

- 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 AUCKLAND VERTICAL DATUM 1946.
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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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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

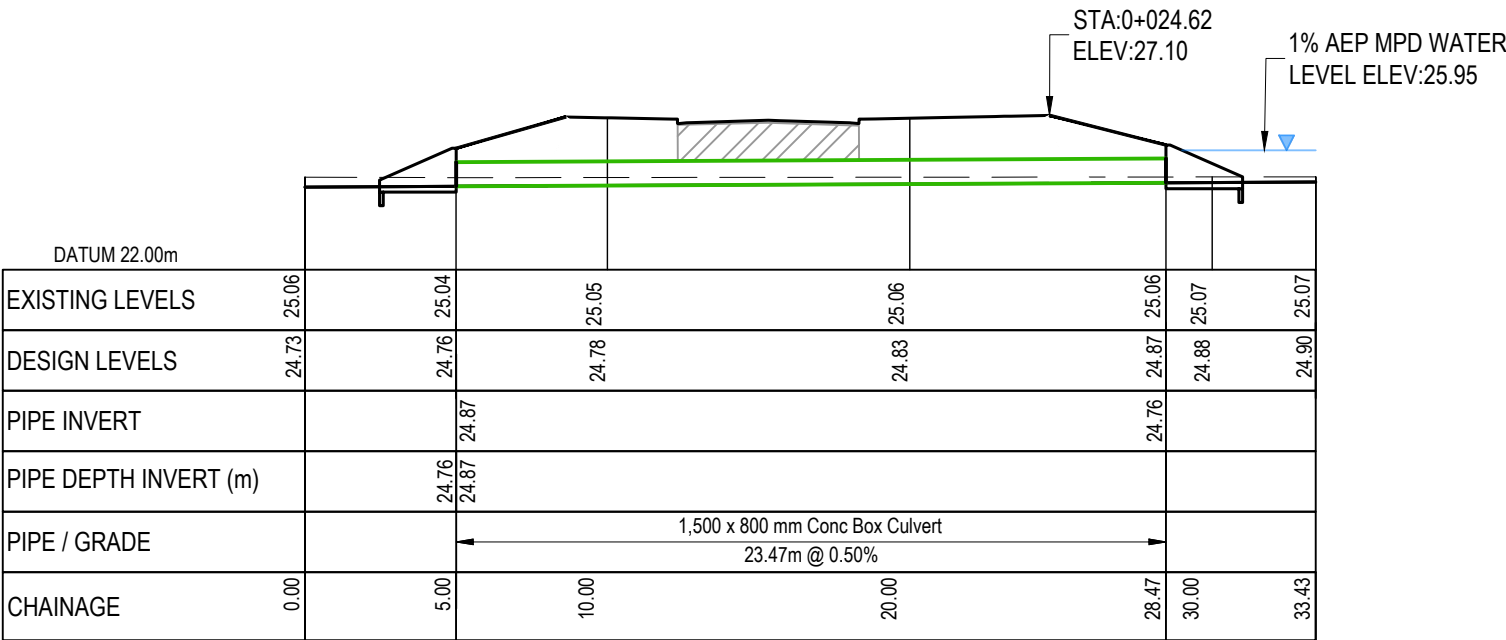
Title
**PROPOSED
ROAD 9 CULVERT 1
SHEET 1**

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

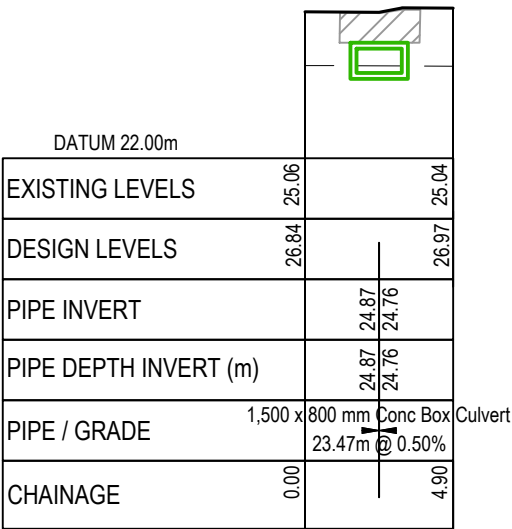
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RESOURCE CONSENT

DATE: 27/25 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

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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

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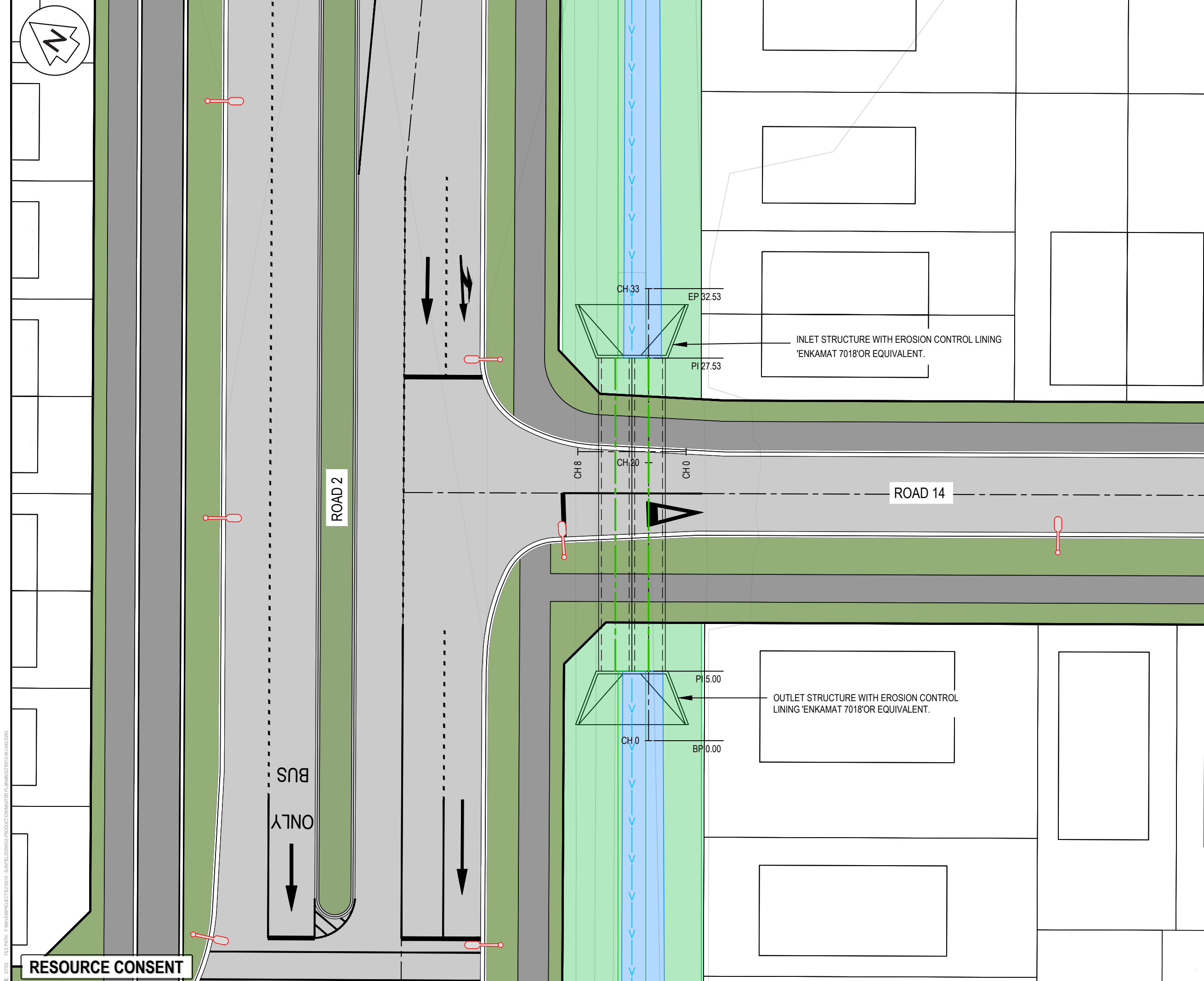
5 Owens Road, Epsom

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



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---	SWALE TOP/BASE
---	PR SW SWALES
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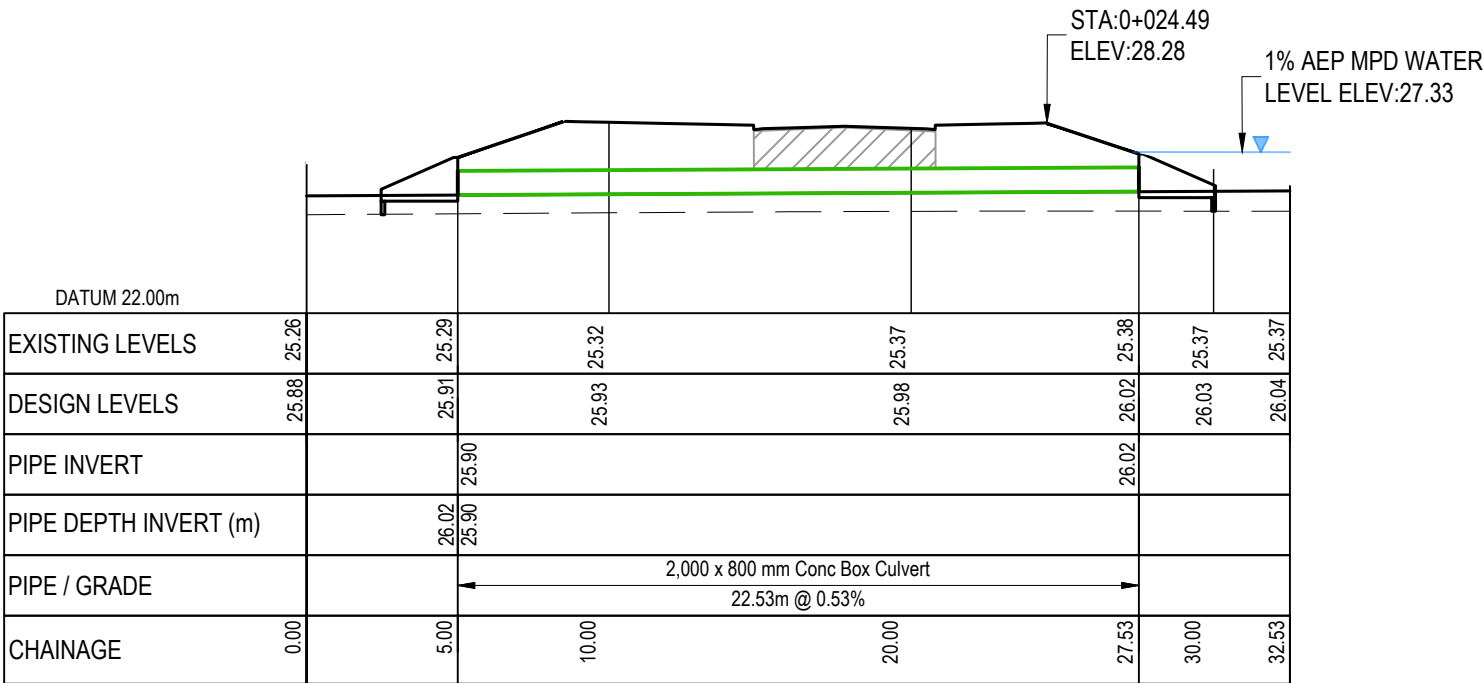
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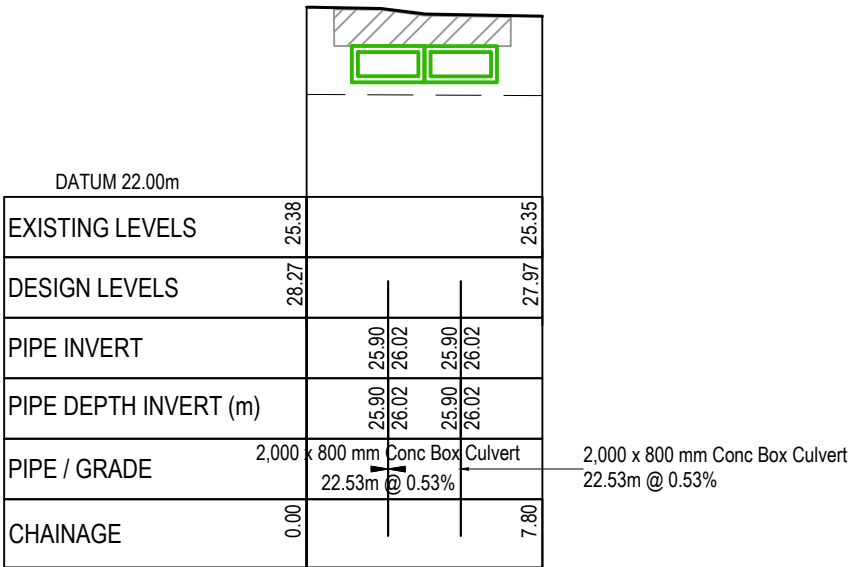
Title
**PROPOSED
ROAD 14 CULVERT 1
SHEET 1**

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

DATE: 27/25 FILE PATH: F:\MAYN\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

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

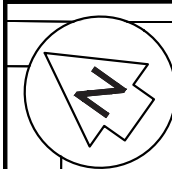
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Project
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FOR SUNFIELD
DEVELOPMENTS LIMITED**

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



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

ROAD 2

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

CH 33
EP 32.72
PI 27.72

CH 20
CH 9
CH 0

ROAD 14

PI 5.00
CH 0
BP 0.00

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

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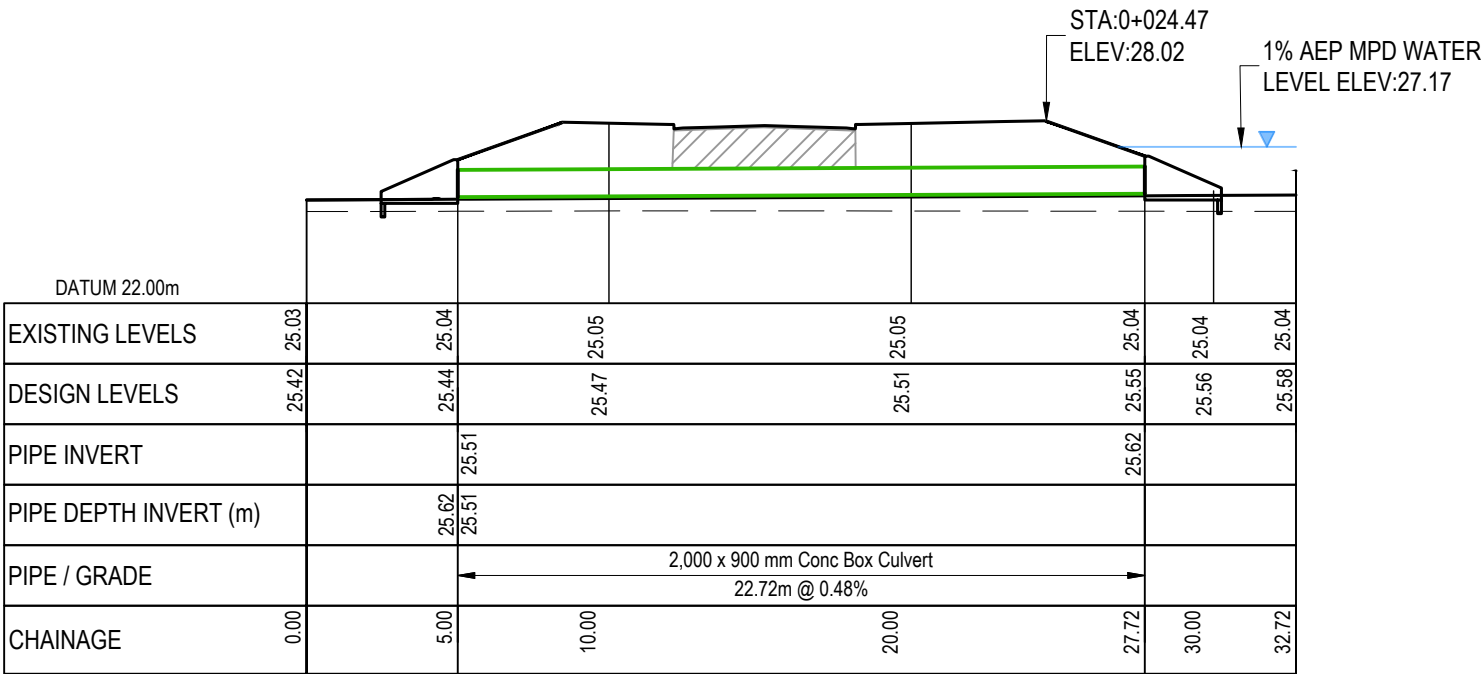
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

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

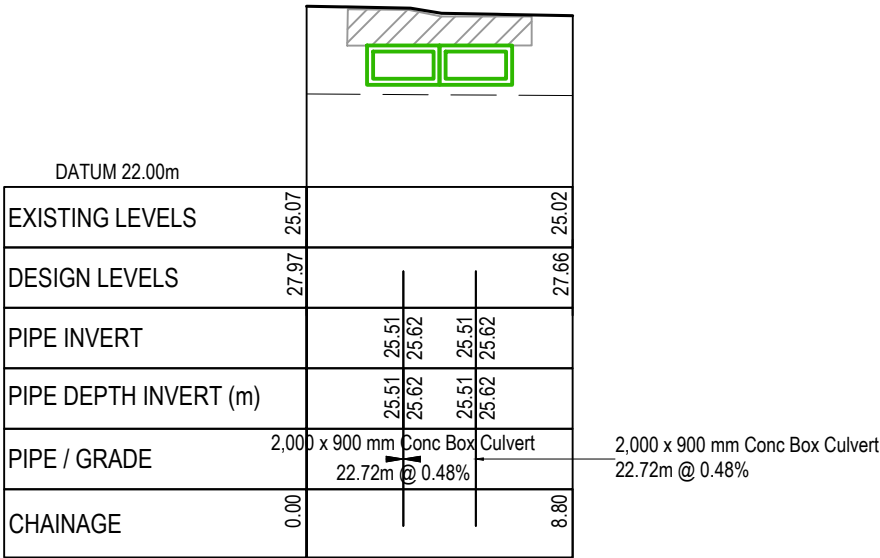
Project no.	215010		
Scale	1:250 @ A3		
Cad file	215010-M-C440.DWG		
Drawing no.	M-C4416-1	Rev	A

RESOURCE CONSENT

DATE: 27/25 FILE PATH: F:\MAYN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



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

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LEGEND:

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

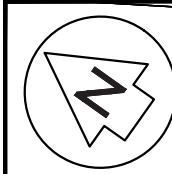
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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

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

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



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LEGEND

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

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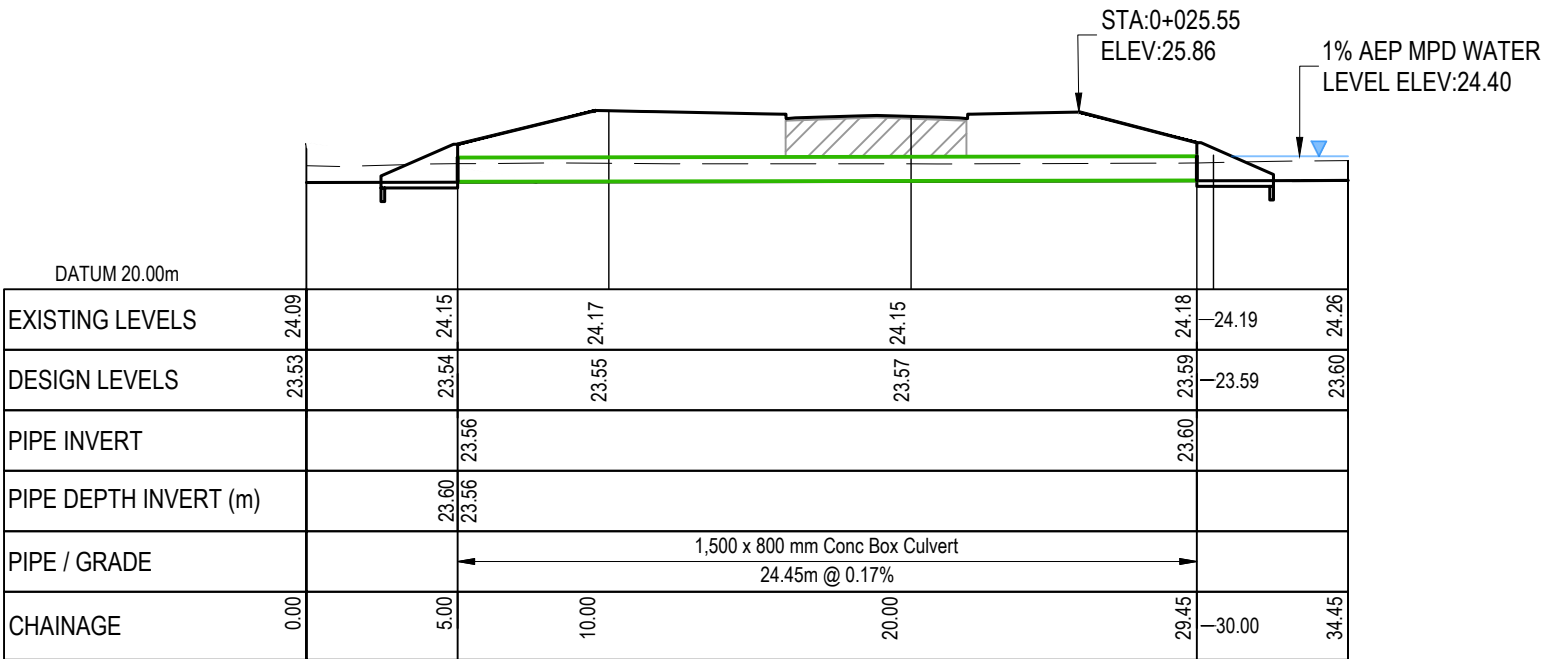
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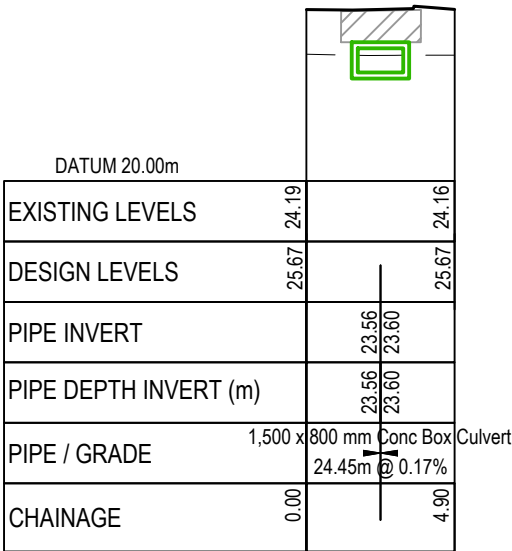
Title
**PROPOSED
ROAD 19 CULVERT 1
SHEET 1**

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

DATE: 27/25 FILE PATH: F:\MAYN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



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



ROAD 19 - 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

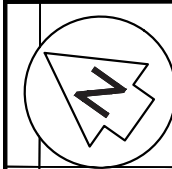
A	RESOURCE CONSENT	OQ	02/2025
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Project
**SUNFIELD DEVELOPMENT
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Title
**PROPOSED
ROAD 19 CULVERT 1
SHEET 2**

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 28

CH 0

PI 5.00

CH 0

BP 0.00

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LEGEND

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

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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

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LEGEND:

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

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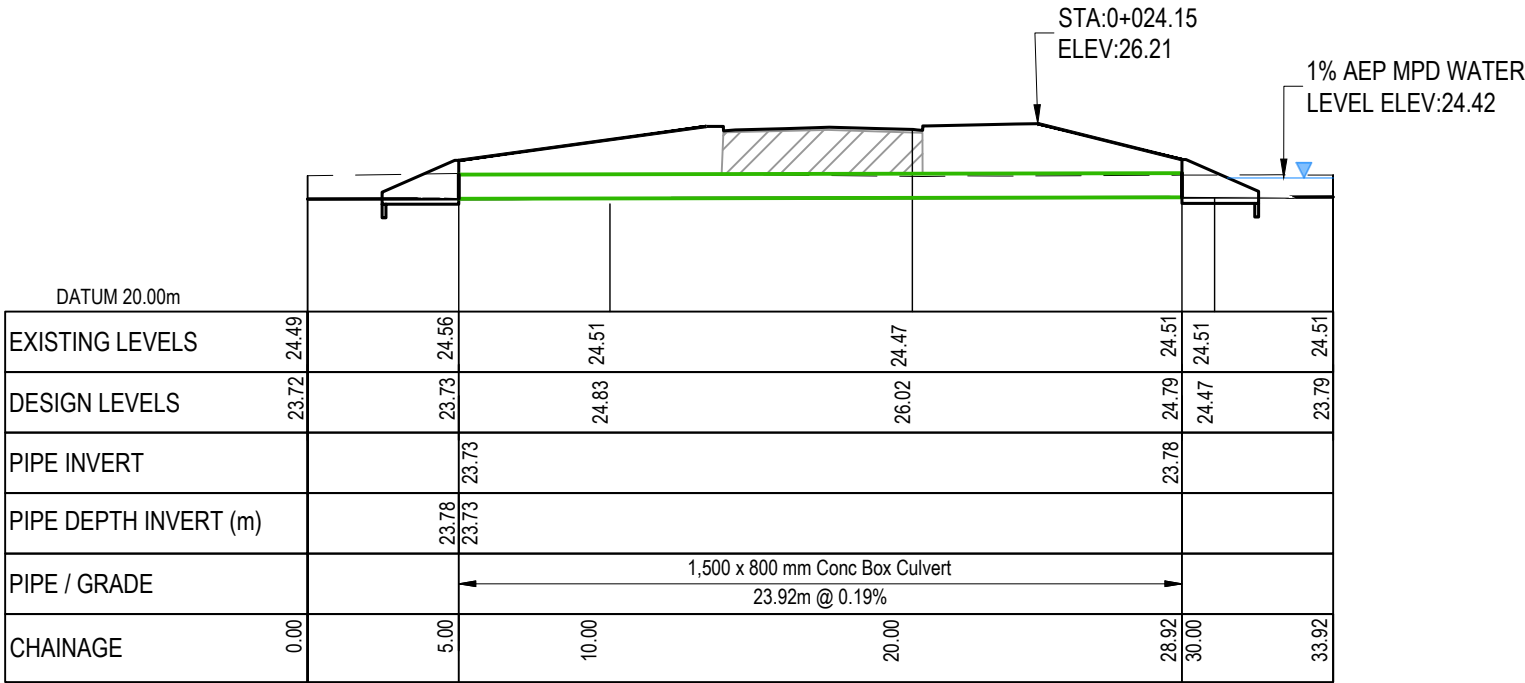
Title

PROPOSED

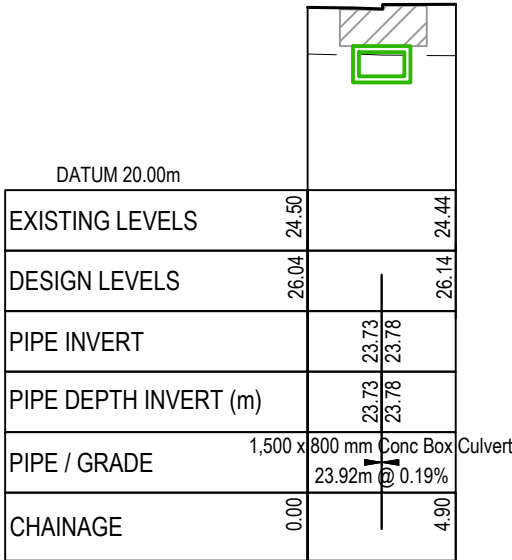
ROAD 20 CULVERT 1

SHEET 2

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



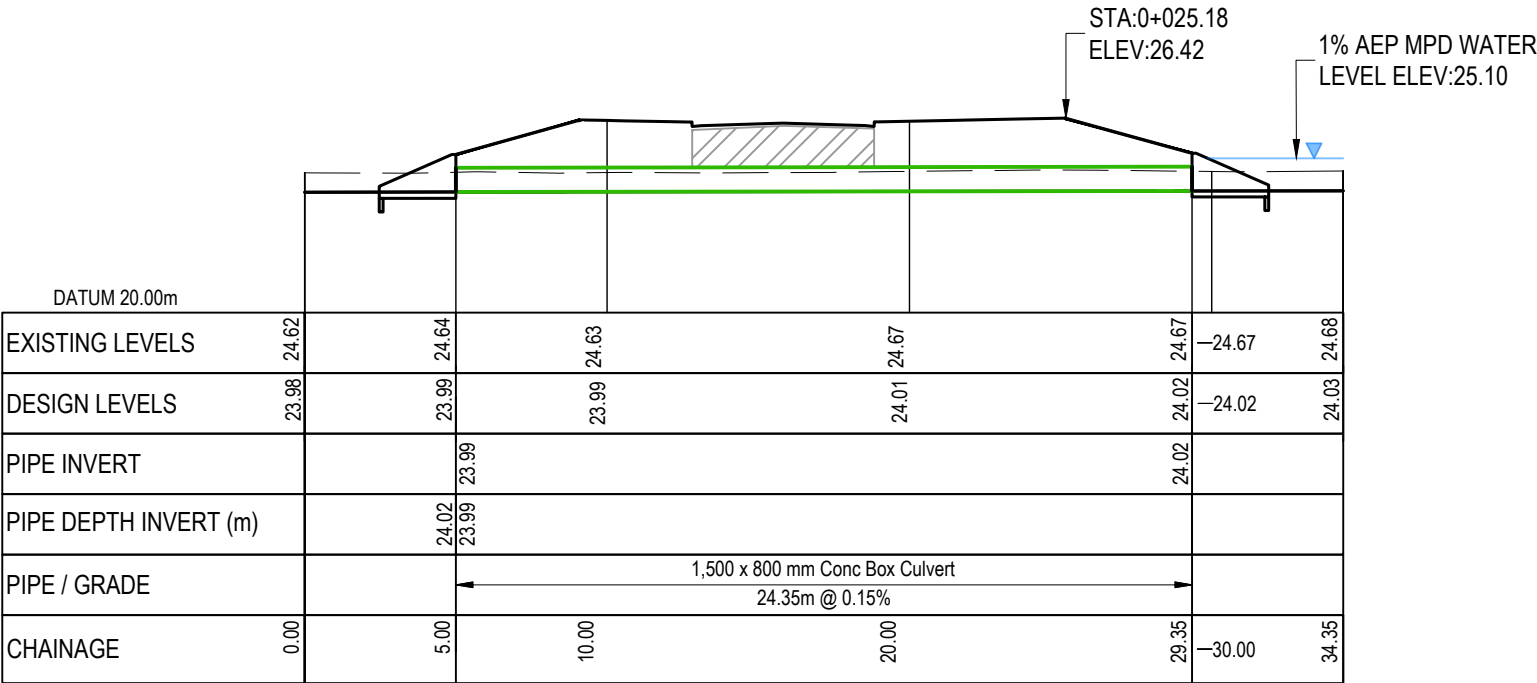
ROAD 20 - CULVERT 1
SCALE: HORI 1:250 VERT 1:250



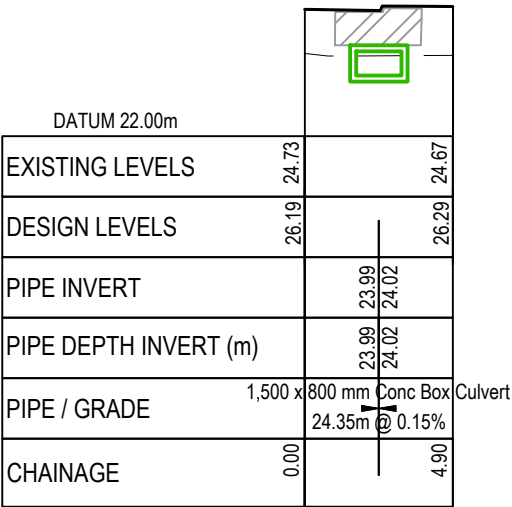
ROAD 20 - CULVERT 1 XS
SCALE: HORI 1:250 VERT 1:250

RESOURCE CONSENT

DATE: 27/25 FILE PATH: F:\MAYN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



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
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 AUCKLAND VERTICAL DATUM 1946.
 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
SW PIPE CROSSING
SW CULVERT CROSSING
HARDFILL BACKFILL

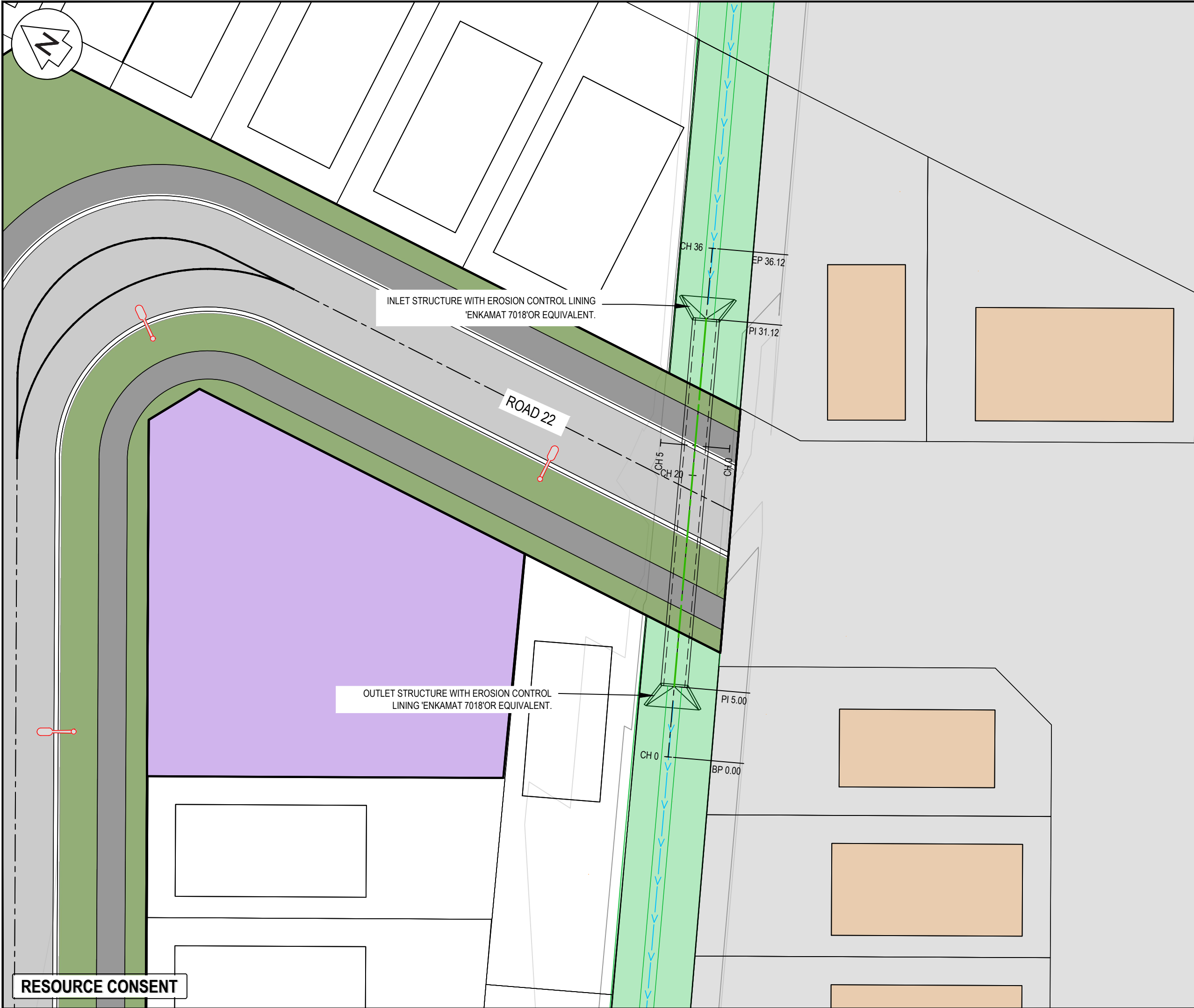
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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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



- 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 AUCKLAND VERTICAL DATUM 1946.
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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

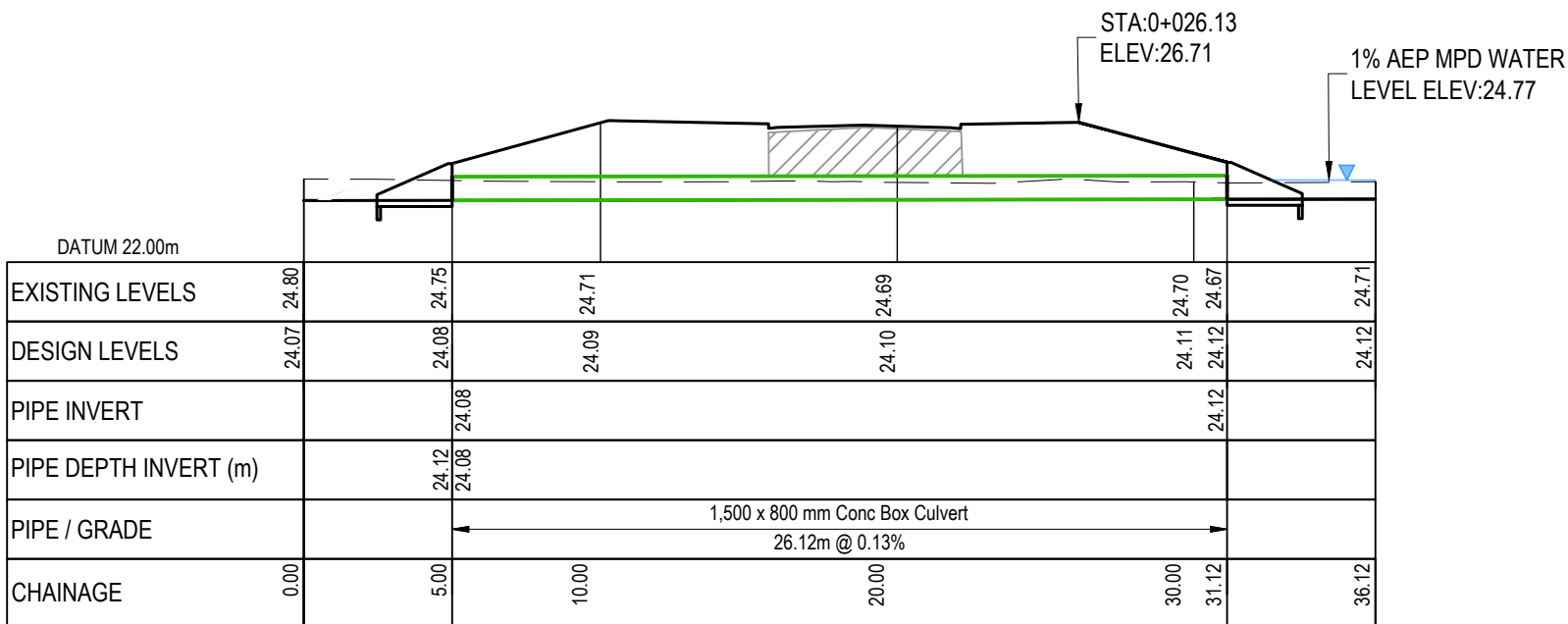


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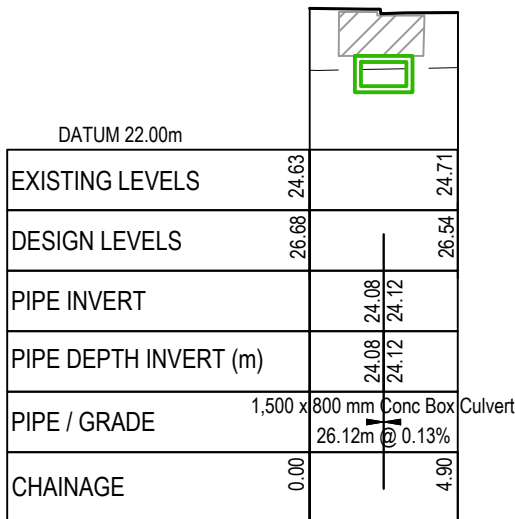
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

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



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	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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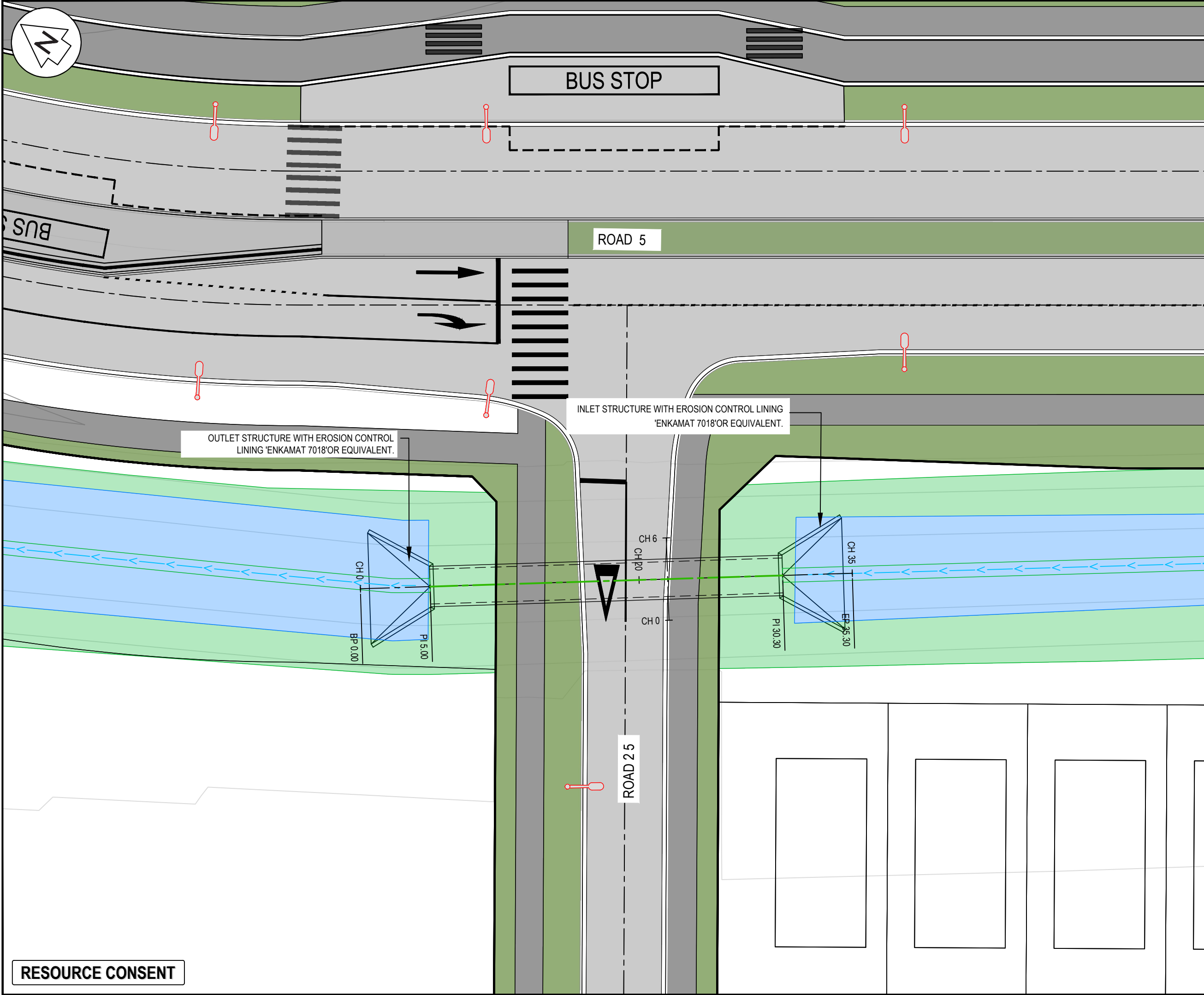
5 Owens Road, Epsom

Auckland 1023

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

Title
PROPOSED
ROAD 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



- 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 AUCKLAND VERTICAL DATUM 1946.
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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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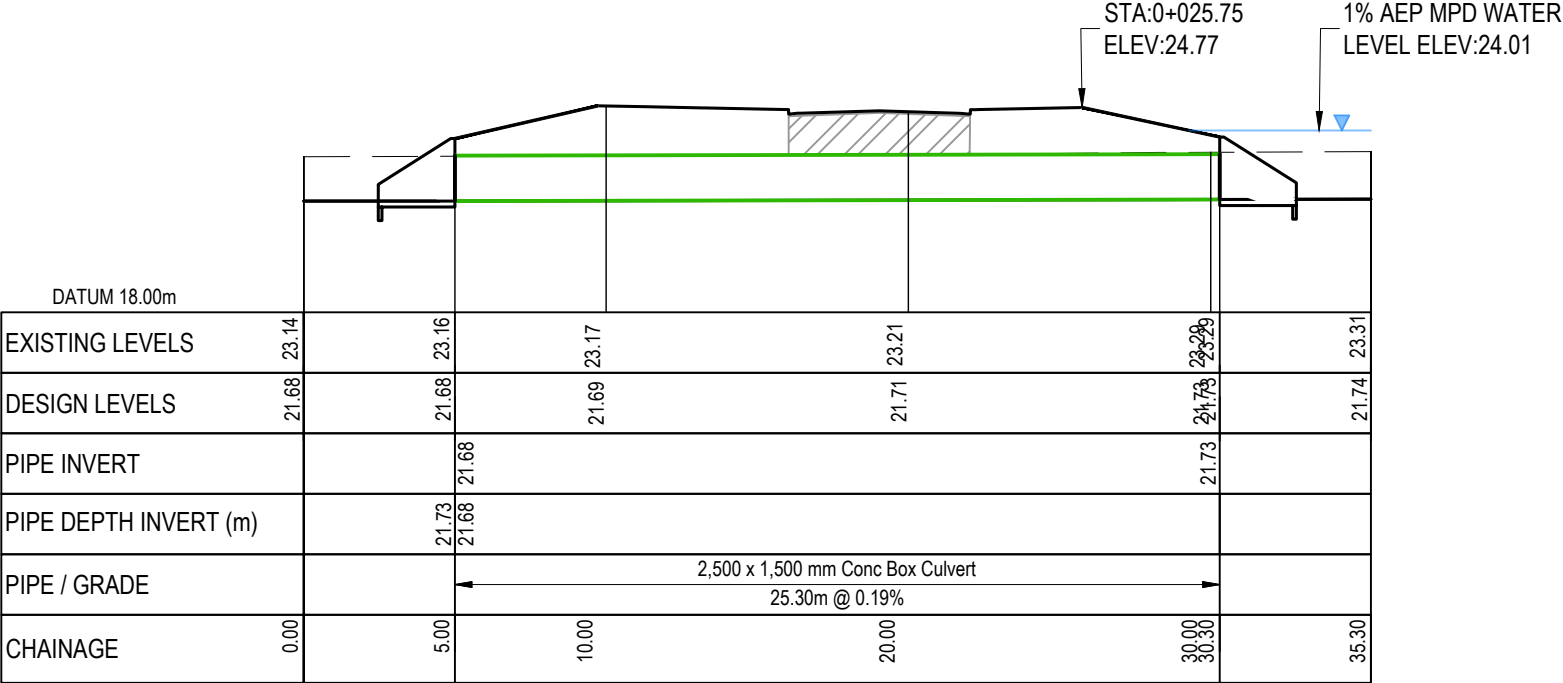
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

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

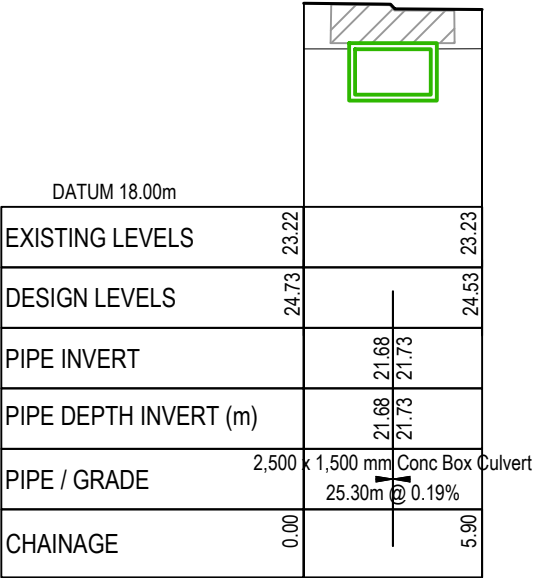
Project no.	215010
Scale	1:250 @ A3
Cad file	215010-M-C440.DWG
Drawing no.	M-C4421-1
Rev	A

RESOURCE CONSENT

DATE: 27/25 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
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

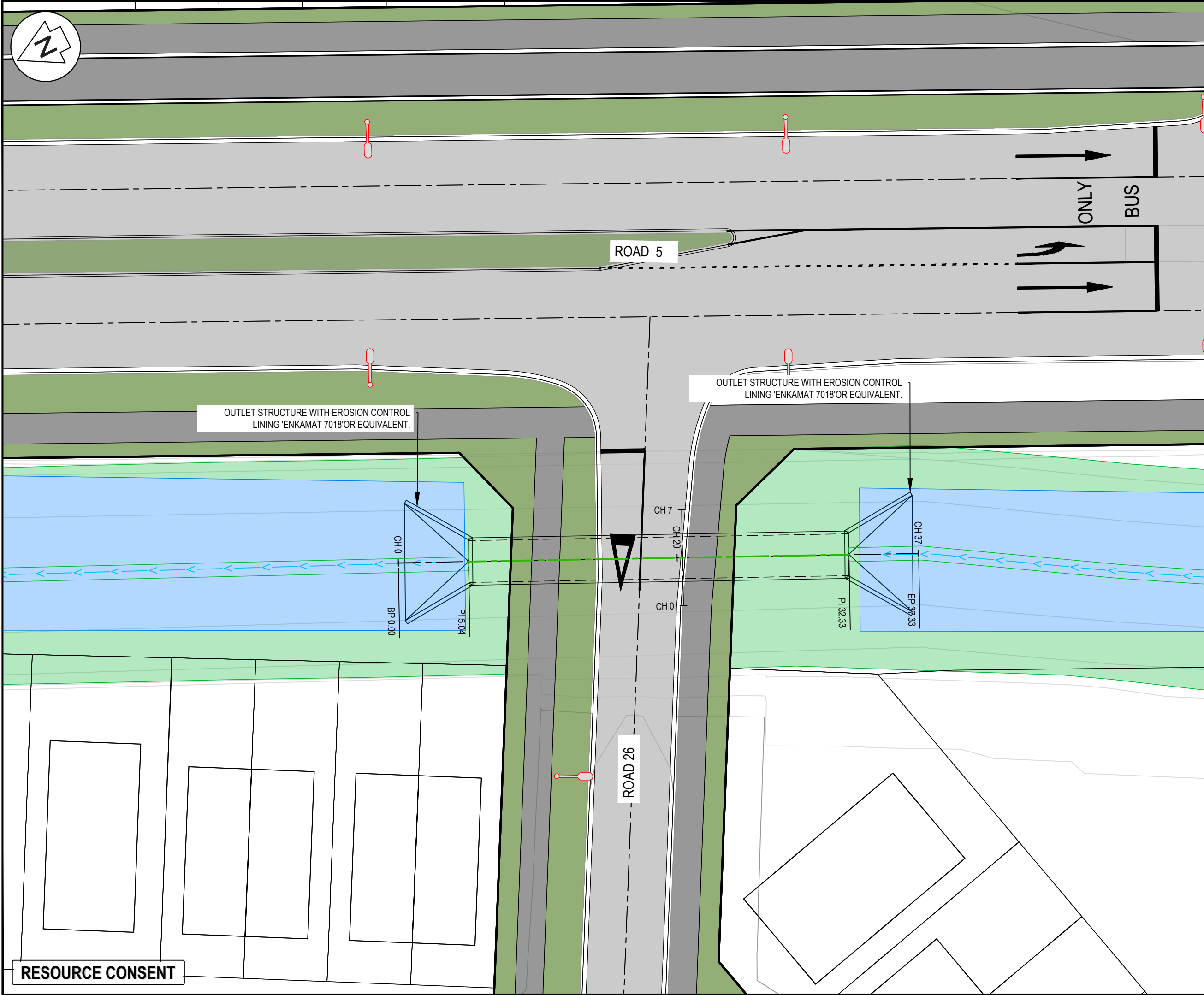
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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

Title
**PROPOSED
ROAD 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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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

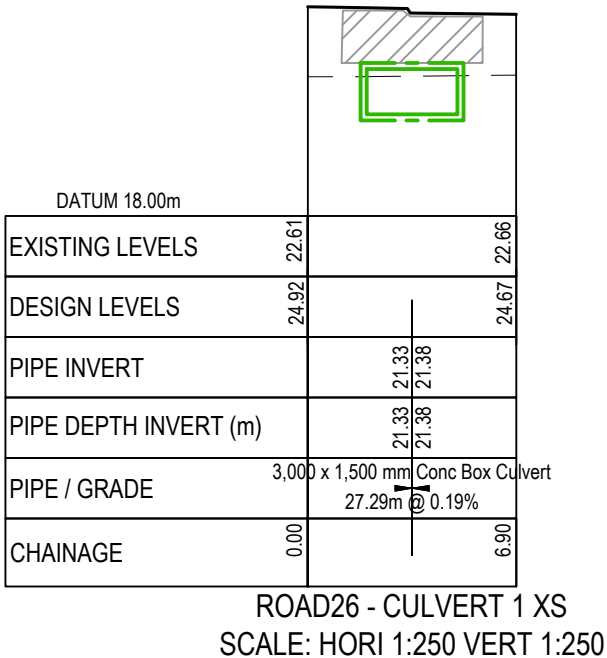
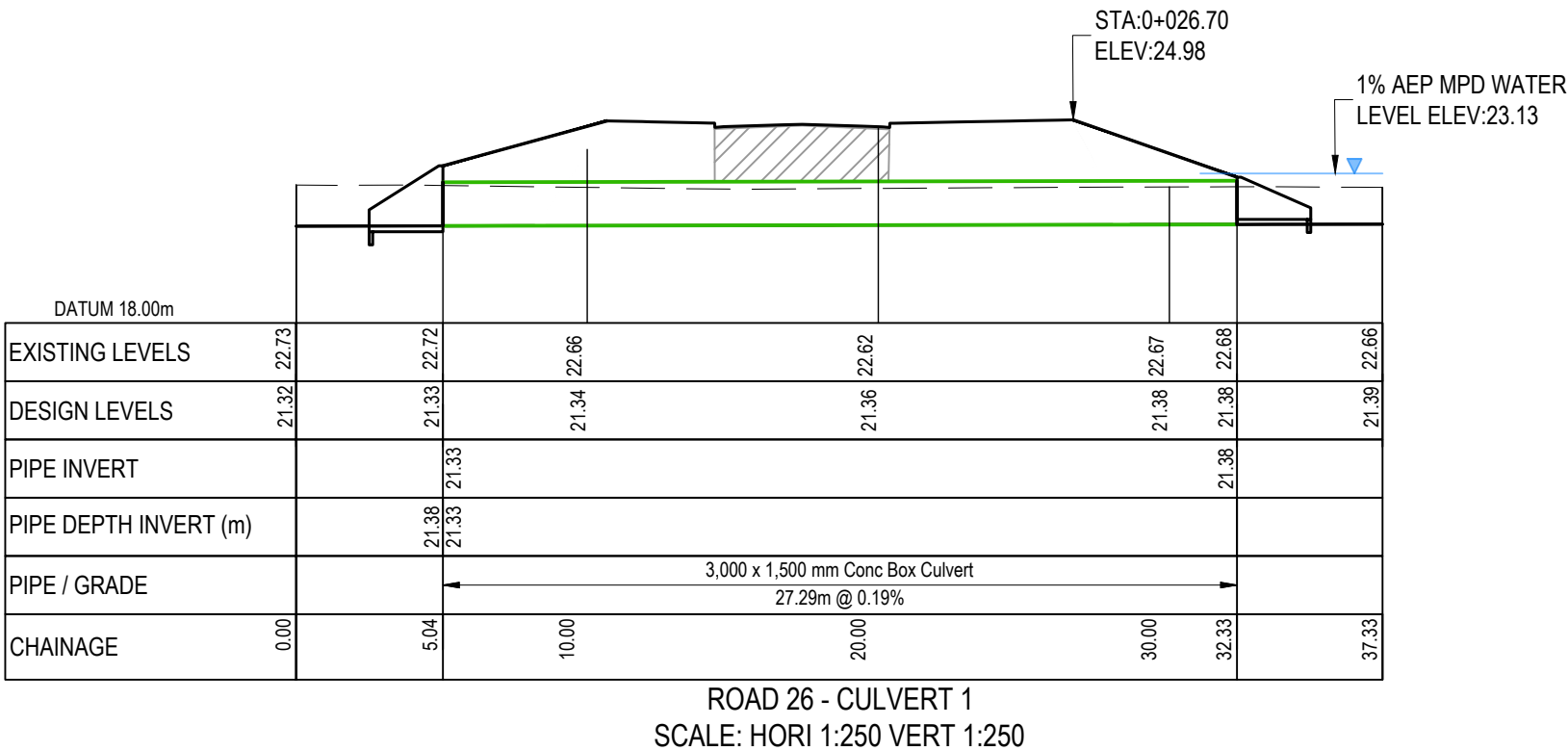
M **Maven Associates**
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www.maven.co.nz
5 Owens Road, Epsom
Auckland 1023

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

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

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

DATE: 27/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-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
- 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

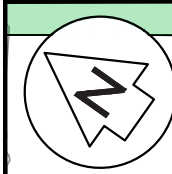
Title

PROPOSED

ROAD 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 119.55

CH 160

CH 140

CH 120

CH 100

CH 80

CH 60

CH 40

CH 20

CH 0

ROAD 31

ROAD 1

PI 68.06

Mid 62.25

PI 38.65

PI 52.70

PI 10.00

21.00

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

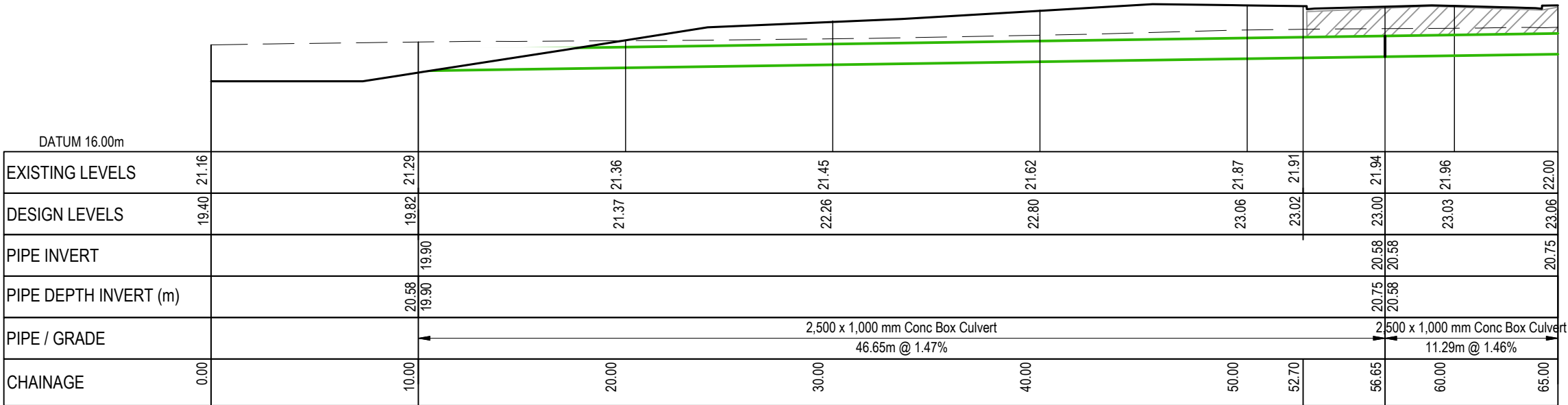
M **A** **E** **N** **Associates**
09 571 0050
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www.maven.co.nz
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

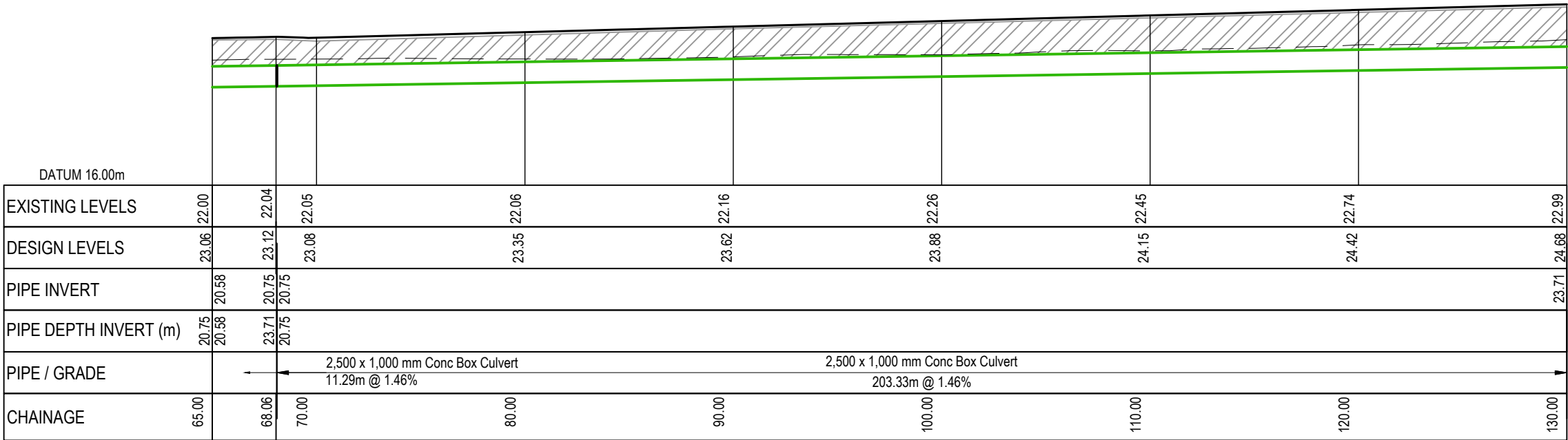
Title
**PROPOSED
ROAD 31 CULVERT 1
SHEET 1**

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

DATE: 27/25 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

- 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	

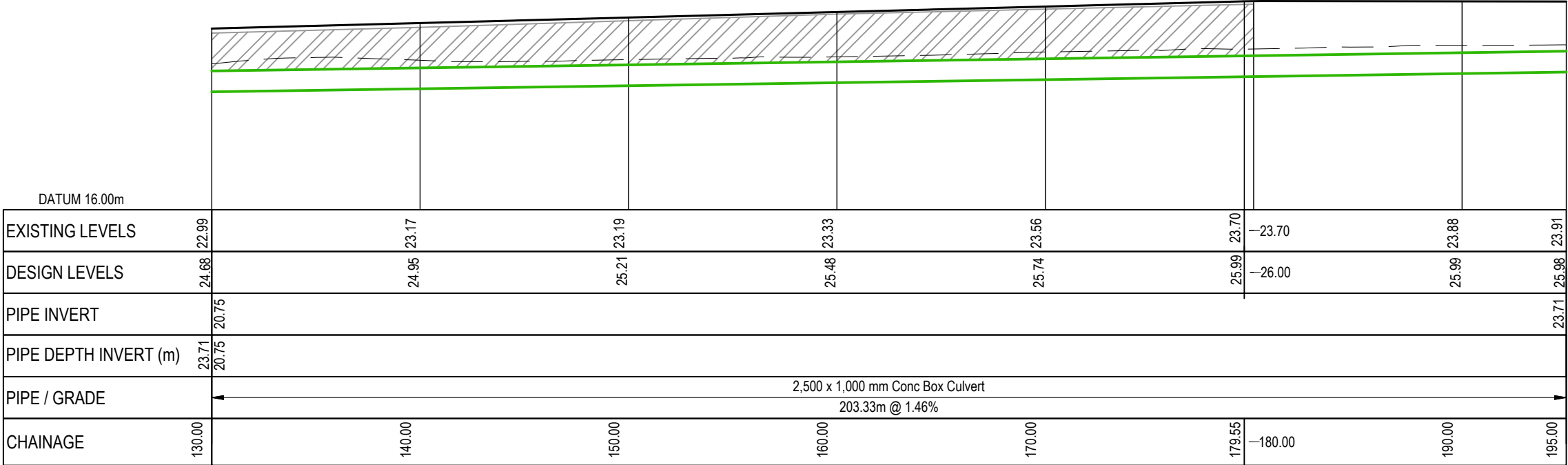
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

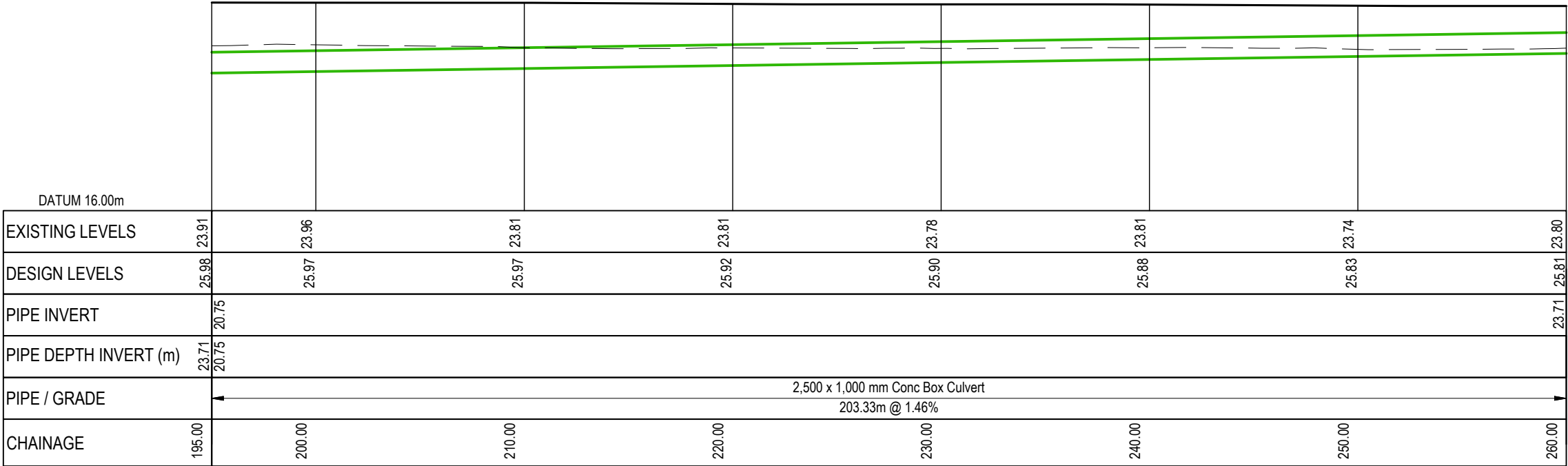
Title
**PROPOSED
ROAD 31 CULVERT 1
SHEET 2**

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

DATE: 27/25 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
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	

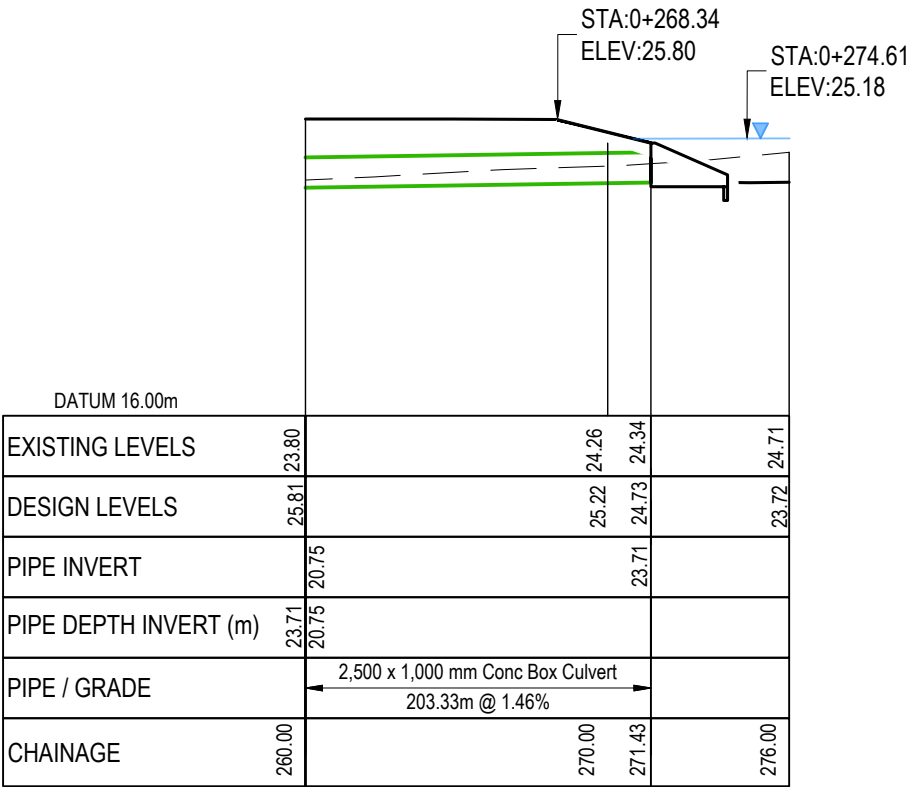
M **Maven Associates**
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5 Owens Road, Epsom
Auckland 1023

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

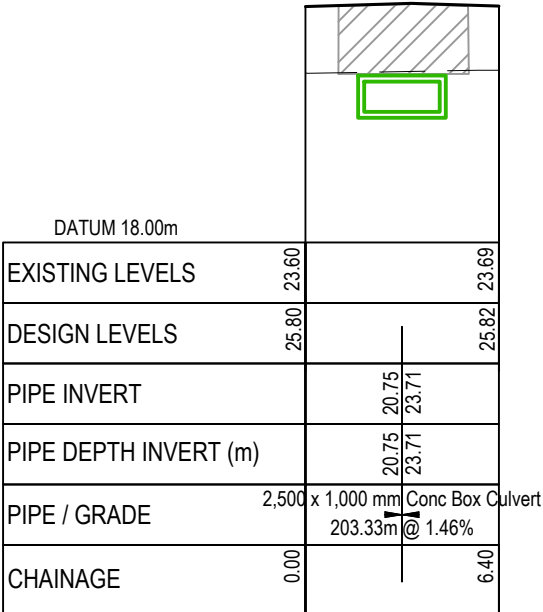
Title
**PROPOSED
ROAD 31 CULVERT 1
SHEET 3**

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

DATE: 27/25 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

- 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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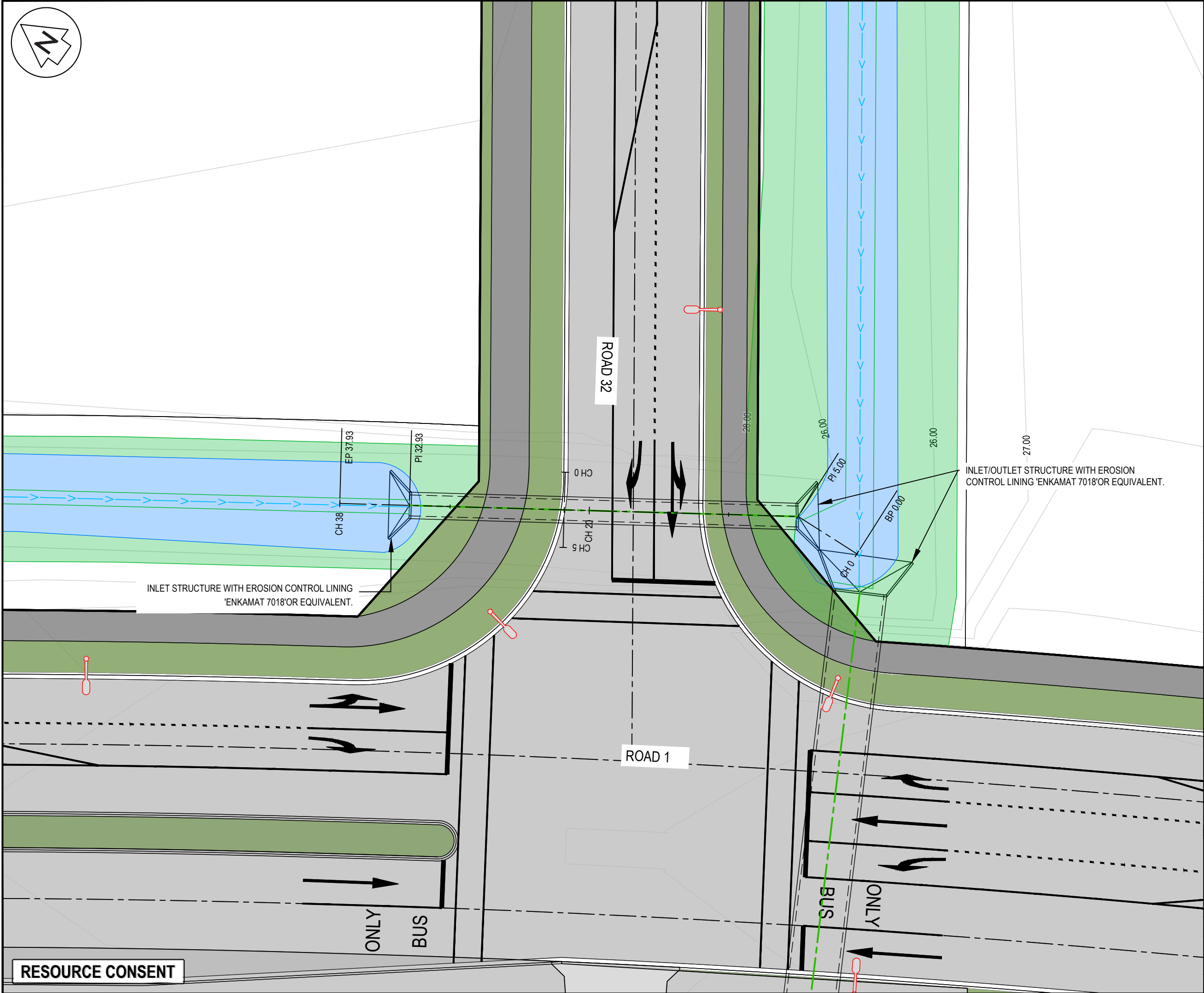
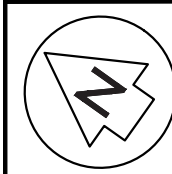
5 Owens Road, Epsom

Auckland 1023

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

Title
PROPOSED
ROAD 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
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



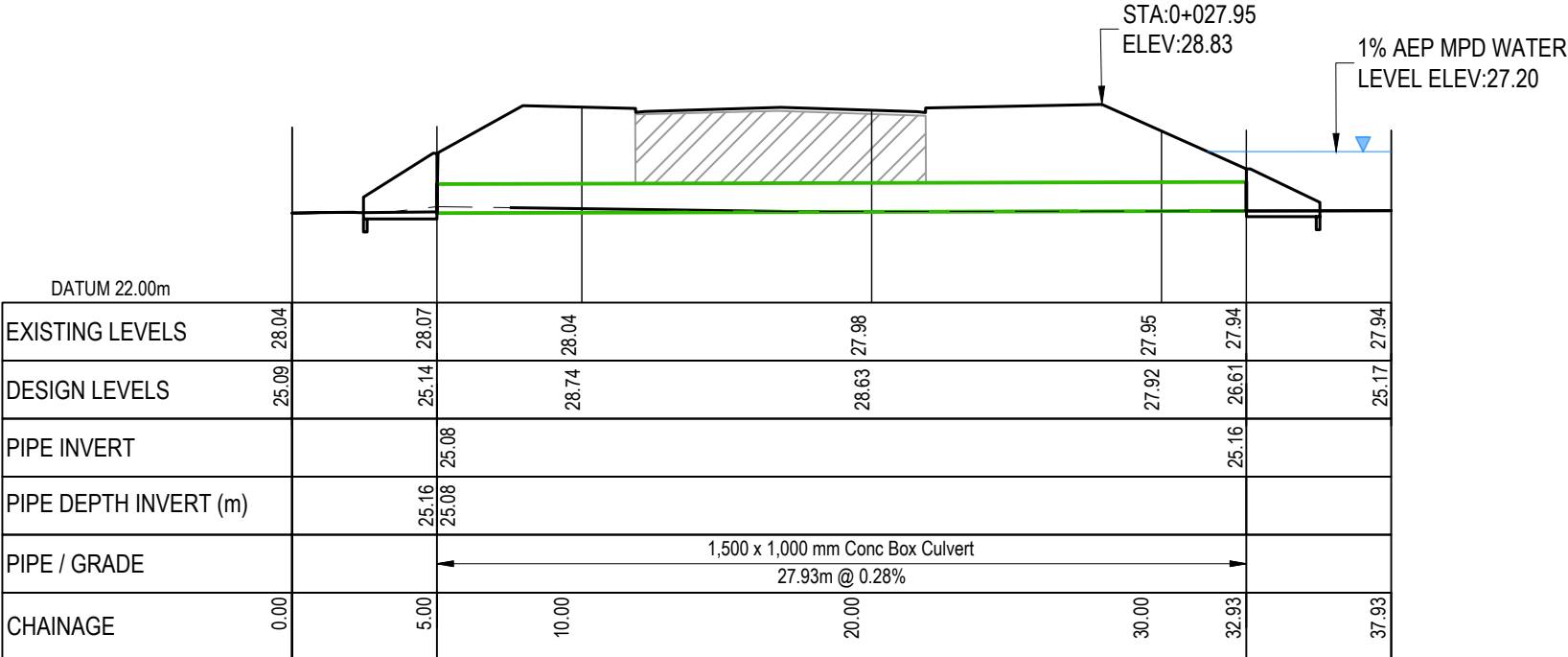
Maven Associates
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5 Owens Road, Epsom
Auckland 1023

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

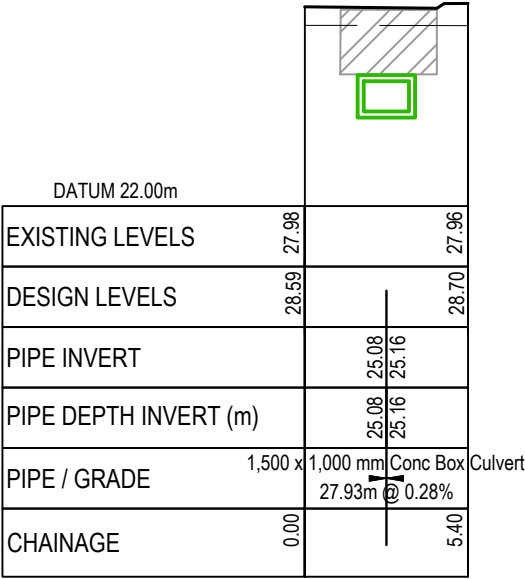
Title
**PROPOSED
ROAD 32 CULVERT 1
SHEET 1**

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

DATE: 27/25 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

- NOTES
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LEGEND:

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

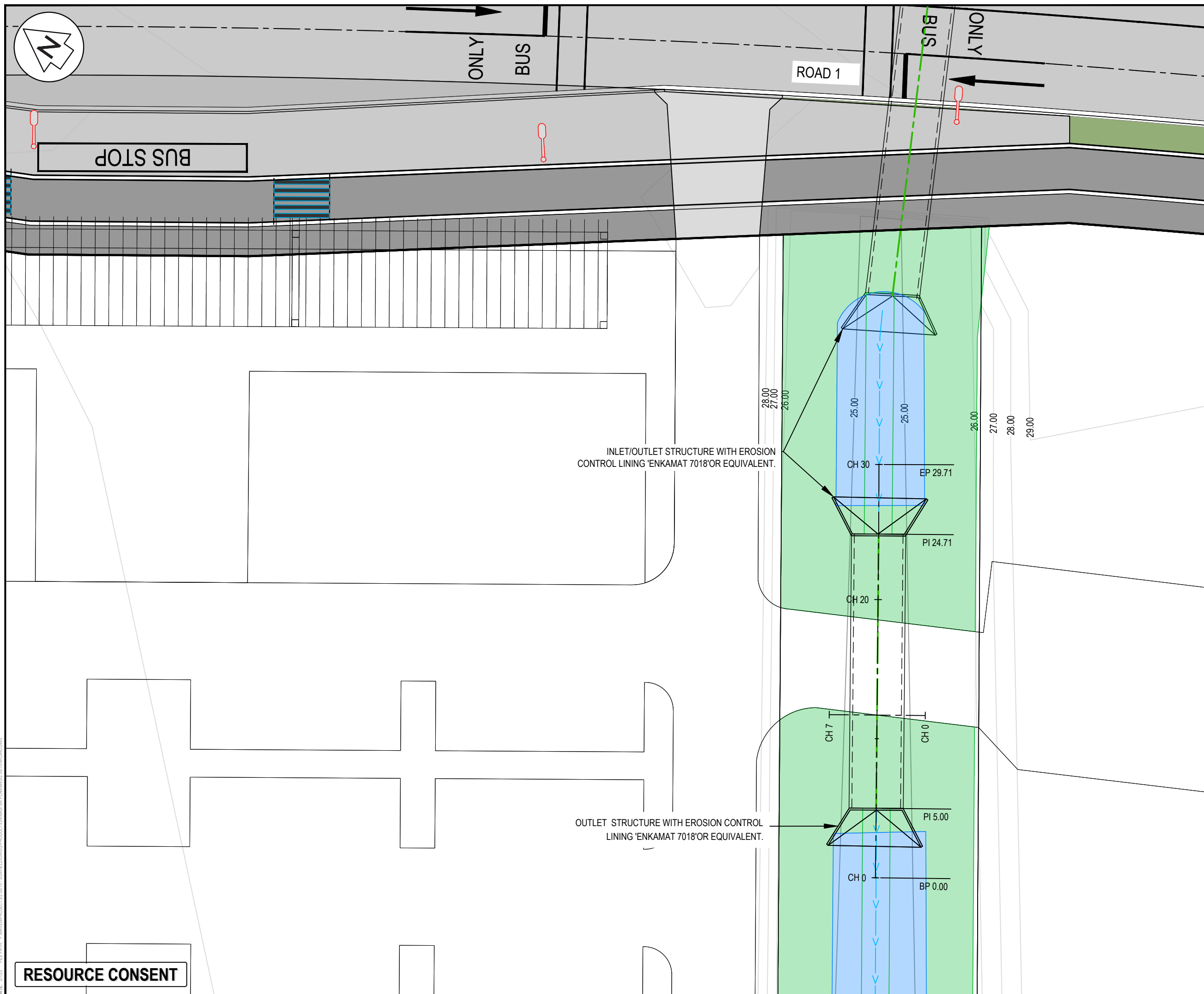
A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
	By	Date	
Survey	SURVEYWORX	02/2021	
Design	YW	11/2024	
Drawn	OQ	11/2024	
Checked	JP/LC	02/2025	

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Auckland 1023

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



- ## 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	



Project

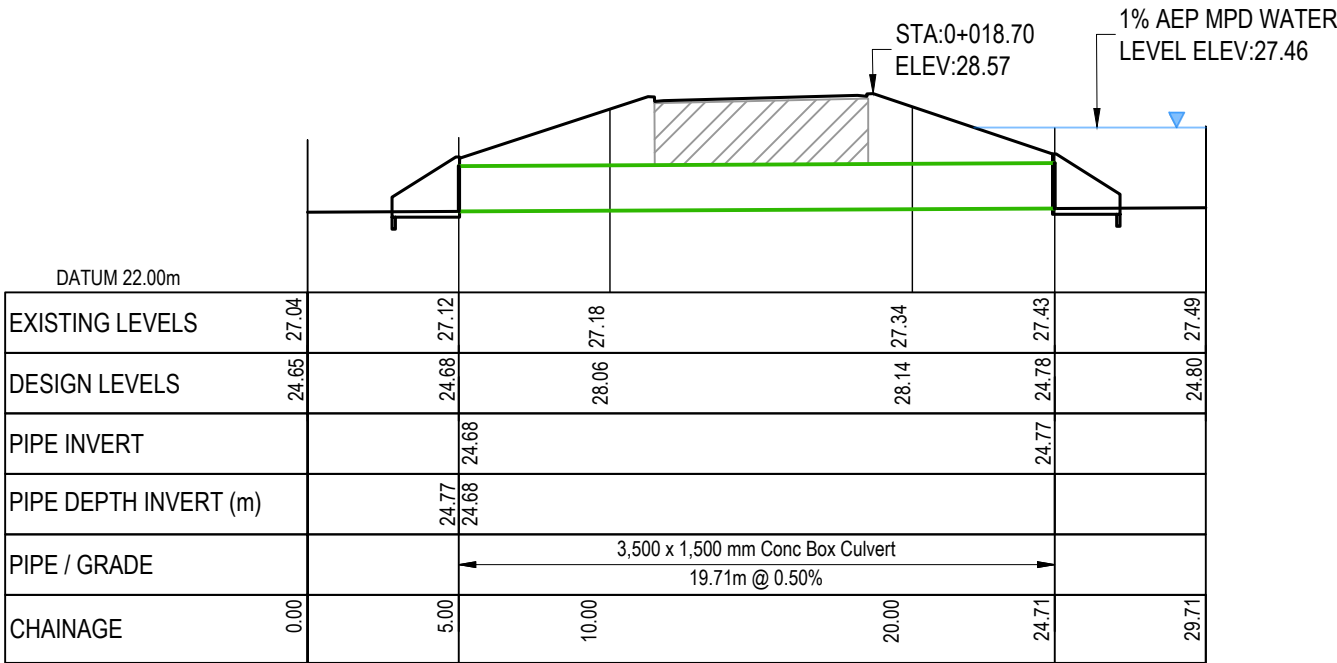
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTER PLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title

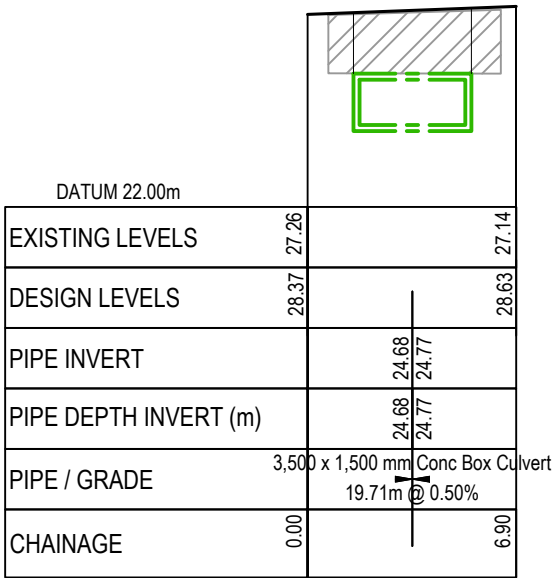
**PROPOSED CAR PARK
CROSSING CULVERT 1
SHEET 1**

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

DATE: 27/25 FILE PATH: F:\MAYN\PROJECTS\215010 - SUNFIELD\DWG3-PRODUCTION\MASTER PLANNING\215010-M-C440.DWG



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
	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

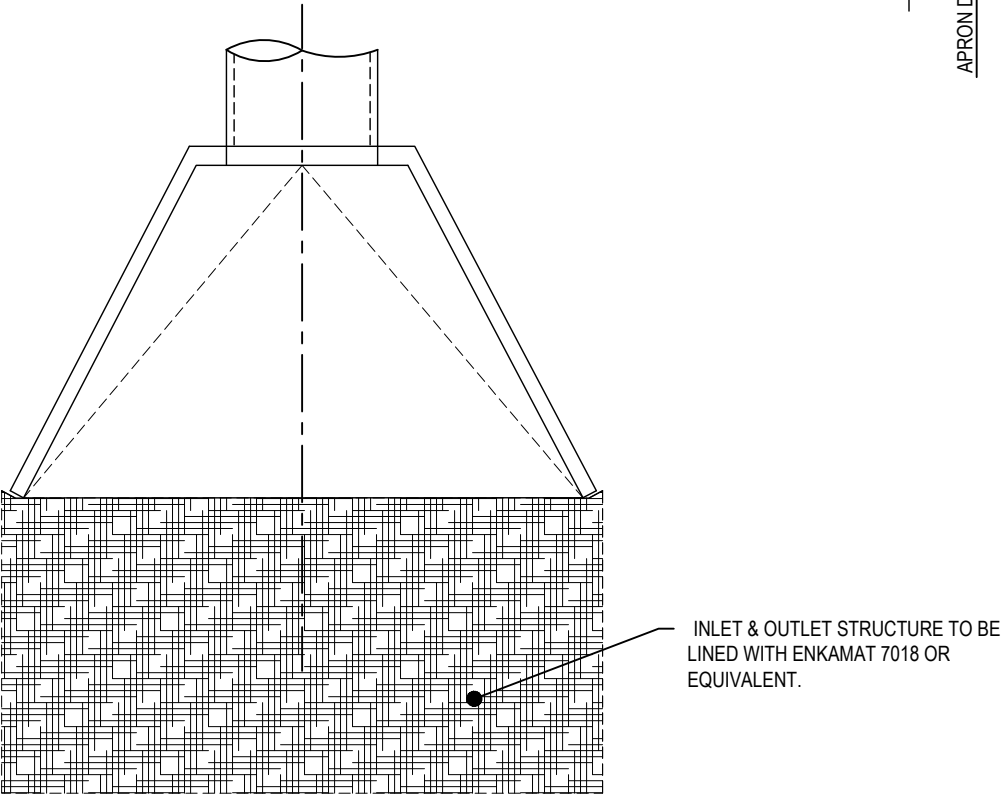
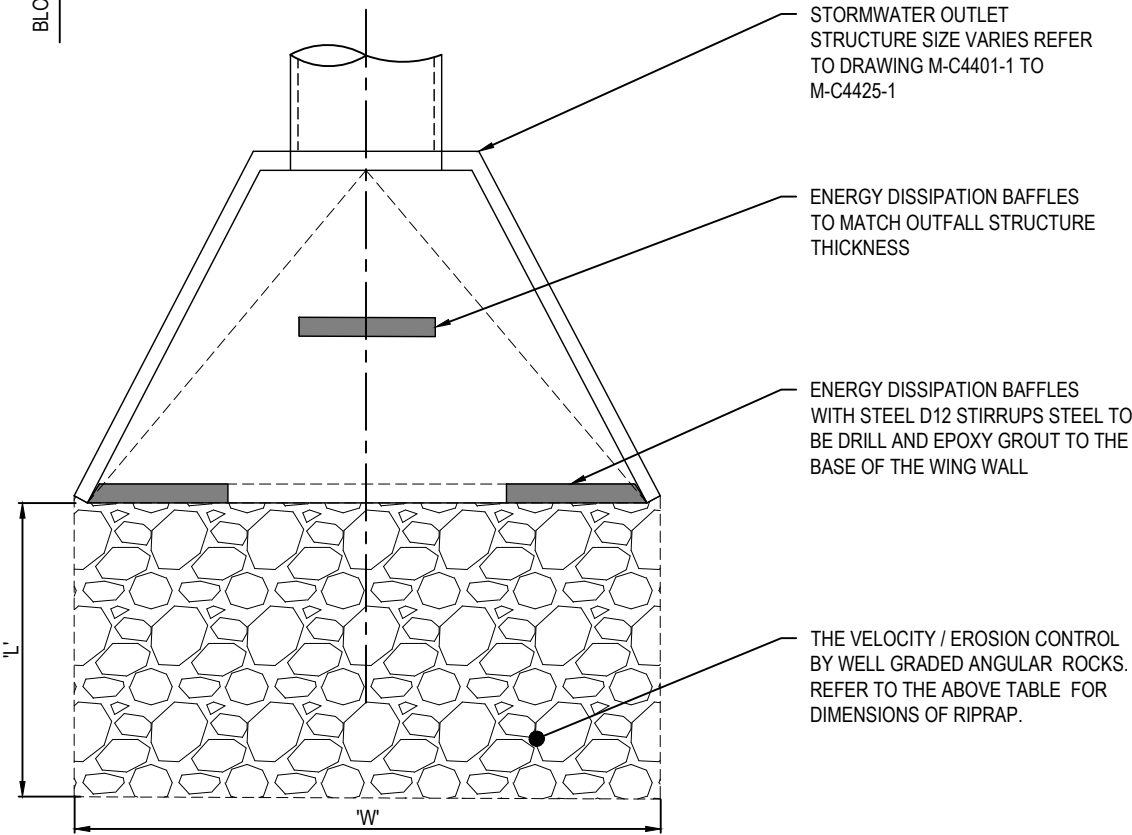
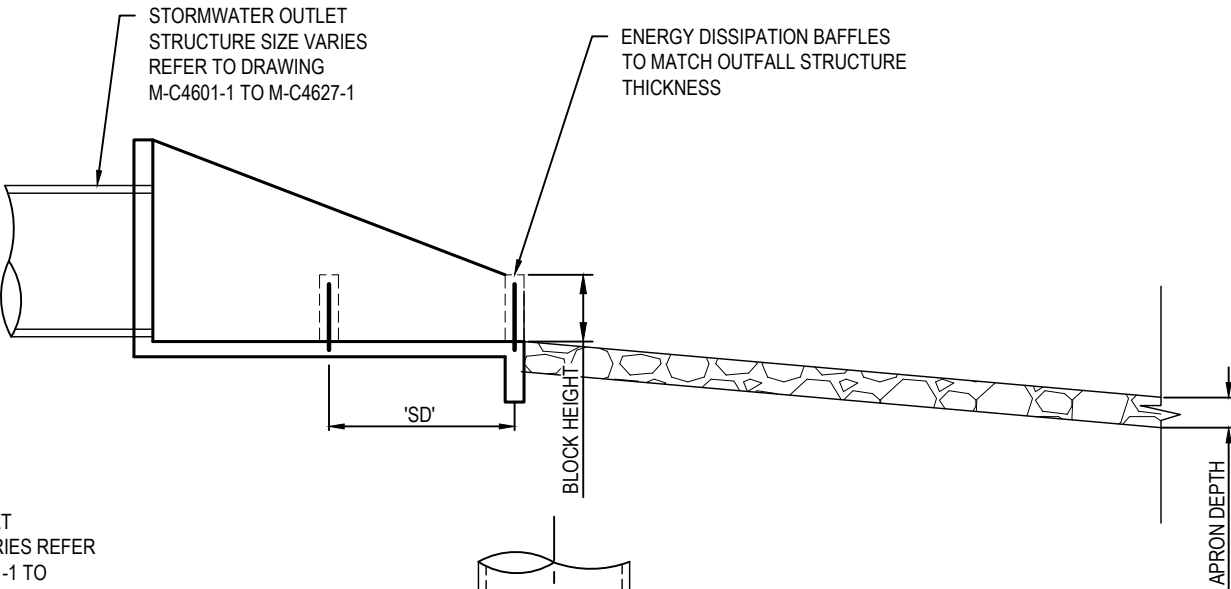
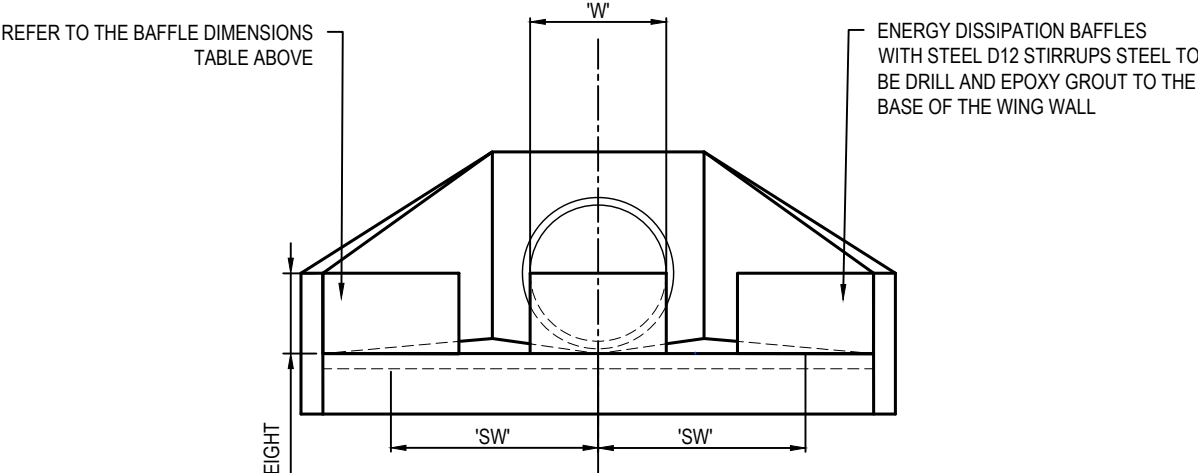
PROPOSED CAR PARK
CROSSING CULVERT 1
SHEET 2

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

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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.
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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

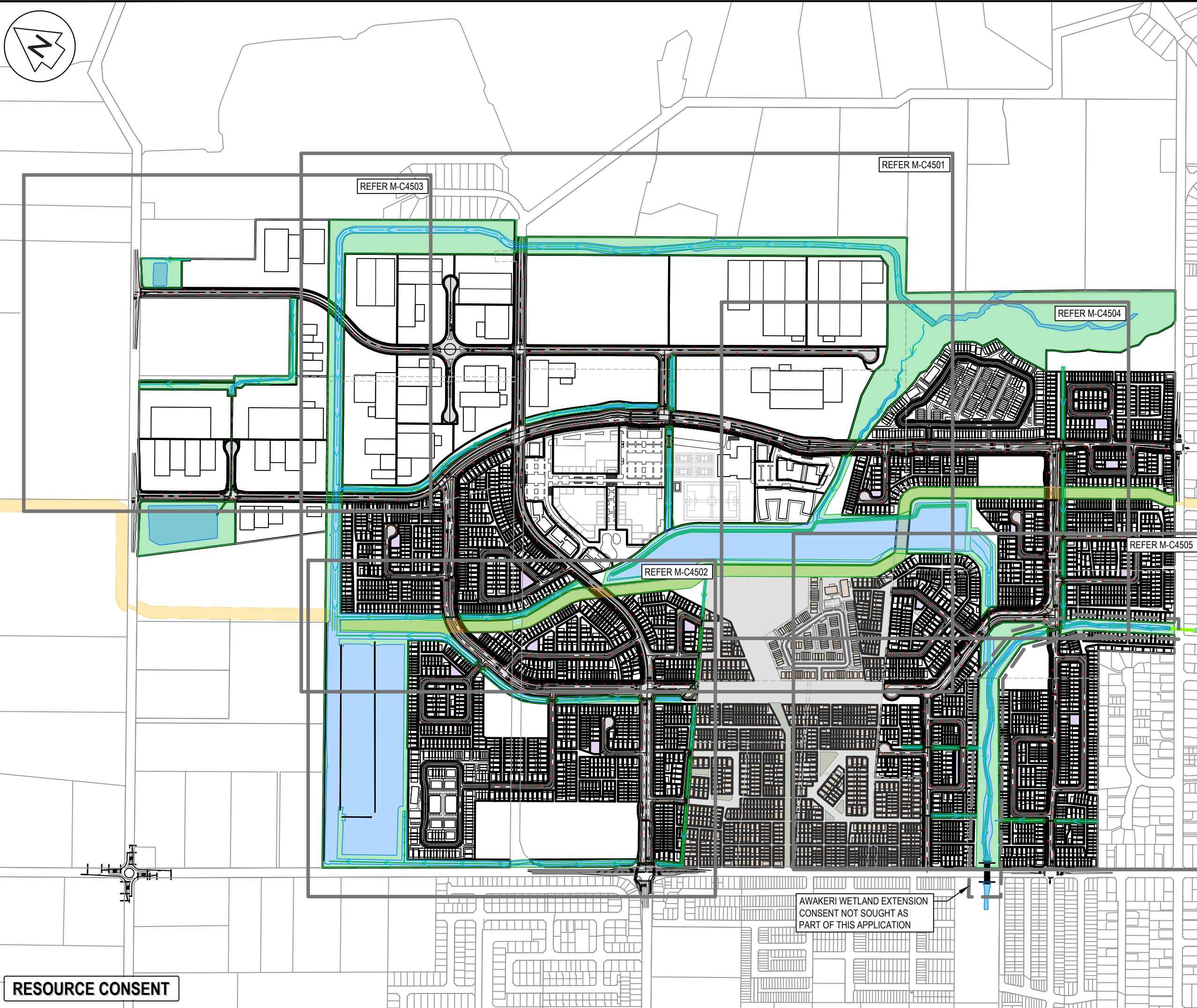


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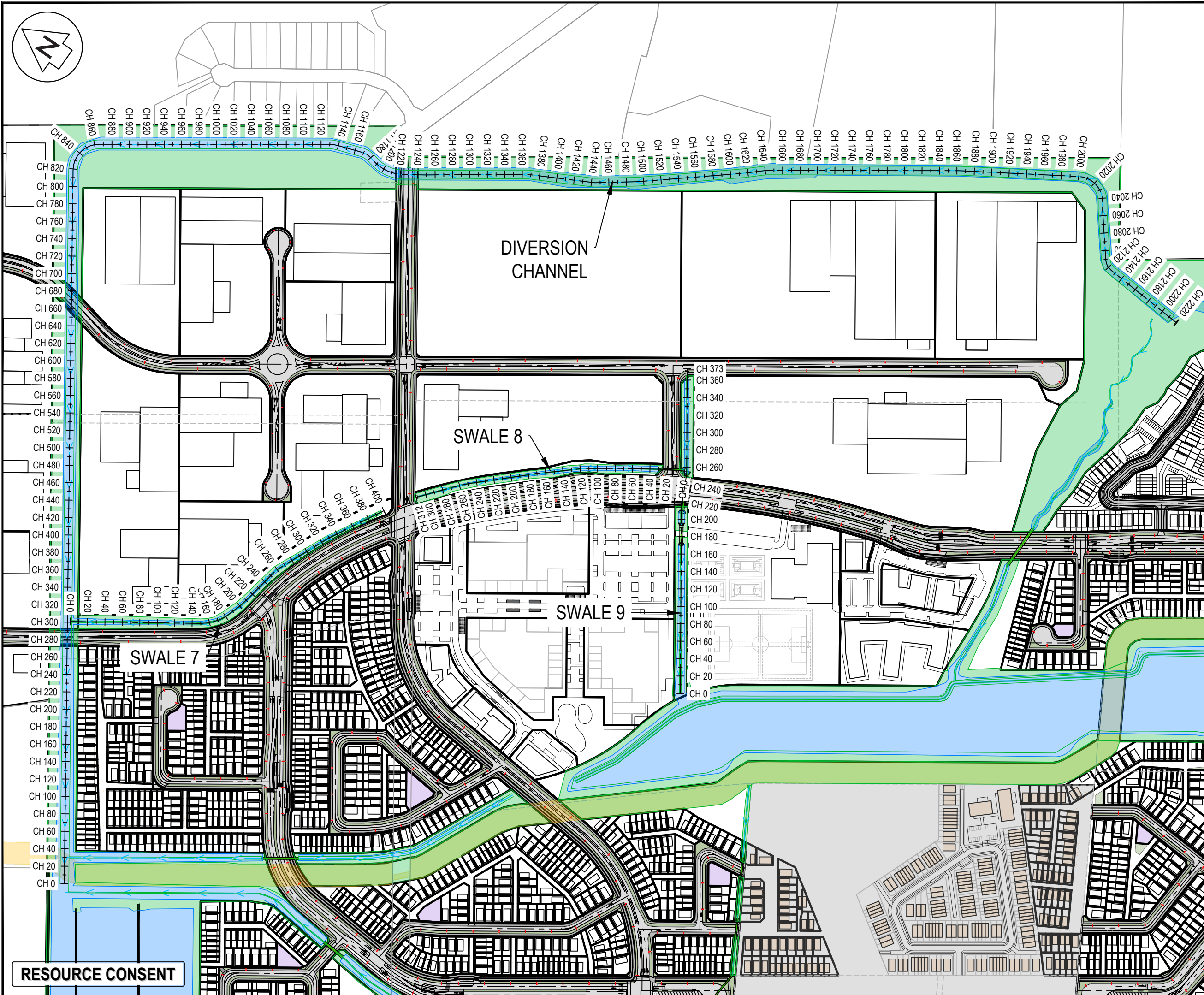
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

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



RESOURCE CONSENT



- NOTES
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- 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	



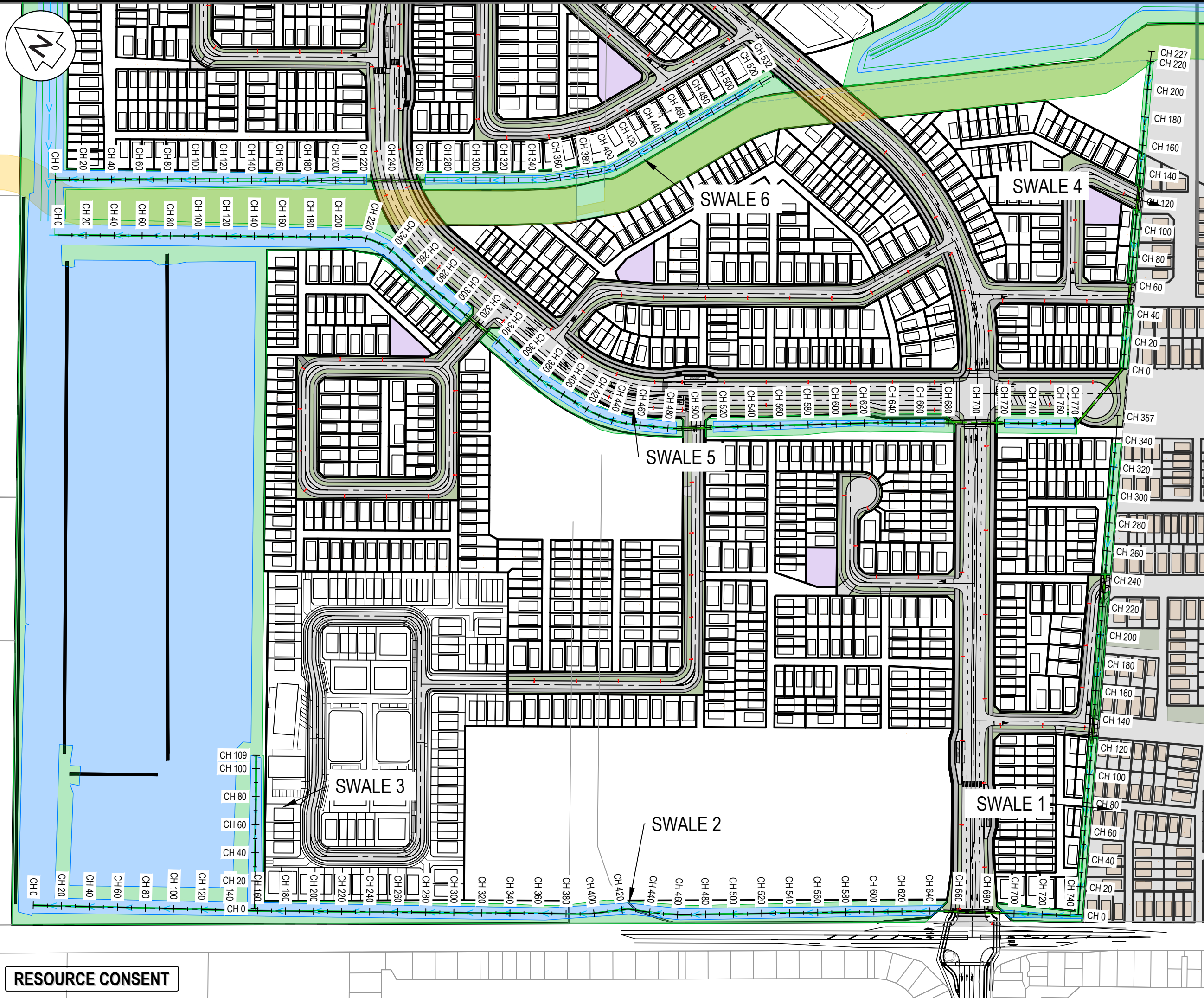
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Auckland 1023

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

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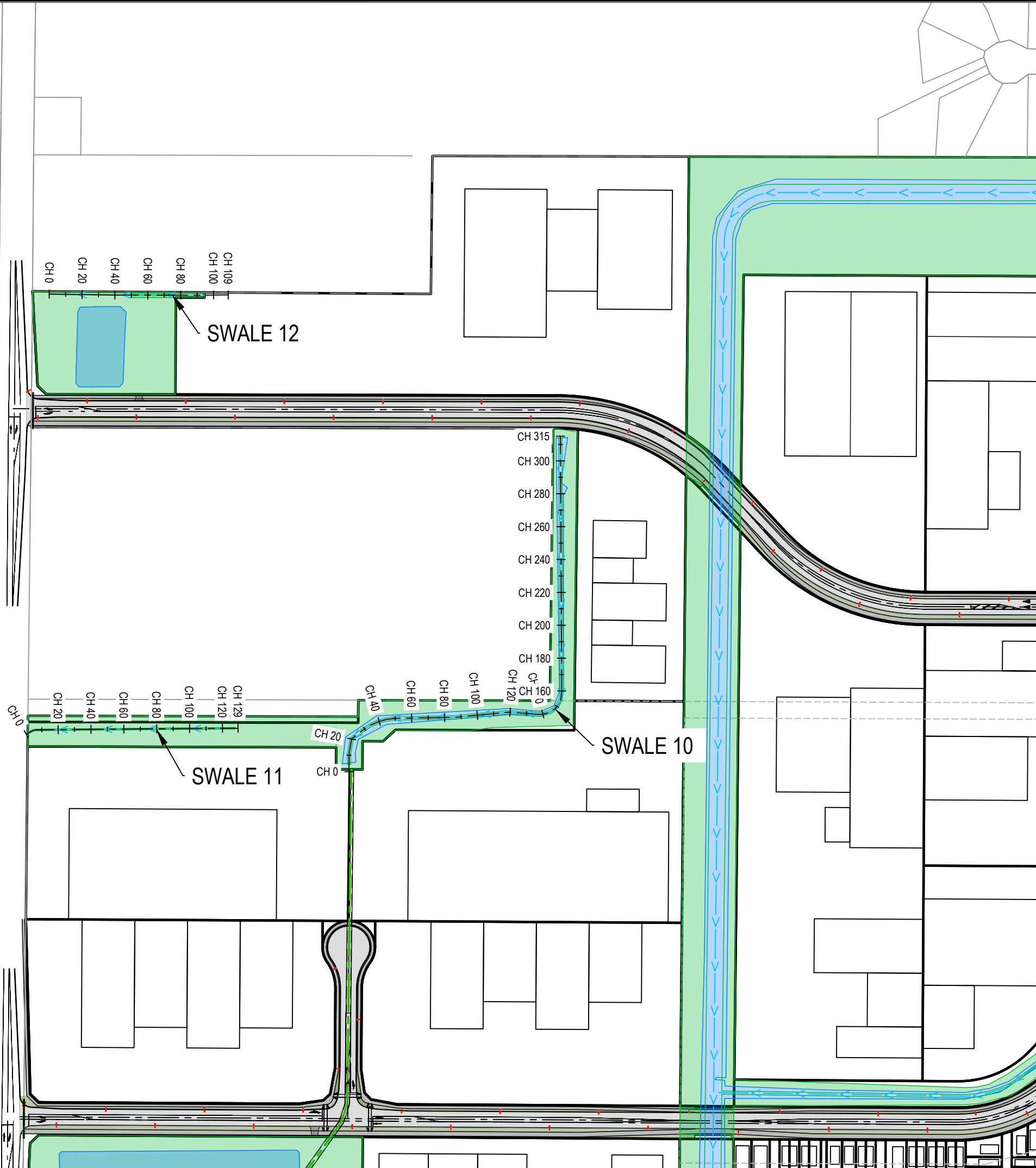
M **Maven Associates**
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

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.
 2. COORDINATES IN TERMS OF NZ GEODETIC DATUM MT EDEN 2000. LEVELS IN TERMS OF THE AUCKLAND VERTICAL DATUM 1946.
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 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
Survey	SURVEYWORX		02/2021
Design	YW		11/2024
Drawn	OQ		11/2024
Checked	JP/LC		02/2025

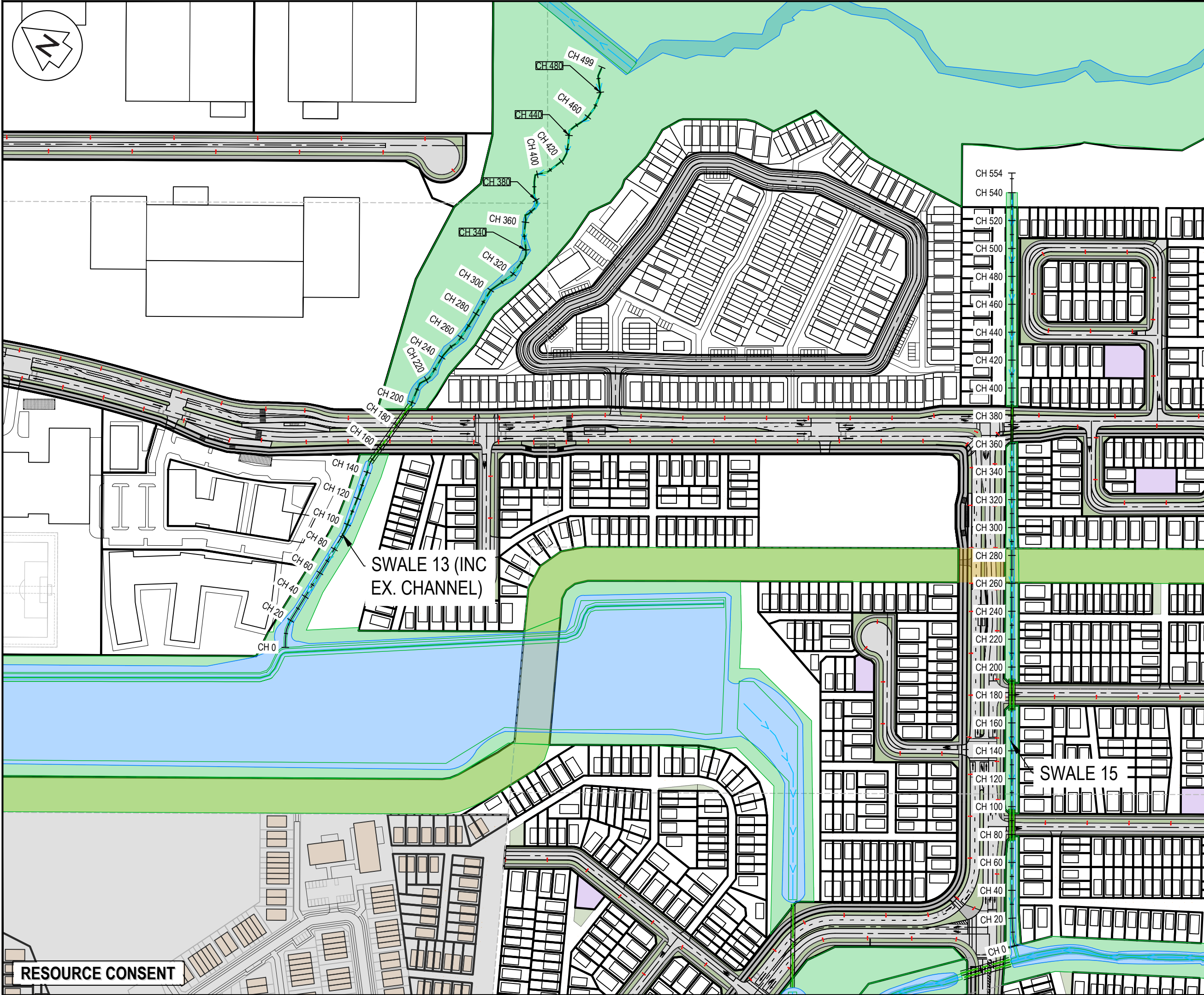


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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

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



- 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 AUCKLAND VERTICAL DATUM 1946.
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- LEGEND
- EX BDY
 - PR BDY
 - SWALE FLOW DIRECTION
 - SWALE TOP/BASE
 - PR SW SWALES
 - EX FIRST GAS EASEMENT

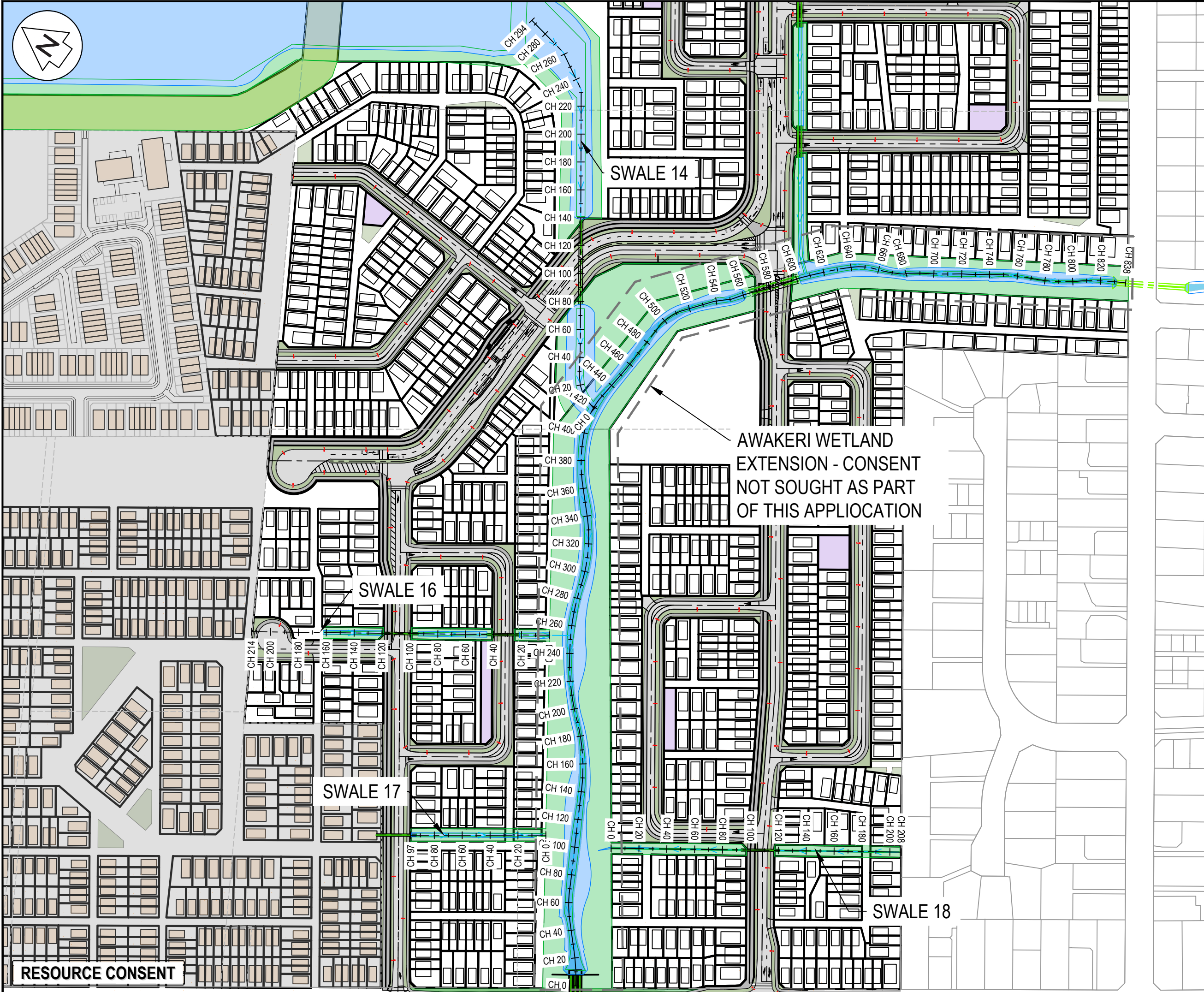
A		RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date	
Survey	SURVEYWORX		02/2021	
Design	YW		11/2024	
Drawn	OQ		11/2024	
Checked	JP/LC		02/2025	

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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



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

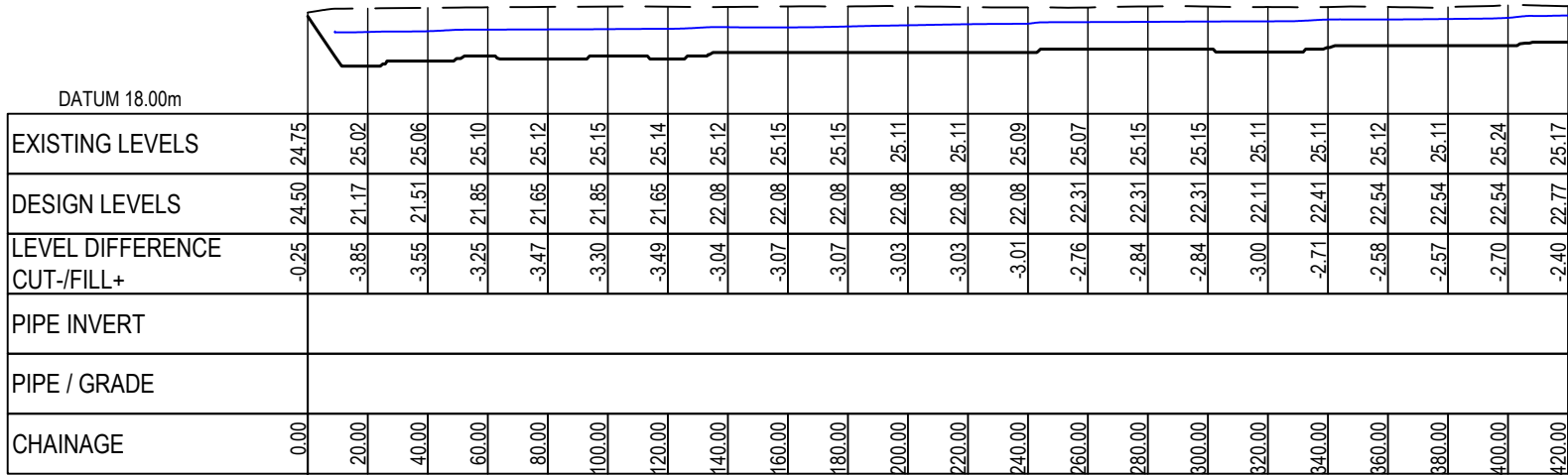
M **Maven Associates**
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Auckland 1023

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

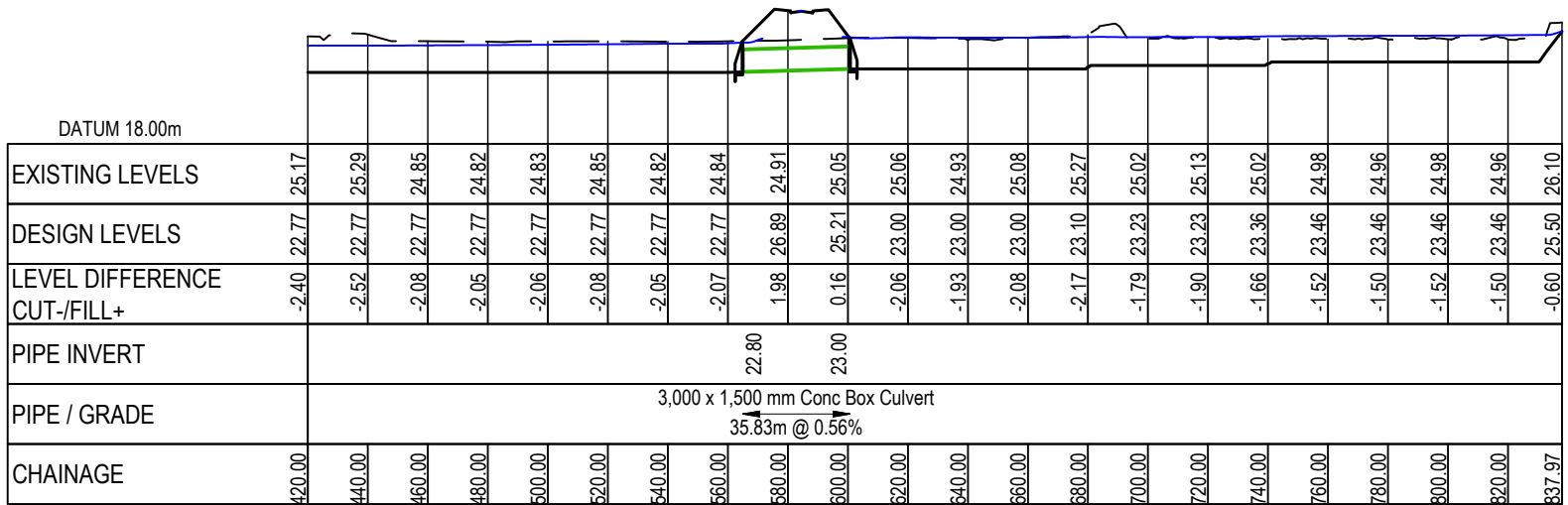
Title
**PROPOSED SWALES/
DIVERSION PATH PLAN
SHEET 5**

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

DATE: 27/25 FILE PATH: F:\Maven\PROJECTS\1910 - SUNFIELD\3.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

AWAKERI WETLAND EXTENSION
CONSENT NOT SOUGHT AS
PART OF THIS APPLICATION

- 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 AUCKLAND VERTICAL DATUM 1946.
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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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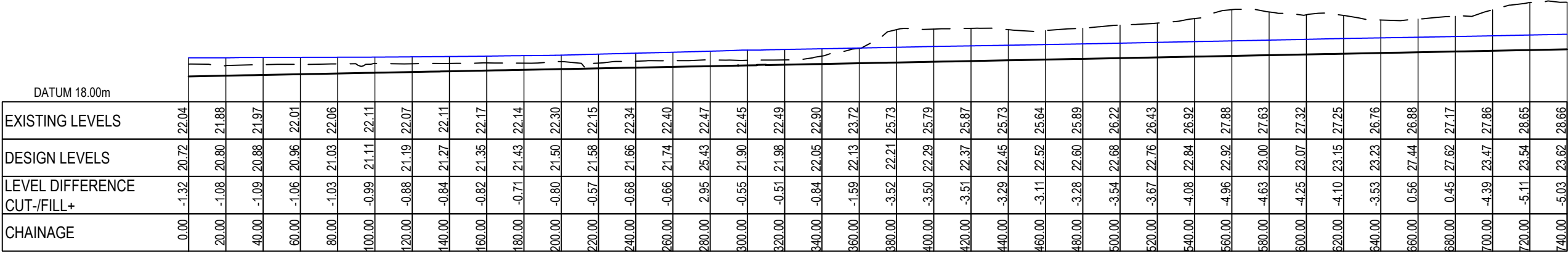
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

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

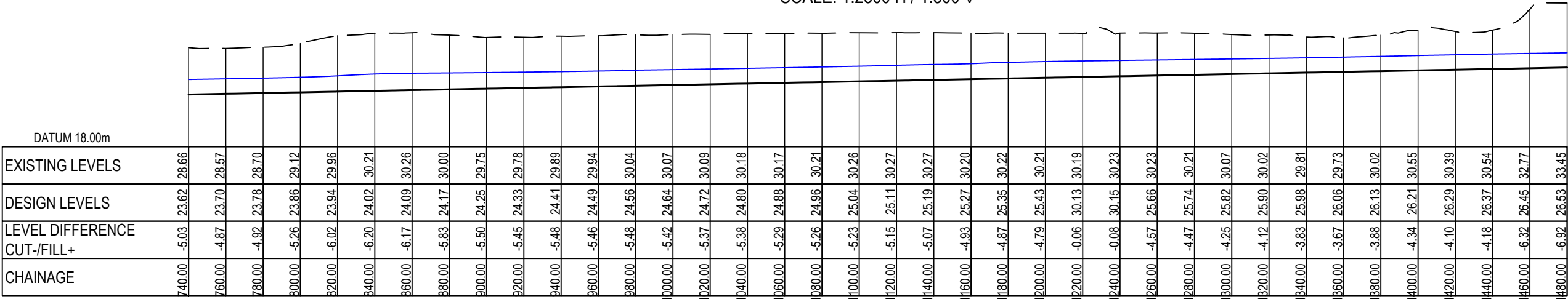
Project no.	215010		
Scale	1:2500 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4510	Rev	A

RESOURCE CONSENT

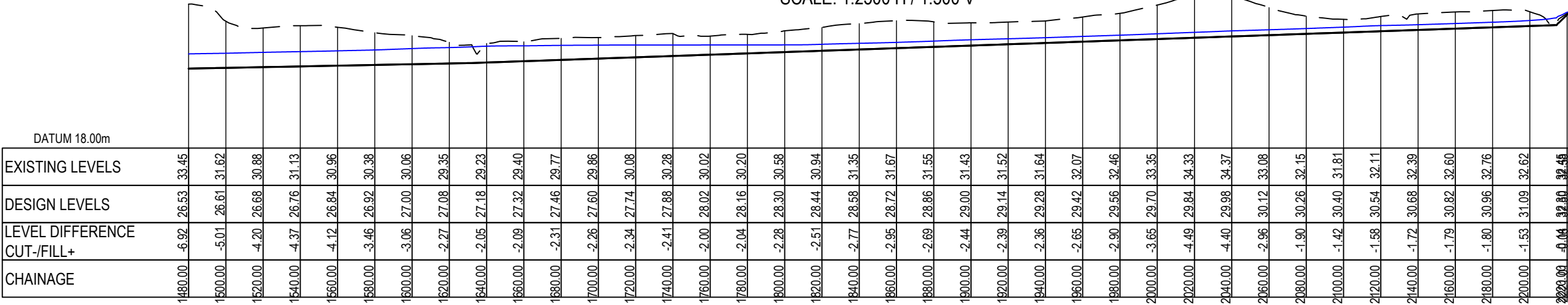
DATE: 27/05 / FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\3D\PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



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

- 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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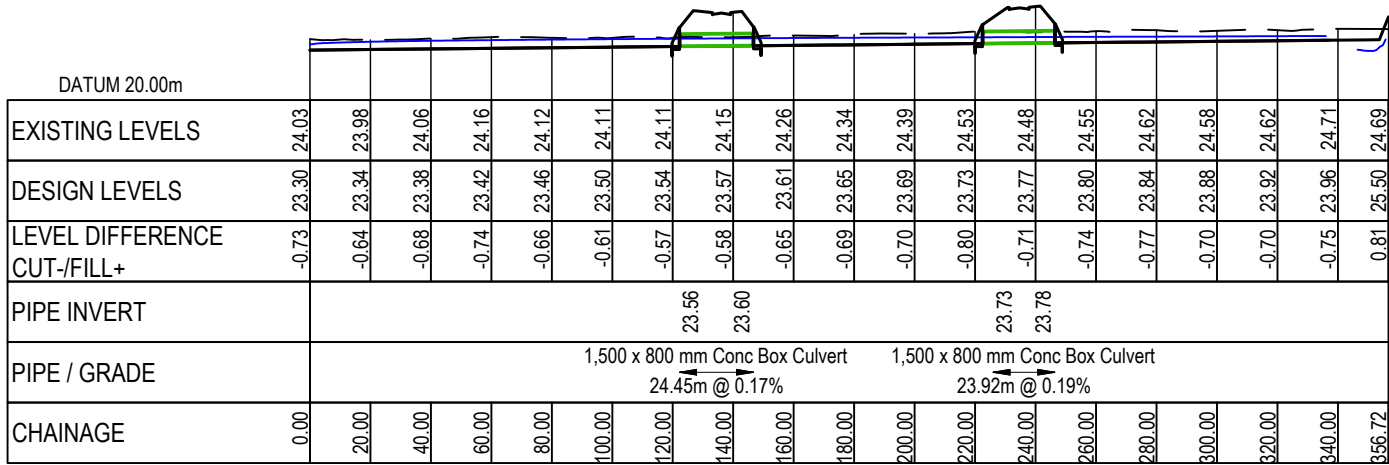
SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED

Title

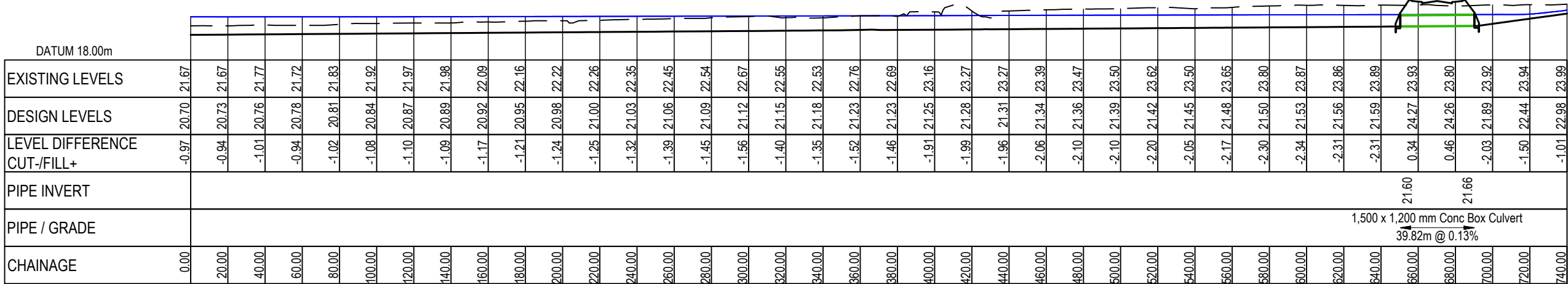
PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 2

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

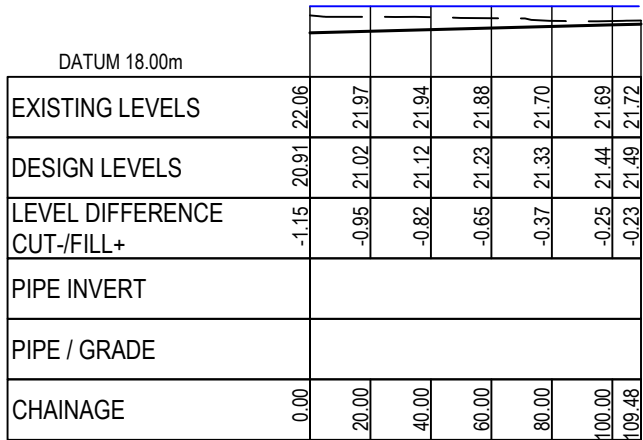
DATE: 27/05 FILE PATH: F:\Maven\PROJECTS\1910 - SUNFIELD\3\PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



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
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	



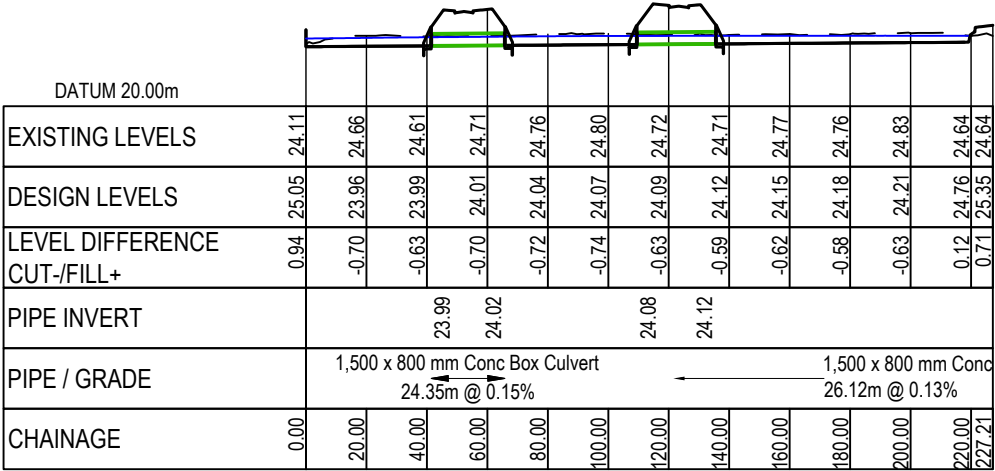
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

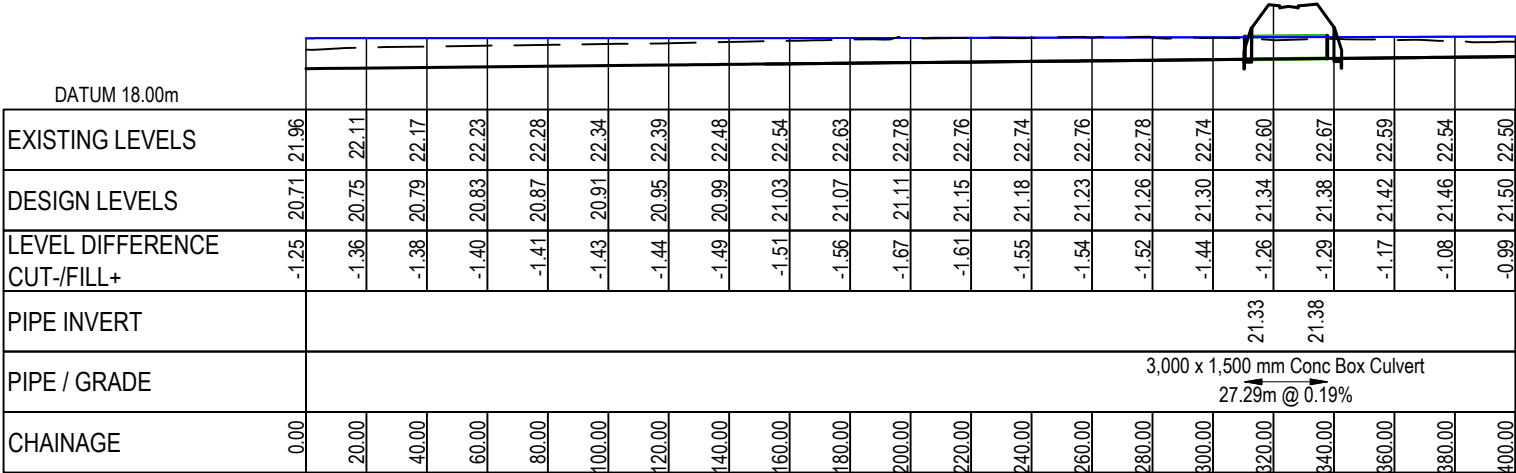
Title
**PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 3**

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

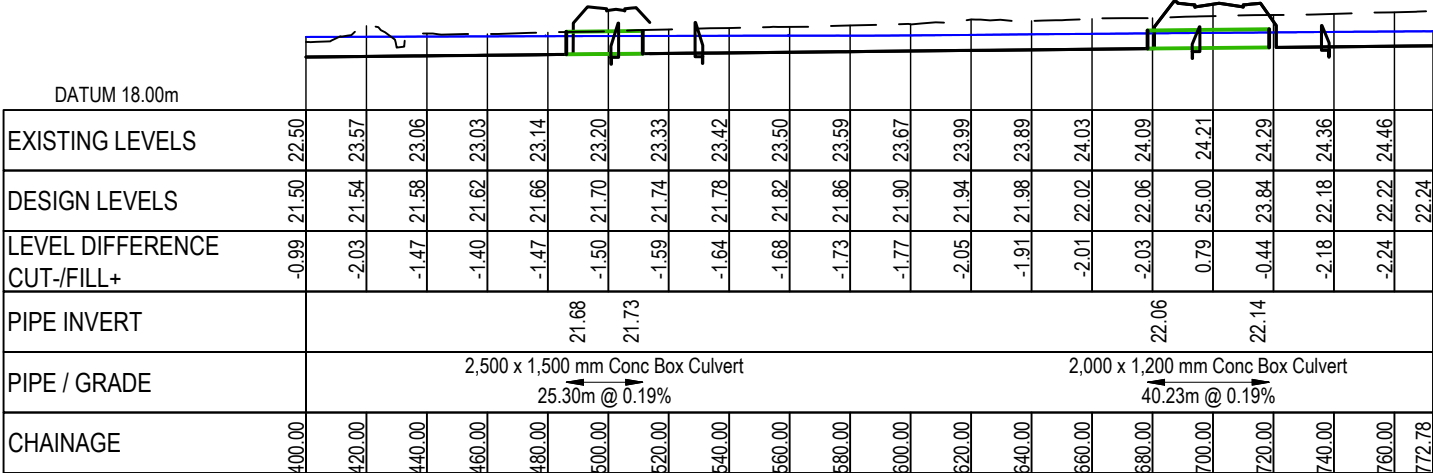
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PROPOSED - SWALE 4 CH 0+00.00 TO CH 2+27.21
SCALE: 1:2500 H / 1:500 V



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
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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
	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

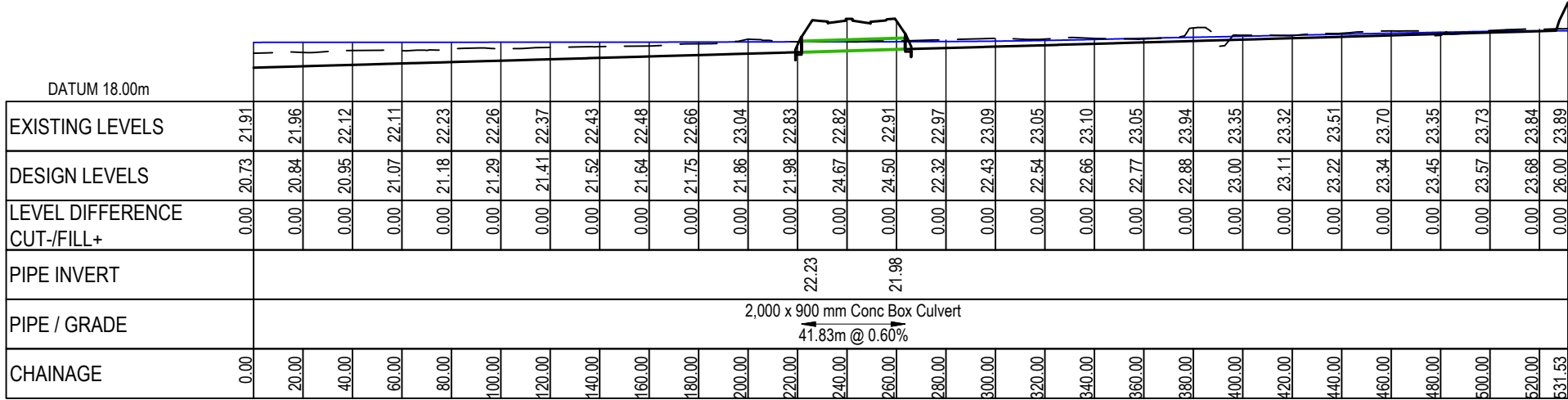
DEVELOPMENTS LIMITED

Title

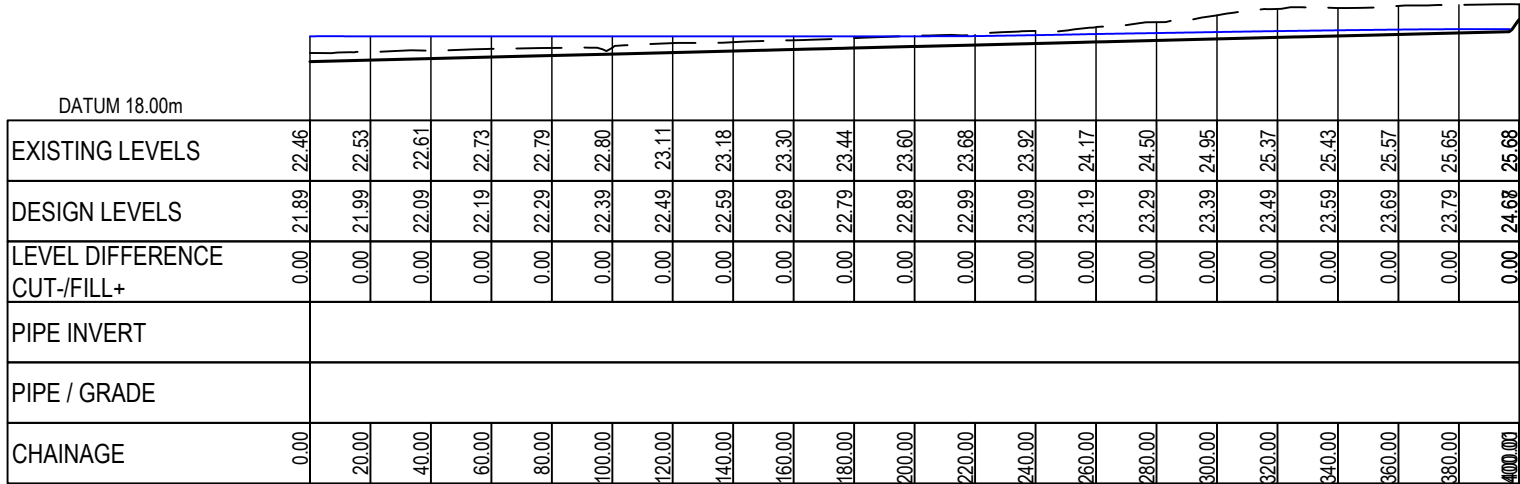
**PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 4**

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

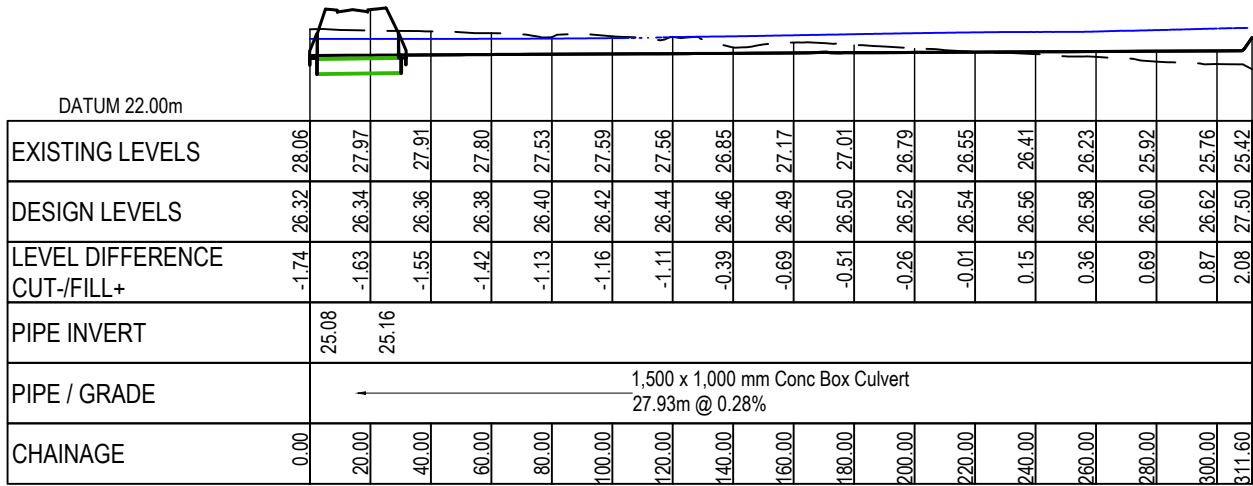
DATE: 27/05 FILE PATH: F:\Maven\PROJECTS\1910 - SUNFIELD\03\PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



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
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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

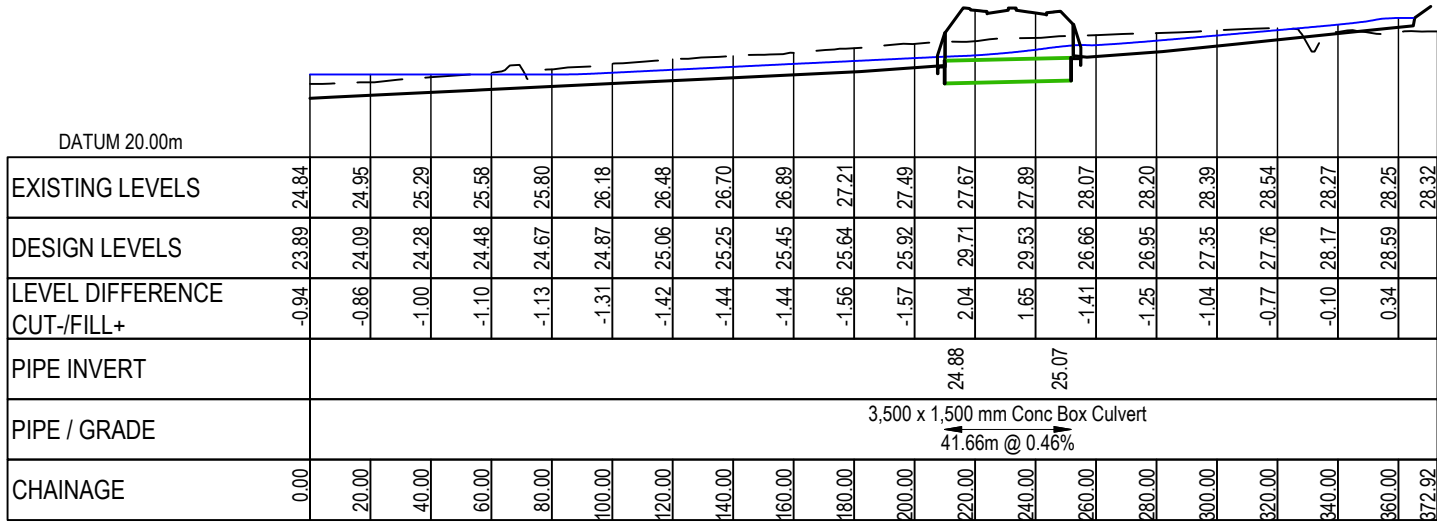
DEVELOPMENTS LIMITED

Title

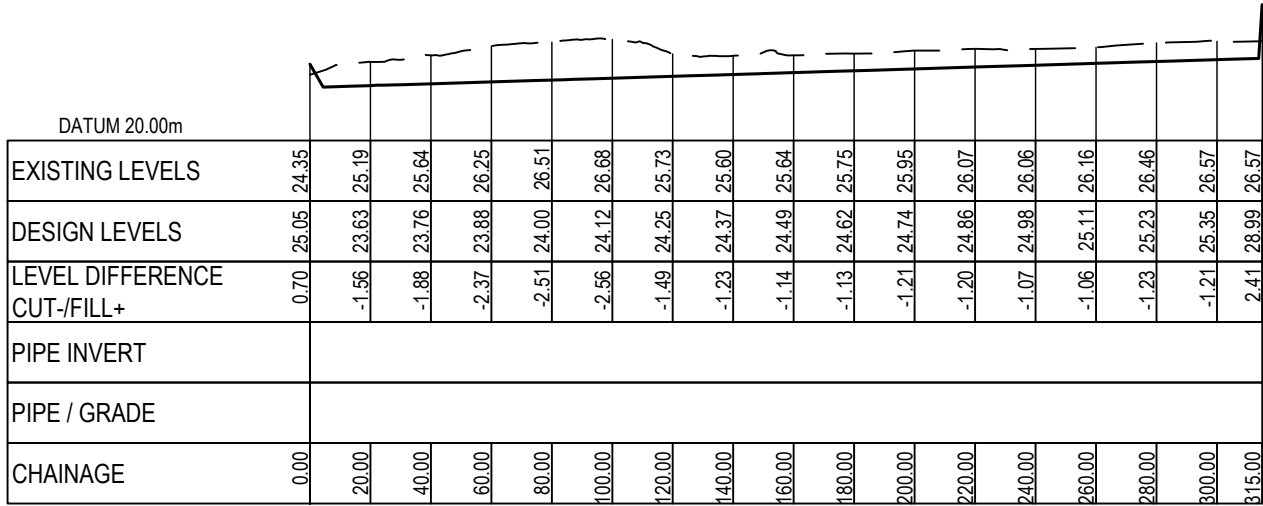
**PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 5**

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

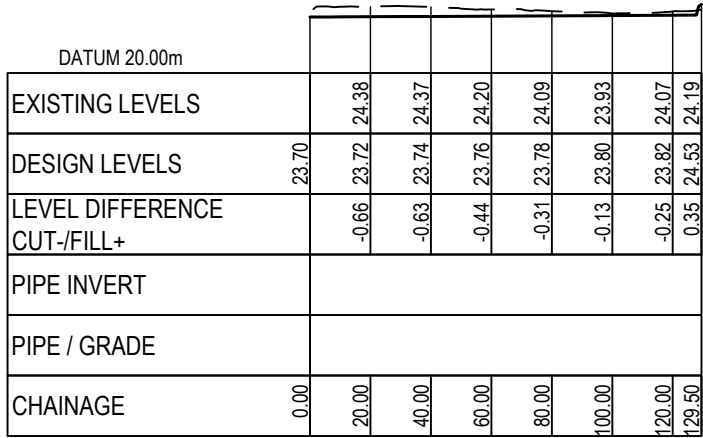
DATE: 27/25 FILE PATH: F:\Maven\PROJECTS\1910 - SUNFIELD\WORK\PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



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
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

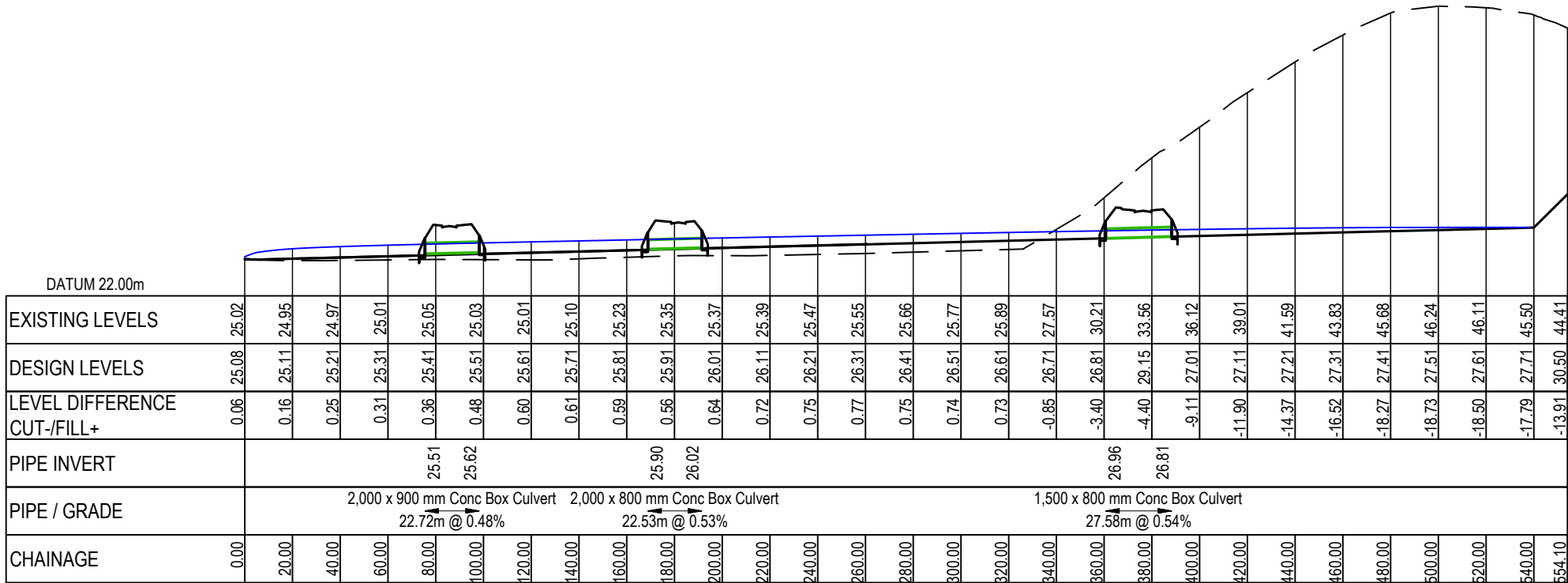
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

Title

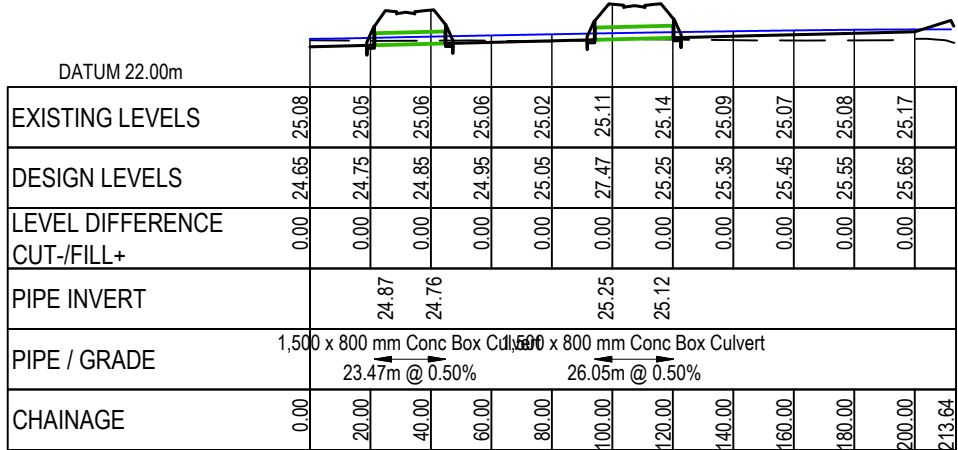
**PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 5**

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

DATE: 27/25 - 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.
 2. COORDINATES IN TERMS OF NZ GEODETIC DATUM MT EDEN 2000. LEVELS IN TERMS OF THE AUCKLAND VERTICAL DATUM 1946.
 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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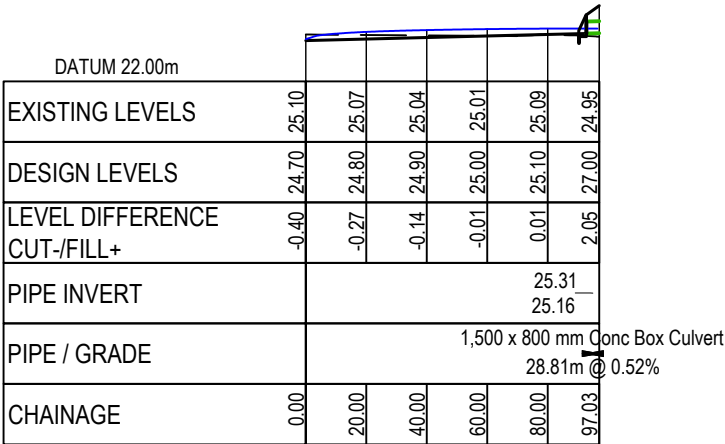
**SUNFIELD DEVELOPMENT
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Title

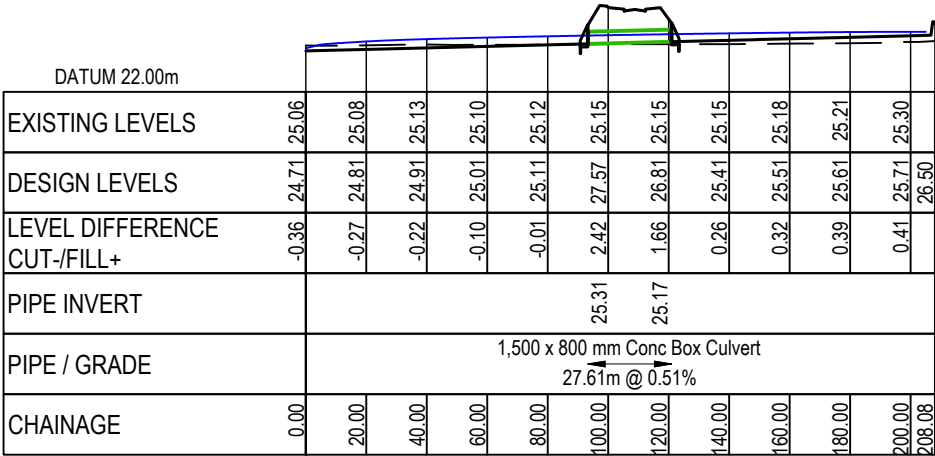
**PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 8**

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

DATE: 27/25 - FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\WORK\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

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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	

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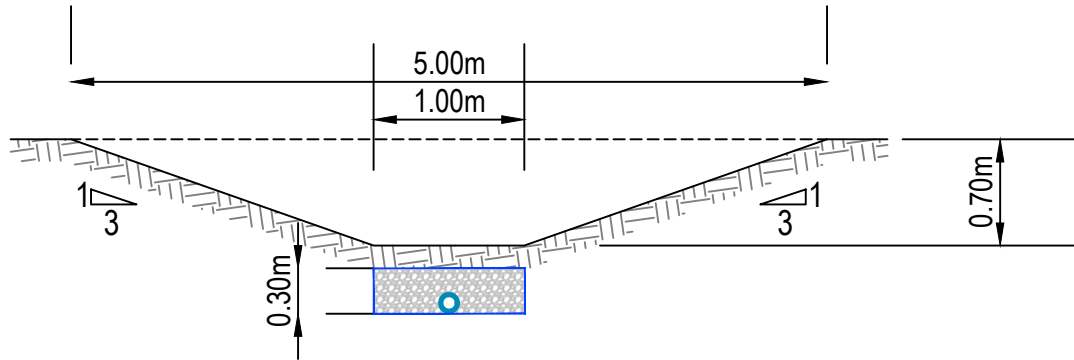
**SUNFIELD DEVELOPMENT
MASTERPLANNING
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Title

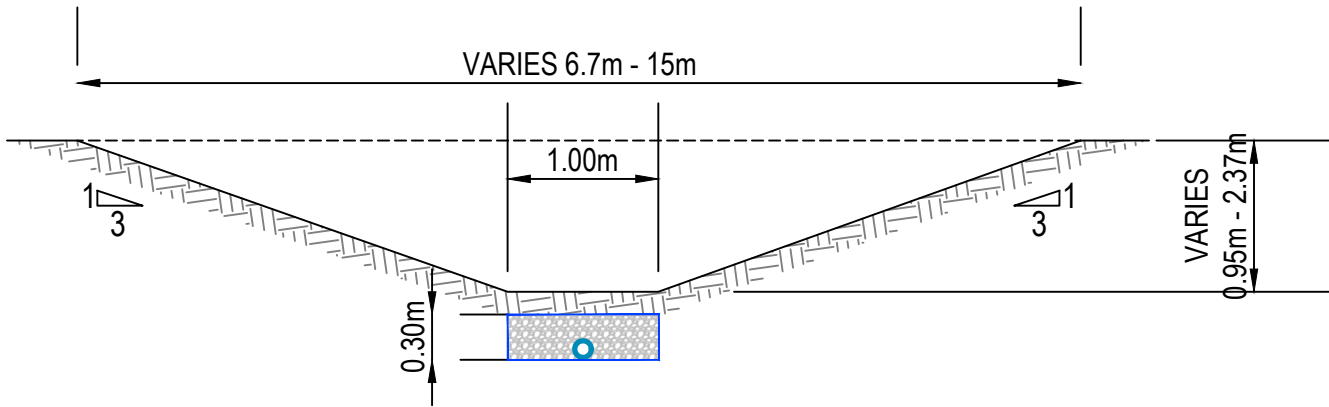
**PROPOSED SWALES/
DIVERSION PATH LONG-
SECTIONS - SHEET 1**

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

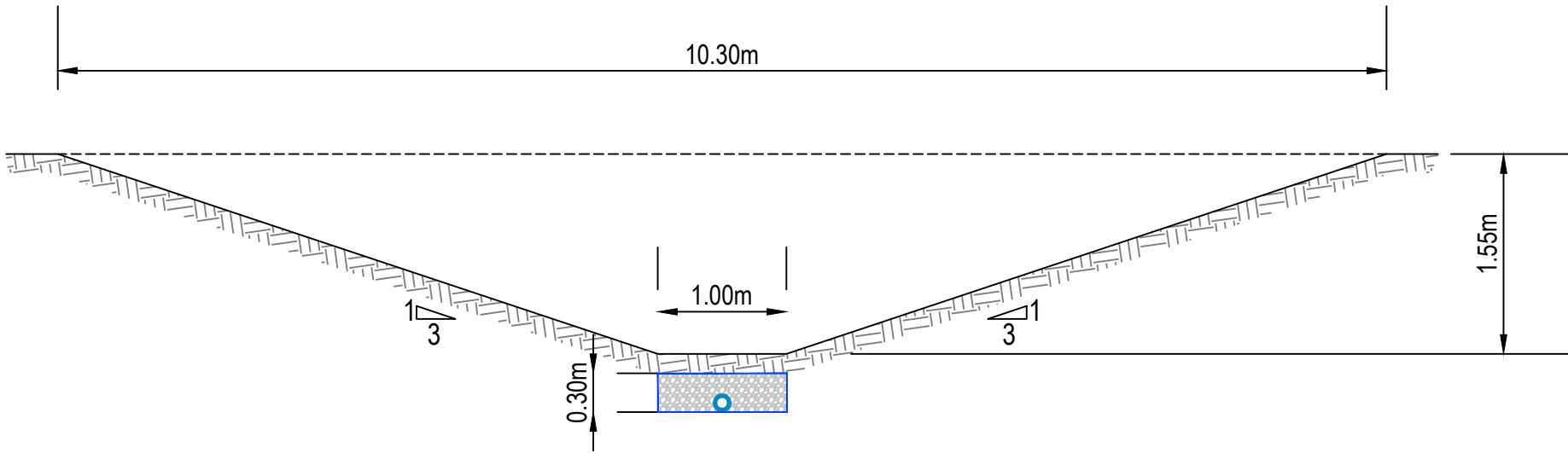
DATE: 27/25 FILE PATH: F:\Maven\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



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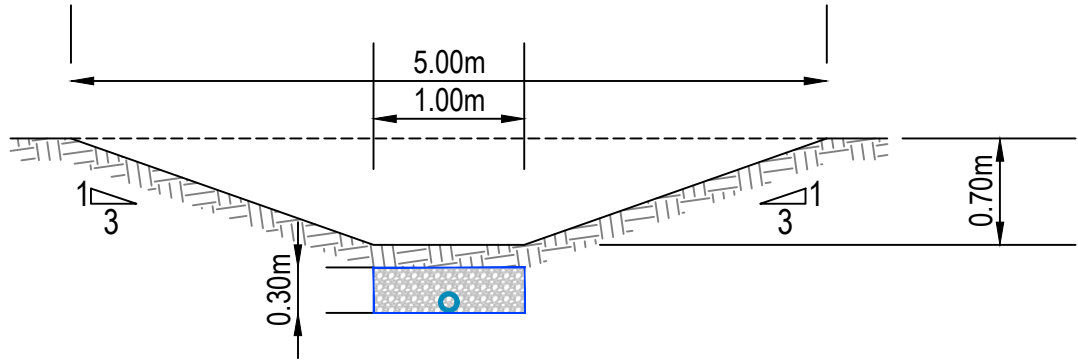
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

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

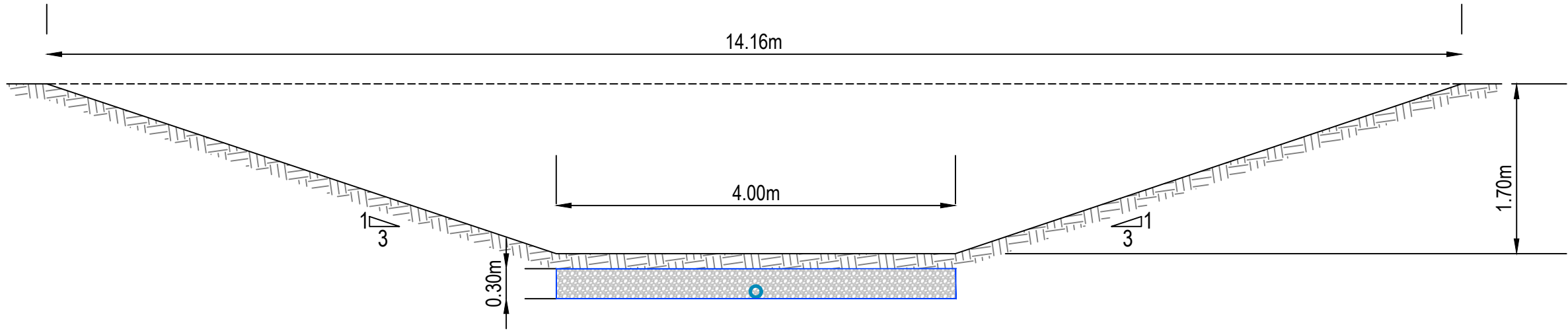
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Scale	1:50 @ A3		
Cad file	215010-M-C450.DWG		
Drawing no.	M-C4520	Rev	A

RESOURCE CONSENT

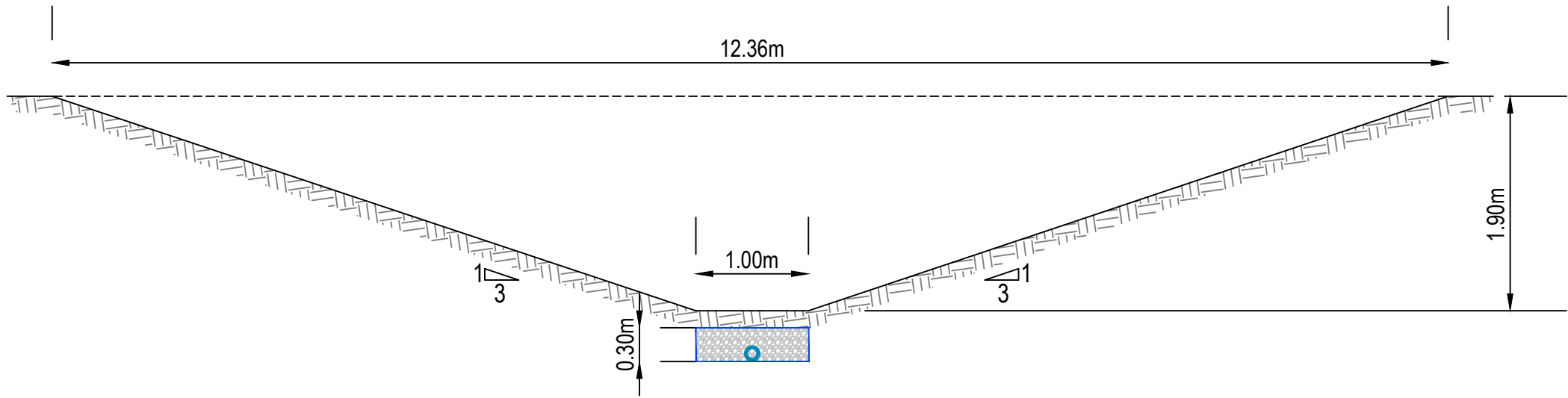
DATE: 27/25 FILEPATH: F:\Maven\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



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

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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

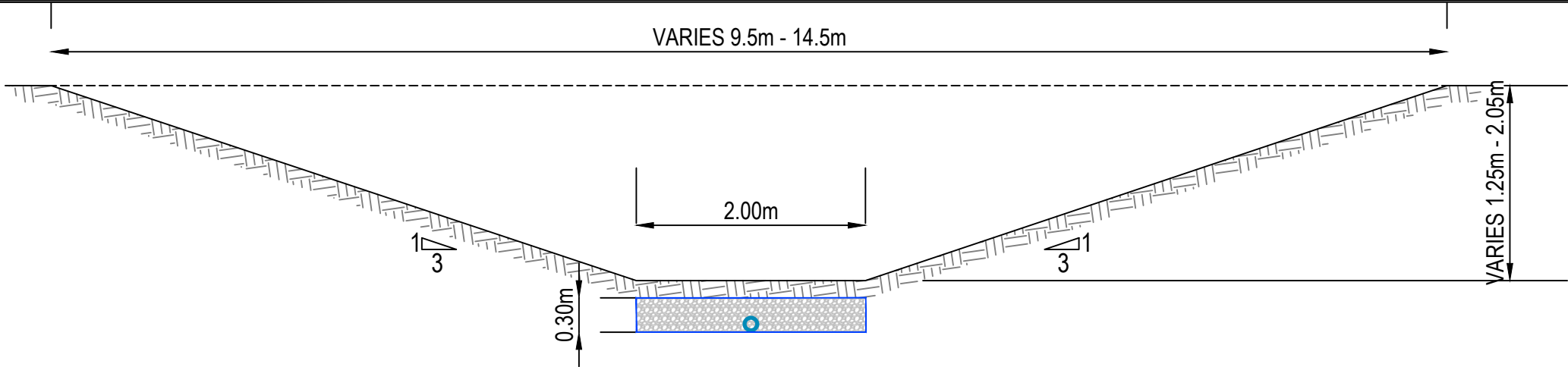


Project
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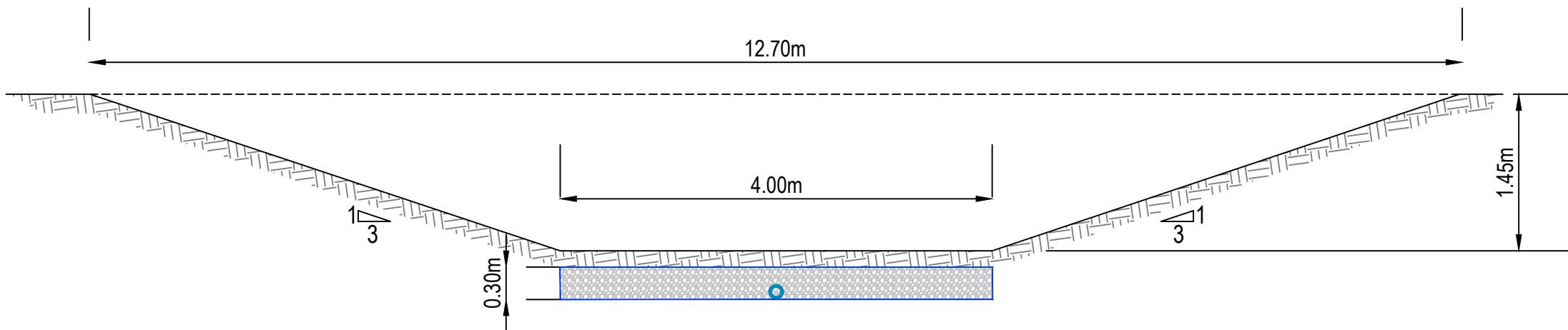
Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 2**

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

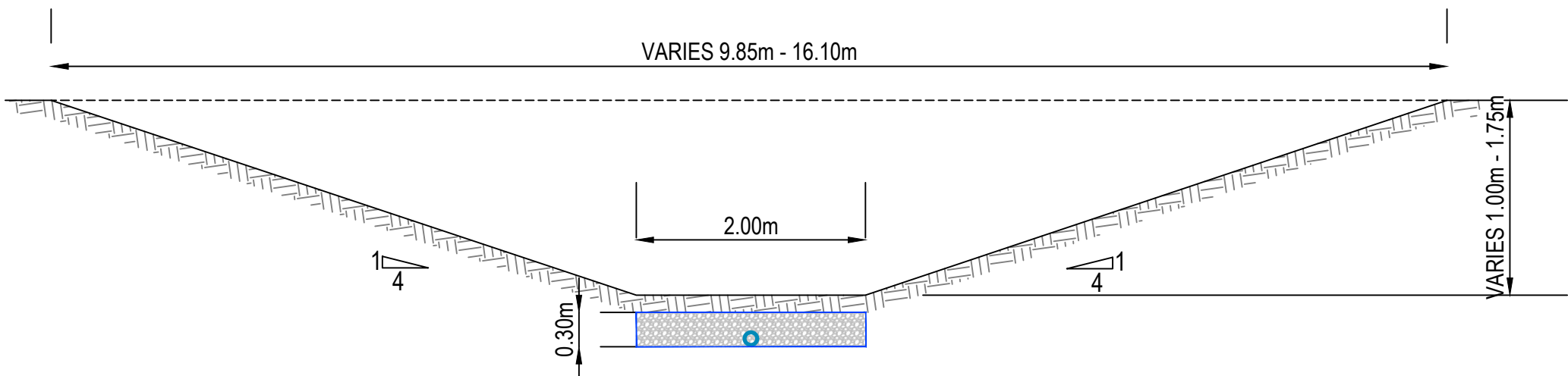
RESOURCE CONSENT



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

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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

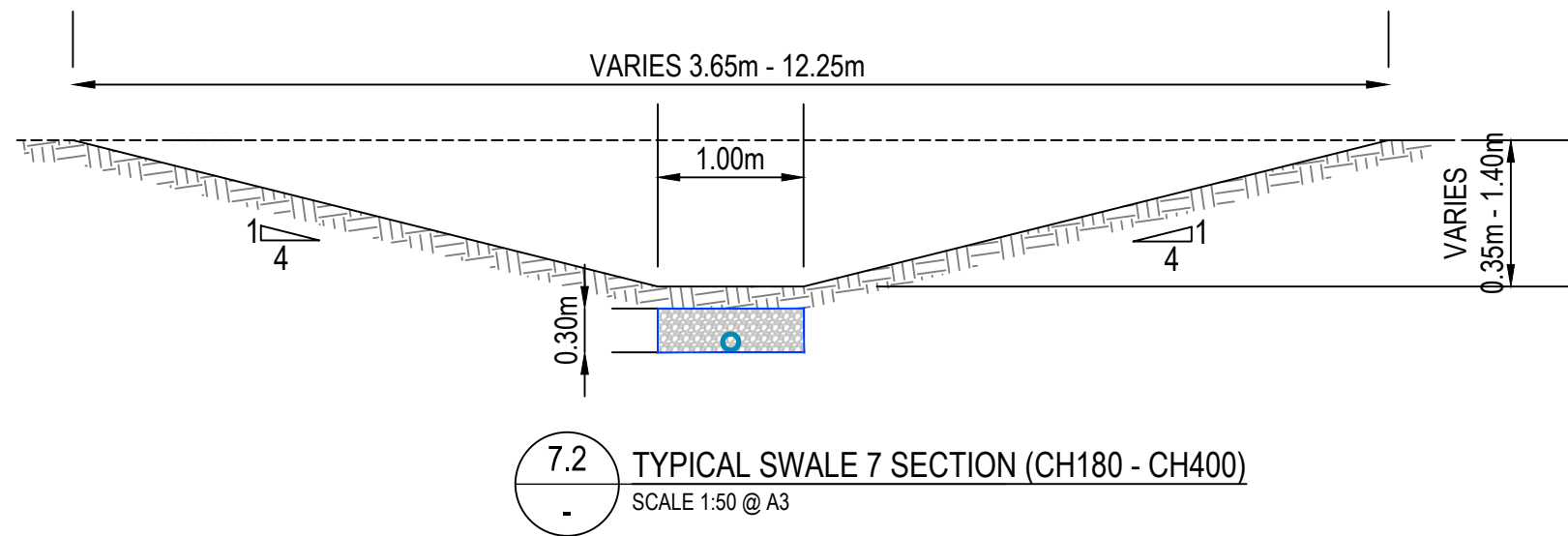
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Project
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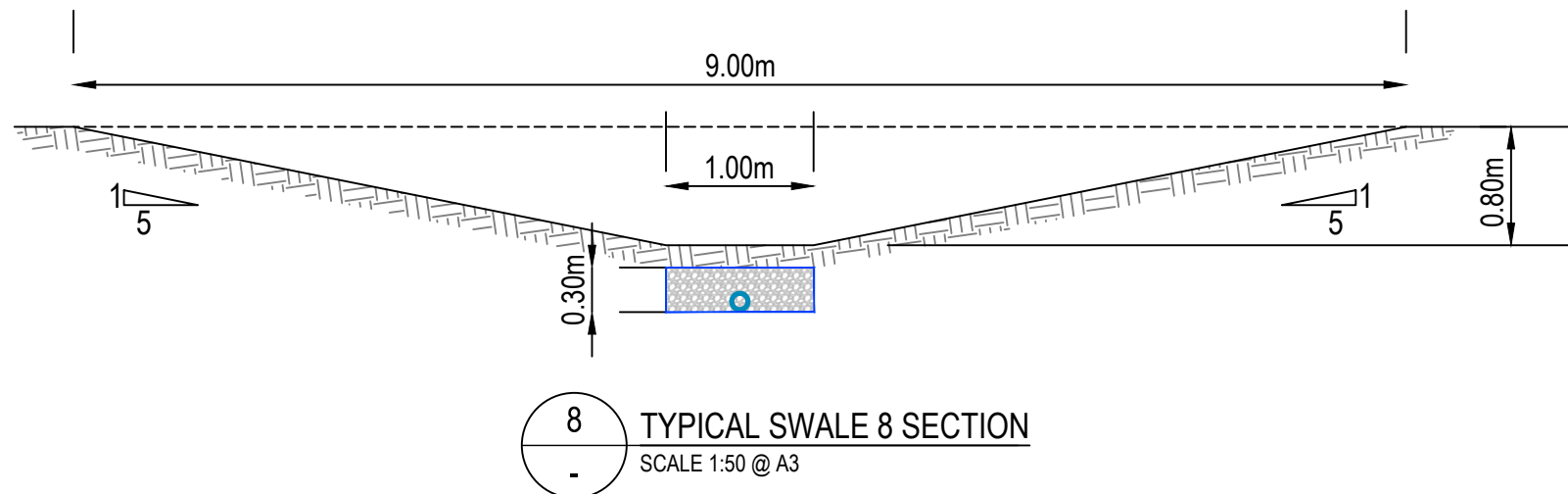
Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 3**

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

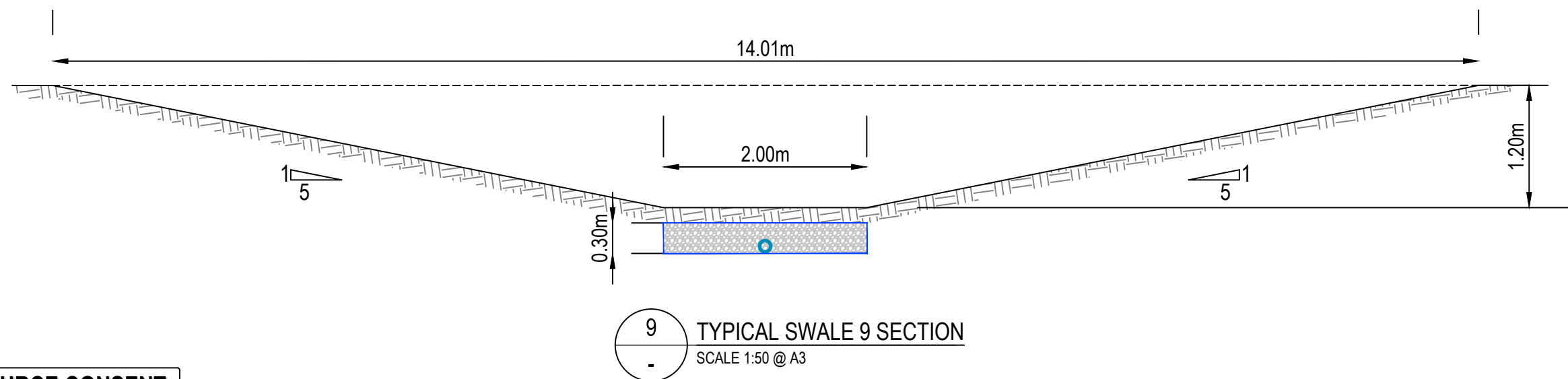
RESOURCE CONSENT



7.2 TYPICAL SWALE 7 SECTION (CH180 - CH400)
SCALE 1:50 @ A3



8 TYPICAL SWALE 8 SECTION
SCALE 1:50 @ A3



9 TYPICAL SWALE 9 SECTION
SCALE 1:50 @ A3

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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	

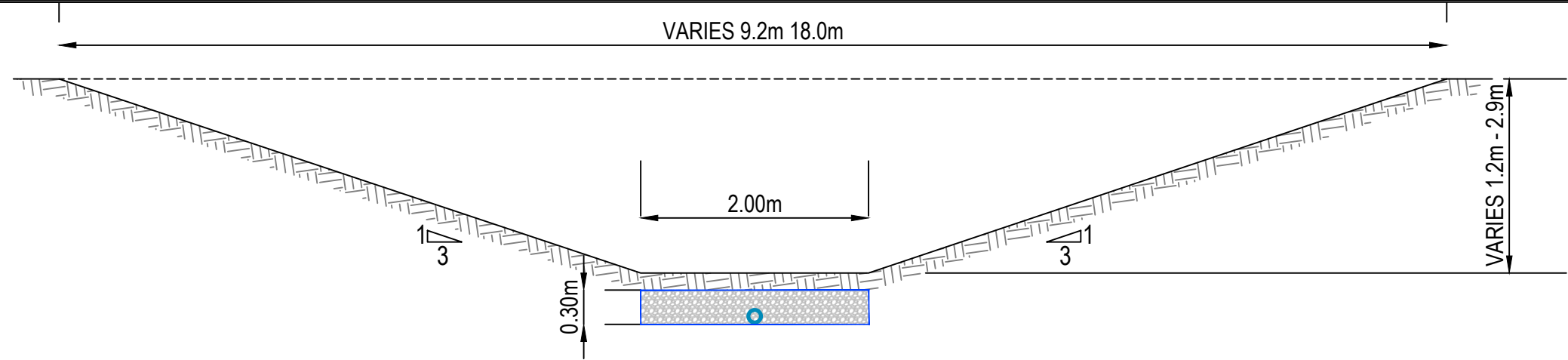
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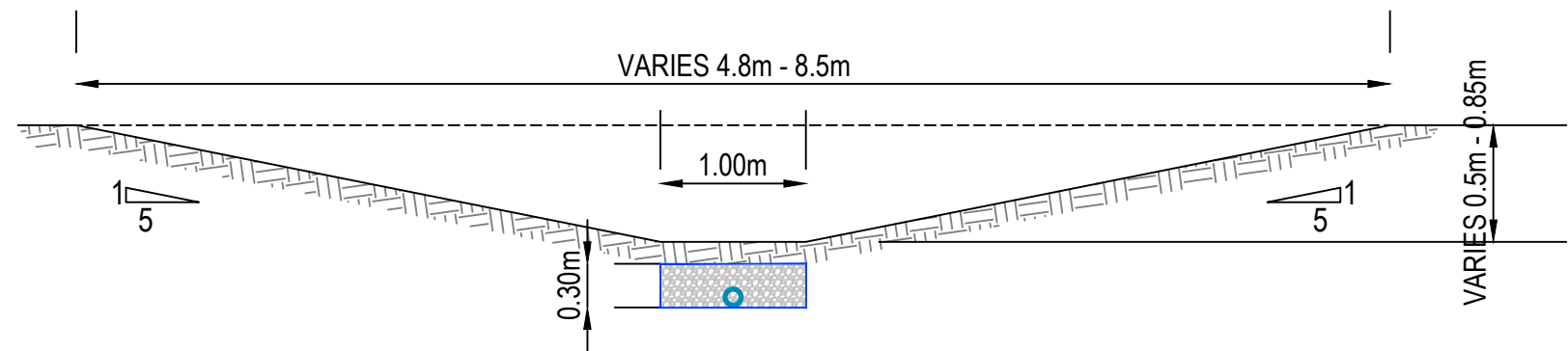
Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 4**

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

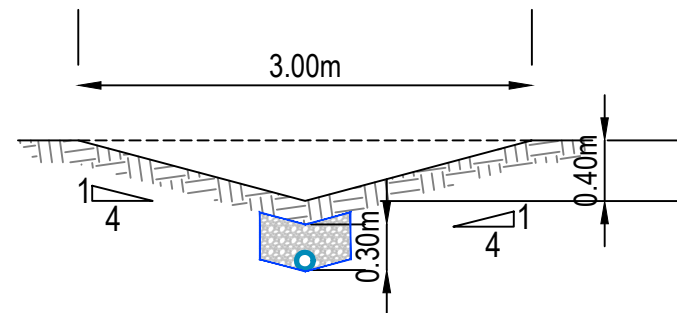
RESOURCE CONSENT



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

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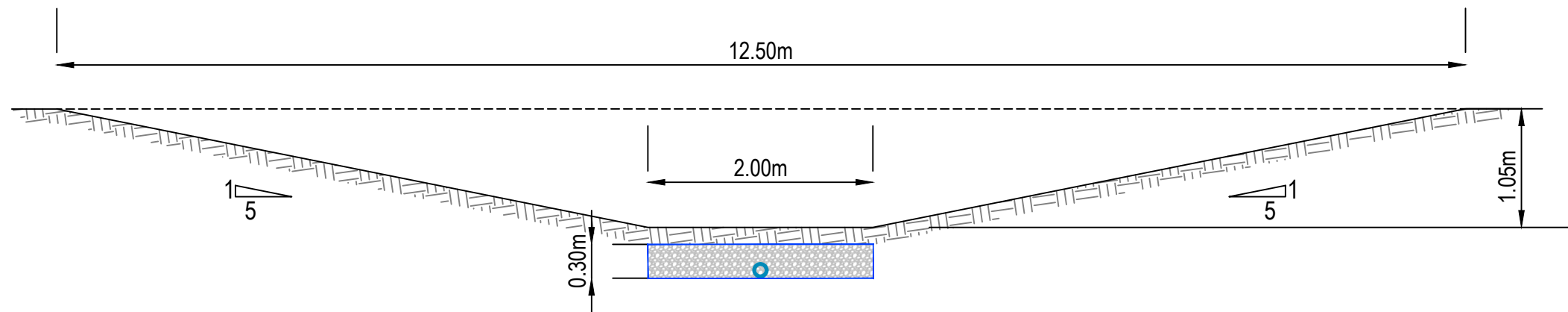
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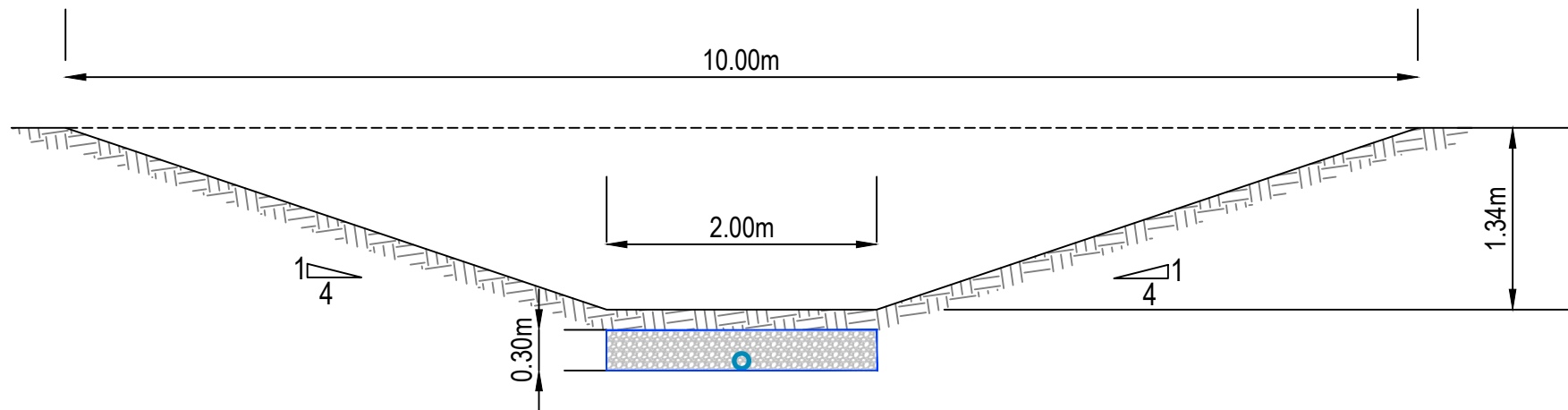
Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 5**

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

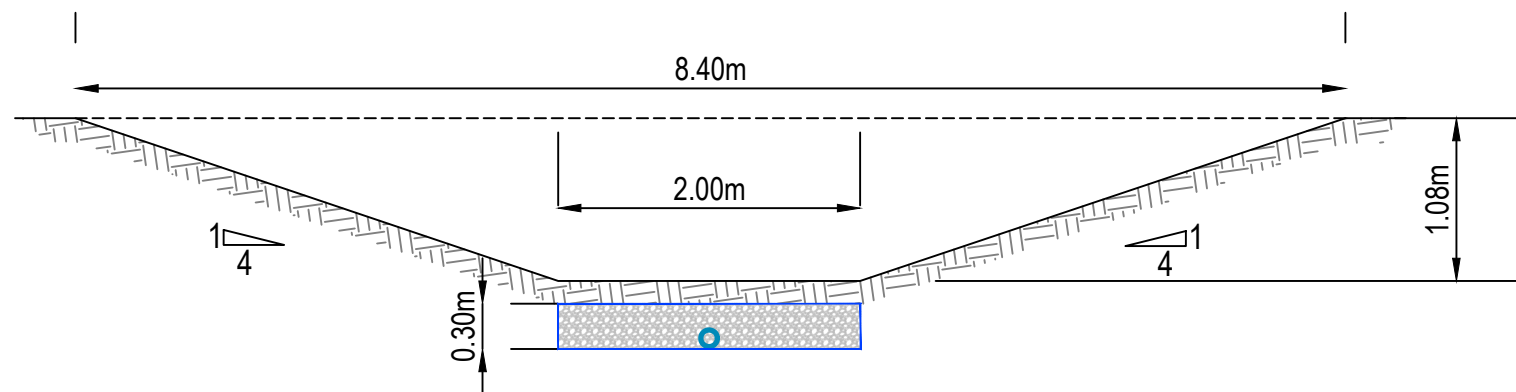
RESOURCE CONSENT



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

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A	RESOURCE CONSENT	OQ	02/2025
Rev	Description	By	Date
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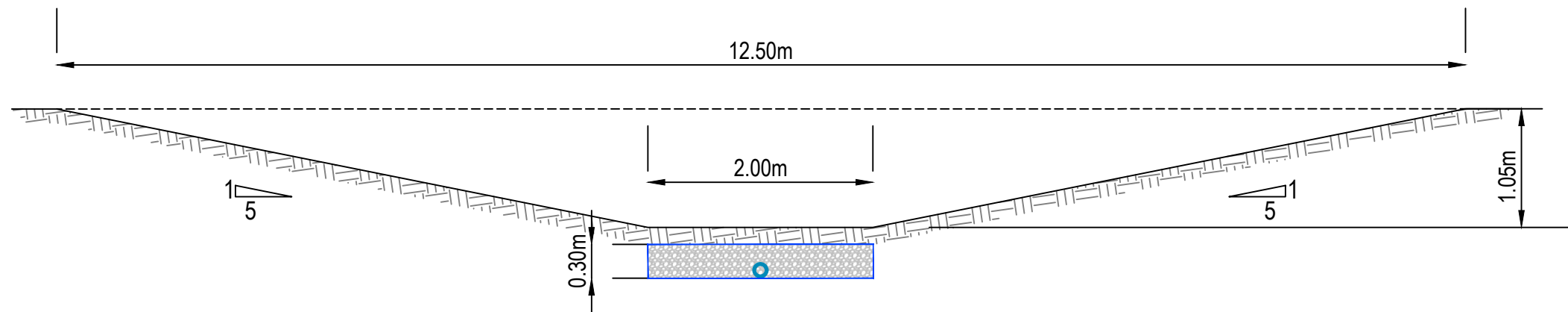
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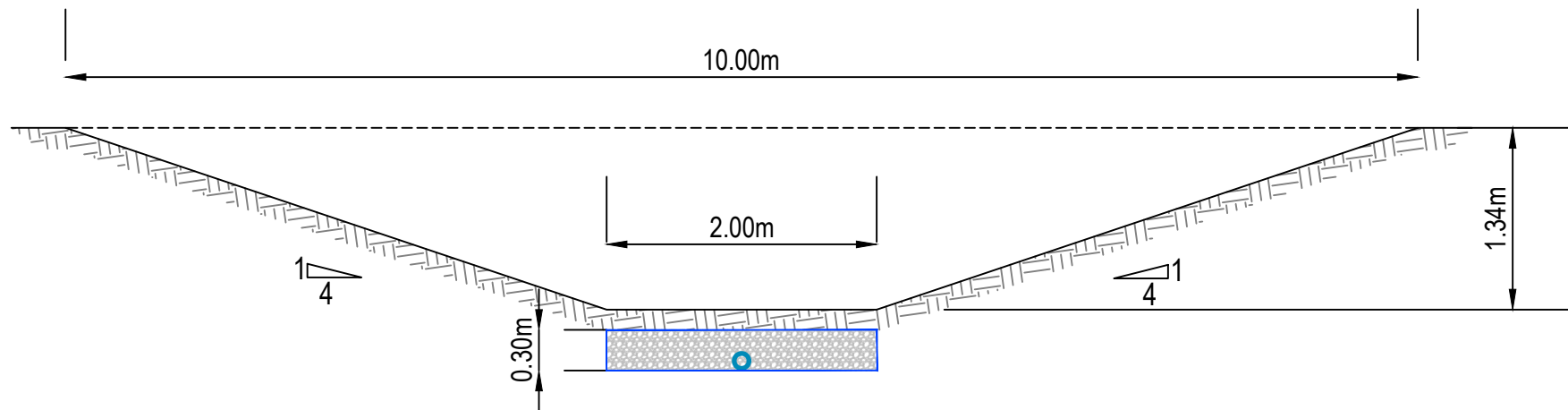
Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 6**

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

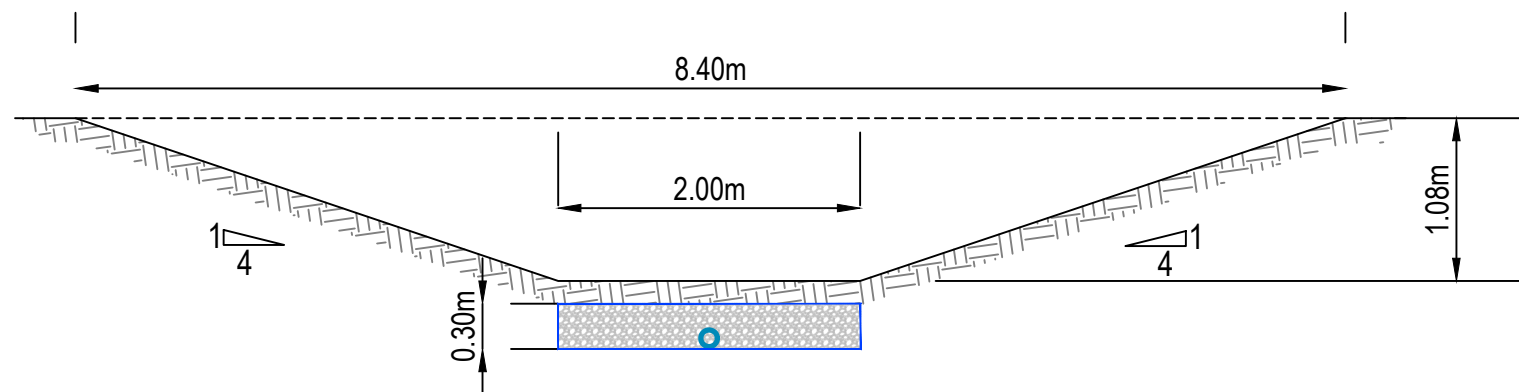
RESOURCE CONSENT



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
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 AUCKLAND VERTICAL DATUM 1946.
 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:
- 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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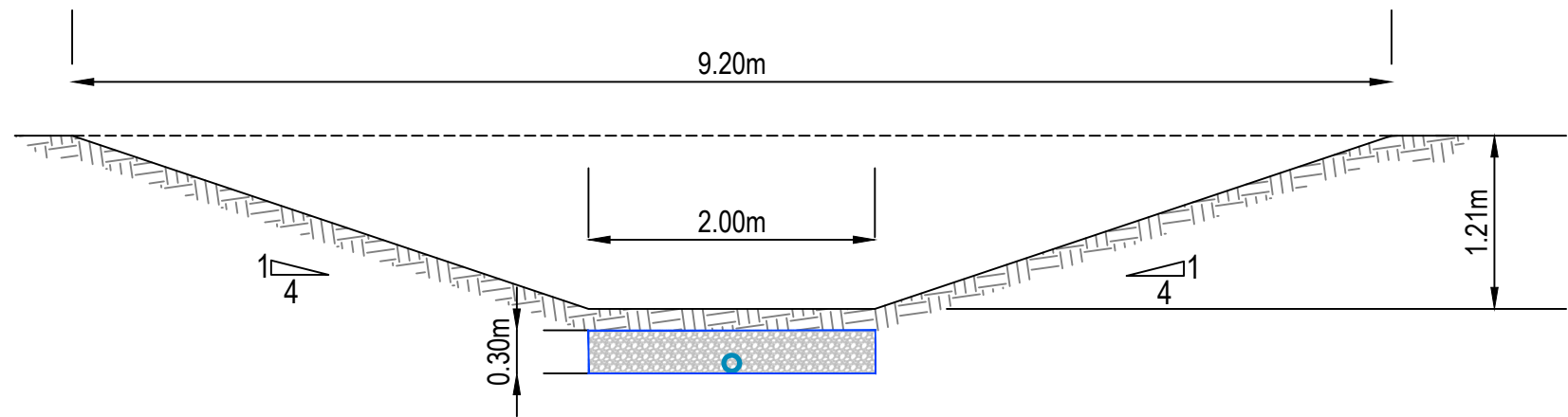
Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

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

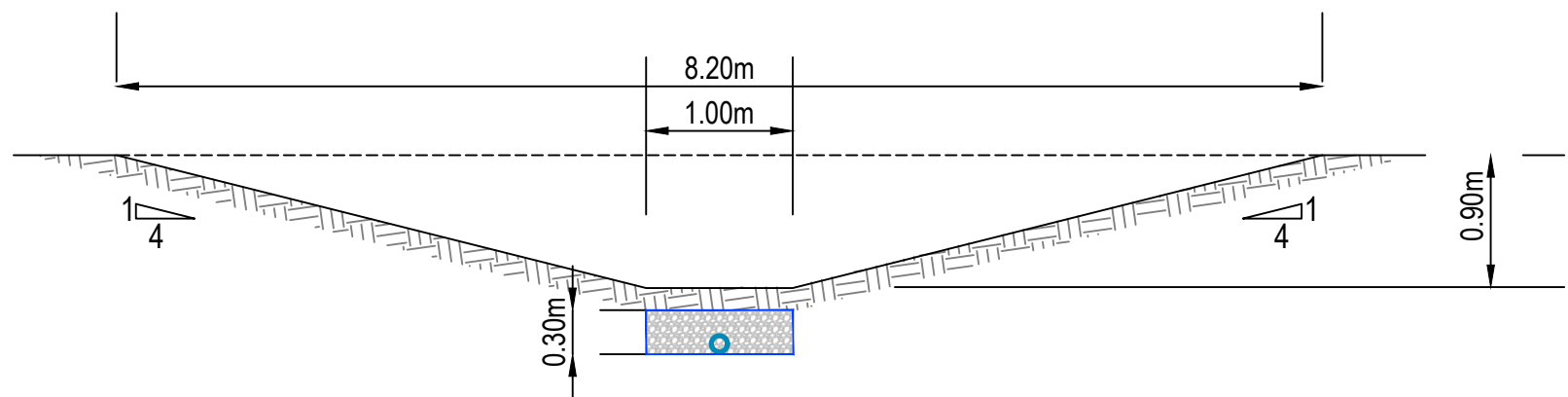
Project no.	215010
Scale	1:50 @ A3
Cad file	215010-M-C450.DWG
Drawing no.	M-C4526
Rev	A

RESOURCE CONSENT

DATE: 27/25 FILEPATH: F:\M\EN\PROJECTS\215010 - SUNFIELD\03-PRODUCTION\MASTER PLANNING\215010-M-C450.DWG



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	

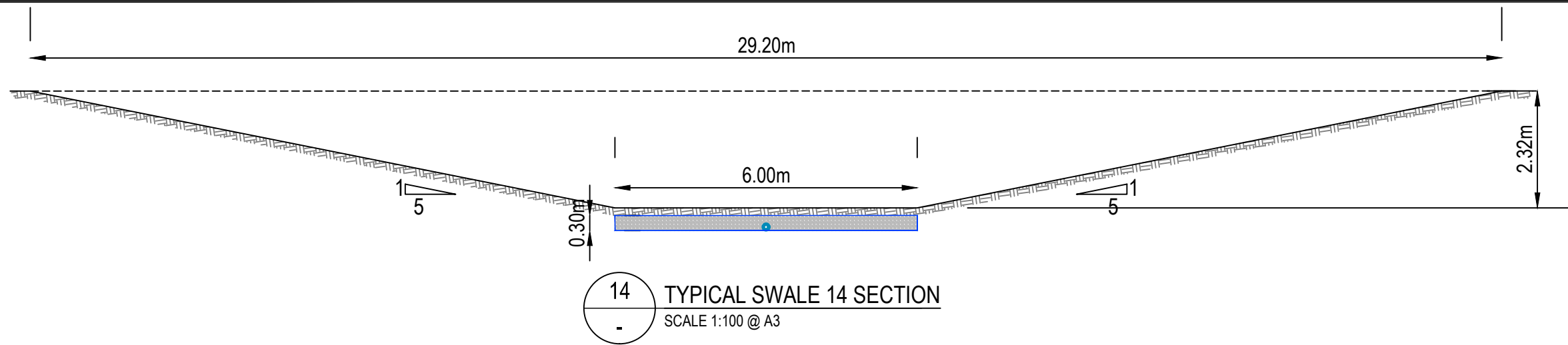
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
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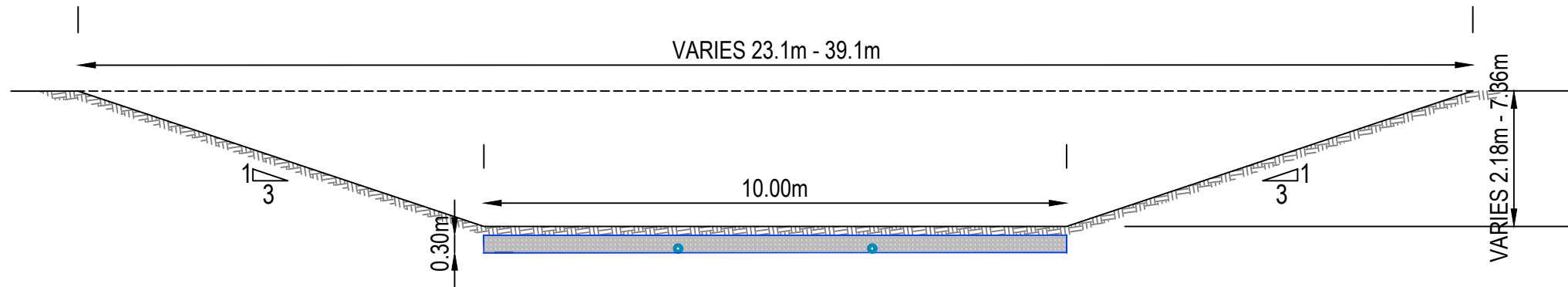
Title
**PROPOSED SWALES/
DIVERSION PATH CROSS-
SECTIONS - SHEET 8**

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

RESOURCE CONSENT

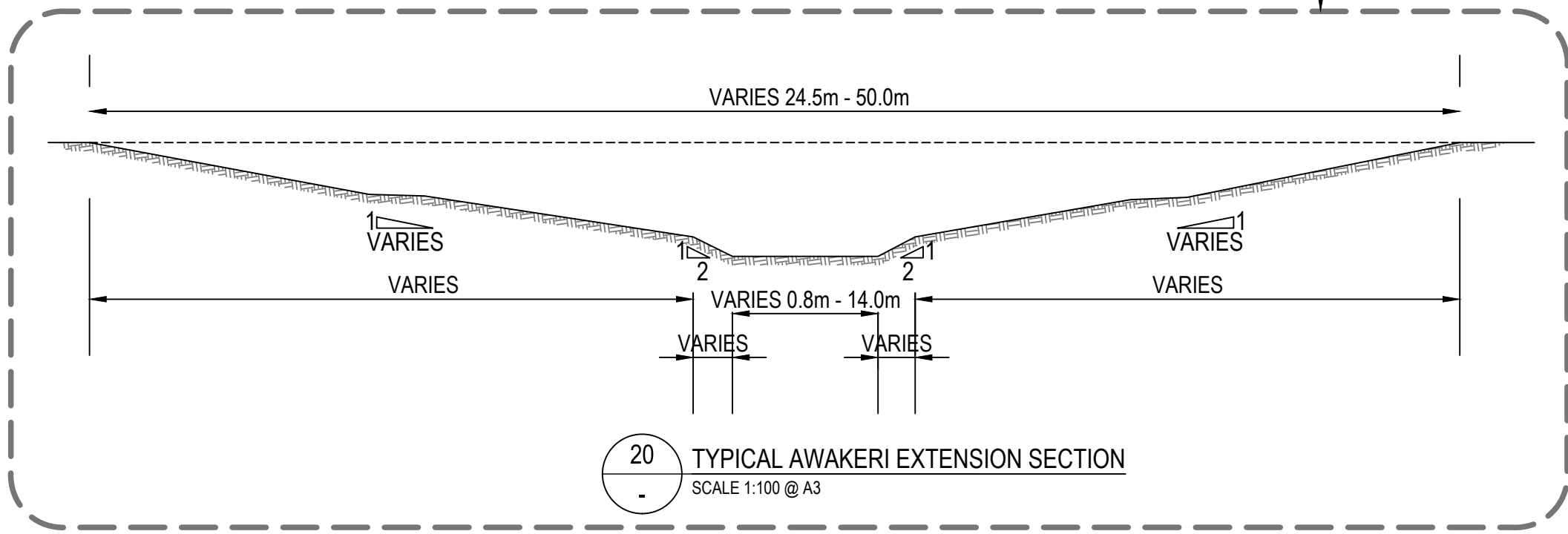


14 TYPICAL SWALE 14 SECTION
SCALE 1:100 @ A3



19 TYPICAL DIVERSION CHANNEL SECTION
SCALE 1:100 @ A3

AWAKERI WETLAND EXTENSION
CONSENT NOT SOUGHT AS
PART OF THIS APPLICATION



20 TYPICAL AWAKERI EXTENSION SECTION
SCALE 1:100 @ A3

- NOTES
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 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:
- 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

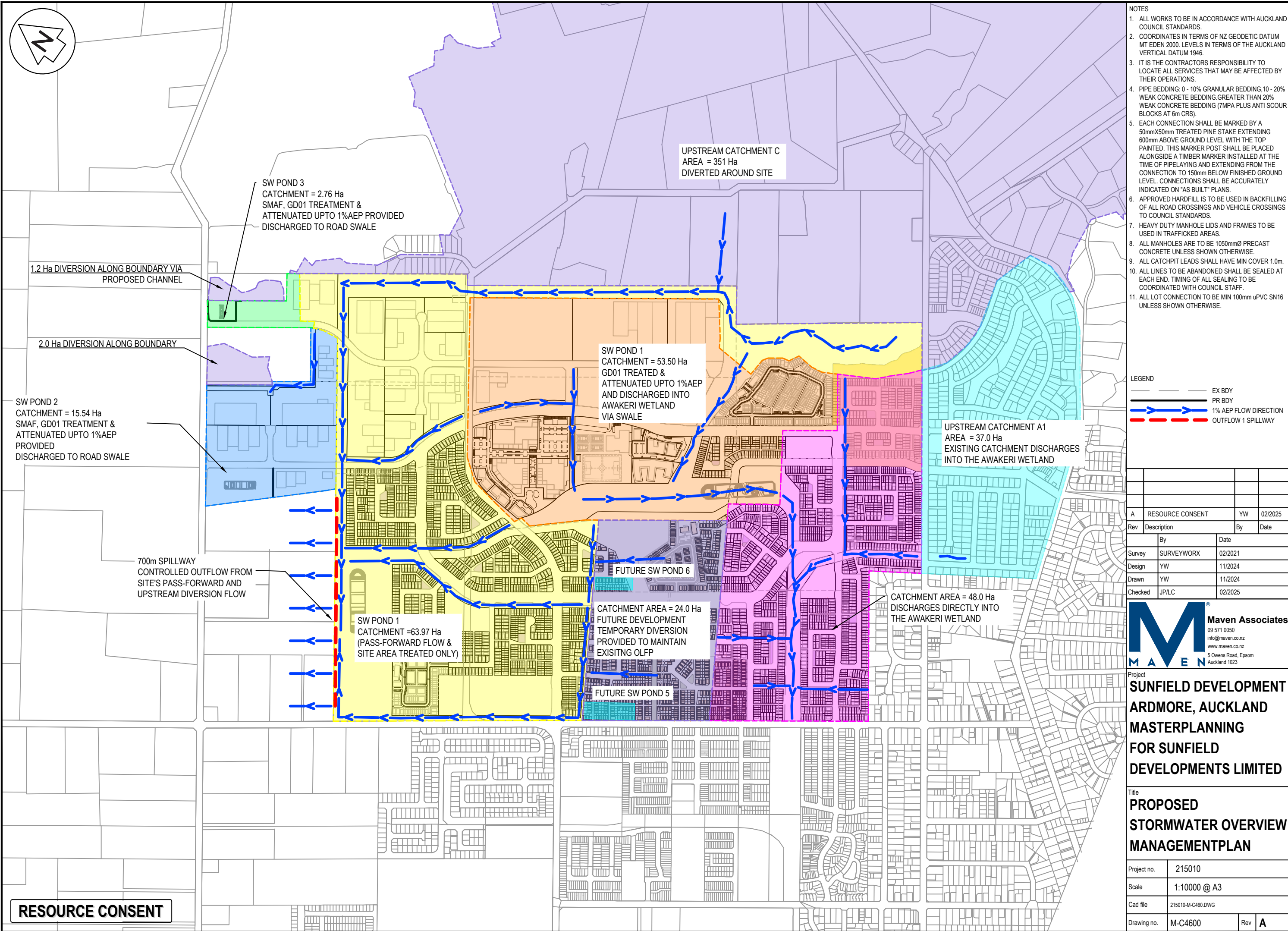
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Project
**SUNFIELD DEVELOPMENT
ARDMORE, AUCKLAND
MASTERPLANNING
FOR SUNFIELD
DEVELOPMENTS LIMITED**

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

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

RESOURCE CONSENT



- NOTES
1. ALL WORKS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STANDARDS.
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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.
 6. APPROVED HARDFILL IS TO BE USED IN BACKFILLING OF ALL ROAD CROSSINGS AND VEHICLE CROSSINGS TO COUNCIL STANDARDS.
 7. HEAVY DUTY MANHOLE LIDS AND FRAMES TO BE USED IN TRAFFICKED AREAS.
 8. ALL MANHOLES ARE TO BE 1050mmØ PRECAST CONCRETE UNLESS SHOWN OTHERWISE.
 9. ALL CATCHPIT LEADS SHALL HAVE MIN COVER 1.0m.
 10. ALL LINES TO BE ABANDONED SHALL BE SEALED AT EACH END. TIMING OF ALL SEALING TO BE COORDINATED WITH COUNCIL STAFF.
 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
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Project
**SUNFIELD DEVELOPMENT
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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

DATE: 27/05/2025 FILE PATH: F:\Maven\Projects\215010 - SUNFIELD\DWG\3 PRODUCTION\MASTER PLAN\215010-M-C460.DWG