



6. APPROVED HARDFILL IS TO BE USED IN BACKFILLING OF ALL ROAD CROSSINGS AND VEHICLE CROSSINGS TO COUNCIL STANDARDS.
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9. ALL LINES TO BE ABANDONED SHALL BE SEALED AT EACH END. TIMING OF ALL SEALING TO BE COORDINATED WITH COUNCIL STAFF.

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- LEGEND
- EX BDY
 - PROP BDY
 - STAGE BOUNDARY
 - EX OLFP
 - REMOVED EX OLFP
 - EXISTING STREAMS
 - PR SW FLOW PTH
 - PR SW PIPE
 - RIPARIAN YARD 20m SETBACK
 - WETLAND AREA 100m SETBACK
 - EX/PROP SWMH
 - PROP SWCP SINGLE
 - PR INDICATIVE LEVEL SPREADER - SUBJECT TO DETAIL DESIGN
 - PR RIPRAP
 - PR CULVERT
 - EX CULVERT
 - PR SCRUFFY DOME

A	RC	WY	03/2025
Rev	Description	By	Date
	By	Date	
Survey	LANDPRO	03/22	
Design	WY	03/2025	
Drawn	WY	03/2025	
Checked	RW/KH	03/2025	



Project
**DEVELOPMENT OF
RIVERHEAD FOREST
FOR RANGITOOPUNI
DEVELOPMENTS LIMITED
PARTNERSHIP**

Title
**PROPOSED
STORMWATER
OVERVIEW - STAGE 1**

Project no.	147007		
Scale	1:10,000 @ A3		
Cad file	147007-M-C400 STAGE 1 - 5 STORMWATER.DWG		
Drawing no.	C400-1-0	Rev	A

C400-1-1

STAGE 1

STAGE 3

STAGE 4

STAGE 7

STAGE 6

STAGE 8

STAGE 9

STAGE 12

STAGE 14

STAGE 11

STAGE 10

STAGE 13

PROPOSED
RETIREMENT
VILLAGE

RESOURCE CONSENT



PROPOSED BOX CULVERT 1-1, DETAILS
REFER TO C484 FROM PROJECT NUMBER
147007 AND FLOOD ASSESSMENT REPORT

PROP ROAD SWALE OUTLET 1-2

LOT 11

LOT 10

LOT 48

STAGE 1

LOT 4

LOT 3

LOT 2

LOT 9

LOT 8

LOT 49

OLD NORTH ROAD

LOT 1

LOT 7

LOT 6

LOT 5

PROP SW CIRCULAR
CULVERT 3-1 WITH Ø650mm

LOT 51

LOT 50

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 - PR RIPRAP
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Drawing no.	C400-1-1
Rev	A

RESOURCE CONSENT



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Title
**PROPOSED
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OVERVIEW - STAGE 2**

Project no.	147007
Scale	1:10,000 @ A3
Cad file	147007-M-C400 STAGE 1 - 5 STORMWATER.DWG
Drawing no.	C400-2-0
Rev	A

RESOURCE CONSENT

DATE: 5/2/25 FILE PATH: F:\MAVEN\PROJECTS\147007 RIVERHEAD FOREST\DWG\147007-M-C400 STAGE 1 - 5 STORMWATER.DWG



STAGE 2

JOAL 1

PROP ROAD SWALE OUTLET 2-1

RESOURCE CONSENT

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DEVELOPMENTS LIMITED
PARTNERSHIP**

Title
**PROPOSED
STORMWATER
PLAN - STAGE 2**

Project no.	147007		
Scale	1:1500 @ A3		
Cad file	147007-M-C400 STAGE 1 - 5 STORMWATER.W		
Drawing no.	C400-2-1	Rev	A

DATE: 4/3/25 FILE PATH: F:\MAVEN\PROJECTS\147007 RIVERHEAD FOREST\DWG\147007-M-C400 STAGE 1 - 5 STORMWATER.DWG



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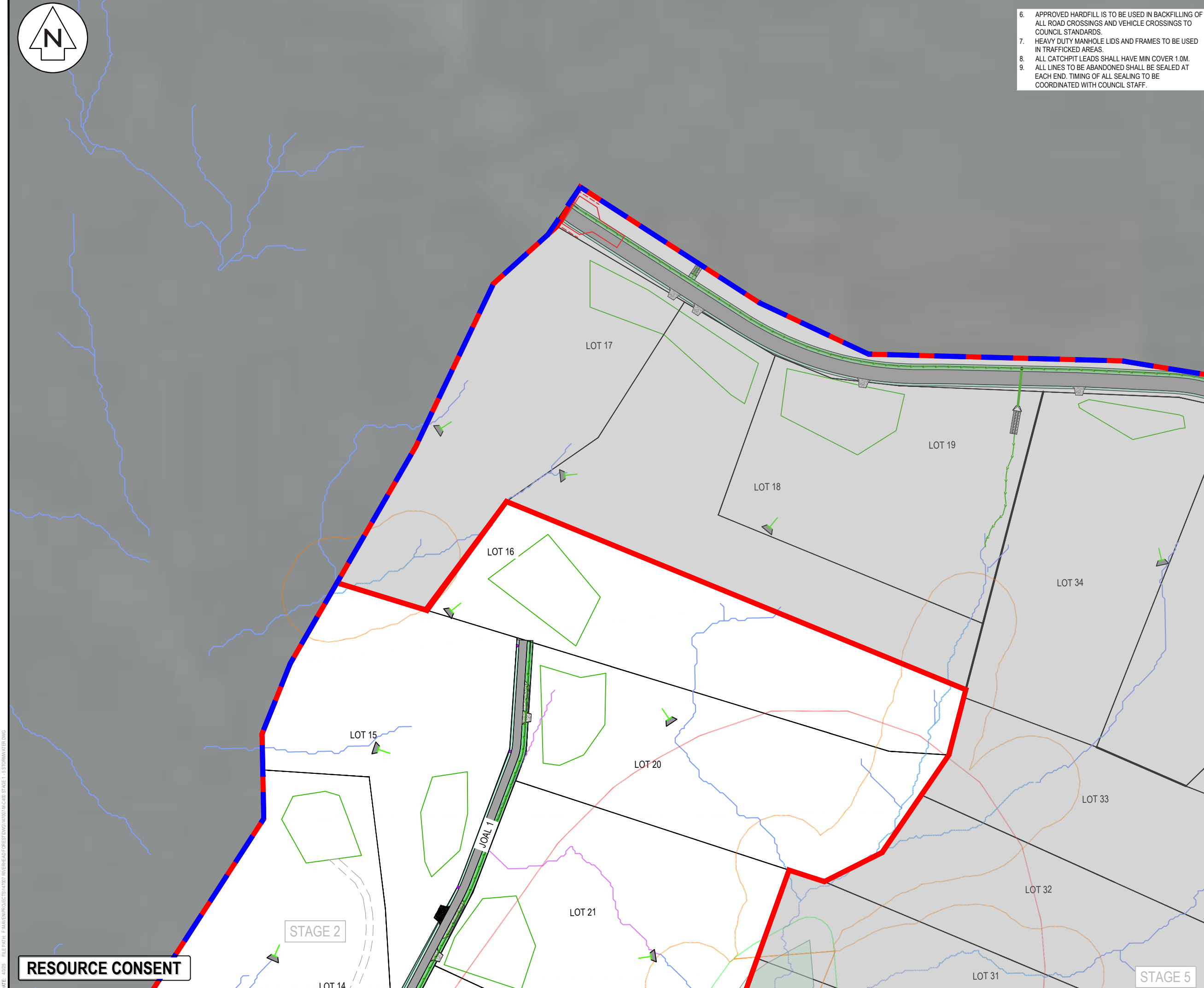
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Project
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Title
**PROPOSED
STORMWATER
PLAN - STAGE 2**

Project no.	147007
Scale	1:1500 @ A3
Cad file	147007-M-C400 STAGE 1 - 5 STORMWATER.DWG
Drawing no.	C400-2-2
Rev	A



DATE: 03/25 FILE PATH: F:\Maven\PROJECTS\147007 RIVERHEAD FOREST.DWG 147007-M-C400 STAGE 1 - 5 STORMWATER.DWG



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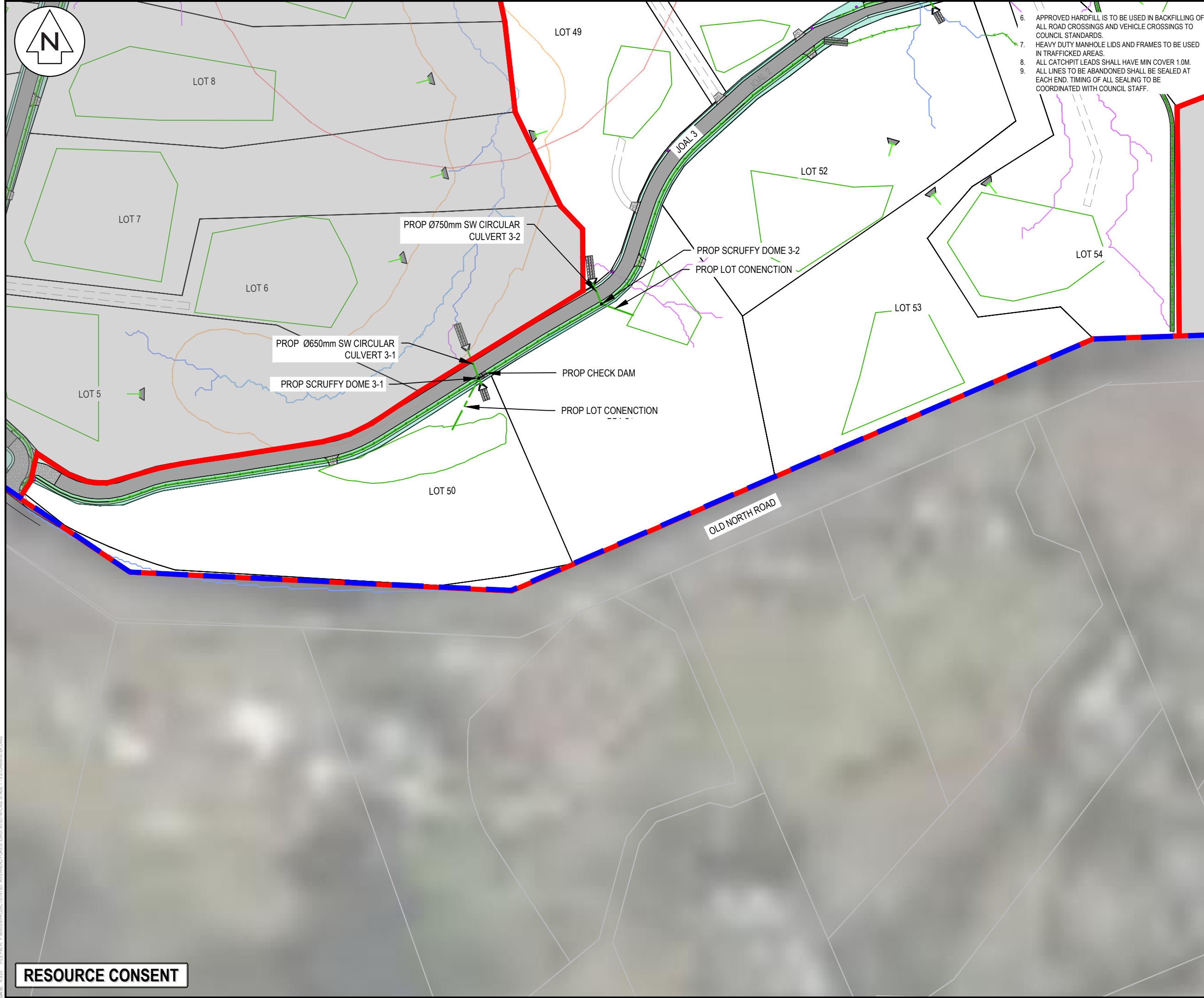
Project
**DEVELOPMENT OF
RIVERHEAD FOREST
FOR RANGITOOPUNI
DEVELOPMENTS LIMITED
PARTNERSHIP**

Title
**PROPOSED
STORMWATER
OVERVIEW - STAGE 3**

Project no.	147007
Scale	1:10,000 @ A3
Cad file	147007-M-C400 STAGE 1 - 5 STORMWATER.DWG
Drawing no.	C400-3-0
Rev	A

RESOURCE CONSENT

DATE: 5/2/25 FILE PATH: F:\MAVEN\PROJECTS\147007 RIVERHEAD FOREST\DWG\147007-M-C400 STAGE 1 - 5 STORMWATER.DWG



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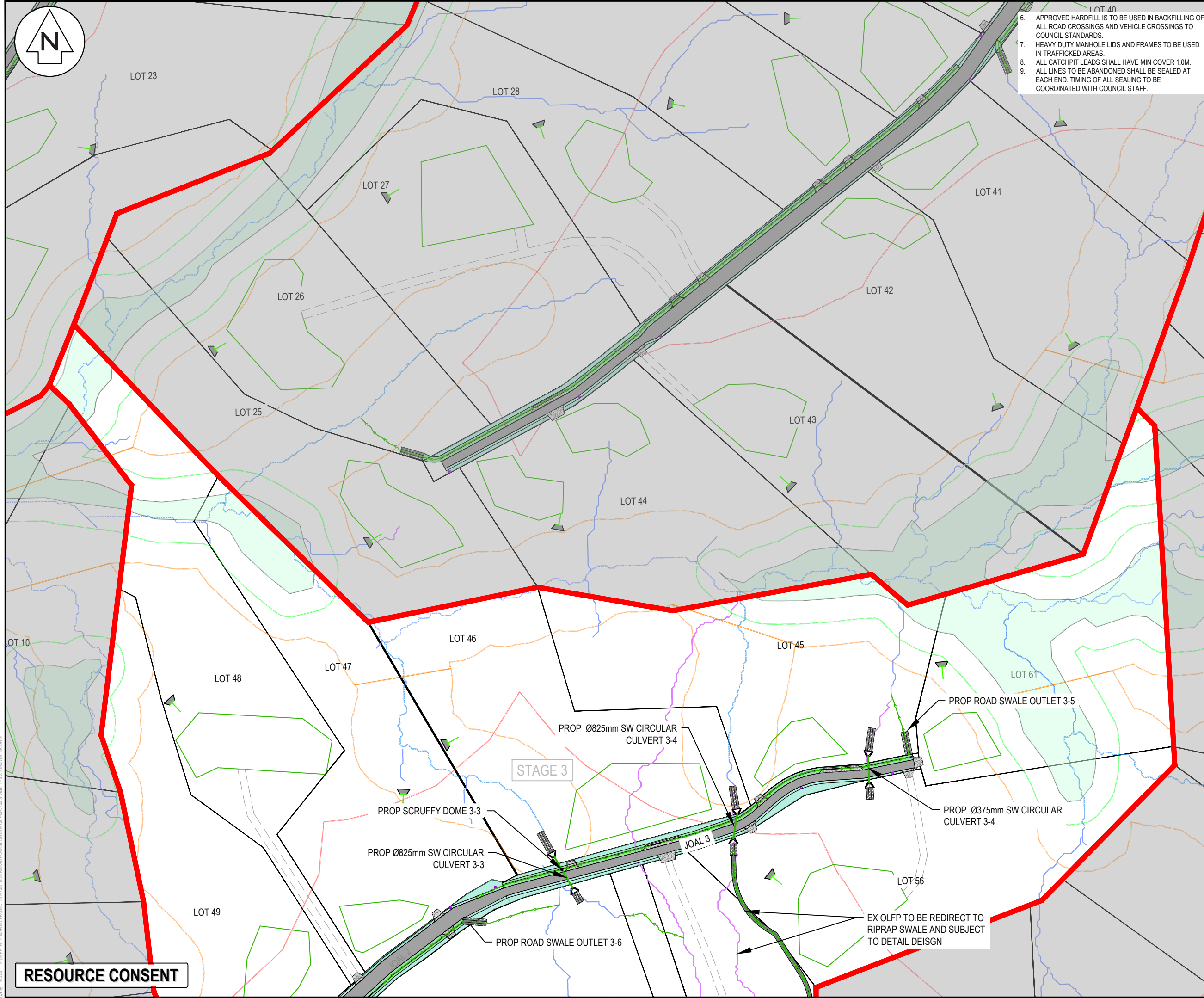
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Project
DEVELOPMENT OF RIVERHEAD FOREST FOR RANGITOOPUNI DEVELOPMENTS LIMITED PARTNERSHIP

Title
PROPOSED STORMWATER PLAN - STAGE 3

Project no.	147007		
Scale	1:1500 @ A3		
Cad file	147007-M-C400 STAGE 1 - 5 STORMWATER.DWG		
Drawing no.	C400-3-1	Rev	A

RESOURCE CONSENT



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Title
PROPOSED STORMWATER PLAN - STAGE 3

Project no.	147007
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Cad file	147007-M-C400 STAGE 1 - 5 STORMWATER.DWG
Drawing no.	C400-3-2
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RESOURCE CONSENT

DATE: 4/3/25 FILE PATH: F:\MAVEN\PROJECTS\147007 RIVERHEAD FOREST\DWG\147007-M-C400 STAGE 1 - 5 STORMWATER.DWG



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Drawn	WY		03/2025
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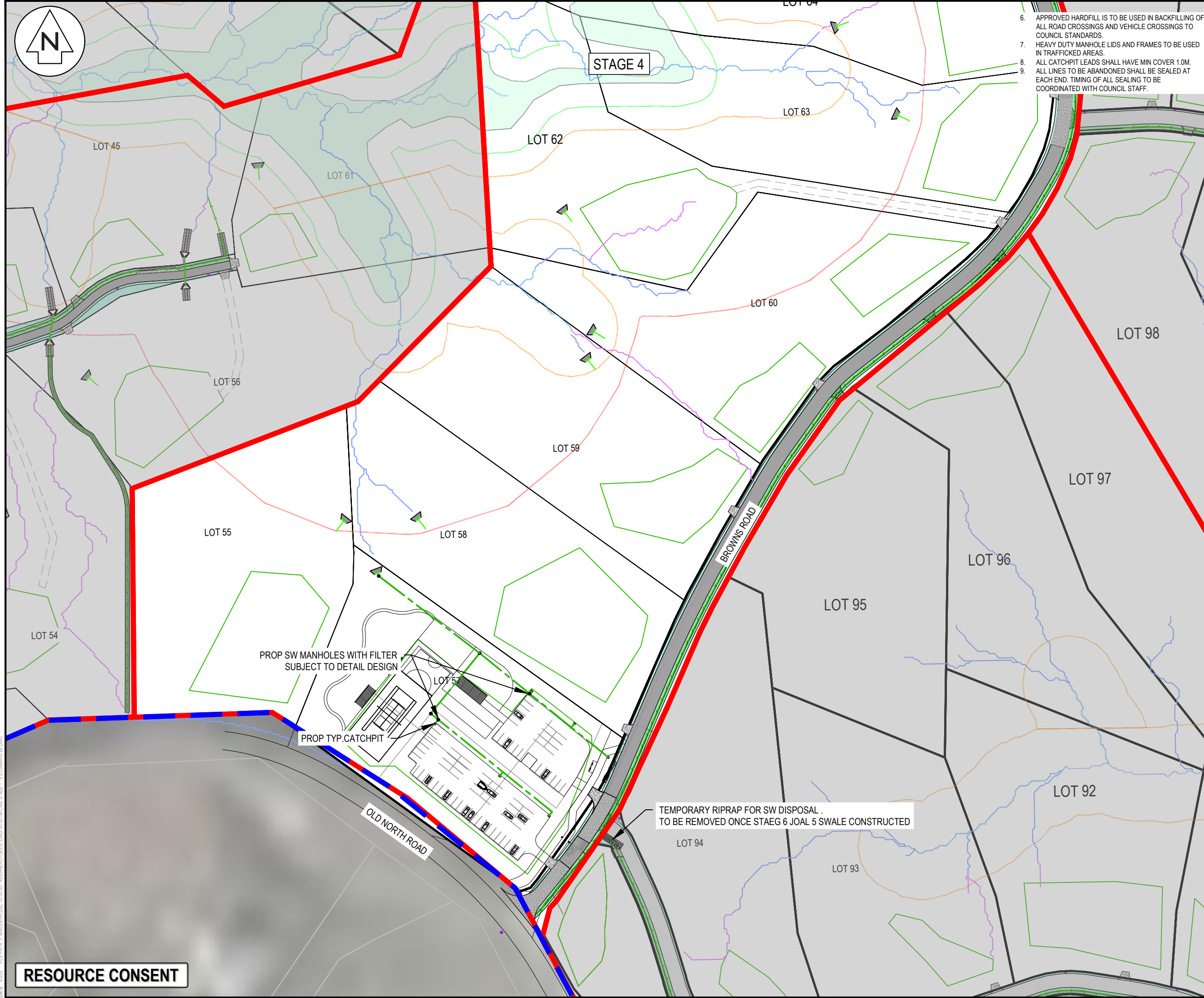
Project
**DEVELOPMENT OF
RIVERHEAD FOREST
FOR RANGITOOPUNI
DEVELOPMENTS LIMITED
PARTNERSHIP**

Title
**PROPOSED
STORMWATER
OVERVIEW - STAGE 4**

Project no.	147007		
Scale	1:10,000 @ A3		
Cad file	147007-M-C400 STAGE 1 - 5 STORMWATER.DWG		
Drawing no.	C400-4-0	Rev	A

RESOURCE CONSENT

DATE: 5/2/25 FILE PATH: F:\MAVEN\PROJECTS\147007 RIVERHEAD FOREST\DWG\147007-M-C400 STAGE 1 - 5 STORMWATER.DWG



- 6. APPROVED HARDFILL IS TO BE USED IN BACKFILLING OF ALL ROAD CROSSINGS AND VEHICLE CROSSINGS TO COUNCIL STANDARDS.
- 7. HEAVY DUTY MANHOLE LIDS AND FRAMES TO BE USED IN TRAFFICKED AREAS.
- 8. ALL CATCHPIT LEADS SHALL HAVE MIN COVER 1.0M. ALL LINES TO BE ABANDONED SHALL BE SEALED AT EACH END. TIMING OF ALL SEALING TO BE COORDINATED WITH COUNCIL STAFF.
- 9.

- NOTES
- 1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
 - 2. COORDINATES IN TERMS OF NZ GEODETIC DATUM MT EDEN 2000. LEVELS IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.
 - 3. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE ALL SERVICES THAT MAY BE AFFECTED BY THEIR OPERATIONS.
 - 4. PIPE BEDDING: 0 - 10% GRANULAR BEDDING, 10 - 20% WEAK CONCRETE BEDDING GREATER THAN 20% WEAK CONCRETE BEDDING (7MPA PLUS ANTI SCOUR BLOCKS AT 6M CRS).
 - 5. EACH CONNECTION SHALL BE MARKED BY A 50MMX50MM TREATED PINE STAKE EXTENDING 600MM ABOVE GROUND LEVEL WITH THE TOP PAINTED. THIS MARKER POST SHALL BE PLACED ALONGSIDE A TIMBER MARKER INSTALLED AT THE TIME OF PIPELAYING AND EXTENDING FROM THE CONNECTION TO 150MM BELOW FINISHED GROUND LEVEL. CONNECTIONS SHALL BE ACCURATELY INDICATED ON "AS BUILT" PLANS.

LEGEND

	EX BDY
	PROP BDY
	STAGE BOUNDARY
	EX OLFP
	REMOVED EX OLFP
	EXISTING STREAMS
	PR SW FLOW PTH
	PR SW PIPE
	RIPIARIAN YARD 20m SETBACK
	WETLAND AREA 100m SETBACK
	EX/PROP SWMH
	PROP SWCP SINGLE
	PR INDICATIVE LEVEL SPREADER - SUBJECT TO DETAIL DESIGN
	PR RIPRAP
	PR CULVERT
	EX CULVERT
	PR SCRUFFY DOME

A	RC	WY	03/2025
Rev	Description	By	Date
Survey	LANDPRO	03/22	
Design	WY	03/2025	
Drawn	WY	03/2025	
Checked	RW/KH	03/2025	



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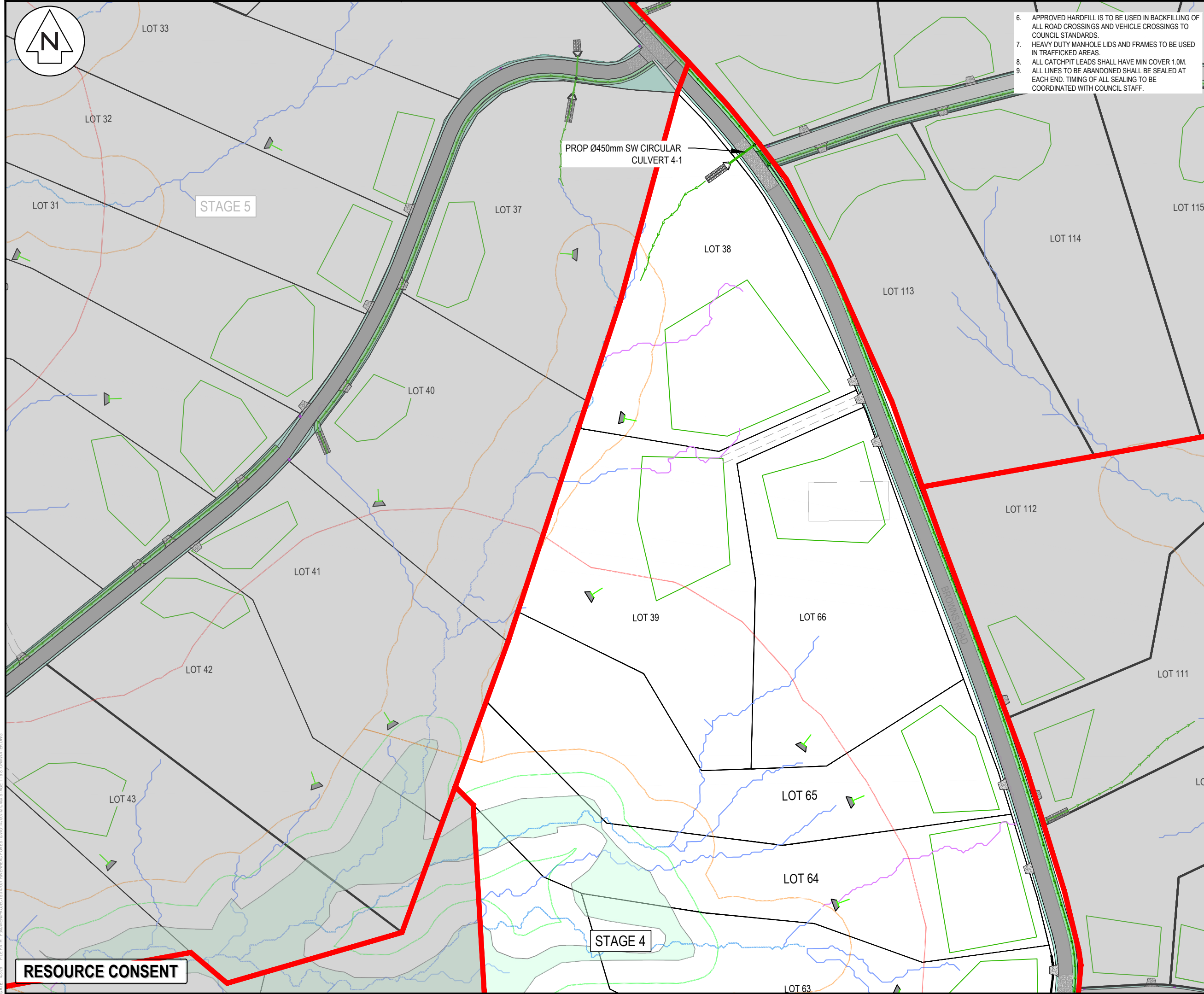
Project
DEVELOPMENT OF RIVERHEAD FOREST FOR RANGITOOPUNI DEVELOPMENTS LIMITED PARTNERSHIP

Title
PROPOSED STORMWATER PLAN - STAGE 4

Project no.	147007		
Scale	1:1500 @ A3		
Cad file	147007-M-C400 STAGE 1 - 5 STORMWATER.WG		
Drawing no.	C400-4-1	Rev	A

DATE: 03/25 FILE PATH: F:\Maven\PROJECTS\147007 RIVERHEAD FOREST\DWG\147007-M-C400 STAGE 1 - 5 STORMWATER.DWG

RESOURCE CONSENT



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LEGEND

EX BDY

PROP BDY

STAGE BOUNDARY

EX OLFP

REMOVED EX OLFP

EXISTING STREAMS

PR SW FLOW PTH

PR SW PIPE

RIPARIAN YARD
20m SETBACK

WETLAND AREA
100m SETBACK

EX/PROP SWMH

PROP SWCP SINGLE

PR INDICATIVE LEVEL
SPREADER - SUBJECT TO
DETAIL DESIGN

PR RIPRAP

PR CULVERT

EX CULVERT

PR SCRUFFY DOME

A	RC	WY	03/2025
Rev	Description	By	Date
	By	Date	
Survey	LANDPRO	03/22	
Design	WY	03/2025	
Drawn	WY	03/2025	
Checked	RW/KH	03/2025	

M

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Project

DEVELOPMENT OF
RIVERHEAD FOREST
FOR RANGITOOPUNI
DEVELOPMENTS LIMITED
PARTNERSHIP

Title

PROPOSED
STORMWATER
PLAN - STAGE 4

Project no.	147007
Scale	1:1500 @ A3
Cad file	147007-M-C400 STAGE 1 - 5 STORMWATER.RWG
Drawing no.	C400-4-2
Rev	A

DATE: 03/25 FILE PATH: F:\MVEN\PROJECTS\147007 RIVERHEAD FOREST\DWG\147007-M-C400 STAGE 1 - 5 STORMWATER.DWG



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- LEGEND
- EX BDY
 - PROP BDY
 - STAGE BOUNDARY
 - EX OLFP
 - REMOVED EX OLFP
 - EXISTING STREAMS
 - PR SW FLOW PTH
 - PR SW PIPE
 - RIPARIAN YARD 20m SETBACK
 - WETLAND AREA 100m SETBACK
 - EX/PROP SWMH
 - PROP SWCP SINGLE
 - PR INDICATIVE LEVEL SPREADER - SUBJECT TO DETAIL DESIGN
 - PR RIPRAP
 - PR CULVERT
 - EX CULVERT
 - PR SCRUFFY DOME

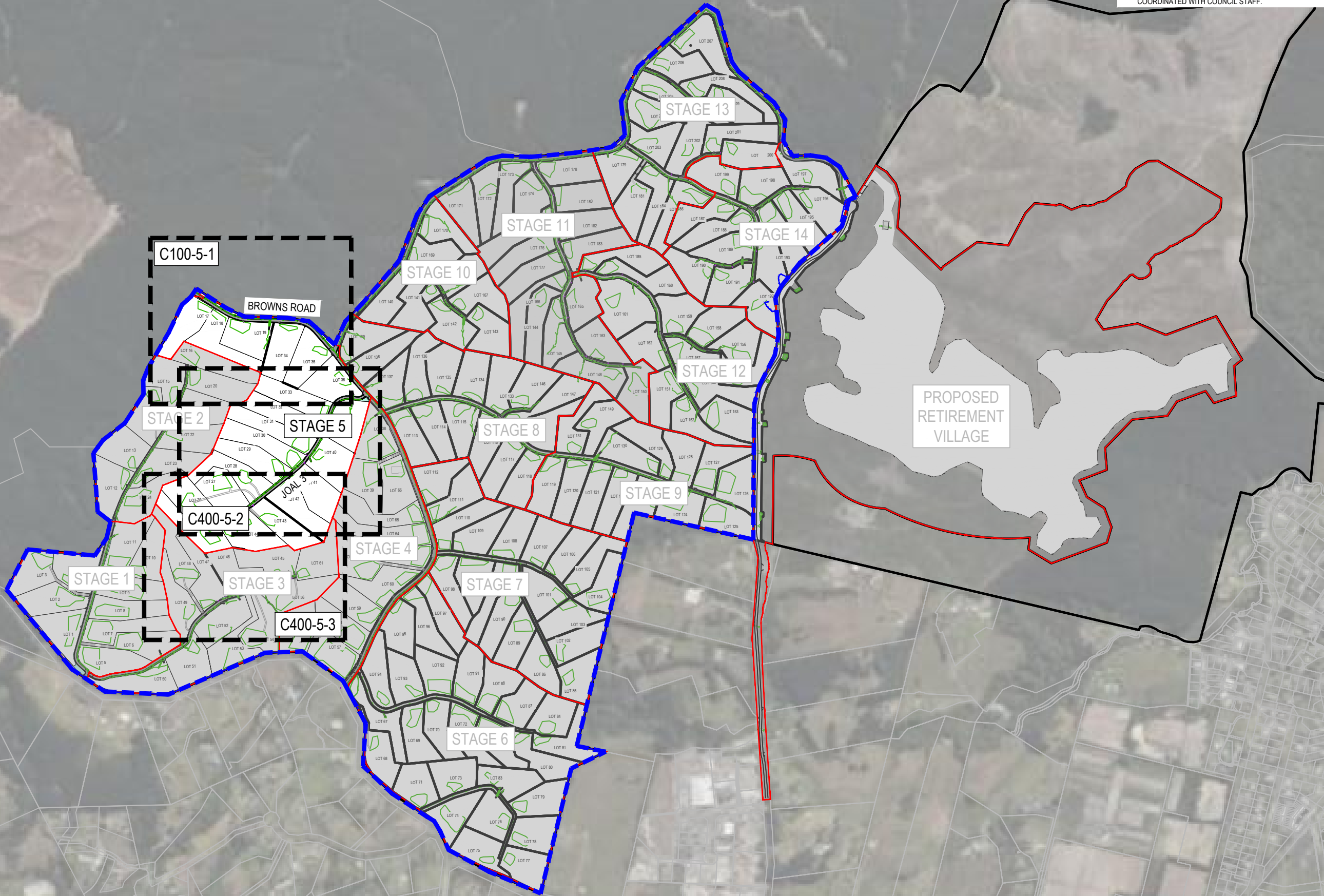
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Rev	Description	By	Date
Survey	LANDPRO		03/22
Design	WY		03/2025
Drawn	WY		03/2025
Checked	RW/KH		03/2025

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Project
**DEVELOPMENT OF
RIVERHEAD FOREST
FOR RANGITOOPUNI
DEVELOPMENTS LIMITED
PARTNERSHIP**

Title
**PROPOSED
STORMWATER
OVERVIEW - STAGE 5**

Project no.	147007
Scale	1:10,000 @ A3
Cad file	147007-M-C400 STAGE 1 - 5 STORMWATER.DWG
Drawing no.	C400-5-0
Rev	A



RESOURCE CONSENT



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- LEGEND
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 - PROP BDY
 - STAGE BOUNDARY
 - EX OLFP
 - REMOVED EX OLFP
 - EXISTING STREAMS
 - PR SW FLOW PTH
 - PR SW PIPE
 - RIPARIAN YARD 20m SETBACK
 - WETLAND AREA 100m SETBACK
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 - PROP SWCP SINGLE
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 - PR RIPRAP
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A	RC	WY	03/2025
Rev	Description	By	Date
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Project
**DEVELOPMENT OF
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FOR RANGITOOPUNI
DEVELOPMENTS LIMITED
PARTNERSHIP**

Title
**PROPOSED
STORMWATER
PLAN - STAGE 5**

Project no.	147007
Scale	1:1500 @ A3
Cad file	147007-M-C400 STAGE 1 - 5 STORMWATER.WG
Drawing no.	C400-5-1
Rev	A

PROP ROAD SWALE OUTLET 5-1

PROP SCRUFFY DOME 5-2

PROP SW CIRCULAR
CULVERT 5-2 WITH Ø450mm

LOT 17

LOT 18

LOT 16

LOT 34

LOT 35

LOT 36

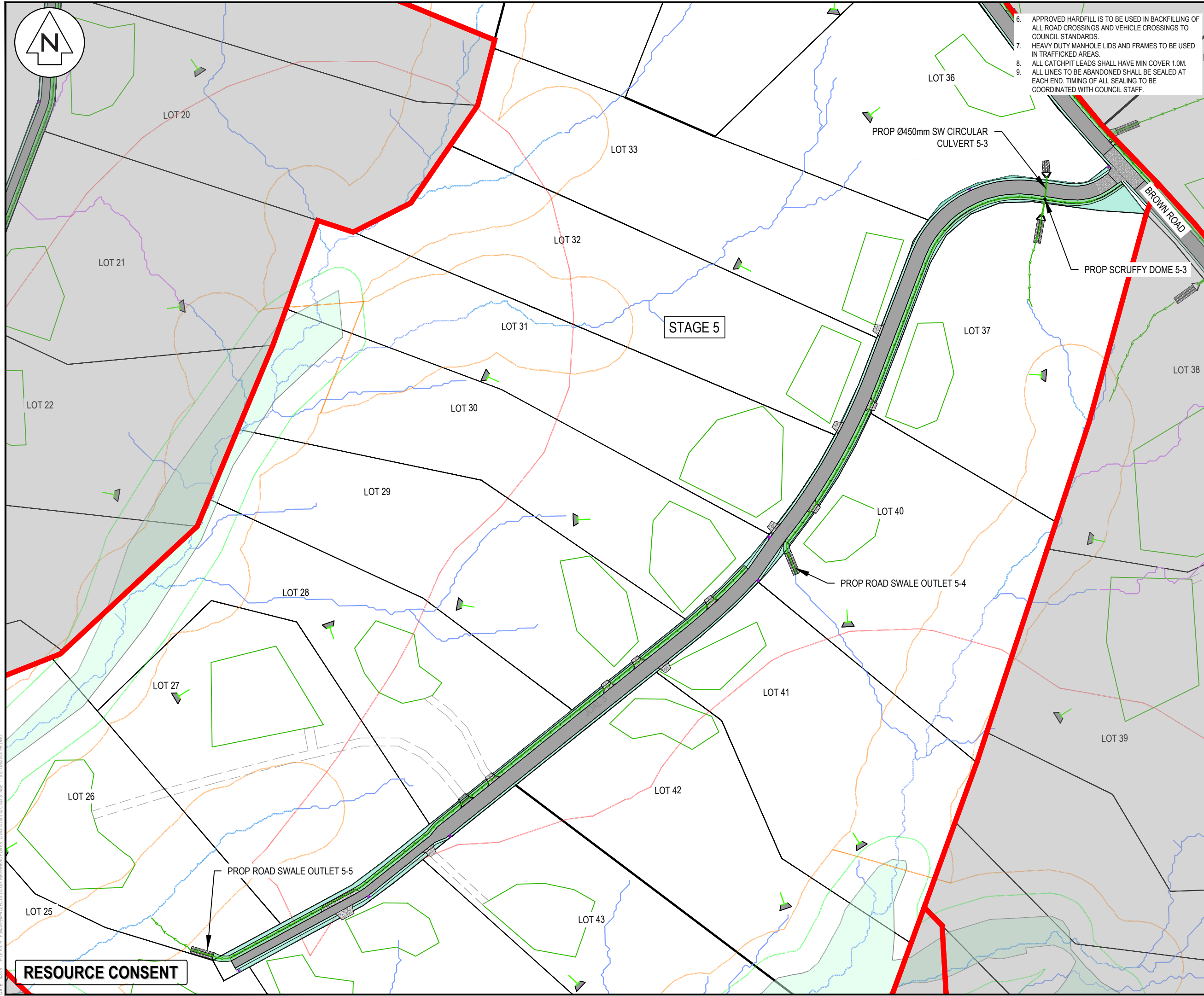
LOT 33

LOT 20

LOT 15

RESOURCE CONSENT

DATE: 03/25 FILE PATH: F:\Maven\PROJECTS\147007 RIVERHEAD FOREST\DWG\147007-M-C400 STAGE 1 - 5 STORMWATER.DWG



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LEGEND

	EX BDY
	PROP BDY
	STAGE BOUNDARY
	EX OLFP
	REMOVED EX OLFP
	EXISTING STREAMS
	PR SW FLOW PTH
	PR SW PIPE
	RIPARIAN YARD 20m SETBACK
	WETLAND AREA 100m SETBACK
	EX/PROP SWMH
	PROP SWCP SINGLE
	PR INDICATIVE LEVEL SPREADER - SUBJECT TO DETAIL DESIGN
	PR RIPRAP
	PR CULVERT
	EX CULVERT
	PR SCRUFFY DOME

A	RC	WY	03/2025
Rev	Description	By	Date
Survey	LANDPRO	Date	03/22
Design	WY	Date	03/2025
Drawn	WY	Date	03/2025
Checked	RW/KH	Date	03/2025

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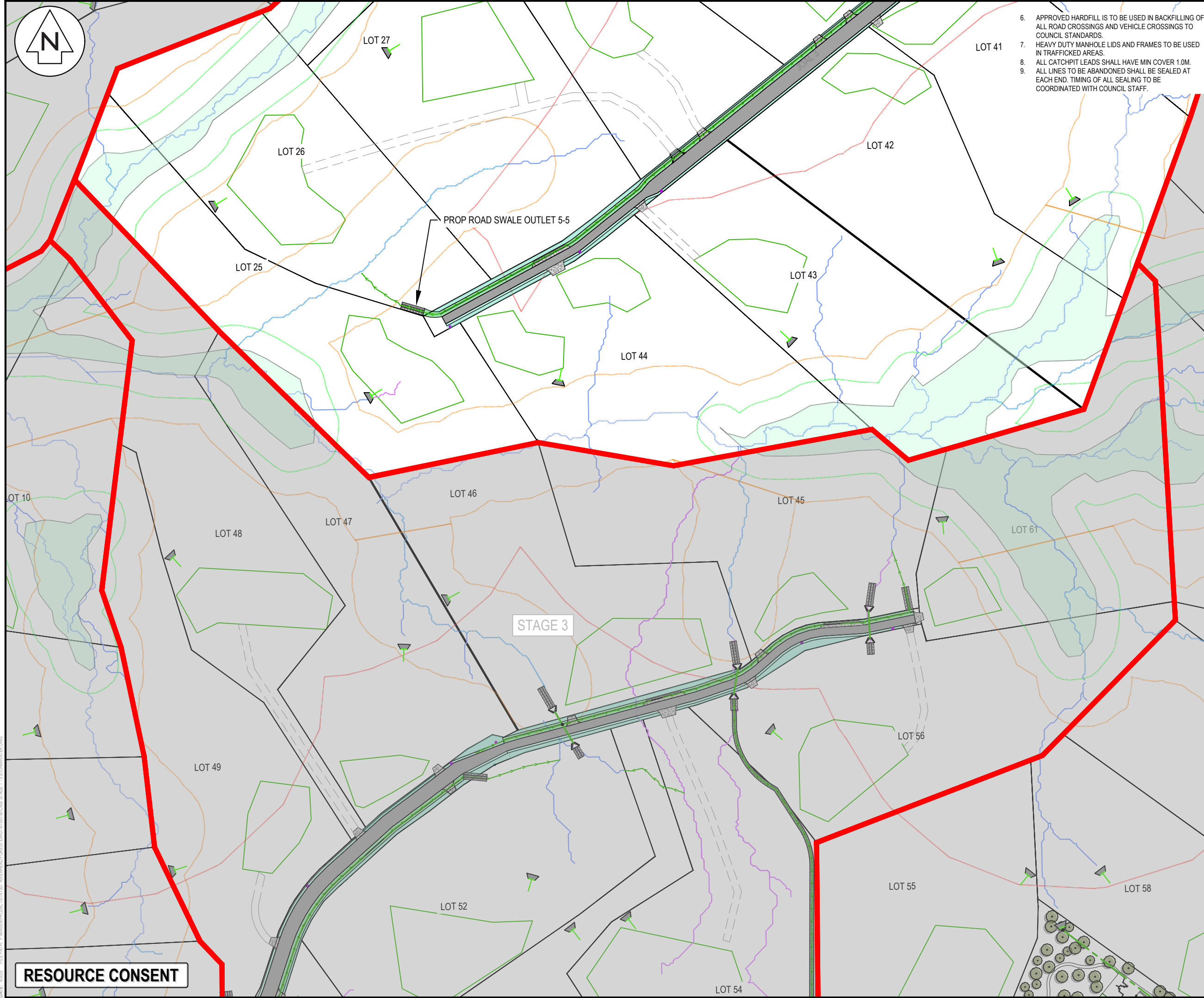
Project
**DEVELOPMENT OF
RIVERHEAD FOREST
FOR RANGITOOPUNI
DEVELOPMENTS LIMITED
PARTNERSHIP**

Title
**PROPOSED
STORMWATER
PLAN - STAGE 5**

Project no.	147007
Scale	1:1500 @ A3
Cad file	147007-M-C400 STAGE 1 - 5 STORMWATER.MWG
Drawing no.	C400-5-2
Rev	A

DATE: 03/25 FILE PATH: F:\MVEN\PROJECTS\147007 RIVERHEAD FOREST\DWG\147007-M-C400 STAGE 1 - 5 STORMWATER.DWG

RESOURCE CONSENT



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LEGEND

	EX BDY
	PROP BDY
	STAGE BOUNDARY
	EX OLFP
	REMOVED EX OLFP
	EXISTING STREAMS
	PR SW FLOW PTH
	PR SW PIPE
	RIPARIAN YARD 20m SETBACK
	WETLAND AREA 100m SETBACK
	EX/PROP SWMH
	PROP SWCP SINGLE
	PR INDICATIVE LEVEL SPREADER - SUBJECT TO DETAIL DESIGN
	PR RIPRAP
	PR CULVERT
	EX CULVERT
	PR SCRUFFY DOME

A	RC	WY	03/2025
Rev	Description	By	Date
Survey	LANDPRO	03/22	
Design	WY	03/2025	
Drawn	WY	03/2025	
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Project
**DEVELOPMENT OF
RIVERHEAD FOREST
FOR RANGITOOPUNI
DEVELOPMENTS LIMITED
PARTNERSHIP**

Title
**PROPOSED
STORMWATER
PLAN - STAGE 5**

Project no.	147007
Scale	1:1500 @ A3
Cad file	147007-M-C400 STAGE 1 - 5 STORMWATER.DWG
Drawing no.	C400-5-3
Rev	A

DATE: 03/25 FILE PATH: F:\Maven\PROJECTS\147007 RIVERHEAD FOREST\DWG\147007-M-C400 STAGE 1 - 5 STORMWATER.DWG

RESOURCE CONSENT



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 - EXISTING STREAMS
 - PR SW FLOW PTH
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 - 20m SETBACK
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 - 100m SETBACK
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 - PR INDICATIVE LEVEL
 - SPREADER - SUBJECT TO DETAIL DESIGN
 - PR RIPRAP
 - PR CULVERT
 - EX CULVERT
 - PR SCRUFFY DOME

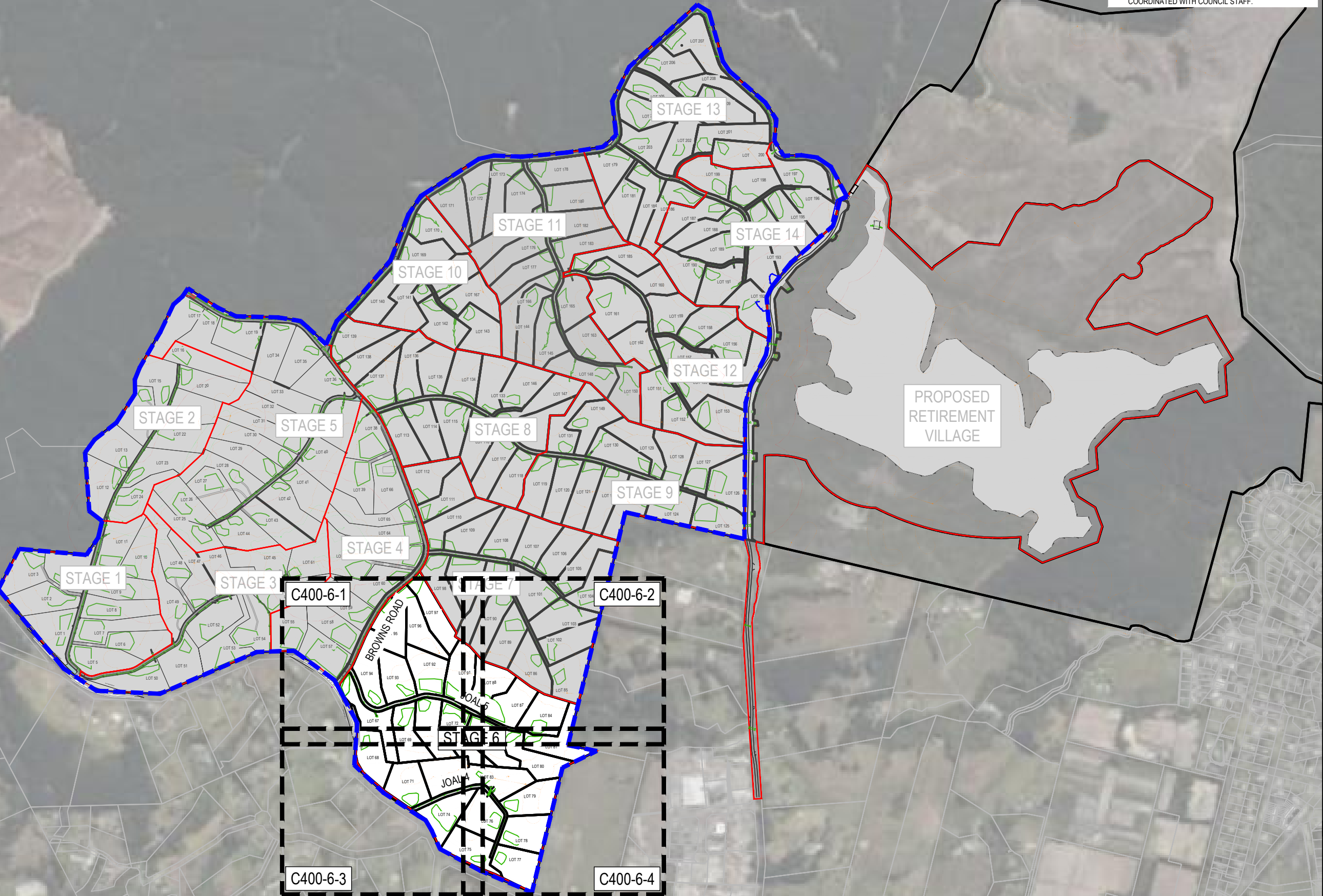
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Rev	Description	By	Date
Survey	LANDPRO		03/22
Design	WY		03/2025
Drawn	WY		03/2025
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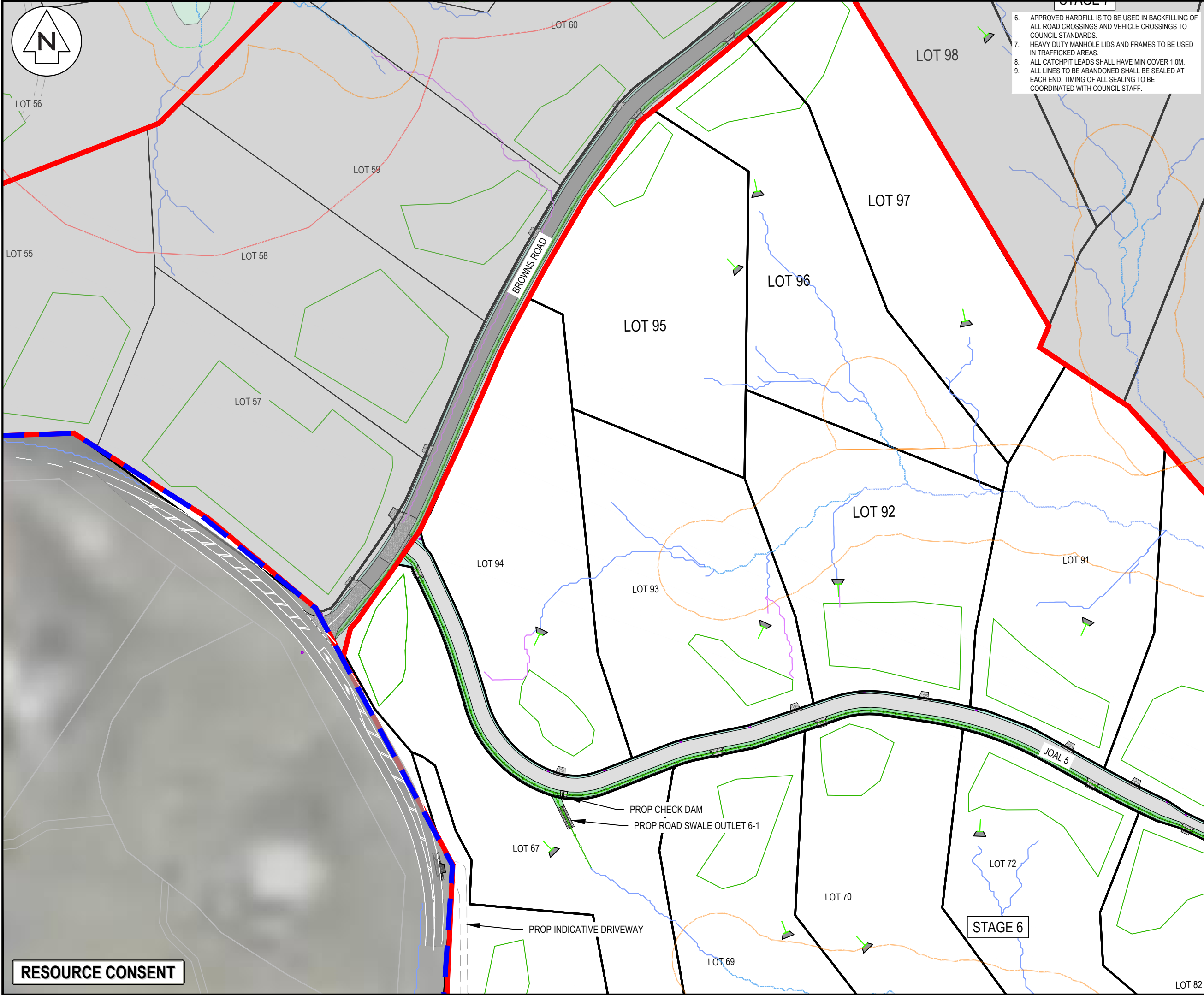
Project
**DEVELOPMENT OF
RIVERHEAD FOREST
FOR RANGITOOPUNI
DEVELOPMENTS LIMITED
PARTNERSHIP**

Title
**PROPOSED
STORMWATER
OVERVIEW - STAGE 6**

Project no.	147007
Scale	1:10,000 @ A3
Cad file	147007-M-C400 STAGE 6 - 7 STORMWATER.DWG
Drawing no.	C400-6-0
Rev	A



RESOURCE CONSENT



- STAGE 6**
- 6. APPROVED HARDFILL IS TO BE USED IN BACKFILLING OF ALL ROAD CROSSINGS AND VEHICLE CROSSINGS TO COUNCIL STANDARDS.
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LEGEND

	EX BDY
	PROP BDY
	STAGE BOUNDARY
	EX OLFP
	REMOVED EX OLFP
	EXISTING STREAMS
	PR SW FLOW PTH
	PR SW PIPE
	10m STREAM SETBACK
	RIPARIAN YARD
	20m SETBACK
	WETLAND AREA
	100m SETBACK
	EX/PROP SWMH
	PROP SWCP SINGLE
	PR INDICATIVE LEVEL SPREADER - SUBJECT TO DETAIL DEISGN
	PR RIPRAP
	PR CULVERT
	EX CULVERT
	PR SCRUFFY DOME

A	RC	WY	03/2025
Rev	Description	By	Date
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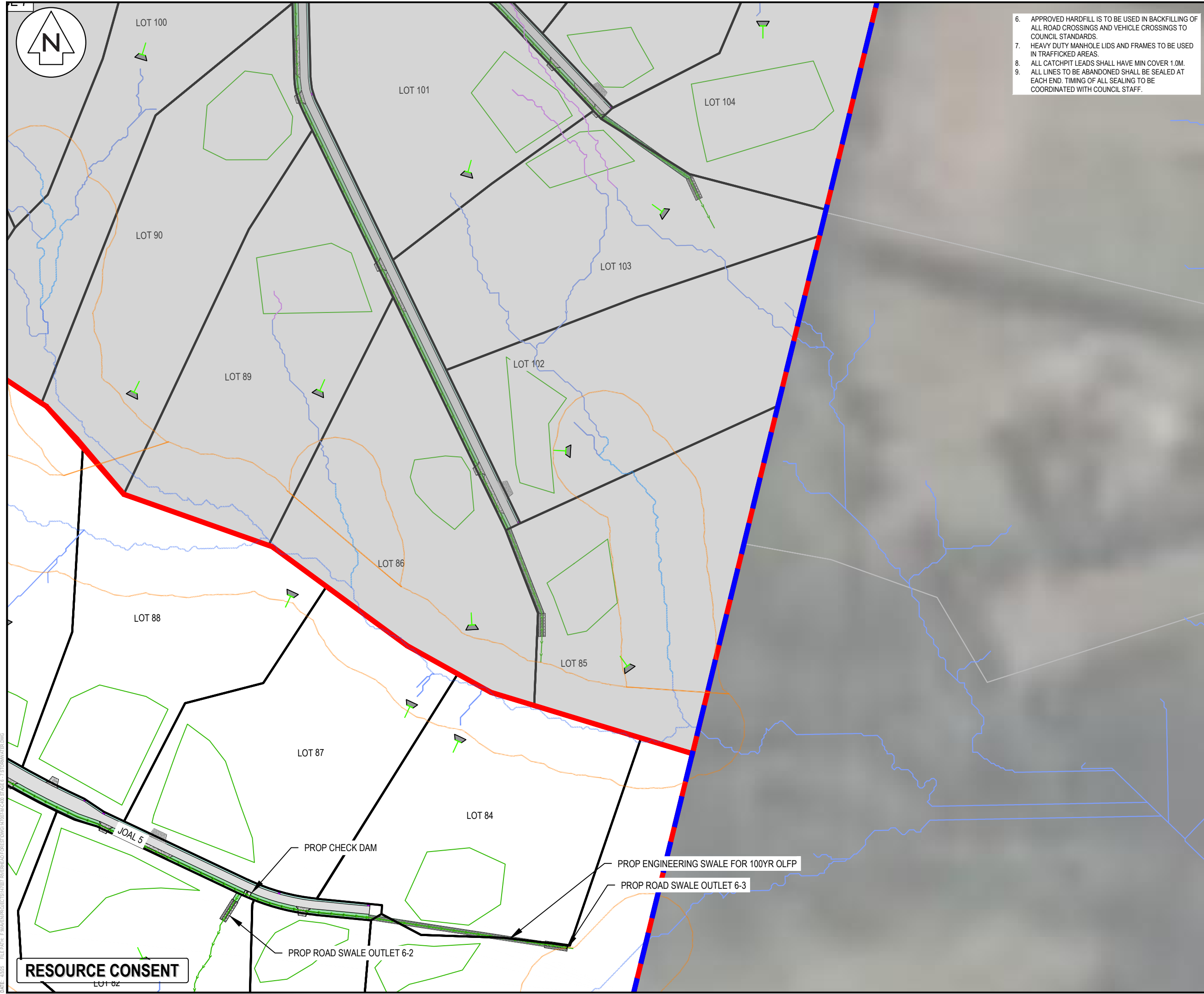
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Project
DEVELOPMENT OF RIVERHEAD FOREST FOR RANGITOOPUNI DEVELOPMENTS LIMITED PARTNERSHIP

Title
PROPOSED STORMWATER PLAN - STAGE 6

Project no.	147007
Scale	1:1500 @ A3
Cad file	147007-M-C400 STAGE 6 - 7 STORMWATER.DWG
Drawing no.	C400-6-1
Rev	A

RESOURCE CONSENT



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LEGEND

	EX BDY
	PROP BDY
	STAGE BOUNDARY
	EX OLFP
	REMOVED EX OLFP
	EXISTING STREAMS
	PR SW FLOW PTH
	PR SW PIPE
	10m STREAM SETBACK
	RIPARIAN YARD
	20m SETBACK
	WETLAND AREA
	100m SETBACK
	EX/PROP SWMH
	PROP SWCP SINGLE
	PR INDICATIVE LEVEL
	SPREADER - SUBJECT TO
	DETAIL DEISGN
	PR RIPRAP
	PR CULVERT
	EX CULVERT
	PR SCRUFFY DOME

A	RC	WY	03/2025
Rev	Description	By	Date
Survey	LANDPRO		03/22
Design	WY		03/2025
Drawn	WY		03/2025
Checked	RW/KH		03/2025



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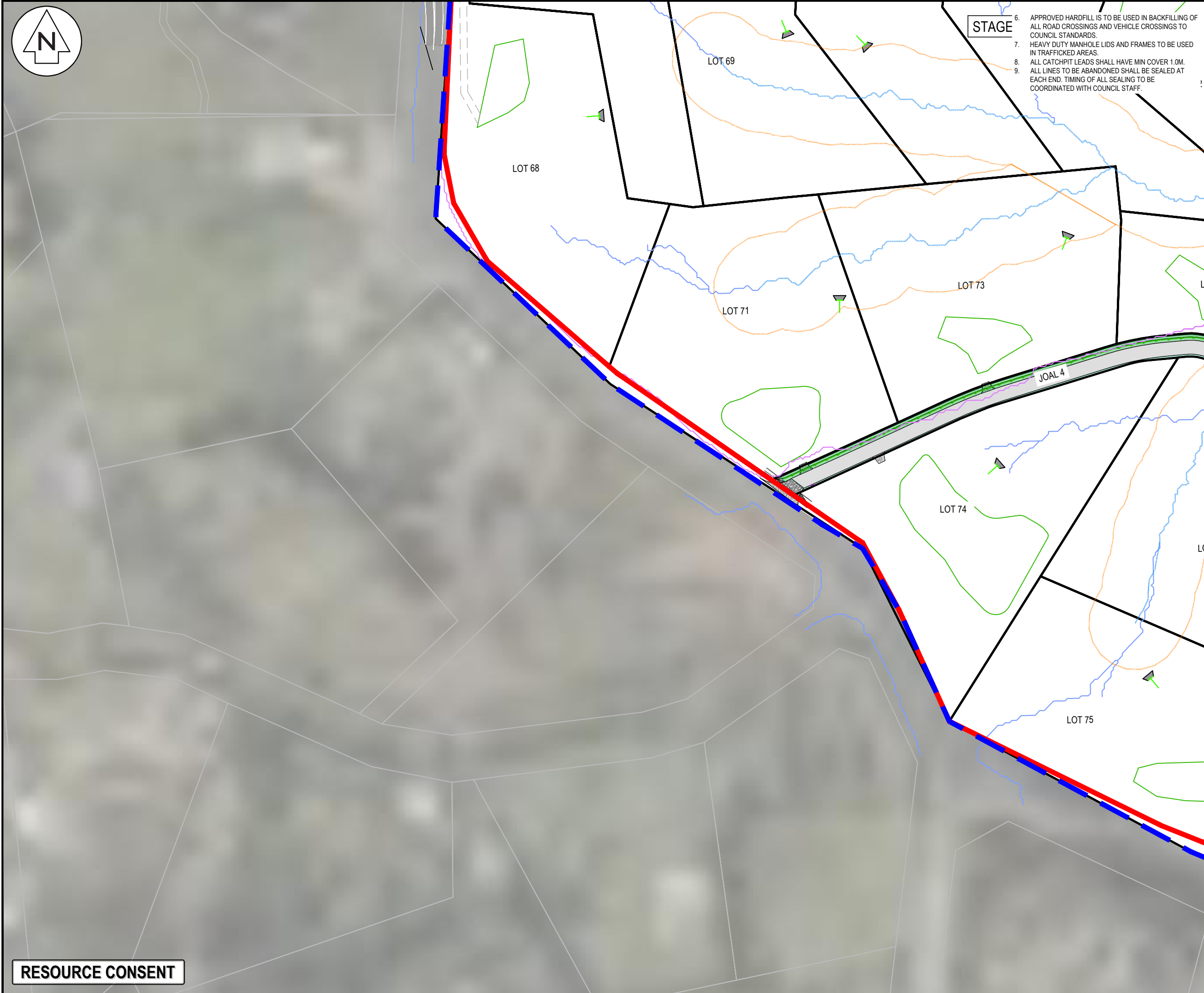
Project

DEVELOPMENT OF RIVERHEAD FOREST FOR RANGITOOPUNI DEVELOPMENTS LIMITED PARTNERSHIP

Title

PROPOSED STORMWATER PLAN - STAGE 6

Project no.	147007
Scale	1:1500 @ A3
Cad file	147007-M-C400 STAGE 6 - 7 STORMWATER.DWG
Drawing no.	C400-6-2
Rev	A



STAGE

- APPROVED HARDFILL IS TO BE USED IN BACKFILLING OF ALL ROAD CROSSINGS AND VEHICLE CROSSINGS TO COUNCIL STANDARDS.
- HEAVY DUTY MANHOLE LIDS AND FRAMES TO BE USED IN TRAFFICKED AREAS.
- ALL CATCHPIT LEADS SHALL HAVE MIN COVER 1.0M.
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 - STAGE BOUNDARY
 - EX OLFP
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 - EXISTING STREAMS
 - PR SW FLOW PTH
 - PR SW PIPE
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 - RIPARIAN YARD
 - 20m SETBACK
 - WETLAND AREA
 - 100m SETBACK
 - EX/PROP SWMH
 - PROP SWCP SINGLE
 - PR INDICATIVE LEVEL
 - SPREADER - SUBJECT TO DETAIL DEISGN
 - PR RIPRAP
 - PR CULVERT
 - EX CULVERT
 - PR SCRUFFY DOME

LC	A	RC	WY 03/2025
Rev	Description	By	Date
Survey	LANDPRO		03/22
Design	WY		03/2025
Drawn	WY		03/2025
Checked	RW/KH		03/2025



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Project
**DEVELOPMENT OF
RIVERHEAD FOREST
FOR RANGITOOPUNI
DEVELOPMENTS LIMITED
PARTNERSHIP**

Title
**PROPOSED
STORMWATER
PLAN - STAGE 6**

Project no.	147007
Scale	1:1500 @ A3
Cad file	147007-M-C400 STAGE 6 - 7 STORMWATER.DWG
Drawing no.	C400-6-3
Rev	A

RESOURCE CONSENT



6. APPROVED HARDFILL IS TO BE USED IN BACKFILLING OF ALL ROAD CROSSINGS AND VEHICLE CROSSINGS TO COUNCIL STANDARDS.
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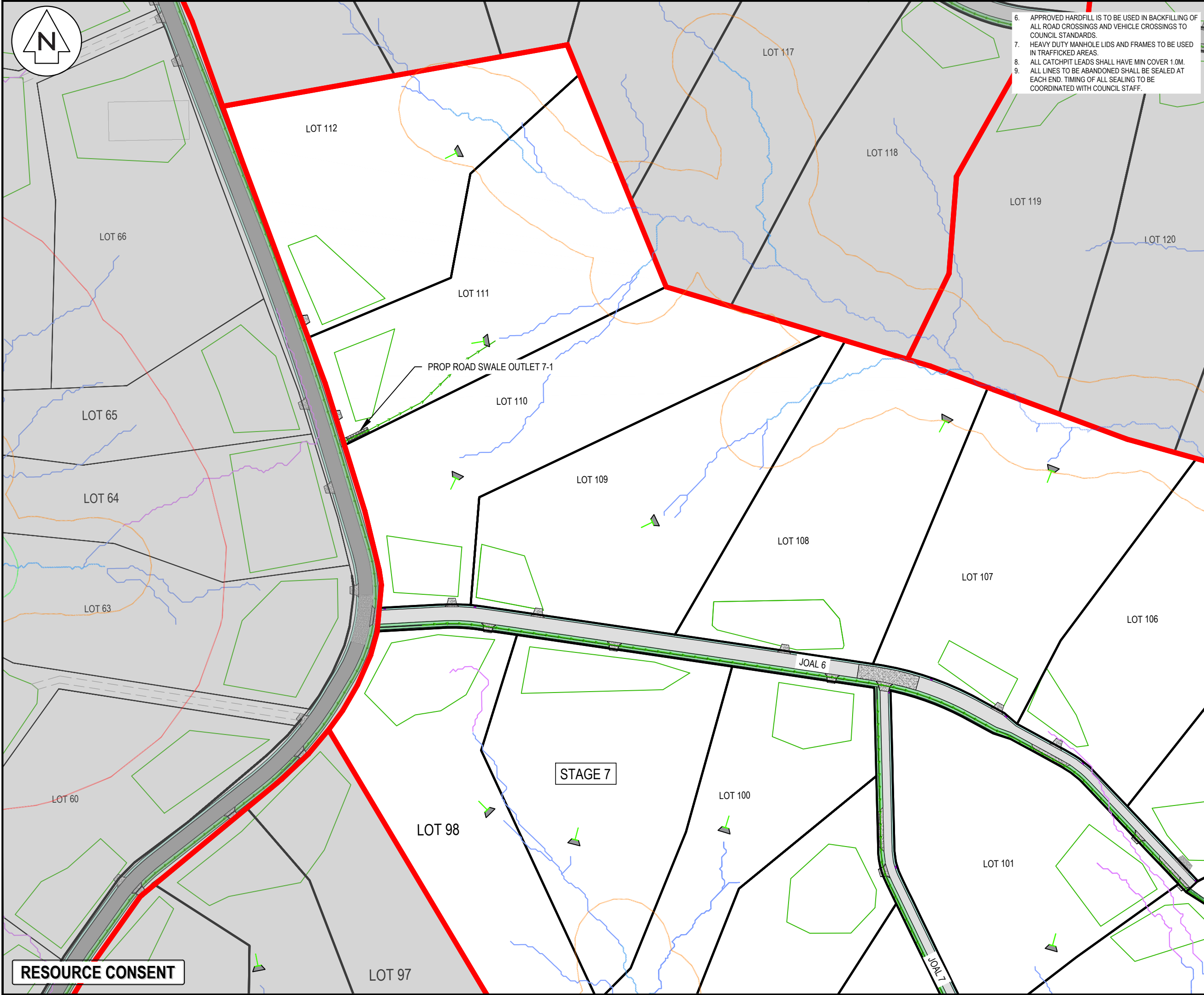
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Project
**DEVELOPMENT OF
RIVERHEAD FOREST
FOR RANGITOOPUNI
DEVELOPMENTS LIMITED
PARTNERSHIP**

Title
**PROPOSED
STORMWATER
OVERVIEW - STAGE 7**

Project no.	147007
Scale	1:10,000 @ A3
Cad file	147007-M-C400 STAGE 6 - 7 STORMWATER.DWG
Drawing no.	C400-7-0
Rev	A

RESOURCE CONSENT



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A	RC	WY	03/2025
Rev	Description	By	Date
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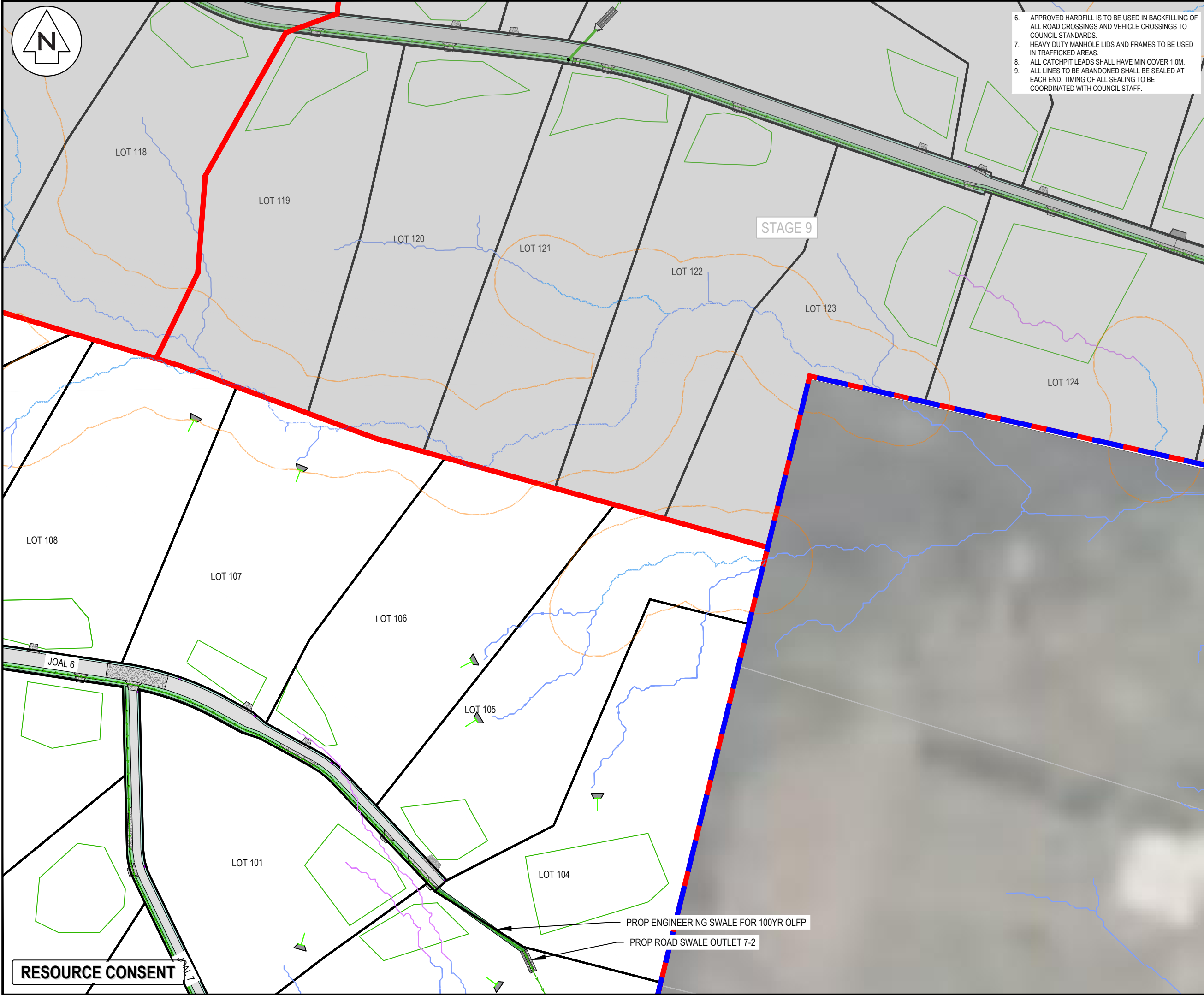
Title

PROPOSED STORMWATER PLAN - STAGE 7

Project no.	147007		
Scale	1:1500 @ A3		
Cad file	147007-M-C400 STAGE 6 - 7 STORMWATER.DWG		
Drawing no.	C400-7-1	Rev	A

DATE: 4/02/25 FILE PATH: F:\Maven\PROJECTS\147007 RIVERHEAD FOREST\DWG\147007-M-C400 STAGE 6 - 7 STORMWATER.DWG

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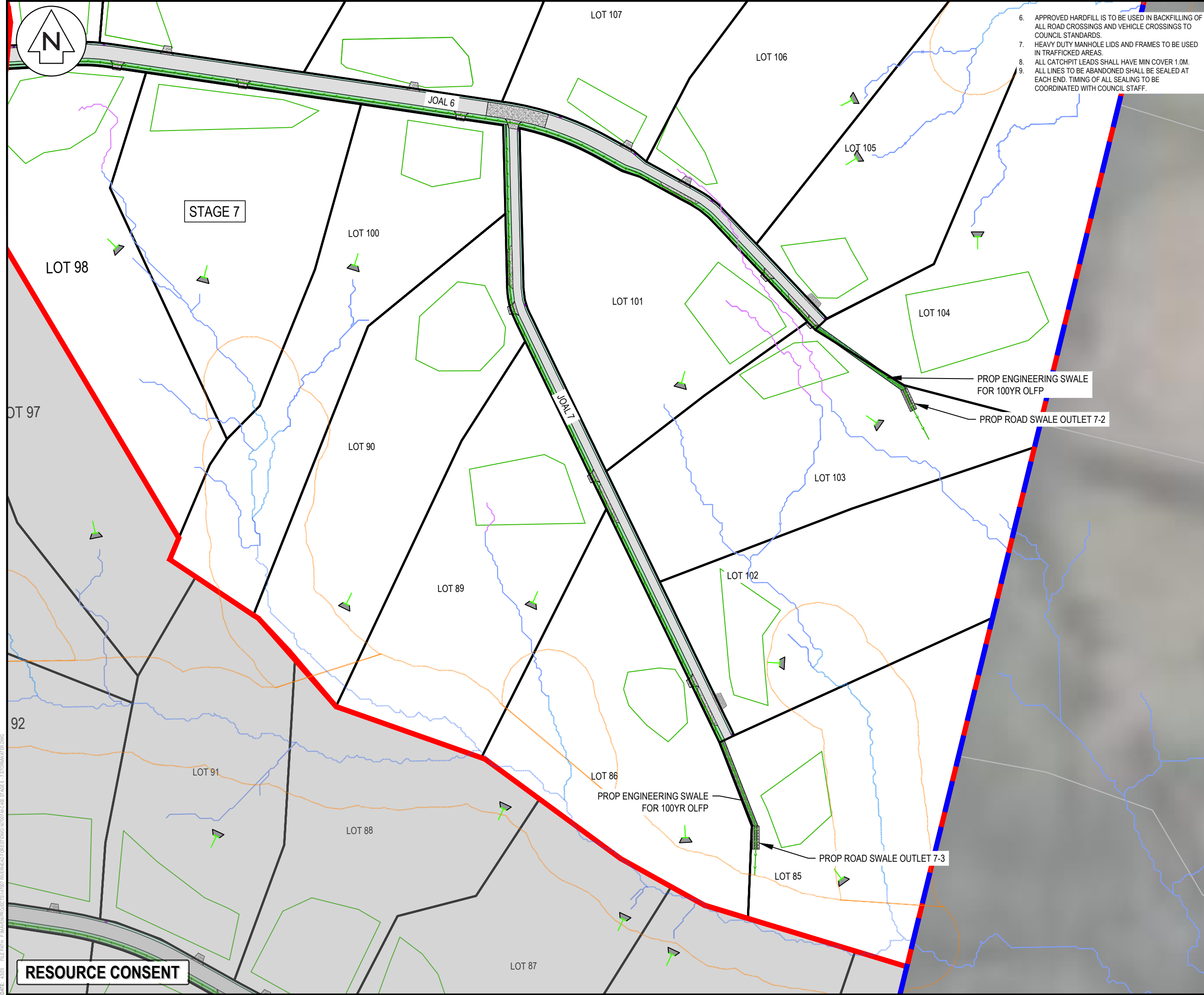
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Title
**PROPOSED
STORMWATER
PLAN - STAGE 7**

Project no.	147007
Scale	1:1500 @ A3
Cad file	147007-M-C400 STAGE 6 - 7 STORMWATER.DWG
Drawing no.	C400-7-2
Rev	A

DATE: 4/02/25 FILE PATH: F:\MVEN\PROJECTS\147007 RIVERHEAD FOREST\DWG\147007-M-C400 STAGE 6 - 7 STORMWATER.DWG



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Project no.	147007
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Cad file	147007-M-C400 STAGE 6 - 7 STORMWATER.DWG
Drawing no.	C400-7-3
Rev	A

DATE: 4/02/25 FILE PATH: F:\Maven\PROJECTS\147007 RIVERHEAD FOREST\DWG\147007-M-C400-STAGE 6 - 7 STORMWATER.DWG