



- 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 THE NEW ZEALAND VERTICAL DATUM (NZVD) 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. APPROVED HARDFILL IS TO BE USED IN BACKFILLING OF ALL ROAD CROSSINGS AND VEHICLE CROSSINGS TO COUNCIL STANDARDS.
 6. HEAVY DUTY MANHOLE LIDS AND FRAMES TO BE USED IN TRAFFICKED AREAS.
 7. ALL MANHOLES ARE TO BE 1050MMØ PRECAST CONCRETE UNLESS SHOWN OTHERWISE.
 8. ALL LINES TO BE ABANDONED SHALL BE SEALED AT EACH END. TIMING OF ALL SEALING TO BE COORDINATED WITH COUNCIL STAFF.

LEGEND

- EX BDY
- PR BDY
- SWALE FLOW DIRECTION
- SWALE TOP/BASE
- PR SW SWALES
- EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

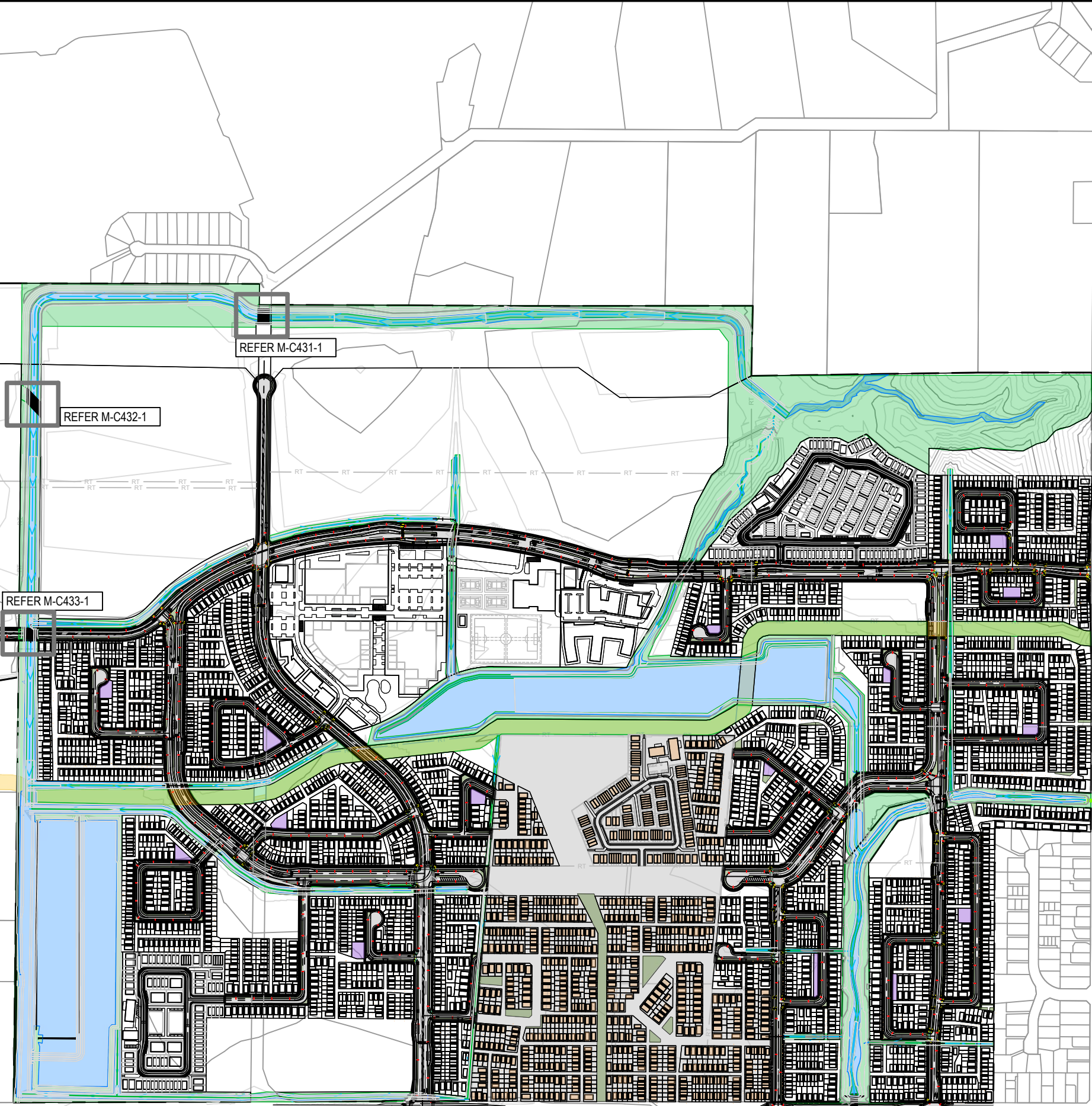


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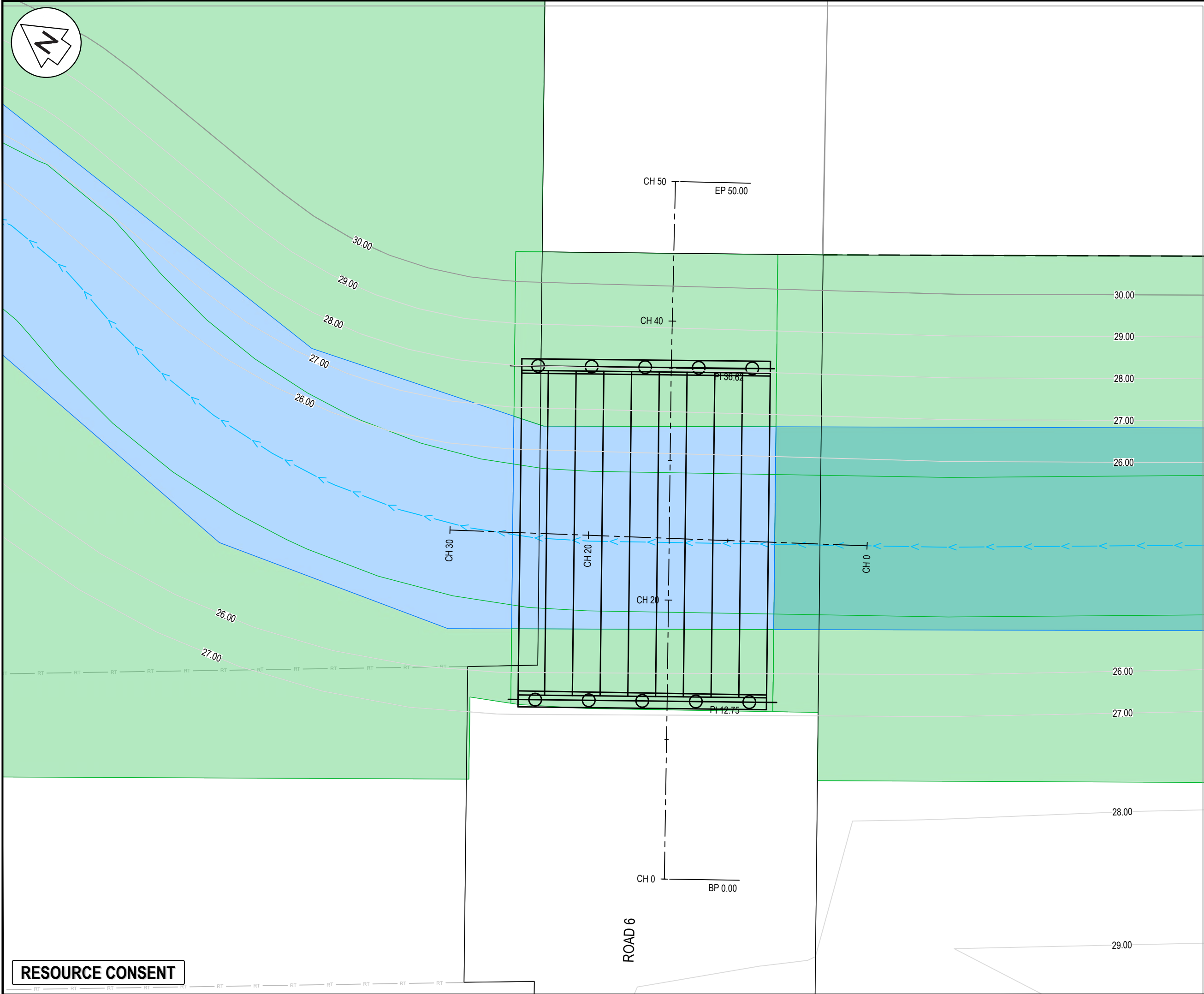
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
BRIDGE
OVERVIEW PLAN**

Project no.	215010
Scale	1:7500 @ A3
Cad file	215010-M-C430.DWG
Drawing no.	M-C430
Rev	A



RESOURCE CONSENT



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LEGEND

---	EX BDY
---	PR BDY
→→→	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
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Drawn	OQ		11/2024
Checked	JP/LC		02/2025



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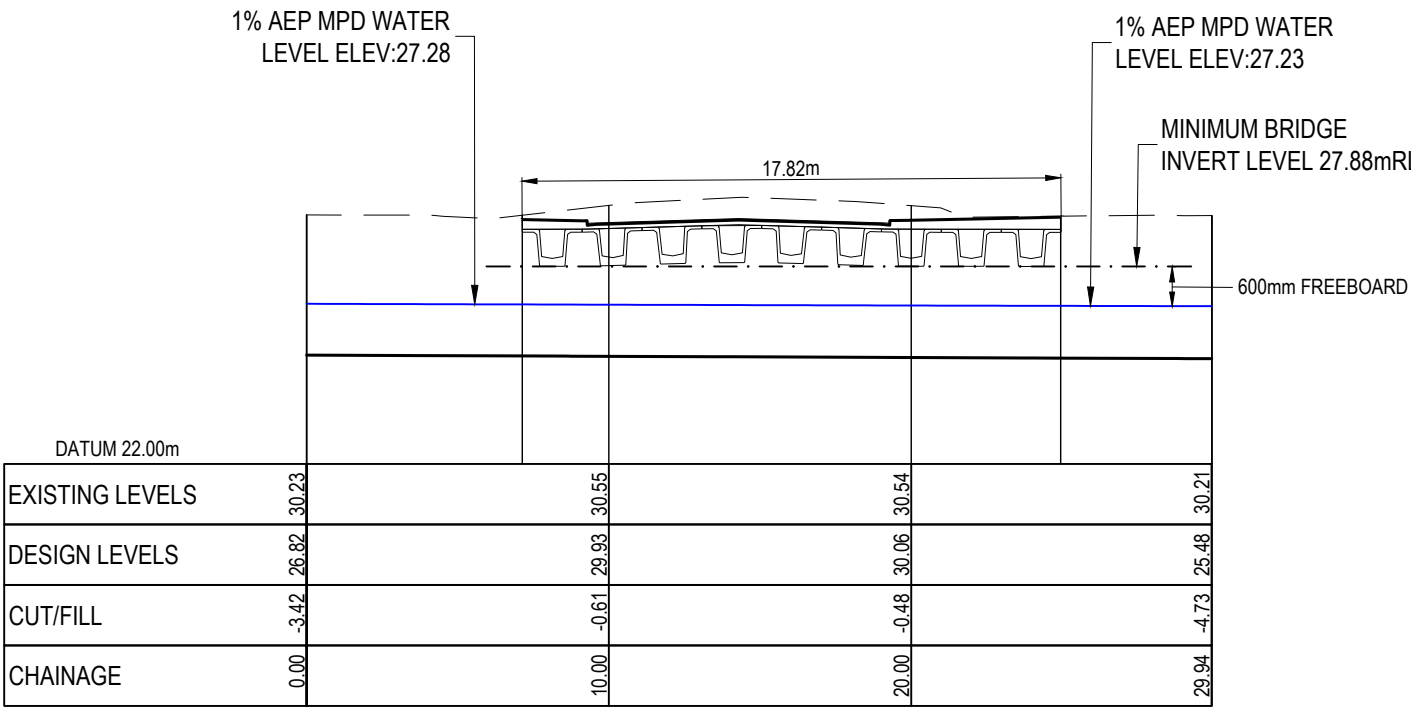
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 6 BRIDGE
SHEET 1**

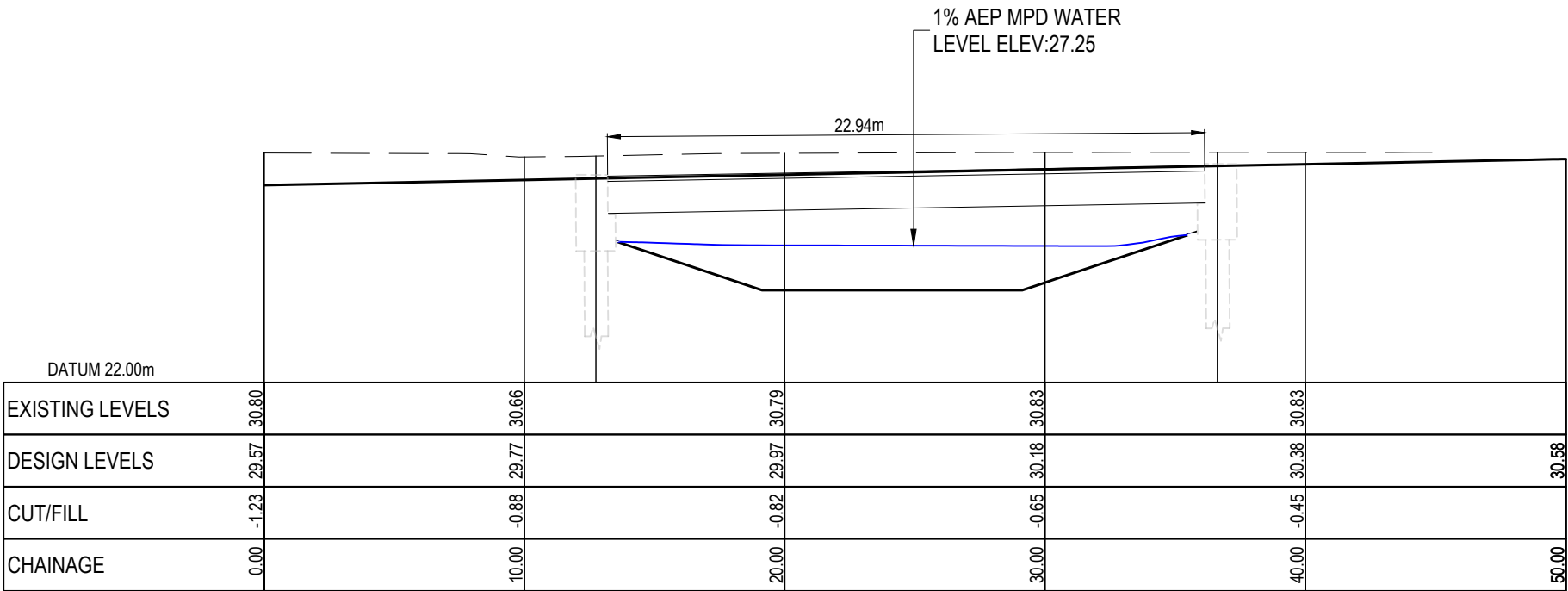
Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C430.DWG
Drawing no.	M-C431-1
Rev	A

RESOURCE CONSENT

DATE: 8/1/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C430.DWG



ROAD 6 - BRIDGE
SCALE: HORI 1:250 VERT 1:250



ROAD 6 - BRIDGE LS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

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LEGEND:

--- EX GROUND SURFACE
--- PR FINISHED GROUND SURFACE
--- 1% AEP (MPD) WATER LEVEL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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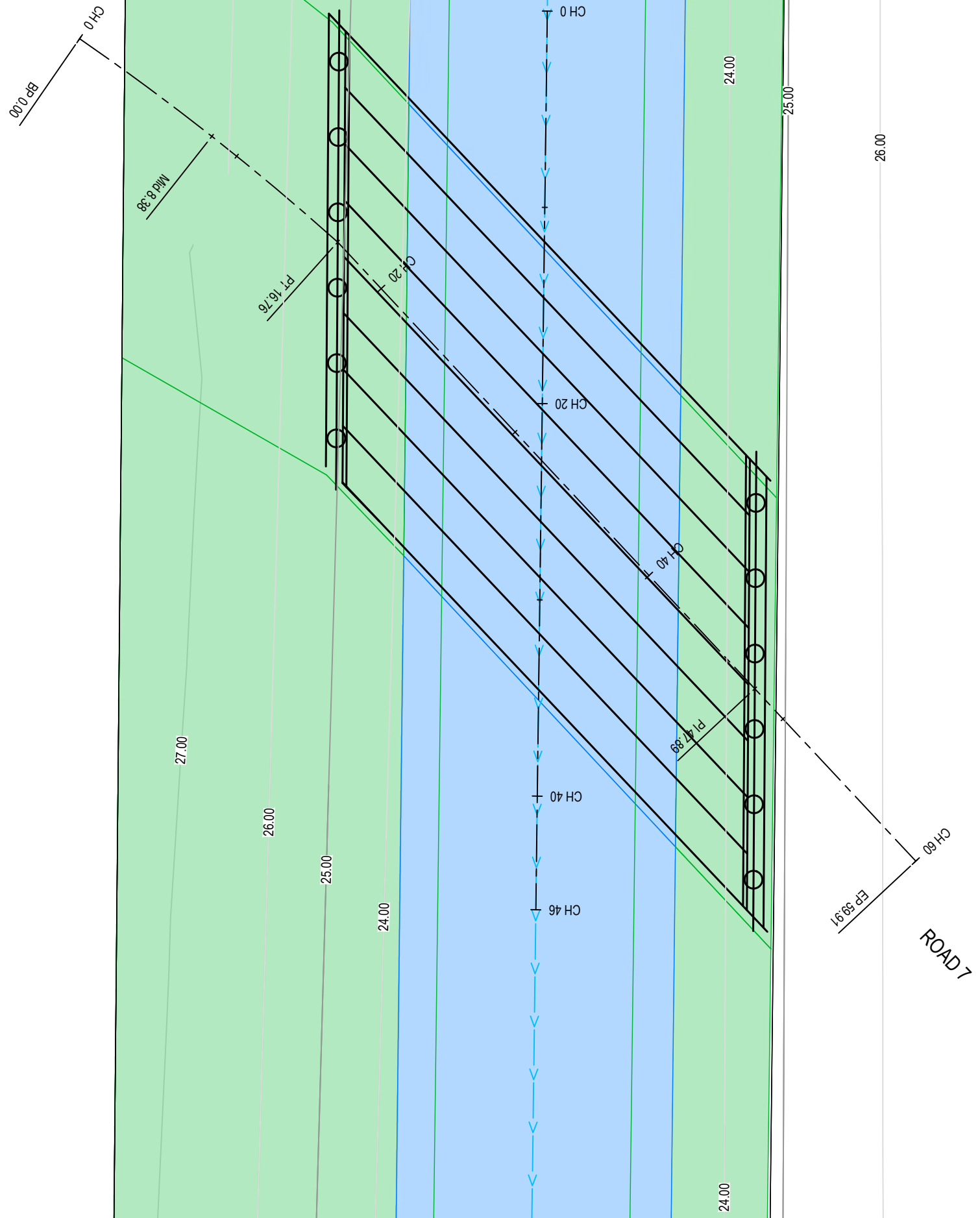
5 Owens Road, Epsom

Auckland 1023

Project
SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED

Title
PROPOSED
ROAD 6 BRIDGE
SHEET 2

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C430.DWG
Drawing no.	M-C431-2
Rev	A



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LEGEND

---	EX BDY
---	PR BDY
→→→→	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
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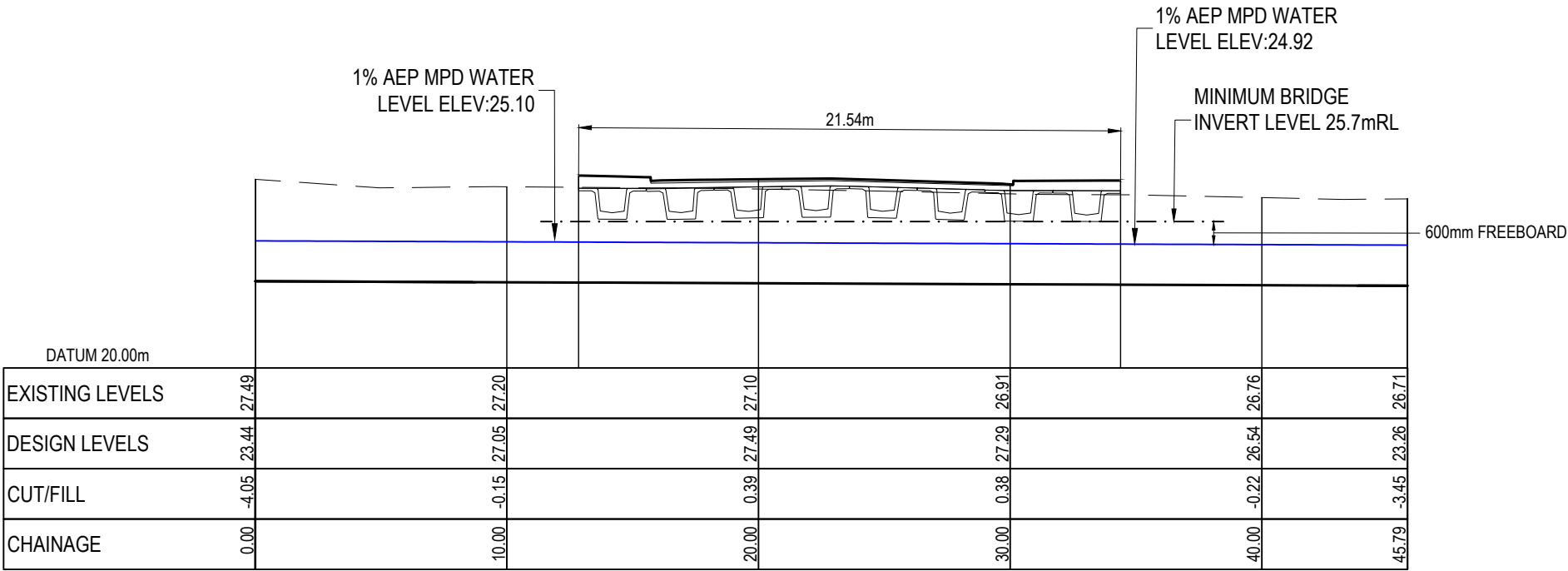
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 7 BRIDGE
SHEET 1**

Project no.	215010		
Scale	1:250 @ A3		
Cad file	215010-M-C430.DWG		
Drawing no.	M-C432-1	Rev	A

RESOURCE CONSENT

DATE: 8/1/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C430.DWG

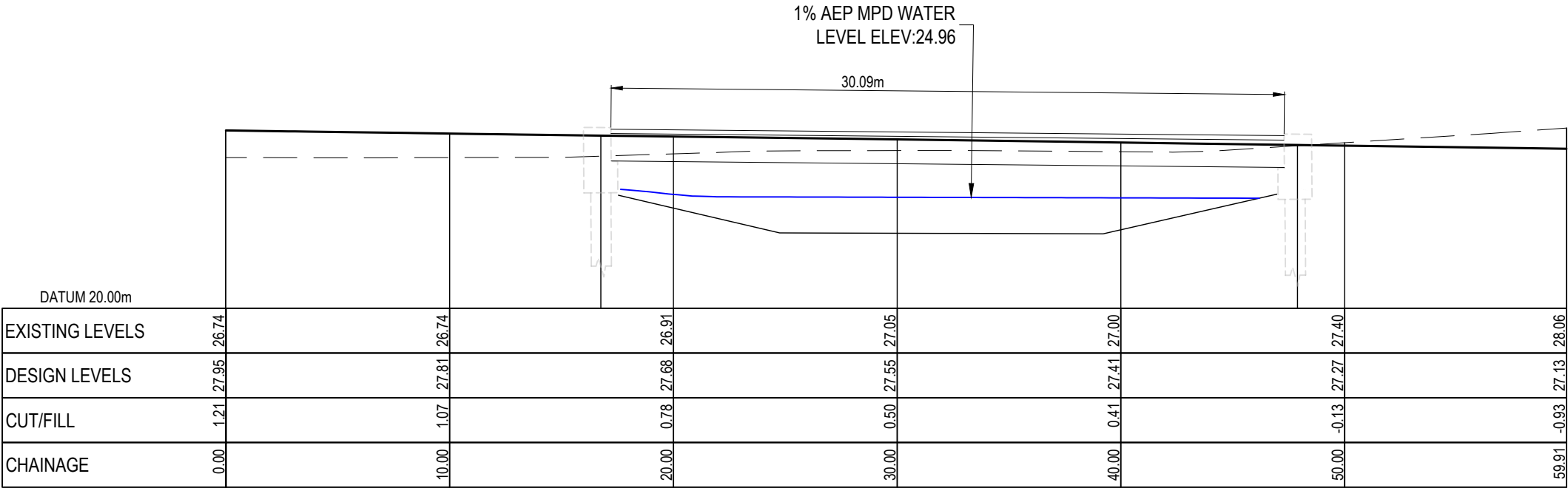


ROAD 7 - BRIDGE
SCALE: HORI 1:250 VERT 1:250

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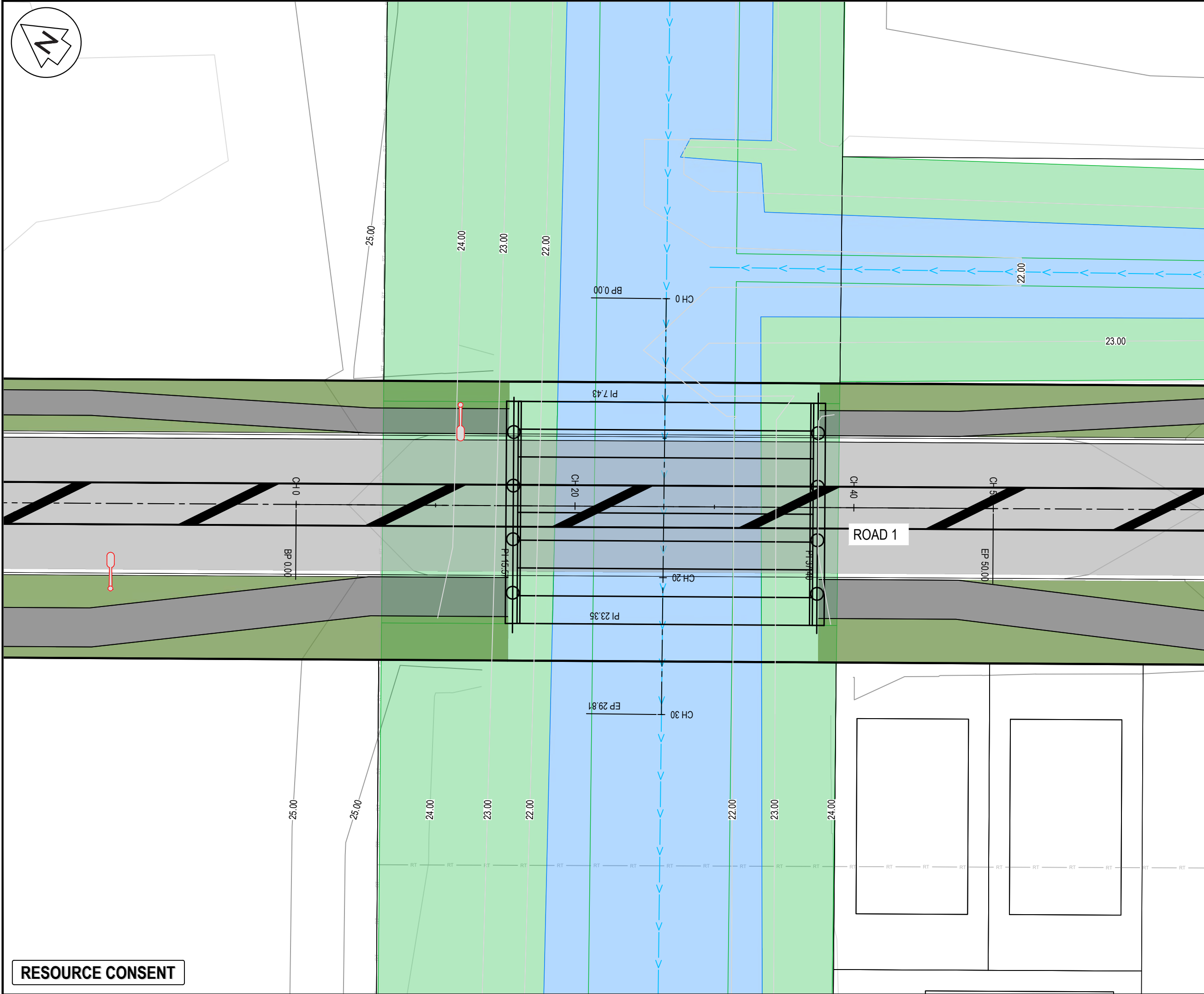
- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- 1% AEP (MPD) WATER LEVEL



ROAD 7 - BRIDGE LS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

A	RESOURCE CONSENT		OQ	02/2025	
Rev	Description		By	Date	
	By		Date		
Survey	SURVEYWORX		02/2021		
Design	YW		11/2024		
Drawn	OQ		11/2024		
Checked	JP/LC		02/2025		
M A E N Maven Associates 09 571 0050 info@maven.co.nz www.maven.co.nz 5 Owens Road, Epsom Auckland 1023					
Project					
SUNFIELD DEVELOPMENT					
ARDMORE, AUCKLAND					
MASTER PLANNING					
FOR SUNFIELD					
DEVELOPMENTS LIMITED					
Title					
PROPOSED					
ROAD 7 BRIDGE					
SHEET 2					
Project no.		215010			
Scale		1:250 @ A3			
Cad file		215010-M-C430.DWG			
Drawing no.		M-C432-2		Rev	A



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---	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
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Design	YW		11/2024
Drawn	OQ		11/2024
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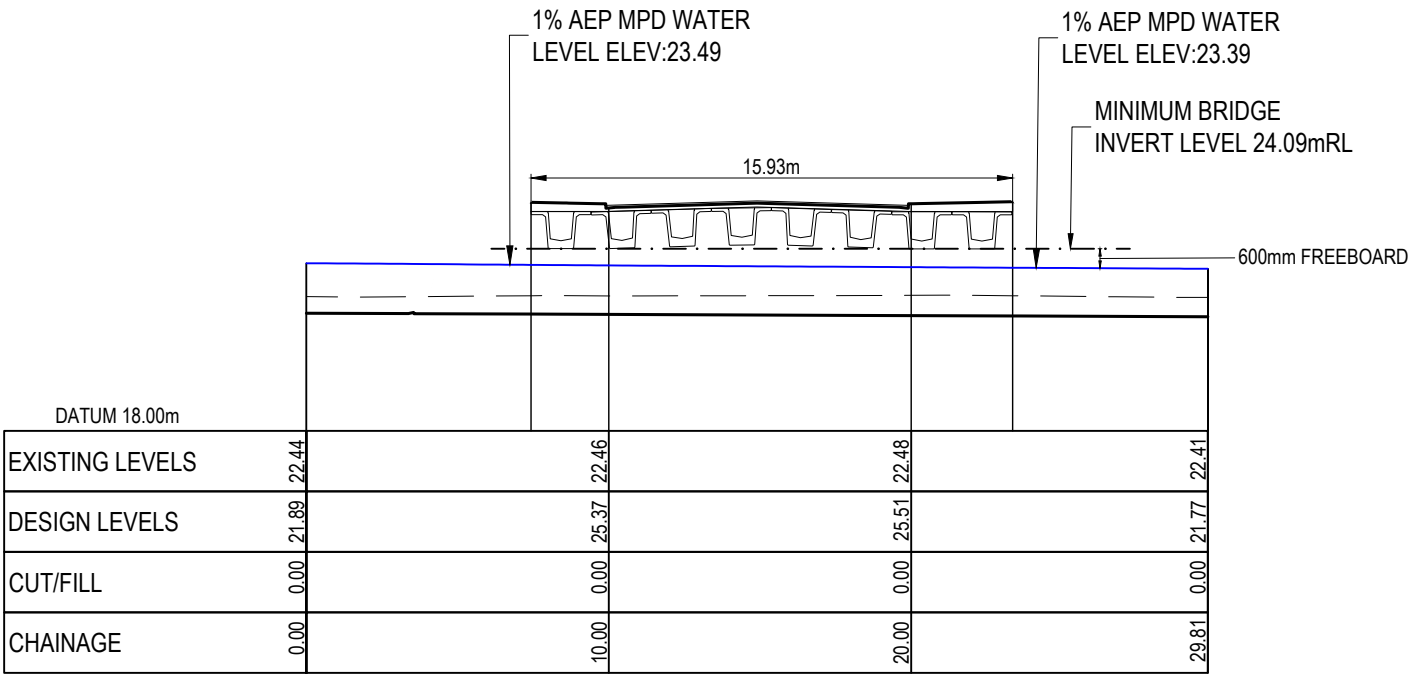
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 1 BRIDGE
SHEET 1**

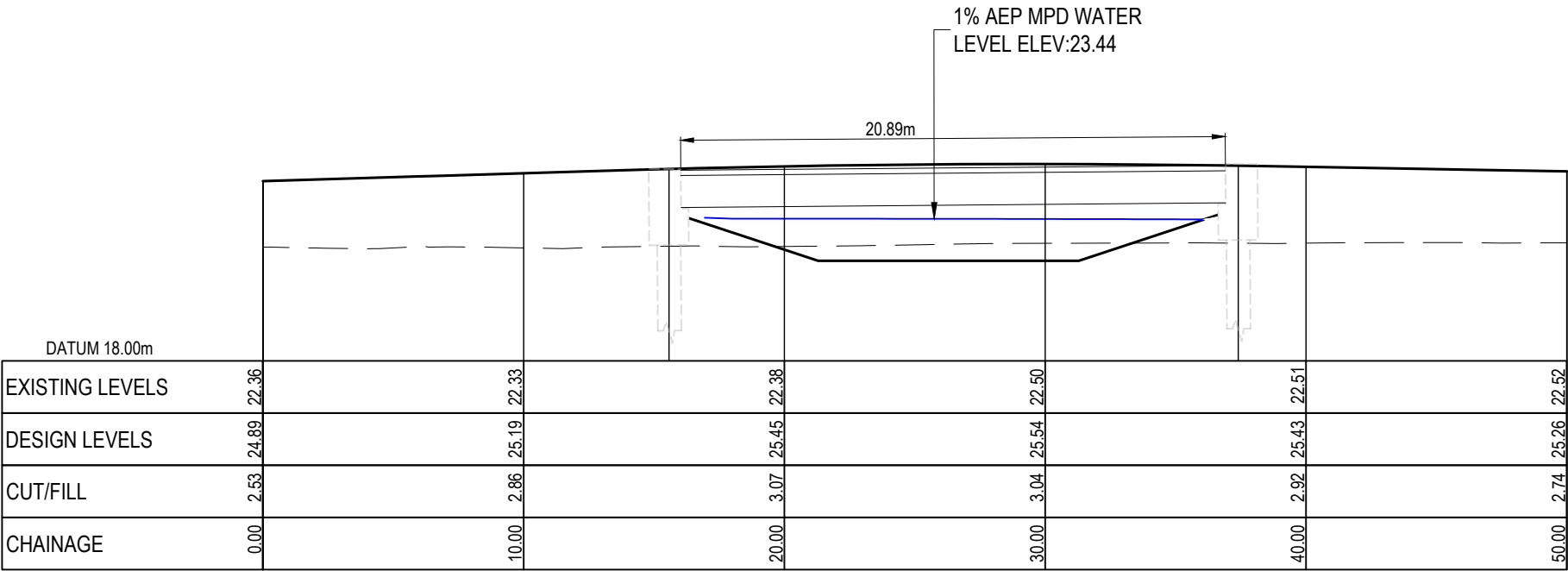
Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C430.DWG
Drawing no.	M-C433-1
Rev	A

RESOURCE CONSENT

DATE: 8/11/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010-M-C430.DWG



ROAD 1 BRIDGE
SCALE: HORI 1:250 VERT 1:250



ROAD 1 - BRIDGE LS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- 1% AEP (MPD) WATER LEVEL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	



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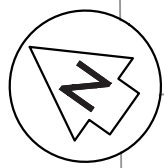
Project

**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title

**PROPOSED
ROAD 1 BRIDGE
SHEET 2**

Project no.	215010		
Scale	1:250 @ A3		
Cad file	215010-M-C430.DWG		
Drawing no.	M-C433-2	Rev	A



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- LEGEND
- EX BDY
 - PR BDY
 - SWALE FLOW DIRECTION
 - SWALE TOP/BASE
 - PR SW SWALES
 - EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
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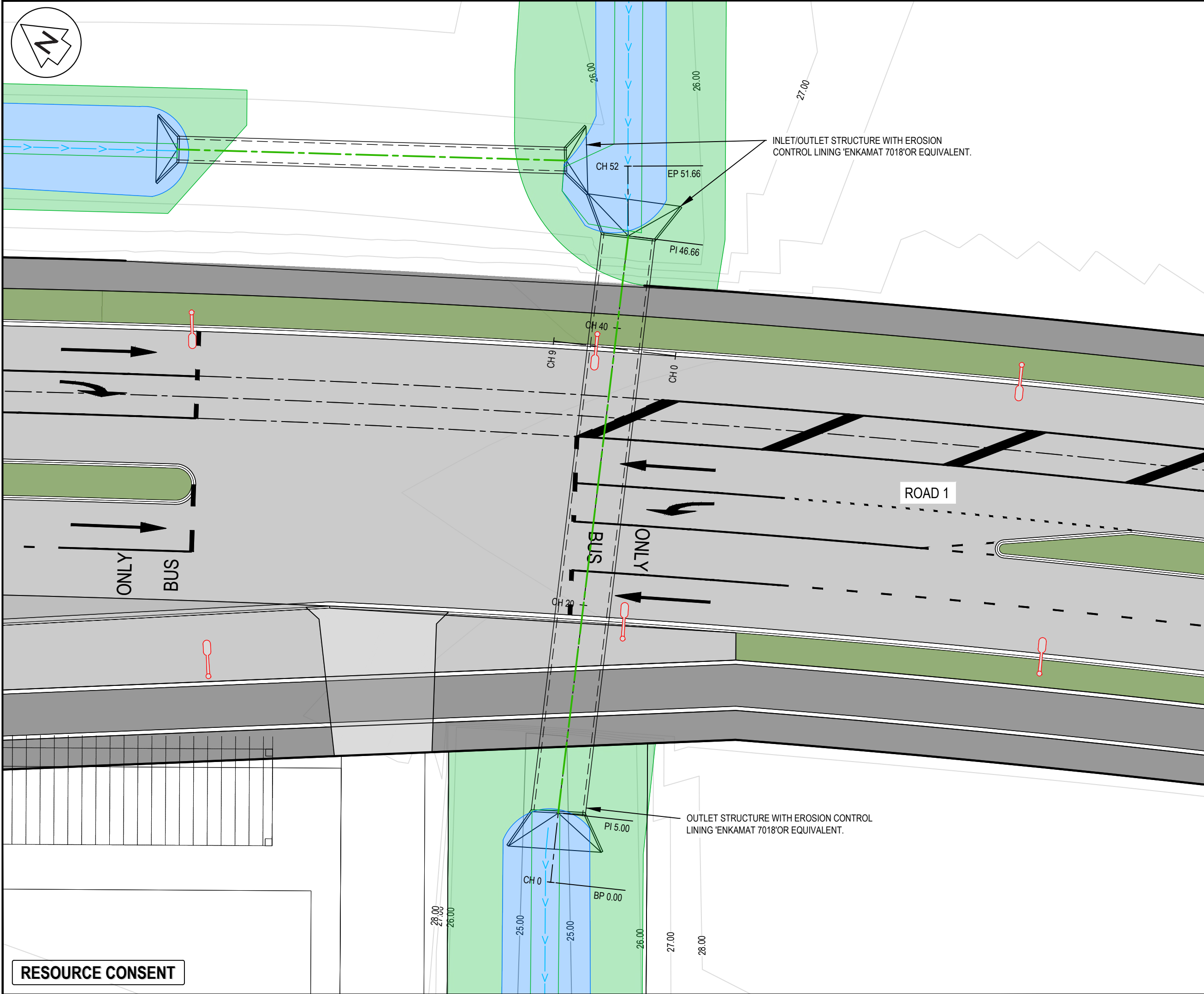
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
CULVERT
OVERVIEW PLAN**

Project no.	215010		
Scale	1:10000 @ A3		
Cad file	215010-M-C440.DWG		
Drawing no.	M-C4400	Rev	A

RESOURCE CONSENT

DATE: 8/10/25 FILE PATH: F:\MAVEN\PROJECTS\215010 - SUNFIELD\DWG\3-PRODUCTION\MASTER PLAN\0215010-M-C440.DWG



- NOTES
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---	SWALE TOP/BASE
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Rev	Description	By	Date
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Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

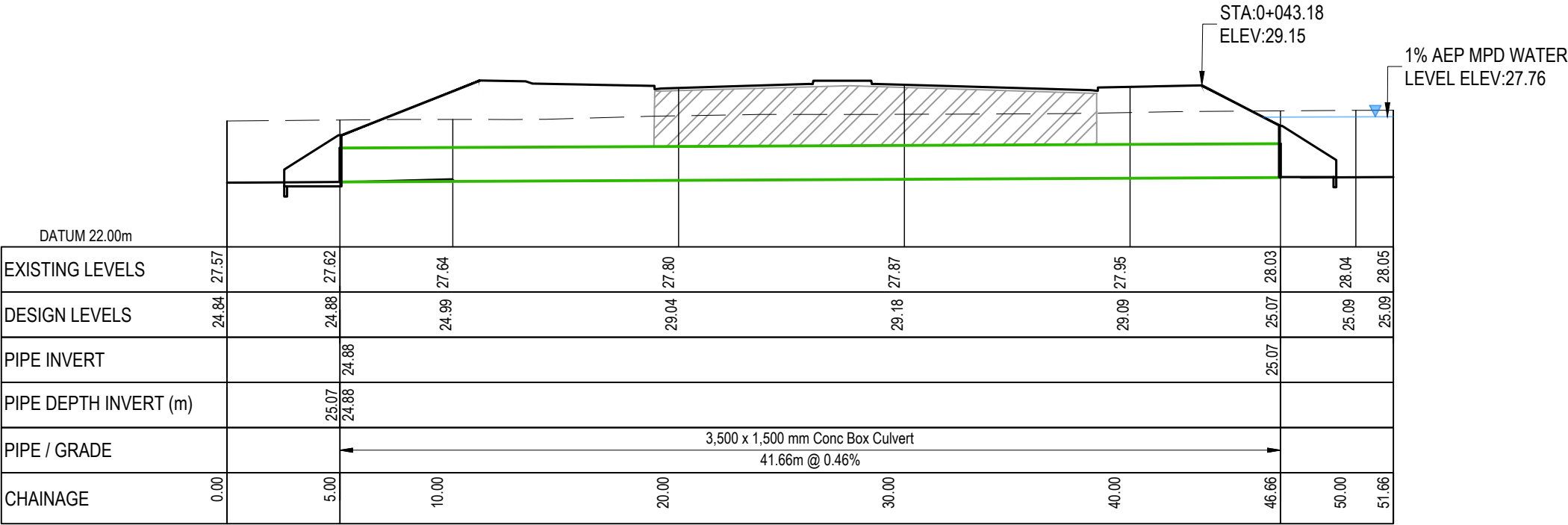
M **Maven Associates**
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
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FOR SUNFIELD
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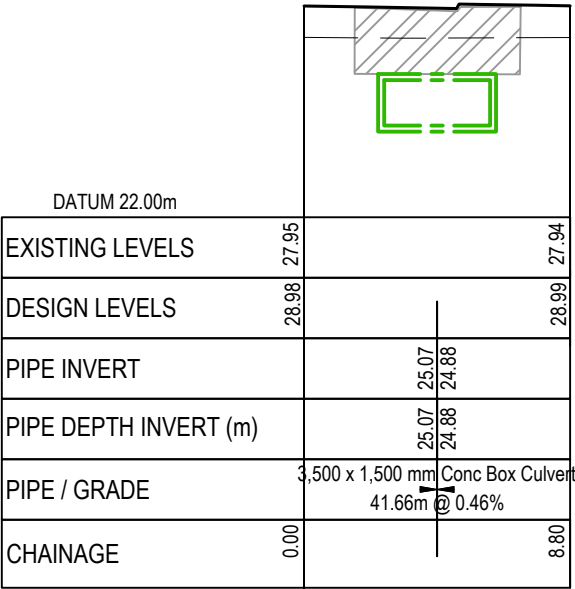
Title
**PROPOSED
ROAD 1 CULVERT 1
SHEET 1**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4401-1
Rev	A

DATE: 8/1/25 FILE PATH: F:\MAYN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 1 - CULVERT 1
SCALE: HORI 1:250 VERT 1:250



ROAD 1 - CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

- NOTES
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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

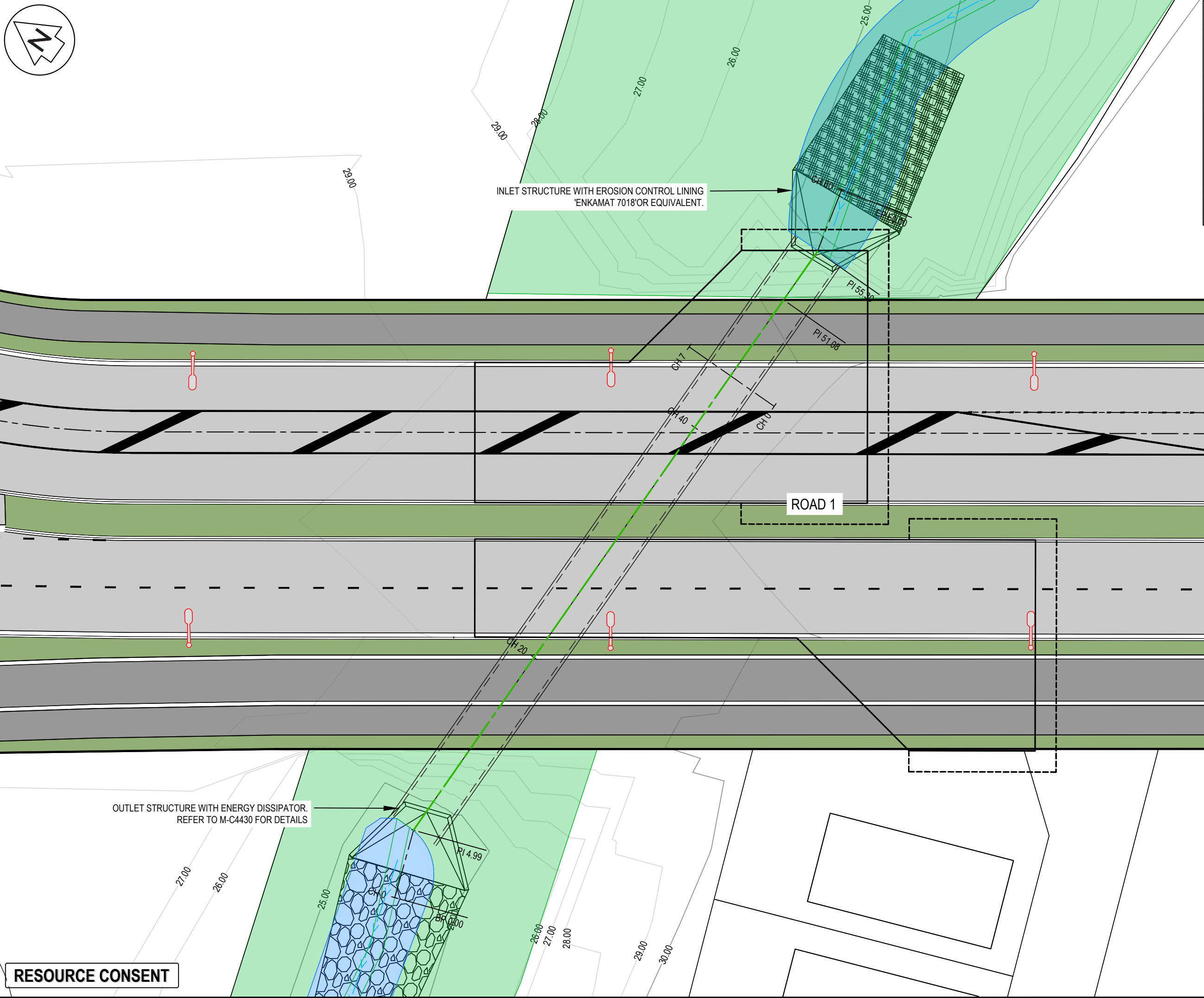
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 1 CULVERT 1
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4401-2
Rev	A



- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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LEGEND

---	EX BDY
---	PR BDY
---	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

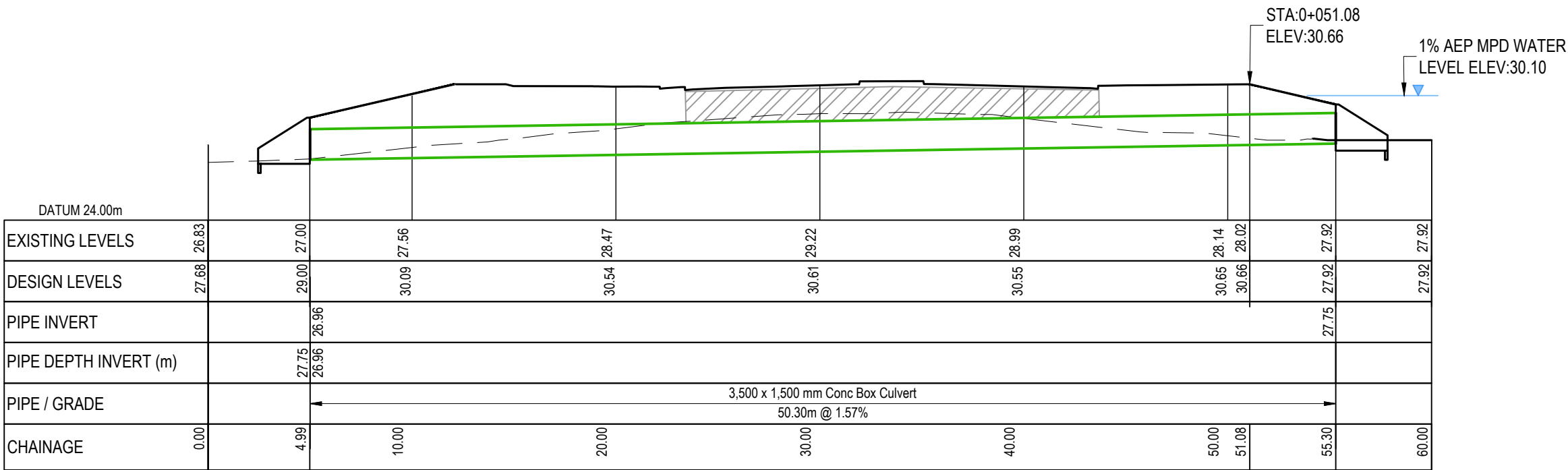
M **Maven Associates**
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5 Owens Road, Epsom
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

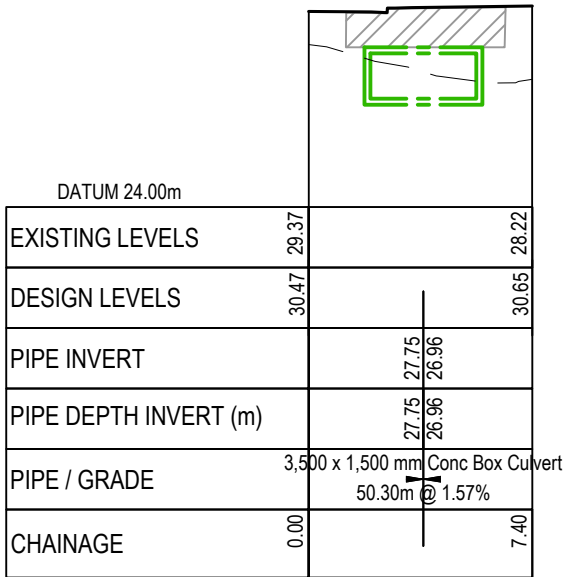
Title
**PROPOSED
ROAD 1 CULVERT 2
SHEET 1**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4402-1
Rev	A

DATE: 8/11/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 1 - CULVERT 2
SCALE: HORI 1:250 VERT 1:250



ROAD 1 - CULVERT 2 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

- NOTES:
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- LEGEND:
- EX GROUND SURFACE
 - PR FINISHED GROUND SURFACE
 - SW PIPE CROSSING
 - SW CULVERT CROSSING
 - HARDFILL BACKFILL

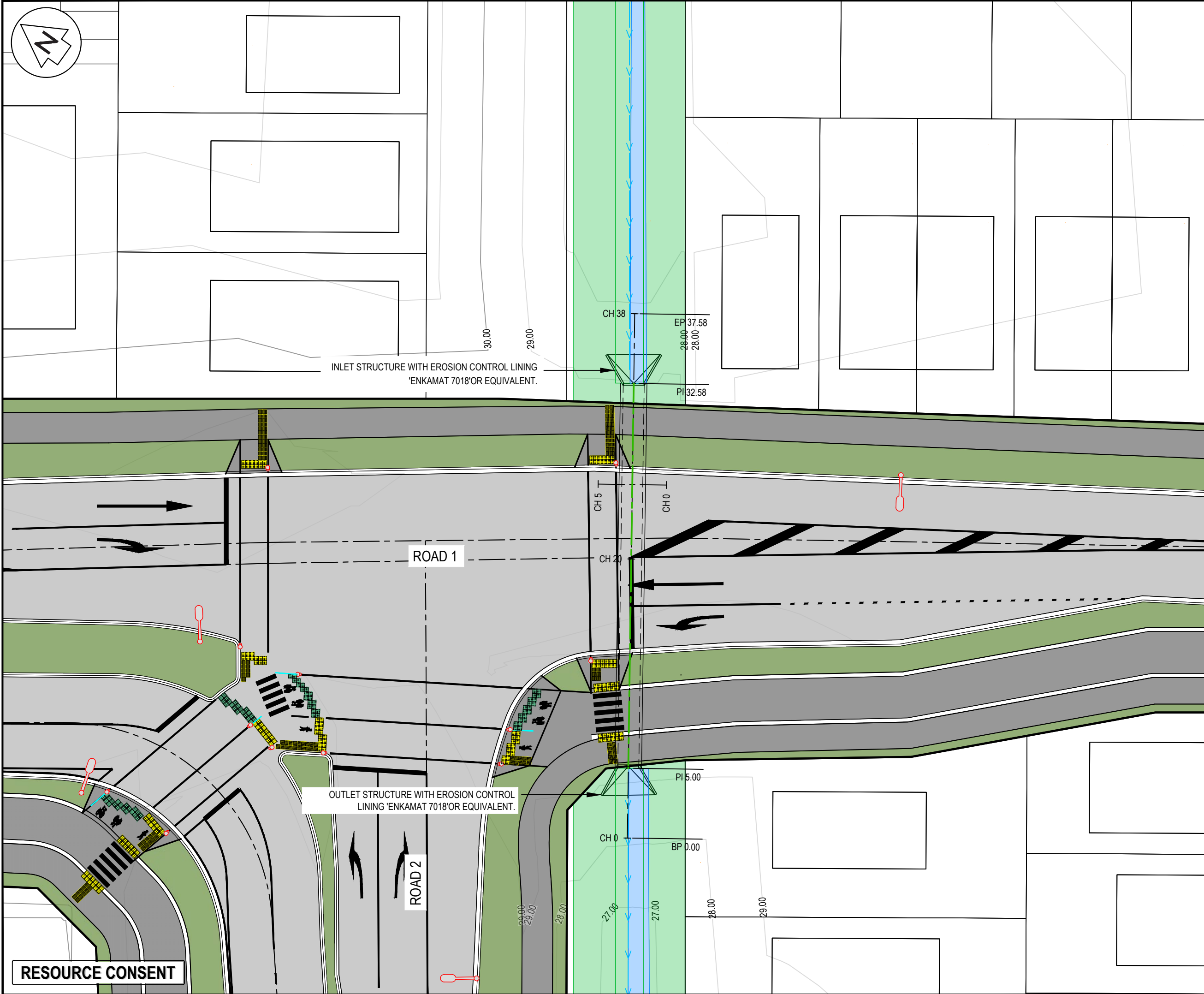
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 1 CULVERT 2
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4402-2
Rev	A



- NOTES
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LEGEND

---	EX BDY
---	PR BDY
---	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
Survey	SURVEYWORK		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
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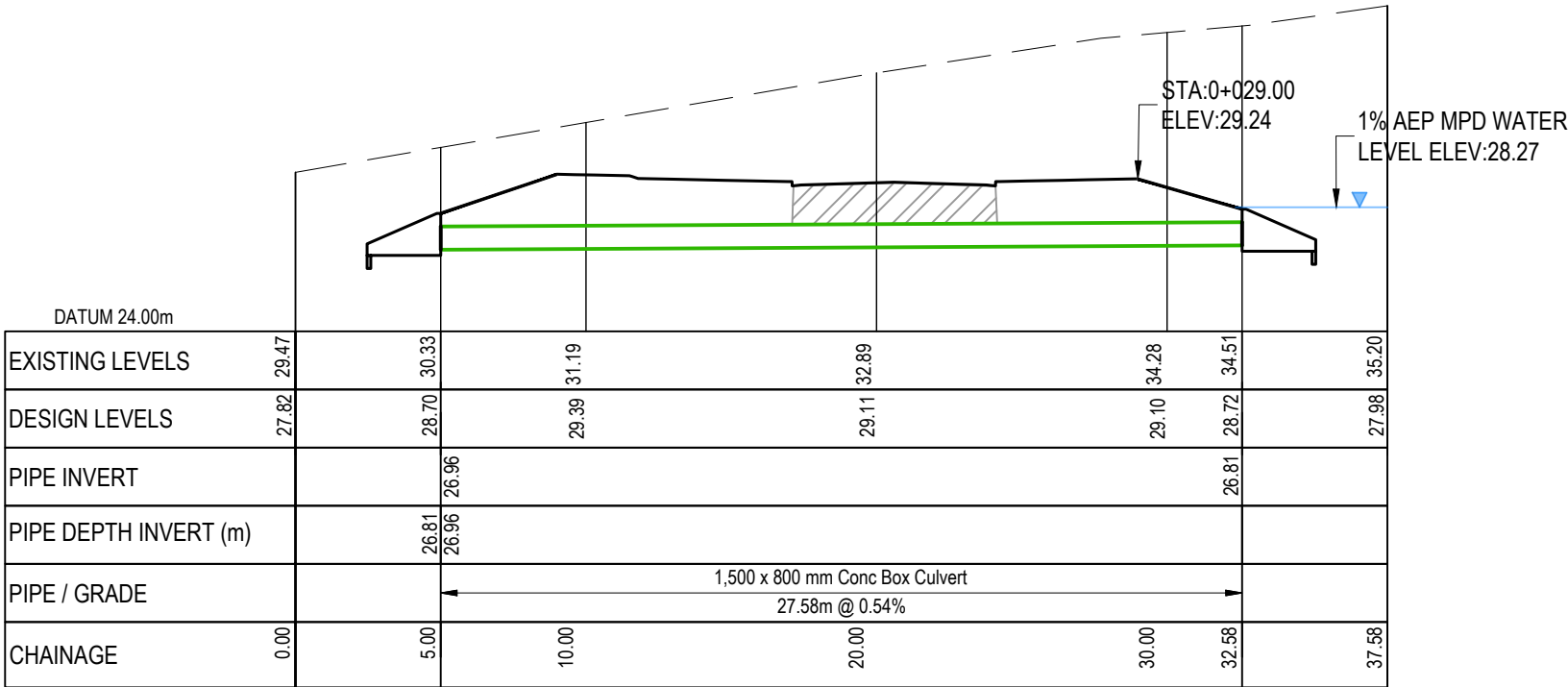
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 1 CULVERT 3
SHEET 1**

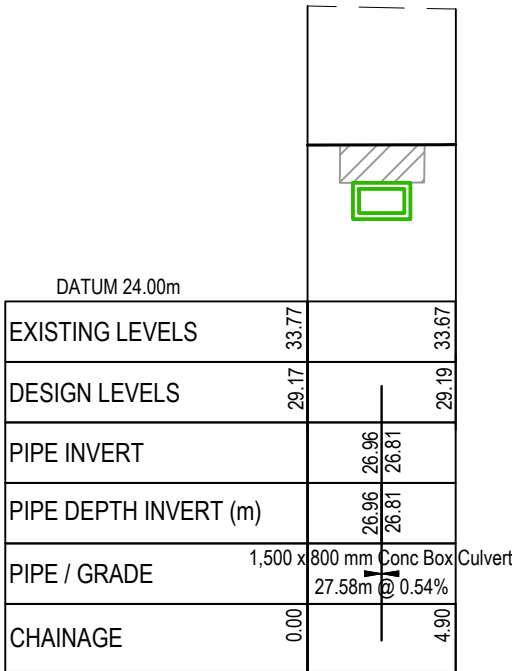
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Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4403-1
Rev	A

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DATE: 8/11/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 1 - CULVERT 3
SCALE: HORI 1:250 VERT 1:250



ROAD 1 - CULVERT 3 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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- LEGEND:
- — — — — EX GROUND SURFACE
 - — — — — PR FINISHED GROUND SURFACE
 - — — — — SW PIPE CROSSING
 - — — — — SW CULVERT CROSSING
 - — — — — HARDFILL BACKFILL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

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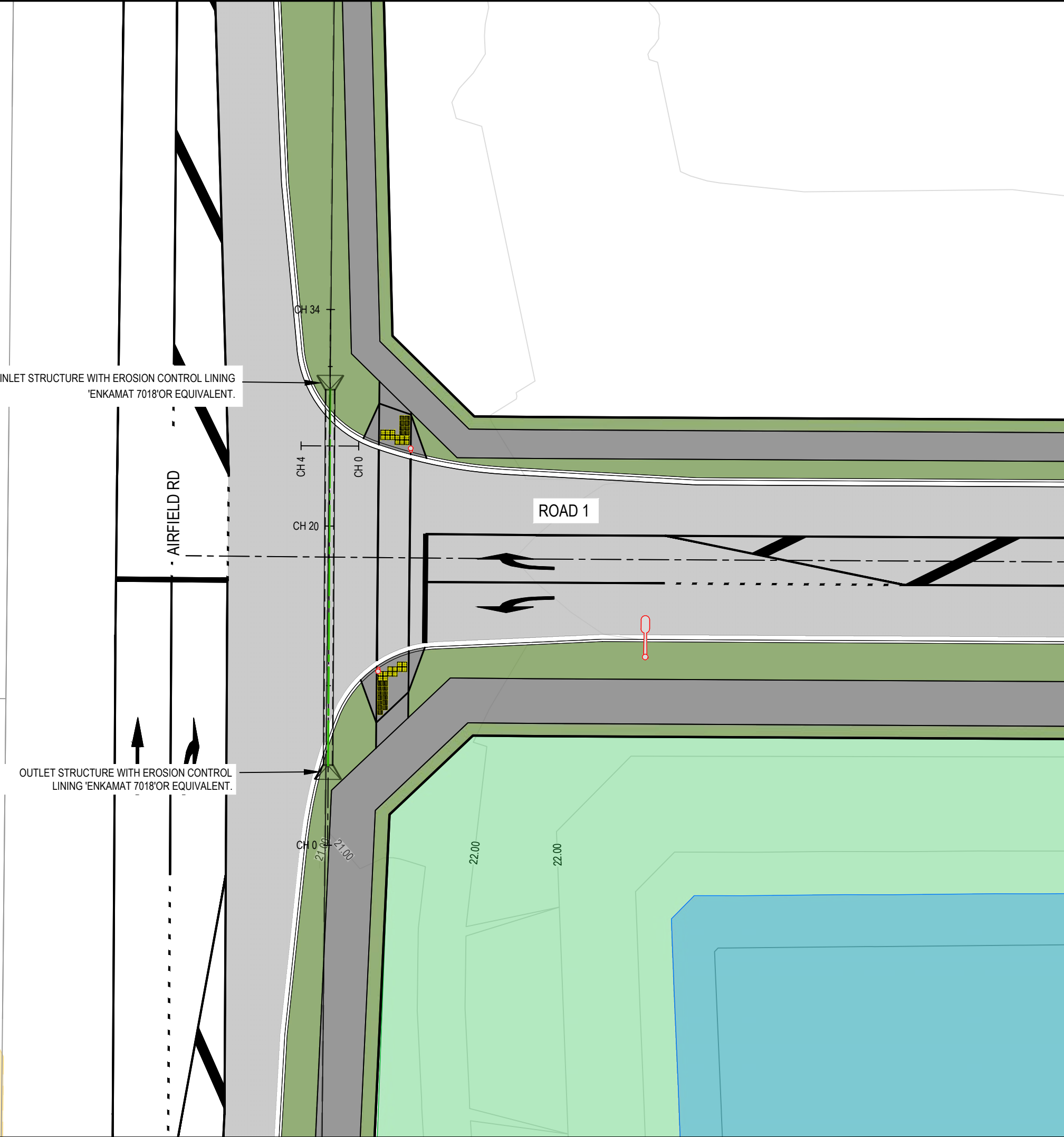
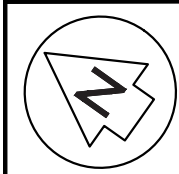
5 Owens Road, Epsom

Auckland 1023

Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 1 CULVERT 3
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4403-2
Rev	A



INLET STRUCTURE WITH EROSION CONTROL LINING
'ENKAMAT 7018' OR EQUIVALENT.

AIRFIELD RD

ROAD 1

OUTLET STRUCTURE WITH EROSION CONTROL
LINING 'ENKAMAT 7018' OR EQUIVALENT.

CH 34

CH 4

CH 0

CH 20

CH 0

21.00

22.00

22.00

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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---	PR BDY
---	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025



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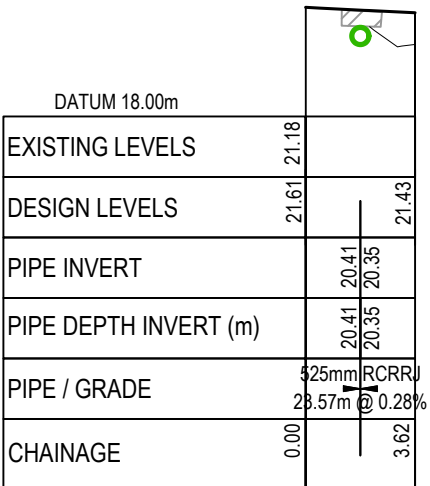
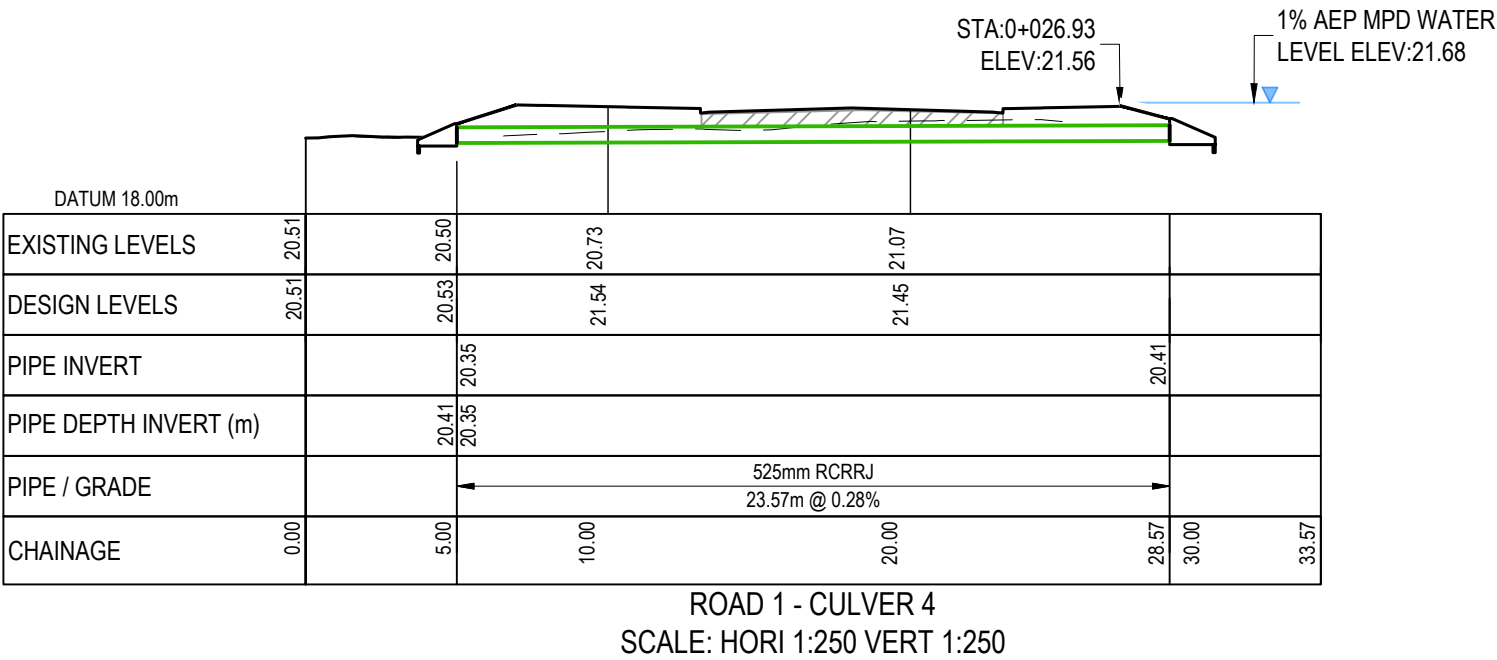
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 1 CULVERT 4
SHEET 1**

Project no.	215010		
Scale	1:250 @ A3		
Cad file	215010-M-C440.DWG		
Drawing no.	M-C4404-1	Rev	A

RESOURCE CONSENT

DATE: 8/1/25 FILE PATH: F:\WAYRN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 1 - CULVERT 4 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project

SUNFIELD DEVELOPMENT

ARDMORE, AUCKLAND

MASTER PLANNING

FOR SUNFIELD

DEVELOPMENTS LIMITED

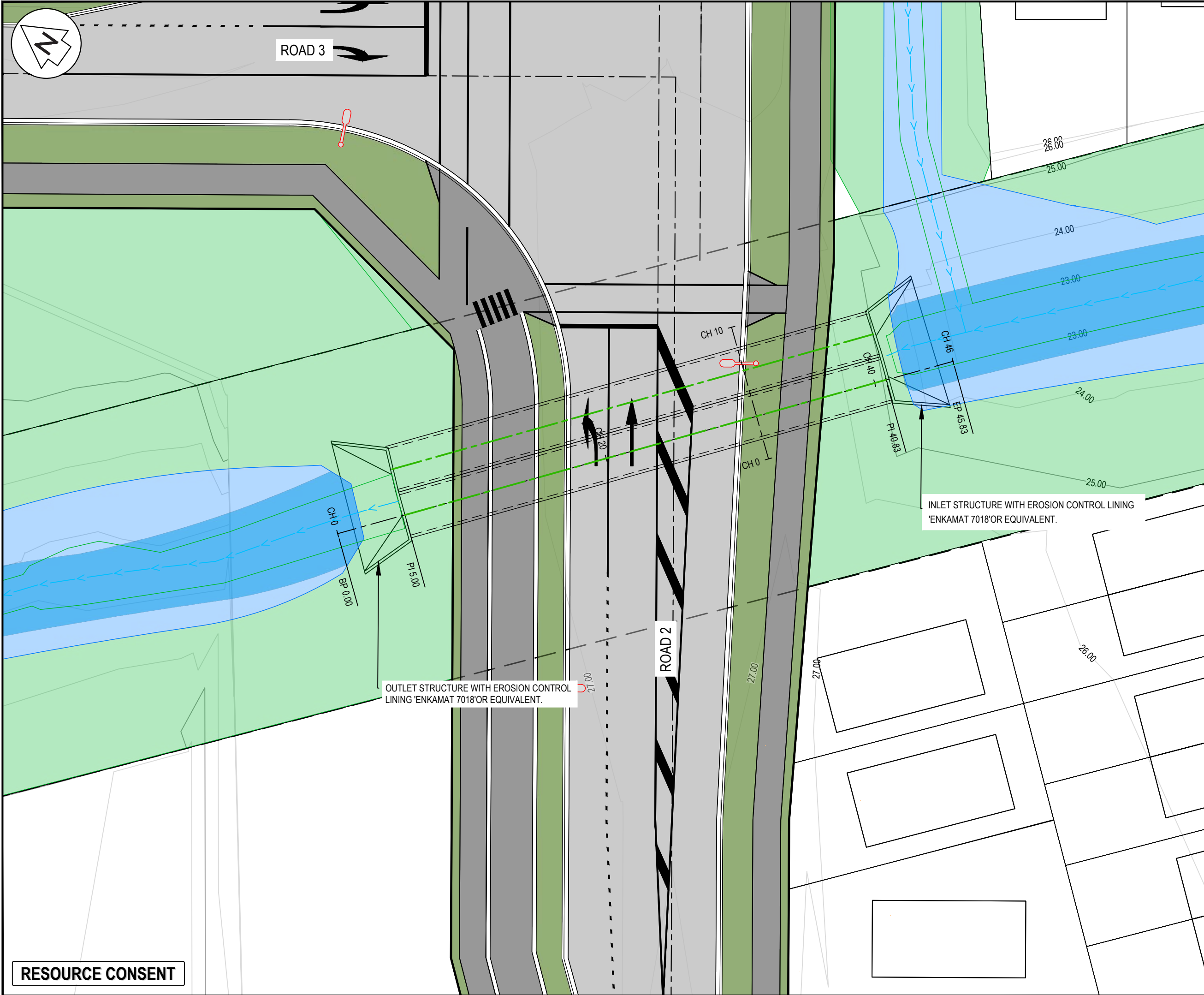
Title

PROPOSED

ROAD 1 CULVERT 4

SHEET 2

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4404-2
Rev	A



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---	EX BDY
---	PR BDY
---	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
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A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
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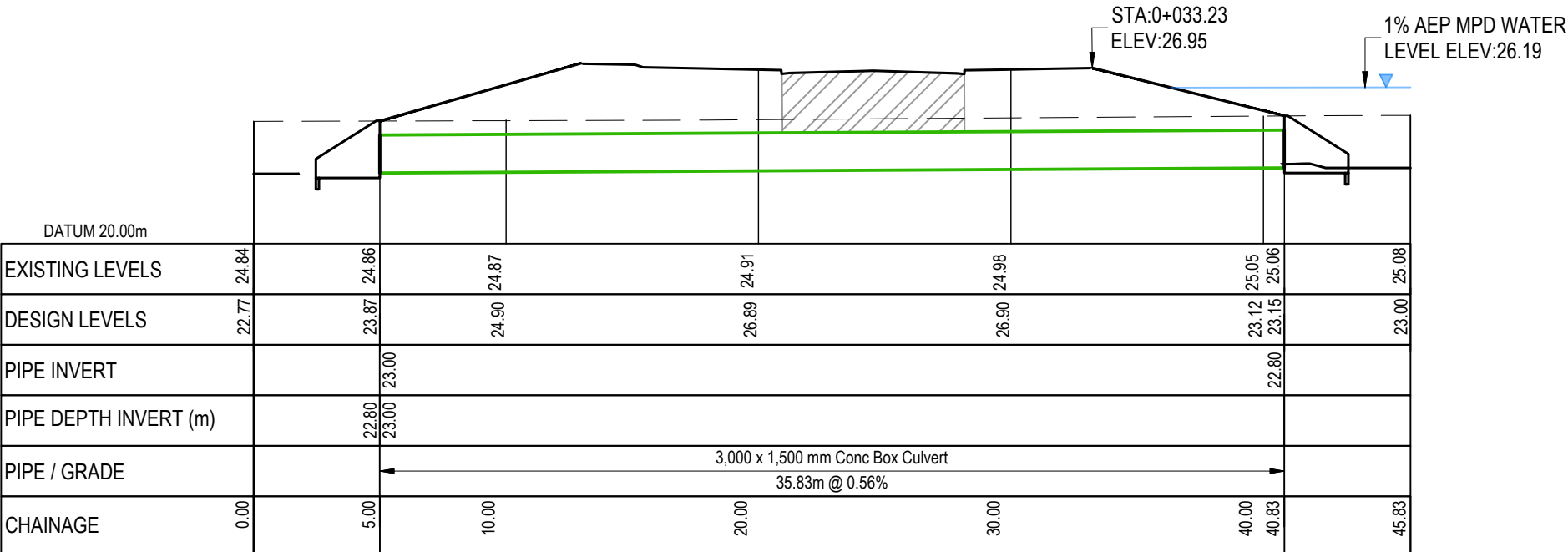
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 2 CULVERT 1
SHEET 1**

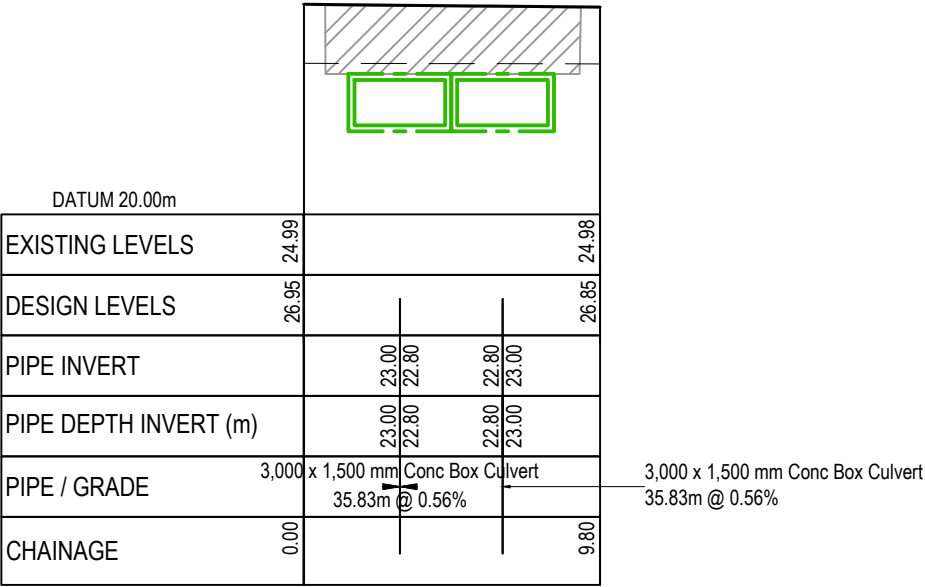
Project no.	215010
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Cad file	215010-M-C440.DWG
Drawing no.	M-C4405-1
Rev	A

RESOURCE CONSENT

DATE: 8/1/25 FILE PATH: F:\MAYN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 2 - CULVERT 1
SCALE: HORI 1:250 VERT 1:250



ROAD 2 - CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

- NOTES
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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

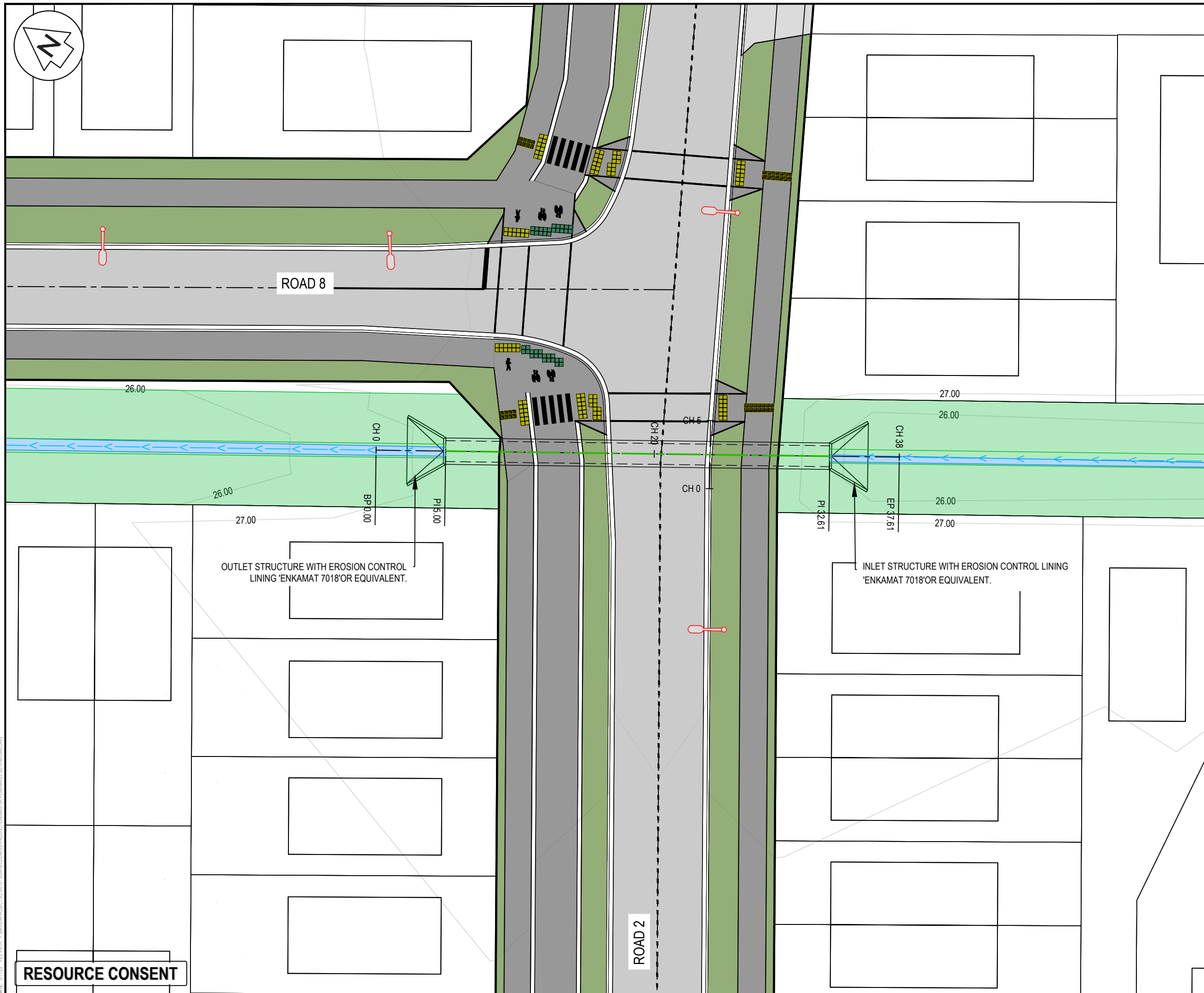
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 2 CULVERT 1
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4405-2
Rev	A



- ## NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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LEGEND

-
- EX BDY
 PR BDY
 SWALE FLOW DIRECTION
 SWALE TOP/BASE
 PR SW SWALES
 EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
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Project

**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
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FOR SUNFIELD
DEVELOPMENTS LIMITED**

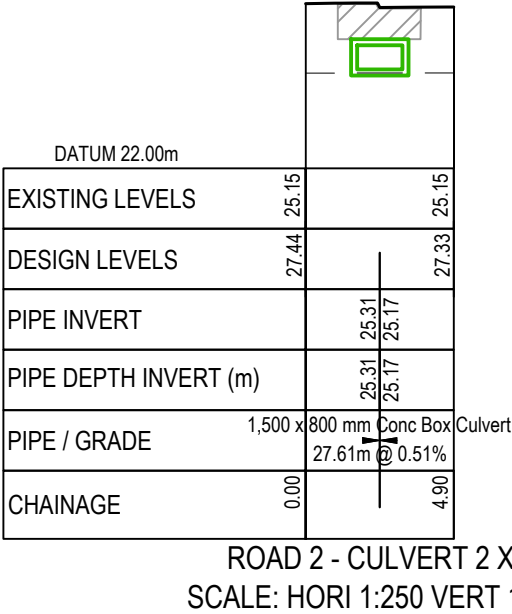
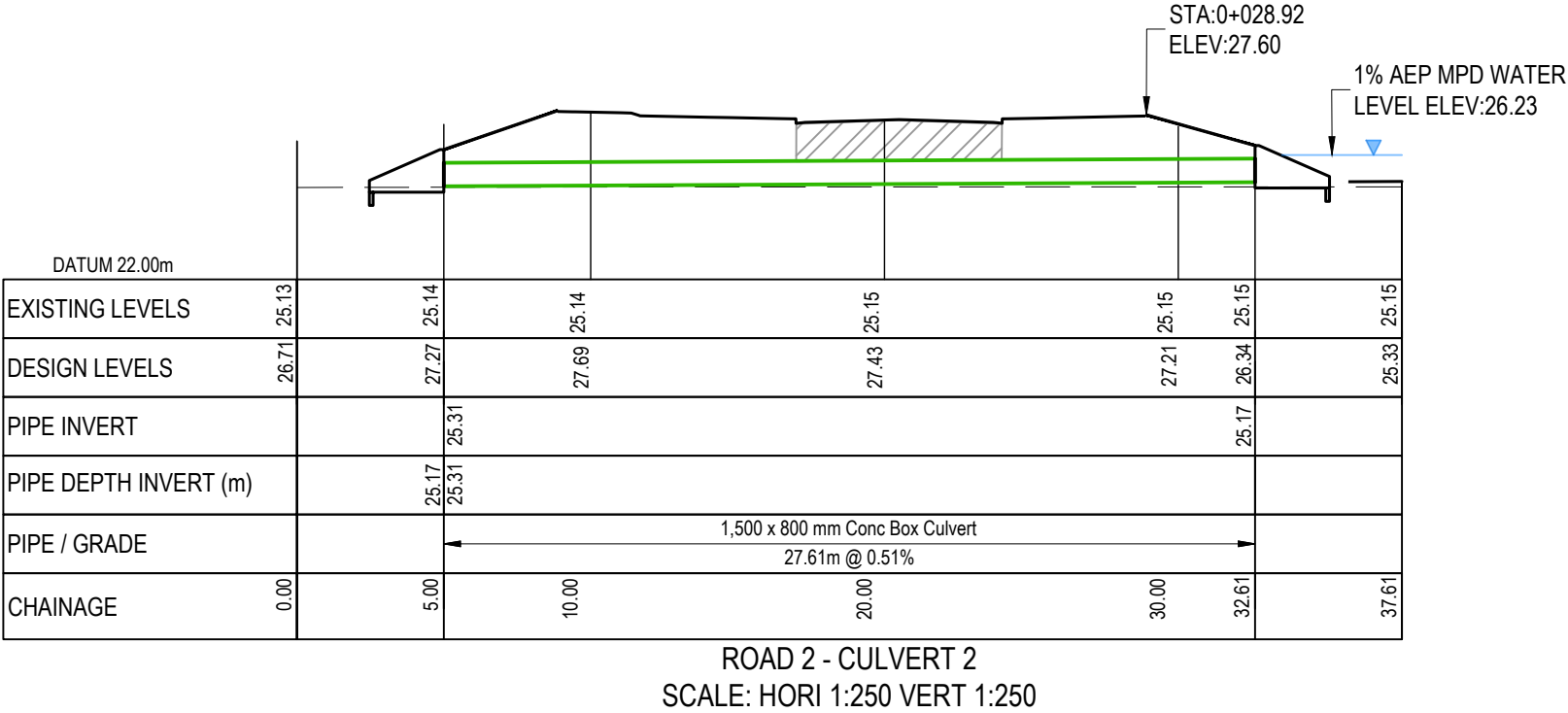
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**PROPOSED
ROAD 2 CULVERT 2
SHEET 1**

Project no.	215010		
Scale	1:250 @ A3		
Cad file	215010-M-C440.DWG		
Drawing no.	M-C4406-1	Rev	A

RESOURCE CONSENT

DATE: 8/1/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



RESOURCE CONSENT

- NOTES
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LEGEND:

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- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
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5 Owens Road, Epsom

Auckland 1023

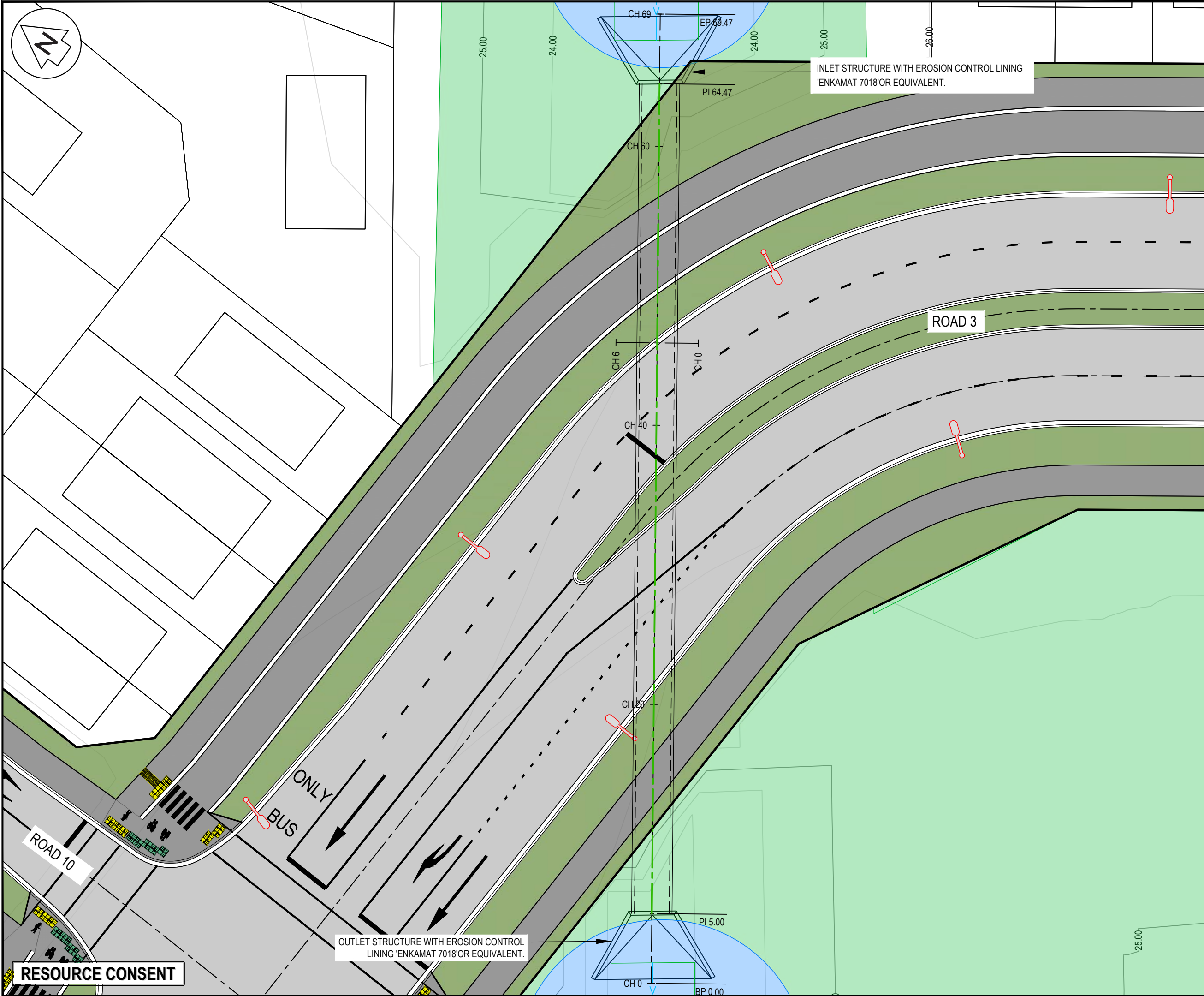
Project

SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED

Title

PROPOSED
ROAD 2 CULVERT 2
SHEET 2

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4406-2
Rev	A



- 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 THE NEW ZEALAND VERTICAL DATUM (NZVD) 2016.
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 6. HEAVY DUTY MANHOLE LIDS AND FRAMES TO BE USED IN TRAFFICKED AREAS.
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LEGEND

---	EX BDY
---	PR BDY
---	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

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Auckland 1023

Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 3 CULVERT 1
SHEET 1**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4607-1
Rev	A

DATE: 8/10/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\DWG\3-PRODUCTION\MASTER PLAN\N0215010-M-C440.DWG

RESOURCE CONSENT

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- 0 SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project

SUNFIELD DEVELOPMENT

ARDMORE, AUCKLAND

MASTER PLANNING

FOR SUNFIELD

DEVELOPMENTS LIMITED

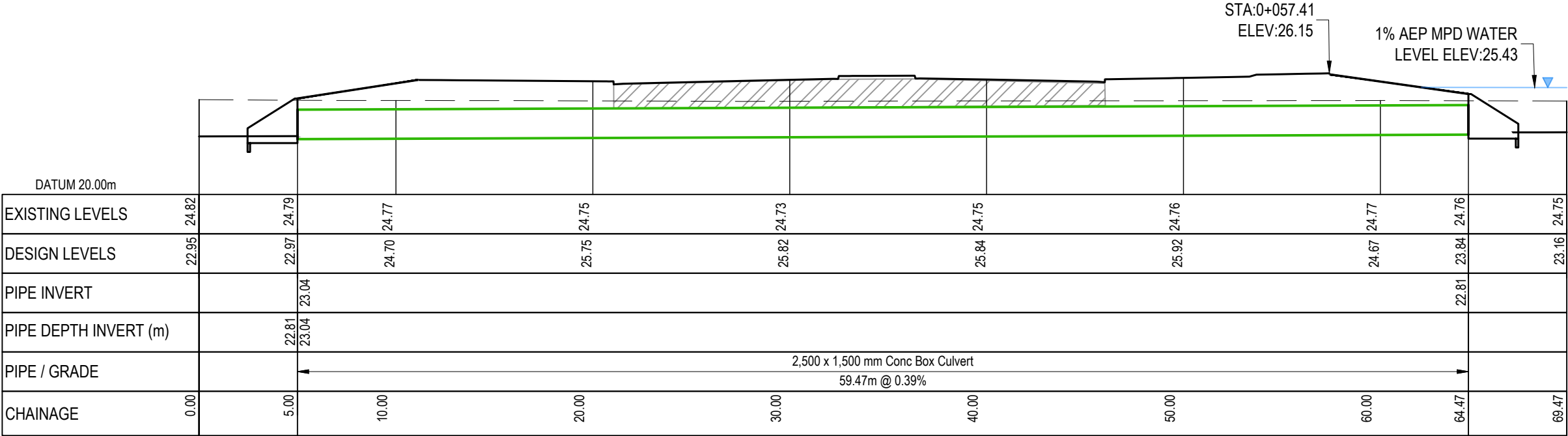
Title

PROPOSED

ROAD 3 CULVERT 1

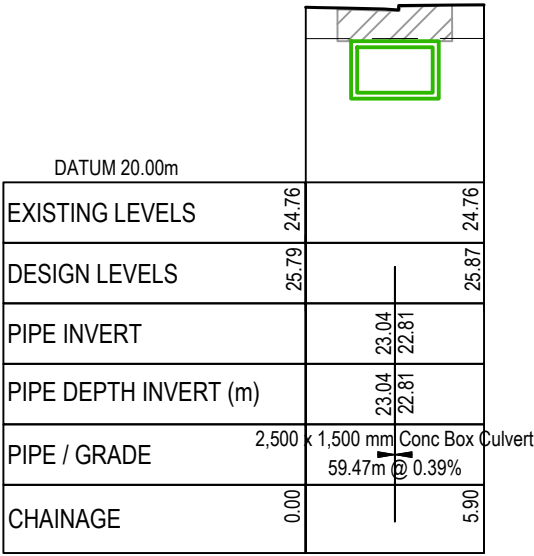
SHEET 2

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4607-2
Rev	A



ROAD 3 - CULVERT 1

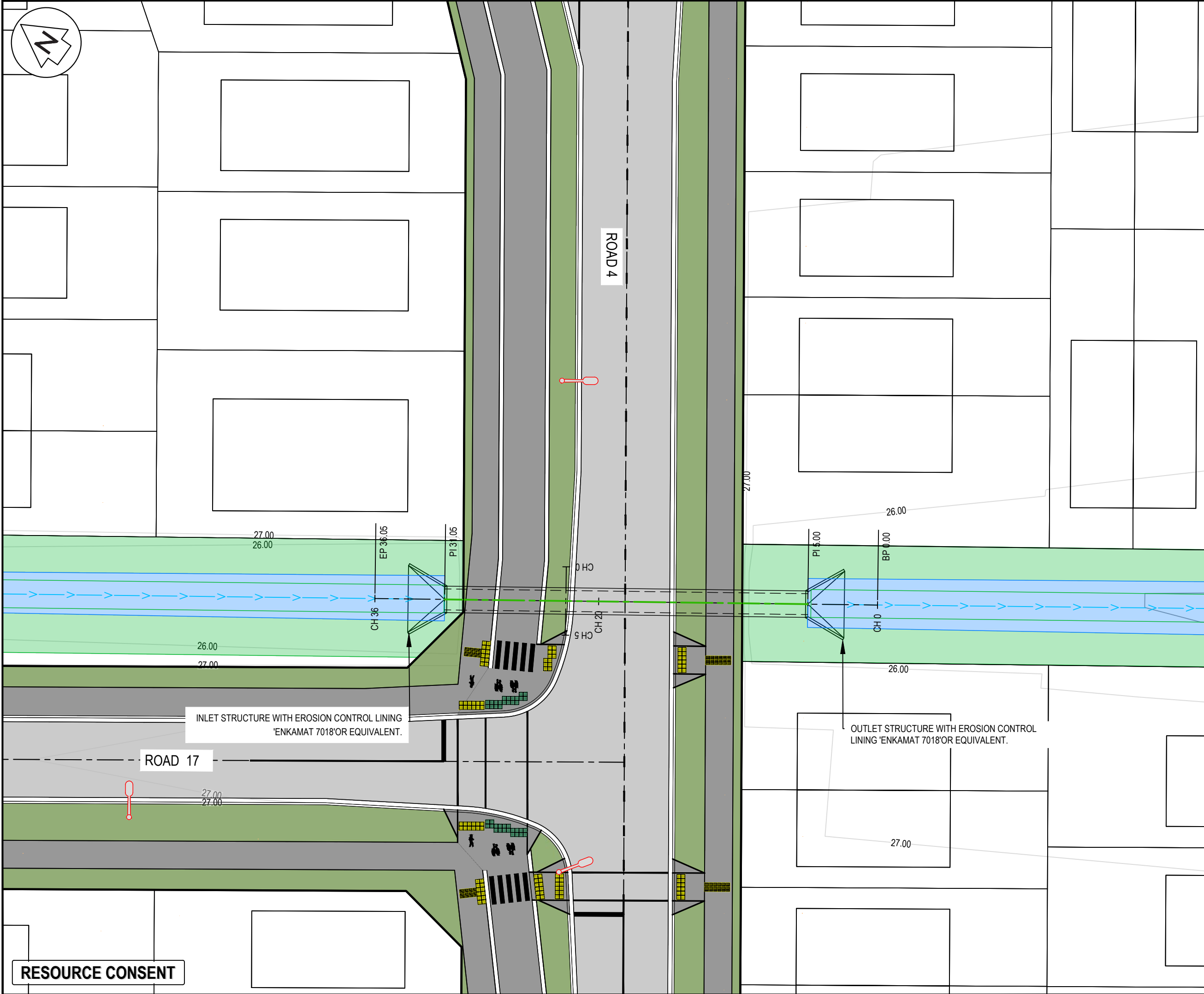
SCALE: HORI 1:250 VERT 1:250



ROAD 3 - CULVERT 1 XS

SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT



- NOTES
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LEGEND

---	EX BDY
---	PR BDY
---	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

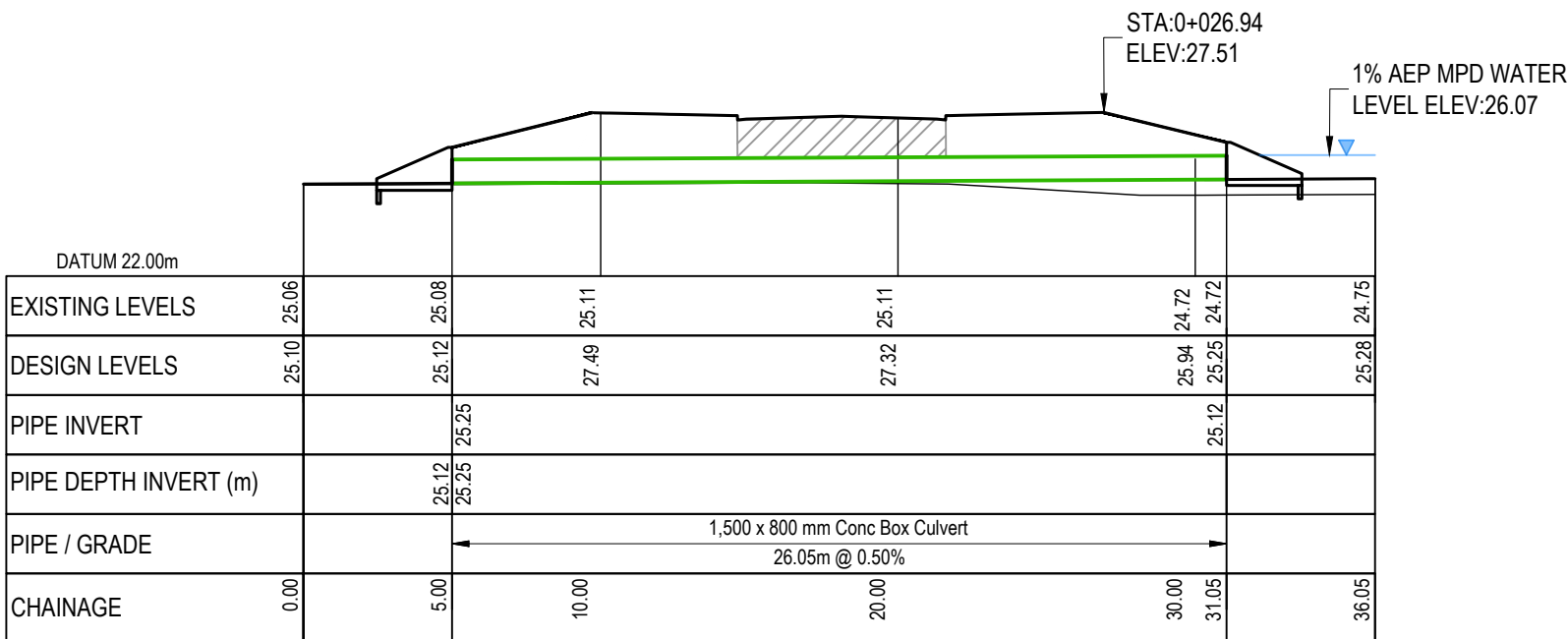
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	Survey	SURVEYWORX	02/2021
	Design	YW	11/2024
	Drawn	OQ	11/2024
	Checked	JP/LC	02/2025

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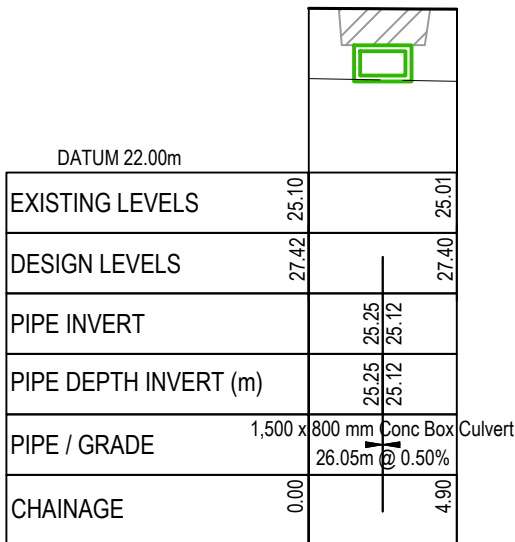
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 4 CULVERT 1
SHEET 1**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4408-1
Rev	A



ROAD 4 - CULVERT 1
SCALE: HORI 1:250 VERT 1:250



ROAD 4 - CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

- NOTES
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LEGEND:

--- EX GROUND SURFACE
--- PR FINISHED GROUND SURFACE
SW PIPE CROSSING
SW CULVERT CROSSING
HARDFILL BACKFILL

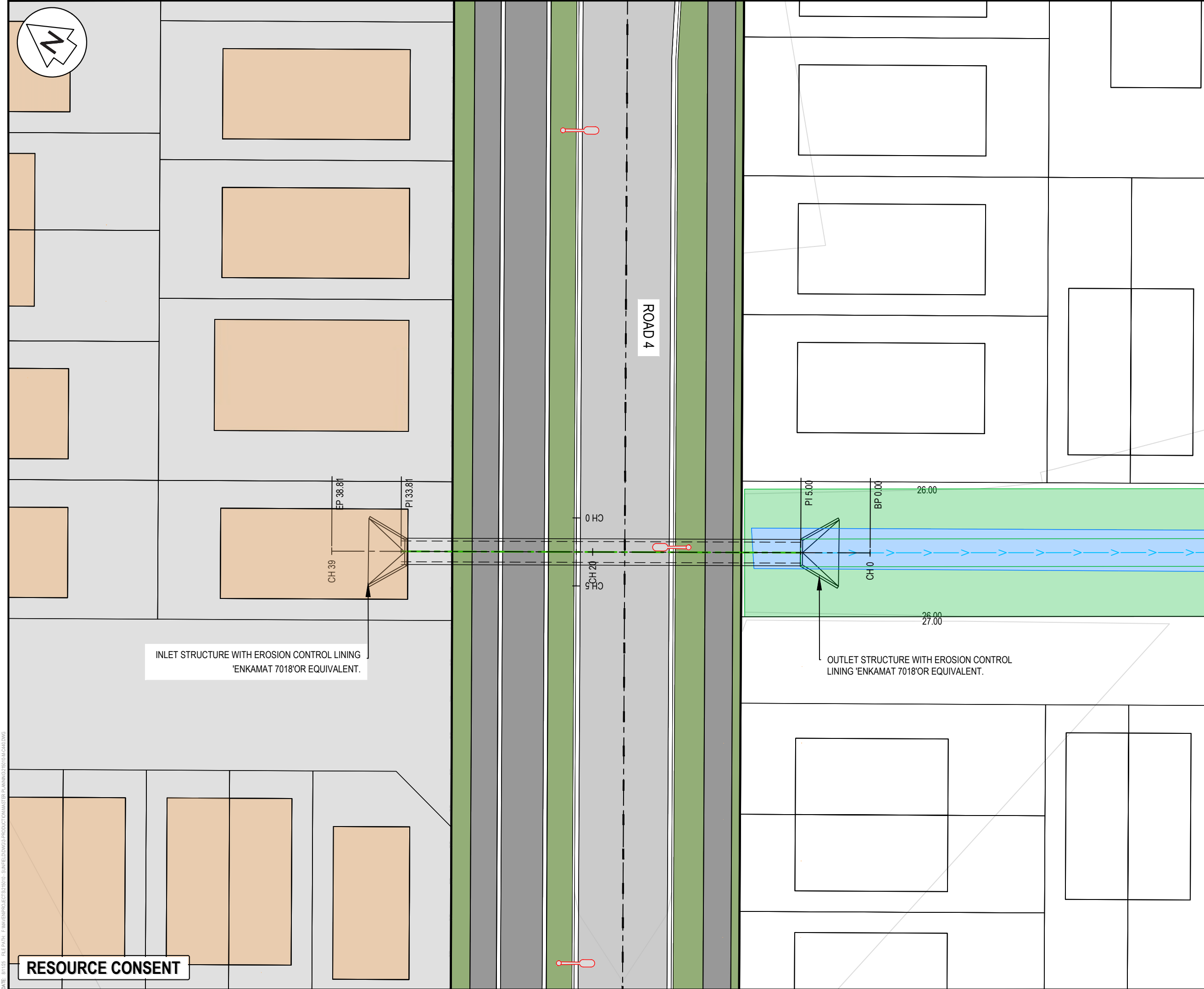
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 4 CULVERT 1
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4408-2
Rev	A



- NOTES
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- LEGEND
- EX BDY
 - PR BDY
 - SWALE FLOW DIRECTION
 - SWALE TOP/BASE
 - PR SW SWALES
 - EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 4 CULVERT 2
SHEET 1**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4409-1
Rev	A

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project

SUNFIELD DEVELOPMENT

ARDMORE, AUCKLAND

MASTER PLANNING

FOR SUNFIELD

DEVELOPMENTS LIMITED

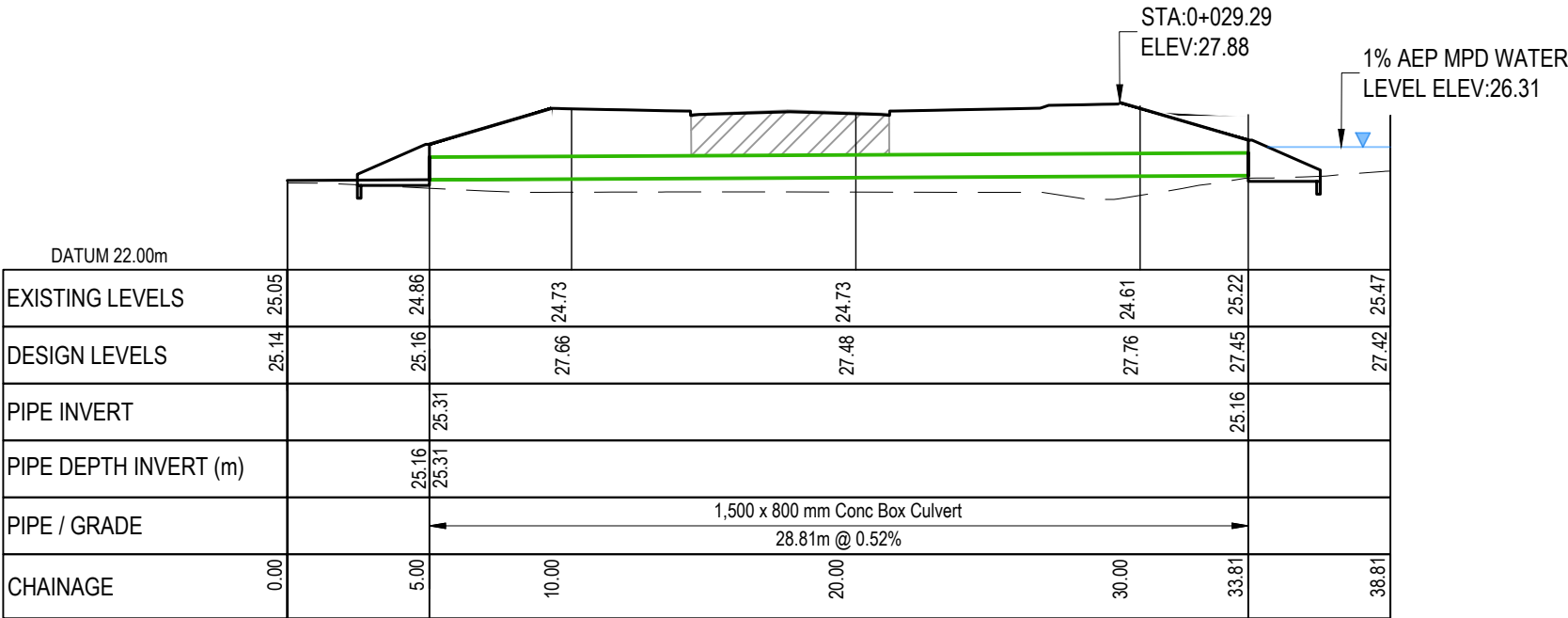
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PROPOSED

ROAD 4 CULVERT 2

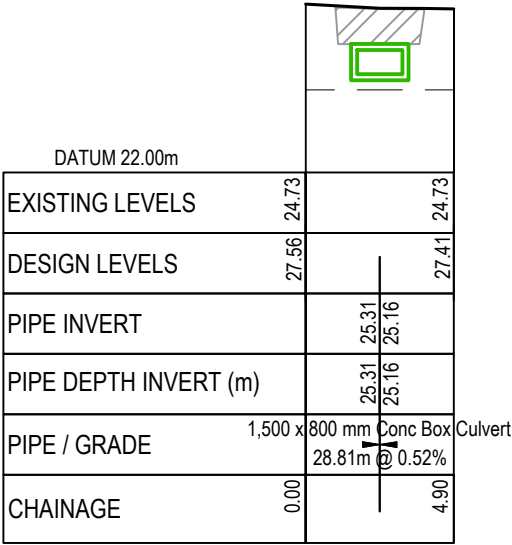
SHEET 2

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4409-2
Rev	A



ROAD 4 - CULVERT 2

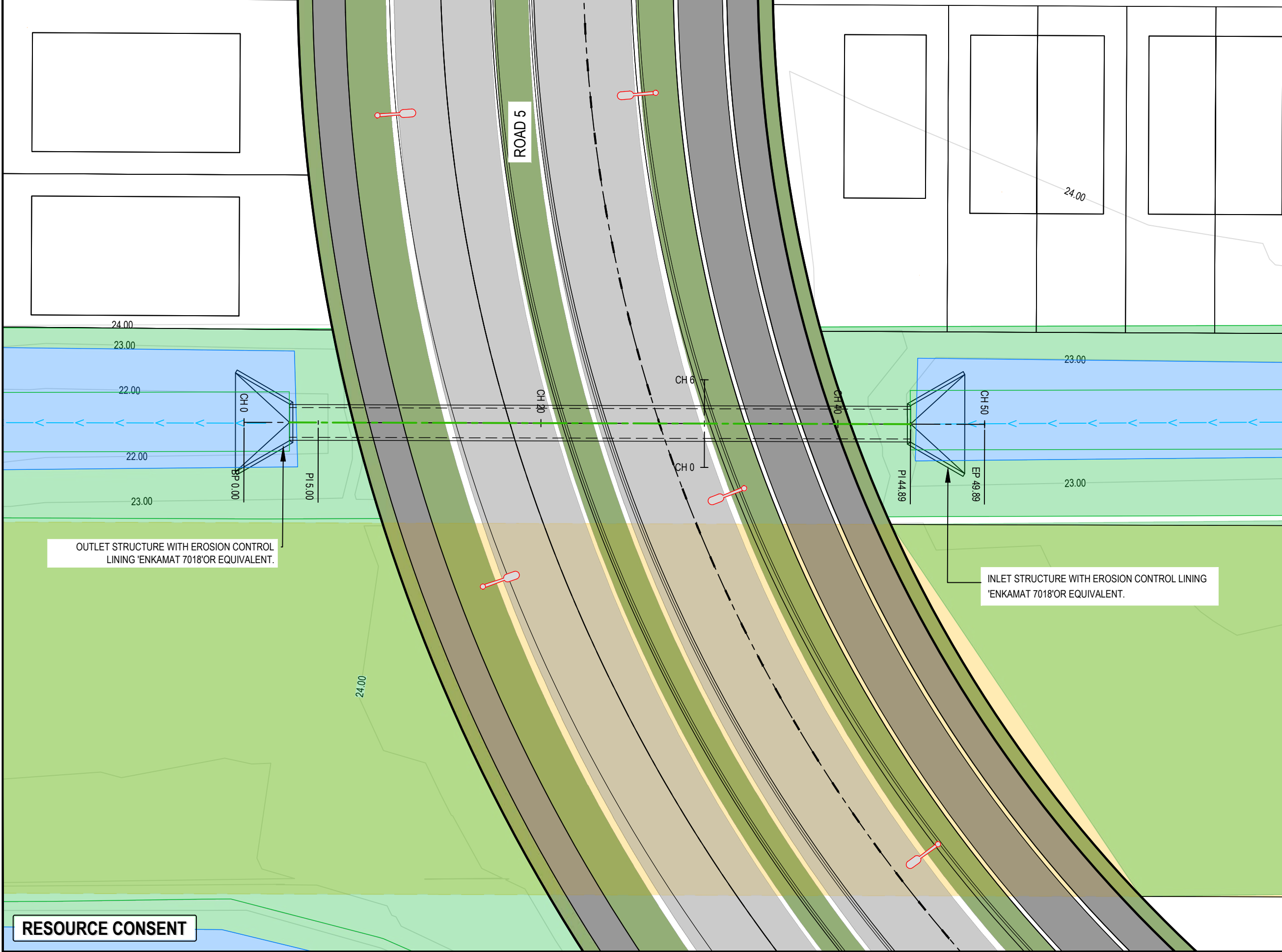
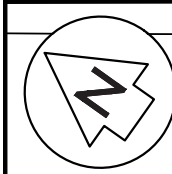
SCALE: HORI 1:250 VERT 1:250



ROAD 4 - CULVERT 2 XS

SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT



- NOTES
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LEGEND

---	EX BDY
---	PR BDY
---	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025



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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 5 CULVERT 1
SHEET 1**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4410-1
Rev	A

RESOURCE CONSENT

- NOTES
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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
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Project

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MASTER PLANNING

FOR SUNFIELD

DEVELOPMENTS LIMITED

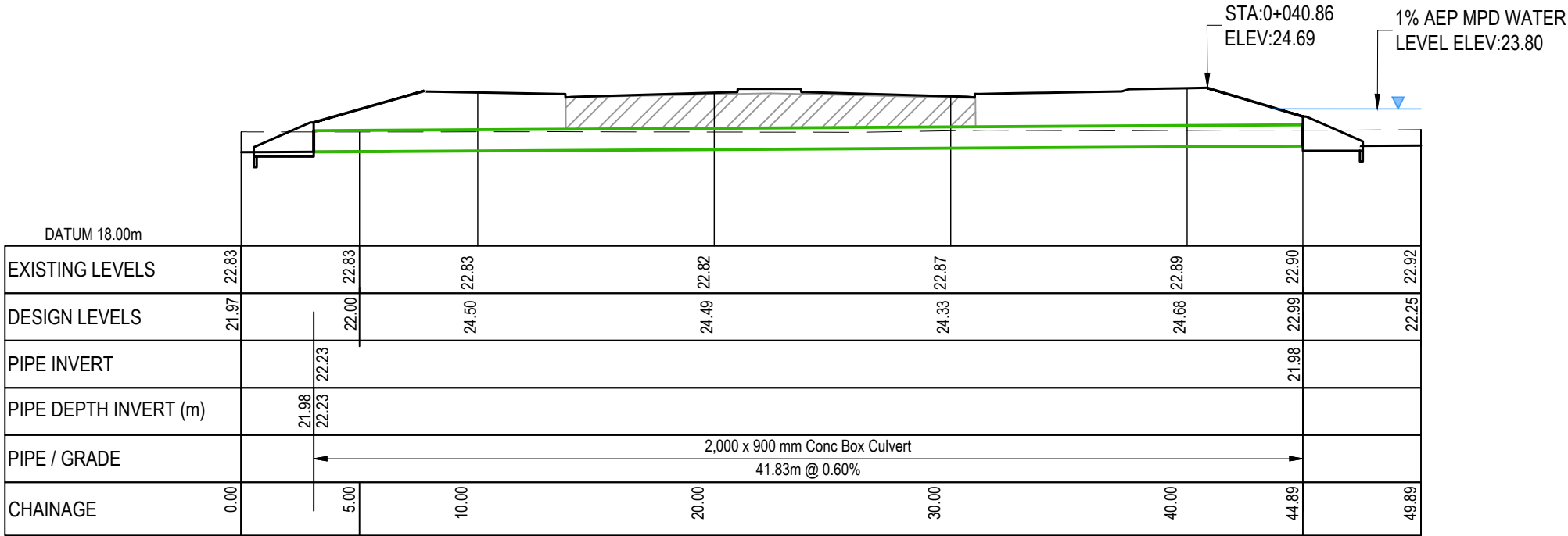
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PROPOSED

ROAD 5 CULVERT 1

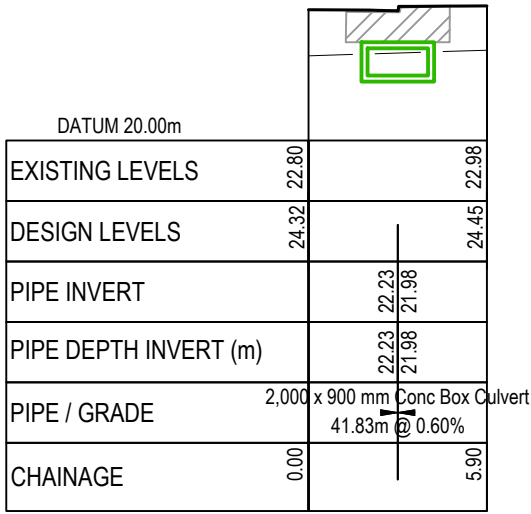
SHEET 2

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4410-2
Rev	A



ROAD 5 - CULVERT 1

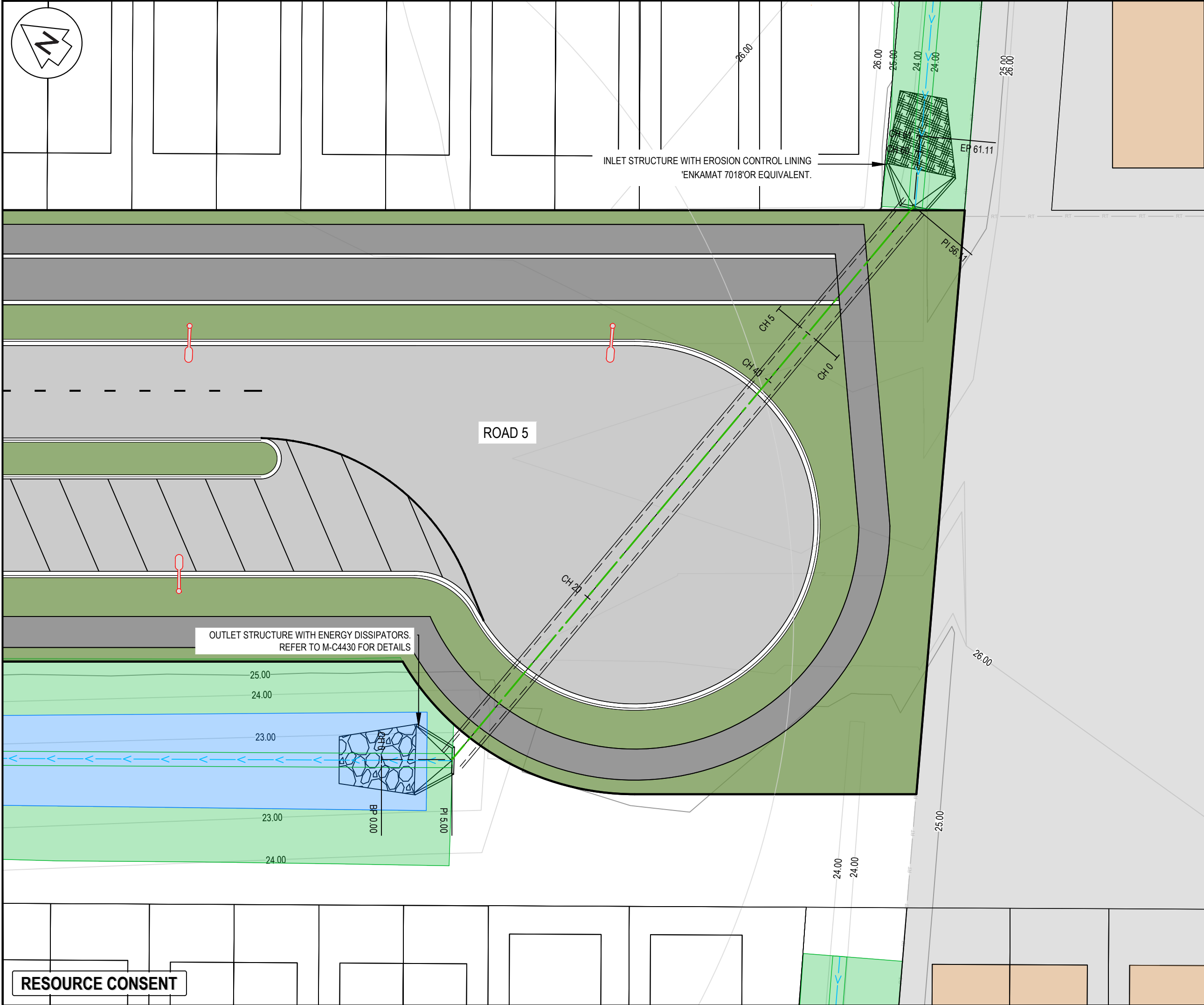
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ROAD 5 - CULVERT 1 XS

SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT



- NOTES
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LEGEND

---	EX BDY
---	PR BDY
→→→	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
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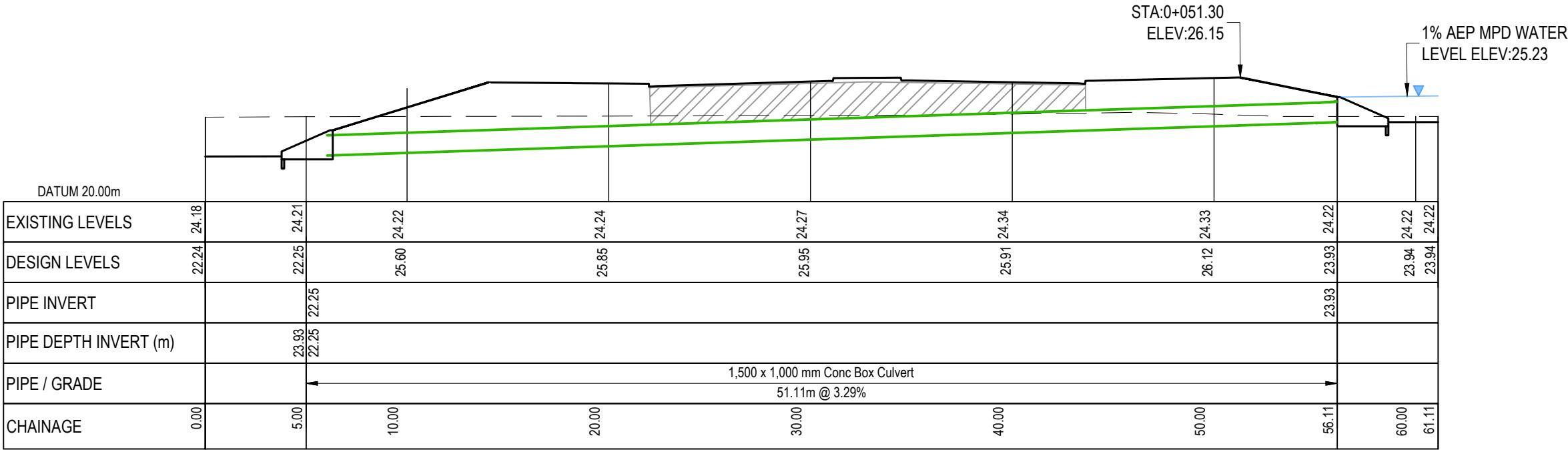
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Project
**SUNFIELD DEVELOPMENT
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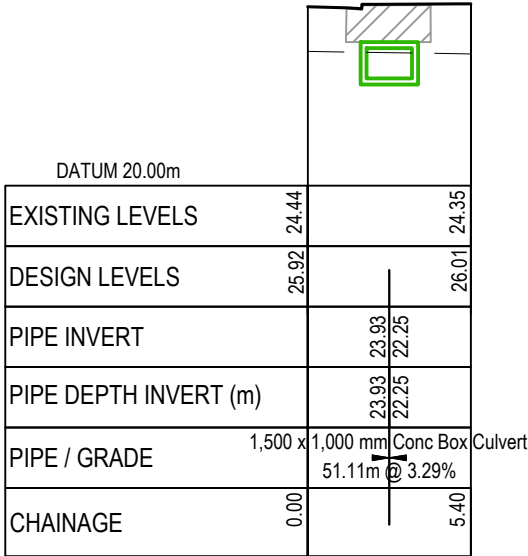
Title
**PROPOSED
ROAD 5 CULVERT 2
SHEET 1**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4411-1
Rev	A

DATE: 8/1/25 FILE PATH: F:\MAYN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 5 - CULVERT 2
SCALE: HORI 1:250 VERT 1:250



ROAD 5 - CULVERT 2 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

- NOTES
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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

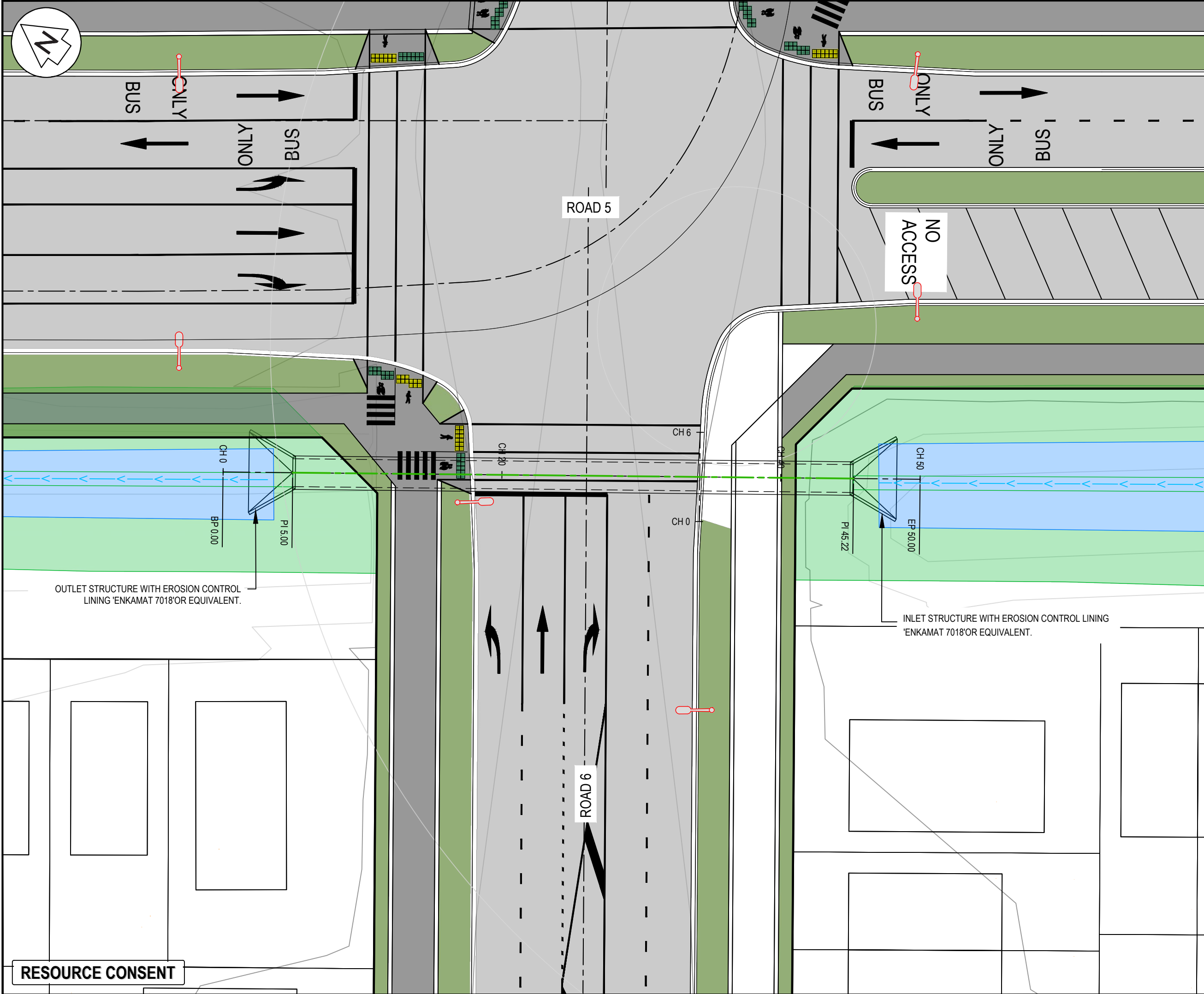
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 5 CULVERT 2
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4411-2
Rev	A



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 THE NEW ZEALAND VERTICAL DATUM (NZVD) 2016.
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5. 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
- PR BDY
- SWALE FLOW DIRECTION
- SWALE TOP/BASE
- PR SW SWALES
- EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

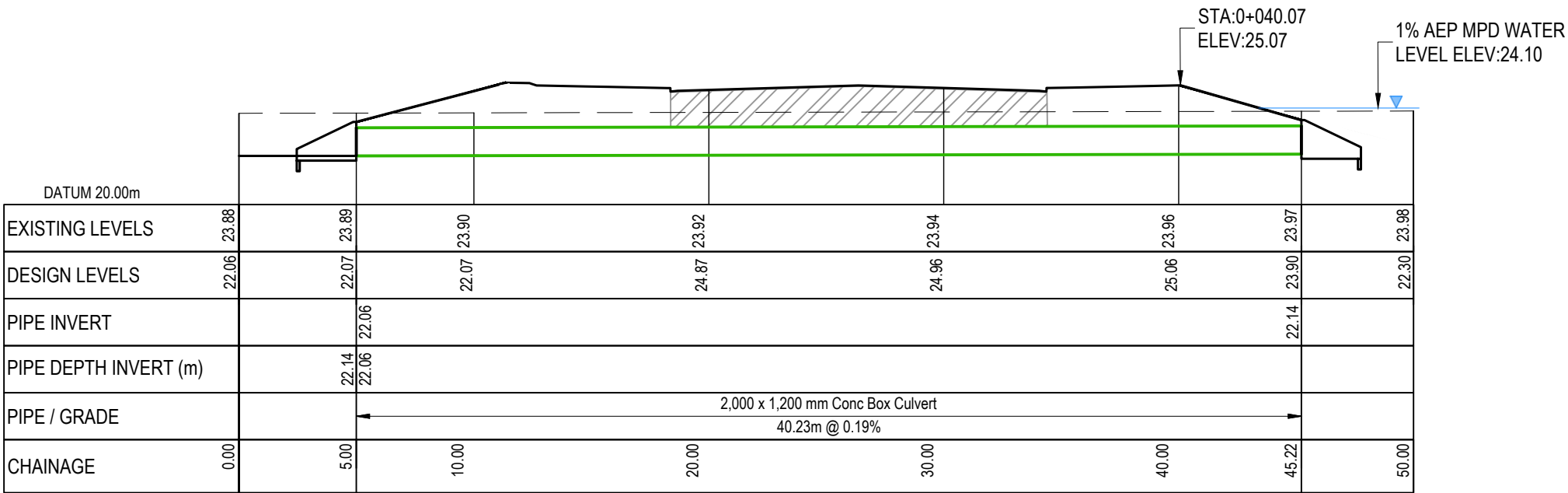
M **Maven Associates**
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ARDMORE, AUCKLAND
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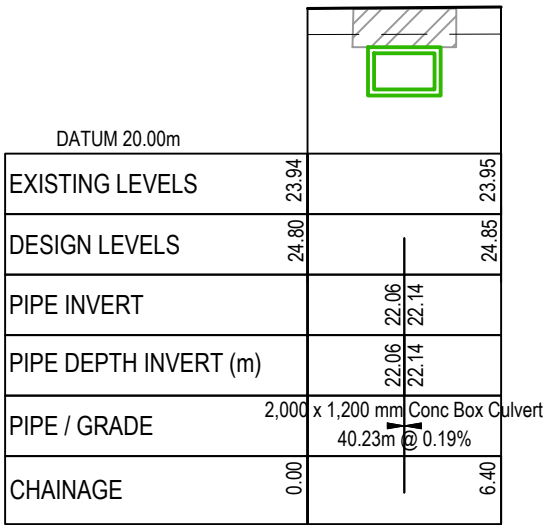
Title
**PROPOSED
ROAD 6 CULVERT 1
SHEET 1**

Project no.	215010		
Scale	1:250 @ A3		
Cad file	215010-M-C440.DWG		
Drawing no.	M-C4412-1	Rev	A

DATE: 8/1/25 FILE PATH: F:\MAYN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 6 - CULVERT 1
SCALE: HORI 1:250 VERT 1:250



ROAD 6 - CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- 0 SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

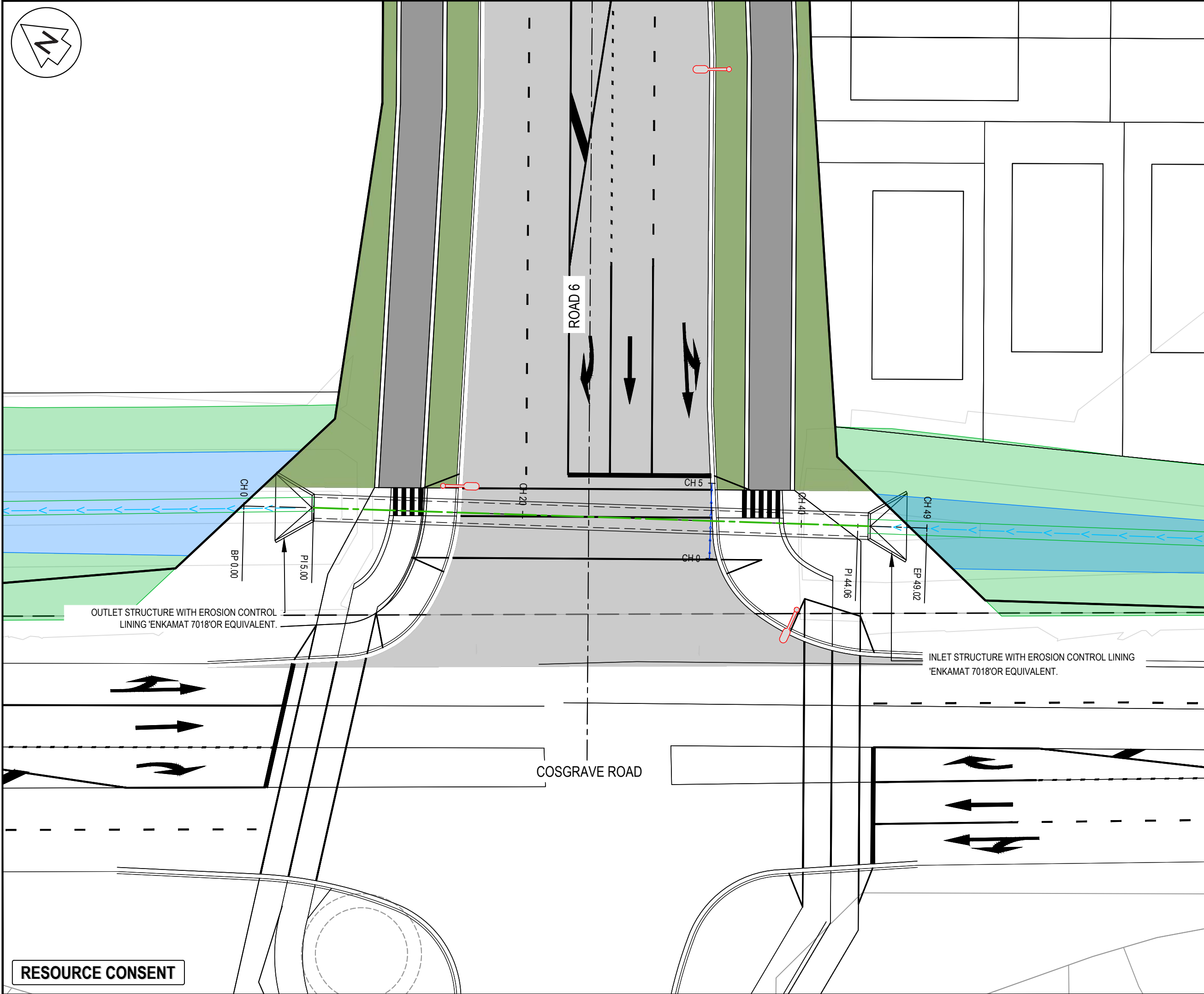
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 6 CULVERT 1
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4412-2
Rev	A



NOTES

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LEGEND

---	EX BDY
---	PR BDY
→→→	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
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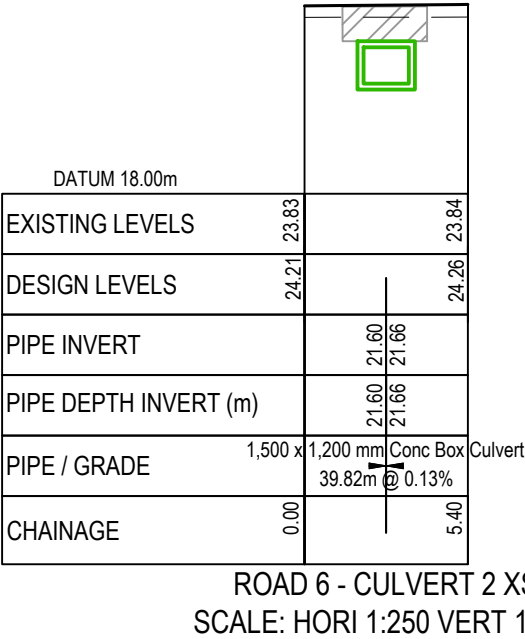
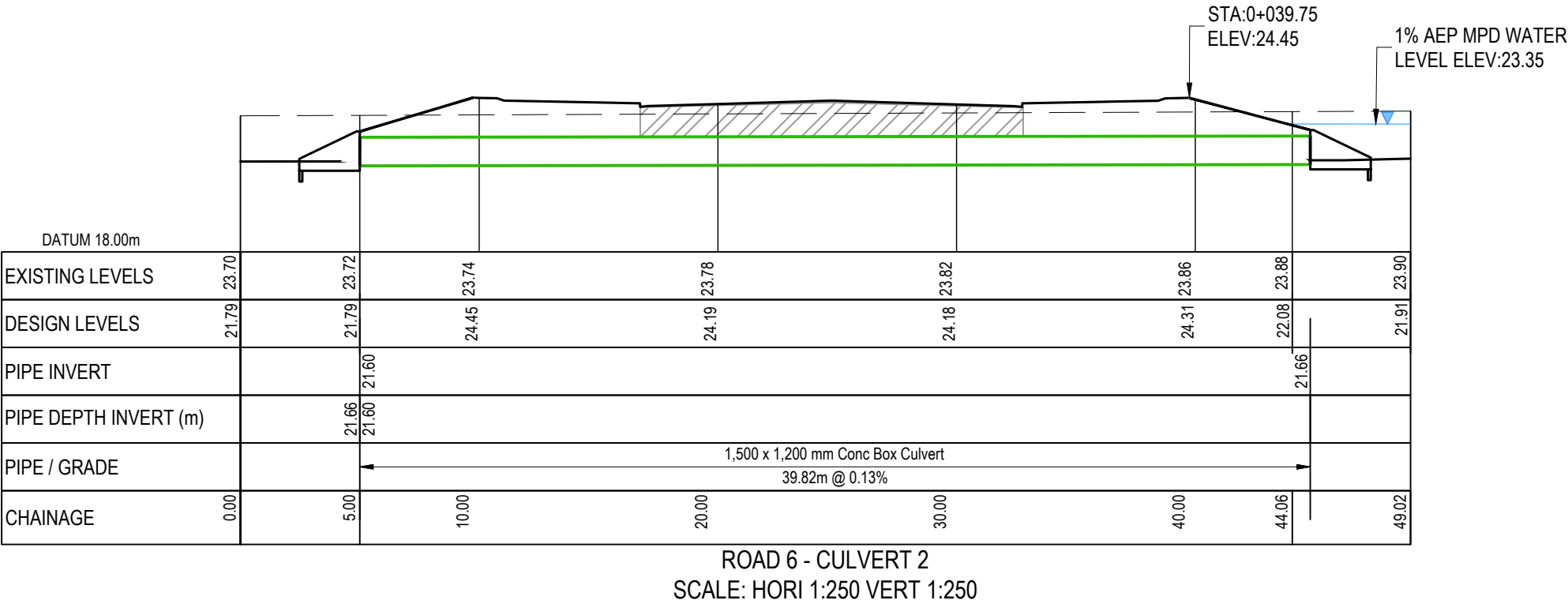
Title
**PROPOSED
ROAD 6 CULVERT 2
SHEET 1**

Project no.	215010		
Scale	1:250 @ A3		
Cad file	215010-M-C440.DWG		
Drawing no.	M-C4413-1	Rev	A

RESOURCE CONSENT

DATE: 8/10/25 FILE PATH: F:\MAVEN\PROJECTS\215010 - SUNFIELD\DWG\3-PRODUCTION\MASTER PLAN\N0215010-M-C440.DWG

DATE: 8/1/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



RESOURCE CONSENT

- NOTES
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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

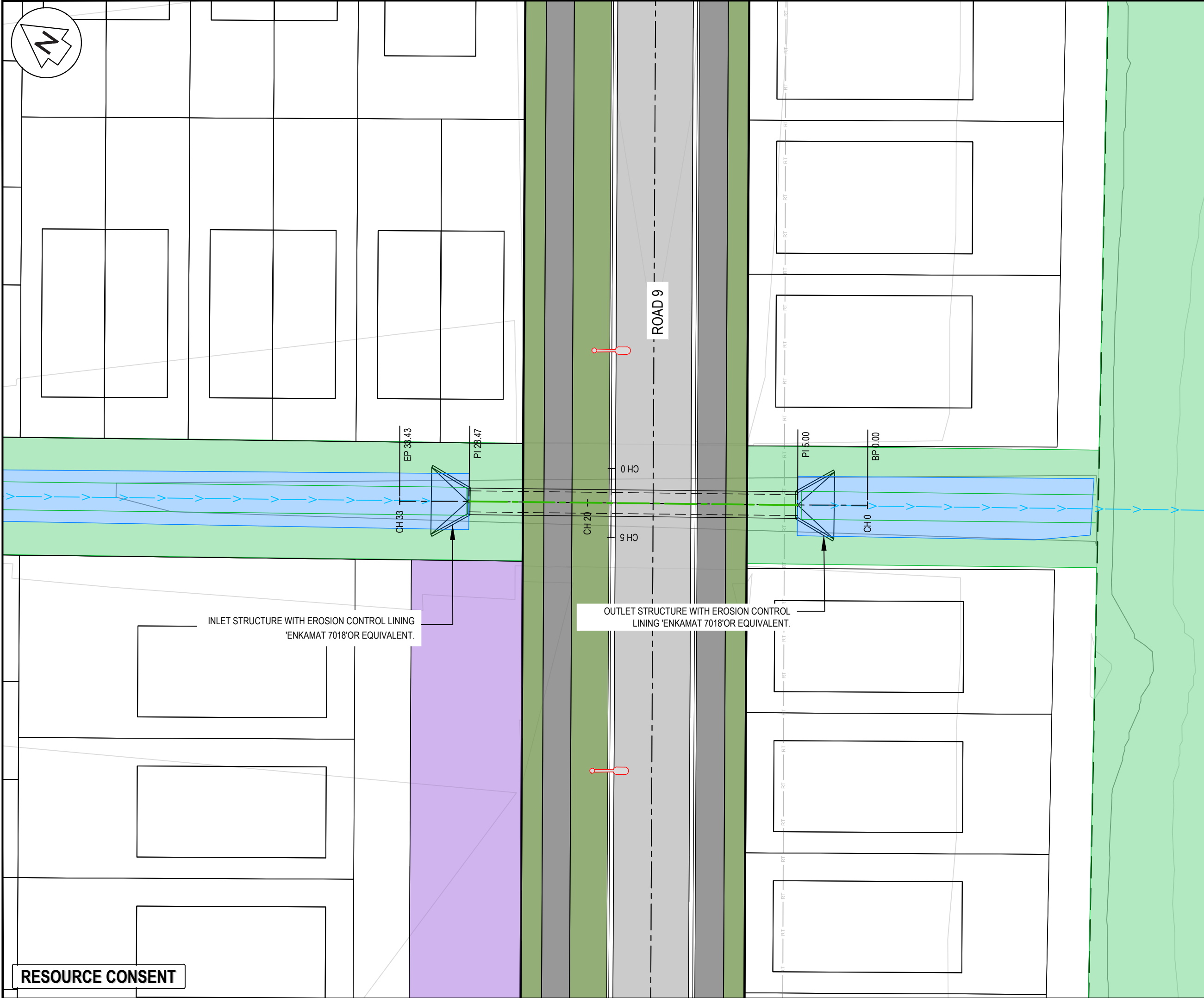
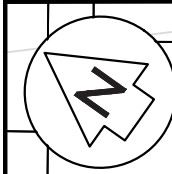
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 6 CULVERT 2
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4413-2
Rev	A



- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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LEGEND

---	EX BDY
---	PR BDY
→→→→→	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025



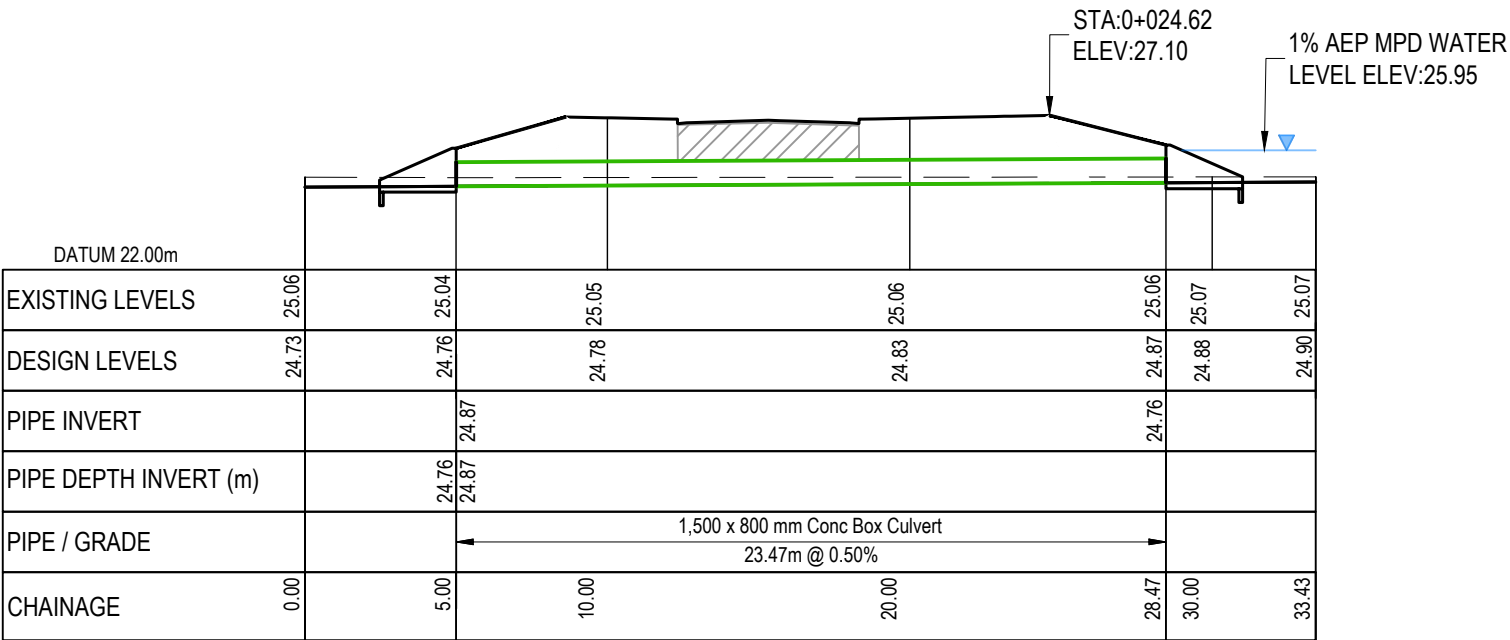
Maven Associates
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

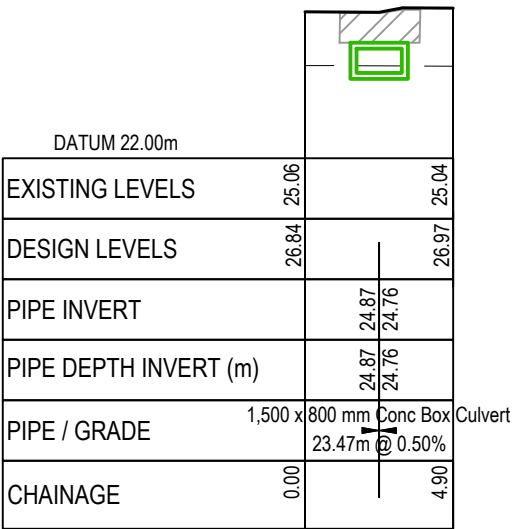
Title
**PROPOSED
ROAD 9 CULVERT 1
SHEET 1**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4414-1
Rev	A

DATE: 8/1/25 FILE PATH: F:\MAYN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 9 - CULVERT 1
SCALE: HORI 1:250 VERT 1:250



ROAD 9 - CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

- NOTES
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- LEGEND:
- EX GROUND SURFACE
 - PR FINISHED GROUND SURFACE
 - SW PIPE CROSSING
 - SW CULVERT CROSSING
 - HARDFILL BACKFILL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

M

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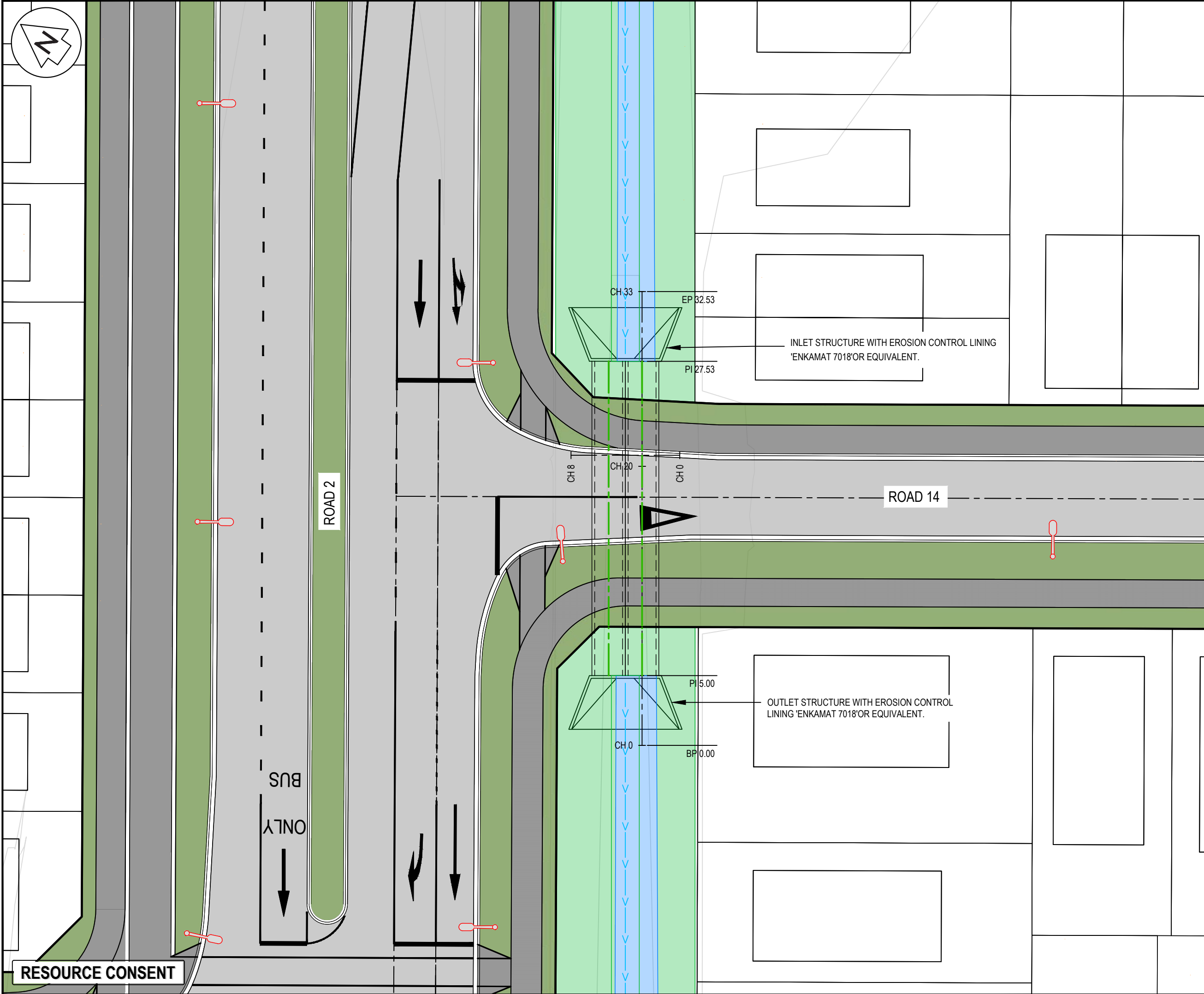
5 Owens Road, Epsom

Auckland 1023

Project
SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED

Title
PROPOSED
ROAD 9 CULVERT 1
SHEET 2

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4414-2
Rev	A



- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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LEGEND

---	EX BDY
---	PR BDY
→→→	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025



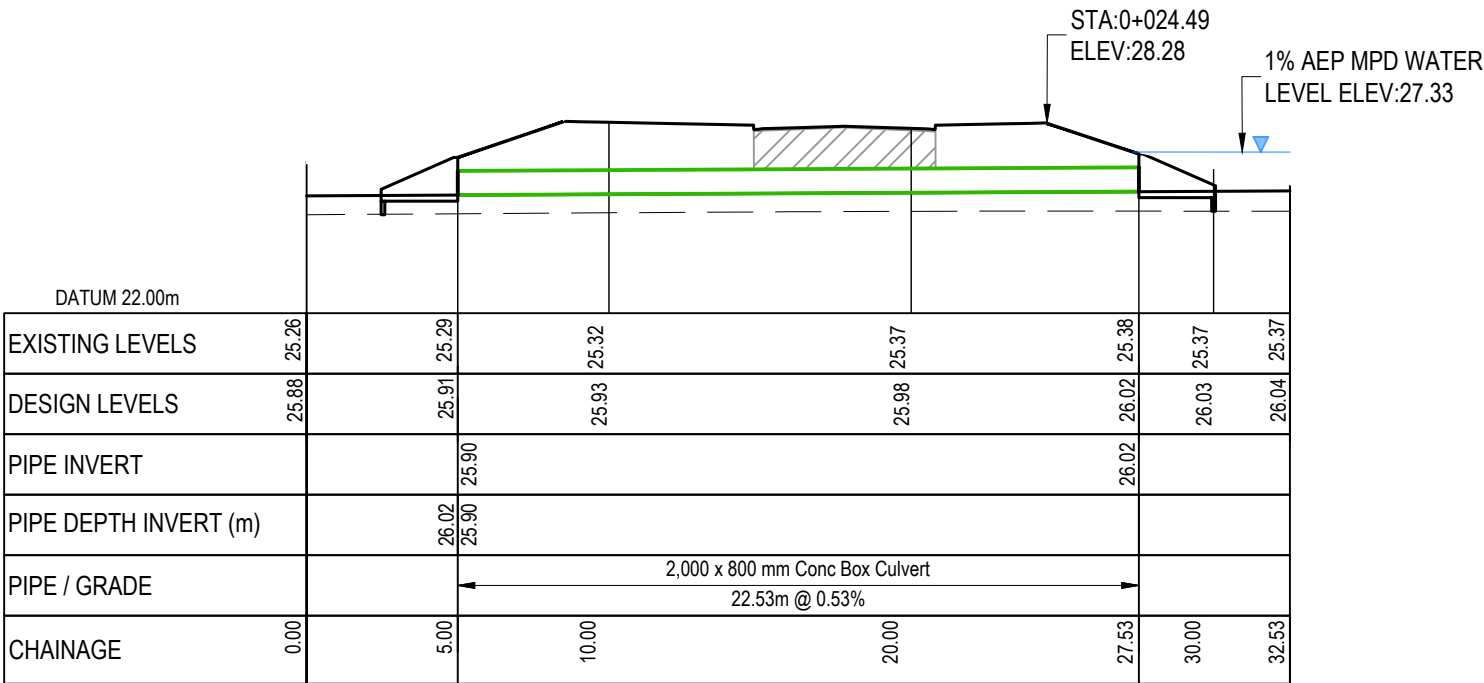
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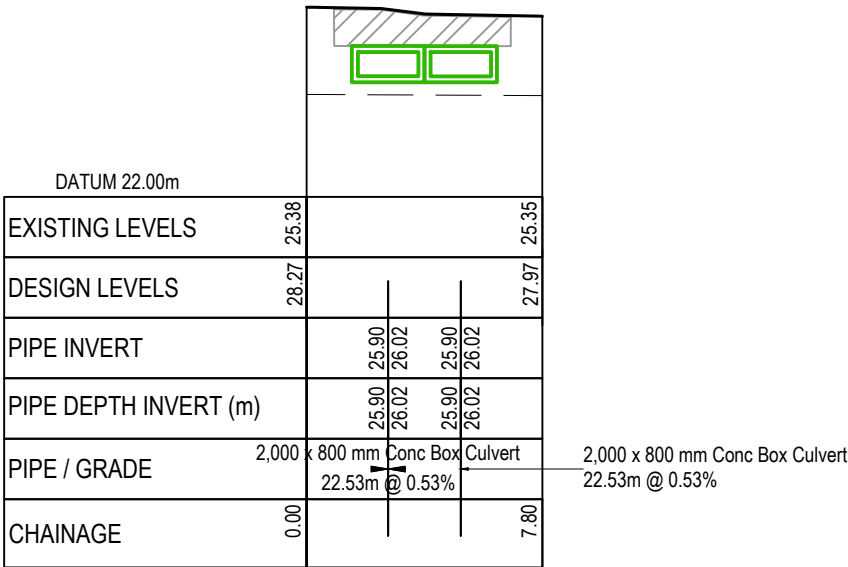
Title
**PROPOSED
ROAD 14 CULVERT 1
SHEET 1**

Project no.	215010		
Scale	1:250 @ A3		
Cad file	215010-M-C440.DWG		
Drawing no.	M-C4415-1	Rev	A

DATE: 8/1/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 14 - CULVERT 1
SCALE: HORI 1:250 VERT 1:250



ROAD 14 - CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

- NOTES
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LEGEND:

--- EX GROUND SURFACE
— PR FINISHED GROUND SURFACE
SW PIPE CROSSING
SW CULVERT CROSSING
HARDFILL BACKFILL

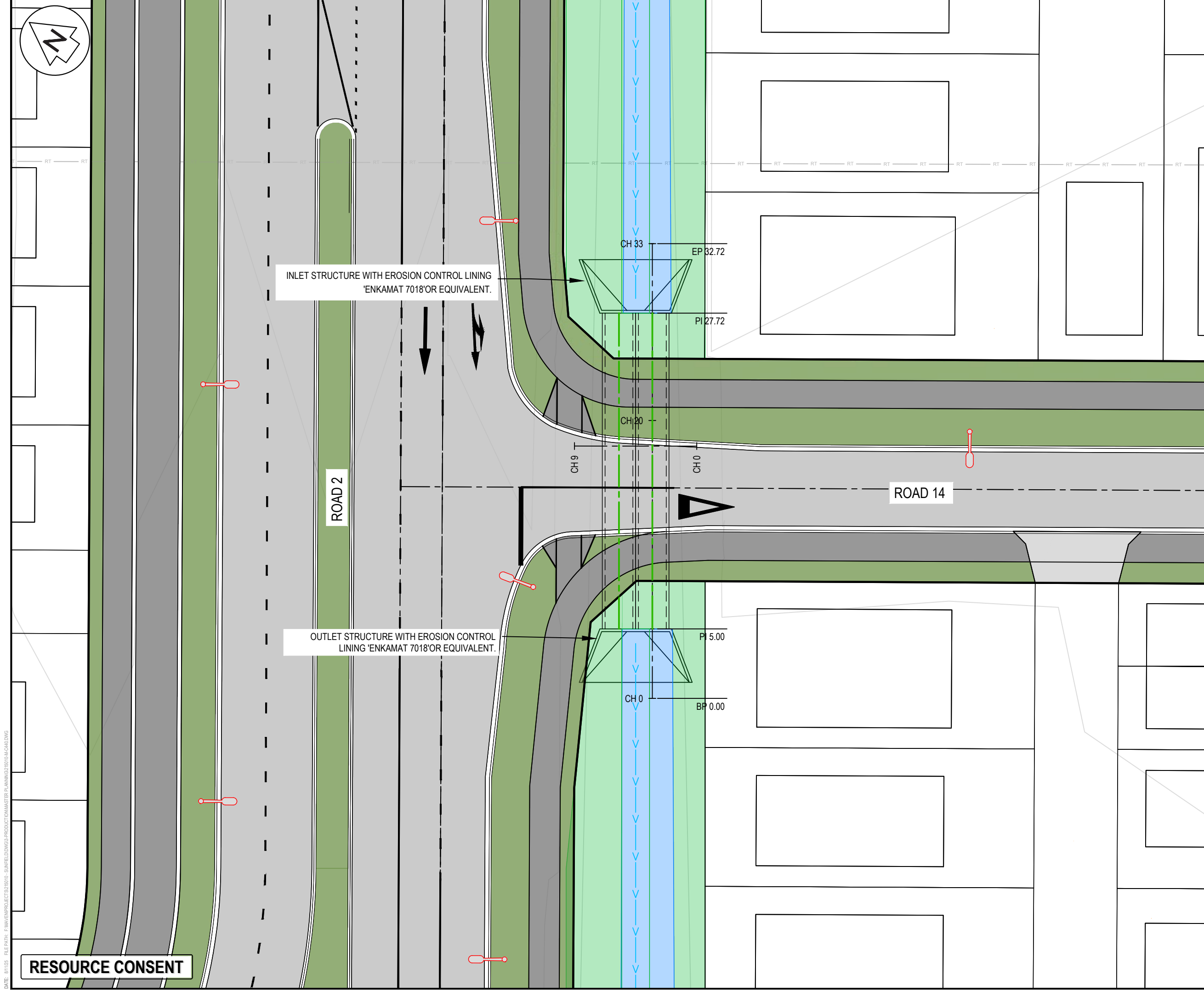
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 14 CULVERT 1
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4415-2
Rev	A



- NOTES
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LEGEND

	EX BDY
	PR BDY
	SWALE FLOW DIRECTION
	SWALE TOP/BASE
	PR SW SWALES
	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
Survey	SURVEYWORX		02/2021
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Drawn	OQ		11/2024
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Project		SUNFIELD DEVELOPMENT ARDMORE, AUCKLAND MASTER PLANNING FOR SUNFIELD DEVELOPMENTS LIMITED		
Title		PROPOSED ROAD 14 CULVERT 2 SHEET 1		
Project no.				215010
Scale				1:250 @ A3
Cad file				215010-M-C440.DWG
Drawing no.		M-C4416-1	Rev	A

DATE: 8/10/25 FILE PATH: F:\MAVEN\PROJECTS\215010 - SUNFIELD\DWG\3-PRODUCTION\MASTER PLAN\215010-M-C440.DWG

- NOTES
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LEGEND:

--- EX GROUND SURFACE
— PR FINISHED GROUND SURFACE
0 SW PIPE CROSSING
SW CULVERT CROSSING
HARDFILL BACKFILL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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ARDMORE, AUCKLAND

MASTER PLANNING

FOR SUNFIELD

DEVELOPMENTS LIMITED

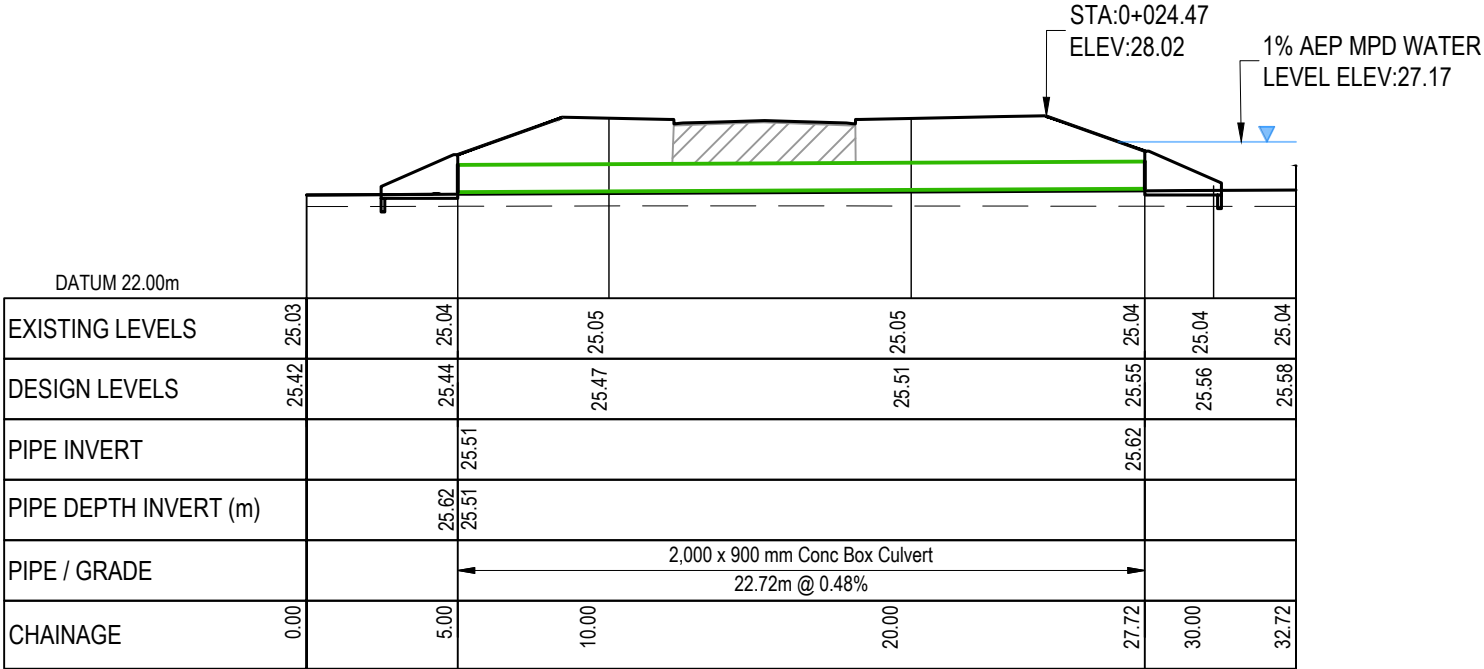
Title

PROPOSED

ROAD 14 CULVERT 2

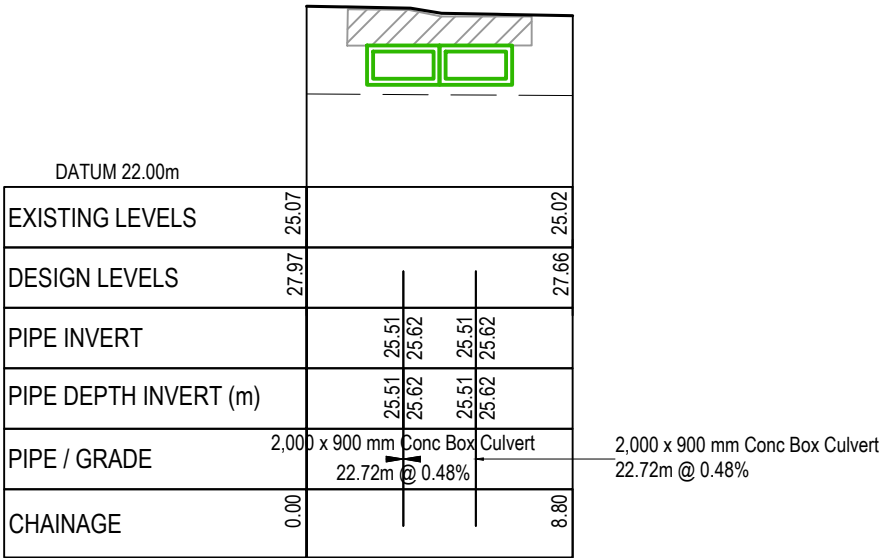
SHEET 2

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4416-2
Rev	A



ROAD 14 - CULVERT 2

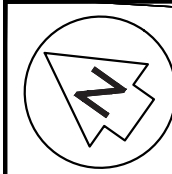
SCALE: HORI 1:250 VERT 1:250



ROAD 14 - CULVERT 2 XS

SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT



- 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 THE NEW ZEALAND VERTICAL DATUM (NZVD) 2016.
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 8. ALL LINES TO BE ABANDONED SHALL BE SEALED AT EACH END. TIMING OF ALL SEALING TO BE COORDINATED WITH COUNCIL STAFF.

LEGEND

---	EX BDY
---	PR BDY
---	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

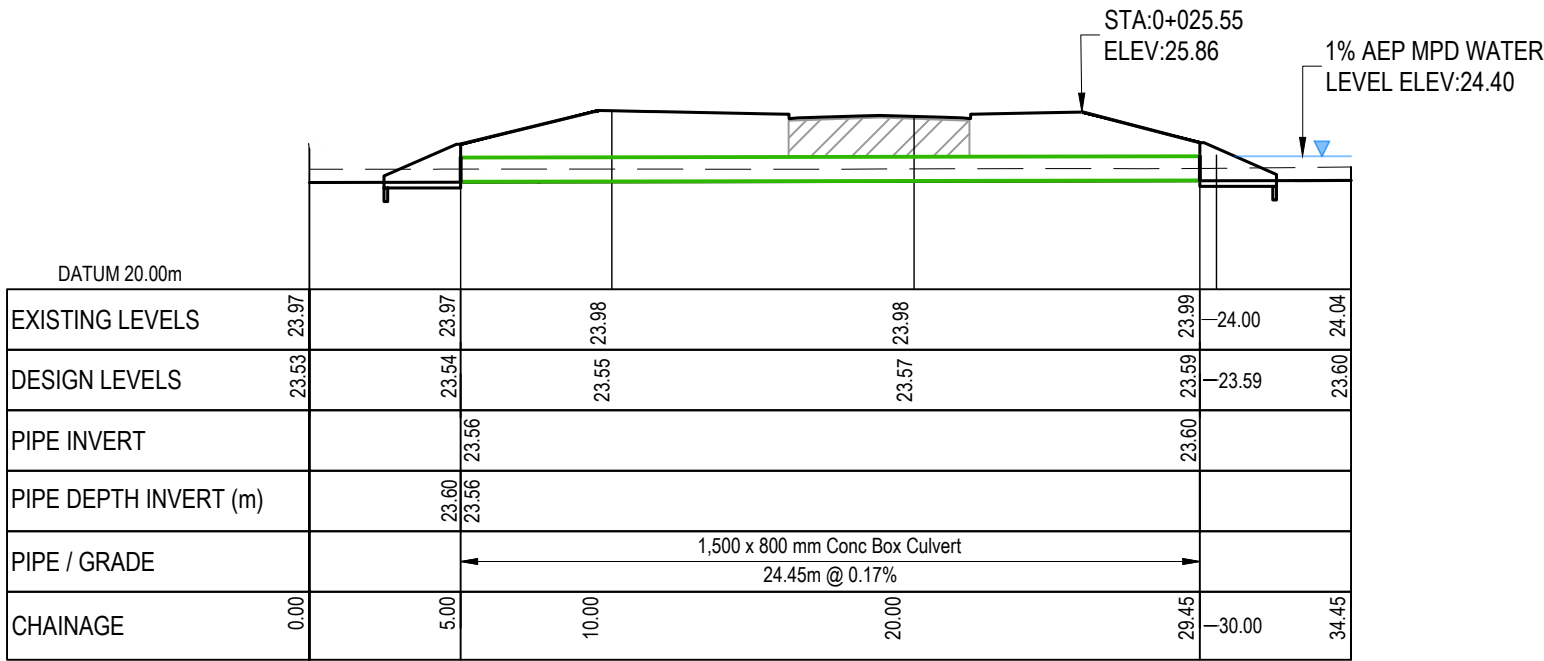


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5 Owens Road, Epsom
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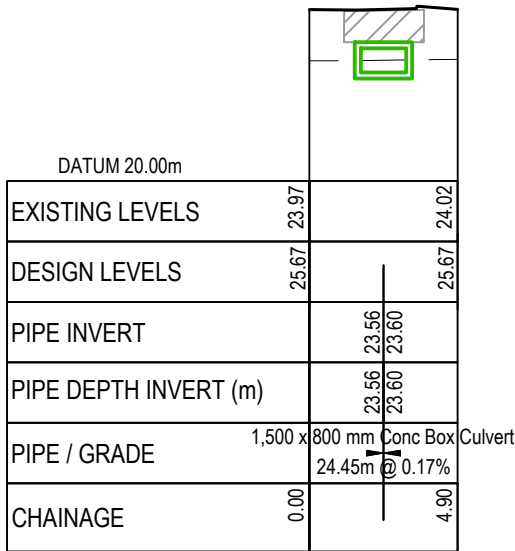
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 19 CULVERT 1
SHEET 1**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4417-1
Rev	A



ROAD19 - CULVERT 1
SCALE: HORI 1:250 VERT 1:250



ROAD 19 - CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

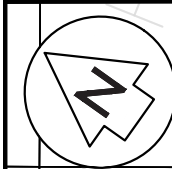
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 19 CULVERT 1
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4417-2
Rev	A



INLET STRUCTURE WITH EROSION CONTROL LINING 'ENKAMAT 7018' OR EQUIVALENT.

OUTLET STRUCTURE WITH EROSION CONTROL LINING 'ENKAMAT 7018' OR EQUIVALENT.

ROAD 20

CH 34

EP 38.92

PI 28.92

CH 25

CH 0

PI 5.00

CH 0

BP 0.00

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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LEGEND

---	EX BDY
---	PR BDY
---	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025



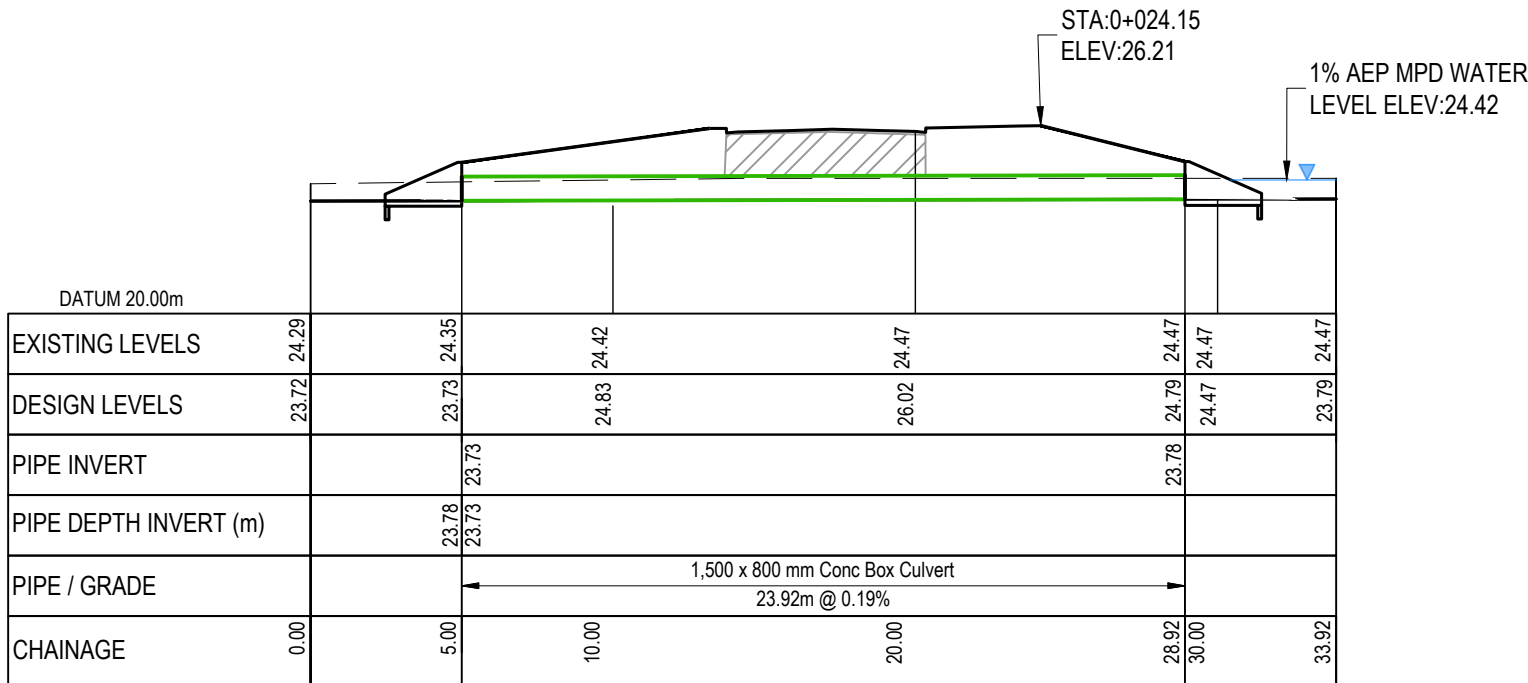
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
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DEVELOPMENTS LIMITED**

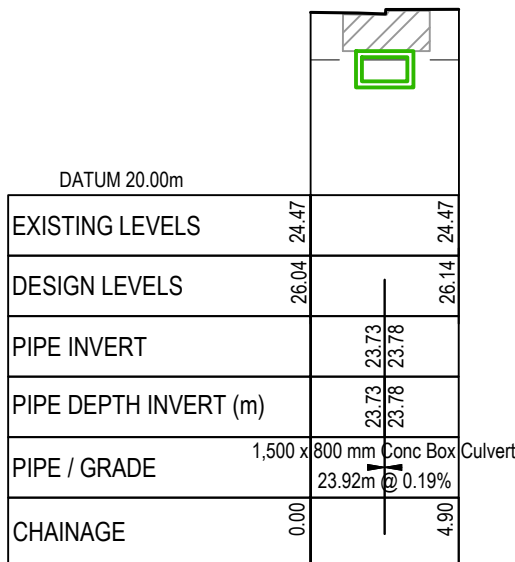
Title
**PROPOSED
ROAD 20 CULVERT 1
SHEET 1**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4418-1
Rev	A

RESOURCE CONSENT



ROAD 20 - CULVERT 1
SCALE: HORI 1:250 VERT 1:250



ROAD 20 - CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

- NOTES
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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

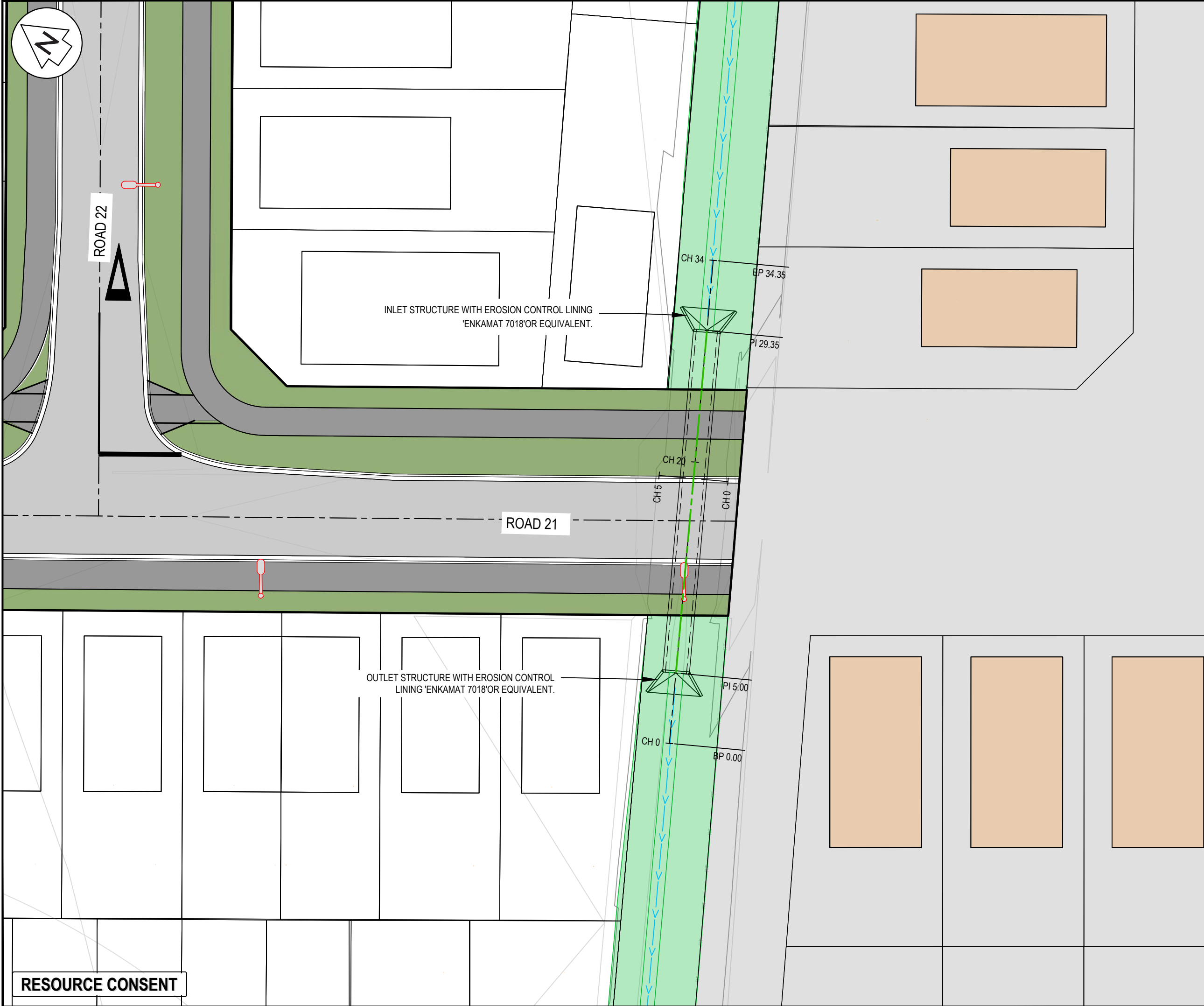
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 20 CULVERT 1
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4418-2
Rev	A



- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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LEGEND

---	EX BDY
---	PR BDY
---	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025



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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 21 CULVERT 1
SHEET 1**

Project no.	215010		
Scale	1:250 @ A3		
Cad file	215010-M-C440.DWG		
Drawing no.	M-C4419-1	Rev	A

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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LEGEND:

--- EX GROUND SURFACE
— PR FINISHED GROUND SURFACE
SW PIPE CROSSING
SW CULVERT CROSSING
HARDFILL BACKFILL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project

SUNFIELD DEVELOPMENT

ARDMORE, AUCKLAND

MASTER PLANNING

FOR SUNFIELD

DEVELOPMENTS LIMITED

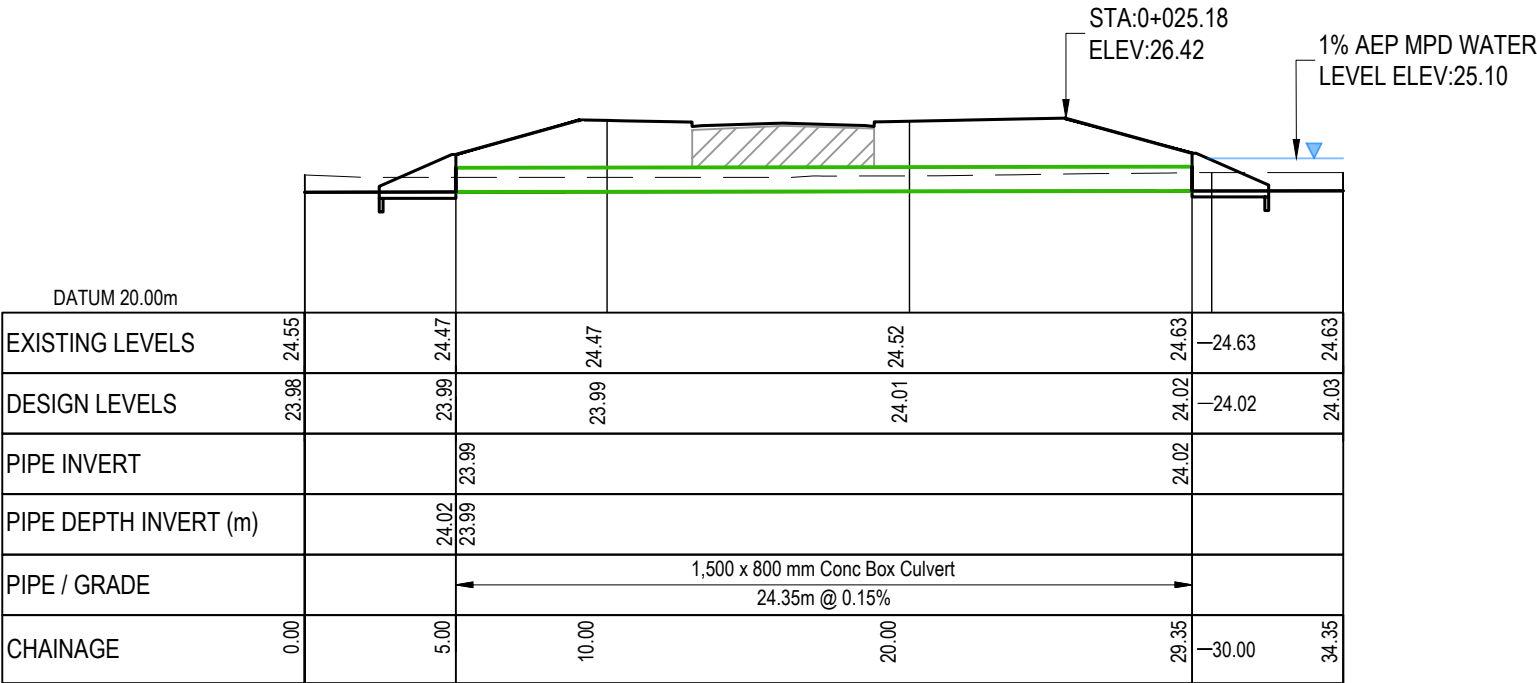
Title

PROPOSED

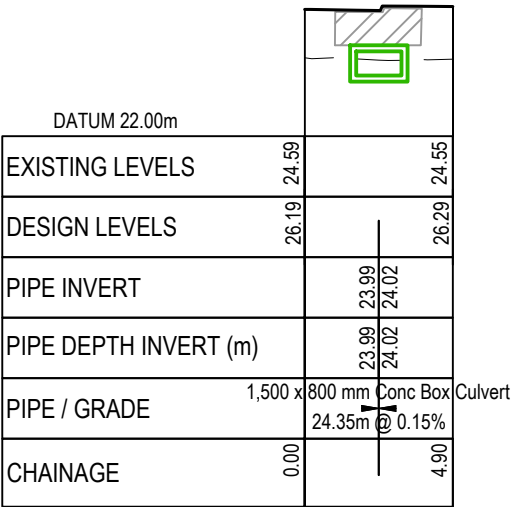
ROAD 21 CULVERT 1

SHEET 2

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4419-2
Rev	A

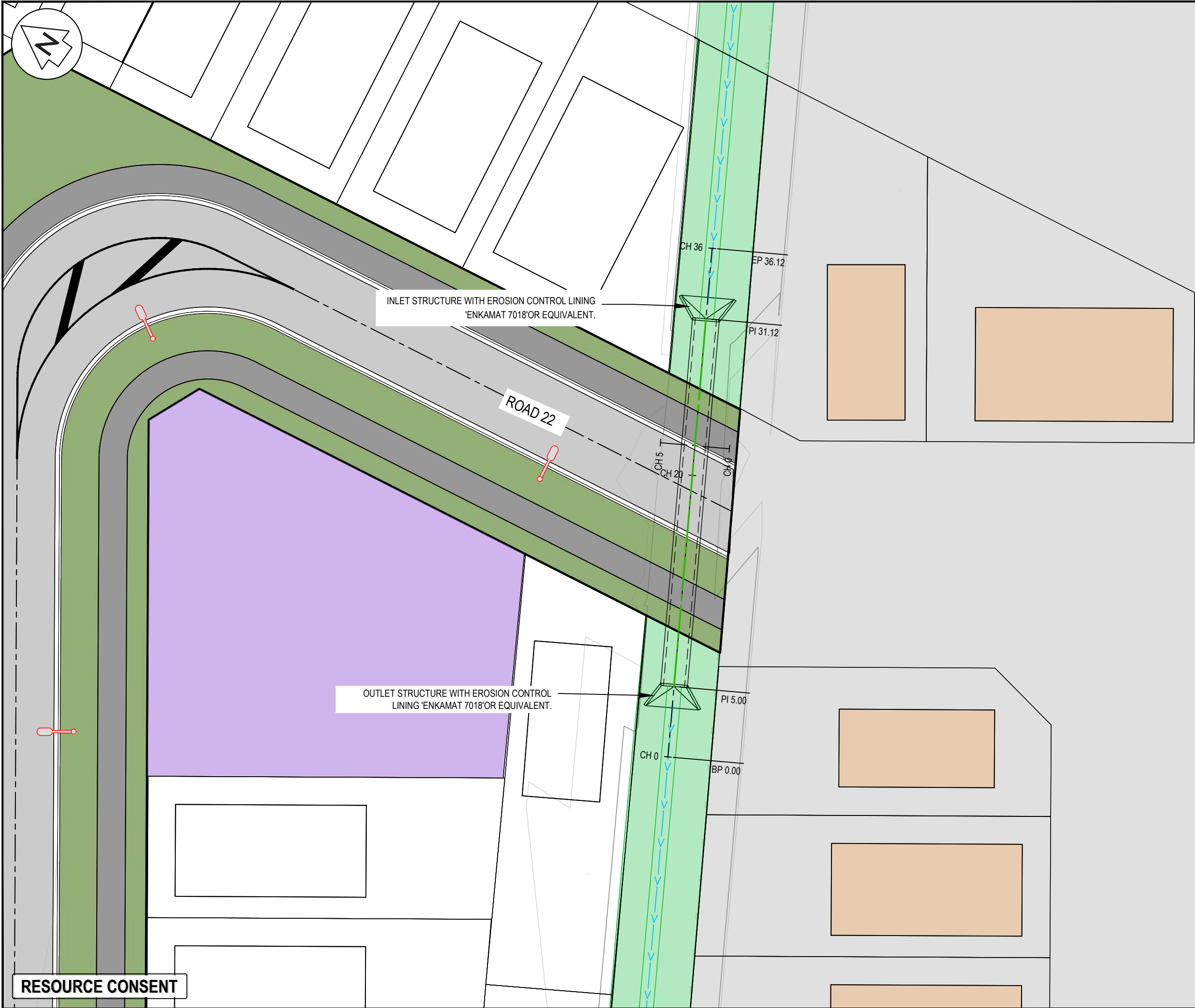


ROAD 21 - CULVERT 1
SCALE: HORI 1:250 VERT 1:250



ROAD 21 - CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT



- NOTES
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LEGEND

---	EX BDY
---	PR BDY
→→→→	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	



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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

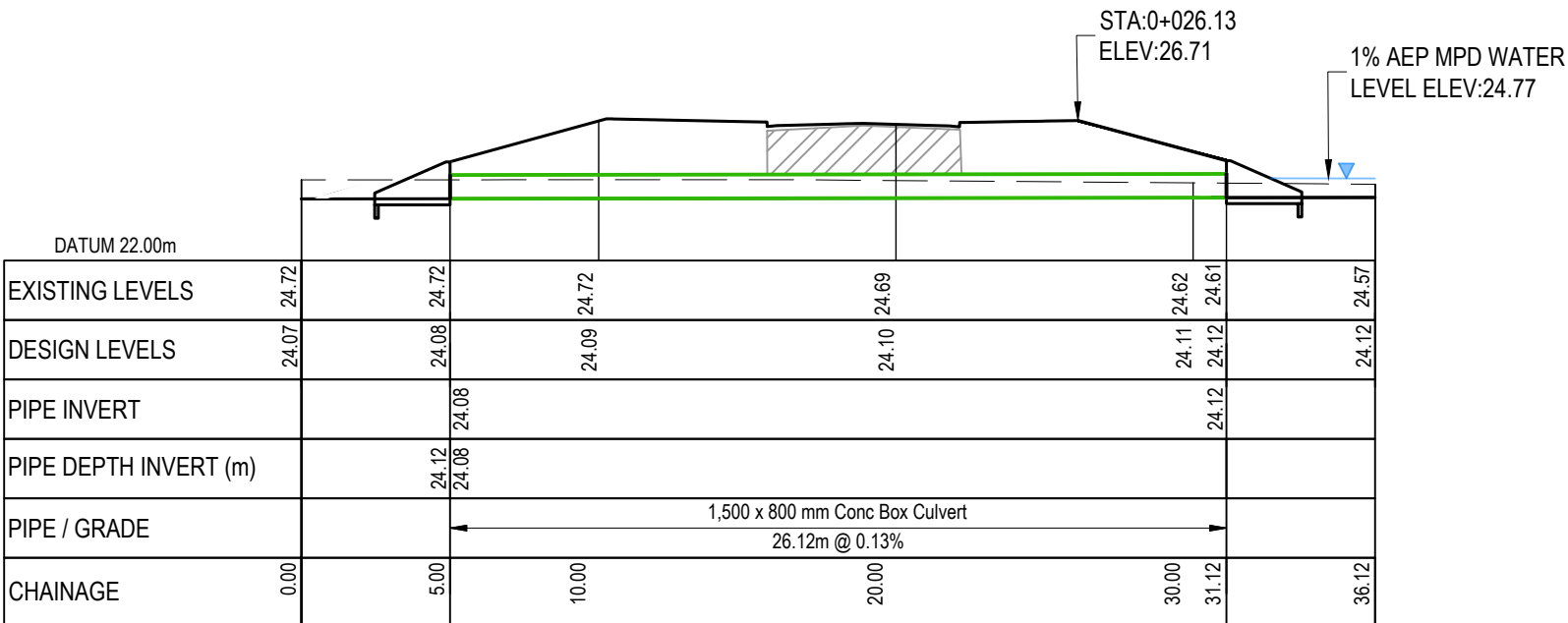
Title
**PROPOSED
ROAD 22 CULVERT 1
SHEET 1**

Project no.	215010		
Scale	1:250 @ A3		
Cad file	215010-M-C440.DWG		
Drawing no.	M-C4420-1	Rev	A

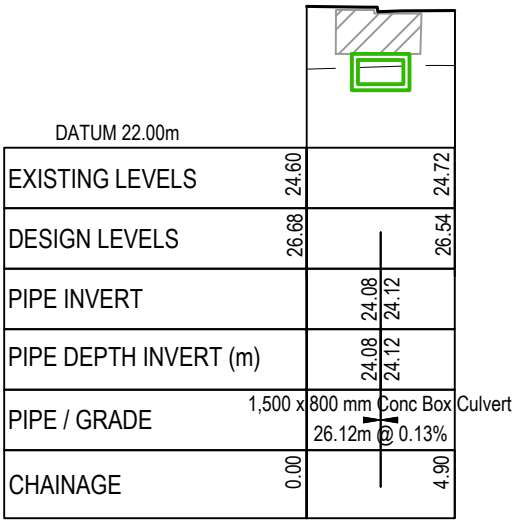
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RESOURCE CONSENT

DATE: 8/1/25 FILE PATH: F:\MAYN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 22 - CULVERT 1
SCALE: HORI 1:250 VERT 1:250



ROAD 22 - CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

- NOTES
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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

AA	RESOURCE CONSENT	CS	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

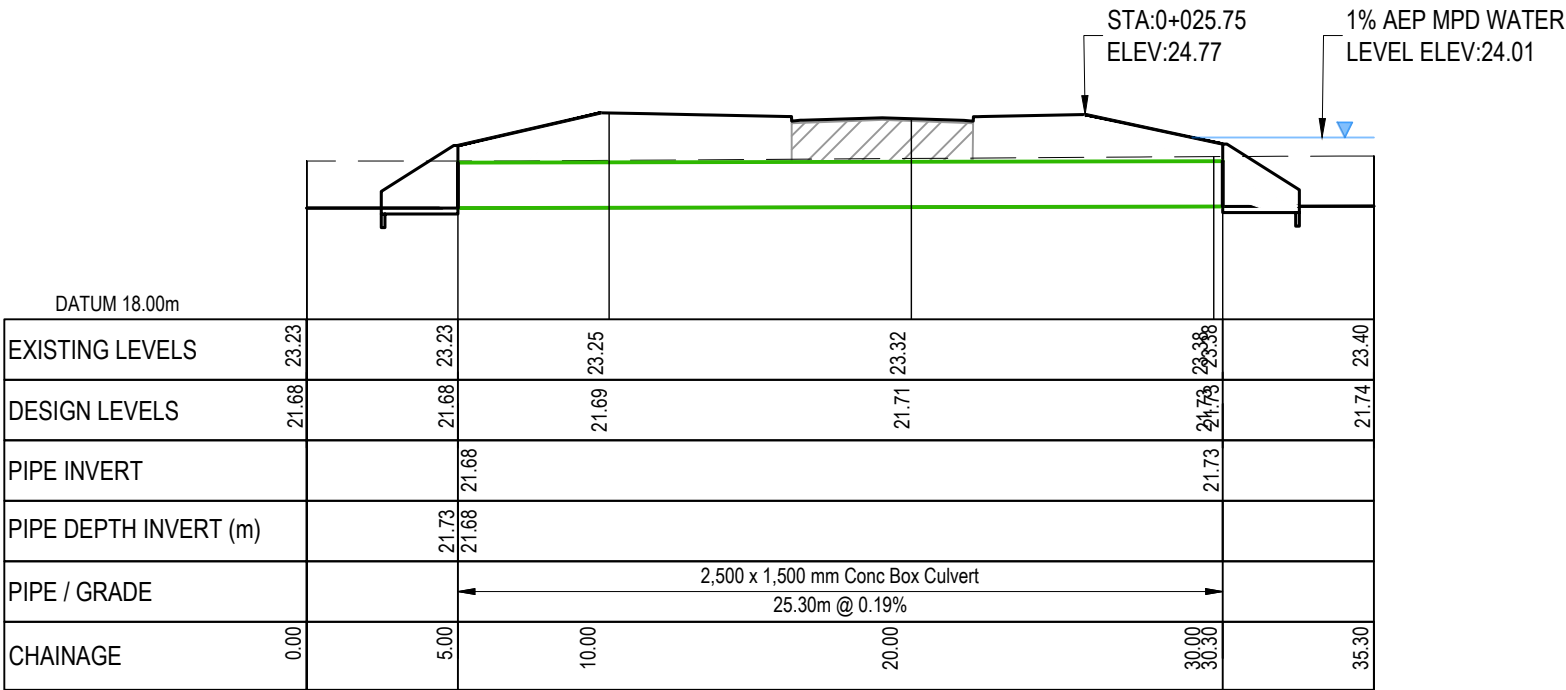
M **Maven Associates**
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
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DEVELOPMENTS LIMITED**

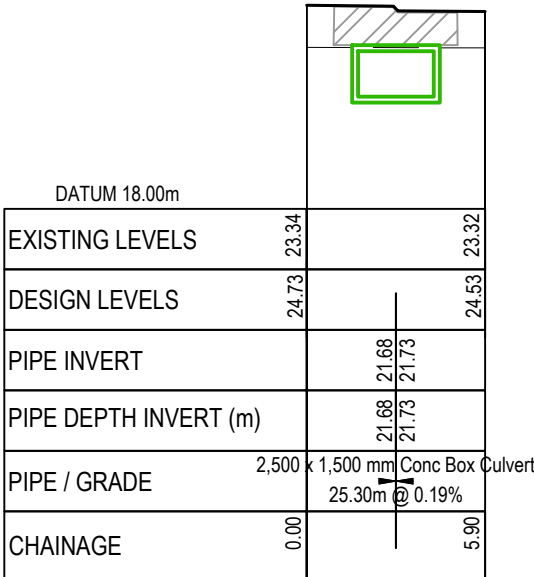
Title
**PROPOSED
ROAD 22 CULVERT 1
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4420-2
Rev	A

DATE: 8/1/25 FILE PATH: F:\MAYN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 25 - CULVERT 1
SCALE: HORI 1:250 VERT 1:250



ROAD 25 - CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

- NOTES
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LEGEND:

--- EX GROUND SURFACE
--- PR FINISHED GROUND SURFACE
--- SW PIPE CROSSING
--- SW CULVERT CROSSING
--- HARDFILL BACKFILL

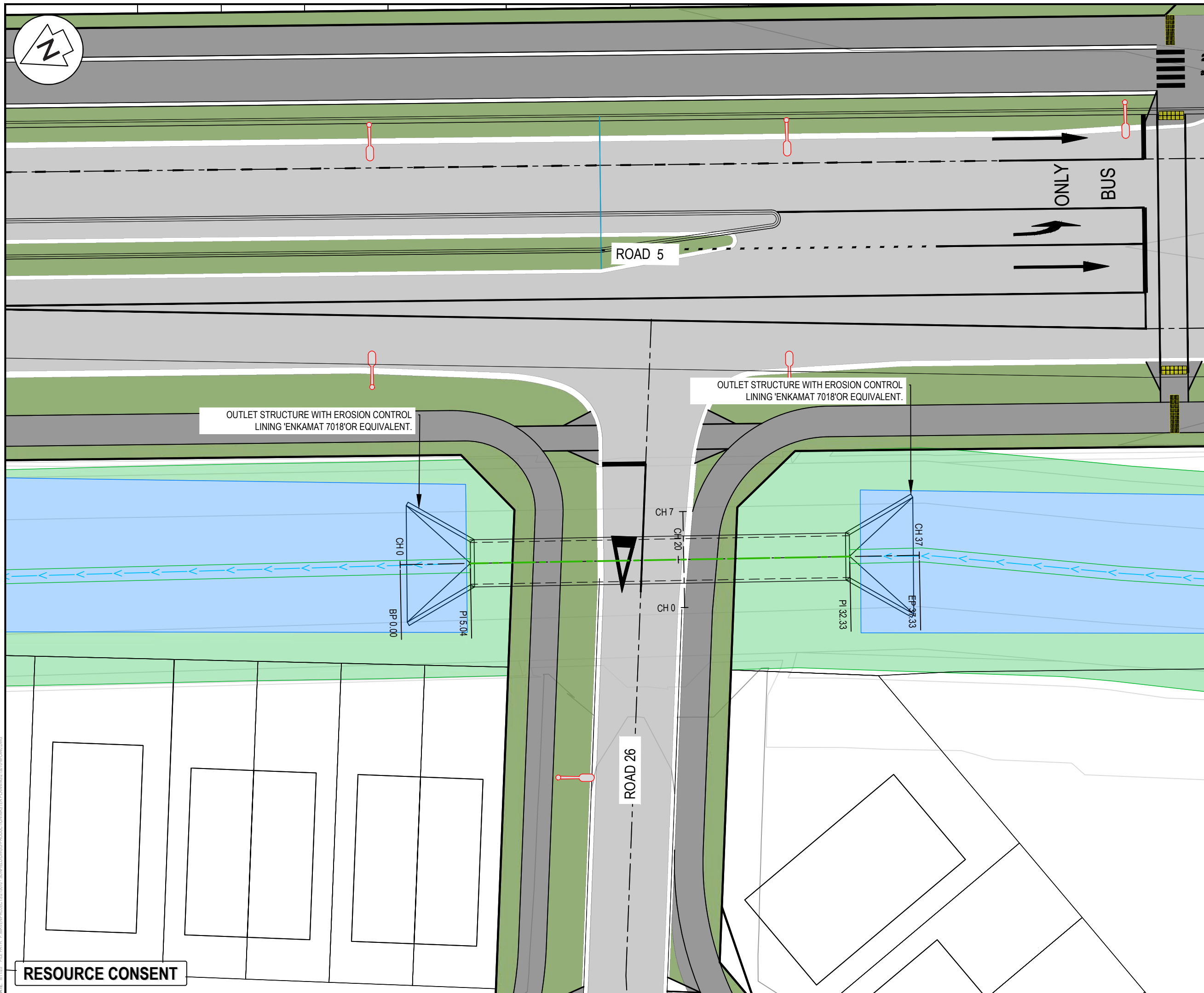
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 25 CULVERT 1
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4421-2
Rev	A

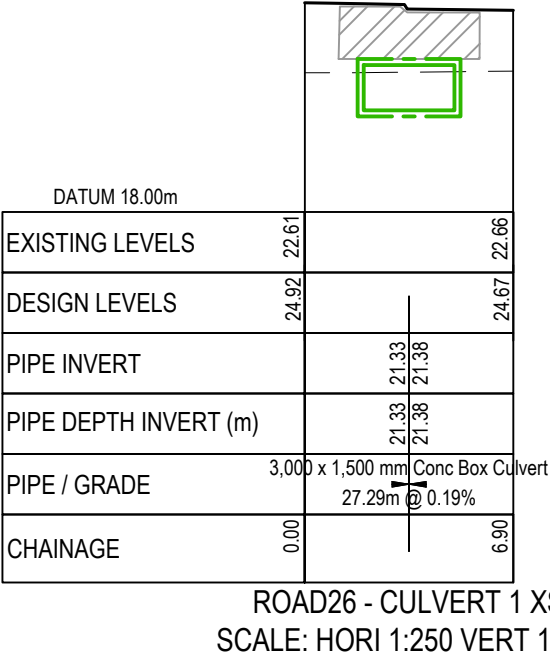
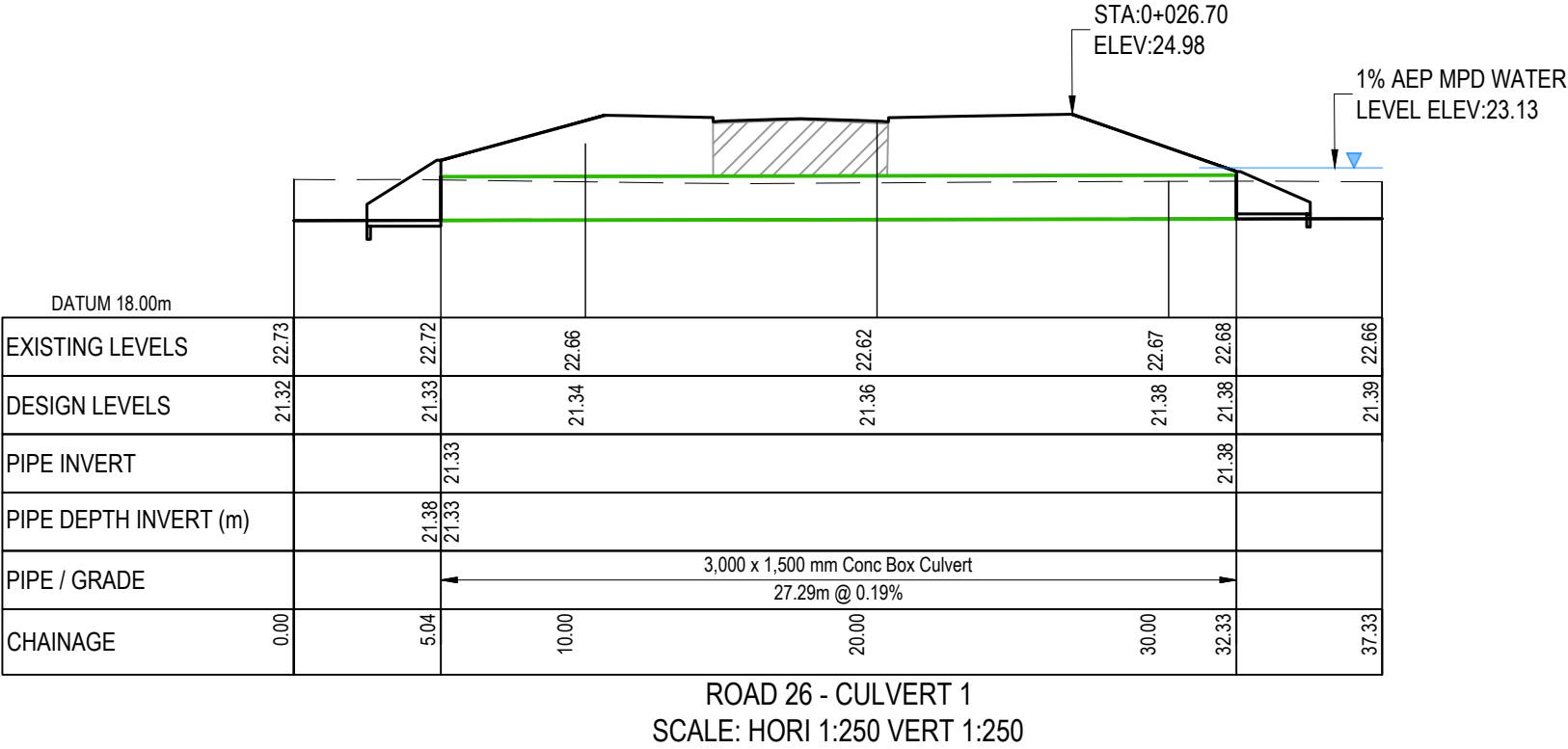


- ## NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/ILC	02/2025	

Project
SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED

DATE: 8/1/25 FILE PATH: F:\Maven\Projects\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



RESOURCE CONSENT

- NOTES
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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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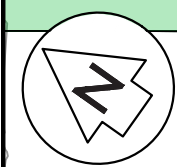
5 Owens Road, Epsom

Auckland 1023

Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 26 CULVERT 1
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4422-2
Rev	A



INLET STRUCTURE WITH EROSION CONTROL LINING
'ENKAMAT 7018'OR EQUIVALENT.

CH 276
EP 276.00
PI 271.43

CH 260

CH 240

CH 220

CH 200

CH 180

PI 179.55

CH 16

CH 0

CH 160

CH 140

ROAD 31

CH 120

CH 100

CH 80

CH 60

PT 68.06

Mid 62.35

CH 40

PC 38.65

PI 52.70

CH 20

CH 0

PI 10.00

ROAD 1

RESOURCE CONSENT

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LEGEND				
---	---	---	---	EX BDY
---	---	---	---	PR BDY
---	---	---	---	SWALE FLOW DIRECTION
---	---	---	---	SWALE TOP/BASE
---	---	---	---	PR SW SWALES
---	---	---	---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

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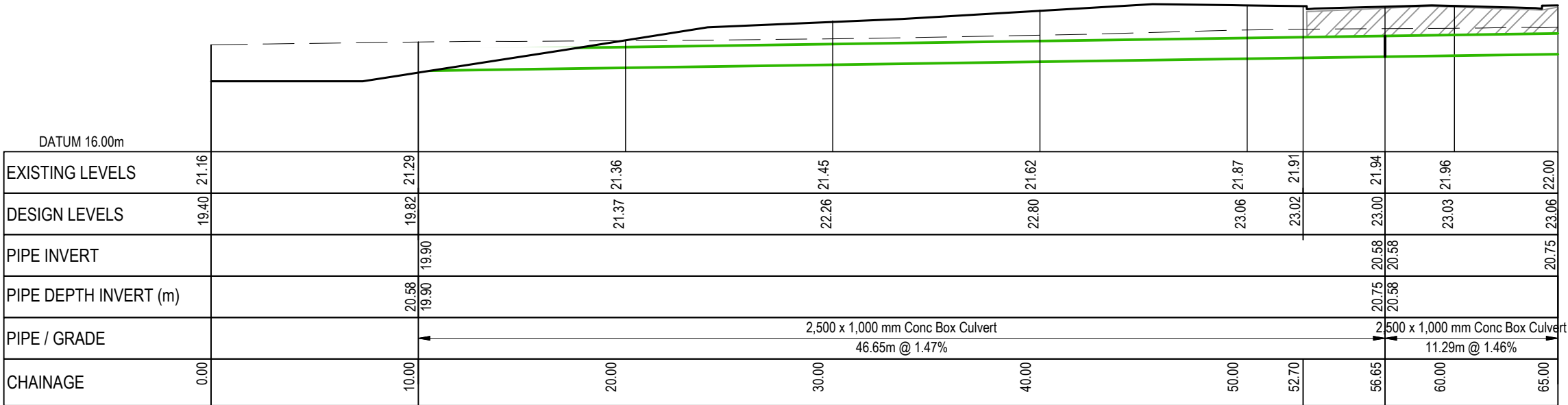
Auckland 1023

Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

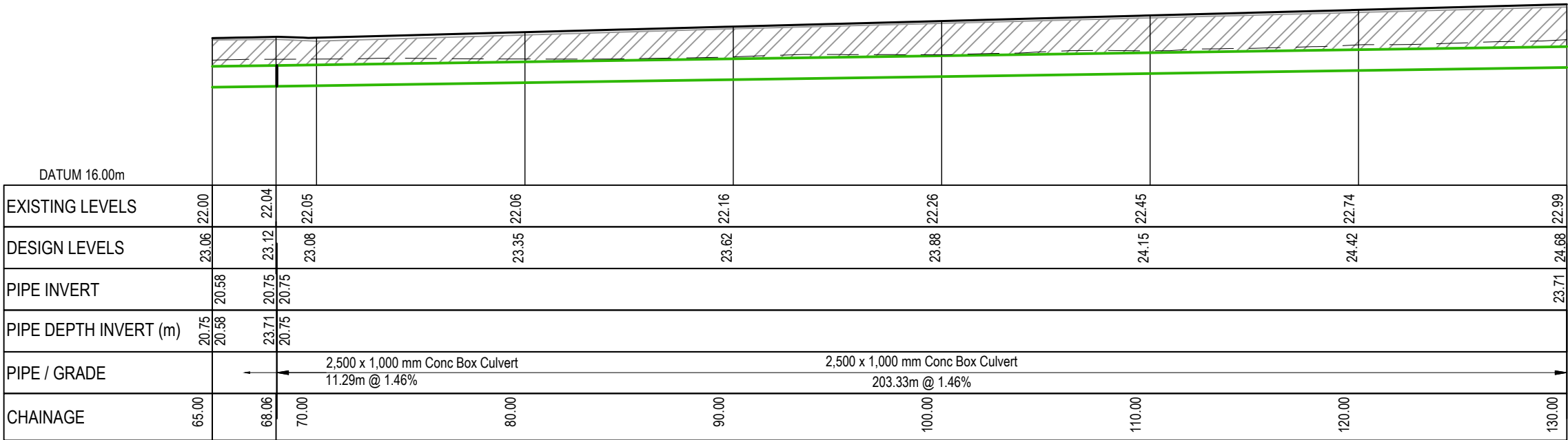
Title
**PROPOSED
ROAD 31 CULVERT 1
SHEET 1**

Project no.	215010
Scale	1:1000 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4423-1
Rev	A

DATE: 8/1/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 31 - CULVERT 1 (CH0 - CH65)
SCALE: HORI 1:250 VERT 1:250



ROAD 31 - CULVERT 1 (CH65 - CH130)
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

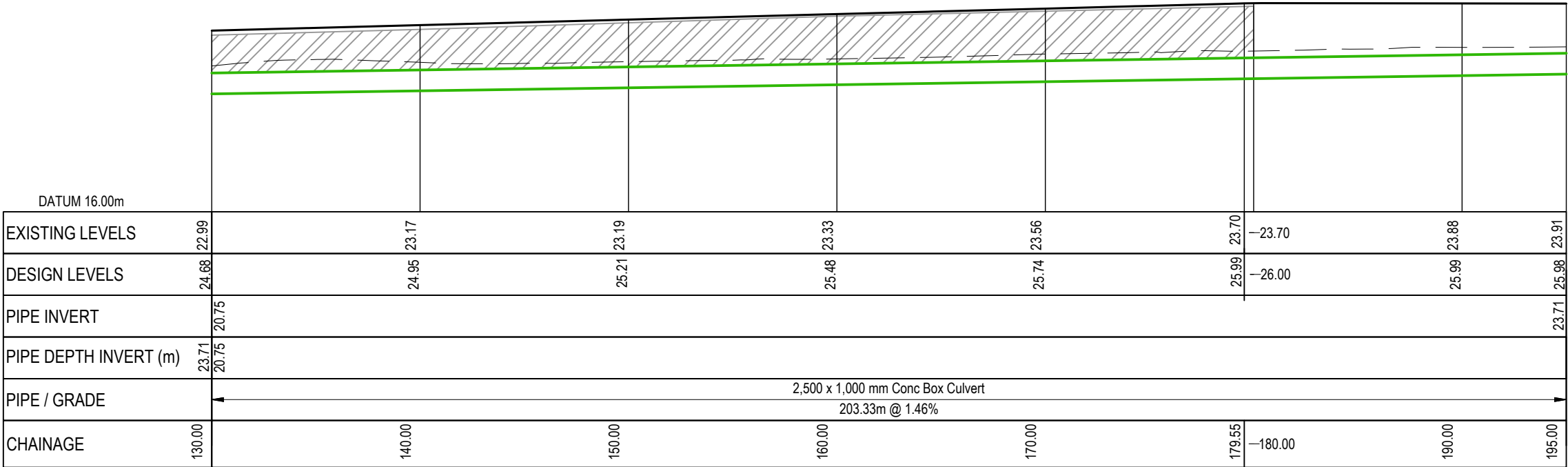
M **A** **E** **N** **®**
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
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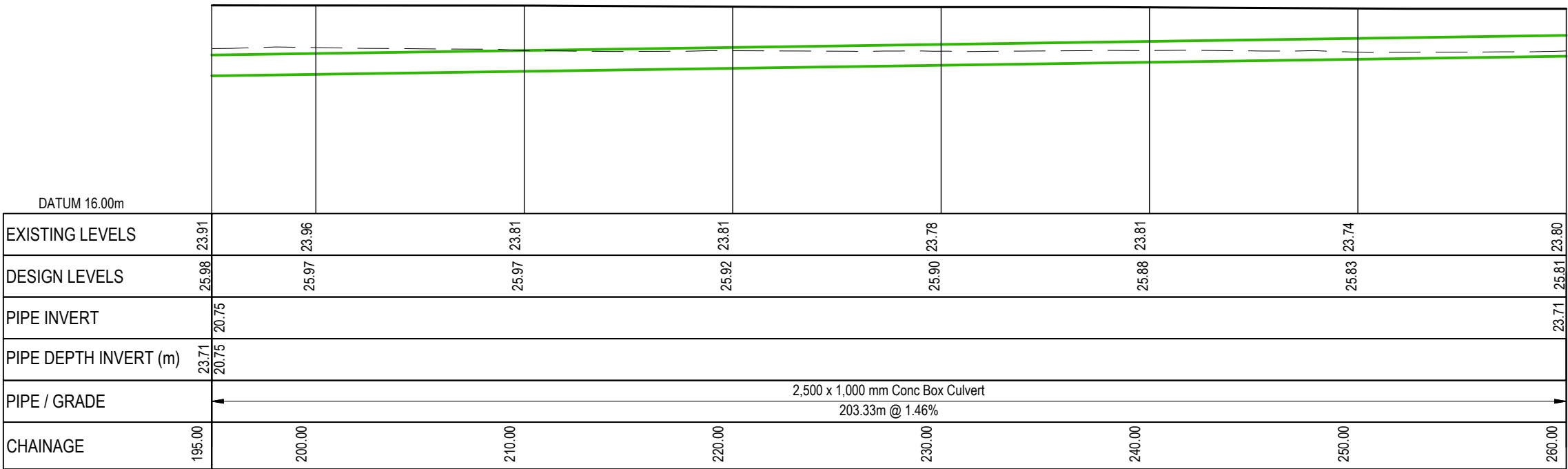
Title
**PROPOSED
ROAD 31 CULVERT 1
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4423-2
Rev	A

DATE: 8/1/25 FILE PATH: F:\MAYN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 31 - CULVERT 1 (CH130 - CH195)
SCALE: HORI 1:250 VERT 1:250



ROAD 31 - CULVERT 1 (CH195 - CH260)
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

- NOTES
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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

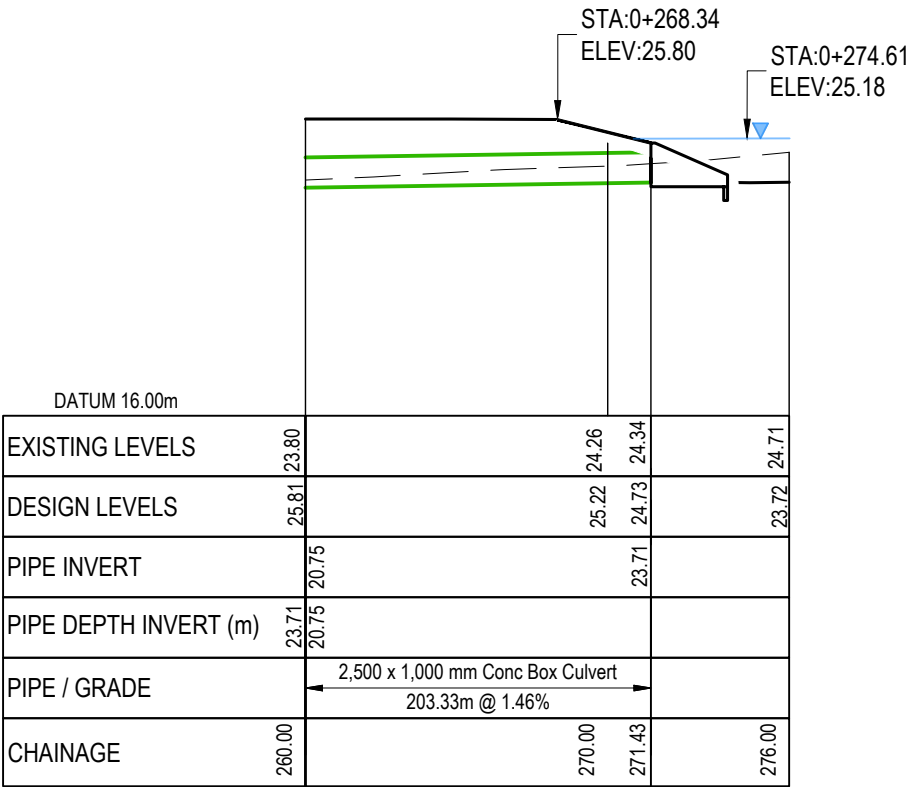
M **A** **E** **N** **®**
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Project
**SUNFIELD DEVELOPMENT
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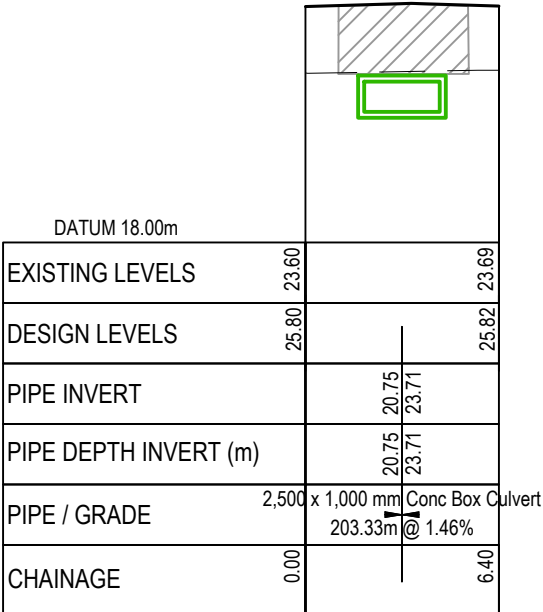
Title
**PROPOSED
ROAD 31 CULVERT 1
SHEET 3**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4423-3
Rev	A

DATE: 8/1/25 FILE PATH: F:\MAYN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 31 - CULVERT 1 (CH260 - CH276)
SCALE: HORI 1:250 VERT 1:250



ROAD 31 - CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

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LEGEND:

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- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

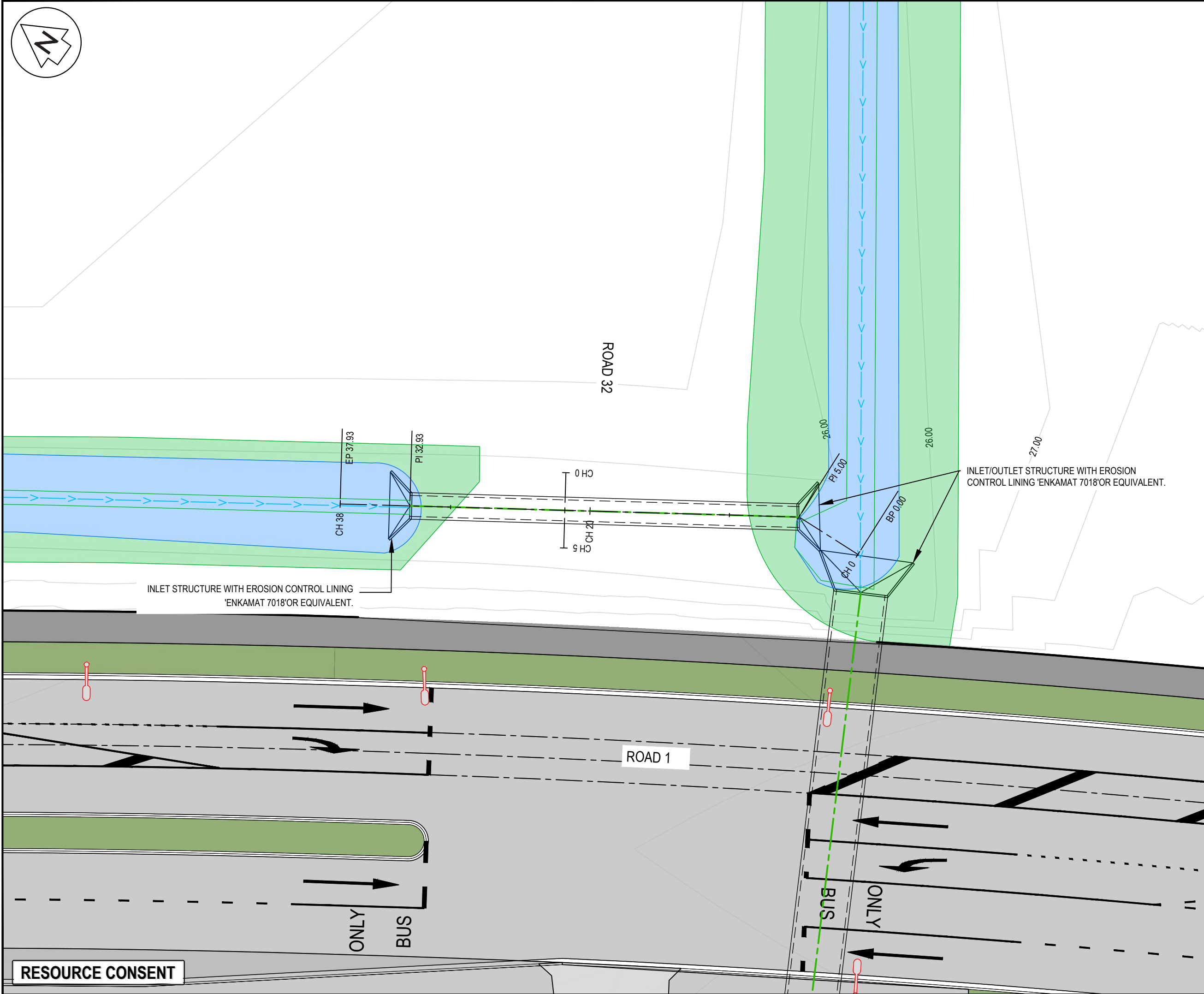
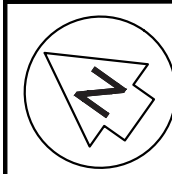
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

M **Maven Associates**
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Auckland 1023

Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 31 CULVERT 1
SHEET 4**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4423-4
Rev	A



- NOTES
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LEGEND

	EX BDY
	PR BDY
	SWALE FLOW DIRECTION
	SWALE TOP/BASE
	PR SW SWALES
	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025



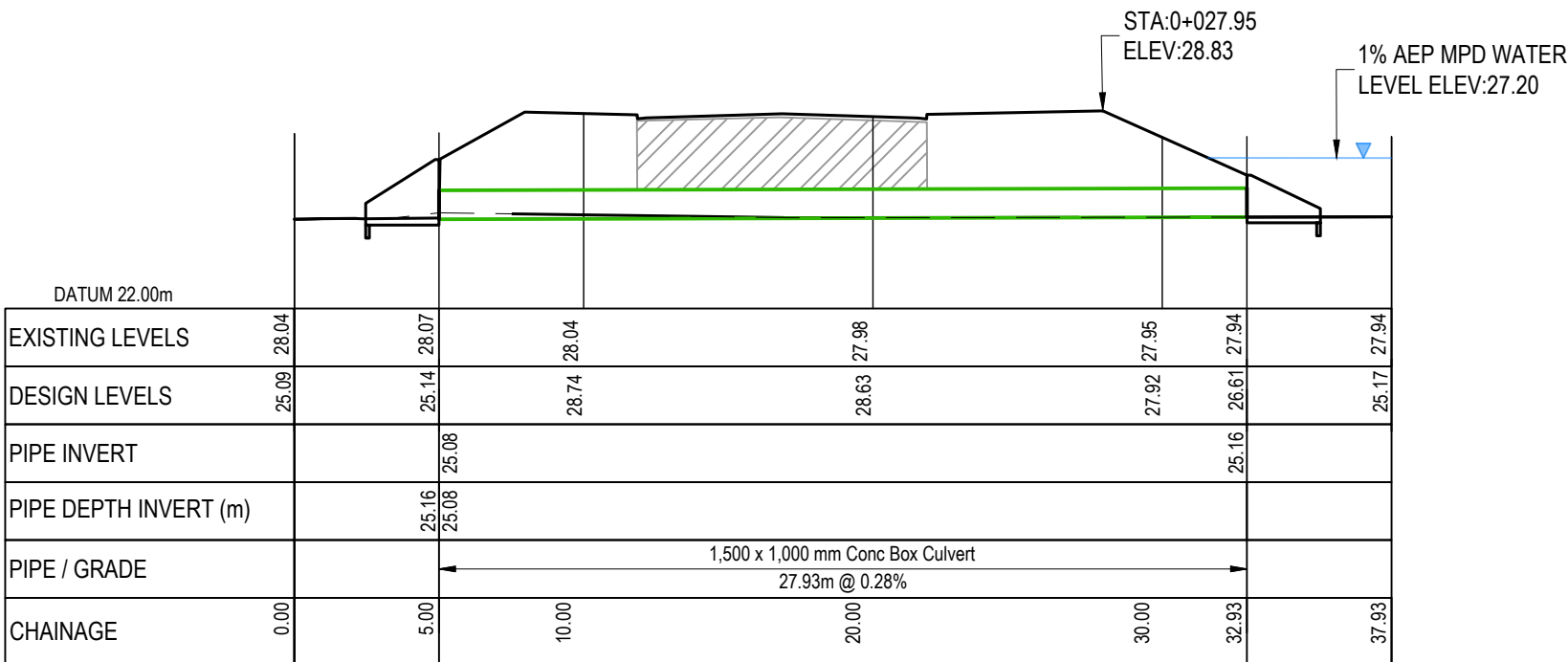
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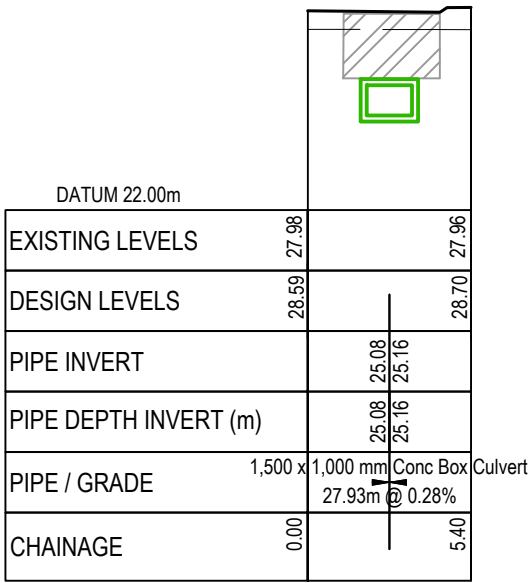
Title
**PROPOSED
ROAD 32 CULVERT 1
SHEET 1**

Project no.	215010		
Scale	1:250 @ A3		
Cad file	215010-M-C440.DWG		
Drawing no.	M-C4424-1	Rev	A

DATE: 8/1/25 FILE PATH: F:\MAYN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



ROAD 32 - CULVERT 1
SCALE: HORI 1:250 VERT 1:250



ROAD 32 - CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

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LEGEND:

- EX GROUND SURFACE
- PR FINISHED GROUND SURFACE
- SW PIPE CROSSING
- SW CULVERT CROSSING
- HARDFILL BACKFILL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
ROAD 32 CULVERT 1
SHEET 2**

Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4424-2
Rev	A

- LEGEND
- | | |
|-------|-----------------------|
| --- | EX BDY |
| — | PR BDY |
| →→→→→ | SWALE FLOW DIRECTION |
| — | SWALE TOP/BASE |
| ■ | PR SW SWALES |
| ■ | EX FIRST GAS EASEMENT |

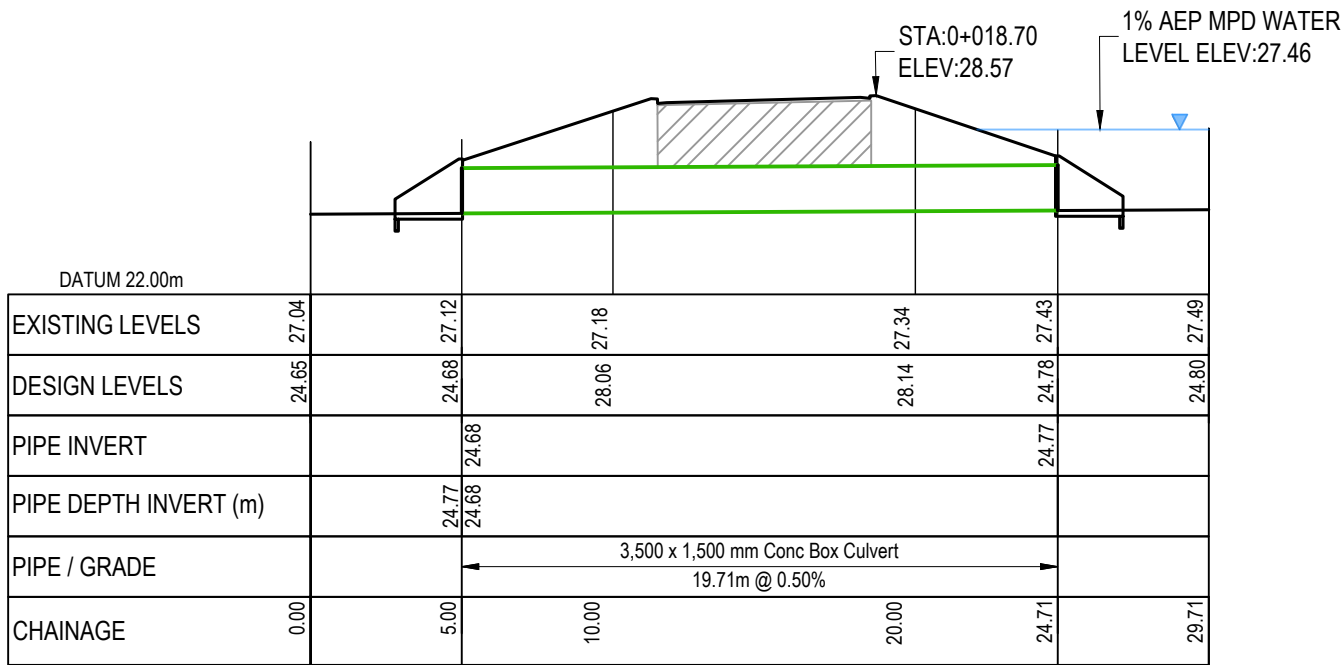


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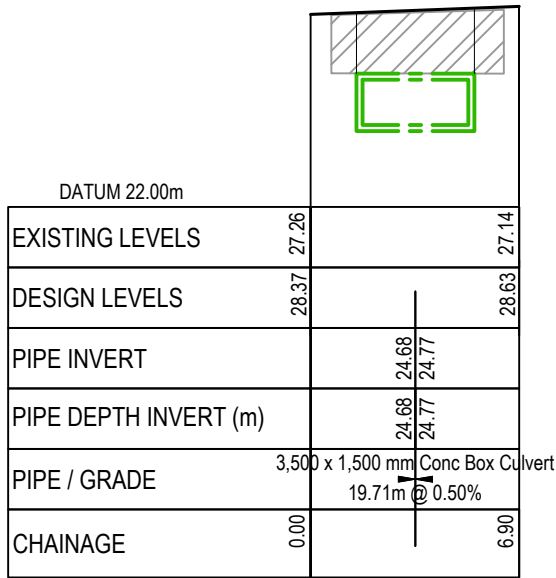
Title

**PROPOSED CAR PARK
CROSSING CULVERT 1
SHEET 1**

Project no.	215010		
Scale	1:250 @ A3		
Cad file	215010-M-C440.DWG		
Drawing no.	M-C4425-1	Rev	A



CARPARK CROSSING CULVERT 1
SCALE: HORI 1:250 VERT 1:250



CARPARK CROSSING CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

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LEGEND:

--- EX GROUND SURFACE
— PR FINISHED GROUND SURFACE
— SW PIPE CROSSING
— SW CULVERT CROSSING
HARDFILL BACKFILL

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
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Survey	SURVEYWORX	02/2021	
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Drawn	OQ	11/2024	
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MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED CAR PARK
CROSSING CULVERT 1
SHEET 2**

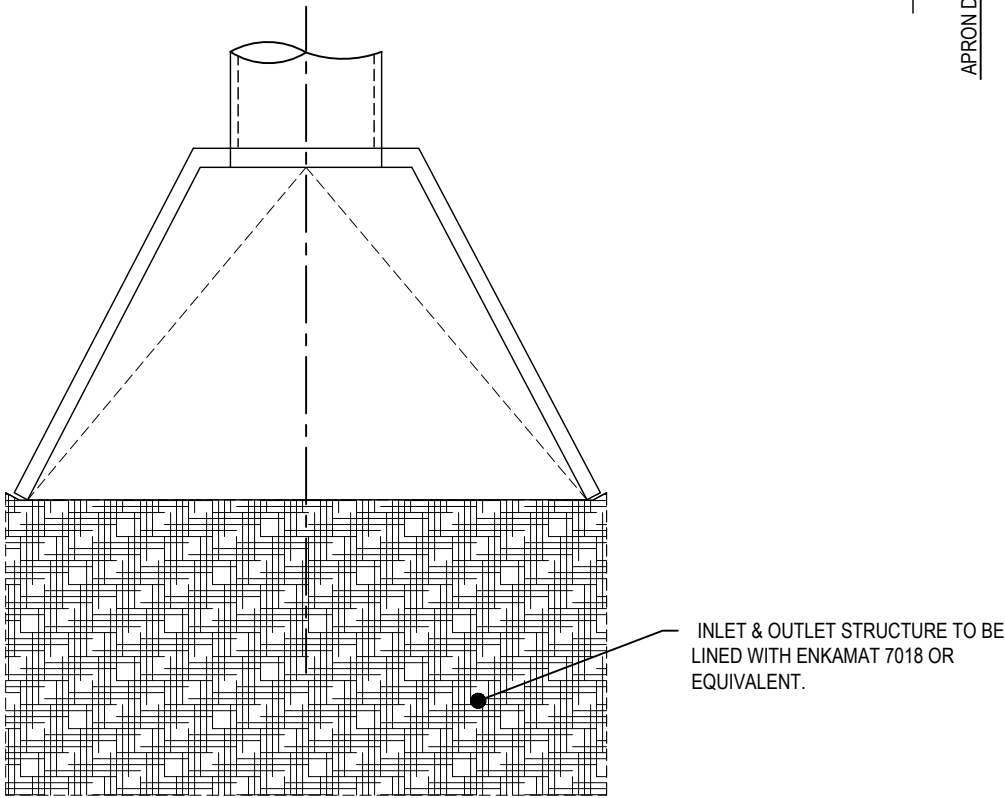
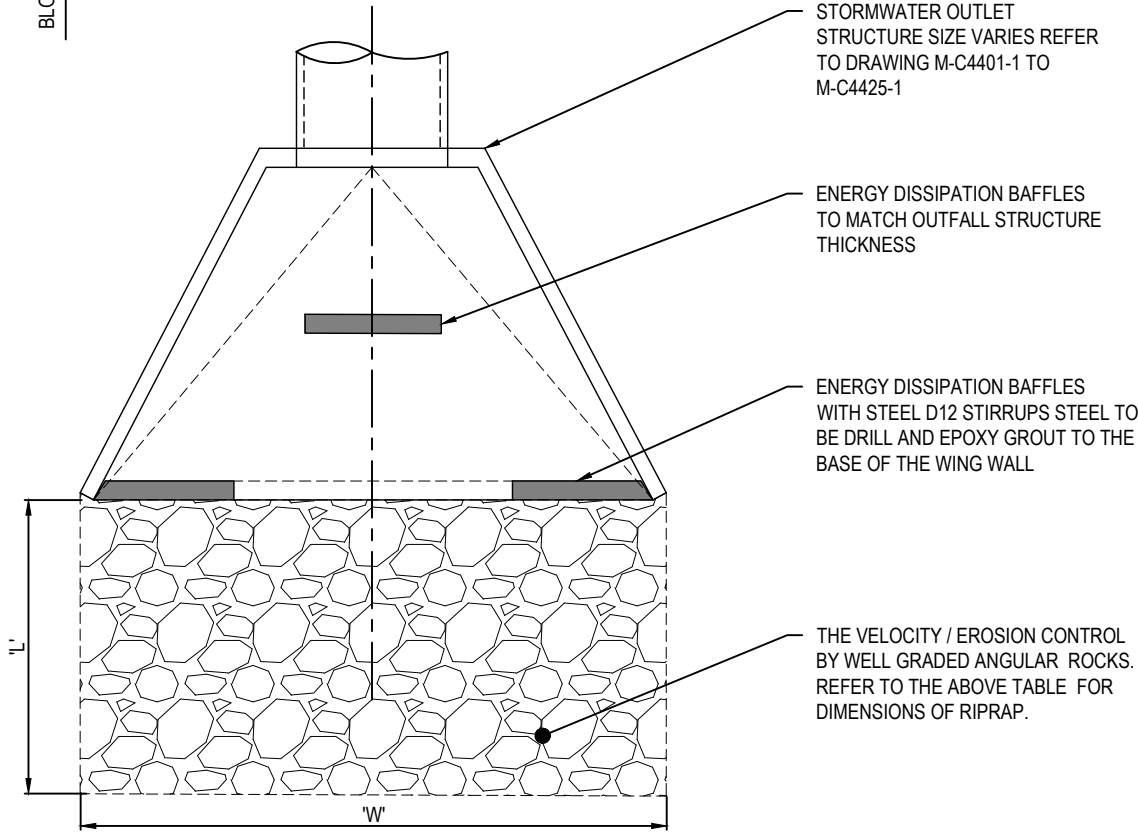
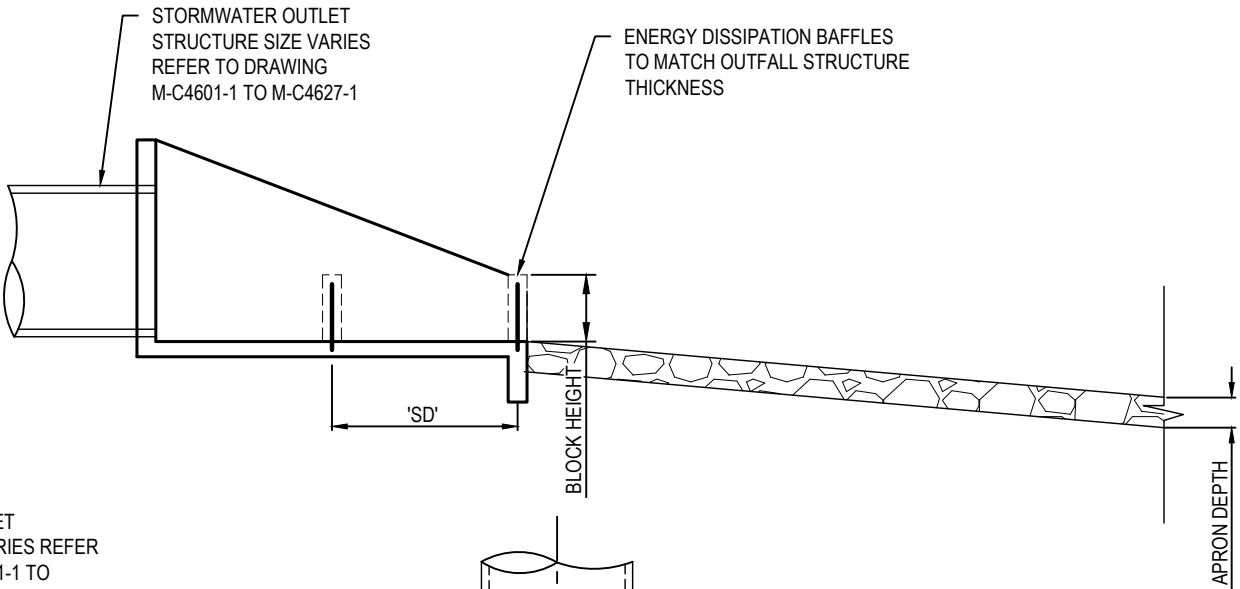
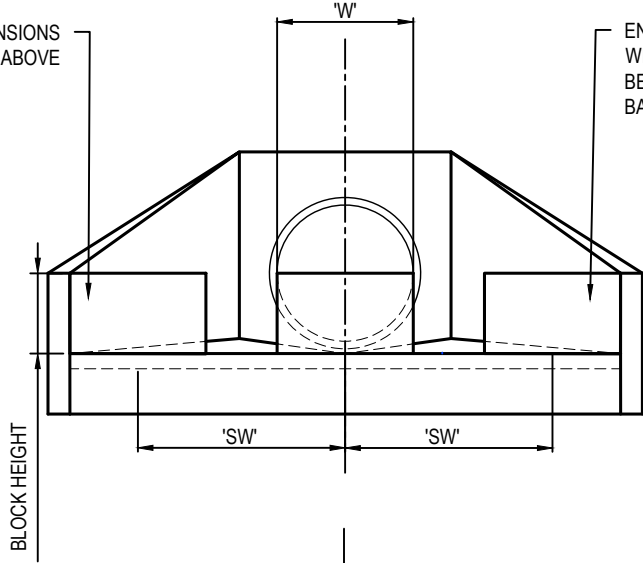
Project no.	215010
Scale	1:250 @ A3
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Drawing no.	M-C4425-2
Rev	A

BAFFLE BLOCK (ENERGY DISSIPATORS)					
* ALL DIMENSION ARE IN METRES (m)					
STRUCTURE NAME	BLOCK HEIGHT	WIDTH OF BLOCK 'W'	ROW SPACING 'SD'	BLOCK WIDTH 'SW'	TOTAL QTY OF BLOCKS
R1-C2	0.75	3.50	2.90	2.45	3.00
R5-C2	0.50	1.50	1.45	1.00	3.00

RIP RAP APRONS					
* ALL DIMENSION ARE IN METRES (m)					
STRUCTURE NAME	LENGTH 'L'	WIDTH 'W'	ROCK SIZE	APRON DEPTH	TOTAL LAYER OF ROCK
R1-C2	6.0	8.5	0.125	0.25	2
R5-C2	4.0	5.8	0.125	0.25	2

- NOTES
- ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
 - COORDINATES IN TERMS OF NZ GEODETIC DATUM MT EDEN 2000. LEVELS IN TERMS OF THE NEW ZEALAND VERTICAL DATUM (NZVD) 2016.
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 - HEAVY DUTY MANHOLE LIDS AND FRAMES TO BE USED IN TRAFFICKED AREAS.
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 - ALL LINES TO BE ABANDONED SHALL BE SEALED AT EACH END. TIMING OF ALL SEALING TO BE COORDINATED WITH COUNCIL STAFF.

REFER TO THE BAFFLE DIMENSIONS TABLE ABOVE



RESOURCE CONSENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
INLET & OUTFALL
DETAIL**

Project no.	215010
Scale	1:50 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4430
Rev	A



- 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 THE NEW ZEALAND VERTICAL DATUM (NZVD) 2016.
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- LEGEND
- EX BDY
 - PR BDY
 - SWALE FLOW DIRECTION
 - SWALE TOP/BASE
 - PR SW SWALES
 - EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

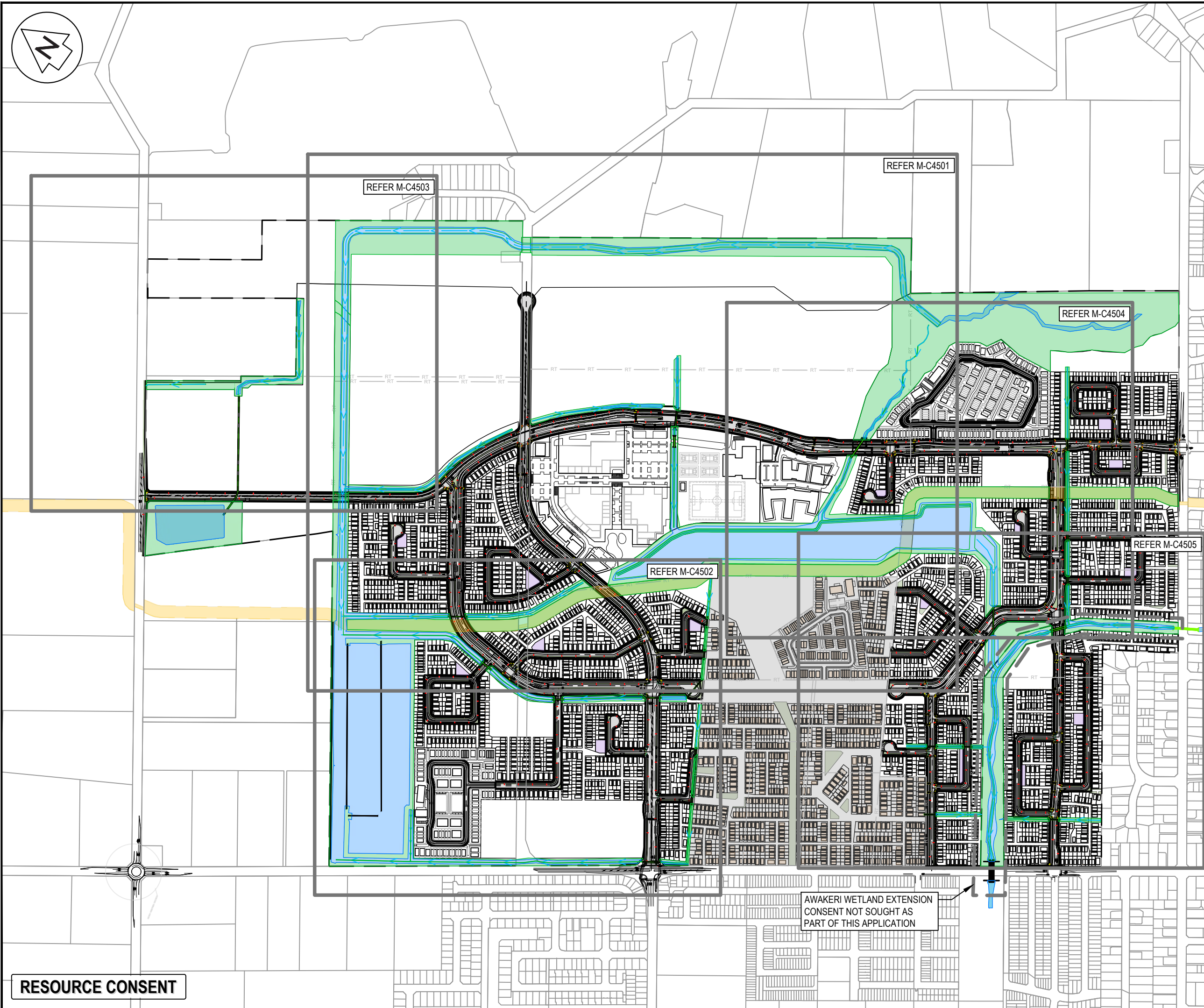


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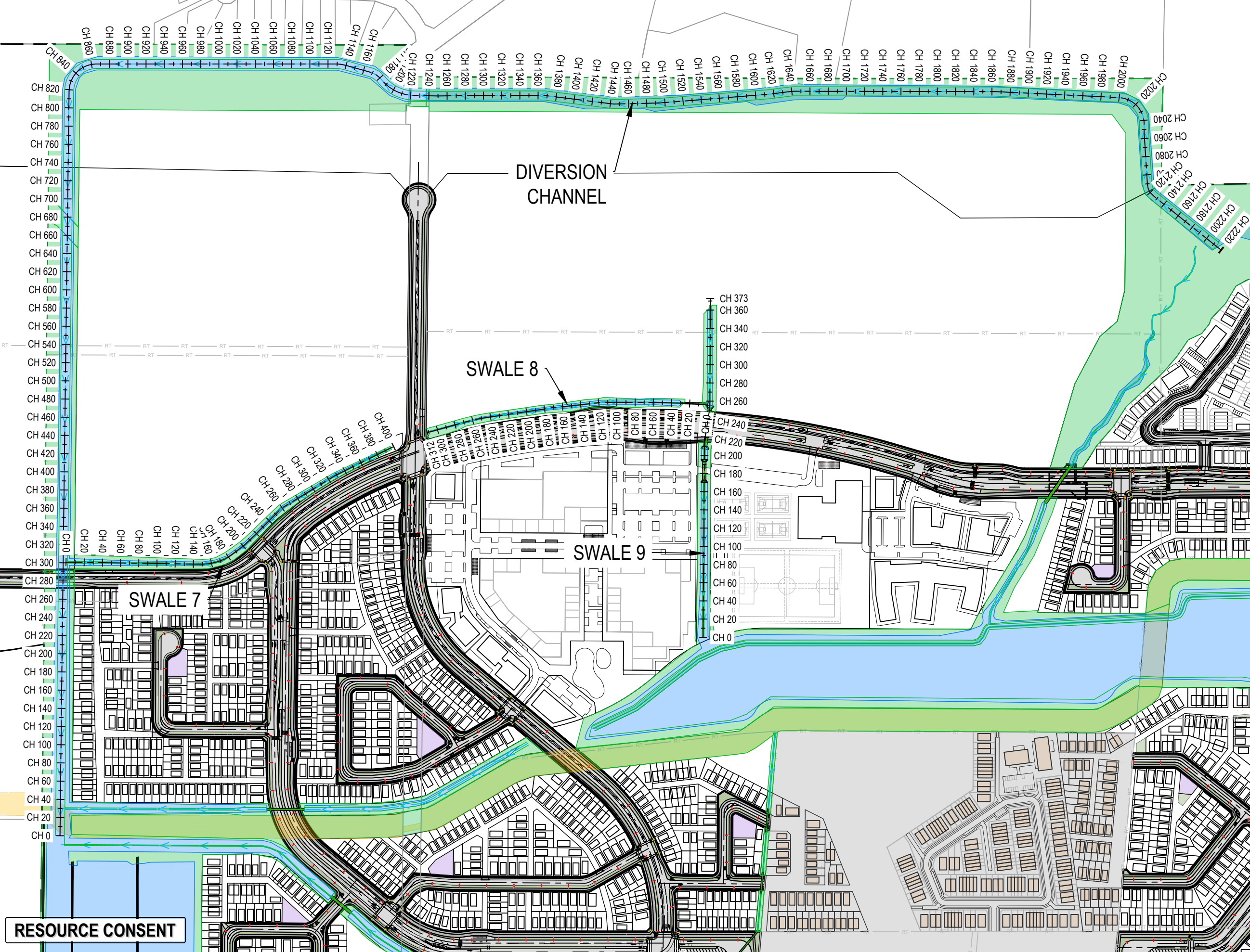
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED SWALES/
DIVERSION PATH OVER-
VIEW PLAN**

Project no.	215010		
Scale	1:7500 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4500	Rev	A



DATE: 8/1/25 FILE PATH: E:\Maven\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCT\MASTER PLANNING\215010A-M-C450.DWG



- NOTES
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LEGEND

	EX BDY
	PR BDY
	SWALE FLOW DIRECTION
	SWALE TOP/BASE
	PR SW SWALES
	EX FIRST GAS EASEMENT

Rev	Description	By	Date
A	RESOURCE CONSENT	OQ	02/2025
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

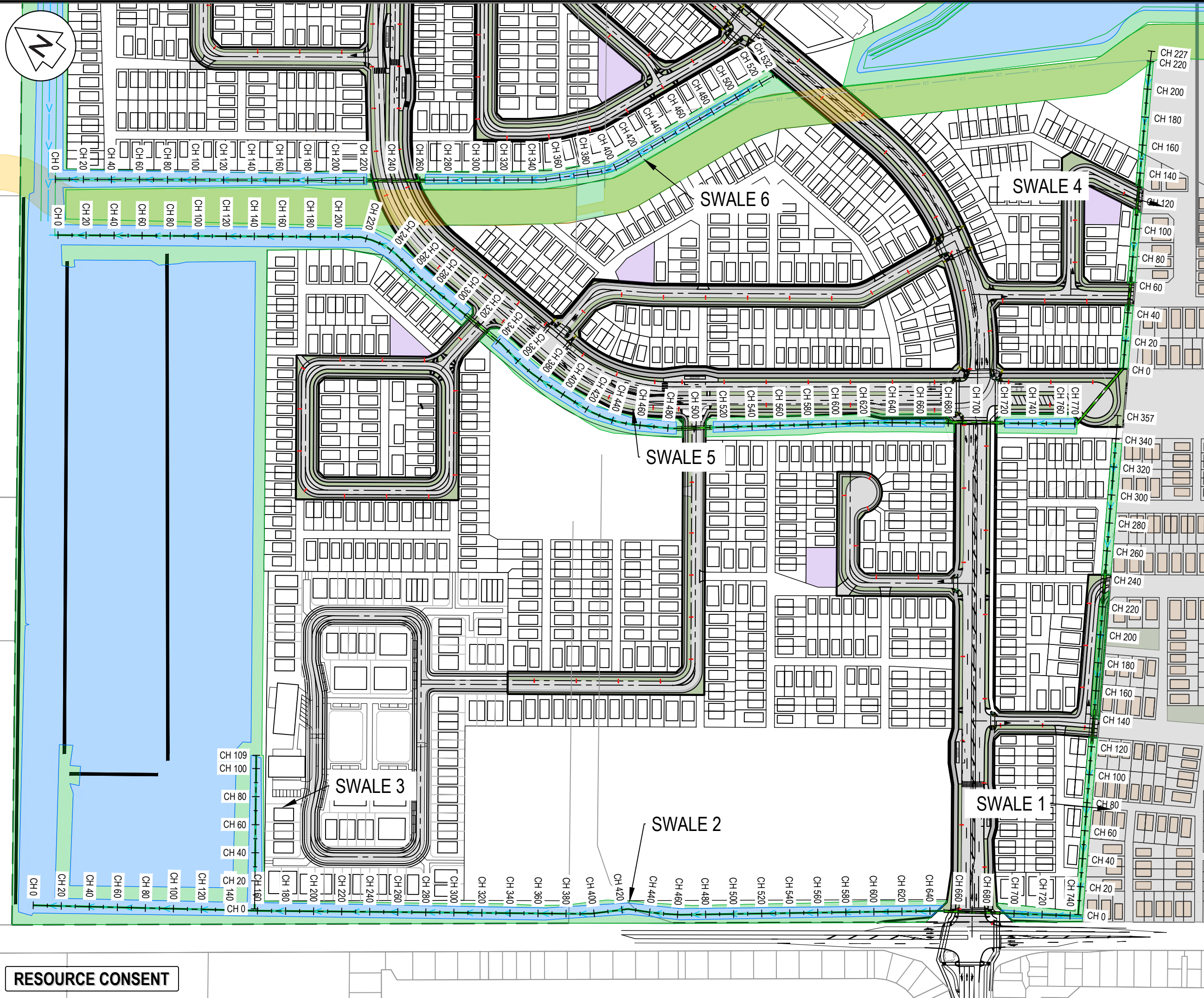
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED SWALES/
DIVERSION PATH PLAN
SHEET 1**

Project no.	215010
Scale	1:4000 @ A3
Cad file	215010-M-C450.DWG
Drawing no.	M-C4501
Rev	A

DATE: 8/1/25 FILE PATH: E:\Maven\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCT\MASTER PLANNING\215010M-C450.DWG



NOTES

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LEGEND

- EX BDY
- PR BDY
- SWALE FLOW DIRECTION
- SWALE TOP/BASE
- PR SW SWALES
- EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

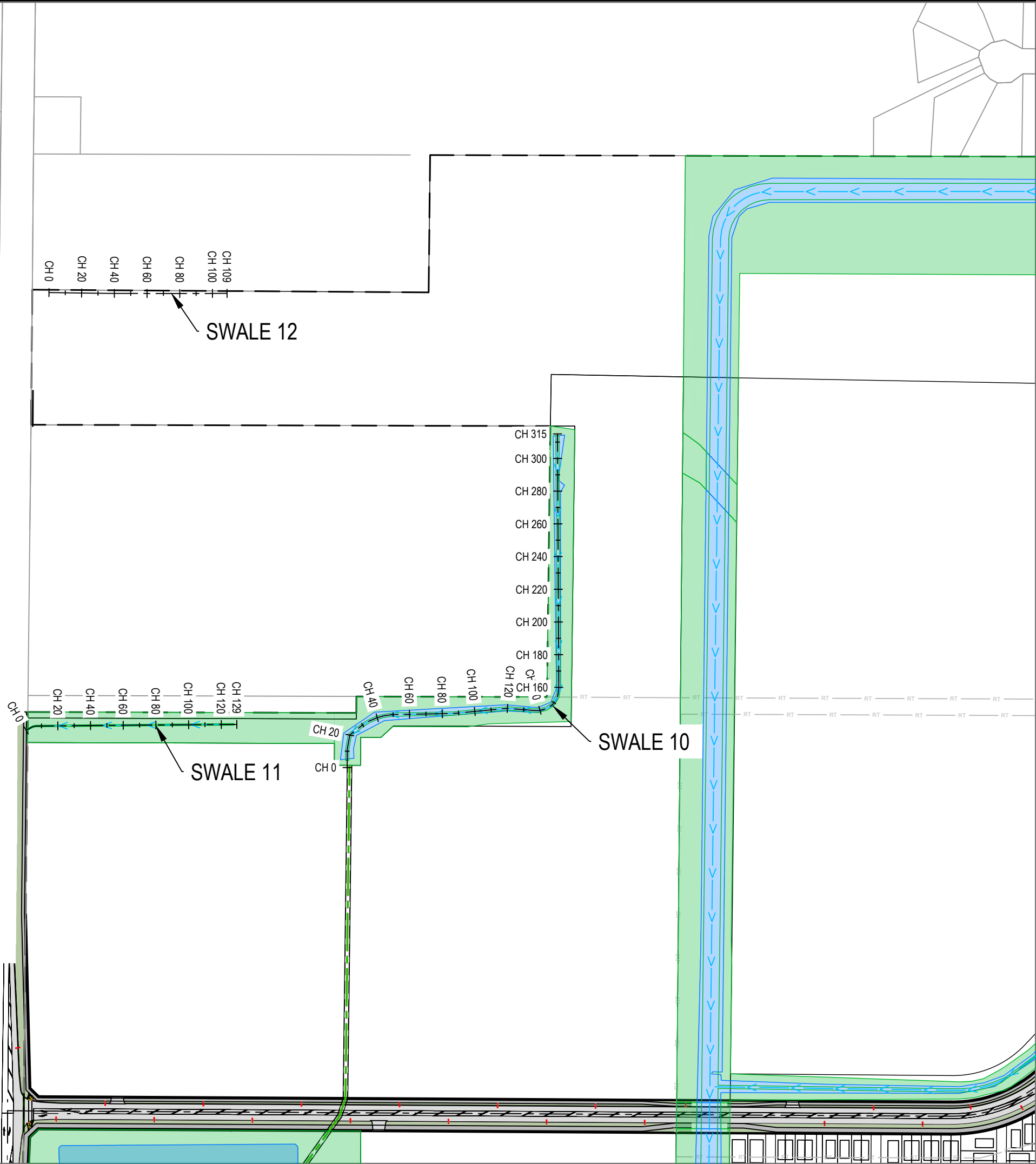
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED SWALES/
DIVERSION PATH PLAN
SHEET 2**

Project no.	215010
Scale	1:2500 @ A3
Cad file	215010-M-C450.DWG
Drawing no.	M-C4502
Rev	A

RESOURCE CONSENT



- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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LEGEND

---	EX BDY
---	PR BDY
→→→	SWALE FLOW DIRECTION
---	SWALE TOP/BASE
---	PR SW SWALES
---	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

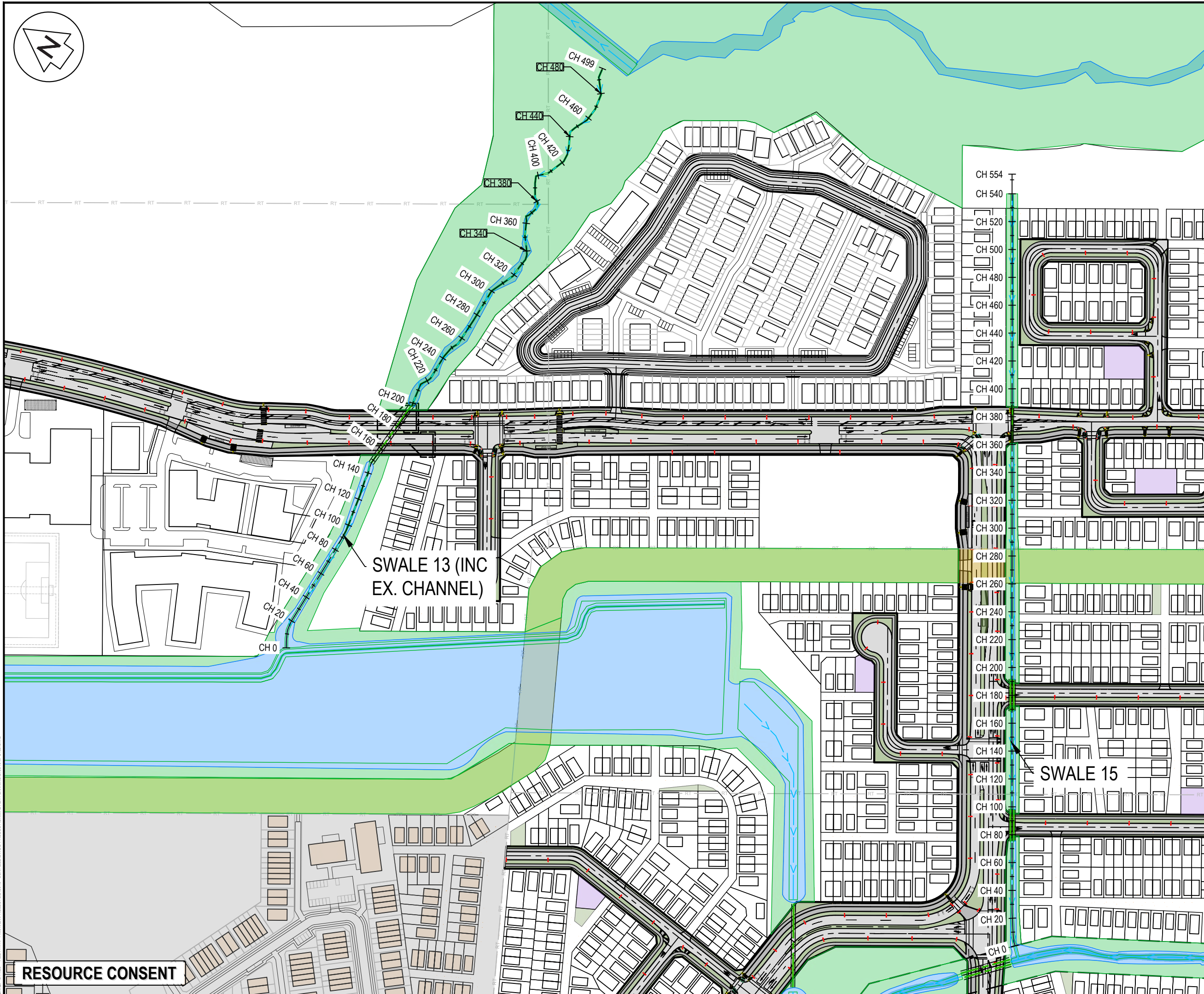
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED SWALES/
DIVERSION PATH PLAN
SHEET 3**

Project no.	215010
Scale	1:2500 @ A3
Cad file	215010-M-C450.DWG
Drawing no.	M-C4503
Rev	A

RESOURCE CONSENT



- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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- LEGEND
- EX BDY
 - PR BDY
 - SWALE FLOW DIRECTION
 - SWALE TOP/BASE
 - PR SW SWALES
 - EX FIRST GAS EASEMENT

A		RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date	
Survey	SURVEYWORX		02/2021	
Design	YW		11/2024	
Drawn	OQ		11/2024	
Checked	JP/LC		02/2025	



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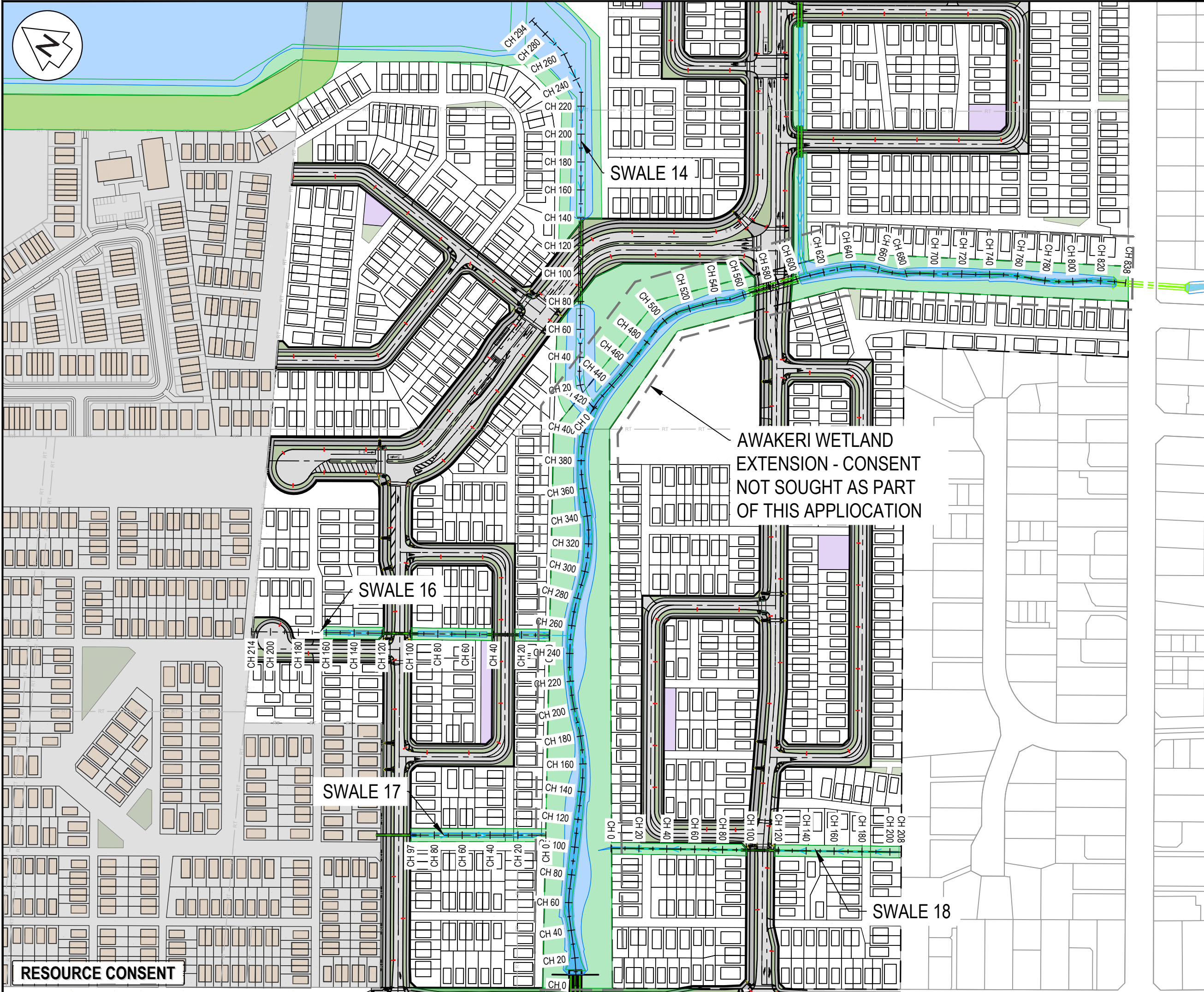
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED SWALES/
DIVERSION PATH PLAN
SHEET 4**

Project no.	215010
Scale	1:2500 @ A3
Cad file	215010-M-C450.DWG
Drawing no.	M-C4504
Rev	A

RESOURCE CONSENT

DATE: 8/1/25 FILE PATH: E:\Maven\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCT\MASTER PLANNING\215010M-C450.DWG



- NOTES
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LEGEND

	EX BDY
	PR BDY
	SWALE FLOW DIRECTION
	SWALE TOP/BASE
	PR SW SWALES
	EX FIRST GAS EASEMENT

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025



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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

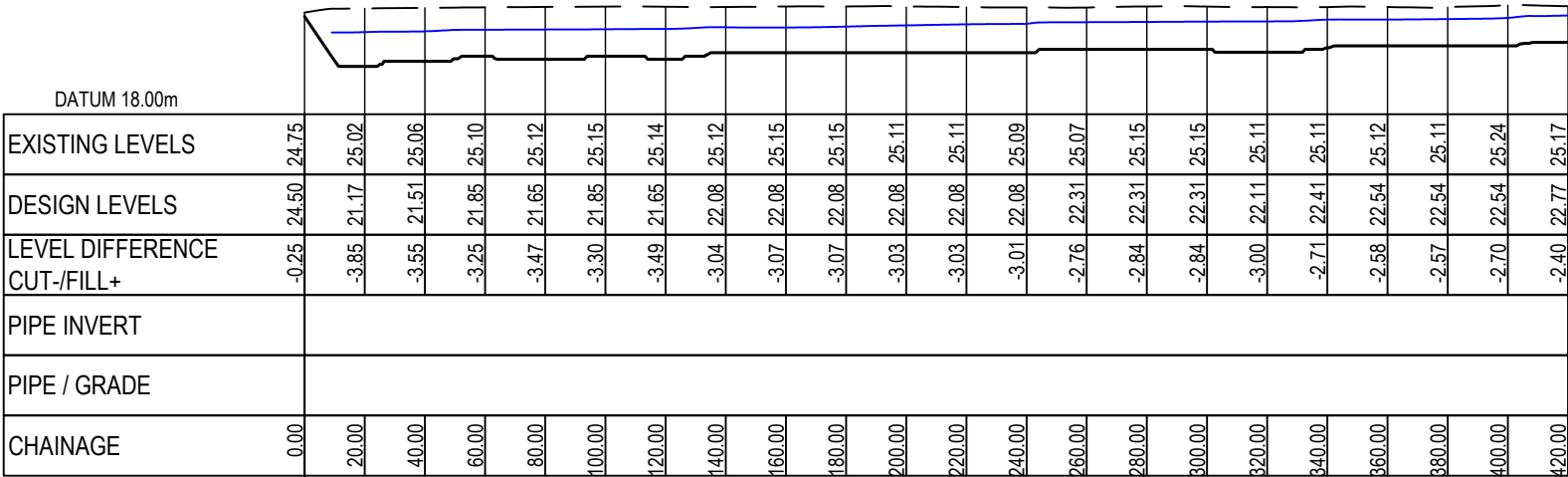
Title
**PROPOSED SWALES/
DIVERSION PATH PLAN
SHEET 5**

Project no.	215010
Scale	1:2500 @ A3
Cad file	215010-M-C450.DWG
Drawing no.	M-C4505
Rev	A

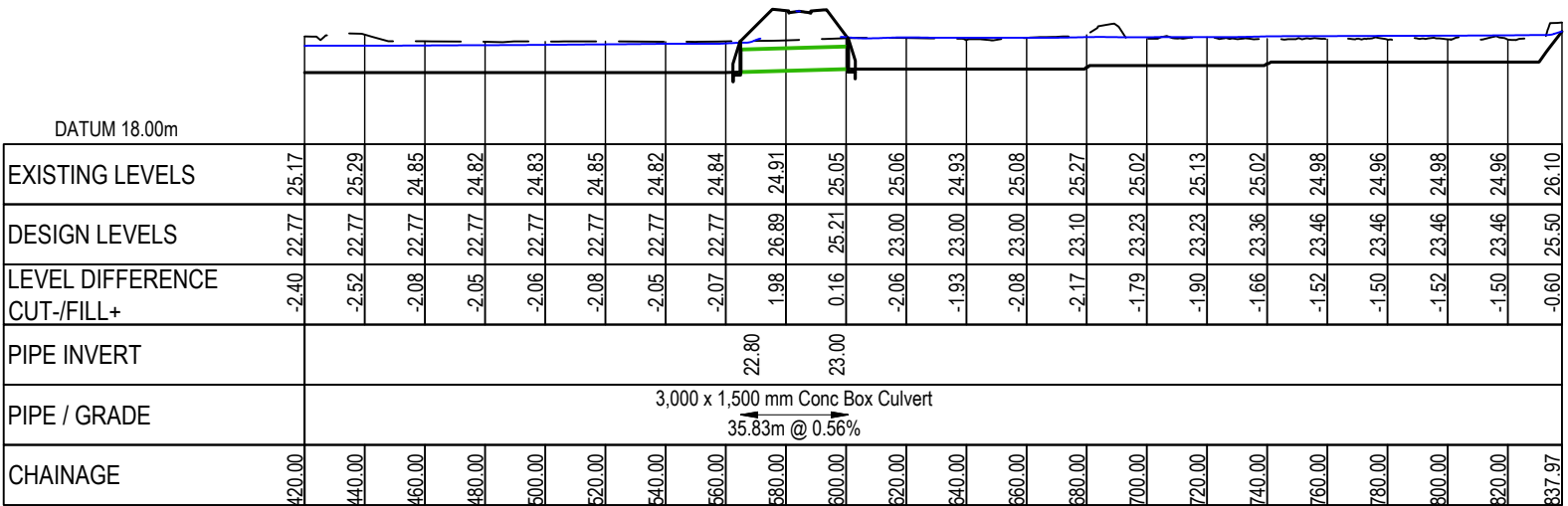
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RESOURCE CONSENT

DATE: 8/11/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



PROPOSED - AWAKERI WETLAND EXTENSION CH 0+00.00 TO CH 4+20.00
SCALE: 1:2500 H / 1:500 V



PROPOSED - AWAKERI WETLAND EXTENSION CH 4+20.00 TO CH 8+37.97
SCALE: 1:2500 H / 1:500 V

RESOURCE CONSENT

AWAKERI WETLAND EXTENSION
CONSENT NOT SOUGHT AS
PART OF THIS APPLICATION

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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- LEGEND:
- EX GROUND SURFACE
 - PR FINISHED GROUND SURFACE
 - 1% AEP FLOOD LEVEL (MPD)
 - SW CULVERT CROSSING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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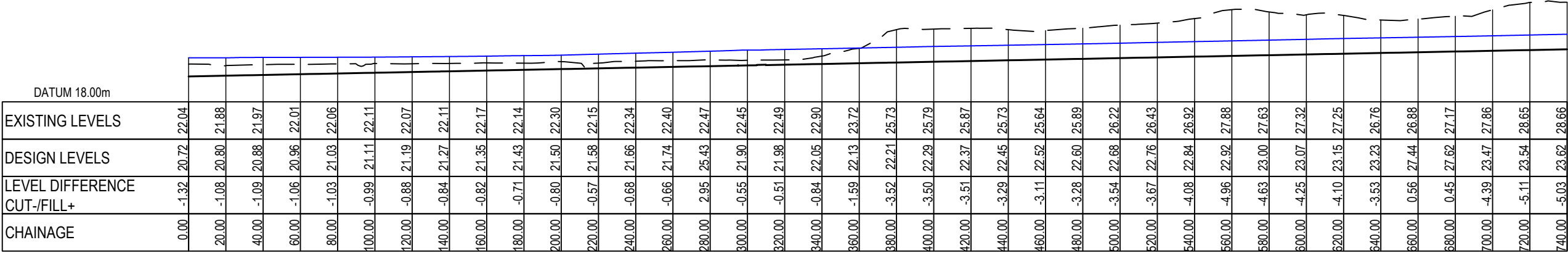
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

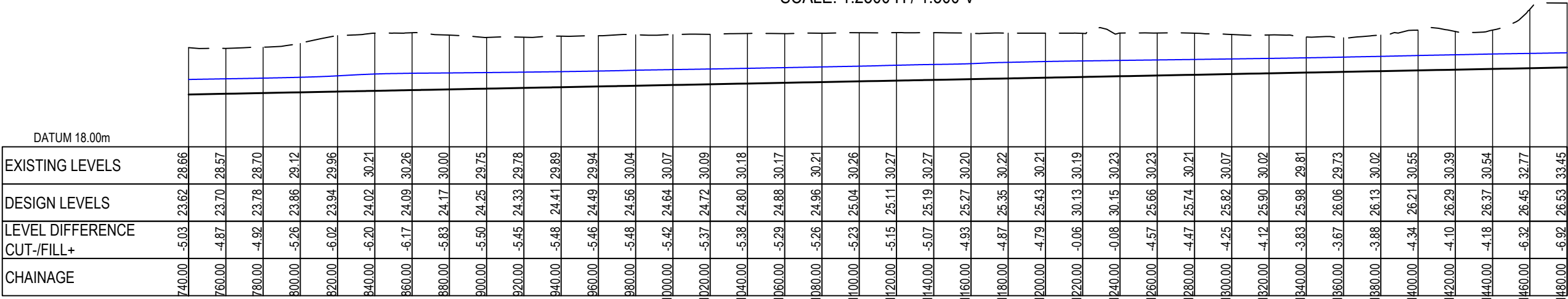
Title
**PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 1**

Project no.	215010		
Scale	1:2500 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4510	Rev	A

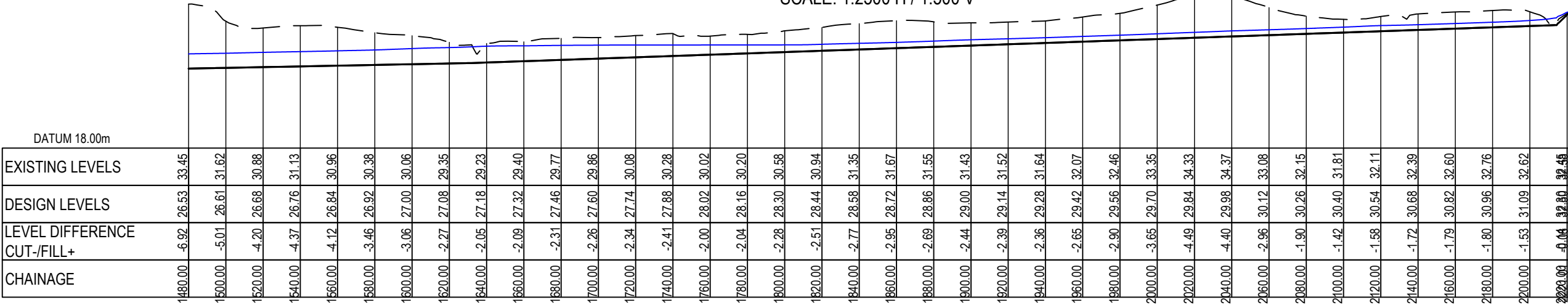
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PROPOSED - DIVERSION CHANNEL CH 0+00.00 TO CH 7+40.00
SCALE: 1:2500 H / 1:500 V



PROPOSED - DIVERSION CHANNEL CH 7+40.00 TO CH 14+80.00
SCALE: 1:2500 H / 1:500 V



PROPOSED - DIVERSION CHANNEL CH 14+80.00 TO CH 22+21.01
SCALE: 1:2500 H / 1:500 V

RESOURCE CONSENT

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- LEGEND:
- EX GROUND SURFACE
 - PR FINISHED GROUND SURFACE
 - 1% AEP FLOOD LEVEL (MPD)
 - SW CULVERT CROSSING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

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Project

SUNFIELD DEVELOPMENT

ARDMORE, AUCKLAND

MASTERPLANNING

FOR SUNFIELD

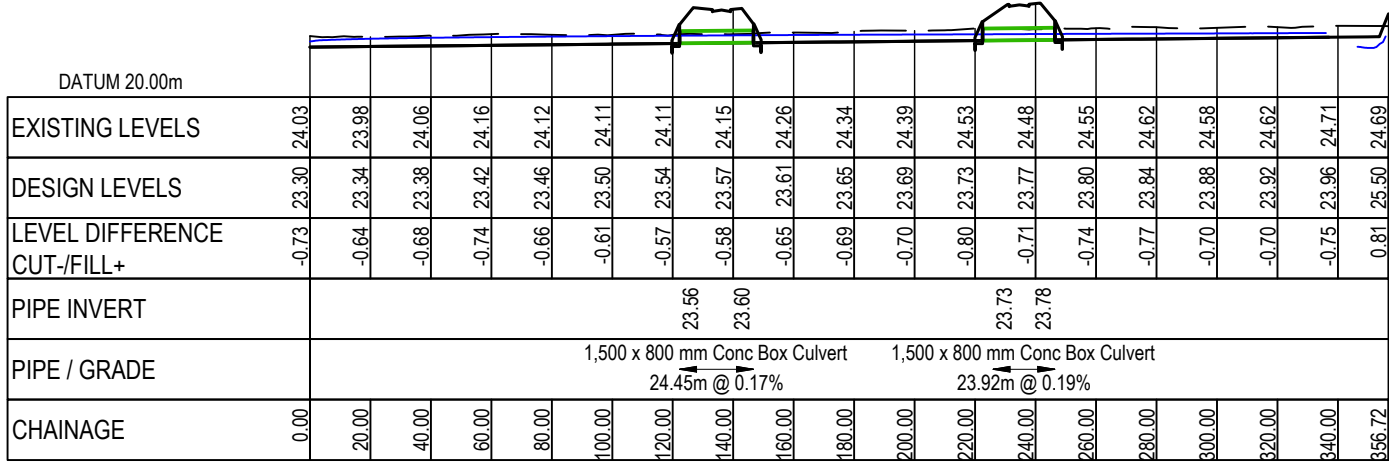
DEVELOPMENTS LIMITED

Title

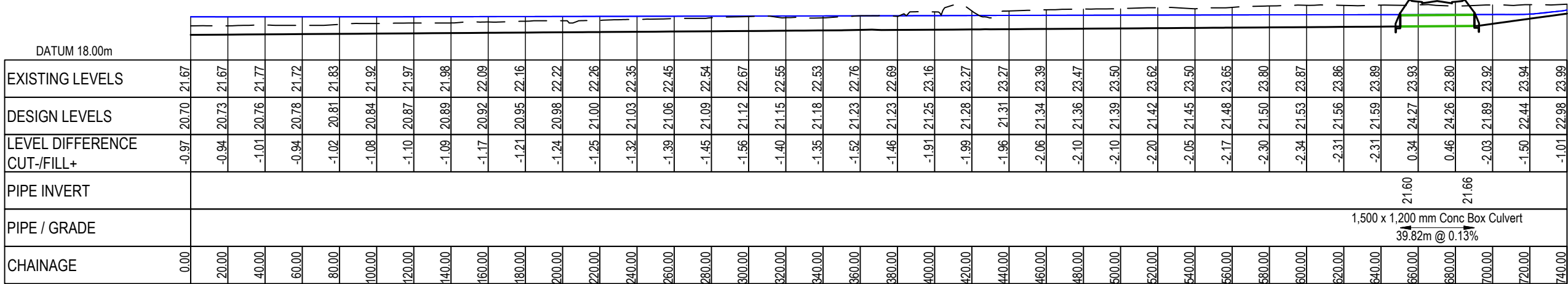
**PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 2**

Project no.	215010		
Scale	1:2500 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4511	Rev	A

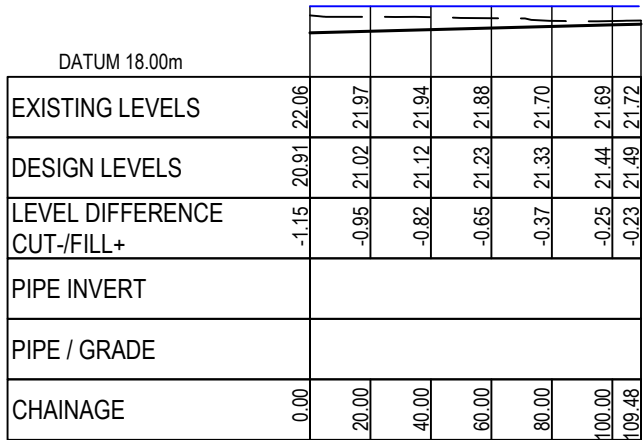
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PROPOSED - SWALE 1 CH 0+00.00 TO CH 3+56.72
SCALE: 1:2500 H / 1:500 V



PROPOSED - SWALE 2 CH 0+00.00 TO CH 7+40.00
SCALE: 1:2500 H / 1:500 V



PROPOSED - SWALE 3 CH 0+00.00 TO CH 1+09.48
SCALE: 1:2500 H / 1:500 V

RESOURCE CONSENT

- NOTES:
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- LEGEND:
- EX GROUND SURFACE
 - PR FINISHED GROUND SURFACE
 - 1% AEP FLOOD LEVEL (MPD)
 - SW CULVERT CROSSING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Auckland 1023

Project

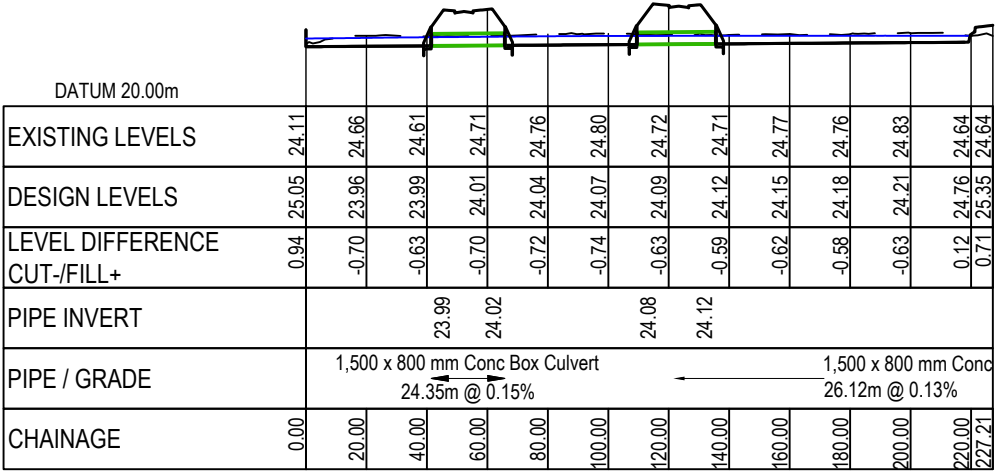
SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED

Title

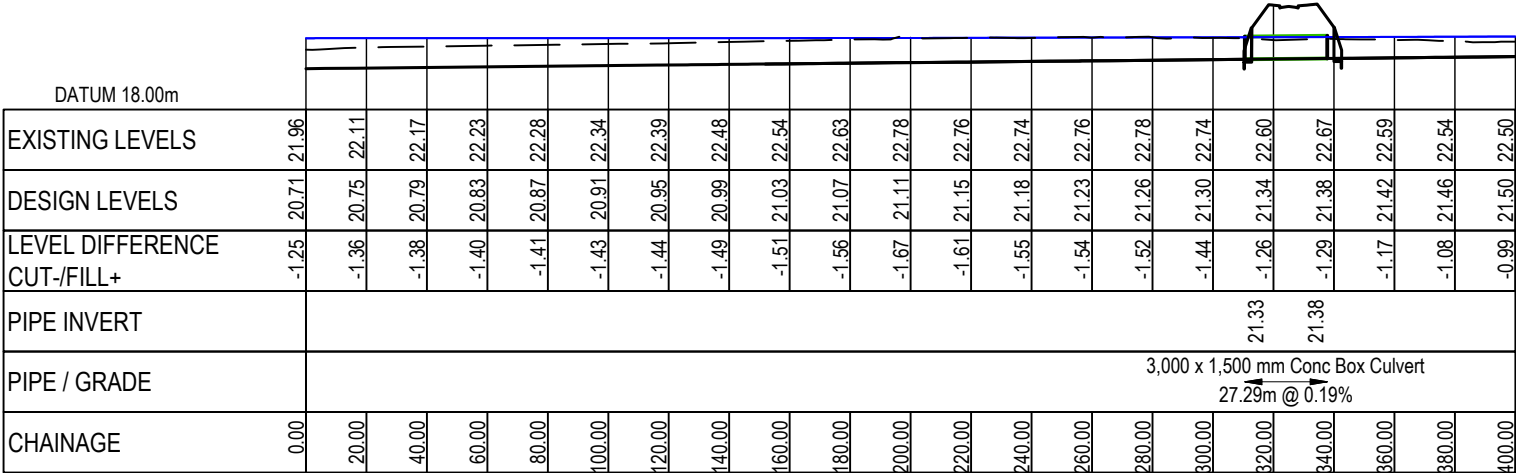
PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 3

Project no.	215010		
Scale	1:2500 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4512	Rev	A

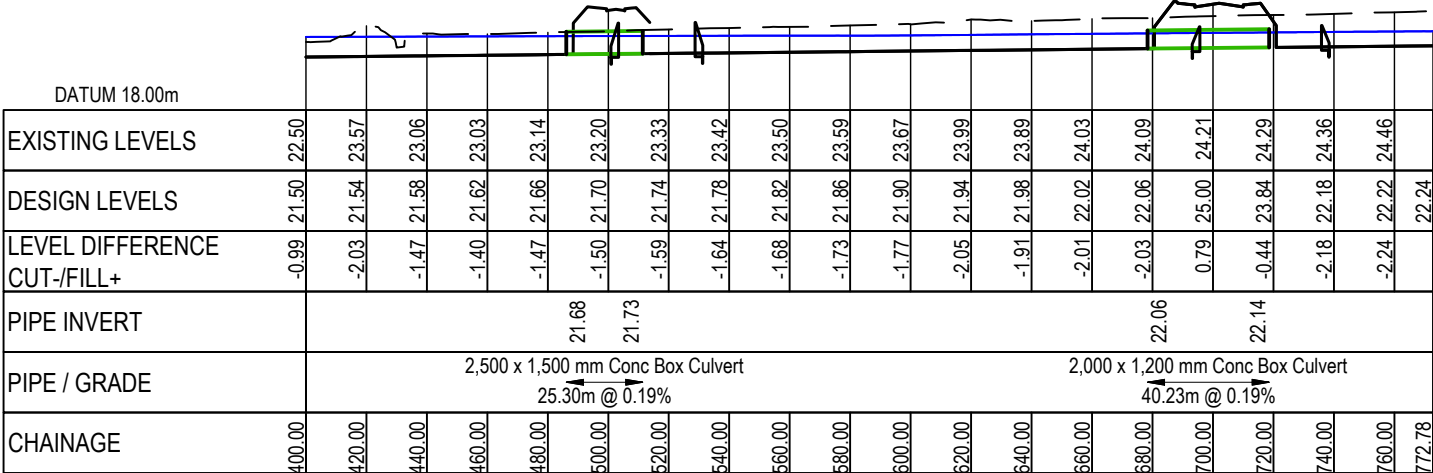
DATE: 8/11/25 FILE PATH: F:\Maven\PROJECTS\1010 - SUNFIELD\WORK\PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



PROPOSED - SWALE 4 CH 0+00.00 TO CH 2+27.21
SCALE: 1:2500 H / 1:500 V



PROPOSED - SWALE 5 CH 0+00.00 TO CH 4+00.00
SCALE: 1:2500 H / 1:500 V



PROPOSED - SWALE 5 CH 4+00.00 TO CH 7+72.78
SCALE: 1:2500 H / 1:500 V

RESOURCE CONSENT

- 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 THE NEW ZEALAND VERTICAL DATUM (NZVD) 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. APPROVED HARDFILL IS TO BE USED IN BACKFILLING OF ALL ROAD CROSSINGS AND VEHICLE CROSSINGS TO COUNCIL STANDARDS.
 6. HEAVY DUTY MANHOLE LIDS AND FRAMES TO BE USED IN TRAFFICKED AREAS.
 7. ALL MANHOLES ARE TO BE 1050MMØ PRECAST CONCRETE UNLESS SHOWN OTHERWISE.
 8. ALL LINES TO BE ABANDONED SHALL BE SEALED AT EACH END. TIMING OF ALL SEALING TO BE COORDINATED WITH COUNCIL STAFF.

- LEGEND:
- EX GROUND SURFACE
 - PR FINISHED GROUND SURFACE
 - 1% AEP FLOOD LEVEL (MPD)
 - SW CULVERT CROSSING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project

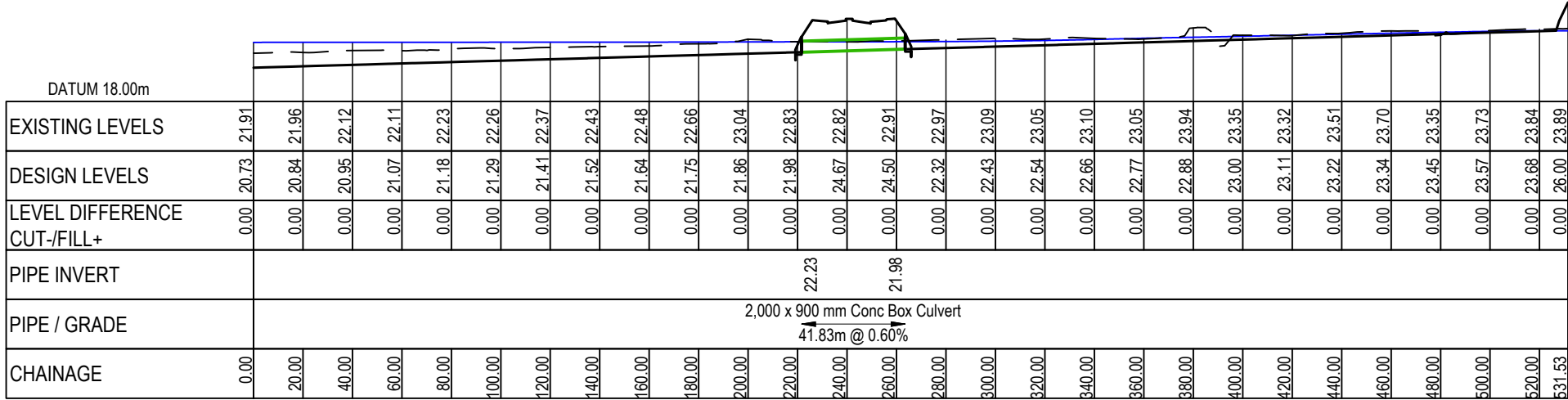
SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED

Title

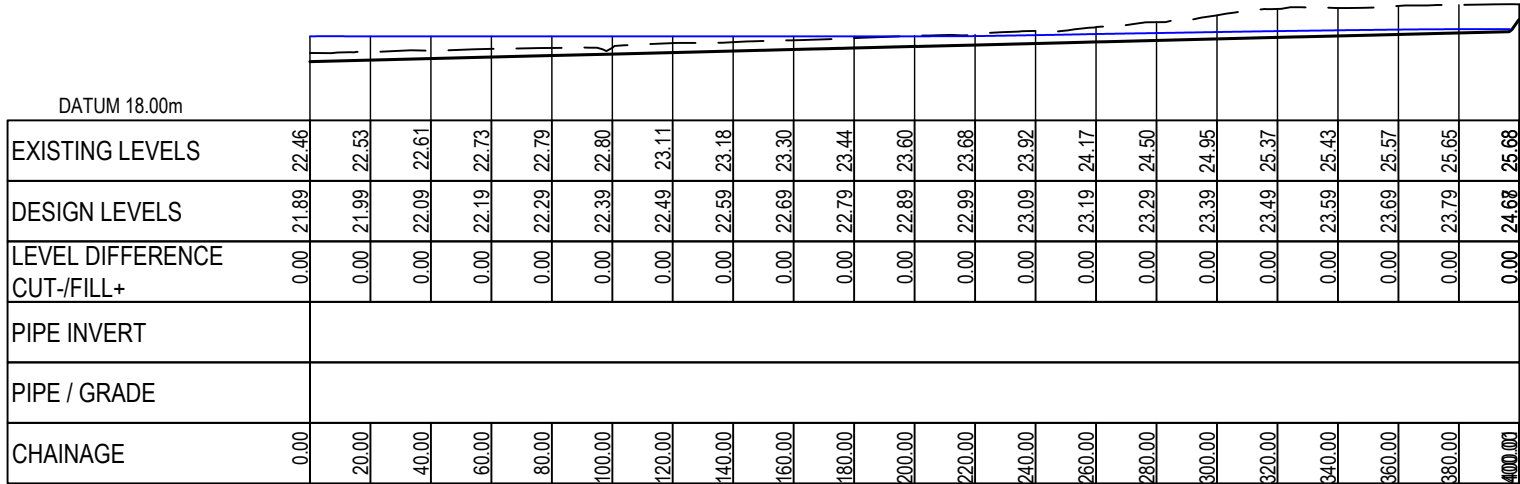
PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 4

Project no.	215010		
Scale	1:2500 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4513	Rev	A

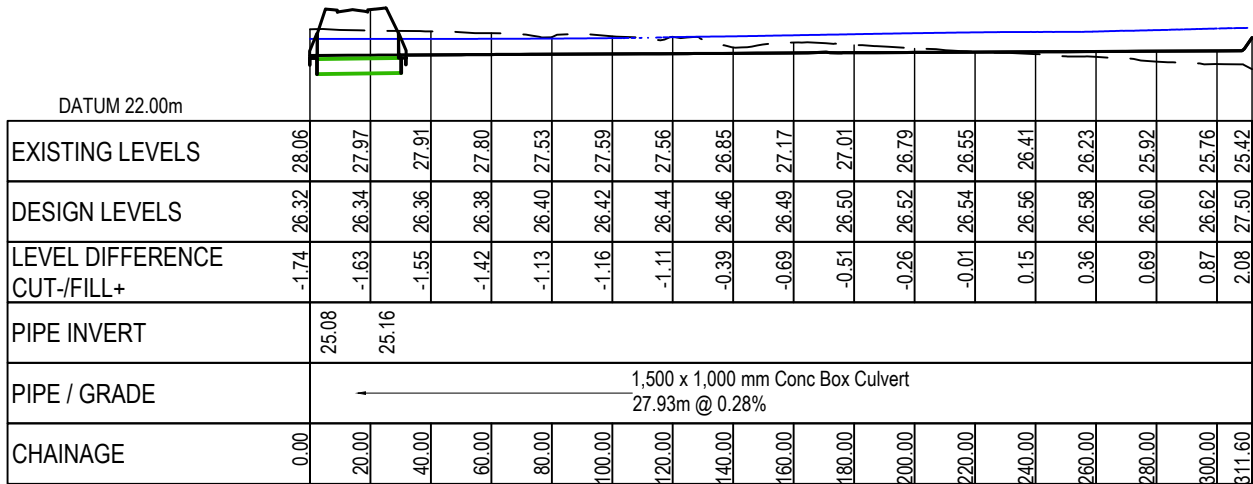
DATE: 8/11/25 FILE PATH: F:\Maven\PROJECTS\1910 - SUNFIELD\03\PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



PROPOSED - SWALE 6 CH 0+00.00 TO CH 5+31.53
SCALE: 1:2500 H / 1:500 V



PROPOSED - SWALE 7 CH 0+00.00 TO CH 4+00.01
SCALE: 1:2500 H / 1:500 V



PROPOSED - SWALE 8 CH 0+00.00 TO CH 3+11.60
SCALE: 1:2500 H / 1:500 V

RESOURCE CONSENT

- 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 THE NEW ZEALAND VERTICAL DATUM (NZVD) 2016.
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 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. APPROVED HARDFILL IS TO BE USED IN BACKFILLING OF ALL ROAD CROSSINGS AND VEHICLE CROSSINGS TO COUNCIL STANDARDS.
 6. HEAVY DUTY MANHOLE LIDS AND FRAMES TO BE USED IN TRAFFICKED AREAS.
 7. ALL MANHOLES ARE TO BE 1050MMØ PRECAST CONCRETE UNLESS SHOWN OTHERWISE.
 8. ALL LINES TO BE ABANDONED SHALL BE SEALED AT EACH END. TIMING OF ALL SEALING TO BE COORDINATED WITH COUNCIL STAFF.

- LEGEND:
- EX GROUND SURFACE
 - PR FINISHED GROUND SURFACE
 - 1% AEP FLOOD LEVEL (MPD)
 - SW CULVERT CROSSING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

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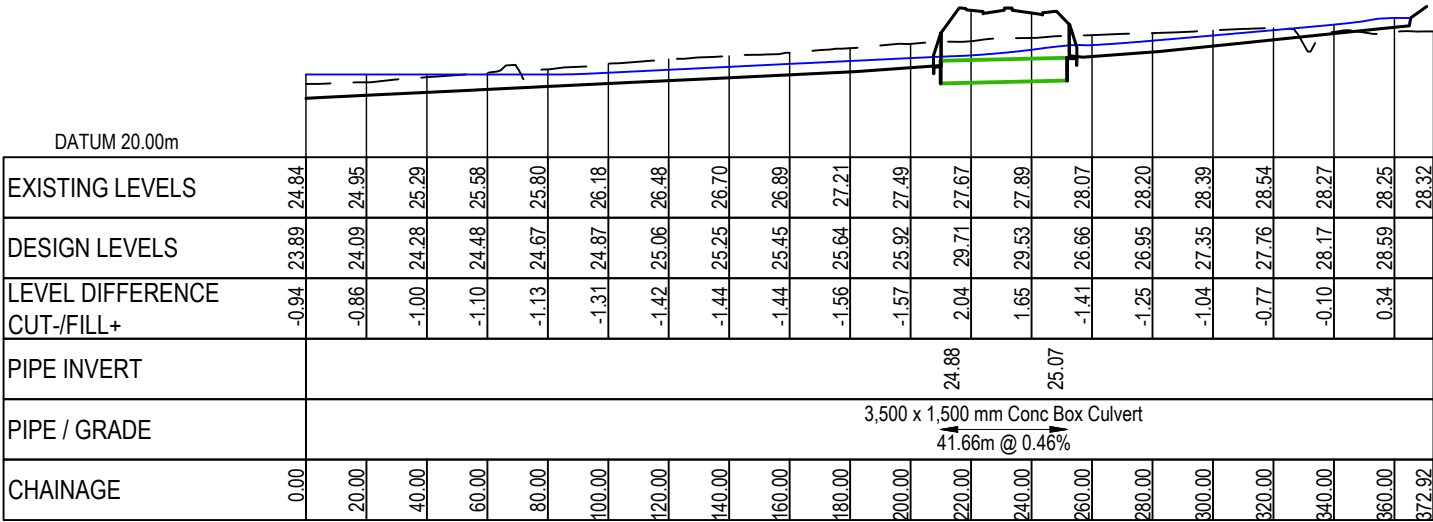
Auckland 1023

Project
SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED

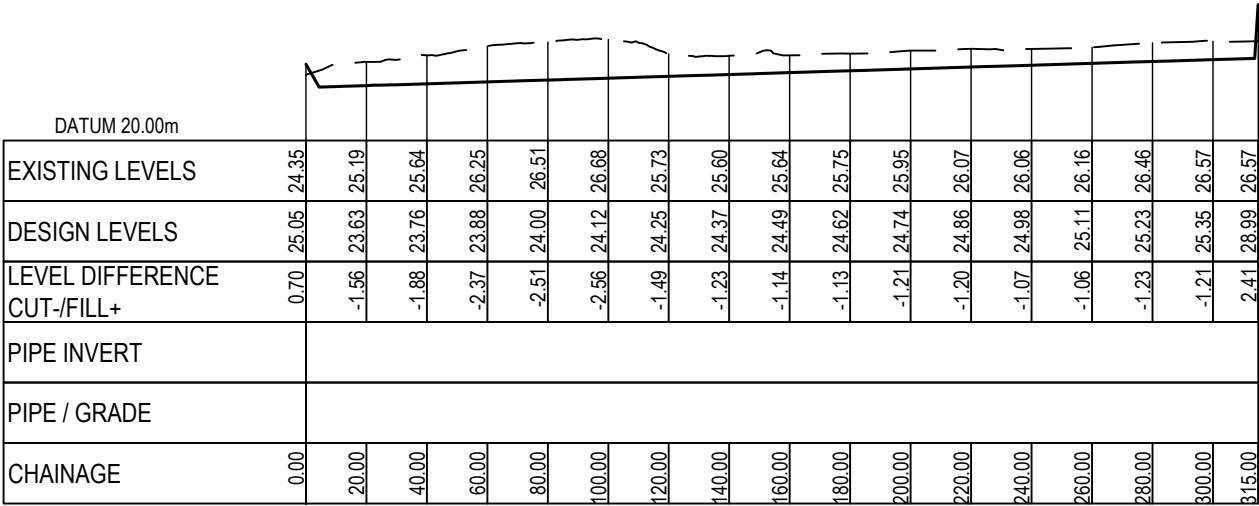
Title
**PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 5**

Project no.	215010		
Scale	1:2500 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4514	Rev	A

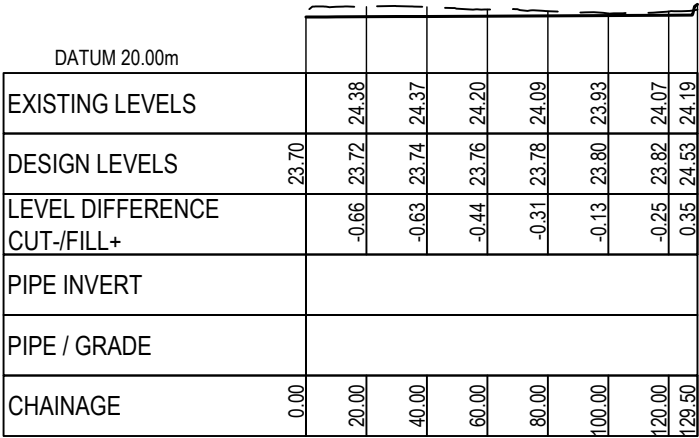
DATE: 8/11/25 FILE PATH: F:\Maven\PROJECTS\15010 - SUNFIELD\WORK\PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



PROPOSED - SWALE 9 CH 0+00.00 TO CH 3+72.92
SCALE: 1:2500 H / 1:500 V



PROPOSED - SWALE 10 CH 0+00.00 TO CH 3+15.00
SCALE: 1:2500 H / 1:500 V



PROPOSED - SWALE 11 CH 0+00.00 TO CH 1+29.50
SCALE: 1:2500 H / 1:500 V

RESOURCE CONSENT

- NOTES
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 2. COORDINATES IN TERMS OF NZ GEODETIC DATUM MT EDEN 2000. LEVELS IN TERMS OF THE NEW ZEALAND VERTICAL DATUM (NZVD) 2016.
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- LEGEND:
- EX GROUND SURFACE
 - PR FINISHED GROUND SURFACE
 - 1% AEP FLOOD LEVEL (MPD)
 - SW CULVERT CROSSING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project

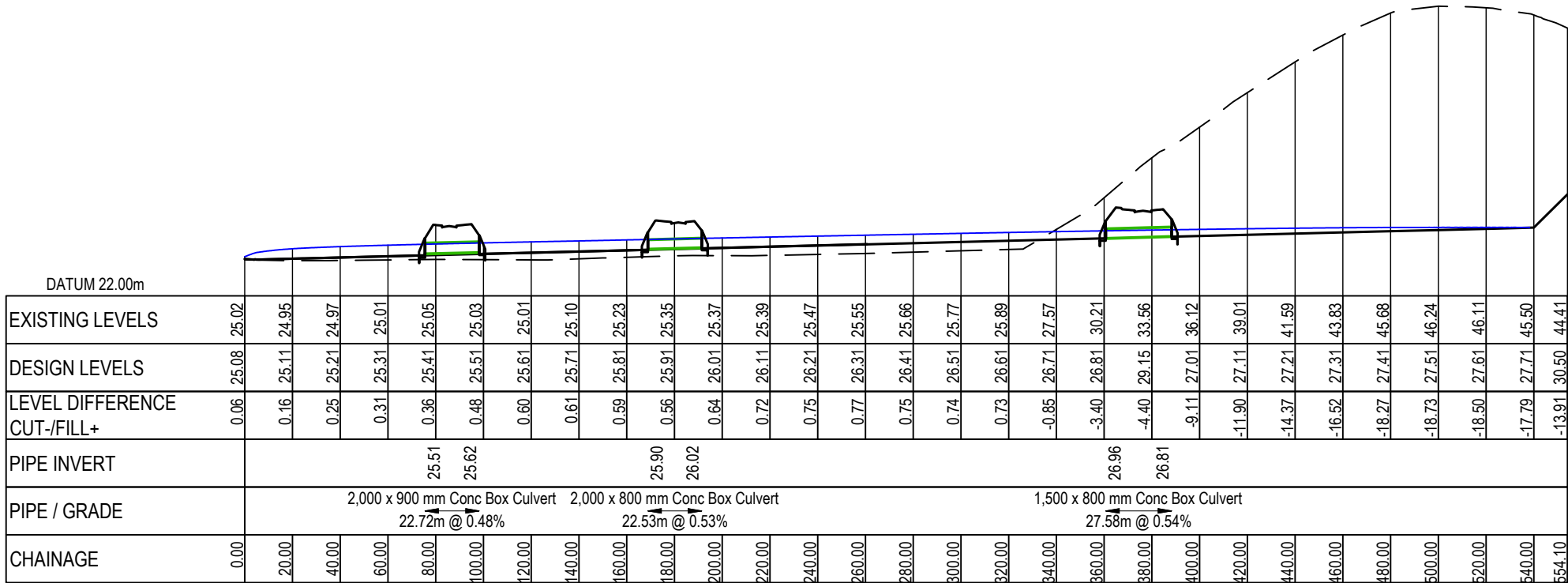
SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED

Title

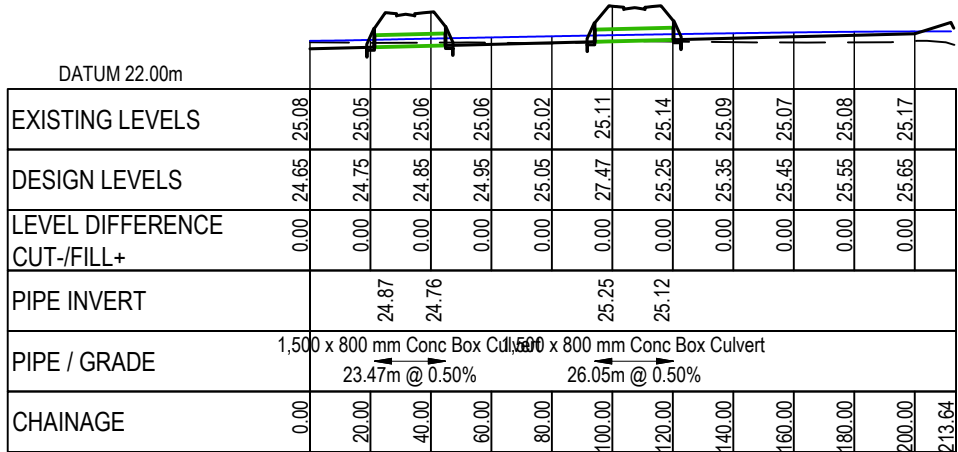
PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 5

Project no.	215010		
Scale	1:2500 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4515	Rev	A

DATE: 8/11/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



PROPOSED - SWALE 15 CH 0+00.00 TO CH 5+54.10
SCALE: 1:2500 H / 1:500 V



PROPOSED - SWALE 16 CH 0+00.00 TO CH 2+13.64
SCALE: 1:2500 H / 1:500 V

RESOURCE CONSENT

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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- LEGEND:
- EX GROUND SURFACE
 - PR FINISHED GROUND SURFACE
 - 1% AEP FLOOD LEVEL (MPD)
 - SW CULVERT CROSSING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025



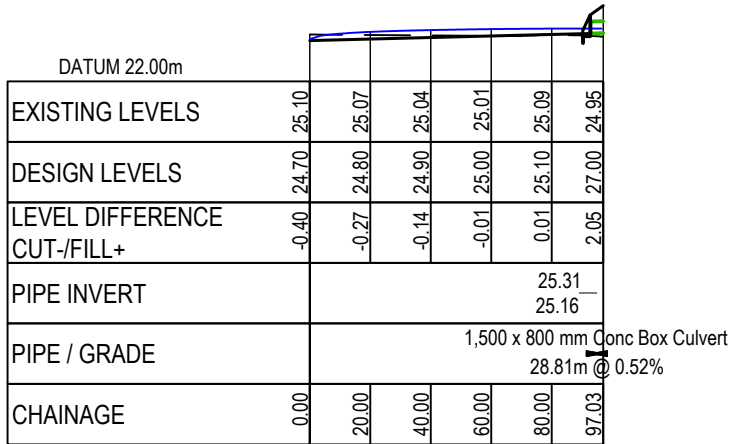
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5 Owens Road, Epsom
Auckland 1023

Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

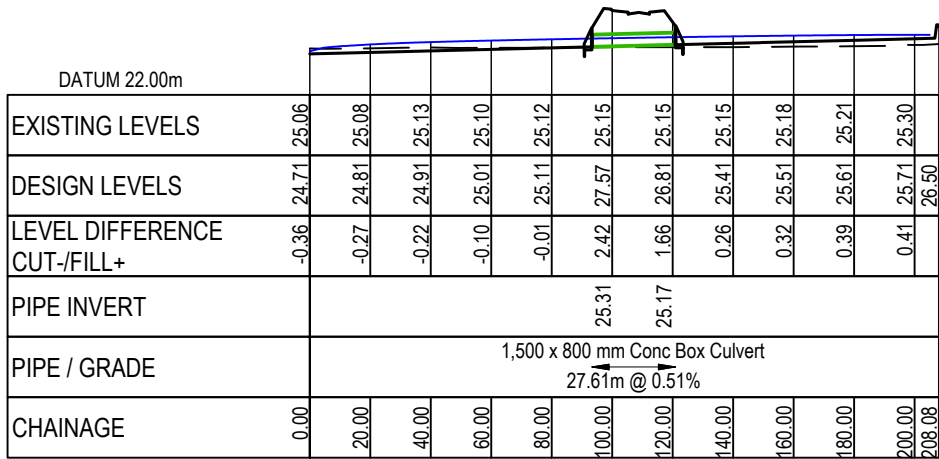
Title
**PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 8**

Project no.	215010		
Scale	1:2500 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4517	Rev	A

DATE: 8/11/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\WORKS\PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



PROPOSED - SWALE 17 CH 0+00.00 TO CH 0+97.03
SCALE: 1:2500 H / 1:500 V



PROPOSED - SWALE 18 CH 0+00.00 TO CH 2+08.08
SCALE: 1:2500 H / 1:500 V

RESOURCE CONSENT

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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- LEGEND:
- EX GROUND SURFACE
 - PR FINISHED GROUND SURFACE
 - 1% AEP FLOOD LEVEL (MPD)
 - SW CULVERT CROSSING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Project

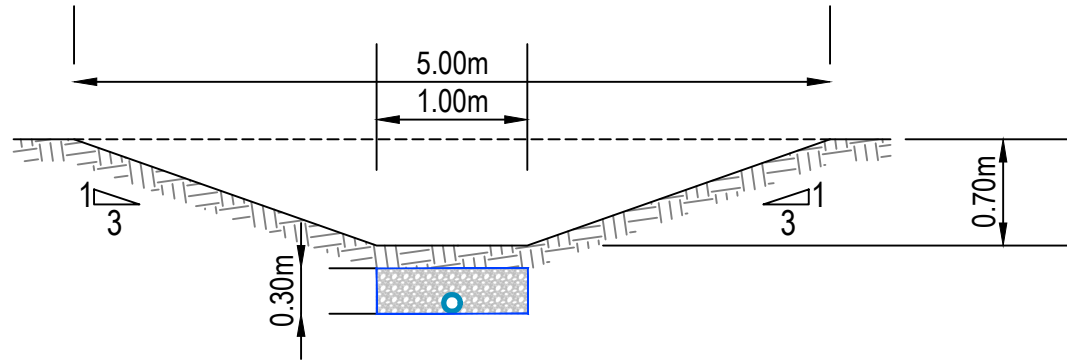
**SUNFIELD DEVELOPMENT
MASTERPLANNING
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title

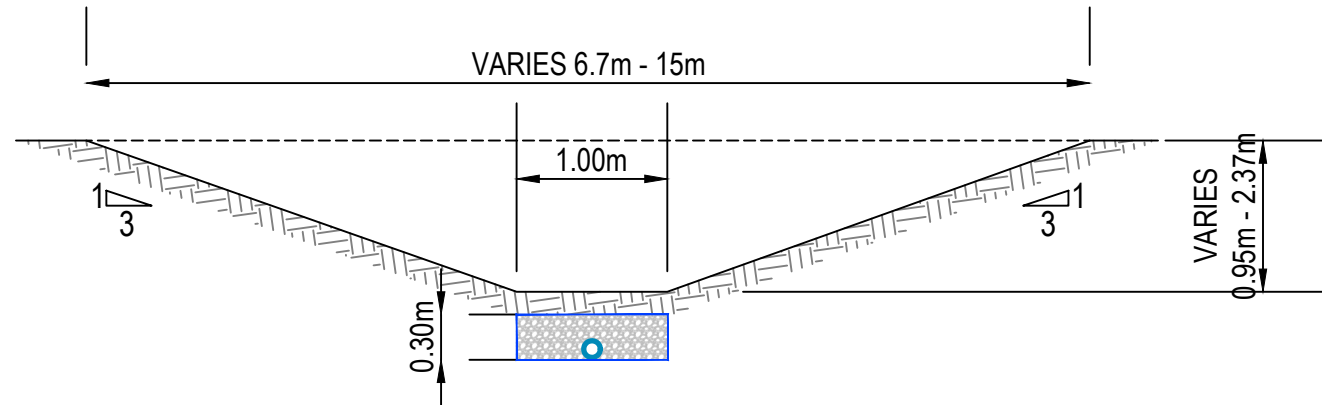
**PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 1**

Project no.	215010		
Scale	1:2500 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4518	Rev	A

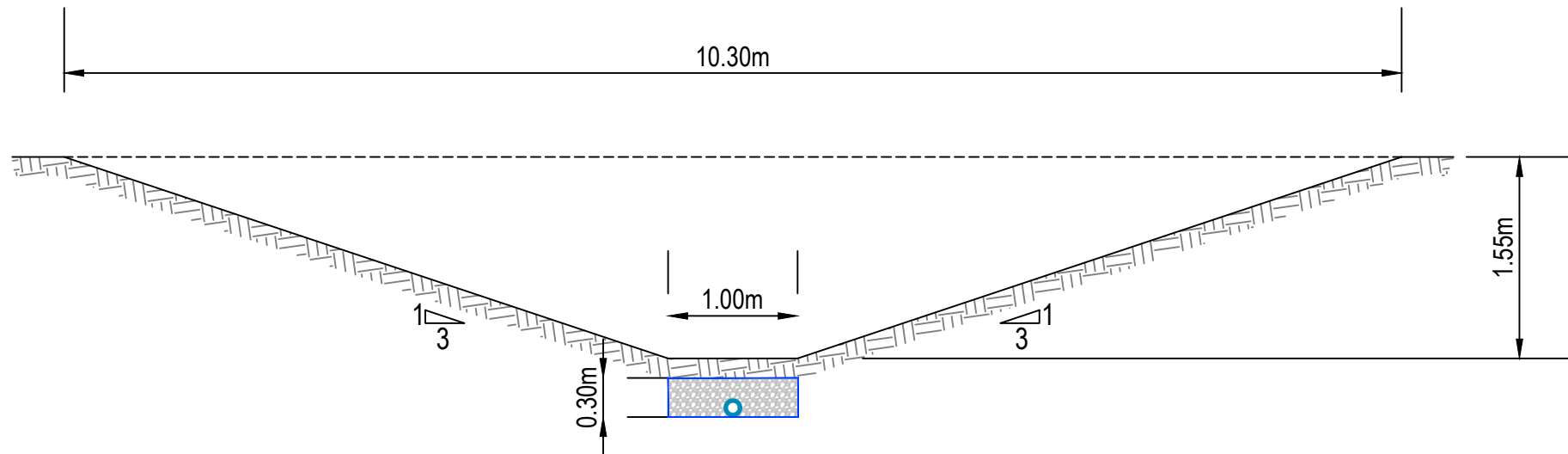
DATE: 8/11/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



1 TYPICAL SWALE 1 SECTION
SCALE 1:50 @ A3



2 TYPICAL SWALE 2 SECTION
SCALE 1:50 @ A3



3 TYPICAL SWALE 3 SECTION
SCALE 1:50 @ A3

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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LEGEND:

- GEOTEXTILE PERMEABLE LINER
- 110mm Ø PERFORATED PIPE
- GRAVEL BEDDING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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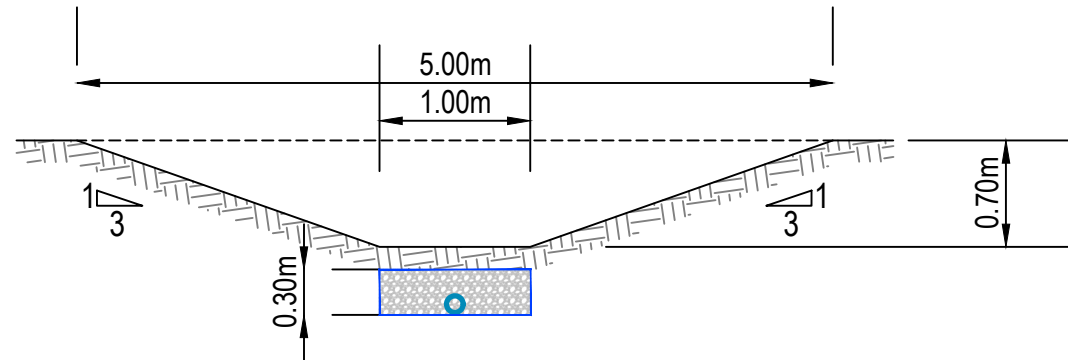
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 1**

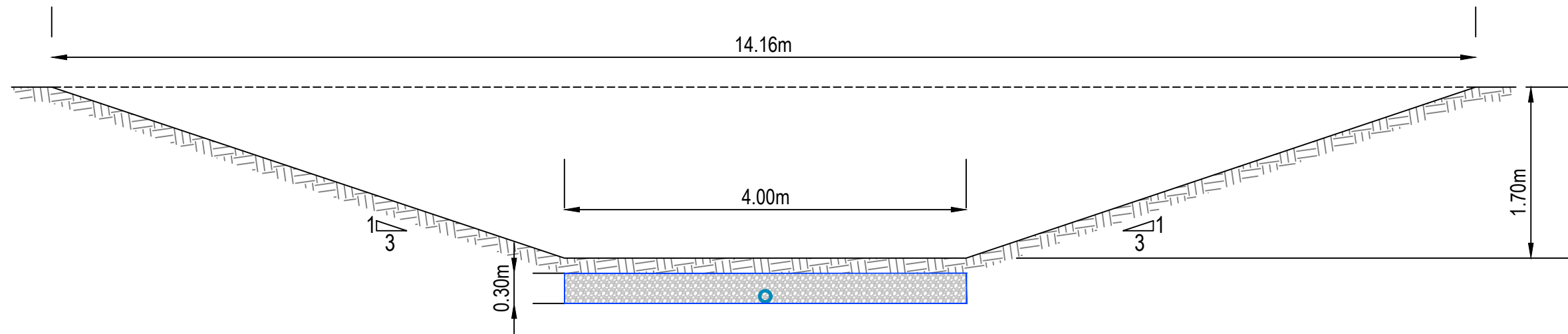
Project no.	215010		
Scale	1:50 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4520	Rev	A

RESOURCE CONSENT

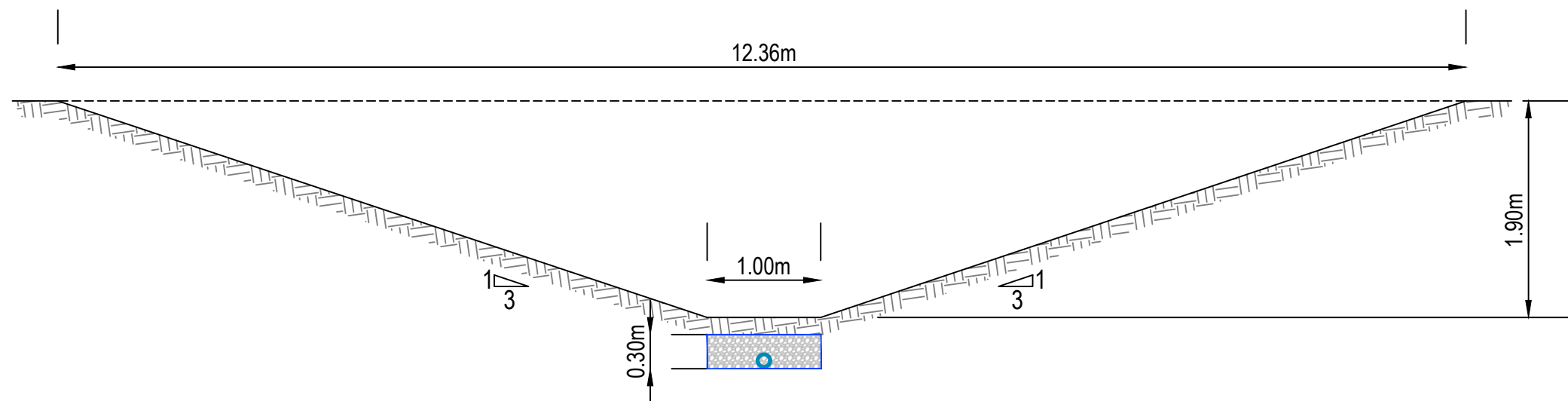
DATE: 8/11/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



4 TYPICAL SWALE 4 SECTION
SCALE 1:50 @ A3



5.1 TYPICAL SWALE 5 SECTION (CH0 -CH580)
SCALE 1:50 @ A3



5.2 TYPICAL SWALE 5 SECTION (CH580 -CH770)
SCALE 1:50 @ A3

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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LEGEND:

- GEOTEXTILE PERMEABLE LINER
- 110mm Ø PERFORATED PIPE
- GRAVEL BEDDING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

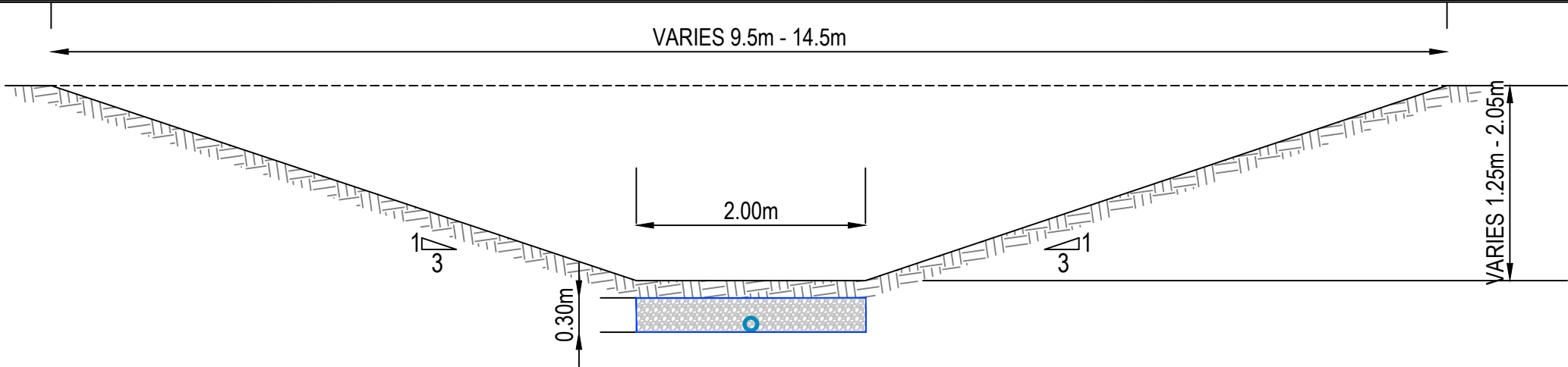


Project
**SUNFIELD DEVELOPMENT
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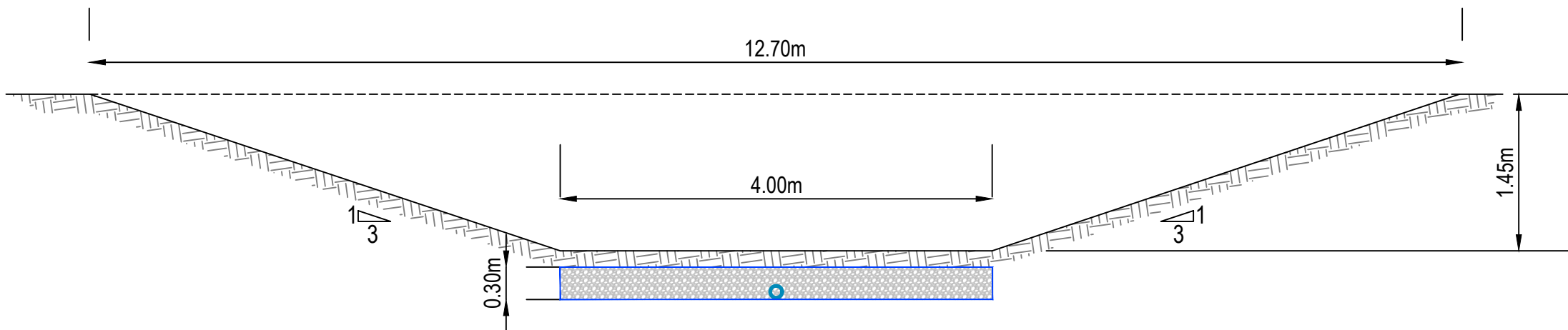
Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 2**

Project no.	215010		
Scale	1:50 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4521	Rev	A

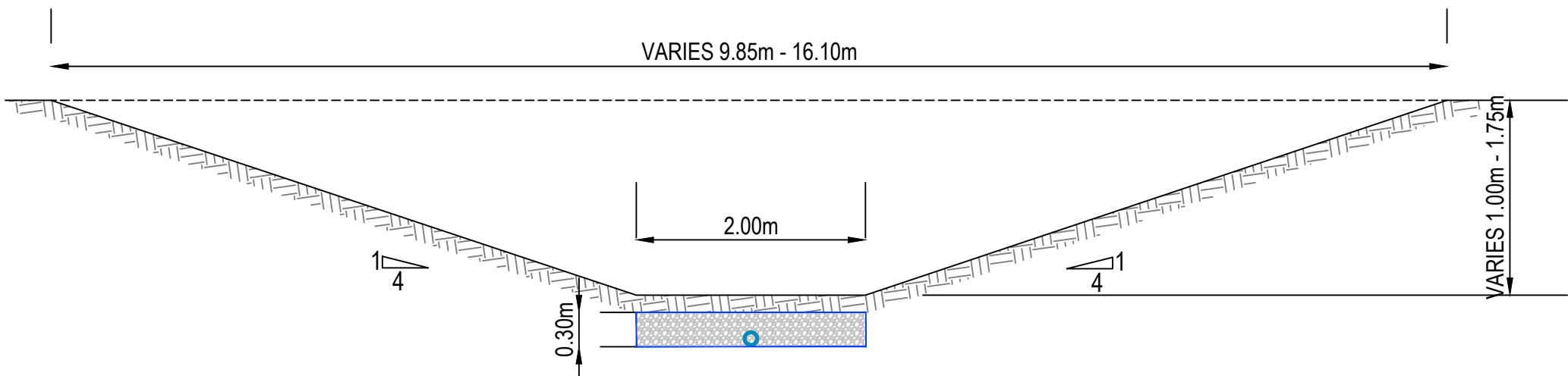
RESOURCE CONSENT



6.1 TYPICAL SWALE 6 SECTION (CH0 -CH200)
SCALE 1:50 @ A3



6.2 TYPICAL SWALE 6 SECTION (CH200 -CH530)
SCALE 1:50 @ A3



7.1 TYPICAL SWALE 7 SECTION (CH0 - CH180)
SCALE 1:50 @ A3

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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- LEGEND:
- GEOTEXTILE PERMEABLE LINER
 - 110mm Ø PERFORATED PIPE
 - GRAVEL BEDDING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

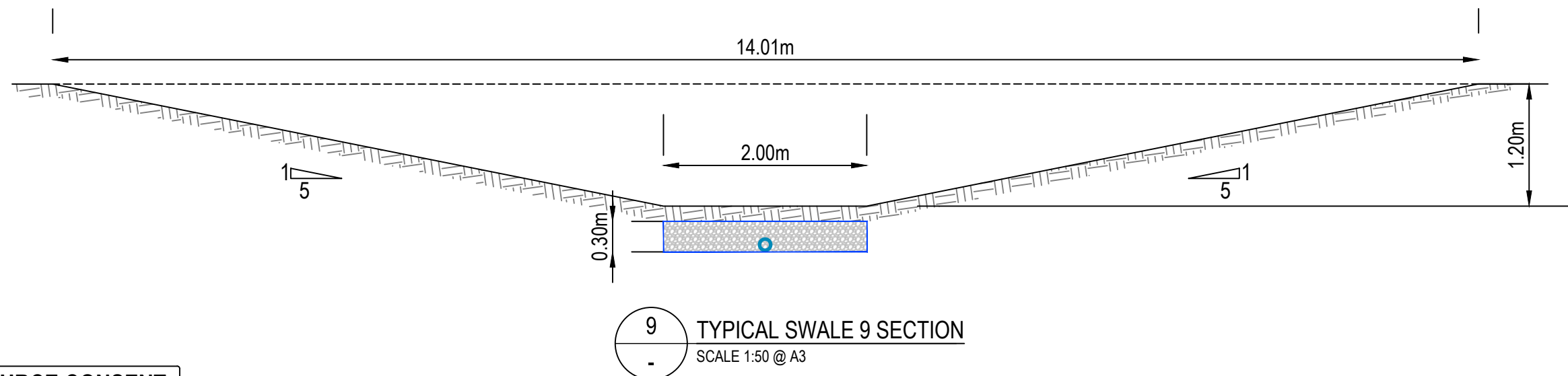
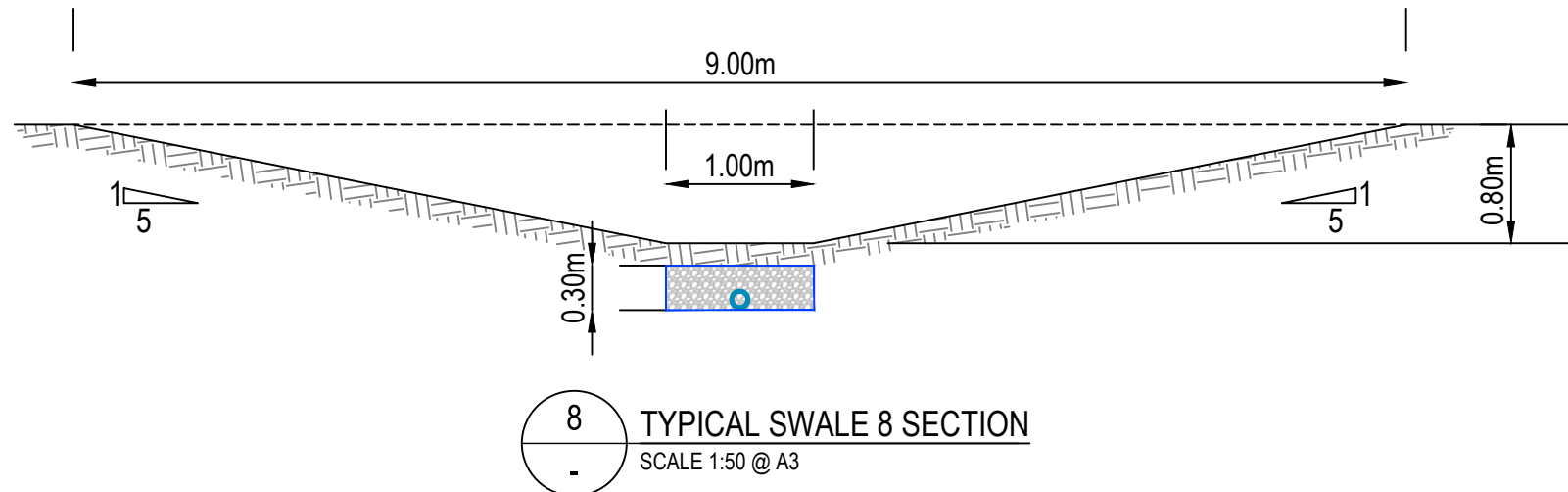
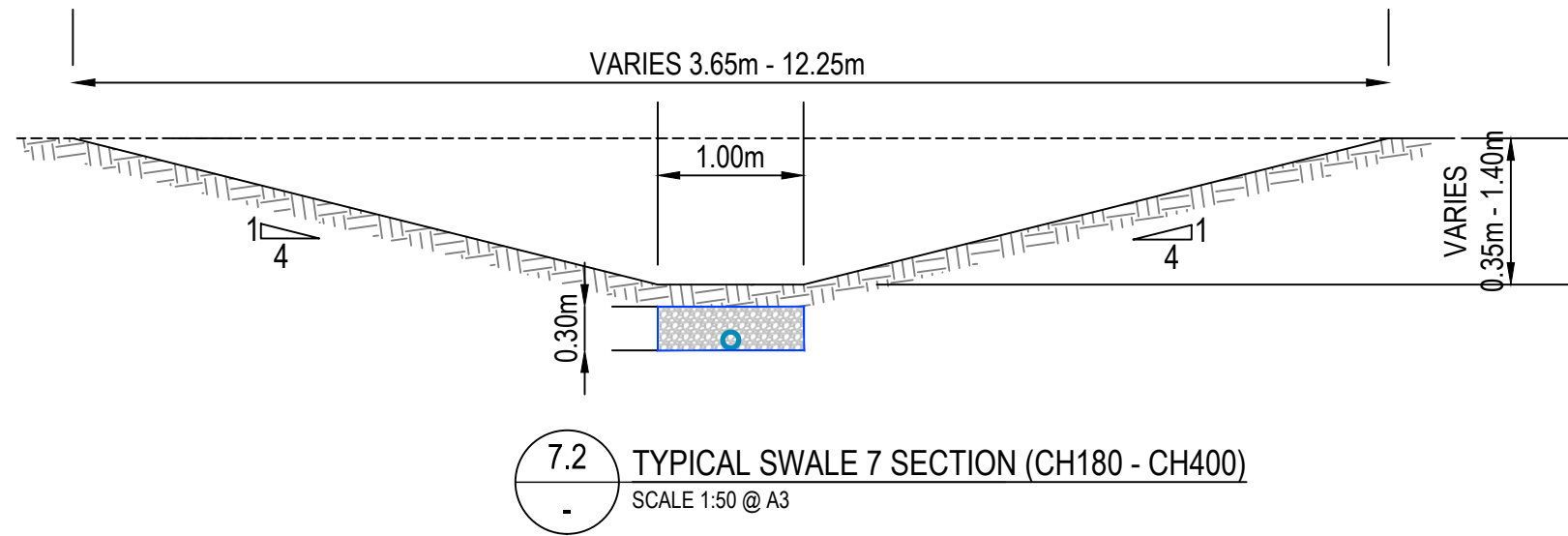
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5 Owens Road, Epsom
Auckland 1023

Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 3**

Project no.	215010
Scale	1:50 @ A3
Cad file	215010-M-C450.DWG
Drawing no.	M-C4522
Rev	A

RESOURCE CONSENT



- 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 THE NEW ZEALAND VERTICAL DATUM (NZVD) 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).
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 6. HEAVY DUTY MANHOLE LIDS AND FRAMES TO BE USED IN TRAFFICKED AREAS.
 7. ALL MANHOLES ARE TO BE 1050MMØ PRECAST CONCRETE UNLESS SHOWN OTHERWISE.
 8. ALL LINES TO BE ABANDONED SHALL BE SEALED AT EACH END. TIMING OF ALL SEALING TO BE COORDINATED WITH COUNCIL STAFF.

LEGEND:

- GEOTEXTILE PERMEABLE LINER
- 110mm Ø PERFORATED PIPE
- GRAVEL BEDDING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

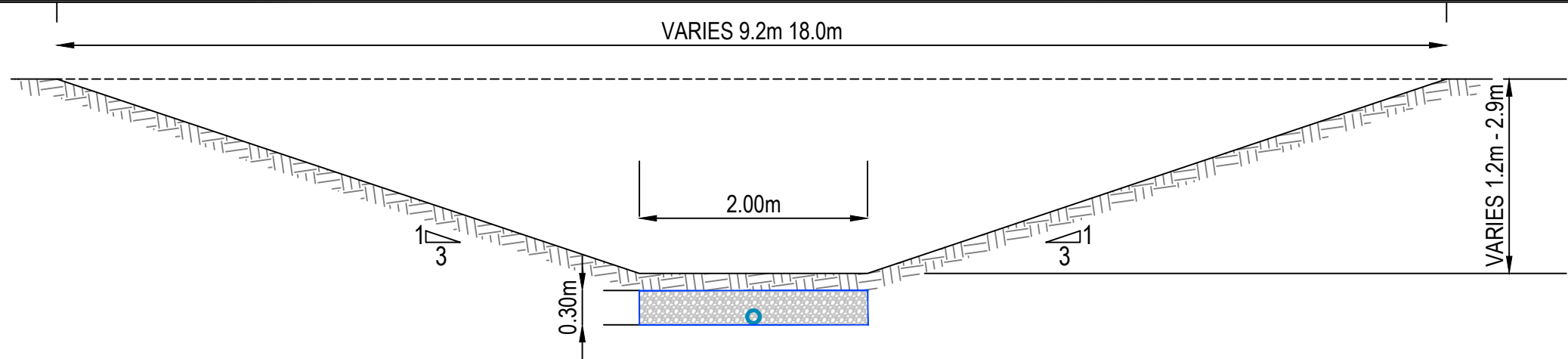


Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

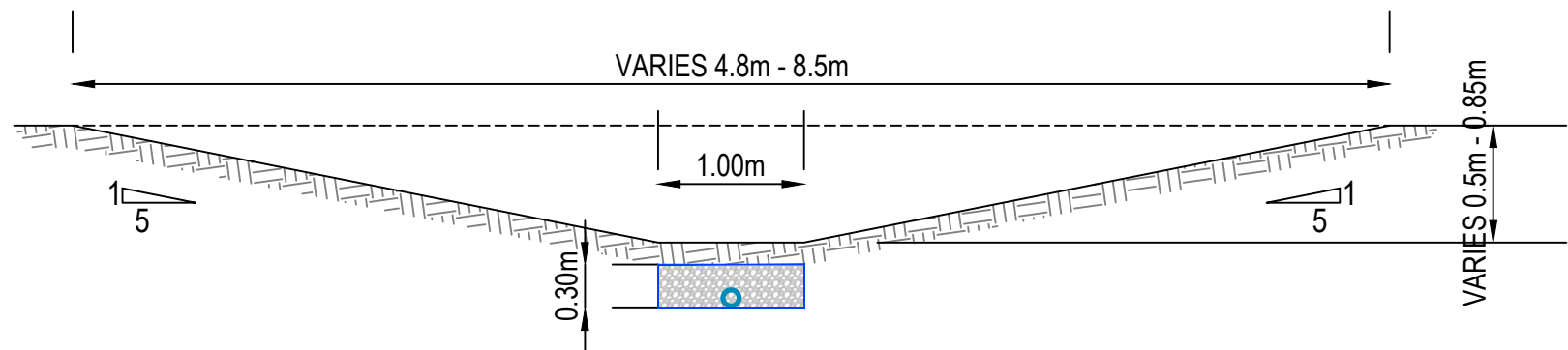
Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 4**

Project no.	215010		
Scale	1:50 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4523	Rev	A

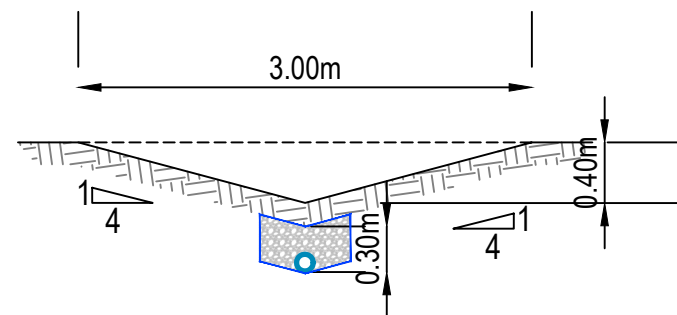
RESOURCE CONSENT



10 TYPICAL SWALE 10 SECTION
SCALE 1:50 @ A3



11 TYPICAL SWALE 11 SECTION
SCALE 1:50 @ A3



12 TYPICAL SWALE 12 SECTION
SCALE 1:50 @ A3

- NOTES
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- LEGEND:
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 - 110mm Ø PERFORATED PIPE
 - GRAVEL BEDDING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

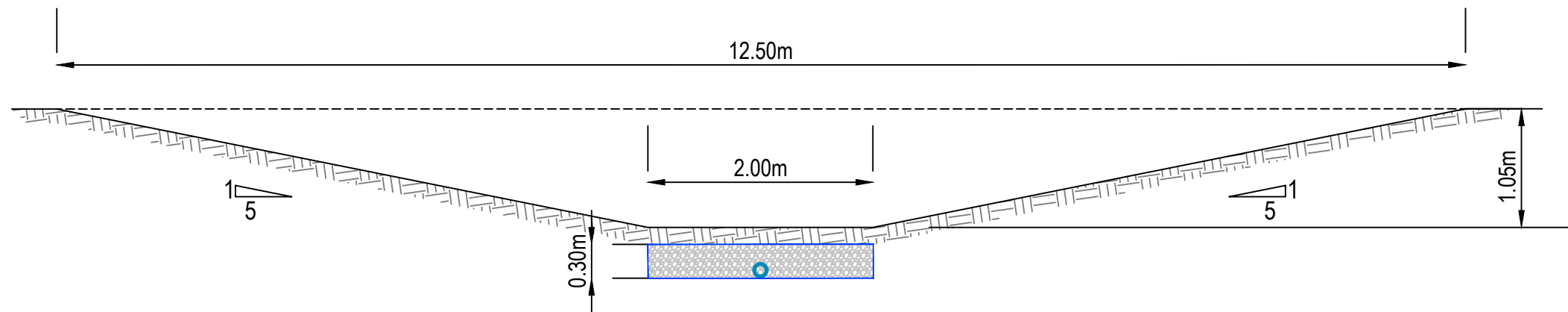
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

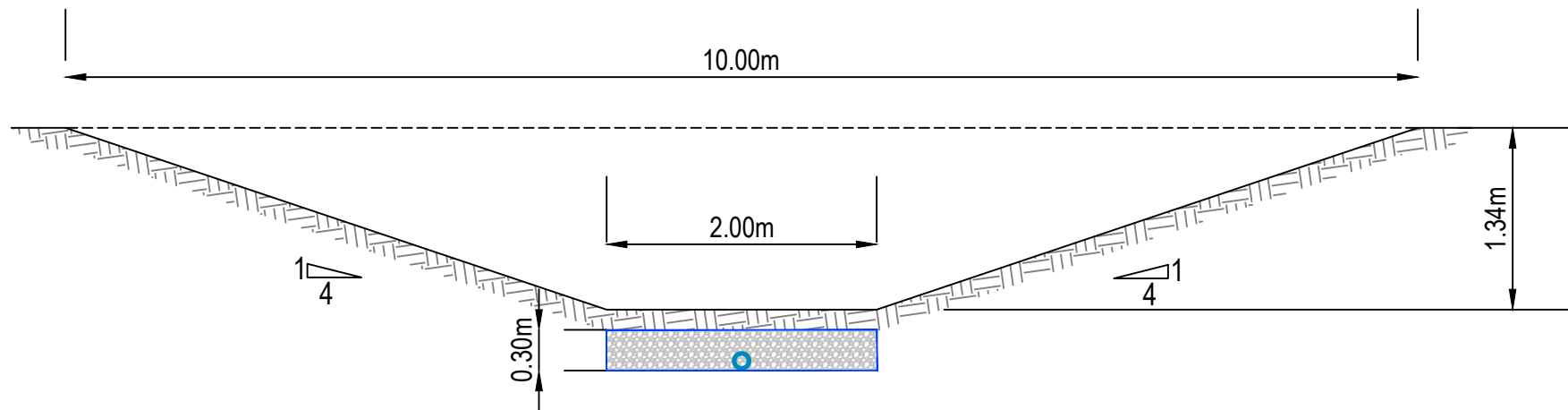
Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 5**

Project no.	215010		
Scale	1:50 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4524	Rev	A

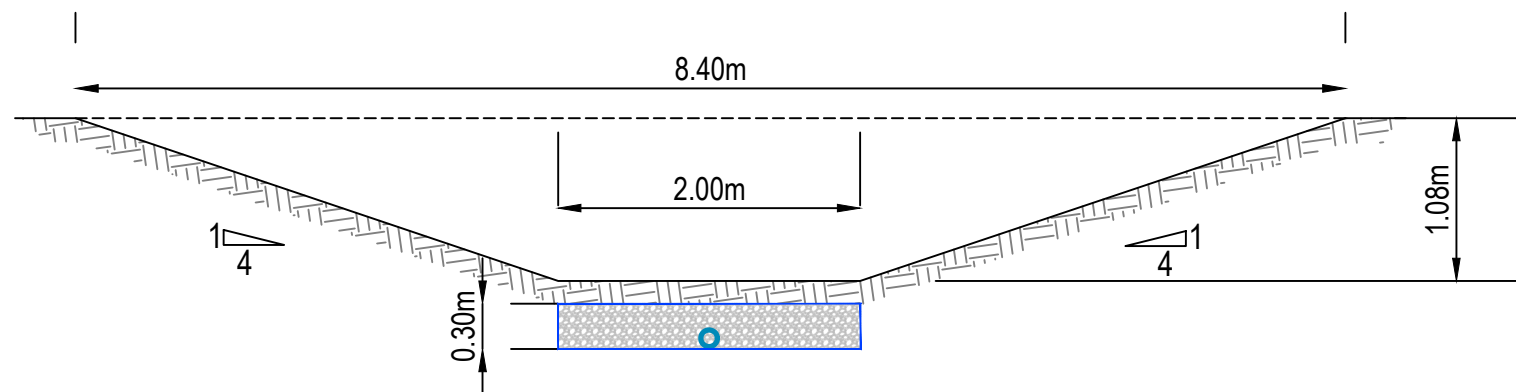
RESOURCE CONSENT



13 TYPICAL SWALE 13 SECTION
SCALE 1:50 @ A3



15 TYPICAL SWALE 15 SECTION
SCALE 1:50 @ A3



16 TYPICAL SWALE 16 SECTION
SCALE 1:50 @ A3

- NOTES
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- LEGEND:
- GEOTEXTILE PERMEABLE LINER
 - 110mm Ø PERFORATED PIPE
 - GRAVEL BEDDING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

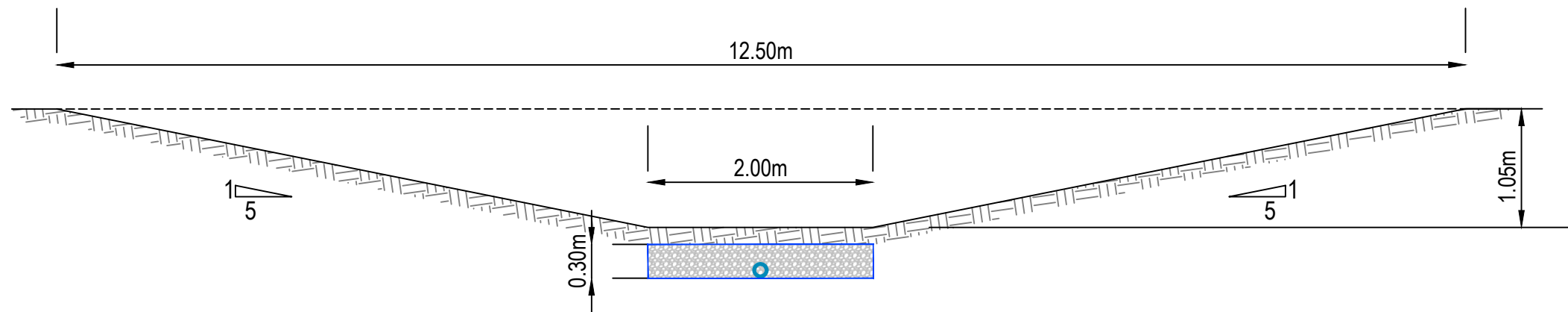
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

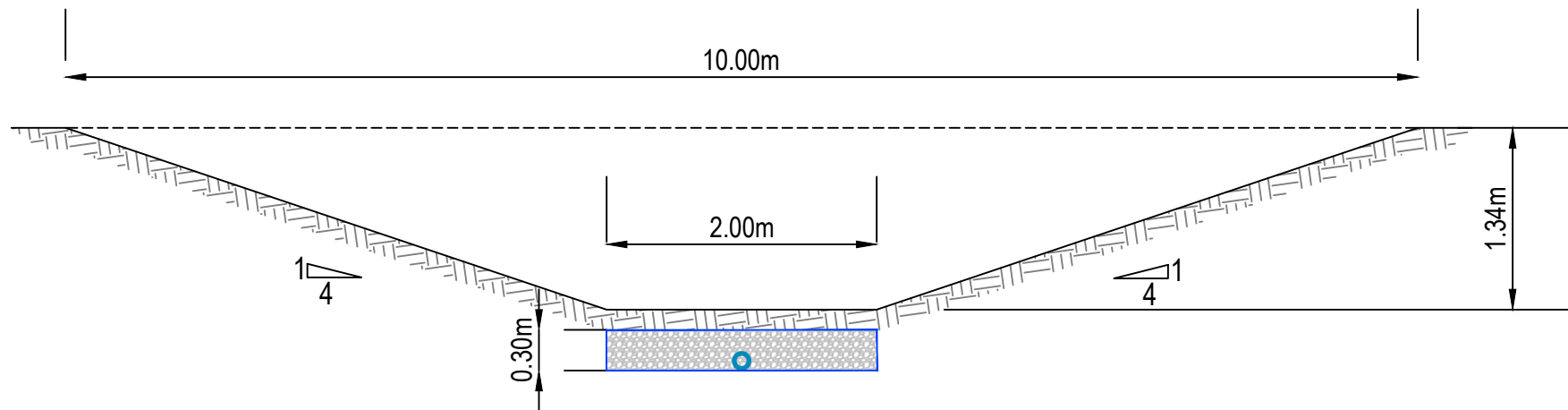
Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 6**

Project no.	215010
Scale	1:50 @ A3
Cad file	215010-M-C450.DWG
Drawing no.	M-C4525
Rev	A

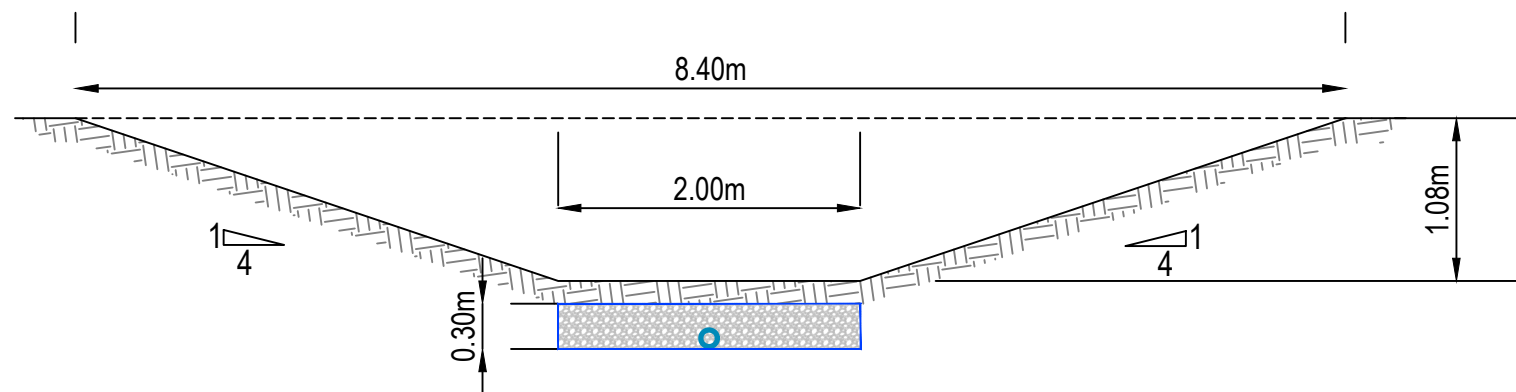
RESOURCE CONSENT



13 TYPICAL SWALE 13 SECTION
SCALE 1:50 @ A3



15 TYPICAL SWALE 15 SECTION
SCALE 1:50 @ A3



16 TYPICAL SWALE 16 SECTION
SCALE 1:50 @ A3

- NOTES
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- LEGEND:
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 - 110mm Ø PERFORATED PIPE
 - GRAVEL BEDDING

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

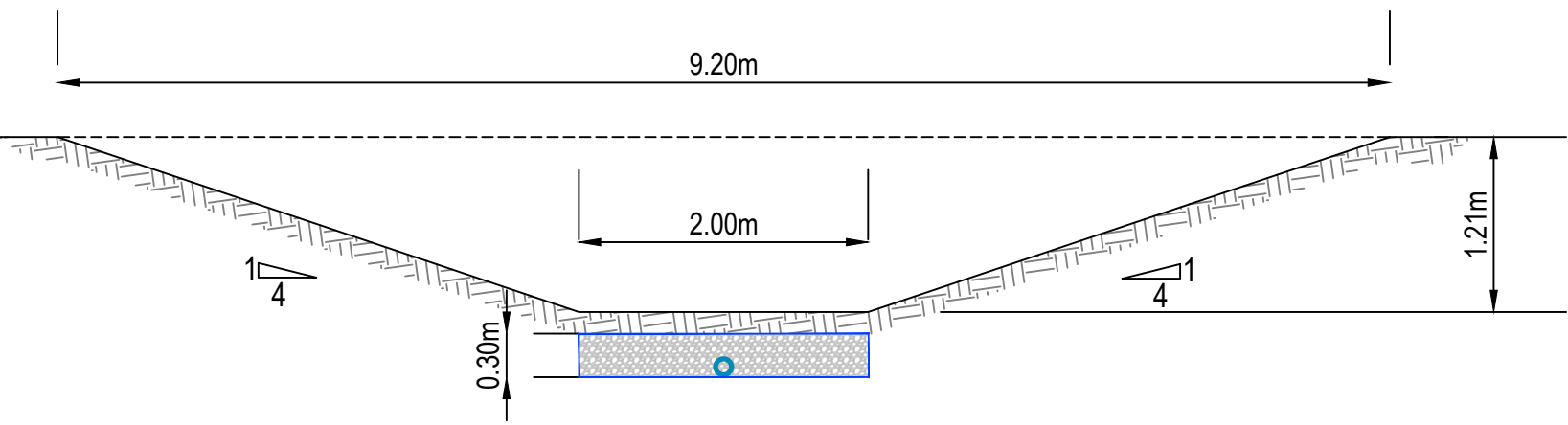
M **Maven Associates**
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

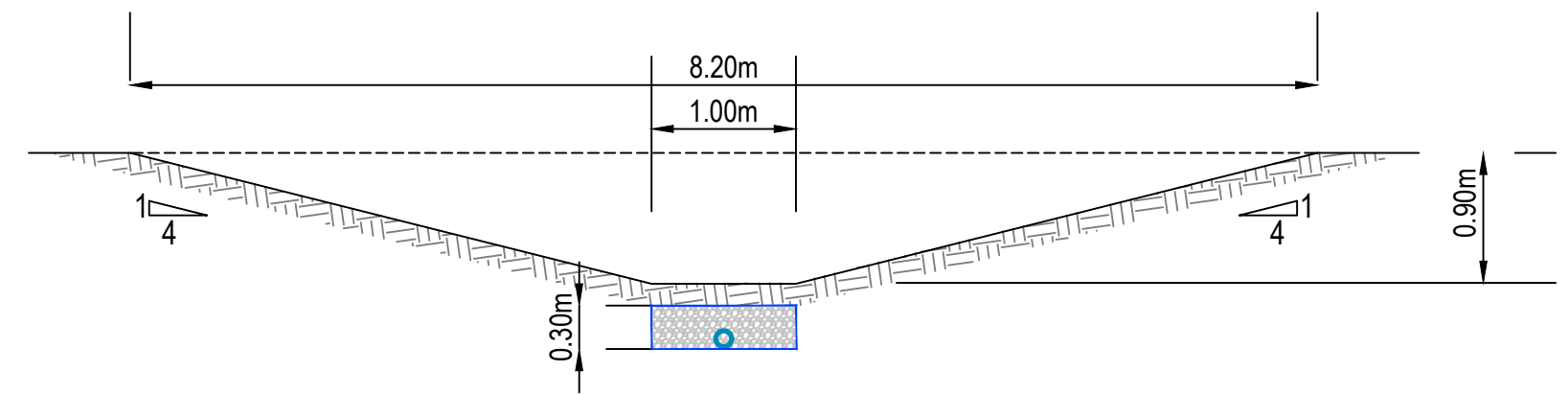
Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 7**

Project no.	215010
Scale	1:50 @ A3
Cad file	215010-M-C450.DWG
Drawing no.	M-C4526
Rev	A

RESOURCE CONSENT



17 TYPICAL SWALE 17 SECTION
SCALE 1:50 @ A3



18 TYPICAL SWALE 18 SECTION
SCALE 1:50 @ A3

- NOTES
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A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

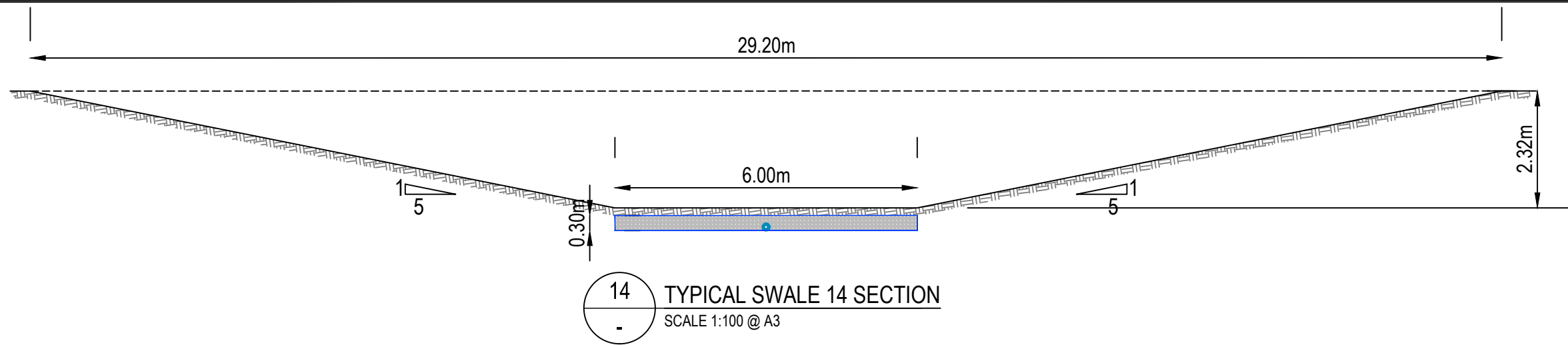
M **Maven Associates**
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
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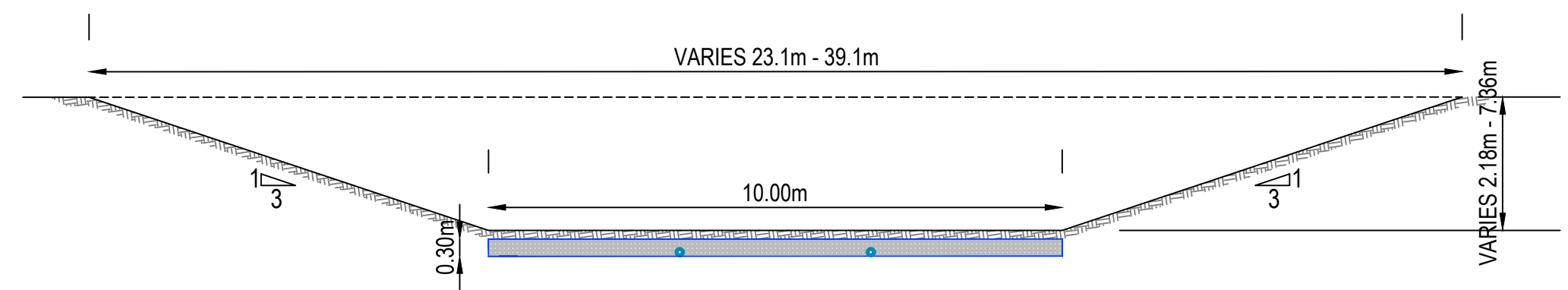
Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 8**

Project no.	215010
Scale	1:50 @ A3
Cad file	215010-M-C450.DWG
Drawing no.	M-C4527
Rev	A

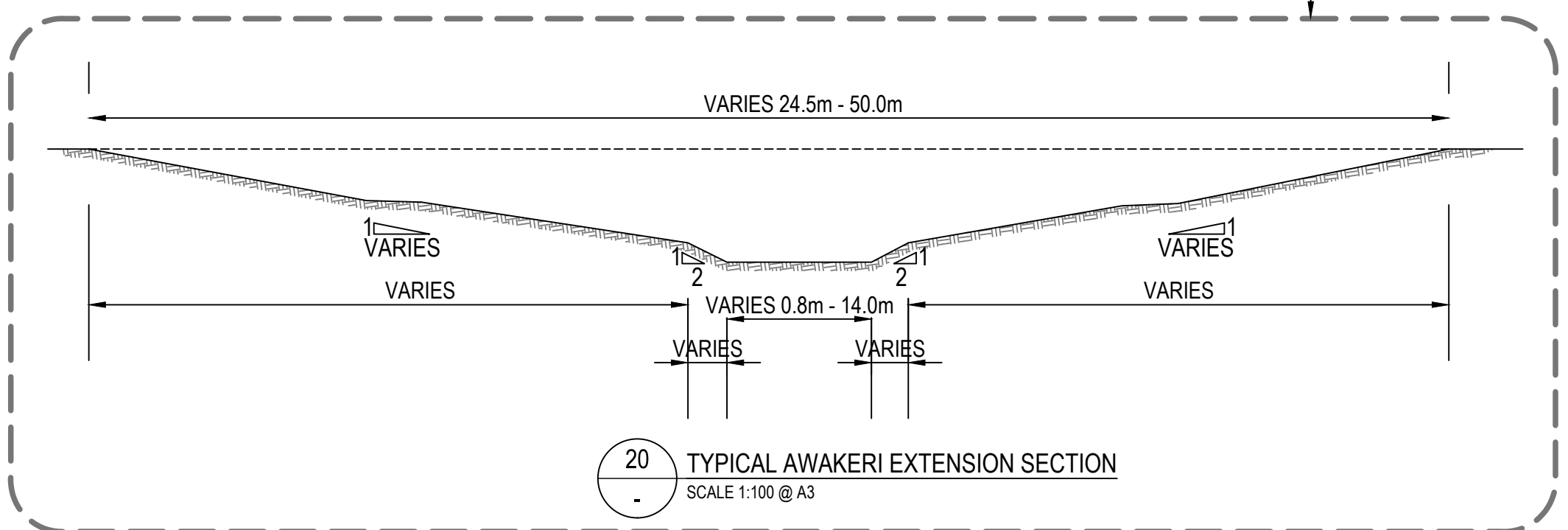
RESOURCE CONSENT



14 TYPICAL SWALE 14 SECTION
SCALE 1:100 @ A3



19 TYPICAL DIVERSION CHANNEL SECTION
SCALE 1:100 @ A3



20 TYPICAL AWAKERI EXTENSION SECTION
SCALE 1:100 @ A3

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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 - 110mm Ø PERFORATED PIPE
 - GRAVEL BEDDING

AWAKERI WETLAND EXTENSION
CONSENT NOT SOUGHT AS
PART OF THIS APPLICATION

A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

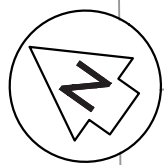
M **Maven Associates**
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5 Owens Road, Epsom
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 8**

Project no.	215010
Scale	1:100 @ A3
Cad file	215010-M-C450.DWG
Drawing no.	M-C4528
Rev	A

RESOURCE CONSENT



1.2 Ha DIVERSION ALONG BOUNDARY VIA PROPOSED CHANNEL

2.0 Ha DIVERSION ALONG BOUNDARY

SW POND 2
CATCHMENT = 15.54 Ha
SMAF, GD01 TREATMENT &
ATTENUATED UPTO 1%AEP
PROVIDED
DISCHARGED TO ROAD SWALE

700m SPILLWAY
CONTROLLED OUTFLOW FROM
SITE'S PASS-FORWARD AND
UPSTREAM DIVERSION FLOW

SW POND 3
CATCHMENT = 2.76 Ha
SMAF, GD01 TREATMENT &
ATTENUATED UPTO 1%AEP PROVIDED
DISCHARGED TO ROAD SWALE

UPSTREAM CATCHMENT C
AREA = 351 Ha
DIVERTED AROUND SITE

SW POND 1
CATCHMENT = 53.50 Ha
GD01 TREATED &
ATTENUATED UPTO 1%AEP
AND DISCHARGED INTO
AWAKERI WETLAND
VIA SWALE

UPSTREAM CATCHMENT A1
AREA = 37.0 Ha
EXISTING CATCHMENT DISCHARGES
INTO THE AWAKERI WETLAND

SW POND 1
CATCHMENT = 63.97 Ha
(PASS-FORWARD FLOW &
SITE AREA TREATED ONLY)

FUTURE SW POND 6

CATCHMENT AREA = 24.0 Ha
FUTURE DEVELOPMENT
TEMPORARY DIVERSION
PROVIDED TO MAINTAIN
EXISTING OLFP

FUTURE SW POND 5

CATCHMENT AREA = 48.0 Ha
DISCHARGES DIRECTLY INTO
THE AWAKERI WETLAND

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 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.
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 11. ALL LOT CONNECTION TO BE MIN 100mm uPVC SN16 UNLESS SHOWN OTHERWISE.

LEGEND

- EX BDY
PR BDY
1% AEP FLOW DIRECTION
OUTFLOW 1 SPILLWAY

A	RESOURCE CONSENT	YW	02/2025
Rev	Description	By	Date
	Survey	SURVEYWORX	02/2021
	Design	YW	11/2024
	Drawn	YW	11/2024
	Checked	JP/LC	02/2025

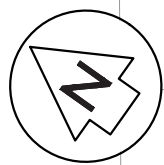
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
STORMWATER OVERVIEW
MANAGEMENT PLAN**

Project no.	215010
Scale	1:10000 @ A3
Cad file	215010-M-C460.DWG
Drawing no.	M-C4600
Rev	A

RESOURCE CONSENT



WETLAND 3
REFER C4609

WETLAND 2
REFER C4606

WETLAND 1
REFER C4602

WETLAND 4
REFER C4612

RESOURCE CONSENT

- NOTES
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LEGEND

EX BDY
PROP SL BDY

A	RESOURCE CONSENT	AO	02/2025
Rev	Description	By	Date
		By	Date
Survey	MAVEN		11/2024
Design	AO		12/2024
Drawn	OE		01/2025
Checked	LC		02/2025



Project
**SUNFIELD
SUBDIVISION
AUCKLAND
FOR SUNFIELD
DEVELOPMENTS LTD.**

Title
**PROPOSED WETLANDS -
OVERVIEW PLAN**

Project no.	215010		
Scale	1:10000 @ A3		
Cad file	215010-M-C460_DWG		
Drawing no.	M-C4601	Rev	A



LOT 1 DP 109061

345ø SMAF ORIFICE @ IL = 20.70
750ø SW PIPE @ IL = 21.15 (POST STORM DRAINDOWN)

SPILL WAY TO BE LOCATED ALONG BOUNDARY
BUND REFER TO DRAWING M-C4605

LOW FLOW BY PASS INTO WETLAND
BOX CULVERT 0.4m X 1.2m

3.5m WIDE ACCESS
TRACK AROUND
WETLAND

2YR & 10YR FLOOD STORAGE AREA
PEAK 2YR WATER LEVEL = 22.37 mRL
PEAK 10YR WATER LEVEL = 22.55 mRL

WETLAND LOCATION AND SHAPE
SHOWN IS INDICATIVE

PROPOSED DRYING AREA

SPILLWAY TO 100YR
FLOOD STORAGE
RL = 22.57

100YR FLOOD STORAGE AREA
PEAK 100YR WATER LEVEL = 22.60 mRL

INDICATIVE LOCATION
OF 3.5m WIDE
ACCESS WAY TO
WETLAND WITH MAX
1:8 SLOPE

WETLAND 1 - PLAN
SCALE 1:1000

- 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 THE NEW ZEALAND VERTICAL DATUM (NZVD) 2016.
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LEGEND

PR WETLAND FGL

A	RESOURCE CONSENT	AO	02/2025
Rev	Description	By	Date
		By	Date
Survey	MAVEN		11/2024
Design	AO		12/2024
Drawn	OE		01/2025
Checked	LC		02/2025

M

A

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N

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Project

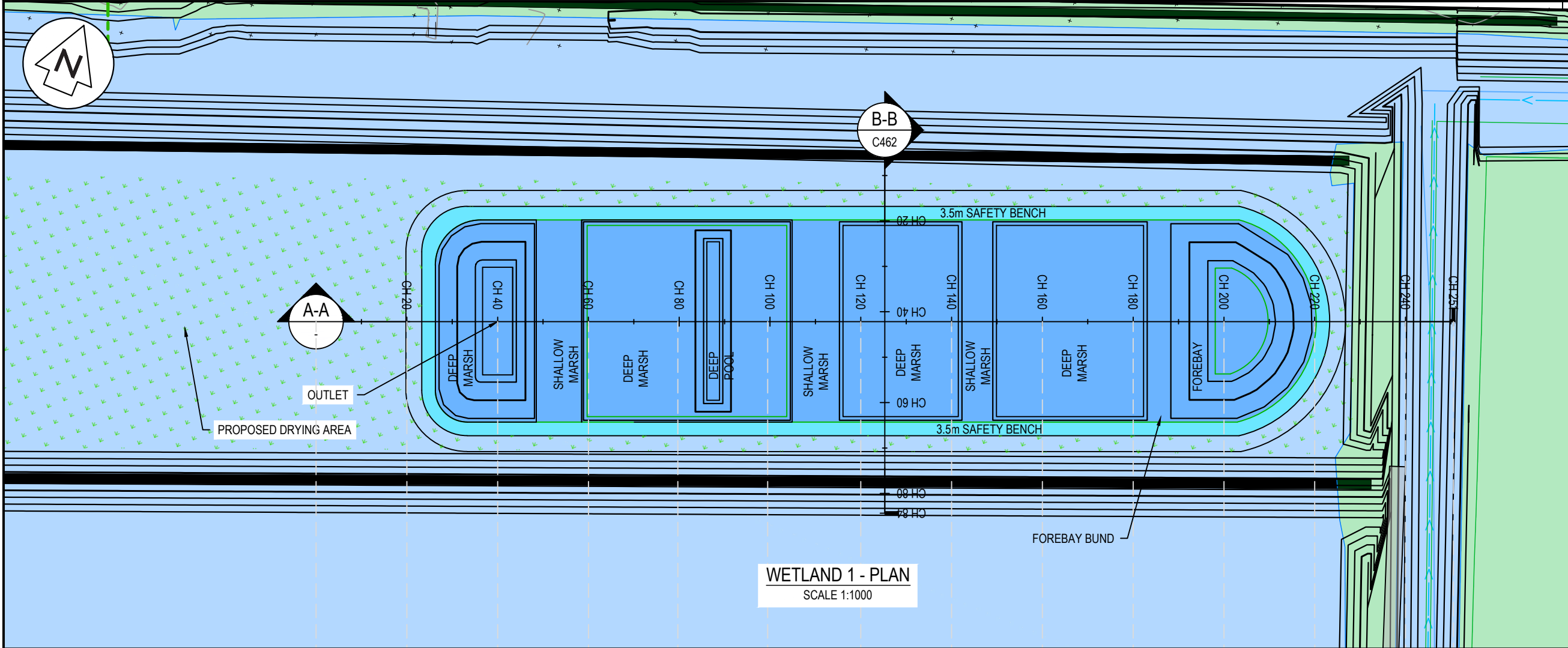
**SUNFIELD
SUBDIVISION
AUCKLAND
FOR SUNFIELD
DEVELOPMENTS LTD.**

Title

**PROPOSED WETLANDS -
WETLAND 1
PLAN & LONGSECTION**

Project no.	215010
Scale	AS SHOWN
Cad file	215010-M-C460_DWG
Drawing no.	M-C4602
Rev	A

RESOURCE CONSENT



WETLAND 1 - PLAN
SCALE 1:1000

- NOTES
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LEGEND

PR WETLAND FGL

A	RESOURCE CONSENT	AO	02/2025
Rev	Description	By	Date
		By	Date
Survey	MAVEN		11/2024
Design	AO		12/2024
Drawn	OE		01/2025
Checked	LC		02/2025



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Auckland 1023

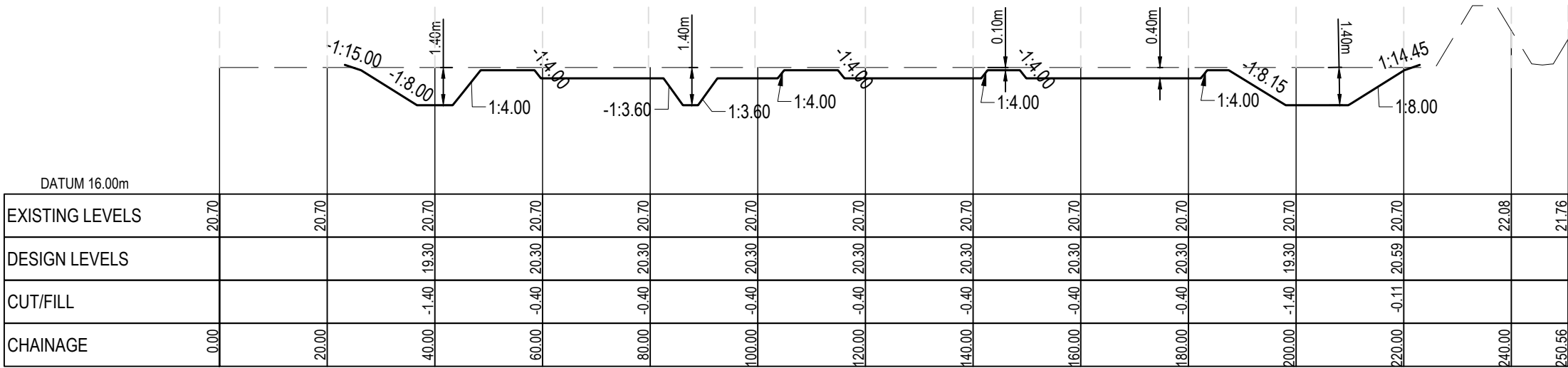
Project

**SUNFIELD
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AUCKLAND
FOR SUNFIELD
DEVELOPMENTS LTD.**

Title

**PROPOSED WETLANDS -
WETLAND 1
PLAN & LONGSECTION**

Project no.	215010		
Scale	AS SHOWN		
Cad file	215010-M-C460_DWG		
Drawing no.	M-C4603	Rev	A

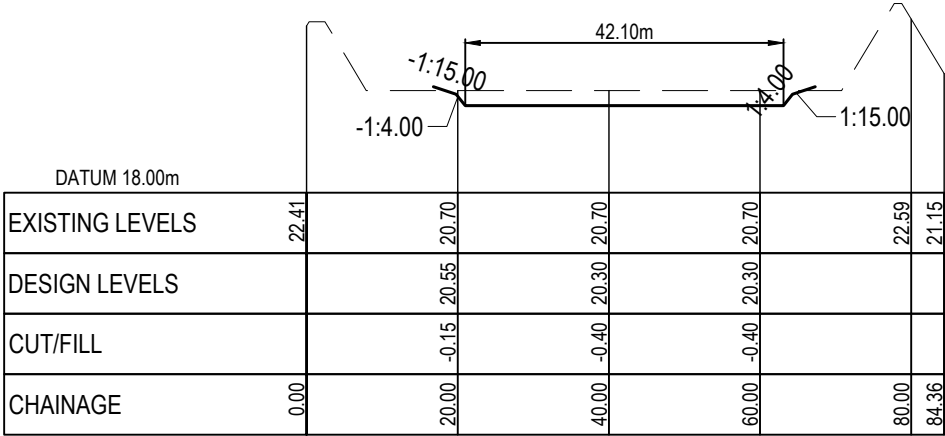


WETLAND 1 A-A
SCALE: HORI 1:1000 VERT 1:200

RESOURCE CONSENT

DATE: 8/11/25 FILEPATH: F:\MAVEN\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010\AC460_DWG

RESOURCE CONSENT



WETLAND 1 B-B
SCALE: HORI 1:1000 VERT 1:200

- NOTES
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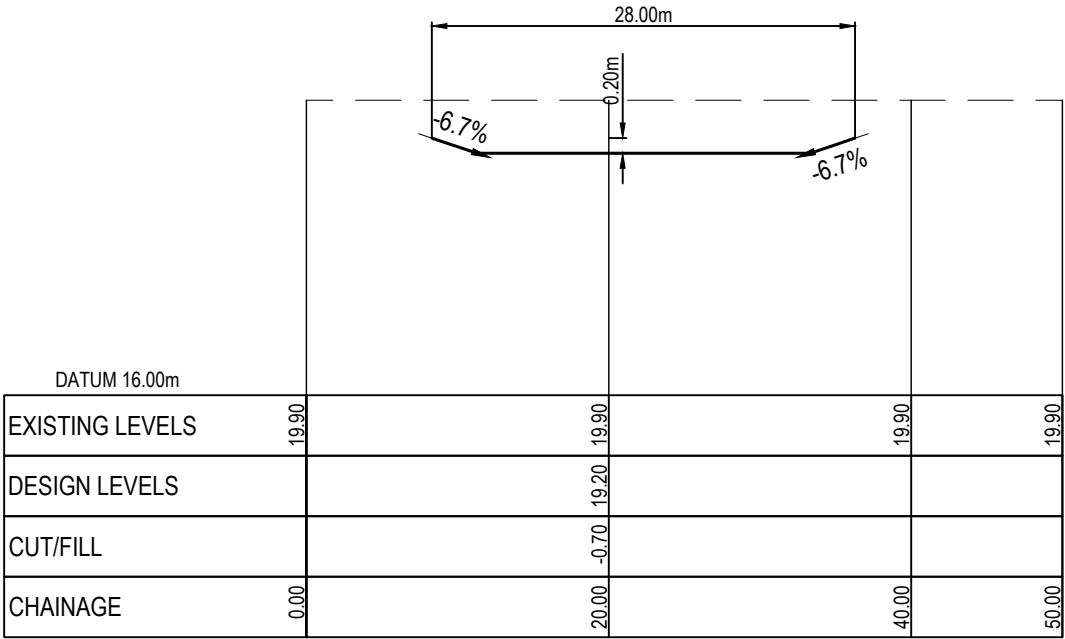
LEGEND

PR WETLAND FGL

A	RESOURCE CONSENT	AO	02/2025
Rev	Description	By	Date
	By	Date	
Survey	MAVEN	11/2024	
Design	AO	12/2024	
Drawn	OE	01/2025	
Checked	LC	02/2025	
M A E N Maven Associates 09 571 0050 info@maven.co.nz www.maven.co.nz 5 Owens Road, Epsom Auckland 1023			
Project SUNFIELD SUBDIVISION AUCKLAND FOR SUNFIELD DEVELOPMENTS LTD.			
Title PROPOSED WETLANDS - WETLAND 1 CROSS SEC. & OUTLET			
Project no.	215010		
Scale	AS SHOWN		
Cad file	215010-M-C460_DWG		
Drawing no.	M-C4604	Rev	A

DATE: 8/11/25 FILEPATH: F:\MAVEN\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010\AC460_DWG

RESOURCE CONSENT



WETLAND 2 D-D
SCALE: HORI 1:1000 VERT 1:200

- NOTES
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PR WETLAND FGL

A	RESOURCE CONSENT	AO	02/2025
Rev	Description	By	Date
	By	Date	
Survey	MAVEN	11/2024	
Design	AO	12/2024	
Drawn	OE	01/2025	
Checked	LC	02/2025	

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Project

SUNFIELD
SUBDIVISION
AUCKLAND
FOR SUNFIELD
DEVELOPMENTS LTD.

Title

PROPOSED WETLANDS -
WETLAND 2
CROSS SEC. & OUTLET

Project no.	215010		
Scale	AS SHOWN		
Cad file	215010-M-C460_DWG		
Drawing no.	M-C4608	Rev	A



AIRFIELD ROAD

EX CONC. PIPE
Ø=0.35m
IL=25.55m

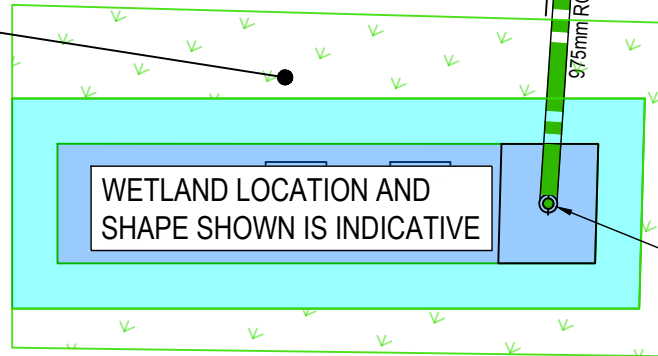
EX CONC. PIPE
Ø=0.35m
IL=25.47m

100 YEAR EMERGENCY SPILL WAY TO BE
LOCATED ALONG BOUNDARY BUND

RIPRAP AT OUTLET AND
EARTHWORKS REQUIRED FOR
CONVEYANCING CHANNEL FROM
OUT FALL TO EXISTING CULVERT

PR SWMH WL3-1
LL=26.65
IL=25.60 (in)

3.5m WIDE ACCESS
TRACK AROUND
WETLAND



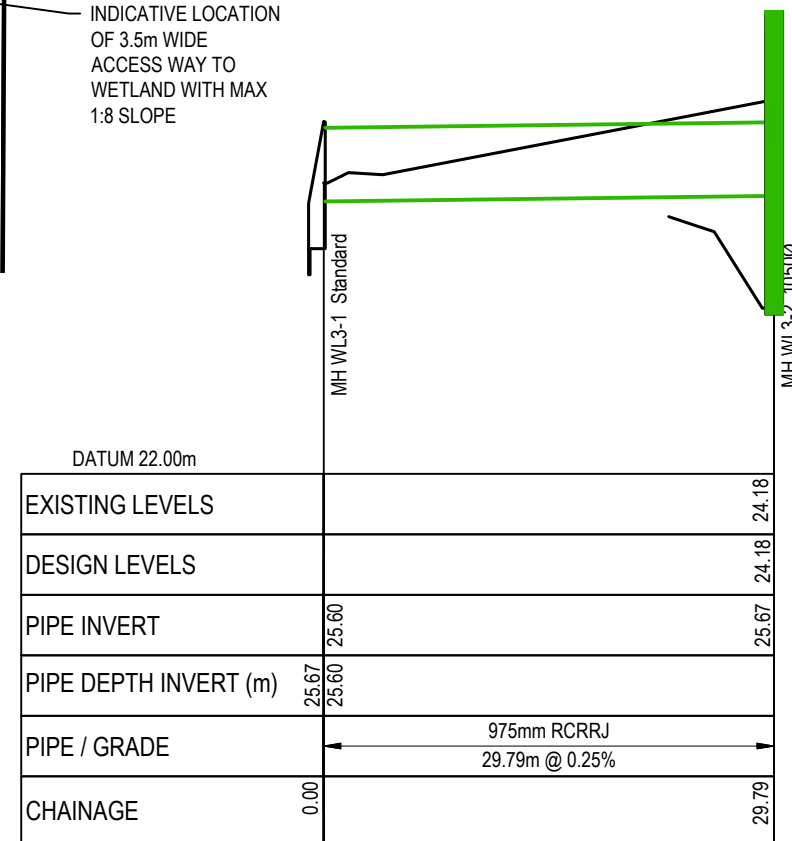
WETLAND 3 OUTLET
PR SWMH WL3-2
LL=29.00
IL=25.67 (out)
SMAF OUTLET @ 25.67m IL

INDICATIVE LOCATION
OF 3.5m WIDE
ACCESS WAY TO
WETLAND WITH MAX
1:8 SLOPE

PROPOSED DRYING
AREA

WETLAND 3 - OVERALL PLAN
SCALE 1:500

STORMWATER QUALITY DETAILS	
PERNAMENT WATER LEVEL	25.67 mRL
OUTLET DETAILS	
SMAF OUTLET	68mm Ø
2YR/10YR/100YR OUTLET	SCRUFFY DOME MANHOLE WITH 0.7m WEIR @ RL26.43m
100YR EMERGENCY SPILLWAY	20m LONG @ 27.27m RL



WETLAND 3 OUTLET
SCALE: HORI 1:1000 VERT 1:200

- NOTES
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LEGEND

PR WETLAND FGL

A	RESOURCE CONSENT	AO	02/2025
Rev	Description	By	Date
		By	Date
Survey	MAVEN		11/2024
Design	AO		12/2024
Drawn	OE		01/2025
Checked	LC		02/2025



Project
**SUNFIELD
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FOR SUNFIELD
DEVELOPMENTS LTD.**

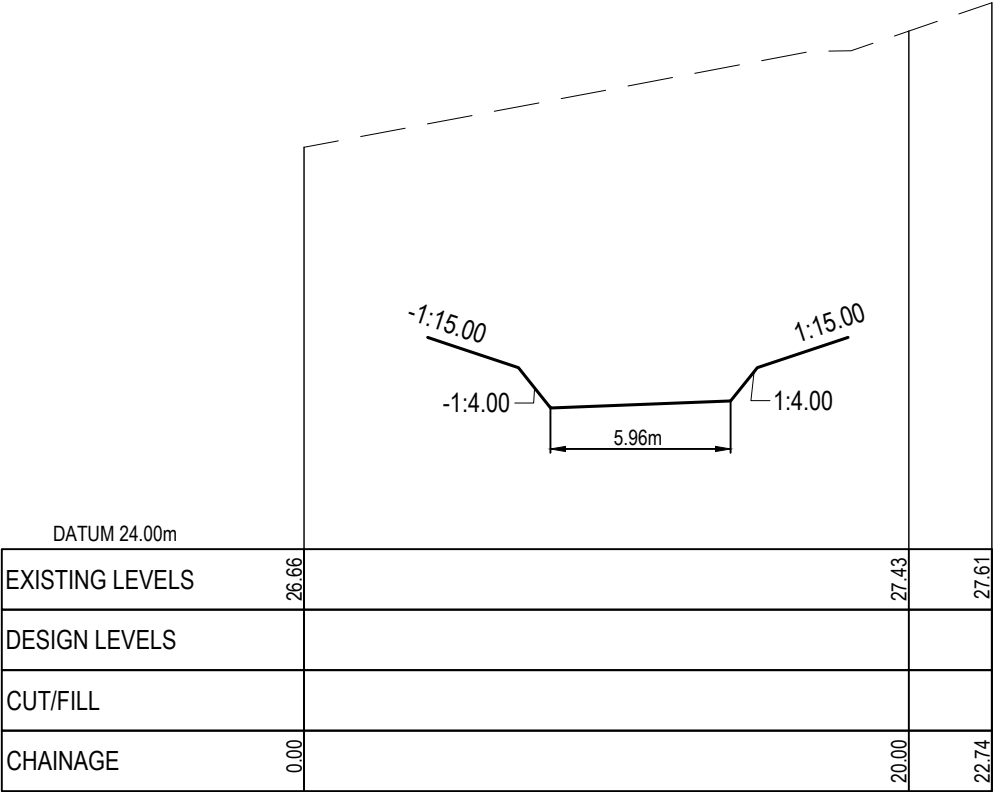
Title
**PROPOSED WETLANDS -
WETLAND 3
PLAN & LONGSECTION**

Project no.	215010
Scale	AS SHOWN
Cad file	215010-M-C460_DWG
Drawing no.	M-C4609
Rev	A

RESOURCE CONSENT

DATE: 8/11/25 FILEPATH: F:\MAVEN\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010\AC460_DWG

RESOURCE CONSENT



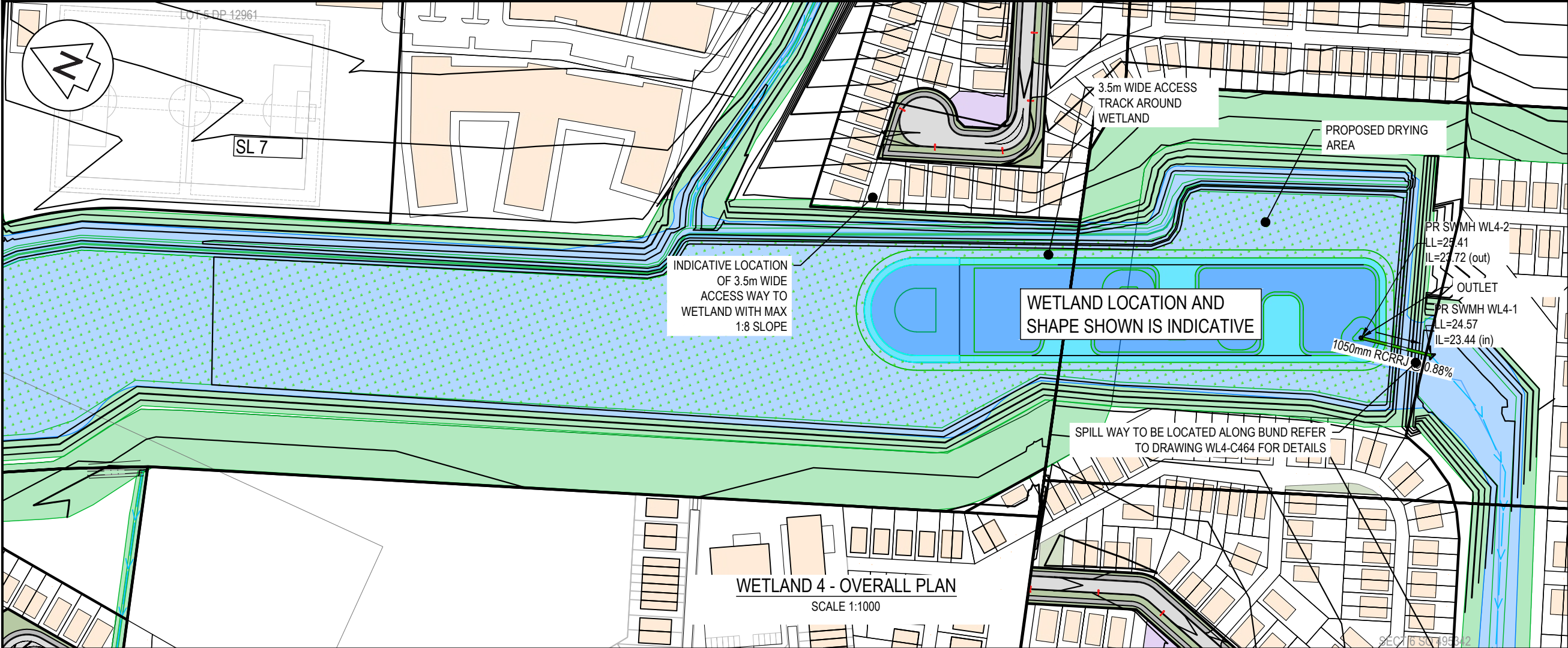
WETLAND 3 F-F
SCALE: HORI 1:1000 VERT 1:200

- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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A	RESOURCE CONSENT	AO	02/2025
Rev	Description	By	Date
	By	Date	
Survey	MAVEN	11/2024	
Design	AO	12/2024	
Drawn	OE	01/2025	
Checked	LC	02/2025	
M A E N Maven Associates 09 571 0050 info@maven.co.nz www.maven.co.nz 5 Owens Road, Epsom Auckland 1023			
Project SUNFIELD SUBDIVISION AUCKLAND FOR SUNFIELD DEVELOPMENTS LTD.			
Title PROPOSED WETLANDS - WETLAND 3 CROSS SEC. & OUTLET			
Project no.	215010		
Scale	AS SHOWN		
Cad file	215010-M-C460_DWG		
Drawing no.	M-C4611	Rev	A



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PR WETLAND FGL

A	RESOURCE CONSENT	AO	02/2025
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Survey	MAVEN		11/2024
Design	AO		12/2024
Drawn	OE		01/2025
Checked	LC		02/2025



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Project

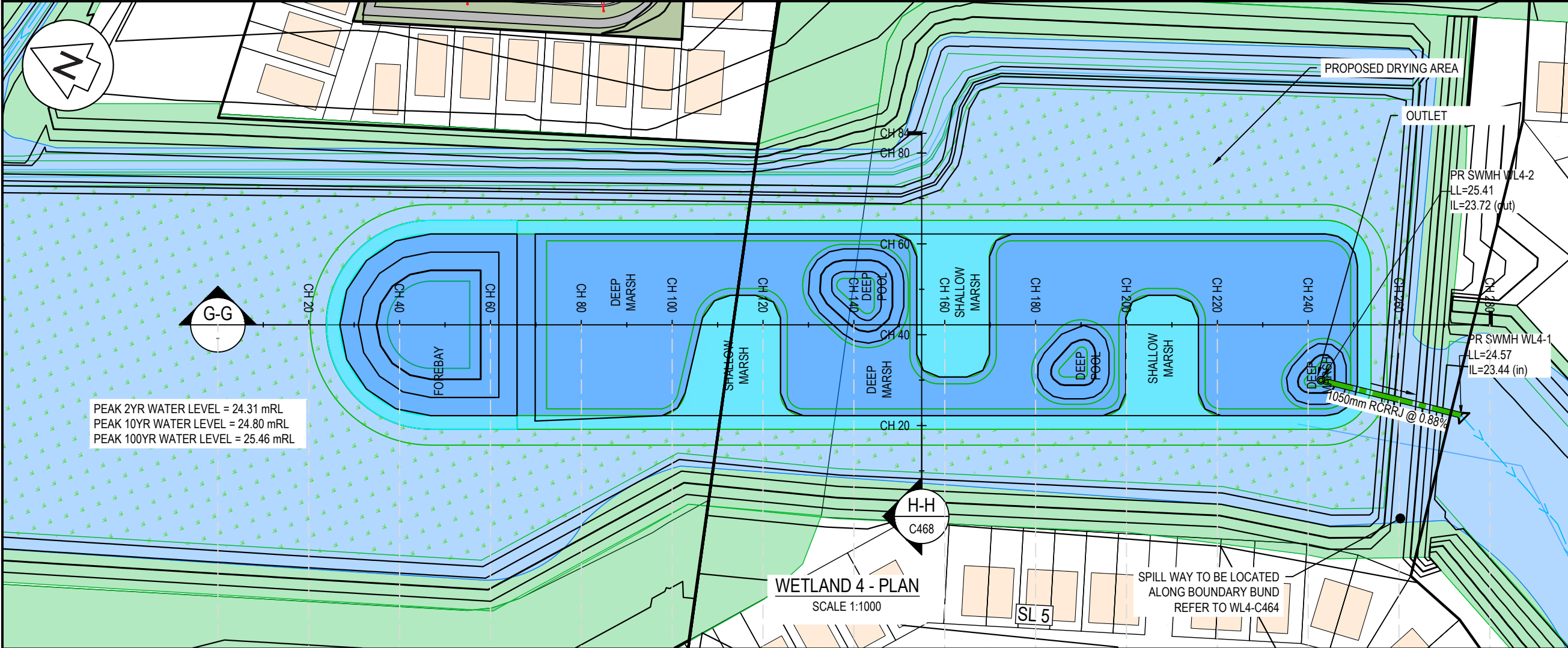
**SUNFIELD
SUBDIVISION
AUCKLAND
FOR SUNFIELD
DEVELOPMENTS LTD.**

Title

**PROPOSED WETLANDS -
WETLAND 4
PLAN & LONGSECTION**

Project no.	215010		
Scale	AS SHOWN		
Cad file	215010-M-C460_DWG		
Drawing no.	M-C4612	Rev	A

RESOURCE CONSENT



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PR WETLAND FGL

A	RESOURCE CONSENT	AO	02/2025
Rev	Description	By	Date
Survey	MAVEN		11/2024
Design	AO		12/2024
Drawn	OE		01/2025
Checked	LC		02/2025



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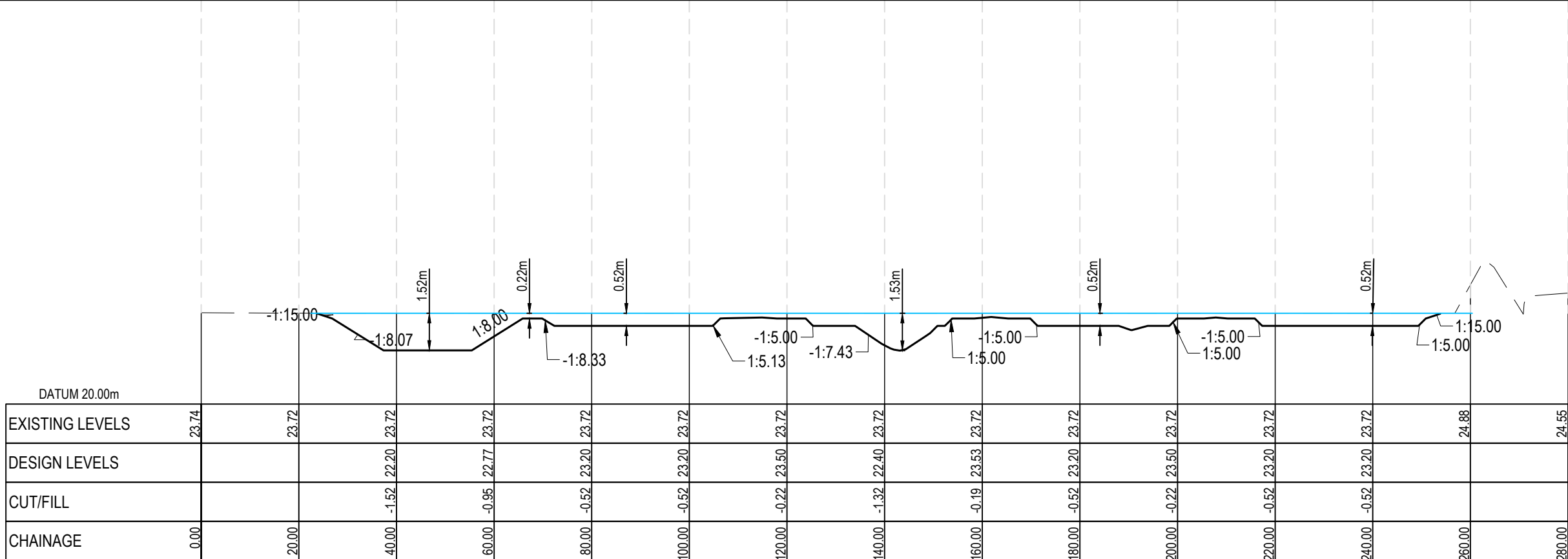
Project

**SUNFIELD
SUBDIVISION
AUCKLAND
FOR SUNFIELD
DEVELOPMENTS LTD.**

Title

**PROPOSED WETLANDS -
WETLAND 4
PLAN & LONGSECTION**

Project no.	215010
Scale	AS SHOWN
Cad file	215010-M-C460_DWG
Drawing no.	M-C4613
Rev	A



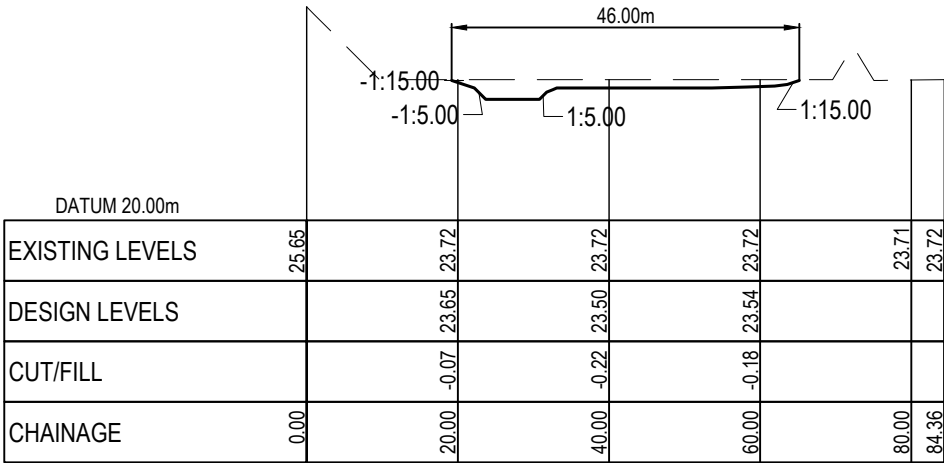
WETLAND 4 G-G
SCALE: HORI 1:1000 VERT 1:200

RESOURCE CONSENT

DATE: 8/1/25 FILEPATH: F:\Maven\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010-M-C460_DWG

DATE: 8/11/25 FILEPATH: F:\MAVEN\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010-M-C460_DWG

RESOURCE CONSENT



WETLAND 4 H-H
SCALE: HORI 1:1000 VERT 1:200

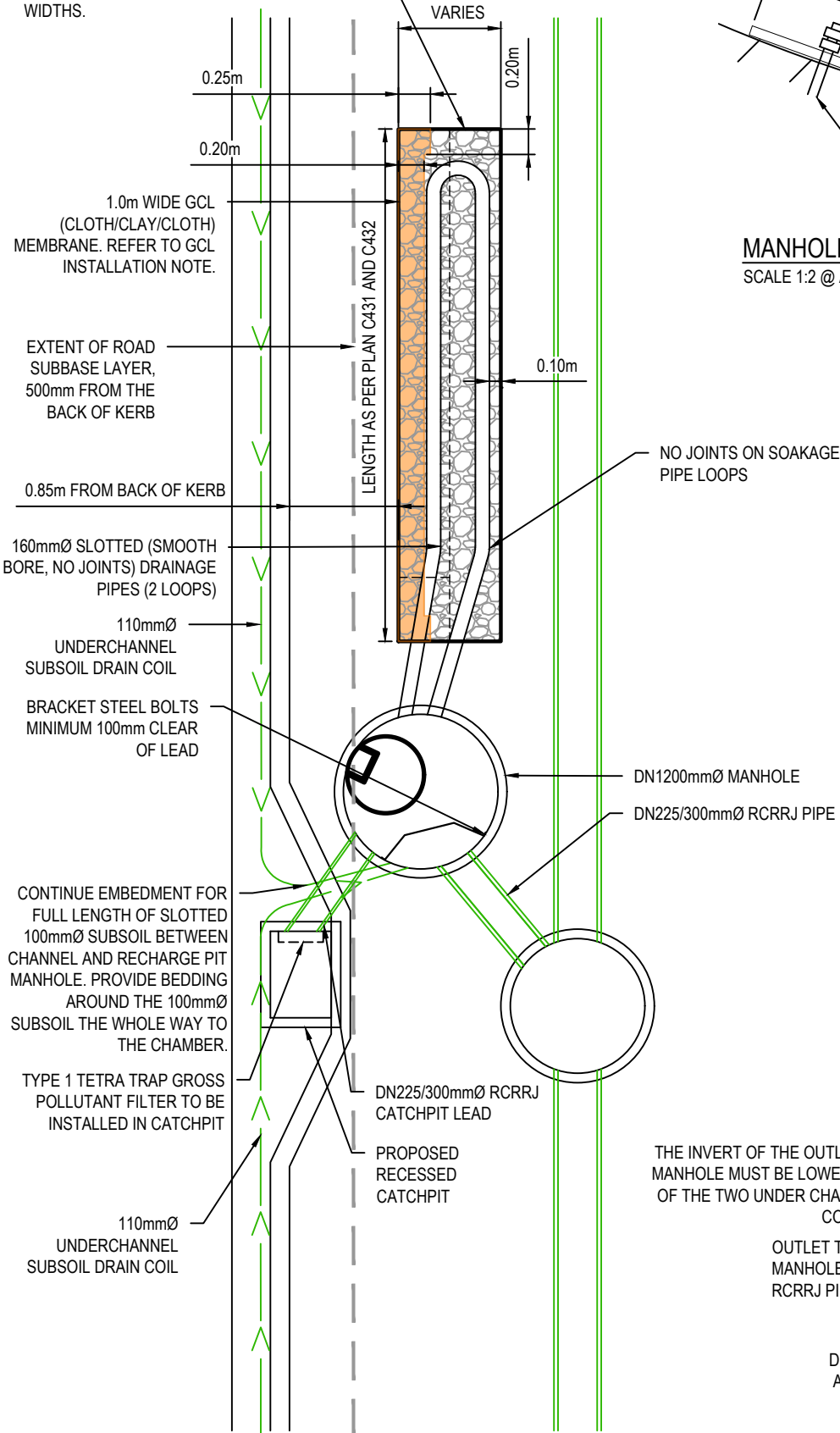
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LEGEND

PR WETLAND FGL

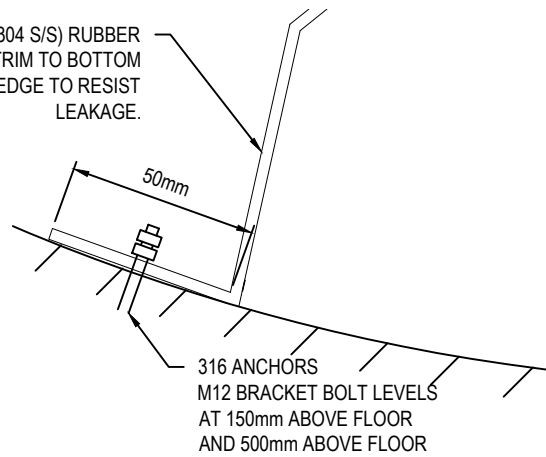
A	RESOURCE CONSENT	AO	02/2025
Rev	Description	By	Date
	By	Date	
Survey	MAVEN	11/2024	
Design	AO	12/2024	
Drawn	OE	01/2025	
Checked	LC	02/2025	
M A E N Maven Associates 09 571 0050 info@maven.co.nz www.maven.co.nz 5 Owens Road, Epsom Auckland 1023			
Project SUNFIELD SUBDIVISION AUCKLAND FOR SUNFIELD DEVELOPMENTS LTD.			
Title PROPOSED WETLANDS - WETLAND 4 CROSS SEC. & OUTLET			
Project no.	215010		
Scale	AS SHOWN		
Cad file	215010-M-C460_DWG		
Drawing no.	M-C4614	Rev	A

PROPOSED RECHARGE PIT WITH 20/50 SCORIA OR EQUIVALENT FOR DRAINAGE MATERIAL. RECHARGE PITS TO BE LINED WITH GEOTEXTILE CLOTH. REFER TO DWG C431 AND C432 FOR SPECIFIC RECHARGE PIT LENGTHS AND WIDTHS.



PROPOSED RECHARGE PIT DETAILS
SCALE 1:50 @ A3

WEIR (3mm 304 S/S) RUBBER BEAD SEAL TRIM TO BOTTOM AND SIDE EDGE TO RESIST LEAKAGE.



MANHOLE WEIR AND BRACKET DETAIL
SCALE 1:2 @ A3

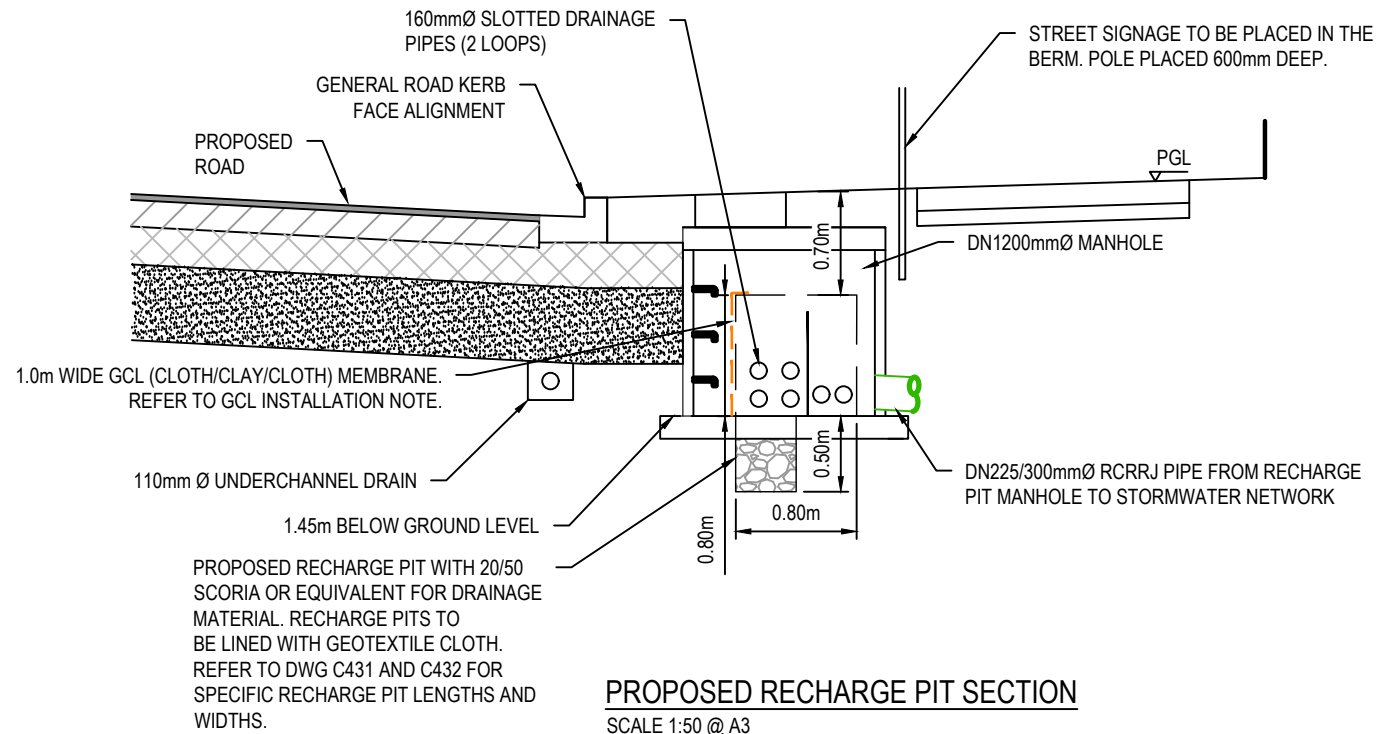
GCL INSTALLATION:

1.0m WIDE GCL (CLOTH/CLAY/CLOTH) MEMBRANE AS STRIP TO PREVENT HIGH FLOW RATES FROM RECHARGE PIT TO ROAD SUBBASE.

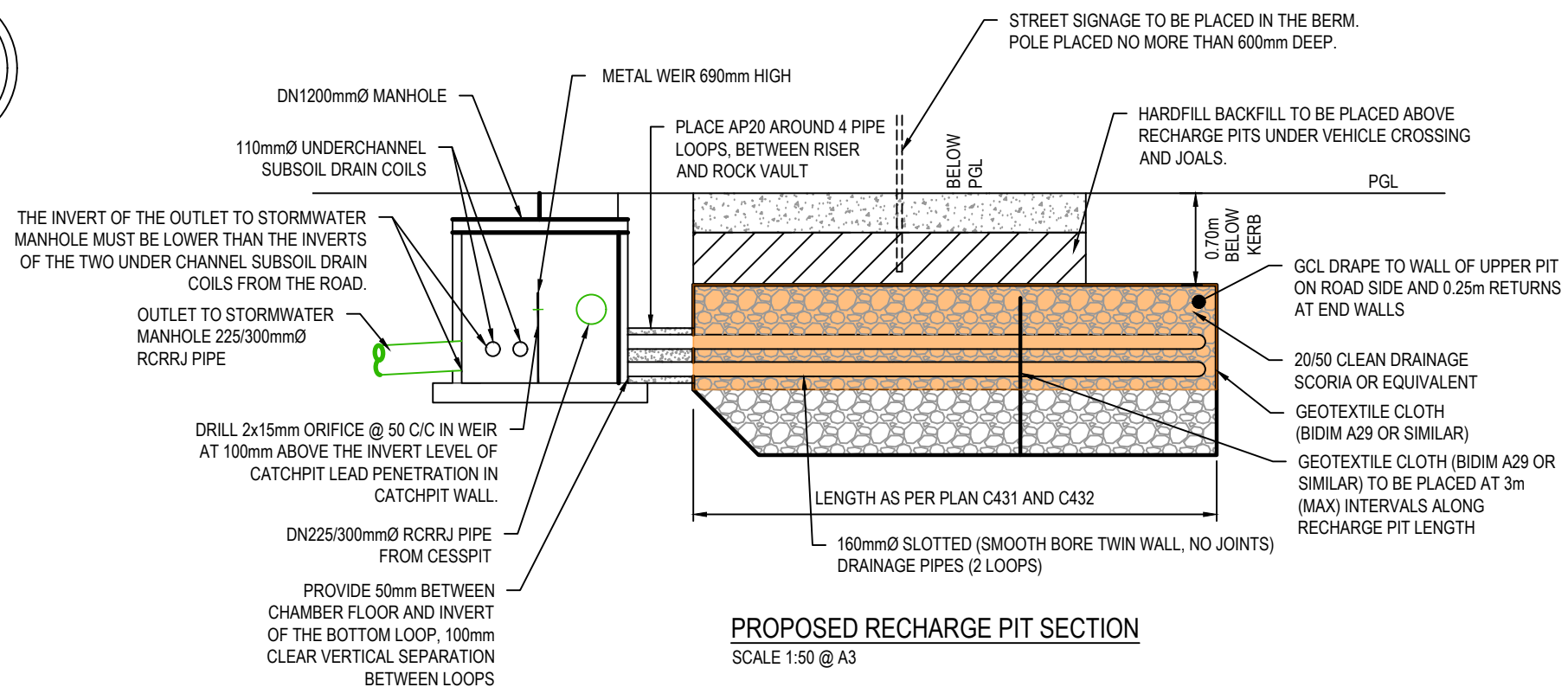
INSTALL GCL MEMBRANE BEFORE PLACING THE SCORIA'S BIDIM WRAP.

LAY 0.8m HIGH VERTICAL GCL WALL AGAINST SOIL FACE ALONG FULL PIT LENGTH ON THE ROAD SIDE OF UPPER PIT AND RETURN A MINIMUM OF 0.25m AROUND END WALLS OF UPPER PIT. BOTTOM EDGE OF GCL TO FINISH LEVEL WITH THE FLOOR OF THE UPPER PIT. ONCE THE ROCK FILL IS COMPLETED AND THE SCORIA'S BIDIM WRAP HAS BEEN LAID BACK DOWN OVER THE TOP OF THE ROCK, RETURN THE EXCESS GCL (0.20m) ACROSS THE TOP BIDIM LAYER.

INSTALL THE GCL SLIGHTLY LOOSE TO ENCOURAGE CONFORMING TO SOIL SURFACE.



PROPOSED RECHARGE PIT SECTION
SCALE 1:50 @ A3



PROPOSED RECHARGE PIT SECTION
SCALE 1:50 @ A3

NOTES

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- 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).
- 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.
- 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 MANHOLES ARE TO BE 1050mmØ PRECAST CONCRETE UNLESS SHOWN OTHERWISE.
- 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.
- ALL LOT CONNECTION TO BE MIN 100mm uPVC SN16 UNLESS SHOWN OTHERWISE.

A	RESOURCE CONSENT	RK	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	YW		11/2024
Checked	JP/LC		02/2025



Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED PUBLIC
ROAD STORMWATER
RECHARGE PIT DETAIL**

Project no.	215010
Scale	AS SHOWN
Cad file	215010-M-C470.DWG
Drawing no.	M-C470
Rev	A

RESOURCE CONSENT



- NOTES
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 3. PLEASE REFER TO MAVEN ASSOCIATES FLOOD MODELING REPORT REV G FOR FLOOD MODELLING OF CATCHMENTS
 4. CATCHMENT AREAS SHOWN DO NOT INCLUDE SWALE AND POND AREAS

LEGEND

---	EX BDY
---	PR BDY
---	CATCHMENT BDY
C-39	CATCHMENT NUMBER
Yellow	SW POND 1 CATCHMENT
Blue	SW POND 2 CATCHMENT
Green	SW POND 3 CATCHMENT
Orange	SW POND 4 CATCHMENT
Pink	DIRECTLY TO AWAKERI WETLAND

A	RESOURCE CONSENT	YW	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	SP		11/2024
Checked	LC		02/2025

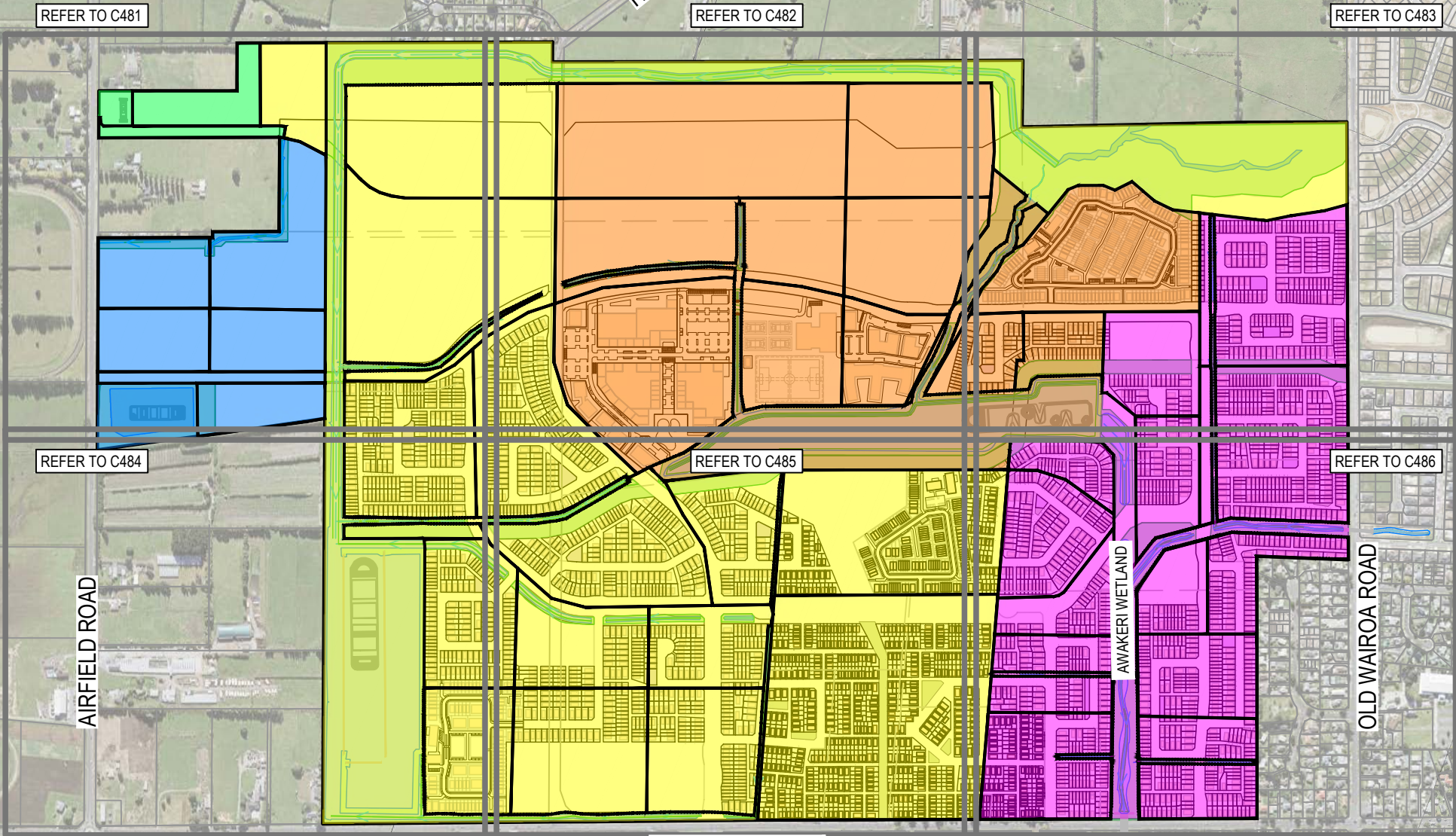


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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED OVERVIEW
STORMWATER CATCHMENT
PLAN**

Project no.	215010		
Scale	1:10000 @ A3		
Cad file	215010-M-C480.DWG		
Drawing no.	M-C480	Rev	A



RESOURCE CONSENT

DATE: 8/1/25 FILE PATH: F:\MAVEN\PROJECTS\215010 - SUNFIELD\DWG\3-PRODUCT\MASTER PLANNING\215010-M-C480.DWG



STORMWATER POND 3

CATCHMENT AREA = 2.756 Ha
MIN PWV = 181m³
TOTAL LIVE STORAGE = 1,820 m³
ATTENUATED OUTFLOWS
Q₂=0.075m³/s
Q₁₀=0.487m³/s
Q₁₀₀=0.873m³/s

C-50

AREA=1.729 Ha
Q₂=0.244m³/s
Q₁₀=0.495m³/s
Q₁₀₀=0.846m³/s

C-58

AREA=0.672 Ha
Q₂=0.093m³/s
Q₁₀=0.200m³/s
Q₁₀₀=0.331m³/s

C-51

AREA=1.933 Ha
Q₂=0.292m³/s
Q₁₀=0.593m³/s
Q₁₀₀=1.037m³/s

C-38

AREA=7.191 Ha
Q₂=0.963m³/s
Q₁₀=1.947m³/s
Q₁₀₀=3.293m³/s

C-37

AREA=10.002 Ha
Q₂=1.277m³/s
Q₁₀=2.494m³/s
Q₁₀₀=4.169m³/s

C-55

AREA=2.434 Ha
Q₂=0.363m³/s
Q₁₀=0.737m³/s
Q₁₀₀=1.280m³/s

C-56

AREA=4.019 Ha
Q₂=0.528m³/s
Q₁₀=1.071m³/s
Q₁₀₀=1.801m³/s

C-53

AREA=2.187 Ha
Q₂=0.328m³/s
Q₁₀=0.667m³/s
Q₁₀₀=1.161m³/s

C-54

AREA=2.225 Ha
Q₂=0.331m³/s
Q₁₀=0.672m³/s
Q₁₀₀=1.168m³/s

C-52

AREA=0.799 Ha
Q₂=0.111m³/s
Q₁₀=0.228m³/s
Q₁₀₀=0.394m³/s

C-57

AREA=1.758 Ha
Q₂=0.264m³/s
Q₁₀=0.536m³/s
Q₁₀₀=0.936m³/s

STORMWATER POND 2

CATCHMENT AREA = 15.538 Ha
MIN PWV = 1,026m³
TOTAL LIVE STORAGE = 22,290 m³
ATTENUATED OUTFLOWS
Q₂=0.060m³/s
Q₁₀=0.639m³/s
Q₁₀₀=4.142m³/s

RESOURCE CONSENT

- NOTES
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LEGEND

---	EX BDY
---	PR BDY
---	CATCHMENT BDY
---	CATCHMENT NUMBER
---	SW POND 1 CATCHMENT
---	SW POND 2 CATCHMENT
---	SW POND 3 CATCHMENT
---	SW POND 4 CATCHMENT
---	DIRECTLY TO AWAKERI WETLAND

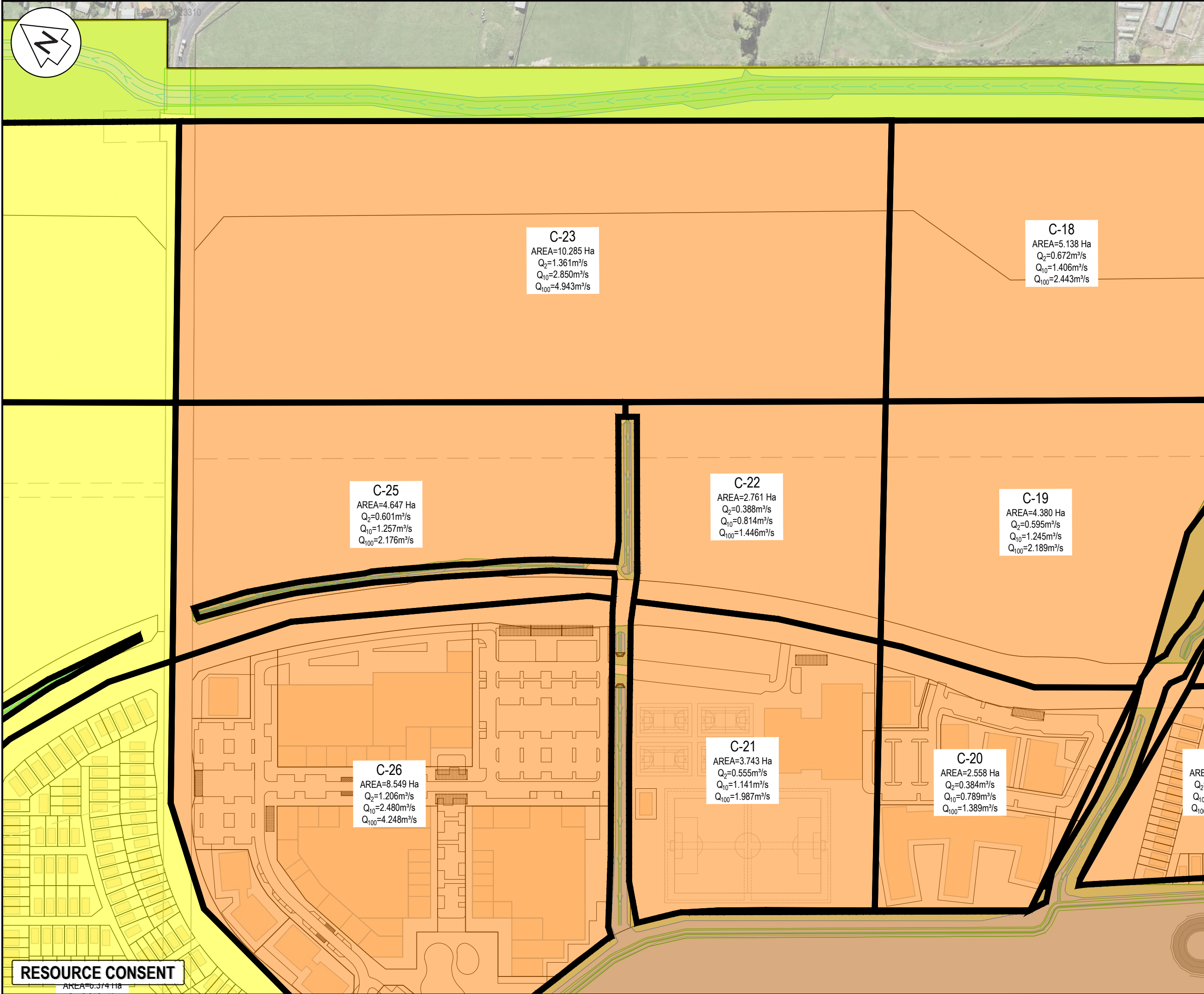
A	RESOURCE CONSENT	YW	02/2025
Rev	Description	By	Date
	Survey	SURVEYWORX	02/2021
	Design	YW	11/2024
	Drawn	SP	11/2024
	Checked	LC	02/2025



Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
STORMWATER CATCHMENT
PLAN: SHEET 1**

Project no.	215010
Scale	1:2500 @ A3
Cad file	215010-M-C480.DWG
Drawing no.	M-C481
Rev	A



- 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 THE NEW ZEALAND VERTICAL DATUM (NZVD) 2016.
 3. PLEASE REFER TO MAVEN ASSOCIATES FLOOD MODELING REPORT REV G FOR FLOOD MODELLING OF CATCHMENTS.
 4. CATCHMENT AREAS SHOWN DO NOT INCLUDE SWALE AND POND AREAS.

LEGEND

---	EX BDY
---	PR BDY
---	CATCHMENT BDY
---	CATCHMENT NUMBER
---	SW POND 1 CATCHMENT
---	SW POND 2 CATCHMENT
---	SW POND 3 CATCHMENT
---	SW POND 4 CATCHMENT
---	DIRECTLY TO AWAKERI WETLAND

A	RESOURCE CONSENT	YW	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	SP	11/2024	
Checked	LC	02/2025	

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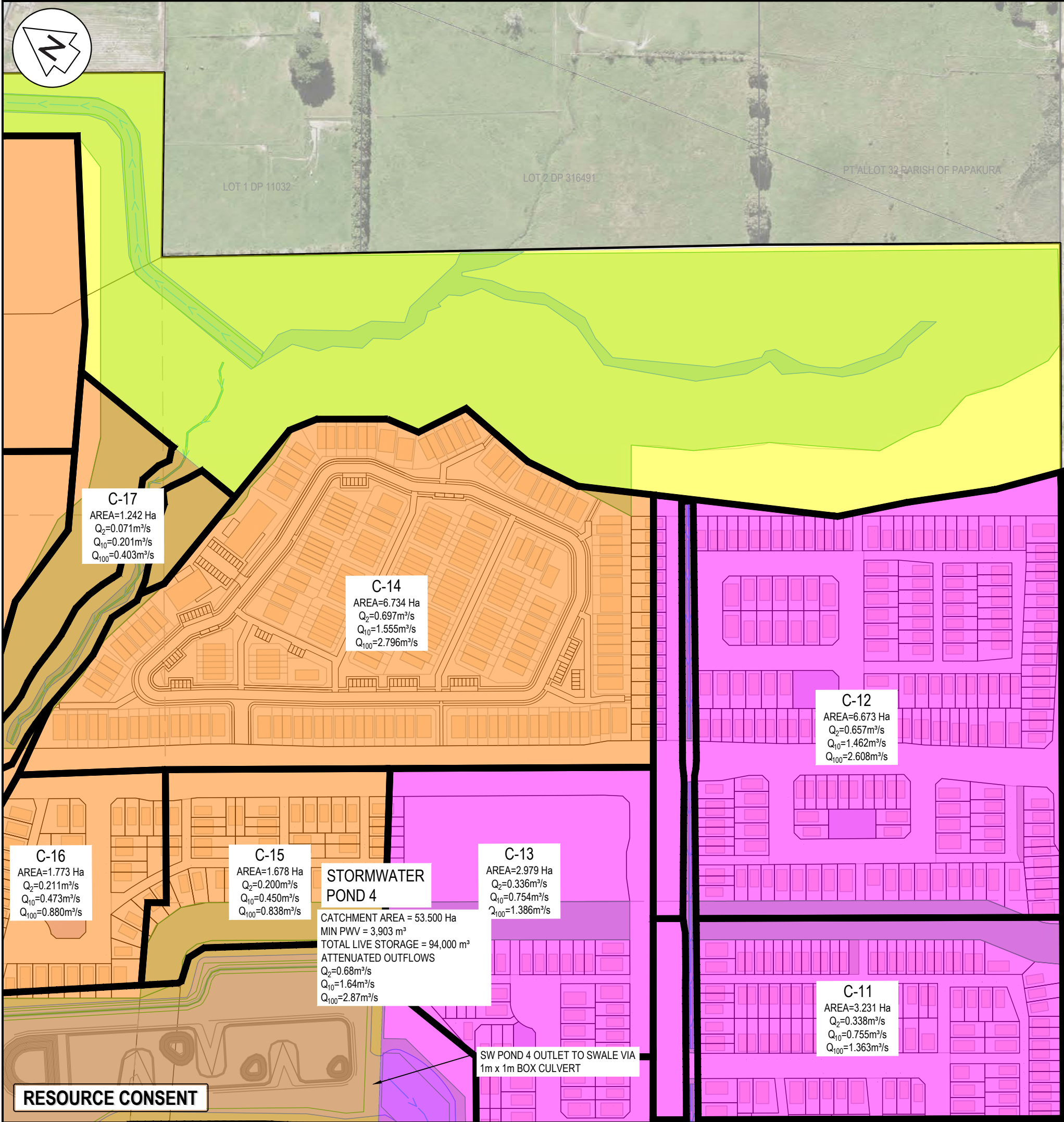
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
STORMWATER CATCHMENT
PLAN: SHEET 2**

Project no.	215010
Scale	1:2500 @ A3
Cad file	215010-M-C480.DWG
Drawing no.	M-C482
Rev	A

RESOURCE CONSENT

AKLA=0.374118



- 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 THE NEW ZEALAND VERTICAL DATUM (NZVD) 2016.
 3. PLEASE REFER TO MAVEN ASSOCIATES FLOOD MODELING REPORT REV G FOR FLOOD MODELLING OF CATCHMENTS.
 4. CATCHMENT AREAS SHOWN DO NOT INCLUDE SWALE AND POND AREAS.

LEGEND

---	EX BDY
---	PR BDY
---	CATCHMENT BDY
---	CATCHMENT NUMBER
---	SW POND 1 CATCHMENT
---	SW POND 2 CATCHMENT
---	SW POND 3 CATCHMENT
---	SW POND 4 CATCHMENT
---	DIRECTLY TO AWAKERI WETLAND

A	RESOURCE CONSENT	YW	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	SP		11/2024
Checked	LC		02/2025



Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
STORMWATER CATCHMENT
PLAN: SHEET 3**

Project no.	215010
Scale	1:2500 @ A3
Cad file	215010-M-C480.DWG
Drawing no.	M-C483
Rev	A

DATE: 8/10/25 FILE PATH: F:\MAVEN\PROJECTS\215010 - SUNFIELD\DWG\3-PRODUCT\MASTER PLANNING\215010-M-C480.DWG



C-36
AREA=6.341 Ha
 $Q_2=0.706\text{m}^3/\text{s}$
 $Q_{10}=1.460\text{m}^3/\text{s}$
 $Q_{100}=2.555\text{m}^3/\text{s}$

$Q_{10}=1.402\text{m}^3/\text{s}$
 $Q_{100}=2.445\text{m}^3/\text{s}$

**STORMWATER
POND 1**

CATCHMENT AREA = 63.966 Ha
MIN PWV = 3,836 m^3
2yr FLOOD STORAGE = 68,000 m^3
10yr FLOOD STORAGE = 77,000 m^3
100yr FLOOD STORAGE = 141,000 m^3

C-34
AREA=3.798 Ha
 $Q_2=0.469\text{m}^3/\text{s}$
 $Q_{10}=0.932\text{m}^3/\text{s}$
 $Q_{100}=1.653\text{m}^3/\text{s}$

C-35
AREA=3.445 Ha
 $Q_2=0.430\text{m}^3/\text{s}$
 $Q_{10}=0.866\text{m}^3/\text{s}$
 $Q_{100}=1.545\text{m}^3/\text{s}$

- NOTES
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LEGEND

---	EX BDY
---	PR BDY
---	CATCHMENT BDY
C-39	CATCHMENT NUMBER
SW POND 1 CATCHMENT	
SW POND 2 CATCHMENT	
SW POND 3 CATCHMENT	
SW POND 4 CATCHMENT	
DIRECTLY TO AWAKERI WETLAND	

A	RESOURCE CONSENT	YW	02/2025
Rev	Description	By	Date
		By	Date
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	SP		11/2024
Checked	LC		02/2025

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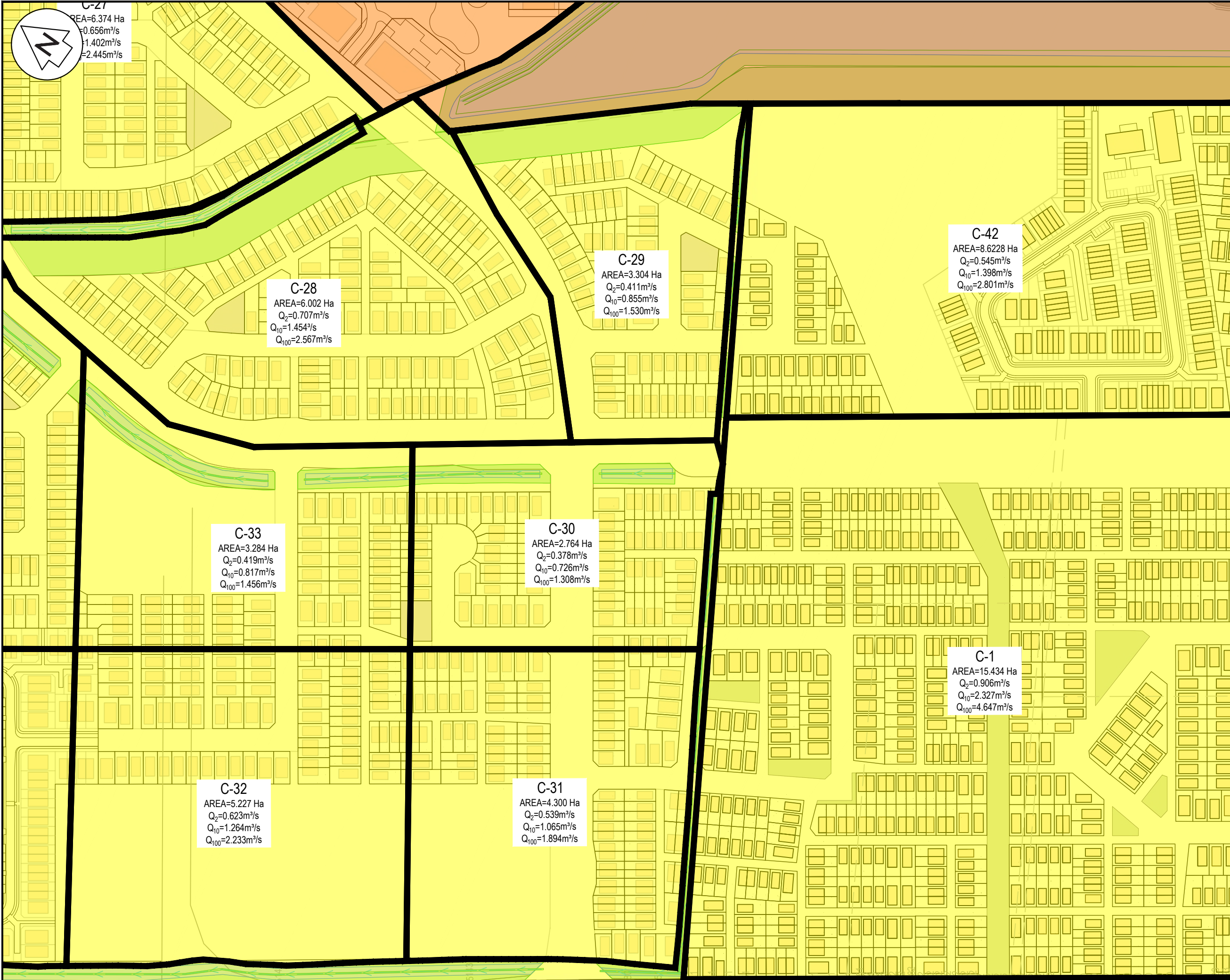
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title
**PROPOSED
STORMWATER CATCHMENT
PLAN: SHEET 4**

Project no.	215010
Scale	1:2500 @ A3
Cad file	215010-M-C480.DWG
Drawing no.	M-C484
Rev	A

RESOURCE CONSENT

DATE: 8/10/25 FILE PATH: F:\MAVEN\PROJECTS\215010 - SUNFIELD\DWG\3-PRODUCT\MASTER PLANNING\215010-M-C480.DWG



NOTES

1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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---	PR BDY
---	CATCHMENT BDY
---	CATCHMENT NUMBER
---	SW POND 1 CATCHMENT
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---	SW POND 3 CATCHMENT
---	SW POND 4 CATCHMENT
---	DIRECTLY TO AWAKERI WETLAND

A	RESOURCE CONSENT	YW	02/2025
Rev	Description	By	Date
	Survey	SURVEYWORX	02/2021
	Design	YW	11/2024
	Drawn	SP	11/2024
	Checked	LC	02/2025

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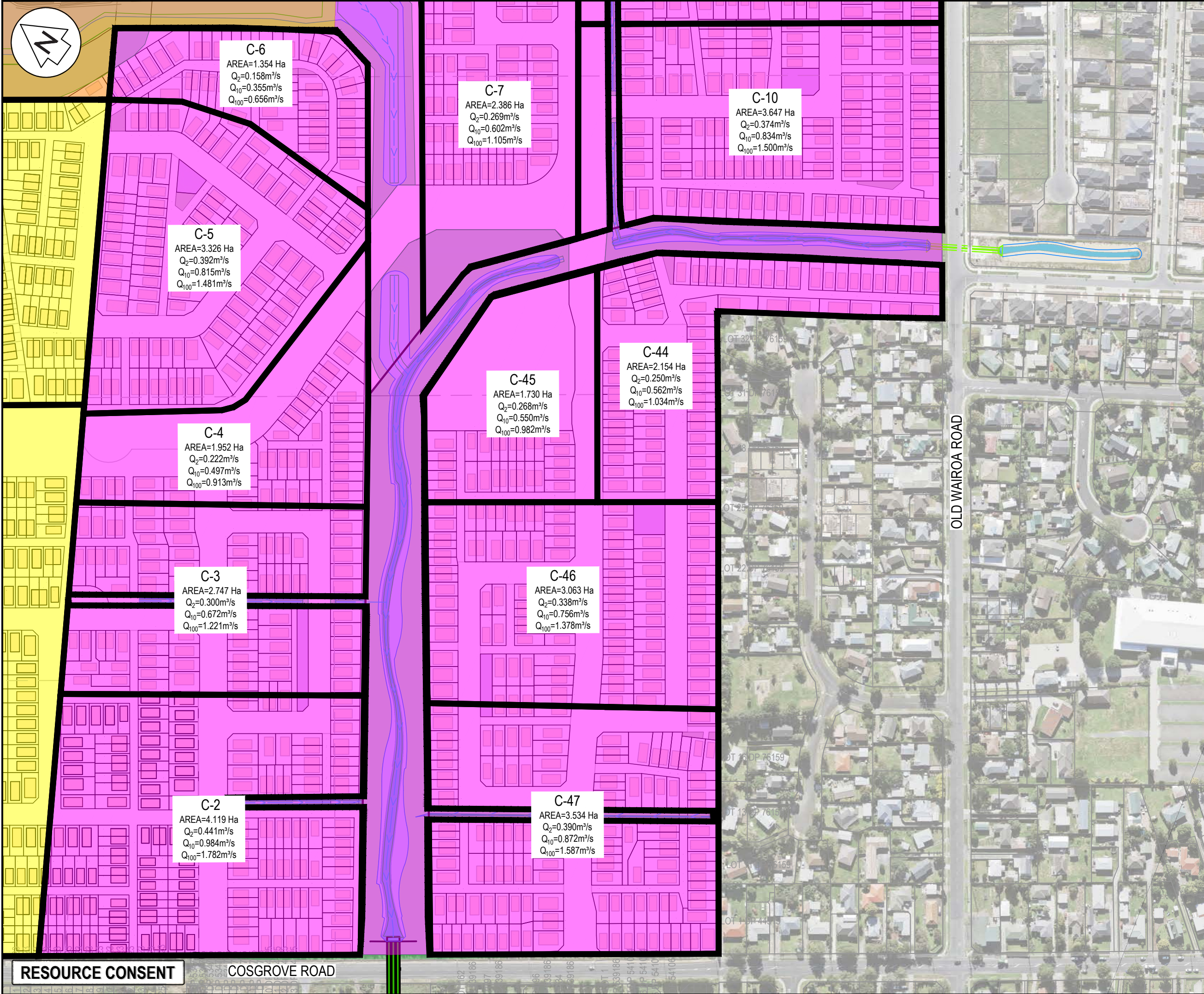
Project

**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title

**PROPOSED
STORMWATER CATCHMENT
PLAN: SHEET 5**

Project no.	215010
Scale	1:2500 @ A3
Cad file	215010-M-C480.DWG
Drawing no.	M-C485
Rev	A



- NOTES
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 2. COORDINATES IN TERMS OF NZ GEODETIC DATUM MT EDEN 2000. LEVELS IN TERMS OF THE NEW ZEALAND VERTICAL DATUM (NZVD) 2016.
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LEGEND

- EX BDY
- PR BDY
- CATCHMENT BDY
- CATCHMENT NUMBER
- SW POND 1 CATCHMENT
- SW POND 2 CATCHMENT
- SW POND 3 CATCHMENT
- SW POND 4 CATCHMENT
- DIRECTLY TO AWAKERI WETLAND

A	RESOURCE CONSENT	YW	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	SP	11/2024	
Checked	LC	02/2025	

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Project
**SUNFIELD DEVELOPMENT
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DEVELOPMENTS LIMITED**

Title
**PROPOSED
STORMWATER CATCHMENT
PLAN: SHEET 6**

Project no.	215010
Scale	1:2500 @ A3
Cad file	215010-M-C480.DWG
Drawing no.	M-C486
Rev	A