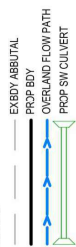






LEGEND



Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	DC	11/25

By	Date
Survey	HAVEN
Design	VHU
Drawn	JC
Checked	DC

**M**aven Bay of Plenty  
 115 Cameron Street, Tauranga  
 www.maven.co.nz

Project  
**WAIRAKEI SOUTH FTA090**  
**DEVELOPMENT**  
**BELL ROAD, PAPAMOAO**  
**FOR BELL ROAD**  
**LIMITED PARTNERSHIP**

Title  
**PROPOSED**  
**CULVERT OVERVIEW**  
**PLAN**

Project no.	BOP0749
Scale	1:4000 @ A3
Cad file	BOP0749-C470-0-2.WG
Drawing no.	C470-0-2
Rev	B



LEGEND

- EXBDDY ABBUTUAL
- PRCP BDDY
- OVERLAND FLOW PATH
- PRCP SW CULVERT

By	Date
SURVEY	15/02/25
DESIGN	12/02/25
DRAWN	12/02/25
CHECKED	12/02/25

By	Date
FOR CONSENT	VHU 03/26
FOR REVIEW	DC 11/25

**M** M A V E N  
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 www.mavennz.co.nz

Project  
**WAIRAKEI SOUTH FTA090**  
**DEVELOPMENT**  
**BELL ROAD, PAPAMOA**  
**FOR BELL ROAD**  
**LIMITED PARTNERSHIP**

Title  
**PROPOSED**  
**CULVERT OVERVIEW**  
**PLAN**

Project no.	BOP0749
Scale	1:4000 @ A3
Cad file	BOP0749-C470-03.WMG
Drawing no.	C470-0-3
Rev.	B

**FOR CONSENT**



LEGEND

- EXBDDY ABBUTTAL
- PCRP BODY
- OVERLAND FLOW PATH
- PCRP SW CULVERT

Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	DC	11/25

Survey	By	Date
MAYEN	MAYEN	05/2025
Design	VHU	12/2025
Drawn	JC	12/2025
Checked	DC	12/2025

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 New Zealand

**Project**  
 WAIRAKEI SOUTH FTA090  
 DEVELOPMENT  
 BELL ROAD, PAPAMOA  
 FOR BELL ROAD  
 LIMITED PARTNERSHIP

**Title**  
 PROPOSED  
 CULVERT OVERVIEW  
 PLAN

Project no.	BOP0749
Scale	1:4000 @ A3
Cad file	BOP0749-C470-0-WG
Drawing no.	C470-0-4
Rev	B

**FOR CONSENT**



PROPOSED WINGWALL SIZE  
TO BE CONFIRMED AT  
DETAILED DESIGN STATE

-0.02%

CULVERT 1: 3.5m x 1.5m  
BOX CULVERT  
@0.02%

CULVERT 1 PLAN VIEW  
SCALE 1:250 @A3

PROPOSED ROAD

BATTER TO 1:3

BODY

BODY

PROPOSED CHANNEL  
GROUND SURFACE  
RL 0.8m

25.02m

CULVERT 1 LONG SECTION  
SCALE: HORIZ 1:100 VERT 1:100 @A3

FOR CONSENT

LEGEND

	EXISTING ABUTTAL
	PROP. BODY
	PROP. SW. CULVERT

Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	DC	11/25

Survey	MAYEN	Date	05/2025
Design	VHU	Date	12/2025
Drawn	JC	Date	12/2025
Checked	DC	Date	12/2025



Project: **WAIRAKEI SOUTH FTA090**  
**DEVELOPMENT**  
**BELL ROAD, PAPAMOA**  
**FOR BELL ROAD**  
**LIMITED PARTNERSHIP**

Title: **PROPOSED**  
**CULVERT 1**  
**DETAIL**

Project no.	BOP0749
Scale	1:4000 @A3
Card file	BOP0749-C47D-0-WG
Drawing no.	C47D-1-1
Rev	B

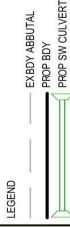




CULVERT 3: 3.5m x 1.5m  
BOX CULVERT  
@0.02%

PROPOSED WINGWALL SIZE  
TO BE CONFIRMED AT  
DETAIL DESIGN STAGE

-0.02%



CULVERT 3 PLAN VIEW  
SCALE 1:250 @A3

PROPOSED ROAD

BATTER TO 1:3

BDY

AOB

PROPOSED CHANNEL  
GROUND SURFACE  
RL 0.7m

25.83m

CULVERT 3 LONG SECTION  
SCALE: HORI 1:100 VERT 1:100 @A3

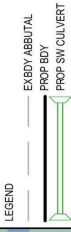
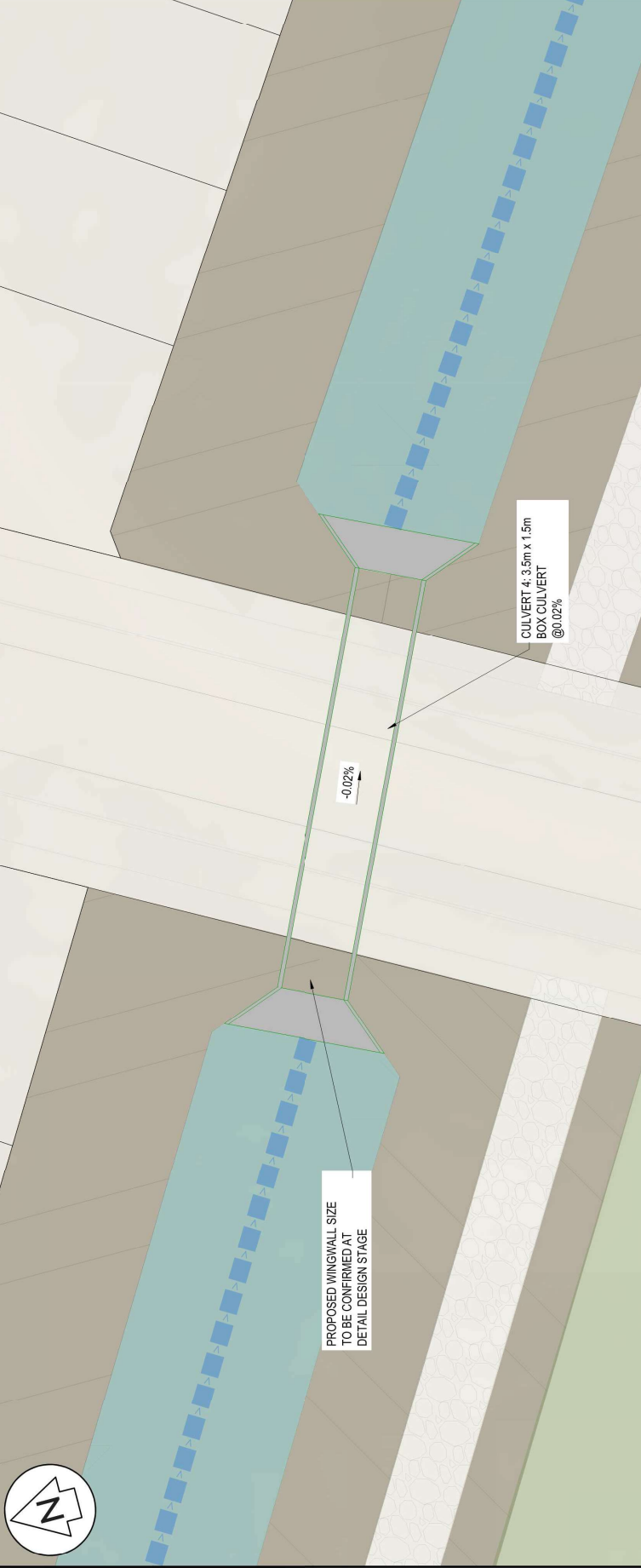
FOR CONSENT

Rev	Description	By	Date												
B	FOR CONSENT	VHU	03/26												
A	FOR REVIEW	DC	11/25												
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Survey	MAVEN	15/2/2025													
Design	VHU	12/2/2025													
Drawn	JC	12/2/2025													
Checked	DC	12/2/2025													

Project	WAIRAKEI SOUTH FTA090 DEVELOPMENT BELL ROAD, PAPAMOA FOR BELL ROAD LIMITED PARTNERSHIP
Client	PROPOSED CULVERT 3 DETAIL
Project no.	BOP0749
Scale	AS SHOWN
Cad file	BOP0749-C470-3.WG
Drawing no.	C470-1-3
Rev	B





CULVERT 4 PLAN VIEW  
SCALE 1:250 @A3

Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	PC	11/25

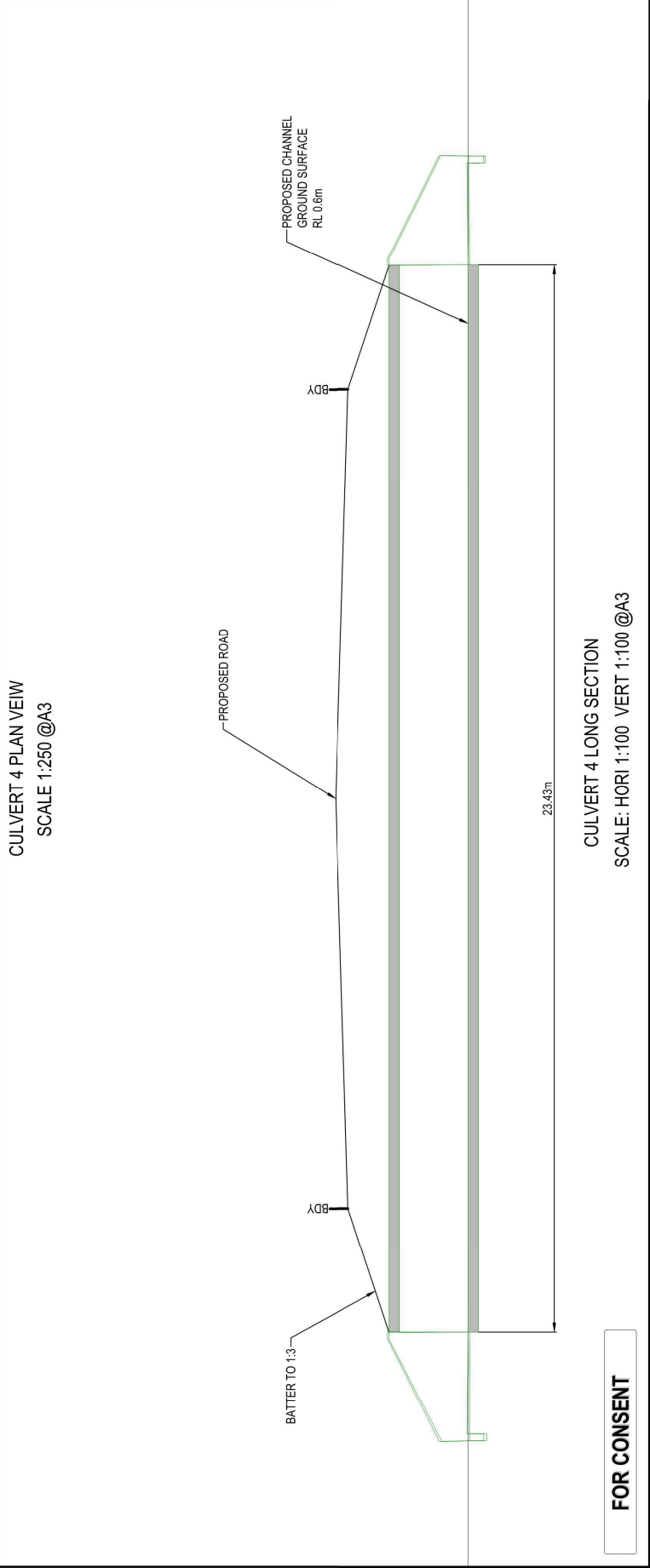
Survey	Design	Drawn	Checked
MAVEN	VHU	JC	PC

**M A E N**  
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 www.maiven.co.nz

Project: **WAIRAKEI SOUTH FTA090 DEVELOPMENT**  
**BELL ROAD, PAPAMOA FOR BELL ROAD LIMITED PARTNERSHIP**

Title: **PROPOSED CULVERT 4 DETAIL**

Project no.	BOP0749
Scale	AS SHOWN
Cad file	BOP0749-C470-01-WG
Drawing no.	C470-1-4
Rev	B



CULVERT 4 LONG SECTION  
SCALE: HORIZ 1:100 VERT 1:100 @A3

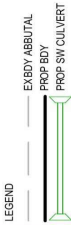
**FOR CONSENT**



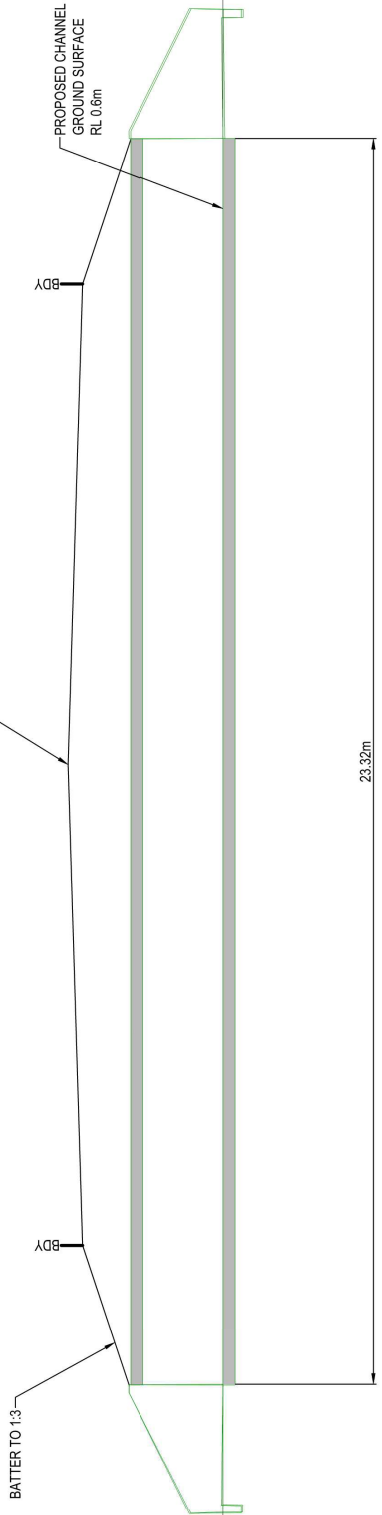
PROPOSED WINGWALL SIZE  
TO BE CONFIRMED AT  
DETAIL DESIGN STAGE

CULVERT 5: 3.5m x  
1.5m  
BOX CULVERT  
@0.02%

-0.02%



CULVERT 5 PLAN VIEW  
SCALE 1:250 @A3



CULVERT 5 LONG SECTION  
SCALE: HORI 1:100 VERT 1:100 @A3

FOR CONSENT

Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	DC	11/25

Survey	Design	Drawn	Checked
MAVEN	VHU	JC	DC

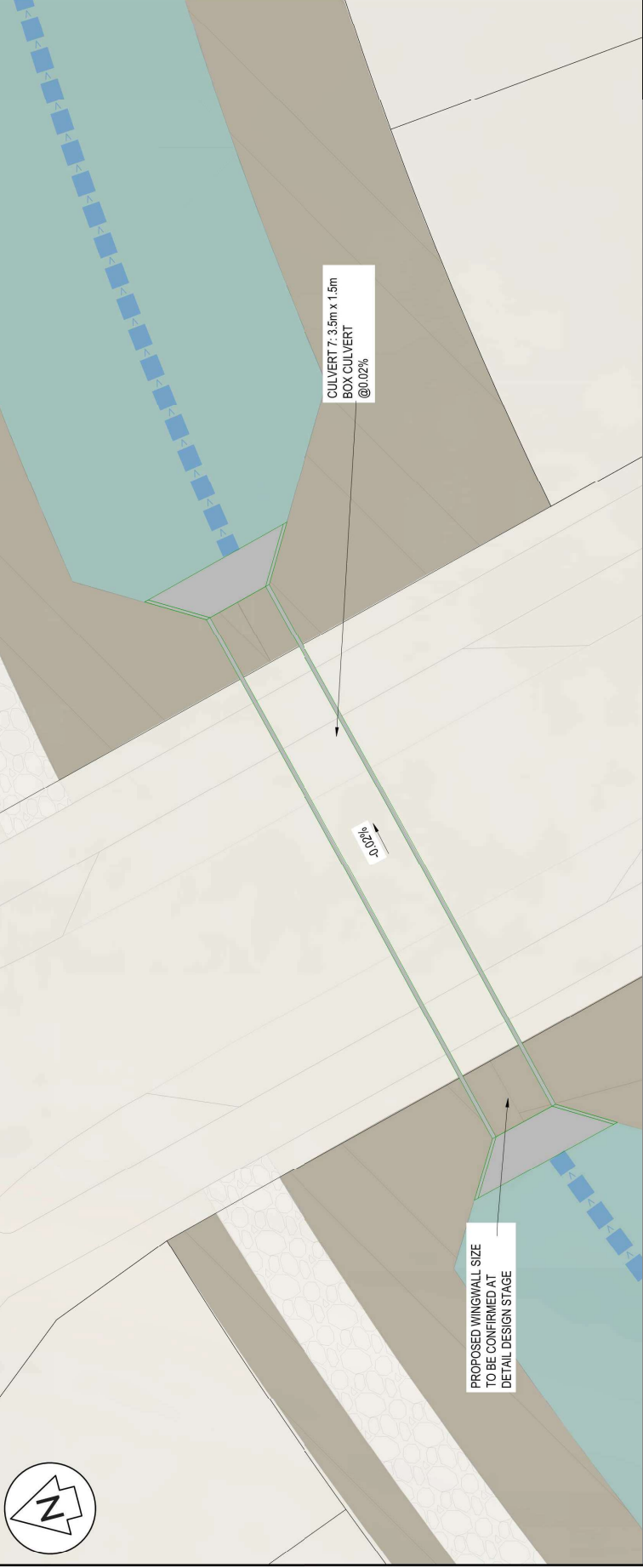
**M** **MAVEN** Bay of Plenty  
 118 Cameron Street, Tauranga  
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Project: **WAIRAKEI SOUTH FTA090**  
**DEVELOPMENT**  
**BELL ROAD, PAPAMOA**  
**FOR BELL ROAD**  
**LIMITED PARTNERSHIP**

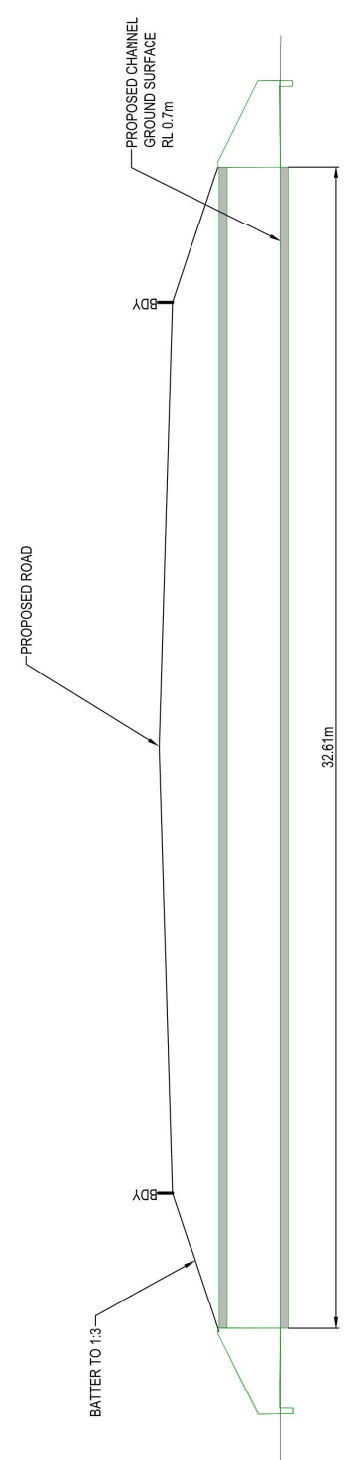
Title: **PROPOSED**  
**CULVERT 5**  
**DETAIL**

Project no.	BOP0749
Scale	AS SHOWN
Cad file	BOP0749-C470-1-5.DWG
Drawing no.	C470-1-5
Rev	B





CULVERT 7 PLAN VIEW  
SCALE 1:250 @A3



CULVERT 7 LONG SECTION  
SCALE: HORI 1:150 VERT 1:150 @A3

LEGEND

	EXIST'G ABUTTAL
	PROP. BODY
	PROP. SW CULVERT

Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	DC	11/25

Survey	MAVEN	16/2/2025
Design	VHU	12/2/2025
Drawn	JC	12/2/2025
Checked	DC	12/2/2025

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Project: **WAIRAKEI SOUTH FTA090 DEVELOPMENT**  
**BELL ROAD, PAPAMOA**  
**FOR BELL ROAD LIMITED PARTNERSHIP**

Title: **PROPOSED CULVERT 7 DETAIL**

Project no.	BOP0749
Scale	AS SHOWN
Cad file	BOP0749-C470-1-7WG
Drawing no.	C470-1-7
Rev	B

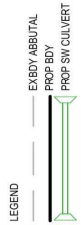
FOR CONSENT



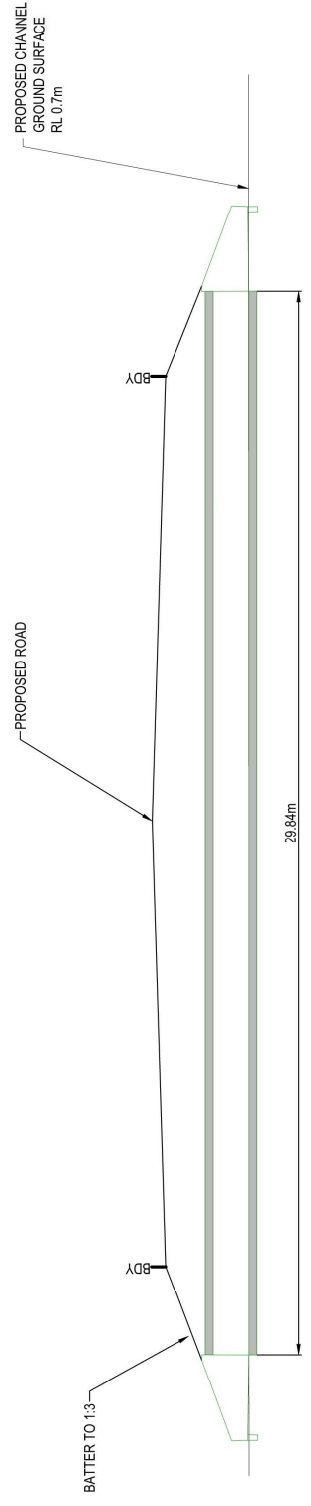
CULVERT 8: 3.5m x 1.5m  
- BOX CULVERT  
@0.02%

PROPOSED WINGWALL SIZE  
TO BE CONFIRMED AT  
DETAIL DESIGN STAGE

-0.02%



CULVERT 8 PLAN VIEW  
SCALE 1:250 @A3



CULVERT 8 LONG SECTION  
SCALE: HORI 1:150 VERT 1:150 @A3

FOR CONSENT

Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	PC	11/25

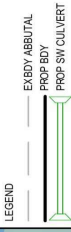
Survey	By	Date
MAVEN	MAVEN	05/2025
Design	VHU	12/2025
Drawn	JC	12/2025
Checked	PC	12/2025

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Project: **WAIRAKEI SOUTH FTA090 DEVELOPMENT**  
**BELL ROAD, PAPAMOA FOR BELL ROAD LIMITED PARTNERSHIP**

Title: **PROPOSED CULVERT 8 DETAIL**

Project no.	BOP0749
Scale	AS SHOWN
Cad file	BOP0749-C470-1-B.dwg
Drawing no.	C470-1-B
Rev	B



CULVERT 9 PLAN VIEW  
SCALE 1:250 @A3

Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	DC	11/25

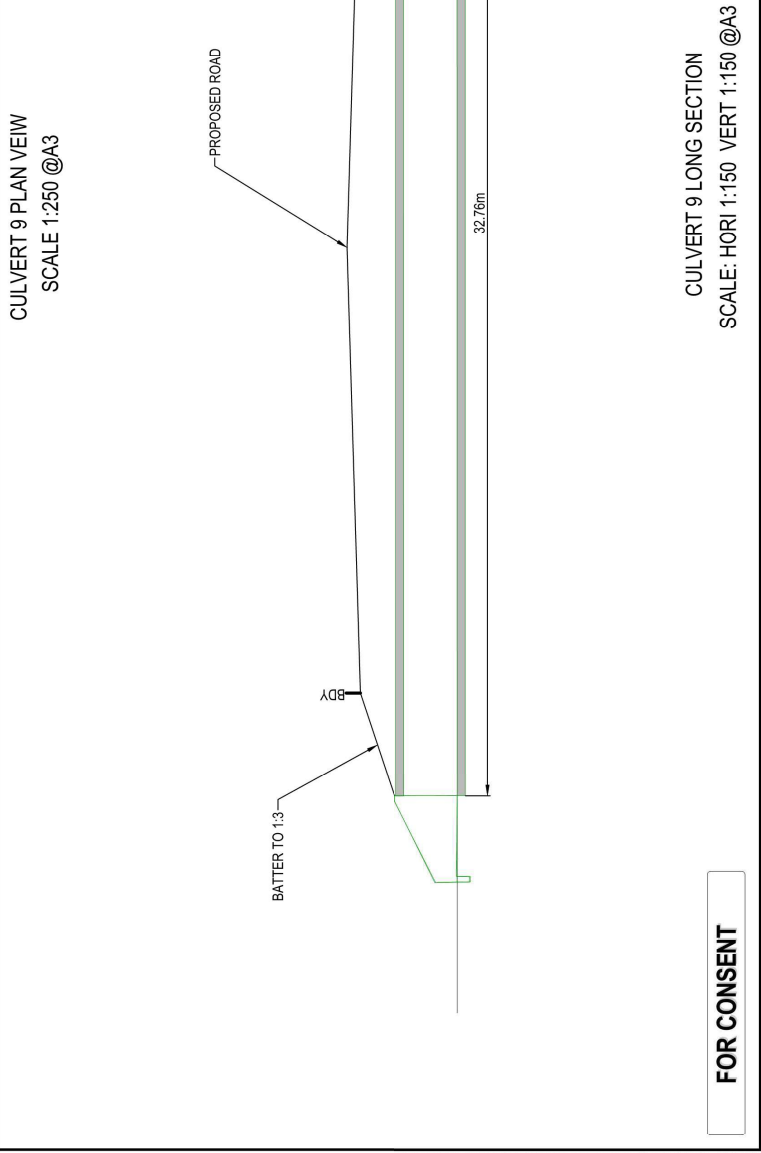
By	Date	
Survey	MAVEN	05/2025
Design	VHU	12/2025
Drawn	JC	12/2025
Checked	DC	12/2025

**M** Maiven Bay of Plenty  
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Project: **WAIRAKEI SOUTH FTA090 DEVELOPMENT**  
**BELL ROAD, PAPAMOA**  
**FOR BELL ROAD LIMITED PARTNERSHIP**

Title: **PROPOSED CULVERT 9 DETAIL**

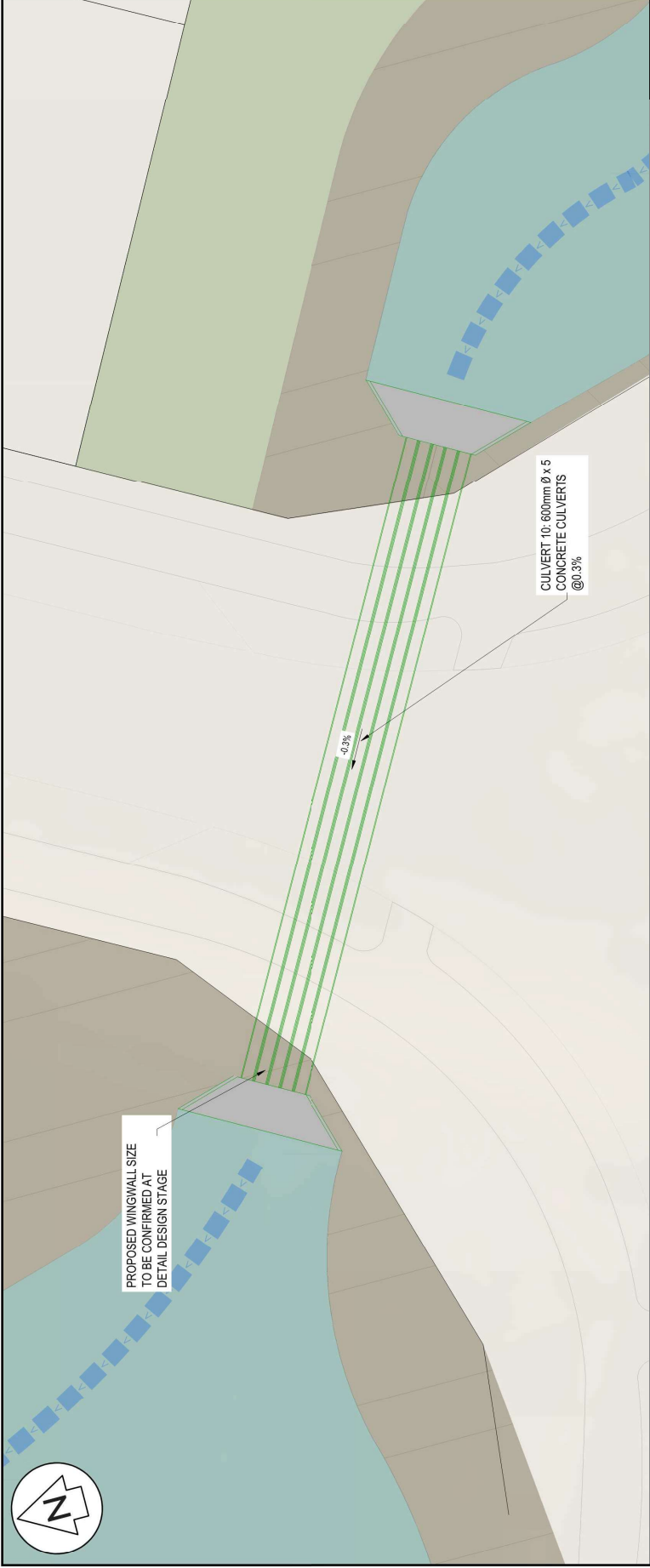
Project no.	BOP0749
Scale	AS SHOWN
Cad file	BOP0749-C470-01-WG
Drawing no.	C470-1-9
Rev	B



**FOR CONSENT**



PROPOSED WINGWALL SIZE  
TO BE CONFIRMED AT  
DETAIL DESIGN STAGE



LEGEND

	EX-BDY ABBUTMENT
	PROP. BDY
	PROP. SW CULVERT

CULVERT 10 PLAN VIEW  
SCALE 1:250 @A3

Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	DC	11/25

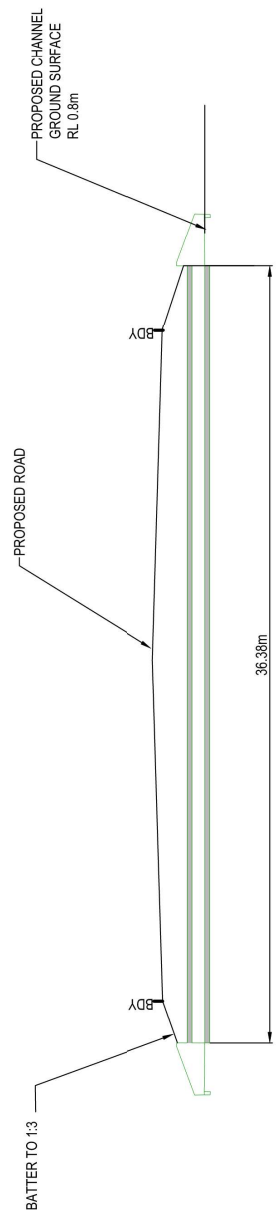
Survey	MAVEN	05/2025
Design	VHU	12/2025
Drawn	JC	12/2025
Checked	DC	12/2025

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Project: **WAIRAKEI SOUTH FTA090**  
**DEVELOPMENT**  
**BELL ROAD, PAPAMOA**  
**FOR BELL ROAD**  
**LIMITED PARTNERSHIP**

Title: **PROPOSED**  
**CULVERT 10**  
**DETAIL**

Project no.	BOP0749
Scale	AS SHOWN
Cad file	BOP0749-C470-01-WG
Drawing no.	C470-1-10
Rev	B



CULVERT 10 LONG SECTION  
SCALE: HORI 1:250 VERT 1:250 @A3

**FOR CONSENT**





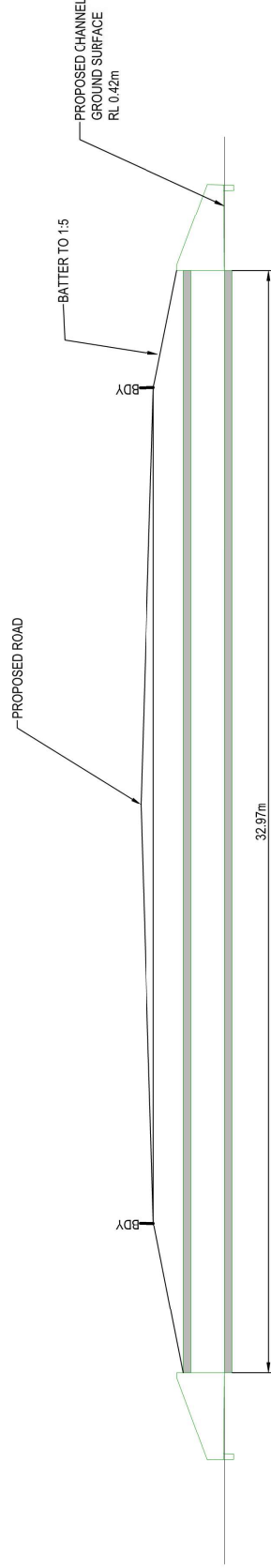
PROPOSED WINGWALL SIZE  
TO BE CONFIRMED AT  
DETAIL DESIGN STAGE

CULVERT 12: 600mm Ø x 5  
CONCRETE CULVERTS  
@0.3%

-0.3%



CULVERT 12 PLAN VIEW  
SCALE 1:250 @A3



CULVERT 12 LONG SECTION  
SCALE: HORI 1:150 VERT 1:150 @A3

FOR CONSENT

Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	DC	11/25

Survey	Design	Drawn	Checked
HAVEN	VHU	JC	DC

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**BELL ROAD, PAPAMOA**  
**FOR BELL ROAD**  
**LIMITED PARTNERSHIP**

Title: **PROPOSED CULVERT 12 DETAIL**

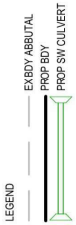
Project no.	BOP0749
Scale	AS SHOWN
Cad file	BOP0749-C470-010.DWG
Drawing no.	C470-1-12
Rev	B



PROPOSED WINGWALL SIZE  
TO BE CONFIRMED AT  
DETAIL DESIGN STAGE

CULVERT 13: 2.5m x 1.0m  
BOX CULVERTS x2 @0.02%

→ -0.02%  
→ -0.02%



CULVERT 13 PLAN VIEW  
SCALE 1:250 @A3

PROPOSED CHANNEL  
GROUND SURFACE  
RL 0.8m

PROPOSED ROAD

BATTER TO 1:3

BDY

BDY

24.00m

CULVERT 13 LONG SECTION  
SCALE: HORI 1:150 VERT 1:150 @A3

FOR CONSENT

Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	DC	11/25

Survey	MAVEN	15/2/25
Design	VHU	12/2/25
Drawn	JC	12/2/25
Checked	DC	12/2/25



Project:  
**WAIRAKEI SOUTH FTA090**  
**DEVELOPMENT**  
**BELL ROAD, PAPAMOA**  
**FOR BELL ROAD**  
**LIMITED PARTNERSHIP**

Title:  
**PROPOSED**  
**CULVERT 13**  
**DETAIL**

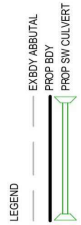
Project no.	BOP0749
Scale	AS SHOWN
Card file	BOP0749-C470-01-WG
Drawing no.	C470-1-13
Rev	B



PROPOSED WINGWALL SIZE  
TO BE CONFIRMED AT  
DETAIL DESIGN STAGE

CULVERT 14: 2.5m x 1.0m  
BOX CULVERTS x2  
@0.02%

-0.02%

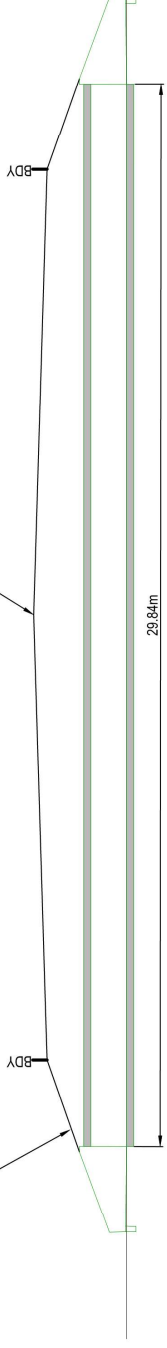


CULVERT 14 PLAN VIEW  
SCALE 1:250 @A3

PROPOSED CHANNEL  
GROUND SURFACE  
RL 0.9m

PROPOSED ROAD

BAITER TO 1:3



CULVERT 14 LONG SECTION  
SCALE: HORI 1:150 VERT 1:150 @A3

FOR CONSENT

Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	DC	11/25

Survey	MAVEN	Date	05/2025
Design	VHU	Date	12/2025
Drawn	JC	Date	12/2025
Checked	DC	Date	12/2025

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Project:  
**WAIRAKEI SOUTH FTA090**  
**DEVELOPMENT**  
**BELL ROAD, PAPAMOA**  
**FOR BELL ROAD**  
**LIMITED PARTNERSHIP**

Title:  
**PROPOSED**  
**CULVERT 14**  
**DETAIL**

Project no.	BOP0749
Scale	AS SHOWN
Cad file	BOP0749-C470-1-14.DWG
Drawing no.	C470-1-14
Rev	B

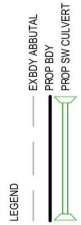


PROPOSED WINGWALL SIZE  
TO BE CONFIRMED AT  
DETAIL DESIGN STAGE

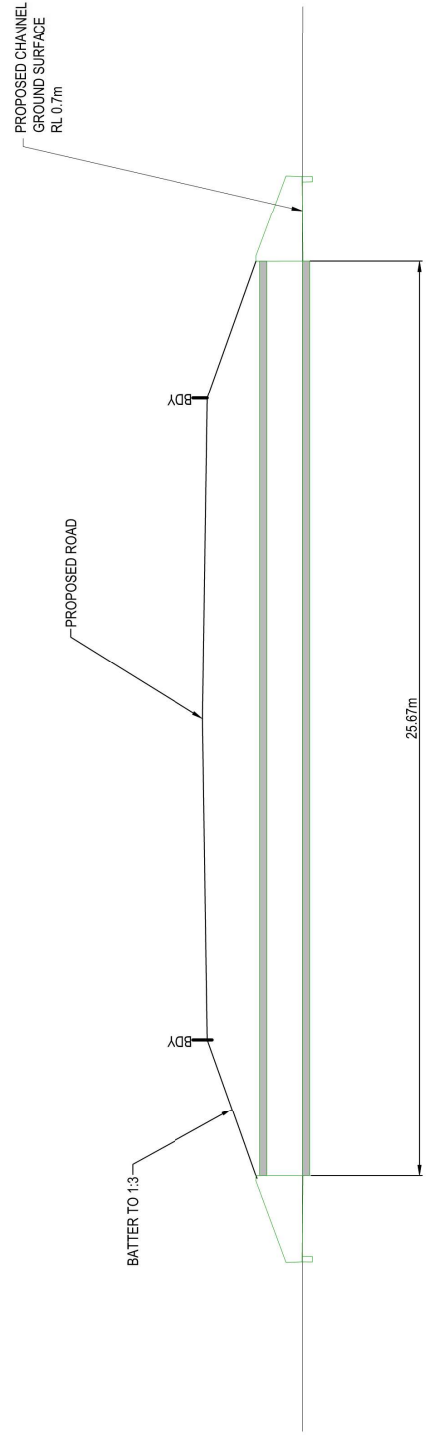
CULVERT 15: 2.5m x 1.0m  
BOX CULVERTS x2 @0.02%

-0.02%

-0.02%



CULVERT 15 PLAN VIEW  
SCALE 1:250 @A3



CULVERT 15 LONG SECTION  
SCALE: HORI 1:150 VERT 1:150 @A3

FOR CONSENT

Rev	Description	By	Date												
B	FOR CONSENT	VHU	03/26												
A	FOR REVIEW	DC	11/25												
<table border="1"> <tr> <td>Survey</td> <td>MAVEN</td> <td>16/2025</td> </tr> <tr> <td>Design</td> <td>VHU</td> <td>12/2025</td> </tr> <tr> <td>Drawn</td> <td>JC</td> <td>12/2025</td> </tr> <tr> <td>Checked</td> <td>DC</td> <td>12/2025</td> </tr> </table>				Survey	MAVEN	16/2025	Design	VHU	12/2025	Drawn	JC	12/2025	Checked	DC	12/2025
Survey	MAVEN	16/2025													
Design	VHU	12/2025													
Drawn	JC	12/2025													
Checked	DC	12/2025													

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**Project:** WAIRAKEI SOUTH FTA090  
**DEVELOPMENT**  
**BELL ROAD, PAPAMOA**  
**FOR BELL ROAD**  
**LIMITED PARTNERSHIP**

**Title:** PROPOSED  
**CULVERT 15**  
**DETAIL**

Project no.	BOP0749
Scale	AS SHOWN
Cad file	BOP0749-C470-1-15.DWG
Drawing no.	C470-1-15
Rev	B





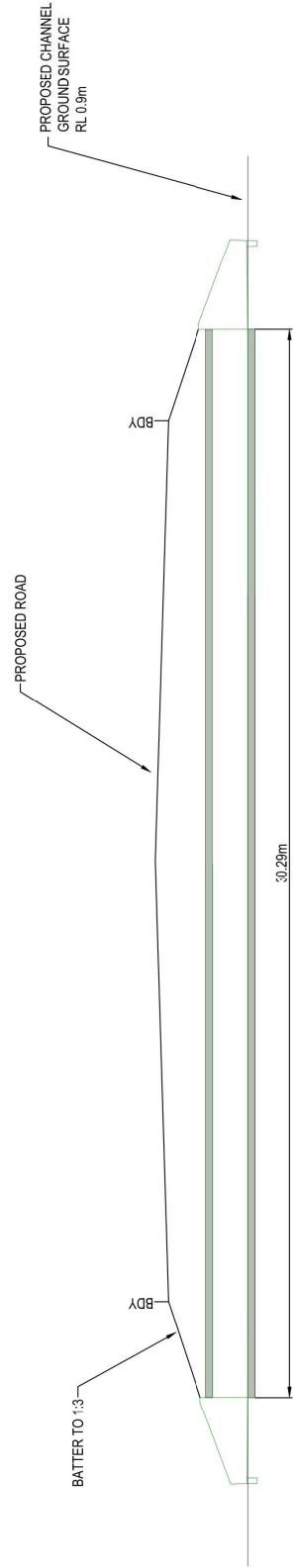
PROPOSED MINGWALL SIZE  
TO BE CONFIRMED AT  
DETAIL DESIGN STAGE

-0.02%  
-0.02%

CULVERT 17: 2.5m x 1.0m  
BOX CULVERTS x2  
@0.02%



CULVERT 17 PLAN VIEW  
SCALE 1:250 @A3



CULVERT 17 LONG SECTION  
SCALE: HORI 1:150 VERT 1:150 @A3

FOR CONSENT

Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	DC	11/25

Survey	MAVEN	Date	05/2025
Design	VHU	Date	12/2025
Drawn	JC	Date	12/2025
Checked	DC	Date	12/2025

**Maven Bay of Plenty**  
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Project: **WAIRAKEI SOUTH FTA090**  
**DEVELOPMENT**  
**BELL ROAD, PAPAMOA**  
**FOR BELL ROAD**  
**LIMITED PARTNERSHIP**

Title: **PROPOSED**  
**CULVERT 17**  
**DETAIL**

Project no.	BOP0749
Scale	AS SHOWN
Cad file	BOP0749-C470-1-17.dwg
Drawing no.	C470-1-17
Rev	B



PROPOSED WINGWALL SIZE  
TO BE CONFIRMED AT  
DETAIL DESIGN STAGE

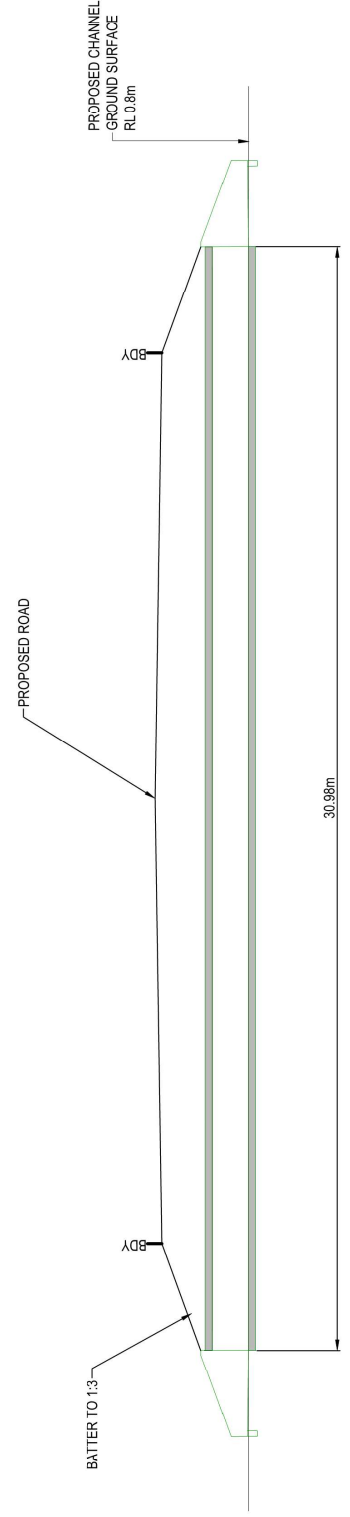
CULVERT 18: 2.5m x 1.0m  
BOX CULVERT  
@0.02%

-0.02%  
-0.02%

LEGEND

	EX-BDY ABBUTMENT
	PROP. BDY
	PROP. SW CULVERT

CULVERT 18 PLAN VIEW  
SCALE 1:250 @A3



CULVERT 18 LONG SECTION  
SCALE: HORIZ 1:150 VERT 1:150 @A3

FOR CONSENT

Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	DC	11/25

Survey	HAIVEN	Date	05/2025
Design	VHU	Date	12/2025
Drawn	JC	Date	12/2025
Checked	DC	Date	12/2025

Project	WAIRAKEI SOUTH FTA090 DEVELOPMENT BELL ROAD, PAPAMOA FOR BELL ROAD LIMITED PARTNERSHIP
Client	M A E N Maven Bay of Plenty 118 Cameron Street, Tauranga New Zealand
Project no.	BOP0749
Scale	AS SHOWN
Cad file	BOP0749-07100.JWG
Drawing no.	C470-1-18
Rev	B



PROPOSED WINGWALL SIZE  
TO BE CONFIRMED AT  
DETAIL DESIGN STAGE

-0.02%

CULVERT 19: 1.5m x 1.0m  
BOX CULVERT  
@0.02%

LEGEND

	EX-BDY/ABBUTAL
	PROP. BDY
	PROP. SW. CULVERT

CULVERT 19 PLAN VIEW  
SCALE 1:250 @A3

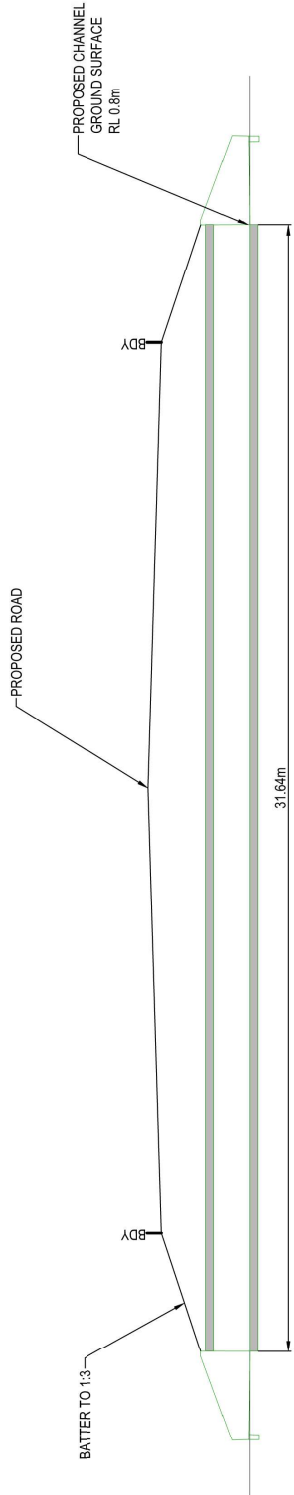
Rev	Description	By	Date
B	FOR CONSENT	VHU	03/26
A	FOR REVIEW	DC	11/25
Sundry			
		BY	DATE
		MAVEN	05/2025
Design			
		VHU	12/2025
Drawn			
		JC	12/2025
Checked			
		DC	12/2025

**M A E N**  
Maven Bay of Plenty  
118 Cameron Street, Tauranga  
www.maven.co.nz  
New Zealand

Project: **WAIRAKEI SOUTH FTA090**  
**DEVELOPMENT**  
**BELL ROAD, PAPAMOA**  
**FOR BELL ROAD**  
**LIMITED PARTNERSHIP**

Title: **PROPOSED**  
**CULVERT 19**  
**DETAIL**

Project no.	BOP0749
Scale	AS SHOWN
Card file	BOP0749-C47D-0.0-WG
Drawing no.	C47D-1-19
Rev	B



CULVERT 19 LONG SECTION  
SCALE: HORI 1:150 VERT 1:150 @A3

**FOR CONSENT**