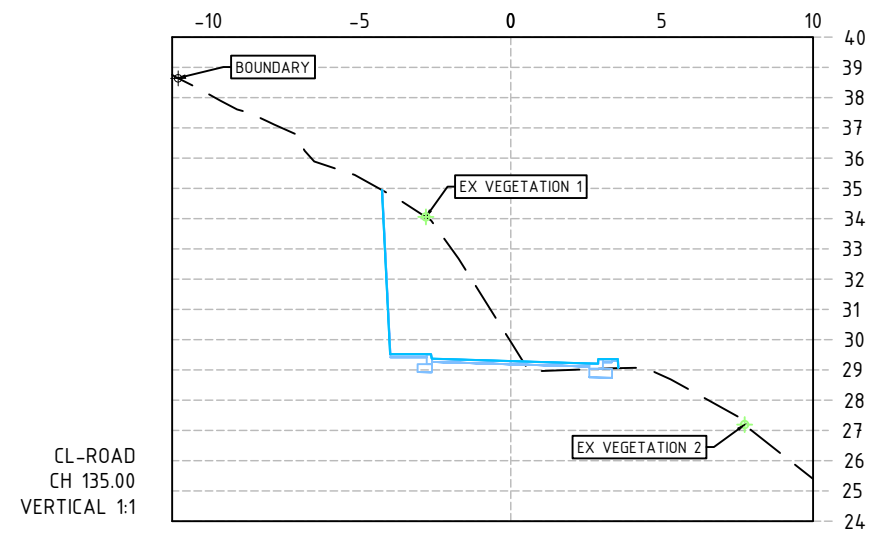
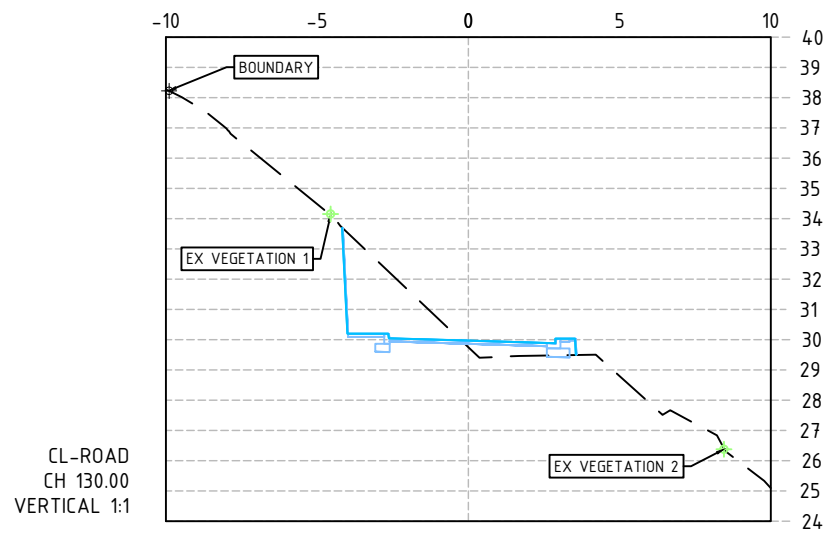
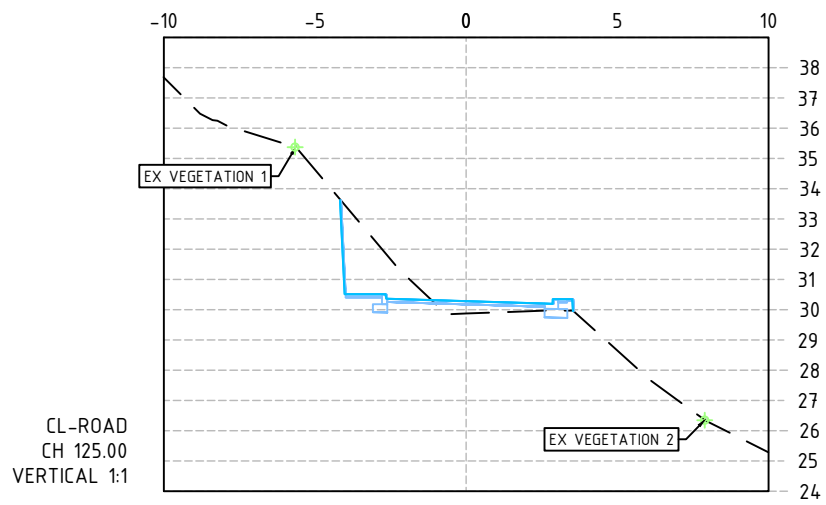
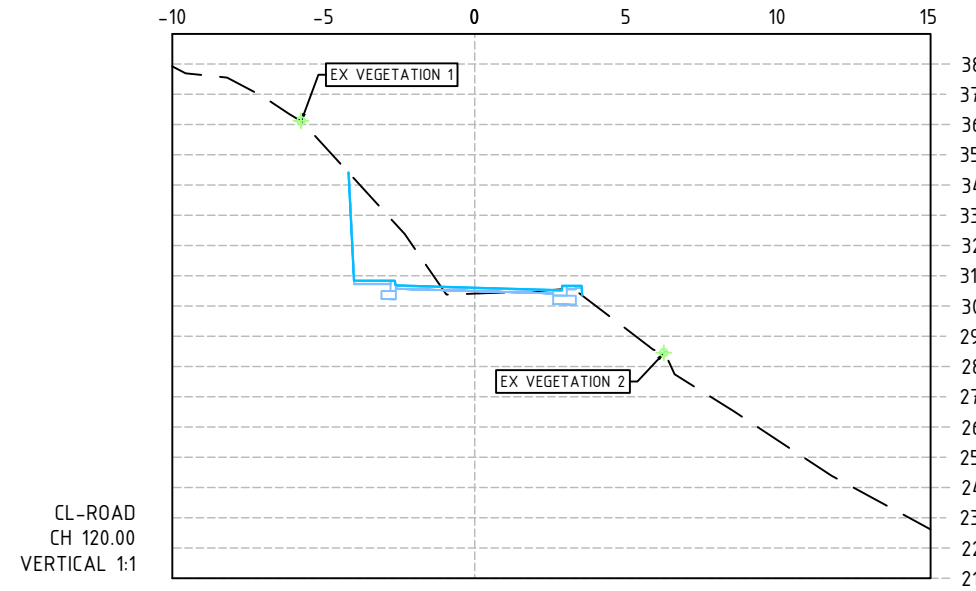
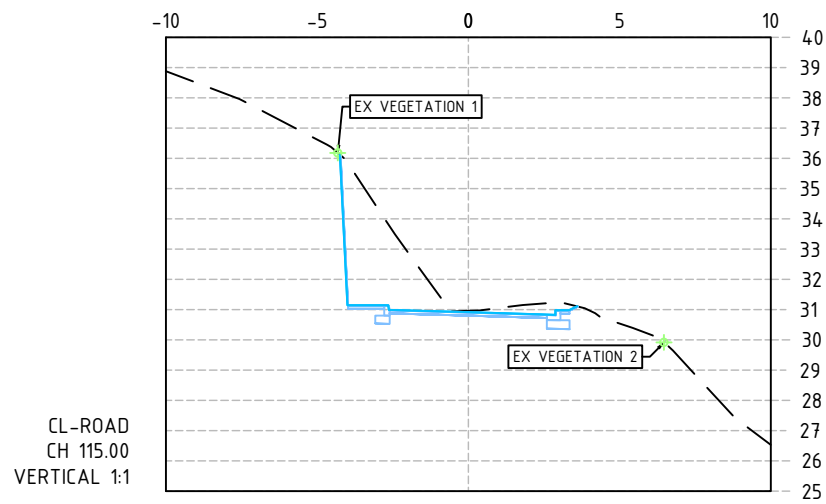
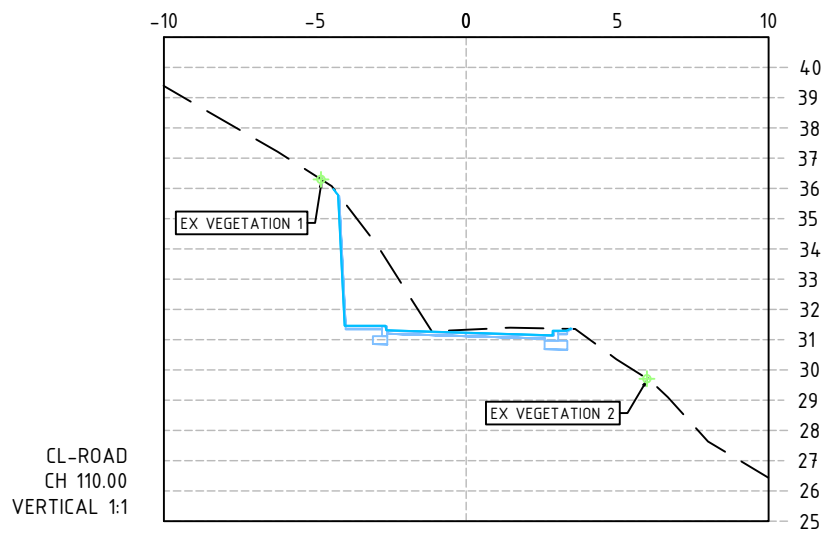
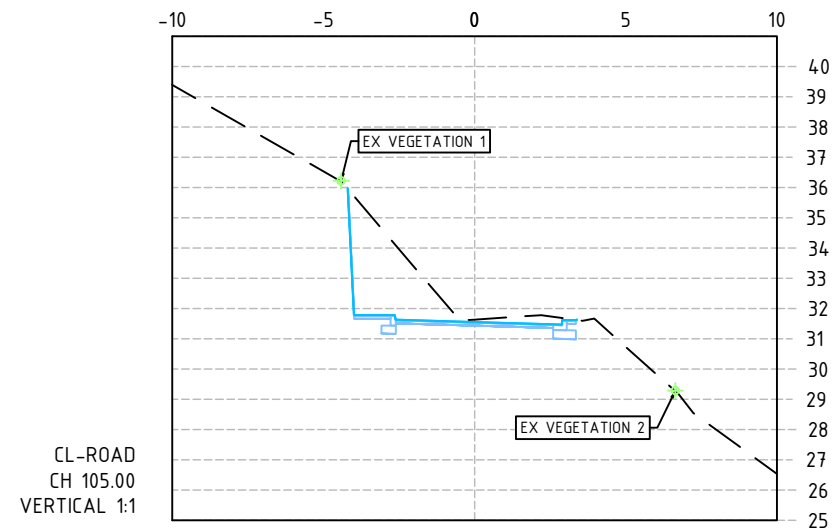
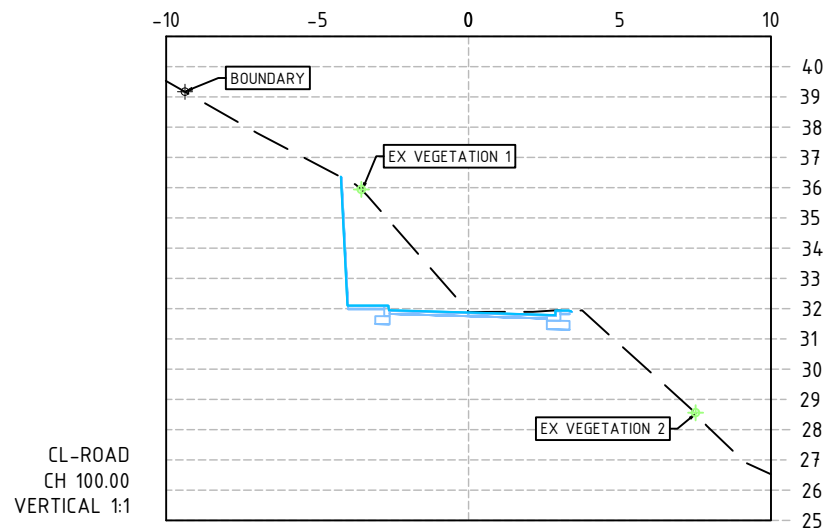
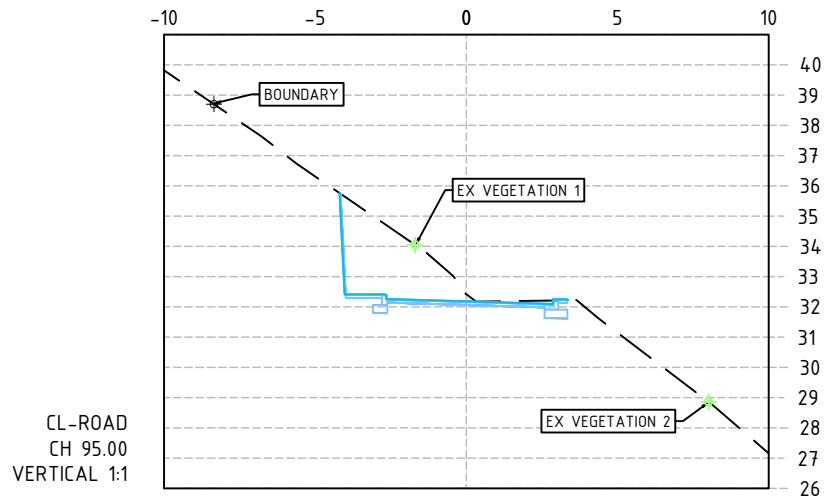


Rev	Date	Amendments	By
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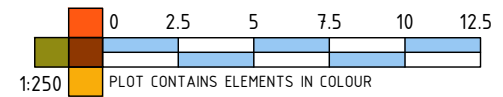
Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: ROAD XS 02

Drawing: 703 Rev: 0
 Scale: 1:250 @ A3
 Project: 15569
 Issue: CONSENT

C:\Users\JackChen\OneDrive\Documents\15569 - Hihihi Rise\15569-C-DWG-700-SERIES - XSEC.dwg 6/7/2024 10:31 am



LONGSECTION LEGEND	
EXISTING GROUND	
PROPOSED GROUND	
ALL MEASUREMENTS IN METRES	



Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

Drafter: V. RIVIER

Designer: N. JULL

Checker: J. CHEN

Date: 31/05/2024

Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION

Client: HERON POINT LIMITED

Address: 45 & 47 HIHITAHU RISE, PAIHIA.

Drawing Title: ROAD XS 03

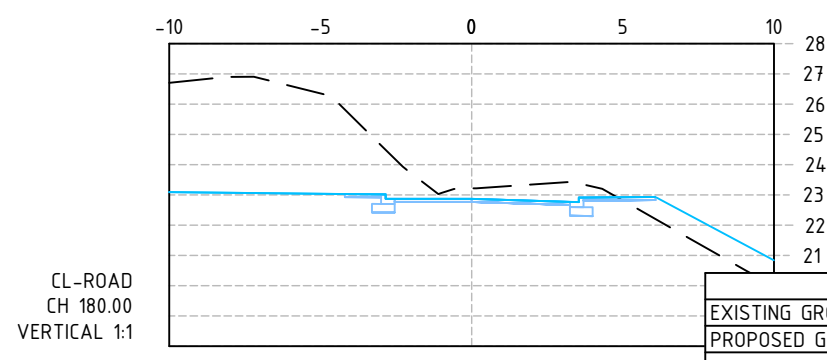
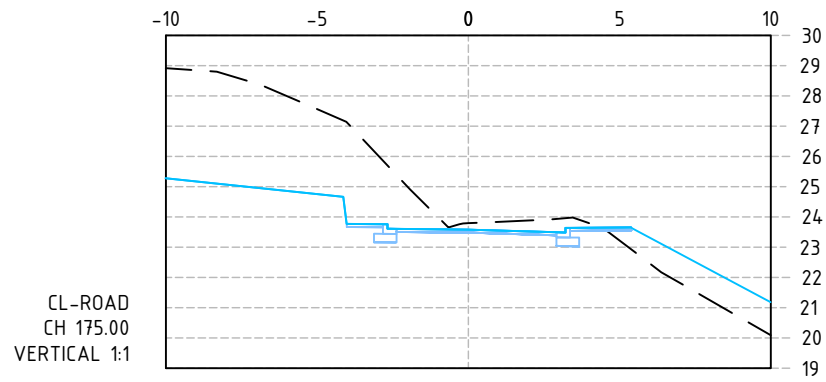
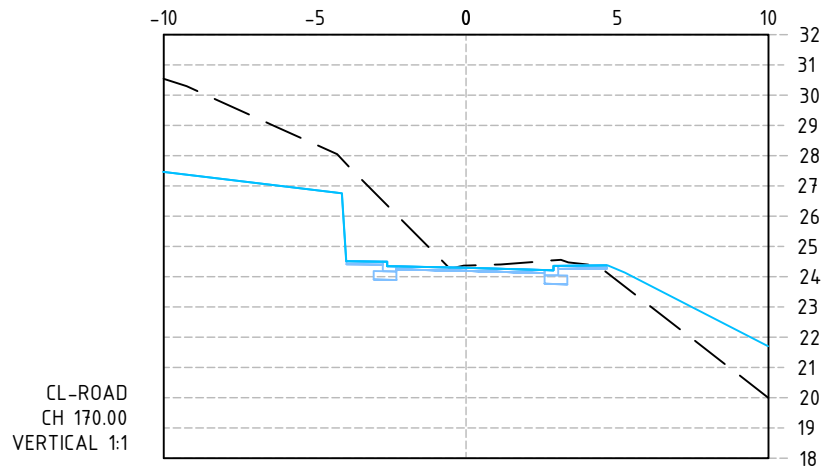
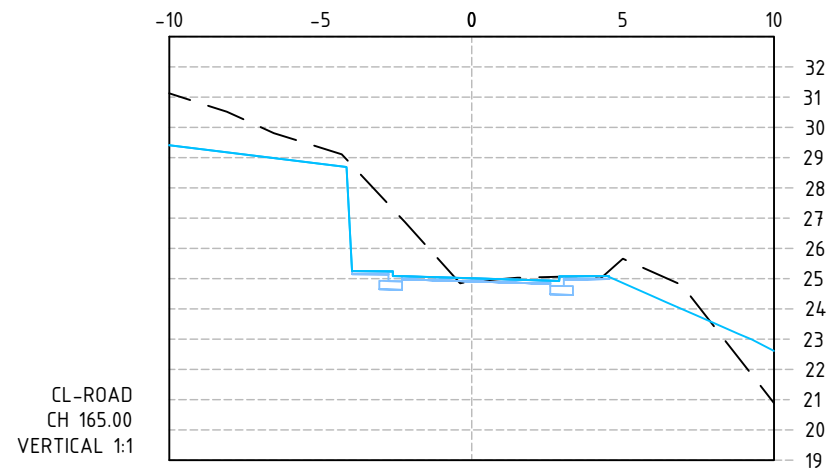
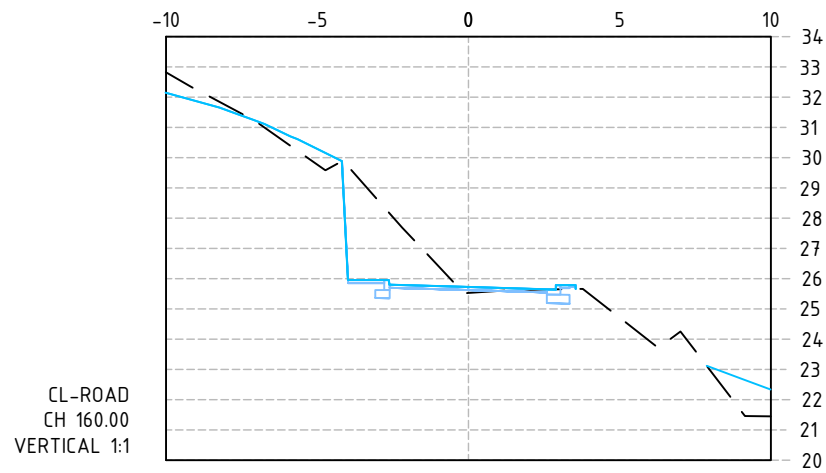
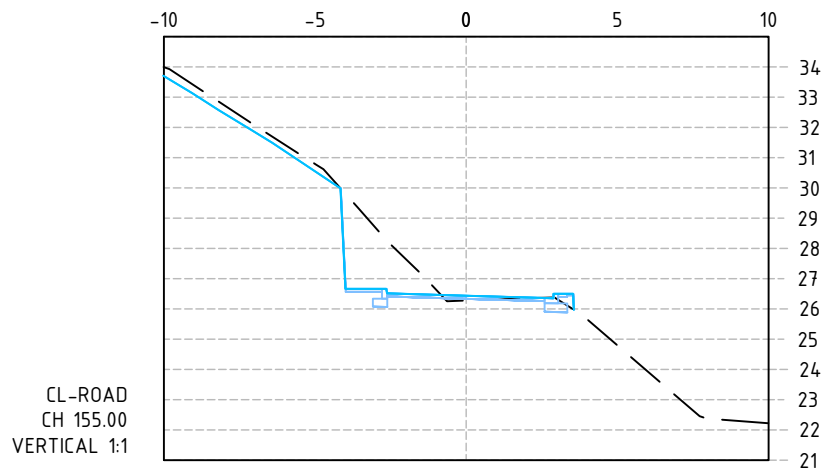
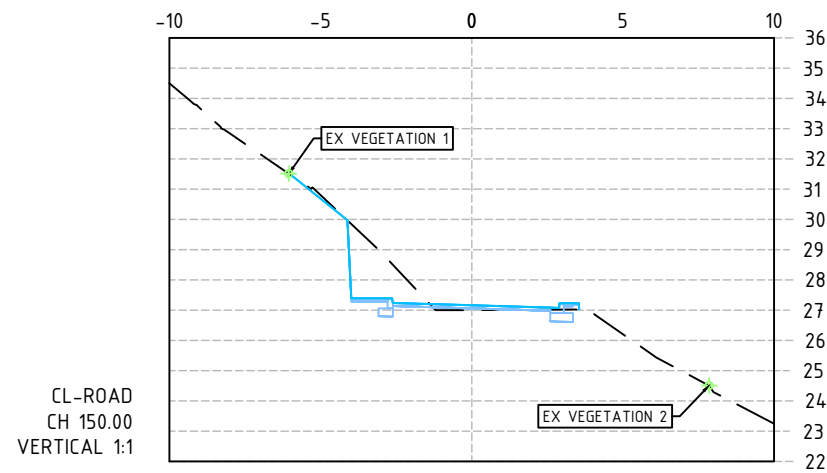
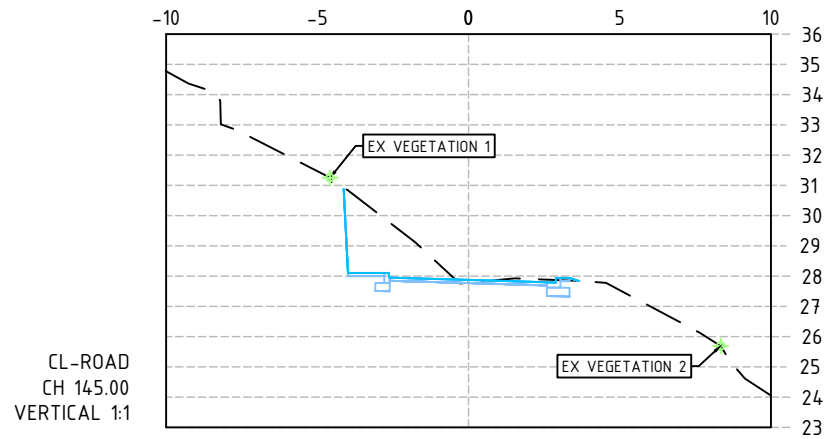
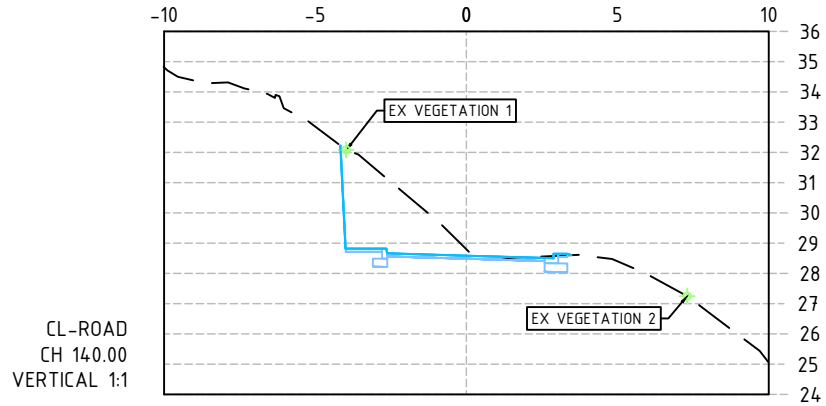
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Scale: 1:250 @ A3

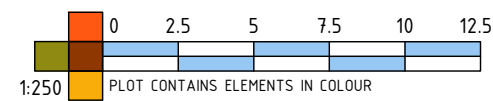
Project: 15569

Issue: CONSENT





LONGSECTION LEGEND	
EXISTING GROUND	
PROPOSED GROUND	
ALL MEASUREMENTS IN METRES	



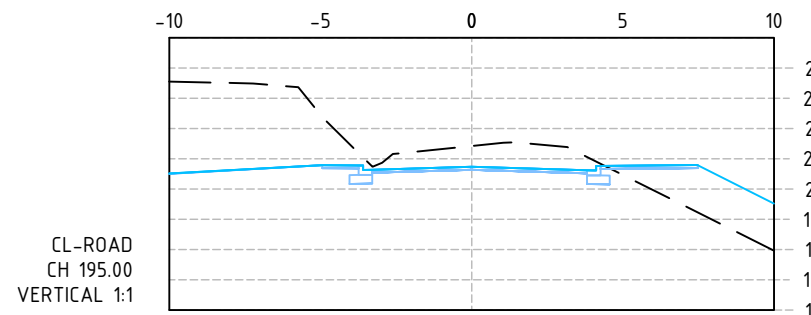
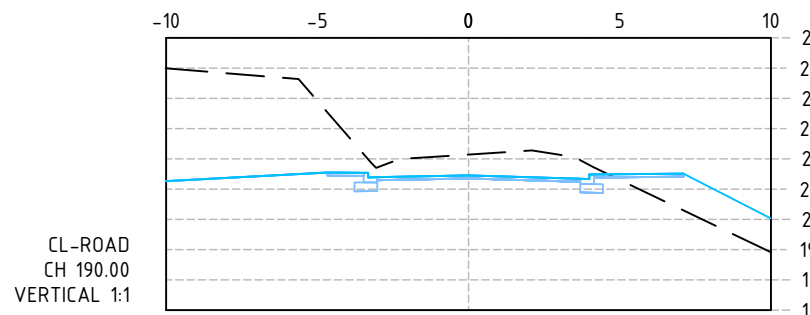
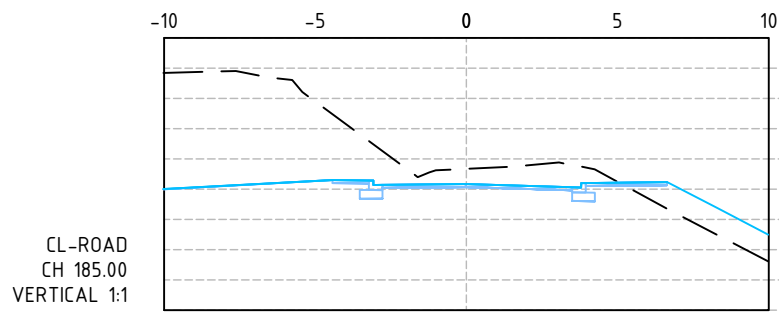
Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

Drafter: V. RIVIER
 Designer: N. JULL
 Checker: J. CHEN
 Date: 31/05/2024

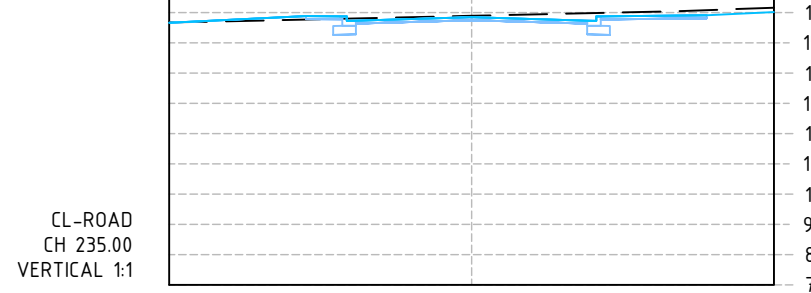
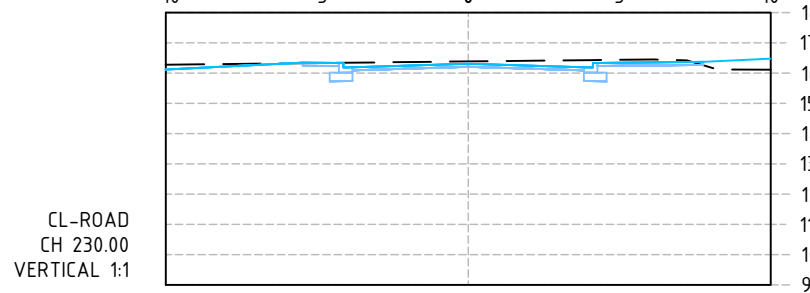
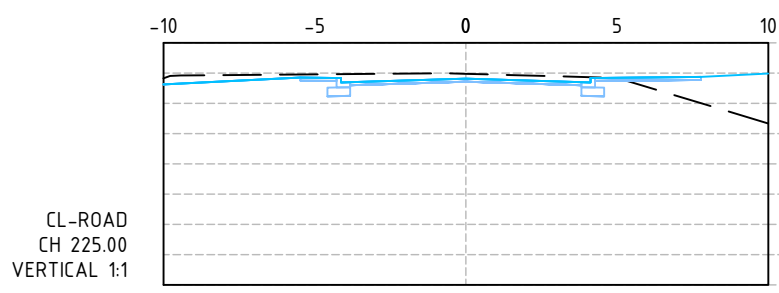
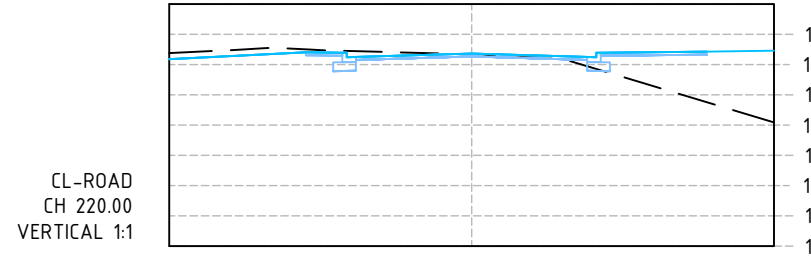
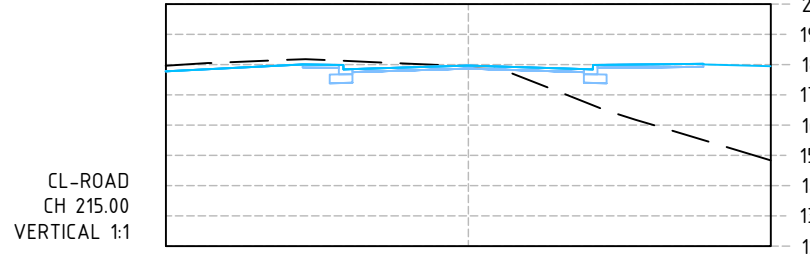
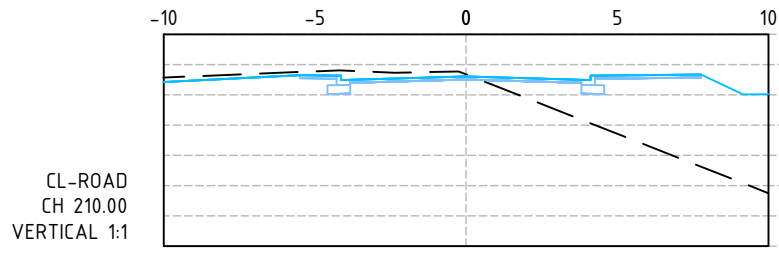
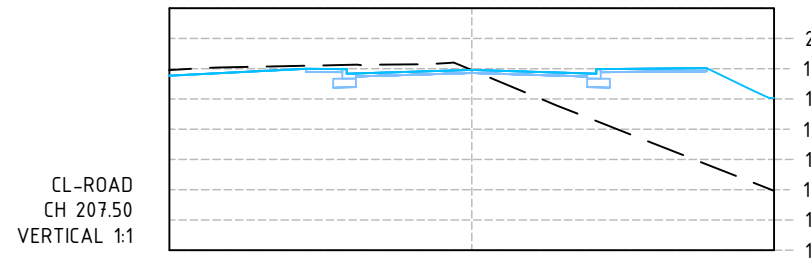
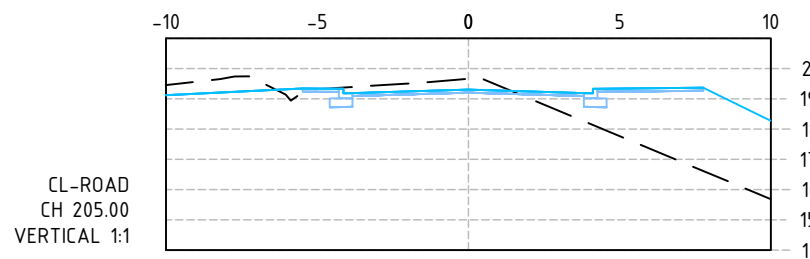
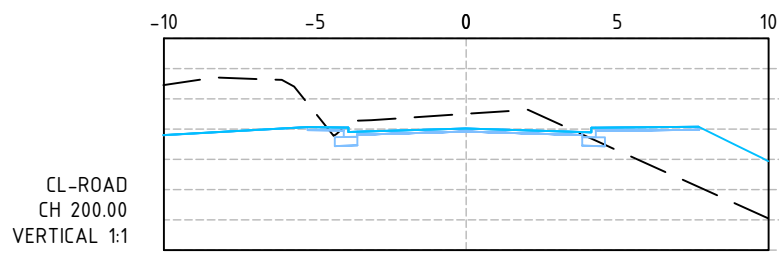
Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Client: HERON POINT LIMITED
 Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Drawing Title: ROAD XS 04

Drawing: 705 Rev: 0
 Scale: 1:250 @ A3
 Project: 15569
 Issue: CONSENT

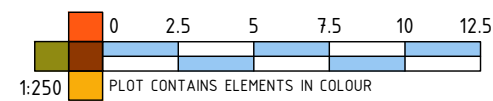
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CL-ROAD
CH 240.00
VERTICAL 1:1



LONGSECTION LEGEND	
EXISTING GROUND	
PROPOSED GROUND	
ALL MEASUREMENTS IN METRES	



Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

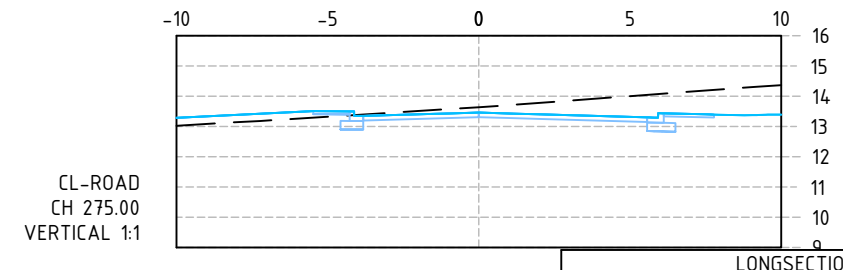
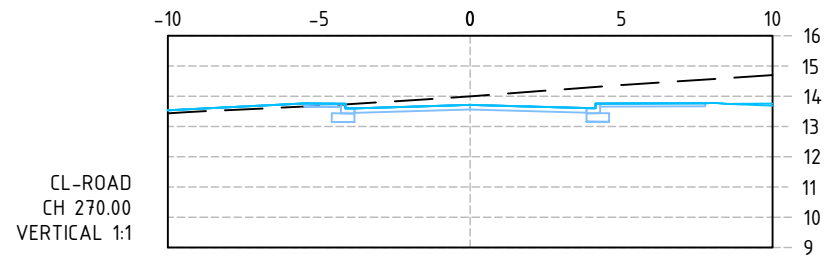
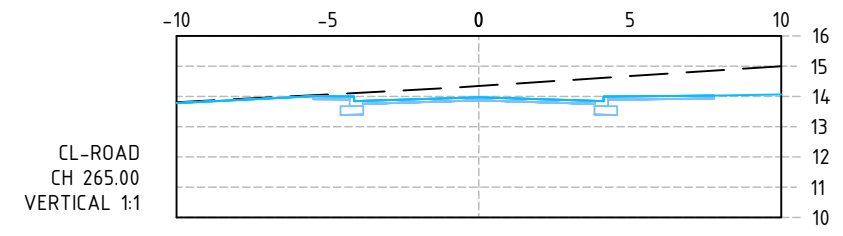
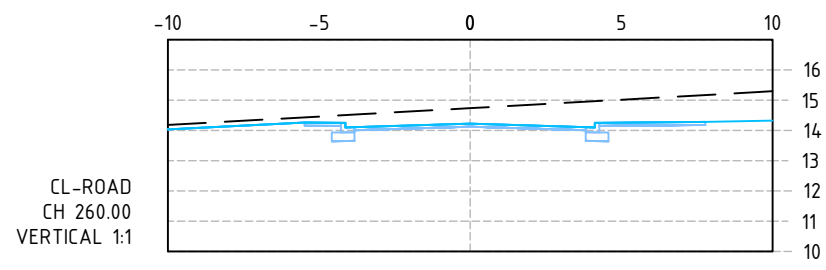
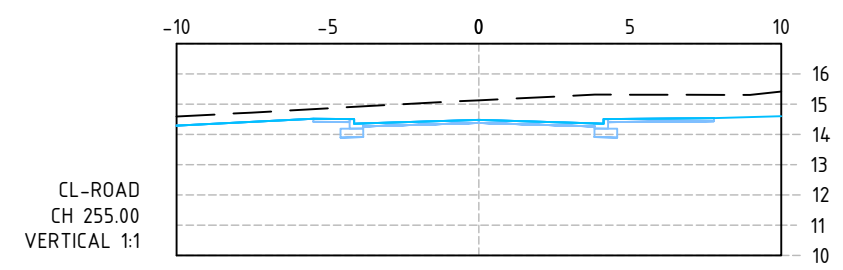
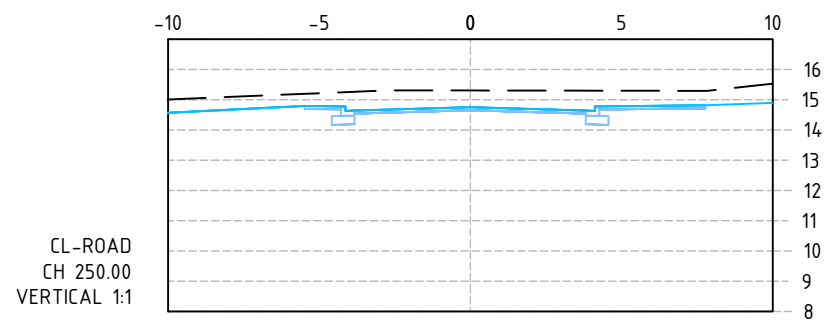
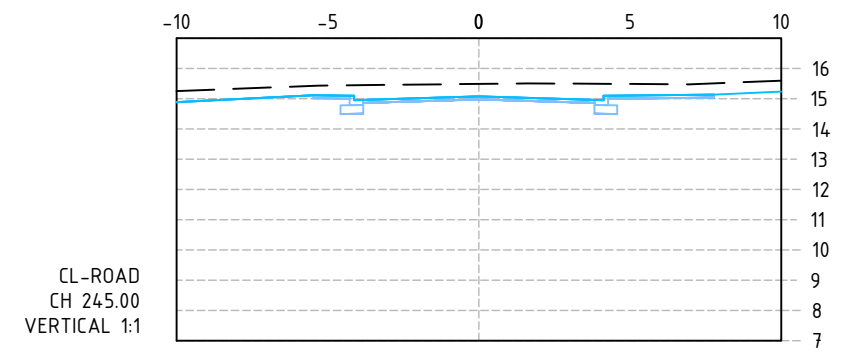
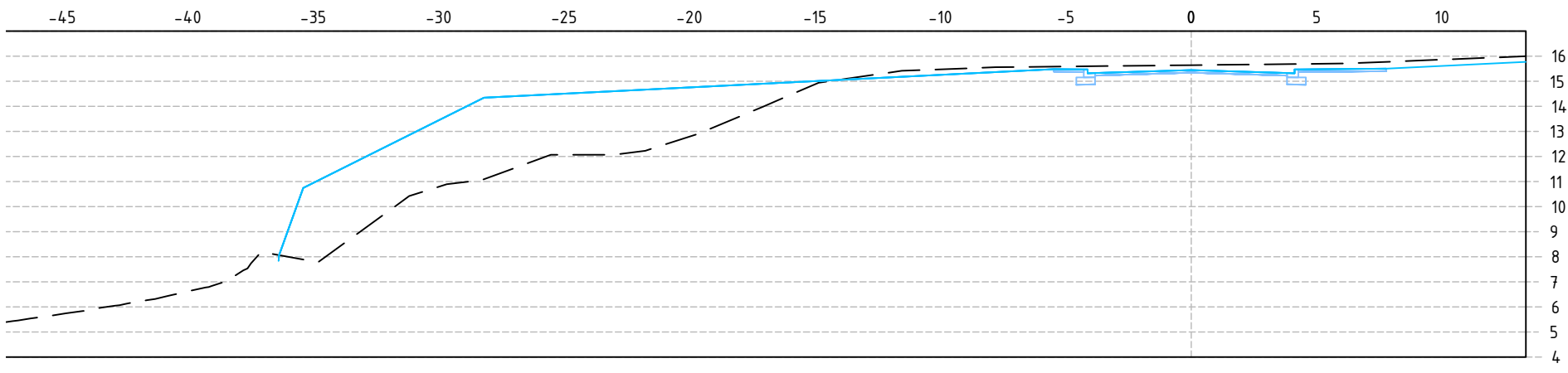
Drafter: V. RIVIER
Designer: N. JULL
Checker: J. CHEN
Date: 31/05/2024

Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
Client: HERON POINT LIMITED
Address: 45 & 47 HIHITAHU RISE, PAIHIA.
Drawing Title: ROAD XS 05

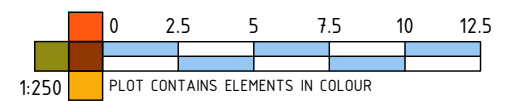
Drawing: 706 Rev: 0
Scale: 1:250 @ A3
Project: 15569
Issue: CONSENT



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LONGSECTION LEGEND	
EXISTING GROUND	
PROPOSED GROUND	
ALL MEASUREMENTS IN METRES	

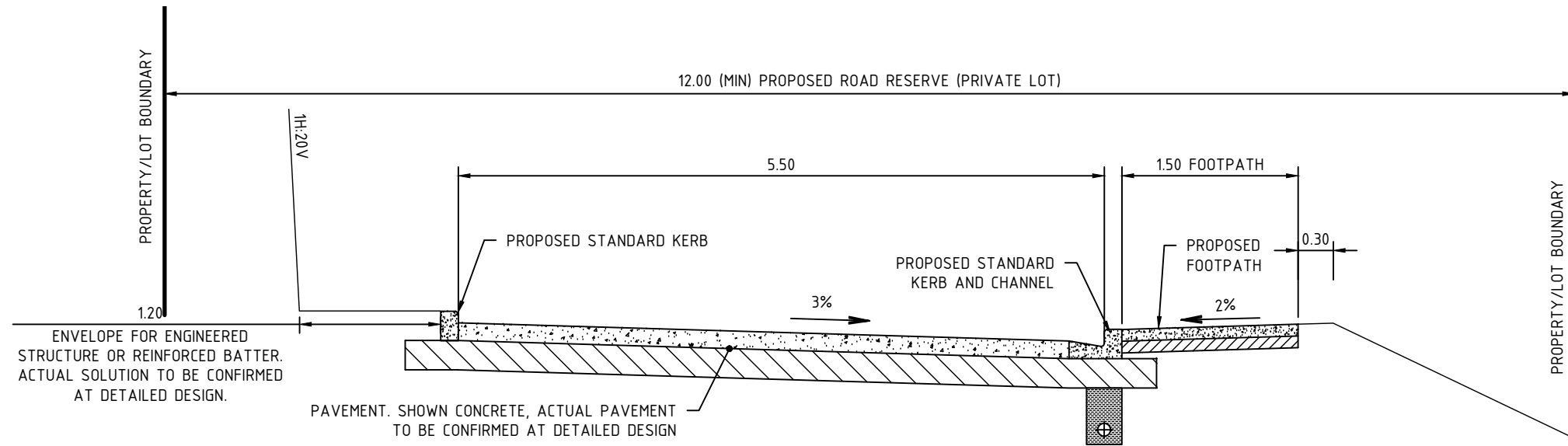


Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

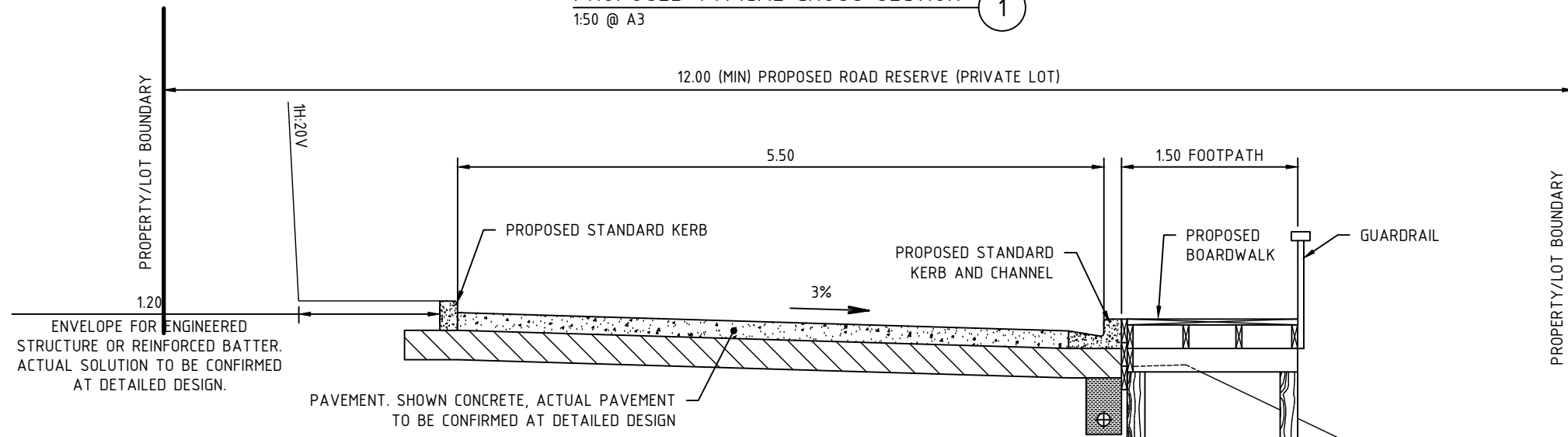
Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHTAHI RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: ROAD XS 06

Drawing: 707 Rev: 0
 Scale: 1:250 @ A3
 Project: 15569
 Issue: CONSENT

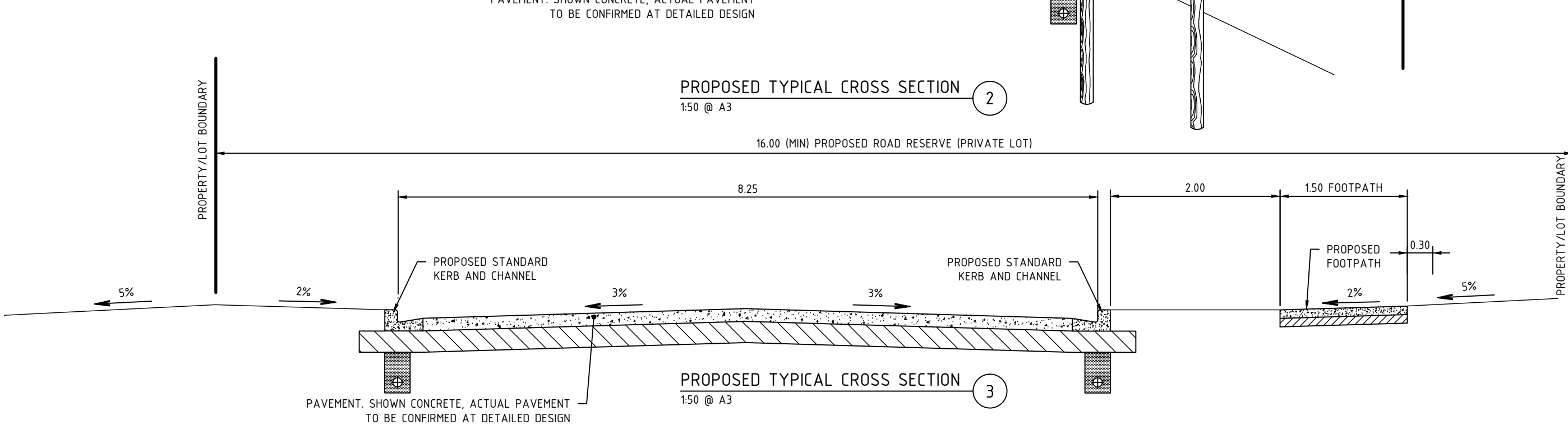




PROPOSED TYPICAL CROSS SECTION 1
1:50 @ A3



PROPOSED TYPICAL CROSS SECTION 2
1:50 @ A3



PROPOSED TYPICAL CROSS SECTION 3
1:50 @ A3

Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

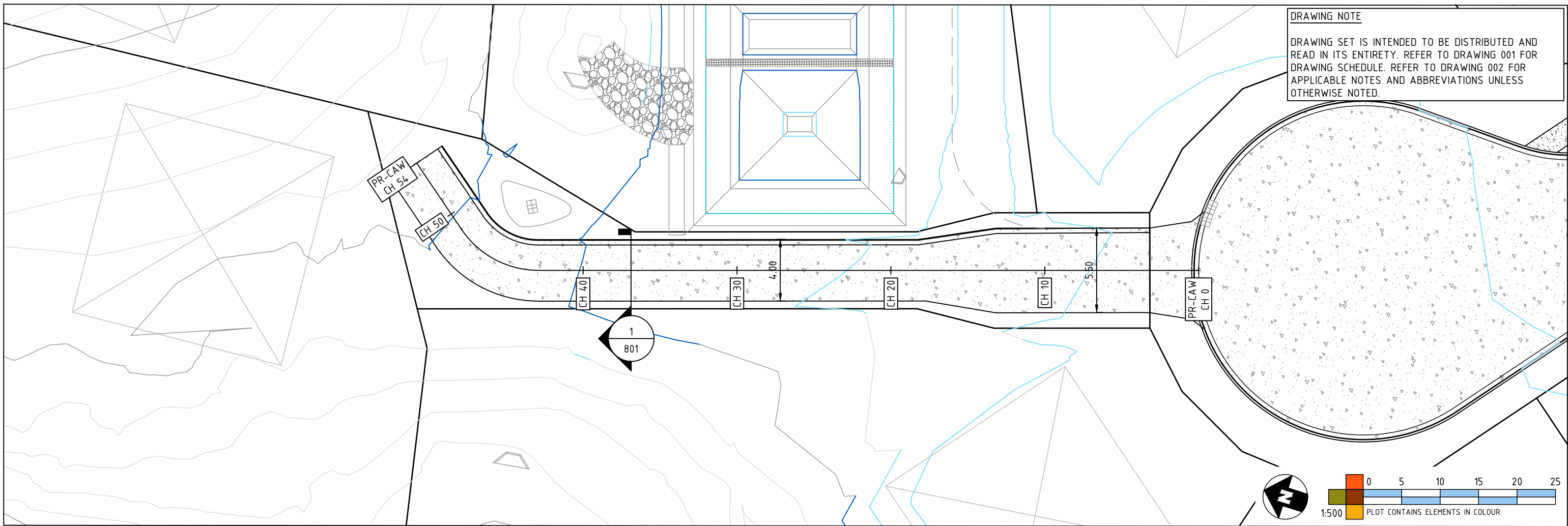
Drafter: V. RIVIER
 Designer: N. JULL
 Checker: J. CHEN
 Date: 31/05/2024
 Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Client: HERON POINT LIMITED
 Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Drawing Title: TYPICAL CROSS SECTIONS

Drawing: 708 Rev: 0
 Scale: 1:50 @ A3
 Project: 15569
 Issue: CONSENT



DRAWING NOTE

DRAWING SET IS INTENDED TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING 001 FOR DRAWING SCHEDULE. REFER TO DRAWING 002 FOR APPLICABLE NOTES AND ABBREVIATIONS UNLESS OTHERWISE NOTED.



LONGSECTION LEGEND	
EXISTING GROUND	
PROPOSED GROUND	
ALL MEASUREMENTS IN METRES	

PR-CAW
DATUM: 6.00
VERT. EXAGGERATION 1:1

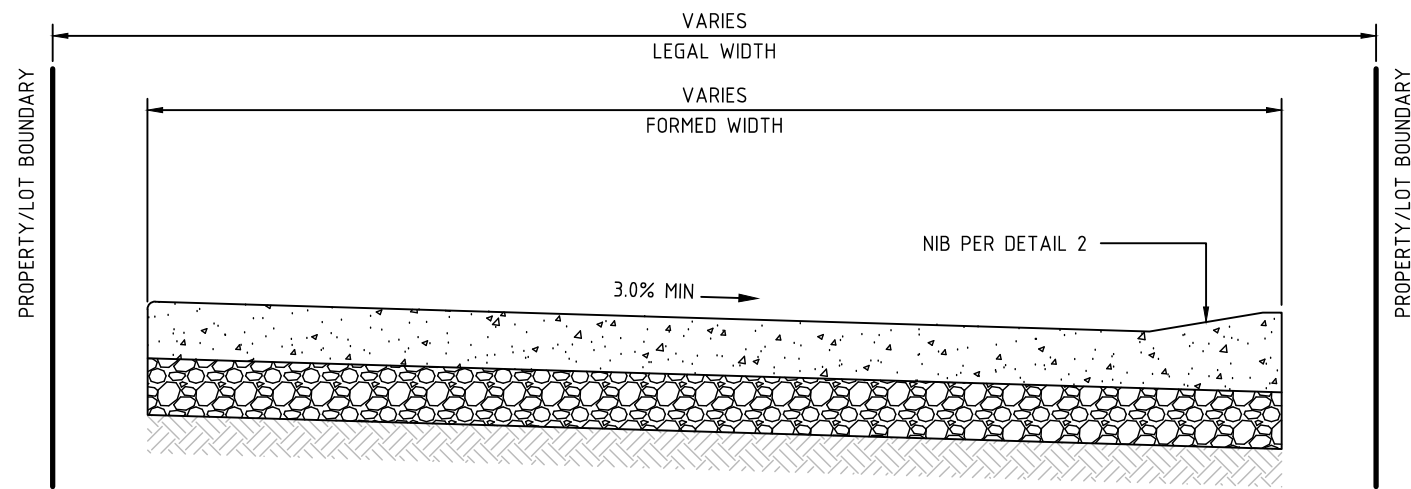
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DESIGN LEVELS		12.10	11.85	11.42	11.10	10.95	10.85	10.57	10.02	9.71	10.02	10.52
EXISTING LEVELS	12.45	12.33	12.15	11.95	11.34	10.80	10.62	10.20	10.06	9.88	10.01	
VERTICAL GEOMETRY		7.35m 7.4%	8.36m -5.0%	4.64m -8.7%	VC 8.75, A.D. 6.7% IP CH 19.02/RL 11.07	5.95m -2.0%	VC 9.31, A.D. -10.5% IP CH 34.00/RL 10.77	7.35m 9.5%	VC 10.00, A.D. 25.0% IP CH 45.00/RL 9.40		4.00m 12.5%	
HORIZONTAL GEOMETRY		42.92m 342°27'06"						R 6.00 A 5.86		5.22m 38°23'05"		
CHAINAGE	0	5	10	15	20	25	30	35	40	45	50	54

Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: COMMON ACCESS WAY PLAN

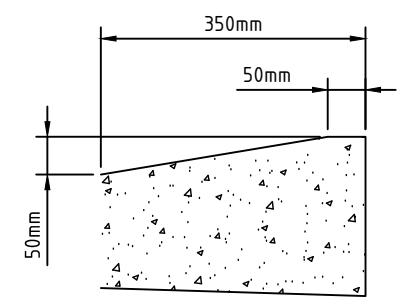
Drawing: 800 Rev: 0
 Scale: 1:500 @ A3
 Project: 15569
 Issue: CONSENT





1 TYPICAL DRIVEWAY SECTION (2-5 REAR SITES SERVED)

SCALE: 1:50



2 CONCRETE NIB

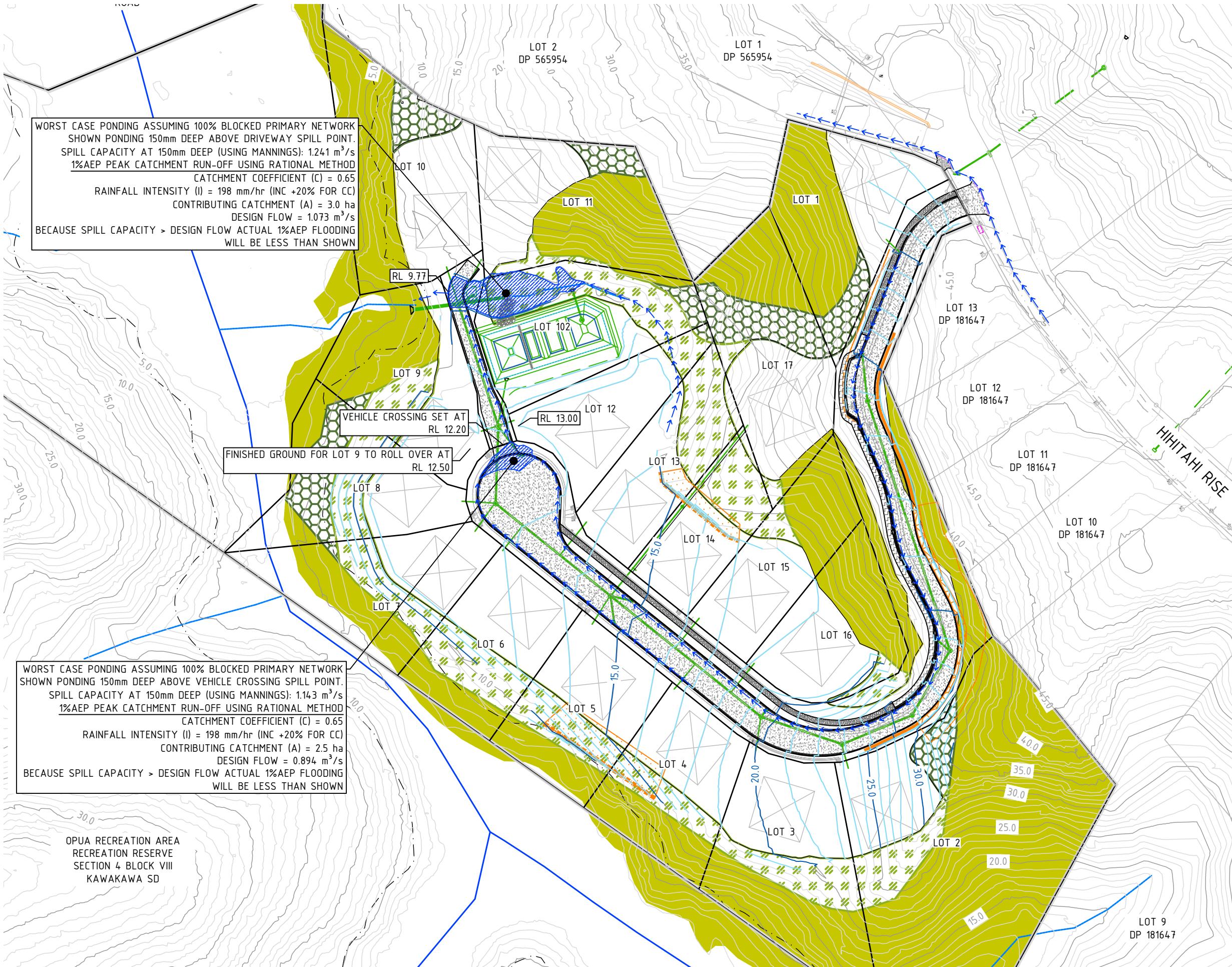
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Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: COMMON ACCESSWAY TYPICAL SECTION

Drawing: 801 Rev: 0
 Scale: 1:500 @ A3
 Project: 15569
 Issue: CONSENT





WORST CASE PONDING ASSUMING 100% BLOCKED PRIMARY NETWORK SHOWN PONDING 150mm DEEP ABOVE DRIVEWAY SPILL POINT.
 SPILL CAPACITY AT 150mm DEEP (USING MANNINGS): 1.241 m³/s
 1%AEP PEAK CATCHMENT RUN-OFF USING RATIONAL METHOD
 CATCHMENT COEFFICIENT (C) = 0.65
 RAINFALL INTENSITY (I) = 198 mm/hr (INC +20% FOR CC)
 CONTRIBUTING CATCHMENT (A) = 3.0 ha
 DESIGN FLOW = 1.073 m³/s
 BECAUSE SPILL CAPACITY > DESIGN FLOW ACTUAL 1%AEP FLOODING WILL BE LESS THAN SHOWN

WORST CASE PONDING ASSUMING 100% BLOCKED PRIMARY NETWORK SHOWN PONDING 150mm DEEP ABOVE VEHICLE CROSSING SPILL POINT.
 SPILL CAPACITY AT 150mm DEEP (USING MANNINGS): 1.143 m³/s
 1%AEP PEAK CATCHMENT RUN-OFF USING RATIONAL METHOD
 CATCHMENT COEFFICIENT (C) = 0.65
 RAINFALL INTENSITY (I) = 198 mm/hr (INC +20% FOR CC)
 CONTRIBUTING CATCHMENT (A) = 2.5 ha
 DESIGN FLOW = 0.894 m³/s
 BECAUSE SPILL CAPACITY > DESIGN FLOW ACTUAL 1%AEP FLOODING WILL BE LESS THAN SHOWN

OPIA RECREATION AREA
 RECREATION RESERVE
 SECTION 4 BLOCK VIII
 KAWAKAWA SD

DRAWING NOTE
 DRAWING SET IS INTENDED TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING 001 FOR DRAWING SCHEDULE. REFER TO DRAWING 002 FOR APPLICABLE NOTES AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

THREE WATERS LEGEND	
EX / PROP PRIV. SW PIPE	
EX / PROP PRIV. WW PIPE	
EX / PROP PUBLIC SW PIPE	
EX / PROP PUBLIC WW PIPE	
EX / PROP SWIC	
EX / PROP SWCP	
EX / PROP WWIC	
CONNECTION DIRECTION	N,NE,E,SE,S,SW,W,NW
EX / PROP WS PIPE	

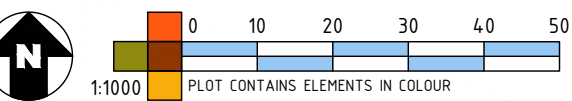
ALL MEASUREMENTS IN METRES

LEGEND	
AREA TYPE	SHOWN
PERMANENT STREAMS	
INTERMITTENT STREAMS	
10m WETLAND SETBACK	
REGENERATING KANUKA FOREST	

PLANTING LEGEND	
AREA TYPE	SHOWN
MIXED NATIVE RETAINED/PLANTED	
FIRE RETARDANT NATIVE SPECIES PLANTING	

SITE LEGEND	
EX MIN / MAJ CONTOURS	
PROP MIN / MAJ CONTOURS	
EX / PROP CONCRETE PAVE	
PROP PERMEABLE PAVE	
EX / PROP. RETAINING WALL	
EX/PROP SWCP	

ALL MEASUREMENTS IN METRES



Rev	Date	Amendments	By
0	31/05/24	INITIAL ISSUE	VR

Drafter: V. RIVIER Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Designer: N. JULL Client: HERON POINT LIMITED
 Checker: J. CHEN Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Date: 31/05/2024 Drawing Title: SECONDARY FLOW PLAN

Drawing: 900 Rev: 0
 Scale: 1:1000 @ A3
 Project: 15569
 Issue: CONSENT

PART HAUMI RIVER BED
SURVEY OFFICE PLAN 47307
HAUMI RIVER

OPUA RECREATION AREA
RECREATION RESERVE
SECTION 4 BLOCK VIII
KAWAKAWA SD

EXISTING EASEMENT TO BE EXTINGUISHED	
RIGHT OF WAY EASEMENT	D 490711.5

EXISTING EASEMENT			
PURPOSE	SHOWN	BURDENED LAND (SERVIENT TENEMENT)	CREATED BY
RIGHT TO DRAIN SEWAGE	AA	LOT 10 HEREON	D 180390.15

AMALGAMATION CONDITION:
 THAT LOT 100 HEREON (JOINTLY OWNED LOT) BE HELD AS TO SIXTEEN UNDIVIDED ONE - ONE SIXTEENTH SHARES BY THE OWNERS OF LOTS 2 TO 17 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORD OF TITLES BE ISSUED IN ACCORDANCE THEREWITH.
 THAT LOT 101 HEREON (JOINTLY OWNED LOT) BE HELD AS TO TWO UNDIVIDED ONE - ONE HALF SHARES BY THE OWNERS OF LOTS 10, 11 AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORD OF TITLES BE ISSUED IN ACCORDANCE THEREWITH.

AMALGAMATION CONDITION (CARPARK):
 THAT LOT 200 HEREON AND LOT 17 HEREON BE HELD AS TENANTS IN COMMON AND THAT INDIVIDUAL RECORD OF TITLES BE ISSUE IN ACCORDANCE THEREWITH.

AREAS AC, D, F-Z TO BE SUBJECT TO A LAND COVENANT (BUSH PROTECTION)

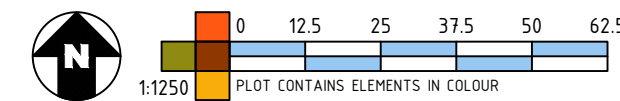
KEY	
REGISTERED TITLE	RT

SCHEDULE OF EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND (SERVIENT TENEMENT)	BENEFITED LAND (DOMINANT TENEMENT)
RIGHT OF WAY RIGHT TO CONVEY ELECTRICITY, TELECOMMUNICATIONS, WATER, RIGHT TO DRAIN WATER	A	LOT 100 HEREON	LOTS 2 - 17 HEREON
	B	LOT 101 HEREON	LOTS 10 & 11 HEREON
RIGHT TO DRAIN SEWAGE	B	LOT 101 HEREON	LOTS 10 & 11 HEREON
RIGHT TO DRAIN WATER	A	LOT 100 HEREON	LOT 1 HEREON
	AB	LOT 200 HEREON	LOTS 1 - 17 HEREON
RIGHT OF WAY	A	LOTS 100 HEREON	LOT 200 HEREON

SCHEDULE OF EASEMENTS IN GROSS			
PURPOSE	SHOWN	BURDENED LAND (SERVIENT TENEMENT)	GRANTEE
RIGHT TO CONVEY ELECTRICITY	A	LOT 100 HEREON	VECTOR LIMITED
	B	LOT 101 HEREON	
RIGHT TO CONVEY TELECOMMUNICATIONS	A	LOT 100 HEREON	CHORUS NEW ZEALAND LIMITED
	B	LOT 101 HEREON	
RIGHT TO DRAIN WATER	A	LOT 100 HEREON	FAR NORTH DISTRICT COUNCIL
	B	LOT 101 HEREON	
	C,D,E	LOT 14 HEREON	
RIGHT OF WAY	A	LOT 100 HEREON	FAR NORTH DISTRICT COUNCIL
	B	LOT 101 HEREON	
RIGHT TO DRAIN SEWAGE	A	LOT 100 HEREON	FAR NORTH DISTRICT COUNCIL
	B	LOT 101 HEREON	

SITE DESCRIPTION:
 TERRITORIAL AUTHORITY: FAR NORTH DISTRICT COUNCIL
 ADDRESS: 47 HIHITAHU RISE, TE HAUMI
 APPELLATION: LOT 21 DP 181647 & LOT 2 DP 200205
 ZONING: RESIDENTIAL
 RECORD OF TITLE: NA112C/975 & NA126B/885
 AREAS:
 TITLE NA112C/975 = 0.2395Ha
 TITLE NA126B/885 = 4.6400Ha
 DP 551452

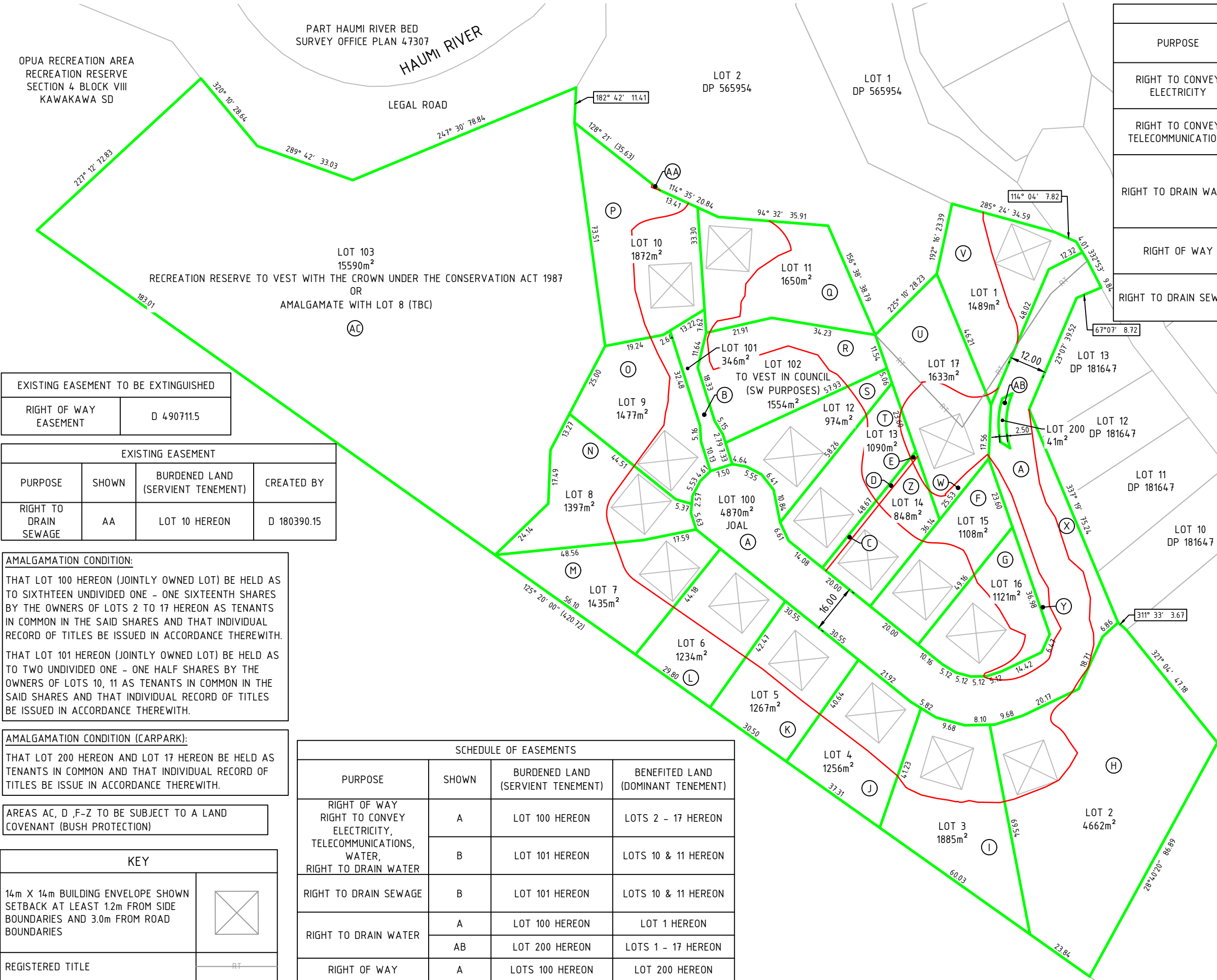
- NOTES:**
- THIS PLAN IS FOR A RESOURCE CONSENT APPLICATION ONLY. AREAS, BOUNDARY DIMENSIONS AND LEVELS ARE SUBJECT TO A LAND TRANSFER SURVEY AND APPROVAL BY THE LOCAL AUTHORITY AND LAND INFORMATION NZ.
 - ANY DISCREPANCIES ON THIS PLAN ARE TO BE REFERRED TO CHESTER CONSULTANTS LTD FOR COMMENT OR RESOLUTION.
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Rev	Date	Amendments	By

Drafter: V.RIVIER Job Title: LOTS 1-17, 100-103 BEING A SUBDIVISION OF LOT 21 DP181647 & LOT 2 DP200205
 Designer: C. DAY Client: HERON POINT LIMITED
 Checker: C. DAY Address: 45 & 47 HIHITAHU RISE, PAIHIA, FAR NORTH DISTRICT.
 Date: 05/07/2024 Drawing Title: PROPOSED SCHEME PLAN

Drawing: 120 Rev: 0
 Scale: 1:1250 @ A3
 Project: 15569
 Issue: CONSENT



SCHEDULE OF EASEMENTS IN GROSS			
PURPOSE	SHOWN	BURDENED LAND (SERVIENT TENEMENT)	GRANTEE
RIGHT TO CONVEY ELECTRICITY	A	LOT 100 HEREON	TOP ENERGY LIMITED
	B	LOT 101 HEREON	
RIGHT TO CONVEY TELECOMMUNICATIONS	A	LOT 100 HEREON	CHORUS NEW ZEALAND LIMITED
	B	LOT 101 HEREON	
RIGHT TO DRAIN WATER	A	LOT 100 HEREON	FAR NORTH DISTRICT COUNCIL
	B	LOT 101 HEREON	
	C,D,E	LOT 14 HEREON	
RIGHT OF WAY	A	LOT 100 HEREON	FAR NORTH DISTRICT COUNCIL
	B	LOT 101 HEREON	
RIGHT TO DRAIN SEWAGE	A	LOT 100 HEREON	FAR NORTH DISTRICT COUNCIL
	B	LOT 101 HEREON	

EXISTING EASEMENT TO BE EXTINGUISHED	
RIGHT OF WAY EASEMENT	D 490711.5

EXISTING EASEMENT			
PURPOSE	SHOWN	BURDENED LAND (SERVIENT TENEMENT)	CREATED BY
RIGHT TO DRAIN SEWAGE	AA	LOT 10 HEREON	D 180390.15

AMALGAMATION CONDITION:
 THAT LOT 100 HEREON (JOINTLY OWNED LOT) BE HELD AS TO SIXTEEN UNDIVIDED ONE - ONE SIXTEENTH SHARES BY THE OWNERS OF LOTS 2 TO 17 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORD OF TITLES BE ISSUED IN ACCORDANCE THEREWITH.
 THAT LOT 101 HEREON (JOINTLY OWNED LOT) BE HELD AS TO TWO UNDIVIDED ONE - ONE HALF SHARES BY THE OWNERS OF LOTS 10, 11 AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORD OF TITLES BE ISSUED IN ACCORDANCE THEREWITH.

AMALGAMATION CONDITION (CARPARK):
 THAT LOT 200 HEREON AND LOT 17 HEREON BE HELD AS TENANTS IN COMMON AND THAT INDIVIDUAL RECORD OF TITLES BE ISSUE IN ACCORDANCE THEREWITH.

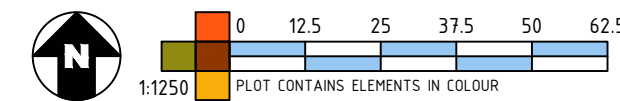
AREAS AC, D, F-Z TO BE SUBJECT TO A LAND COVENANT (BUSH PROTECTION)

KEY	
14m X 14m BUILDING ENVELOPE SHOWN SETBACK AT LEAST 1.2m FROM SIDE BOUNDARIES AND 3.0m FROM ROAD BOUNDARIES	
REGISTERED TITLE	

SCHEDULE OF EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND (SERVIENT TENEMENT)	BENEFITED LAND (DOMINANT TENEMENT)
RIGHT OF WAY RIGHT TO CONVEY ELECTRICITY, TELECOMMUNICATIONS, WATER, RIGHT TO DRAIN WATER	A	LOT 100 HEREON	LOTS 2 - 17 HEREON
	B	LOT 101 HEREON	LOTS 10 & 11 HEREON
RIGHT TO DRAIN SEWAGE	B	LOT 101 HEREON	LOTS 10 & 11 HEREON
RIGHT TO DRAIN WATER	A	LOT 100 HEREON	LOT 1 HEREON
	AB	LOT 200 HEREON	LOTS 1 - 17 HEREON
RIGHT OF WAY	A	LOTS 100 HEREON	LOT 200 HEREON

SITE DESCRIPTION:
 TERRITORIAL AUTHORITY: FAR NORTH DISTRICT COUNCIL
 ADDRESS: 47 HIHITAHU RISE, TE HAUMI
 APPELLATION: LOT 21 DP 181647 & LOT 2 DP 200205
 ZONING: RESIDENTIAL
 RECORD OF TITLE: NA112C/975 & NA126B/885
 AREAS:
 TITLE NA112C/975 = 0.2395Ha
 TITLE NA126B/885 = 4.6400Ha
 DP 551452

NOTES:
 1. THIS PLAN IS FOR A RESOURCE CONSENT APPLICATION ONLY. AREAS, BOUNDARY DIMENSIONS AND LEVELS ARE SUBJECT TO A LAND TRANSFER SURVEY AND APPROVAL BY THE LOCAL AUTHORITY AND LAND INFORMATION NZ.
 2. ANY DISCREPANCIES ON THIS PLAN ARE TO BE REFERRED TO CHESTER CONSULTANTS LTD FOR COMMENT OR RESOLUTION.
 3. THIS DOCUMENT HAS BEEN PREPARED FOR THE AGREED PURPOSES OF OUR CLIENT. NO REPRODUCTION, COPYING, REUSE, SALE, HIRE, LOAN OR GIFT OF THIS DOCUMENT DIRECTLY OR INDIRECTLY IS PERMITTED WITHOUT PRIOR WRITTEN CONSENT OF CHESTER CONSULTANTS LTD.



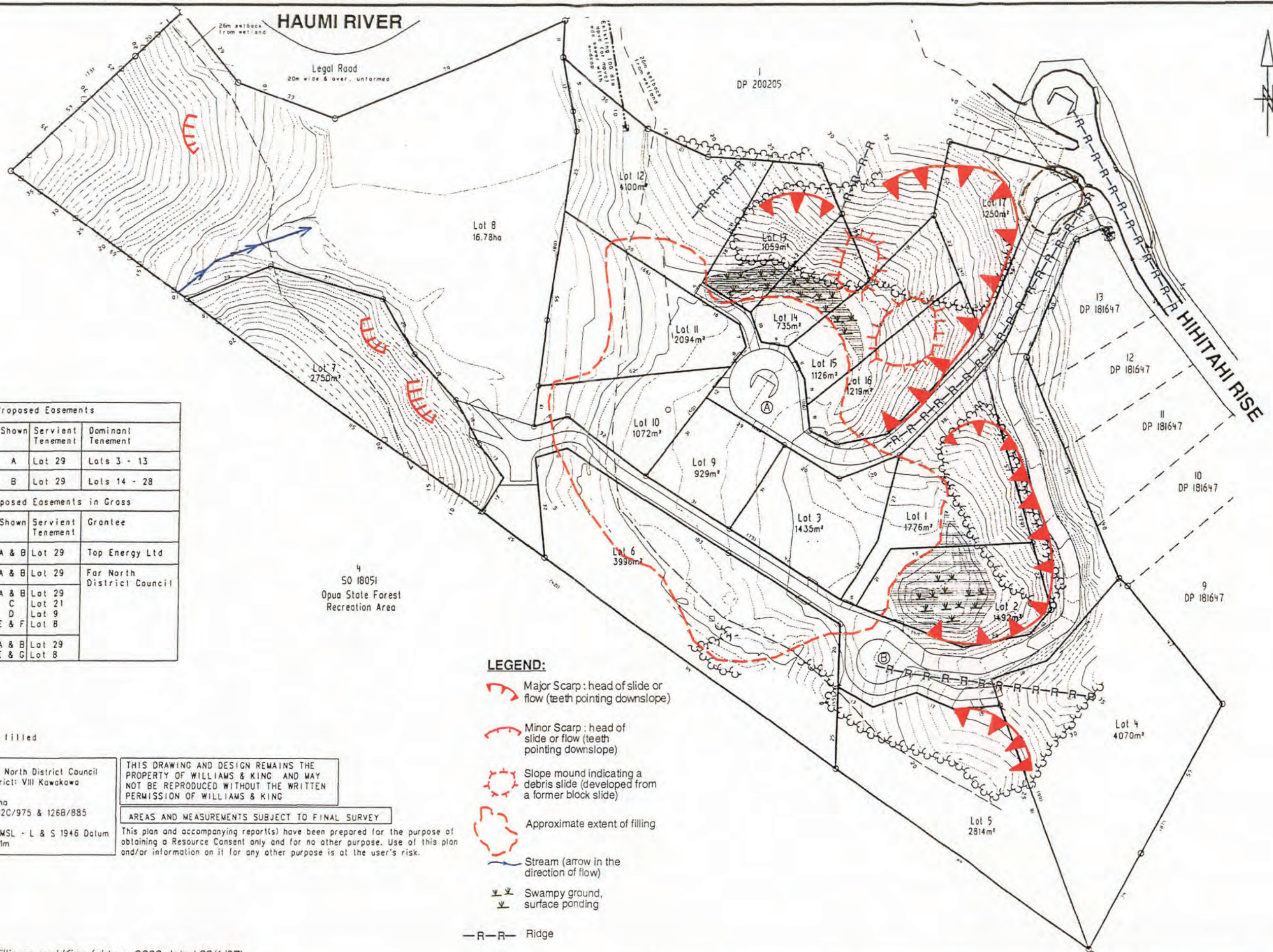
Rev	Date	Amendments	By

Drafter: V.RIVIER Job Title: LOTS 1-17, 100-103 BEING A SUBDIVISION OF LOT 21 DP181647 & LOT 2 DP200205
 Designer: C. DAY Client: HERON POINT LIMITED
 Checker: C. DAY Address: 45 & 47 HIHITAHU RISE, PAIHIA, FAR NORTH DISTRICT.
 Date: 05/07/2024 Drawing Title: OPERATIVE FNDC BUILDING ENVELOPE ASSESSMENT - RULE 13.7.2.2 AND RULE 7.6.5.17

Drawing: 121 Rev: 0
 Scale: 1:1250 @ A3
 Project: 15569
 Issue: CONSENT



APPENDIX B: GEOMORPHOLOGICAL PLAN



Schedule of Proposed Easements			
Purpose	Shown	Servient Tenement	Dominant Tenement
Right of Way	A	Lot 29	Lots 3 - 13
	B	Lot 29	Lots 14 - 28
Schedule of Proposed Easements in Gross			
Purpose	Shown	Servient Tenement	Grantee
Power Supply	A & B	Lot 29	Top Energy Ltd
Water Supply	A & B	Lot 29	Far North District Council
Sewage	A & B	Lot 29	Far North District Council
	C	Lot 21	
	D	Lot 9	
	E & F	Lot 8	
Stormwater	A & B	Lot 29	Far North District Council
	E & G	Lot 8	

Areas to be filled

Local Authority: Far North District Council
Survey Block & District: VIII Kawakawa

Total Area: 4.8795ha
Comprised in: Cst 112C/975 & 126B/885

Levels in terms of: MSL - L & S 1946 Datum
Contour interval is: 1m

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AREAS AND MEASUREMENTS SUBJECT TO FINAL SURVEY

This plan and accompanying report(s) have been prepared for the purpose of obtaining a Resource Consent only and for no other purpose. Use of this plan and/or information on it for any other purpose is at the user's risk.

- LEGEND:**
- Major Scarp: head of slide or flow (teeth pointing downslope)
 - Minor Scarp: head of slide or flow (teeth pointing downslope)
 - Slope mound indicating a debris slide (developed from a former block slide)
 - Approximate extent of filling
 - Stream (arrow in the direction of flow)
 - Swampy ground, surface ponding
 - Ridge

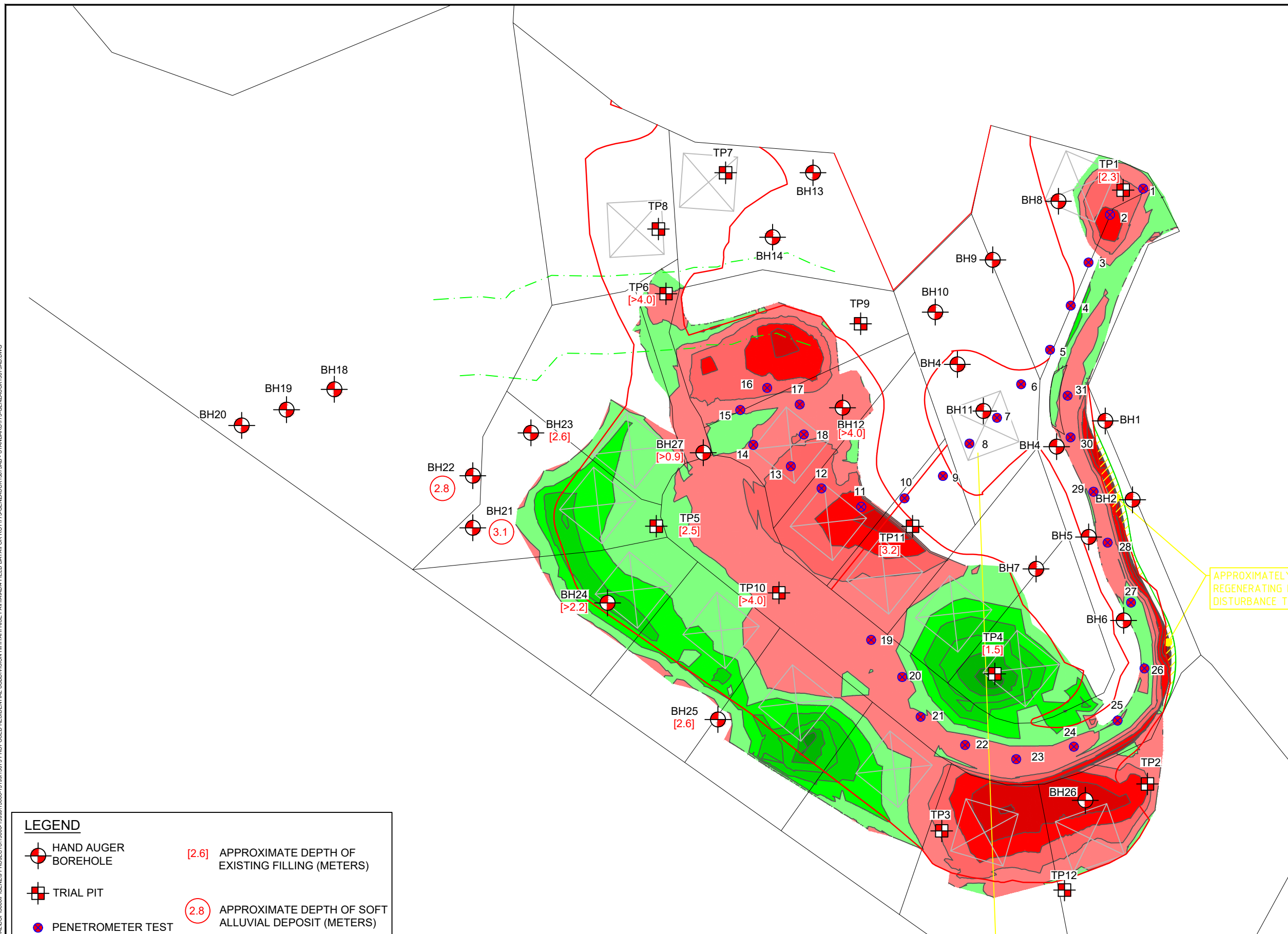
Base Drawing Reference : Williams and King (sht no. 9269 dated 22/1/07)

	CLIENT HERON POINT LIMITED	LEGEND AND/OR NOTES:	Foundation Engineering 216 Gt Sth Rd Newmarket Ph +64 9 523 5626 20 Tamariki Ave Orewa Ph +64 9 426 9707	JOB NUMBER 13073	DATE 28.2.07
	DRAWING TITLE GEOMORPHOLOGICAL MAP PROPOSED RESIDENTIAL SUBDIVISION, HIHITAHU RISE, PAIHIA		DRAWN dab/ rvp	SCALE (A3) 1 : 1200	CHECKED

APPENDIX C: FIELD INFORMATION (2007)

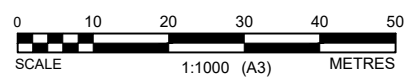


CUT/FILL DEPTHS TABLE		
LOWER RANGE (m)	UPPER RANGE (m)	COLOUR
-6.00	-5.00	Dark Brown
-5.00	-4.00	Red
-4.00	-3.00	Light Red
-3.00	-2.00	Lighter Red
-2.00	-1.00	Very Light Red
-1.00	0.00	Light Pink
0.00	1.00	Light Green
1.00	2.00	Medium Green
2.00	3.00	Dark Green
3.00	4.00	Very Dark Green
4.00	5.00	Black
5.00	6.00	Black



LEGEND	
	HAND AUGER BOREHOLE
	TRIAL PIT
	PENETROMETER TEST
	APPROXIMATE DEPTH OF EXISTING FILLING (METERS)
	APPROXIMATE DEPTH OF SOFT ALLUVIAL DEPOSIT (METERS)

no.	description	drawn	approved	date
A	ORIGINAL ISSUE	RZ	JL	19/06/2024





drawn	RZ
approved	JL
date	19/06/2024
scale	1:1000
original size	A3





client:	THE PLANNING COLLECTIVE LIMITED		
project:	47 HIHITAH IRISE, PAIHIA		
title:	SITE PLAN		
project no:	773-GENZAUCK13073AB	figure no:	01
rev:	A		


PLOT DATE: 19/06/2024 3:42:15 pm DWG FILE: \\TT.LOCAL\COFF\8086\GENZ9\PROJECTS\13000-13999\13006-13199\13073\PROPOSED RESIDENTIAL SUBDIVISION HIHITAH IRISE PAIHIA\4 FIELD DATA\73-GENZAUCK13073AB - STANDARD\73-GENZAUCK13073AB.DWG


Client : Heron Point Limited				Auger Borehole No. 1					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 1 of 28					
Job Number: 13073				Vane Head: 574 ivxx	Logged By: AH	Processor : DAB	Date: 22.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
TOPSOIL									
NATURAL : Stiff, moderately plastic, brown clayey SILT, with minor manganese inclusions					0.5		139+		
					1.0		139+		
					1.5		139+		
Stiff, slightly plastic, brown mottled grey slightly clayey SILT, with slight manganese staining					2.0		98	4.9	
					2.5		139+		
					3.0		139+		
					3.5		139+		
E.O.B. at 4.0 metres.					4.0		139+		
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 2					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 2 of 28					
Job Number: 13073				Vane Head: 574 ivxx	Logged By: AH	Processor : DAB	Date: 22.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
TOPSOIL									
NATURAL : Stiff, slightly plastic, brown slightly clayey SILT, with numerous fine to coarse gravel inclusions					0.5		139+		
Stiff, moderately plastic, brown mottled grey clayey SILT, with manganese inclusions and slight manganese staining					1.0		139+		
Stiff, slightly plastic, brown mottled grey slightly clayey SILT, with slight manganese staining					1.5		96	8.0	
- with occasional fine gravel inclusions									
- with numerous fine to coarse gravel inclusions					2.0		139+		
E.O.B. at 2.2 metres. Unable to penetrate further.					2.5				
					3.0				
					3.5				
					4.0				
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 3					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 3 of 28					
Job Number: 13073				Vane Head: 574 ivxx	Logged By: AH	Processor : DAB	Date: 22.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
TOPSOIL									
NATURAL : Stiff, moderately plastic, brown clayey SILT, with minor manganese inclusions					0.5		139+		
					1.0		139+		
					1.5		139+		
Stiff, slightly plastic, brown mottled grey slightly clayey SILT, with slight manganese staining					2.0		139+		
					2.5		139+		
					3.0		139+		
					3.5		139+		
E.O.B. at 4.0 metres.					4.0		139+		
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 4					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 4 of 28					
Job Number: 13073				Vane Head: 438 vvv	Logged By: SG	Processor : DAB	Date: 22.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
NATURAL : Stiff, very plastic, red/ brown mottled grey silty CLAY							130	3.3	
Stiff, moderately plastic, red/ brown clayey SILT					0.5				
					1.0		110	3.7	
							140+		
					1.5		140+		
					2.0		124	3.1	
							130	4.3	
					2.5		128	4.6	
							140+		
- becoming moist					3.0		130	3.3	
					3.5		132	3.5	
E.O.B. at 4.0 metres.					4.0				
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 5					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 5 of 28					
Job Number: 13073				Vane Head: 438 vvv	Logged By: SG	Processor : DAB	Date: 22.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
<p>NATURAL : Stiff, moderately plastic, red/ brown clayey SILT</p> <p>- becoming light brown</p> <p>- with major fine to coarse gravel inclusions</p> <p>E.O.B. at 2.2 metres. Too stiff to auger further.</p>					0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0		80 82 90 94 100	4.0 3.7 3.0 3.4 3.3	
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 7					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 7 of 28					
Job Number: 13073				Vane Head: 574 ivxx	Logged By: AH	Processor : DAB	Date: 22.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
TOPSOIL									
NATURAL : Stiff, moderately plastic, light brown mottled red/ brown clayey SILT					0.5		90	3.2	
- with major fine to medium gravel inclusions					1.0		112	3.5	
- with numerous fine to coarse gravel inclusions					1.5		139+		
E.O.B. at 2.0 metres. Unable to penetrate further.					2.0		139+		
					2.5				
					3.0				
					3.5				
					4.0				
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 8					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 8 of 28					
Job Number: 13073				Vane Head: 574 ivxx	Logged By: AH	Processor : DAB	Date: 22.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
<p>NATURAL : Stiff, slightly plastic, light brown clayey SILT, with major fine to coarse gravel inclusions</p> <p>- becoming firm, with numerous fine to coarse gravel inclusions</p> <p>- becoming stiff</p> <p>- becoming moist</p>					0.5		(Too gravelly)		
					1.0		(Too gravelly)		
					1.5		139+		
					2.0		70	3.9	
					2.5		82	2.9	
E.O.B. at 2.3 metres. Unable to penetrate further.					3.0				
					3.5				
					4.0				
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 9					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 9 of 28					
Job Number: 13073				Vane Head: 574 ivxx	Logged By: AH	Processor : DAB	Date: 22.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
TOPSOIL									
NATURAL : Stiff, moderately plastic, light brown mottled grey clayey SILT					0.5		139+		
					1.0		139+		
					1.5		139+		
Stiff, slightly plastic, brown mottled grey clayey SILT, with slight manganese staining					2.0		139+		
					2.5		139++		
- with numerous fine gravel inclusions					3.0		139++		
- becoming brown					3.5		139+		
- becoming moist					4.0		139+		
- becoming stiff					4.5				
E.O.B. at 4.0 metres.					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 10					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 10 of 28					
Job Number: 13073				Vane Head: 574 ivxx	Logged By: AH	Processor : DAB	Date: 22.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
	Description: Refer to site plan								
SOIL DESCRIPTION									
TOPSOIL									
NATURAL : Stiff, moderately plastic, red/ brown mottled grey clayey SILT, with slight manganese staining					0.5		139+		
Very stiff, slightly plastic, red/ brown mottled grey slightly clayey SILT, with slight manganese staining and numerous fine gravel inclusions					1.0		139++		
- with numerous fine to coarse gravel inclusions							139++		
E.O.B. at 1.3 metres. Unable to penetrate further.					1.5				
					2.0				
					2.5				
					3.0				
					3.5				
					4.0				
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 11					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 11 of 28					
Job Number: 13073				Vane Head: 574 ivxx	Logged By: AH	Processor : DAB	Date: 22.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
TOPSOIL									
NATURAL : Stiff, moderately plastic, light brown clayey SILT							139+		
- becoming red/ brown					0.5		139+		
					1.0		139+		
					1.5		139+		
					2.0		139+		
					2.5		139+		
- becoming moist					3.0		122	7.6	
					3.5		130	4.3	
E.O.B. at 4.0 metres.					4.0		139+		
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 12					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 12 of 28					
Job Number: 13073				Vane Head: 574 ivxx	Logged By: SG	Processor : DAB	Date: 22.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
	Description: Refer to site plan								
SOIL DESCRIPTION									
<p>FILL : Firm, moderately plastic, light grey mottled red/ brown clayey silt</p> <p>- becoming stiff</p> <p>- with major fine to coarse gravel inclusions</p> <p>- becoming light grey mottled grey</p> <p>- becoming moist</p>					0.5		60	6.0	
					1.0		139+		
					1.5		139+		
					2.0		130	6.5	
					2.5		139+		
					3.0		139+		
					3.5		128	4.3	
E.O.B. at 3.6 metres. Unable to penetrate further.					4.0		139+		
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 13					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 13 of 28					
Job Number: 13073				Vane Head: 574 ivxx	Logged By: AH	Processor : DAB	Date: 22.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
<p>NATURAL : Stiff, very plastic, brown mottled grey silty CLAY</p> <p>- becoming red/ brown</p> <p>- with minor manganese inclusions</p> <p>- with numerous fine gravel inclusions</p> <p>- becoming moist</p>					0.5		139+		
E.O.B. at 3.0 metres.					1.0		139+		
					1.5		139+		
					2.0		139+		
					2.5		139+		
					3.0		139+		
					3.5				
					4.0				
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 15					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 15 of 28					
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 23.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
TOPSOIL									
NATURAL : Stiff, moderately plastic, orange clayey SILT							110	2.6	
					0.5				
							124	2.6	
					1.0				
							140+		
					1.5				
							140+		
Stiff, slightly plastic, cream pink and orange slightly clayey SILT					2.0				
							140+		
					2.5			6.9	
							117		
					3.0				
							140+		
					3.5				
							140+		
					4.0				
							140+		
E.O.B. at 4.0 metres.					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 16					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 16 of 28					
Job Number: 13073				Vane Head: 438 vvxii	Logged By: SG	Processor : DAB	Date: 23.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
TOPSOIL									
NATURAL : Stiff, very plastic, light brown silty CLAY							80	2.7	
					0.5		90	2.8	
					1.0		90	4.1	
					1.5		92	3.5	
Stiff, moderately plastic, red/ brown clayey SILT					2.0		88	2.9	
					2.5		140++		
E.O.B. at 2.4 metres. Unable to penetrate further.					3.0				
					3.5				
					4.0				
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 17					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 17 of 28					
Job Number: 13073				Vane Head: 574 ivxx	Logged By: AH	Processor : DAB	Date: 23.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
TOPSOIL									
NATURAL : Stiff, moderately plastic, brown mottled grey clayey SILT					0.5		100	2.0	
NATURAL : Stiff, moderately plastic, brown mottled grey clayey SILT, with minor manganese inclusions					1.0		110	2.2	
Stiff, slightly plastic, brown mottled light brown/ light grey slightly clayey SILT - becoming very stiff - with occasional fine gravel inclusions					1.5		110	2.4	
					2.0		139+		
					2.5		139+		
					3.0		139+		
					3.5		139+		
E.O.B. at 3.6 metres. Unable to penetrate further.					4.0				
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	50mm	Topsoil	Sand	Sandstone	Plutonic
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 18							
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 18 of 28							
Job Number: 13073				Vane Head: 438 vvxii	Logged By: SG	Processor : DAB	Date: 23.2.07				
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details		
Description: Refer to site plan											
SOIL DESCRIPTION											
TOPSOIL											
NATURAL : Firm, very plastic, light brown mottled grey silty CLAY, wet							50	2.5			
					0.5						
							50	3.1			
					1.0	?					
							40	4.0			
Stiff, moderately plastic, dark grey clayey SILT, with major fine to medium gravel sized grey wacke inclusions											
							70	2.9			
E.O.B. at 2.3 metres. Unable to penetrate further.							90	3.2			
					2.0						
					2.5						
					3.0						
					3.5						
					4.0						
					4.5						
					5.0						
					5.5						
					6.0						
	Comments: Groundwater encountered at 1.0 metres.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic			
				50mm	Fill	Gravel	Siltstone	No Core			
				Checked:	Clay	Organic	Limestone				
					Silt	Pumice	Volcanic				


Client : Heron Point Limited				Auger Borehole No. 20					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 20 of 28					
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 23.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
TOPSOIL									
NATURAL : Stiff, moderately plastic, orange clayey SILT							132	3.7	
- becoming cream mottled pink/ orange					0.5		140+		
- becoming pink/ orange					1.0		140+		
- becoming slightly plastic, cream, orange and pink slightly clayey silt					1.5		140+		
					2.0		140+		
					2.5		140+		
					3.0		140+		
					3.5		140+		
E.O.B. at 4.0 metres.					4.0		140+		
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 21					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 21 of 28					
Job Number: 13073				Vane Head: 438 vvxii	Logged By: SG	Processor : DAB	Date: 23.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION						?			
NATURAL : Very soft, moderately plastic, dark grey silty CLAY, with major organic staining, saturated							(Too soft)		
					0.5		(Too soft)		
					1.0		(Too soft)		
					1.5		(Too soft)		
					2.0		14	1.8	
					2.5		30	3.0	
					3.0		56	4.7	
Stiff, moderately plastic, dark grey clayey SILT, with major fine to medium gravel sized grey wacke inclusions					3.5		34	2.4	
E.O.B. at 3.2 metres.					4.0		92	3.1	
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater encountered at 0.0 metres (surface).			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		

Client : Heron Point Limited				Auger Borehole No. 22					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 22 of 28					
Job Number: 13073				Vane Head: 574 ivxx	Logged By: AH	Processor : DAB	Date: 23.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
NATURAL : Soft, moderately plastic, grey clayey SILT, with fine to medium gravel inclusions						?			
					0.5				
					1.0				
					1.5		14	1.8	
					2.0		32	3.2	
					2.5		38	3.8	
Stiff, moderately plastic, dark grey clayey SILT, with major fine to medium gravel sized grey wacke inclusions							82	2.7	
E.O.B. at 2.9 metres.					3.0				
					3.5				
					4.0				
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater encountered at 0.0 metres (surface).			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 23					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 23 of 28					
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 23.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
TOPSOIL									
FILL : Stiff, moderately plastic, orange, brown and grey clayey silt							86	3.6	
- becoming firm					0.5		68	4.3	
					1.0		58	2.8	
- becoming stiff					1.5		66	2.8	
					2.0		45	3.2	
NATURAL : Stiff, moderately plastic, cream mottled pink/ orange slightly fine sandy clayey SILT					2.5		120	4.8	
E.O.B. at 3.0 metres.					3.0		90	2.8	
					3.5				
					4.0				
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 26					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 26 of 28					
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 23.2.07		
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
Description: Refer to site plan									
SOIL DESCRIPTION									
TOPSOIL									
NATURAL : Stiff, moderately plastic, orange clayey SILT							136	4.0	
- becoming red/ orange					0.5		140+		
					1.0		140+		
					1.5		126	4.7	
					2.0		140+		
- becoming slightly plastic, cream mottled orange slightly clayey silt with minor manganese inclusions					2.5		140+		
					3.0		140+		
E.O.B. at 3.0 metres.					3.5				
					4.0				
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Borehole Diameter:	Topsoil	Sand	Sandstone	Plutonic	
				50mm	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		


Client : Heron Point Limited				Auger Borehole No. 28						
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 28 of 28						
Job Number: 13073				Vane Head: 438 vvxii	Logged By: SG	Processor : DAB	Date: 23.2.07			
Borehole Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Standing Water Level	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details	
Description: Refer to site plan										
SOIL DESCRIPTION										
TOPSOIL										
SLUMP DEBRIS : Stiff, moderately plastic, light brown clayey silt										
- becoming red/ brown										
- becoming moist										
- becoming firm										
NATURAL : Stiff, moderately plastic, red/ brown clayey SILT										
- becoming red/ brown speckled white (slightly pumiceous)										
- becoming very stiff										
- becoming stiff										
Stiff, slightly plastic, red/ brown clayey SILT, with common fine to medium gravel inclusions										
E.O.B. at 3.6 metres. Unable to penetrate.										
				Borehole Diameter:		50mm	Comments: Groundwater not encountered.			
				Checked:	Topsoil	Sand	Sandstone	Plutonic		
				Clay	Gravel	Siltstone	No Core			
				Silt	Organic	Limestone				
		Pumice	Volcanic							

Client : Heron Point Limited				Trial Pit No. TP 1									
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 1 of 12									
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 22.2.07						
Stratigraphy	Pit Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Groundwater	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details			
	Description: Refer to site plan												
SOIL DESCRIPTION													
FILL : Very stiff, moderately plastic, cream mottled orange clayey silt						0.5		140+					
FILL : Stiff, very plastic, cream streaked orange silty clay						1.0		114	4.1				
FILL : Stiff, moderately plastic, orange clayey silt						1.5		92	9.2				
- becoming red/ orange and grey with minor fine gravel greywacke inclusions						2.0		96	3.4				
- becoming grey/ brown (possibly topsoil) to 2.3m						2.5		90	4.5				
NATURAL : Stiff, moderately plastic, red/ orange dark grey clayey SILT						3.0		70	3.9				
- becoming grey with major fine gravel greywacke inclusions, moist						3.5		140+					
Stiff, very plastic, dark grey silty CLAY, with major fine to medium gravel greywacke inclusions						4.0		91	1.9				
E.O.P. at 4.5 metres.						4.5							
						5.0							
						5.5							
						6.0							
		Comments: Groundwater not encountered.		Excavator Used:		Topsoil		Sand		Sandstor		Plutonic	
				Hitachi EX 150		Fill		Gravel		Siltstone		No Core	
				Checked:		Clay		Organic		Limestor			
						Silt		Pumice		Volcanic			

Client : Heron Point Limited				Trial Pit No. TP 2									
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 2 of 12									
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 22.2.07						
Stratigraphy	Pit Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Groundwater	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details			
	Description: Refer to site plan												
SOIL DESCRIPTION													
<p>TOPSOIL</p> <p>NATURAL : Stiff, moderately plastic, orange very clayey SILT</p> <p>- becoming red/ orange/ pink</p> <p>- becoming orange with major fine to coarse gravel inclusions</p> <p>- with minor manganese staining</p> <p>- with minor highly weathered, greywacke inclusions (manganese stained)</p> <p>- becoming cream, pink, red, orange and grey (manganese stained)</p> <p>E.O.P. at 4.0 metres.</p>													
				Comments: Groundwater not encountered.		Excavator Used:		Topsoil		Sand			
						Hitachi EX 150		Sandstor		Plutonic			
						Checked:		Fill		Siltstone		No Core	
								Clay		Limestor			
								Silt		Volcanic			

Client : Heron Point Limited				Trial Pit No. TP 3					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 3 of 12					
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 22.2.07		
Stratigraphy	Pit Location:	mN Description: Refer to site plan	mE Ground R.L.	Legend	Depth (m)	Groundwater	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
	SOIL DESCRIPTION								
	TOPSOIL								
	NATURAL : Very stiff, very plastic, orange silty CLAY				0.5		127	1.9	
	Stiff, moderately plastic, red clayey SILT				1.0		140+		
	Stiff, slightly plastic, red, brown (manganese) mottled cream slightly clayey SILT (slightly pumiceous)				1.5		121	1.8	
	- with major fine to coarse gravel sized, highly weathered, greywacke inclusions				2.0		140+		Sample 2 2.0-2.5m
					2.5		140+		
					3.0		118	8.4	
					3.5		140+		
	E.O.P. at 4.0 metres.				4.0		140+		
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Excavator Used:	Topsoil	Sand	Sandstor	Plutonic	
				Hitachi EX 150	Fill	Gravel	Siltstone	No Core	
				Checked:	Clay	Organic	Limestor		
					Silt	Pumice	Volcanic		

Client : Heron Point Limited				Trial Pit No. TP 4					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 4 of 12					
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 22.2.07		
Stratigraphy	Pit Location:	mN Description: Refer to site plan	mE Ground R.L.	Legend	Depth (m)	Groundwater	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
	SOIL DESCRIPTION								
TOPSOIL									
FILL : Stiff, moderately plastic, grey mottled orange very clayey silt					0.5		92	6.1	
- becoming grey					1.0		92	6.6	
- becoming orange mottled grey					1.5		61	3.8	
- becoming firm					2.0		52	2.6	
NATURAL : Firm, moderately plastic, grey and orange clayey SILT, with major fine to medium gravel sized greywacke inclusions and groundwater seepage					2.5		56	4.7	
Firm, moderately plastic, light grey/ mottled dark grey clayey SILT, with major fine gravel sized highly weathered, greywacke inclusions					3.0		57	7.1	
E.O.P. at 4.0 metres.					3.5		48	2.2	
					4.0		70	1.6	
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater seepage at 1.6 metres.			Excavator Used: Hitachi EX 150	Topsoil	Sand	Sandstone	Plutonic	
				Checked:	Fill	Gravel	Siltstone	No Core	
					Clay	Organic	Limestone		
					Silt	Pumice	Volcanic		

Client : Heron Point Limited				Trial Pit No. TP 5							
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 5 of 12							
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 22.2.07				
Stratigraphy	Pit Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Groundwater	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details	
	Description: Refer to site plan		SOIL DESCRIPTION								
TOPSOIL											
FILL : Firm, moderately plastic, red/ pink and grey clayey silt											
- becoming brown with major wood inclusions to 1.3m											
- becoming grey, orange and pink											
NATURAL : Stiff, moderately plastic, grey mottled orange clayey SILT											
E.O.P. at 4.0 metres.											
				Comments: Groundwater not encountered.		Excavator Used: Hitachi EX 150		Topsoil	Sand	Sandstone	Plutonic
				Checked:		Fill	Gravel	Siltstone	No Core		
						Clay	Organic	Limestone			
						Silt	Pumice	Volcanic			


Client : Heron Point Limited				Trial Pit No. TP 6							
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 6 of 12							
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 22.2.07				
Stratigraphy	Pit Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Groundwater	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details	
	Description: Refer to site plan										
SOIL DESCRIPTION											
Fill	TOPSOIL					0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0					
	FILL : Firm, moderately plastic, cream streaked orange clayey silt										
	- becoming pink, orange and cream										
	E.O.P. at 4.0 metres.										
Comments: Groundwater not encountered.				Excavator Used:		Topsoil	Sand	Sandstone	Plutonic		
				Hitachi EX 150		Fill	Gravel	Siltstone	No Core		
				Checked:		Clay	Organic	Limestone			
						Silt	Pumice	Volcanic			





Client : Heron Point Limited				Trial Pit No. TP 7						
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 7 of 12						
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 22.2.07			
Stratigraphy	Pit Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Groundwater	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
	Description: Refer to site plan									
SOIL DESCRIPTION										
TOPSOIL										
NATURAL : Stiff, moderately plastic, orange clayey SILT										
- becoming red/ orange with minor highly weathered, cream clast inclusions										
- becoming orange										
- becoming cream, brown (manganese), orange and red with major fine to coarse gravel sized, highly weathered, greywacke inclusions										
E.O.P. at 4.0 metres.										
		Comments: Groundwater not encountered.		Excavator Used:		Topsoil	Sand	Sandstor	Plutonic	
				Hitachi EX 150		Fill	Gravel	Siltstone	No Core	
				Checked:		Clay	Organic	Limestor		
						Silt	Pumice	Volcanic		

Client : Heron Point Limited				Trial Pit No. TP 8													
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 8 of 12													
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 22.2.07										
Stratigraphy	Pit Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Groundwater	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details							
	Description: Refer to site plan																
SOIL DESCRIPTION																	
TOPSOIL																	
NATURAL : Stiff, moderately plastic, orange very clayey SILT																	
- becoming cream mottled orange																	
Stiff, very plastic, orange silty CLAY																	
Stiff, moderately plastic, cream mottled pink/ red clayey SILT																	
E.O.P. at 4.0 metres.																	
				Comments: Groundwater not encountered.				Excavator Used:		Topsoil		Sand		Sandstone		Plutonic	
								Hitachi EX 150		Fill		Gravel		Siltstone		No Core	
								Checked:		Clay		Organic		Limestone			
										Silt		Pumice		Volcanic			

Client : Heron Point Limited				Trial Pit No. TP 9						
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 9 of 12						
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 22.2.07			
Stratigraphy	Pit Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Groundwater	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
	Description: Refer to site plan									
SOIL DESCRIPTION										
TOPSOIL										
NATURAL : Stiff, moderately plastic, orange clayey SILT										
- becoming light grey										
Stiff, moderately plastic, cream, brown (manganese) and orange clayey SILT (pumiceous), with minor highly weathered, fine to coarse gravel greywacke inclusions										
E.O.P. at 4.0 metres.										
		Comments: Groundwater not encountered.		Excavator Used:		Topsoil	Sand	Sandstor	Plutonic	
				Hitachi EX 150		Fill	Gravel	Siltstone	No Core	
				Checked:		Clay	Organic	Limestor		
						Silt	Pumice	Volcanic		

Client : Heron Point Limited				Trial Pit No. TP 10						
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 10 of 12						
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 22.2.07			
Stratigraphy	Pit Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Groundwater	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
	Description: Refer to site plan									
SOIL DESCRIPTION										
FILL : Stiff, moderately plastic, pink/ red clayey silt - becoming brown (organic)										
FILL: Stiff, moderately plastic, orange, cream and red clayey SILT, with major fine to coarse, highly weathered, greywacke inclusions						0.5		100	5.6	
						1.0		140+		
						1.5		78	3.9	
						2.0		140+		
- with minor limonite inclusions										
FILL : Stiff, moderately plastic, grey clayey SILT, with major fine gravel greywacke inclusions						2.5		77	3.1	
						3.0		140+		
						3.5		50	1.7	
FILL : Firm, very plastic, orange and grey silty CLAY										
						4.0		140+		
E.O.P. at 4.0 metres.						4.5				
						5.0				
						5.5				
						6.0				
	Comments: Groundwater not encountered.			Excavator Used: Hitachi EX 150	Topsoil	Sand	Sandstone	Plutonic		
				Checked:	Fill	Gravel	Siltstone	No Core		
					Clay	Organic	Limestone			
					Silt	Pumice	Volcanic			


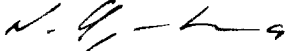
Client : Heron Point Limited				Trial Pit No. TP 11					
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 11 of 12					
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 22.2.07		
Stratigraphy	Pit Location:	mN Description: Refer to site plan	mE Ground R.L.	Legend	Depth (m)	Groundwater	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details
	SOIL DESCRIPTION								
FILL : Stiff, moderately plastic, orange and cream clayey silt					0.5		106	7.1	
- with minor topsoil inclusions to 0.4m									
- becoming pink/ red					1.0		50	3.1	
- becoming grey									
- becoming pink/ red and cream					1.5		76	3.8	
- with minor highly decomposed organic inclusions to 2.1									
MULLOCK/ TOPSOIL					3.0		53	2.4	
NATURAL: Stiff, very plastic, orange and grey silty CLAY									
E.O.P. at 4.0 metres.					4.0		98	2.2	
					4.5				
					5.0				
					5.5				
					6.0				
	Comments: Groundwater not encountered.			Excavator Used: Hitachi EX 150	Topsoil	Sand	Sandstor	Plutonic	
				Checked:	Fill	Gravel	Siltstone	No Core	
					Clay	Organic	Limestor		
				Silt	Pumice	Volcanic			

Client : Heron Point Limited				Trial Pit No. TP 12											
Project Location : Proposed Residential Subdivision Hihitahi Rise, Paihia				Sheet 12 of 12											
Job Number: 13073				Vane Head: 445 vxivx	Logged By: JB	Processor : DAB	Date: 22.2.07								
Stratigraphy	Pit Location:	mN	mE	Ground R.L.	Legend	Depth (m)	Groundwater	Vane Dial Reading	Soil Sensitivity	Sample and Laboratory Test Details					
	Description: Refer to site plan														
SOIL DESCRIPTION															
TOPSOIL															
SLUMP DEBRIS : Stiff, moderately plastic, orange clayey silt															
- becoming pink/ red															
NATURAL : Very stiff, slightly plastic, cream/ grey slightly clayey SILT, with manganese staining and minor highly weathered, fine gravel sized greywacke inclusions															
E.O.P. at 4.0 metres.															
				Comments: Groundwater not encountered.		Excavator Used:		Topsoil		Sand		Sandstor		Plutonic	
						Hitachi EX 150		Fill		Gravel		Siltstone		No Core	
						Checked:		Clay		Organic		Limestor			
								Silt		Pumice		Volcanic			

APPENDIX D: LABORATORY TEST RESULTS (2007)

CLASSIFICATION TEST RESULTS

Test Methods: NZS 4402:1986 Tests 2.1, 2.5 & 2.6

 <p>All tests reported herein have been performed in accordance with the laboratory's scope of accreditation</p>  <p>N.G. Agarkova Approved Signatory</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">JOB NO</td> <td style="text-align: right;">13073</td> </tr> <tr> <td>PROJECT</td> <td style="text-align: right;">Proposed Residential Subdivision Hihitahi Rise Paihia</td> </tr> <tr> <td>CLIENT</td> <td style="text-align: right;">Heron Point Limited</td> </tr> </table>	JOB NO	13073	PROJECT	Proposed Residential Subdivision Hihitahi Rise Paihia	CLIENT	Heron Point Limited
JOB NO	13073						
PROJECT	Proposed Residential Subdivision Hihitahi Rise Paihia						
CLIENT	Heron Point Limited						

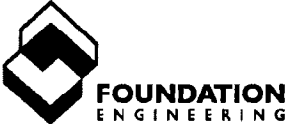
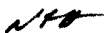
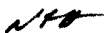
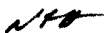
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Borehole No	12	16
Sample No	23.02.07	24.02.07
Depth	0.4-0.8 m	0.4-0.8 m
Water Content %	42.7	47.8

Samples prepared from 'As Received' Natural Water Content

Soil fraction used	< 0.425mm	Whole soil
Cone Penetration Limit	53	85
Linear Shrinkage %	9	14

--

	216 Gt Sth Rd Newmarket Ph + 64 9 523 5626 20 Tamariki Ave Orewa Ph + 64 9 426 9707	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">TESTED AT</td> <td style="text-align: right;">Newmarket</td> </tr> <tr> <td>DATE</td> <td style="text-align: right;">12.03.07</td> </tr> <tr> <td>CHECKED</td> <td style="text-align: right;"></td> </tr> </table>	TESTED AT	Newmarket	DATE	12.03.07	CHECKED	
TESTED AT	Newmarket							
DATE	12.03.07							
CHECKED								

COMPACTION TEST RESULT

Test Method: NZS 4402:1986 Test 4.1.1 & NZGS 8-2001



Tests / comments indicated ^{NE} are outside the scope of the laboratory's accreditation

N.G. Agarkova

N.G. Agarkova Approved Signatory

JOB	13073
PROJECT	Proposed Residential Subdivision Hihitahi Rise, Paihia
CLIENT	Heron Point Limited
TRIAL PIT NO	TP2
SAMPLE REF	22.02.07
DEPTH	1.5-1.8m

TEST DETAILS:

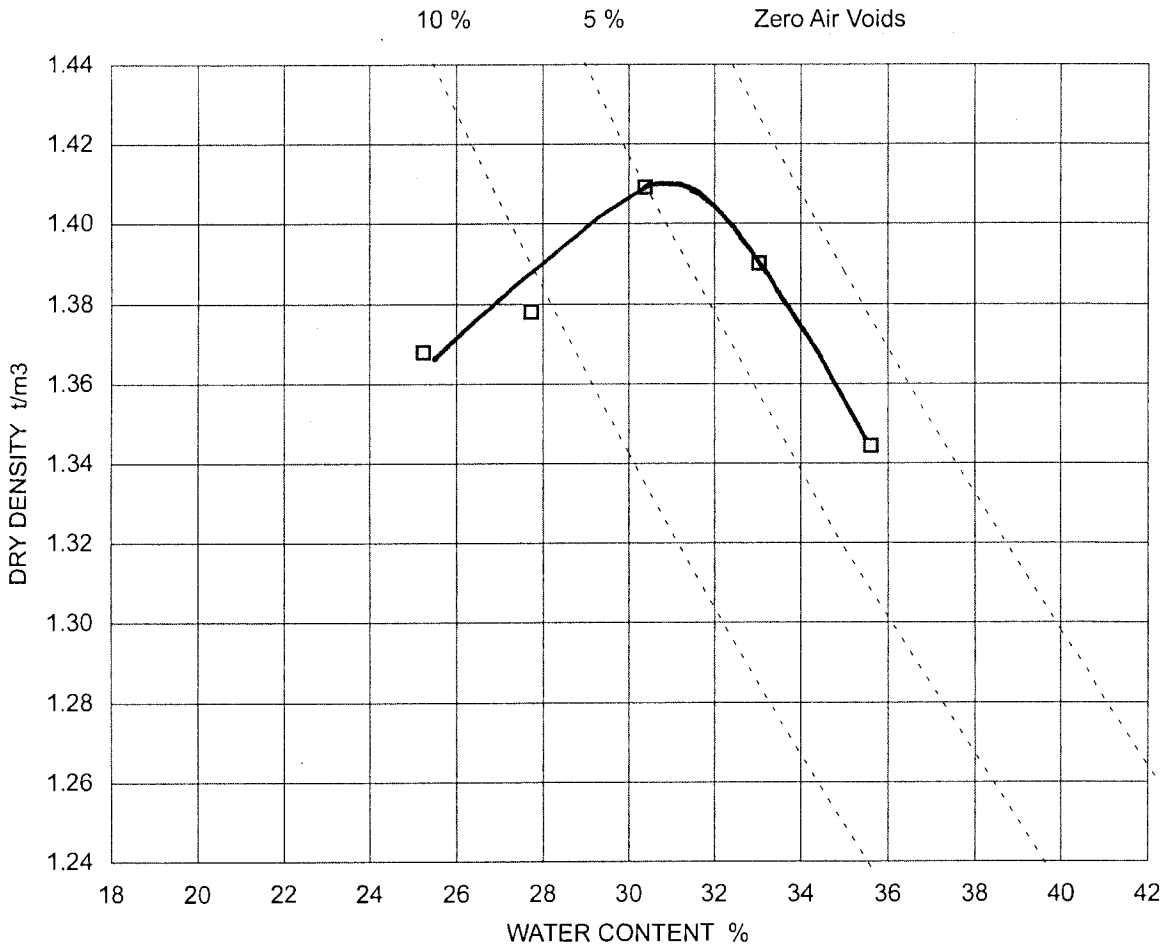
NZ Standard Compaction

Sample prepared from 'As Received' Water Content of 30.6 %

Tests on fraction passing 19mm sieve

Separate samples were used for each compaction point

^{NE} Material used was Pink & brown mottled slightly clayey SILT with gravel



Solid Density Assumed 2.70 t/m³

Maximum Dry Density 1.41 t/m³

Optimum Water Content 31 %



FOUNDATION ENGINEERING

26 Patey Street
 REMUERA 1051
 www.fel-nz.com

DATE 12.03.07
 CHECKED *N.G.*

COMPACTION TEST RESULT

Test Method: NZS 4402:1986 Test 4.1.1 & NZGS 8-2001



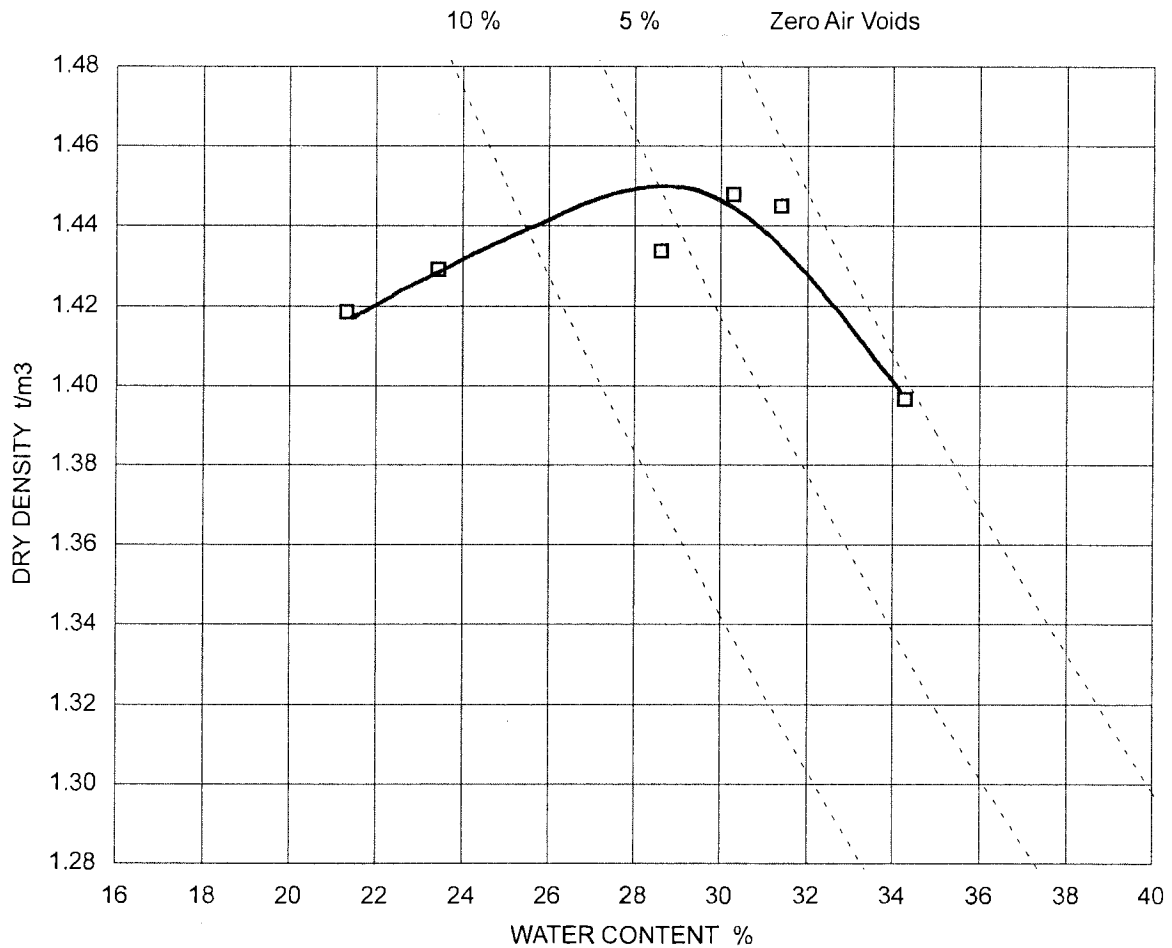
Tests / comments indicated ^{NE} are outside the scope of the laboratory's accreditation

N.G. Agarkova Approved Signatory

JOB	13073
PROJECT	Proposed Residential Subdivision Hihitahi Rise, Paihia
CLIENT	Heron Point Limited
TRIAL PIT NO	TP3
SAMPLE REF	22.02.07
DEPTH	2.2-2.5m

TEST DETAILS:

- NZ Standard Compaction
- Sample prepared from 'As Received' Water Content of 25.5 %
- Tests on fraction passing 19mm sieve
- Separate samples were used for each compaction point
- ^{NE} Material used was Orange/brown clayey SILT with gravel



Solid Density Assumed 2.70 t/m³

Maximum Dry Density 1.45 t/m³

Optimum Water Content 29 %



FOUNDATION ENGINEERING

26 Patey Street
 REMUERA 1051
 www.fel-nz.com

DATE 12.03.07
 CHECKED

WATER CONTENT TEST RESULTS

Test Method: NZS 4402:1986 Test 2.1



All tests reported herein have been performed in accordance with the laboratory's scope of accreditation

N. G. Agarkova

N. G. Agarkova Approved Signatory

JOB NO 13073
 PROJECT Proposed Residential Subdivision Hihitahi Rise, Paihia
 CLIENT Heron Point Limited

Borehole No	Sample No	Depth m	Water Content %
26	23.02.07	0.5	35.3
		1.0	32.7
		1.5	32.3
		2.0	38.4
		2.5	31.4
		3.0	33.1



FOUNDATION ENGINEERING

26 Patey Street
 REMUERA 1051
 www.fel-nz.com

DATE 12.03.07
 CHECKED *NBA*

WATER CONTENT TEST RESULTS

Test Method: NZS 4402:1986 Test 2.1



All tests reported herein have been performed in accordance with the laboratory's scope of accreditation

N. G. Agarkova Approved Signatory

JOB NO	80106
PROJECT	Proposed Residential Subdivision, Hihitahi Rise Paihia (Ref 13073)
CLIENT	Coffey Geotechnics (NZ) Limited


Borehole No	Sample No	Depth	Water Content
		m	%
HA(29)	03.09.08	0.4	17.7
		0.8	35.2
		1.2	23.8
		1.6	30.5
		2.0	28.7
		2.4	30.5
		2.8	26.1
		3.2	35.2
		3.6	45.3
		4.0	47.6
HA(30)	03.09.08	0.4	40.0
		0.8	29.2
		1.2	35.2
		1.6	28.3
		2.0	29.2
		2.4	33.7
		2.8	34.4
		3.2	38.7
		3.6	36.6
		4.0	34.0
HA(31)	03.09.08	0.4	26.8

WATER CONTENT TEST RESULTS

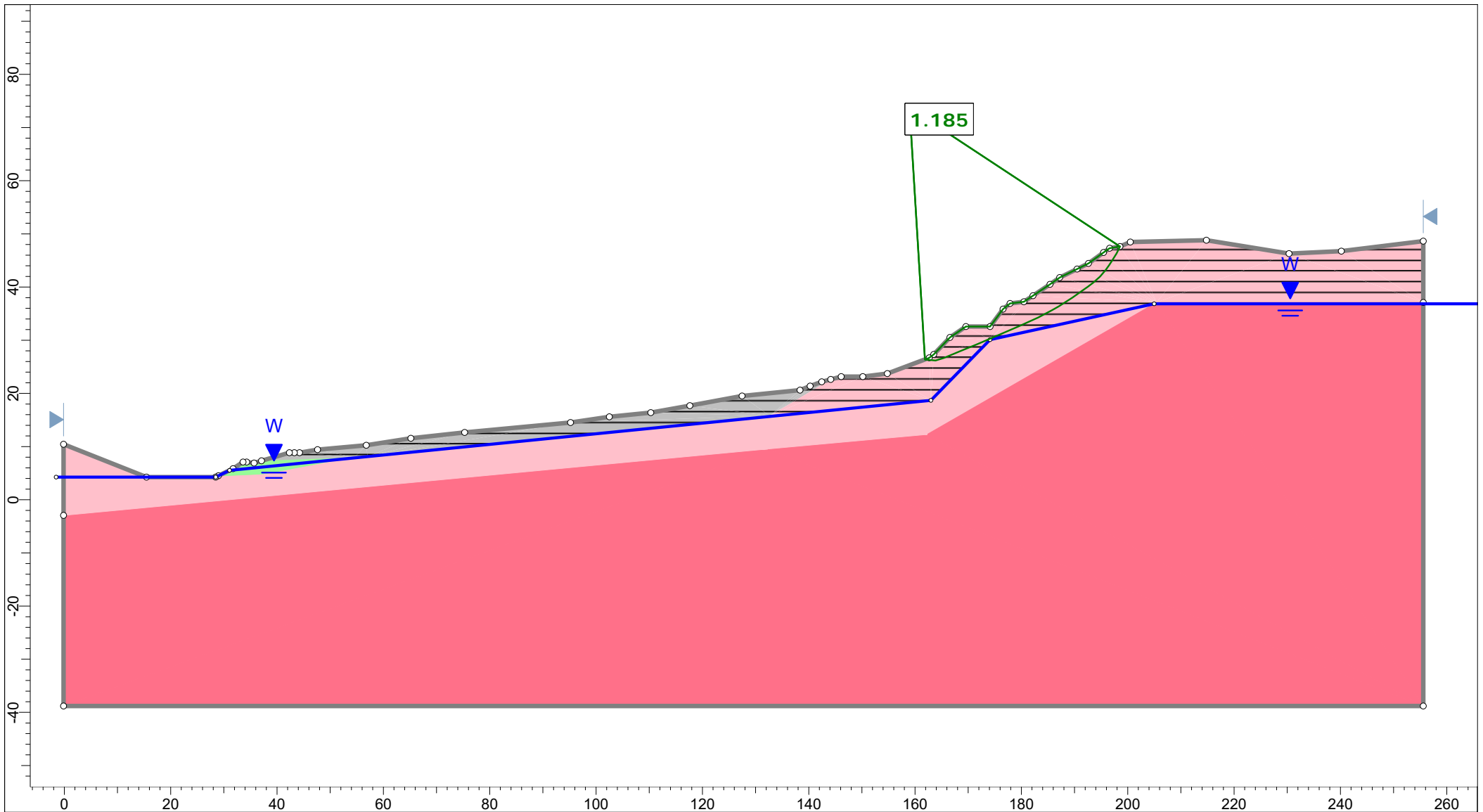
Test Method: NZS 4402:1986 Test 2.1


	JOB NO	80106
	PROJECT	Proposed Residential Subdivision, Hihitahi Rise Paihia (Ref 13073)
	CLIENT	Coffey Geotechnics (NZ) Limited

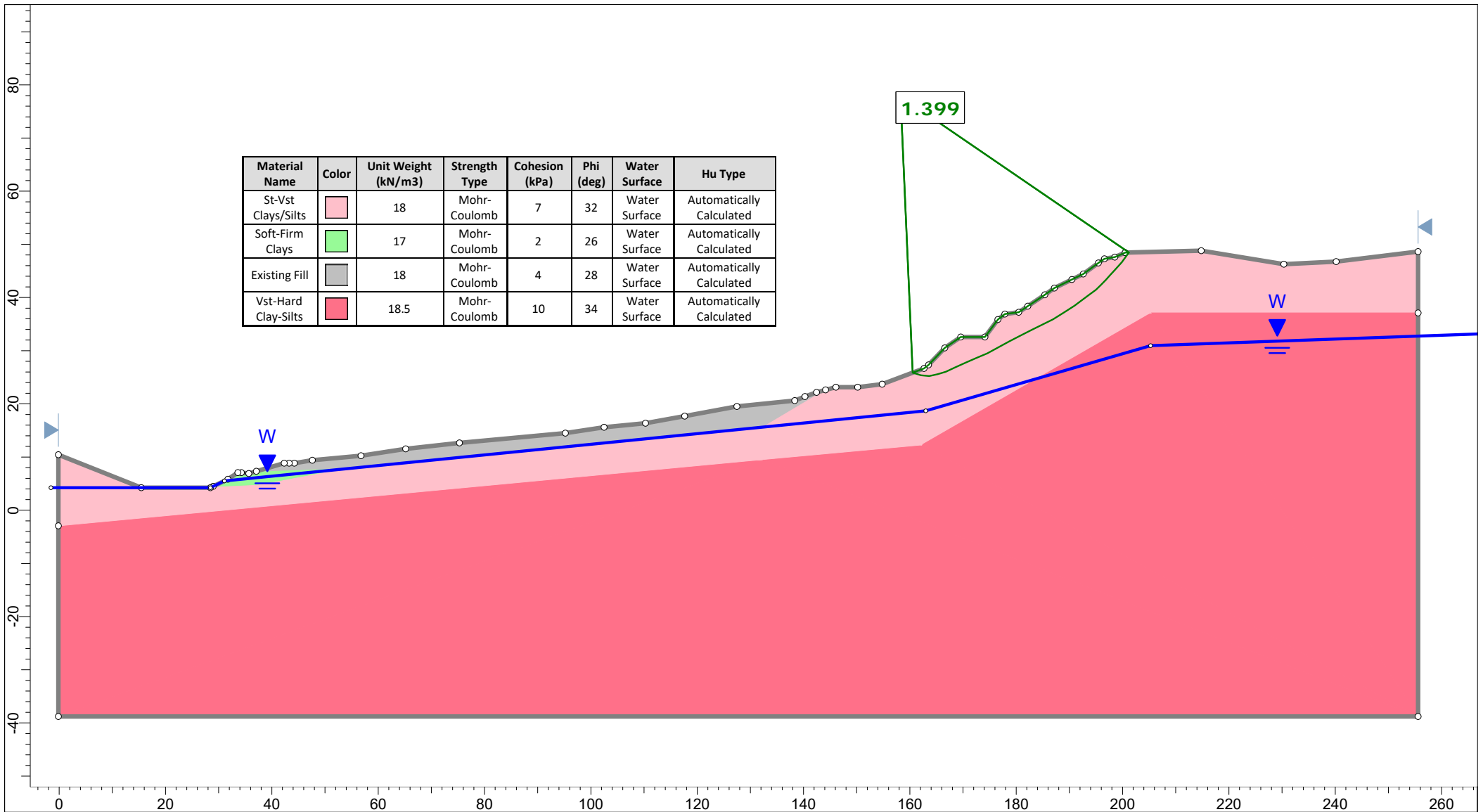
Borehole No	Sample No	Depth	Water Content
		m	%
HA(32)	03.09.08	0.4	46.7
		0.8	37.0
		1.2	35.0
		1.6	33.1
		2.0	32.8
		2.4	33.6
		2.8	37.3
		3.2	34.3
		3.6	34.6
		4.0	36.1
HA(33)	03.09.08	0.4	41.6
		0.8	39.0
		1.2	35.6
		1.6	39.8
		2.0	49.0
		2.4	44.3
		2.8	41.7
		3.2	39.1
		3.6	40.4
		4.0	48.8
HA(34)	03.09.08	0.4	32.7
		0.8	27.5
		1.2	29.2
		1.6	39.3
		2.0	33.3


 information SPECIALISTS IN SCIENTIFIC TESTING SOLUTIONS	10 Lion Place Newmarket 1023 www.coffey.com	DATE 08.09.08 CHECKED YJ
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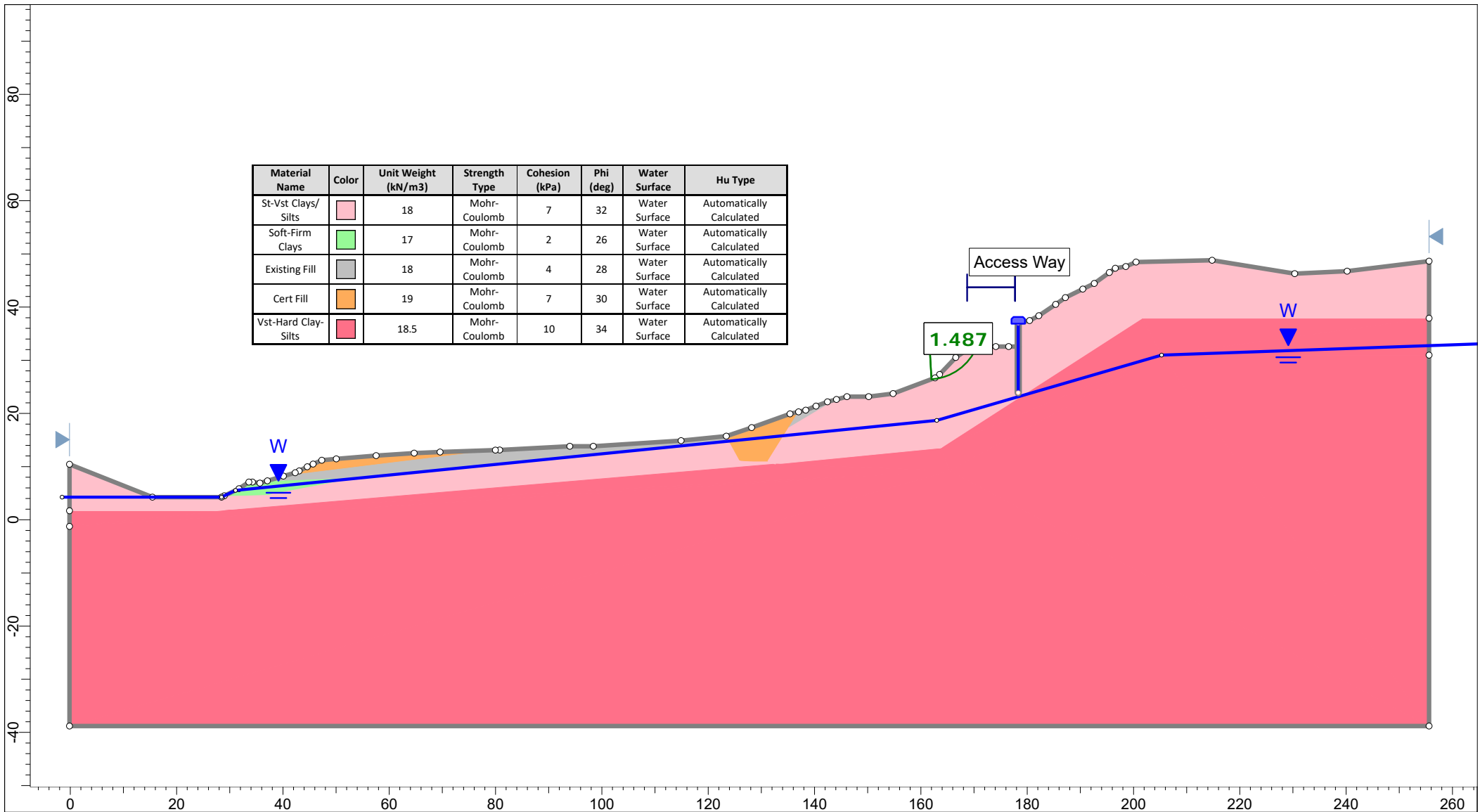
APPENDIX E: SLOPE STABILITY OUTPUTS




	<i>Project</i> SLIDE - An Interactive Slope Stability Program		
	<i>Analysis Description</i> Existing Slope - EGW		
	<i>Drawn By</i> JL	<i>Company</i> Tetra Tech Coffey	
	<i>Date</i> 18/05/24	<i>File Name</i> 13073AB SLIDE XS1.sldm	

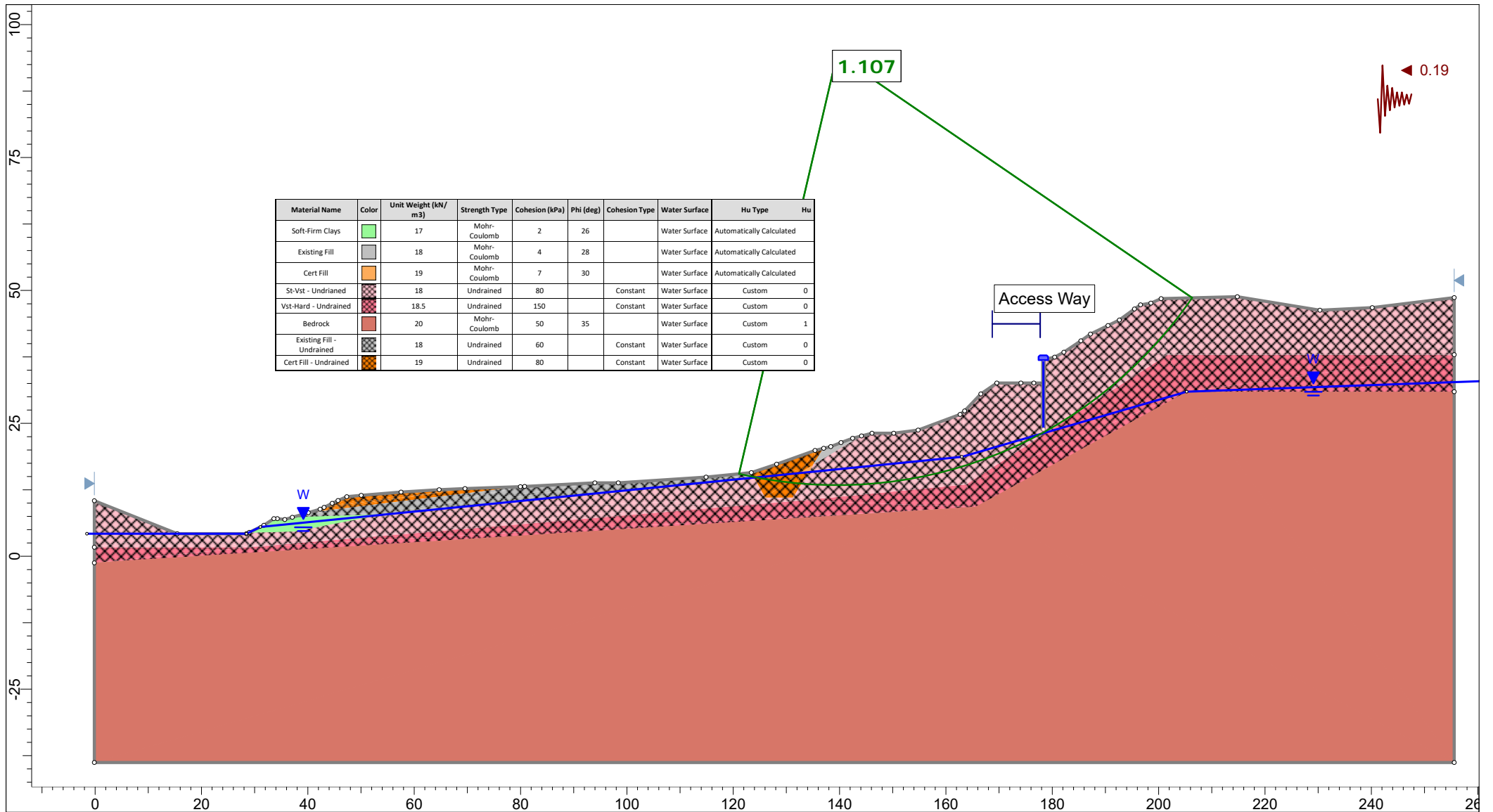


	Project		SLIDE - An Interactive Slope Stability Program		
	Analysis Description		Existing Slope - PGW		
	Drawn By		JL	Company	Tetra Tech Coffey
	Date		18/05/24	File Name	13073AB SLIDE XS1.sldm



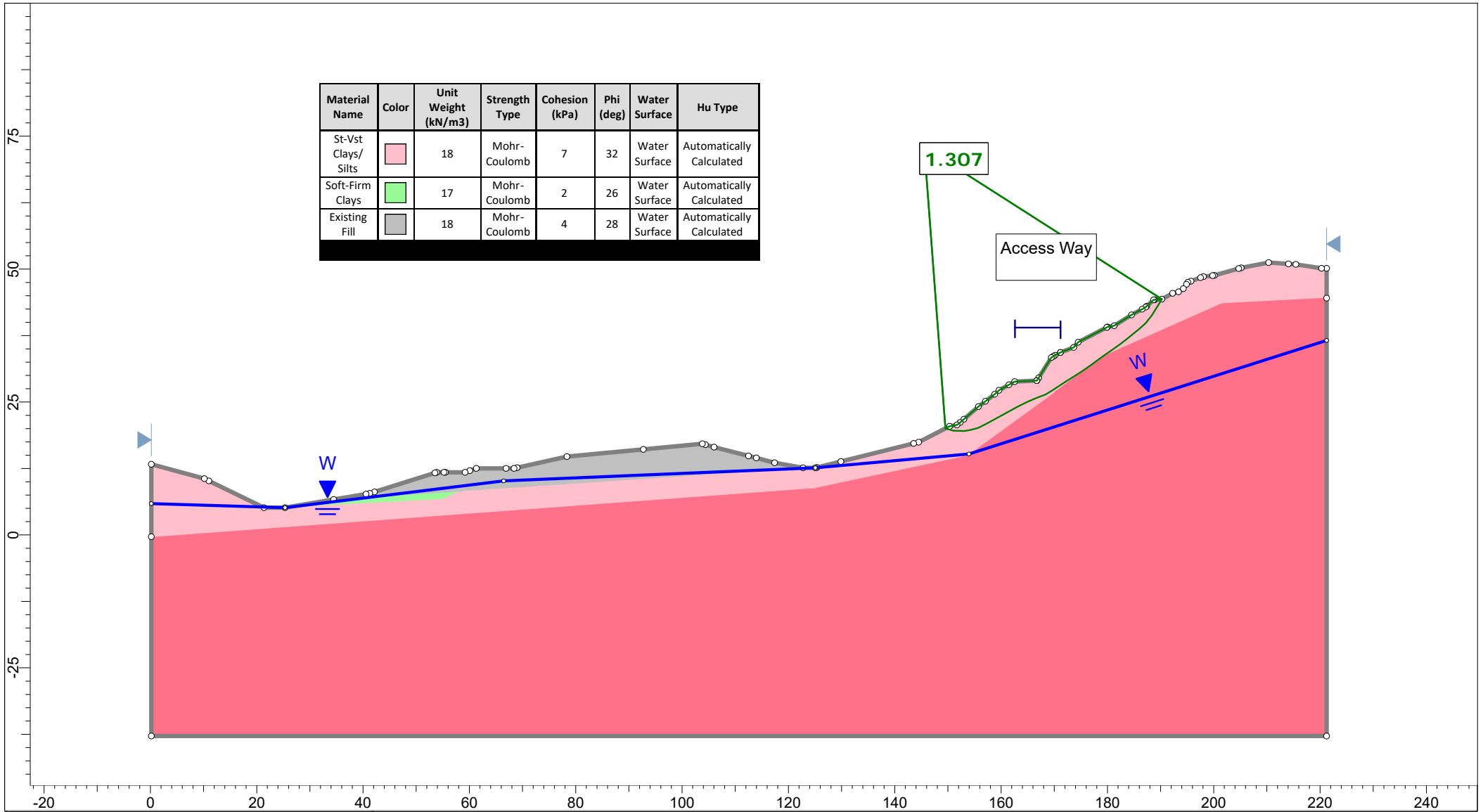
Material Name	Color	Unit Weight (kN/m ³)	Strength Type	Cohesion (kPa)	Phi (deg)	Water Surface	Hu Type
St-Vst Clays/Silts	■	18	Mohr-Coulomb	7	32	Water Surface	Automatically Calculated
Soft-Firm Clays	■	17	Mohr-Coulomb	2	26	Water Surface	Automatically Calculated
Existing Fill	■	18	Mohr-Coulomb	4	28	Water Surface	Automatically Calculated
Cert Fill	■	19	Mohr-Coulomb	7	30	Water Surface	Automatically Calculated
Vst-Hard Clay-Silts	■	18.5	Mohr-Coulomb	10	34	Water Surface	Automatically Calculated


	Project		SLIDE - An Interactive Slope Stability Program	
	Analysis Description		Proposed with drainage - PGW	
	Drawn By	JL	Company	Tetra Tech Coffey
	Date	18/05/24	File Name	13073AB SLIDE XS1.sldm

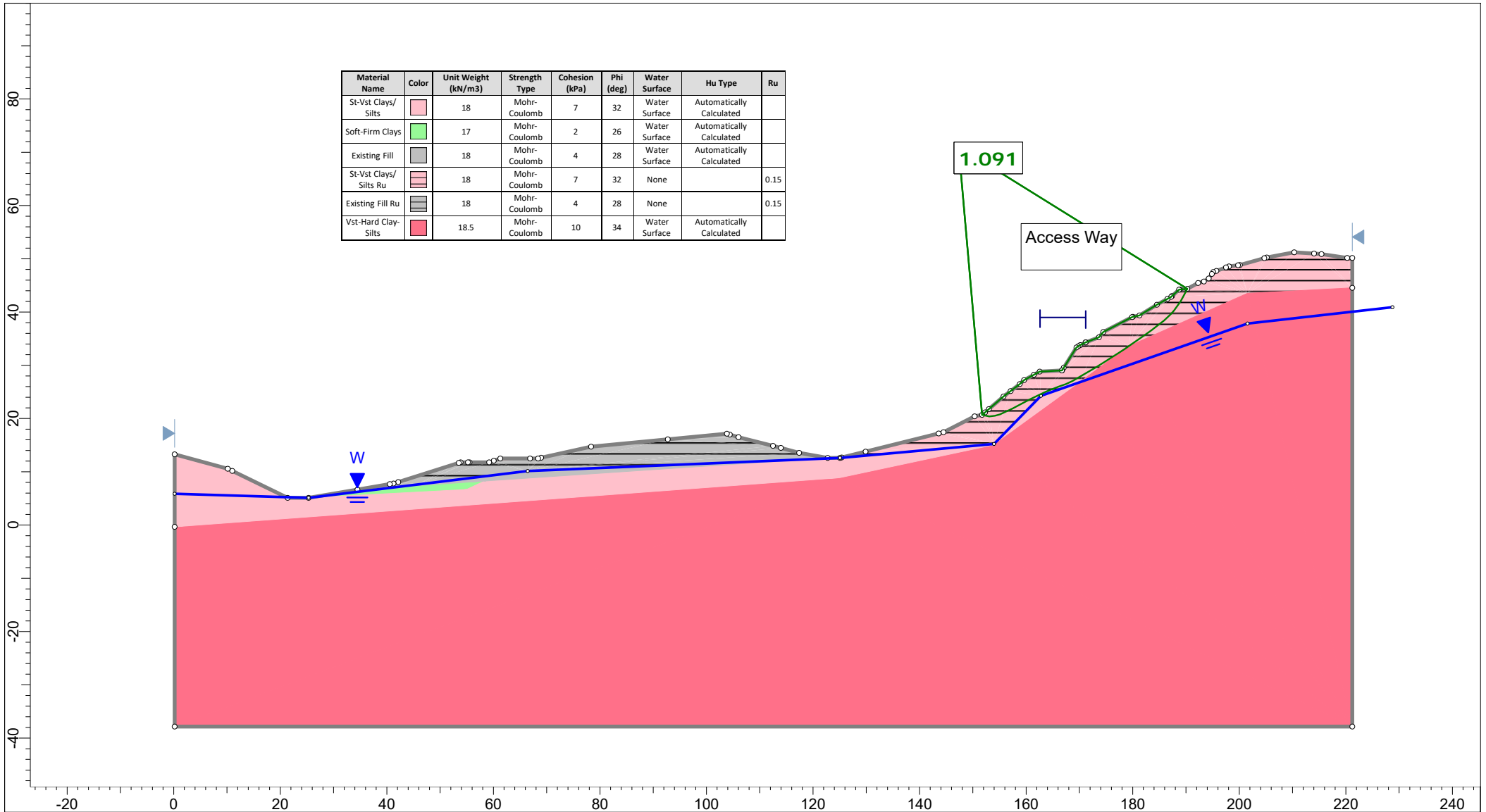


Material Name	Color	Unit Weight (kN/m ³)	Strength Type	Cohesion (kPa)	Phi (deg)	Cohesion Type	Water Surface	Hu Type	Hu
Soft-Firm Clays		17	Mohr-Coulomb	2	26		Water Surface	Automatically Calculated	
Existing Fill		18	Mohr-Coulomb	4	28		Water Surface	Automatically Calculated	
Cert Fill		19	Mohr-Coulomb	7	30		Water Surface	Automatically Calculated	
St-Vst - Undrained		18	Undrained	80		Constant	Water Surface	Custom	0
Vst-Hard - Undrained		18.5	Undrained	150		Constant	Water Surface	Custom	0
Bedrock		20	Mohr-Coulomb	50	35		Water Surface	Custom	1
Existing Fill - Undrained		18	Undrained	60		Constant	Water Surface	Custom	0
Cert Fill - Undrained		19	Undrained	80		Constant	Water Surface	Custom	0


	Project SLIDE - An Interactive Slope Stability Program	
	Analysis Description Proposed with drainage - Seis	
	Drawn By JL	Company Tetra Tech Coffey
	Date 18/05/24	File Name 13073AB SLIDE XS1.slm

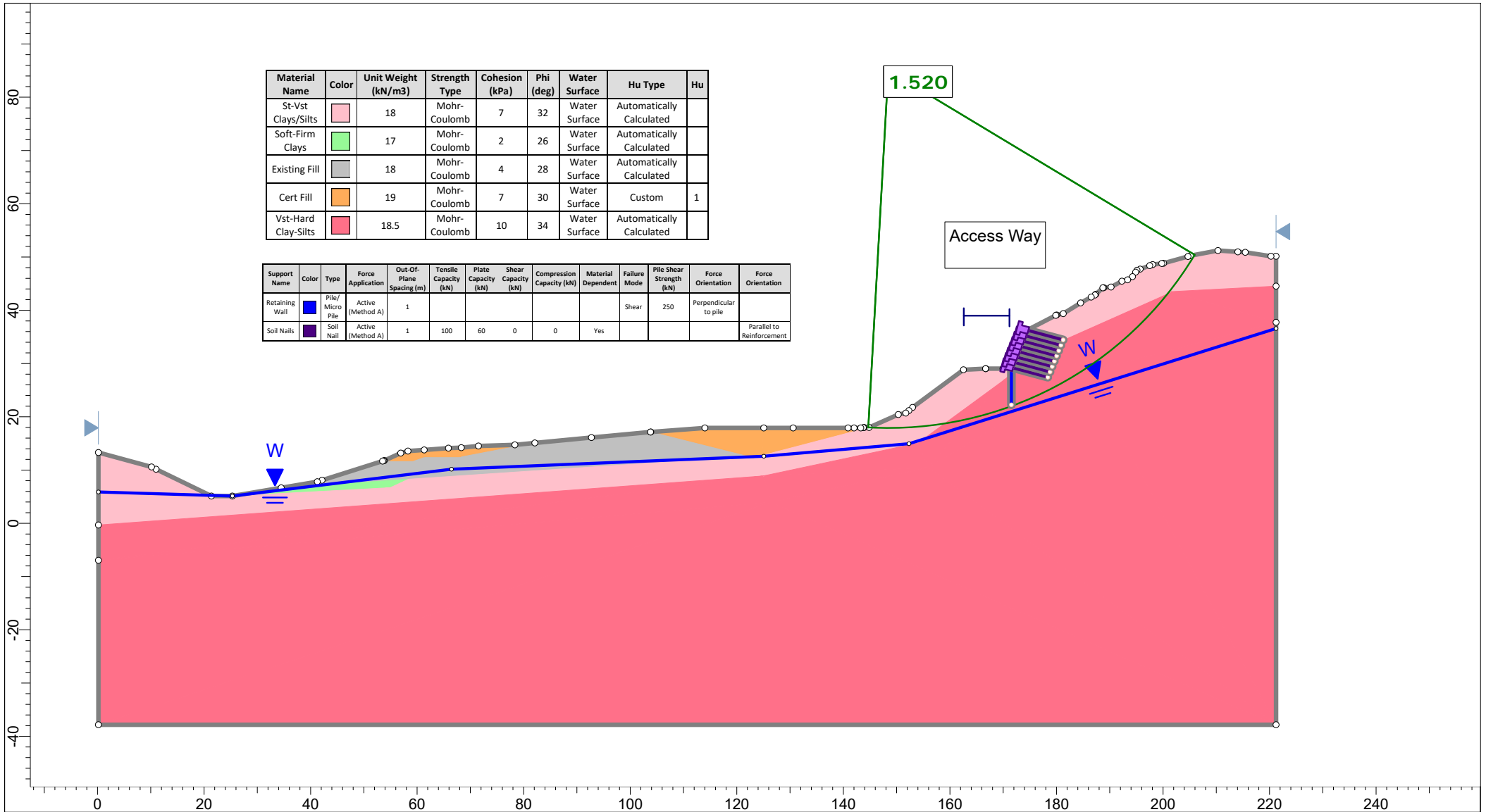



	Project		SLIDE - An Interactive Slope Stability Program		
	Analysis Description		Existing Surface - PGW		
	Drawn By		JL	Company	
	Date		18/05/24	File Name	
				Tetra Tech Coffey	
				13073AB SLIDE XS2 v2.sldm	

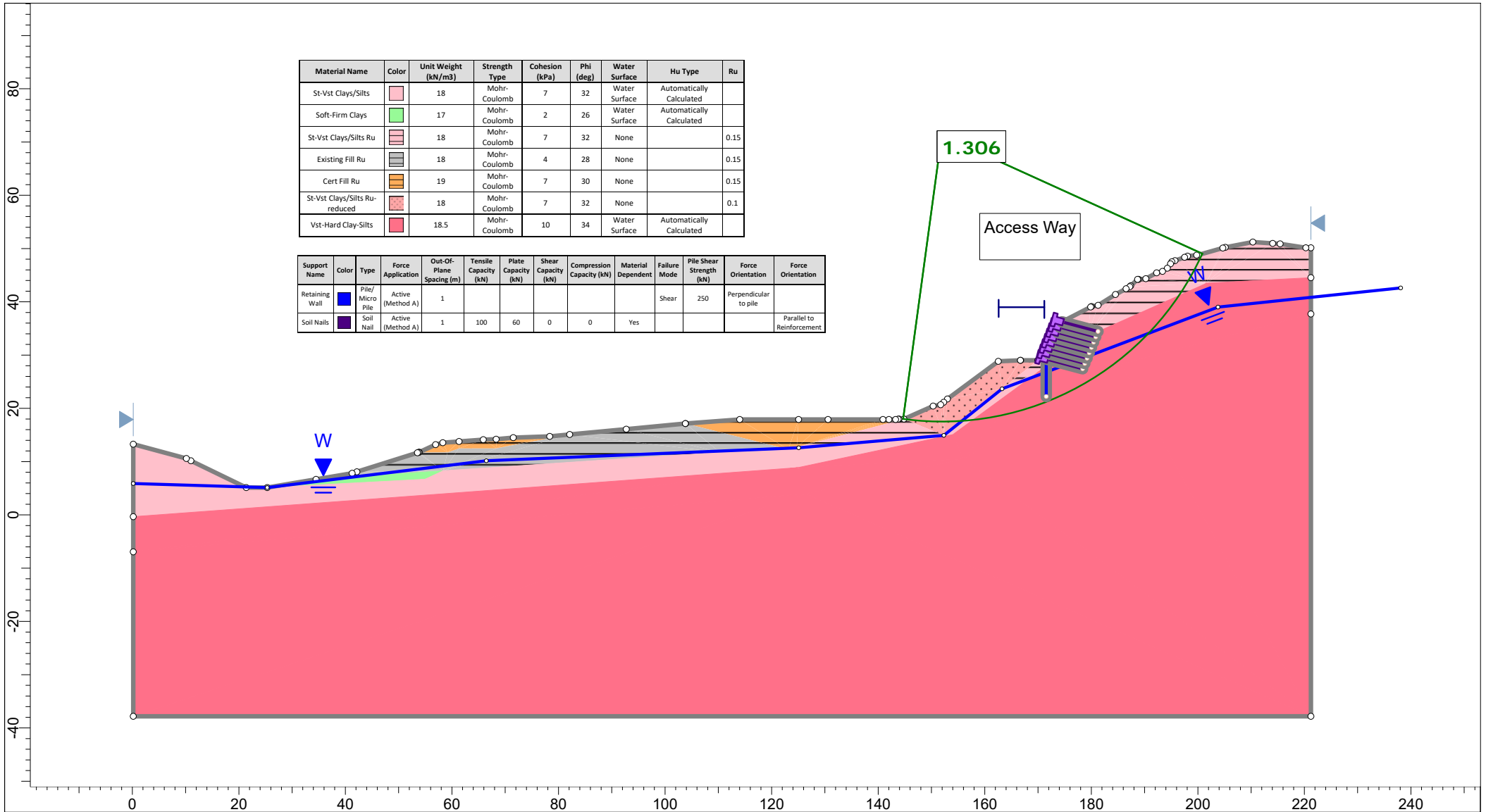


Material Name	Color	Unit Weight (kN/m ³)	Strength Type	Cohesion (kPa)	Phi (deg)	Water Surface	Hu Type	Ru
St-Vst Clays/Silts	Light Pink	18	Mohr-Coulomb	7	32	Water Surface	Automatically Calculated	
Soft-Firm Clays	Light Green	17	Mohr-Coulomb	2	26	Water Surface	Automatically Calculated	
Existing Fill	Grey	18	Mohr-Coulomb	4	28	Water Surface	Automatically Calculated	
St-Vst Clays/Silts Ru	Light Pink	18	Mohr-Coulomb	7	32	None		0.15
Existing Fill Ru	Grey	18	Mohr-Coulomb	4	28	None		0.15
Vst-Hard Clay-Silts	Red	18.5	Mohr-Coulomb	10	34	Water Surface	Automatically Calculated	

	Project			SLIDE - An Interactive Slope Stability Program		
	Analysis Description			Existing Surface - EGW		
	Drawn By		JL	Company		Tetra Tech Coffey
	Date		18/05/24	File Name		13073AB SLIDE XS2 v2.slm




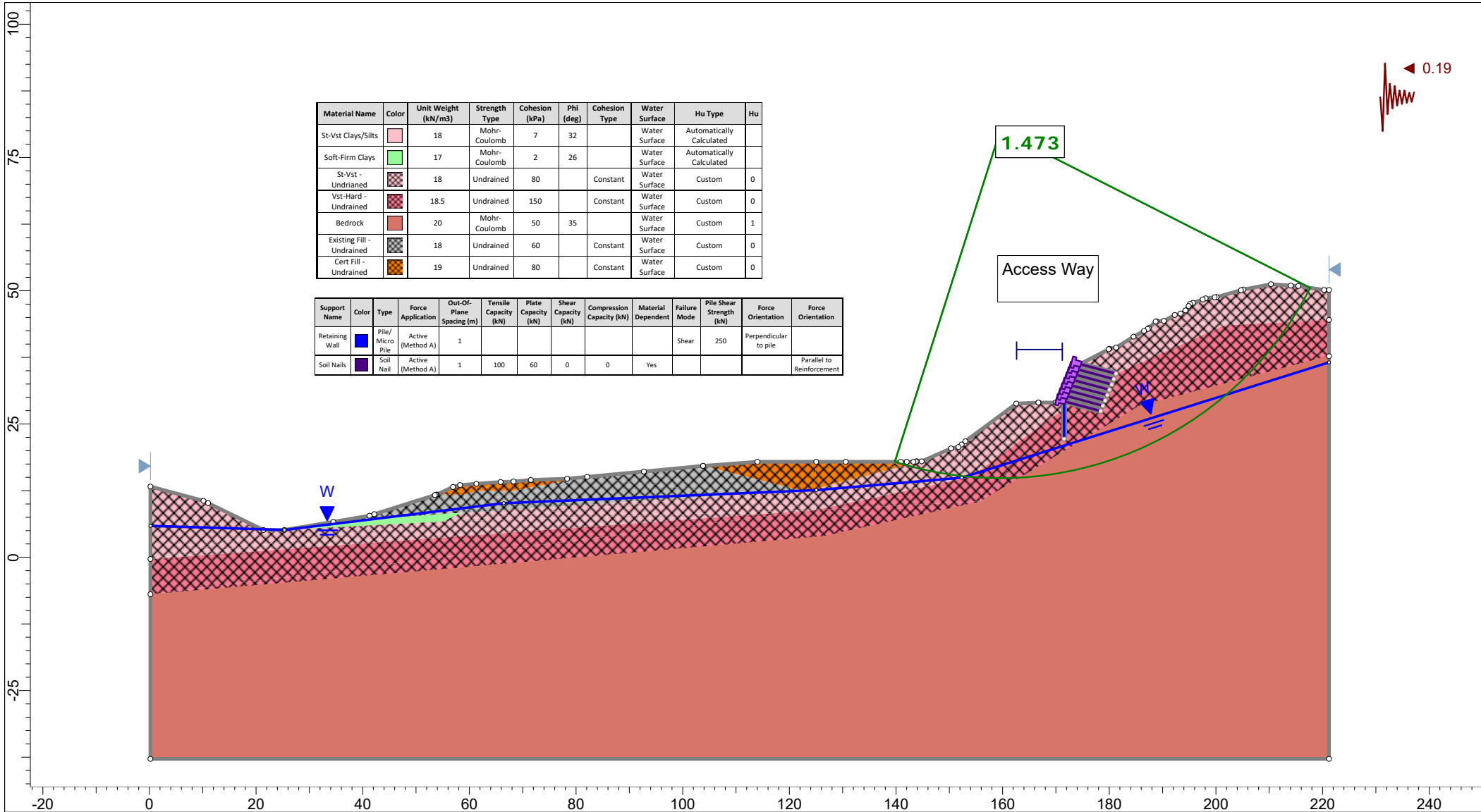
	Project		
	SLIDE - An Interactive Slope Stability Program		
	Analysis Description		
	Proposed - Soil Nails - PGW		
Drawn By		JL	Company
Date		18/05/24	File Name
			Tetra Tech Coffey
			13073AB SLIDE XS2 v2.slm



Material Name	Color	Unit Weight (kN/m ³)	Strength Type	Cohesion (kPa)	Phi (deg)	Water Surface	Hu Type	Ru
St-Vst Clays/Silts	█	18	Mohr-Coulomb	7	32	Water Surface	Automatically Calculated	
Soft-Firm Clays	█	17	Mohr-Coulomb	2	26	Water Surface	Automatically Calculated	
St-Vst Clays/Silts Ru	█	18	Mohr-Coulomb	7	32	None		0.15
Existing Fill Ru	█	18	Mohr-Coulomb	4	28	None		0.15
Cert Fill Ru	█	19	Mohr-Coulomb	7	30	None		0.15
St-Vst Clays/Silts Ru-reduced	█	18	Mohr-Coulomb	7	32	None		0.1
Vst-Hard Clay-Silts	█	18.5	Mohr-Coulomb	10	34	Water Surface	Automatically Calculated	

Support Name	Color	Type	Force Application	Out-Of-Plane Spacing (m)	Tensile Capacity (kN)	Plate Capacity (kN)	Shear Capacity (kN)	Compression Capacity (kN)	Material Dependent	Failure Mode	Pile Shear Strength (kN)	Force Orientation	Force Orientation
Retaining Wall	█	Pile/Micro Pile	Active (Method A)	1						Shear	250	Perpendicular to pile	
Soil Nails	█	Soil Nail	Active (Method A)	1	100	60	0	0	Yes			Parallel to Reinforcement	

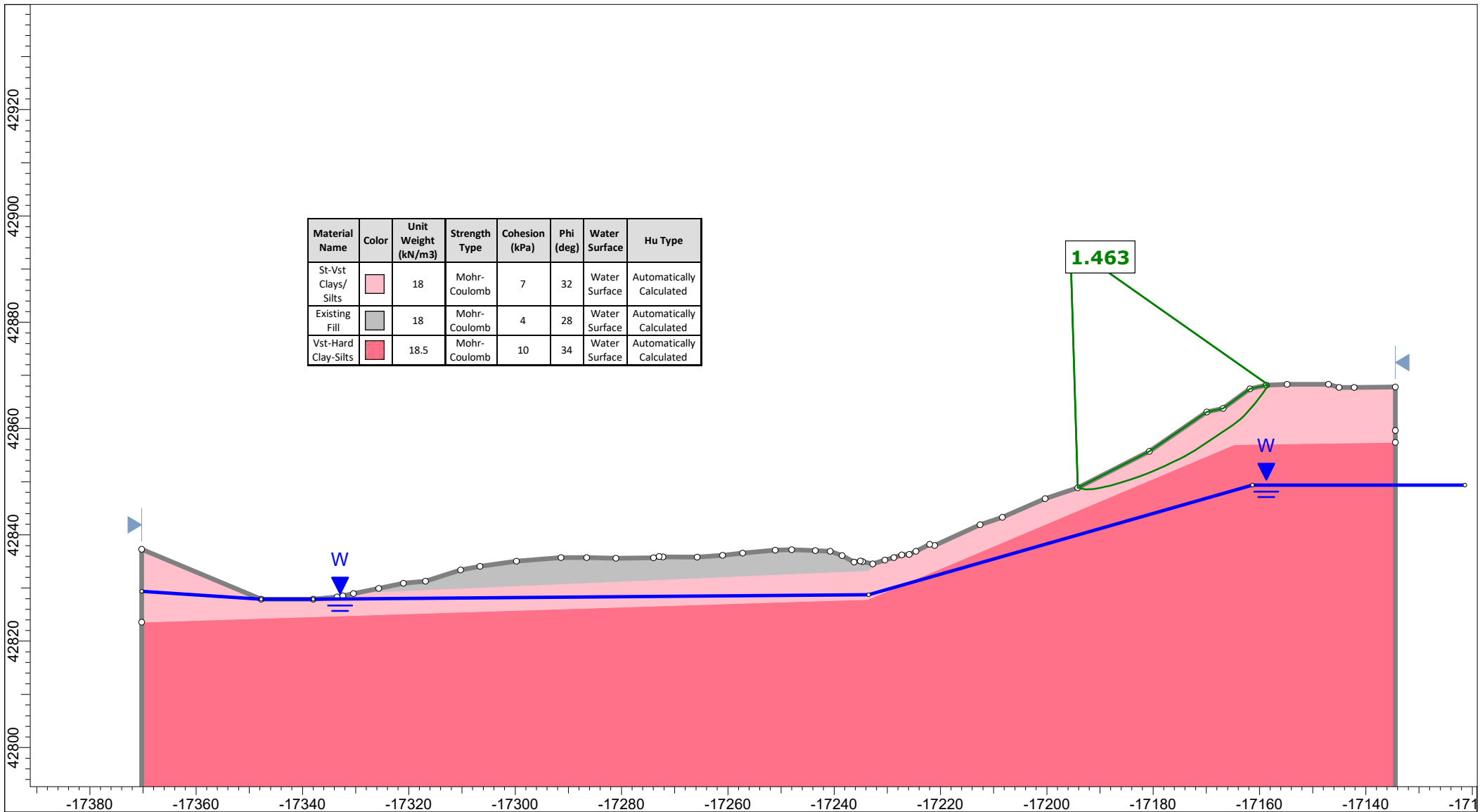
	Project		SLIDE - An Interactive Slope Stability Program	
	Analysis Description		Proposed - Soil Nails - EGW	
	Drawn By	JL	Company	Tetra Tech Coffey
	Date	18/05/24	File Name	13073AB SLIDE XS2 v2.slm



Material Name	Color	Unit Weight (kN/m ³)	Strength Type	Cohesion (kPa)	Phi (deg)	Cohesion Type	Water Surface	Hu Type	Hu
St-Vst Clays/Silts	[Pink]	18	Mohr-Coulomb	7	32		Water Surface	Automatically Calculated	
Soft-Firm Clays	[Light Green]	17	Mohr-Coulomb	2	26		Water Surface	Automatically Calculated	
St-Vst - Undrained	[Cross-hatch]	18	Undrained	80		Constant	Water Surface	Custom	0
Vst-Hard - Undrained	[Dark Red]	18.5	Undrained	150		Constant	Water Surface	Custom	0
Bedrock	[Red]	20	Mohr-Coulomb	50	35		Water Surface	Custom	1
Existing Fill - Undrained	[Grey]	18	Undrained	60		Constant	Water Surface	Custom	0
Cert Fill - Undrained	[Orange]	19	Undrained	80		Constant	Water Surface	Custom	0

Support Name	Color	Type	Force Application	Out-Of-Plane Spacing (m)	Tensile Capacity (kN)	Plate Capacity (kN)	Shear Capacity (kN)	Compression Capacity (kN)	Material Dependent	Failure Mode	Pile Shear Strength (kN)	Force Orientation	Force Orientation
Retaining Wall	[Blue]	Pile/Micro Pile	Active (Method A)	1						Shear	250	Perpendicular to pile	
Soil Nails	[Purple]	Soil Nail	Active (Method A)	1	100	60	0	0	Yes			Parallel to Reinforcement	

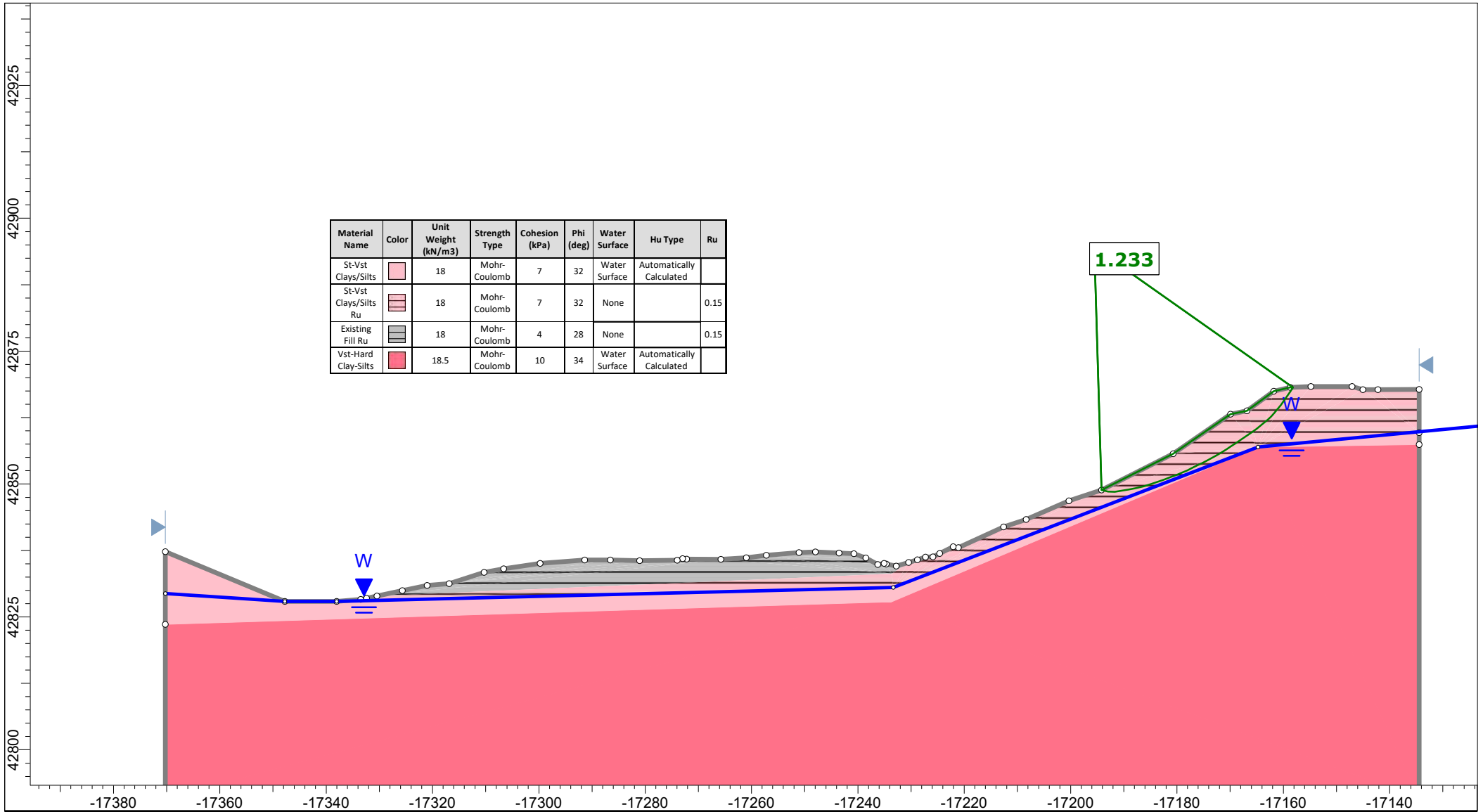
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	Analysis Description	Proposed - Soil Nails - Seismic	
	Drawn By	JL	Company Tetra Tech Coffey
	Date	18/05/24	File Name 13073AB SLIDE XS2 v2.slm




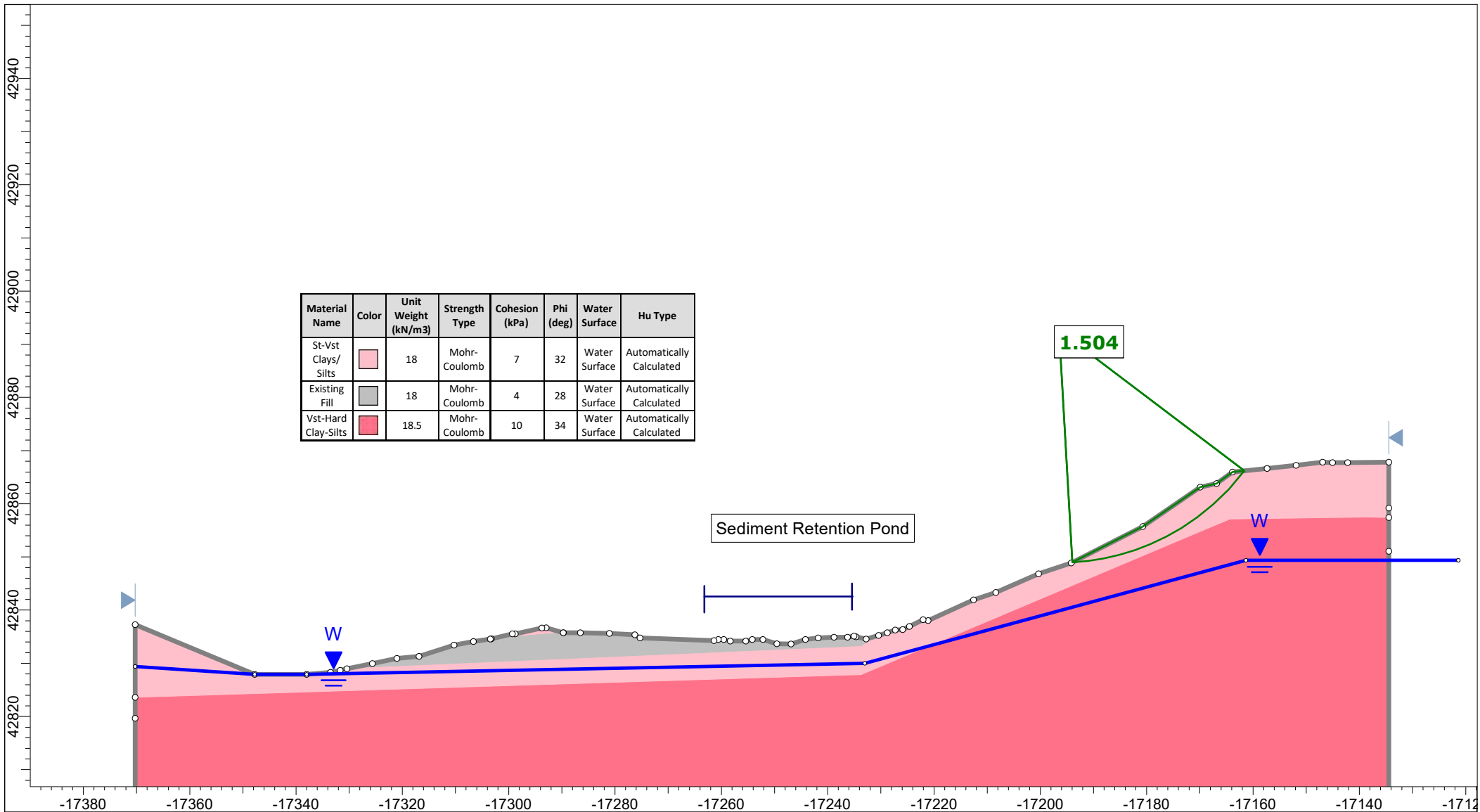
Material Name	Color	Unit Weight (kN/m ³)	Strength Type	Cohesion (kPa)	Phi (deg)	Water Surface	Hu Type
St-Vst Clays/Silts		18	Mohr-Coulomb	7	32	Water Surface	Automatically Calculated
Existing Fill		18	Mohr-Coulomb	4	28	Water Surface	Automatically Calculated
Vst-Hard Clay-Silts		18.5	Mohr-Coulomb	10	34	Water Surface	Automatically Calculated




Project		SLIDE - An Interactive Slope Stability Program	
Analysis Description		Existing Ground - PGW	
Drawn By	JL	Company	Tetra Tech Coffey
Date	18/05/24	File Name	13073AB SLIDE XS9 v3.sldm

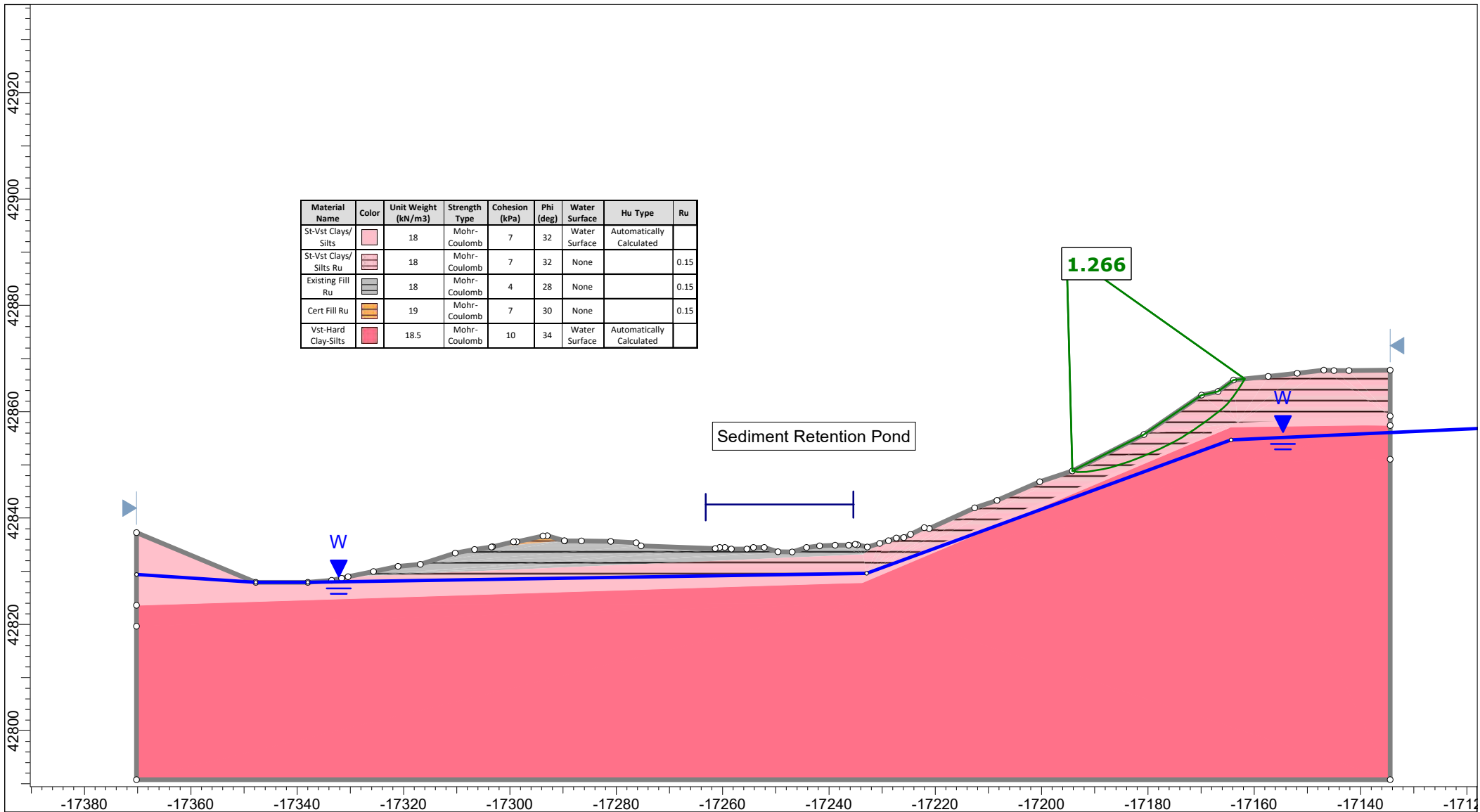


	Project		SLIDE - An Interactive Slope Stability Program	
	Analysis Description		Existing Ground - EGW	
	Drawn By	JL	Company	Tetra Tech Coffey
	Date	18/05/24	File Name	13073AB SLIDE XS9 v3.slm



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (deg)	Water Surface	Hu Type
St-Vst Clays/Silts	█	18	Mohr-Coulomb	7	32	Water Surface	Automatically Calculated
Existing Fill	█	18	Mohr-Coulomb	4	28	Water Surface	Automatically Calculated
Vst-Hard Clay-Silts	█	18.5	Mohr-Coulomb	10	34	Water Surface	Automatically Calculated

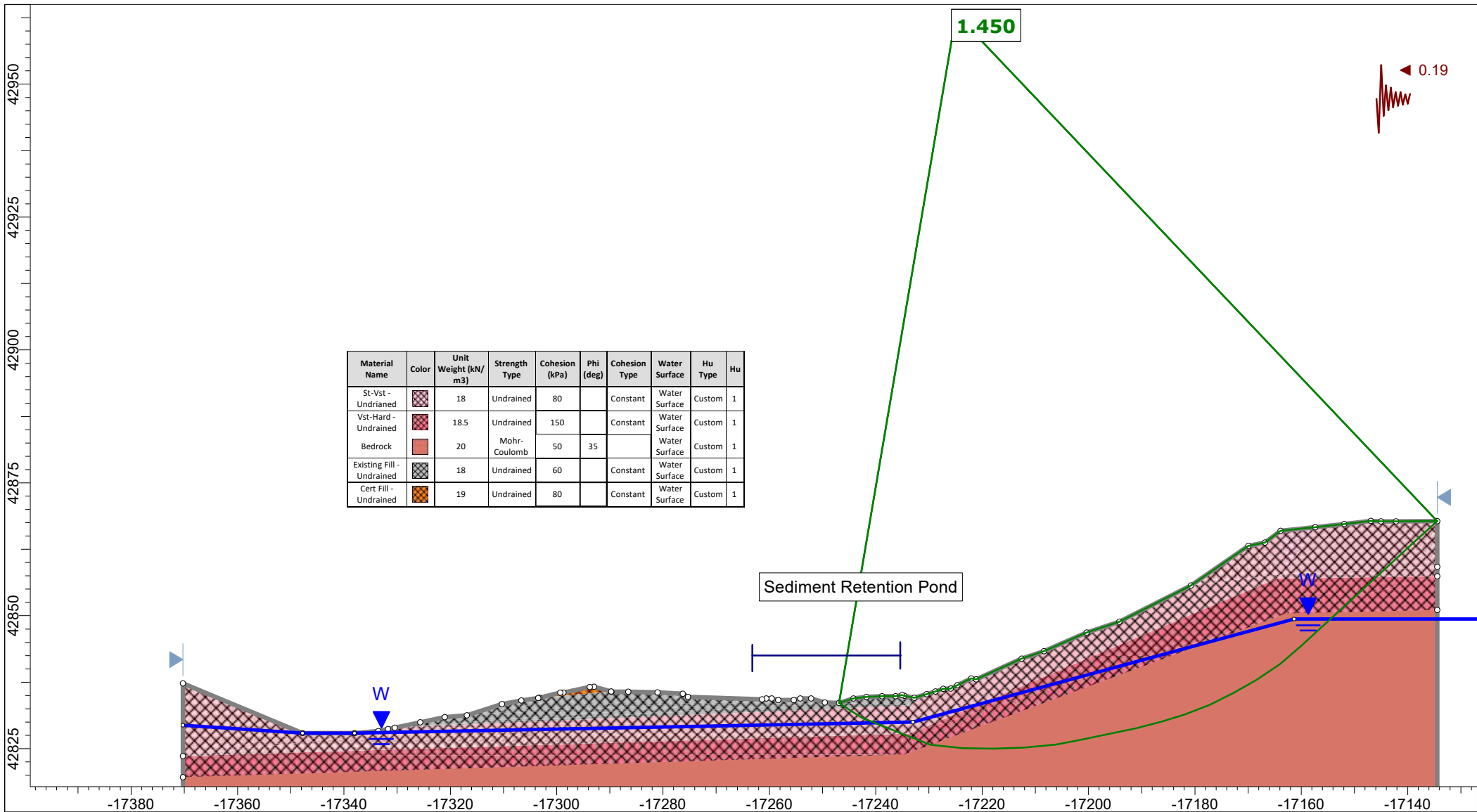
	Project		SLIDE - An Interactive Slope Stability Program	
	Analysis Description		Proposed Slope - PGW	
	Drawn By	JL	Company	Tetra Tech Coffey
	Date	18/05/24	File Name	13073AB SLIDE XS9 v3.sldm



Material Name	Color	Unit Weight (kN/m ³)	Strength Type	Cohesion (kPa)	Phi (deg)	Water Surface	Hu Type	Ru
St-Vst Clays/Silts	[Pink]	18	Mohr-Coulomb	7	32	Water Surface	Automatically Calculated	
St-Vst Clays/Silts Ru	[Pink]	18	Mohr-Coulomb	7	32	None		0.15
Existing Fill Ru	[Grey]	18	Mohr-Coulomb	4	28	None		0.15
Cert Fill Ru	[Orange]	19	Mohr-Coulomb	7	30	None		0.15
Vst-Hard Clay-Silts	[Red]	18.5	Mohr-Coulomb	10	34	Water Surface	Automatically Calculated	



Project		SLIDE - An Interactive Slope Stability Program	
Analysis Description		Proposed Slope - EGW	
Drawn By	JL	Company	Tetra Tech Coffey
Date	18/05/24	File Name	13073AB SLIDE XS9 v3.slm



	Project		SLIDE - An Interactive Slope Stability Program		
	Analysis Description		Proposed Slope - Seismic		
	Drawn By		JL	Company	Tetra Tech Coffey
	Date		18/05/24	File Name	13073AB SLIDE XS9 v3.slm

APPENDIX F: CONCEPT GEOTECHNICAL TREATMENT PLAN

Concept Geotechnical Treatment Plan

DRAWING NOTE

DRAWING SET IS INTENDED TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING 001 FOR DRAWING SCHEDULE. REFER TO DRAWING 002 FOR APPLICABLE NOTES AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

THREE WATERS LEGEND	
EX / PROP PRIV. SW PIPE	
EX / PROP PRIV. WW PIPE	
EX / PROP PUBLIC SW PIPE	
EX / PROP PUBLIC WW PIPE	
EX / PROP SWIC	
EX / PROP SWCP	
EX / PROP WWIC	
CONNECTION DIRECTION	N,NE,E,SE,S,SW,W,NW
EX / PROP WS PIPE	

ALL MEASUREMENTS IN METRES

WORST CASE PONDING ASSUMING 100% BLOCKED PRIMARY NETWORK SHOWN PONDING 150mm DEEP ABOVE DRIVEWAY SPILL POINT. SPILL CAPACITY AT 150mm DEEP (USING MANNINGS): 1.241 m³/s
 1%AEP PEAK CATCHMENT RUN-OFF USING RATIONAL METHOD
 CATCHMENT COEFFICIENT (C) = 0.65
 RAINFALL INTENSITY (I) = 198 mm/hr (INC +20% FOR CC)
 CONTRIBUTING CATCHMENT (A) = 3.0 ha
 DESIGN FLOW = 1.073 m³/s
 BECAUSE SPILL CAPACITY > DESIGN FLOW ACTUAL 1%AEP FLOODING WILL BE LESS THAN SHOWN

WORST CASE PONDING ASSUMING 100% BLOCKED PRIMARY NETWORK SHOWN PONDING 150mm DEEP ABOVE VEHICLE CROSSING SPILL POINT. SPILL CAPACITY AT 150mm DEEP (USING MANNINGS): 1.143 m³/s
 1%AEP PEAK CATCHMENT RUN-OFF USING RATIONAL METHOD
 CATCHMENT COEFFICIENT (C) = 0.65
 RAINFALL INTENSITY (I) = 198 mm/hr (INC +20% FOR CC)
 CONTRIBUTING CATCHMENT (A) = 2.5 ha
 DESIGN FLOW = 0.894 m³/s
 BECAUSE SPILL CAPACITY > DESIGN FLOW ACTUAL 1%AEP FLOODING WILL BE LESS THAN SHOWN

LEGEND

AREA TYPE	SHOWN
PERMANENT STREAMS	
INTERMITTENT STREAMS	
10m WETLAND SETBACK	
REGENERATING KANUKA FOREST	

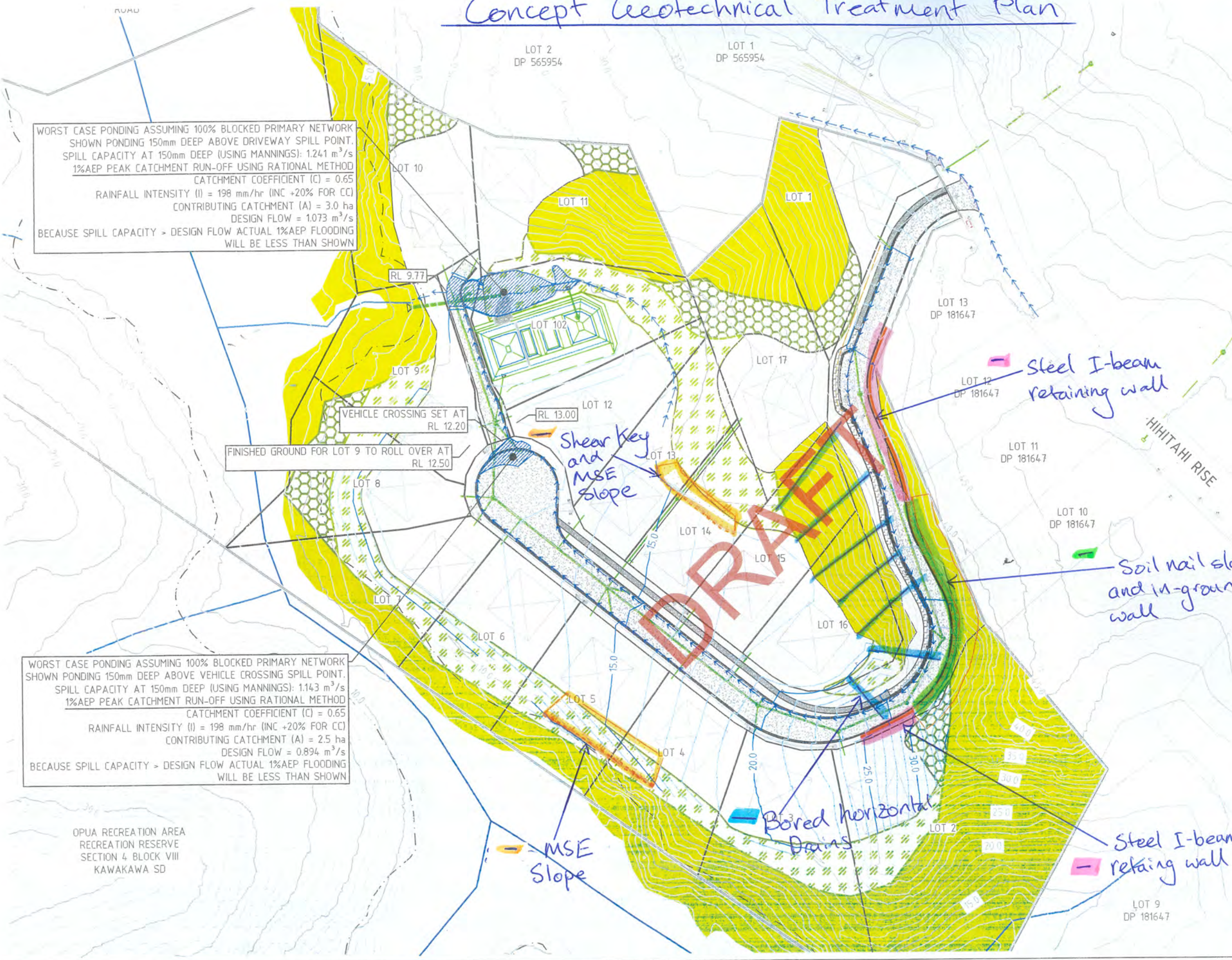
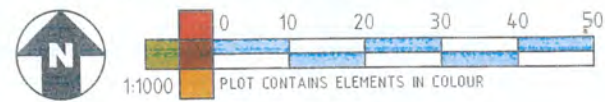
PLANTING LEGEND

AREA TYPE	SHOWN
MIXED NATIVE RETAINED/PLANTED	
FIRE RETARDANT NATIVE SPECIES PLANTING	

SITE LEGEND

EX MIN / MAJ CONTOURS	
PROP MIN / MAJ CONTOURS	
EX / PROP CONCRETE PAVE	
PROP PERMEABLE PAVE	
EX / PROP. RETAINING WALL	
EX/PROP SWCP	

ALL MEASUREMENTS IN METRES



OPIA RECREATION AREA
 RECREATION RESERVE
 SECTION 4 BLOCK VIII
 KAWAKAWA SD

0	31/05/24	INITIAL ISSUE	VR
Rev	Date	Amendments	By
	31/05/2024		

Drafter: V. RIVIER
 Designer: N. JULL
 Checker: J. CHEN
 Date: 31/05/2024

Job Title: CIVIL DESIGN - PROPOSED 17 LOT SUBDIVISION
 Client: HERON POINT LIMITED
 Address: 45 & 47 HIHITAHU RISE, PAIHIA.
 Drawing Title: SECONDARY FLOW PLAN

Drawing: 900 Rev: 0
 Scale: 1:1000 @ A3
 Project: 15569
 Issue: CONSENT

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Appendix 8:

Assessment of Landscape, natural character and visual effects,
prepared by Littoralis Landscape Architects, dated August
2024



**47 HIHITAHU RISE, TE HAUMI, NORTHLAND
PROPOSED SUBDIVISION**

ASSESSMENT OF LANDSCAPE, NATURAL CHARACTER
AND VISUAL EFFECTS

1 INTRODUCTION AND METHODOLOGY

This report has been commissioned by Heron Point Ltd to inform a resource consent application to undertake a subdivision of its property situated at 47 Hihitahi Rise, Te Haumi, associated with the southern arm of Haumi River, which flows to Veronica Channel downstream of Opuā. The title is legally described as Lot 21 DP181647 and Lot 2 DP200205 (the Site) and has an area of 4.78795 ha. It lies within a Residential Zone under the Operative Far North District Plan (OFNDP) and a General Residential Zone under the Proposed Far North District Plan (PFNDP).

The proposal is to re-consent a subdivision for 17 residential lots that was issued in 2010 and subsequently lapsed, but based upon a refined, lower-impact layout. It is assessed as being a non-complying activity.

The Site lies almost entirely with an Outstanding Natural Landscape as defined by the PFNDP and Regional Policy Statement for Northland (RPSN), but is not recognised as such by the OFNDP.

A comprehensive planning report which has been prepared by The Planning Collective contains a full description of the proposal and includes detailed analysis against the OFNDP provisions and other relevant regulatory matters.

An equally detailed report prepared by Wild Ecology (the Wild Ecology report)¹ provides a comprehensive description of the ecological characteristics of the Site and its setting, along with a range of matters recommended to be addressed by way of conditions of consent.

¹ Wild Ecology (July 2024) *Ecology Report – Proposed Subdivision of 41 Hihitahi Rise, Paihia*

This landscape-related assessment is intended to be read in close conjunction with the Wild Ecology report and defers to its detail of the ecology of the Site and its setting.

The assessment has been undertaken on the basis of the following methodology:

- Review background documents that inform an understanding of the Site and wider setting in terms of both physical characteristics and the regulatory framework.
- Undertake a walkover of the Site and visit immediately adjacent, publicly accessible land-based areas that have a view to the Site (essentially only Hihitahi Drive).
- Photograph the Site – where visible – from these various locations and assemble the resulting images into accompanying attachments. Vantage-points were selected to capture the greatest exposure or “worst case” view from each locale.
- Describe and analyse the biophysical and land use characteristics of the Site.
- Broadly categorise the Site context based upon areas of contiguous landscape/urban character, with these areas being frequently determined by land use as the primary determinant.
- Assess the relationship between the Site and the various viewing audience groupings that are potentially affected by the proposal in order to report upon visual effects.
- Assess landscape effects in relation to the form of the proposal and its compatibility or otherwise with established characteristics, patterns and general structure of both the Site and its wider context.

- Identify and quantify natural character effects that may be imposed upon adjacent areas of coast or waterbody.
- Relate the proposal to relevant provisions of the OFNDP, PFNDP and RPSN.
- Provide some summarising conclusions that draw together the main body of findings.

SECTION A: DESCRIPTION OF THE SITE

The image on the cover of this report, replicated in Attachment Three alongside another oblique view, illustrates Site in relation to its wider setting. These images highlight the way that the property occupies part of a visually contained flank that drops to a wetland tributary of Te Haumi River.

The Site lies almost entirely within a broader extent of the coastal and inland terrain that is defined as being an Outstanding Natural Landscape and as having High Natural Character under the PFNDP and Regional Policy Statement for Northland (RPSN), notwithstanding its residential zoning and the level of modification and development that exists in the area most closely associated with the Site.

2 EXISTING PHYSICAL CHARACTERISTICS

2.1 Geology and soils

GNS Science documents that the spur that the potentially developed part of the Site lies upon is founded upon geology derived from the Waipapa Group, which is a

greywacke described as being massive to thin bedded sandstone and siltstone, lithic volcanoclastic metasandstones and argillite.

According to the Landcare Research Soils Portal, Marua Clay Loam and Rangiora Clay Loam and Silty Clam Loam (MRH and RAH) lie across the Site and adjoining terrain. These soils types are found across a significant part of the steeper land on the eastern portion of Northland, between Bream Tail and Mangonui. They are known to be vulnerable to erosion.

2.2 Landform

Close inspection of the oblique image on the cover of this report and those in Attachment Three reveals the broad structure of the Site and related parts of the the Hihitahi Rise spur. It descends from the public road that passes along the crest of that spur and drops steeply to something of a bench that runs parallel to the valley floor. Chester Consultants' Existing Site Plan (dwg ref. 100) illustrates this morphology through its contour lines and cross sections found in the Chester's bundle further defines the profile of the land.

The terrain drops a modest height from the bench to the valley floor that is occupied by the wetland associated with the upper Haumi River inlet. Section DD" in Attachment Six illustrates a typical segment of that interface with its "existing ground profile" line.

2.3 Hydrology

Its position bordering Haumi River inlet system, the lower part of the Site has margin where a raupo-dominated wetland seen in Photograph 1. This broad, deflated and gently falling flat is fed by a stream draining a reasonably large,

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PROPOSED SUBDIVISION AND BUILDING SITE
ASSESSMENT OF LANDSCAPE, NATURAL CHARACTER AND VISUAL EFFECTS**

forested catchment via two tributaries. The extent of that wetland complex is most clearly documented by Figure 26 of the Wild Ecology report and its species composition and values are recorded in detail in that report.



Photograph 1: A segment of the raupo-dominated wetland that bisects the western part of the Site.

A couple of very small, intermittent watercourses sit within the portion of the Site that is proposed to be developed, but almost entirely outside of the primary development footprint. One tracks immediately to the north of the proposed wetland construction and the other just clips the southern corner of proposed Lot 2. These elements are very subtle and do not express themselves in the landscape character of the Site.

2.4 Vegetation

A matrix of vegetation associations exists across the Site, influenced particularly by the impact of a series of past clearances and natural drainage characteristics. The Wild Ecology report provides a very detailed description and analysis of the ecological characteristics of the land and that reporting should be read in conjunction with *this* assessment. The brief discussion that follows is intended to merely place some context for the consideration of landscape and natural character matters.



Photograph 2: Looking up the alignment of the access bench that was formed in earlier works from the upper part of the Site, showing a density of slender kanuka that have established since those earthworks. Note large brown trunk of invasive Acacia in the midst.

As the historic photos contained in Attachment 4 illustrate, the Site has had a history of being cleared from its original forest cover and progressively colonised

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with indigenous species such as kanuka, and tanekaha through to approximately 2005 when a large proportion of the southern part of the Site was cleared to provide for civil works associated with the consented subdivision of that time.

Much of the steepest flank was spared from that vegetation removal, allowing some moderately sized areas of tanekaha and kanuka cover to remain intact. Those areas have been accurately mapped by Wild Ecology and are identified in that report and on the Landscape Integration Concept attached to *this* report. The wetland bisecting the middle of the overall Site and the area of forest lying to the north beyond that raupo zone were also spared from the most recent clearance works.



Photograph 3: Looking up to the canopy of the belt of tanekaha-dominant belt situated between the building locations of proposed Lots 16 and 17. The stem of a Taiwan cherry – which is widely scattered – is evident to the right.

Since that latest clearing those modified areas have been colonised by a mix of indigenous species – primarily kanuka – and invasive exotic plants. In predictable fashion, the kanuka has typically established as a thick sward that is following a normal process of progressively thinning from an initial state of dense, slender plants reaching up to 8-10m in height. Scattered seedlings of *Coprosma spp.*, tanekaha, rewararewa and other species found as more mature specimens are establishing an initial foothold.



Photograph 4: The entrance to the Site from Hihitahi Rise, marked by a dip in landform where the earlier access was cut in (connecting to the road just beyond the pair of catch basins in an elbow in the kerb line).

Amongst this cover of indigenous species is a variable intrusion by invasive exotic plants that include woolly nightshade, pine, Taiwan cherry, wattle, Khahali ginger, pampas, prickly hakea, privet, *Smilax* and others. In the eastern part of the Site and the largely undisturbed margins these tend to be found as scattered individuals, commonly accompanied by juvenile seedlings. In the core of the Site,

where the main body of proposed development would occur, the exotic invaders are considerably more dominant and are considerably suppressing colonisation by indigenous species. This situation is a reflection of past disturbance of that gentler land and demonstrates the aggressive opportunism of these fast-growing weed species.

2.5 Land use

The Site is free of existing built development, but is modified by past clearance and earthworks to form the access that descends into the core of the Site. The land has been left untouched since the 2005 clearance in advance of the previously consented subdivision, the mix of indigenous and invasive exotic vegetation that is described earlier has colonised the titles.



Photograph 5: The existing cut batter (now largely revegetated) near the entry to the Site and showing the relationship with a neighbouring home.

SECTION B: CHARACTERISATION OF SETTING

3 DEFINING ELEMENTS / LANDSCAPE CHARACTER AREAS

The wider structure of Te Haumi settlement hinterland can be categorised into a series of defining elements and landscape character areas. In general, these tend to be largely determined by relationships between housing and terrain, the influence of the inlet and extensive protected areas that are established in this variably developed area. Reference to the panoramic photographs contained in Attachment Two and single-framed images that follow will usefully inform reading of the following descriptions. The position of those photographing points is set out in a sheet forming Attachment One, with all of these being devoted to views from within a small portion of the first of the following character areas, and thereby indicating the very limited extent of visibility.

3.1 Te Haumi residential area

The Site is associated with one of a sequence of spurs that project out into the Haumi River inlet. Whilst well-established, Te Haumi settlement is relatively recent compared to the long-established cores of nearby Opuia and Paihia.

The steep land that has been described as existing on the eastern side of the Site is typical of the slopes that drop from the spur crests that the wider residential area has been developed upon. Oblique aerial views found in Attachment Three illustrate the way that Te Haumi is configured almost as a hand, with “fingers” of roads extending along ridges and spurs. Inspection of the contours of land surrounding the Site in the Chester Consultants’ Existing Site Plan is illuminating, in that it shows how existing residential sites along Hihitahi Rise are constrained to

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being very close to the crest of the spur by steep flanks that drop continuously to valley floors.



Photograph 6: Looking across to Te Haumi settlement from Seaview Road (SH11) to the north, showing the settled areas focussed along ridges and spurs. Lower Hihitahi Rise is obscured by the more elevated Tui Grove spur, and the Site lies entirely out of any potential for view in being on the western face of Hihitahi Rise spur.

The exception to this typical terrain existing across the entirety of the Te Hamui settlement (and explaining its narrow, linear format) are the northern “noses” of the spurs associated with Hihitahi Drive, Tui Grove and Puketiro Place. These are more gradual than the side slopes and have allowed buildings to spill further from the end of the public road. This is particularly so for Hihitahi Drive, where five homes are stretched along that descending land via private accessways. The lower part of the Site that would contain most of the new titles incorporates some of that easing terrain associated with the northern end of the spur. When considered in combination with that northern spur end, the Site is distinctive and different to the balance of Te Haumi, albeit closely related in spatial terms.



Photograph 7: A view up Hihitahi Rise from just above the Site, highlighting the mix of forested margins, exotic amenity planting and houses largely nestled amongst that vegetation.



Photograph 8: Looking down to the end of public Hihitahi Rise towards the Site entry, located by the mouth of a drive seen peeling to the left just beyond and opposite the parked cars.

4.2 Opu Forest reserve

This extensive tract of forest is the primary driver for the Outstanding Natural Landscapes that apply respectively under the OFNDP and PFNDP. It is an area of complex terrain featuring numerous spurs falling from primary ridges and a correspondingly complicated catchment pattern. A dense indigenous forest/shrubland cover containing a range of species associations (including kauri) clads the entirety of the forest area. Wild Ecology's reporting provides a valuable insight to those parts of the Forest that are most closely associated with the Site.

The margins of the forested area that is identified variably by the two phases of ONL mapping that apply incorporates areas that extend up into private land, much of which has seen clearance more recently than the main body of the forest (protected as it is by its prevailing reserve status) and therefore features younger sequences that are dominated by manuka and kanuka, but also often supports heightened numbers of exotic weed species. The Site is a good example of one of these "margin" areas.

Lightly used Oromahoe Road weaves its way through the midst of the Forest, its metal surface tracing a route primarily along ridgelines, largely beyond intervening terrain relative to the Site. Despite its elevated position, the road is extremely introspective as dense vegetation crowds its edges and a tree canopy frequently arches overhead. As a result, the road provides very few opportunities to view out and the Site is effectively invisible from passing cars.

A similar situation almost certainly exists for the Opu Kauri Walk which meanders through the forest from the east. This track and others within the Forest are permanently closed due to the risk of kauri dieback, according to The Department of Conservation's website.

SECTION C: DESCRIPTION OF PROPOSAL

Prior segments have analysed the Site and its context as a setting for the proposed subdivision. They also describe the nature of the previously consented subdivision and earthworks that were commenced to provide for that development.

The application is to subdivide the titles into a total of 17 residential lots, replicating the yield of the previously consented development of the land. This proposal has sought to rationalise the earlier layout to limit the potential effects of development and to more efficiently access the land. As a result, it has limited earthworks to a practicable minimum, sought to contain vegetation clearance to largely coincide with areas dominated by weeds, and to avoid impact upon the adjacent wetland (part of which bisects a portion of the wider Site).

Attachment Four contains a development concept prepared by Chester Consultants and Attachment Five is a landscape integration concept for the Site. These collectively illustrate the proposal at a spatial level. The Land Development Report² (the Chester Report) and a related volume of drawings provides further detail on the engineering works required to realise the proposal. Attachment Six to *this* report consists of four cross section diagrams that illustrate how restoration and mitigation measures have been configured to limit the impacts of earthworks, road formation and related retaining.

² Chester Consultants Ltd (7 June 2024) *Land Development Report – 45 and 47 Hihitahi Rise, Paihia. Proposed 17 Lot Subdivision*

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A formed road would approximately follow an existing formed bench from an entry at the northern end of Hihitahi Rise, sidling down across the steep slope that characterises that eastern portion of the Site.

The 17 proposed residential lots would range from 848m² (Lot 14) and 4662m² (Lot 2). Almost all of these titles would be accessed directly from the new road, other than proposed Lots 10 and 11, which would be reached via a narrow, shared access corridor. A Council Reserve is proposed to contain stormwater ponds, as illustrated by the second sheet of Attachment Five.

A large balance area of just over 1.5ha would occupy the north western sector of the Site. This would remain free of built development and be either vested as under the Conservation Act 1977 or entirely subject to a conservation and no build covenants in remaining in private ownership (being amalgamated with proposed Lot 8).

Planning of the proposal has been configured largely around avoiding, to the greatest extent practicable, the oldest and most diverse native vegetation; this having been retained during earlier earthworks. It is also strongly influenced by the natural and modified terrain that exists. This includes the need to traverse a steep slope associated with the north eastern edges of proposed Lots 15-17. In this stretch, a footpath on the downhill side of the road would need to be supported on low retaining or a low retaining wall to contain potential effects upon the tanekaha-dominant belt on that very steep slope.

On the uphill side of the road, a cut would be created initially as a low, steep batter and progressively transition to a retaining structure to support a bank up to 5m high

at its largest. An armouring and vegetated face that has a maximum height of 6m would be located downhill of that structure. It is intended that clearance of the existing vegetation at the crest of this cut would be minimised to being the smallest extent practicable.

The extent of mature vegetation that is to be conserved within the development footprint is denoted by the texture of the underlying aerial being allowed to show through, along with some annotation. This will be protected by covenant. Complementing that frame of existing vegetation is a broad indigenous planting initiative that is divided into two types. For those areas that are well separated from future building sites, the species are selected to echo those native plants that are prevailing nearby, with some consideration of robustness to fulfill a colonising role. This vegetation would buffer and extend the natural patterns of the existing vegetation that is to be conserved, limiting edge effects in the process.

The other primary type of anticipated native planting is devoted to those areas that are in closer proximity to identified building areas and consists of species that are known to have limited flammability. These will serve to somewhat expand the visual and habitat coherence of the Site, whilst serving to mitigate potential fire risk to adjacent buildings and the access road corridor.

Earlier mention has been made of the intended use of planting to screen and integrate retaining structures and armouring. Once again, the use of locally-found species that have suitable habits of climbing and cascading will be promoted. Infill planting between the road and conserved areas of natural vegetation will further serve to achieve coherence and seal the edges of natural areas against wind and moisture/light fluctuations. Street tree planting intended for the segment of road

that runs across the lower site completes the suite of planting types that are planned.

Areas of planted vegetation within the development area – as documented in the Landscape Integration Concept – would also be formally protected. An exception is the stormwater wetland, where a regime of management may be required.

Perpetual management of the vegetated parts within the access corridor would be undertaken by a private, resident body in accordance with a schedule and specification that will be prepared to inform potential conditions of consent. The management of the vegetation on each individual Lot will be the responsibility of each of the future owners. The vegetation required to establish a buffer for fire management will be planted prior to the issue of the S224(c) certificate. This vegetation will also be protected via covenants on each title.

The nature of retaining associated with the upper portion of the primary access would be determined through detailed design, but is likely to consist of a wall structure or some form of ground anchoring. Sections B-B' and C-C' of Attachment Six provide a sense of the nature of the retained face. Regardless of the methodology adopted, the intention is to fully conceal the structure within vegetation. With a hard structure, this would be achieved by a combination of plantings at the crest and the toe. An anchoring method would allow for vegetation to also be established on the face. Finishes of any structural elements or exposed geotextile material used for retaining is intended to be dark and recessive to minimise any prominence prior to the establishment of vegetation.

The boardwalk is anticipated to be a light timber structure that is seen to skirt the margin of the established forest, with supplementary planting filling any voids on the upper slope associated with the structure. A kerbside parking bay devoted to Lot 17 (which would not have direct vehicular access) would be skirted by the boardwalk/retaining and would incorporate a ramp or other structure to provide foot access down to Lot 17.

A resource consent will be required for all buildings under the PFNDP, which will provide the opportunity for the potential effects of those structures to be assessed in relation to the character of the Site and its setting, and for each application to be specifically shaped in recognition of those matters. As such, some buildings may be subject to constraints upon their maximum height and their finishes.

SECTION D: EFFECTS ASSESMENT

Preceding sections describe the characteristics of the Site and its setting. These are followed by a description of the anticipated development of the Site and its component parts. The purpose of *this* section of the report is to define the effects of the proposal upon the setting, to consider how the proposal would impact upon the experience of people viewing development that would result from the plan change from outside of the site, and to comment upon the resulting level of effect upon landscape character, visual amenity and natural character.

Adverse effects impact negatively on the landscape and result in landscape, natural character and/or visual amenity values being diminished. **Benign or neutral effects** are those in which a proposed change neither degrades nor enhances these values when considered in the whole. In circumstances where

positive effects arise from a development, the changes that have been brought are deemed to be beneficial relative to the landscape state of the site prior to that change.

Effect ratings that will be used:

Very high: resulting in a dramatic or total loss of the defining landscape characteristics of the site/context, or visual amenity associated with that setting.

High: leading to a major change in the characteristics site or setting, or significantly diminishing key attributes, and/or comparable impacts upon visual amenity.

Moderate – high: an interim measure of effect in which impact of the development results in a change of some significance to the qualities or perception subject landscape.

Moderate: a self-explanatory magnitude in which effects sit midway between the extremes this spectrum of magnitude. Can also be considered as an “average” level.

Moderate – low: impacts on landscape characteristics and attributes are relatively contained. The threshold defining “minor” in relation to the S104D gateway test sits within this level of magnitude, typically towards the lower end of its spectrum.

Low: effects are generally very limited and do not result in compromising the characteristics of a landscape or perceptions of it in a more than subtle way.

Very low: negligible or imperceptible effects result upon the landscape and/ or perceptions of it.

7 VISUAL AMENITY EFFECTS

Viewing audiences / affected parties

To assist with predicting the level of visual and landscape effect that the proposal would generate, publicly accessible vantage points in the area were selected to be broadly representative of each of the following identified audience groups, selecting worst-case views wherever possible. Panoramic photographs for each vantage point are found in Attachment Two. These will be referred to in the following commentary.

Their number and contained distribution are telling; the position and topographic orientation of the Site towards the “unutilised” expanse of Opuia Forest, dramatically limits the potential for it to be seen from outside the Site.

The degree of adverse visual / landscape effect generated by a proposed change or development depends upon the character of the surrounding landscape (the context), existing levels of development on the application site, the contour of the land, the presence or absence of screening and/or backdrop vegetation, and the characteristics of the proposed development.

Travellers on Hihitahi Rise

Users of the far end of the Rise that relates (slightly) to the Site are predicted to consist almost entirely of nearby residents and their visitors. The road is no-exit and being located at the furthest extent of Te Haumi settlement, the incentive for other motorists to travel this far is extremely limited.

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Panoramas VP01 and VP03 in Attachment Two were taken from the northern end of Hihitahi Rise, with this 30-40m segment being the only part of the road where a view to the Site is available. The combination of the terrain and enduring vegetation pattern of the Site is such that only a future house on proposed Lot 1 and the upper part of the proposed access road will be experienced from the road, and largely by southbound vehicles. It is a fleeting outlook that occurs in a narrow break in established roadside vegetation. Inspection of the Landscape Integration Concept reveals that a pair of trees are intended to be planted near the access road's junction with Hihitahi Rise, supported by further roadside planting on the northern edge of the access road. These measures would further subdue the limited presence that the road entry and a house on proposed Lot 1 would impose.

Further influencing consideration of the impact of the proposal upon views from Hihitahi Road is the fact that existing Lot 2 DP200205 occupies a similar location to proposed Lot 1 and therefore provides for a house to be established in the position defined on proposed Lot 1 as a permitted activity. Arguably, the proposal provides for a superior outcome to the existing situation, insofar as it incorporates buffering planting at the roadside that has been described in a way that conventional development of proposed Lot 1 would not be compelled to achieve. It is to be noted that a dwelling on the balance of the Site could also be established as of right.

After factoring the very small size of this viewing audience, the extremely limited extent of exposure of the proposal and the permitted baseline nature of a building on proposed Lot 1, the visual amenity effects of the proposal upon users of Hihitahi Rise are assessed as being very low and, potentially, superior to alternative, permitted, development of proposed Lot 1.

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Neighbouring residents

The preceding commentary applies almost entirely to the residents of 28, 42, 44, 46, and 57 Hihitahi Road when using that road to access their properties. Of these, only the house at 28 Hihitahi Rise has a direct physical connection to the entry to the Site, as its short drive lies somewhat opposite. Panorama VP02 illustrates that this home lies slightly below the road level and, unsurprisingly, appears to be oriented to views to the north and east rather than its entry side to the south west. As a result, it is anticipated that it will only be when leaving that property by vehicle that its residents will experience the very limited portion of the proposal that is related to the existing road corridor.

The only other nearby property that provides for potential views to the Site is number 43 Hihitahi Rise, which is situated immediately uphill of the proposed entry to the Site and related Lot 1. Panorama VP01 and earlier Photograph 5 show this house from the position of the proposed access into the Site. Photograph 5 also illustrates how a combination of unauthorised vegetation clearance and dirt spoiling on the existing cut batter ascending towards 43 Hihitahi Rise has exposed the house to a view to this eastern apex of the Site in a way that would not have existed without that clearance and tipping.

An intention to plant the south eastern verge of this portion of the proposed access will serve to rapidly screen any views down to the proposed access from this house. Over time, they will also limit the outlook to the proposed Lot 1 house site. Previous comment about the status of the existing small title that occupies proposed Lot 1, and the likelihood of a house being constructed there as it stands, apply particularly to considerations of effects upon the occupants of 43 Hihitahi Rise.

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Aerial photographs within the Attachments show a rank of four homes immediately uphill of 43 Hihitahi Rise on the western side of the road. They also indicate the belt of sizeable vegetation that occupies intervening terrain. That kanuka-dominant canopy is estimated to have a height of 10-15m and, despite being situated on dropping ground, is predicted to be of adequate scale to preclude views down into the property.

In light of the preceding discussion, it is considered that the level of adverse visual amenity effect upon almost all neighbouring residents would be either non-existent or *very low*. Impacts upon the residents of 43 Hihitahi Rise, being the slight exception, are assessed as being *low* initially and *very low* (and therefore less than minor) once vegetation planned for alongside the uppermost portion of the proposed achieves a height to fully screen the road from within this neighbouring property (predicted to be within three years). Accordingly, it is my opinion that the occupants of 43 Hihitahi Rise are not an “affected party”.

8 LANDSCAPE EFFECTS

Landscape effects are those impacts upon the structure, pattern and character of landscape that result from a development or change in land use.

In the case of this proposal, the context of the Site is highly influential in determining the magnitude of landscape effects arising from the proposed building and related site development / enhancement.

As the two oblique views in Attachment Three and the various attachments illustrate, the Site and its setting have a complex landscape identity on the margin

of the ONL. That complexity results from the combination of an interface with the Haumi River wetlands, the expansive presence of Opuia Forest to the west and related belts of native vegetation extending east, curving fingers of settlement along largely elevated ground and related vehicle access routes, all overlaid on a convoluted topography. Overall, this immediate landscape is one where the influence of well-established housing development and roading occupies a commanding presence within the terrain, but the extent and continuity of vegetation serves to influence and unify this residential area.

Two successive broadscale landscape assessment studies have identified the area associated with the Site as being an Outstanding Natural Landscape (ONL). The study that informed the OFNDP was completed in 1995³ and saw the eastern edge of the wider ONL extend align with the western boundary of the Site, excluding it from provisions relating to ONLs. A more recent assessment was undertaken as part of Regional Policy Statement for Northland⁴ and the findings of that exercise inform the PFNDP. Under this mapping, the Site falls almost entirely within an ONL that is identified as “Bush clad hills to west of Opuia and Pahia, including Morewa Flank”.

A copy of the worksheet for this ONL is contained in Appendix 1. The “characterisation” section of that worksheet provides the following description of its qualities:

A block of moderately elevated terrain that stretches from estuarine coastal flanks to ridges and scarps running some distance inland. A coherent cover

³ *Far North District Landscape Assessment* (1995) LA4 Landscape Architects

⁴ *Northland Mapping Project: outstanding Natural Landscapes – Mapping Methodology Report and Worksheets* (February 2014) Littoralis Landscape Architecture and Simon Cocker Landscape Architect

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of predominantly indigenous vegetation, with some variation in species composition, is the unifying theme. In addition to its intrinsic role as an extensive area that is primarily natural in its character, this landscape unit has an important task as a backdrop to the inner Bay of Islands around Paihia and Te Haumi.

It is also a powerful influence in the identity of Morewa and the travelling experience between Kawakawa and Morewa. Here the canopy features a diversity of forest species and is rapidly developing a particular richness as a result.

Large parts of this landscape are administered as conservation estate.

Of particular relevance to the Site, and to the proposal, is the Worksheet's commentary under the heading of Coherence:

A consistency of indigenous vegetation species brings a relatively high level of unity. Some variability through remnant exotic species and weeds such as hakea and acacia. Margins around Paihia and Te Haumi influenced by scattered housing and related infrastructure (underlining added).

Paihia's western housing areas, and much of western Te Haumi, interact with and influence the much wider ONL that they skirt. Moving a few hundred metres west from these settled areas places one in the midst of the core characteristics and values of the ONL, but that part of the ONL (particularly under the RPSN/PFNDP version) that then continues on to interface with the residential areas sees a progressive reduction in core values and identity. In reality, this interface exists as a "zone of transition" out to the settled margin of the ONL rather than as the hard boundary to the ONL that is imposed by conventional landscape mapping practise.

The Site is considered to lie within that 'zone of transition' for two reasons. The first is its spatial relatedness to the pattern of Te Haumi, with its fingers of housing and projection of homes onto the lower "nose" of the Hihitahi Rise spur. This part of the terrain. The other reason is that the Site's relatively recent history of clearance and earthworks, and subsequent widespread invasion by exotic weeds, has considerably compromised its intactness and association with the primary attributes that inform the existence of the ONL. Arguably, those portions of the Site that have remained untouched by clearance and excavation since 2000 may retain those characteristics (particularly the north western extent that straddles the wetland), but the area proposed for development holds the primary ONL attributes in much lesser measure. The valley floor acts as a topographic divide between the main body of the ONL and the modified part of the Site

After accounting for the proposal's provisions for weed management, ameliorating vegetation planting and likely controls over building characteristics imposed under consents under the PFNDP - once established in the context of Te Haumi and the matters outlined in the immediately preceding discussion - the magnitude of adverse landscape effects of the proposal upon the already compromised landscape values of the Site itself is considered to be *moderate-low* and more than minor. It is important to emphasise that whilst this level of effect is assessed as being above the "minor" threshold, it is not dramatically elevated or reaching a "significant" level. It is also necessary to acknowledge that this finding does not suggest that the proposal will not result in a *change* to the landscape of the Site and its immediate setting but that its landscape effects will be relatively contained.

It is important to also consider the potential adverse effect of the proposal upon the wider "Bush clad hills to west of Opuia and Pahia, including Morewa Flank" ONL.

As previously mentioned, this landscape unit is expansive, convoluted and almost entirely intact through its body, with small parts of its margins influenced by housing. Te Haumi already exerts that influence and the Site sits within that diminished edge. In acknowledging that spatial relationship, the adverse landscape effects of the proposal upon the wider ONL are assessed as *low* and less than minor.

9 NATURAL CHARACTER EFFECTS

Section 6(a) of the Resource Management Act (1991) states that the following matter of national importance shall be recognised and provided for:

“The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins and the protection of them from inappropriate subdivision, use and development.”

A working definition of natural character is derived from research undertaken for the Ministry of the Environment in relation to Environmental Performance Indicators (Boffa Miskell Ltd 2002). This states that:

“The degree or level of natural character within an area depends on the extent to which natural elements, patterns and processes occur; and the nature and extent of modifications to the ecosystems and landscape / seascape. The highest degree of natural character (greatest naturalness) occurs where there is least modification. The effect of different types of modification upon the natural character of an area varies with the context and may be perceived differently by different parts of the community.”

As the preceding extract indicates, natural character exists on a continuum that spans from totally modified at one extreme, to entirely natural at the other. The OFNDP does not map natural character values and so the Site has not been defined as having unduly heightened natural character by that current planning instrument. The more recent assessment⁵ that informs the RPSN – and hence the PFNDP - identifies most of the Site as having high natural character and it is therefore deemed to have heightened measure of sensitivity under related provisions. Key characteristics and values identified for the Te Haumi natural character unit (09/62) that the Site lies within are:

<i>Summary Description</i>	<i>Hill slopes around part of southern arm and between two main arms of the Haumi River Estuary. Kanuka dominant forest with some emergent native conifers (rimu, tanekaha) and some wilding pines. Localised small blocks of weeds (wattles, pampas, cherry)</i>
<i>Contributing Values</i>	<i>Largely indigenous vegetation, generally with relatively few pest plants. Part of larger area of indigenous vegetation. Minimal human-mediated hydrological or landform changes. Few obvious human structures.</i>

The adjacent area of intertidal marine environment of Haumi River Estuary (09/63) is identified as having outstanding natural character.

The preceding discussion about the modified vegetative and landform characteristics of the Site in relation to landscape effects equally informs consideration of natural character effects. Whilst the large area of intense weed

⁵ *Northland Mapping Project: Natural Character – Mapping Methodology Report and Data* (February 2014) Pacific Eco-Logic Ltd

invasion that exists may be seen to create a vegetative canopy, cloaking the extent of earlier earthworks in the process, the intrinsic natural character values of the Site are inherently compromised by those anthropocentric modifications. Correlating the reality of the Site's current condition with the *Summary Description* and *Contributing Values* that are inserted above supports this assessment's observation that the Site is distinct from the balance of the flanks associated with Te Haumi settlement, including in its natural character values being deflated.

The Wild Ecology assessment has identified those vegetative elements that have heightened value and those areas of native growth are conserved as a result of the design of the proposal, which is shaped to minimise and avoid impacts upon that most mature and diverse vegetation,

Planting proposals will assist to considerably mitigate the relatively limited loss of indigenous vegetation that results from utilising the Site's residential zoning and provide a native replacement to the margins of the weed-infested area on the bench that is intended to be primarily developed. The existing and proposed native vegetation would be subject to ongoing protective covenants, providing protection that does not currently exist.

When these influences are balanced, it is considered that the resulting level of natural character effects of the proposal, when established, would be at a *moderate-low* level. As outlined in relation to landscape effects, the natural character effects upon the Site itself would be above a "minor" level, but not at a "significant" level, whilst those upon the wider HNC area (which is spatially complex and "winding" along the coast), are considered to be less than minor.

SECTION E: REGIONAL POLICY STATEMENT AND DISTRICT PLAN PROVISIONS

10 REGIONAL POLICY STATEMENT FOR NORTHLAND

Part 3 – Objectives

3.14 Natural Character, Outstanding Natural Features, Outstanding Natural Landscapes and Historic Heritage

Identify and protect from inappropriate subdivision, use and development;

- (a) The qualities and characteristics that make up the natural character of the coastal environment, and the natural character of freshwater bodies and their margins;***

Comment: At a strategic level, the identification and description of areas of ONL, ONC, and HNC through the RPSN and, subsequently, through the PFNDP, addresses these qualities in relation to the most sensitive areas. The earlier commentary in this report about the natural character state of the Site records the elements that make a positive contribution and those that detract – particularly in relation to the proximity of established settlement, past clearance and earthworks and the considerable presence of invasive plants that is linked to those past activities. In this context and the specific nature of the Site, the proposal is not considered to be "inappropriate subdivision, use and development".

- (a) The qualities and characteristics that make up outstanding natural features and outstanding natural landscapes;***

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Comment: The preceding comment in relation to natural character applies also to consideration of the ONL that is identified by the RPSN and FNDP in relation to the Site and its wider setting.

4 Policies and methods – Water, land and common resources

4.6.1 Policy – Managing effects on the characteristics and qualities of natural character, natural features and landscapes

(1) In the coastal environment:

- a) Avoid adverse effects of subdivision use, and development on the characteristics and qualities which make up the outstanding values of areas of outstanding natural character, outstanding natural features and outstanding natural landscapes.**

Comment: The site is zoned as residential and in a position on the margin of a settled area. It has a history of relatively recent modification, and therefore does not embody the entire essence of the ONL that it relates to. That more intact and very expansive extent of ONL is broadly unconnected to the Site in spatial terms, with the Site being more associated with the Te Haumi settlement than Opua Forest. As such, the proposal will have some inevitable effect upon the landscape identity of the Site and its immediately adjacent setting, but not upon the broader area of ONL that this provision is targeted towards. Notwithstanding these observations, the proposal would inevitably have some adverse effects upon the characteristics of the ONL and therefore cannot satisfy this provision.

- b) Where (a) does not apply, avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of subdivision, use and**

development on natural character, natural features and natural landscapes. Methods which may achieve this include:

- (i) Ensuring the location, intensity, scale and form of subdivision and built development is appropriate having regard to natural elements, landforms and processes, including vegetation patterns, ridgelines, headlands, peninsulas, dune systems, reefs and freshwater bodies and their margins; and**

Comment: The proposal has been very deliberately configured to avoid impacts upon the adjacent wetland, occupy areas that have been previously cleared and lies within a topographic setting that is low-lying and spatially discrete.

- (ii) In areas of high natural character, minimising to the extent practicable indigenous vegetation clearance and modification (including earthworks / disturbance, structures, discharges and extraction of water) to natural wetlands, the beds of lakes, rivers and the coastal marine area and their margins; and**

Comment: Proposed controls over vegetation clearance will conserve the most intact and diverse areas of natural vegetation that exists. Areas of clearance will be confined largely to those areas that are currently dominated by weed species and modification of areas that have less mature native growth is to be limited to an extent that is a practicable minimum. As previously mentioned, the design avoids impact upon the nearby wetland.

- (iii) Encouraging any new subdivision and built development to consolidate within and around existing settlements or where natural character and landscape has already been compromised.**

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Comment: The Site is residentially zoned and that part of its eastern boundary that is associated with proposed development is integral with the existing Te Haumi settlement that runs along Hihitahi Rise. Almost all of those parts of the Site that are proposed to be modified have been compromised by past clearance and/or earthworks and subsequent weed infestation.¹

(3) When considering whether there are any adverse effects on the characteristics and qualities of the natural character, natural features and landscape values in terms of (1)(a), whether there are any significant adverse effects and the scale of any adverse effects in terms of (1)(b) and (2), and in determining the character, intensity and scale of the adverse effects:

- a) Recognise that a minor or transitory effect may not be an adverse effect;***
- b) Recognise that many areas contain ongoing use and development that:***
 - (i) Were present when the area was identified as high or outstanding or have subsequently been lawfully established***
 - (ii) May be dynamic, diverse or seasonal;***
- c) Recognise that there may be more than minor cumulative adverse effects from minor or transitory adverse effects; and***
- d) Have regard to any restoration and enhancement on the characteristics and qualities of that area of natural character, natural features and/or natural landscape.***

Comment: Whilst acknowledging that proposal will have a measure of adverse effect upon landscape and natural character values, this assessment does not find those to be significant. The Site is influenced by the long-established

residential area immediately adjacent. The unavoidable, heightened level of impact that accompanies the initial development of a subdivision and construction of housing is a transitional phase that typically tapers and dissipates over a period of 3-4 years. Restoration aspects of the proposal are well documented by this report and the wider application.

4.7.3 Policy – Improving natural character

Except where in conflict with established uses promote rehabilitation and restoration of natural character in the manner described in Policy 4.7.1 in the following areas:

- (a) Wetlands, rivers, lakes, estuaries, and their margins;***
- (b) Undeveloped or largely undeveloped natural landforms between settlements, such as coastal headlands, peninsulas, ridgelines, dune systems;***
- (c) Areas of high natural character;***
- (d) Land adjacent to outstanding natural character areas, outstanding natural features, and outstanding natural landscapes;***
- (e) Remnants of indigenous coastal vegetation particularly where these are adjacent to water or can be linked to establish or enhance ecological corridors; and***
- (f) The areas or values identified in Policy 4.4.1 (protecting significant areas and species).***

Comment: The Site is closely related to a wetland, but would not impact upon its margin, which would remain undisturbed. It is recognised as having high natural character and outstanding landscape values and can be considered to have remnants of indigenous vegetation, although it is debateable whether these are “coastal” in their composition, and they are not particularly old. The

proposal embodies areas of restorative planting and provision to remove invasive species, both of which will contribute to a measure of natural character. Simultaneously, introduction of buildings and infrastructure, along with a measure of clearance of young native vegetation will negatively impact natural character values.

11 OPERATIVE FAR NORTH DISTRICT PLAN

7 URBAN ENVIRONMENT

7.3.4 To enable urban activities to establish in areas where their potential effects will not adversely affect the character and amenity of those areas.

Comment: The Site is zoned residential and lies alongside established residential titles. As described previously, the position of the land straddles the interface between that Te Haumi settlement and the extensive Opua Forest ONL that continues west. The Site is modified by past clearance and earthworks. As a result of that circumstance and the distinctive topographic nature of the Site, it has been assessed that the effects that it would impose upon the urban neighbourhood would be extremely limited and its impact upon the wider ONL would be very contained.

7.4 Policies

7.4.5 That new urban development avoid:

- (a) adversely affecting the natural character of the coastal environment, lakes, rivers, wetlands or their margins;**

Comment: The natural character of that part of the Site that is proposed to be developed is compromised by the past activities that have occurred there. Whilst any development of coastal land that is extensively vegetated by native species (in this case broken by a large block of weeds) will have a measure of adverse impact upon natural character, the nature of this Site means that natural character effects will be considerably more limited than if the Site had been located on the more intact flanks associated with Te Haumi. The proposal avoids impacts upon the related wetland area and provides for permanent protection of the most intact vegetation on the Site.

7.4.7 That urban areas with distinctive characteristics be managed to maintain and enhance the level of amenity derived from those characteristics.

Comment: The distinctive characteristic of Te Haumi results from the interplay between belts of housing and belts/fingers of native vegetation that provide a unifying frame and setting for each of the houses. The configuration of the proposal is shaped to perpetuate that characteristic and for the descending portion of access road to ultimately be experienced as a bush-fringed lane.

12 NATURAL AND PHYSICAL RESOURCES

12.1 Landscapes and Natural Features

12.1.3 Objectives

- 12.1.3.3 To recognise and provide for the distinctiveness, natural diversity and complexity of landscapes as far as practicable including the complexity found locally within landscapes and the diversity of landscapes across the District.**

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Comment: Much of the thrust of this provision can be seen to relate, in part, to the identification of ONLs and influencing provisions that then apply to those areas. Being spatially contained and on the margin of a very expansive area of ONL, the proposal is not considered to have the potential to compromise the distinctiveness, natural diversity or complexity of that ONL or to the wider landscape that falls outside of that ONL.

12.14 Policies

12.1.4.8 *That the trend is towards the enhancement rather than the deterioration of landscape values, including the encouragement of the restoration of degraded landscapes.*

Comment: The proposal has approached a Site that is residentially zoned with a strategy to conserve the vegetative elements that area of greatest value and related to the wider landscape identity of the setting, whilst removing a large area of invasive vegetation that degrade the landscape values of the Site. Restorative and mitigating plantings are targeted at integrating proposed development within a landscape pattern the relates to the wider context.

12.1.4.10 *That landscape values be protected by encouraging development that takes in account:*

(a) the rarity or value of the landscape and/or landscape features;

Comment: The landscape is not rare but has been identified as part of a wider ONL with heightened values. As previous discussions have outlined, those values are not fully expressed by the Site due to its relationship with a residential area and the impact of past activities within it.

(b) the visibility of the development;

Comment: This assessment has demonstrated that the proposal would have extremely limited visibility.

(c) important views as seen from public vantage points on a public road, public reserve, the foreshore and the coastal marine area;

Comment: There are almost no views to the body of the Site from publicly accessible areas and certainly no important ones.

(d) the desirability of avoiding adverse effects on the elements that contribute to the distinctive character of the coastal landscapes, especially outstanding landscapes and natural features, ridges and headlands or those features that have significant amenity value;

Comment: The proposal would provide a measure of enhancement to portions of the Site that currently support weed growth. Overall, the residential development of the Site cannot achieve a net enhancement, but the proposal is configured to limit adverse impacts that lead to a deterioration in values. The longstanding zoning of the Site is for residential use, so housing development of the land is anticipated, being shaped by the physical characteristics of the Site and matters such as infrastructure.

(e) the contribution of natural patterns, composition and extensive cover of indigenous vegetation to landscape values;

Comment: Past modifications to the Site have left it would disrupted terrain and a vegetation cover that is severely compromised by weeds in its core (and the area now proposed to receive most of the built development). It has, however, retained a critical mass of native vegetation that informs its

current state and that pattern has been acknowledged and incorporated in the proposal, supported by supplementary planting.

(f) Maori cultural values associated with landscapes;

Comment: It is assumed that the area that contains the Site will possess cultural values in light of native vegetation cover and its wetland and estuarine relationships. Engagement has been initiated with Ngati Rahiri me Ngati Kawa, who are identified as holding mana whenua. Engagement has commenced, but has not been able to be completed prior to lodgement of this Application. The Applicant remains committed to continuing an engagement in dialogue and responding appropriately to a cultural impact assessment or some other form of documentation that emerges.

(g) the importance of the activity in enabling people and communities to provide for their social, economic and cultural well-being.

Comment: The Site is residentially zoned in readiness for people to build homes in this Te Haumi locale. The land's owner has invested in the property on that basis and therefore has an interest in realising an economic benefit that is balanced by the financial risk of holding and developing that land. In approaching the format of development, the proposal has sought to achieve a responsible balance between conserving core natural values and commercial benefit.

12 PROPOSED FAR NORTH DISTRICT PLAN

In its "proposed" state the PFNDP has limited statutory weight, but regard must be given to its provisions. The comments that follow are provided in direct response to those provisions but need to be considered in light of the PFND's current status.

SUBDIVISION

Objectives

SUB-O2 Subdivision provides for the:

- b Protection, restoration or enhancement of Outstanding Natural Features, Outstanding Natural Landscapes, Natural Character of the Coastal Environment, Areas of High Natural Character, Outstanding Natural Character, wetland, lake and river margins, Significant Natural Areas, Sites and Areas of Significance to Māori, and Historic Heritage.***

Comment: The proposal is designed to conserve the key components of the landscape of the Site, which is compromised in its landscape and natural character values in its current state.

SUB-P11 Manage subdivision to address the effects of the activity requiring resource consent including (but not limited to) consideration of the following matters where relevant to the application:

- a. consistency with the scale, density, design and character of the environment and purpose of the zone;***

Comment: The format of subdivision being proposed is consistent with the established character of Te Haumi and, in large part, lies as an enclave within a landscape setting of conserved vegetation and restorative planting that provides a broader pattern of relationship with the vegetated setting.

e. Any adverse effects on areas with historic heritage and cultural values, natural features and landscapes, natural character or indigenous biodiversity values;

Comment: The ONL and HNC status of the land under the PFNDP are acknowledged but considered to be tempered by the particularly characteristics of the Site that have been canvassed earlier and exist as a reflection of residential zoning. The proposal will inevitably result in a measure of adverse effect, as would any development that is formulated in response to the zone provisions, but has been configured to avoid and remedy potential effects through spatial planning and rehabilitation measures.

7.3.4 To enable urban activities to establish in areas where their potential effects will not adversely affect the character and amenity of those areas.

Comment: The specific topographic and locational nature of the Site, and the way that this serves to limit effects, has been described by this report, as has the way that past modifications of the Site have left its character and amenity somewhat modified. As a result of this combination of influences, the proposal is considered to have almost no adverse effect upon Te Haumi settlement and limited impact upon the landscape that stretches off to its west.

NATURAL FEATURES AND LANDSCAPES

Objectives

NFL-O1 ONL and ONF are identified and managed to ensure their long-term protection for current and future generations.

Comment: ONLs are identified through the PFNDP mapping (as derived from the RPSN) and related provisions are targeted at providing a regime of management. As previously outlined, the Site exists in a topographically discrete position (as distinct from a ridge or skyline, or area exposed to wide public experience) in a somewhat compromised state on the margin of an expansive ONL. Its state within this “transition edge” means that it doesn’t express the full essence of the characteristics of the ONL and that it has a relatedness to a residential area that is acknowledged by its zoning. As a result, it is not considered to compromise the body of the ONL or its core values.

NFL-O2 Land use and subdivision in ONL and ONF is consistent with and does not compromise the characteristics and qualities of that landscape or feature.

Comment: The preceding comment in relation to NFL-O1 applies also to this Objective.

NFL-O3 The ancestral relationships Tangata Whenua has with the land is recognised and provided for as a part of the characteristics and qualities of ONL and ONF.

Comment: See response to 12.1.4.10(f) of OFNDP earlier.

Policies

NFL-P2 Avoid adverse effects of land use and subdivision on the characteristics and qualities of ONL and ONF within the coastal environment.

Comment: The Site lies within the Coastal Environment as defined by the RPSN, so this policy applies. Any development of this residentially-zoned Site would

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be unable to entirely avoid some level of effect upon the ONL that is defined by the PFNDP, but the proposal represents a carefully resolved response to the Site's characteristics, with the appropriate mitigation measures in order to ensure that the development does not have an adverse effect on the characteristics and qualities of the ONL and ONF.

NFL-P6 Encourage the restoration and enhancement of ONL and ONF where it is consistent with the characteristics and qualities.

Comment: Once again, the residential zone applying to the Site is informative.

Measures within the proposal to manage weed invasion and provide a strong, frame of indigenous vegetation bring a restorative theme to those parts of the Site that are set aside from a practicable expression of the development of the land that is anticipated by the zoning that is present.

NFL-P8 Manage land use and subdivision to protect ONL and ONF and address the effects of the activity requiring resource consent, including (but not limited to) consideration of the following matters where relevant to the application:

a. the presence or absence of buildings, structures or infrastructure;

Comment: The Site is free of buildings and infrastructure, but is modified by past earthworks that were partially undertaken in readiness for subdivision.

b. the temporary or permanent nature of any adverse effects;

Comment: Temporary adverse effects resulting from civil and building works will be of greater magnitude than enduring effects. Those "permanent effects", of themselves, will also gradually phase to a lesser level as retained vegetation continues to mature and planting gains stature and diversity over decades. The introduction of garden plantings, whilst likely to be somewhat inconsistent

with the natural frame of the proposal, will bring further melding over time, as seen in the established grounds of home in Te Haumi.

c. the location, scale and design of any proposed development;

Comment: Height and finish controls to limit the impact of a future buildings will serve to limit any potential effects arising from their scale and characteristics. The location of the Site, largely in low-lying terrain but still related to the long-standing housing nearby, further informs the limited level of adverse effect that the proposal would impose.

d. any means of integrating the building, structure or activity;

Comment: The layout of the proposal sees almost all buildings set low in the Site within areas that have seen past earthworks and clearance. The house provided for near the Site entry is positioned within an existing small title, so could occur as a permitted activity under the OFNDP as it stands. Future requirements for resource consent under the PFNDP are likely to influence finish and height of future houses and also inform this clause. The proposed access largely follows an existing bench, limiting the extent of additional earthworks. Comprehensive planting will further serve to integrate the proposal.

e. the ability of the environment to absorb change;

Comment: The topographic and vegetative characteristics of the Site, coupled with its relationship with Te Haumi, elevate its capacity with accommodate the sort of change anticipated by the proposal in accordance with the underlying zoning of the Site.

f. the need for and location of earthworks or vegetation clearance;

Comment: Earthworks are largely confined to areas that have been subject to relatively recent clearance and earthworks in readiness for earlier development intentions. Planned clearance beyond those areas has been carefully configured to limit its extent. Restorative and mitigating planting is intended to repair and soften the necessary civil works and structures.

g. any viable alternative locations for the activity or development outside the landscape or feature;

Comment: The Site is almost entirely within an ONL delineation under the PFNDP, leaving no opportunity for development to occur outside of the ONL.

h. any historical, spiritual or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6;

See response to 12.1.4.10(f) of OFNDP earlier.

i. the characteristics and qualities of the landscape or feature;

Comment: The ONL is expansive and robust. The Site lies on its margin with a residential area, as previously discussed. The proposal is not predicted to compromise the characteristics and qualities of the main body of the ONL

j. the physical and visual integrity of the landscape or feature;

Comment: See preceding Comment.

k. the natural landform and processes of the location; and

Comment: The landform of the Site is compromised by past modification (at something of a detailed level). The proposal involves further earthworks to create a practicable use of the land, but does not threaten to compromise the broad natural landform beyond what exists. Natural drainage channels remain

largely as they currently exist and ecological processes will continue largely uncompromised once restorative measures are established.

l. any positive contribution the development has on the characteristics and qualities.

Comment: The intention to remove weed species and replace some portions of that current invasion with native planting will bring a measure of benefit. The proposal also incorporates a commitment to formally protect all identified areas of indigenous vegetation and proposed plan, which will provide a level of certainty that will contribute positively to landscape values and natural character.

Standards

NFL-S1 Maximum height within ONL and ONF

The maximum height of any new building or structure above ground level is 5m and must not exceed the height of the nearest ridgeline, headland or peninsula; and

Any extension to a building or structure must not exceed the height of the existing building above ground level or exceed the height of the nearest ridgeline, headland or peninsula.

Comment: The height of each future building, with the exception of that on proposed Lot 1 (which is integrally related to the Hihitahi Rise road corridor) and compliance with the other PFNDP standards will be addressed through the resource consent process for the new dwellings. This will provide an opportunity for building designs to respond to the characteristics of the Site and for Council to assess suitability relative to the Site's characteristics and potential adverse effects.

NFL-S2 Colours and materials Within ONL and ONF

The exterior surfaces of buildings or structures shall:

- 1. be constructed of materials and/or finished to achieve a reflectance value no greater than 30%;***
- and***
- 2. have an exterior finish within Groups A, B or C as defined within the BS5252 standard colour palette.***

Comment: It is anticipated that buildings and structures will comply with these sorts of finish parameters through compliance with the PFNDP standards that will be addressed through the resource consent process for the new dwellings.

NFL-S3 Earthworks or indigenous vegetation clearance within ONL and ONF.

Any earthworks or indigenous vegetation clearance must (where relevant):

- 1. not exceed a total area of 50m over the life of the District Plan;***
- 2. not exceed a cut height or fill depth of 1m;***
- 3. screen any exposed faces; and***
- 4. be for the purpose of access and/or a building platform.***

Comment: The proposal does not comply with the component clauses of this standard.

SECTION F: CONCLUSIONS

The Site lies on the threshold between the residential influence of Te Haumi settlement and the expansive area of forested landscape that stretches off to the west through Opua Forest. In that position it lies on the margin of an ONL under the OFNDP and almost entirely within the comparable ONL and an area of HNC under the RPSN and PFNDP.

The interface between the ‘built’ and the ‘natural’ in this specific case is further influenced by the past management of the Site, with a combination of vegetation clearance and earthworks leaving an enduring legacy that is explained by the residential zoning of the Site under both Far North District plans.

Further influencing consideration of the proposal is its remarkably contained visibility in relation to local residents, users of the adjacent road and very limited accessibility or visibility from expansive extent of Opua Forest that the terrain of the Site addresses.

The proposal has been configured around the past areas of clearance and earthworks undertaken, with these coinciding with the most practicable and low impact opportunities for achieving a vehicular access and providing for future homes. It has also been resolved through an integrated effort to conserve the most intact and diverse areas of native vegetation and to then unify the resulting pattern through restoration planting. Further indigenous planting is proposed to assertively address the potential impact of roading and retaining, strengthening the wider integration still more fully.

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Whilst acknowledging that visual exposure of the Site is extremely limited, future management of building characteristics through required resource consents under the PFNDP is expected to ensure that houses will achieve a sympathetic fit with the Site. These measures would serve the amenity of future residents of the proposed subdivision rather than other viewing audiences.

When balancing the impact of the proposed subdivision against initiatives for ecological management and restoration, landscape and natural character effects upon those values of the Site itself are assessed as ultimately being *moderate-low*, but more than minor. Those effects are predicted to be contained though, and not elevated enough to be considered significant. Adverse effects upon the wider ONL and Te Haumi area of HNC are assessed as being less than minor.

There is expected to be a period during implementation where civil construction works and progressive building of homes would result in phases of slightly elevated effects, but the topographic and vegetative containment of almost all of the Site will serve to contain those impacts, with adverse effects rapidly diminishing following completion of construction, as vegetation establishes and the buildings mature into residential gardens.

Visual amenity effects are assessed as being *very low* and less than minor, at most.

Mike Farrow

Principal landscape architect

August 2024

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APPENDIX 1: RPS LANDSCAPE ASSESSMENT WORKSHEET

BUSH CLAD HILLS TO WEST OF OPUA & PAIHIA, INCLUDING MOREWA FLANK

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Northland Regional Landscape Assessment Worksheet	
	Unit name – BUSH CLAD HILLS TO WEST OF OPUA & PAIHIA, INCLUDING MOREWA FLANK
DESCRIPTION AND CHARACTERISATION	
Component	Comment
Land Types (refer to list overleaf) Rolling hills	A broad belt of bush clad rolling hills which extend inland from Paihia & Opuia with a consistent flank extending from the north of Kawakawa through to the west of Morewa. A second ridgeline extends to the west further to the north, adjacent to Oromahoe. These inner portions of the area ascend to peaks in the order of 220 – 230 metres. Whilst the profile of the terrain is typically rolling, some lower catchment valleys become moderately steep sided.
Geology (including geopreservation sites)	Waipapa Group greywacke overlying Te Kuiti Group glauconitic sandstone and Mangakahia Complex mudstones (near Morewa) and Waipapa Group greywacke for balance.
Soil Types	Marua clay loam; Te Ranga steepland soils, light brown clay loam and sandy clay loam; Rangiora clay, clay loam, and silty clay loam; White Cone steepland soils, clay loam and sandy clay loam.
Ecology (including protected vegetation / features, PNAP Level 1 and 2 sites)	Predominant indigenous cover consists of pockets of podocarp-hardwood association & with fringes typically transitioning from kanuka dominant. Includes 2 PNA sites: Taramawa Forest PO5/056 (flank north of Morewa) and Opuia Forest PO5/058. Former involves 6 vegetation types, with tanekaha, towai taraire, manuka and kanuka being prevailing species. Latter covers 7 types, with similar species embodied, but also areas of kauri and raupo reedbed. Noted habitat for NI brown kiwi, NZ pigeon, Northland green gecko and NZ weka. Includes some areas and scattered specimens of more exotic growth, primarily pine and wattle, which native species are emerging through and tending to dominate.
Archaeological sites	Largely situated around the coastal margins – most of which are settled – or associated with the Puketona stonefields, both of which are outside of this unit. Small clusters of identified sites are found within the ONL near Kaipatiki Stream (off of the lower Waitangi River), the southern side of Taratarua, the main peak on the Puketona ridgeline, and in the vicinity of Paringaringa and Hukahuka pa, at Taumarere just north east of Kawakawa.
Heritage Landscapes	Past extractive use for milling of native timber.
Landscape characterisation (including the identification of any specific characteristics)	
A block of moderately elevated terrain that stretches from estuarine coastal flanks to ridges and scarps running some distance inland. A coherent cover of predominantly indigenous vegetation, with some variation in species composition, is the unifying theme. In addition to its intrinsic role as an extensive area that is primarily natural in its character, this landscape unit has an important task as a backdrop to the inner Bay of Islands around Paihia and Te Haumi.	
It is also a powerful influence in the identity of Morewa and the travelling experience between Kawakawa and Morewa. Here the canopy features a diversity of forest species and is rapidly developing a particular richness as a result. Large parts of this landscape are administered as conservation estate.	

EVALUATION		
Criteria	Rank	Comment
Natural Science Factors		
Representativeness Natural landscapes are clearly characteristic of the area, district or region. The key components of the landscape will be present in a way that defines the character of the place and gives it its character and essence. Endemic associations.	4	Vegetation cover is very characteristic of prevailing Northland themes, including the interplay between young shrubland that has developed from former pastoral use, and the developing forest types that occupy varying conditions.
Rarity Natural features are unique or rare in the region or nationally, and few comparable examples exist.	3	A relatively common landscape type.
Aesthetic Values		
Coherence The patterns of land cover and land use are largely in harmony with the underlying natural pattern of the landscape of the area and there are no significant discordant elements of land cover or land use.	4	A consistency of indigenous vegetation species brings a relatively high level of unity. Some variability through remnant exotic species and weeds such as hakea and acacia. Margins around Paihia and Te Haumi influenced by scattered housing and related infrastructure.
Diversity & Complexity The elements contributing to overall landscape character are diverse and complex, particularly in ecological terms) without creating disharmony.	3	Subtle variations in species composition relative to terrain. Varying influence of maritime area relative to the coast.
Vividness Natural features and landscape are widely recognized across the community and beyond the local area and remain clearly in the memory; striking landscapes are symbolic of an area due to their recognisable and memorable qualities.	4	Particularly important in terms of the backdrop role to the inner BOI and the influence of the Morewa flank upon that town and, to a lesser extent, Kawakawa.
Naturalness How affected by human activity is the landscape? Does human activity intrude on the landscape? (5%)	4	Buildings and other infrastructure typically confined to margins. Limited road corridors through unit itself. Area has a large margin with settlement to the east and rural landuse to the west. Exotic tree and weed species are present in varying degrees of intensity, but largely confined to north of Kawakawa. Native plant cover generally consistent and unifying, but with subtle compositions and patterns in response to past land use, terrain and habitat types. Relationship with estuarine coastal areas in parts and freshwater, catchment orientation over larger body of this landscape. Landform largely intact, but with some incursions by quarrying, roading and building developments around margins (and typically outside) of unit.
Intactness Natural systems are intact and aesthetically coherent and do not display significant visual signs of human modification, intervention or manipulation, thereby intact and highly aesthetic natural landscapes.	4	Main body of the unit is very intact and cohesive. The relatively large "edge" means that the coastal margins and interface of the two inland spurs are particularly influenced by immediately adjacent land uses.
Experiential Values		
Expressiveness The "legibility" of the landscape. Though features clearly demonstrate the natural processes that formed them.	3	Broadly expressive in terms of elevated landform and relatively cohesive vegetation, but not as graphic as some landscapes where the formative origins are of critical importance to the contemporary character of that landscape.
Sensory qualities		Richness in terms of backdrop role to Paihia and inner Bay

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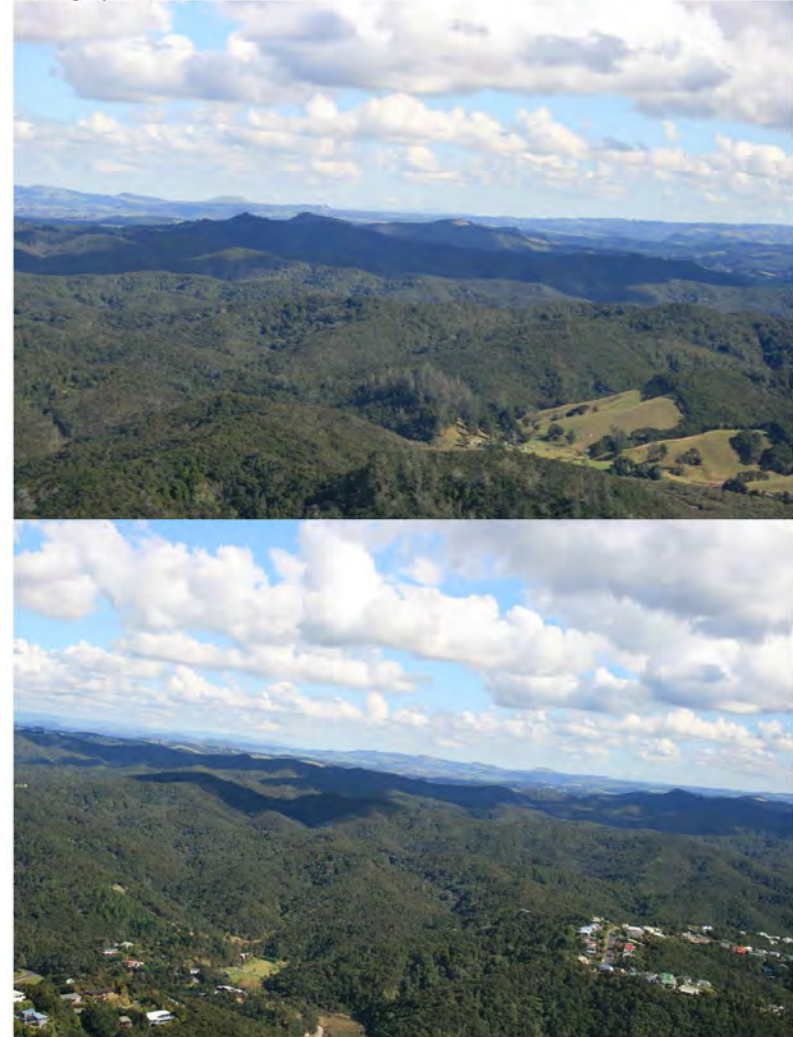


(These are landscape phenomena as directly perceived and experienced by humans, such as the view of a scenic landscape, or the distinctive smell and sound of the foreshore)	4	of Islands. Similar sensory aspect to the flank that acts as a northern context to Kawakawa and Morewa.
Transient Values The consistent and repeated occurrence of transient features that contributes to the character, quality and values of the landscape. Landscapes are widely recognised for their transient features and the contribution that these make to the landscape.	3	Somewhat limited, but character of area changes subtly according to light and atmospheric condition, being sometimes very textured and graphic, and at other times more subdued and simple – acting more as a mass.
Remoteness / Wildness Does the landscape display a wilderness character, remote from and unaltered by human presence? Eg. <ul style="list-style-type: none"> • Sense of remoteness • Accessibility • Distance from built development 	3	Large parts of this area are in quite close proximity to areas of settlement or agriculture. The two inland spurs are narrow and closely related to nearby busy road corridors. Central portion of the Opua Forest and being within the forest canopy lead to a greater sense of isolation and wilderness.
Shared and recognised values Natural features and landscapes are widely known and valued by the immediate and wider community for their contribution to a sense of place leading to a strong community association with, or high public esteem for the place.	4	Strongly aligned to the identities of Kawaka and, more particularly, Morewa. Important relationship with inner BOI means that the eastern part of the unit is strongly connected with Paihia, Waitangi and related maritime identity and tourism promotion.
Spiritual, cultural and historical associations Natural features and landscapes can be clearly and widely known and influenced by their connection to the spiritual, cultural and historical values in the place and includes associative meanings and associative activities valued by the community. These can include both activities and meanings; associative meanings are spiritual, cultural or social associations with particular landscape elements, features, or areas, whilst associative activities are patterns of social activity that occur in particular parts of a landscape, for example, popular walking routes or fishing spots.	**	Consultation was initiated during the mapping process, but has not led to any feedback within the required period.

Rank scale between 1 (low) and 5 (high)

Land Types
Coastal cliffs / escarpment
Low escarpment
Bays and headlands
Beach
Dune complex
Reefs and islands
Estuarine / inlet
Open harbour
Coastal plain
Rolling hills
Steep hills; moderate to high relief
Ranges; high relief
Strongly rolling land
Low rolling land
Valley floors and flats
Plains
Volcanic cones
River mouth
Wetland
Watercourses
Lakes and water bodies

Photographs of unit



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ATTACHMENTS

PROPOSED SUBDIVISION HERON POINT
47 HIHITAHU RISE | TE HAUMI

ATTACHMENT ONE VANTAGE POINT LOCATIONS

Aerial image source: Google Earth.



Date of photography 26/03/2024

1:40pm to 2:40pm

The panoramic photographs were digitally merged. Original photographs with Nikon Z5 with approx. 33mm focal length lens setting, making the image magnification equivalent to a 50mm focal length lens on a full frame 35mm camera. The field of view for each panorama varies in response to the relevant field of view for each of the vantage points.



ATTACHMENT TWO SITE PHOTOGRAPHS



Panorama VP01:

Looking towards the entrance to the proposed road and Lot 1, with only a house on that title being visible from this point.



Panorama VP02:

The view out from the proposed road entry to the turning head at the end of Hihitahi Rise. This gives a sense of how existing houses in the area are typically set within a frame of natural vegetation and amenity garden plantings.

ATTACHMENT TWO SITE PHOTOGRAPHS



Panorama VP03:
Sighting up Hihitahi Rise from the mouth of the turning head, with the Site entry marked by a small black utility box by the kerb line to centre right.



Panorama VP04:
Looking west towards Opuia Forest through an area of past clearance for a house site, approximately 150m up Hihitahi Rise from the Site.

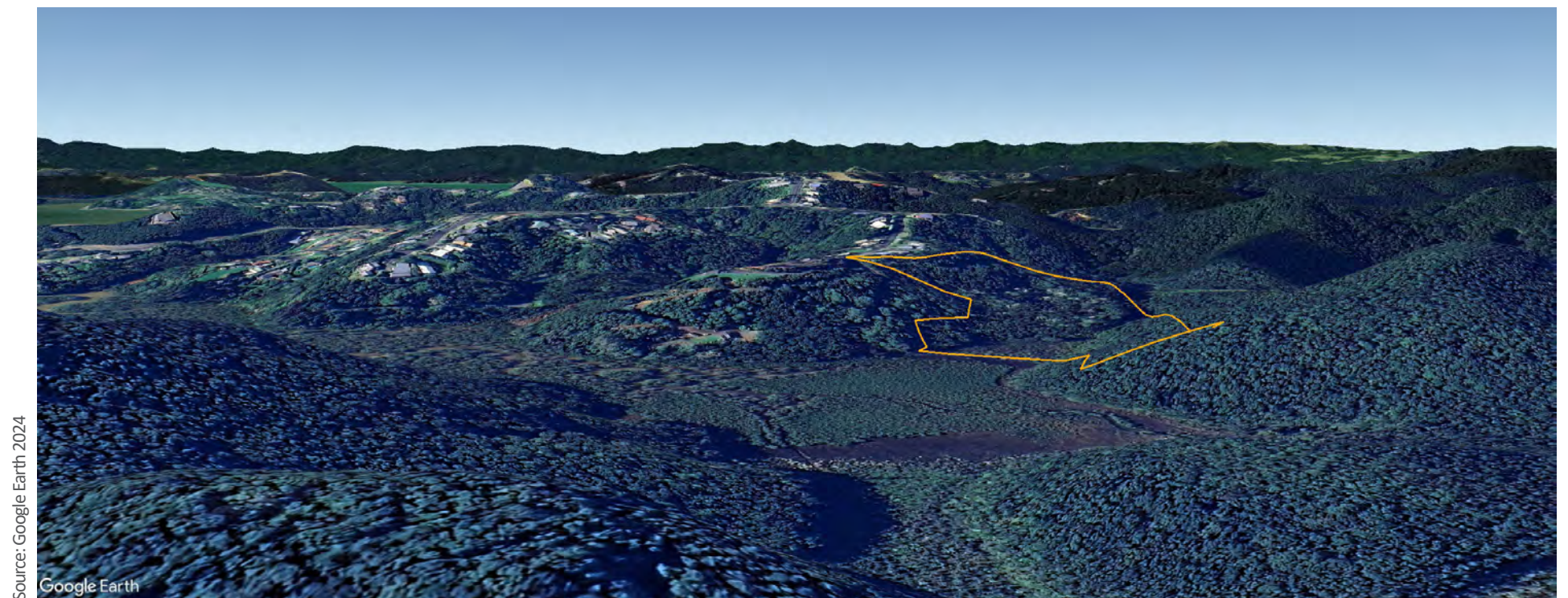
ATTACHMENT THREE AERIAL VIEWS



Source: Google Earth 2024

OBLIQUE VIEW 1:

A high oblique image from the south with the Site boundaries indicatively marked in orange. This image shows the Site's relatedness to the residential belt of Hihitahi Rise and its seclusion from wider exposure.



Source: Google Earth 2024

Google Earth

OBLIQUE VIEW 2:

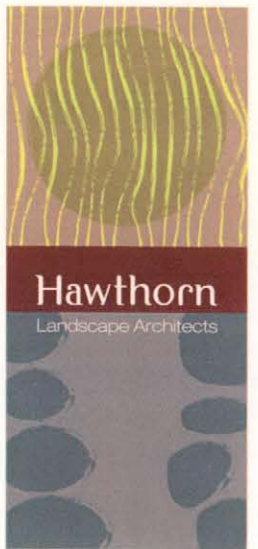
A lower altitude oblique from over Russell Forest, to the north west and further illustrating the containment created by landform.

ATTACHMENT FOUR

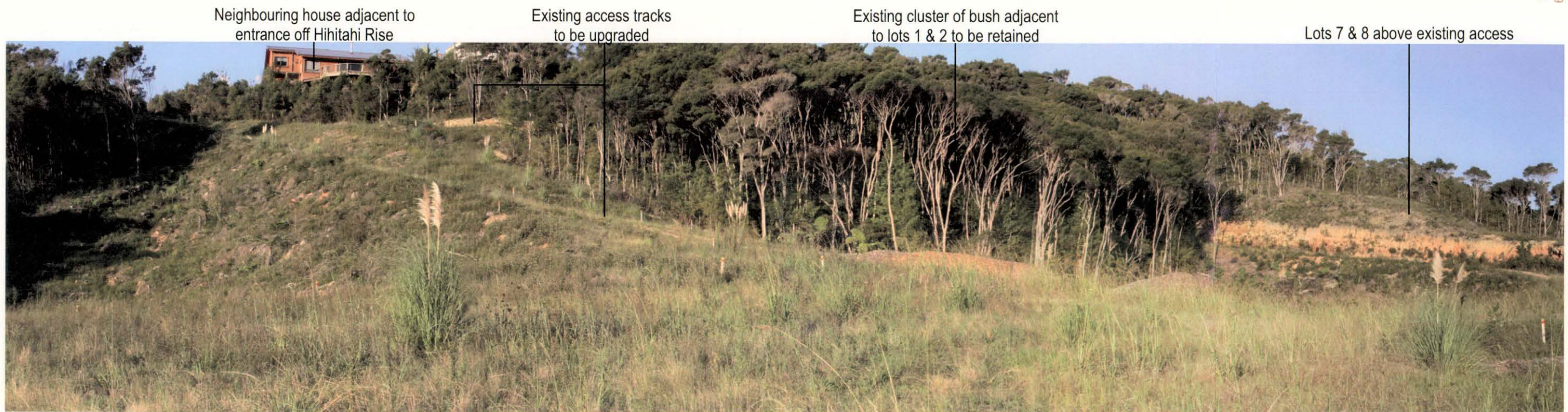
2007 SITE PHOTOGRAPHS



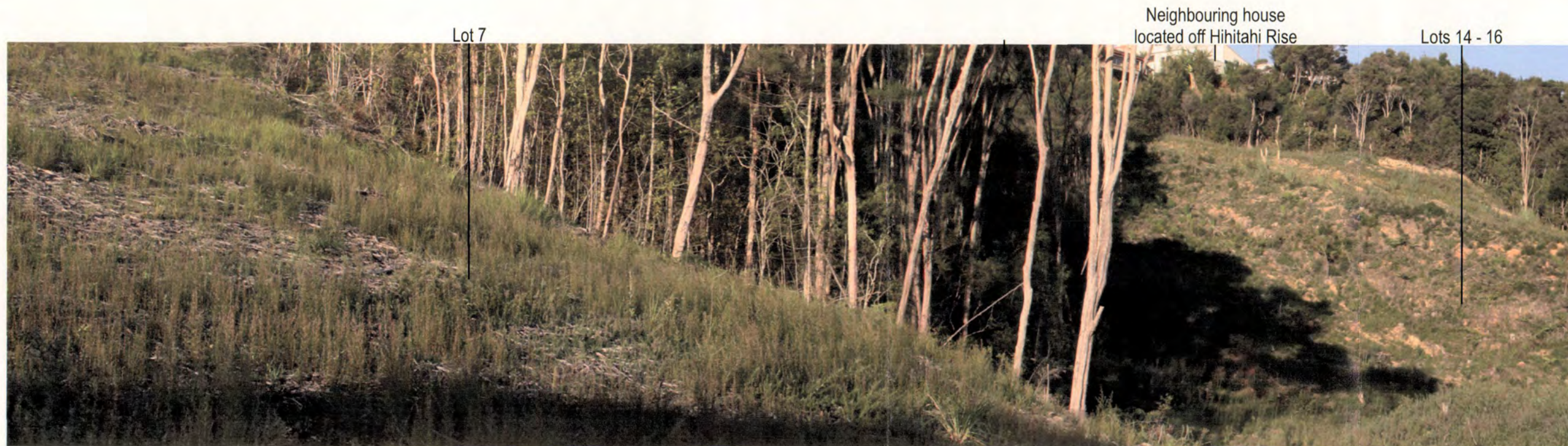
Photograph One Located on the existing access driveway into the property. Looking southwest across the open reasonably flat area that will contain the main cluster of lots. The access across the wetland to the bush lots 5 & 6 is located to the right of the image. The bush clad hill slopes that form the backdrop to the subdivision is contained with the DOC managed Opua Forest.



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 www.hawthornlandscapes.co.nz



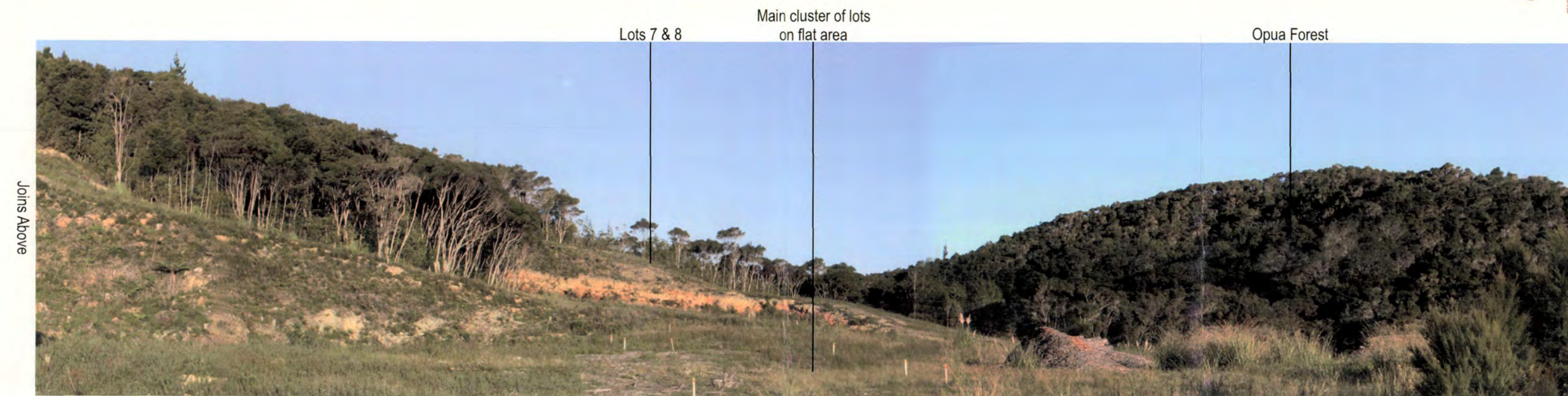
Photograph Two Looking east from the middle of the open area that will contain the main cluster of lots. The existing access tracks are visible, and will be upgraded. The existing indigenous vegetation will be retained and protected.



Joins below



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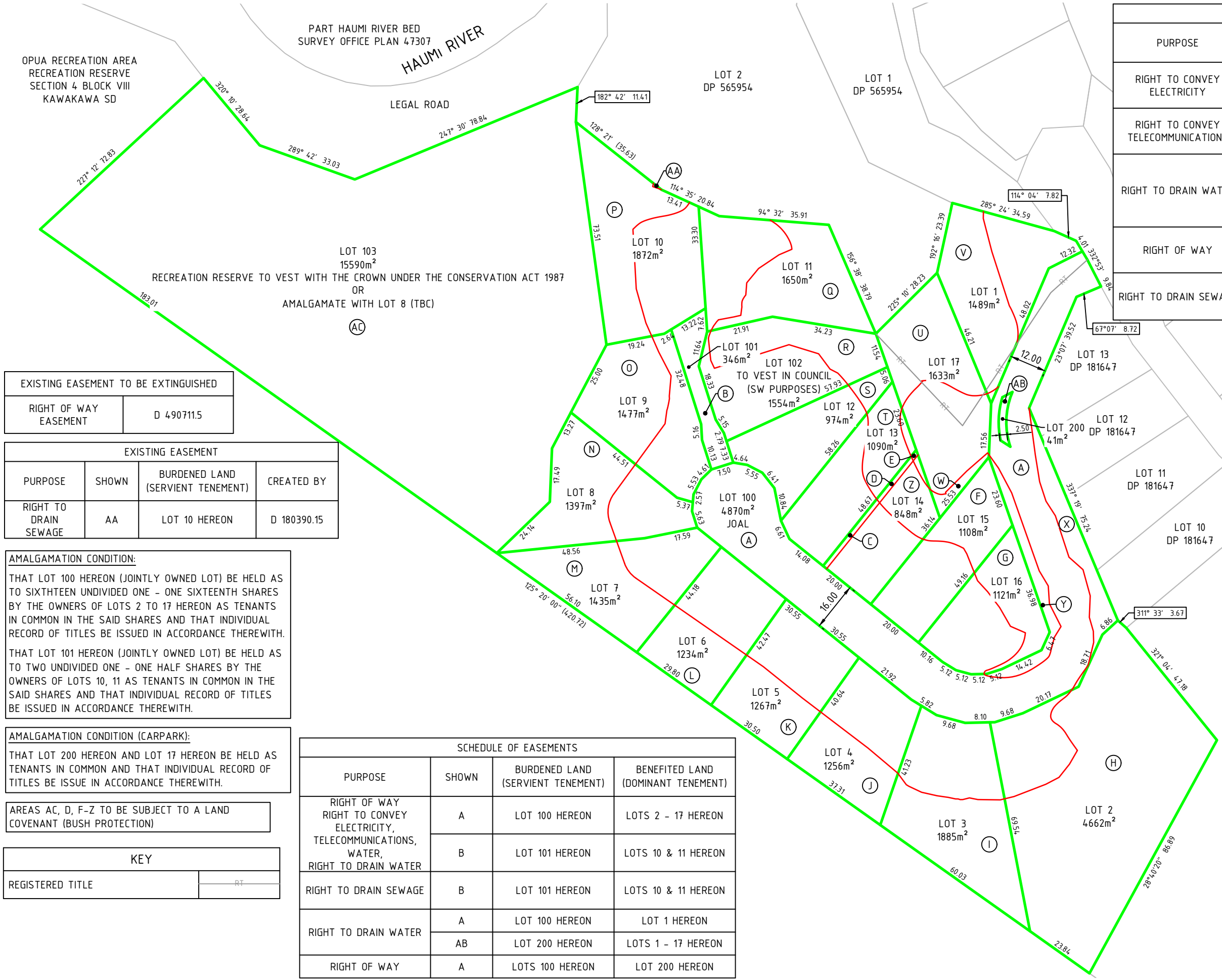


Joins Above

Photograph Three Located at the western end of the property adjacent to proposed lots 11 & 12. Looking southwest across the property. The approximate location of proposed lots has been indicated.

ATTACHMENT FIVE

SCHEME PLAN
PREPARED BY CHESTER



SCHEDULE OF EASEMENTS IN GROSS			
PURPOSE	SHOWN	BURDENED LAND (SERVIENT TENEMENT)	GRANTEE
RIGHT TO CONVEY ELECTRICITY	A	LOT 100 HEREON	VECTOR LIMITED
	B	LOT 101 HEREON	
RIGHT TO CONVEY TELECOMMUNICATIONS	A	LOT 100 HEREON	CHORUS NEW ZEALAND LIMITED
	B	LOT 101 HEREON	
RIGHT TO DRAIN WATER	A	LOT 100 HEREON	FAR NORTH DISTRICT COUNCIL
	B	LOT 101 HEREON	
	C,D,E	LOT 14 HEREON	
RIGHT OF WAY	A	LOT 100 HEREON	FAR NORTH DISTRICT COUNCIL
	B	LOT 101 HEREON	
RIGHT TO DRAIN SEWAGE	A	LOT 100 HEREON	FAR NORTH DISTRICT COUNCIL
	B	LOT 101 HEREON	

EXISTING EASEMENT TO BE EXTINGUISHED	
RIGHT OF WAY EASEMENT	D 4907115

EXISTING EASEMENT			
PURPOSE	SHOWN	BURDENED LAND (SERVIENT TENEMENT)	CREATED BY
RIGHT TO DRAIN SEWAGE	AA	LOT 10 HEREON	D 180390.15

AMALGAMATION CONDITION:
 THAT LOT 100 HEREON (JOINTLY OWNED LOT) BE HELD AS TO SIXTEEN UNDIVIDED ONE - ONE SIXTEENTH SHARES BY THE OWNERS OF LOTS 2 TO 17 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORD OF TITLES BE ISSUED IN ACCORDANCE THEREWITH.
 THAT LOT 101 HEREON (JOINTLY OWNED LOT) BE HELD AS TO TWO UNDIVIDED ONE - ONE HALF SHARES BY THE OWNERS OF LOTS 10, 11 AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORD OF TITLES BE ISSUED IN ACCORDANCE THEREWITH.

AMALGAMATION CONDITION (CARPARK):
 THAT LOT 200 HEREON AND LOT 17 HEREON BE HELD AS TENANTS IN COMMON AND THAT INDIVIDUAL RECORD OF TITLES BE ISSUE IN ACCORDANCE THEREWITH.

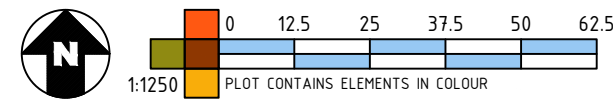
AREAS AC, D, F-Z TO BE SUBJECT TO A LAND COVENANT (BUSH PROTECTION)

KEY	
REGISTERED TITLE	RT

SCHEDULE OF EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND (SERVIENT TENEMENT)	BENEFITED LAND (DOMINANT TENEMENT)
RIGHT OF WAY RIGHT TO CONVEY ELECTRICITY, TELECOMMUNICATIONS, WATER, RIGHT TO DRAIN WATER	A	LOT 100 HEREON	LOTS 2 - 17 HEREON
	B	LOT 101 HEREON	LOTS 10 & 11 HEREON
RIGHT TO DRAIN SEWAGE	B	LOT 101 HEREON	LOTS 10 & 11 HEREON
RIGHT TO DRAIN WATER	A	LOT 100 HEREON	LOT 1 HEREON
	AB	LOT 200 HEREON	LOTS 1 - 17 HEREON
RIGHT OF WAY	A	LOTS 100 HEREON	LOT 200 HEREON

SITE DESCRIPTION:
 TERRITORIAL AUTHORITY: FAR NORTH DISTRICT COUNCIL
 ADDRESS: 47 HIHITAHU RISE, TE HAUMI
 APPELLATION: LOT 21 DP 181647 & LOT 2 DP 200205
 ZONING: RESIDENTIAL
 RECORD OF TITLE: NA112C/975 & NA126B/885
 AREAS:
 TITLE NA112C/975 = 0.2395Ha
 TITLE NA126B/885 = 4.6400Ha

- NOTES:**
- THIS PLAN IS FOR A RESOURCE CONSENT APPLICATION ONLY. AREAS, BOUNDARY DIMENSIONS AND LEVELS ARE SUBJECT TO A LAND TRANSFER SURVEY AND APPROVAL BY THE LOCAL AUTHORITY AND LAND INFORMATION NZ.
 - ANY DISCREPANCIES ON THIS PLAN ARE TO BE REFERRED TO CHESTER CONSULTANTS LTD FOR COMMENT OR RESOLUTION.
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Rev	Date	Amendments	By

Drafter: V.RIVIER Job Title: LOTS 1-17, 100-103 BEING A SUBDIVISION OF LOT 21 DP181647 & LOT 2 DP200205
 Designer: C. DAY Client: HERON POINT LIMITED
 Checker: C. DAY Address: 45 & 47 HIHITAHU RISE, PAIHIA, FAR NORTH DISTRICT.
 Date: 05/07/2024 Drawing Title: PROPOSED SCHEME PLAN

Drawing: 120 Rev: 0
 Scale: 1:1250 @ A3
 Project: 15569
 Issue: CONSENT



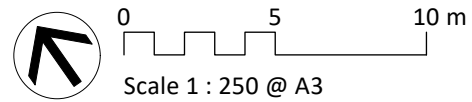
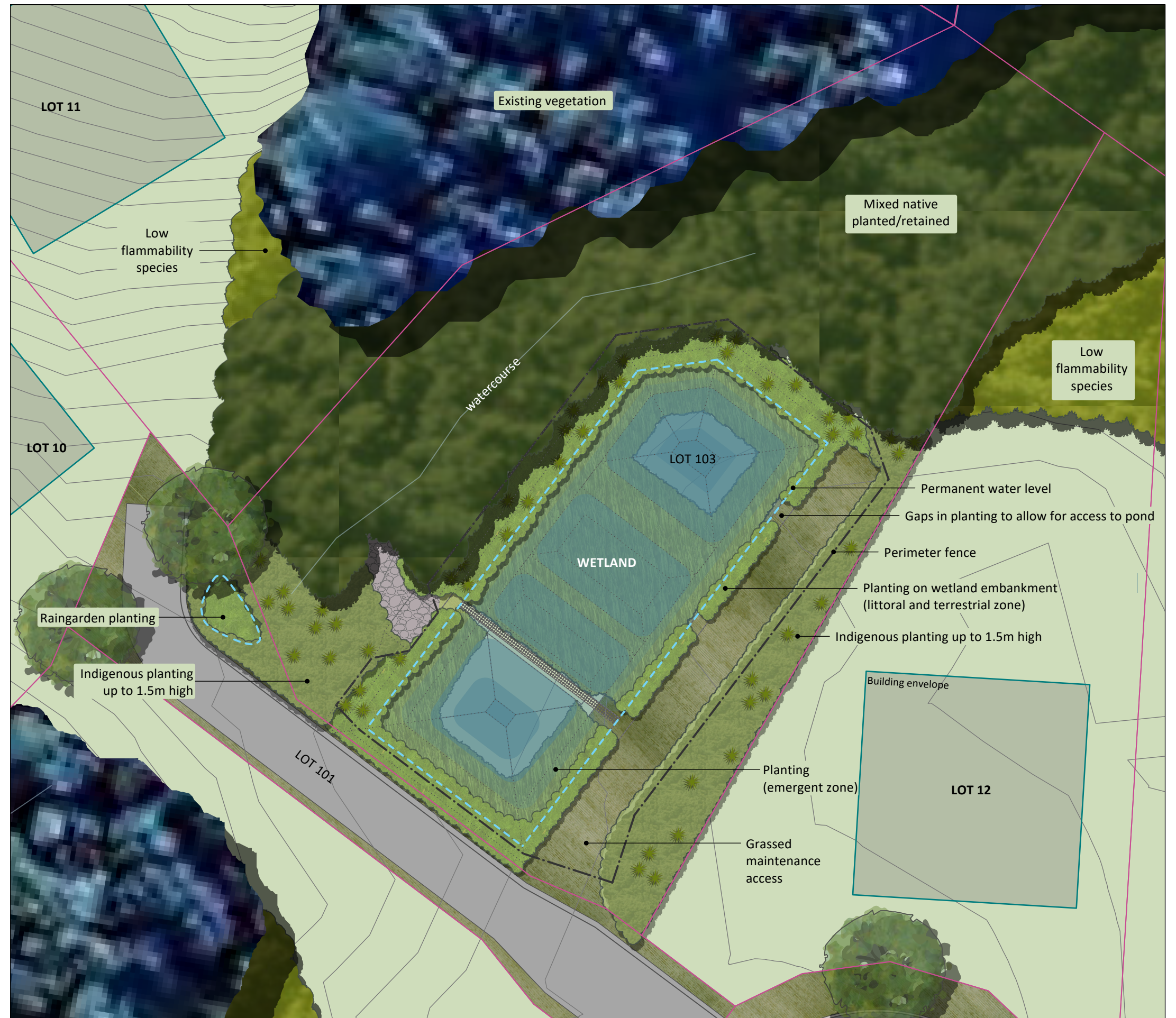
ATTACHMENT SIX

LANDSCAPE INTEGRATION CONCEPT



Indicative species | Wetland and surrounds

Botanical name	Common name
<i>Carex lessoniana</i>	swamp sedge
<i>Carex secta</i>	purei
<i>Ficinia nodosa</i>	wiwī
<i>Apodasmia similis</i>	oioi
<i>Eleocharis acuta</i>	spike rush
<i>Machaerina sinclarii</i>	tuhara, pepepe
<i>Coprosma propinqua</i>	mingimingi
<i>Cyperus ustulatus</i>	giant umbrella sedge
<i>Phormium tenax</i>	harakeke



ATTACHMENT SEVEN

CROSS SECTIONS

SECTION LOCATION PLAN



- Site/Lot boundaries
- Building envelopes
- Retaining structures



LEGEND

- 1 | Roadway 5.5m wide
- 2 | Indicative footpath 1.5m wide
- 3 | Indicative low retaining wall
- 4 | Timber handrail
- 5 | Mixed native planting with low to moderate flammability species
- 6 | Existing cut-face colonised with native vegetation
- Existing ground profile
- Proposed ground profile

0 2.5 5.0 m
Scale 1 : 100 @ A3

SECTION LOCATION PLAN



- Site/Lot boundaries
- Building envelopes
- Retaining structures



LEGEND

- 1 | Roadway 5.5m wide
- 2 | Indicative boardwalk 1.5m wide
- 3 | Indicative crash barrier
- 4 | Indicative retaining structure to be confirmed at detailed design
- 5 | Cascading, native planting atop retaining structure
- 6 | Low native planting at base of wall and possibly climbing species
- 7 | Mixed native planting with low to moderate flammability species
- Existing ground profile
- Proposed ground profile

0 2.5 5.0 m
Scale 1 : 100 @ A3

SECTION LOCATION PLAN



- Site/Lot boundaries
- Building envelopes
- Retaining structures

LEGEND

- 1 | Roadway 5.5m wide
 - 2 | Indicative boardwalk 1.5m wide
 - 3 | Indicative crash barrier
 - 4 | Indicative engineered batter slope to be confirmed at detailed design
 - 5 | Cascading, native planting atop retaining structure
 - 6 | Vegetated batter slope with native groundcovers (if engineering solution allows for planting)
 - 7 | Mixed native planting with low to moderate flammability species
- Existing ground profile
 ——— Proposed ground profile



0 2.5 5.0 m
 Scale 1 : 100 @ A3



47 HIHITAHU RISE | TE HAUMI | NORTHLAND
SECTION CC'

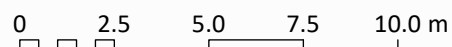
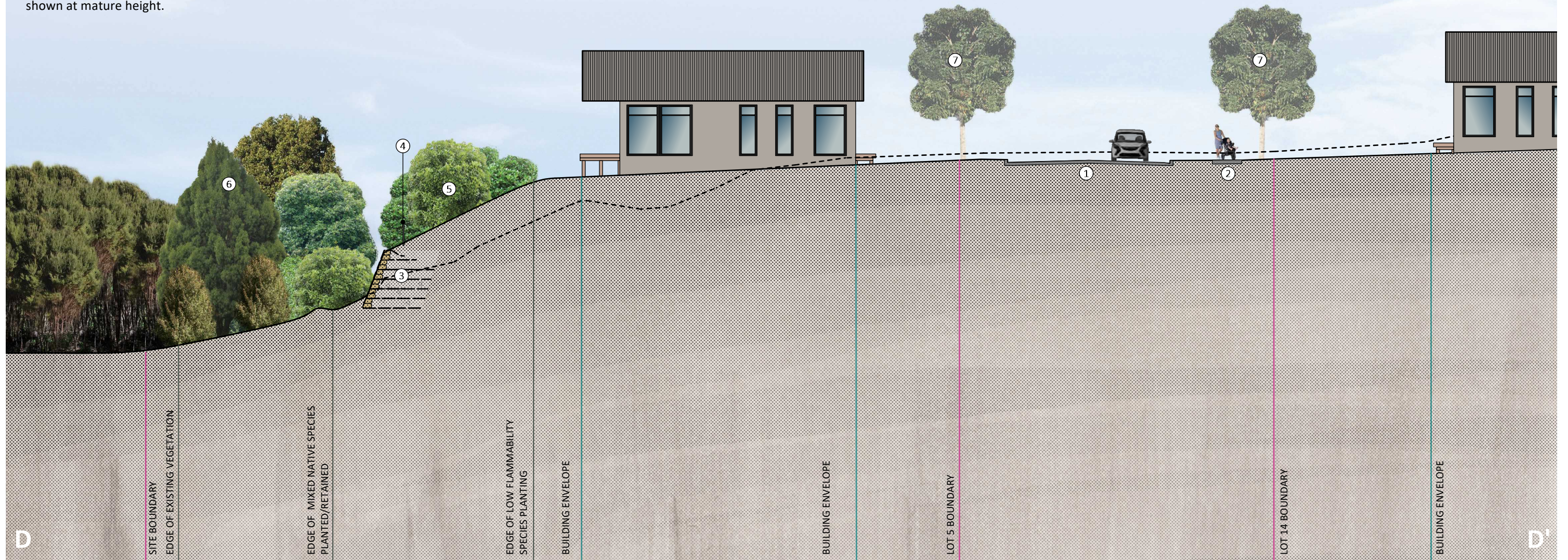
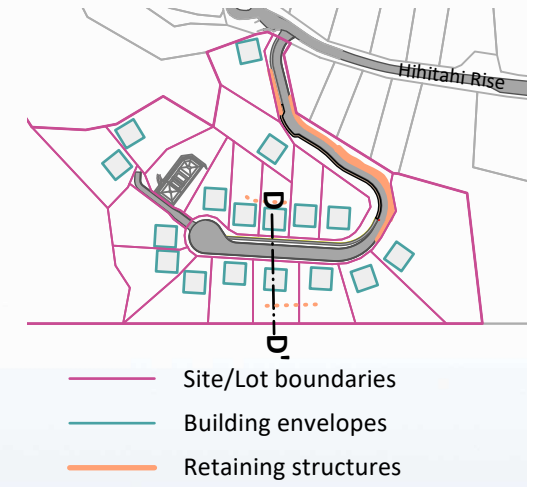
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LEGEND

- 1 | Roadway 8.25m wide
- 2 | Indicative footpath 1.5m wide
- 3 | Indicative engineered fill embankment to be confirmed at detailed design likely to be planted
- 4 | Fall barrier (if required)
- 5 | Low flammability, indigenous species planting
- 6 | Mixed native planting with low to moderate flammability species
- 7 | Specimen street trees (in background of section line)
- Existing ground profile
- Proposed ground profile

Note: Planting shown after approx. 10 years of growth. Trees not shown at mature height.

SECTION LOCATION PLAN



Scale 1 : 200 @ A3

Ref: 1262_SectionDD_20240611



47 HIHITAH I RISE | TE HAUM I | NORTHLAND
SECTION DD'

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ATTACHMENT EIGHT

AREA TAKE-OFF VEGETATION AREAS

Note: All areas are measured in plan view, not along the slope of the site.

AREA TO BE CLEARED between 20,220m² to 22,950m²

Note: Some of the existing vegetation in the 'Mixed native' planting areas will be able to be retained. This accounts for the variance in the area to be cleared.

Key

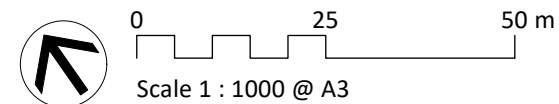
- Lot boundaries
- Building envelopes
- Specimen tree tree

EXISTING VEGETATION AREAS WITHIN SITE BOUNDARIES TO BE RETAINED

- 9,140 m² Regenerating podocarp forest
- 7,380m² Regenerating kanuka forest
- 11,330m² Raupo reedland
- TOTAL 27,850m²**

PROPOSED PLANTING AREAS

- 2,730m² Mixed native **retained**/planted
- 3,100m² Low flammability native species planting
- 400m² Riparian/low planting
- 260m² Emergent riparian planting
- TOTAL 6,490m²**



Appendix 9:

Draft Fauna Management Plan, prepared by Kukuwai Civil and Environmental Services, dated August 2024.




DRAFT FAUNA MANAGEMENT PLAN FOR A PROPOSED SUBDIVISION AT 47 HIHITAHI RISE, PAIHIA



Prepared for:
Heron Point Ltd
July 2024



Document Quality Assurance

Document Version	Action	Name	Signed	Date
1.0	Prepared by	Jacqui Wairepo Director Principal Fauna Ecologist Kūkūwai Consulting Ltd		30.07.2024

Cover image: View from Hihitahi Rise looking west towards proposed clearance area.

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1. INTRODUCTION

Heron Point Ltd, the Client, requires wildlife management services associated with the development of a proposed new subdivision of adjacent properties; 45 and 47 Hihitahi Rise, Paihia. The site is classified as a Significant Natural Area (SNA) and sits within an Outstanding Natural Landscape (ONL) due to being situated on the eastern boundary of Opua Forest. Zoned as Residential in the Far North District Plan, it comprises two land-parcels totalling an area of 4.87 ha (Figure 1), part of which was historically cleared of vegetation (circa 2005) when a previous resource consent for subdivision was granted. Over the past c.20 years indigenous forest and scrub regeneration has occurred throughout the site providing habitat to a range of indigenous wildlife. The proposed subdivision will require clearance of the same area that was previously cleared, at an approximate quantum of 2.0-2.2 ha of the overall 4.87 ha site. An additional 114m² of kānuka (*Kunzea robusta*) forest is also required to be cleared. Following subdivision construction, c. 0.65ha of indigenous vegetation is to be replanted, while approximately 2.8ha of indigenous forest and wetland are to be retained and protected in perpetuity (Figures 2 & 3). The Planning Collective has been engaged to manage an application for Resource Consent and has identified the likely requirement of a Fauna Management Plan (FMP), given the sensitive ecological area that this project is located within.

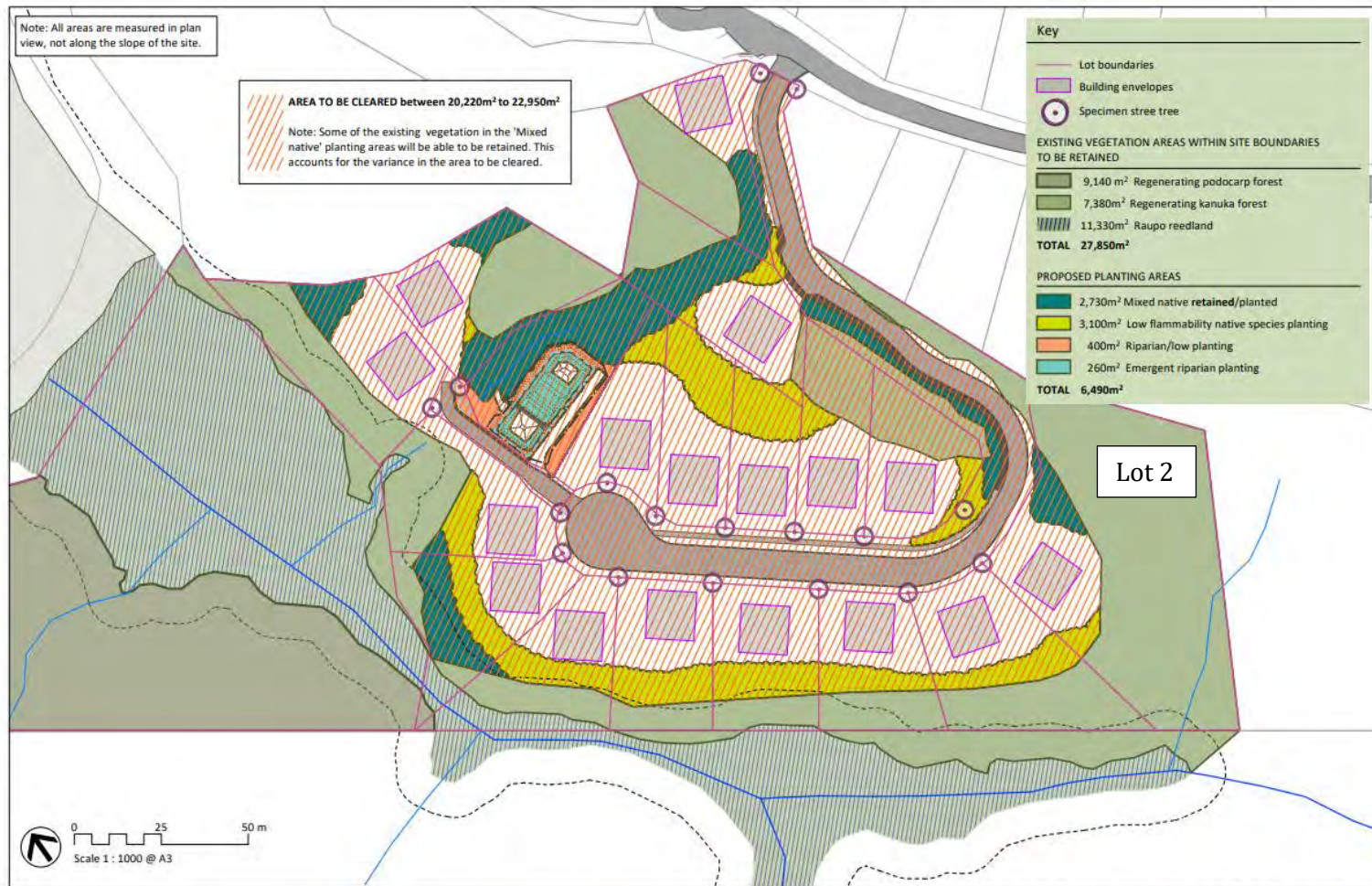
A range of indigenous fauna are known to reside within Opua Forest, several of which are classified as At Risk and Threatened. All indigenous lizards, bats, birds, and kauri snails are absolutely protected under the Wildlife Act (1953) which is administered by the Department of Conservation (DOC). The processes of significantly disturbing, catching, handling, and relocating (i.e., salvage) native wildlife requires a Wildlife Act Authority (WAA) permit from DOC before the work can be undertaken. It is likely that Far North District Council will also require fauna management for At Risk and Threatened species as conditions of Consent.

To support the WAA application process and avoid, minimise, and mitigate potentially adverse impacts to indigenous wildlife that are resident within and in close proximity to the vegetation and earthworks footprint, a FMP is required.

This FMP describes the values of vegetation and habitats within the clearance footprint with respect to lizards, avifauna (including kiwi/kiwi-nui; *Apteryx mantelli*), protected invertebrates (including kauri snail; *Paryphanta busbyi busbyi*) and long-tailed bats (*Chalinolobus tuberculatus*). It presents a strategy to minimise the effects of the project on those values and presents mitigation measures to commensurately manage potential impacts on wildlife that may be using edge vegetation as habitat. Where impacts cannot be completely mitigated, residual effects are to be addressed via a wider Ecological Management Plan (EMP) that includes vesting a large Lot comprising mature indigenous podocarp forest and wetland to the Crown, predator management and pest plant management for a specified period of time.



Figure 1: Subject site at 45 and 47 Hihitahi Rise, Paihia (purple polygons).
Map Source: Far North District Council GIS Maps (LINZ imagery)



Ref: 1262_AreaTakeOff_20240723



**47 HIHITAHİ RISE | TE HAUMI | NORTHLAND
 AREA TAKE-OFF**
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Figure 2: Vegetation units and quantum to be cleared, retained and restored during and following subdivision construction.
 Figure source: Littoralis Landscape Architecture, 2024.

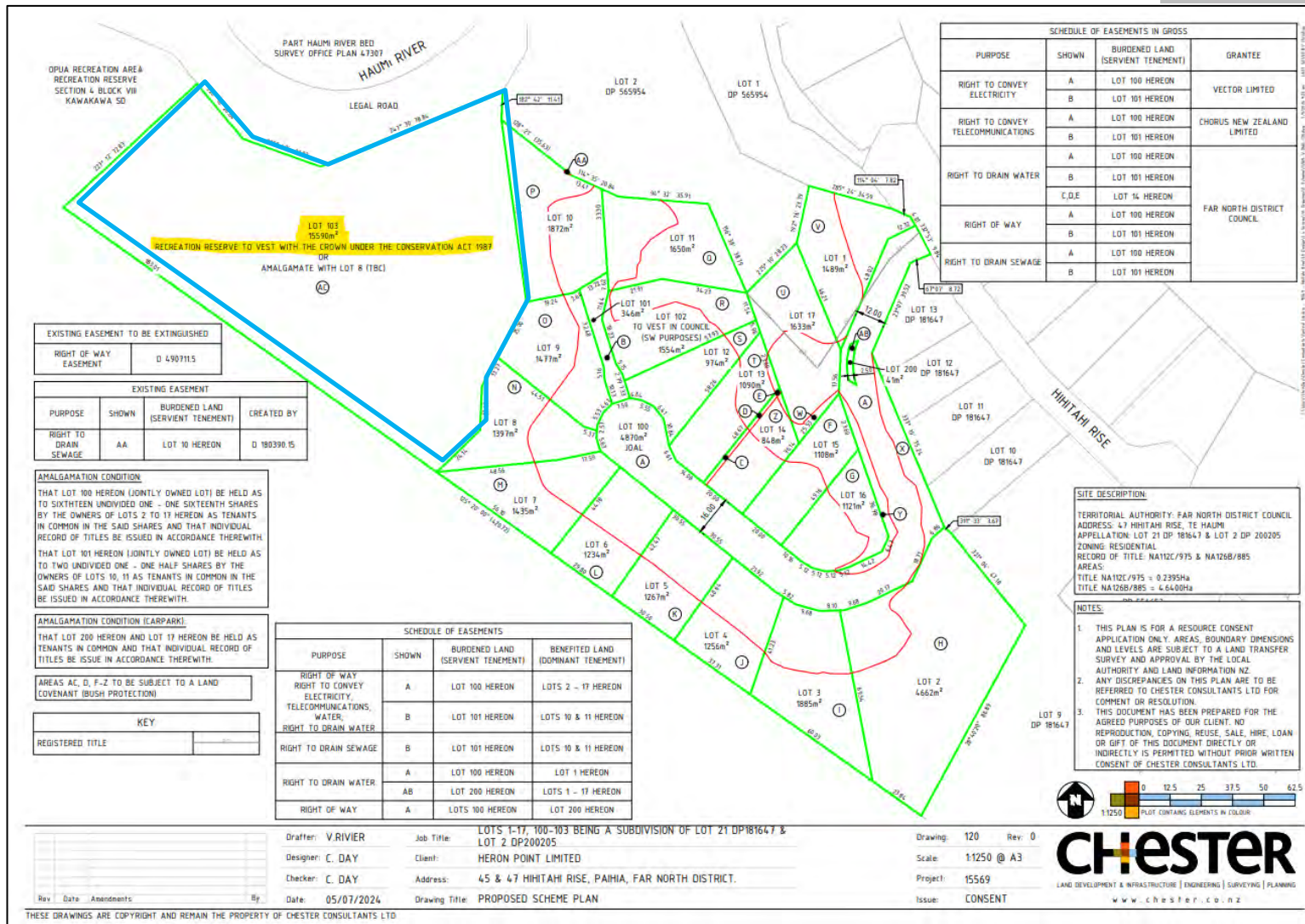


Figure 3: Proposed subdivision scheme design with Lot 103 (blue polygon) to be vested as Conservation Land and protected in perpetuity.
 Figure source: Chester Consultants Ltd, 2024.



2. LEGISLATIVE REQUIREMENTS

Three key pieces of legislation apply to regional and national-level management of indigenous terrestrial fauna at Hihitahi Rise:

1. Resource Management Act (1991) ('RMA')
2. Wildlife Act (1953) ('WA')
3. Conservation Act (1987) ('CA')

The RMA is administered by district and regional councils via the resource consenting process, while the CA and WA are administered by DOC; the latter via the Wildlife Act Authority process.

All indigenous fauna is protected under the Wildlife Act regardless of its threat status. Capturing and relocating indigenous fauna should not be undertaken prior to gaining a Wildlife Act Authority ('WAA') permit from DOC, or without gaining written permission from DOC.

This FMP is being prepared alongside an application to gain a WAA under Section 53 of the Wildlife Act. Once approved, this WAA will enable protected lizards and kiwi to be safely removed from impact areas and relocated into adjacent areas of forest that are subject to predator management in the wider, contiguous landscape.

2.1 National Policy Statement on Indigenous Biodiversity

The National Policy Statement on Indigenous Biodiversity (NPSIB, 2023) has now come into force with the specified objective to:

"Maintain indigenous biodiversity across Aotearoa New Zealand so that there is at least no overall loss in indigenous biodiversity after the commencement date;"

The NPSIB has been created as a tool to provide Councils with a clear and consistent approach to managing significant, indigenous biodiversity and SNAs. It provides definitions and criteria for identifying areas of significance and these will be evaluated during the resource consent approval process for this project.

Opuā Forest and surrounding wetlands qualify as a Significant Natural Area under the NPSIB under the criterion for 'rarity and distinctiveness', providing significant habitat to numerous At Risk (fauna) species, and potentially three specified Threatened 'highly mobile fauna' species. Under the NPSIB there is a requirement for the Applicant to ensure that the effects management hierarchy is upheld and that efforts are made to achieve its objectives and policies.



3. PURPOSE AND SCOPE

This FMP describes measures to salvage and relocate indigenous protected invertebrates, lizards and kiwi within areas of vegetation and habitat clearance. It also provides an avoidance protocol to provision for long-tailed bats and other avifauna, if they are present. This FMP includes the following:

- a) Desktop and field assessments of habitat value to indigenous invertebrates, lizards, long-tailed bats and avifauna.
- b) Summary of the potential effects to the above fauna groups that arise from habitat clearance.
- c) Responsibilities and competencies of the staff involved in bat mitigation work, plus lizard and kiwi relocation.
- d) Salvage protocols.
- e) Relocation site description.
- f) Additional considerations (seasonality, residual effects and adaptive management).
- g) Compensation opportunities for temporary and permanently lost habitats and potential loss of individual animals that are not salvaged.

4. ROLES AND RESPONSIBILITIES

Implementation of this FMP will be supervised and led by the Project's Fauna Ecologist ('PFE'). It is the responsibility of the appointed Project/Site Manager to ensure clear and consistent information is relayed to the ecology team regarding proposed vegetation and habitat clearance activities. Any supporting ecologists and/or kaitiaki assisting with the salvage components of this project will be trained by the PFE in the basic techniques required to search for and safely handle indigenous lizards. A good understanding of the habitat requirements of each species being relocated should be gained prior to commencing salvage activities.

A specialist Kiwi Ecologist shall lead the implementation of the kiwi searches using their trained and certified kiwi detection dog. If required, the PFE may assist with kiwi relocation under the direct supervision of the Kiwi Ecologist.

It is important that all key project team members are familiar with the requirements and protocols of this FMP to ensure that appropriate mitigation (i.e., salvage) can be implemented both prior to, and where appropriate during, habitat clearance.

The responsibilities of the Project / Site Manager include but are not limited to:

- Review of this FMP, with a clear understanding of what comprises potential habitat for the range of indigenous fauna that are potentially affected.
- Liaising with the PFE with clear communication of any/all proposed works that require earthworks and or vegetation clearance the following week (to the greatest extent possible).
- Maintaining clear lines of communication with the PFE regarding changes to the works schedule.



5. SUMMARY OF ECOLOGICAL VALUES

5.1 Vegetation types

Site visits to assess vegetation and habitats have been undertaken by Wild Ecology and Kūkūwai Consulting Ltd. Wild Ecology was engaged to prepare an Ecological Assessment (2024) and identified four vegetation types within the property boundary. The below vegetation descriptions have been summarised from the Ecological Assessment:

“The site generally has a steeply falling topography and falls roughly in a south-westerly direction from the sites north-eastern aspect towards Haumi River estuarine environment. The eastern and western flanks of the site are separated by a large wetland-saltmarsh ecotone transitional area.”

1. Regenerating kānuka forest – c. 0.74ha

- a. This vegetation unit is typical of a regenerating forest ecosystem that is supported by a range of species including ponga (*Alsophila tricolor*), tī kouka (*Cordyline australis*), mapou (*Myrsine australis*) and māhoe (*Melicytus ramiflorus*).

2. Regenerating podocarp forest – c. 0.91ha

- a. This vegetation type is located on the western side of the site and is separated from the development footprint by the raupo wetland. Vegetation is contiguous with the wider Opu Forest and is dominated by tōtara (*Podocarpus totara*), tanekaha (*Phyllocladus trichominooides*), rimu (*Dacrydium cuppressinum*) and kahikatea (*Dacrycarpus dacrydioides*). Kauri (*Agathis australis*) is also present but sparse. Gully vegetation includes pūriri (*Vitex lucens*), kohekohe (*Dysoxylum spectabile*) and taraire (*Beilschmiedia tarairi*).

3. Exotic – indigenous regenerating vegetation – c. 2.18ha

- a. This vegetation unit comprises much of the proposed subdivision footprint and has been routinely cleared of vegetation since 1982 and most recently around 2005 (Wild Ecology, 2024). A range of pest plants are distributed throughout this vegetation type including gorse (*Ulex europaeus*), pampas (*Cortaderia selloana*), and woolly nightshade (*Solanum mauritianum*). Regenerating indigenous species are also present within this area, including kānuka, tī kouka, hangehange (*Geniostoma ligustrifolium*) and mahoe.

4. Raupo reedland – c. 1.13ha

- a. The wetland is situated outside of the construction footprint and is dominated by raupo (*Typha orientalis*), with additional species including but not limited to harakeke (*Phormium tenax*), purei (*Carex secta*), mānuka (*Leptospermum scoparium*), tangle fern (*Gleichenia dicarpa*), and whekī (*Dicksonia squarrosa*).



5.2 Fauna values

A wide range of indigenous, native and exotic fauna (terrestrial, arboreal and aquatic) are well known residents throughout Opua Forest. Historical avifauna assemblages were diverse and included North Island weka (*Gallirallus australis greyi*; At Risk-Relict) which was introduced to Opua Forest and thought to be down to the last few individuals by the late 1990's (Conning, 1999). However, several iNaturalist records in more recent years confirm that this species is still distributed throughout Opua Forest, including a single record in 2023 only 1.2km from the project site. A sustained population of North Island kiwi are present and supported by local conservation efforts, and North Island fernbird/mātātā (*Poodytes punctatus vealeae*; At Risk-Declining) has been observed on-site within wetland habitats.

Commonly observed indigenous avifauna that are likely to use vegetation and habitats within and immediately surrounding the clearance area include: Tūi (*Prosthemadera novaeseelandiae*), kerurū (*Hamiphaga novaeseelandiae*), tomtit/miromiro (*Petroica macrocephala toitoi*), morepork/ruru (*Ninox novaeseelandiae*), fantail/pīwakawaka (*Rhipidura fuliginosa*), shining cuckoo/pipiwharauoa (*Chrysococcyx lucidus*), grey warbler/riroriro (*Gerygone igata*), New Zealand pipit/pīhoihoi (*Anthus novaeseelandiae*), kingfisher/kotare (*Todiramphus sanctus*), mātuku/white-faced heron (*Egretta novaehollandiae*), harrier hawk/kāhu (*Circus approximans*) and silvereye/tahou (*Zosterops lateralis*). There is some potential for banded rail/Moho pererū (*Gallirallus philippensis*), spotless crane/pūweto (*Zapornia tabuensis*) and the Australasian bittern (*Botaurus poiciloptilus*) to be present on-site in wetland and saltmarsh habitats.

A well-established population of long-tailed bats is known to widely utilise habitats throughout Puketī Forest (c. 25km from Opua Forest), together with a range of skinks and geckos including copper skink (*Oligosoma aeneum*), Northland green gecko (*Naultinus greyi*), elegant gecko (*N. elegans*), Pacific gecko (*Dactylocnemis pacificus*) and forest gecko (*Mokopirirakau granulatus*). Nearby records of shore skink (*O. smithi*) suggest that there is some potential for this species to also be present given the project site is less than 1km from the coast. Copper skink and one of the *Naultinus* gecko species were also observed on site by Wild Ecology (2024).

Of the invertebrate fauna, kauri snail is known to be present in habitats that are contiguous with Opua Forest due to citizen scientist records on iNaturalist. Other At-Risk invertebrates that may be present within the landscape and project site include *Amborhytida dunniae* (hereafter referred to as rhytida snails), peripatus (*Peripatoides sp.* also known as ngaokoeoke or velvet worms). A range of wētā species within the ground, tree and cave wētā groups, stick insects, spiders, leaf-vein slugs and other invertebrates will also be present within each of the vegetation units on-site.

6. ECOLOGICAL IMPACT ASSESSMENT (EIANZ EVALUATION METHOD)

The Ecological Institute of Australia and New Zealand (EIANZ) evaluation method for assessing ecological impact comprises assessments of i) ecological value, ii) the magnitude of effects and iii) the level of effects. Based on this framework, an assessment of potential impact has been made to each of the fauna types that may be present within the clearance footprint and consequently potentially adversely impacted by the removal of vegetation and habitats. In general, the actual and potential effects of works upon resident wildlife may include the following:



1. Accidental injury and/or mortality
2. Displacement
3. Habitat loss
4. Significant and sustained disturbance
5. Increased vulnerability to predation
6. Breeding disruption/failure

This FMP provides an assessment of the potential effect on fauna that is assumed to be present within the clearance footprint. Brief, preliminary survey work was undertaken to inform the Ecological Assessment prepared by Wild Ecology, and this FMP draws on information from those survey results together with detailed Desktop Assessments. Assessments of effects are provided in each of the management strategies for lizards (Section 9.4), bats (Section 10.5), avifauna (Section 11.5) and invertebrates (Section 12.2).

7. GENERAL APPROACH TO FAUNA MANAGEMENT

The general approach that has been taken in preparing this FMP follows the mitigation hierarchy to prioritise the **avoidance** of adverse impacts to the environment. The mitigation hierarchy is a tool that has been developed to avoid adverse impacts of development projects on biodiversity values. Where any effects occur, they should be appropriately 'minimised' and 'mitigated'. For any remaining effects (known as 'residual effects') that are left, they should be appropriately quantified and offset if possible, or compensated for as the last resort. The goal of this approach is to end up with 'no-net-loss' of biodiversity, or if possible to achieve a 'net-gain'.

7.1 Avoidance and minimisation of effects

To-date, the project team has worked closely with Wild Ecology to prioritise biodiversity values and avoid adverse impacts wherever possible. This includes restricting the development footprint to only those areas that have been cleared historically and consequently remain in a somewhat degraded state that is dominated by exotic vegetation. The result is the avoidance of removing any mature vegetation where complex microhabitats have developed in association with older growth forest. Where vegetation must be removed, the project ecologist and engineer have worked closely together to ensure that the 30m minimum wetland setback rule is adhered to and minimising adverse impacts to biodiversity values in the surrounding terrestrial, freshwater and estuarine landscapes.

7.2 Mitigation of effects

Vegetation clearance and earthworks activities are likely to adversely impact resident fauna that use habitats within and adjacent to the project footprint. Therefore, these effects shall be mitigated by using a range of survey and salvage tools and methods to i) minimise the potential for wildlife to be present within habitats at the time of removal, and ii) relocate catchable wildlife (i.e., lizards and kiwi) into safe habitats that are outside of (but adjacent to) the clearance footprint where they will be prevented from 'homing' back to their capture sites via the erection of a super-silt fence that also serves as a wildlife-exclusion fence.

7.3 Offsetting and compensating for residual effects

Residual effects are the impacts that cannot be mitigated through the salvage and relocation protocols, or onsite measures to reduce impacts of clearance on remaining habitat. In general, these can include the permanent loss and/or fragmentation of fauna habitats, the increase in competition between species and individuals for resources, and the increased vulnerability of native wildlife to predation that may arise following habitat displacement. They may also include temporary shifts in behaviour that result in ‘Moderate’ level indirect effects such as reduced foraging ranges and reduced fecundity.

8. SEASONALITY REQUIREMENTS

Fauna work is subject to seasonal restrictions, with many activities only able to be undertaken during certain times of year. Table 1 below identifies seasonal constraints associated with fauna being managed for this project.

Table 1: Seasonal constraints associated with fauna management.

Fauna	Activity	Restricted months	Approved months	Explanation for restriction
Lizards	Survey and salvage	May – September	October - April	Lizards enter a state of semi-hibernation known as ‘torpor’ during the winter months, making them extremely difficult to detect and vulnerable to stress-induced mortality.
Bats	Surveys / Felling high-risk trees with potential bat roosts	May – September (Avoidance of November – January if possible)	October - April	Bats also enter torpor during the winter months. Breeding season spans between November and January, making heavily pregnant females less mobile, and non-volant young unable to fly and leave roosts independently.
Avifauna (forest)	Tree felling	October – January	February - September	Where confirmed active nests with eggs or young chicks are detected trees cannot be felled until chicks have fledged. A 10m buffer should also be applied to vegetation surrounding the tree to minimise disturbance and risk to breeding failure.
Kiwi	Habitat clearance	June - February	March – May	Breeding season spans between winter and summer, with chicks continuing to hatch into March / April in some seasons in Northland. The destruction of kiwi habitat should be avoided during these months wherever possible.
Weka	Habitat clearance	August – January	February - July	Breeding occurs from late winter till early summer, with high variability in egg production and chick rearing year-on-year.



9. LIZARD MANAGEMENT PLAN

9.1 Desktop assessment

DOC’s herpetofauna database contains records for four indigenous lizards within 10km of the project site, three of which are classified as ‘At Risk’. iNaturalist records the same four species, plus one additional species that is also classified as ‘At Risk’ (Hitchmough *et al.*, 2021). Table 2 below identifies the indigenous species that are protected by the WA that are known to be present or have the potential to be impacted by the project.

Table 2: Lizards known to be or likely to be within vegetation and habitats at Hihitahi Rise.

Species	Common name	Threat class	Nearest known record	Preferred habitats	Likely presence on site
<i>Oligosoma aeneum</i>	Copper skink	At Risk- Declining	Observed on-site	Grassland, scrubland, shrubland and forested areas, residing within leaf litter and beneath woody debris and rocks. Widely distributed within rural, coastal and urban areas throughout the Bay of Islands and Kerikeri Ecological District.	Confirmed
<i>Oligosoma ornatum</i>	Ornate skink	At Risk- Declining	<6km	Grassland, scrubland, shrubland and forested areas, residing within leaf litter and beneath woody debris and rocks. Widely but sparsely distributed throughout the Kerikeri Ecological District.	Moderate
<i>Oligosoma moco</i>	Moko skink	At Risk – Relict	<6km	Coastal, lowland species that is commonly observed in coastal scrub and boulder beaches where present. Will inhabit coastal forest edges where it is present. Sparse numbers in discrete locations remain scattered along Northland’s east coast.	Low
<i>Oligosoma smithi</i>	Shore skink	At Risk – Declining	1.5km	Coastal dunelands, shelly, boulder beaches and littoral zone. Known to travel up to 1km or more inland where habitat supports dispersal.	Moderate-high
<i>Naultinus elegans</i>	Elegant gecko	At Risk- Declining	<3km	Coastal, lowland species found in forest, shrubland and scrub and known to disperse across open ground. Northern distribution range and widely distributed within rural, coastal and urban areas throughout the Kerikeri Ecological District.	High (possibly confirmed)



<i>Naultinus greyii</i>	Northland green gecko	At Risk-Declining	<3km	Coastal, lowland species found in forest, shrubland and scrub and known to disperse across open ground. Southern distribution range and widely distributed within rural, coastal and urban areas throughout the Kerikeri Ecological District.	High (possibly confirmed)
<i>Mokopirirakau granulatus</i>	Forest gecko	At Risk-Declining	<15km	Coastal, lowland and alpine species that may inhabit forest, scrub, rocky bluffs and outcrops. Widely but sparsely distributed within rural, coastal and urban areas throughout the Kerikeri Ecological District.	Moderate
<i>Dactylocnemis pacificus</i>	Pacific gecko	Not Threatened	1.5km	In habits a wide range of habitats between the coast and lowland forest. Commonly found in human structures including sheds. Widely distributed within rural, coastal and urban areas throughout the Kerikeri Ecological District.	High
<i>Woodworthia maculata</i>	Raukawa gecko	Not Threatened	<6km	Coastal lowland species know to inhabit a variety of habitats grading between scrub, boulder beaches, forest edges, regenerating scrub, flaxland and human debris including buildings. Widely distributed along Northland coastlines.	High

9.2 Habitat assessment survey

A site visit was undertaken by the PFE on 1st March 2024 to assess the value of vegetation and habitats within the proposed clearance footprint to indigenous fauna. Whilst understorey vegetation is patchy and sparse in some areas (Photo 1), good quality habitat for a range of lizard species is present in dense leaf litter, pampas tussocks and rotting logs that are scattered throughout (Photos 2 and 3).

Mid-tier vegetation is also patchy and sparse beneath the canopy (Photo 4); however, forest structure becomes denser towards the kānuka forest edge and good quality habitat is available for the five gecko species that may be present.



Photo 1 (left) and 2(right): Sparsely vegetated terrestrial habitats comprising dense leaf litter and scattered woody debris.



Photo 3 (left): Example of good quality skink habitat within the clearance footprint.
Photo 4 (right): Mid-tier vegetation within the central clearance area near to the existing track.



9.3 DOC’s key principles for Lizard Salvage and Transfer in New Zealand

This Lizard Management Plan (LMP) has been prepared in accordance with DOC’s best practice guidelines for salvaging indigenous lizards. These guidelines include the following nine key principles that have been prepared specifically for New Zealand practitioners to ensure that mitigation-driven translocations of lizards have the greatest chance of success at achieving the goal of ‘no net loss of lizards’.

1. Lizard values and site significance must be assessed at both the impact (development) and receiving sites.
2. Actual and potential development-related effects and their significance must be assessed.
3. Alternatives to moving lizards must be considered.
4. Threatened lizard species require more careful consideration than less-threatened species.
5. Lizard salvage, transfer and release must use the best available methodology.
6. Receiving sites and their carrying capacities must be suitable in the long term.
7. Monitoring is required to evaluate the salvage operation.
8. Reporting is required to communicate outcomes of salvage operations and facilitate process improvements.
9. Contingency actions are required when lizard salvage and transfer activities fail.

9.4 Summary of potential effects

To provide context to the proposed management strategy, some of the activities that can adversely impact lizards, and the potential effects associated with these activities, are outlined in Table 3 below.

Table 3: Construction-related activities and their potential adverse effects to lizards

Activity	Potential Direct & Indirect Effects
Clearance of vegetation and habitat	<ul style="list-style-type: none"> ▪ Injury and/or mortality to lizards ▪ Reduced habitat availability / habitat fragmentation ▪ Deterioration of forest interior habitats associated with newly created edges and edge effects
Relocation into habitats outside of the impact areas	<ul style="list-style-type: none"> ▪ Displacement ▪ Increased competition for resources ▪ Increased vulnerability to predation ▪ Stress related reproductive failure



The risk of injury or mortality to lizards through vegetation clearance is to be addressed by the mitigation actions described throughout Section 9.5 of this management plan. In the absence of effective mitigation measures, the potential level of effect for the site is considered as ‘High’ in accordance with the EIANZ framework (2018). This is due to the following considerations and expert judgement:

- Seven of the nine species of lizards that may be found on site are classified as ‘At Risk’.
 - Duration required for lizard numbers to re-establish is anticipated to be between one and three generations depending on the number of lizards lost.
- Approximately 1.5ha of habitat being permanently lost which has been undisturbed for c. 18 years, allowing sufficient time for most of the lizard species to recolonise the landscape either as foraging or resident habitat.
 - A medium to long-term duration is anticipated to be required for habitat regeneration following restoration planting activities within the c. 0.6ha of land to be replanted following earthworks.
- The development site will encroach slightly into the 10m wetland setback. The resulting narrow strip of indigenous vegetation being retained along the southern boundary of the subdivision will result in the fragmentation of contiguous habitats. This will force terrestrial wildlife of low-mobility to be ‘funnelled’ through the narrow channel of vegetation between the coast and the wider Opua Forest and may result in a range of direct and indirect effects.

However, it is noted that un-mitigated adverse impacts may only be ‘moderate’ or even ‘low’ if lizard diversity and abundance is very low within the clearance footprint. If mitigation activities are applied in accordance with best practice, the overall level of effects may be reduced to ‘Low’ or ‘Very Low’ for the project (Table 4).

Table 4: Level of effects for lizards based on EIANZ assessment criteria (2018).

Species	Ecological value of species	Effect	Timescale of effect	Magnitude of effect	Level of ecological effect (no mitigation)	Main mitigating activity	Level of ecological effect following mitigation
At Risk lizards	High	Injury & mortality	Temporary (Medium term: 5-15 years)	Moderate	High	Salvage	Low
		Habitat loss (1.4ha permanent)	Temporary (Medium-long term: 10- 25 years+)	Moderate	High	Habitat restoration (c. 0.6ha)	Moderate
Not Threatened lizards	Low	Injury & mortality habitat loss	Temporary (Medium term: 5-15 years)	Moderate	Low	Salvage	Very Low



Habitat loss (1.4ha permanent)	Temporary (Medium- long term: 10- 25 years+)	Moderate	Low	Habitat restoration (c. 0.6ha)	Low
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The residual effects associated with the permanent loss of c. 1.4ha of lizard habitat cannot be mitigated through the activities discussed below and will be addressed via additional activities being proposed (see Section 13.5) through the Ecological Management Plan for this project. In summary, this involves the protection in perpetuity of c. 2.8ha of forest and wetland habitats within the area known as Lot 103 (Figure 3). The additionality of these activities is considered to reduce the effect of habitat loss on At Risk lizards to Low.

9.5 Management of effects

Several design iterations have been made to reduce the quantum of vegetation to be cleared and the resulting adverse impacts upon biodiversity values. Where avoidance cannot be achieved, salvage and relocation are the main activities being undertaken to mitigate the adverse effects of vegetation and habitat clearance on indigenous lizards. The following methods describe how lizards are to be detected, handled and released.

A preliminary trapping effort shall be undertaken for one week, supplemented by active hand-searching and raking as the main methods for catching skinks.

9.5.1 Live capture traps: Pitfall traps / Funnel traps

Approximately four weeks prior to scheduled vegetation clearance, a network of 60-100 traps will be installed throughout the clearance footprint, targeting skinks. Pitfall traps are made of four litre buckets that are dug into the ground with the lip of the bucket sitting flush with the soil surface. Traps will have a small amount of leaf litter inside them, together with a piece of fruit bait and a small square of damp sponge. Traps will have an Onduline or plywood square placed over the top of them to provide shade and protection from rain. This type of trap requires a settle-in period of at least 10 days in an inactive state so that lizards can habituate to them before being activated into 'trap mode'.

As pitfall traps are only suitable where topography is relatively flat, these will be substituted for funnel traps where the land gradient is sloping. Funnel traps will be set-up in the same way as pitfall traps (i.e., with food, damp sponge and shade provision) and habituated for the same 10-day period.

Once activated, all traps will be inspected daily (always within 24hrs) for lizards. Lizard trapping will be undertaken for a minimum duration of four consecutive days during suitable weather conditions (i.e., trap activation on a Monday and de-activation on a Friday).

Live capture traps are a good and useful tool in habitats including grassland, shrubland, scrub and forest.



9.5.2 Pre-clearance systematic and destructive hand-searching & raking

During the trapping week, destructive hand-searching will also be undertaken throughout the clearance footprint. This method will be used to specifically target ground-dwelling skinks and geckos, and will continue for five days, or until the entire clearance footprint has been thoroughly searched.

Hand-searching will involve the use of hand-forks and leaf rakes to gently rake through leaf litter and loose debris to search for skinks. Fronds of tree ferns that collect around the bottom of the trunk forming 'fern skirts' will also be searched thoroughly, together with cavities that form at the base of trees where lizards can frequently be found taking refuge. This process will result in the raking and relocation of leaf litter to the edge of the clearance footprint to capture as many lizards as possible and remove as much habitat as possible to prevent recolonisation of habitats throughout the week. All objects providing potential refuge such as rotting logs and liftable rocks will be inspected and where logs or rocks are not able to be lifted by hand, these will be flagged for machine-assisted removal (see Section 9.5.5).

9.5.3 Nocturnal spotlighting searches for geckos

During the lizard salvage week the site will be subject to no less than eight-person search hours of evening spotlighting surveys (e.g., two surveys, each for two hours of searching by two people, at least one hour after dusk). Spotlighting surveys will only be undertaken during suitable weather conditions (>15°C, warm, calm with little to no wind or rain). Surveys will be conducted using powerful headlamps (at least 600 lumens or higher) and supported with binoculars. Forest and scrub vegetation within the clearance footprint will be systematically scanned to ensure all visible trunk wood, limb wood and foliage is searched for the presence of nocturnal, arboreal geckos.

If a gecko is detected and accessible it will be carefully caught, handled and released in accordance with best practice into the appointed release site. If a gecko is high in the canopy a telescopic pruner may be used to assist with its capture. Alternatively, the tree will be clearly marked with flagging tape or dazzle paint and prioritised for supervised felling the following week.

9.5.4 Supervision of tree-felling

Geckos are frequently found to favour species like mānuka, kānuka and tōtara that have dense, spikey leaves with complex cover and flaking bark. These trees will be classified as 'high risk' habitat and consequently prioritised for supervised felling, inspection and relocation into adjacent habitats to be left in-situ. Broadleaved species are less likely to contain resident geckos but cannot be excluded from searching, particularly if close to high-risk species and if they contain epiphytes or other features that may provide refuge to geckos. The herpetologist shall apply expert judgement on all sections of vegetation to be felled and determine whether supervised removal is required.

9.5.5 Supervision of earthworks (Vegetation scrape back)

Where lizards have been detected through pre-clearance salvage then it may also be necessary to supervise the initial scrape back of any remaining vegetation and topsoil. This will likely be required around the entry area that is currently covered in rank grass, weeds and large clusters of pampas. This is the preferred



technique to use where ground cover is too thick to completely remove or search through effectively by hand.

If supervised scrape back is required, this will involve the herpetologist working alongside an excavator with a toothed bucket attachment to scrape back vegetation and expose/disturb skinks residing within deeper layers and the vegetation root matrix. Clear communication and hand-signals shall be established between the herpetologist and the contractor to ensure they may only approach to capture a fleeing lizard, once the machine has stopped and it is safe to proceed.

This is an extremely effective technique for revealing and catching a good proportion of resident lizards if undertaken by an experienced team.

9.6 Data collection

Each captured lizard will have the following information recorded:

- Date
- GPS location (capture and release)
- Species
- Habitat type (i.e., leaf litter, rotting log, foliage)
- Age class
- Photograph
- Any other relevant information (e.g., tail loss, distinctive pattern or scar, if found with any other individuals).

9.7 Capture, handling and transport

All captured lizards will be handled gently in accordance with best practice techniques described in the New Zealand Lizard Conservation Toolkit. All captured lizards will be placed immediately into either an individual cloth bag or directly into a well-ventilated container with damp leaf litter. Containers will be secured with a lid and stored in the shade for no more than four hours before being released. Morphometric data will be collected immediately prior to release. Containers will be washed and sterilized between each slip site. All handling and transport will be in accordance with requirements of the Animal Welfare Act (1999).

9.8 Lizard release location

In order for a release site to be assessed as suitable, it must fulfil the following criteria as detailed in the Key Principles for Lizard Salvage and Transfer in New Zealand guidelines:

1. The site must be ecologically appropriate and have long-term security
2. The habitat at the site must be suitable for the salvaged species
 - a. The site should have the same or superior habitat quality that is relevant to each species being moved
3. The site must have protection from predators
4. The site must be protected from future human disturbance

- a. Ideally, the site should be protected in perpetuity

As the project site is situated on the eastern edge of Opua Forest surrounding adjacent habitats are of suitable quality. While Lot 103 would be an ideal release site as it is to be vested as a conservation site and protected in perpetuity, it is not accessible by foot from the site, being separated from the project area by dense raupo reedland and a permanent watercourse.

It is therefore recommended that all lizards are relocated into suitable habitats within an area of kānuka forest that is on Lot 2 on the eastern end of the site (See Figures 2 and 4). The wider mitigation package proposes to implement predator management throughout all areas of indigenous forest being retained on the project site for five years, and consequently this will ensure that lizards are released into an area that is subject to pest animal management and physically separated from the impact area. The clearance area shall be sectioned off with a super-silt-fence style of fencing that prevents the recolonisation of the footprint by any terrestrial fauna that are residing within the adjacent landscape (i.e., lizards and kiwi). Section 13.3 describes this in further detail.

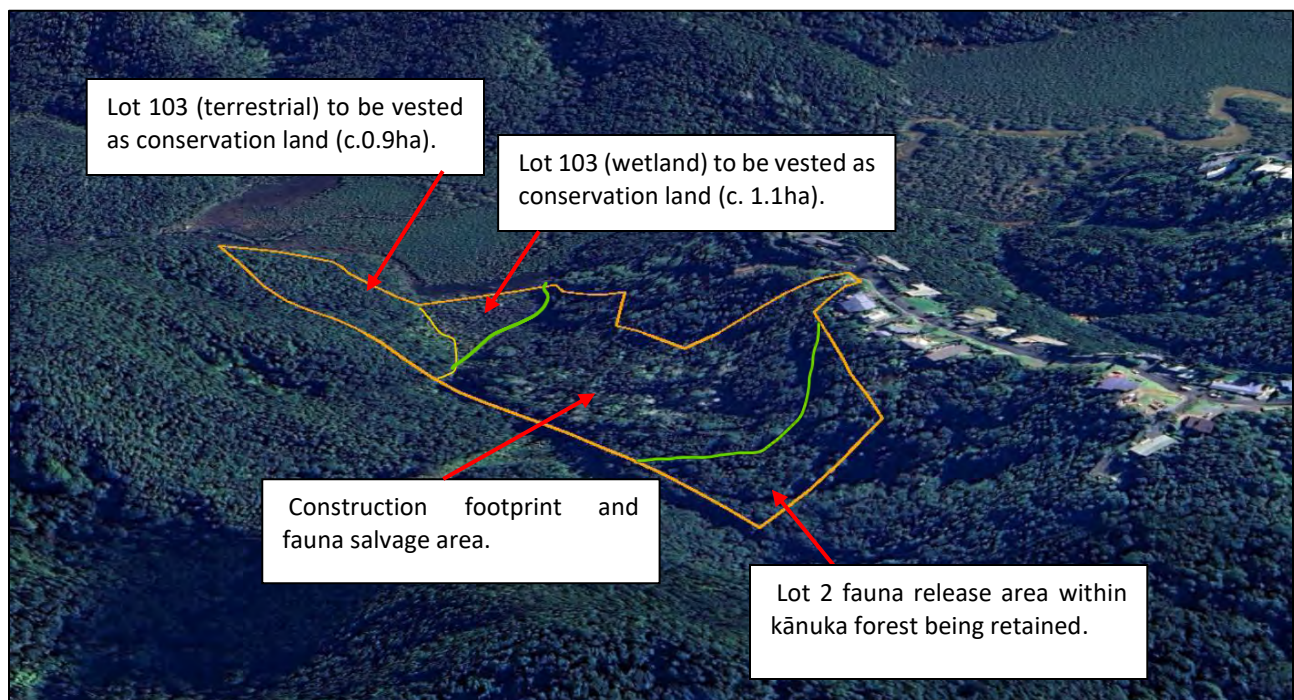


Figure 4: Management areas and proposed fauna release area within the overall project site at Hihitahi Rise.



9.8.1 Habitat enhancement

To ensure that they are released into microhabitats that are free of competition, all skinks (and any Raukawa geckos captured) will be released into specially constructed lizard refuges that comprise stacks of woody debris with dense layers of damp leaf litter, and ponga or whekī fronds built up around them. Materials will be gathered from the understorey of the release area on a daily basis and constructed to suit numbers caught each day. Each refuge will be approximately 1-2m² and no more than five skinks will be relocated into a single refuge.

Refuges will also be constructed at the base of mature trees that have been assessed as suitable for arboreal geckos to be released into. This will allow geckos to have somewhere covered and free of competition to rest in during the day so they can freely relocate themselves into suitable arboreal habitats that night.

9.9 Contingencies and triggers for additional mitigation

Planning for contingencies is important to minimise any disruptions associated with unexpected outcomes. With wildlife management it's important to recognise the potential for unexpected species and/or population densities, particularly when comprehensive baseline surveys have not been undertaken. In the unlikely event that a Threatened lizard species or any not discussed in this plan are discovered, clearance works shall temporarily stop whilst DOC is contacted and consulted on how to proceed.

An Ecological Management Plan is being prepared and this will contain details for pest animal control within the kānuka forest being retained on-site and the Lot-2 wildlife release area. At the time of preparing this LMP it is unclear what suite of predators will be controlled but it is assumed that it will be tailored to cover possums, mustelids, rats, hedgehogs and potentially feral cats. If lizard capture numbers are significant (i.e., more than 20 individual lizards are caught and relocated), then mice should also be managed for within Lot-2, as mice are also known to be a significant lizard predator, particularly when higher predators are suppressed.

9.9.1 Trigger thresholds for enhanced predator control

- 5-20 lizards: Enhanced rodent control throughout Lot-2 for 12 months (*most likely estimate in this range*)
- 20-50 skinks: Enhanced rodent control in immediate release site and wider kānuka forest being retained for 3 years
- 50-100 skinks: Enhanced rodent control in immediate release site and wider kānuka forest being retained for 5 years

Enhanced rodent control shall comprise 25x25m grids of either bait-station and/or trapping networks, in accordance with the EMP being prepared for this project.

9.9.2 Trigger thresholds for post-salvage monitoring

Monitoring low numbers of translocated lizards (<20) is not considered to be feasible, particularly for skinks that cannot be individually identified. For post-translocation monitoring to be feasible, at least 40-50 skinks would need to be salvaged and this is considered as highly unlikely for this project.



Geckos are more easily monitored due to the ability to identify individual animals by their markings and patterns (plus any distinguishable features such as scars or broken tails). Therefore, it is recommended that the capture and relocation of five At-Risk or ten Not-Threatened geckos be the trigger for post-salvage gecko monitoring.

An alternative option could be to design a general monitoring plan for lizards throughout Lot 103. This may be triggered by the salvage of any combination of skinks or geckos where the total number of lizards caught exceeds 20.

9.10 Incidental injury or mortality of indigenous lizards

If an injured lizard is found during any of the above-described activities then the herpetologist shall be contacted immediately if not already on site. If the injury is assessed as minor or survivable then the lizard shall be immediately transported to either Bay of Islands Veterinary clinic in Waipapa, or alternatively to Auckland Zoo for assessment and treatment. It is recommended that the Veterinarian is contacted prior to commencing salvage activities as a courtesy and to confirm they would be willing to receive and treat indigenous lizards that may be injured during salvage or construction works.

If immediate euthanasia is deemed as the most appropriate course of action then this shall be undertaken only by the herpetologist or by the on-site ecologist under the supervision and direction of the herpetologist. The preferred technique for New Zealand skink and gecko euthanasia shall be using blunt force trauma as per Gatrell and Kirk (2005). This is a mechanical method for small reptiles that are less than 1kg body weight and is the only practical method to achieve quick, humane euthanasia in the field.

Any dead lizard shall be immediately provided to DOC.



10. BAT MANAGEMENT PLAN

This Bat Management Plan (BMP) describes the values of vegetation and habitats within the clearance footprint with respect to long-tailed bats. It presents a strategy to minimise the effects of the project on those values and presents mitigation measures to commensurately manage potential impacts on bats that may be using edge vegetation as roosting and foraging habitat.

10.1 Certified Bat Ecologist

Any ecologist working with indigenous bats in New Zealand must be certified in accordance with the Department of Conservation's bat handling competencies authorisation. This is a set of skills that must be attained and certified by DOC's National Bat Recovery Group and technical experts. Any ecologists that are engaged to implement this BMP must be certified in the following task competencies:

3. High risk activities: Roost felling

- 3.1. Assessing roost trees using ABMs
- 3.2 Undertake roost watches / emergence counts
- 3.3 Identification and evaluation of potential roost features

Bat ecologists with the above certified competencies are assumed as capable of understanding what to do if bats are found during tree felling. However, it is also preferable that the Certified Bat Ecologist ('CBE') has also achieved the following competencies:

2. Handling bats

- 2.1. Bagging, storage, handling, measuring, weighing, sexing, aging, temporary marking and releasing appropriately.

10.2 Desktop assessment (long-tailed bat distribution records)

Numerous records of this species are held throughout Northland on DOC's bat distribution database, the closest of which are located 24.5km from the site in Oheawai, with the closest population stronghold in Puketī Forest. Consequently, it must be assumed that long bats may be using trees containing roost features within the clearance footprint. The Ecological Assessment prepared by Wild Ecology (2024) for this project also reports anecdotal records of long-tailed bats in Opua Forest by Bay Bush Action, a community conservation organisation that undertakes predator management and other activities in the forest to protect indigenous wildlife.

10.3 Roost assessment survey

Roosts are critical to bats as they have an influence on a range of behaviours associated with ecological and physiological requirements. Cavities in trees, as well as features including fractured and broken limbs, flaking bark and crevices all provide good quality roosting habitat for bats. Mature vegetation containing a range of these features and/or epiphytes provide good quality potential habitat and structural complexity to the canopy. Importantly, these features are not limited to indigenous vegetation, as a range of exotic tree

species including pine (*Pinus* sp.), eucalyptus (*Eucalyptus* sp.) and acacia (*Acacia* sp.) are regularly used by bats.

When undertaking roost assessments, trees can be broadly categorised into the following two categories:

1. High Risk: DBH¹ >15cm and contains suitable roost features
2. Low Risk: DBH <15cm or with no suitable roost features

Trees assessed as ‘High Risk’ are subject to further management as described in Section 10.5. Trees assessed as ‘Low Risk’ can be felled without further management or supervision.

A brief site visit was undertaken on 1 March 2024 by the author who is a DOC certified bat ecologist. The site visit was not sufficient to undertake a comprehensive roost assessment survey, but rather quickly focussed on finding any trees within the clearance footprint for potential roost features and determining an overall potential for roosting activity. The assessment resulted in the identification of one high-risk live tree (Photos 5 and 6) and one rotting dead tree and confirmed the need for a detailed roost assessment survey and the implementation of bat management protocols.



Photos 5 (left) and 6 (right): Exotic tree within clearance footprint containing potential bat roost features.

¹ DBH: Diameter at breast height.



10.4 Summary of potential effects

Some of the activities that can adversely impact bats and the potential effects associated with these activities are outlined in Table 5 below:

Table 5: Construction-related activities and their potential adverse effects to bats.

Activity	Potential Direct & Indirect Effects
Tree felling/habitat removal	<ul style="list-style-type: none"> ▪ Injury and/or mortality to individual bats, entire colonies and/or offspring ▪ Reduced habitat availability ▪ Increased competition for resources
Use of construction equipment including generators, heavy machinery, vehicles and artificial lighting	<ul style="list-style-type: none"> ▪ Avoidance of habitats and well-established commuting/foraging pathways ▪ Disruption to echolocation (communication and foraging) ▪ Displacement into sub-optimal habitats ▪ Abandonment of roosts / breeding failure ▪ Reduction of foraging efficiency (including range and/or duration)

The risk of injury or mortality to bats through vegetation clearance is to be addressed by the following mitigation actions described below in Section 10.5 of this management strategy.

The remaining adverse effects that may result from the disturbance caused by artificial noise and lighting cannot be mitigated through the activities discussed below, and therefore shall be addressed as residual effects (see Section 13.5).

10.5 Management of effects

As long-tailed bats have been anecdotally reported as present within Opuā Forest and are known within 25km of the project site, the following management strategies shall be implemented.

10.5.1 Tree felling protocol

There are four primary activities that can be undertaken to ensure that trees do not have bats roosting in them at the time of felling. These approaches are summarised in Table 6 below and described in detail in the following Sections.

Table 6: Management activities to ensure that potential roost trees do not contain bats prior to felling.

Management Activity	Personnel required on site	Seasonal requirements
1. Roost identification & visual observation	Certified bat ecologist	None
2. Acoustic monitoring	Certified bat ecologist	October to April
3. Roost emergence watches	Certified bat ecologist & Project ecologist	October to April
4. Tree-climbing and roost inspection	Certified bat ecologist & Climbing arborist	October to April

The following protocols will apply to any High-Risk tree within a clearance boundary that contains potential bat roosting features. Any trees immediately adjacent to clearance boundary edges shall also be inspected if there is potential that they may be knocked or damaged during the felling of adjacent vegetation.

No tree that has been identified as containing bats may be felled until bats have been confirmed as vacated using one or a combination of the following protocols. This is of particular importance during the breeding months between November and January (inclusive). This may require daily monitoring for several days to a week (or more).

10.5.2 Acoustic monitoring

Undertaking ABM surveys immediately prior to tree-felling provides a low-disturbance method of minimising the likelihood of felling a tree with a bat inside a roost. Two days prior to commencing tree-felling, ABMs will be deployed throughout the area to achieve two nights of survey (comprising consecutive dusk, dawn, dusk, dawn activity periods). ABMs cover a radius of up to 30 metres, therefore a sufficient number of units must be deployed to ensure the entire proposed clearance area is adequately covered. It is recommended that one ABM is used per tree or small group of trees.

Each morning of tree felling the CBE will analyse ABM data from the previous two nights.

If bat passes are not detected by ABMs for two consecutive nights that both fulfil the ‘survey suitability’ criteria, then trees may be felled that day only. However, if all relevant trees within the radius of each ABM (and with a DBH of >15cm) are unable to be felled in a single day, the ABM will need to be re-deployed and re-analysed the following morning again to ensure that the trees have not become occupied again.

If bat passes are detected on any given ABM, no trees may be felled within the radius of that ABM (i.e., 30 metres) the following day, unless:

1. They have a DBH of less than 15cm, and/or



2. They have been assessed for roost features and do not contain any potential roosting habitat for bats, as determined by the CBE, and/or
3. Roost features have been inspected by a qualified climber and confirmed as empty.

It's important to note that if general bat activity levels on site are moderate to high, then achieving two consecutive nights without passes is unlikely and therefore this method should be discontinued in favour of undertaking roost emergence watches and/or physical inspections.

10.5.3 Roost inspections

Where ABM activity is consistent and/or there is any uncertainty by the CBE as to whether bats are using a roost, then it will be necessary to undertake physical inspections of roosts immediately prior to felling. This involves engaging an experienced arborist to climb the tree and inspect the cavity/crevice/other roost feature for the presence of bats under the direct supervision of the CBE. They may need to take a photograph or use an endoscope (a long flexible tube with a lens at one end and a camera at the other) to illuminate and record the inside of the roost. Arborists should also inspect for other signs associated with roost usage (such as guano or urine stains), or a lack of suitability such as a wet cavity/crack. Once the arborist has communicated their findings to the CBE, a decision will be made on whether that tree may be felled that day.

As with ABM monitoring, roost inspection results are valid for the same day only, and any trees unable to be felled that day will need to be re-inspected the following day to ensure they are still clear of bats. If bats have (re)occupied a roost overnight, then the surveillance and inspection protocols shall be continued daily until it has been confirmed that a tree is vacant.

10.5.4 Tree felling

Once the above pre-felling protocols have been successfully applied and a tree has been approved for felling by the CBE, it must be removed on the same day, under the supervision of the CBE.

Immediately following tree felling, the CBE will need to undertake their own inspection of all roosts to search for any sign of bat presence that may have gone undetected. A handheld bat detector will be used during these searches to listen for distressed bats. If an injured or dead bat is located during these final inspections, the following section discusses the protocol that must be applied.

10.5.5 Injured or dead bats

If a bat is found during post-felling inspections, they may only be handled by the CBE who will apply the 'Initial Veterinary Care for New Zealand Bats' protocols (Wildland Consultants, 2019). This Document was prepared specifically to provide guidelines for situations such as during tree-felling that may result in the injury and/or mortality of indigenous bats.

It is recommended that the CBE contact the nearest appropriate Wildlife Veterinarian in advance of tree-felling if bats are determined to be present. The veterinarian can ensure they are adequately prepared, and the guideline Document may be emailed to them to familiarise themselves with it if they haven't reviewed it. There are numerous veterinarian practices throughout the Bay of Islands; however, Bay of Islands Vets in



Waipapa is recommended to initially receive and assess any injured bat. If deemed necessary by the Vet, transportation to Auckland Zoo for treatment by an experienced, specialised Wildlife Vet shall be prioritised.

The protocols should be reviewed prior to commencing tree-felling by the CBE but can be summarised as follows:

- If practical, the CBE should wear at least one thin disposable glove on the hand that is securing the bat before handling any injured bats.
- The bat should be placed in a cloth bag in the dark in a warm, quiet room and taken to the veterinarian as soon as possible.
- When transporting the bat, be mindful of keeping the drive as smooth and quiet as possible (i.e., no loud music and avoiding metal roads where possible).
- Have a colleague record important details regarding the bat's location and condition.
- The Department of Conservation's nearest office should be contacted and informed, and this must be done promptly if a bat is found injured or dead in a felled tree.
 - If injured, the Veterinarian shall liaise with DOC to discuss the injuries and prognosis and seek guidance on the preferred rehabilitation requirements or euthanasia option.
 - If dead, the bat shall be returned to Bay of Islands' DOC office as soon as possible.
 - Any bats that are assessed by the veterinarian as 'uninjured' shall be kept until dusk when it will be released into an area within Opuā Forest that is agreed upon by the CBE and the local DOC office.



11. AVIFAUNA MANAGEMENT PLAN

This Avifauna Management Plan (AMP) describes the values of vegetation and habitats within the clearance footprint with respect to a range of indigenous avifauna including kiwi and weka. It discusses wetland avifaunal assemblages that are known to or likely to be utilising habitats throughout the wider property but are unlikely to be within the construction footprint. It then discusses forest and terrestrial avifauna that may be using vegetation and habitats within the development footprint and presents a strategy to minimise and mitigate the effects of the project on those values.

11.1 Accreditation and training requirements for working with kiwi

A formal accreditation system for managing kiwi has been introduced by the National Kiwi Recovery Group to ensure that best practice is followed for any activities that may impact kiwi. The following activities that may be undertaken by this project require the relevant Ecologist (hereafter referred to as the Kiwi Ecologist) to be trained and certified:

- Use of a kiwi detection dog
- Capture and handling of kiwi
- Collection of kiwi eggs
- Banding and/or attaching radio-transmitters to kiwi
- Transferring kiwi to a new location

The Kiwi Recovery Group and DOC have recently published an updated version of the 'Kiwi Best Practice Manual' (Colbourne *et al.*, 2020) and any of the above activities shall only be undertaken by a fully certified Kiwi Ecologist whose experience fulfils each of the requirements listed in the manual. Any other project Ecologists assisting the Kiwi Ecologist (if required) will be under the direct supervision of the Kiwi Ecologist and be familiar with best practice techniques (noting only the Kiwi Ecologist will catch or handle birds or their eggs).

11.2 Desktop assessment

A desktop review of vegetation, habitats and DOC records was undertaken to better understand the landscape context, historical context and ecological context of the site with respect to general forest avifauna and kiwi. The most recent Call Count Monitoring Data of Northland Brown Kiwi (Craig, 2022) was also reviewed.

11.2.1 Wetland and estuarine birds

While the overall project site includes good quality wetland habitat that is known to have the At-Risk North Island fernbird and likely several other wetland species, this report does not provision for the management of these as the development footprint does not overlap with the wetland and will be physically separated

from it via earth-bunds and a super-silt fence. The elevated, drier kānuka forest ecotype that is adjacent to the wetland does not contain habitat that wetland species are likely to utilise; however, if project ecologists do encounter any wetland species that are nesting within adjacent, terrestrial habitats during any of the pre-clearance ecological and fauna mitigation work then DOC shall be contacted and asked for guidance on how to proceed. Additional species that have been recorded on iNaturalist as using wetland and estuarine habitats within the Haumi River catchment (and adjacent to the project construction boundary) include:

- Matuku / white-faced heron (*Egretta novaehollandiae*)
- Banded rail (*Gallirallus philippensis*)
- Variable oystercatcher (*Haematopus unicolor*)
- Pied oystercatcher (*Haematopus finschi*)
- Pied stilt (*Himantopus leucocephalus*)
- Red billed gull (*Chroicocephalus novaehollandiae scopulinus*)
- Northern New Zealand Dotterel (*Anarhynchus obscurus aquilonius*)
- White-fronted tern (*Sterna striata striata*)
- Black-backed gull (*Larus dominicanus dominicanus*)
- Sacred kingfisher (*Todiramphus sanctus vagans*)
- Royal spoonbill (*Platalea regia*)
- *Australasian bittern (*Botaurus poiciloptilus*)
- *Spotless crane (*Zapornia tabuensis*)

*No nearby observations however suitable habitats for this species are present and therefore it cannot be ruled out.

11.2.2 Forest birds

There are numerous eBird and iNaturalist records of a range of indigenous and exotic birds Opuā Forest and the surrounding landscape. As discussed in Section 5.2, historical avifauna assemblages were diverse and included species such as North island wekā and Australasian bittern. In addition to the suite of commonly observed indigenous forest birds listed in Section 5.2 (tūi, kerurū, tomtit, morepork, fantail, shining cuckoo, grey warbler, kingfisher and silvereye), a diverse range of exotic birds have been observed both on-site and in the area (eBird records) and are likely be using vegetation and habitats within the construction footprint:

- California quail (*Callipepla californica*)
- Eastern rosella (*Platycercus eximius*)
- Welcome swallow (*Hirundo neaxena*)
- House sparrow (*Passer domesticus*)
- Common chaffinch (*Fringilla coelebs*)
- European chaffinch (*Chloris chloris*)
- European goldfinch (*Carduelis carduelis*)
- Blackbird (*Turdus merula*)
- Song thrush (*Turdus philomelos*)
- Common myna (*Acridotheres tristis*)
- Yellowhammer (*Emberiza citronella*)
- African collared-dove (*Streptopelia roseogrisea*)
- Spur-winged plover (*Vanellus miles*)



11.2.3 North Island brown kiwi

There are four geographically distinct forms of brown kiwi, of which Northland brown kiwi is the northernmost taxon. Populations of Northland brown kiwi have historically declined due to increasing land pressures and predation by dogs (*Canis familiaris*), cats (*Felis catus*), stoats (*Mustela erminea*), and ferrets (*M. furo*) (Pierce *et al.*, 2006; Craig, 2022). Although kiwi is no longer classed as threatened (Robertson *et al.*, 2021), it is still important to monitor populations to understand more about their behaviour, where and how far they travel, and how they respond to environmental pressures such as habitat modification, predator presence and drought.

The breeding season for Northland brown kiwi begins from mid-June with chicks hatching from September through to March or even April in some seasons. Clutches of one or two eggs are incubated by the male partner for 75-90 days (Colbourne *et al.*, 2020). Upon hatching, juveniles will remain in the nest until they are at least two weeks old, or longer if there are two chicks. From there they will frequently return to the nest for up to 10 weeks before leaving the territory of their parents to establish their own (Colbourne *et al.*, 2020). Kiwi are extremely vulnerable to a range of predators, particularly domestic pets and mustelids, and consequently their numbers and distribution have significantly declined. In August of last year, DOC and media reported that at least six kiwis had been killed by suspected roaming dogs in Opuia Forest and that the 50-year lifespan of a kiwi reduced to an average survival age of just 14 years in the region (Hewett, 2023).

Conservation efforts in recent years have managed to slow the rate of decline. Efforts include dedicated predator management, the creation of kiwi corridors, and education and upskilling within local communities where kiwi reside. An important component of management includes consistent monitoring using simple, replicable methods that can be undertaken by community members and citizen scientists.

To monitor and assess trends in kiwi populations, call count surveys are often used. Call count survey data is used to monitor the trends in kiwi population over time, indicating population size, and the health of a population (a stable, increasing, or decreasing population). A high-density population is considered as having ≥ 5 calls per hour (Craig, 2022). Kiwi in Northland are particularly vocal during the breeding season between June and July, and then again between September and November (Colbourne *et al.*, 2020).

Localised annual kiwi monitoring is undertaken for Northland brown kiwi by a wide range of experts and volunteers with Kiwi Coast, NRC and DOC. Monitoring has only been undertaken at Opuia Forest since 2021; however, the 2022 surveys resulted in 32 calls and a mean call count of 5.4 calls per hour across four listening stations (Craig, 2022).

11.2.4 North Island weka

North Island weka (At Risk-Relict) are known in Northland for their population stronghold around the Russell Peninsula where their habitats overlap with residential properties, presenting as a nuisance by entering houses, eating pet food and destroying vegetable gardens. Historically they were introduced to Opuia Forest, with iNaturalist records confirming they remain in the area although density is unknown (Figure 5). The nearest record and their known potential dispersal range of up to 14km suggest that the subject site at Hihitahi Rise may be within the home range of at least one or more individuals. Weka are inquisitive and will forage in a range of habitats including forest, scrub and wetlands. Breeding can be highly variable, with an average of two to four eggs per clutch and breeding occurring between August and December. Nesting behaviours are similar to kiwi, with nests comprising burrows or dense vegetation including pampas. Weka

are vocally active year-round, with peak calling occurring in January and February, and again in July just prior to the onset of the breeding season (Bramley, 2000).

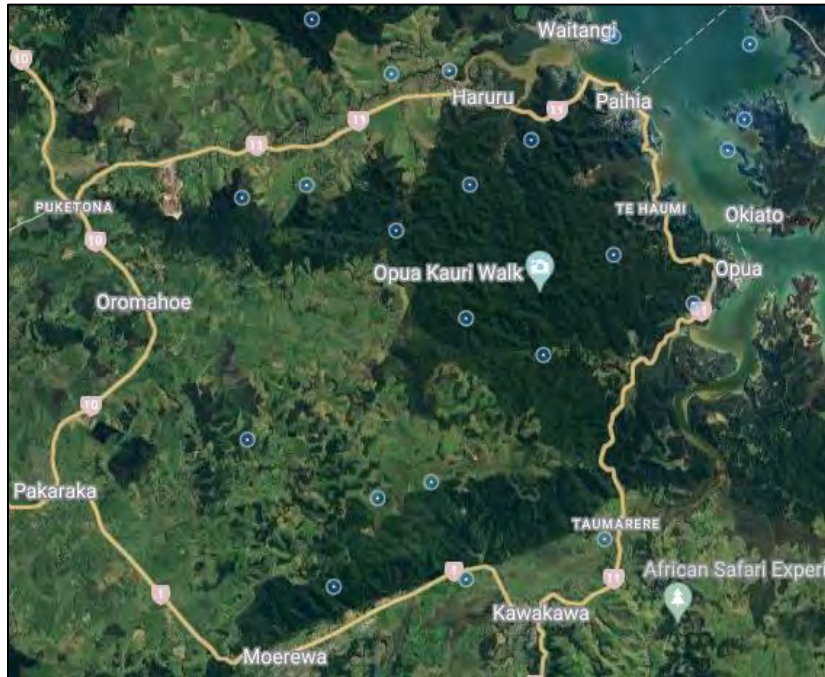


Figure 5: iNaturalist records of North Island weka in and around Opuia Forest in recent years.

11.3 Habitat assessment survey

Shrubland, scrubland and regenerating forest is an important habitat for forest birds, weka and kiwi, of equal value to mature forests with numerous small remnants known to be used (DOC, 2002). A brief, preliminary site visit was undertaken 1 March 2024 to assess the potential for kiwi and weka to be using edge habitat within the clearance footprint. Overall, the site does contain potential roosting habitat in the form of scrubby edge vegetation and burrow opportunities beneath decomposing fallen trees (Photo 6). Consequently, the clearance area is considered to have moderate potential habitat value to kiwi and weka.



Photo 6: Example of potential kiwi or weka roosting habitat within clearance footprint.

11.4 Summary of potential effects

Some of the activities that can adversely impact avifauna and the potential effects associated with these activities are outlined in Table 7 below:

Table 7: Construction-related activities and their potential adverse effects to avifauna.

Activity	Potential Direct & Indirect Effects
Tree felling/terrestrial habitat removal	Injury and/or mortality to nests, eggs and non-volant chicks Injury and/or mortality to roosting kiwi, eggs and chicks Reduced habitat availability Edge effects Increased competition for resources
Use of construction equipment including generators, heavy machinery, vehicles and artificial lighting, on-going maintenance activities	Construction noise disturbance Displacement into sub-optimal habitats Abandonment of nests / roosts / breeding failure Reduction of foraging efficiency (including range and/or duration)



The risk of injury or mortality to general forest avifauna, weka and kiwi through vegetation clearance is to be addressed by the mitigation actions described in Section 11.5 below.

11.5 Management of effects

Measures to **avoid**, minimise and mitigate the potential adverse effects on forest birds, weka and kiwi associated with works at Hihitahi Rise are described below.

11.5.1 Pre-clearance searches: General forest avifauna

For the months from October to February inclusive (i.e., the general breeding season of forest avifauna) bird nest surveys shall be undertaken within two-days leading up to vegetation clearance in any given area. This shall be achieved by first searching for any visible nests in the canopy. If a nest is identified then it shall be observed for a period of at least one hour-post sunrise to determine if birds are actively flying to and from the nest, an activity that is indicative of an active nest. The identification of any active bird nest shall be a trigger for the following actions:

- The tree containing the nest shall be flagged, together with all vegetation within a 10-metre buffer of the tree. These shall be protected from all clearance and construction activities until chicks have fledged.
- Following identification of the nest, the PFE shall undertake a dawn survey to identify the relevant species if it was not previously observed or if it is not easily distinguished by nest shape and other characteristics.
- Dawn watches shall be taken twice weekly to observe parental behaviour and determine when the chicks have fledged.

Upon confirmation of chicks having left the nest, the PFE may approve the vegetation to be cleared.

11.5.2 Pre-clearance searches: North Island brown kiwi and North Island weka

It is well established that both kiwi and weka are distributed throughout Opuā Forest and have a known presence in the general Bay of Islands area. Therefore, the methods for kiwi will default straight to undertaking daily sweep through with a Certified kiwi ecologist and trained kiwi dog. At least three surveys should be undertaken prior to clearance for the kiwi ecologist to identify and locate potential burrows and undertake a search of the wider surrounding area for possible kiwi sign. The results of the preliminary survey shall guide the effort-level of subsequent searches with the trained kiwi dog.

Surveys for weka will be prioritised during the summer months through evening listening surveys undertaken during suitable weather conditions. At least three evening listening surveys shall be conducted during the pre-clearance search period for all pre-clearance fauna management. As timing will co-incide with pre-clearance searches for lizards and kauri snails, manual searches for weka will also be undertaken the week(s) prior to vegetation clearance. This will broadly involve physically deconstructing dense vegetation cover and searching in burrows and hollows using a headlamp with red light setting. Weka are considered to be



crepuscular, although the author has regularly observed them foraging and moving around diurnally in locations where their populations are robust including Russell Peninsula, Kawau, Pakatoa and Rotoroa Islands, Abel Tasman and Fiordland. Consequently, if weka is discovered on-site during pre-clearance works, this method is aimed to flush them out of their habitats and encourage self-directed dispersal to outside of the footprint.

11.5.3 Walk through with trained kiwi dog

Walk through surveys with a trained kiwi detection dog will be undertaken by the kiwi ecologist throughout the clearance area on each day of tree felling and/or vegetation clearance (or at a frequency deemed appropriate by the kiwi ecologist). This will involve a search for burrows and to ensure if present, that the area does not have roosting kiwi on the day of vegetation clearance. The number of sweeps will be determined by the kiwi ecologist and will be initially based on habitat availability any indication from the dog that kiwi may be using nearby surrounding habitats.

11.6 During clearance searches

11.6.1 Daily sweep through with kiwi dog

On any given day of tree-felling or machine-clearance, a morning survey will be conducted by the kiwi ecologist to determine whether any kiwi is active within the territory and where they have settled into their roosts for the day. If, after three separate site walk-overs, the dog has not detected any kiwi sign then the kiwi ecologist has the discretion to reduce the frequency of these searches.

11.7 Kiwi relocation

Any kiwi roosting within 50m of the clearance area will be removed from the burrow by the kiwi ecologist and relocated into an alternative roost within Lot-2. Appropriate roosts in landscapes surrounding the construction footprint will be pre-identified by the kiwi ecologist prior to commencing clearance. Kiwi will be prevented from re-entering the works site via the installation of a super-silt fence that also serves as a wildlife exclusion fence (see Section 13.3).

11.8 Nesting kiwi, weka and egg uplift

Between the months of July and April (i.e., the breeding season for kiwi), kiwi are even more vulnerable to potential adverse impacts due to females being gravid and/or males incubating eggs. Males will sit on eggs for up to 80 days (or more) and disturbance may cause him to abandon the nest and not return, or remain still and be at risk of injury or mortality (Sporle, 2012). The incubation period of weka eggs is considerably shorter at 25-26 days, with eggs laid only a day apart. Therefore, if a weka is identified on a nest, then works shall temporarily stop until chicks have hatched and are mobile.

It is not practical or possible to restrict vegetation clearance to a two-month window between April and May, and consequently it is likely that fauna work and vegetation clearance will be undertaken during late summer



/ early autumn when some male kiwi could possibly still be on nests.² Therefore, during this timeframe if any kiwi is found to be incubating eggs then works at this site will need to stop immediately. The egg may not be uplifted for a minimum of 10 days post-discovery. This is because it is almost impossible to successfully hatch a chick in captivity from an egg that's less than 10 days but has an almost 90% success rate at 30 days (Colbourne *et al.*, 2020). While the ecology team wait for the egg to mature for the appropriate duration, no works may take place within a 50m radius of the burrow. During this time, the kiwi ecologist may choose to undertake night observation work to wait for the male to leave the nest and identify the number of eggs being incubated. If only a single egg is observed, the night observation survey should be repeated immediately prior to the planned uplift, as a second egg may have been deposited during the 10-day stand-down period. This may mean vegetation clearance at site is required to temporarily stop for a further 10 days.

Any eggs removed will be immediately taken to the Whangārei Native Bird Recovery Centre where they have the Bayer Incubation Unit and are highly experienced in hatching kiwi chicks. Following successful hatching, chicks will be transferred back to the kiwi rehabilitation clinic in Kerikeri Te Korowai Atawhai o Puketōtara to reach an appropriate age, before being repatriated to Opua Forest in an area that is subject to good quality predator control. This process will be co-ordinated with DOC, hapū and other stakeholders.

Prior to commencing kiwi searches, the kiwi ecologist shall liaise with the recovery centre to ensure that they are aware of the project and the potential need to incubate eggs.

11.9 Injured or dead kiwi

If an injured or dead kiwi (or egg) is detected during works then the following protocols shall be applied:

1. Works shall stop immediately at the works site while the kiwi ecologist is contacted and brought to site.
2. Injured kiwi shall be immediately transported to the Bay of Islands Vets in Waipapa for assessment and treatment. Thereafter, it shall be transferred to the kiwi rehabilitation clinic in Kerikeri Te Korowai Atawhai o Puketōtara for ongoing treatment and recovery. Note: Any eggs uplifted will be transferred to the Whangārei Native Bird Recovery Centre.
3. The local DOC office shall be contacted immediately and informed of what has been discovered (i.e., whether the bird is injured or dead). Any dead birds shall be handed over to the kiwi ecologist who shall place it into a box and transfer it as quickly as possible to the local DOC office. If after hours, it shall be frozen overnight in site facilities and taken to DOC the following morning.

Injured kiwi shall be rehabilitated in accordance with recommendations of the wildlife veterinarian for the kiwi rehabilitation clinic in Kerikeri, the project kiwi ecologist and DOC's in-house technical specialist for kiwi. If it is determined that euthanasia is the best course of action once euthanised then kiwi will either be returned to Hapū or to the local DOC office.

² Provided fauna work is undertaken between February and April, chicks of forest birds and weka should have hatched and fledged, leaving only kiwi at risk of still incubating eggs.



12. KAURI SNAIL MANAGEMENT PLAN

Kauri snail is one of New Zealand’s large, endemic, carnivorous snails. Historically widespread throughout many areas from the Far North to Warkworth, their former range has been severely restricted by human-related disturbance, land clearance and habitat loss, and high levels of predation by mammals including feral pigs (*Sus scrofa*) and possums (*Trichosurus vulpecula*). Two populations outside of Northland and North Auckland occur in the Waitakere Ranges and the Kaimai Ranges where they have been introduced and established successfully.

This Kauri snail Management Plan (KSMP) describes the values of habitats at Hihitahi Rise with respect to kauri snail and other indigenous invertebrate fauna. It presents a strategy to minimise the effects of the project on those values and describes mitigation measures to manage potential impacts on kauri snail (also known as ‘pupurangi’).

12.1 Desktop assessment

Kauri snail belong to the *Rhytididae* family of land snails that occur in South Africa, Australia, Pacific Islands and New Zealand (Parrish, Sherley & Aviss, 1995). Their shells can reach up to 80mm in diameter and they can live up to 25 years, reaching maturity at around three years old. Kauri snails eat a variety of invertebrates and can reach high densities when soils are fertile and prey species are abundant. Mating takes place from autumn to winter, egg litters are laid in August and September, and hatching occurs from summer till winter (Stringer & Montefiore, 2000). Eggs are laid deep within leaf litter and are approximately 12x10mm in size (Parrish *et al.*, 1995).

A desktop assessment of vegetation, habitats and iNaturalist records of kauri snail was undertaken to better understand the historical and ecological context of the site with respect to this species. There are two records from 2022 of kauri snail held on iNaturalist within 15km of the site (Figure 6). Of note is that both records are obscured to a 28km range, are recorded by the same observer with commentary indicating both individuals were most likely found at same ‘whēkī wetland’. The Observer states that they detected 45 kauri snails within a 0.1ha area with no pest control (iNaturalist, 2024), and it should be assumed that this population of kauri snails is likely to be from Opuā Forest and that they may be patchily distributed throughout it. It is noted that whēkī is present within and throughout the raupo reedland on site.

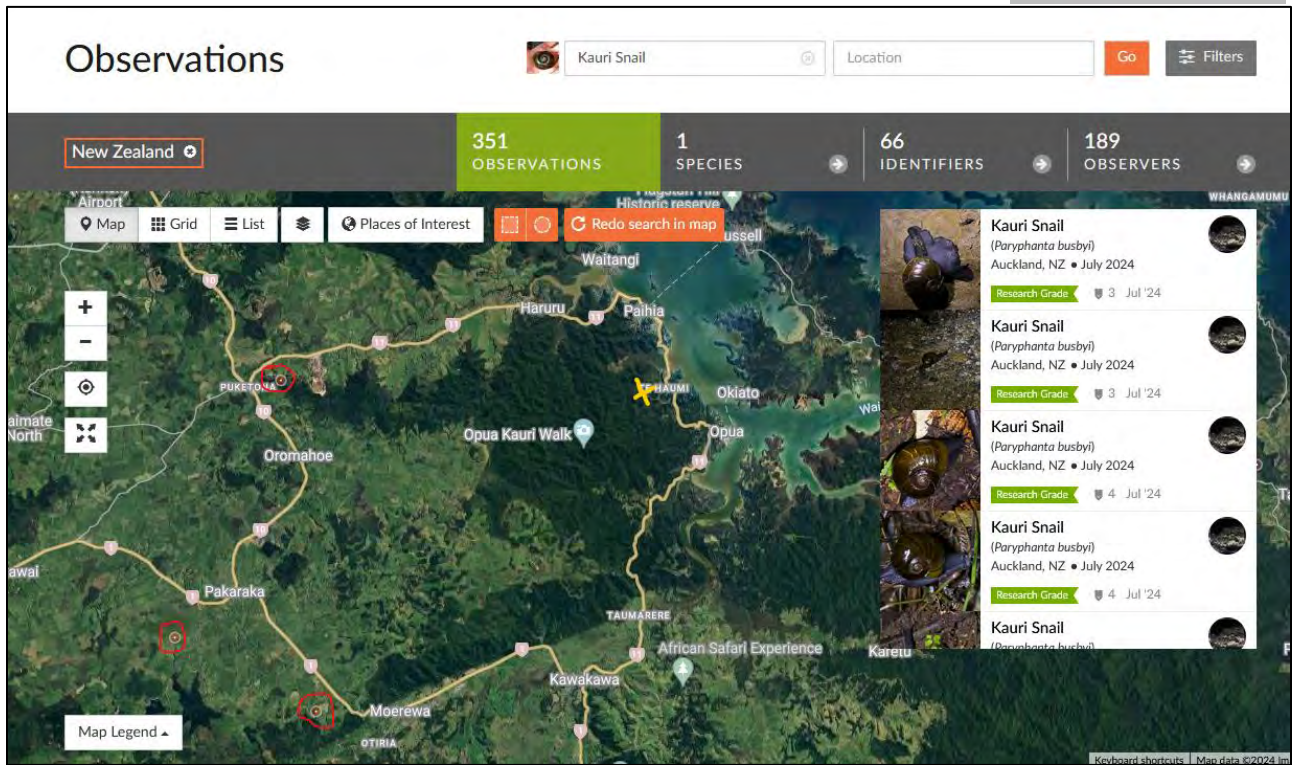


Figure 6: iNaturalist records (brown dot with red circle) of kauri snail in proximity to the project site (c.10km). iNaturalist record locations are obscured within a 28km range.

12.2 Summary of potential effects

Some of the activities that can adversely impact kauri snail, and the potential effects associated with these activities, are outlined in Table 8 below:

Table 8: Construction-related activities and their potential adverse effects to kauri snail

Activity	Potential Direct & Indirect Effects
Clearance of vegetation and habitat	<ul style="list-style-type: none"> ▪ Injury and/or mortality to kauri snail ▪ Reduced habitat availability ▪ Deterioration of forest interior habitats associated with newly created edges and edge effects
Relocation into habitats outside of the impact areas	<ul style="list-style-type: none"> ▪ Displacement ▪ Increased competition for resources ▪ Increased vulnerability to predation

In the absence of effective mitigation measures, the potential level of effect is considered as ‘High’ to localised populations of kauri snail due to its ‘At Risk’ status, in accordance with the EIANZ framework (2018). However, if the species is absent or in very low numbers and provided that mitigation activities are applied in accordance with best practice, the overall level of effects are assessed as Low (Table 9).

Table 9: Level of effects based on EIANZ assessment criteria (2018)

Species	Ecological value of species	Activity/Effect	Timescale of effect	Magnitude of effect	Level of ecological effect (pre-mitigation)	Level of ecological effect (post mitigation)
Kauri snail	High	Habitat loss (clearance and construction)	Temporary	Low	Low	Very Low

12.3 Management of effects

Salvage and relocation are the main activities being undertaken to mitigate the adverse effects of vegetation and habitat clearance on kauri snail. The following methods describe how they are to be detected, handled and released.

12.3.1 Visual observations (spotlighting searches)

As kauri snails are nocturnally active, evening spotlighting surveys for them will be undertaken in conjunction with searches for nocturnal geckos. Care will be taken to ensure that everywhere that ecologists walk is systematically inspected for emerging snails so they are not accidentally stepped on. Edges and leaf litter will be targeted for searching.

12.3.2 Systematic hand-searching

Destructive hand-searching for kauri snails will be undertaken throughout the clearance footprint at the same time as skink salvage. This will involve using hands and fingers to gently sift through leaf litter and loose debris to find kauri snails (and skinks). Terrestrial vegetation including grasses and mosses will be pulled away from the soil surface to search beneath vegetation layers, and all objects providing potential refuge such as rotting logs and liftable rocks will be inspected. Wherever possible, leaf litter and vegetation will be raked back to the edges of the footprint to remove all kauri snail habitat and minimise the risk of recolonisation.

It is anticipated that egg litters of kauri snail may also be detected (September till May) and these are likely to be located at a depth of 0.5cm or more in the leaf litter (Figure 7).

Where possible, at least two ecologists will undertake this searching process, using a type of ‘double observer’ technique that ensures each clearance area has been thoroughly searched twice.

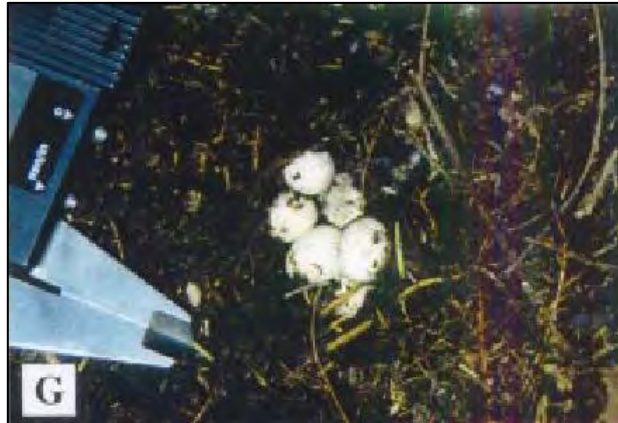


Figure 7: Egg litter of *P. busbyi watti* as an example of the appearance of *P. busbyi* eggs (Stringer & Montefiore, 2000).

12.3.3 Tree inspections

Fronds of tree ferns that collect around the bottom of the trunk forming ‘fern skirts’ will also be searched thoroughly, together with flaking bark on tree trunks where juvenile kauri snail are known to reside arboreally. These tree inspections will be made both prior to and immediately post-felling.

12.3.4 Data collection

Each captured kauri snail will have the following information recorded:

- Date and slip site
- GPS location (both capture and relocation)
- Habitat type (i.e., leaf litter, rotting log, tree bark)
- Shell diameter (mm)
- Photograph and assignment of ID number to link data to photo
- Any other relevant information (e.g., cracked shell, distinguishing shell markings etc).

12.4 Handling and transport

All captured kauri snails will be handled gently and placed immediately into a bin or bucket filled to the top with damp leaf litter. Each container secured with a lid and stored in the shade for no more than four hours before being released. An additional container will be kept for any opportunistic invertebrate captures of other species. Containers will be washed and sterilized at the end of each day of searching. All handling and transport will be in accordance with requirements of the Animal Welfare Act (1999).



12.4.1 Kauri snail egg litters

If detected, eggs will be gently collected and placed into a small, ventilated container with the adult kauri snail that they are found with (if found together or in close proximity). The container will be filled with moist soil and placed within the larger kauri snail relocation container. If found together, adult snails and their eggs will be relocated together into individual release refuges at the appointed release site.

12.5 Release location

Vegetation downslope of the construction footprint comprises kānuka forest that transitions into raupo reedland. Kauri snails will be released downslope as closely as possible to their original location into suitable microhabitats that are outside of the super-silt / wildlife exclusion fencing. This will allow them to remain within their existing population range and ensure that no inadvertent genetic impacts occur because of relocation activities (pers. comms with Kath Walker, DOC).

12.5.1 Habitat enhancement

To ensure that they are released into microhabitats that are free of competition, all kauri snails will be released beneath a large log or piece of wood (hereafter referred to as 'snail refuge') or debris and have a dense layer of damp leaf litter built up around it. A selection of snail refuges and quality leaf litter plus moss will be gathered from the release site and used to create competition-free release refuges for each individual snail being released.

12.5.2 Injured or dead kauri snail

If an injured kauri snail is discovered the project ecologist shall be called to site immediately (if not already there). An initial assessment as to the scale of injury shall be made in consultation with DOC's Technical Specialist for land snails who will be called and sent photos immediately. If there is significant damage to the shell and/or obvious injury to the body (including head and foot of snail) the project fauna ecologist shall have the authority to humanely euthanize the snail in accordance with best practice and methods recommended in Gilbertson and Wyatt (2016) and endorsed by the AMVA Guidelines (Underwood & Antony, 2020). Euthanasia may only be carried out by the Project Fauna Ecologist following assessment. A euthanasia kit will be assembled that contains the following:

1. Ethanol (lab-grade 5%)
2. Ethanol (70-95%) or neutral-buffered formalin (10%)
3. 2 x plastic jars with sealed lid
4. A small hammer with flat head (for other injured invertebrates such as tree wētā or stick insects that are frequently injured during tree-felling)

Snails with only minor shell damage shall be assessed by the PFE and DOC's Technical Specialist. Shells can regenerate quickly in these circumstances and therefore any individuals with only minor damage will be released in the same manner as uninjured snails. Where it is deemed appropriate, the snail may be kept safe for a few days in a large fish bin filled with moist leaf litter containing abundant invertebrates, empty snail shells and worms as snails require extra calcium to heal their shells. The container would be stored in the shade within the kānuka forest, be ventilated and inspected twice daily to ensure moisture is retained and



inspect food consumption. Any dead specimens shall be photographed and frozen. DOC shall be contacted and asked for direction on how they would like the specimen to be managed (i.e., submitted to DOC or taken to the release site).



13. ADDITIONAL FAUNA MANAGEMENT REQUIREMENTS - GENERAL

13.1 Accidental discovery protocol

Despite the best efforts of ecologists to detect and relocate wildlife prior to works commencing, low detection probabilities and cryptic fauna mean there is always a chance that species will be accidentally discovered following commencing works. The following accidental discovery protocols shall be applied if unexpected indigenous fauna is discovered in the absence of the PFE:

Lizards and kauri snails: If any indigenous lizards (skinks or geckos) or kauri snails are detected in vegetation when the Project Fauna Ecologist is not at site then work shall temporarily stop and the ecologist contacted. Contractors will be left with a capture container that is partially filled with leaf-litter, and may be instructed to safely capture and store the lizard / snail until the ecologist can get to site. If appropriate, the contractors may be instructed to undertake the release themselves; however, this shall only be undertaken under the direction of the ecologist.

Bats: If bats are not detected, and tree-felling continues without the supervision of the PFE/CBE, arborists shall be provided with an accidental discovery protocol prior to commencing tree-felling. This should broadly involve a description of what to look out for (signs such as guano that may have been missed during the assessments), together with the CBE's contact details. **Work should stop immediately until the PFE is able to attend site and assess the situation.** The PFE shall contact relevant staff at DOC so that together they can determine an appropriate course of action.

This may involve repeating ABM surveys, tree inspections and/or applying the Veterinary Care for New Zealand Bats protocols (Section 10.5.5).

Avifauna: If kiwi are not detected during a pre-clearance search and vegetation removal continues without the supervision of the kiwi ecologist, contractors shall be provided with an accidental discovery protocol by the ecology team prior to commencing vegetation clearance. This should broadly involve a description of what to look out for, what to do if a kiwi is seen running through vegetation and contact details for the kiwi ecologist. Similarly, if a kiwi egg is uncovered during vegetation clearance or earthworks activities, then works shall also stop until the kiwi ecologist can get to site and safely assess the egg and determine appropriate next steps.

There may also be instances where contractors observe an arboreal bird or weka nest in vegetation that has been approved for clearance by the ecology team. In this situation contractors shall take a photograph of the nest and contact the lead field ecologist for guidance. Clearance work may not proceed until the ecologist has determined whether the nest is active and applied relevant protocols if it is active.

In all situations where indigenous fauna, their nests or eggs are accidentally discovered, work must temporarily stop until the Project Fauna Ecologist is able to attend site, assess the situation and apply the appropriate protocols.

13.2 Vegetation management

Where possible, felled vegetation will be relocated into the understorey of adjacent vegetation that sits outside of the clearance footprint. Mānuka, kānuka, ponga, mamaku, ti kouka and tōtara and other cut material with obvious cavities capable of providing refuge to arboreal geckos that can't be searched properly will be prioritised.

Felled trees of the above species must not be chipped, but rather stacked into the understorey of adjacent vegetation outside the zone of impact.

13.3 Exclusion fencing

To prevent all terrestrial fauna from (re)colonising the clearance footprint, a super-silt fence shall also serve as a wildlife exclusion fence. This shall be erected as outlined in the stormwater management design in Figure 8 below, prior to commencing fauna salvage and tree felling to prevent lizards, snails, weka and kiwi from re-entering the impact area and potentially being injured or killed. Vegetation being removed off-site will be taken out of the northern entry and following the completion of this, wildlife exclusion fencing shall be extended to close off remaining gaps where wildlife could otherwise enter the project footprint via un-fenced contiguous vegetation.

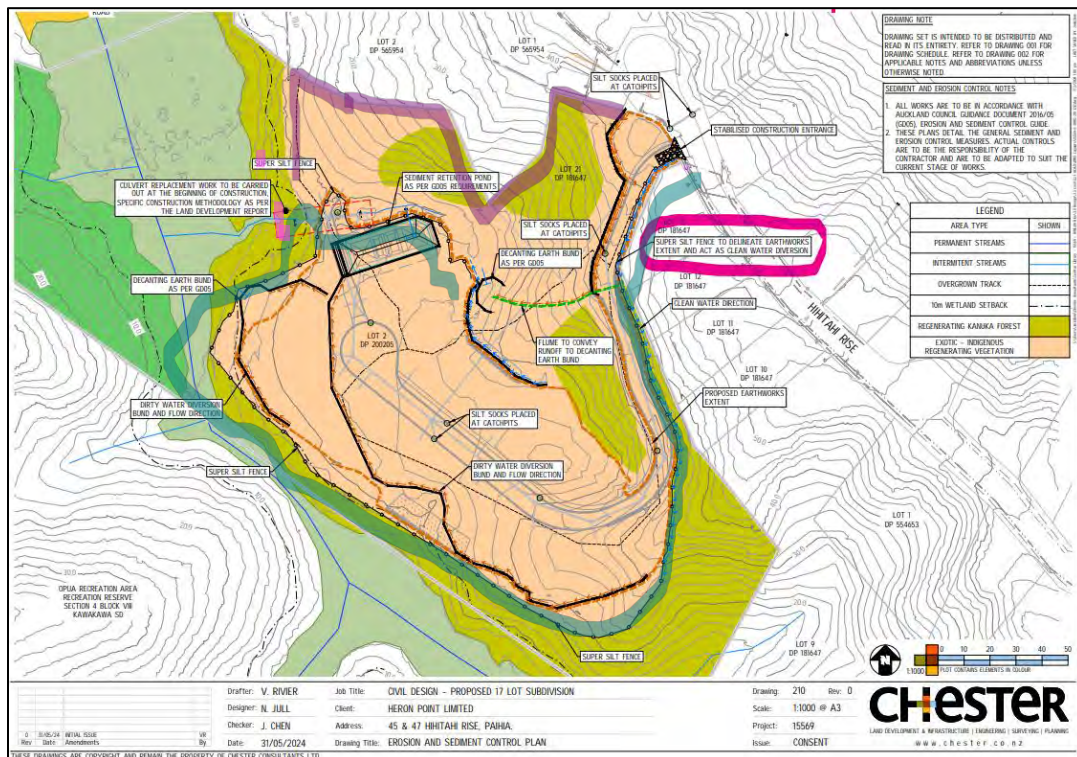


Figure 8: Sediment and erosion control design showing location of super-silt fence (highlighted in blue) that will also serve as a wildlife exclusion fence (extension highlighted in pink) (Source: Chester Consultants Ltd).



13.4 Adaptive management

The focus of this FMP is addressing project impacts on resident indigenous fauna populations in the clearance area. The proposed methods described throughout this document will be selected according to targeted species (i.e., lizards, bats or avifauna) and based on other variables such as lead-in times, topography, and health and safety considerations.

Any adaptations to these management protocols are at the discretion of the PFE. However, if these situations arise and the proposed management of fauna needs to be altered in any significant way, DOC will be consulted prior to implementation.

13.5 Residual effects and opportunities

Residual effects are those effects that cannot be mitigated through the avoidance or salvage protocols. In general, these can include the permanent loss and/or fragmentation of habitats, the increase in competition for resources and the increased vulnerability to predation that may arise following habitat displacement. They may also include temporary shifts in behaviour that result in 'Moderate' level indirect effects such as reduced foraging ranges and territories, abandoned maternity roosts and unsuccessful breeding attempts. Residual effects are also those associated with time lags between habitat removal and regeneration, which may take decades to develop the level of complexity and resource provision required to support certain types of wildlife.

At the time of preparing this FMP, it is estimated that vegetation removal (c. 2.0-2.3ha) will be replaced by c. 0.7ha of indigenous replanting, leaving a residual quantum of approximately 1.3-1.6ha of permanent habitat loss. This is to be offset by the protection in perpetuity of c. 2.8ha of regenerating podocarp forest (c.0.9ha), kānuka forest (c. 0.74ha) and raupo reedland (c. 1.13ha), which will be vested to the Crown by an open space covenant under the Queen Elizabeth the Second (QEII) National Trust Act (1977) (Wild Ecology, 2024). An EMP shall be prepared as a condition of consent and will include predator management and annual monitoring of this conservation area for five years, and this shall be submitted to DOC for review. Pet cats and dogs are to be prohibited as a condition of sale for each Lot.

Aside from the impact of habitat removal, additional residual effects are likely to arise from construction-related disturbance in the form of noise, light, possible collisions (bats and birds) and subsequent potential alterations in foraging, commuting and breeding behaviours. The following recommendations have been made in the Ecological Assessment (Wild Ecology, 2024) to minimise adverse impacts of artificial lighting to bats and these are to be implemented by the construction team and built into conditions of consent for the construction of each new residential dwelling.

- Any external lighting should be LED, narrow spectrum, with minimum ultraviolet spectrum. Should be warm spectrum avoiding white and blue light spectrum.
- Exterior lights should be cowled (shielded) and or low-level downward directional, to reduce light spill and direct lighting only where required.
- Exterior lights are to be on a short (1min) timer, set to automatically switch off when not in use.



- No flood lights within areas facing forest vegetation.

Options that are frequently used to address habitat loss specifically for bats include replanting fast-growing tree species or cutting notches in trees (i.e., habitat replacement). However, these activities have not been considered for this project due to the extensive and abundant habitat that is already available throughout Opua Forest. Therefore, it is recommended that any residual effects associated with temporary but long-term habitat loss may be suitably addressed through the protection of 2.8ha of existing vegetation and habitats, the exclusion of domestic cats and dogs and lighting management.

13.6 Reporting

A detailed report will be prepared following the completion of all fauna management work at site. The report will contain capture records and data for the works site where fauna is detected, together with a map showing GPS locations of capture and relocation sites. It is anticipated that this will be a condition of the WAA permit once both have been approved. Amphibian and Reptile Distribution Scheme Cards (ARDS) will be completed and submitted to DOC for any lizard captures made.

13.7 Proposed sequence of works and timings

Due to various timing constraints associated with fauna breeding seasons, it is recommended that fauna management works for this project commence in the summer months of **January or February** with pre-salvage works, and that salvage be undertaken during the months of **March or April**. This will avoid and/or minimise risk to fauna by ensuring that forest birds chicks have fledged, that juvenile long-tailed bats are able to fly and that most kiwi chicks will have hatched. It ensures that the winter months are avoided (a requirement of any WAA permit and frequently specified in Consent Conditions) and that any lizards to be relocated will have sufficient lead-in times to re-orient themselves prior to the onset of the cooling season.

The following sequence of fauna management activities are recommended in Table 10 below.

Table 10: Fauna management activities and timings in relation to vegetation clearance activities.

Suitable time of year	Lead-in prior to vegetation clearance	Activity
January/February	8-12 weeks	<ul style="list-style-type: none"> ▪ Weka listening surveys ▪ Deployment of lizard survey/salvage equipment ▪ Roost assessment survey & acoustic surveys using hand-held detectors (can be undertaken concurrently with weka listening surveys) ▪ Installation of predator control in kānuka forest being retained on-site, with a focus on 0.4ha area in Lot 2 (lizard and snail release site) ▪ Installation of silt-fence / wildlife exclusion fence.
March	2-3 weeks minimum	<ul style="list-style-type: none"> ▪ Lizard and kauri snail salvage week (5-day duration) ▪ Kiwi dog pre-clearance surveys (minimum of 3 sweeps)

		<ul style="list-style-type: none"> ▪ Weka surveys (minimum of 3 evening listening surveys) and manual searches ▪ Forest bird surveys for active nests
March-April	2-days	<ul style="list-style-type: none"> ▪ Bat acoustic surveys & application of tree-felling protocols ▪ Vegetation clearance – tree felling ▪ Machine-assisted clearance (if required) ▪ Any post-clearance fauna searches as required
Ongoing	Post-vegetation clearance	<ul style="list-style-type: none"> ▪ Pest animal control (as per EMP and FMP triggers) ▪ Lizard monitoring (if triggered by exceeding capture thresholds)

14. CONCLUSIONS

Heron Point Ltd, the Client, requires wildlife management services associated with the development of a proposed new subdivision at 45 and 47 Hihitahi Rise, Paihia. The proposed subdivision requires an approximate quantum of 2.0-2.3 ha of vegetation clearance from the overall 4.87 ha site. An additional 114m² of kānuka forest clearance is also required. The site is classified as a PNA and sits within an ONL due to being situated on the eastern boundary of Opuā Forest. Biodiversity values throughout Opuā Forest and the surrounding landscape are significant, with several At Risk and Threatened flora and fauna species known to be present, including indigenous geckos and North Island brown kiwi.

This FMP has been prepared to guide wildlife management for the project and ensure that serious adverse impacts are avoided, minimised, mitigated and/or adequately addressed through additional activities including pest animal management and land-protection in perpetuity. The strategy focuses on the salvage of lizards and kauri snails as the main activity to mitigate adverse impacts to them. Mitigation protocols for bats focus on the avoidance of removing any occupied roost trees, while protocols for kiwi focus on the use of a certified detection dog. The main breeding season for all avifauna will be avoided, minimising the risk of disturbing active nests or non-volant juveniles.

Provided that robust searches for indigenous fauna are undertaken in accordance with each of the management strategies proposed in this FMP, it is anticipated that the risk of injury or mortality that would otherwise occur during vegetation clearance and earthworks may be adequately avoided, minimised and/or mitigated. The implementation of a comprehensive EMP will support the FMP through the provision of habitat restoration and protection, pest plant and pest animal control.



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Appendix 10:
Archaeology Assessment, prepared by Origin Archaeology,
dated July 2024.

47 Hihitahi Rise, Paihia, Bay of Island – Proposed Subdivision: Archaeological Assessment

Prepared for Heron Point Ltd



Prepared by

Charlotte Judge (MA Hons)
Alex Queenin (MA Hons)

July 2024

 Origin Archaeology

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Introduction

Project Background

The owners of the property at 47 Hihitahi Rise, Te Haumi, Paihia, Bay of Islands are proposing a 17-lot residential subdivision of the block (Figures 1-5). The legal description of the property is Lot 21 DP 181647 and Lot 2 DP 200205. The proposal includes areas of protected bush covenant and proposed residential allotments within an area that was previously cleared around 2005/06 (Figure 3). The extent of the proposed earthworks is illustrated on Figure 5, and include areas of excavation to a maximum depth of c.6m.

An archaeological assessment of the proposed development area was commissioned by Heron Point Ltd to determine if the works are likely to have any effects on archaeological values. This report has been prepared to identify any requirements in relation to archaeology under the Resource Management Act 1991 (RMA) and the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA). Recommendations are made in accordance with statutory requirements.

Assessment Methodology

As part of the preparation of this report, the New Zealand Archaeological Association (NZAA) Archsite database was searched for information on archaeological or other historic heritage sites recorded within close proximity to the proposed areas of works. The District Plan schedule and the Heritage New Zealand List were consulted to determine if any sites had been scheduled or Listed within or close to the proposed works area. Relevant archaeological reports previously undertaken within the area were also consulted (see Bibliography). Historic survey plans held at Land Information NZ (LINZ) and accessed through Quickmap, and historic aerial photographs were also reviewed. Lidar imagery was also reviewed to determine if archaeological features could be identified beneath the existing vegetation cover.

Field assessment of the proposed development area as shown on Figure 5 was undertaken on 23 July 2024. Photographs were taken to record the project area.

Constraints and Limitations

Existing dense vegetation cover prevented adequate access in areas during field survey.

All statements and opinions in this document are offered in accordance with accepted best practice. No responsibility is taken for errors of fact or opinion resulting from data supplied by a third party.

This report has been carried out based on the information available at the time. Due to the timeframes presented, research for the report was undertaken to an extent that enables the archaeological values of the proposed areas of works to be adequately evaluated but is potentially not exhaustive.

This report does not represent the views of Māori regarding the cultural significance of the place. Cultural significance of the place to iwi can only be competently assessed by mana whenua.

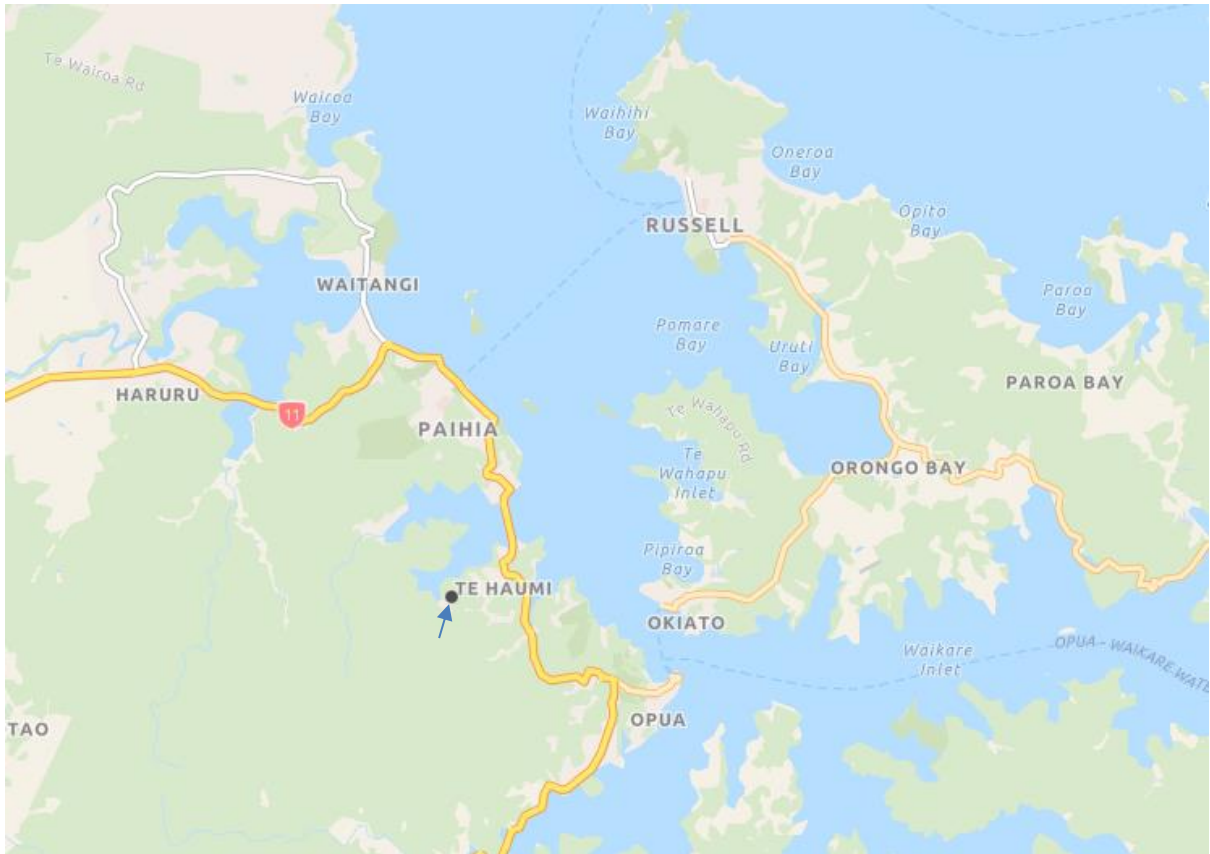


Figure 1. Map showing the location of the subject property (marked). Map source: Far North Maps 2024



Figure 2. Aerial showing the location of the subject property (outlined). Aerial source: Far North Maps 2024



Figure 3. Proposed Subdivision 47 Hihitahi Road – Draft Plan showing extent of previous vegetation clearance (outlined in green) where the subdivision is proposed.

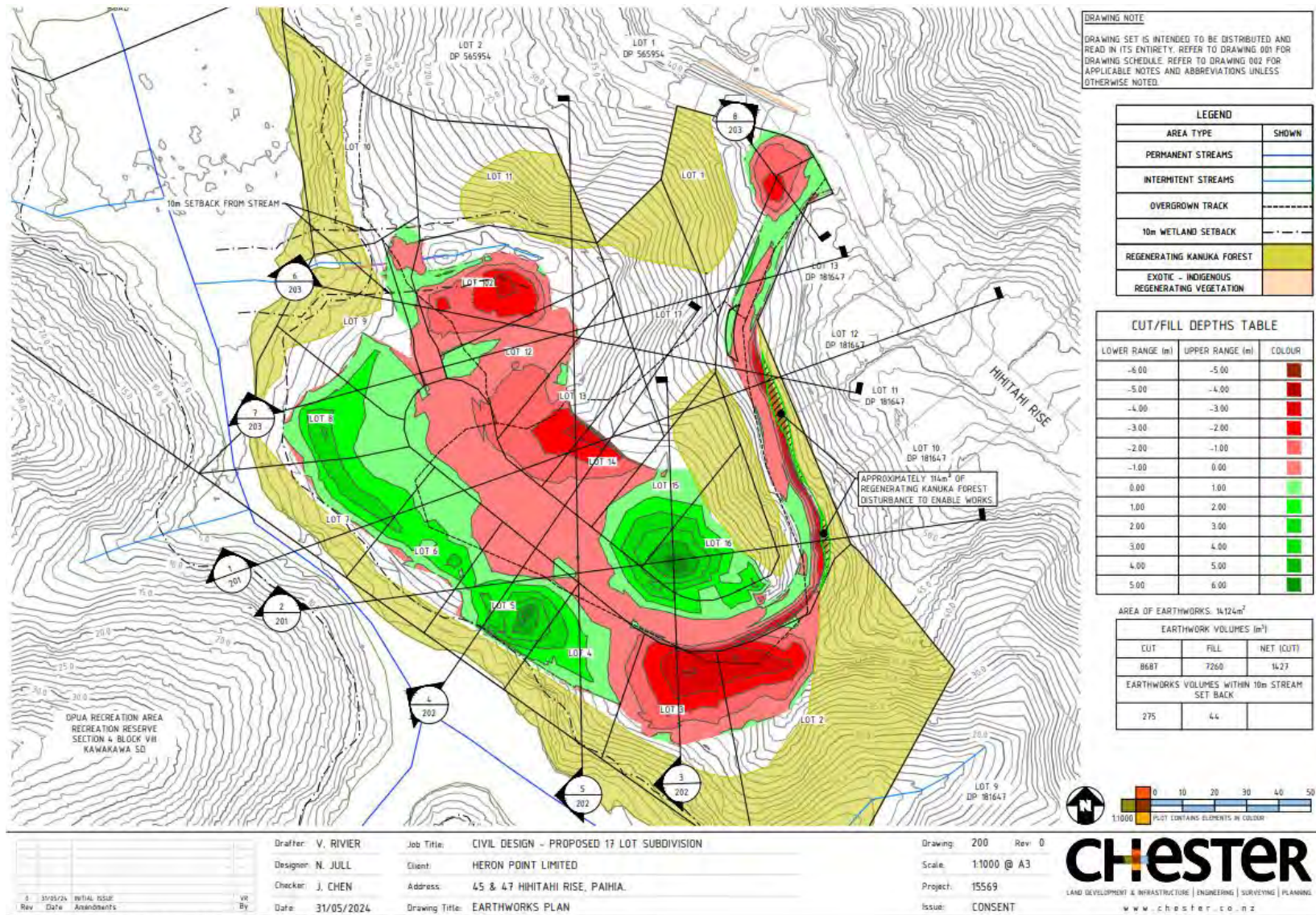


Figure 5. 45 & 47 Hihitahi Rise, Paihia – Earthworks Plan

Brief Historical Background¹

The Bay of Islands has the highest density of recorded archaeological sites in New Zealand, reflecting the important role it played in the history of Māori settlement. Not only was there intensive Māori settlement prior to the 18th century arrival of Europeans, but it was also the location of some of the earliest contacts between Māori and Europeans, and the focus of early European settlement in New Zealand.

At the time of the arrival of Captain James Cook and crew on the Endeavour in 1769, the area soon to be known as the Bay of Islands was found to be densely populated. Cook referred to several villages being located on the islands of the bay as well as on the mainland. Well defended pā were also evident on naturally strategic points around the bay (Pickmere 2000).

During the early 1790s, Lieutenant Governor Philip Gidley King chartered the Britannia to accompany two Māori chiefs (previously kidnapped aboard the Daedalus and taken to Norfolk Island), Tuki and Huru back to New Zealand. Upon the ship's arrival (some distance north of Tuki and Huru's rohe) King presented an assortment of tools, spades, hoes, garden seeds (including potato), and pigs. This was the first introduction of pigs to Northland which laid the foundation for a trade which would become an important element in the history of the area and its people (Pickmere 2000).

A number of whaling ships followed the early tentative visits, leading to increased trade opportunities between local Māori and the new arrivals. By the early 19th century, many chiefs from the Bay of Islands travelled to New South Wales on whaling and sealing ships. It was at the time of one of these visits that the chiefs, Te Pahi and Ruatara met the Reverend Samuel Marsden of the Church Missionary Society. This meeting 'imbued Marsden with enthusiasm to establish a mission station in New Zealand' (Pickmere 2000).

The first CMS mission station was soon established in Ruatara's territory at Rangihoua on the northern side of the entrance to the Bay of Islands (Pickmere 2000). In 1823, the Church Missionary Society led by Reverend Henry Williams established a mission station at Paihia and set up New Zealand's first printing press on the site in 1835. Although a thriving settlement at this time, the mission station was closed in 1850 and by the late nineteenth century there were only a handful of houses and a church focussed around the coastal edge at the settlement (Orange 2015).

From the 1930s, Paihia became a holiday destination, with visitors attracted to the restored Treaty House at nearby Waitangi and a road that had recently been built from Opuia made the town much easier to reach from the south (Orange 2015).

¹ Adapted from Judge 2020

Archaeological Background

The archaeological record held within the NZAA database shows a continuous pattern of intensive Māori settlement around the coastal areas and along navigable waterways of the Bay of Islands from the earliest period of settlement around the 13th century AD (Figure 4). A large number of sites relating to the post European contact period from the late 18th through to the end of the 19th centuries are also focussed around these areas.

Multiple archaeological surveys and monitoring/investigations have previously been undertaken across the wider Te Haumi area. The majority of these have been undertaken for residential subdivisions and/or developments (Bruce 2001, 2003; Johnson 1996, 2000, 2002, 2009), with the most common site type encountered being shell midden deposits associated with pre-1900 Māori settlement. The Te Haumi area was also included within the broadscale archaeological assessment and subsequent monitoring for the installation of ultra-fast broadband along existing public road corridors (Judge 2020; Gaylard & Judge 2022). No archaeological sites were identified within a small number of drill pits excavated along Hihitahi Rise (Gaylard & Judge 2022).

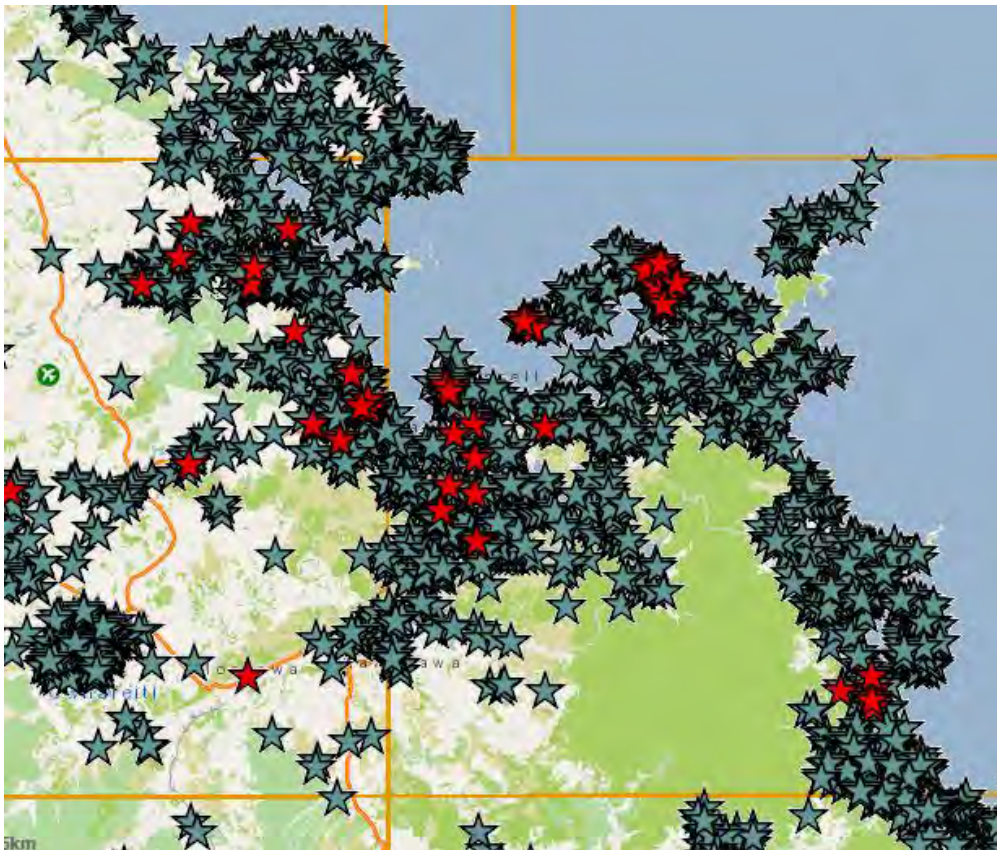


Figure 6. NZ Archaeological Association Archsite map showing the distribution of recorded archaeological sites (marked with stars) within the Bay of Islands area.

Archaeological Landscape of the Project Area

A survey of a block including the subject property has previously been undertaken by Northern Archaeological Research in 1996 as part of a proposed 58 lot subdivision application known

as the Renmar Construction Ltd subdivision (Johnson 1996). The survey identified one archaeological site within the subject property (Figure 7). The site has been recorded by error under two separate site numbers (P05/755 and Q05/1199). As the site is located within the Q05 topographical map, it will be referred to within this report as Q05/1199.

Site Q05/1199 was recorded by Johnson in 1996 on the southwestern side of the main ridge, towards the base of the hillside on the northwestern side ‘of a large fan of spoil bulldozed down from the ridge above’. The site is described as a thin layer of shell that was reported in a test bore within an area of previous soil disposal. The shell was identified beneath 3-4m of spoil. Given the physical context and location, the shell was thought to originate from an archaeological midden deposit, however this was unable to be confirmed (NZAA Site Record).

Lidar Analysis

Lidar is often useful in identifying larger features such as terraces, pits and ditches that are covered in dense vegetation. An analysis of recent lidar images undertaken for this assessment was not able to identify any substantial archaeological features (Figure 8).

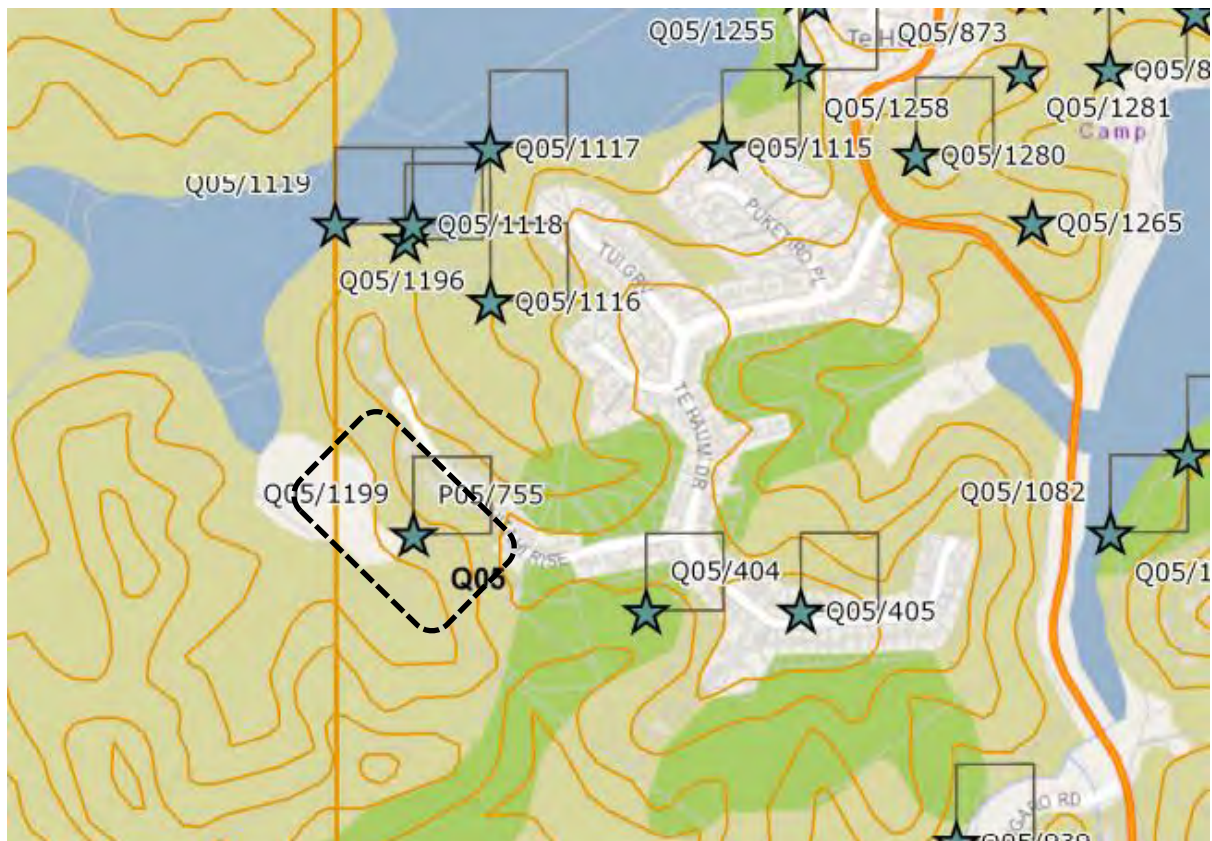


Figure 7. NZ Archaeological Association Archsite map showing the distribution of recorded archaeological sites in relation to the subject property (approximate area outlined).

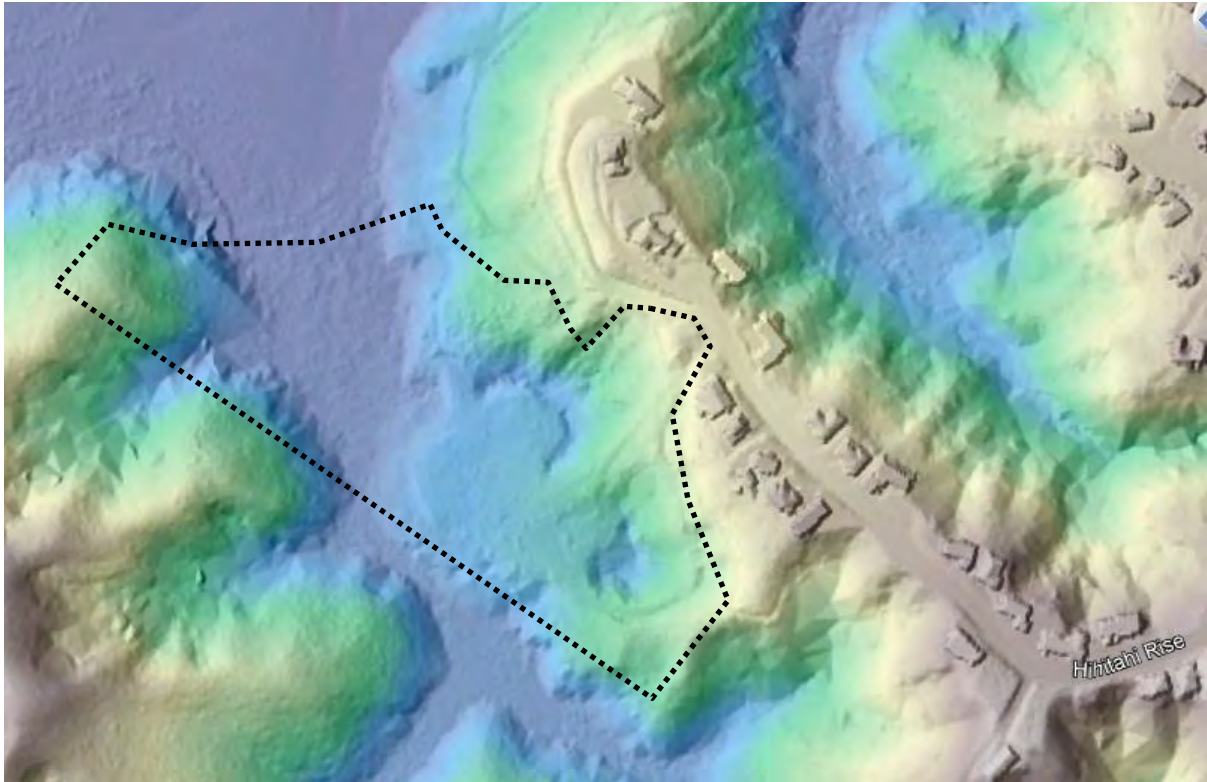


Figure 8. Lidar overlay showing the approximate bounds of the subject property (overlaid in black) (Lidar source: B. Jones 2024)

Physical Landscape

Topography and Environment

The property is located on the southern side of the southern arm of the Haumi River. The block covers a section of moderate-steep west to southwest slopes that run down from the ridge crest (along which Hihitahi Rise runs) at an elevation of c.35m a.s.l. to the gully below (Figure 9). The north-western corner of the property extends onto the toe of the ridge to the west. The property is currently under predominantly dense bush cover, with an area of regenerative bush/scrub covering the extent of clearance undertaken in the early 2000s.



Figure 9. Aerial showing the contours of the subject property (outlined). Source: Far North Maps 2024

Previous Works

The property appears to have formed part of an unsuccessful subdivision attempt in the 1970s at which time the top section of the ridge was bulldozed to form a road, and a broad area of the gully to the southwest was filled with spoil to a depth of between 2m-5m. Tracks were bulldozed down both sides of the ridge and across much of the face of the headland which overlooks the estuary (Johnson 1996). In the 1990s, Renmar Construction Ltd undertook clearance of the ridge and access road as well as the hillside and south-western gully. Earthworks were also undertaken for the upgrading of the existing access along the ridge and development of parts of a proposed stormwater system (Johnson 1996).

In the early 2000s, clearance of a section of regenerative bush was undertaken for a further attempt at subdividing the property.

An analysis of historic aerial photographs shows evidence of some of the works previously undertaken on the property. An aerial photograph dated to 1953 shows the subject block under bush cover with no evidence of earthworks or recent clearance evident (Figure 10). A later aerial dated to 1981 shows the start of residential development within the wider area as well as within the subject property (Figure 11). Quite extensive earthworks having been undertaken for what appears to be an access road and a probable proposed construction area towards the

base of the slope. A 2005/2006 aerial shows the same general area as having again been cleared of vegetation (Figure 12).



Figure 10. Detail of 1953 aerial photograph with the approximate bounds of the subject property overlaid. Source: Retrolens ref. Crown-209-546-75



Figure 11. Detail of 1981 aerial photograph with the approximate bounds of the subject property overlaid. Aerial source: Retrolens ref. Crown-5932-K-36



Figure 12. 2005/06 aerial photograph showing the area of bush clearance undertaken at this time (Chester 2024)

Results of Field Assessment

Field assessment of the proposed extent of earthworks was undertaken on 23 July 2024 (Figure 13). Much of the current proposed area of works has been subject to varying degrees of earthworks in the recent past (Figures 11, 12 & 14). Vegetation cover was dense across much of the area surveyed. The area cleared of vegetation in the early 2000s is now covered in a mixture of tall manuka/kanuka, pampas grass, ponga, fern and other native and introduced species (Figure 15-Figure 17). In addition, plenty of fell trees restricted access in some areas.

The only accessible path through the proposed development area was the old eastern access, which was still reasonably overgrown. The downslope side of the track appears to be slumped and eroded. Exposed soils showed a generally yellow or orange clay subsoil beneath a mid-yellow/brown mixed clay topsoil (where present) (Figure 18-Figure 22). The clay within the local area appears to be highly susceptible to weathering and erosion.

No archaeological material was identified on either the upslope or downslope side of the access track. Natural slump terracing was evident down the steep slopes. A small amount of charcoal flecking was identified in the topsoil at the southeastern end of the access track; however, this may well be of modern origin. The remainder of the proposed area of works was largely inaccessible for detailed survey.

The previously recorded midden site (Q05/1199) that was originally identified in a test bore hole beneath 3-4m of clay fill – as such it was not able to be relocated during the current assessment.



Figure 13. Aerial showing the extent of the subject property (outlined in yellow), approximate extent of the current survey area (shaded white – note access was restricted across much of the area), approximate alignment of existing overgrown access track (black) and the recorded location of Q05/1199 (midden). Aerial source: Far North Maps



Figure 14. View looking north over modified flattened area close to property entrance



Figure 15. Dense vegetation cover across area previously cleared in the early 2000s



Figure 16. Vegetation cover across former cut track access



Figure 17. Bush cover across partially in-filled gully



Figure 18. Clearer section of former access track providing adequate survey conditions for the immediate surrounding area including the upslope track cut.



Figure 19. Redeposited/slumped clay evident towards the eastern side of the proposed area of works



Figure 20. View looking north towards elevated flat close to eastern entrance showing exposed soils



Figure 21. Exposed soils on side of track along western side of proposed subdivision



Figure 22. Relatively clear area around track towards the southern end of the proposed area of works showing exposed clay subsoils

Summary and Discussion

Summary

One probable archaeological site has previously been recorded within the bounds of the subject property, just outside the proposed development area. The site (Q05/1199) was recorded in 1996 after a lens of shell was identified in a test bore hole at a depth of 3m-4m below a thick layer of clay spoil. The site could not be relocated during survey.

No archaeological sites were identified within the proposed development area as a result of the field survey.

While the property is located within a wider area known to have been intensively utilised by pre-AD1900 Māori, the topography and aspect of the property itself is such that intensive or sustained settlement would have been unlikely (the exception to this may be the far north-western corner of the property which covers the toe of a north-east running spur overlooking the Haumi River – outside of the proposed development area). This, together with the previous modifications that have occurred within the property and the results of the 1996 survey suggest that it is unlikely that significant intact archaeological remains will be present within the proposed development area.

Archaeological Values and Effects of Proposal

The wider project area contains significant archaeological sites related to pre-European Māori settlement as well as 19th and early 20th century Māori and European occupation and industry. There is currently one probable archaeological site (Q05/1199) recorded within the subject property. The site comprises a lens of shell located beneath 3-4m of clay fill, identified through test borehole. No further information is currently known about the probable site. Shell midden sites are the most common site type recorded within the Bay of Islands. If in-situ components of the site have survived intact subsurface, these would have the potential to provide information relating to the pre-1900 settlement of the area.

Site Q05/1199 is recorded just outside of the proposed development area – within an area of regenerating kanuka forest (Figure 23). The recorded location of the site is therefore unlikely to be affected by the current proposal.

In any area where archaeological sites have been recorded in the vicinity, it is possible that unrecorded in-situ subsurface remains may be exposed during works. Archaeological features and remains can take the form of burnt and fire cracked stones, charcoal, rubbish heaps including shell, bone and/or 19th century glass and crockery, ditches, banks, pits, old building foundations, artefacts of Māori and early European origin or human burials.

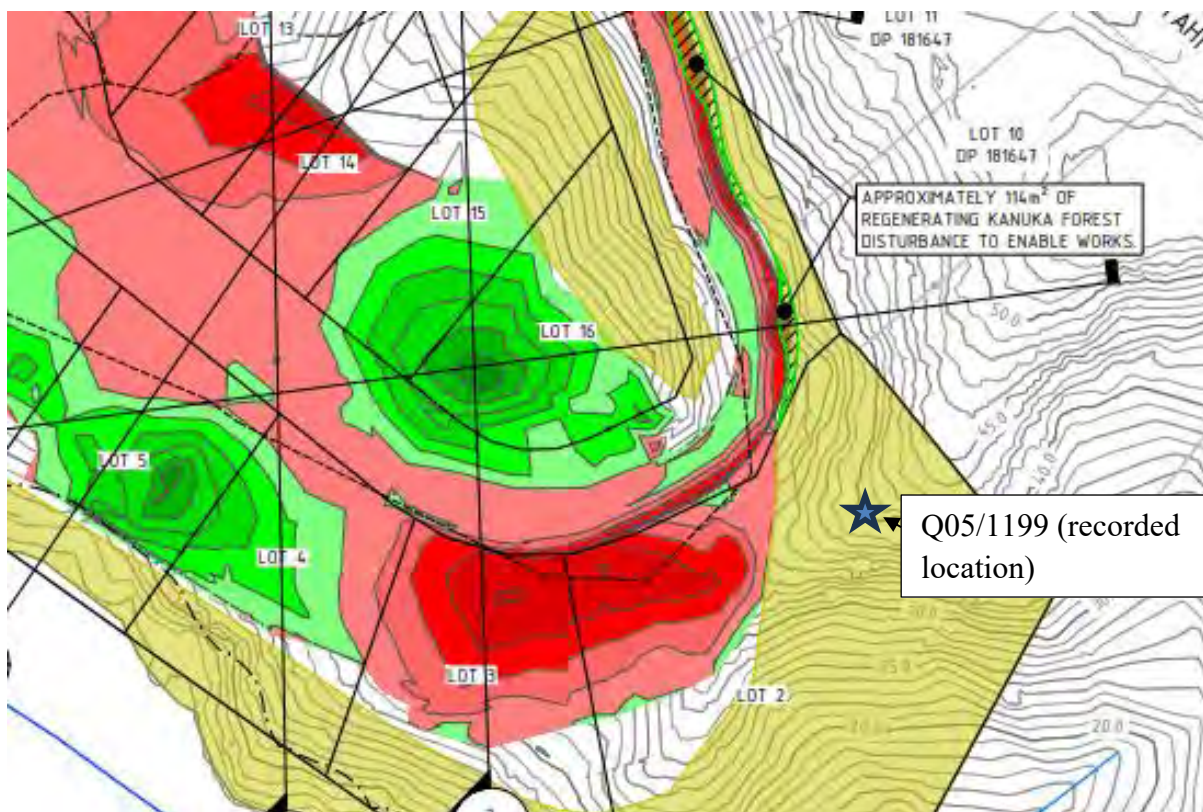


Figure 23. Detail of proposed earthworks plan overlaid with the recorded location of archaeological site Q05/1199

Legislation and Policy

There are two main pieces of legislation in New Zealand that control work affecting archaeological and significant historic heritage sites. These are the Resource Management Act 1991 (RMA) and the Heritage New Zealand Pouhere Taonga Act (2014). The relevant provisions of these Acts in regards to archaeological and historic heritage sites are outlined below.

Resource Management Act 1991

Section 6 of the Resource Management Act 1991 (RMA) recognises as matters of national importance: *‘the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga’* (S6(e)); and *‘the protection of historic heritage from inappropriate subdivision, use, and development’* (S6(f)).

All persons exercising functions and powers under the RMA are required under Section 6 to recognise and provide for these matters of national importance when *‘managing the use, development and protection of natural and physical resources’*. There is a duty to avoid, remedy, or mitigate any adverse effects on the environment arising from an activity (S17), including historic heritage.

Historic heritage is defined (S2) as *‘those natural and physical resources that contribute to an understanding and appreciation of New Zealand’s history and cultures, deriving from any of the following qualities: (i) archaeological; (ii) architectural; (iii) cultural; (iv) historic; (v) scientific; (vi) technological’*. Historic heritage includes: *‘(i) historic sites, structures, places, and areas; (ii) archaeological sites; (iii) sites of significance to Māori, including wahi tapu; (iv) surroundings associated with the natural and physical resources’*.

Regional, district and local plans contain sections that help to identify, protect and manage archaeological and other heritage sites. The plans are prepared under the rules of the RMA. The Far North District Plan is relevant to the current project area.

There are currently no archaeological sites scheduled within the subject property on the District Plan.

Heritage New Zealand Pouhere Taonga Act 2014

In addition to any requirements under the RMA, the HNZPTA protects all archaeological sites whether recorded or not, and they may not be damaged or destroyed unless an Authority to modify an archaeological site has been issued by Heritage NZ (Section 42).

An archaeological site is defined by the HNZPTA Section 6 as follows:

‘archaeological site means, subject to section 42(3), –

- (a) any place in New Zealand, including any building or structure (or part of a building or structure) that –
 - (i) was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and

(ii) provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and

(b) includes a site for which a declaration is made under section 43(1)'

Authorities to modify archaeological sites can be applied for either in respect to archaeological sites within a specified area of land (Section 44(a)), or to modify a specific archaeological site where the effects will be no more than minor (Section 44(b)), or for the purpose of conducting a scientific investigation (Section 44(c)). Applications that relate to sites of Māori interest require consultation with (and in the case of scientific investigations the consent of) the appropriate iwi or hapu and are subject to the recommendations of the Māori Heritage Council of Heritage NZ. In addition, an application may be made to carry out an exploratory investigation of any site or locality under Section 56, to confirm the presence, extent and nature of a site or suspected site.

While the proposal will have no identified effects on archaeological sites, there is potential for previously unrecorded subsurface archaeological remains to be exposed/affected as a result of the proposal. As such, it is recommended that an Authority under Section 44(a) of the Heritage New Zealand Pouhere Taonga Act is sought prior to the start of works as a precaution.

Recommendations

- As there is potential for unrecorded archaeological sites to be exposed/affected as a result of the proposal, it is recommended that an Authority under Section 44(a) of the Heritage NZ Pouhere Taonga Act 2014 is sought prior to the start of works as a precaution.
- An Archaeologist should be present to monitor preliminary earthworks across the project area. Any archaeological remains encountered should be investigated, recorded and sampled in accordance with the Heritage NZ Authority and any resource consent obtained for the project.
- If an Authority is not obtained for the project, and archaeological remains (including but not limited to: intact shell midden, fire scoops, rubbish pits/deposits, building foundations, human remains etc.) are exposed during works, then works must be immediately halted in the immediate vicinity of the remains and Heritage NZ, the NZ Police (in the case of kōiwi tangata) and mana whenua (in the case of archaeological remains of Māori cultural origin) must be notified in accordance with Accidental Discovery Protocols. If modification of an archaeological site does become necessary, an Authority must be applied for under Section 44(a) of the HNZPTA and granted prior to any further work being carried out that will affect the site. (Note that this is a legal requirement).
- The wider project area is known to be of high cultural significance to mana whenua. As archaeological survey cannot always detect sites of traditional significance to Māori,

such as wāhi tapu, mana whenua should be consulted regarding the potential effects of the project on cultural values.

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Historic Survey Plans

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SO 6218

SO 18051

Appendix A: Site Record Forms

(Note that P05/755 and Q05/1199 are the same site)

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

 <p>Site Record Form</p>	<p>NZAA SITE NUMBER: P05/755</p> <p>SITE TYPE: Midden/Oven</p> <p>SITE NAME(s):</p> <p>DATE RECORDED:</p>
<p>SITE COORDINATES (NZTM) Easting: 1699276 Northing: 6092520 Source: CINZAS</p>	
<p>IMPERIAL SITE NUMBER: METRIC SITE NUMBER: P05/755</p>	
 <p>Scale 1:2,500</p> <p><small>Deprecated Basemap - Eagle Technology, Land Information New Zealand, OpenStreetMap Contributors, Kaitiaki</small></p>	
<p>Finding aids to the location of the site</p>	
<p>Brief description MIDDEN</p>	
<p>Recorded features Midden</p>	
<p>Other sites associated with this site</p>	

Supporting documentation held in ArchSite

P5/755

NORTHERN ARCHAEOLOGICAL RESEARCH

ARCHAEOLOGICAL SURVEY OF THE PROPOSED
RENMAR CONSTRUCTION LTD SUBDIVISION, TE
HAUMI, BAY OF ISLANDS.



Prepared for

Thomson & King
Paihia



Northern Archaeological Research
67, Church St, Devonport,
Auckland.

November 1996

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

702

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION		NZAA METRIC SITE NUMBER: P05/755	
SITE RECORD FORM (METRIC)		DATE VISITED: 21. 11. 96.	
Metric map number: P05		SITE TYPE: Midden.	
Metric map name: KAIKOHE		SITE NAME: MAORI -	
Metric map edition: 1 st 1984		OTHER: NIG	
Grid Reference Easting	<input type="text" value="26101"/>	Northing	<input type="text" value="66544"/>
<p>1. Aids to relocation of site (attach a sketch map): Located on the Renmar Construction Ltd subdivision, Te Haumi, Bay of Islands. The site occurs on the SW side of the main ridge, towards the base of the hillside on the NW side of a large fan of spoil bulldozed down from the ridge above. A small tea tree filled gully and hillside occurs 15m to the NE and 25m to the NW and a larger raupo swamp occurs a short distance to the SW. Approximately 25m ASL.</p>			
<p>2. State of site and possible future damage: Buried under a thick layer of clay spoil. In area of proposed subdivision.</p>			
<p>3. Description of site (Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here):</p> <p>A thin layer of shell reported in a test bore in the area of previous spoil disposal (C Gilkison pers com). The shell is reported to have occurred under 3m-4m of spoil. The physical context and position suggest a probable midden origin. No other information.</p>			
4. Owner: Renmar Construction Ltd.		Tenant/Manager:	
Address:		Address:	
<p>5. Nature of information (hearsay, brief or extended visit, etc.): Brief visit.</p> <p>Photographs (reference numbers):</p> <p>Aerial photographs (reference numbers and clarity of site):</p>			
6. Reported by: Leigh Johnson		Filekeeper: <i>[Signature]</i>	
Address: Northern Archaeological Research 67 Church St, Devonport Auckland		Date: <i>9/1/97.</i>	
7. New Zealand Historic Places Trust (for office use)			
<input checked="" type="checkbox"/> AA	Type of site	<input checked="" type="checkbox"/> XX	<input type="checkbox"/> AC Present condition and future danger of destruction
<input type="checkbox"/>	Local environment today	<input type="checkbox"/>	<input type="checkbox"/> MA Local Body
<input type="checkbox"/> AE	Land classification		

 <p>Site Record Form</p>	<p>NZAA SITE NUMBER: Q05/1199</p> <p>SITE TYPE: Midden/Oven</p> <p>SITE NAME(s):</p> <p>DATE RECORDED:</p>
<p>SITE COORDINATES (NZTM) Easting: 1699276 Northing: 6092520 Source: CINZAS</p>	
<p>IMPERIAL SITE NUMBER: METRIC SITE NUMBER: Q05/1199</p>	
 <p>Scale 1:2,500</p> <p><small>Deprecated Basemap - Eagle Technology, Land Information New Zealand, OpenStreetMap Contributors, Kiwiraui</small></p>	
<p>Finding aids to the location of the site</p>	
<p>Brief description MIDDEN</p>	
<p>Recorded features Midden</p>	
<p>Other sites associated with this site</p>	

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

SITE RECORD INVENTORY	NZAA SITE NUMBER: Q05/1199
------------------------------	-----------------------------------

Supporting documentation held in ArchSite

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION		NZAA METRIC SITE NUMBER: P05755	
SITE RECORD FORM (METRIC)		DATE VISITED: 21. 11. 96. Q05/1199	
Metric map number: P05		SITE TYPE: Midden.	
Metric map name: KAIKŌHE		SITE NAME: MAORI: -	
Metric map edition: 1 ST 1984		OTHER:	
Grid Reference Easting		Northing	
251911		665441	
<p>1. Aids to relocation of site (attach a sketch map): Located on the Renmar Construction Ltd subdivision, Te Haumi, Bay of Islands. The site occurs on the SW side of the main ridge, towards the base of the hillside on the NW side of a large fan of spoil bulldozed down from the ridge above. A small tea tree filled gully and hillside occurs 15m to the NE and 25m to the NW and a larger raupo swamp occurs a short distance to the SW. Approximately 25m ASL.</p>			
<p>2. State of site and possible future damage: Buried under a thick layer of clay spoil. In area of proposed subdivision.</p>			
<p>3. Description of site (Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here):</p> <p>A thin layer of shell reported in a test bore in the area of previous spoil disposal (C Gilkison pers com). The shell is reported to have occurred under 3m-4m of spoil. The physical context and position suggest a probable midden origin. No other information.</p>			
4. Owner: Renmar Construction Ltd.		Tenant/Manager:	
Address:		Address:	
<p>5. Nature of information (hearsay, brief or extended visit, etc.): Brief visit.</p> <p>Photographs (reference numbers):</p> <p>Aerial photographs (reference numbers and clarity of site):</p>			
6. Reported by: Leigh Johnson		Filekeeper:	
Address: Northern Archaeological Research		Date: 9/1/97	
67 Church St, Devonport			
Auckland			
7. New Zealand Historic Places Trust (for office use)			
AR	Type of site	BC	Present condition and future danger of destruction
-	Local environment today	MA	Local Body
AI	Land classification		

Appendix 11:

Transportation Assessment Report, prepared by TEAM, dated 18/06/2024

PROPOSED RESIDENTIAL SUBDIVISION

47 Hihitahi Rise | Paihia

Transportation Assessment Report

Prepared For

Heron Point

Date of Issue

18 June 2024

team

The logo for 'team' features the word in a lowercase, sans-serif font. Below the text is a graphic element consisting of three curved, parallel lines that sweep upwards and to the right, suggesting motion or a stylized 'T'.

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Quality Assurance & Version Management

Limitations:

This report has been prepared for the sole use of our client, Heron Point, for the particular brief and on the terms and conditions agreed with our client. It may not be used or relied on (in whole or part) by anyone else, or for any other purpose or in any other contexts, without our prior written agreement. This report may not be read or reproduced except in its entirety.

This report has been prepared by Traffic Engineering & Management Ltd (TEAM) based on information provided by our Client, Heron Point. TEAM have not independently verified the provided information and relied upon it as being accurate and suitable for use by TEAM in preparing this report. TEAM accepts no responsibility for errors or omissions in, or the currency or sufficiency of the provided information.

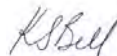
Quality Assurance

Prepared by:

Jesus Turla
Traffic Engineer

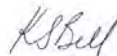


Keith Bell
Senior Associate



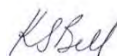
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Keith Bell
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Keith Bell
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Version Management

Date	Revision
14 June 2024	Draft

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1. Introduction

This report considers the traffic related aspects of a proposed residential subdivision at 45 & 47 Hihitahi Rise in Paihia.

The proposal involves the subdivision of the site to provide 17 residential sections, a private access road and a common accessway.

The sole vehicle and pedestrian connection to the site will be via a new vehicle crossing that will connect the private road to the southern side of Hihitahi Rise near the cul-de-sac head of Hihitahi Rise.

The layout of the subdivision is shown in the following landscaping plan.

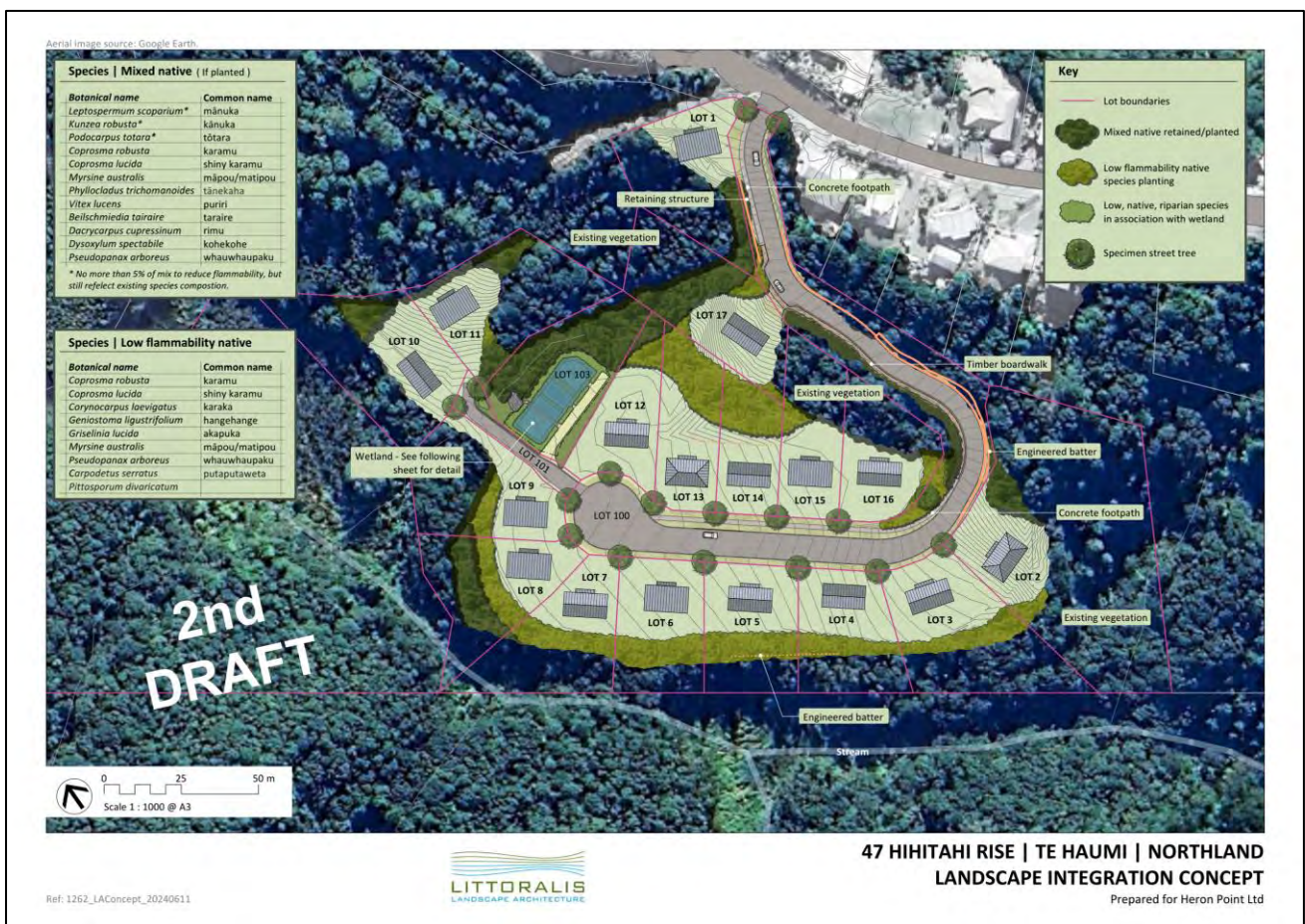


Figure 1: Subdivision Landscape plan

2. Assessment Methodology

The site is zoned 'Residential' under the operative Far North District Plan and 'General Residential' under the proposed Far North District Plan. The following illustration has been sourced from the Far North District – Proposed District Plan.

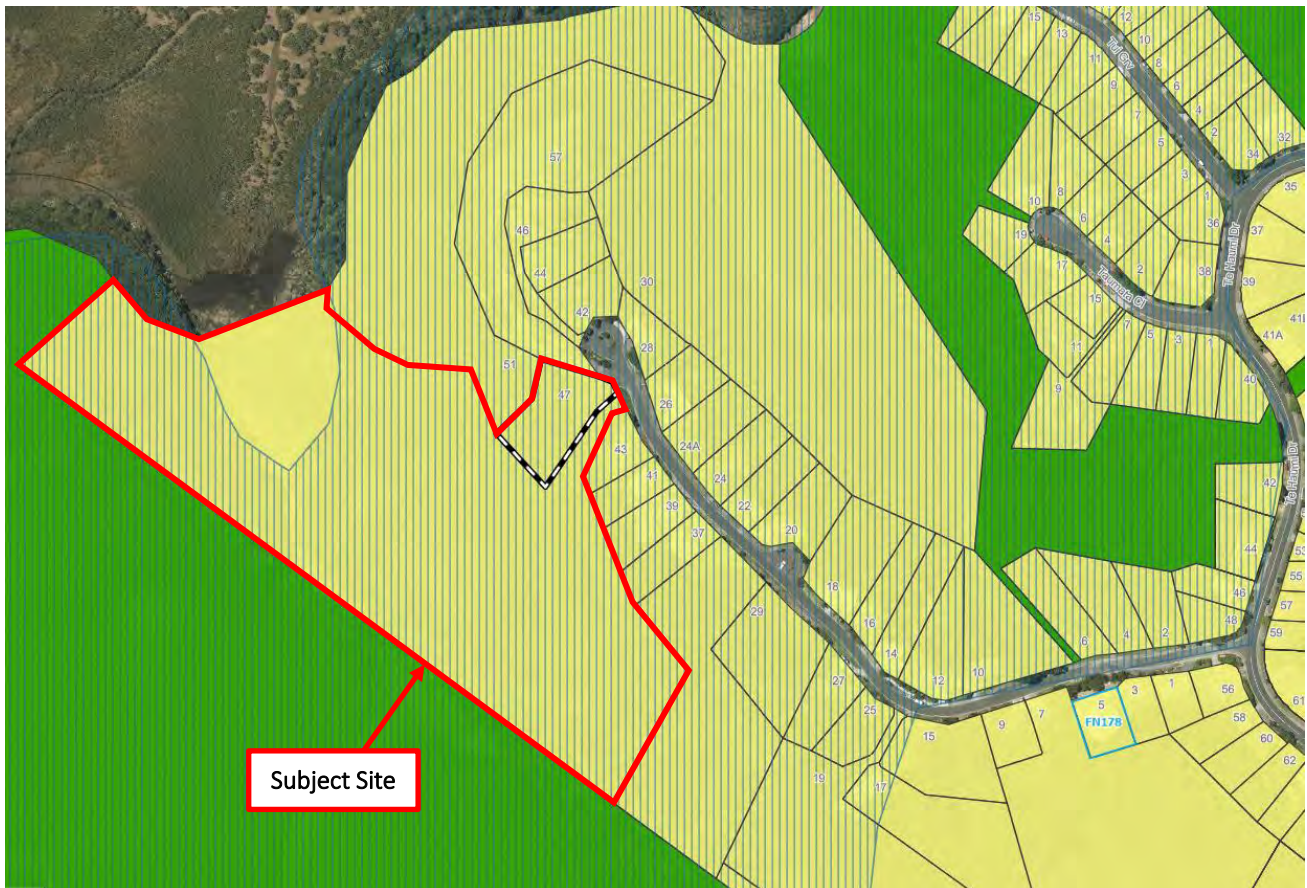


Figure 2: District Plan map

This assessment considers the traffic related aspects of the Far North District Council Engineering Standards (FNDCEs).

This assessment also considers the operational and safety aspects of the proposed new intersection between the new private road and Hihitahi Rise.

At the time of subdivision, no driveway access will be constructed within the individual lots, however the subdivision layout has considered the ability to provide suitable vehicle access to each development lot. This is discussed in more detail in Section 4.3 of this report.

The access, parking and manoeuvring arrangements within each development lot will be provided when each individual lot is developed.

3. The Existing Traffic Environment

The subject site is situated on the southern side of Hihitahi Rise and has a legal description of Lot 21 DP 181647 and Lot 2 DP 200205. The site has an area of 4.8795 hectares.

The location of the site in relation to the surrounding road network and properties is shown in the following aerial photograph.



Figure 3: Surrounding Road and Wider Network

3.1 Traffic and Rooding Characteristics

The proposed subdivision has a sole vehicle connection frontage to Hihitahi Rise.

3.1.1 Hihitahi Rise

Hihitahi Rise functions as a local road. Hihitahi Rise connects with Te Haumi Drive at its eastern end and terminates as a cul-de-sac at its western end. Te Haumi Drive has a connection to the wider network via Paihia Road.

Hihitahi Rise in the vicinity of the subject site has a carriageway width of 6.0 metres and consists of one lane in each direction, although there is no road marking to delineate the directional flows. There is a 50km/h speed restriction in place.

The configuration of Hihitahi Rise is shown in the following google earth photographs taken in the vicinity of the proposed site access.



Figure 4: Hihitahi Rise – East of the access position



Figure 5: Hihitahi Rise – West of the access position

3.1.2 Pedestrian Amenity

A footpath is provided on the northern side of Hihitahi Rise that provides connections within the residential area that is serviced by Te Haumi Drive. Additionally, a footpath is provided on the western side of Paihia Road from the Te Haumi Drive/Paihia Road intersection and the bridge to the north (Te Haumi River Bridge).

3.1.3 Passenger Transport

There are no bus stops located within easy access to the subject site.

The nearest bus stop is located on Marsden Road, adjacent to the Paihia Ferry Terminal Building which is approximately 3.8 km from the site.

This bus stop is serviced by the Mid North Link and operates one morning service from Kaikohe to Waipapa and one afternoon service from Waipapa to Kaikohe on Tuesdays and Thursdays.

The proposed development is considered to have very limited options in terms of public transport.

3.1.4 Crash Analysis

To determine if there are any existing operational issues in the vicinity of the site, a study of the crash record maintained by Waka Kotahi (NZTA) has been undertaken for the 5-year period 2019-2023 inclusive. Crashes that occurred and were reported during 2024 were also included.

The searched area covered Hihitahi Rise within approximately 100 metres of the intersection between the proposed private road and Hihitahi Rise. The searched area is shown in the following figure.

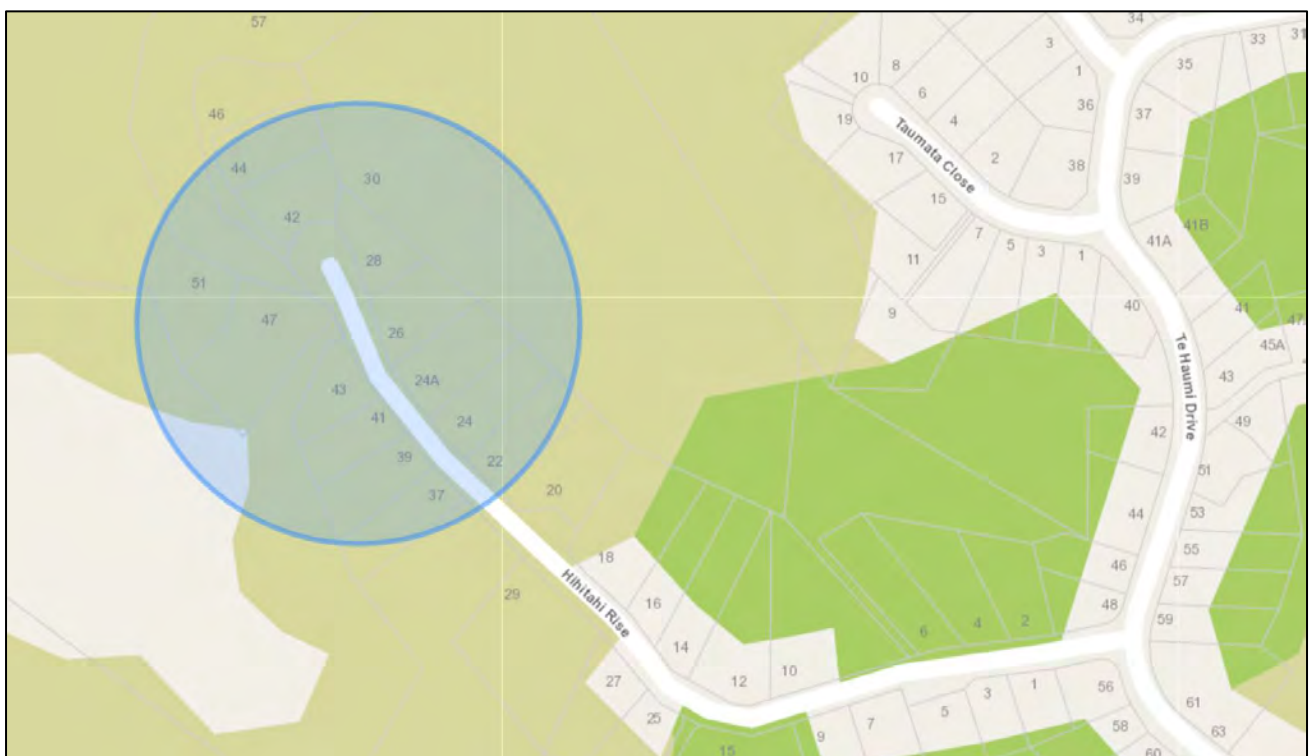


Figure 6: CAS searched area

There were no crashes recorded within the searched area for the given timeframe. The reported crash history does not raise any concerns with regard to the current traffic operation in the vicinity of the site.

4. The Proposal

The proposal involves the subdivision of the site to provide 17 residential sections, a private access road (Lot 100) and a common accessway (Lot 101).

The layout of the subdivision is shown in the following roading plan.

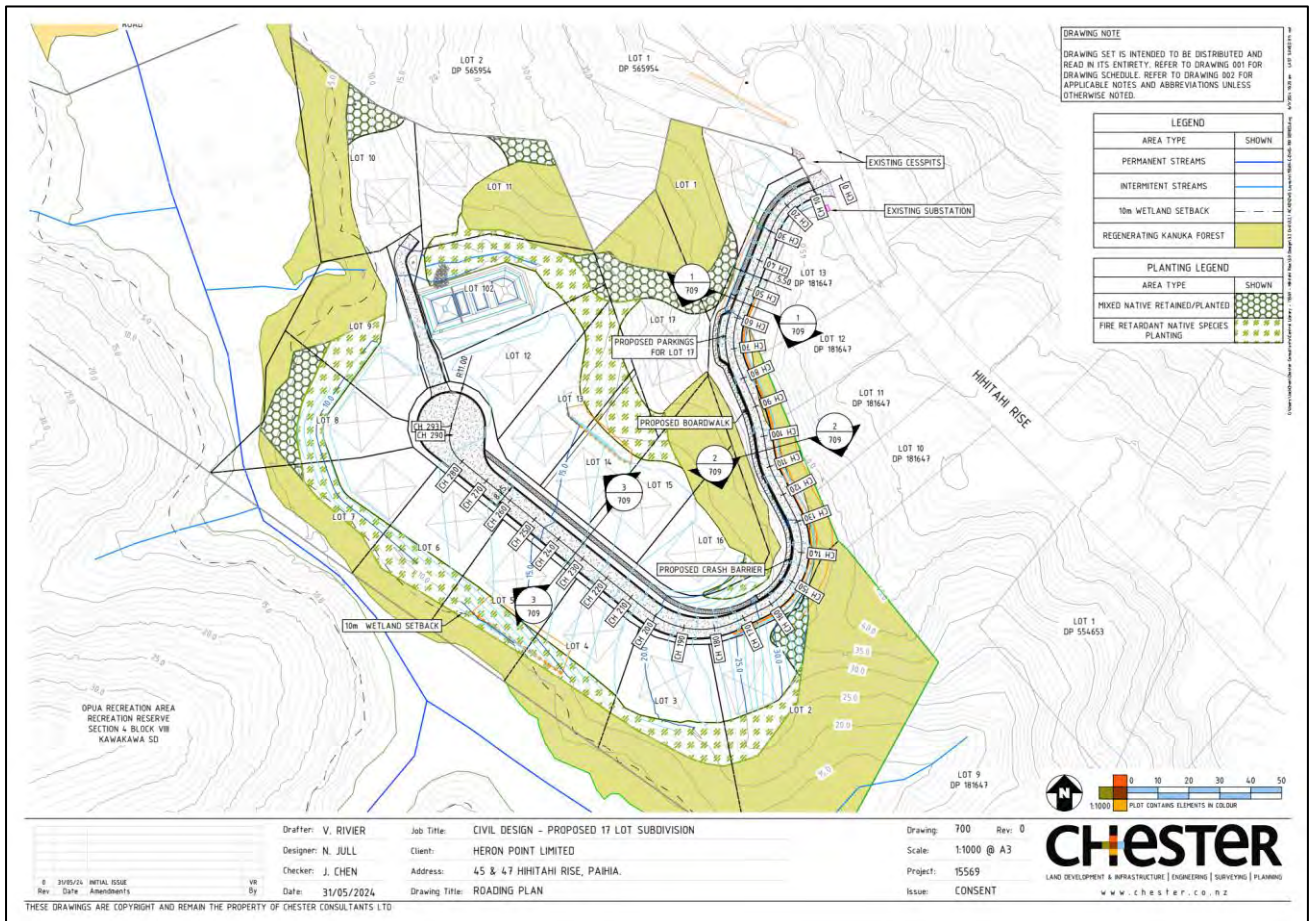


Figure 7: Roading plan

4.1 Private Access Road

As can be seen above, the private access road will connect with Hihitahi Rise at the eastern end via a new vehicle crossing and will terminate at the western end as a cul-de-sac.

The Far North District Council Engineering Standards (FNDCES) require¹ that:

- a vehicular access that serves eight or less lots or Household Units shall be private access ways, except where FNDC agrees that they become public road through resource consent conditions.
- Unless approved otherwise through the resource consent conditions, private accessways serving more than eight lots or Household Units shall be formed to the requirements of the relevant road standard.

¹ FNDCES 3.2.28. Private Accessways

Given that the access road will provide access to 17 residential lots, the relevant road standard² is a ‘Low Volume Access Road’ based on an estimated 177 daily vehicle movements³.

Due to the significant topographical and ecological constraints the provision of a dimensionally compliant ‘Low Volume Access Road’ is not possible.

On this basis, the private road has the configuration of a ‘Private Accessway’ and has incorporated the configuration of a ‘Low Volume Access’ Road wherever possible.

4.1.1 Private Road cross-sections

The private road will generally have two cross-sections as follows and shown in the cross-section plan.

Eastern end:

- Road reserve: 12 metres
- Carriageway: 5.5 metres
- Footpath/boardwalk: 1.5 metres

Western end:

- Road reserve: 16 metres
- Carriageway: 8.25 metres
- Footpath: 1.5 metres

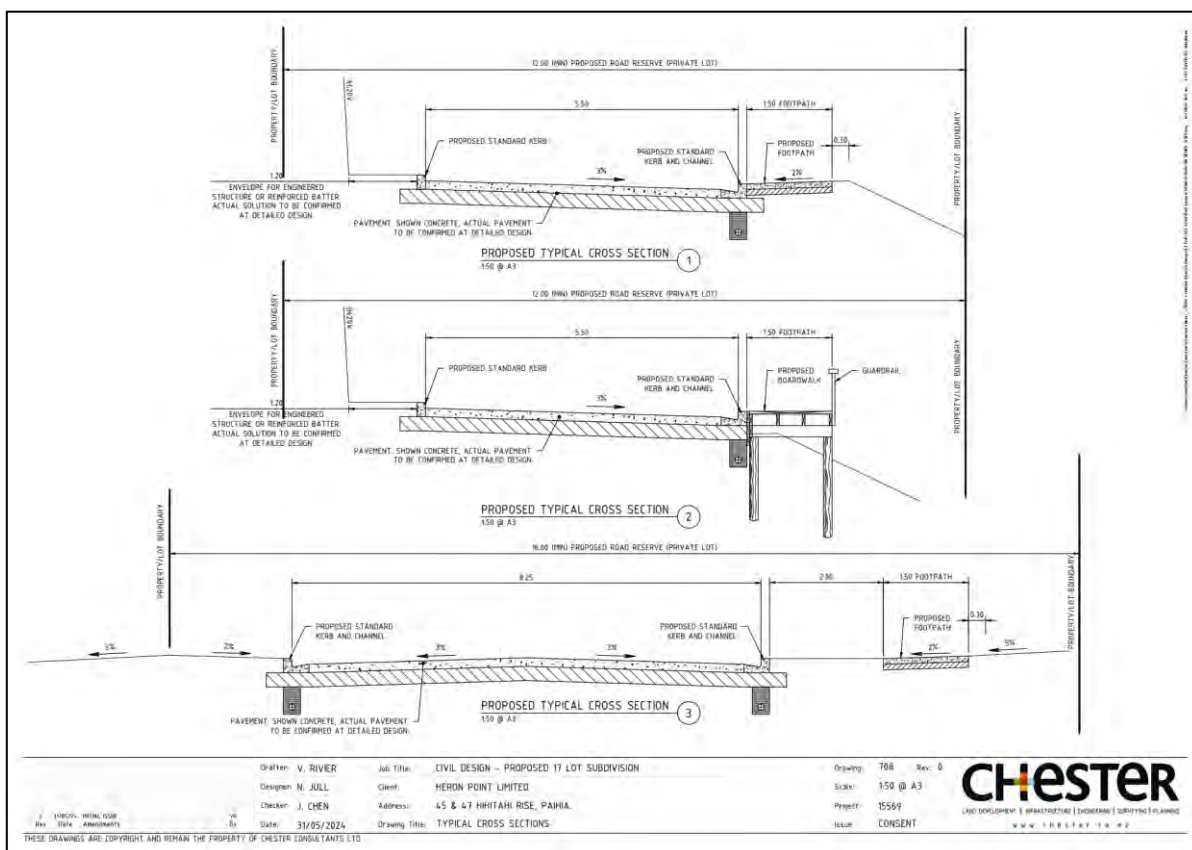


Figure 8: Private Road cross-sections

² FNDCEs Table 3-2: Urban Road Design Criteria.

³ FNDCEs Table 3-2 (Note 1) – The NZTA Research report 453 provides an 85th% daily trip rate of 10.4 trips/dwelling.

The wider carriageway at the eastern end of the road is intended to be used for parking on the northern side of the road.

The dimensional requirements for Private Accessways that serve 8 units⁴ is as follows.

- Minimum legal width: 6 metres
- Carriageway width: 4.5 metres
- Footpath: 0.95 metres

The dimensional requirements for 'Low Volume Access' Roads⁵ are as follows.

- Minimum legal width: 18 metres
- Carriageway width: 8.25 metres
- Lane widths: 2 x 3.0 metres
- Footpath: 2 x 1.8 metres

As can be seen above, the proposed cross-sections exceed all dimensional requirements for 'Private Accessways', but generally do not meet the dimensional requirements for 'Low volume Accessways'.

However, the proposed cross-sections of the Private Road are considered to be suitable for the intended use given that:

- The legal road width has no tangible traffic related effect, although a narrower corridor does provide visual 'side-friction' resulting in a lower speed environment.
- The carriageway width is suitable for simultaneous two-way traffic movements and will provide a relatively slow speed environment.
- The footpath is suitable for providing pedestrian access to the residential lots and will not have to accommodate any through pedestrian movements.

4.1.2 Private Road long-section

The private road will slope downwards from the vehicle crossing at Hihitahi Rise to the lowest point at the eastern end which terminates as a cul-de-sac.

The vertical configuration of the road has been designed to generally provide the gentlest slopes in the vicinity of property accesses and steeper slopes where there are less property accesses. On this basis, the eastern end of the road is generally steeper and then levels out towards the west.

The first 10 metres of the private road is located within the Hihitahi Rise road reserve and has a maximum gradient of 12.5% (1:8).

The first 5 metres of the road located within the property boundary is configured a vertical curve with a maximum gradient of 13.4% (1:7.5). This gradient is marginally steeper than the requirements of the FNDCEs⁶ in this regard however this is considered to be a minor infringement that will not have any operational adverse effect.

The steepest section of the remainder of the road is a relatively short section (19.68 metres) of 20% (1:5). This maximum gradient meets the requirements of the FNDCEs for Private Accessways⁷.

⁴ FNDCEs Table 3-16: Minimum Width Requirements – Private Accessways

⁵ FNDCEs Table 3-2: Urban Road Design Criteria

⁶ FNDCEs 3.2.28.2 Urban Private Accessways Note a.

⁷ FNDCEs 3.2.28.2 Urban Private Accessways Note b.

In summary, the proposed gradients of the private road are considered to be suitable for the intended use. The gradients of the private road are shown in the following long section.

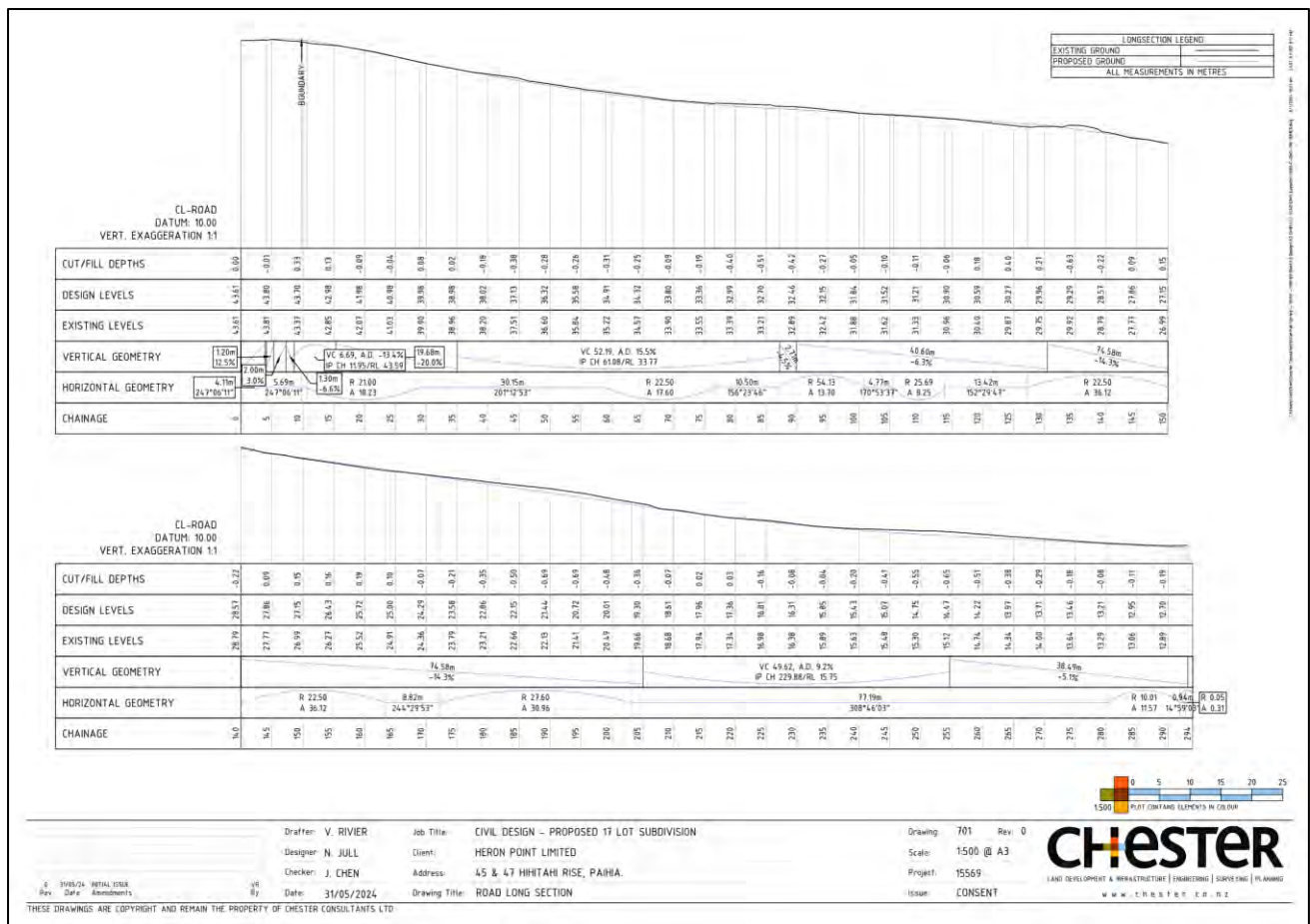


Figure 9: Private Road long section

4.1.3 Private Road/Hihitahi Rise

The private road connection to Hihitahi Drive will be formed as a vehicle crossing. The carriageway will be 5.5 metres wide, with the crossing splays configured to accommodate simultaneous two-way movements for cars and the spatial requirements of an 11.5-metre-long Large Rigid Truck (LRT).

The movements described above are shown in the following vehicle tracking simulations.

There are good sightlines available from the vehicle crossing in both directions along Hihitahi Rise and given that Hihitahi Rise terminates a short distance to the north, there is expected to be very low through traffic.

The proposed vehicle crossing location and configuration is considered to be suitable for the intended use and is expected to operate without issue.

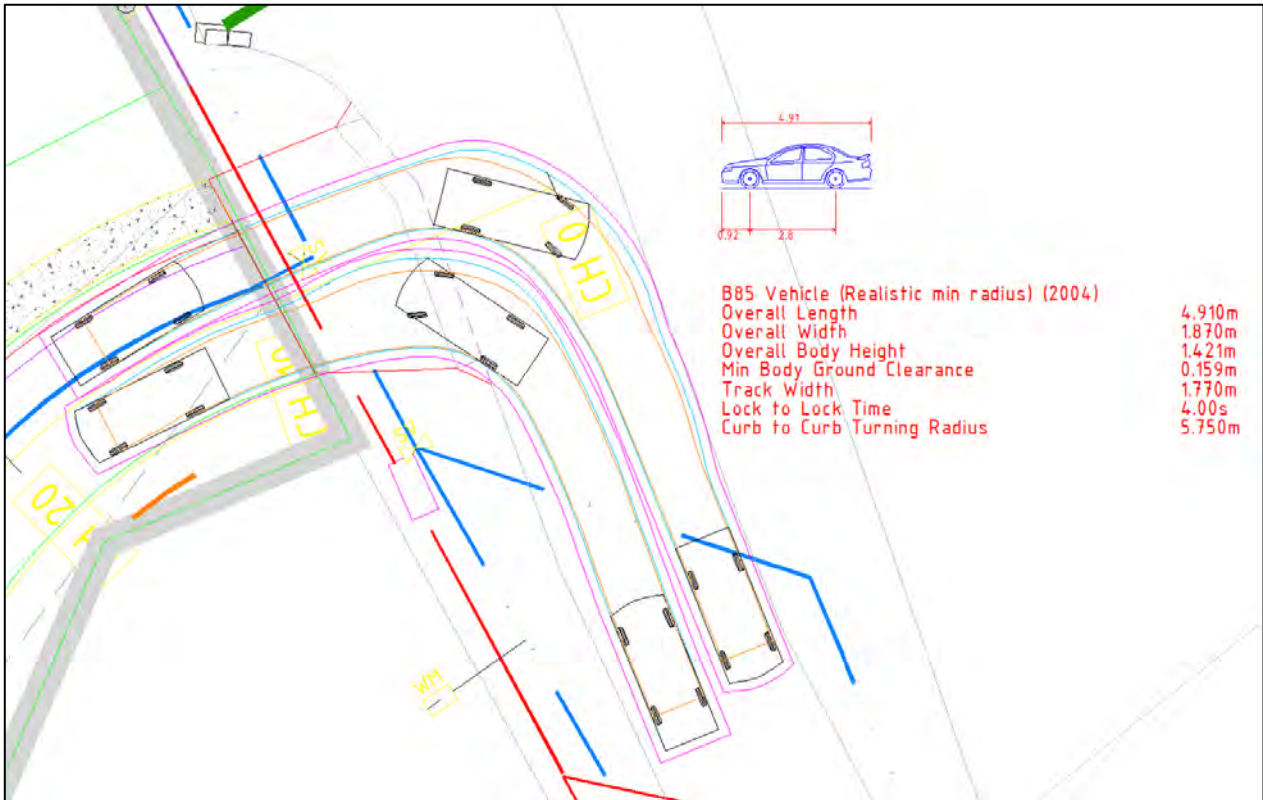


Figure 10: Vehicle Crossing- two cars

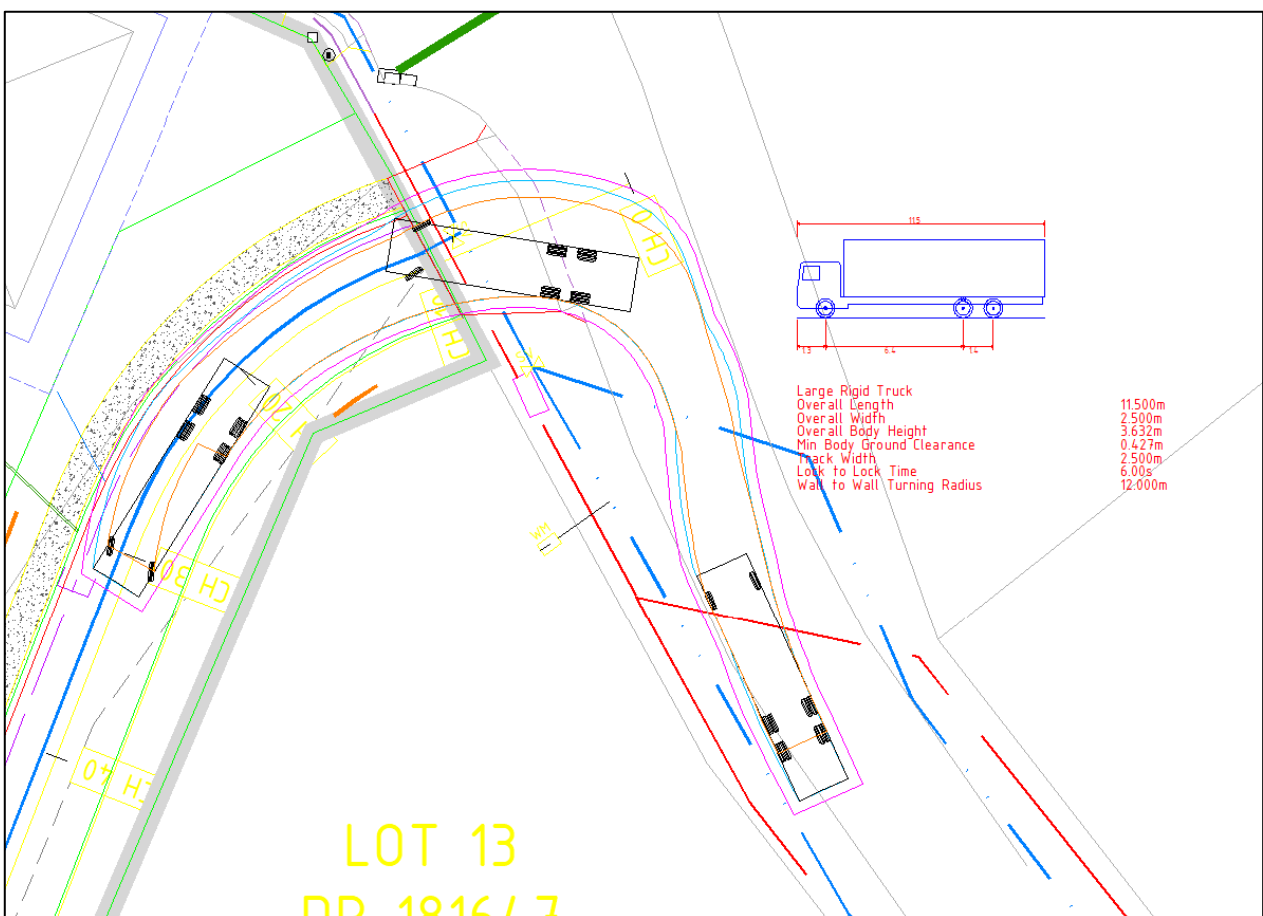


Figure 11: Vehicle crossing - 11.5 metre LRT

4.1.4 Cul-de-sac

The eastern termination of the new road will be formed as a cul-de-sac. The cul-de-sac has been configured to accommodate the spatial requirements of an 8-metre-long Medium Rigid Truck (MRT).

The MRT is considered to be an appropriate design vehicle for this purpose as this is expected to be the largest vehicle that will frequently use the road. However, larger vehicles will also be able to turn around within the cul-de-sac by undertaking a 3-point turn manoeuvre.

The following vehicle tracking simulations show the MRT and the LRT turning around within the cul-de-sac.

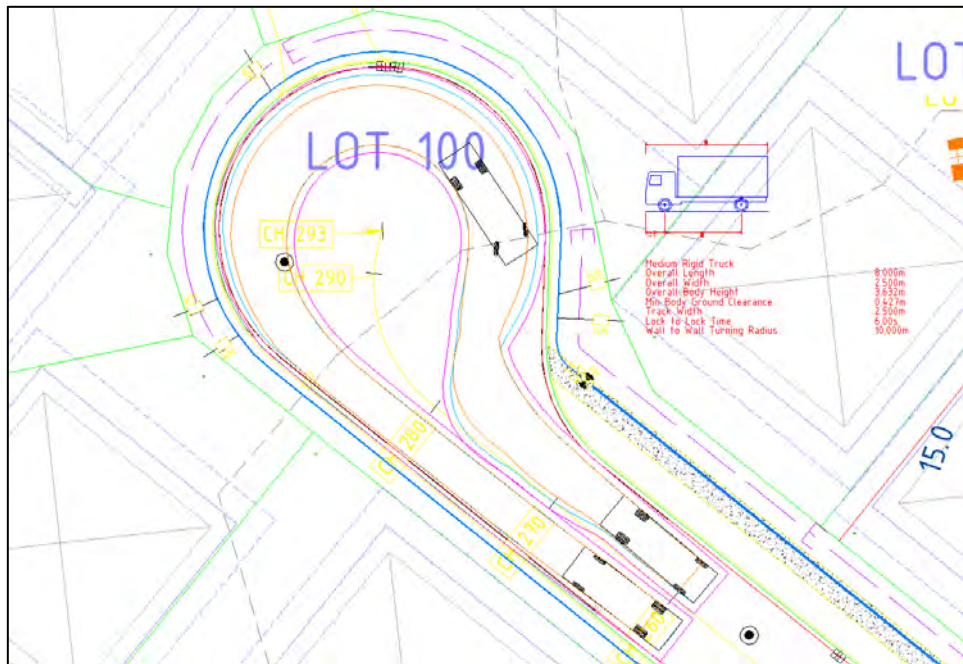


Figure 12: Cul-de-sac (MRT)

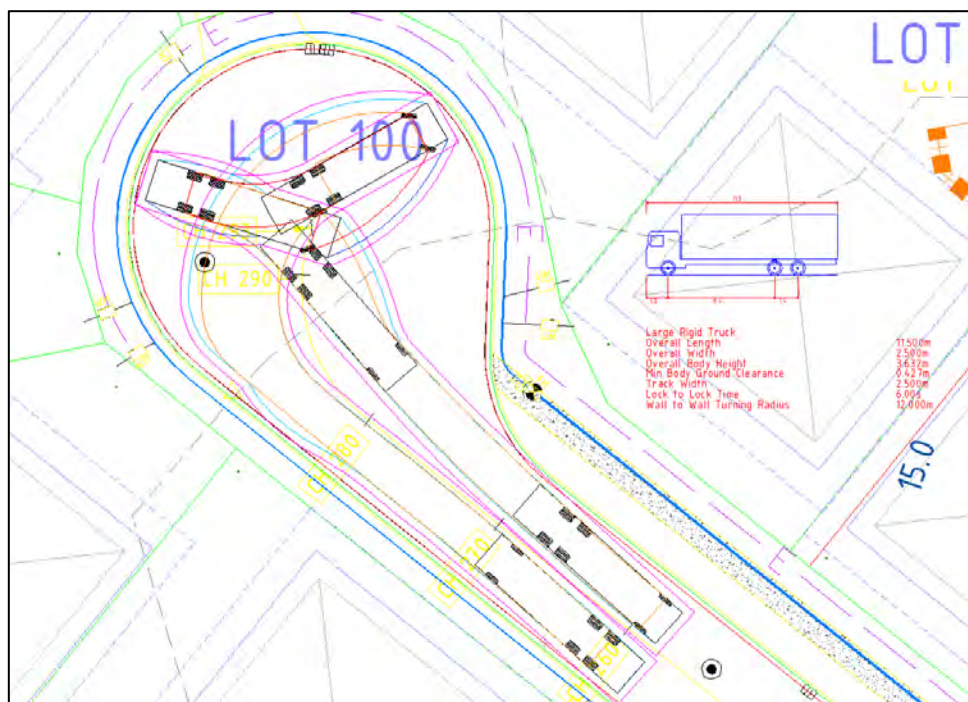


Figure 13: Cul-de-sac (LRT)

The configuration of the cul-de-sac is considered to be suitable for the intended use and meets the requirements of the FNDCEs⁸.

4.2 Common Access (Lot 101)

The common access will connect with the private road at the end of the cul-de-sac. This position ensures that there will be very good sightlines along the private road.

The common access will provide a connection to Lot 10 and Lot 11 and the proposed wetland. The common access could also potentially provide access to lot 9 and lot 12, depending on the layout of the future dwellings and the associated parking and access. On this basis, the common access will serve between 2 and 4 residential lots.

The configuration of the common access is shown in the following plan.

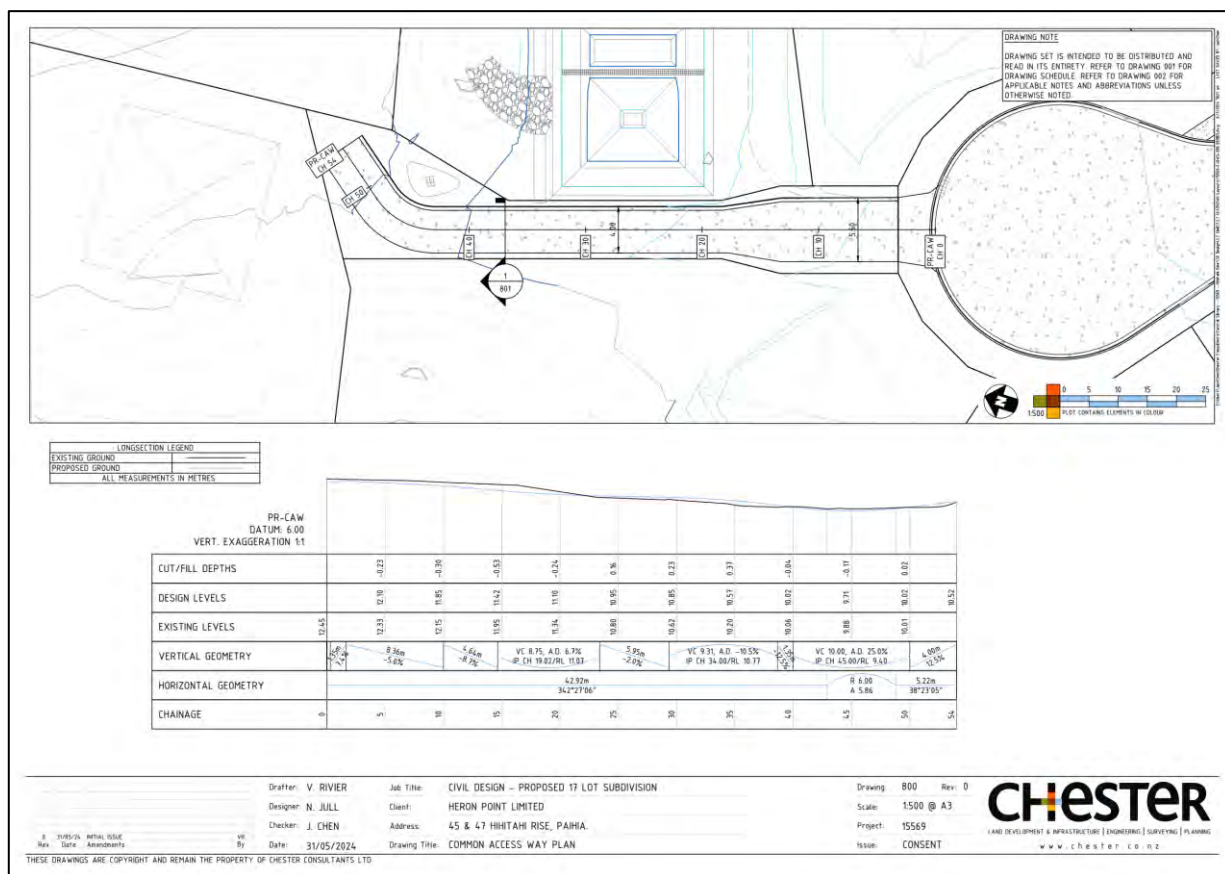


Figure 14: Common Access

As can be seen above the common access will be 5.5 metres wide for the first 15 metres and then narrow to 4 metres for the remainder of the access. The wide section at the intersection with private road will accommodate two-way traffic movements at the entrance.

These widths meet the FNDCEs requirements for private accessways that serve between 2 and 4 dwellings⁹.

The configuration of the common access is considered to be suitable for the intended use.

⁸ FNDCEs 3.2.16.2 Cul-de-sac Head Design

⁹ FNDCEs Table 3-16: Minimum Width Requirements – Private Accessways

4.3 Access to Development Lots

Access to each individual development lot will be considered when each lot is developed, with actual locations and configurations being based on the design of the individual dwellings and associated parking.

However, the subdivision layout has considered access to each of the properties, with gentle slopes being provided on development lots adjacent to the road, which will accommodate compliant driveway gradients.

The only exception to this is Lot 17, where the lot drops away for the road at a significant grade, however this gradient issue could potentially be overcome by providing a parking pad within the property at road level.

However, to provide a practical alternative arrangement, two parking spaces will be provided on the private road adjacent to lot 17. These parking spaces will be legally allocated for the exclusive use of lot 17 and will allow the design of a dwelling that does not necessarily require an elevated parking pad.

The proposed access arrangements for individual lots are considered to be suitable for the provision of future dwellings.

4.4 Traffic Generation

As previously discussed in Section 4.1, as required by the FNDCEs, the 'Trips & Parking Related to land use Nov 2011 – NZTA Research report 453' has been referred to. This document recommends a daily trip rate of 10.4 trips/dwelling. Application of this rate to 17 dwellings results in an estimated 177 daily vehicle movements and 18 vehicle movements during the peak hours¹⁰.

The likely direction that these vehicles will arrive from and depart to has been considered, with the directional assignment of these trips based on the following.

- The traffic generated by the development is likely to have a typical residential profile with an outbound bias in the morning and inbound bias in the evening (80/20 morning and 70/30 evening peak hour split).
- Given that the development is located near the northern end of Hihitahi Rise, 100% of traffic movements will be to and from the south on Hihitahi Rise. (all vehicle movements will be left turn in/right turn out)

Application of these directional assignments results in the following anticipated vehicle movements occurring at the connection to Hihitahi Rise during the weekday peak periods.

AM Peak Hour

- Left turn in: 18 trips x 20% = 4 vehicles/hour
- Right turn out: 18 trips x 80% = 14 vehicles/hour

PM Peak Hour

- Left turn in: 18 trips x 70% = 13 vehicles/hour
- Right turn out: 18 trips x 30% = 5 vehicles/hour

The number of estimated vehicle movements is considered to be low from a traffic engineering perspective and are not expected to result in any safety or operational issues at the site access, particularly due to the very low through traffic on Hihitahi Rise in the vicinity of the access.

The anticipated number of additional vehicle trips is low from a traffic operational perspective and is not expected to have any adverse effects on the surrounding network.

¹⁰ It is commonly assumed that 10% of daily trips occur during each peak hour.

5. Conclusion

This assessment considers the traffic related aspects of the Far North District Council Engineering Standards (FNDCEs).

The proposed development is considered to have very limited options in terms of public transport.

The reported crash history does not raise any concerns with regard to the current traffic operation in the vicinity of the site.

Due to the significant topographical and ecological constraints the provision of a dimensionally compliant 'Low Volume Access Road' is not possible. On this basis, the private road has the configuration of a 'Private Accessway' and has incorporated the configuration of a 'Low Volume Access' Road wherever possible.

The proposed cross-sections exceed all dimensional requirements for 'Private Accessways', but generally do not meet the dimensional requirements for 'Low volume Accessways'.

However, the proposed cross-sections of the Private Road are considered to be suitable for the intended use given that:

- The legal road width has no tangible traffic related effect, although a narrower corridor does provide visual 'side-friction' resulting in a lower speed environment.
- The carriageway width is suitable for simultaneous two-way traffic movements and will provide a relatively slow speed environment.
- The footpath is suitable for providing pedestrian access to the residential lots and will not have to accommodate any through pedestrian movements.

The proposed gradients of the private road are considered to be suitable for the intended use

The proposed vehicle crossing location and configuration is considered to be suitable for the intended use and is expected to operate without issue.

The configuration of the cul-de-sac is considered to be suitable for the intended use and meets the requirements of the FNDCEs.

The configuration of the common access is considered to be suitable for the intended use.

The proposed access arrangements for individual lots are considered to be suitable for the provision of future dwellings.

The number of estimated vehicle movements is considered to be low from a traffic engineering perspective and are not expected to result in any safety or operational issues at the site access, particularly due to the very low through traffic on Hihitahi Rise in the vicinity of the access.

The anticipated number of additional vehicle trips is low from a traffic operational perspective and is not expected to have any adverse effects on the surrounding network.

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PO Box 21-803, Henderson 0650,
Auckland



Appendix 12:
Relevant communications with Iwi and the Department of
Conservation.

From: [Lilli Crossland](#)
To: [Claire Booth](#)
Cc: [Lara McDonald](#)
Subject: RE: 47 Hihitahi Rise- Proposed Subdivision
Date: Thursday, 20 June 2024 9:13:53 am
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Hi Claire,

Firstly, thank you for sending through the file. We have had a meeting with our Operations Manager here at the Bay of Islands office and she is in principle supportive of the acquisition of that parcel of land on a conditional basis. What this would require is:

- a conservation value's report of the land to be gifted – I can try to find some examples of other reports for reference.
- All costs associated with Title being issued, as well as Sale and Purchase legal fees, and transfer fees through LINZ to be covered by Applicant.
- We would consider the wetland to be valuable also, and this could be included as one title, (wetland and land adjacent the forest)
- Possibly some consideration of fencing however this may not be required/possible.

If all things considered and you are able to meet those requirements, we would be happy to seek further approvals.

Let me know,
Lilli

From: Claire Booth <claire@thepec.co.nz>
Sent: Tuesday, June 18, 2024 10:37 AM
To: Lilli Crossland <lcrossland@doc.govt.nz>; Lara McDonald <lmcdonald@doc.govt.nz>
Subject: RE: 47 Hihitahi Rise- Proposed Subdivision

Thanks Lilli,

We are just getting the archaeology assessment updated to reflect the earthworks plans. We will also be applying for a Archaeology Authority for the site as well which we will need to engage with you on as well.

I have attached the final draft of the Civil Drawings. It is unlikely that these will change prior to the submission of the application.

When the archeology report is updated, I will send this over as well.

Let me know if you need anything else in the meantime.

Ngā mihi / Kind regards



Claire Booth

Planner BRP, MNZPI



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Working days are Monday, Tuesday, Thursday 9am - 4pm

From: Lilli Crossland <lcrossland@doc.govt.nz>

Sent: Tuesday, June 18, 2024 9:21 AM

To: Claire Booth <claire@thepc.co.nz>; Lara McDonald <lmcdonald@doc.govt.nz>

Subject: RE: 47 Hihitahi Rise- Proposed Subdivision

Hi Claire,

With your deadline for the end of June, I would suggest submitting to council as they will then approach us for comment regardless.

On our end, we have had a site visit and are currently seeking advice on acquiring the land however it seems to be a lengthy process.

In the meantime, are you able to send the finalised site plans and archaeological maps so that we can have a more fulsome comment.

Ngā mihi,

Lilli

From: Claire Booth <claire@thepc.co.nz>

Sent: Thursday, June 13, 2024 9:48 AM

To: Lilli Crossland <lcrossland@doc.govt.nz>; Lara McDonald <lmcdonald@doc.govt.nz>

Subject: 47 Hihitahi Rise- Proposed Subdivision

Hi Lilli and Lara,

Just wanting to check in to see if you had any further feedback for us on whether or not DoC would be interested in the wetland area of land as discussed at our meeting on the 28th of May.

Hoping to submit the application by the end of June so would be great if we could have some feedback by then.

As always happy to discuss.

Ngā mihi / Kind regards

Claire Booth



Planner BRP, MNZPI



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From: [Claire Booth](#)
To: info@northland@heritage.org.nz
Subject: Proposed Development at 47 Hihitahi Rise, Paihia- Archaeology Site.
Date: Monday, 22 July 2024 9:53:00 am
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[15569-V-DWG-SCHEME-0.pdf](#)
[image005.png](#)

Kia Ora,

I am getting in touch on behalf of my client who owns land at 47 Hihitahi Rise, Paihia, and the adjacent Lot 2 DP200205. We are aiming to lodge a resource consent to develop at 17 lot subdivision (and associated earthworks and vegetation removal) on the land on Friday.

There is an archaeology site within the Site Boundary. The site (Q05/1199) was recorded in 1996 after a lens of shell was identified in a test bore hole at a depth of 3m-4m below a thick layer of clay spoil. No further information is known about the site.

Based on the locational information that the Applicant has, the subdivision access road has been designed to avoid earthworks in this area. The archaeology site is not expected to be harmed as a result of the proposed development. However, given that the site has not been extensively earthworked in the past, there is a possibility that more unknown sites could be found as the earthworks progress. To mitigate and manage the effects of this risk, we will be applying for an Archaeology Authority to ensure that the correct protocols are followed during earthworks and in the event of the discovery of an item of significance.

We will need to consult with Heritage NZ through this process, (as well as DoC and Iwi).

Are you please able to advise what information you need to review as a part of the resource consent process and how you would like to be engaged? Is there anything I can send you ahead of submitting the resource consent with FNDC? I have attached the proposed scheme plan for your reference.

Look forward to hearing from you.

Ngā mihi / Kind regards



Claire Booth

Planner BRP, MNZPI



M: +64-21-422-079 W: www.thepec.co.nz E: claire@thepec.co.nz



Working days are Monday, Tuesday, Thursday 9am - 4pm

Claire Booth

From: Claire Booth
Sent: Monday, 22 April 2024 9:47 am
To: wiremu.t@tetiwaitangi.co.nz; ngatikawat@gmail.com; pita@nhht.co.nz; arapetahamilton@gmail.com; gm@teroroa.iwi.nz; Kipa Munro (kipa@ngatirehia.co.nz); honetiatoa@wenuarangatira.com
Subject: Proposed Subdivision- 47 Hihitahi Rise.

Kia Ora,

Hope you all had a lovely weekend. FNDC have kindly provided me with your contact details.

We are currently progressing with an application for subdivision at 47 Hihitahi Rise, Paihia on behalf of our clients (see location plan below).

The site is in a residential zone and backs on to the Opuia Forest. The current design of the scheme plan is to have 17 residential lots and a private accessway. The site contains a large wetland area that is connected to the coastal environment and the Opuia Forest.

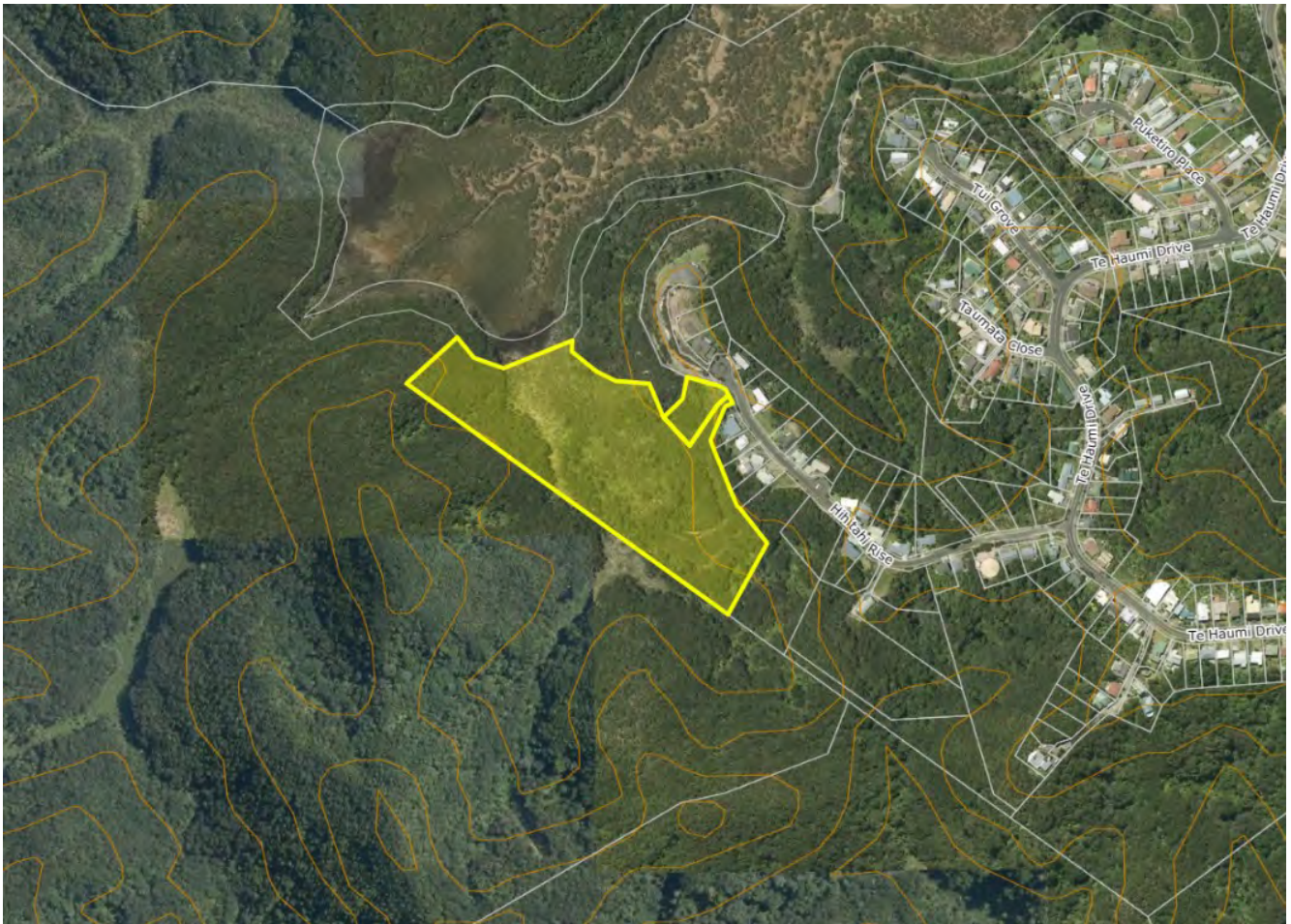
To enable the development of the site, a reasonably large area of vegetation needs to be cleared, as well as earthworks. The wetland is proposed to be held in its own title (or similar) and protected with appropriate pest management plans etc.

There is a registered archaeology site has been recorded on the property (Q05/1199). The site was recorded in 1996 after some shell was identified in a test bore hole 3 to 4m below the ground level. It is likely that this could be a midden. The design of the subdivision has been designed to avoid this location, however, the exact extent of the site is unknown as it has not been fully surveyed. As such, we will likely need to apply for an Archaeology Authority.

We would like to discuss the proposed development with you on behalf of your iwi/hapu prior to submission of the Resource Consents to FNDC. We are aiming to submit the application before the end of May. Would there be a time that is suitable to meet with you to discuss the application? Either online or in person.

The scheme plan is still being developed, so I will send through a copy of this for consideration in the next week. We should have details of the area of vegetation needing to be cleared and a general idea on earthworks volumes at this time.

Look forward to hearing from you.



Ngā mihi / Kind regards



Claire Booth

Planner BRP, MNZPI



THE **PLANNING**
COLLECTIVE

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Appendix 13:

Relevant objectives and policies from the FNDC- Operative Plan.

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7 URBAN ENVIRONMENT

CONTEXT

Redistribution and increase of population in the District is causing a demand for the expansion of some settlements. This has the potential to cause significant effects on the environment. In particular, urban expansion requires the provision of infrastructure (roads, electricity, telecommunications, water supplies, sewage and stormwater disposal systems, and community facilities such as parks and reserves, public parking, libraries and halls). It also results in a demand for residential, commercial, industrial and community activity.

Some other settlements have declining populations and a consequent decline in associated urban activities. This can have the effect of creating a surplus of infrastructure for the activities which wish to utilise them. These resources, such as buildings, roads and service infrastructure, cannot be moved to another location. Enabling people and communities to provide for their well-being by the use of such physical resources in innovative ways which do not have significant adverse effects on the environment is as important as managing development in expanding communities.

The various urban areas within the District have distinct, and often unique, amenity values. It is this variety which contributes to the diversity of the District and to the quality of life of its residents.

Amenity is protected in this Plan by providing separate zones for housing, industry and commerce, and by establishing appropriate thresholds. The thresholds reflect the different levels of sensitivity to environmental effects of the various urban activities.

A consequence of urban development is an increase in the area of impermeable surfaces. This in turn can affect the speed, volume and quantity of runoff into streams and rivers and can result in a significant deterioration of the natural environment of streams, rivers and the coast. This can be minimised through the use of Low Impact Design principles and through catchment-based management measures.

7.1 ISSUES

- 7.1.1 The demand for development which leads to urban expansion and the potential for this expansion to adversely affect the character and amenity of the areas in which it occurs.
- 7.1.2 The intensity of urban development generates a need for community-based utility services, in order to avoid adverse effects on the environment.
- 7.1.3 The adverse effects on communities of under-utilised buildings and infrastructure.
- 7.1.4 Amenity values within urban areas can be adversely affected by inappropriate subdivision, use and development.
- 7.1.5 Urban development results in an increase in impermeable surfaces and a risk of environmental degradation of streams, rivers and the coast and the habitats of flora and fauna that they contain.
- 7.1.6 Urban development leads to an increased demand for water in a District where there are summer shortfalls.
- 7.1.7 Increasing the intensity of urban development may generate more traffic and a demand for roads and access to them.

7.2 ENVIRONMENTAL OUTCOMES EXPECTED

- 7.2.1 Urban areas developed in a manner that promotes sustainable management of natural and physical resources, while preserving the distinctive character and amenity of each area.
- 7.2.2 Urban areas where a wide range of activities are provided for in a manner which ensures that adverse effects on the environment are avoided, remedied or mitigated.
- 7.2.3 Urban areas containing a variety of residential and non-residential environments, providing for a level of amenity which is appropriate to the particular environment.

7.3 OBJECTIVES

- 7.3.1 To ensure that urban activities do not cause adverse environmental effects on the natural and physical resources of the District.
- 7.3.2 To enable the continuing use of buildings and infrastructure in urban areas, particularly where these are under-utilised.

- 7.3.3 To avoid, remedy or mitigate the adverse effects of activities on the amenity values of existing urban environments.
- 7.3.4 To enable urban activities to establish in areas where their potential effects will not adversely affect the character and amenity of those areas.
- 7.3.5 To achieve the development of community services as an integral and complementary component of urban development.
- 7.3.6 To ensure that sufficient water storage is available to meet the needs of the community all year round.

7.4 POLICIES

- 7.4.1 That amenity values of existing and newly developed areas be maintained or enhanced.
- 7.4.2 That the permissible level of effects created or received in residential areas reflects those appropriate for residential activities.
- 7.4.3 That adverse effects on publicly-provided facilities and services be avoided or remedied by new development, through the provision of additional services.
- 7.4.4 That stormwater systems for urban development be designed to minimise adverse effects on the environment.
- 7.4.5 That new urban development avoid:
 - (a) adversely affecting the natural character of the coastal environment, lakes, rivers, wetlands or their margins;
 - (b) adversely affecting areas of significant indigenous vegetation or significant habitats of indigenous fauna;
 - (c) adversely affecting outstanding natural features, landscapes and heritage resources;
 - (d) adversely affecting the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga;
 - (e) areas where natural hazards could adversely affect the physical resources of urban development or pose risk to people's health and safety;
 - (f) areas containing finite resources which can reasonably be expected to be valuable for future generations, where urban development would adversely affect their availability;
 - (g) adversely affecting the safety and efficiency of the roading network;
 - (h) the loss or permanent removal of highly productive and versatile soils from primary production due to subdivision and development for urban purposes.
- 7.4.6 That the natural and historic heritage of urban settlements in the District be protected (refer to **Chapter 12**).
- 7.4.7 That urban areas with distinctive characteristics be managed to maintain and enhance the level of amenity derived from those characteristics.
- 7.4.8 That infrastructure for urban areas be designed and operated in a way which:
 - (a) avoids remedies or mitigates adverse effects on the environment;
 - (b) provides adequately for the reasonably foreseeable needs of future generations; and
 - (c) safeguards the life-supporting capacity of air, water, soil and ecosystems.
- 7.4.9 That the need for community services in urban areas is recognised and provided for.

7.5 METHODS OF IMPLEMENTATION

DISTRICT PLAN METHODS

- 7.5.1 **Policies 7.4.1, 7.4.2** and **7.4.7** are implemented through patterns of zoning appropriate to each urban area and the zone rules in the Plan.
- 7.5.2 **Policies 7.4.3, 7.4.4** and **7.4.9** are implemented through controls on subdivision applications (**Chapter 13**) and on applications for land use consents.
- 7.5.3 Methods in **Chapter 12 - Natural and Physical Resources**, together with the zoning pattern, will achieve **Policies 7.4.5, 7.4.6** and **7.4.8**.

12.7 LAKES, RIVERS, WETLANDS AND THE COASTLINE

Wai

Ma te wai, ka ora ai nga mea katoa. Kia tupato te whakahaere mahi o tena, kia u tonu ki te mauri.

Water

Water has a vital quality that nourishes all living things. Let us ensure its purity to retain that essential life force - the mauri of the water

CONTEXT

Note: For the purposes of this chapter “lakes” include the Waingaro and Manuwai Reservoirs.

The Far North District has an extensive coastline, eight harbours, estuaries, many rivers and streams, lakes and wetlands. The health of these water bodies is vital to sustaining all kinds of life. Human activity, however, can lead to contamination of the water, reduced water quantity and consequential loss of habitats. For example, Lake Omapere and a number of small west coast dune lakes have been contaminated by nutrients and other material in rural run-off to the extent that they are no longer suitable for their indigenous aquatic ecosystems, contact recreation or water supplies, and have degraded aesthetic values. Also, there are several inner harbours and estuaries which, due to contamination from rivers, do not meet the very high standards for shellfish gathering, cultivation, or human consumption e.g. Kawakawa estuary, some areas of the inner Bay of Islands and inner Whangaroa harbour (refer to s17/4 of the Regional Policy Statement for Northland). Maintaining water quality and quantity is therefore fundamental if sustainable management of natural and physical resources is to be achieved.

The District has a surprising scarcity of high quality water resources, despite its large land area. Most of the rivers and streams are relatively short with small catchments which means that sources of potable water are limited. Conserving water quantity is therefore very important, particularly in catchments near to settlements that have the capacity to be utilised as potable water supplies.

Pollution by rural and urban run-off contaminated from non-point source discharges and stormwater is a major cause of deteriorating water quality. Degradation of water quality can have an adverse impact on visual and amenity values. The Northland Regional Council and Far North District Council jointly share responsibility for ensuring that pollution from this, and all other sources, is minimised. While the Northland Regional Council is responsible for the control of discharges of contaminants to air, land and water, and for the use of land and water for the maintenance and enhancement of water quality, Far North District Council has primary responsibility for the subdivision, use and development of land, and for the control of activities on the surface of water. Thus, Far North District Council can manage the location of buildings, impervious surfaces and effluent disposal in relation to riparian margins as one method of addressing the effects of activities on water quality. The Council can also, through its own Strategic and Annual Plans, set priorities for the public provision of stormwater systems and adopt best management practices when implementing its works programme. Accordingly, the Plan provisions are designed to complement those of the Regional Policy Statement and Regional Water and Soil Plan.

Public access to the margins of rivers, lakes and the coastline is highly sought after. In particular, tangata whenua have an interest in gaining access, via traditional paths, to food-gathering areas. Also, there is considerable demand for residential properties with beach frontage and/or sea views, especially along the eastern coastline. As a result, subdivision offers many opportunities to acquire riparian margins and to secure public access where appropriate. This includes the opportunity to have unformed legal road vested as esplanade reserve. However, it will not always be wise to facilitate public access because of conservation, amenity, landscape, heritage, cultural and spiritual values, or topography or safety reasons. In such cases, public acquisition of the riparian margins may be justified in order to protect and preserve those special values.

Historically, some settlements have developed close to, or over, the coast e.g. Mangonui and Rawene. These are recognised as having a special character and are therefore identified as heritage precincts. Some activities also have a need to be located close to, or over, the boundary of the coastal marine area. Where there is a functional need of this kind, the Plan recognises and provides for the circumstances in which development can occur.

Where development occurs within the coastal marine area (under the jurisdiction of the Northland Regional Coastal Plan) there may be adverse effects that occur on the land i.e. within the District. For example, parking associated with marinas can cause traffic problems and loss of amenity in coastal settlements. Co-operation between the two Councils is essential to ensure that all of the adverse effects of an activity located in the coastal marine area are adequately addressed when resource consents are considered. This is one of several cross-boundary issues which need to be resolved.

12.7.1 ISSUES

- 12.7.1.1 Land use and subdivision activities adjoining or on lakes, rivers, wetlands or the coastline can reduce their amenity and natural values, including the quality and quantity of water. However, there is significant opportunity to restore, rehabilitate and revegetate these areas through the application of methods set out in this Plan.
- 12.7.1.2 Wetlands can be adversely affected by land drainage, modification of the natural water levels, vegetation clearances, filling, polluted run-off and stock, reducing the effectiveness of their natural functions of buffering water flows and providing habitat.
- 12.7.1.3 Some activities depend on being located right next to the water, such as port facilities, shore-based facilities for marine farming, jetties and boatyards, and there is a need to provide for these activities in a way which minimises adverse effects on the natural character of lakes, rivers and the coastline.
- 12.7.1.4 Recognising and providing for the historic pattern of settlement in some towns whereby buildings are located very close to, or even over, the water.
- 12.7.1.5 Access to lakes, rivers and the coastline is generally inadequate compared to demand from tangata whenua, residents and visitors. An important way this can be addressed at the time of subdivision as for example in a management plan but, at the same time, there are some places which are inappropriate for public access because of conservation, cultural, heritage, and spiritual values, or topography or safety reasons.
- 12.7.1.6 Impervious surfaces increase run-off to natural water bodies which can alter their habitat values and physical form through scour and sediment deposition, adversely affect water quality and reduce water quantity in ground and surface water bodies.
- 12.7.1.7 The degradation of the mauri and wairua of water bodies and adverse effects on kaimoana due to pollution.
- 12.7.1.8 Human activities can create and exacerbate the risk of erosion and other natural hazards in riparian areas.
- 12.7.1.9 Vehicles on beaches can have adverse effects, impacting on dune stability, and dune and coastal flora and fauna. Domestic pets, particularly dogs, can have adverse effects on species dependent on riparian areas and the coastal margin. Stock grazing in riparian margins can have adverse effects on habitat values, natural hazards and on water quality.

12.7.2 ENVIRONMENTAL OUTCOMES EXPECTED

- 12.7.2.1 Use of lakes and rivers which is appropriate in terms of the preservation of the natural character and values of these areas.
- 12.7.2.2 Riparian margins are enhanced.
- 12.7.2.3 Activities on, or adjoining, the surface of water bodies are carried out in a way which avoids, remedies or mitigates adverse effects on the environment.
- 12.7.2.4 Buildings and other impervious surfaces generally set back far enough from riparian margins including from the coastal marine area, so that esplanade reserves, strips or other forms of protection can be achieved in the future if required, except in locations where the types of activity or historic patterns demand otherwise.
- 12.7.2.5 Enhanced public access to and along lakes, rivers and the coastal marine area.
- 12.7.2.6 A reduction in the rate of loss or adverse modification of indigenous wetlands.

12.7.3 OBJECTIVES

- 12.7.3.1 To avoid, remedy or mitigate the adverse effects of subdivision, use and development on riparian margins.
- 12.7.3.2 To protect the natural, cultural, heritage and landscape values and to promote the protection of the amenity and spiritual values associated with the margins of lakes, rivers and indigenous wetlands and the coastal environment, from the adverse effects of land use activities, through proactive restoration/rehabilitation/revegetation.
- 12.7.3.3 To secure public access (including access by Maori to places of special value such as waahi tapu, tauranga waka, mahinga kai, mahinga mataitai, mahinga waimoana and taonga raranga) to

and along the coastal marine area, lakes and rivers, consistent with **Chapter 14 - Financial Contributions**, to the extent that this is compatible with:

- (a) the maintenance of the life-supporting capacity of the waterbody, water quality, aquatic habitats, and
- (b) the protection of natural character, amenity, cultural heritage, landscape and spiritual values; and
- (c) the protection of public health and safety; and
- (d) the maintenance and security of authorised activities (but acknowledging that loss of privacy or fear of trespass are not valid reasons for precluding access).

In some circumstances public acquisition of riparian margins may be required and managed for purposes other than public access, for example to protect significant habitats, waahi tapu or historic sites, or for public recreation purposes.

- 12.7.3.4 To provide for the use of the surface of lakes and rivers to the extent that this is compatible with the maintenance of the life supporting capacity of the water body, water quality, aquatic habitats, and the protection of natural character, amenity, cultural heritage, landscape and spiritual values.
- 12.7.3.5 To avoid the adverse effects from inappropriate use and development of the margins of lakes, rivers, indigenous wetlands and the coastline.
- 12.7.3.6 To protect areas of indigenous riparian vegetation:
 - (a) physically, by fencing, planting and pest and weed control; and
 - (b) legally, as esplanade reserves/strips.
- 12.7.3.7 To create, enhance and restore riparian margins.

12.7.4 POLICIES

- 12.7.4.1 That the effects of activities which will be generated by new structures on or adjacent to the surface of lakes, rivers and coastal margins be taken into account when assessing applications.
- 12.7.4.2 That land use activities improve or enhance water quality, for example by separating land use activities from lakes, rivers, indigenous wetlands and the coastline, and retaining riparian vegetation as buffer strips.
- 12.7.4.3 That adverse effects of land use activities on the natural character and functioning of riparian margins and indigenous wetlands be avoided.
- 12.7.4.4 That adverse effects of activities on the surface of lakes and rivers in respect of noise, visual amenity of the water body, life supporting capacity of aquatic habitats, on-shore activities, the natural character of the water body or surrounding area, water quality and Maori cultural values, are avoided, remedied or mitigated.
- 12.7.4.5 That activities which have a functional relationship with waterbodies or the coastal marine area be provided for.
- 12.7.4.6 That public access to and along lakes, rivers and the coastline be provided as a consequence of development or as a result of Council (see **Method 10.5.19**) or public initiatives except where it is necessary to restrict access or to place limits on the type of access, so as to:
 - (a) protect areas of significant indigenous vegetation and/or significant habitats of indigenous fauna or
 - (b) protect cultural values, including Maori culture and traditions; or
 - (c) protect public health and safety;to the extent that is consistent with policies in **Chapter 14**.
- 12.7.4.7 That any adverse effects on the quality of public drinking water supplies from land use activities, be avoided, remedied or mitigated. (Refer to **Commentary** and **Methods 12.7.5.6** and **12.7.5.7**.)
- 12.7.4.8 That the Council acquire esplanade reserves, esplanade strips and access strips in accordance with **Chapter 14 - Financial Contributions** and **Method 10.5.10** of the Plan.
- 12.7.4.9 That riparian areas in Council ownership be managed so as to protect and enhance the water quality of surface waters.
- 12.7.4.10 That historic buildings erected close to, or over, water bodies be protected and provision be made for new buildings where this form of development is in keeping with the historic pattern of settlement.

- 12.7.4.11 That the extent of impervious surfaces be limited so as to restore, enhance and protect the natural character, and water quantity and quality of lakes, rivers, wetlands and the coastline.
- 12.7.4.12 That provision be made to exempt activities on commercial or industrial sites from the need to be set back from the coastal marine area, and from the need to provide esplanade reserves on subdivision or development, where the location of the commercial or industrial site is such as to be particularly suited to activities that cross the land-water interface, or have a close relationship to activities conducted in the coastal marine area. Refer also to **Rule 14.6.3**.
- 12.7.4.13 That provision be made to exempt activities on particular sites as identified in the **District Plan Maps** as adjacent to an MEA from the need to be set back from the coastal marine area where those activities on that site have a functional relationship with marine activities and cross the line of Mean High Water Springs (MHWS).
- 12.7.4.14 That the efficient use of water and water conservation be encouraged.
- 12.7.4.15 To encourage the integrated protection and enhancement of riparian and coastal margins through:
- planting and/or regeneration of indigenous vegetation;
 - pest and weed control;
 - control (including, where appropriate, exclusion) of vehicles, pets and stock.
- Note:** The Regional Coastal Plan for Northland and Regional Water and Soil Plan for Northland contain policies, rules and other methods to protect and enhance wetlands, lakes, rivers and the coastal marine area. Vehicle, pet and stock control is particularly important in areas and at times when birds are nesting.

12.7.5 METHODS OF IMPLEMENTATION

DISTRICT PLAN METHODS

- 12.7.5.1 Objectives and policies will be implemented through rules in this Section and through minimum site sizes and other provisions specified in **Chapter 13 Subdivision** and **Chapter 14 Financial Contributions**.
- 12.7.5.2 Through provisions in this section, and elsewhere in **Chapter 12**, encourage the planting of vegetation and particularly indigenous vegetation on the margins of lakes, rivers, wetlands and the coastal marine area.
- 12.7.5.3 Identify areas in the Plan where development up to the land-water interface will be provided for. The types of development anticipated to be provided for in this manner include:
- river crossings and activities associated with their construction;
 - pump houses;
 - legally formed and maintained roads;
 - buildings and impermeable surfaces associated with utility services;
 - activities associated with maintenance, replacement and upgrading of network utilities;
 - other activities (including structures) which cross the land/water interface; and
 - activities (including structures) which have a close relationship to activities conducted within the coastal marine area.

The areas identified as Maritime Exemption Areas are generally those that are zoned Commercial and/or Industrial in the District Plan and where the adjoining coastal marine area is zoned in the Regional Coastal Plan for Northland as Marine 6 (Wharves) Management Area.

OTHER METHODS

- 12.7.5.4 Improve physical access to, and along existing esplanade reserves and strips, and marginal strips where appropriate. This will be achieved through the Council setting priorities for expenditure from reserves accounts in its Annual and Strategic Plans.
- 12.7.5.5 The Council may require (under s77 and s229 of the Act and/or fund the purchase of (under s237F of the Act) esplanade reserves and/or access strips where new sites are created adjacent to lakes, rivers, indigenous wetlands and the coastal marine area. To this end, Council has identified some riparian areas in the Kerikeri area that, because of their high recreational or conservation value, will be given priority when determining requirements for esplanade reserves or strips (shown as **Esplanade Priority Areas** on the **Zone Maps**). Refer also to **Method 10.5.19**.

12.2 INDIGENOUS FLORA AND FAUNA

Nga Tamariki Tuturu A Tane

I mua atu, ki pai nga tamariki tuturu Maori e noho ana i roto i te Waonui o Tane. I tenei wa, tiakina aua taonga ka mahue, me te whakahoki i aua mea e ngaro haere ana.

Indigenous Flora and Fauna

This land was once clothed in native forest and plants with an abundance of birds and other living creatures. Let us conserve what remains and restore what has been depleted.

CONTEXT

The Far North District contains some of the most distinctive ecological districts in New Zealand with an exceptional biological diversity. While most natural areas have been extensively modified by man, the District retains a large number of valuable habitats with a wide variety of wildlife. These include some species that are endemic to Northland, and others which are nationally threatened or declining.

Key types of natural areas include:

- freshwater wetlands;
- podzol gumfields;
- dunelands and dune lakes;
- coastal broadleaf forests;
- volcanic broadleaf forests;
- podocarp forests;
- kauri forests;
- alluvial flood plain and riverine forests;
- saltmarsh;
- swamp forests and shrublands.

The District contains the main or only populations of several threatened species, as well as containing habitats that support a very large number of other nationally threatened species. The District also contains a high number of endemic species, i.e. species that are found only locally. Examples of threatened species are the North Island brown kiwi, kukupa (wood pigeon), large Bartlett's tree rata, the Northland green gecko and the Northland black mudfish.

Many habitats are under threat from modification and/or destruction by human activities. Particularly scarce or threatened habitats are dune systems (including dune lakes), scrub and shrublands (including gumlands), coastal forest remnants, swamp forests, fertile swamps and peat bogs. In addition, pests damage indigenous vegetation by browsing and cause loss of indigenous fauna by predation. Weed invasion is also a problem. Thus, human activities and the presence of pests and weeds reduce ecosystem quality.

Not only is there exceptional biodiversity in the Far North District, but the area of indigenous vegetation and habitat of indigenous fauna is also very large compared to neighbouring local authorities, and probably most other districts in New Zealand (Whangarei District has only 48,000 ha and Kaipara has only 40,000 ha). Of a total land area of 684,000 ha, approximately 239,000 ha has been identified as "significant". This identification was carried out through the Department of Conservation's SNA survey programme, adapted from the previous Protected Natural Areas (PNA) Programme. This data has undergone at least two reviews both by the Department itself and independently and will continue to be updated.

The PNA programme identifies some 35% of the total land area of the District as ecologically important. Of this area, just over half is in private ownership. Most privately owned land is not formally protected (by covenant or other means). The private owners are primarily responsible for the management of this land, although the regional council has a responsibility for weed, pest and erosion control. Part of the reason for the large area of land identified as significant indigenous vegetation and significant habitats of indigenous fauna is that the climate and geography of the District have contributed to a great diversity of indigenous flora and fauna. The District is renowned for a high rate of natural reversion. Another part of the reason is that the geography of the District did not permit the large-scale forest clearance for the early milling and farming purposes that occurred on the more fertile and easier contoured land in the adjoining districts.

The exceptional biodiversity and extensive areas of indigenous vegetation and habitat have implications for the choice of methods adopted to meet the requirements of s6(c) of the Act. A wide range of methods is required to better achieve protection.

The Act requires that areas of significant indigenous vegetation and significant habitats of indigenous fauna are protected. In evaluating the "significance" of an area, the criteria set out in Appendix III of the Northland Regional Policy Statement will be applied. Areas identified in the PNA programme as being internationally or nationally important will have the highest priority when allocating resources to assist with their protection.

The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development is a matter of national importance. Many rare and threatened habitats are located within the coastal environment and contribute to its natural character. Therefore there is a dual onus on the Council to ensure that the Plan contains methods for achieving their protection.

The Act requires protection but does not specify how protection is to be achieved. However, it is obvious that a basic requirement for protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna is that such areas are not removed. Sustainable management also involves controlling plants and animals, which adversely affect indigenous ecosystems. An important goal is to achieve widespread commitment to the active protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna on public and private property.

At a minimum, having a representative sample of important habitats and ecosystems under some form of protection is essential as this ensures that biodiversity is maintained and enhanced and promotes amenity. However, it is not sufficient to rely upon public ownership alone to achieve the purposes of the Act. Sustainable management requires a comprehensive approach to the protection and active management of areas of Public land administered by the Department of Conservation and other significant indigenous vegetation and significant habitats of indigenous fauna, and this approach must involve the private landowners who have stewardship over this important resource.

The requirement to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna must be seen in the light of the over-arching purpose of the Act (s5), which is "to promote the sustainable management of natural and physical resources". This includes enabling people and communities to provide for their social, economic and cultural well being, provided that the life supporting capacity of ecosystems is safe guarded and adverse effects are avoided, remedied or mitigated. This is particularly important for certain sectors of the community where their ability to provide for their economic, social and cultural wellbeing is restricted by land tenure and where the high rate of reversion means that vegetation can become significant quite quickly.

The Far North is fortunate to have one of the largest populations of North Island brown kiwi in the country. Council holds indicative maps of high and medium density kiwi habitat and will make that information freely available. Council recognises high-density kiwi habitat as significant habitat in terms of the relevant provisions of the Plan. Kiwis are still under threat in the Far North, especially from predation by cats, dogs and mustelids but increasingly more are dying on our roads. Council has a range of measures aimed at protecting or enhancing kiwi habitat including advocacy and education, conditions on consents in areas of confirmed high-density kiwi habitat, and use of other procedures such as the Dog Control Act.

12.2.1 ISSUES

- 12.2.1.1 The Far North District contains a higher number of rare and threatened indigenous flora and fauna than any other district in New Zealand and these species are inadequately protected.
- 12.2.1.2 Loss or degradation of significant indigenous vegetation and significant habitats of indigenous fauna has occurred as a result of several factors, including human activity; pressure from pests, browsing and predation, invasion by weed species, stock grazing and inappropriate vehicle use.
- 12.2.1.3 The extensive areas of indigenous vegetation and habitats of indigenous fauna, and the implications of this scale when choosing methods that promote their protection and active management, is an issue.
- 12.2.1.4 A large proportion of the as yet unprotected significant indigenous vegetation and significant habitats of indigenous fauna is privately owned, giving rise to questions of equity if protection of this land constrains otherwise normal rural activities and affects economic wellbeing as part of sustainable management .
- 12.2.1.5 Areas of indigenous vegetation have become fragmented with a resulting loss of the natural corridors, which facilitate migration of fauna between areas.
- 12.2.1.6 The existence of habitats for indigenous species in exotic vegetation (e.g. pine forests) is an important component of the ecosystem, which requires recognition.
- 12.2.1.7 There is an ongoing need to ensure there is public awareness about the values of indigenous ecosystems and the threat to them, which arises from human activity.
- 12.2.1.8 Loss of indigenous vegetation can have adverse effects on landscape.

- 12.2.1.9 Loss of biodiversity due to inadequate management of areas of indigenous flora and fauna.
- 12.2.1.10 High rates of reversion can limit landowners' ability to provide for their economic and social wellbeing.

12.2.2 ENVIRONMENTAL OUTCOMES EXPECTED

- 12.2.2.1 Population numbers of rare and threatened species of flora and fauna are maintained or increased and their habitat enhanced.
- 12.2.2.2 Existing areas of significant indigenous vegetation and significant habitats of indigenous fauna do not suffer further degradation, and are, where possible, managed to enhance the area, and new and/or alternative areas are developed.
- 12.2.2.3 The District's exceptional biological diversity, including its high level of endemism, is maintained and enhanced for national benefit.
- 12.2.2.4 An increase in those areas of significant indigenous vegetation and significant habitats of indigenous fauna, which are formally protected.
- 12.2.2.5 The people of the Far North will have an increased awareness of the indigenous biodiversity of the area and a stronger commitment to its protection and enhancement.

12.2.3 OBJECTIVES

- 12.2.3.1 To maintain and enhance the life supporting capacity of ecosystems and the extent and representativeness of the District's indigenous biological diversity.
- 12.2.3.2 To provide for the protection of, and to promote the active management of areas of significant indigenous vegetation and significant habitats of indigenous fauna.
- 12.2.3.3 To recognise issues of wellbeing including equity for landowners in selecting methods of implementation.
- 12.2.3.4 To promote an ethic of stewardship.

12.2.4 POLICIES

- 12.2.4.1 That areas of significant indigenous vegetation and significant habitats of indigenous fauna be protected for the purpose of promoting sustainable management with attention being given to:
 - (a) maintaining ecological values;
 - (b) maintaining quality and resilience;
 - (c) maintaining the variety and range of indigenous species contributing to biodiversity;
 - (d) maintaining ecological integrity; and
 - (e) maintaining tikanga Maori in the context of the above.

Note: In determining whether a subdivision, use or development is appropriate in areas containing significant indigenous vegetation and significant habitats of indigenous fauna, Council shall consider each application on a case by case basis, giving due weight to Part II of the Act as well as those matters listed above.
- 12.2.4.2 That the significance of areas of indigenous vegetation be evaluated by reference to the criteria listed in Appendix III of the Northland Regional Policy Statement (refer also to definition of "significant" in **12.2.5.6**).
- 12.2.4.3 That adverse effects on areas of significant indigenous vegetation and significant habitats of indigenous fauna are avoided, remedied or mitigated by:
 - (a) seeking alternatives to the disturbance of habitats where practicable;
 - (b) managing the scale, intensity, type and location of subdivision, use and development in a way that avoids, remedies or mitigates adverse ecological effects;
 - (c) ensuring that where any disturbance occurs it is undertaken in a way that, as far as practicable:
 - (i) minimises any edge effects;
 - (ii) avoids the removal of specimen trees;
 - (iii) does not result in linkages with other areas being lost;
 - (iv) avoids adverse effects on threatened species;
 - (v) minimises disturbance of root systems of remaining vegetation;
 - (vi) does not result in the introduction of exotic weed species or pest animals;

- (d) encouraging, and where appropriate, requiring active pest control and avoiding the grazing of such areas.
- 12.2.4.4 That clearance of limited areas of indigenous vegetation is provided for.
- 12.2.4.5 That the contribution of areas of indigenous vegetation and habitats of indigenous fauna to the overall biodiversity and amenity of the District be taken into account in evaluating applications for resource consents.
- 12.2.4.6 That support is given to programmes for weed and pest control, including support for community pest control areas established by the Northland Regional Council under the Regional Pest Management Strategies, in areas of significant indigenous vegetation and significant habitats of indigenous fauna and surrounding lands.
- 12.2.4.7 That community awareness of the need and reasons for protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna be promoted.
- 12.2.4.8 That restoration and enhancement of indigenous ecosystems is based on plants that would have occurred naturally in the locality and is sourced from local genetic stock where practicable.
- 12.2.4.9 That the Council will work with landowners and communities to ensure outcomes are achieved in an effective and equitable manner.
- 12.2.4.10 In order to protect areas of significant indigenous fauna:
- (a) that dogs (excluding working dogs), cats, possums, rats, mustelids and other pest species are not introduced into areas with populations of kiwi, dotterel and brown teal;
 - (b) in areas where dogs, cats, possums, rats, mustelids and other pest species are having adverse effects on indigenous fauna their removal is promoted.
- 12.2.4.11 That when considering resource consent applications in areas identified as known high density kiwi habitat, the Council may impose conditions, in order to protect kiwi and their habitat.
- 12.2.4.12 That habitat restoration be promoted.
- 12.2.4.13 That the maintenance of riparian vegetation and habitats be recognised and provided for, and their restoration encouraged, for the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna, preservation of natural character and the maintenance of general ecosystem health and indigenous biodiversity.
- 12.2.4.14 That when considering an application to clear areas of significant indigenous vegetation or significant habitats of indigenous fauna, enabling Maori to provide for the sustainable management of their ancestral land will be recognised and provided for by Council.

12.2.5 METHODS OF IMPLEMENTATION

DISTRICT PLAN METHODS

- 12.2.5.1 Rules in the Plan monitor and control as far as is appropriate, subdivision and activities that could adversely affect areas of significant indigenous vegetation and significant habitats of indigenous fauna.
- 12.2.5.2 In all zones rules apply to the clearance of indigenous vegetation.
- 12.2.5.3 In Outstanding Landscapes and in regard to Outstanding Landscape Features, and Outstanding Natural Features, rules apply to the clearance of vegetation (see **Section 12.1**).
- 12.2.5.4 Policies in the Plan supporting initiatives for weed and pest control and habitat management be implemented, where practicable, when assessing applications for subdivision and land use consents and by financial assistance.
- 12.2.5.5 Incentives in the Plan encourage voluntary protection of indigenous vegetation and habitats of indigenous species.
- 12.2.5.6 The significance of indigenous vegetation and habitats will be assessed by reference to the criteria in Appendix III of the Northland Regional Policy Statement when processing applications for resource consent for land use or subdivision. These criteria are:
- (a) whether the area contains critical, endangered, vulnerable or rare taxa, or taxa of indeterminate threatened status (in the context of this clause, taxa means species and subspecies);
 - (b) whether the area contains indigenous or endemic taxa that are threatened or rare in Northland;

- (c) whether the area contains representative examples in an ecological district of a particular habitat type;
 - (d) whether the area has a high diversity of taxa or habitat types for the ecological district;
 - (e) whether the area forms an ecological buffer, linkage or corridor to other areas of significant vegetation or significant habitats of indigenous fauna;
 - (f) whether the area contains types that are rare in the ecological district;
 - (g) whether the area supports good populations of taxa which are endemic to the Northland or Northland-Auckland regions;
 - (h) whether the area is important for indigenous or endemic migratory taxa;
 - (i) whether the area supports viable populations of species, which are typical of that type of habitat within an ecological district and retain a high degree of naturalness.
- 12.2.5.7 Council retains the discretion to impose conditions on subdivision or land use consents within areas of confirmed high density kiwi habitat regarding the keeping of dogs and cats.
- 12.2.5.8 Council holds indicative maps showing both high and medium density kiwi habitat, and will make that information available on request.

OTHER METHODS

- 12.2.5.9 Non-regulatory methods and/or voluntary protection of areas of significant indigenous vegetation and habitat will be encouraged to complement regulatory methods of protection.
- 12.2.5.10 The Council will establish/appoint a Significant Natural Area (SNA) Committee (including representatives of Iwi, landowners and Council). The SNA Committee will meet regularly and be tasked with providing direction and impetus for meeting the Council's biodiversity protection functions. The SNA committee will, among other things, be expected to play a key role in assisting the Council in its formulation, evolution and delivery of education and advocacy programmes under this Plan whilst providing an interface between the District Council, Iwi, other agencies (in particular NRC and DoC), landowners, environmental groups and other interested parties. The role of the SNA Committee or its representative specifically includes:
- (a) issuing of a certificate exempting clearance under **Rule 12.2.6.3.1**;
 - (b) responding to requests from landowners who are not proposing clearance of indigenous vegetation or habitats, but who wish to offer voluntarily land for protection. In these cases, the SNA Committee or its representative will carry out an on-site inspection and discussion with the landowner;
 - (c) registration of areas which are to be voluntarily protected. The register will be held by the Council. Any offer from a landowner to register an area for voluntary protection should include the following information, which will be included on the register:
 - (i) the name and postal address of the owner of the property;
 - (ii) the terms of the voluntary protection, including the length of time for which the protection will exist;
 - (iii) willingness to sell land for the purpose of having it protected;
 - (iv) location of the area (an aerial photograph is preferable);
 - (v) the area to be registered;
 - (vi) description of the topography;
 - (vii) description of the vegetation or the habitat which is to be protected;
 - (viii) assessment of the resource management significance of the area;
 - (ix) description of the management measures which are proposed for the property (e.g. fencing, weed and pest control);
 - (x) description of the land use activities which are proposed (e.g. grazing/shelter for stock, watering of stock, harvesting of firewood, harvesting of timber for personal use in accordance with the provisions of the Forests Act 1949, revegetation);
 - (xi) any measures to restrict or exclude dogs and cats;
 - (xii) any proposals for the relocation of threatened species;
 - (xiii) any assistance which is sought from the Council in respect of the creation and management of the protected area;
 - (d) giving advice on land management to landowners and recommending to them how development of their land can be achieved while protecting areas of significant indigenous vegetation and habitats of indigenous species;
 - (e) making recommendations for allocating any money that is available to the Council from time to time for active management of protected areas;
 - (f) reporting to the Council from time to time concerning the success of any voluntary protection.

In carrying out an evaluation of the significance of indigenous vegetation and habitats, the SNA Committee or its representative will have regard for the criteria listed in Appendix III of the Northland Regional Policy Statement and in **Method 12.2.5.6**.

The SNA Committee or its representative will use the opportunity provided by site visits to update the Council's records of the aerial extent and ecological value of indigenous vegetation and habitats in the District.

12.2.5.11 The Council will progressively develop a database on indigenous vegetation areas and habitat. The database will include, but not be restricted to:

- (a) sites under statutory protection outside of the Act, e.g. covenanted areas, Nga Whenua Rahui, Queen Elizabeth II Trust covenants;
- (b) sites where legal protection has been secured under the Act, e.g. consent notices, conditions on resource consents;
- (c) sites volunteered by landowners for protection;
- (d) further potential sites, by reference to published information and surveys undertaken by qualified personnel;
- (e) areas covered by Plans and Permits granted under the Forests Act 1949;
- (f) known high density kiwi habitat.

Council will progressively develop maps of the District's significant indigenous vegetation and significant habitats of indigenous fauna, including confirmed high density kiwi habitat, as allowed for in the Long Term Council Community Plan and in collaboration with other key agencies, in particular the Department of Conservation and the Northland Regional Council.

12.2.5.12 Education is an important method. The Council will provide information to landowners and the public generally about the existence and value of indigenous vegetation and habitats and the management of them. Information on management practices that protect kiwi and other indigenous fauna in exotic forests will be provided.

12.2.5.13 The Council will postpone or remit rates where an area is afforded permanent legal protection through a covenant or reserves status where Council's Rates Remission Policy is met.

12.2.5.14 The Council will waive fees for resource consents, in full or in part, where an applicant offers to legally protect an area deemed to be significant under **Method 12.2.5.6** through a covenant or reserve status and may do so where the conditions of a consent achieve protection of indigenous vegetation and habitats of indigenous species.

12.2.5.15 The Council will make available incentives to private landowners for protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna.

12.2.5.16 Where appropriate Council will plant indigenous species on Council controlled land particularly where it involves riparian areas or degraded natural areas.

12.2.5.17 Council will liaise with relevant agencies when developing strategies, research proposals, making acquisitions or undertaking investigations relating to the management and protection of habitats of indigenous fauna and areas of indigenous vegetation.

12.2.5.18 The Council will approach those landowners who have participated in previous reviews to see whether formal protection can be achieved on a voluntary basis.

12.2.5.19 Council will give advice to landowners on sources of assistance available such as the Northland Regional Council Environment Fund, the Nature Heritage Fund, QE II National Trust and Nga Whenua Rahui.

12.2.5.20 Council will promote awareness of the adverse effects of introduced species on indigenous ecosystems and the role of the Biosecurity Act, Wild Animal Control Act and the Hazardous Substances and New Organisms Act in their management and control.

12.2.5.21 Where appropriate, Council may impose conditions on subdivision and land use consents to address the adverse effects of introduced species on indigenous ecosystems resulting from the subdivision or land use activity.

12.2.5.22 Council will ensure that any landscape plan approved as a condition of consent does not include any plant included in the "National Pest Plant Accord" (August 2001) administered by the Ministry of Agriculture and Forestry.

12.2.5.23 In community pest control areas where the Northland Regional Council is funding control operations, the Far North District Council will consider through its Annual Plan process contributing to those operations where they are carried out on Far North District Council property and within the community pest control areas.

COMMENTARY

The mandate for protection of significant indigenous vegetation and the habitats of significant indigenous fauna is set out in s6(c) of the Act, and supported by s6(a) and s6(b). This mandate is more fully explained in the Northland Regional Policy Statement and particularly relevant are the criteria for assessing "significance" which are adopted in this Plan for consistency (refer to **Policy 12.2.4.2** and **Method 12.2.5.6**).

Given the exceptional biodiversity and large areal extent of habitats, achieving both the protection and sustainable management of these resources requires an ongoing commitment from the whole community. The need for this ongoing commitment explains the choice of both a voluntary and regulatory system of protection and provision for incentives within and outside the Plan.

Landowners in the Rural Production Zone were concerned that the imposition of rules relating to vegetation clearance would prevent otherwise normal land use activities and result in economic losses. As ongoing stewardship depends on landowner co-operation, it became clear that focussing the rules to protect areas of significant indigenous vegetation or habitats, remnant forest and riparian margins combined with education, incentives and partnerships for encouraging voluntary protection, was more likely to gain acceptance in this particular community than would rules applying to any vegetation clearance, and therefore would be more likely to promote the goal of sustainable management. To assist landowners within the Rural Production and Minerals Zones identify and protect areas of significance whilst allowing normal land uses and activities to continue, **Rule 12.2.6.3.1** provides for a site specific assessment by an approved ecologist to identify those areas requiring protection (i.e. where any of the criteria in **Method 12.2.5.6** are met).

An important non-regulatory component is the compilation of a comprehensive database recording identified sites, their significance and measures for protection. In time, this database will provide accurate information on which to base future environmental policy and, when compared to aerial photography, the means to monitor its effectiveness (refer to **Method 12.2.5.11**).

For several reasons, general clearance rules have been chosen as the preferred method in all zones and in Outstanding Landscapes and Outstanding Landscape Features. First, there is a degree of certainty about the effectiveness of rules compared to voluntary systems, and greater certainty is preferable where the protection of the natural character of the coastal environment, and of outstanding landscapes and features, is sought. Second, by and large there has been community acceptance of rules in these areas due in part to the provisions of the Transitional District Plans. Third, the lack of reliable data limits the ability to target rules to areas which have been mapped, and therefore changes in land use or subdivision must be relied upon to trigger a site evaluation and, possibly, an application for resource consent. Finally, applications for resource consent enable the Council to consider applying incentives or approval to bonus lots where legal protection is achieved, both being integral to the policy of promoting active management (refer to **Policies 12.2.4.5 & 12.2.4.9**, and **Methods 12.2.5.1, 12.2.5.2 and 12.2.5.3**).

Incentives for protection and support for the ongoing management of significant indigenous vegetation and significant habitats of indigenous fauna are an important part of a comprehensive approach to sustainable management. Not only will the Council take the lead by planting indigenous species on riparian margins in public ownership but it will facilitate co-ordinated action by all interested parties and practical support where protection is assured (refer to **Policies 12.2.4.6 and 12.2.4.8** and **Methods 12.2.5.4, 12.2.5.13, 12.2.5.14, 12.2.5.15, 12.2.5.16 and 12.2.5.17**).

12.2.6 RULES

Activities affected by this section of the Plan must comply not only with the rules in this section, but also with the relevant standards applying to the zone in which the activity is located (refer to **Part 2 Environment Provisions**), and with other relevant standards in **Part 3 – District Wide Provisions**.

Particular attention is drawn to:

- (a) **Chapters 7-10 in Part 2;**
- (b) Other sections within **Chapter 12 Natural and Physical Resources** (and the **District Plan Maps**);
- (c) **Chapter 13 Subdivision;**
- (d) **Chapter 14 Financial Contributions;**
- (e) **Chapter 17 Designations and Utility Services** (and the **Zone Maps**).

Where relevant, refer to other sections of the plan such as Part 2 – Environmental Provisions and other parts of Part 3 – District Wide Provisions as there may be other provisions that need to be considered.

12.2.6.1 PERMITTED ACTIVITIES

An activity is a permitted activity if:

- (a) it complies with the standards for permitted activities set out in **Rules 12.2.6.1.1 to 12.2.6.1.4** below; and
- (b) it complies with the relevant standards for permitted activities in the zone in which it is located, set out in **Part 2 of the Plan - Environment Provisions**; and

12.3 SOILS AND MINERALS

Te Oneone Me Te Papa

Ahakoia he iti, he kaupapa ta te whenua. Me ka tiakina te whenua me ona taonga e te iwi, ka whakahoki mai te tiaki o te iwi, e te whenua me ona taonga.

Soils and Minerals

Earth nurtures us with its richness and fertility. Let us sustain the earth and its treasures, so that the earth and its treasures will sustain us.

CONTEXT

The Far North District has a great variety of soil types, with widely varying suitability for productive purposes. Soils suitable for horticultural use have been identified near Kaitaia and up to Pukenui, and in the vicinity of Kerikeri, Kaikohe and Waimate North. However, versatile soils are a very small proportion, by area, of the total soil resource.

While loss of versatile soils to urban development should generally be avoided, the more important risk to manage in the Far North is the loss of soil due to erosion, particularly in vulnerable hill country and in coastal areas. Uncontrolled earthworks (excavation and filling) can exacerbate this risk. In addition, earthworks can detrimentally affect the amenity of the landscape by causing scarring, vegetation removal and loss of natural character. Damage to Sites of Cultural Significance to Maori and archaeological sites is also a risk to be avoided.

The protection of the soil resource, including soil quality and quantity, from degradation or loss as a result of unsustainable land use and land use practices is the responsibility of both the Northland Regional Council through any Regional Water and Soil Plan currently in force, and the Far North District Council. While the Regional Council's role is fairly specific, relating primarily to soil conservation, mitigation of natural hazards, control of contaminant discharges and associated water quality management, it also has a general role in identifying and setting policy in relation to any effects of the use, development or protection of land which is of regional significance. The Far North District Council has the major responsibility for controlling the environmental effects of land use, subdivision and development.

The District has a wide variety of minerals, some of which are currently being extracted in quantities suitable for commercial use. Common minerals are aggregates, clay and limestone. Quarries, both large and small, are located throughout the District, extracting a range of rock resources primarily for roading purposes.

Minerals are a special case in resource management because they occur only in particular places and must be extracted in order to be used. Given their vital contribution to the economic and social well-being of the community, the key role of the Plan is to enable the utilisation of both existing and potential resources and to manage any adverse environmental effects arising from mineral extraction e.g. noise and vibration, traffic, dust, loss of visual amenity and reverse sensitivity matters.

Controlling adverse effects is especially important where quarrying and mining takes place near residential activities but conversely residential or other activities can give rise to reverse sensitivity effects on mineral extraction activities. The Minerals Zone has been applied to existing mineral extraction activities registered with the Ministry of Economic Development in order to enable effective management of these valuable resources. Other large scale mineral extraction activities can seek to have the zone applied by means of a Plan Change or can apply for resource consent through the rules in this section. Small scale farm and forest quarries obtaining roading material for use on the farm or forest production unit on which they are located are included in the definition of normal rural practices and are exempt from the rules on excavation and filling and on mining and quarrying. (Refer also to **Section 8.8 – Minerals Zone**).

12.3.1 ISSUES

- 12.3.1.1 Unless carefully managed, excavation and filling may lead to adverse effects such as erosion, loss of soil structure due to disturbance or compaction, water logging and loss of visual amenity.
- 12.3.1.2 Efficient mineral extraction and processing is necessary for the well-being of people and communities but has the potential to cause adverse effects on the environment.

12.3.2 ENVIRONMENTAL OUTCOMES EXPECTED

- 12.3.2.1 Retention and enhancement of the life supporting capacity of soil resources of the District.
- 12.3.2.2 A reduced rate of loss of soil through erosion.

- 12.3.2.3 Adverse effects arising from mineral extraction on other activities and natural and physical resources are avoided, remedied or mitigated.

12.3.3 OBJECTIVES

- 12.3.3.1 To achieve an integrated approach to the responsibilities of the Northland Regional Council and Far North District Council in respect to the management of adverse effects arising from soil excavation and filling, and minerals extraction.
- 12.3.3.2 To maintain the life supporting capacity of the soils of the District.
- 12.3.3.3 To avoid, remedy or mitigate adverse effects associated with soil excavation or filling.
- 12.3.3.4 To enable the efficient extraction of minerals whilst avoiding, remedying or mitigating any adverse environmental effects that may arise from this activity.

12.3.4 POLICIES

- 12.3.4.1 That the adverse effects of soil erosion are avoided, remedied or mitigated.
- 12.3.4.2 That the development of buildings or impermeable surfaces in rural areas be managed so as to minimise adverse effects on the life supporting capacity of the soil.
- 12.3.4.3 That where practicable, activities associated with soil and mineral extraction be located away from areas where that activity would pose a significant risk of adverse effects to the environment and/or to human health. Such areas may include those where:
- (a) there are people living in close proximity to the site or land in the vicinity of the site is zoned Residential, Rural Living, Coastal Residential or Coastal Living;
 - (b) there are significant ecological, landscape, cultural, spiritual or heritage values;
 - (c) there is a potential for adverse effects on lakes, rivers, wetlands and the coastline;
 - (d) natural hazards may pose unacceptable risks.
- 12.3.4.4 That soil excavation and filling, and mineral extraction activities be designed, constructed and operated to avoid, remedy or mitigate adverse effects on people and the environment.
- 12.3.4.5 That soil conservation be promoted.
- 12.3.4.6 That mining tailings that contain toxic or bio-accumulative chemicals are contained in such a way that adverse effects on the environment are avoided.
- 12.3.4.7 That applications for discretionary activity consent involving mining and quarrying be accompanied by a Development Plan.
- 12.3.4.8 That as part of a Development Plan rehabilitation programmes for areas no longer capable of being actively mined or quarried may be required.
- 12.3.4.9 That soil excavation and filling in the National Grid Yard are managed to ensure the stability of National Grid support structures and the minimum ground to conductor clearances are maintained.
- 12.3.4.10 To ensure that soil excavation and filling are managed appropriately, normal rural practices as defined in Chapter 3 will not be exempt when determining compliance with rules relating to earthworks, except if the permitted standards in the National Grid Yard specify that activity is exempt.

12.3.5 METHODS OF IMPLEMENTATION

DISTRICT PLAN METHODS

- 12.3.5.1 All excavation and filling that exceeds a certain minimum volume requires a resource consent (refer to **Rules** under **12.3.6**). The thresholds which trigger an application for resource consent complement the standards in any Regional Water and Soil Plan currently in force. There are different thresholds for urban and non-urban zones.
- 12.3.5.2 Where necessary information on soil properties will be required to be submitted with resource consent applications and will be taken into account in assessing the environmental effects of such applications on the life supporting capacity of soils.
- 12.3.5.3 The subdivision rules identify minimum lot sizes in rural areas (see **Chapter 13**).

- 12.3.5.4 Rules controlling the extent of impermeable surfaces are included in all zones (refer to **Chapters 7 – 10** inclusive).
- 12.3.5.5 Existing areas where quarrying and mining activities occur are included in the Minerals Zone (refer to **Section 8.8**) so as to provide for this activity.
- 12.3.5.6 New quarries and mines, and extensions to existing quarries and mines, will be included in the Minerals Zone by way of a Plan Change as required by **Policy 8.8.4.2** (Minerals Zone). Alternatively, an application for a resource consent may be lodged as a discretionary activity pursuant to **Rule 12.3.6.3.1** or as a non complying activity pursuant to **Rule 12.3.6.4**.
- 12.3.5.7 Additional rules controlling excavation and filling apply in areas identified as Coastal Hazard 1 and Coastal Hazard 2 Areas as shown on the **Coastal Hazard Maps**.
- 12.3.5.8 Excavation and filling is not permitted within an Outstanding Landscape Feature as listed in **Appendix 1B** in **Part 4**, or an Outstanding Natural Feature as listed in **Appendix 1A** in **Part 4**, and as shown on **Resource Maps** (refer to rules in **Section 12.1**).
- 12.3.5.9 Where an application is made for an activity, breaching **Rule 12.3.6.1.5** Transpower New Zealand Limited shall be considered an affected party, due to the national significance of the National Grid line.

OTHER METHODS

- 12.3.5.10 Rules in any Regional Water and Soil Plan for Northland currently in force control the effects of activities that could create or exacerbate erosion. The Council will work with the Northland Regional Council to ensure that joint applications are made where appropriate.
- 12.3.5.11 The Council's bylaws control excavation and/or filling within 20m of any road, private road or adjoining properties.
- 12.3.5.12 The Council's Engineering Infrastructure Standards, and Roading Policies specify good practice in respect to avoiding, remedying or mitigating the adverse effects of excavation and filling on roads.
- 12.3.5.13 When notices of requirement are received seeking the designation of new roads, the Council will consider the adverse effects of excavation and filling and may recommend to the requiring authority that alternative methods be used, volumes be reduced and such other measures be taken as necessary to avoid, remedy or mitigate those adverse effects.
- 12.3.5.14 Best management practices in regard to soil conservation may be required as conditions of consent on resource applications, especially subdivisions.
- 12.3.5.15 In conjunction with the Northland Regional Council, explore the feasibility of setting up a register of contractors who are specially trained in good environmental practices and licensed to carry out their work in accordance with approved codes of practice. Work undertaken by a licensed contractor that complies with the relevant code of practice would not require a property – specific resource consent.

COMMENTARY

*In regard to soils, the principal reason for adopting the objectives, policies and methods is that safeguarding the life supporting capacity of soils and sustaining their potential to meet the reasonably foreseeable needs of future generations is one of the fundamental resource management functions of regional and district councils. Many land use activities can adversely affect soil quality and quantity, particularly where they cause erosion or exacerbate the risks of natural hazards. The Council has assessed the risks to the soil resource arising from land use activities and has concluded that the significant risks are mostly addressed by the provisions of the Regional Water and Soil Plan. Accordingly, the volume of excavation or filling which triggers a resource consent in the Rural Production Zone is pitched at a level that minimises unnecessary administrative duplication. However, there are some effects which are clearly the responsibility of the District Council and, given overlapping jurisdictions, for major developments an application for resource consent is also required under this plan in order that those effects can be evaluated (**Objectives 12.3.3.1, 12.3.3.2 and 12.3.3.4, Policies 12.3.4.1 and 12.3.4.4 and Methods 12.3.5.1, 12.3.5.2, 12.3.5.3 and 12.3.5.4**).*

*In regard to minerals, the principal reason for the objectives, policies and methods is to recognise the importance of mineral resources and provide for the continued operation of existing quarries and mines through the application of the Minerals Zone. This approach ensures that people choosing to live near existing quarries and mines will be forewarned of the activity. Equally, it provides a degree of security for quarry operators. When new quarries and mines, or extensions to existing operations are proposed, the Plan Change process can be used to apply the Minerals Zone to the activity. Alternatively a resource consent can be sought under **Rule 12.3.6.3.1 (Objectives 12.3.3.3 and 12.3.3.4, Policies 12.3.4.3 and 12.3.4.4 and Methods 12.3.5.5 and 12.3.5.6)**.*

13 SUBDIVISION

CONTEXT

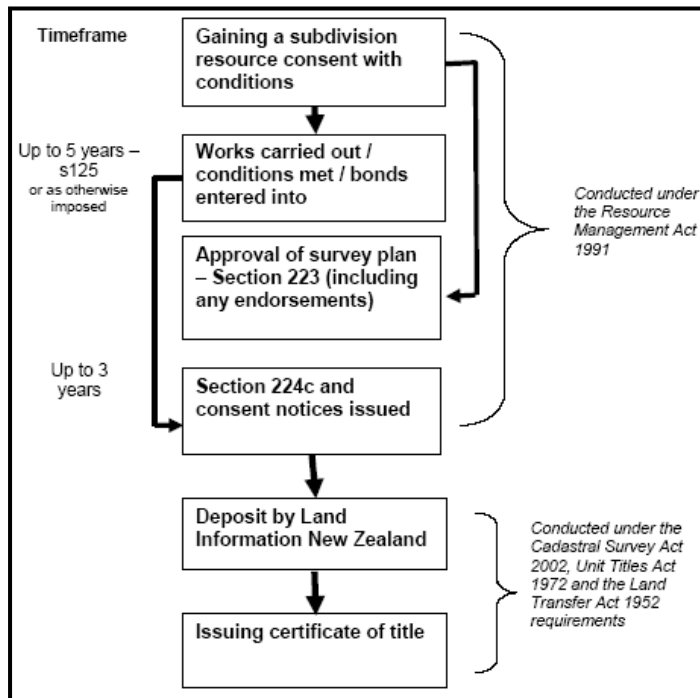
The Far North District Council is responsible for issuing two types of resource consents – land use consents and subdivision consents. In many cases both types of consents must be obtained before a development can proceed. Consents may also be needed from the Northland Regional Council. This chapter deals with subdivision.

Subdivision is essentially a process of dividing a parcel of land or a building into one or more further parcels, or changing an existing boundary location. Land subdivision creates separate and saleable certificates of title, which can define an existing interest in land (including buildings) and impose limitations on landowners or occupiers for how the land can be used or developed, through conditions and consent notices imposed under sections 108, 220 and 221 of the Resource Management Act 1991. Subdivision also provides the opportunity for Council to require land to be vested, and reserve and other financial contributions to be taken to provide necessary infrastructure.

Figure 1 below shows the subdivision process. [Ministry for the Environment Quality Planning website]

Note that Council does not have control of the whole process.

FIGURE 1: PROCESS OF SUBDIVISION



Land subdivision under the RMA includes:

- the creation of separate fee-simple allotments with new certificates of title (freehold);
- the lease of land or buildings or both for 35 years or longer (leasehold);
- the creation of a unit title, company lease, or cross-lease.

Freehold subdivisions occur where new allotments (usually referred to as lots) are created under the Land Transfer Act and ownership is held in an estate in fee simple. Fee simple means that the ownership of the land and the buildings on it is held solely by those persons listed on the certificate of title. Freehold is the most common form of subdivision. The boundaries are pegged by licensed cadastral surveyors and a 'guaranteed' title is issued.

Leasehold subdivisions: land or buildings or both that are leased for a period exceeding 35 years is defined in the RMA as a subdivision. A leasehold estate is most commonly defined as an estate or interest in land held for a fixed term of years. **Cross-lease subdivisions** (occasionally called composite leasehold and share titles) occur where buildings or dwellings are leased. The cross-lease plan shows the dwellings as 'flats' and is often called a 'flats-plan'. The term 'cross-lease' is used to describe the method whereby the purchaser of a dwelling / flat obtains a lease of that dwelling, generally for a term of 999 years, together with an undivided share in the underlying fee-simple estate. Cross-lease titles usually involve common-use areas (eg, shared driveways) and exclusive or restrictive covenant areas (eg, backyards). The owners agree to use certain areas for their own use without infringing on the areas of the other owners. For any changes to be made to a cross-lease site or building the leaseholder must have regard to the cross-lease documents that may require the consent of all other cross-leasing owners (eg, to erect a garage or add a new room)

Unit title subdivisions (or strata titles) generally occur where more than one dwelling or building is built on a single title and separate ownership is required. This includes multi-storey developments and the unit title allows for ownership to be defined in three dimensions. A unit title provides single ownership of a 'principal unit' (the dwelling) and one or more 'accessory units' (eg, garages or outdoor spaces). Each principal and each accessory unit will usually be defined spatially, so that the dwelling and any other buildings or outdoor spaces are contained in compartments of space, which are owned rather than leased. There are usually common areas that provide access for all unit title owners (eg, driveways, lifts and stairwells).

A unit title is made up of two components:

- (a) ownership in the particular unit
- (b) an undivided share in the ownership of the common property.

[quoted from Ministry for the Environment Quality Planning website]

All subdivision requires resource consent except for:

- (a) lots for utility services under the Public Works Act;
- (b) those other situations set out in Section 11 of the Act. The exemptions in s11 anticipate (among other things) the creation of separate titles for natural and historic conservation purposes.

Boundary adjustments are a controlled activity throughout the District, subject to meeting specific criteria. Section 13.7.2, which includes Table 13.7.2.1, sets out the activity status, allotment sizes and dimensions for all other subdivisions throughout the District. The matters, or topics, which the Council will consider in any application for a resource consent for subdivision, and the rules that apply to any such application are set out in section 13.7.3 of this chapter. The rules will ensure that appropriate consideration is given to the relevant elements of subdivision, and that conditions of consent are directed towards those elements.

Attention is drawn to the fact that rules in parts of the Plan other than this chapter may have a bearing on subdivision applications. For example, a subdivision may result in an existing land use activity failing to comply with the relevant zone rules or District-wide rules. The provisions of the relevant zone rules and District-wide rules will be relevant for land use activities, which may be associated with subdivisions and which would allow the subdivision to proceed.

Chapter 2 of this Plan describes in general terms the role of the Maori Land Court in regulating the partition, amalgamation, aggregation and exchange of Maori land. Subdivision of ancestral land does not occur in the ordinary course of events and so there is no special provision in this Plan for it. However, the Council recognises the need to provide for the development of ancestral land and this is included in **Part 2 of the Plan - Environment Provisions**.

For the context of the management plan rule refer to **Rule 13.9.2**.

13.1 ISSUES

- 13.1.1 Because the type and scale of activities that can occur in the District are often linked to the size of a lot, the effect of subdividing land is reflected in the subsequent development of that land.
- 13.1.2 While subdivision is essentially a mechanistic process, integrated management of resources can be assisted by the imposition of appropriate controls on the way in which subdivision is carried out.
- 13.1.3 The subdivision of land can result in development that has significant effects on natural character.
- 13.1.4 Subdivision of properties containing scheduled heritage resources (as listed in **Appendices 1D, 1E, 1F and 1G**) can result in the alienation of a heritage resource from land closely associated with it and the consequent loss/degradation/diminution of its heritage values.

- 13.1.5 Subdivisions may lead to an increased demand for water in a District where there are summer shortfalls.
- 13.1.6 Subdivision may lead to an increased demand for energy in the District where there is a limited reticulated supply and a reliance on electricity generated outside the District. The adoption of energy efficiency and renewable energy initiatives and technologies will need to be considered in all new subdivisions and related development.
- 13.1.7 The subdivision of land can result in development that has an adverse effect on the sustainable functioning of infrastructure, particularly roads.
- 13.1.8 Inappropriate subdivision, use and development can cause reverse sensitivity effects on the National Grid, compromising its safe and efficient operation, development, maintenance and upgrading.

Note: Attention is also drawn to the provisions of **Section 12.9**. This section includes an Issue, Objective and Policy with respect to potential reverse sensitivity effects arising from subdivision, use and development adjacent to consented or existing lawfully established renewable energy projects, including associated transmission activities.

13.2 ENVIRONMENTAL OUTCOMES EXPECTED

- 13.2.1 A subdivision pattern that is consistent with:
- (a) existing land uses;
 - (b) the preservation of the natural character of the coastal environment and the restoration or enhancement of areas which may have been compromised by past land management practices;
 - (c) the protection, restoration and/or enhancement of outstanding natural features and landscapes;
 - (d) the protection, restoration and/or enhancement of areas of significant indigenous vegetation and significant habitats of indigenous fauna;
 - (e) the maintenance and enhancement of public access to and along the coast and lakes and rivers;
 - (f) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga;
 - (g) the type of management of natural and physical resources that is provided for in the **Environmental Provisions** (refer to **Part 2**) and elsewhere in the **District Wide Provisions** (refer to **Part 3**) of this Plan;
 - (h) the retention of heritage values of heritage resources (as listed in **Appendices 1D, 1E, 1F and 1G**) through conservation of its immediate context.
- 13.2.2 Sufficient water storage is provided to meet the present and likely future needs of the Community.
- 13.2.3 Subdivisions, land use and development which respond in a sustainable way to the site specific environmental conditions, values and enhancement opportunities, through the use of management plans.
- 13.2.4 A sufficient and secure energy supply is available to meet the present and likely future needs of the District.
- 13.2.5 13.2.5 Where the safe and efficient operation, maintenance, development and upgrading of the existing National Grid operations are protected from the reverse sensitivity effects of other activities.

13.3 OBJECTIVES

- 13.3.1 To provide for the subdivision of land in such a way as will be consistent with the purpose of the various zones in the Plan, and will promote the sustainable management of the natural and physical resources of the District, including airports and roads and the social, economic and cultural well being of people and communities.
- 13.3.2 To ensure that subdivision of land is appropriate and is carried out in a manner that does not compromise the life-supporting capacity of air, water, soil or ecosystems, and that any actual or potential adverse effects on the environment which result directly from subdivision, including reverse sensitivity effects and the creation or acceleration of natural hazards, are avoided, remedied or mitigated.

- 13.3.3 To ensure that the subdivision of land does not jeopardise the protection of outstanding landscapes or natural features in the coastal environment.
- 13.3.4 To ensure that subdivision does not adversely affect scheduled heritage resources through alienation of the resource from its immediate setting/context.
- 13.3.5 To ensure that all new subdivisions provide a reticulated water supply and/or on-site water storage and include storm water management sufficient to meet the needs of the activities that will establish all year round.
- 13.3.6 To encourage innovative development and integrated management of effects between subdivision and land use which results in superior outcomes to more traditional forms of subdivision, use and development, for example the protection, enhancement and restoration of areas and features which have particular value or may have been compromised by past land management practices.
- 13.3.7 To ensure the relationship between Maori and their ancestral lands, water, sites, wahi tapu and other taonga is recognised and provided for.
- 13.3.8 To ensure that all new subdivision provides an electricity supply sufficient to meet the needs of the activities that will establish on the new lots created.
- 13.3.9 To ensure, to the greatest extent possible, that all new subdivision supports energy efficient design through appropriate site layout and orientation in order to maximise the ability to provide light, heating, ventilation and cooling through passive design strategies for any buildings developed on the site(s).
- 13.3.10 To ensure that the design of all new subdivision promotes efficient provision of infrastructure, including access to alternative transport options, communications and local services.
- 13.3.11 To ensure that the operation, maintenance, development and upgrading of the existing National Grid is not compromised by incompatible subdivision and land use activities

13.4 POLICIES

- 13.4.1 That the sizes, dimensions and distribution of allotments created through the subdivision process be determined with regard to the potential effects including cumulative effects, of the use of those allotments on:
 - (a) natural character, particularly of the coastal environment;
 - (b) ecological values;
 - (c) landscape values;
 - (d) amenity values;
 - (e) cultural values;
 - (f) heritage values; and
 - (g) existing land uses.
- 13.4.2 That standards be imposed upon the subdivision of land to require safe and effective vehicular and pedestrian access to new properties.
- 13.4.3 That natural and other hazards be taken into account in the design and location of any subdivision.
- 13.4.4 That in any subdivision where provision is made for connection to utility services, the potential adverse visual impacts of these services are avoided.
- 13.4.5 That access to, and servicing of, the new allotments be provided for in such a way as will avoid, remedy or mitigate any adverse effects on neighbouring property, public roads (including State Highways), and the natural and physical resources of the site caused by silt runoff, traffic, excavation and filling and removal of vegetation.
- 13.4.6 That any subdivision proposal provides for the protection, restoration and enhancement of heritage resources, areas of significant indigenous vegetation and significant habitats of indigenous fauna, threatened species, the natural character of the coastal environment and riparian margins, and outstanding landscapes and natural features where appropriate.
- 13.4.7 That the need for a financial contribution be considered only where the subdivision would:
 - (a) result in increased demands on car parking associated with non-residential activities; or
 - (b) result in increased demand for esplanade areas; or
 - (c) involve adverse effects on riparian areas; or

- (d) depend on the assimilative capacity of the environment external to the site.
- 13.4.8 That the provision of water storage be taken into account in the design of any subdivision.
- 13.4.9 That bonus development donor and recipient areas be provided for so as to minimise the adverse effects of subdivision on Outstanding Landscapes and areas of significant indigenous flora and significant habitats of fauna.
- 13.4.10 The Council will recognise that subdivision within the Conservation Zone that results in a net conservation gain is generally appropriate.
- 13.4.11 That subdivision recognises and provides for the relationship of Maori and their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga and shall take into account the principles of the Treaty of Waitangi.
- 13.4.12 That more intensive, innovative development and subdivision which recognises specific site characteristics is provided for through the management plan rule where this will result in superior environmental outcomes.
- 13.4.13 Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the character of the applicable zone in regards to s6 matters. In addition subdivision, use and development shall avoid adverse effects as far as practicable by using techniques including:
- (a) clustering or grouping development within areas where there is the least impact on natural character and its elements such as indigenous vegetation, landforms, rivers, streams and wetlands, and coherent natural patterns;
 - (b) minimising the visual impact of buildings, development, and associated vegetation clearance and earthworks, particularly as seen from public land and the coastal marine area;
 - (c) providing for, through siting of buildings and development and design of subdivisions, legal public right of access to and use of the foreshore and any esplanade areas;
 - (d) through siting of buildings and development, design of subdivisions, and provision of access that recognise and provide for the relationship of Maori with their culture, traditions and taonga including concepts of mauri, tapu, mana, wehi and karakia and the important contribution Maori culture makes to the character of the District (refer **Chapter 2** and in particular **Section 2.5** and Council's "*Tangata Whenua Values and Perspectives*" (2004);
 - (e) providing planting of indigenous vegetation in a way that links existing habitats of indigenous fauna and provides the opportunity for the extension, enhancement or creation of habitats for indigenous fauna, including mechanisms to exclude pests;
 - (f) protecting historic heritage through the siting of buildings and development and design of subdivisions.
 - (g) achieving hydraulic neutrality and ensuring that natural hazards will not be exacerbated or induced through the siting and design of buildings and development.
- 13.4.14 That the objectives and policies of the applicable environment and zone and relevant parts of **Part 3** of the Plan will be taken into account when considering the intensity, design and layout of any subdivision.
- 13.4.15 That conditions be imposed upon the design of subdivision of land to require that the layout and orientation of all new lots and building platforms created include, as appropriate, provisions for achieving the following:
- (a) development of energy efficient buildings and structures;
 - (b) reduced travel distances and private car usage;
 - (c) encouragement of pedestrian and cycle use;
 - (d) access to alternative transport facilities;
 - (e) domestic or community renewable electricity generation and renewable energy use.
- 13.4.16 When considering proposals for subdivision and development within an existing National Grid Corridor the following will be taken into account:
- (a) the extent to which the proposal may restrict or inhibit the operation, access, maintenance, upgrading of transmission lines or support structures;
 - (b) any potential cumulative effects that may restrict the operation, access, maintenance, upgrade of transmission lines or support structures; and

- (c) whether the proposal involves the establishment or intensification of a sensitive activity in the vicinity of an existing National Grid line.

Note 1: Structures and activities located near transmission lines must comply with the safe distance requirements in the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001). Compliance with this plan does not ensure compliance with NZECP34:2001.

Note 2: Vegetation to be planted within, or adjacent to, the National Grid Corridor should be selected and/or managed to ensure that it will not result in that vegetation breaching the Electricity (Hazards from Trees) Regulations 2003.

13.5 METHODS

DISTRICT PLAN METHODS

- 13.5.1 Rules in **Chapter 13** of the Plan impose controls on most forms of subdivision activity.
- 13.5.2 **Chapter 13** provides an alternative to the standard rules, through the implementation of a management plan for subdivision in the Rural Production, General Coastal, Coastal Living, South Kerikeri Inlet and Waimate North Zones.
- 13.5.3 Financial contributions in respect of subdivision are set out in **Chapter 14**.
- 13.5.4 Matters of National Importance specified in s6 of the Act are addressed in various sections of the District Plan, including the following sections in particular:
- (a) preservation of the natural character of the coastal environment, wetlands, and lakes and rivers and their margins is provided for in **Chapter 10** and in **Section 12.7**;
 - (b) protection and enhancement of outstanding natural features and landscapes is provided for in **Section 12.1** and by the restriction on subdivision in the Recreational Activities and Conservation Zones;
 - (c) the protection of significant indigenous vegetation and significant habitats of indigenous fauna is addressed in **Section 12.2**;
 - (d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers is provided for in **Chapter 10**, **Section 12.7** and **Chapter 14**;
 - (e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga are provided for throughout the District Plan but attention is drawn in particular to **Chapter 2**; and
 - (f) the protection of historic heritage is addressed in **Chapter 12.5**.
- The objectives and policies relating to each of the above (where relevant) and those of the applicable zone will be taken into account in assessing applications for subdivision, including applications made under **Rule 13.9.2**.
- 13.5.5 Structure Plans are included as an alternative means of providing for subdivision on a comprehensive basis (**Section 13.12**).
- 13.5.6 Where a subdivision (which includes a boundary adjustment) is proposed on land where a hazardous activity of industry has been, or is more likely than not to have been, or is currently operating, then the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 apply.
- 13.5.7 Where an application is made for an activity, breaching **Rule 13.8.1** Transpower New Zealand Limited shall be considered an affected party, due to the national significance of the National Grid.

OTHER METHODS

- 13.5.8 Non-regulatory methods, including brochures and informal contact with applicants will help to promote subdivision activities that are sensitive to the physical environment. In this respect, the Council encourages early consultation with parties who may be affected by a subdivision proposal such as neighbouring landowners, Heritage New Zealand Pouhere Taonga and tangata whenua.
- 13.5.9 The Council encourages applicants to take into account any provisions of any relevant planning documents prepared for the area and recognised by iwi authorities, pursuant to Sections 6(e), 6(g), 7(a) and 7(aa) of the Resource Management Act 1991

COMMENTARY

Subdivision of land can have adverse effects on the environment if the design of the subdivision is such that subsequent use and development on the subdivided land is environmentally inappropriate. While it is the

15 TRANSPORTATION

15.1 TRAFFIC, PARKING AND ACCESS

CONTEXT

The main emphasis in this chapter is on the provision of parking and access in association with land uses on private property. Associated public transportation facilities, such as footpaths and cycleways, are generally provided for at the time subdivision of land is approved. However this chapter also aims to encourage sustainable transportation.

The number of vehicles using a site (traffic intensity) may lead to significant adverse effects created by activities on that site; e.g. there is a direct link between vehicle numbers and noise generation. Rules and assumptions about typical traffic intensity of various activities (used as a basis for determining the application status of an activity) are located within this chapter and **Appendix 3**.

The Council will continue to make provision for new roading and roading improvements through the Annual Plan, 30 Year Infrastructure Plan and the Long Term Plan. There are also other controls on traffic, parking and access provided through other regulatory instruments such as Council Bylaws (Parking, Speed Limits) and Council's "*Engineering Standards and Guidelines*" (June 2004 – Revised 2009).

15.1.1 ISSUES

- 15.1.1.1 Activities in the District generate a significant amount of traffic and create the need for associated facilities such as parking and loading spaces, but these facilities can create or increase adverse effects on other activities.
- 15.1.1.2 Development in locations with limited space for provision of adequate car parking space can cause a significant adverse effect in popular tourist destinations, particularly in summer.
- 15.1.1.3 Traffic access to property can interfere with traffic flow and can affect public safety.
- 15.1.1.4 In terms of the environmental effects of activities, traffic is often the most obvious. Consequently controls on the effects of traffic are an important component of the sustainable management of resources.
- 15.1.1.5 Sustainable transportation options, such as cycling and buses, are limited and often used ineffectively within the District.
- 15.1.1.6 People with disabilities often have difficulty navigating safe and efficient access routes due to fragmented footpaths and inappropriate car parking layout.

15.1.2 ENVIRONMENTAL OUTCOMES EXPECTED

- 15.1.2.1 Appropriate provision of car parking and loading facilities for all activities generating vehicle trips, particularly within business areas.
- 15.1.2.2 Safe and efficient access within the District for pedestrians, cyclists and motorists, including those with disabilities while minimising disruptions to the amenities of the surrounding environment.
- 15.1.2.3 In situations where it is practicable, improvements to and effective use of sustainable transportation options.

15.1.3 OBJECTIVES

- 15.1.3.1 To minimise the adverse effects of traffic on the natural and physical environment.
- 15.1.3.2 To provide sufficient parking spaces to meet seasonal demand in tourist destinations.
- 15.1.3.3 To ensure that appropriate provision is made for on-site car parking for all activities, while considering safe cycling and pedestrian access and use of the site.
- 15.1.3.4 To ensure that appropriate and efficient provision is made for loading and access for activities.
- 15.1.3.5 To promote safe and efficient movement and circulation of vehicular, cycle and pedestrian traffic, including for those with disabilities.

15.1.4 POLICIES

- 15.1.4.1 That the traffic effects of activities be evaluated in making decisions on resource consent applications.
- 15.1.4.2 That the need to protect features of the natural and built environment be recognised in the provision of parking spaces.
- 15.1.4.3 That parking spaces be provided at a location and scale which enables the efficient use of parking spaces and handling of traffic generation by the adjacent roading network.
- 15.1.4.4 That existing parking spaces are retained or replaced with equal or better capacity where appropriate, so as to ensure the orderly movement and control of traffic.
- 15.1.4.5 That appropriate loading spaces be provided for commercial and industrial activities to assist with the pick-up and delivery of goods.
- 15.1.4.6 That the number, size, gradient and placement of vehicle access points be regulated to assist traffic safety and control, taking into consideration the requirements of both the New Zealand Transport Agency and the Far North District Council.
- 15.1.4.7 That the needs and effects of cycle and pedestrian traffic be taken into account in assessing development proposals.
- 15.1.4.8 That alternative options be considered to meeting parking requirements where this is deemed appropriate by the Far North District Council.

15.1.5 METHODS

DISTRICT PLAN METHODS

- 15.1.5.1 Rules in the Plan impose controls on parking and vehicle access. The Rules must be read in conjunction with Appendix 3 (3A – 3F).

OTHER METHODS

- 15.1.5.2 The Council's "*Engineering Standards and Guidelines*" (June 2004 – Revised 2009) are referred to in the rules for **Chapter 15**. These standards and guidelines are applied to the provision of access, parking spaces and manoeuvring areas, and the construction of service lanes, accessways and roads.
- 15.1.5.3 Provision of signs to adequately identify public parking areas to ensure more effective and efficient use, particularly in business areas and tourist destinations.
- 15.1.5.4 Council will endeavour to increase the provision of integrated walking and cycling facilities throughout the Far North District, particularly where they will provide the greatest benefit.

COMMENTARY

Traffic is an integral part of the operation of most activities, and can be one of the more significant adverse effects of any activity arising from its traffic generating capacity. In particular, motorised vehicular traffic creates noise, visual disruption and safety issues. It also creates a need for parking and loading space, manoeuvring space and adequate access to and from public roads. In those areas of the District subject to seasonal tourism pressure, provision of adequate parking to meet peak demand is a challenge, particularly in settlements that have limited space available, such as Paihia. Pedestrian and bicycle traffic is generally less problematic but nevertheless also needs to be provided for, as do the needs of those with disabilities.

Providing proper facilities for traffic enables activities to operate in an efficient and convenient manner, while avoiding or minimising adverse effects.

All activities in all zones generate traffic however some locations, such as central business districts or town centres, have different requirements, particularly with regard to parking. It is therefore appropriate that objectives, policies and methods relating to parking and access are put together in one chapter but some exemptions are included to differentiate between varying requirements in specified areas.

The reason for the objectives, policies and methods of this chapter is that they are necessary in order to ensure that adequate provision is made for traffic, in any development proposal. Without such provision, activities could be constrained in their operation and/or adjoining activities could be adversely affected.

The methods in this chapter complement the Council's "*Engineering Standards and Guidelines*" (June 2004 – Revised 2009) that are concerned more with the technical detail of the work required to provide for traffic.

Appendix 14:

Rules Assessment FNDC- Operative Plan

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THE **PLANNING**
COLLECTIVE



Proposed Subdivision of 47 Hihitahi Rise and Lot 2 DP 200205

FAR NORTH DISTRICT PLAN RULES- OPERATIVE VERSION

Zoning Map 92- Te Haumi Opuā – Okiato

- Zoned Residential
- Part of the site is within the modelled 2007 Flood Hazard Zone (1:10 year ARI, 1:5 Year ARI with Climate Change). There are identified overland flow paths within the site.
- Not identified as a HAIL site (Hazardous Land and Industries List)
- One identified Historic Site in the SE corner of the Site- being a midden (NZ AA reference P05/755)

Northland Regional Policy Statement

- Within an Outstanding Natural Landscape
- Within an area of High Natural Character
- The coastal area within the site is identified as a site with Outstanding Natural Character.
- The site is within an area defined as the “Coastal Environment”.

Adjacent site- Section 4 Block VIII Kawakawa SD

The land to the SW, the Opuā Forest is zoned for Conservation purposes. It is within an Outstanding Landscape. It is a protected area and managed under the Reserves Act.

Chapter 7: Operative Plan Residential Zone Rules- Permitted Standards

Rule	Requirement	Assessment of Proposal
7.6.5.3	<p>Restricted Discretionary Activity</p> <p><i>An activity is a restricted discretionary activity in the Residential Zone if:</i></p> <p><i>(a) it does not comply with any one of the following Rules 7.6.5.1.2 Residential Intensity; 7.6.5.1.3 Scale of Activities; 7.6.5.1.4 Building Height; 7.6.5.1.5 Sunlight; 7.6.5.1.7 Setback from Boundaries; 7.6.5.1.11 Transportation; 7.6.5.1.15 Noise and/or 7.6.5.1.17 Building Coverage as set out above; but</i></p> <p><i>(b) it complies with all of the other rules for permitted and controlled activities under Rules 7.6.5.1 and 7.6.5.2; and</i></p> <p><i>(c) it complies with Rules 7.6.5.3.1 Residential Intensity; 7.6.5.3.2 Scale of Activities; 7.6.5.3.3 Building Height; 7.6.5.3.4 Sunlight; 7.6.5.3.5 Building Coverage; 7.6.5.3.6 Transportation; 7.6.5.3.7 Setback from Boundaries and 7.6.5.3.8 Noise below; and</i></p> <p><i>(d) it complies with the relevant standards for permitted, controlled or restricted discretionary activities set out in Part 3 of the Plan - District Wide Provisions. The Council may approve or refuse an application for a restricted discretionary activity, and it may impose conditions on any consent.</i></p>	<p>Restricted Discretionary Activity</p> <p>Compliance with the setback for a retaining wall cannot be achieved (7.6.5.1.7)</p>
7.6.5.1.1	<p>Relocated buildings</p> <p><i>Buildings are permitted activities provided that they comply with all the standards for permitted activities in the Plan, and further provided that where the building is a relocated building all work required to reinstate the exterior including painting and repair of joinery shall be completed within six months of the building being delivered to the site. Reinstatement work is to include connections to all infrastructure services and closing in and ventilation of the foundations.</i></p>	<p>No relocated buildings are proposed, but may be proposed by the future owners of the Lot. Compliance against this standard can be assessed at the time.</p>
7.6.5.1.2	<p>Residential Intensity</p> <p>(a) Each residential unit for a single household shall have available to it a minimum net site area of: Sewered sites: 600m²</p>	<p>Complies with minimum site areas for sewered sites.</p>

Rule	Requirement	Assessment of Proposal
	<p>Unsewered sites: 3,000m²</p> <p>This minimum net site area may be for the exclusive use of the residential unit, or as part of land held elsewhere on the property, provided that a ratio of one residential unit per minimum net site area (as stated above) is not exceeded.</p> <p>Except that this rule shall not limit the use of an existing site for a single residential unit for a single household, provided that all other standards for permitted activities are complied with.</p>	
7.6.5.1.3	Scale of Activities	N/A
7.6.5.1.4	<p>Building Height</p> <p>The maximum height of any building shall be 8m</p>	<p>Future buildings will be able to comply with this height limit. If not, then resource consent will be applied for accordingly.</p> <p>The proposed retaining walls on site will be a maximum of 6 m likely 5m in height.</p>
7.6.5.1.5	<p>Sunlight</p> <p>No part of any building shall project beyond a 45 degree recession plane as measured inwards from any point 2m vertically above ground level on any site boundary (refer to definition of Recession Plane in Chapter 3 - Definitions), except that:</p> <ul style="list-style-type: none"> (a) a building may exceed this standard for a maximum distance of 10m along any one boundary other than a road boundary, provided that the maximum height of any building where it exceeds the standard is 2.7m (refer to Recession Plane Diagram B within the definition of Recession Plane in Chapter 3 – Definitions); and (b) where a site boundary adjoins a legally established entrance strip, private way, access lot, or access way serving a rear site, the measurement shall be taken from the farthest boundary of the entrance strip, private way, access lot, or access way. 	<p>Future buildings will be able to comply with this standard. If not, then resource consent will be applied for accordingly.</p>

Rule	Requirement	Assessment of Proposal
7.6.5.1.6	Stormwater The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 50%.	Future buildings will be able to comply with this standard. If not, then resource consent will be applied for accordingly.
7.6.5.1.7	Setback from boundaries <ul style="list-style-type: none"> (a) The minimum building setback from road boundaries shall be 3m (b) The minimum set-back from any boundary other than a road boundary, on all sites... shall be 1.2m except that no set-back is required for a maximum total length of 10m along any one such boundary (c) Not less than 50% of that part of the site between the road boundary and a parallel line 2m there from (i.e. a 2m wide planting strip along the road boundary) shall be landscaped, on all sites ... (d) The minimum set back from any other boundary ... shall be 3m. 	Does not comply The proposed retaining wall adjacent to Lot 13 DP 181647 will not be set back 1.2m from the boundary. The retaining wall will be a standard design (either timber or cantilever) - designed to retained land for 100 years (as per the requirements of the Building Act) Future buildings will be able to comply with this standard. If not, then resource consent will be applied for accordingly.
7.6.5.1.7	Screening for neighbors – Non-residential activities	N/A
7.6.5.1.9	Outdoor Activities	N/A
7.6.5.1.10	Visual Amenity	N/A
7.6.5.1.11	Transport- Refer to Chapter 15	N/A
7.6.5.1.12	Site intensity- Non-residential activities	N/A
7.6.5.1.13	Hours of Operation- Non-residential activities	N/A
7.6.5.1.14	Keeping of animals	N/A
7.6.5.1.15	Noise All activities shall be conducted so as to ensure that noise from the site shall not exceed the following noise limits as measured at or within the boundary of any other site in this zone, or at or within the notional boundary of any dwelling in a rural or coastal zone: 0700 to 2200 hours 50 dBA L10 2200 to 0700 hours 45 dBA L10 and 70 dBA Lmax	Compliance with this standard during construction will be achieved.

Rule	Requirement	Assessment of Proposal
	Construction Noise: Construction noise shall meet the limits recommended in, and shall be measured and assessed in accordance with, NZS 6803P:1984 "The Measurement and Assessment of Noise from Construction, Maintenance and Demolition Work"	
7.6.5.1.16	Helicopter Landing Area	N/A
7.6.5.1.17	Building Coverage Any new building or alteration/addition to an existing building is a permitted activity if the total Building Coverage of a site does not exceed 45% of the gross site area.	Future buildings will be able to comply with this standard. If not, then resource consent will be applied for accordingly.

Chapter 12.1: Operative Plan Natural and Physical Resources – Landscape and Natural features Permitted Standards

Rule	Requirement	Assessment of Proposal
12.1.6.1.2	<p>Indigenous Vegetation clearance in outstanding landscapes</p> <p>Indigenous vegetation clearance is a permitted activity in an Outstanding Landscape, as shown on the Resource Maps, where the clearance is for any of the following purposes:</p> <ul style="list-style-type: none"> (a) to provide for a building platform for a building (where a rule in the Plan provides for this as a permitted activity), and/or access and/or construction of a boundary fence so long as the area cleared for that purpose is no more than 1,000m² per site; or (b) .. (c) to provide clearance for existing overhead power and telephone lines, provided that no more vegetation is cleared or trimmed than is necessary for the safe operation of the utility service; or (d) the removal of trees and other vegetation which, as a result of old age or a natural event such as a storm or erosion, are a risk to the safety of people or property; or (e) the maintenance of existing roads, and private accessways and walkways including for the purposes of visibility and road safety; or (f) the formation and maintenance of walking tracks less than 1.2m wide using manual methods which do not require the removal of any tree over 300mm in girth; or (g) ... 	The site is within an identified Outstanding Natural Landscape within the Northland RPS, but not as identified within the Operative FNDC Plan. As such, this Rule does not apply.

Rule	Requirement	Assessment of Proposal
	<ul style="list-style-type: none"> (h) the removal of dead trees, provided that no more vegetation is cleared or trimmed than is necessary for safe removal; or (i) .. (j) the maintenance of existing fence lines, provided that the clearance does not exceed 3.5m in width either side of the fence line; or (k) normal gardening activities which result from the maintenance of lawn and gardens; or (l) the removal is in accordance with an existing use right; or (m) the removal is for a new fence where the purpose of the new fence is to exclude stock and/or pests from the area provided that the clearance does not exceed 3.5m in width either side of the fence line; or (n) creation and maintenance of firebreaks provided that no more vegetation is cleared than is necessary to achieve the practical purpose of the firebreak; or (o) ... (p) vegetation clearance of land which has been previously cleared and where the vegetation to be cleared is less than 10 years old; or (q) ... 	
12.1.6.1.3	<p>Tree Planting in outstanding landscapes Single species tree planting is permitted in an Outstanding Landscape, as shown on the Resource Maps:</p> <ul style="list-style-type: none"> (a) if the species is indigenous; or (b) ... (c) ... 	The site is within an identified Outstanding Natural Landscape within the Northland RPS, but not as identified within the Operative FNDC Plan. As such, this Rule does not apply.
12.1.6.1.3	<p>Excavaton/filling within an Outstanding Landscape Excavation and/or filling on any site within an Outstanding Landscape as shown on the Resource Maps, is permitted provided that:</p> <ul style="list-style-type: none"> (a) it does not exceed 300m³ in any 12 month period per site; and (b) it does not involve a cut and/or filled face exceeding 1.5m in height i.e. the maximum permitted cut and/or fill height may be 3m; and (c) any cut or fill areas that will be visible from a viewing point on a public road, public reserve, coastal marine area or the foreshore shall be stabilised using mulch, hydroseeding, or other rapid effective stabilisation technique. All other cut and fill areas will be revegetated as soon as practicable in the spring or autumn immediately 	The site is within an identified Outstanding Natural Landscape within the Northland RPS, but not as identified within the Operative FNDC Plan. As such, this Rule does not apply.

Rule	Requirement	Assessment of Proposal
	following construction.	
12.1.6.1.5	<p>Buildings within an Outstanding Landscape The following are permitted activities in an Outstanding Landscape, as shown on the Resource Maps:</p> <ul style="list-style-type: none"> (a) ... (b) where that building will be visible from a viewing point on a public road, public reserve, coastal marine area or the foreshore that is within 500m of that building, the exterior is coloured within the BS5252 standard colour palette range with a reflectance value of 30% or less or is constructed of natural materials which fall within this range; or (c) ... (d) where the building site is not in the General Coastal Zone construction of one residential dwelling per site, provided that the building is not visible from a public viewing point on a public road, public reserve, or the foreshore that is within 2km of the site; (e) where the building site is not in the General Coastal Zone any new building, including relocated buildings, with a gross floor area of less than 25m². 	<p>The site is within an identified Outstanding Natural Landscape within the Northland RPS, but not as identified within the Operative FNDC Plan. As such, this Rule does not apply.</p>
12.1.6.2.1	<p>Restricted Discretionary Activity: Buildings within Outstanding Landscapes</p> <ul style="list-style-type: none"> (a) any new building, including relocated buildings, exceeding a gross floor area of 25m²; Or (b) any alteration/addition to an existing building which does not exceed 40% of the gross floor area of the building which is being altered or added to, provided that any alteration/addition does not exceed the height of the existing building. <p>The Council will restrict the exercise of its discretion to:</p> <ul style="list-style-type: none"> (i) the location of the building; and (ii) the size, bulk and height of the building in relation to ridgelines, areas of indigenous vegetation and habitats of indigenous fauna, existing trees and other natural features; and (iii) the degree to which the landscape will retain the qualities that make it outstanding, including naturalness, and visual and amenity values; and (iv) the design of the building; and 	<p>The site is within an identified Outstanding Natural Landscape within the Northland RPS, but not as identified within the Operative FNDC Plan. As such, this Rule does not apply.</p>

Rule	Requirement	Assessment of Proposal
	<ul style="list-style-type: none"> (v) the location and design of associated vehicle access, manoeuvring and parking areas; and (vi) the extent to which planting can mitigate visual effects; and (vii) the means by which permanent screening of the building from public viewing points on a public road, public reserve, or the foreshore may be achieved, and (viii) the cumulative visual effects of all buildings on the site. 	
12.1.6.2.2	<p>Restricted Discretionary Activity- Excavation and Filling in an Outstanding Landscape</p> <ul style="list-style-type: none"> (a) any excavation and/or filling that exceeds 300m³ in any 12 month period; and (b) any excavation and/or filling that involves a cut or filled face exceeding 1.5m in height i.e. exceeding a total cut and/or fill height of 3m; and (c) it does not meet the permitted activity standards in 12.1.6.1.4(c); <p>The Council will restrict the exercise of its discretion to:</p> <ul style="list-style-type: none"> (i) the location, scale and alignment of excavation and/or filling in relation to any existing indigenous vegetation, site features, and underlying landform including ridgelines; and (ii) the nature of any avoidance, remedying or mitigation measures proposed, including consideration of alternatives, the profile of cut and fill batters, provisions for revegetation and the likely long-term stability of the works proposed; and (iii) the degree to which the landscape will retain the qualities that make it outstanding, including naturalness and visual value. 	The site is within an identified Outstanding Natural Landscape within the Northland RPS, but not as identified within the Operative FNDC Plan. As such, this Rule does not apply.
12.1.6.3.1	<p>Discretionary Activity: Development Bonus</p> <p>Where a site is located wholly or partly within an Outstanding Landscape (as shown on the Resource Maps), or Outstanding Landscape Feature or Outstanding Natural Feature (as listed in Appendices 1A and 1B in Part 4, and as shown on the Resource Maps) and:</p> <ul style="list-style-type: none"> (a) Where any or all of the area included within that landscape and/or feature is proposed to be permanently protected, and/or where revegetation and/or enhancement is proposed, within that landscape and/or feature, either: 	The site is within an identified Outstanding Natural Landscape within the Northland RPS, but not as identified within the Operative FNDC Plan. As such, this Rule does not apply.

Rule	Requirement	Assessment of Proposal
	<p>(i) the standards permitted on that site may be increased up to the lower level that corresponds with that provided for discretionary activities in the relevant zone. Where necessary, to give practical effect to this development bonus, the Council will not require compliance with any of the following rules: Traffic Intensity, Scale of Activities and Impermeable Surfaces; or</p> <p>(ii) the Council may grant consent to an application to subdivide one or more bonus lots. The new lot(s) can be either from the parent title on which the area to be protected, revegetated and/or enhanced is located, or on another title. The new lot(s) may be created in addition to the rights to subdivide which otherwise apply, and may include the area to be protected and/or enhanced. The minimum area of a bonus lot shall be the minimum area provided for as a discretionary subdivision activity in the relevant zone. If the site is located within the Rural Production Zone the minimum discretionary lot size of any bonus lot shall be 4.0 ha. This bonus lot provision cannot apply to the General Coastal Zone as there is no discretionary minimum lot size (management plan subdivision is the only option provided).</p> <p>(b) Where there is an ongoing comprehensive pest control programme within that landscape or feature, the Council may allow a bonus of up to 20% more open space and impermeable surface than is allowed as a restricted discretionary standard or alternatively increase the Scale of Activities rule up to the lower level that corresponds with that provided for under a discretionary activity in the relevant zone.</p> <p>The amount of additional development opportunities, or the number of extra lots that are allowed by the Council, will be determined in relation to the degree of protection of the landscape and/or features that is proposed, and to the extent of any revegetation or enhancement within that landscape and/or feature. Preference will be given to locating additional residential intensity or further lots outside of the Outstanding Landscape, Outstanding Natural Feature, or Outstanding Landscape Feature.</p>	

Rule	Requirement	Assessment of Proposal
	<p>The Council will require that a covenant or other legal instrument be registered against the Certificate of Title to record the commitment to protection, revegetation, or enhancement before any bonus can be given effect to.</p> <p>The Council may impose, as a condition of consent to any application for a development bonus, a requirement that a bond be paid, to be refunded when the Council is satisfied that the conditions attached to that consent have been complied with. The Council may provide assistance in respect of any such application by waiving resource consent charges and reserve contributions. It may also provide assistance with fencing and fees associated with achieving formal protection.</p>	

Chapter 12.2: Operative Plan Natural and Physical Resources – Indigenous Vegetation Clearance Permitted Standards

Rule	Requirement	Assessment of Proposal
12.2.6.1.1	<p>Indigenous vegetation clearance permitted throughout the district</p> <p>Notwithstanding any rule in the Plan to the contrary but subject to Rules 12.5.6.1.1, 12.5.6.1.3 and 12.5.6.2.2 in the Heritage section of this Plan, indigenous vegetation clearance is permitted throughout the District where the clearance is for any of the following purposes:</p> <ul style="list-style-type: none"> (d) ... (e) ... (f) the removal of trees and other vegetation which, as a result of old age or a natural event such as a storm or erosion, are a risk to the safety of people or property; or (g) the maintenance of existing roads, and private accessways and walkways including for the purposes of visibility and road safety; or (h) the formation and maintenance of walking tracks less than 1.2m wide using manual methods which do not require the removal of any tree over 300mm in girth; or (i) the maintenance of existing open space within 20m of an existing building; or (j) the removal of dead trees, provided that no more vegetation is cleared or trimmed than is necessary for safe removal; or (k) ... (l) the maintenance of existing fence lines, provided that the clearance does not exceed 3.5m in width either side of the fence line; or 	<p>Does not comply</p> <p>The removal of the vegetation on the site to construct the subdivision does not comply with the permitted standard.</p>

Rule	Requirement	Assessment of Proposal
	<p>(m) normal gardening activities which result from the maintenance of lawn and gardens; or</p> <p>(n) the removal is in accordance with an existing use right; or</p> <p>(o) the removal is for a new fence where the purpose of the new fence is to exclude stock and/or pests from the area provided that the clearance does not exceed 3.5m in width either side of the fence line;</p> <p>(p) creation and maintenance of firebreaks provided that no more vegetation is cleared than is necessary to achieve the practical purpose of the firebreak; or</p> <p>(q) vegetation clearance of land which has been previously cleared and where the vegetation to be cleared is less than 10 years old</p> <p>(r) it involves the felling, trimming, damaging or removal of a tree or group of trees in an urban environment unless the tree or group of trees is—</p> <p>(A) specifically identified in the plan (refer to Chapter 12.5 and Appendix 1D); or</p> <p>(B) located within an area in the district that—</p> <p>(i) is a reserve (within the meaning of section 2(1) of the Reserves Act 1977); or</p> <p>(ii) is subject to a conservation management plan or conservation management strategy prepared in accordance with the Conservation Act 1987 or the Reserves Act 1977</p> <p>Where urban environment means an allotment no greater than 4000 m² — (a) that is connected to a reticulated water supply system and a reticulated sewerage system; and (b) on which is a building used for industrial or commercial purposes, or a dwellinghouse.</p>	
12.2.6.2	<p>Restricted Discretionary Activities</p> <p>An activity is a restricted discretionary activity if:</p> <p>(a) it does not comply with Rule 12.2.6.1.1 Indigenous Vegetation Clearance Permitted Throughout the District; Rule 12.2.6.1.3 Indigenous Vegetation Clearance in the General Coastal Zone or Rule 12.2.6.1.4 Indigenous Vegetation Clearance in Other Zones for permitted activities above; but</p> <p>(b) it complies with Rules 12.2.6.2.1 Indigenous Vegetation Clearance in the General Coastal Zone and 12.2.6.2.2 Indigenous Vegetation Clearance in Other Zones below; and</p>	<p>Does not comply</p> <p>(a) The vegetation removal does not comply with 12.2.6.1.1</p> <p>(b) The vegetation removal complies with Rule 12.2.6.2.2 for vegetation removal in other zones It</p>

Rule	Requirement	Assessment of Proposal
	<p>(c) it complies with the relevant standards for permitted, controlled or restricted discretionary activities in the zone in which it is located, set out in Part 2 of the Plan - Environment Provisions; and</p> <p>(d) it complies with the other relevant standards for permitted, controlled or restricted discretionary activities set out in Part 3 of the Plan - District Wide Provisions.</p>	<p>does not comply with 12.2.6.2.1 as there is vegetation clearance within 20m of a wetland, even though the site is not within the General Coastal Zone.</p>
12.2.6.2.2	<p>Indigenous Vegetation Clearance in Other zones- Restricted Discretionary Standards (Applies to residential zone)</p> <p>In all zones other than Rural Production, Minerals and General Coastal, the felling, injuring or removal of indigenous vegetation is a restricted discretionary activity if it does not comply with Rules 12.2.6.1.1 or 12.2.6.1.4.</p> <p>The Council will restrict the exercise of its discretion to:</p> <p>(a) the significance of the area assessed using the criteria listed in Method 12.2.5.6; and</p> <p>(b) the extent to which adverse effects on areas of significant indigenous vegetation and significant habitats of indigenous fauna are avoided, remedied or mitigated; and</p> <p>(c) the extent to which any proposed measures will result in the protection and enhancement of the ecological values of the area; and</p> <p>(d) the extent to which the activity may adversely impact on visual and amenity values; and</p> <p>(e) the extent to which the activity may restrict the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, other taonga and the exercise of kaitiakitanga over these.</p> <p>An activity is a discretionary Activity if:</p> <p>(a) it does not comply with Rule 12.2.6.1.1 Indigenous Vegetation Clearance Permitted Throughout the District or Rule 12.2.6.1.2 Vegetation Clearance in the Rural Production and Minerals Zones; or</p> <p>(b) it does not comply with one or more of the other standards for restricted discretionary activities as set out under Rules in 12.2.6.2; and/or</p>	<p>(c) Does not comply with other relevant standards under Part 3. Consent is sought for Earthworks and development in relation to wetlands as set out in the AEE.</p> <p>Table 5 of the Ecological Assessment provides an assessment against the Assessment Criteria 12.2.7</p>

Rule	Requirement	Assessment of Proposal
	<p>(c) it complies with Rules 12.2.6.3.1 Indigenous Vegetation Clearance in the Rural Production and Minerals Zone or 12.2.6.3.2 Development Bonus below; and</p> <p>(d) it complies with the relevant standards for permitted, controlled, restricted discretionary or discretionary activities in the zone in which it is located, set out in Part 2 of the Plan - Environment Provisions; and</p> <p>(e) it complies with the other relevant standards for permitted, controlled, restricted discretionary or discretionary activities set out in Part 3 of the Plan - District Wide Provisions.</p>	
12.2.6.3.2	<p>Development Bonus- Discretionary Activity</p> <p>Where a site contains one or more areas of significant indigenous vegetation and/or significant habitats of indigenous fauna, and:</p> <p>(a) Where any or all of the area(s) and/or habitat(s) on the site is/are proposed by the applicant to be permanently protected, or where revegetation or enhancement is proposed but not where this is required by the Plan or as a condition of consent, either:</p> <ul style="list-style-type: none"> (i) the residential intensity on the site may be increased by up to a maximum level that corresponds with the level provided for restricted discretionary activities (in the case of urban zones), and discretionary activities (in the case of non-urban zones). Where necessary, to give practical effect to this development bonus, the Council will not require compliance with the following rules: Traffic Intensity, Scale of Activities and Impermeable Surfaces; or (ii) The Council may grant consent to an application to subdivide one or more bonus lots. The new lot(s) may be created in addition to the rights to subdivide which otherwise apply, and may include the area to be protected, revegetated or enhanced. The minimum area of a bonus lot shall be the minimum area provided for as a discretionary subdivision activity in the relevant zone. If the site is located within the Rural Production Zone the minimum discretionary lot size of any bonus lot shall be 4.0 ha. This bonus lot provision cannot apply to the General Coastal Zone as there is no discretionary minimum lot size (management plan subdivision is the only option provided) 	<p>Complies</p> <p>Consent is sought under this rule for the removal of the vegetation.</p>

Rule	Requirement	Assessment of Proposal
	<p>(b) Where there is an ongoing comprehensive pest control programme within that area of significant indigenous vegetation or significant habitat of indigenous fauna, the Council may allow a bonus of up to 20% more open space and impermeable surface than is allowed as a restricted discretionary standard or alternatively increase the Scale of Activities rule up to the lower level that corresponds with that provided for under a discretionary activity in the relevant zone.</p> <p>The Council will require that a covenant or other legal instrument be registered against the Certificate of Title to record the commitment to protection, revegetation, or enhancement before any bonus can be given effect to.</p> <p>In deciding whether or not to grant a development bonus, Council will ensure that the adverse effects on the areas of significant indigenous vegetation and/or significant habitats of indigenous fauna that may result from the increased residential intensity or subdivision are avoided.</p> <p>The Council may impose, as a condition of consent to any application for a development bonus, a requirement that a bond be paid, to be refunded when the Council is satisfied that the conditions of that resource consent have been complied with.</p> <p>The Council may provide assistance in respect of any such application by waiving resource consent charges and reserve contributions. It may also provide assistance with fencing and fees associated with achieving formal protection.</p>	

Chapter 12.3: Operative Plan Natural and Physical Resources -Soil and Minerals Permitted Standards

Rule	Requirement	Assessment of Proposal
12.3.6.1.3	<p>Excavation/Filling in the Residential Zone Permitted provided that:</p> <p>(a) It does not exceed 200m³ in any 12 month period per site; and</p> <p>(b) it does not involve a cut or filled face exceeding 1.5m in height i.e. the maximum permitted cut and fill height may be 3m.</p>	<p>Does Not Comply</p> <p>Total proposed earthworks area is 14,264 m²</p>
12.3.6.1.4	Nature of Filling Materials	Complies

Rule	Requirement	Assessment of Proposal
	Filling in any zone shall meet the following standards: (a) the fill material shall not contain putrescible, pollutant, inflammable or hazardous components; and (b) the fill shall not consist of material other than soil, rock, stone, aggregate, gravel, sand, silt, or demolition material; and (c) the fill material shall not comprise more than 5% vegetation (by volume) of any load.	Can manage through conditions on the consent requiring compliance with this standard.
12.3.6.2.2	Restricted Discretionary Activity- Excavation/Filling in a residential zone Restricted Discretionary Activity provided that: (a) it does not exceed 500m ³ in any 12 month period per site; and (b) it does not involve a cut or filled face exceeding 1.5m in height i.e. the maximum permitted cut and fill height may be 3m.	Does Not Comply Total proposed earthworks area is 14,264 m ² If this standard is not met, then consent is required as a Discretionary Activity under Rule 12.3.6.3
12.3.6.3	Discretionary Activities An activity is a discretionary activity if: (a) it does not comply with one or more of the standards for permitted or restricted discretionary activities as set out under Rules 12.3.6.1 and 12.3.6.2 above; or (b) The excavation and/or filling is for the purposes of mining or quarrying, other than a quarry covered by definition of ‘normal rural practices’, and a Development Plan is part of the application as provided for in Rule 12.3.6.3.1 below; but (c) it complies with the relevant standards for permitted, controlled, restricted discretionary and discretionary activities in the zone in which it is located, set out in Part 2 of the Plan - Environment Provisions; and (d) it complies with the other relevant standards for permitted, controlled, restricted discretionary or discretionary activities set out in Part 3 of the Plan - District Wide Provisions. The Council may impose conditions of consent on a discretionary activity or it may refuse consent to the application. When considering a discretionary activity	Consent is sought as a Discretionary Activity Compliance with Rule 12.3.6.1 is not achieved.

Rule	Requirement	Assessment of Proposal
	application, the Council will have regard to the assessment criteria set out under Section 12.3.7 and, where appropriate, Chapter 11.	

Chapter 12.4: Operative Plan Natural and Physical Resources -Natural Hazards Permitted Standards

Rule	Requirement	Assessment of Proposal
12.4.6.1.2	<p>Fire Risk to Residential Units</p> <p>(a) Residential units shall be located at least 20m away from the drip line of any trees in a naturally occurring or deliberately planted area of scrub or shrubland, woodlot or forest;</p>	<p>Does not comply</p> <p>The proposed building platforms will be located at least 20m away from the drip line</p> <p>Consent is sought as a <u>Discretionary Activity</u> under Rule 12.4.6.3</p>
12.4.7	<p>Assessment Criteria</p> <p>The matters set out in s104 and s105, and in Part II of the Act, apply to the consideration of all resource consents for land use activities. In addition to these matters, the Council shall also apply the relevant assessment matters set out below:</p> <p>(a) the degree to which the activity may cause or exacerbate natural hazards or may be adversely affected by natural hazards, and therefore increase the risk to life, property and the environment;</p> <p>(b) the extent to which the activity may adversely affect cultural and spiritual values;</p> <p>(c) the degree to which any proposed activity is compatible with the maintenance of the natural character of the environment;</p> <p>(d) the effects on amenity values, landscape values, heritage features and indigenous habitats and ecosystems, especially in the coastal environment and associated with rivers, lakes, wetlands and their margins;</p> <p>(e) the effects on natural features, such as beaches, sand dunes, mangrove areas, wetlands and vegetation, which have the capacity to protect land and structures from natural hazards;</p> <p>(f) any adverse effects on water quality;</p>	

Rule	Requirement	Assessment of Proposal
	<p>(g) any adverse effects of the activity on any archaeological sites;</p> <p>(h) any effect on the life supporting capacity of soil;</p> <p>(i) the potential impact of sea level rise;</p> <p>(j) in respect of fire risk to residential units:</p> <ul style="list-style-type: none"> (i) the degree of fire risk to dwellings arising from the proximity of the woodlot or forest and vice versa; and (ii) any mitigation measures proposed to reduce the fire risk; and (iii) the adequacy of the water supply; and (iv) the accessibility of the water supply to fire service vehicles. <p>(k) any cumulative adverse effects on the environment arising from the activity; (l) the potential need for ongoing maintenance and the potential effects of such maintenance;</p> <p>(m) the effects of any proposed option to either avoid, remedy or mitigate the effects of identified natural hazards;</p> <p>(n) the ability to monitor the effects of the activity and take remedial action (e.g. removal) if necessary;</p> <p>(o) the extent to which any proposed activity or works intended to provide protection from natural hazards will result in the effects of the natural hazard being transferred to another location.</p>	

Chapter 12.5: Operative Plan Natural and Physical Resources -Heritage Permitted Standards

Rule	Requirement	Assessment of Proposal
12.5.6.1.2	<p>Alterations to/an maintenance of historic sites, buildings and objects</p> <p>No person shall alter, remove or destroy any site, building or object listed in Appendix 1E and shown on the Zone Maps and Heritage Precinct Maps without a resource consent. This provision shall not apply to minor repairs and maintenance of such historic sites, buildings and objects</p>	There is a known midden on the site, listed on the planning maps.
12.5.6.1.3	<p>Registered Archaeological Sites</p> <p>Activities involving the alteration of land, including building, excavation, filling, planting of trees and disturbance of ground, shall not disturb, modify, damage or destroy a registered archaeological site (as listed in Appendix 1G and shown on the</p>	<p>Complies.</p> <p>There is a possible midden located on the site. The proposed development has been designed to avoid excavation in this location.</p>

Rule	Requirement	Assessment of Proposal
	Resource Maps), unless an Authority to Destroy, Damage or Modify an Archaeological Site has been issued by the New Zealand Historic Places Trust.	<p>Given the risk of finding more archeological sites, an Archaeology Approval will be applied for across the site to set out a process should any site of significance be found during the earthworks phase.</p> <p>The accidental discovery protocol shall also apply.</p>
12.5.6.2.2	<p>Restricted Discretionary: Activities which could affect sites of cultural significance to Maori</p> <p>Building, excavating, filling, planting of trees or clearance of vegetation within any Site of Cultural Significance to Maori, as listed in Appendix 1F and shown on the Resource Maps, is a restricted discretionary activity, unless the activity is proposed by the requesting party, in which case this rule does not apply.</p> <p>The Council will restrict the exercise of its discretion to:</p> <ul style="list-style-type: none"> (a) the extent to which the activity may adversely affect cultural and spiritual values; and (b) whether the activity will have an adverse effect on any historic site, building or object, notable tree, or archaeological site; and (c) the means by which any adverse effects on cultural, spiritual and heritage values can be avoided, remedied or mitigated. <p>Where an application is made in terms of this rule, the requesting party and the relevant iwi authority and the New Zealand Historic Places Trust shall be considered an affected party.</p>	
12.5.6.3.1	<p>Discretionary Activities: Development Bonus</p> <p>Where a site contains a heritage resource, and where this resource is proposed to be permanently protected, and/or where restoration or rehabilitation of the heritage resource is proposed, the Council may grant consent to an application to</p>	

Rule	Requirement	Assessment of Proposal
	<p>subdivide one or more bonus lots. The new lot(s) can be either from the parent title on which the area to be protected, restored or rehabilitated is located, or on another title. The new lot(s) may be created in addition to the rights to subdivide which would otherwise apply, and may include the area to be protected, restored or rehabilitated. The minimum area of a bonus lot shall be the minimum area provided for as a discretionary subdivision activity in the relevant zone. If the site is located within the Rural Production Zone the minimum discretionary lot size of any bonus lot shall be 4.0 ha. This bonus lot provision cannot apply to the General Coastal Zone as there is no discretionary minimum lot size (management plan subdivision is the only option provided).</p> <p>The Council will require that a covenant or a consent notice or other legal instrument records the commitment to protection, restoration or rehabilitation before any bonus can be given effect to.</p> <p>The Council may impose, as a condition of consent to any application for a development bonus, a requirement that a bond be paid, to be refunded when the Council is satisfied that the conditions attached to that consent have been complied with.</p> <p>The Council may provide assistance in respect of any such application by waiving resource consent charges and reserve contributions. It may also provide assistance with fencing and fees associated with achieving formal protection.</p> <p>Where an application is made in terms of this rule, the New Zealand Historic Places Trust and, where appropriate, the tangata whenua and the relevant iwi authority for whom the heritage resource has significance, and the Department of Conservation shall be considered an affected party.</p>	

Chapter 12.7: Operative Plan Natural and Physical Resources -Lakes, Rivers, Wetlands and the Coastline: Permitted Standards

Rule	Requirement	Assessment of Proposal
12.7.6.1.1	<p>Setback from lakes, rivers and the coastal marine area</p> <p>Any building and any impermeable surface must be set back from the boundary of any lake (where a lake bed has an area of 8ha or more), river (where the average width of the riverbed is 3m or more) or the boundary of the coastal marine area, except that this rule does not apply to man-made private water bodies other than the Manuwai and Waingaro Reservoirs.</p> <p>...</p> <p>(c) a minimum of 26m in the Residential, Coastal Residential and Russell Township Zones.</p> <p>Exemptions listed for activities such as river crossings/culverts</p>	<p>Complies</p> <p>The intermittent stream located on the site has an average width of less than 3m.</p>
12.7.6.1.2	<p>Setback from smaller lakes, rivers and wetlands</p> <p>Any building and any impermeable surface must be set back from the boundary of lakes (where the lake bed has an area of less than 8ha) smaller continually flowing rivers (where the average width of the river bed is less than 3m) and wetlands except that this rule does not apply to man-made private water bodies:</p> <p>The setback shall be:</p> <p>(a) 3 x the area (ha) of the lake (e.g. if the lake is 5ha in area, the setback shall be 15m);</p> <p>and/or</p> <p>(b) 10 x the average width of the river where it passes through or past the site;</p> <p>provided that in both cases the minimum setback shall be 10m and the maximum setback shall be no more than the minimum required by Rule 12.7.6.1.1 above;</p> <p>(c) 30m for any wetland of 1ha or more in area.</p> <p>Exemptions listed for activities such as river crossings/culverts.</p>	<p>Does not comply</p> <p>The nominated building areas for proposed lots 3- 10 will be located more than 10m but less than less than 30m from the raupo wetland which is identified to be greater than 1ha in size.</p> <p>There is a proposed retaining wall within 30m of a wetland within proposed Lot 4 and 5. The wall will be an engineered fill embankment at a max height of 4m.</p> <p>Discretionary Activity as standard not complied with.</p>
12.7.6.1.4	<p>Land use activities involving discharges of Human Sewage Effluent</p> <p>Land use activities which produce human sewage effluent (including grey water) are permitted provided that:</p> <p>(a) the effluent discharges to a lawfully established reticulated sewerage system; or</p>	<p>Complies</p> <p>A new connection to the reticulated network is proposed</p>

Rule	Requirement	Assessment of Proposal
	<p>(b) the effluent is treated and disposed of on-site such that each site has its own treatment and disposal system no part of which shall be located closer than 30m from the boundary of any river, lake, wetland or the boundary of the coastal marine area.</p> <p>Note: The discharge may also require consent under the Regional Water and Soil Plan</p>	
12.7.6.2	<p>Restricted Discretionary Activity An activity is a restricted discretionary activity if:</p> <p>(a) it complies with Rule 12.7.6.2.1 Development Bonus below; and (b) it complies with the relevant standards for permitted, controlled or restricted discretionary activities in the zone in which it is located, set out in Part 2 of the Plan – Environment Provisions; and (c) it complies with the other relevant standards for permitted, controlled or restricted discretionary activities set out in Part 3 of the Plan – District Wide Provisions.</p> <p>The Council may approve or refuse an application for a restricted discretionary activity, and it may impose conditions on any consent. In assessing an application for a restricted discretionary activity, the Council will restrict the exercise of its discretion to the matters specified in the relevant rule and will, where appropriate, take account of the Assessment Criteria applicable in the relevant zone and in Section 12.7.7.</p>	Does not comply- A 20m fenced buffer is not possible across the site
12.7.6.2.1	<p>Restricted Discretionary Activity: Development Bonus Where in any zone an activity is subject to a discretionary activity standard limiting building coverage or impermeable surface coverage, the maximum coverage set by that discretionary activity standard may be increased by up to 100% where a 20m wide margin for the length of the surface waterbody that lies within or adjacent to the site, is permanently protected from all stock intrusion by fencing or other means and is planted and maintained in indigenous vegetation suitable for that location</p>	Does not comply- A 20m fenced buffer is not possible across the site
12.7.6.3	Discretionary Activity	Complies

Rule	Requirement	Assessment of Proposal
	<p>An activity is a discretionary activity if:</p> <ul style="list-style-type: none"> (a) it complies with Rule 12.7.6.1.6 Noise above; but (b) it does not comply with one or more of the other standards for permitted activities set out under Rule 12.7.6.1 above; and (c) it complies with the relevant standards for permitted, controlled, restricted discretionary or discretionary activities in the zone in which it is located, set out in Part 2 of the Plan - Environment Provisions; and (d) it complies with the other relevant standards for permitted, controlled, restricted discretionary or discretionary activities set out in Part 3 of the Plan - District Wide Provisions; and (e) it is not a non-complying activity as described in Rule 12.7.6.4. <p>The Council may impose conditions of consent on a discretionary activity or it may refuse consent to the application. When considering a discretionary activity application, the Council will have regard to the assessment criteria set out under Section 12.7.7. Where an application is made in terms of this rule for any activity that relates to significant indigenous wetlands the Northland Regional Council and the Department of Conservation shall be considered an affected party. If an activity does not comply with the standards for a discretionary activity, it will be a non complying activity</p>	<p>Consent is sought as a Discretionary Activity. Rule 12.7.6.1.2 cannot be complied with. The proposed development is not non-complying under Rule 12.7.6.4.</p>
12.7.6.4	<p>Non-complying</p> <p>Any new building within 20m of the boundary of a lake greater than 8ha in area, any continually flowing river wider than 3m or the coastal marine area which is not a permitted, restricted discretionary or discretionary activity under Rules 12.7.6.1, 12.7.6.2 or 12.7.6.3 is a noncomplying activity</p>	N/A

Chapter 13: Operative Plan Subdivision Rules

Rule	Requirement	Assessment of Proposal
13.7.2.1	<p>Controlled Activity: Minimum Allotment sizes Every allotment to be created by a subdivision shall comply either with the conditions of a resource consent or with the minimum standards specified as follows in Table 13.7.2.1, and shall comply with all other relevant zone rules, except as provided for in Rules 13.7.2.4, 13.7.2.5, 13.7.2.6 and 13.7.2.7 below.</p> <p>Table 13.7.2.1 Minimum Lot Sizes (residential)</p> <ul style="list-style-type: none"> - Controlled Activity: The minimum lot sizes are 3,000m² (unsewered) and 600m² (sewered). - Discretionary Activity: The minimum lot sizes are 2,000m² (unsewered) and 300m² (sewered). <p>Table 13.7.2.1(xix) For sites within an outstanding landscape or on a site with outstanding natural features</p> <ul style="list-style-type: none"> - 2. For all other zones, the minimum lot size for a discretionary activity in an Outstanding Landscape, Outstanding Landscape Feature or Outstanding Natural Feature, as listed in Appendices 1A and 1B and as shown on the Resource Maps is the same as the discretionary standard that applies to the zone in which the site is located 	<p>Also refer to rule 13.7.3 and 13.9, 13.7.2.5</p> <p>Complies: The proposed subdivision lot sizes exceed 600m² and are sewered.</p>
13.7.2.2	<p>Allotment dimensions Any allotment created in terms of these rules must be able to accommodate a square building envelope of the minimum dimensions specified below; which does not encroach into the permitted activity boundary setbacks for the relevant zones:</p> <ul style="list-style-type: none"> - Residential Zone: 14 x 14m 	<p>Complies: The scheme plan shows building platforms of 14 X 14m for each residential lot.</p>
13.7.2.6	<p>Access, utilities, roads, reserves Notwithstanding the standards for minimum net area, there shall be no minimum allotment areas in any zone for allotments created for access, utilities, roads and reserves. Within areas covered by a structure plan, appropriate provision shall be made for access, utilities, roads and reserves in terms of those structure plans.</p> <p>A consent notice may be registered on the Certificate of Title, pursuant to Rule 13.6.7, in respect of any lot occupied by a utility, requiring enforcement of a condition that, in the event of the utility being removed, the lot be amalgamated</p>	<p>Complies: There are two access lots where the minimum site size does not apply</p>

Rule	Requirement	Assessment of Proposal
	with an adjoining allotment unless it is a fully complying allotment for the respective zone.	
13.7.3	CONTROLLED (SUBDIVISION) ACTIVITIES: OTHER MATTERS TO BE TAKEN INTO ACCOUNT	
13.7.3.1	<p>Property Access A controlled (subdivision) activity application must comply with rules for property access in Chapter 15, namely Rules 15.1.6C.1.1 - 15.1.6C.1.11 (inclusive).</p>	<p>Does not comply: The accessway does not comply with Rule 15.1.6C.1.1 as the accessway services more than 8 lots and will not be vested as a public road.</p> <p>A full assessment of Chapter 15 is provided for in the following tables.</p>
13.7.3.2	<p>Natural Hazards and other hazards Any proposed subdivision shall avoid, remedy or mitigate any adverse effects of natural hazards. In considering a controlled (subdivision) activity application under Rule 13.7.3.2 the Council will restrict the exercise of its control to the following matters and shall have regard to section 106 of the Resource Management Act 1991:</p> <ul style="list-style-type: none"> (a) the degree to which the proposed subdivision avoids, remedies or mitigates the potential adverse effects of: <ul style="list-style-type: none"> (i) erosion; (ii) overland flow paths, flooding and inundation; (iii) landslip; (iv) rockfall; (v) alluvion (deposition of alluvium); (vi) avulsion (erosion by streams or rivers); (vii) unconsolidated fill; (viii) soil contamination; (ix) subsidence; (x) fire hazard; (xi) sea level rise <p>Provided that where Coastal Hazard Maps show land as being within a Coastal Hazard 1 Area, any subdivision that will create additional allotments (other than to</p>	<p>Refer to the AEE for a full assessment on Natural Hazards.</p>

Rule	Requirement	Assessment of Proposal
	facilitate the subdivision of land for the purposes of transfer to the Council) shall be a non-complying subdivision activity	
13.7.3.3	<p>Water Supply</p> <p>All new allotments shall be provided with the ability to connect to a safe potable water supply with an adequate capacity for the respective potential land uses, except where the allotment is for a utility, road, reserve or access purposes, by means of one of the following:</p> <ul style="list-style-type: none"> (a) a lawfully established reticulated water supply system; or (b) where no reticulated water supply is available, the ability to provide an individual water supply on the respective allotment. <p>In considering a controlled (subdivision) activity application under Rule 13.7.3.3 the Council will restrict the exercise of its control to the following matters:</p> <ul style="list-style-type: none"> (i) the adequacy of the supply of water to every allotment being created on the subdivision, and its suitability for the likely land use, for example the installation of filtration equipment if necessary; (ii) adequacy of water supplies, and access for fire fighting purposes; (iii) the standard of water supply infrastructure installed in subdivisions, and the adequacy of existing supply systems outside the subdivision. 	<p>Complies</p> <p>The Water supply network will be extended into the site. Fire fighting hydrants will be provided in the JOAL.</p>
13.7.3.4	<p>Stormwater disposal</p> <p>(a) All allotments shall be provided, within their net area, with a means for the disposal of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces, in such a way so as to avoid or mitigate any adverse effects of stormwater runoff on receiving environments, including downstream properties. This shall be done for a rainfall event with a 10% Annual Exceedance Probability (AEP).</p> <p>(b) The preferred means of disposal of collected stormwater in urban areas will be by way of piping to an approved outfall, each new allotment shall be provided with a piped connection to the outfall laid at least 600mm into the net area of the allotment. This includes land allocated on a cross lease or company lease. The connection should be at the lowest point of the site to enable water from driveways and other impervious surfaces to drain to it. Where it is not practical to provide stormwater connections for each lot then the application for subdivision shall include</p>	<p>Does not comply</p> <p>It is proposed to manage the stormwater generated from the site via an on-site wetland system that will then discharge to a nearby intermittent stream, then the coastal wetland. Consent from NRC will be required to authorize the discharge.</p>

Rule	Requirement	Assessment of Proposal
	<p>a report detailing how stormwater from each lot is to be disposed of without adversely affecting downstream properties or the receiving environment. (c) The provision of grass swales and other water retention devices such as ponds and depressions in the land surface may be required by the Council in order to achieve adequate mitigation of the effects of stormwater runoff.</p> <p>(d) All subdivision applications creating sites 2ha or less shall include a detailed report from a Chartered Professional Engineer or other suitably qualified person addressing stormwater disposal.</p> <p>(d) Where flow rate control is required to protect downstream properties and/or the receiving environment then the stormwater disposal system shall be designed in accordance with the onsite control practices as contained in “Technical Publication 10, Stormwater Management Devices – Design Guidelines Manual” Auckland Regional Council (2003).</p> <p>In considering a controlled (subdivision) activity application under Rule 13.7.3.4 the Council will restrict the exercise of its control to the following matters:</p> <ul style="list-style-type: none"> (i) control of water-borne contaminants, litter and sediments; (ii) the capacity of existing and proposed stormwater disposal systems (refer also to the Council’s various urban stormwater management plans and any relevant Northland Regional Council stormwater discharge consents); (iii) the effectiveness and environmental impacts of any measures proposed for avoiding or mitigating the effects of stormwater runoff, including low impact design principles; (iv) the location, scale and construction of stormwater infrastructure; (v) measures that are necessary in order to give effect to any drainage or catchment management plan that has been prepared for the area. 	
13.7.3.5	<p>Sanitary and Sewage Disposal</p> <p>(a) Where an allotment is situated within a duly gazetted district or drainage area of a lawfully established reticulated sewerage scheme, or within an area to be serviced by a private reticulated sewerage scheme for which Northland Regional Council has issued a consent, each new allotment shall be provided with a piped outfall</p>	<p>Complies</p> <p>All new allotments will be connected to the existing reticulated wastewater system. Full</p>

Rule	Requirement	Assessment of Proposal
	<p>connected to that scheme and shall be laid at least 600mm into the net area of the allotment.</p> <p>(b) Where connection is not available, all allotments in urban, rural and coastal zones shall be provided with a means of disposing of sanitary sewage within the net area of the allotment, except where the allotment is for a road, or for access purposes, or for a purpose or activity for which sewerage is not necessary (such as a transformer).</p> <p>Note: Allotments include additional vacant sites on cross lease or unit titles.</p> <p>In considering a controlled (subdivision) activity application under Rule 13.7.3.5 the Council will restrict the exercise of its control to the following matters:</p> <ul style="list-style-type: none"> (i) the method and adequacy of sewage disposal where a Council owned reticulated system is not available; (ii) the capacity of, and impacts on, the existing reticulated sewage disposal system; (iii) the location, capacity and environmental effects of the proposed sanitary sewerage system. 	<p>details are outlined within the Land Development Report, prepared by Chesters.</p>
13.7.3.6	<p>Energy Supply</p> <p>All urban allotments (Residential, Commercial, Industrial Zones) including the Coastal Residential, Russell Township, and Rural Living Zones, shall be provided with the ability to connect to an electrical utility system and applications for subdivision consent should indicate how this could be done.</p> <p>In considering a controlled (subdivision) activity application under Rule 13.7.3.6 the Council will restrict the exercise of its control to the following matters: (i) the adequacy and standard of any electrical utility system.</p>	<p>Complies</p> <p>The ability to connect to an electrical utility system will be provided to each lot.</p>
13.7.3.7	<p>Telecommunications</p> <p>All urban allotments (Residential, Commercial, Industrial Zones) including the Coastal Residential, Russell Township, and Rural Living Zones, shall be provided with the ability to connect to a telecommunications system at the boundary of the site.</p>	<p>Complies</p> <p>The ability to connect to a telecommunications system will be provided at the boundary to each lot.</p>

Rule	Requirement	Assessment of Proposal
	<p>In considering a controlled (subdivision) activity application under Rule 13.7.3.7 the Council will restrict the exercise of its control to the following matters: (i) the adequacy and standard of telecommunication installations.</p>	
13.7.3.8	<p>Easements for any purpose</p> <p>Easements shall be provided where necessary for public works and utility services. In considering a controlled (subdivision) activity application under Rule 13.7.3.8 the Council will restrict the exercise of its control to the following matters:</p> <ul style="list-style-type: none"> (a) Easements in gross where a service or access is required by the Council. (b) Easements in respect of other parties in favour of nominated allotments or adjoining Certificates of Title. (c) Service easements, whether in gross or private purposes, with sufficient width to permit maintenance, repair or replacement. Centre line easements shall apply when the line is privately owned and unlikely to require upgrading. (d) The need for easements for any of the following purposes: <ul style="list-style-type: none"> (i) private ways, whether mutual or not; (ii) stormwater, sanitary sewer, water supply, electric power, gas reticulation; (iv) telecommunications; (v) party walls and floors/ceilings; (vi) other utilities. 	<p>Complies</p> <p>The relevant easements to manage the services on the site will be noted on the titles and the JOAL in favor of Far North District Council.</p>
13.7.3.9	<p>Preservation of heritage resources, vegetation, fauna and landscape and land set aside for conservation purposes</p> <p>Where any proposed allotment contains one or more of the following:</p> <ul style="list-style-type: none"> (a) a Notable Tree as listed in Appendix 1D; (b) an Historic Site, Building or Object as listed in Appendix 1E; (c) a Site of Cultural Significance to Maori as listed in Appendix 1F; (d) an Outstanding Natural Feature as listed in Appendix 1A; (e) an Outstanding Landscape Feature as listed in Appendix 1B; (f) an archaeological site as listed in Appendix 1G; 	<p>Complies</p> <p>The Site is not listed under (a) to (g) below.</p>

Rule	Requirement	Assessment of Proposal
	<p>(g) an area of significant indigenous vegetation or significant habitats of indigenous fauna, as defined in Method 12.2.5.6.</p> <p>The continued preservation of that resource, area or feature shall be an ongoing condition for approval to the subdivision consent.</p> <p>Note: There are many ways in which preservation/protection can be achieved, and the appropriate means will vary according to the circumstance. In some cases physical means (e.g. fencing) may be appropriate. In other cases, a legal means will be preferred instead of (or as well as) physical means</p> <p>Council encourages permanent protection by:</p> <ul style="list-style-type: none"> (i) a reserve or covenant under the Reserves Act; (ii) a Maori reservation under s338 and s340 of Te Ture Whenua Maori (Maori Land) Act; (iii) a conservation covenant with the Department of Conservation or the Council; (iv) an open space covenant with the Queen Elizabeth II National Trust; (v) a heritage covenant with the Heritage New Zealand Pouhere Taonga. <p>The Act also provides for a consent notice under s221 in accordance with Rule 13.6.7.</p> <p>In considering a controlled (subdivision) activity application under Rule 13.7.3.9 the Council will restrict the exercise of its control to the preservation of significant indigenous vegetation and fauna habitats, heritage resources and landscape. Where an application is made under this provision, the following shall be included as affected parties in terms of s93 and s94 of the Act:</p> <ul style="list-style-type: none"> ☐ for an Historic Site, Building or Object, or archaeological site, the Heritage New Zealand Pouhere Taonga and the Department of Conservation; ☐ for a Site of Cultural Significance to Maori, the tangata whenua for whom the site has significance; 	

Rule	Requirement	Assessment of Proposal
	<p>for an area of significant indigenous vegetation or significant habitat of indigenous fauna, the Department of Conservation</p>	
13.7.3.10	<p>Access to reserves and water ways</p> <p>Where appropriate and relevant, public access shall be provided in proposed subdivisions, to public reserves, waterways and esplanade reserves.</p> <p>The Council may decide, on application, that public access to reserves or public areas may be provided in lieu of, or partially in lieu of, any reserves or financial contribution that is required in respect of the subdivision.</p> <p>In considering a controlled (subdivision) activity application under Rule 13.7.3.10 the Council will restrict the exercise of its control to the provision of easements or registration of an instrument for the purpose of public access and the provision of public works and utility services.</p>	<p>Does not comply</p> <p>Public access to the wetland area is not proposed and not considered appropriate in this location, given the ecological sensitivity of the site. Public access is already provided via a paper road along the Te Haumi River.</p>
13.7.3.11	<p>Land Use compatibility.</p> <p>Subdivision shall avoid, remedy or mitigate any adverse effects of incompatible land uses (reverse sensitivity). In considering a controlled subdivision activity under Rule 13.7.3.11 the Council will restrict the exercise of its control to the following matters:</p> <p>(i) the degree to which the proposed allotments take into account adverse effects arising from incompatible land use activities (including but not limited to noise, vibration, smell, smoke, dust and spray) resulting from an existing land use adjacent to the proposed subdivision.</p>	<p>Complies</p> <p>The site is zoned for residential purposes. The proposed development is for residential activity. There are not expected to be any reverse sensitivity issues generated from the proposed development.</p>
13.7.3.12	<p>Proximity to airports</p> <p>Where applications for subdivision consent relate to land that is situated within 500m of the nearest boundary of land that is used for an airport, the airport operator will be considered by the Council to be an affected party. The written approval of the airport operator to the proposed subdivision must be obtained by the applicant.</p>	<p>N/A</p>

Rule	Requirement	Assessment of Proposal
	Where this approval cannot be obtained, the Council will consider the application as a discretionary activity application.	
13.9.1	<p>Discretionary Activity- Subdivision Subdivision is a discretionary activity where:</p> <ul style="list-style-type: none"> (a) it does not comply with one or more of the standards for controlled or restricted-discretionary (subdivision) activities set out in rules under 13.7 and 13.8, but (b) it complies with the rules under 13.9.1, 13.9.2 or 13.9.3; (c) it is located in the Pouerua Heritage Precinct. <p>Applications for discretionary and non-complying activities within the South Kerikeri Inlet Zone will require notification of all property owners within the Zone and DH Ellis (being the property owner of Lot 2 DP 114410) at least.</p> <p>If a subdivision activity does not comply with the standards for a discretionary (subdivision) activity, it will be a non-complying (subdivision) activity.</p>	<p>Does not Comply</p> <p>There is a non-compliance with the access provisions within Chapter 15 referenced in Chapter (Standard 13.7.3.1)</p> <p>Compliance is achieved with Standards</p> <ul style="list-style-type: none"> - 13.9.1 (Complies) - The Site is not located within the Pouerua Heritage Precinct. <p>While it is unclear in the drafting of this rule as to whether compliance with all (a), (b), AND (c) is required to be a Discretionary Activity, advice sought from FNDC Duty Planner on 25/06/2024 confirms that this rule is meant to be read as AND, rather than OR.</p> <p>As such, as a precautionary approach, consent is sought as a Non-complying Activity.</p>
13.9.1	<p>Minimum net area for vacant new lots and new lots which already accommodate structures: Refer to 13.7.2.1 Minimum allotment sizes</p>	<p>Complies</p> <p>Table 13.7.2.1 Minimum Lot Sizes (residential)</p> <ul style="list-style-type: none"> - Controlled Activity: The minimum lot sizes are 3,000m² (unsewered) and 600m² (sewered).

Rule	Requirement	Assessment of Proposal
		<p>- Discretionary Activity: The minimum lot sizes are 2,000m² (unsewered) and 300m² (sewered).</p> <p>All the sites are over the minimum 600m² lot size.</p> <p>However, there is a non-compliance with the access provisions within Chapter 15 referenced in Chapter (Standard 13.7.3.1)</p> <p>The Site is not located within the Pouerua Heritage Precinct, as such this rule con not apply.</p>
13.9.2	<p>Management Plan</p> <p>The purpose of management plan subdivision or development is to facilitate the sustainable management of natural and physical resources in an integrated way. The management plan rule provides a once-off opportunity for integrated subdivision or development which results in superior outcomes to more traditional forms of subdivision, use or development.</p> <p>Management plans allow subdivision and development where the location, form and scale of the proposal complements sustainable environmental management consistent with the protection of natural character, landscape, amenity, heritage, and cultural values.</p> <p>Management plans provide flexibility to create innovative and site specific proposals.</p>	<p>The Site is not located within the Pouerua Heritage Precinct, as such this rule con not apply.</p>
13.9.3	<p>Discretionary Activity: Development Bonus</p> <p>Where any proposed plan of subdivision provides for the formal protection of Outstanding Landscape (as shown on the Resource Maps), or Outstanding Landscape Features or Outstanding Natural Features (as listed in Appendices 1A and 1B and shown on the Resource Maps), or areas of significant indigenous vegetation or significant habitats of indigenous fauna (refer to criteria in Method 12.2.5.6 of the</p>	<p>The Site is not located within the Pouerua Heritage Precinct, as such this rule con not apply.</p>

Rule	Requirement	Assessment of Proposal
	<p>Plan), or heritage resources, the Council may grant a development bonus, on application for a resource consent. Notwithstanding the rules referred to below, bonus lots may not be located in Natural Resource Overlay Areas or in the General Coastal Zone.</p> <p>The rules relating to development bonuses are as follows:</p> <ul style="list-style-type: none"> (a) 12.1.6.3.1 (in respect of landscape and natural features); (b) 12.2.6.3.2 (in respect of indigenous flora and fauna); (c) 12.5.6.3.1 (in respect of heritage resources); and (d) 18.3.6.4.3 (in respect of the Waimate North Zone). <p>Note: Applications under these rules must identify donor and recipient areas and assess environmental effects on those areas.</p>	
13.11	<p>Non-complying Subdivision</p> <p>Subdivision is a non-complying activity where:</p> <ul style="list-style-type: none"> (a) if a subdivision activity does not comply with the standards for a discretionary (subdivision) activity; or (b) the subdivision is in a Coastal Hazard 1 Area, as shown on the Coastal Hazard Maps; (c) the subdivision is in the Recreational Activities and Conservation Zones. Any application for a subdivision in the Recreational Activities and Conservation Zones will be publicly notified; or (d) a new boundary line passes through the Outstanding Natural Feature (Appendix 1A) or Outstanding Landscape Feature (Appendix 1B) or a lot is created which results in the only building site and/or access to it being located in the feature unless it is for creation of a reserve under the Reserves Act 1977. This clause does not apply within the Pouerua Heritage Precinct. (e) if a subdivision activity does not comply with the standards of Rule 13.8.1 (National Grid Corridor). <p>The Council will use the assessment criteria in 13.10 as a guide when assessing non-complying subdivision activities in conjunction with the matters set out in Sections 104, 104B, 104D and 106 of the Act</p>	<p>Consent is sought as a non complying activity</p> <p>The Site is not located within the Pouerua Heritage Precinct, as such the activity can not be assessed as Discretionary.</p>
	Standards 13.10.2 to 13.10.20	See adjacent column for assessment and refer to AEE.

Rule	Requirement	Assessment of Proposal
	<p>13.10.2- Natural Hazards - Compliance can be achieved with the standard through conditions</p> <p>13.10.3- Water supply - Reticulation is proposed. Compliance can be achieved with the standard through conditions</p> <p>13.10.4- Stormwater - Consent is sought from NRC for the management of stormwater from the site. - Compliance can be achieved with the standard through conditions</p> <p>13.10.5- Wastewater - Reticulation is proposed. Compliance can be achieved with the standard through conditions</p> <p>13.10.6- Energy Supply - Compliance can be achieved with the standard through conditions. No reticulated gas is proposed.</p> <p>13.10.8- Telecommunications - Compliance can be achieved with the standard through conditions</p> <p>13.10.9-Easements for any purpose - All easements are listed within the AEE or shown on the proposed Scheme Plan</p> <p>13.10.10- Access - refer to landscape assessment and transport assessment.</p> <p>13.10.11- Earthworks - Refer to AEE</p>	

Rule	Requirement	Assessment of Proposal
	<p>13.10.12- Building Locations - Suitable building platforms are provided for- refer to the scheme plan and geotechnical assessment.</p> <p>13.10.13- Vegetation management - Compliance can be achieved with the standard through conditions. Large areas of existing vegetation are identified to be protected (legally) - a reserve is proposed to be set aside to FNDC for the management of stormwater - the subdivision will result in a significant enhancement of the existing indigenous vegetation through on-going maintenance and pest management.</p> <p>13.10.15- Access to waterbodies - No public access is proposed. There is an existing paper road along the Te Haumi River that provides for public access to the CMA.</p> <p>13.10.18 – Natural Character of the Coastal Environment - The coastal wetland on the site is proposed to be legally protected.</p> <p>13.10.19- Energy efficiency and renewable energy development/use - pedestrian connections are provided for. - no lighting within the accessway is proposed due to the ecological sensitivities of the site.</p>	

Chapter 15: Operative Plan Traffic and Lighting

Rule	Requirement	Assessment of Proposal
15.16C.2	Discretionary Activity	The Proposed Development is a Discretionary Activity under this Rule

Rule	Requirement	Assessment of Proposal				
	<p>An activity is a discretionary activity if:</p> <p>(a) it does not comply with one or more of the standards for permitted activities set out in Rules 15.1.6C.1.1 to 15.1.6C.1.11; but</p> <p>(b) it complies with the relevant standards for permitted, controlled, restricted discretionary or discretionary activities in the particular zone in which it is located set out in Part 2 of the Plan - Environment Provisions; and</p> <p>(c) it complies with all other relevant standards for permitted, controlled, restricted discretionary or discretionary activities set out in Part 3 of the Plan - District Wide Provisions.</p> <p>Vehicle access to and from land adjoining a State Highway that is a Limited Access Road is subject to restrictions and is controlled by the New Zealand Transport Agency under the Government Roading Powers Act 1989. Accordingly any change to form or intensity of land use on such land is subject to the approval of the New Zealand Transport Agency</p>	<p>based on the Assessment of standards 15.1.6C.1.1 to 15.1.6C.1.11 in the table below.</p>				
15.1.6C.1 Access- Permitted Standards- Referred to in the Subdivision matters of Control.						
15.1.6C.1.1	<p>Private accessways in all zones</p> <p>(a) The construction of private accessway, in addition to the specifics also covered within this rule, is to be undertaken in accordance with Appendix 3B-1 in Part 4 of this Plan.</p> <p>(b) Minimum access widths and maximum centreline gradients, are set out in the Appendix 3B-1 table except that the grade shall be:</p> <table border="1"> <tbody> <tr> <td>All urban zones; excluding the Commercial and Industrial Zones</td> <td>No steeper than 1:8 adjacent to the road boundary for at least 5m.</td> </tr> <tr> <td>Commercial and Industrial Zones</td> <td>No steeper than 1:20 adjacent to the road boundary for a length of at least 6m.</td> </tr> </tbody> </table> <p>(c) A private accessway may serve a maximum of 8 household equivalents.</p> <p>(d) Where a subdivision serves 9 or more sites, access shall be by public road.</p>	All urban zones; excluding the Commercial and Industrial Zones	No steeper than 1:8 adjacent to the road boundary for at least 5m.	Commercial and Industrial Zones	No steeper than 1:20 adjacent to the road boundary for a length of at least 6m.	<p>Does not Comply</p> <p>a) The private road generally meets the dimensional requirements for a ‘private accessway’. The exception is that the first 5 metres of the access has a maximum gradient of 1:7.5. This minor infringement is not expected to result in any operational issues.</p> <p>b)- d) The private accessway will serve 16 lots. The access road will not be vested as a public road. Due to the significant topographical and ecological constraints the provision of a dimensionally compliant ‘Low Volume Access Road’ is not possible.</p>
All urban zones; excluding the Commercial and Industrial Zones	No steeper than 1:8 adjacent to the road boundary for at least 5m.					
Commercial and Industrial Zones	No steeper than 1:20 adjacent to the road boundary for a length of at least 6m.					

Rule	Requirement	Assessment of Proposal
	<p>(e) Access shall not be permitted:</p> <ul style="list-style-type: none"> (i) onto a State Highway or a Limited Access Road; (ii) onto an arterial or collector road within 90m of its intersection with an arterial road or a collector road; (iii) onto an arterial or collector road within 30m of its intersection with a local road; (iv) onto a local road within 30m of its intersection with an arterial or collector road; (v) onto Kerikeri Road (both sides of the road along the portion between Maraenui Drive and Cannon Drive). This rule does not apply to sites with lawfully established access points (as at 6 September 2001) onto Kerikeri Road. (vi) onto Kerikeri Inlet Road from Lot 1 DP 404507 or Lot 1 DP 181291 (and any sites created as result of a subdivision of these lots), except from a single vehicle crossing or intersection at least 30m from the adjoining boundary with Lot 2 DP 103531 and with at least 115m visibility in each direction. <p>Note 1: For the purposes of this rule, a Limited Access Road includes State Highways that have been declared Limited Access Roads by the New Zealand Transport Agency plus other roads that the Council has determined shall have limited access. The roading hierarchy is described in the Council's "Engineering Standards and Guidelines" (June 2004 – Revised 2009) and related documents.</p> <p>Note 2: A Limited Access Road (LAR) declaration is used to maintain the level of property access along a section of road, and to progressively reduce the number of potential points of conflict between turning and through traffic.</p> <p>Note 3: Access to or from roads that have been declared Limited Access Roads under Part IV of the Government Rounding Powers Act 1989 are subject to separate procedures under that Act.</p> <p>Note 4: LAR provisions allow the New Zealand Transport Agency to have an input, with any subdivision or property development, into the number, location and design of accesses on a particular section of LAR. In situations where an alternative road is available for property access, the New Zealand Transport Agency will encourage the property to have all its access to and from that alternative road. The approval of the New Zealand Transport Agency and the Minister of Transport will be required for any subdivision and change in land use if land adjoins a LAR. Applicants are encouraged to contact the New Zealand Transport Agency, prior to lodging applications with the Council, to discuss how their proposal may be affected.</p> <p>Note 5: For the purpose of this rule, non-State Highway Limited Access Roads include roads identified and gazetted by Council as a Limited Access Road.</p>	<p>On this basis, the private road has the configuration of a 'Private Accessway' and has incorporated the configuration of a 'Low Volume Access' Road wherever possible.</p> <p>e) none of these requirements are applicable</p>
15.1.6C.1.2	Private accessways in urban zones	<p>Does not comply</p> <p>a) The private access is 5.5 metre wide. However, both (i) and (iii) are</p>

Rule	Requirement	Assessment of Proposal										
	<p>(a) Private accessways in all urban zones, excluding the Commercial and Industrial Zones, shall comply with the following:</p> <table border="1"> <tr> <td> <p>Where:</p> <ul style="list-style-type: none"> (i) The private accessway serves no more than four residential units; and (ii) Visibility is not restricted; and (iii) The access is less than 60m long; or 60m long or longer and passing bays are provided at intervals not exceeding 60m. </td> <td> <p>The private accessway from the road boundary to any parking or loading space shall be:</p> <ul style="list-style-type: none"> • not less than 3m wide; and • a minimum overhead clearance of 4m. </td> </tr> <tr> <td> <p>Where any one of (i) through (iii) above are not complied with.</p> </td> <td> <p>The private accessway shall be 5m wide.</p> </td> </tr> </table> <p>Note 1: The entrance standards from the road shall comply with the entrance standards detailed in Rules 15.1.6C.1.4 and 15.1.6C.1.5, as applicable.</p> <p>(b) Private accessways in the Commercial and Industrial Zones shall comply with the following:</p> <table border="1"> <tr> <td> <p>(i) One-way operation, excluding service stations.</p> <p>Note: A one-way operation is a 3m wide private accessway that provides entry to the site at one point and exit from the site at a different point.</p> </td> <td> <p>The private accessway from the road to any parking or loading space shall:</p> <ul style="list-style-type: none"> • not less than 3m or more than 4m in width; and • have a minimum overhead clearance of 4.2m. </td> </tr> <tr> <td> <p>(ii) Two-way operation, excluding service stations.</p> <p>Note: A two-way operation is a 6m wide private accessway that provides entry and exit from the site at the same point.</p> </td> <td> <p>The private accessway from the road to any parking or loading space shall:</p> <ul style="list-style-type: none"> • not be less than 6m or more than 7m in width; and • have a minimum overhead clearance of 4.2m. </td> </tr> <tr> <td> <p>(iii) Service stations</p> </td> <td> <p>The private accessway from the road to any parking or loading space shall:</p> <ul style="list-style-type: none"> • have a maximum width for one-way and two-way operations of 9m; and • have a minimum overhead clearance of 4.2m. </td> </tr> </table> <p>(c) All private accessways in all urban zones which serve two or more activities are to be sealed or concreted.</p>	<p>Where:</p> <ul style="list-style-type: none"> (i) The private accessway serves no more than four residential units; and (ii) Visibility is not restricted; and (iii) The access is less than 60m long; or 60m long or longer and passing bays are provided at intervals not exceeding 60m. 	<p>The private accessway from the road boundary to any parking or loading space shall be:</p> <ul style="list-style-type: none"> • not less than 3m wide; and • a minimum overhead clearance of 4m. 	<p>Where any one of (i) through (iii) above are not complied with.</p>	<p>The private accessway shall be 5m wide.</p>	<p>(i) One-way operation, excluding service stations.</p> <p>Note: A one-way operation is a 3m wide private accessway that provides entry to the site at one point and exit from the site at a different point.</p>	<p>The private accessway from the road to any parking or loading space shall:</p> <ul style="list-style-type: none"> • not less than 3m or more than 4m in width; and • have a minimum overhead clearance of 4.2m. 	<p>(ii) Two-way operation, excluding service stations.</p> <p>Note: A two-way operation is a 6m wide private accessway that provides entry and exit from the site at the same point.</p>	<p>The private accessway from the road to any parking or loading space shall:</p> <ul style="list-style-type: none"> • not be less than 6m or more than 7m in width; and • have a minimum overhead clearance of 4.2m. 	<p>(iii) Service stations</p>	<p>The private accessway from the road to any parking or loading space shall:</p> <ul style="list-style-type: none"> • have a maximum width for one-way and two-way operations of 9m; and • have a minimum overhead clearance of 4.2m. 	<p>not able to be complied with as noted above.</p> <p>b) the site is not located within these zones.</p> <p>c) The access will be sealed</p>
<p>Where:</p> <ul style="list-style-type: none"> (i) The private accessway serves no more than four residential units; and (ii) Visibility is not restricted; and (iii) The access is less than 60m long; or 60m long or longer and passing bays are provided at intervals not exceeding 60m. 	<p>The private accessway from the road boundary to any parking or loading space shall be:</p> <ul style="list-style-type: none"> • not less than 3m wide; and • a minimum overhead clearance of 4m. 											
<p>Where any one of (i) through (iii) above are not complied with.</p>	<p>The private accessway shall be 5m wide.</p>											
<p>(i) One-way operation, excluding service stations.</p> <p>Note: A one-way operation is a 3m wide private accessway that provides entry to the site at one point and exit from the site at a different point.</p>	<p>The private accessway from the road to any parking or loading space shall:</p> <ul style="list-style-type: none"> • not less than 3m or more than 4m in width; and • have a minimum overhead clearance of 4.2m. 											
<p>(ii) Two-way operation, excluding service stations.</p> <p>Note: A two-way operation is a 6m wide private accessway that provides entry and exit from the site at the same point.</p>	<p>The private accessway from the road to any parking or loading space shall:</p> <ul style="list-style-type: none"> • not be less than 6m or more than 7m in width; and • have a minimum overhead clearance of 4.2m. 											
<p>(iii) Service stations</p>	<p>The private accessway from the road to any parking or loading space shall:</p> <ul style="list-style-type: none"> • have a maximum width for one-way and two-way operations of 9m; and • have a minimum overhead clearance of 4.2m. 											
15.1.6C.1.3	<p>Passing Bays on Private accessways in all zones</p> <p>(a) Where required, passing bays on private accessways are to be at least 15m long and provide a minimum usable access width of 5.5m.</p> <p>(b) Passing bays are required:</p>	<p>Complies: The Private accessway is 5.5m wide and will provide for two way vehicle access along the entirety of the accessway.</p>										

Rule	Requirement	Assessment of Proposal				
	<p>(i) in rural and coastal zones at spacings not exceeding 100m; (ii) on all blind corners in all zones at locations where the horizontal and vertical alignment of the private accessway restricts the visibility. (c) All accesses serving 2 or more sites shall provide passing bays and vehicle queuing space at the vehicle crossing to the legal road.</p>					
15.1.6C.1.4	<p>Access over footpaths</p> <p>The following restrictions shall apply to vehicle access over footpaths:</p> <p>(a) no more than two crossings per site; and (b) the maximum width of a crossing shall be:</p> <table border="1"> <tr> <td>All activities; except service stations</td> <td>6m</td> </tr> <tr> <td>Service stations or supermarkets</td> <td>9m</td> </tr> </table> <p>Note: Consideration should be given to the location of crossings and the potential for signage to ensure pedestrian safety.</p>	All activities; except service stations	6m	Service stations or supermarkets	9m	N/A: the proposed accessway does not cross an existing public footpath. The public footpath is located on the opposite side of the road.
All activities; except service stations	6m					
Service stations or supermarkets	9m					
15.1.6C.1.5	Vehicle crossing standards in Rural and Coastal Zones	N/A				
15.1.6C.1.6	<p>Vehicle crossing standards in Urban Zones</p> <p>(a) Private access off streets in the urban zones the vehicle crossing is to be constructed in accordance with Council’s “Engineering Standards and Guidelines” (June 2004 – Revised 2009). (b) Where the vehicle crossing serves two or more properties the vehicle crossing is to be widened to provide a double width vehicle crossing.</p> <p>Note 1: Refer to Appendix 3G for a visual representation of what a vehicle crossing is and how it works in relation to a private access.</p>	<p>Complies</p> <p>The vehicle crossing will be designed to meet the Engineering Standards and will be double width to accommodate two-way vehicle movements</p>				
15.1.6C.1.7	<p>General access standards</p> <p>(a) Provision shall be made such that there is no need for vehicles to reverse off a site except where there are less than 4 parking spaces gaining access from a local road. (b) All bends and corners on the private accessway are to be constructed to allow for the passage of a Heavy Rigid Vehicle. (c) Any access where legal width exceeds formation requirements shall have surplus areas (where legal width is wider than the formation) grassed.</p>	<p>Complies</p> <p>a) There will be no reverse manoeuvring to Hihitahi Rise. b) The access has been designed to accommodate a HRV and a LRV.</p>				

Rule	Requirement	Assessment of Proposal
	<p>(d) Runoff from impermeable surfaces shall, wherever practicable, be directed to grass swales and/or shall be managed in such a way as will reduce the volume and rate of stormwater runoff and contaminant loads.</p>	<p>c) The legal width will be landscaped</p> <p>d) The runoff from the road will be managed via the proposed on-site SW wetland. The SW will be treated through the wetland to reduce contaminant loads.</p>
<p>15.1.6C.1.8</p>	<p>Frontage to existing roads</p> <p>(a) Where any proposed subdivision has frontage to a road or roads that do not meet the legal road width standards specified by the Council in its “Engineering Standards and Guidelines” (June 2004 – Revised 2009), road widening shall be vested in the name of the Council.</p> <p>(b) Where any proposed subdivision has frontage to a road or roads that are not constructed to the standards specified by the Council in its “Engineering Standards and Guidelines” (June 2004 – Revised 2009), then the applicant shall complete the required improvements.</p> <p>(c) Where a site has more than one road frontage or frontage to a service lane or right-of-way (ROW) in addition to a road frontage, access to the site shall be in a place that:</p> <ul style="list-style-type: none"> (i) facilitates passing traffic, entering and exiting traffic, pedestrian traffic and the intended use of the site; (ii) is from the road or service lane or ROW that carries the lesser volume of traffic. <p>(d) Where any proposed subdivision has frontage to a road on which the carriageway encroaches, or is close to the subject lot or lots, the encroachment or land shall vest in Council such that either the minimum berm width between the kerb or road edge and the boundary is 2m or the boundary is at least 6m from the centreline of the road whichever is the greater.</p>	<p>N/A</p>

Rule	Requirement	Assessment of Proposal
15.1.6C.1.9	<p>New roads</p> <p>All new public roads shall be laid out, constructed and vested in accordance with the standards set out in the Council’s Engineering Standards and Guidelines (June 2004 – Revised 2009).</p> <p>Note: Refer also to the Designation and Utility Services rules within Chapter 17.</p>	<p>N/A- the road is proposed to be a private road.</p>
15.1.6C.1.10	<p>Service lanes, cycle and pedestrian accessways</p> <p>(a) Service lanes, cycle and pedestrian accessways shall be laid out and vested in accordance with the standards set out in the Council’s “Engineering Standards and Guidelines” June (2004 – Revised 2009).</p> <p>(b) All access reserved for pedestrians only shall be a footpath, formed and concreted (or an alternative surface) to Councils satisfaction.</p>	<p>N/A- the road is proposed to be a private road.</p> <p>A footpath will be formed, but using an alternative surface- boardwalk.</p>
15.1.6C.1.11	<p>Road Designations</p> <p>Where any frontage to an existing road is shown on the Zone Maps as being subject to designation for road acquisition and widening purposes, provision shall be made to enable the Requiring Authority to acquire such land, by separately defining the parcels of land. Where the Requiring Authority is not in a position to acquire such parcels immediately, they shall be held in conjunction with adjoining land, with consent notices registered in accordance with Rule 13.6.7.</p>	<p>N/A</p>

Appendix 15:

Rules Assessment FNDC- Proposed Plan

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THE PLANNING
COLLECTIVE



Proposed Subdivision of 47 Hihitahi Rise and Lot 2 DP 200205

FAR NORTH DISTRICT PLAN RULES- PROPOSED VERSION

Part 2: District Wide Matters

Subdivision Rules

Delete row if irrelevant

Rule	Activity Status	Standards to be complied with	Non compliance activity status	Assessment of proposal
SUB-R3 Subdivision of land to create a new allotment	Controlled	<p>CON-1</p> <p>1. The subdivision complies with standards: SUB-S2 Requirements for building platforms for each allotment; SUB-S3 Water supply; SUB-S4 Stormwater management; SUB-S5 Wastewater disposal; SUB-S6 Telecommunications and power supply; SUB-S7 Easements for any purpose;</p> <p>CON-2</p> <p>1. The subdivision complies with standards: SUB-S1 Minimum allotment sizes SUB-S8 Esplanades</p> <p>Matters of control are limited to:</p> <ul style="list-style-type: none"> i. the design and layout of allotments, and the ability to accommodate permitted and/or intended land uses; ii. the provision of easements or registration of an instrument for the purpose of public access and reserves; iii. the effects of development phase works on the surrounding area; iv. extent of potential effects on sites and areas of significance to Māori, ancestral lands, water, site, wāhi tapu and other taonga; v. adverse effects on areas with historic heritage and cultural values, natural features and landscapes, wetland, lake and river margins, natural character or indigenous biodiversity values including indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification system lists; vi. natural hazards or geotechnical constraints; vii. g. where relevant compliance with Far North District Council Engineering Standards April 2022;and viii. adverse effects arising from land use incompatibility including but not limited to noise, vibration, smell, smoke, dust and spray. NOTE: If a resource consent application is made under this rule on land that is within 500m of the airport zone, the airport operator will likely be considered an affected person for any activity where the adverse effects are considered to be minor or more than minor. 	<p>Activity status where compliance not achieved with CON- 1: Restricted Discretionary Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> a. matters of any infringed standard; and b. any relevant matters of control. <p>Activity status where compliance not achieved with CON-2: Discretionary Where: DIS-1</p> <ul style="list-style-type: none"> 1. compliance with SUB-S1 Minimum allotment sizes - controlled activity is not achieved, but discretionary activity achieved <p>Activity status where compliance not achieved with DIS-1:Non-complying</p>	<p>Discretionary – CON2 not complied with</p>

SUB-R4 Subdivision that creates a private accessway	Controlled	<p>Where: CON -1</p> <ol style="list-style-type: none"> 1. A private accessway serves a maximum of 8 sites. <p>CON-2</p> <ol style="list-style-type: none"> 1. Where a subdivision serves 9 or more sites, access shall be by public road. 	Activity status where compliance not achieved with CON-1 and CON-2: Discretionary	<p>Does not Comply</p> <p>The private accessway will serve 16 lots</p>
SUB-R5 Subdivision around an approved multi-unit development	Controlled	<p>Where: CON-1</p> <ol style="list-style-type: none"> 1. Subdivision complies with standards: SUB-S2 Requirements for building platforms for each allotment; SUB-S3 Water supply; SUB-S4 Stormwater management; SUB-S5 Wastewater disposal; SUB-S6 Telecommunications and power supply; and SUB-S7 Easements for any purpose. <p>CON-2</p> <ol style="list-style-type: none"> 1. Subdivision complies with standards SUB-S1 Minimum allotment sizes - Controlled activity SUB-S8 Esplanades <p>CON-3</p> <ol style="list-style-type: none"> 1. The multi-unit development has already been constructed or the subdivision is proposed around a multi-unit development that has been approved by way of resource consent. <p>Matters of control are limited to:</p> <ol style="list-style-type: none"> i. the design and layout of allotments, and the ability to accommodate permitted and/or intended land uses; ii. the provision of easements or registration of an instrument for the purpose of public access and reserves; iii. the effects of development phase works on the surrounding area; iv. extent of potential effects on sites and areas of significance to Māori, ancestral lands, water, site, wāhi tapu and other taonga; v. adverse effects on areas with historic heritage and cultural values, natural features and landscapes, wetland, lake and river margins, natural character or indigenous biodiversity values including indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification system lists; vi. natural hazards or geotechnical constraints; vii. where relevant compliance with Far North District Council Engineering Standards 2022; and viii. adverse effects arising from land use incompatibility including but not limited to noise, vibration, smell, smoke, dust and spray. NOTE: If a resource consent application is made under this rule on land that is within 500m of the airport zone, the airport operator will likely be considered an affected person for any activity where the adverse effects are considered to be minor or more than minor. 	<p>Activity status where compliance not achieved with CON-1: Restricted Discretionary</p> <p>Matters of discretion are restricted to:</p> <ol style="list-style-type: none"> a. matters of any infringed standard; and b. any relevant matters of control in SUB-R4 <p>Activity status where compliance not achieved with CON-2: Discretionary</p> <p>Activity status where compliance not achieved with CON-3: Non-complying</p>	N/A

SUB-R11 Subdivision of a site within flood hazard areas	Restricted Discretionary	<p>RDIS -1</p> <ol style="list-style-type: none"> 1. Building platforms are located wholly outside the spatial extent of the 1 in 100 year floodplain; 2. Newly created allotments must be located and designed to not divert flood flow onto other properties or otherwise result in any increase in flood hazard beyond the site; 3. Any private roads, right of ways or accessways must be located where the depth of flood waters in a 1 in 100 year flood event does not exceed 200mm above ground level. <p>Matters of discretion are restricted to:</p> <ol style="list-style-type: none"> a. location of suitable and stable building platforms, access and servicing, including on-site wastewater/ stormwater disposal where applicable; b. the effects of the hazard on the intended use of the site or sites created by the subdivision, the range of uses permitted under the relevant zone, and the vulnerability of the uses to flood hazard events; c. the degree to which there may be material damage, through inundation or erosion, in a 1 in 100 year flood event; d. the provision of safe access and egress to and within the created lots during a flood event, including consideration of depth and velocity of flood water over private roads and accessways; e. effects on the functions of floodplains and overland flow paths; f. the effects of potential changes in flood depth, velocity and frequency on other properties, including upstream and downstream from the site; and g. the proposed use of, necessity for and design of engineering solutions (soft or hard) to mitigate the hazard. 	Activity status where compliance not achieved with RDIS-1: Non-complying	N/A
SUB-R12 Subdivision of a site within coastal hazard areas	Restricted Discretionary	<p>RDIS-1</p> <p>All building platforms and associated access for each allotment are located wholly outside the spatial extent of the Coastal Hazard Area.</p> <p>Matters of discretion are restricted to:</p> <ol style="list-style-type: none"> a. location and structural integrity of the building platforms, access and services where they may be affected by inundation or erosion from coastal hazards; b. the effects of the hazard on the intended use of the site or sites created by the subdivision, the range of uses permitted under the relevant zone and the vulnerability of these uses to coastal storm inundation and erosion events; c. the effects of any proposed hazard mitigation works including any earthworks on public access, landscape and other environmental values; and d. the proposed use of, necessity for and design of hard protection structures to mitigate hazards. 	Activity status where compliance not achieved with RDIS-1: Non-complying	N/A
SUB-R18 Subdivision of a site within an Outstanding Natural Landscape and	Discretionary		Activity status where compliance not achieved: Not applicable	Consent would be sought under this rule as the PFNDP identifies the site as an Outstanding Natural Landscape.

Outstanding Natural Feature				
SUB-R21 Subdivision of a site within outstanding natural character areas in the coastal environment	Non-complying		Activity status where compliance not achieved: Not applicable	The site is within a High Natural Character Area, not an outstanding natural character area.

PART 2 – District Wide Matters / Subdivision

Standards

Rule	Requirement	Matters of discretion	Assessment of Proposal						
SUB-S1	Minimum allotment sizes General Residential: 600m ² (Controlled), 300m ² (Discretionary)		Complies - Minimum lot size is achieved.						
SUB-S2	Allotments created must be able to accommodate a square building envelope of the minimum dimensions specified below. Which does not encroach into the permitted activity boundary setbacks for the relevant zones, or into an area that does not allow a building to be located. <table border="1"> <thead> <tr> <th>Zone</th> <th>Minimum dimensions</th> </tr> </thead> <tbody> <tr> <td>General Residential, Kororāreka Russell Township, Settlement</td> <td>14m x 14m</td> </tr> <tr> <td>Rural Production, Horticulture, Rural Lifestyle, Rural Residential</td> <td>30m x 30m</td> </tr> </tbody> </table>	Zone	Minimum dimensions	General Residential, Kororāreka Russell Township, Settlement	14m x 14m	Rural Production, Horticulture, Rural Lifestyle, Rural Residential	30m x 30m	Matters of discretion are restricted to: a. allotment area and dimensions for intended purpose or land use, having regard to the relevant zone standards and any district wide rules for land uses; b. allotment sizes and dimensions are sufficient for operational and maintenance requirements; c. compatibility with the pattern of the surrounding subdivision, land use activities, and access arrangements; d. any physical constraints; and e. whether a suitable alternative building platform can be provided.	Complies
Zone	Minimum dimensions								
General Residential, Kororāreka Russell Township, Settlement	14m x 14m								
Rural Production, Horticulture, Rural Lifestyle, Rural Residential	30m x 30m								
SUB-S3 Water supply	<ol style="list-style-type: none"> All new allotments shall have the ability to connect to a safe portable water supply with a capacity that is adequate for the anticipated potential land uses; Where a connection to a Council's reticulated water supply systems is available, all allotments must connect Where a connection to a Council's reticulated water systems is not available and all allotments must provide a water supply system; All new allotments must have access to sufficient water supplies for fire fighting with the SNZ PAS 4509-2008 New Zealand Fire Service Firefighting Water Supplies Code of Practice <p>Note: This standard does not apply where the allotment is for a road, or for access purposes, or for a purpose or activity for which water supply is not necessary.</p>	Matters of discretion are restricted to: a. adequacy of the supply of water to every allotment, and its suitability for the likely land use; b. adequacy of water supplies, and access for fire fighting purposes; and c. the standard of water supply infrastructure installed in subdivisions, and the adequacy of existing supply systems outside the subdivision.	Complies						

SUB-S4 Stormwater Management	<ol style="list-style-type: none"> 1. All allotments shall be provided, within their site area, with a means for the disposal of collected stormwater from the roof of all potential or existing buildings and from all impermeable surfaces, in such a way so as to avoid or mitigate any adverse effects of stormwater runoff on receiving environments, including downstream properties. This shall be done for a rainfall event with a 10% Annual Exceedance Probability (AEP); and 2. All stormwater management shall be in accordance with Far North District Council Engineering Standards April 2022. 	<ol style="list-style-type: none"> a. control of water-borne contaminants, litter and sediments; b. the capacity of existing and proposed stormwater disposal systems (refer also to the Council’s various urban stormwater management plans and any relevant Northland Regional Council stormwater discharge consents); c. the effectiveness and environmental impacts of any measures proposed for avoiding or mitigating the effects of stormwater runoff, including low impact design principles; d. the location, scale and construction of stormwater infrastructure; and e. measures that are necessary in order to give effect to any drainage or catchment management plan that has been prepared for the area 	Complies
SUB-S5 Wastewater Disposal	<ol style="list-style-type: none"> 1. Where a connection to Council owned reticulated wastewater scheme is available, all allotments must connect; 2. Where connection is not available, all allotments shall be provided with a means of disposing of wastewater within the site area of the allotment; and 3. All wastewater disposal shall be in accordance with Far North District Council Engineering Standards April 2022. <p>Note: This standard does not apply where the Allotment is for a road, or for access purposes, or for a purpose or activity for which wastewater disposal is not necessary.</p>	Matters of discretion are restricted to: <ol style="list-style-type: none"> a. the method and adequacy of wastewater disposal where a Council owned reticulated system is not available; b. the capacity of, and impacts on, the existing reticulated wastewater disposal system; and c. the location, capacity and environmental effects of the proposed wastewater disposal system. 	Complies
Sub-S6 Telecommunic ations and Power Supply	Connections shall be provided at the boundary of the site area of the allotment for: <ol style="list-style-type: none"> 1. telecommunications <ol style="list-style-type: none"> i. Fibre where it is available or; ii. Copper where fibre is not available 2. Electricity supply through the local electricity distribution network. <p>Note: This standard does not apply to allotments for a utility, road, reserve or for access purposes</p>	<ol style="list-style-type: none"> a. alternative provision of telecommunication and electricity supply. 	Complies
SUB-S7 Easements for any purpose	Easements shall be provided where necessary for: <ol style="list-style-type: none"> 1. public works and utility services; 2. easements in gross where a service or access is required by the Council; 3. easements in favour of nominated allotments or adjoining Certificates of Title; 4. Service easements, whether in gross or for private purposes, with sufficient width to permit maintenance, repair or replacement of services. Centre line easements shall apply when the line is privately owned; and	Matters of discretion are restricted to: <ol style="list-style-type: none"> a. whether the easement is located appropriately for its purpose and users. 	Complies

	5. The need for easements for any of the following purposes: i. accessways, whether shared or not; ii. stormwater, wastewater disposal, water supply, utilities; iii. party walls and floor		
SUB-S8 Esplanades	Any subdivision involving the creation of one or more allotments less than 4ha which adjoins: 1. The line of MHWS; 2. The bank of a river whose bed has an average width of 3m or more; and 3. A lake that is larger than 8 ha in size. An esplanade reserve must be provided with a minimum width of 20m, in accordance with section 230 of the RMA.	Activity status when compliance is not achieved: Discretionary	Complies- an esplanade reserve/paper road is already provided for along the Te Haumi River.

Part 2 – District Wide Matters

Earthworks

Rule	Activity Status	Standards to be complied with	Non compliance activity status	Assessment of proposal
EW-R6 Earthworks for the formation of unformed roads and the formation or upgrade of private roads and accessways	Permitted	PER-1 The earthworks for formation of an unformed road is located within the legal road corridor PER-2 The earthworks complies with all standards: EW—S1 Maximum earthworks thresholds EW-S2 Maximum depth and slope EW-S4 Site Reinstatement EW-S6 Setbacks EW-S7 Land Stability EW-S8 Nature of filling material; and EW-S9 Flood and coastal hazards	Activity status where compliance not achieved with PER-2: Restricted discretionary Matters of discretion are restricted to: a. the matters of discretion of any infringed standard. Activity status where compliance not achieved with PER-1: Discretionary	Consent is required as a Restricted Discretionary Activity for the construction of the private accessway.
EW-R8 Earthworks for new infrastructure or repair and upgrades	Permitted	EW-S1 Maximum earthworks thresholds; EW-S2 Maximum depth and slope; EW-S4 Site reinstatement; EW-S6 Setbacks; EW-S7 Land stability; EW-S8 Nature of filling material; and EW-S9 Flood and coastal hazards.	Activity status where compliance not achieved with PER-1: Restricted discretionary Matters of discretion are restricted to: a. the matters of discretion of any infringed standard	Consent is required as a Restricted Discretionary Activity
EW-R13 Earthworks and erosion and sediment control	Permitted	PER-1 The earthworks complies with standard EW-S5 Erosion and sediment control	Activity status where compliance not achieved with PER-1: Restricted discretionary Matters of discretion are restricted to:	Complies

			a. the matters of discretion of any infringed standard	
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Part 2 – District Wide Matters

Earthworks Standards

Rule	Requirement	Matters of discretion	Assessment of Proposal												
EW-S1 Maximum Earthworks Thresholds	The following maximum volumes and area thresholds for all earthworks undertaken on a site within a single calendar year: <table border="1"> <thead> <tr> <th>Zone</th> <th>Volume (m³)</th> <th>Area (m²)</th> </tr> </thead> <tbody> <tr> <td>General Residential, Mixed Use, Light Industrial, Heavy Industrial, Hospital, Horticulture Processing Facility, Carrington, Kororāreka Russell Township, Hospital, Māori Purpose – Urban</td> <td>200</td> <td>2,500</td> </tr> <tr> <td>Natural Open Space, Open Space, Sport and Active Recreation, Rural Residential, Settlement, Quail Ridge, Airport</td> <td>300</td> <td>2,500</td> </tr> <tr> <td>Rural Lifestyle</td> <td>1000</td> <td>2,500</td> </tr> </tbody> </table>	Zone	Volume (m ³)	Area (m ²)	General Residential, Mixed Use, Light Industrial, Heavy Industrial, Hospital, Horticulture Processing Facility, Carrington, Kororāreka Russell Township, Hospital, Māori Purpose – Urban	200	2,500	Natural Open Space, Open Space, Sport and Active Recreation, Rural Residential, Settlement, Quail Ridge, Airport	300	2,500	Rural Lifestyle	1000	2,500	Where the standard is not met, matters of discretion are restricted to: <ul style="list-style-type: none"> a. the location, scale and volume; b. depth and height of cut and fill; c. the nature of filling material and whether it is compacted; d. the extent of exposed surfaces or stockpiling of fill; e. erosion, dust and sediment controls; f. the risks of natural hazards, particularly flood events; g. stormwater controls; h. flood storage, overland flow paths and drainage patterns; i. impacts on natural coastal processes; j. the stability of land, buildings and infrastructure; k. natural character, landscape, historic heritage, spiritual and cultural values; l. the life-supporting capacity of soils; m. the extent of indigenous vegetation clearance and its effect on biodiversity; n. impact on any outstanding natural character, outstanding natural landscapes and outstanding natural features; o. riparian margins; p. the location and use of infrastructure; q. temporary or permanent nature of any adverse effect; r. traffic and noise effects; s. time of year earthworks will be carried out and duration of the activity; and t. impact on visual and amenity values. 	Does not comply
Zone	Volume (m ³)	Area (m ²)													
General Residential, Mixed Use, Light Industrial, Heavy Industrial, Hospital, Horticulture Processing Facility, Carrington, Kororāreka Russell Township, Hospital, Māori Purpose – Urban	200	2,500													
Natural Open Space, Open Space, Sport and Active Recreation, Rural Residential, Settlement, Quail Ridge, Airport	300	2,500													
Rural Lifestyle	1000	2,500													
EW-S2 Maximum Depth and Slope	The maximum depth of any cut or height of any fill shall not exceed: <ol style="list-style-type: none"> 1. 1.5m, i.e. maximum permitted cut and fill height may be 3m; or 2. 3m subject to it being retained by a engineered retaining wall, which has had a building consent issued. 	Where the standard is not met, matters of discretion are restricted to: <ul style="list-style-type: none"> a. the location, scale and volume; b. depth and height of cut and fill; c. the extent of exposed surfaces or stockpiling of fill; d. the risks of natural hazards, particularly flood events; e. stormwater controls; f. flood storage, overland flow paths and drainage patterns; g. impacts on natural coastal processes; h. the stability of land, buildings and infrastructure; i. natural character, landscape, historic heritage, spiritual and cultural values; j. the life-supporting capacity of soils; k. the extent of indigenous vegetation clearance and its effect on biodiversity; 	Does not comply												

		<ul style="list-style-type: none"> l. impact on any outstanding natural character, outstanding natural landscapes and outstanding natural features; m. riparian margins; n. the location and use of infrastructure; o. temporary or permanent nature of any adverse effect; p. traffic and noise effects; q. time of year earthworks will be carried out and duration of the activity; and r. impact on visual and amenity values. 	
<p>EW-S4</p> <p>Site Reinstatement</p>	<p>As soon as practicable, but no later than six months from the commencement of works:</p> <ul style="list-style-type: none"> 1. the earthworks area shall be established, filled and/or recontoured in a manner consistent with the surrounding land. 2. replanted with vegetation which is the same as, or of similar species, to that which existed on the site prior to the earthworks taking place (if any), except that where the site was vegetation with any plant pest, the site may be replanted with indigenous vegetation, from locally sourced genetic stocks or 3. sealed, paved, metaled or built over 	<p>Where the standard is not met, matters of discretion are restricted to:</p> <ul style="list-style-type: none"> a. the location, scale and volume; b. depth and height of cut and fill; c. the nature of filling material and whether it is compacted; d. the extent of exposed surfaces or stockpiling of fill; e. erosion, dust and sediment controls; f. the risks of natural hazards, particularly flood events; g. stormwater controls; h. flood storage, overland flow paths and drainage patterns; i. impacts on natural coastal processes; j. the stability of land, buildings and infrastructure; k. natural character, landscape, historic heritage, spiritual and cultural values; l. the life-supporting capacity of soils; m. the extent of indigenous vegetation clearance and its effect on biodiversity; n. outstanding natural character, outstanding natural landscapes and outstanding natural features; o. riparian margins; p. the location and use of infrastructure; q. temporary or permanent nature of any adverse effect; r. traffic and noise effects; s. time of year earthworks will be carried out and duration of the activity; and t. impact on visual and amenity values 	Potentially will not comply.
<p>EW-S5</p> <p>Erosion and Sediment Control</p>	<p>Earthworks</p> <ul style="list-style-type: none"> 1. must for their duration be controlled in accordance with the Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region 2016 (Auckland Council Guideline Document GD2016/005); 2. shall be implemented to prevent silt or sediment from entering water bodies, coastal marine area, any stormwater system, overland flow paths, or roads. 	<p>Where the standard is not met, matters of discretion are restricted to:</p> <ul style="list-style-type: none"> a. the location, scale and volume; b. depth and height of cut and fill; c. the nature of filling material and whether it is compacted; d. the extent of exposed surfaces or stockpiling of fill; e. erosion, dust and sediment controls; f. the risks of natural hazards, particularly flood events; g. stormwater controls; h. flood storage, overland flow paths and drainage patterns; i. impacts on natural coastal processes; j. the stability of land, buildings and infrastructure; k. natural character, landscape, historic heritage, spiritual and cultural values; l. the life-supporting capacity of soils; m. the extent of indigenous vegetation clearance and its effect on biodiversity; n. outstanding natural character, outstanding natural landscapes and outstanding natural features; 	Complies

		<ul style="list-style-type: none"> o. riparian margins; p. the location and use of infrastructure; q. temporary or permanent nature of any adverse effect; r. traffic and noise effects; s. time of year earthworks will be carried out and duration of the activity; and t. impact on visual and amenity values. 	
EW-S6 Setback	Earthworks must be setback by the following minimum distances: <ol style="list-style-type: none"> 1. earthworks supported by engineered retaining walls – 1.5m from a site boundary; 2. earthworks not supported by engineered retaining walls – 3m from a site boundary; 3. earthworks must be setback by a minimum distance of 10m from coastal marine area. <p>Note: setbacks from waterbodies is managed by the Natural Character chapter.</p>	Where the standard is not met, matters of discretion are restricted to: <ol style="list-style-type: none"> a. the location, scale and volume; b. depth and height of cut and fill; c. the nature of filling material and whether it is compacted; d. the extent of exposed surfaces or stockpiling of fill; e. erosion, dust and sediment controls; f. stormwater controls; g. the stability of land, buildings and infrastructure; h. the life-supporting capacity of soils; i. temporary or permanent nature of any adverse effect; j. traffic and noise effects k. time of year earthworks will be carried out and duration of the activity; l. natural character, landscape, historic heritage, spiritual and cultural values; and m. impact on visual and amenity values. 	Does not comply A retaining wall will be required within 1.5m of the property boundary with Lot 13 DP 181647.
EW-S7 Land Stability	Earthworks must not result in any instability of land at or beyond the boundary of the property where the earthworks occurs.	Where the standard is not met, matters of discretion are restricted to: <ol style="list-style-type: none"> a. the location, scale and volume; b. depth and height of cut and fill; c. the nature of filling material and whether it is compacted; d. the extent of exposed surfaces or stockpiling of fill; e. erosion, dust and sediment controls; f. the risks of natural hazards, particularly flood events; g. stormwater controls; h. flood storage, overland flow paths and drainage patterns; i. impacts on natural coastal processes; j. where the land instability adversely affects any buildings, structures or infrastructure; k. the life-supporting capacity of soils; l. the extent of vegetation clearance; m. proximity to any waterbody or coastal marine area; n. the location and use of infrastructure; o. temporary or permanent nature of any adverse effect; p. traffic and noise effects;and q. time of year earthworks will be carried out and duration of the activity. 	Complies – refer to geotechnical report
EW-S8 Nature of filling material	The fill material shall not: <ol style="list-style-type: none"> 1. contain putrescible, pollutant, inflammable or hazardous components; 	Where the standard is not met, matters of discretion are restricted to: <ol style="list-style-type: none"> a. depth and height of cut and fill; b. the nature of filling material and whether it is compacted; 	Complies

	<ol style="list-style-type: none"> 2. consist of material other than soil, rock, stone, aggregate, gravel, sand, silt, or demolition material. 3. comprise more than 5% vegetation (by volume) of any load. 	<ol style="list-style-type: none"> c. the extent of exposed surfaces or stockpiling of fill; d. erosion, dust and sediment controls; e. the risks of natural hazards, particularly flood events; f. stormwater controls; g. flood storage, overland flow paths and drainage patterns; h. impacts on natural coastal processes; i. the stability of land, buildings and infrastructure; j. natural character, landscape, historic heritage, spiritual and cultural values; k. the life-supporting capacity of soils; l. outstanding natural character, outstanding natural landscapes and outstanding natural features; m. riparian margins; n. the location and use of infrastructure; o. temporary or permanent nature of any adverse effect; and p. traffic and noise effects; q. time of year earthworks will be carried out and duration of the activity; and r. impact on visual and amenity values. 	
EW-S9 Flood and coastal hazards	Earthworks must not: <ol style="list-style-type: none"> 1. divert flood flow or coastal inundation onto other properties or otherwise result in any increase in flood hazard or coastal inundation beyond the boundaries of the site. 2. result in the loss of any flood storage volume within a flood hazard area, unless equivalent flood storage is provided. 	Where the standard is not met, matters of discretion are restricted to: <ol style="list-style-type: none"> a. the location, scale and volume; b. depth and height of cut and fill; c. the nature of filling material and whether it is compacted; d. the extent of exposed surfaces or stockpiling of fill; e. erosion, dust and sediment controls; f. the risks of natural hazards, particularly flood events; g. stormwater controls; h. flood storage, overland flow paths and drainage patterns; i. impacts on natural coastal processes; j. the stability of land, buildings and infrastructure; k. the life-supporting capacity of soils; l. temporary or permanent nature of any adverse effect; and m. time of year earthworks will be carried out and duration of the activity. 	Complies

Part 2 – District Wide Matters / Natural Environment Values / Natural Features and Landscapes

Rules

Rule	Activity Status	Standards to be complied with	Non compliance activity status	Assessment of proposal
NFL-R1. New buildings or structures, and extensions or alterations to existing buildings or structures	Permitted	PER-1 If a new building or structure is located outside the coastal environment it is: <ol style="list-style-type: none"> 1. ancillary to farming (excluding a residential unit); 2. no greater than 25m². PER-2	Activity status when compliance not achieved with PER-1 or PER4: Discretionary Activity status when compliance not achieved with PER-2: Non-Complying	No buildings are proposed. The retaining wall does not comply with Standard NFL-S1 Consent is required as a Discretionary Activity

		<p>If a new building or structure is located within the coastal environment it is:</p> <ol style="list-style-type: none"> 1. ancillary to farming (excluding a residential unit); 2. no greater than 25m². <p>PER-3 Any extension to a lawfully established building or structure is no greater than 20% of the GFA of the existing lawfully established building or structure.</p> <p>PER-4 The building or structure, or extension or alteration to an existing building or structure, complies with standards: NFL-S1 Maximum height NFL-S2 Colours and materials</p>		
NFL-R2. Repair or Maintenance	Permitted	<p>PER-1 The repair or maintenance of the following activities where they have been lawfully established and where the size, scale and materials used are like for like:</p> <ol style="list-style-type: none"> 1. roads 2. fences 3. network utilities 4. driveways and access 5. walking tracks 6. cycling tracks 7. farming tracks 		N/A
NFL-R3. Earthworks or Indigenous Vegetation Clearance	Permitted	<p>PER-1 The earthworks or indigenous vegetation clearance is:</p> <ol style="list-style-type: none"> 1. required for the repair or maintenance permitted under NFL-R2 Repair or maintenance. 2. required to provide for safe and reasonable clearance for existing overhead power lines. 3. necessary to address a risk to public health and safety. 4. for biosecurity reasons. 5. for the sustainable non-commercial harvest of plant material for rongoā Māori. <p>PER-2 The earthworks or indigenous vegetation clearance outside the coastal environment is not provided for within NFL-R3 PER-1 but it complies with standard NFL-S3 Earthworks or indigenous vegetation clearance</p> <p>PER-3</p>	<p>Activity status when compliance not achieved with PER-1 or PER-2: Discretionary</p> <p>Activity status when compliance not achieved with PER-2: Non-Complying</p>	Consent would be sought as a non-complying activity as the permitted standards referred to in PER:2 can not be achieved.

		The earthworks or indigenous vegetation clearance inside the coastal environment is not provided for within NFL-R3 PER-1 but it complies with standard NFL-S3 Earthworks or indigenous vegetation clearance		
NFL-R4 Demolition of buildings or structures	Permitted	n/a	N/a	

PART 2 – District wide matters / natural environment values / natural features and landscapes

Standards

Standard		Matters of Discretion	Assessment of proposal
NFL-S1 Maximum Height	<ol style="list-style-type: none"> The maximum height of any new building or structure above ground level is 5m and must not exceed the height of the nearest ridgeline, headland or peninsula. Any extension to a building or structure must not exceed the height of the existing building above ground level or exceed the height of the nearest ridgeline, headland or peninsula. 	n/a	Does not comply- the maximum height of a retaining wall is 5m for the construction of the road.
NDL-S2 Colours and materials	<p>The exterior surfaces of buildings or structures shall:</p> <ol style="list-style-type: none"> be constructed of materials and/or finished to achieve a reflectance value no greater than 30%. have an exterior finish within Groups A, B or C as defined within the BS5252 standard colour palette. 	n/a	
NFL-S3 Earthworks and Indigenous Clearance	<p>Any earthworks or indigenous vegetation clearance must (where relevant):</p> <ol style="list-style-type: none"> not exceed a total area of 50m² over the life of the District Plan. not exceed a cut height or fill depth of 1m. screen any exposed faces. be for the purpose of access and/or a building platform. <p>Note: The NESF requires a 10m setback from any natural wetland in respect of earthworks or vegetation clearance and may require consent from the Regional Council.</p>	n/a	Does not comply

Part 2 – District – Wide Matters / Natural Environment Values / Natural Character

Rule	Activity Status	Standards to be complied with	Non compliance activity status	Assessment of proposal
NATC-R1 New buildings or structures, and extensions or alteration to existing buildings or structures	Permitted	<p>PER-1 The building or structure, or extension or alteration to an existing building or structure on wetland, lake and river margins is not located within an ONL or ONF.</p> <p>PER-2 The building or structure, or extension or alteration to an existing building or structure on wetland, lake and river margins is required for:</p> <ol style="list-style-type: none"> restoration and enhancement purposes; or 	<p>Activity status where compliance not achieved with PER-1: Non-complying</p> <p>Activity status where compliance not achieved with PER-2, PER-3 and PER-4: Discretionary</p>	N/A

		<ol style="list-style-type: none"> 2. natural hazard mitigation undertaken by, or on behalf of, the local authority; or 3. park management activity in the Open Space or Sport and Active Recreation zones; or 4. a post and wire fence for the purpose of protection from farm stock. 5. river crossings, including but not limited to, fords, bridges, stock crossings and culvert crossings. 6. activities related to the construction of river crossings. 7. pumphouses utilised for the drawing of water provided they cover less than 25m² in area. <p>PER-3 The building or structure on wetland, lake and river margins is no greater than 300m².</p> <p>PER-4 The building or structure, or extension or alteration to an existing building or structure on wetland, lake and river margins complies with standard NATC-S1 Maximum height</p>		
NATC-R2 Repair or maintenance	Permitted	<p>PER-1 The repair or maintenance within wetland, lake and river margins of the following activities where they have been lawfully established and where the size, scale and materials used are like for like:</p> <ol style="list-style-type: none"> 1. roads 2. fences 3. network utilities 4. driveways and access 5. walking tracks 6. cycling tracks 7. farming tracks 	Activity status when compliance not achieved with PER-1: Discretionary	N/A
NACT-R3 Earthworks or indigenous vegetation clearance	Permitted	<p>PER-1 The earthworks or indigenous vegetation clearance within wetland, lake and river margins is:</p> <ol style="list-style-type: none"> 1. required for the repair or maintenance permitted under NATC-R2; or 2. required to provide for safe and reasonable clearance for existing overhead power lines. 3. necessary to address a risk to public health and safety. 4. for biosecurity reasons. 5. for the sustainable non-commercial harvest of plant material for rongoā Māori. <p>PER-2 Earthworks or indigenous vegetation clearance not provided for within NATC-R3 PER-1 but it complies with standard NATC-S2 Earthworks or indigenous vegetation clearance.</p>	<p>Activity status when compliance not achieved with PER-1: Discretionary</p> <p>Activity status when compliance not achieved with PER-2: Non-complying</p>	Consent is sought as a non-complying activity as PER-2 can not be complied with.

Part 2 – District – Wide Matters / Natural Environment Values / Natural Character

Standards

Standard	Standards to be complied with	Matters of Discretion	Assessment of proposal
NATC-S1 Maximum Height	<ol style="list-style-type: none"> 1. The maximum height of a building or structure, or extension or alteration to an existing building or structure is 5m above ground level; or 2. where a building or structure is lawfully established, any extension does not exceed the height of the existing building or structure above ground level. 	n/a	the highest part of the retaining wall for the construction of the access road is 5m – however, this structure is not within 26m of a wetland.

NATC-S2 Earthworks or indigenous clearance	Any earthworks or indigenous vegetation clearance on a site within a wetland, lake and river margins must: <ol style="list-style-type: none"> 1. not exceed a total area of 400m² for 10 years from the notification of the District Plan, unless a control in 5. below applies; 2. not exceed a cut height or fill depth of 1m; 3. screen exposed faces; and 4. comply with Ecosystems and indigenous biodiversity chapter, NFL-S3 Earthworks or indigenous vegetation clearance and CE-S3 Earthworks or indigenous vegetation clearance. <p>Note: The NESF requires a 10m setback from any natural wetland in respect of earthworks or vegetation clearance and may require consent from the Regional Council.</p>	n/a	Does not comply- there will be earthworks and vegetation clearance within the wetland margin (defined as 26m in the PFNDP)
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Part 2 – District Wide Matters / Natural Environmental Values/ Ecosystems and Indigenous Biodiversity

Rule	Activity Status	Standards to be complied with	Non compliance activity status	Assessment of proposal
IB-R1 Indigenous vegetation pruning trimming and clearance and any associated land disturbance for specified activities within and outside a Significant Natural Area	Permitted	PER-1 It is for any of the following: <ol style="list-style-type: none"> 1. To address an immediate risk to the health and safety of the public or damage to property; 2. To remove dead trees, provided that no more indigenous vegetation is cleared or trimmed than is necessary for safe removal; 3. The formation of walking tracks less than 1.2m wide using manual methods which do not require the removal of any tree over 300mm in girth; 4. Clearance for biosecurity reasons; 5. The sustainable non-commercial harvest of plant material for rongoā Māori (customary medicine); 6. To create or maintain a 20m <u>setback</u> from a <u>building</u> used for a <u>vulnerable activity</u> (excluding <u>accessory buildings</u>) to the edge of the indigenous vegetation area; 7. To allow for the construction of a single <u>residential unit</u> on a title and essential associated on-site <u>infrastructure</u> and access and it does not exceed 1,000m²; 8. It is within an area subject to an Open Space Covenant under the Queen Elizabeth II National Trust Act 1977, a Ngā <u>Whenua</u> Rahui Kawenata, a Conservation Covenant under the Reserves Act 1977 or the Conservation Act 1987, or a Heritage covenant under the Heritage New Zealand Pouhere Taonga Act 2014 and the vegetation clearance is provided for in that covenant or order; 9. The construction of a new fence where the purpose of the new fence is to exclude stock and/or pests from the area of indigenous vegetation provided that the clearance does not exceed 3.5m in width either side of the fence line; 10. The removal or clearance from <u>land</u> which was previously cleared and the indigenous vegetation to be cleared is less than 10 years old; 11. Creation and maintenance of firebreaks to manage fire risk; 12. The harvesting of indigenous timber approved under the Forests Act 1949 via either a registered sustainable forest management plan, a registered sustainable forest management permit or a personal use approval for the harvesting and milling of indigenous timber from the Ministry of Primary Industries; 	Discretionary	Permitted The site has not been identified as an SNA, therefore Rule IB-R4 applies. The note in the proposed district Plan states that regarding Rule IB-R2, <i>This rule only has immediate legal effect for indigenous vegetation clearance where compliance is not achieved with PER-2 (i.e. in circumstances where a report confirming that the indigenous vegetation is not a Significant Natural Area has not been obtained).</i> Rule IB- R4-PER 1 does not have immediate legal effect where a report has been obtained to provide an assessment of the vegetation in regard to SNA quality. The Ecology Report Attached notes that the vegetation to be cleared is not of SNA quality, with the exception of 114m ² of kanuka shrubland that would meet the definition of SNA. However, the vegetation would not exceed 500m ² and can therefore be assessed as a Permitted Activity under the proposed District Plan

		<p>13. It is for the operation, repair and maintenance of the following activities where they have been lawfully established:</p> <ul style="list-style-type: none"> i. fences ii. <u>infrastructure</u> iii. <u>buildings</u> iv. driveways and access v. walking tracks vi. cycling tracks vii. <u>farming tracks</u>. 		
IB-R3 Indigenous vegetation clearance and any associated land disturbance within a Significant Natural Area	Permitted	<p>PER-1 It does not exceed 100m² per site in any calendar year.</p>	Discretionary	
IB-R4 Indigenous vegetation clearance and any associated land disturbance outside a Significant Natural Area	Permitted	<p>PER-1</p> <ul style="list-style-type: none"> 1. A report has been obtained from a suitably qualified and experienced ecologist confirming that the indigenous vegetation does not meet the criteria for a Significant Natural Area and it is submitted to Council 14 days in advance of the clearance being undertaken; and 2. It does not exceed the following amounts per site over a 5-year period: <ul style="list-style-type: none"> i. Rural Production zone, Horticulture zone, Māori Purpose zone and Treaty Settlement Land Overlay – 5,000m² if not in a remnant forest, otherwise 500m² in a remnant forest; ii. All other zones – 500m². <p>PER-2</p> <ul style="list-style-type: none"> 1. A report has not been obtained from a suitably qualified and experienced ecologist confirming that the indigenous vegetation does not meet the criteria for a Significant Natural Area and a report has not been submitted to Council 14 days in advance of the clearance being undertaken; and 2. It does not exceed 100m² per site in any calendar year. 	Discretionary	

Part 2 – District Wide Matters / Energy, Infrastructure, and Transport

Rules

Rule	Activity Status	Standards to be complied with	Non compliance activity status	Assessment of proposal
TRAN-R1 Parking	Permitted	<p>PER-1 With the exception of PER-2, parking spaces and loading spaces are located on <u>site</u> and they shall not be located over any footpaths, access, manoeuvring, or outdoor living areas.</p> <p>PER-2 Stacked parking is permitted for one of two spaces associated with a specific <u>residential unit</u>, and may include a parking space on the access in front of a garage or carport.</p> <p>PER-3 Parking spaces and loading spaces are permanently marked or delineated, except when they are:</p> <ol style="list-style-type: none"> 1. associated with a <u>residential unit</u> which is not a <u>multi-unit development</u>; 2. associated with the fuel refill and pumps at service stations. <p>PER-4 All parking and loading spaces comply with: <u>TRAN-S1 Requirements for parking</u>. Where an assessment results in a fractional space, any fraction under half shall be disregarded and any fraction of a half or more shall be counted as one space.</p>	<p>Activity status where compliance not achieved with PER-4: Restricted Discretionary</p> <p>Matters of discretion are restricted to:</p> <ol style="list-style-type: none"> a. the matters of discretion of any infringed standard; b. the streetscape and amenity of the surrounding area; c. screening, planting, landscaping and stormwater mitigation; and d. topographical or other site constraints making compliance with the standard impractical. <p>Activity status where compliance not achieved with PER-1, PER-2 or PER-3: Discretionary</p>	Complies
TRAN-R2 Vehicle Crossings and access, including private accessways	Permitted	<p>PER-1 Where the private <u>accessway</u> serves a maximum of 8 household equivalents</p> <p>Note: 1 household equivalent is represented by 10 vehicle movements. One vehicle movement is a single movement to or from a property.</p> <p>PER-2 The vehicle <u>crossing</u> and access for fire appliances comply with SNZ PAS 4509:2008 New Zealand Fire Fighting Water Supplies Code of Practice.</p> <p>PER-3 The vehicle <u>crossing</u> is not off a State Highway, or off a <u>road</u> classified arterial or higher under the One Network <u>Road</u> Classification.</p> <p>PER-4 Any unused vehicle <u>crossings</u> are reinstated to match the existing footpath and kerbing, or the shoulder and berm are reinstated where there is no footpath or kerbing, with all works to be undertaken as per any required traffic management plan and corridor access request.</p> <p>PER-5 Private <u>accessways</u> shall be designed and constructed in accordance with <u>TRAN-Table 9 - Requirements for private accessways</u>.</p>	<p>Activity status where compliance not achieved with PER-1, PER-2, PER-3, PER-4, PER-5 or PER-6: Discretionary</p>	Does not comply- the Private Accessway services more than 8 lots. -Discretionary.

		<p>PER-6 The vehicle <u>crossing</u>, access, or private <u>accessway</u> complies with standards: <u>TRAN-S2 Requirements for vehicle crossings</u>; and <u>TRAN-S3 Requirements for passing bays</u>.</p>		
TRAN-R3 Maintenance or upgrading of existing transport infrastructure within the existing road corridor	Permitted	<p>PER-1 The maintenance or upgrade is wholly within the existing road corridor (and is subject to an existing designation for a road).</p> <p>PER-2 The upgrade complies with standards: TRAN-S4 Requirements for road design; and TRAN-S5 Requirements for streetlighting.</p>	Activity status where compliance not achieved with PER-1 or PER-2: Discretionary	N/A
TRAN R-5 Trip Generation	Permitted	<p>PER-1 Where the minimum number of parking spaces are provided in accordance with: TRAN-S1 Requirements for parking.</p> <p>Note: Any electric vehicle parking space associated with charging stations contributes towards the total number of required parking spaces in TRAN-Table 1 - Minimum number of parking spaces.</p>	<p>Activity status where compliance not achieved with PER-1: Restricted Discretionary</p> <p>Matters of discretion are restricted to:</p> <ol style="list-style-type: none"> the matters of discretion of any infringed standard; location, size and design of parking and loading areas; and the number of parking spaces that can accommodate electric vehicle charging stations. 	Complies
TRAN R-8 New roads including within unformed paper roads	Permitted	<p>PER-1 The new road complies with standards: TRAN-S4 Requirements for road design; and TRAN-S5 Requirements for streetlighting.</p> <p>PER-2 The new road is not subject to the following overlays:</p> <ol style="list-style-type: none"> Significant Natural Areas. Outstanding Natural Features. Outstanding Natural Landscapes. The Coastal Environment. Natural Hazards. Heritage overlay areas. Scheduled heritage resource. Sites and areas of significance to Māori. 	<p>Activity status where compliance not achieved with PER-1: Restricted discretionary</p> <p>Matters of discretion are restricted to:</p> <ol style="list-style-type: none"> any recommendations in a transport assessment approved by a suitably qualified and experienced transport professional; whether the use or development compromises the safety and efficiency of the transport network, including future transport connections; the extent to which vehicle access, parking and manoeuvring areas associated with the activity are provided; 	N/A

			<ul style="list-style-type: none"> d. the nature of the activity and compatibility with the function and purpose of the underlying zone; and e. the extent to which the design and layout of the site maximise opportunities for alternative transport modes. 	
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Part 2 – District Wide Matters / Energy, Infrastructure, and Transport

Standards

Standard	Standards to be complied with	Matters of Discretion	Assessment of proposal
TRAN-S1 Requirements for parking	<ol style="list-style-type: none"> 1. The minimum number of on-site car parking and bicycle spaces are provided for each activity in accordance with TRAN-Table 1 - Minimum number of parking spaces, except that: <ul style="list-style-type: none"> o for sites in the Mixed Use zone, no additional on-site parking spaces are required where the nature of a lawfully established activity changes, provided that: <ol style="list-style-type: none"> i. the gross business area of the site is not increased; and ii. it is not a residential activity or visitor accommodation activity; 2. Where on-site parking is provided in accordance with (1) above, additional accessible car parking spaces must be provided in accordance with TRAN-Table 2 - Minimum number of accessible car parking spaces; 3. Loading spaces for commercial activities, offices, industrial activities, commercial service activities, hospital activities, and educational facilities are provided on site in accordance with TRAN-Table 3 - Minimum on-site loading bay requirements; 4. End-of-trip facilities for commercial activities, offices, industrial activities, commercial service activities, hospital activities and educational facilities are provided for staff use in accordance with TRAN-Table 4 - End of trip facility requirements; 5. All on-site car parking and manoeuvring areas are provided in accordance with TRAN-Table 5 - Parking and manoeuvring dimensions; and 6. If any activity is not represented within TRAN-Table 1 - Minimum number of parking spaces then the activity closest in nature to the proposed activity shall apply, provided that where there are two or more similar activities in the table, the activity with the higher parking rate shall apply. 	<ol style="list-style-type: none"> a. any recommendations in a transport assessment approved by a chartered professional engineer; b. the potential for adverse effects on the safety and efficiency of the transport network, including effects on vehicles, pedestrians and cyclists; c. the scale, management and operation of the activity as it relates to its demand for parking; d. the use of low impact design techniques to minimise stormwater run off; and e. the ability for persons with a disability or limited mobility to park, enter and exit a vehicle and manoeuvre around a parking area safely and effectively. 	Complies- 2 parking spaces can be provided per residential unit.
TRAN-S2 Requirements for vehicle crossings	<ol style="list-style-type: none"> 1. No more than the maximum number of vehicle crossings shall be provided per site in accordance with TRAN-Table 6 - Maximum number of vehicle crossings per site; 2. New vehicle crossings shall be located at least 8m from a dedicated pedestrian crossing facility; 3. Where a site has frontage to more than one road, the vehicle crossing shall be prioritised to be provided onto the road that has the lower road classification; 4. New vehicle crossings shall meet the minimum separation distance requirements from intersections as set out in TRAN-Table 7 - Minimum distance of vehicle crossings from intersections; and 	n/a	Complies

	<p>5. New vehicle crossings shall be located to meet the minimum sight distance requirements as set out in TRAN-Table 8 - Minimum sight distances for vehicle crossings.</p> <p>Note: Minimum vehicle crossing widths to the State Highway network may be greater than those above. All access to the State Highway network requires the approval of Waka Kotahi under the Government Roadings Powers Act 1989.</p>		
<p>TRAN-S3 Requirements for passing bays</p>	<ol style="list-style-type: none"> 1. Where required, passing bays on private accessways are to be at least 15m long and provide a minimum usable access width of 5.5m; 2. Passing bays are required: <ol style="list-style-type: none"> i. in Rural Production, Rural Lifestyle, Horticulture, and Māori Purpose Rural zones at spacings not exceeding 100m; ii. on all blind corners in all zones at locations where the horizontal and vertical alignment of the private accessway restricts visibility; and 3. All accesses serving 2 or more sites shall provide passing bays and a double width vehicle crossing to allow for vehicles to queue within the site. 	<ol style="list-style-type: none"> a. any adverse effects on the ease and safety of vehicle manoeuvres; b. the extent to which the safety and efficiency of road operations will be adversely affected; c. any adverse effects on character and amenity of the surrounding environment; d. any impacts on public waste collection; and e. any characteristics of the proposed use that will make compliance unnecessary. 	<p>Complies- the accessway provides two way passage its entire length.</p>
<p>TRAN-S4 Requirements for road design</p>	<ol style="list-style-type: none"> 1. all new roads and upgrades to existing roads shall be designed and constructed in accordance with Far North District Council Engineering Standards April 2022 and must be supported by an Integrated Transport Assessment approved by a suitably qualified and experienced transport professional; and 2. Cul-de-sacs must meet the Local Road requirements in Far North District Council Engineering Standards April 2022 and the following additional requirements <ol style="list-style-type: none"> ix. It must not exceed a maximum length of 150m x. There must be a shared-use path link for pedestrians, cyclists and mobility devices at the end of the cul-de-sac in the General Residential and Mixed Use zones to existing adjacent public road, open spaces, recreational facilities, schools or other neighbourhood facilities and where these facilities do not currently exist provision should be made to reserve a shared-use corridor for future connection xi. There must be no more than one private accessway at the end of the cul-de-sac and xii. It must incorporate a turning head meeting the following requirements <ul style="list-style-type: none"> • 25m diameter with on-street parking in the General Residential zone; or • 30m diameter with on-street parking in all other zones 	<ol style="list-style-type: none"> a. safety implications of the non-compliance with engineering standards; and b. layout or topographical constraints that prevent cul-de-sacs meeting the design standards. 	<p>Does not comply with the engineering standards Pedestrian access is provided for. Only one JOAL is provided for at the culdersac. There is provision for some on-street parking within the private accessway.</p>
<p>TRAN-S5 Requirements for streetlighting</p>	<ol style="list-style-type: none"> 1. Any land use or subdivision which creates a new road or extends the requirement for street lighting, must: <ol style="list-style-type: none"> i. include a street lighting plan that is designed and constructed in accordance with Far North District Council Engineering Standards April 2022. 	<ol style="list-style-type: none"> a. the potential for adverse effects on the safety and efficiency of the road network; and b. consideration of crime prevention through environmental design (CPTED) principles. 	<p>No lighting is proposed along the private accessway.</p>

Proposed Subdivision of 47 Hihitahi Rise and Lot 2 DP 200205

FAR NORTH DISTRICT PLAN OBJECTIVES AND POLICIES- PROPOSED VERSION- 15/07/2024

Part 3 – Area specific matters / Zones / Residential Zones / General Residential

Objective/Policy	Description
GRZ-O1	<p>The General Residential zone provides a variety of densities, housing types and lot sizes that respond to:</p> <ul style="list-style-type: none"> a. housing needs and demand; b. the adequacy and capacity of available or programmed development infrastructure; c. the amenity and character of the receiving residential environment; and d. historic heritage.
GRZ-O2	<p>The General Residential zone consolidates urban residential development around available or programmed development infrastructure to improve the function and resilience of the receiving residential environment while reducing urban sprawl.</p>
GRZ- O4	<p>Land Use and subdivision in the General Residential zone is supported where there is adequacy and capacity of available or programmed development infrastructure</p>
GRZ – O5	<p>Land Use and Subdivision in the General Residential zone provides communities with functional and high amenity living environments</p>
GRZ – O6	<p>Residential communities are resilient to changes in climate and are responsive to changes in sustainable development techniques.</p>
GRZ – P1	<p>Enable land use and subdivision in the General Residential zone where:</p> <ul style="list-style-type: none"> a. there is adequacy and capacity of available or programmed development infrastructure to support it; and b. it is consistent with the scale, character and amenity anticipated in the residential environment.
GRZ – P2	<p>Require all subdivision in the General Residential zone to provide the following reticulated services to the boundary of each lot:</p> <ul style="list-style-type: none"> a. telecommunications: <ul style="list-style-type: none"> i. fibre where it is available; or ii. copper where fibre is not available; b. local electricity distribution network; and c. wastewater, potable water and stormwater where they are available.
GRZ – P3	<p>Enable multi-unit developments within the General Residential zone, including terraced housing and apartments, where there is adequacy and capacity of available or programmed development infrastructure.</p>
GRZ – P8	<p>Manage land use and subdivision to address the effects of the activity requiring resource consent, including (but not limited to) consideration of the following matters where relevant to the application:</p> <ul style="list-style-type: none"> a. consistency with the scale, design, amenity and character of the

	<p>residential environment;</p> <p>b. the location, scale and design of buildings or structures, potential for shadowing and visual dominance;</p> <p>c. for residential activities:</p> <ol style="list-style-type: none"> i. provision for outdoor living space; ii. privacy for adjoining sites; iii. access to sunlight; <p>d. for non-residential activities:</p> <ol style="list-style-type: none"> i. scale and compatibility with residential activities ii. hours of operation <p>e. at zone interfaces, any setbacks, fencing, screening or landscaping required to address potential conflicts;</p> <p>f. the adequacy and capacity of available or programmed development infrastructure to accommodate the proposed activity, including:</p> <ol style="list-style-type: none"> i. opportunities for low impact design principles ii. ability of the site to address stormwater and soakage; <p>g. managing natural hazards; and</p> <p>h. any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.</p>
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PART 2 – District-Wide Matters / General District – Wide Matters / Hazards and Risk/ Natural Hazards

Objective/Policy	Description
NH-O1	The risks from natural hazards to people, infrastructure and property are managed, including taking into account the likely long-term effects of climate change, to ensure the health, safety and resilience of communities
NH-O2	Land use and subdivision does not increase the risk from natural hazards or risks are mitigated, and existing risks are reduced where there are practicable opportunities to do so.
NH-O3	New infrastructure is located outside of identified natural hazard areas unless: <ol style="list-style-type: none"> a. it has a functional or operational need to be located in that area b. it is designed to maintain its integrity and function, as far as practicable during a natural hazard event; and c. adverse effects resulting from that location on other people, property and the environment are mitigated
NH-P1	Map or define areas that are known to be subject to the following natural hazards, taking into account accepted estimates of climate change and sea level rise: <ol style="list-style-type: none"> a. flooding b. coastal erosion c. coastal inundation d. land instability
NH-P2	Manage land use and subdivision so that natural hazard risk is not increased or is mitigated, giving consideration to the following: <ol style="list-style-type: none"> a. the nature, frequency and scale of the natural hazard; b. not increasing natural hazard risk to other people, property, infrastructure and the environment beyond the site; c. the location of building platforms and vehicle access; d. the use of the site, including by vulnerable activities;

	<ul style="list-style-type: none"> e. the location and types of buildings or structures, their design to mitigate the effects and risks of natural hazards, and the ability to adapt to long term changes in natural hazards; f. earthworks, including excavation and fill; g. location and design of infrastructure; h. activities that involve the use and storage of hazardous substances; i. aligning with emergency management approaches and requirements; j. whether mitigation results in transference of natural hazard risk to other locations or exacerbates the natural hazard; and k. reduction of risk relating to existing activities.
NH-P3	Take a precautionary approach to the management of natural hazard risk associated with land use and subdivision
NH-P4	Manage land use and subdivision so that the functionality and long-term integrity of existing structural mitigation assets are not compromised or degraded.
NH-P5	<p>Require an assessment of risk prior to land use and subdivision in areas that are subject to identified natural hazards, including consideration of the following:</p> <ul style="list-style-type: none"> a. the nature, frequency and scale of the natural hazard; b. the temporary or permanent nature of any adverse effect; c. the type of activity being undertaken and its vulnerability to an event, including the effects of climate change; d. the consequences of a natural hazard event in relation to the activity; e. any potential to increase existing risk or creation of a new risk to people, property, infrastructure and the environment within and beyond the site and how this will be mitigated; f. the design, location and construction of buildings, structures and infrastructure to manage and mitigate the effects and risk of natural hazards including the ability to respond and adapt to changing hazards; g. the subdivision/site layout and management, including ability to access and exit the site during a natural hazard event; and . h. the use of natural features and natural buffers to manage adverse effects.
NH-P7	<p>Manage new land use and subdivision in coastal hazard areas so that:</p> <ul style="list-style-type: none"> a. new subdivision avoids locating building platforms within High Risk Coastal Hazard areas and building platforms should be located outside other coastal hazard areas where alternative locations are available and it is practicable to do so; b. new buildings containing vulnerable activities are not located within High Risk Coastal Hazard areas unless: <ul style="list-style-type: none"> i. there is no other suitable location available on the existing site; ii. hazard risks can be mitigated without the need for hard protection structures. c. where a building or building platform is located with a coastal hazard area, it should be designed and constructed such that: <ul style="list-style-type: none"> i. the building platform will not be subject to inundation and / or material damage (including erosion) over a 100-year timeframe; and either ii. the finished floor level of any building accommodating a vulnerable

	<p>activity must be at least 500mm above the maximum water level in a 1 percent AEP flood event plus 1m sea level rise; or</p> <p>iii. the finished floor level of any other building must be at least 300mm above the maximum water level in a 1 percent AEP flood event plus 1m sea level rise.</p> <p>d. hazard risk is not transferred to, or increased on, other properties;</p> <p>e. buildings, building platforms, access and services are located and designed to minimise the need for hard protection structures;</p> <p>f. safe vehicle access within the site is provided; and</p> <p>g. services are located and designed to minimise the risk of natural hazards.</p>
NH-P12	<p>Protect existing natural systems and features that buffer or protect development from the adverse effects of natural hazards by:</p> <p>a. avoiding the modification, alteration or loss of natural systems and features that compromises their function, including as a defence against long term effects such as sea level rise and climate change; and</p> <p>b. promoting restoration and enhancement of such natural systems and features.</p>
NH-P13	<p>Consider new hard protection structures to protect existing development and existing and new infrastructure only where:</p> <p>a. natural systems and features will not provide adequate protection from the natural hazard;</p> <p>b. the design is suitable for the location and does not transfer the risk and effects of natural hazards to other locations;</p> <p>c. any hard protection structures considered necessary to protect private assets are not located on public land unless there is significant public or environmental benefit in doing so;</p> <p>d. alternative responses to the hazard (including soft protection measures, restoration or enhancement of natural defences against coastal hazards and abandonment of assets) are demonstrated to be impractical or have significantly greater adverse effects on the environment; and</p> <p>e. they are the only practical means to protect:</p> <p>i. existing infrastructure or new infrastructure that has a functional or operational need to be in the location; or</p> <p>ii. existing settlements of vulnerable activities.</p>
NH-P14	<p>Enable the upgrading and maintenance of existing regional and district council flood management schemes and manage the development of new schemes where they are required to minimise the risks to people, property, infrastructure and the environment from natural hazard events.</p>

PART 2 – District – Wide Matters / Natural Environment Values / Subdivision

Objective/Policy	Description
SUB-O1	<p>Subdivision results in the efficient use of land, which:</p> <p>a. achieves the objectives of each relevant zone, overlays and district wide</p>

	<p>provisions.</p> <ul style="list-style-type: none"> b. contributes to the local character and sense of place. c. avoids reverse sensitivity issues that would prevent or adversely affect activities already established on land from continuing to operate. d. avoids land use patterns which would prevent land from achieving the objectives and policies of the zone in which it is located. e. does not increase risk from natural hazards or risks are mitigated and existing risks reduced; and f. manages adverse effects on the environment.
SUB-O2	<p>Subdivision provides for the:</p> <ul style="list-style-type: none"> a. protection of highly productive land; and b. protection, restoration or enhancement of Outstanding Natural Features, Outstanding Natural Landscapes, Natural Character of the Coastal Environment, Areas of High Natural Character, Outstanding Natural Character, wetland, lake and river margins, Significant Natural Areas, Sites and Areas of Significance to Maori, and Historic Heritage
SUB-O3	<p>Infrastructure is planned to service the proposed subdivision and development where:</p> <ul style="list-style-type: none"> a. there is existing infrastructure connection, infrastructure should be provided in an integrated, efficient, coordinated and future-proofed manner at the time of subdivision; and b. where no existing connection is available infrastructure should be planned and consideration be given to connections with the wider infrastructure network.
SUB-O4	<p>Subdivision is accessible, connected, and integrated with the surrounding environment and provides for:</p> <ul style="list-style-type: none"> a. Public open spaces; b. Esplanade where land adjoins the coastal marine area; and c. Esplanade where land adjoins other qualifying waterbodies
SUB – P3	<p>Provide for subdivision where it results in allotments that:</p> <ul style="list-style-type: none"> a. are consistent with the purpose, characteristics and qualities of the zone; b. comply with the minimum allotment sizes for each zone; c. have an adequate size and appropriate shape to contain a building platform; and d. have legal and physical access.
SUB-P4	<p>Manage subdivision of land as detailed in the district wide, natural environment values, historical and cultural values and hazard and risks sections of the plan</p>
SUB-P5	<p>Manage subdivision design and layout in the General Residential, Mixed Use and Settlement zone to provide for safe, connected and accessible environments by:</p> <ul style="list-style-type: none"> a. minimising vehicle crossings that could affect the safety and efficiency of

	<p>the current and future transport network;</p> <ul style="list-style-type: none"> b. avoid cul-de-sac development unless the site or the topography prevents future public access and connections; c. providing for development that encourages social interaction, neighbourhood cohesion, a sense of place and is well connected to public spaces; d. contributing to a well connected transport network that safeguards future roading connections; and e. maximising accessibility, connectivity by creating walkways, cycleways and an interconnected transport network.
SUB-P6	<p>Require infrastructure to be provided in an integrated and comprehensive manner by:</p> <ul style="list-style-type: none"> a. demonstrating that the subdivision will be appropriately serviced and integrated with existing and planned infrastructure if available; and b. ensuring that the infrastructure is provided is in accordance the purpose, characteristics and qualities of the zone.
SUB-P11	<p>Manage subdivision to address the effects of the activity requiring resource consent including (but not limited to) consideration of the following matters where relevant to the application:</p> <ul style="list-style-type: none"> a. consistency with the scale, density, design and character of the environment and purpose of the zone; b. the location, scale and design of buildings and structures; c. the adequacy and capacity of available or programmed development infrastructure to accommodate the proposed activity; or the capacity of the site to cater for on-site infrastructure associated with the proposed activity; d. managing natural hazards; e. Any adverse effects on areas with historic heritage and cultural values, natural features and landscapes, natural character or indigenous biodiversity values; and f. any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.

PART 2 – District – Wide Matters / Natural Environment Values / Sites and areas of significance to Maori

Objective/Policy	Description
SASM-O1	Sites and areas of significance to Maori are identified, recognized and managed, to ensure their long-term protection for future generations.
SASM-O2	The relationship of tangata whenua with sites and areas of significance to Maori is recognized and provided for, to ensure its protection for future generations
SASM-O3	Sites and areas of significance to Maori are protected from inappropriate subdivision, use and development
SASM-O4	Sites and areas of significance to Maori are known too, appreciated by, and acknowledged as important to, the wider community

SASM-P1	Identify sites and areas of significance to Maori in collaboration with tangata whenua, and assess their significance using the criteria in Policy 4.5.3 of the Northland Regional Policy Statement 2016.
SASM-P2	<p>Protect sites and areas of significance to Māori by:</p> <ul style="list-style-type: none"> a. ensuring that tangata whenua can actively participate in resource management processes which involve sites and areas of significance to Māori including those identified in Schedule 3 - Sites and areas of significance to Māori; b. requiring cultural impact assessments for activities likely to result in adverse effects on scheduled sites and areas of significance to Māori; c. recognition of the holistic nature of the Māori worldview and the exercise of kaitiakitanga; d. acknowledging matauranga Māori; e. having regard to Iwi/Hapū environmental management plans; and f. restricting activities that compromise important spiritual and cultural values held by tangata whenua and/or the wider community.
SASM-P4	<p>Consider the following when assessing applications for land use and subdivision that may result in adverse effects on the relationship of tangata whenua with sites and areas of significance to Māori:</p> <ul style="list-style-type: none"> a. the outcomes of consultation undertaken with iwi, hapū or marae that has an association to the site or area; b. whether a cultural impact assessment has been undertaken by a suitably qualified person who is acknowledged/endorsed by the iwi, hapū or relevant marae, and any recommended conditions and/or monitoring to achieve desired outcomes; c. any iwi/hapū environmental management plans lodged with Council; d. that tangata whenua are specialists in the tikanga of their hapū or iwi, including when preparing or undertaking a cultural impact assessment; and e. any protection, preservation or enhancement proposed.
SASM-P8	<p>Manage land use and subdivision involving sites and areas of significance to Māori to address the effects of the activity requiring resource consent, including (but not limited to) consideration of the following matters where relevant to the application:</p> <ul style="list-style-type: none"> a. the particular cultural, spiritual and/or historical values, interests or associations of importance to tangata whenua that are associated with the site which may be affected; b. the extent to which the activity may compromise the relationship tangata whenua have with their ancestral lands, water, sites, wāhi tapu and other taonga, and/or the ability to protect, maintain or enhance sites and areas of significance to tangata whenua; c. the responsibility of tangata whenua as kaitiaki; d. opportunities for the relationship of tangata whenua with the site or area to be maintained or strengthened on an ongoing or long term basis, including practical mechanisms to access, use and maintain the identified site; e. the outcomes of any consultation with and/or cultural advice provided

	<p>by tangata whenua, in particular with respect to mitigation measures and/or the incorporation of mātauranga Māori principles into the design, development and/or operation of activities that may affect the site; and</p> <p>f. where the site is also an archaeological site, the relevant objectives and policies in the Historic Heritage chapter.</p>
SASM-P9	<p>Encourage protection, maintenance and restoration of scheduled sites and areas of significance to Māori, including consideration of the following additional measures:</p> <p>a. reducing or waiving consent applications costs;</p> <p>b. providing funding, grants and other incentives; and</p> <p>c. obtaining, recording and sharing information about sites and areas of significance to Māori.</p>

PART 2 – District-Wide Matters / General District – Wide Matters / Coastal Environment

Objective/Policy	Description
CE-O1	The natural character of the coastal environment is identified and managed to ensure its long-term preservation and protection for current and future generations.
CE-O2	<p>Land use and subdivision in the coastal environment</p> <p>a. preserves the characteristics and qualities of the natural character of the coastal environment</p> <p>b. is consistent with the surrounding land use</p> <p>c. does not result in urban sprawl occurring outside of urban zones</p> <p>d. promotes restoration and enhancement of the natural character of the coastal environment; and</p> <p>e. recognises tangata whenua needs for ancestral use of whenua Maori</p>
CE- O3	Land use and subdivision in the coastal environment within urban zones is of a scale that is consistent with existing built development
CE – P1	Identify the extent of the as well as areas of high and outstanding natural character using the assessment criteria in APP1- Mapping methods and criteria.
CE – P2	<p>Avoid adverse effects of land use and subdivision on the characteristics and qualities of the coastal environment identified as:</p> <p>a. outstanding natural character;</p> <p>b. ONL;</p> <p>c. ONF.</p>
CE – P3	<p>Avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of land use and subdivision on the characteristics and qualities of the coastal environment not identified as:</p> <p>a. outstanding natural character;</p> <p>b. ONL;</p> <p>c. ONF.</p>

CE – P4	<p>Preserve the visual qualities, character and integrity of the coastal environment by:</p> <ul style="list-style-type: none"> a. consolidating land use and subdivision around existing urban centres and rural settlements; and b. avoiding sprawl or sporadic patterns of development.
CE – P5	<p>Enable land use and subdivision in urban zones within the coastal environment where:</p> <ul style="list-style-type: none"> a. there is adequacy and capacity of available or programmed development infrastructure; and b. the use is consistent with, and does not compromise the characteristics and qualities.
CE – P7	<p>Encourage the restoration and enhancement of the natural character of the coastal environment.</p>
CE – P10	<p>Manage land use and subdivision to preserve and protect the natural character of the coastal environment, and to address the effects of the activity requiring resource consent, including (but not limited to) consideration of the following matters where relevant to the application:</p> <ul style="list-style-type: none"> a. the presence or absence of buildings, structures or infrastructure; b. the temporary or permanent nature of any adverse effects; c. the location, scale and design of any proposed development; d. any means of integrating the building, structure or activity; e. the ability of the environment to absorb change; f. the need for and location of earthworks or vegetation clearance; g. the operational or functional need of any regionally significant infrastructure to be sited in the particular location; h. any viable alternative locations for the activity or development; i. any historical, spiritual or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6; j. the likelihood of the activity exacerbating natural hazards; k. the opportunity to enhance public access and recreation; l. the ability to improve the overall quality of coastal waters; and m. any positive contribution the development has on the characteristics and qualities.

PART 2 – District Wide Matters / Natural Environment Values / Natural Features and Landscapes

Objective/Policy	Description
NFL-O1	ONL and ONF are identified and managed to ensure their long-term protection for current and future generations
NFL-O2	Land use and subdivision in ONL and ONF is consistent with and does not compromise the characteristics and qualities of that landscape or feature
NFL- O3	The ancestral relationships Tangata Whenua has with the land is recognized and provided for as part of the characteristics and qualities of ONL and ONF.
NFL – P1	Identify ONL and ONF through an assessment of the characteristics and qualities using the criteria in APP1- Mapping methods and criteria.

NFL – P2	Avoid adverse effects of land use and subdivision on the characteristics and qualities of ONL and ONF within the coastal environment.
NFL – P6	Encourage the restoration and enhancement of ONL and ONF where it is consistent with the characteristics and qualities.
NFL – P7	Prohibit land use that would result in any loss of and/or destruction of the characteristics and qualities of ONL and ONF.
NFL – P8	<p>Manage land use and subdivision to protect ONL and ONF and address the effects of the activity requiring resource consent, including (but not limited to) consideration of the following matters where relevant to the application:</p> <ol style="list-style-type: none"> a. the presence or absence of buildings, structures or infrastructure; b. the temporary or permanent nature of any adverse effects; c. the location, scale and design of any proposed development; d. any means of integrating the building, structure or activity; e. the ability of the environment to absorb change; f. the need for and location of earthworks or vegetation clearance; g. the operational or functional need of any regionally significant infrastructure to be sited in the particular location; h. any viable alternative locations for the activity or development outside the landscape or feature; i. any historical, spiritual or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6; j. the characteristics and qualities of the landscape or feature; k. the physical and visual integrity of the landscape or feature; l. the natural landform and processes of the location; and m. any positive contribution the development has on the characteristics and qualities.

PART 2 – District – Wide Matters / Natural Environment Values / Natural Character

Objective/Policy	Description
NATC-O1	The natural character of wetland, lake and river margins are managed to ensure their long-term preservation and protection for future generations
NATC-O2	Land use and subdivision is consistent with and does not compromise the characteristics and qualities of the natural character of wetland, lake and river margins.
NATC- P1	Avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of land use and subdivision on the natural character of wetland, lake and river margins.
NATC – P2	Identify or assess the natural character of wetland, lake and river margins in accordance with the natural character assessment criteria in APP1- Mapping methods and criteria.
NATC– P3	<p>Enable indigenous vegetation removal and/or earthworks within wetland, lake and river margins where:</p> <ol style="list-style-type: none"> a. it is for the repair or maintenance of lawfully established activities; b. it is for safe and reasonable clearance for existing overhead powerlines; c. it is for health and safety of the public; d. it is for biosecurity reasons; and

	e. it is for the sustainable non-commercial harvest for rongoā Māori.
NATC– P4	Provide for buildings or structures, and extensions to existing buildings or structures on wetland, lake and river margins where: <ul style="list-style-type: none"> a. there is a functional or operational need for a building or structures location; b. public access, customary access and recreational use can be protected or enhanced; c. the protection of natural character is preserved; and d. natural hazard risk will not be increased, taking into account the likely long term effects of climate change.
NATC– P5	Encourage the restoration and enhancement of wetland, lake and river margins where it will achieve improvement in natural character values.
NATC – P6	Manage land use and subdivision to preserve and protect the natural character of wetland, lake and river margins, and address the effects of the activity requiring resource consent, including (but not limited to) consideration of the following matters where relevant to the application: <ul style="list-style-type: none"> a. the presence or absence of buildings, structures or infrastructure; b. the temporary or permanent nature of any adverse effects; c. the location, scale and design of any proposed development; d. any means of integrating the building, structure or activity; e. the ability of the environment to absorb change; f. the need for and location of earthworks or vegetation clearance; g. the operational or functional need of any regionally significant infrastructure to be sited in the particular location; h. any viable alternative locations for the activity or development; i. any historical, spiritual or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6; j. the likelihood of the activity exacerbating natural hazards; k. the opportunity to enhance public access and recreation; l. the ability to improve the overall water quality; and m. any positive contribution the development has on the characteristics and qualities.

PART 2 – District – Wide Matters / Natural Environment Values / Ecosystems and Indigenous Biodiversity

Objective/Policy	Description
IB-01	Areas of significant indigenous vegetation and significant habitats of indigenous fauna (Significant Natural Areas) are identified and protected for current and future generations
IB-02	Indigenous biodiversity is managed to maintain its extent and diversity in a way that provides for the social, economic, and cultural well-being of people and communities
IB-03	The relationship between tangata whenua and indigenous biodiversity, including taonga species and habitats is recognised and provided for

IB-O4	The role of tangata whenua as kaitiaki and landowners as stewards in protecting and restoring significant natural areas and indigenous biodiversity is provided for
IB-O5	Restoration and enhancement of indigenous biodiversity is promoted and enabled
IB-P1	<p>Identify Significant Natural Areas by:</p> <ol style="list-style-type: none"> a. using the ecological significance criteria in Appendix 5 of the RPS or in any more recent National Policy Statement on indigenous biodiversity; b. including areas that meet the ecological significance criteria as Significant Natural Areas in Schedule 4 of the District Plan and on the planning maps where this is agreed with the landowner and verified by physical inspection where practicable; c. encouraging landowners to include identified Significant Natural Areas in Schedule 4 of the District Plan at the time of subdivision and development; d. providing assistance to landowners to add Significant Natural Areas to Schedule 4 of the District Plan; and e. requiring an assessment of the ecological significance for indigenous vegetation clearance to establish permitted activity thresholds in Rule IB R2-R4.
IB-P2	<p>Within the coastal environment:</p> <ol style="list-style-type: none"> a. avoid adverse effects of land use and subdivision on Significant Natural Areas; and b. avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of land use and subdivision on areas of important and vulnerable indigenous vegetation, habitats and ecosystems
IB-P5	<p>Ensure that the management of land use and subdivision to protect Significant Natural Areas and maintain indigenous biodiversity is done in a way that:</p> <ol style="list-style-type: none"> a. does not impose unreasonable restrictions on existing primary production activities, particularly on highly versatile soils; b. recognises the operational need and functional need of some activities, including regionally significant infrastructure, to be located within Significant Natural Areas in some circumstances; c. allows for maintenance, use and operation of existing structures, including infrastructure; and d. enables Māori land to be used and developed to support the social, economic and cultural well-being of tangata whenua, including the provision of papakāinga, marae and associated residential units and infrastructure.
IB-P10	<p>Manage land use and subdivision to address the effects of the activity requiring resource consent for indigenous vegetation clearance and associated land disturbance, including (but not limited to) consideration of the following matters where relevant to the application:</p> <ol style="list-style-type: none"> a. the temporary or permanent nature of any adverse effects; b. cumulative effects of activities that may result in loss or degradation of

	<p>habitats, species populations and ecosystems;</p> <ul style="list-style-type: none">c. the extent of any vegetation removal and associated land disturbance;d. the effects of fragmentation;e. linkages between indigenous ecosystems and habitats of indigenous species;f. the potential for increased threats from pest plants and animals;g. any downstream adverse effects on waterbodies and the coastal marine area;h. where the area has been mapped or assessed as a Significant Natural Areas:<ul style="list-style-type: none">i. the extent to which the proposal will adversely affect the ecological significance, values and function of that area;ii. whether it is appropriate or practicable to use biodiversity offsets or environmental biodiversity compensation to address more than minor residual adverse effects;i. the location, scale and design of any proposed development;j. the extent of indigenous vegetation cover on the site and whether it is practicable to avoid or reduce the extent of indigenous vegetation clearance;k. the functional or operational needs of regionally significant infrastructure;l. any positive contribution any proposed biodiversity offsets or environmental biodiversity compensation will have on indigenous biodiversity; andm. any historical, spiritual or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.
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Appendix 16:

Rules Assessment Northland Regional Plan- February 2024

A hub of planning excellence



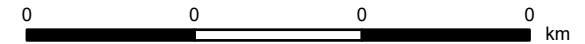
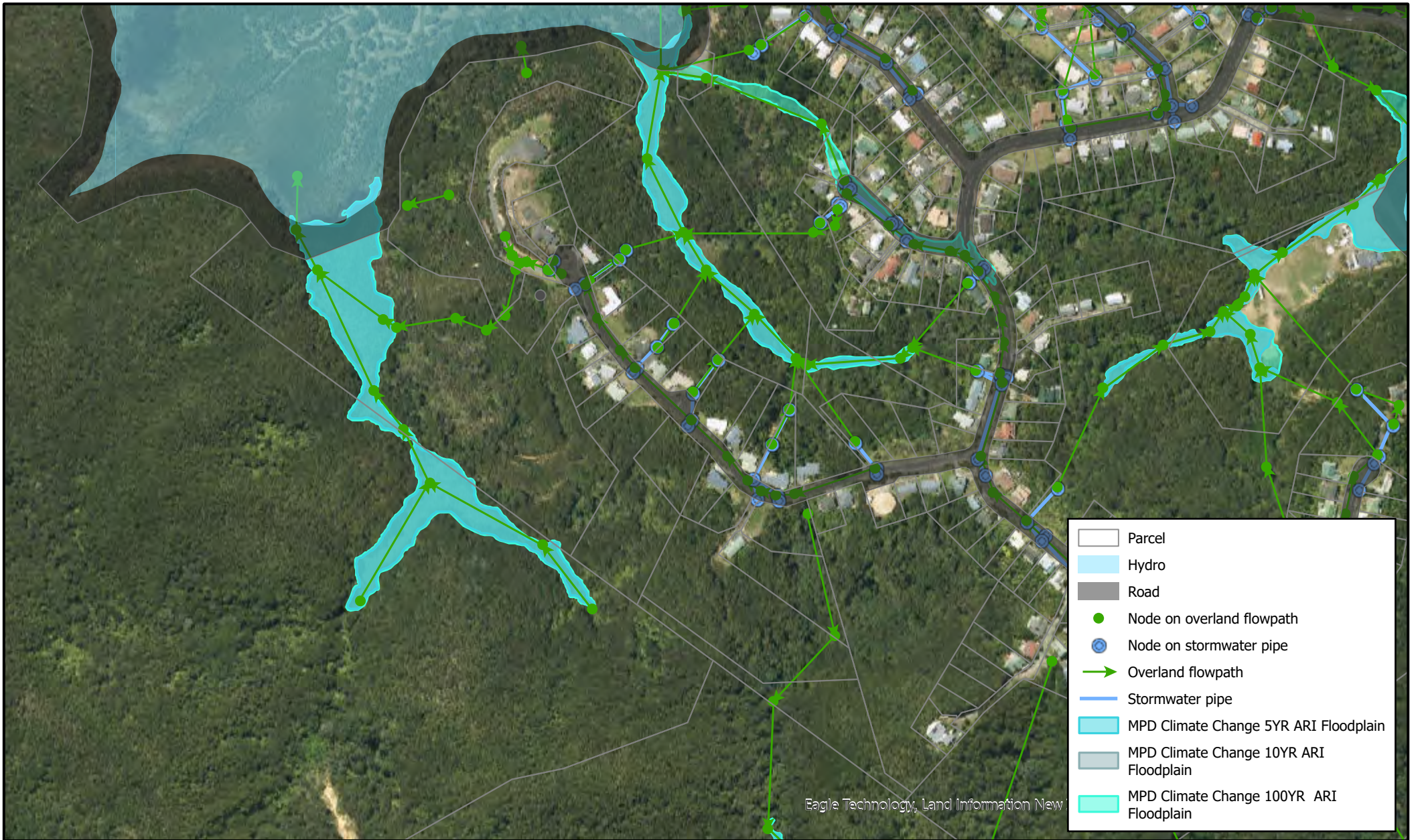
admin@thepc.co.nz



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THE PLANNING
COLLECTIVE

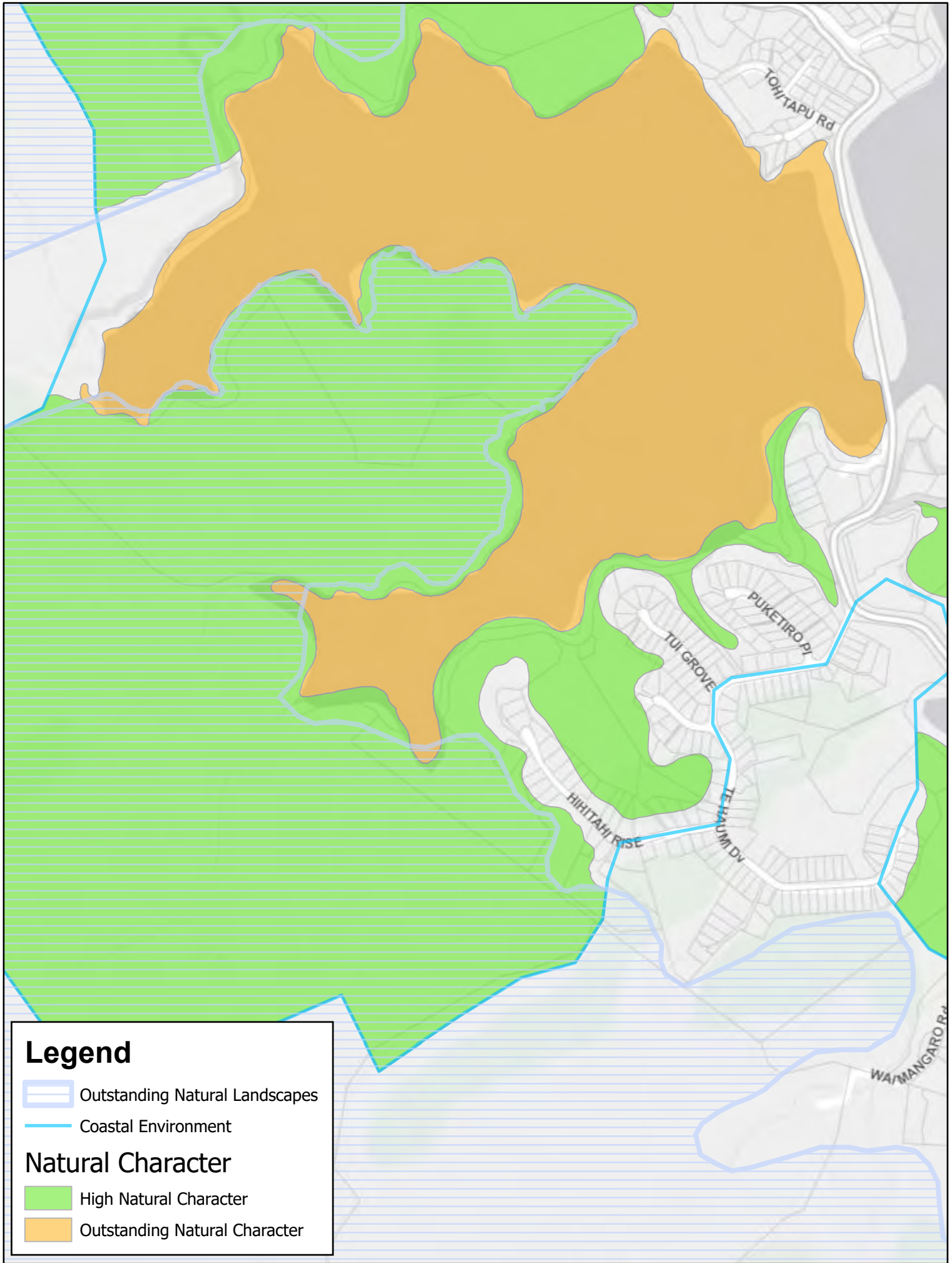






Projection NZTM2000. Datum NZGD2000. Scale:1:4,514

DISCLAIMER:
 While the Far North District Council strives to keep the data in this service current, it may not be the most recent or most accurate data available. No reliance on the information contained on this map by any person is permitted. FNDC will not be liable for any omissions or errors of information contained on this map. FNDC recommends that persons seek specific advice on individual properties from FNDC and other specialist organisations which may hold more up to date or accurate information.







Legend

-  Outstanding Natural Landscapes
-  Coastal Environment

Natural Character

-  High Natural Character
-  Outstanding Natural Character

Rule Assessment- Northland Regional Plan February 2024

Structures in the bed of the intermittent stream C.2

C.2.1.8 Construction and installation of structures – PERMITTED	Assessment
<p>The erection, reconstruction, placement, alteration, or extension of a structure in, on, under or over the bed of a lake or river, any associated temporary damming, taking or diversion of water around the activity site, and any associated bed disturbance or deposition of a substance in, on, or under the bed, are permitted activities, provided:</p> <ol style="list-style-type: none"> 1) the activities, including any temporary damming and diversions around work sites, comply with all relevant conditions of C.2.3 General conditions, and 2) the activities are not associated with the launching, retrieval, mooring, maintenance or repair of vessels, and 3) for culvert crossings: <ol style="list-style-type: none"> a) the contributing catchment is less than 300 hectares, and b) the culvert length under the crossing parallel to river flow must not exceed 25 metres when necessary for a road or railway line, otherwise it must not exceed 10 metres, and c) the culvert is designed such that flow velocity will not impede fish passage during normal flow conditions, and d) culvert approaches and fill placed on the river or lake bed must be free of organic matter, and e) the total height of the crossing crest must be: <ol style="list-style-type: none"> i. no more than 3.5 metres above the invert level of the culvert inlet, and ii. within the manufacturer’s maximum height specifications for the culvert, and iii. below the riverbank level unless it is necessary for a road, and f) the culvert must be either open bottomed or installed so that the base is set a minimum of 25 percent and a maximum of 50 percent of the culvert diameter below the stream bed, and g) on request by the Regional Council, records of structure design and flow calculations must be made available within 10 working days of the request, and h) the culvert is not in a significant wetland, an Outstanding Freshwater Body or mapped (refer I Maps Ngā mahere matawhenua): <ol style="list-style-type: none"> i. Outstanding Natural Character Area, or ii. Outstanding Natural Feature, or 	<p>Does not Comply</p> <p>For culvert crossings:</p> <p>3A Complies- catchment is less than 300ha</p> <p>3B Does not comply- Culvert length is 25m + rip rap pf 5m, total length of the structure is 30m</p> <p>3C Complies: Noting that the stream is intermittent, so normal flow conditions are very low or nil and baffles with spat rope is proposed.</p> <p>3D complies</p> <p>3E complies</p> <p>3F Compliance is not possible. This is not possible in this instance largely due to the grade of the existing stream and culvert.</p> <p>We do note that the proposed culvert will be oversized with respect to capacity and fitted with baffles and spat rope to create an environment with debris that mimic the upstream environment as best as practical. The proposed solution will vastly improve the potential for fish passage above existing scenario.</p>

<p>iii. Site or Area of Significance to Tāngata Whenua, and ...</p>	
<p>C.2.1.11 Activities in the beds of lakes and rivers – discretionary activity</p> <p>The following activities that are not the subject of any other rule in this Plan are discretionary activities:</p> <ol style="list-style-type: none"> 1) use, erect, reconstruct, place, alter, extend, remove, or demolish any structure or part of any structure in, on, under, or over the bed of a lake or river, or 2) disturb the bed of a lake or river, or 3) introduce or plant any plant or any part of any plant (whether exotic or indigenous) in, on, or under the bed of a lake or river, or 4) deposit any substance in, on, or under the bed of a lake or river, or 5) reclaim or drain the bed of a lake or river. <p>For the avoidance of doubt this rule covers the following RMA activities:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Use, erection, reconstruction, placement, alteration, or extension of a structure in, on, under, or over the bed of a lake or river, or introduce or plant any plant or any part of a plant in, on, or under the bed, or reclaim or drain the bed, and any associated bed disturbance or deposition of a substance in, on, or under the bed (s13(1)). <input type="checkbox"/> Damming, taking or diversion of water around the activity site during the erection, reconstruction, placement, alteration, or extension of a structure and any incidental ongoing damming or diversion of water around the structure (14(2)). <input type="checkbox"/> Discharge of sediment or water into water incidental to the activity (s15(1)). <p>Note: Advice on the fish populations can be obtained from the Regional Council, the Department of Conservation, or the Northland Fish and Game Council.</p>	<p>The proposed culvert will be a Discretionary Activity given the non-compliance with the permitted standards and the Controlled Standards.</p>

Earthworks C.8

Earthworks C.8.3.1- PERMITTED	Assessment
<p>Earthworks outside the bed of a river, lake, wetland, inanga spawning site and the coastal marine area, and any associated damming and diversion of stormwater and discharge of stormwater onto or into land where it may enter water, are permitted activities provided:</p> <ol style="list-style-type: none"> 1) the area and volume of earthworks at a particular location or associated with a project complies with the thresholds in Table 15: Permitted activity earthworks thresholds. 	<p>Does not comply</p> <p>The total earthworks proposed are over the permitted thresholds and are on erosion prone land.</p>

Table 15: Permitted activity earthworks thresholds

Location	Earthworks thresholds
Within 10m of a natural wetland, the bed of a continually or intermittently flowing river or lake	200m ³ of exposed earth at any time, and 50m ³ of moved or placed earth in any 12-month period.
Within 10m of an inanga spawning site	200 m ³ of exposed earth at any time, and 50m ³ of moved or placed earth in any 12-month period.
Catchment of an Outstanding Lake	2,500m ³ of exposed earth at any time.
Erosion-prone Land	2,500m ³ of exposed earth at any time.
High-risk flood hazard area	50m ³ of moved or placed earth in any 12-month period.
Coastal riparian and foredune management area	Excluding for coastal dune restoration, 200m ³ of exposed earth at any time.
Flood hazard area	100 m ³ of moved or placed earth in any 12-month period.
Other areas	5,000m ³ of exposed earth at any time.

- 2) the discharge is not within 20 metres of a geothermal surface feature, and
- 3) except for coastal dune restoration activities, good management practice erosion and sediment control measures equivalent to those set out in the Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region 2016 (Auckland Council Guideline Document GD2016/005), are implemented for the duration of the activity, and
- 4) batters and side castings are stabilised to prevent slumping, and
- 5) exposed earth is stabilised upon completion of the earthworks to minimise erosion and avoid slope failure, and
- 6) earth and debris are not deposited into, or in a position where they can enter, a natural wetland, a continually or intermittently flowing river, a lake, an artificial watercourse, or the coastal marine area, and
- 7) the earthworks activity does not:
 - a) reduce the height of a dune crest in a coastal riparian and foredune management area, except where dunes are recontoured to remove introduced materials or to remediate dune blow-outs as part of coastal dune restoration work, or
 - b) exacerbate flood or coastal hazard risk on any other property, or
 - c) create or contribute to the instability or subsidence of land on other property, or
 - d) divert flood flow onto other property, and
- 8) any associated damming, diversion and discharge of stormwater does not give rise to any of the following effects in the receiving waters beyond the zone of reasonable mixing:
 - a) any conspicuous change in colour or visual clarity, or b) the rendering of freshwater unsuitable for consumption by farm animals, or
 - c) contamination which may render freshwater taken from a mapped priority drinking water abstraction point (refer to Maps | Ngā mahere matawhenua) unsuitable for human consumption after existing treatment, and

<p>9) information on the source and composition of any clean fill material and its location within the disposal site are recorded and provided to the Regional Council on request, and</p> <p>10) the Regional Council’s Compliance Manager is given at least five working days’ notice (in writing or by email) of any earthworks activity being undertaken within a high-risk flood hazard area, flood hazard area, where contaminated land will be exposed, or in sand dunes within a coastal riparian and foredune management area.</p>	
<p>C.8.3.4 Earthworks – discretionary activity</p>	
<p>Earthworks outside the bed of a river or lake, a wetland, or the coastal marine area, and any associated damming and diversion of stormwater and discharge of stormwater onto or into land where it may enter water, that are not a permitted or controlled activity under another rule in C.8.3 Earthworks of this Plan.</p> <p>For the avoidance of doubt this rule covers the following RMA activities:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Earthworks (s9(2)). <input type="checkbox"/> Damming and diversion of stormwater associated with earthworks (s14(2)). <input type="checkbox"/> Discharge of stormwater associated with earthworks into water or onto or into land where it may enter water (s15(1)). 	<p>Consent is required as a Discretionary Activity.</p>

Stormwater management and Discharge C.6

<p>Stormwater Discharges C.6.4.2 PERMITTED</p>	<p>Assessment</p>
<p>The diversion and discharge of stormwater into water or onto or into land where it may enter water from an impervious area or by way of a stormwater collection system, is a permitted activity, provided:</p> <p>1) the discharge or diversion is not from:</p> <p>a) a public stormwater network, or</p> <p>b) a high-risk industrial or trade premises, and</p> <p>...</p>	<p>The stormwater network within the proposed development is proposed to be vested with FNDC. The proposed development will therefore not comply with the permitted standard C.6.4.1 or C.6.4.1.2.</p>
<p>Stormwater Discharges- Controlled Activity C.6.4.3</p>	
<p>The diversion and discharge of stormwater into water or onto or into land where it may enter water that is not a permitted activity or discretionary activity in C.6.4 Stormwater discharges of this Plan is a controlled activity.</p> <p>Matters of control:</p> <p>1) The maximum concentration or load of contaminants in the discharge.</p> <p>2) The size of the zone of reasonable mixing.</p>	<p>The diversion of stormwater from the treatment device to the intermittent stream is a Controlled Activity.</p> <p>An assessment of each standard is provided in the AEE and s summarised below for completeness.</p> <p>1) Stormwater quality treatment devices designed in accordance with the engineering guidelines are proposed for</p>

<p>3) The adequacy of measures to minimise erosion.</p> <p>4) The adequacy of measures to minimise flooding caused by the stormwater network.</p> <p>5) The design and operation of the stormwater system and any staging of works.</p> <p>For the avoidance of doubt this rule covers the following RMA activities:</p> <ul style="list-style-type: none"> ☐ Diversion of stormwater (s14(2)). ☐ Discharge stormwater into water or onto or into land where it may enter water (s15(1)). 	<p>all impervious areas. As, such there will be little to no contaminants in the discharge.</p> <ul style="list-style-type: none"> 2) 5 metres is considered to be the zone of reasonable mixing downstream 3) All impervious areas will be reticulated and conveyed to the constructed stormwater pond and culvert. The outlets are specifically designed with scour and erosion protection measures to minimise erosion. 4) The stormwater network will be design in accordance with the engineering standards. No downstream flooding has been identified. 5) The design of the proposed stormwater works will be completed in accordance with the engineering 6) standards. On-going maintenance of the stormwater wetland will be completed by FNDC if vested or a body Corp or similar if it is to remain private.
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General Rules C.2.3

General conditions apply to activities when referred to in the rules of C.2.1 Activities in the beds of lakes and rivers, C.2.2 Activities affecting wetlands or C.3.1 Damming and diverting water.

All Standards are complied with or can be complied with and can be managed via conditions of consent.

Standard C.2.3.11 notes that “any indigenous vegetation damage, destruction, disturbance, clearance or removal is limited to the minimum extent necessary to give effect to the permitted activities.” Consent is sought for earthworks that exceed the permitted threshold. The vegetation clearance will be to the minimum extent necessary to facilitate the proposed development as outlined within the application documents.

Appendix 17:

Previously Approved Subdivision Consent RC2061183

A hub of planning excellence



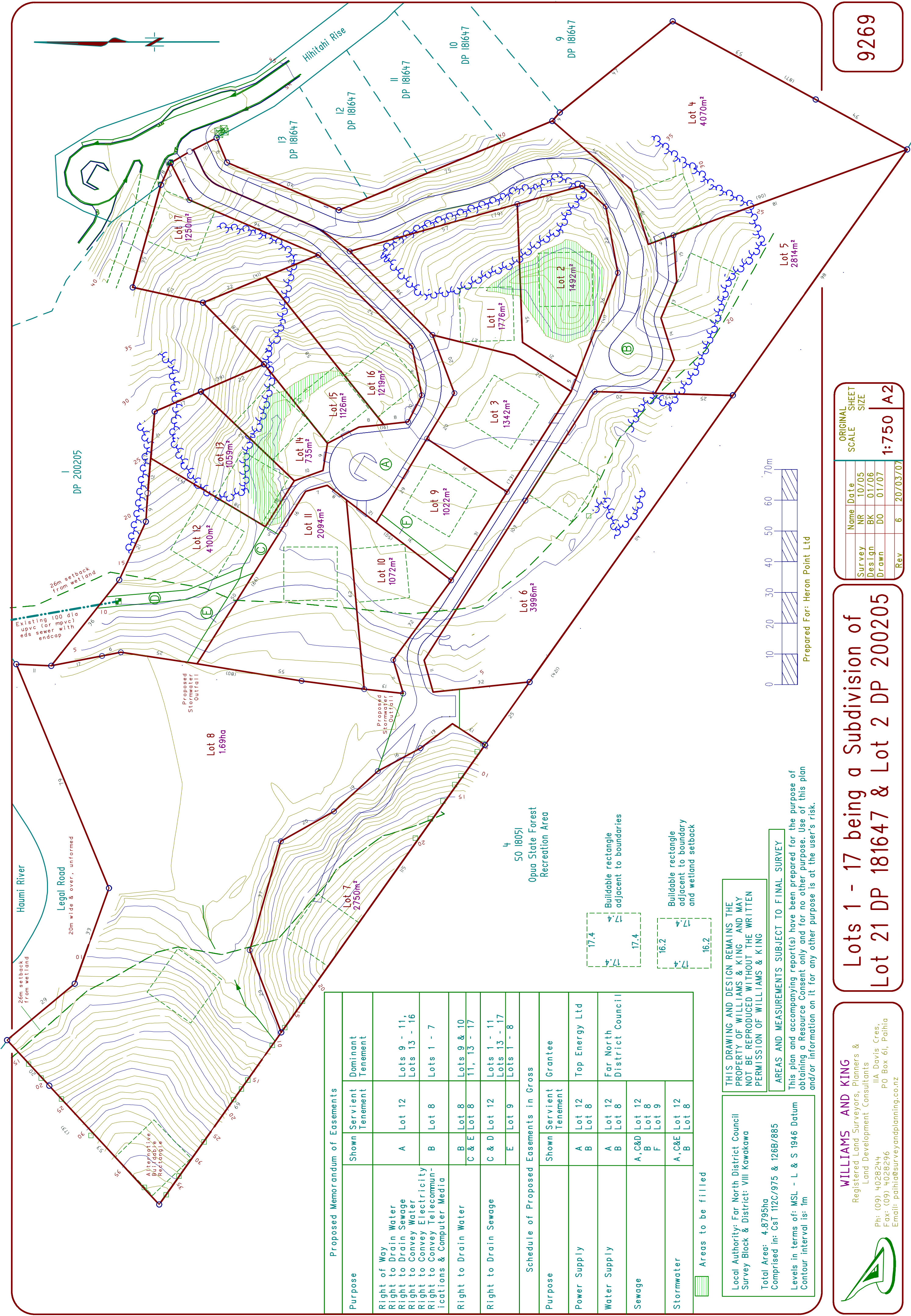
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COLLECTIVE





9269

Survey	NR	Date	10/05
Design	BK	Date	01/06
Drawn	DO	Date	01/07
Rev	6	Date	20/03/07

ORIGINAL SHEET SCALE SIZE
1:750 A2

Lots 1 - 17 being a Subdivision of Lot 21 DP 181647 & Lot 2 DP 200205

WILLIAMS AND KING
 Registered Land Surveyors, Planners & Land Development Consultants
 11A Davis Cres, P.O. Box 61, Pahiia
 Ph: (09) 4028244 Fax: (09) 4028296 Email: pahiia@surveyandplanning.co.nz

Proposed Memorandum of Easements		
Purpose	Shown Servient Tenement	Dominant Tenement
Right of Way	A Lot 12	Lots 9 - 11, Lots 13 - 16
Right to Drain Water	B	Lots 1 - 7
Right to Drain Sewage	C & E Lot 8	Lots 9 & 10, 11, 13 - 17
Right to Drain Sewage	C & D Lot 12	Lots 1 - 11, Lots 13 - 17
Right to Drain Sewage	E Lot 9	Lots 1 - 8

Schedule of Proposed Easements in Gross		
Purpose	Shown Servient Tenement	Grantee
Power Supply	A Lot 12 B Lot 8	Top Energy Ltd
Water Supply	A Lot 12 B Lot 8	Far North District Council
Sewage	A, C&D B Lot 8 Lot 9	
Stormwater	A, C&E B Lot 8	

Areas to be filled

Local Authority: Far North District Council
 Survey Block & District: VIII Kawakawa

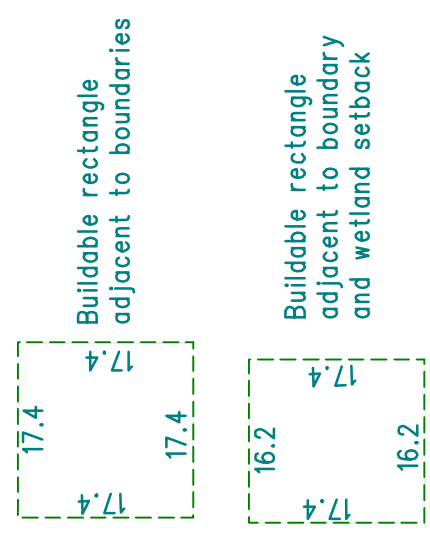
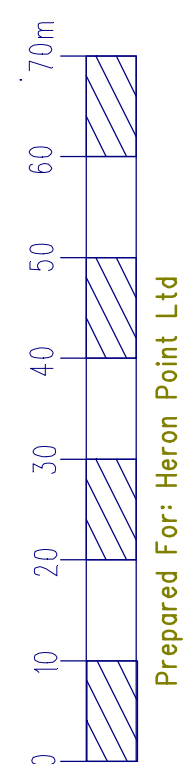
Total Area: 4.8795ha
 Comprised in: CsT 112C/975 & 126B/885

Levels in terms of: MSL - L & S 1946 Datum
 Contour interval is: 1m

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF WILLIAMS & KING AND MAY NOT BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF WILLIAMS & KING

AREAS AND MEASUREMENTS SUBJECT TO FINAL SURVEY

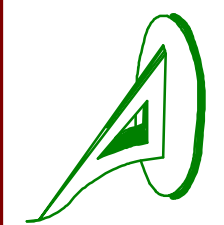
This plan and accompanying report(s) have been prepared for the purpose of obtaining a Resource Consent only and for no other purpose. Use of this plan and/or information on it for any other purpose is at the user's risk.



DP 200205

Haumi River
 Legal Road
 20m wide & over, unformed

Opua State Forest
 Recreation Area



FAR NORTH DISTRICT COUNCIL

FAR NORTH PARTLY OPERATIVE DISTRICT PLAN

IN THE MATTER OF
The Resource Management Act 1991

AND

IN THE MATTER OF
an application for Resource Consent
under the aforesaid Act by

Heron Point Limited
FILE NUMBER RC 2061183

DECISION

That pursuant to Sections 104, 104B and 220 of the Resource Management Act 1991, the Council grants its consent to Heron Point Limited to:

SUBDIVIDE IN TWO STAGES TWO EXISTING LOTS TO CREATE A TOTAL OF 17 RESIDENTIAL LOTS AND UNDERTAKE ASSOCIATED EARTHWORKS FOR THE CONSTRUCTION OF ROADS AND ACCESSWAYS LOCATED AT HIHITAHU RISE, TE HAUMI BEING LEGALLY DESCRIBED AS LOT 21 DP 181647 AND LOT 2 DP 200205, SUBJECT TO THE FOLLOWING CONDITIONS.

- (1) (a) The subdivision shall be carried out in accordance with the approved plans of subdivision prepared by Williams and King, referenced 9269, Drawn 1/7 Rev 9b (11 June 2008), 9269 Drawn 1/7 Rev 9b (11 June 2008) and attached to this consent with the Council's "Approved Plan" stamp affixed to it (dated 27 November 2009).
- (b) Construction works shall be limited to between the hours of 7am and 5pm daily.
- (c) Construction activities shall meet the construction noise limits recommended in, and shall be measured and assessed in accordance with NZS 6803P:1984 The Measurement and Assessment of Noise from Construction, Maintenance and Demolition Work.

STAGE 1: (Lots 1-3 and 7-20)

- (2) That, prior to approval under Section 223 of the Act, the title plan shall show:
 - (a) (esplanade reserve) Lot 18 as an esplanade reserve to vest in Council.
 - (b) (seabed) Lot 19 as seabed to vest in the Crown

- (c) (building areas) Areas on Lots 1 – 3, Lots 7 – 17 and Lot 20 that are not suitable for being built on as subject to a no build covenant (to be enforced by consent notice).
- (d) (forestry, shrubland and wetland protection) Areas of forestry, shrubland and wetland on Lots 1 – 3 and Lots 7 – 17 that are to be protected by way of a vegetation protection covenant (to be enforced by consent notice).
- (e) (easements) All necessary easements which shall be duly granted or reserved.
- (3) That, prior to approval under Section 223 of the Act:
- (a) (engineering plan) Submit plans and details of all works for Stage 1 and services for Stage 2 for the approval of Council. Such works are to be designed in accordance with Council's Engineering Standards and Guidelines: 2009 and NZS4404:2004.

In particular the plans shall show:

- A reticulated sanitary sewerage (effluent drainage system) with a connection to each lot.
- Specific effluent pump station foundation and construction details, if required.
- A reticulated stormwater system with a connection to each lot, where necessary.
- Permanent stormwater control structures.
- An erosion and sediment control plan for works in place during construction.
- Internal access carriageways (on Right of Ways) with provision for turning at the termination of Rights of Way 'A' and 'B', and speed restriction mechanisms where accessways pass through or alongside shrubland, forest habitat and wetland areas.
- A reticulated water supply with a metered connection to each lot.
- A fill restoration and reinstatement plan.
- Subsoil drainage proposed (e.g. counterfort drains) to enhance slope stability.
- Retaining walls and structures.
- Site specific work required to provide a building platform with a factor of safety of 1.5 for each lot under long term ground water conditions expected once all drainage and development works have been completed.

Note: All works associated with fill restoration, excavation or services trenches, road construction and stormwater/groundwater control is to be supervised and certified by a suitably qualified Geotechnical Engineer.

- (b) (approval of engineering plans) Following approval of the plans and selection of the contractor provide to Council;
- Details of the successful contractor;
 - Details of the planned date and duration of contract;
 - Details of the supervising engineer; and
 - A Traffic Management Plan.

- (c) (native revegetation and enhancement planting plan) Submit to the satisfaction of the Resource Consents Manager or delegated officer a detailed native revegetation and enhancement planting and maintenance plan, to be prepared by a suitably qualified and experienced person. The plan shall be prepared in accordance with the recommendations set out in the report– '*LANDSCAPE AND VISUAL IMPACT ASSESSMENT*' – prepared by Hawthorn Landscape Architects dated December 2007 and shall provide details of the areas to be replanted along the edges of cleared areas. The plan shall also provide for any enhancement planting required between building sites and to mitigate the visual effects of building sites and access ways taking into account the need to retain a cleared area around dwellings for fire hazard purposes. The plan shall detail the density of native plantings in stems / hectare and the required maintenance to ensure the ongoing health and survival of the revegetated areas. Where possible the revegetation shall be undertaken utilising eco sourced plant species.
- (d) (submission of a weed and pest management plan) Submit to the Resource Consents Manager or delegated officer an animal pest and weed eradication programme detailing the methodology for animal pest and weed eradication. The plan shall be prepared by a suitably qualified and experienced person; addressing the matters set out in 6 – *Potential effects of development on the ecological values of the property and mitigation measures – Introduced pests* outlined in the ecological assessment prepared by 'David Wright' Ecological services dated May 2008 and submitted with the application.
- (4) That before a certificate is issued pursuant to Section 224 of the Act, the applicant shall:
- a) (engineering works) Undertake construction works in accordance with the approved plans required to be submitted under condition 3(a) and 3(b) above and required to provide access and services to Lots 1 – 3 and 7 – 17 and 20.
- b) (buildable areas) Undertake all works required to provide each lot with a building platform with a factor of safety of 1.5 as required by condition 3(a) of this consent.
- c) (completion of works) Upon completion of the works above, provide certification of the work from an appropriately qualified engineer that all work has been supervised and completed in accordance with the approved plans. Note that this also includes all works associated with fill restoration, excavation of service trenches, road construction and stormwater/groundwater control.
- d) (maintenance – slope stability) Provide a report detailing long term maintenance measures or works required to maintain slope stability. Where specific action is required to be undertaken by the property owner this information shall be conveyed via a consent notice. Measures affecting Rights of Way should be detailed separately within Right of Way documentation.
- e) (effluent pumps) Identify which lots (if any) require effluent pumps to dispose of treated effluent to the reticulated system. This information will be conveyed by a consent notice.
- f) (maintenance agreement) Provide evidence that a maintenance agreement has been entered into with the contractor who is to maintain the work that is to vest in Council for a minimum period of 12 months. The minimum value of the

retention monies held or bond is to be 10% of the construction cost.

- g) (discharge consent) Provide evidence that a discharge consent for stormwater has been obtained from Northland Regional Council.
- h) (Electricity and telecommunications) Provide evidence that electrical and telecommunication services have been reticulated to the boundary of each lot.
- i) (as built plans) Provide Council As Built Plans complying with Schedule 1D of NZS4404:2004
- j) (earthworks) provide evidence by way of a Geotechnical completion report that all earthworks, including fill restoration, ground water/stormwater control and related retaining measures associated with creating building platforms and amenity areas on Lots 1 – 3, Lots 7 – 17 and Lot 20 of Stage 1 have been carried out in accordance with the report prepared by Foundation Engineering Consultants Ltd (FECL) Geotechnical Investigation Report (GIR, reference 13073, dated 31 October 2007).
- k) (services) Power and phone connections and any other cables shall be installed underground along the road alignments to avoid visual disturbance.
- l) (fees) Pay, as may be required, the council's actual and reasonable monitoring and administration fees for assessing compliance with these conditions, and for any additional site visits that may be necessary.
- m) (native revegetation and enhancement planting) Undertake native revegetation and enhancement planting as it relates to Lots 1 – 3, Lots 7 – 17 and Lot 20 of Stage 1 in accordance with the approved native revegetation and enhancement planting and maintenance plan.
- n) (implementation of weed and pest management plan) The weed and pest management and monitoring plan shall be implemented within two months or sooner if possible following the approval of the plan required by condition 3(d) above.
- o) (implementation of measures to protect native wildlife and associated signage) Install signage advising of presence of wetland birds and their breeding periods.
- p) (fencing covenant) Provide confirmation that a fencing covenant pursuant to Section 5 of the Fencing Act 1978 over Lot 20 in favour of the adjoining Council Esplanade Reserve (to be vested), has been prepared and will be registered on the title of that lot. The covenant shall indemnify the Far North District Council from any liability to contribute towards any construction, maintenance or upgrading work on any fence between the reserve and Lot 20. The covenant is to be prepared to the Council's satisfaction and registered on the relevant titles at the applicant's expense.

- (5) Secure the conditions below by way of a consent notice issued under Section 221 of the Act, to be registered against the titles of the affected allotments. The costs of preparing, checking and executing the notice shall be met by the applicants.

Lots 1 – 3, 7 – 17 and 20

- a) (stormwater) Onsite stormwater retention with flow attenuated outflow will be required on all sites where stormwater flow generated by impermeable surfaces exceed the District Plan permitted activity standard and/or the design capacity of the stormwater reticulation system.
- b) (building restrictions foundations) All buildings will require foundations specifically designed by a Chartered Professional Engineer in accordance with design parameters specified by a suitably qualified Geotechnical engineer. The foundation design details shall be submitted in conjunction with the Building Consent application.
- c) (building restrictions cut and fill) Specific design is required for all cuts and fills in excess of 600mm. The design shall be in accordance with the requirements of the report prepared by Foundation Engineering Consultants Ltd (FECL) Geotechnical Investigation Report (GIR, reference 13073, dated 31 October 2007). The foundation design details shall be submitted in conjunction with the Building Consent Application.
- d) (septic tank) Each lot owner is required to install a septic tank with an outlet filter prior to disposal of any effluent in to the Council maintained EDS reticulation.
- e) (buildable areas) No buildings shall be constructed on the area shown as being subject to a no-build covenant.
- f) (forestry, shrubland and wetland protection) The property owner and occupier shall preserve the indigenous forestry, shrubland and wetland areas identified on the title plan as being subject to a vegetation protection covenant together with those areas to be revegetated and shall not without the prior written consent of the Council and then only in strict compliance with any conditions imposed by the Council, cut down, damage or destroy any of the above or suffer or permit the cutting down, damaging or destruction of the above. The owner shall be deemed not to be in breach of this prohibition if any of the above vegetation shall die from natural causes not attributable to any act or default by or on behalf of the owner or for which the owner is responsible. Any work to be undertaken on any natural vegetation (trees in particular) contained within the protected areas is to be carried out under the guidance of a qualified arborist, with Council to be advised in writing of the proposed work prior to the commencement, and notified of the completion of the work. There shall be no buildings constructed in the areas to be protected.
- g) (cats and dogs and mustelids) The property owner and occupier shall not keep or allow the introduction of any animals, including cats, dogs and mustelids which have the potential to be kiwi predators. This prohibition includes the bringing of any such animals onto the site by visitors.
- h) (weed and pest management plan) The property owner shall implement on an

on-going basis the approved weed and pest management plan.

- i) (plant pests) no plant species shall be introduced or kept on the property which comprise plant pests in the Northland Regional Council pest plant list
- j) (design guidelines) Any buildings erected on the property shall be designed in accordance with the recommendations set out in the report titled – '*LANDSCAPE AND VISUAL IMPACT ASSESSMENT*' – prepared by Hawthorn Landscape Architects dated December 2007. An application for Building Consent (or resource consent) shall include a report from a suitably qualified experienced architect/landscape architect to demonstrate that the proposed building(s) will accord with the landscape and architectural guidelines contained in section 6 – *Mitigation and Enhancement Measures* of the above report with regards to the property in respect of the following:
- Location of buildings
 - Building scale and design
 - Materials
 - Screening of utility areas
 - Landscaping of cut and fill batters.
- k) (Landscaping plan) Any buildings erected on the property shall be landscaped in accordance with the recommendations set out in the report titled – '*LANDSCAPE AND VISUAL IMPACT ASSESSMENT*' – prepared by Hawthorn Landscape Architects dated December 2007. An application for Building Consent (or resource consent) shall include a report from a suitably experienced landscape architect to demonstrate that the proposed landscaping will accord with the landscape guidelines contained in section 6 – *Mitigation and Enhancement Measures* of the above report with regards to the property in respect of the following:
- Replanting
 - Implementation of enhancement planting
 - Revegetation of exposed areas
 - Extent of revegetated and enhancement planting areas
 - Weeds
 - Landscape material

Lots 14 and 15

- l) (archaeology) The owners and occupiers of Lots 14 and 15 are advised that a buried archaeological site, namely P05/755, is located in close proximity to the shared boundary between these two lots. The archaeology comprises a midden and is located approximately 3 metres below ground level. In the event that any archaeological evidence is found during the development of these sites, the applicant, prospective landowner and agents are responsible to stop all work and inform the New Zealand Historic Places Trust and obtain an authority to modify the archaeological site.

STAGE 2: (Lots 4, 5 and 6)

(6) That, prior to approval under Section 223 of the Act, the title plan shall show:

- a) (building areas) The identified building area on Lots 5 and 6
- b) (forestry, shrubland and wetland protection) Except for the identified building areas set out in condition 6(a) above and any associated accessways, all the forestry, shrubland and wetland areas on Lots 5 and 6 shall be shown as being subject to a conservation covenant.
- c) (building areas) Areas on Lot 4 that are not suitable for being built on as subject to a no build covenant (to be enforced by consent notice).
- d) (easements) All necessary easements which shall be duly granted or reserved.

(7) That, prior to approval under Section 223 of the Act:

- (a) (engineering plan) Submit plans and details of all works for Stage 2 (incorporating the approved details of servicing for Stage 2 in Stage 1 requirements) for the approval of Council. Such works are to be designed in accordance with Council's Engineering Standards and Guidelines: 2009 and NZS4404:2004.

In particular the plans shall show:

- Permanent stormwater control structures.
 - An erosion and sediment control plan for works in place during construction.
 - Access carriageway on Right of Way 'G' with speed restriction mechanisms where accessways pass through or alongside shrubland, forest habitat and wetland areas.
 - Internal access to the Lots 5 and 6 building platforms.
 - The above accesses are to be suitable for truck access – the Building Industry Authority sets out minimum standards in a publication dated 1 June 2001 called Acceptable Solutions C/AS1 Part 8: Fire Fighting.
 - A reticulated water supply with a metered connection to each lot.
 - A fill restoration and reinstatement plan.
 - Subsoil drainage proposed (e.g. counterfort drains) to enhance slope stability.
 - Retaining walls and structures.
 - Site specific work required to provide a factor of safety of 1.5 for each identified building platform on Lots 5 and 6 under long term ground water conditions expected once all drainage and development works have been completed.
 - Culvert installation under access to Lots 5 and 6.
- (b) (approval of engineering plans) Following approval of the plans and selection of the contractor provide to Council;
 - Details of the successful contractor;
 - Details of the planned date and duration of contract;
 - Details of the supervising engineer; and
 - A Traffic Management Plan.

- (c) (right of way and species relocation plan) Submit to the satisfaction of the Resource Consents Manager or duly delegated officer a detailed Right of Way and specie relocation plan showing how the alignment of Right of Way 'G' has been designed to avoid major areas of tree daisy. The plan shall be prepared by a suitably qualified professional and detail how the relocation of any of the plants that cannot be avoided will be undertaken and the required maintenance to ensure the ongoing health and survival of the relocated plants.
 - (d) (native revegetation and enhancement planting plan) Submit to the satisfaction of the Resource Consents Manager a detailed native revegetation and enhancement planting and maintenance plan, to be prepared by a suitably qualified and experienced person. The plan shall be prepared in accordance with the recommendations set out in the report titled – '*LANDSCAPE AND VISUAL IMPACT ASSESSMENT*' – prepared by Hawthorn Landscape Architects dated December 2007 and the ecological assessment submitted with the application prepared by 'David Wright' Ecological Services dated May 2008. The plans shall provide details of the areas to be replanted along the edges of cleared areas. The plan shall also provide for any enhancement planting required between building sites and to mitigate the visual effects of building sites and access ways taking into account the need to retain a 3 metre cleared area around dwellings for fire hazard purposes. The plan shall detail the density of native plantings in stems / hectare and the required maintenance to ensure the ongoing health and survival of the revegetated areas. Where possible the revegetation shall be undertaken utilising eco sourced plant species.
 - (e) (submission of a weed and pest management plan) Submit to the Resource Consents Manager or duly delegated officer an animal pest and weed eradication programme detailing the methodology for animal pest and weed eradication. The plan shall be prepared by a suitably qualified and experienced person addressing the matters set out in 6 – *Potential effects of development on the ecological values of the property and mitigation measures – Introduced pests* outlined in the ecological assessment prepared by 'David Wright' Ecological services dated May 2008 and submitted with the application.
 - (f) (fire management) In consultation with the Department of Conservation submit a plan or report to the satisfaction of the Resource Consents Manager, which identifies the measures taken to ensure that an adequate fire buffer (consisting of a cleared area of 3 metres around built structures and/or areas re-planted with fire retardant plant species) is provided around the house sites on Lots 5 and 6. The plan or report shall be prepared by a suitably qualified and experienced architect/landscape architect and shall also include measures for the on-going maintenance of the fire buffer zone and accord with the recommendations set out in the report titled – '*LANDSCAPE AND VISUAL IMPACT ASSESSMENT*' – prepared by Hawthorn Landscape Architects dated December 2007 and the ecological assessment submitted with the application prepared by 'David Wright' Ecological Services dated May 2008.
- (8) That before a certificate is issued pursuant to Section 224 of the Act, the applicant shall:
- a) (engineering works) Undertake construction works in accordance with the approved plans required to be submitted under condition 7(a) and 7(b) above and required to provide access and services to the building platforms of Lots 5

and 6.

- b) (buildable areas) Undertake all works required to provide identified building platforms on Lots 5 and 6 with a factor of safety of 1.5 as required by condition 7(a) of this consent.
- c) (completion of works) Upon completion of the works above, provide certification of the work from an appropriately qualified engineer that all work has been supervised and completed in accordance with the approved plans. Note that this includes all works associated with fill restoration, excavation of service trenches, road construction and stormwater/groundwater control.
- d) (maintenance – slope stability) Provide a report detailing long term maintenance measures or works required to maintain slope stability. Where specific action is required to be undertaken by the property owner this information shall be conveyed via a consent notice. Measures affecting Rights of Way should be detailed separately within Right of Way documentation.
- e) (effluent pumps) Identify which lots (if any) require effluent pumps to dispose of treated effluent to the reticulated system. This information will be conveyed by a consent notice.
- f) (maintenance agreement) Provide evidence that a maintenance agreement has been entered into with the contractor who is to maintain the work that is to vest in Council for a minimum period of 12 months. The minimum value of the retention monies held or bond is to be 10% of the construction cost.
- g) (discharge consent) Provide evidence that a discharge consent for stormwater has been obtained from Northland Regional Council.
- h) (Electricity and telecommunications) Provide evidence that electrical and telecommunication services have been reticulated to the boundary of each lot.
- i) (as built plans) Provide Council As Built Plans complying with Schedule 1D of NZS4404:2004
- j) (accessways and driveways) The new Right of Way 'G' and driveways to Lots 5 and 6 building platforms shall be constructed to minimise the amount of cut and fill required and with the minimum amount of vegetation removed. The goal is to retain as much canopy closure over the new Right of Way and driveways as possible to minimise edge effects and to minimise erosion and subsequent siltation to the adjoining wetland and estuary. Road surfaces, kerbs and channel shall be visually recessive so as not to draw attention to the roading route and shall be constructed in black oxide concrete to minimise visibility.
- k) (earthworks) provide evidence by way of a Geotechnical completion report that all earthworks, including fill restoration, ground water/stormwater control and related retaining measures associated with creating building platforms and amenity areas on Lots 5 and 6 have been carried out in accordance with the report prepared by Foundation Engineering Consultants Ltd (FECL) Geotechnical Investigation Report (GIR, reference 13073, dated 31 October 2007).
- l) (services) Power and phone connections and any other cables shall be

installed underground along the road alignments to avoid visual disturbance.

- m) (fees) Pay, as may be required, the council's actual and reasonable monitoring and administration fees for assessing compliance with these conditions, and for any additional site visits that may be necessary.
 - n) (right of way and specie relocation plan) Undertake the relocation of areas of tree daisy within two months, or sooner if possible, following the approval of the plan required by condition 7(c) above.
 - o) (forestry, shrubland and wetland protection) Provide evidence that the indigenous forest, shrubland and wetland areas on Lots 5 and 6 shown on the approved title plan as being subject to a vegetation protection covenant have been legally protected by way of a Conservation Covenant pursuant to section 77 of the Reserves Act. The Conservation Covenant is to be prepared by, and registered by, the Council at the applicant's expense and shall allow for the requirements of other conditions of this consent in respect of pest and weed control measures and fire management as set out in conditions 7(e) and 7(f) of this consent.
 - p) (native revegetation and enhancement planting) Undertake native revegetation and enhancement planting as it relates to Lots 5 and 6 in accordance with the approved native revegetation and enhancement planting and maintenance plan.
 - q) (implementation of weed and pest management plan) The weed and pest management and monitoring plan shall be implemented within two months or sooner if possible following the approval of the plan required by condition 7(e) above.
 - r) (implementation of measures to protect native wildlife and associated signage) Install signage advising of presence of wetland birds and their breeding periods.
 - s) (implementation of fire management plan) The fire management measures shall be implemented within two months, or sooner if possible, following the approval of the plan required by condition 7(f) above.
 - t) (signage) Install signage identifying layout of internal access and lots, with each site clearly numbered (Rural Fire Authority to be notified of numbering).
- (9) Secure the conditions below by way of a consent notice issued under Section 221 of the Act, to be registered against the titles of the affected allotments. The costs of preparing, checking and executing the notice shall be met by the applicants.

Lot 4

- a) (buildable areas) No buildings shall be constructed on the area shown as being subject to a no-build covenant.

Lots 5 and 6

- a) (fire management) Any building erected on the property shall incorporate the fire management measures set out in the approved fire management plan or report required by condition 7(f) of RC-2061183-RMASUB. An application for

Building Consent (or resource consent) shall include details demonstrating how the proposed building(s) will accord with the fire management measures set out in the approved fire management plan. The measures set out in the fire management plan shall be established prior to the occupation of any dwelling to which the fire management plan relates. There shall be at least 2 multipurpose dry powder fire extinguishers in any building, with certification that the extinguishers have been checked by a qualified person to be provided to the Council annually.

- b) (roof materials) Materials used to construct roofing on any structure shall consist of steel or tiles only.
- c) (vegetation) There shall be no trees or shrubs within 3 metres of any building.
- d) (outdoor fires) Despite any fire seasons or permits received, no outdoor fires are permitted on the property.
- e) (fire management) Domestic Home sprinkler systems are to be installed in any habitable dwelling.
- f) (building construction) The eaves and undersides of decks and houses shall be designed to be enclosed.

In consideration of the application under Section 104 of the Act, the following reasons are given for this decision:

- (A) No persons are considered adversely affected by the proposed subdivision.
- (B) There are no apparent conflicts with the purpose of the Act, nor with the matters or principles noted in Sections 6, 7 and 8 of the Act, nor with the objectives and policies of the relevant District Plan as it may apply to the specific circumstances of this proposal.
- (C) The imposed conditions will ensure that the grant of consent will be in conformance with the relevant provisions of the applicable District Plan; and those conditions will adequately avoid, or mitigate to a minor impact level, the expected adverse effects on the environment.

Decision pursuant to Section 37

Pursuant to Section 37 of the Resource Management Act, Council has made a decision to waive the 20 working day time limit for the processing of your application for resource consent.

This decision has been made due to the workload of the Resource Consent Department at the time the application was lodged.

The time period is now extended to 40 working days, being not more than double the time limit set down in the Act.

STATUTORY INFORMATION / ADVICE NOTES

The following matters are noted as being relevant to the land, and possibly requiring additional action for statutory and/or code compliance. The applicant and any prospective purchasers should be aware of these matters; and hence the information will be placed on the property file and will be cited in any related Project or Land Information Memorandum that may be issued by the Council.

- (1) Pursuant to Section 102 of the Local Government Act 2002, the Far North District Council has prepared and adopted a Development Contributions Policy. In

accordance with this policy, the activity to which this consent relates is subject to Development Contributions.

You have been advised of the assessment of the Development Contributions payable under separate cover.

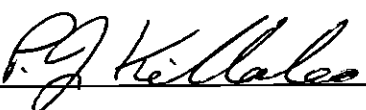
It is important to note that the Development Contributions must be paid prior to commencement of the work or activity to which this consent relates or, in the case of a subdivision, prior to the issue of a Section 224 (c) Certificate.

Further information regarding the Council's Development Contributions Policy may be obtained from the Long Term Council Community Plan (LTCCP) or the Council's web-site at www.fndc.govt.nz.

- (2) Applicant is advised that an invoice will follow this decision being additional cost incurred in its processing.
- (3) In the event that any unrecorded archaeological sites are found during the development of the site, the applicant, prospective landowner and agents are responsible to stop all work and inform the New Zealand Historic Places Trust and obtain an authority to modify the archaeological site.
- (4) Applicant is advised to contact the Northland Regional Council with regards to establishing whether consents will be required under the provisions of the Regional Water and Soil Plan for Northland with regards to the undertaking of works within the wetland and stormwater management. The applicant is advised that should it be determined that additional consents are required from Northland Regional Council, such consents should be obtained prior to commencing any work on site.
- (5) Copy of this consent shall be kept on site during the construction phase.

Approval

This resource consent has been prepared by David Hampson and Diana Bell Consultant Planners and is granted under delegated authority (pursuant to section 34A of the Resource Management Act 1991) from the Far North District Council by:



RESOURCE CONSENTS MANAGER

28th January 2010 DATE
RC 2061183

Right of Objection

If you are dissatisfied with the decision or any part of it, you have the right (pursuant to section 357A of the Resource Management Act 1991) to object to the decision. The objection must be in writing, stating reasons for the objection and must be received by Council within 15 working days of the receipt of this decision.

Lapsing Of Consent

Pursuant to section 125 of the Resource Management Act 1991, this resource consent will lapse 5 years after the date of commencement of consent unless, before the consent lapses;

The consent is given effect to; or

An application is made to the Council to extend the period of consent, and the council decides to grant an extension after taking into account the statutory considerations, set out in section 125(1)(b) of the Resource Management Act 1991.