TECHNICAL MEMORANDUM

DAM CLASSIFICATION MEMO

To	Dean Morris, Maven Regional Director Waikato	**From**	Ben McKay, Project Geotechnical Engineer
Attention	-	**Date**	03 July 2025
Email	[redacted]	**Reference**	HAM2023-0124AL | Rev 0
Cc	[redacted]	**Pages**	5 (incl.)
Subject	Dam Classification Memo		

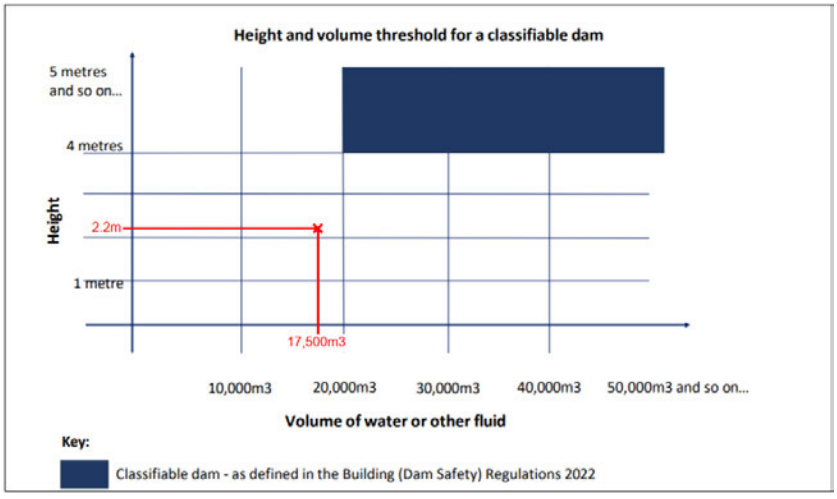
We have performed a review of the drawings sent to us on 02 July 2025 by Maven Ltd (ref. 289001, Drawings C250 & C250-1) presented in ***Appendix A***, alongside email communications from Maven issued on 30 June 2025 confirming the following:

- The proposed Dam 1 at the proposed Ashbourne Development as shown in the above-referenced documents has a volume of approximately 17,500m^3, and a maximum dammed height of 2.2m.

Maven's drawings are presented in ***Appendix A***. Maven's calculations are presented in ***Appendix B***.

Based on the information provided by Maven, we can confirm that the proposed greenway Dam 1 is not a classifiable dam as per MBIE guideline related to Dam Safety Regulations[1].

Figure 1: Proposed Dam 1's classification against MBIE Classifiable Dam Limits (Source: MBIE)



As the proposed Dam 1 is not a classifiable dam, it will not be necessary to classify the proposed dam according to the potential impact of a failure of the dam, and have the classification audited and certified by a recognised engineer.

This memo should not be considered a Potential Impact Classification Assessment for the proposed Dam 1.

[1] Ministry of Business, Innovation and Employment. (2024). Guide of complying with the dam safety regulations. Accessed on 02/07/2025, link https://www.building.govt.nz/assets/Uploads/managing-buildings/building-safety/guide-to-complying-with-the-dam-safety-regulations.pdf.

If there is any proposed change to the design levels or to any detail related to the proposed dam, the information should be shared with CMW, so that recommendations in this memo can be reassessed.

For and on behalf of CMW Geosciences

Prepared by:

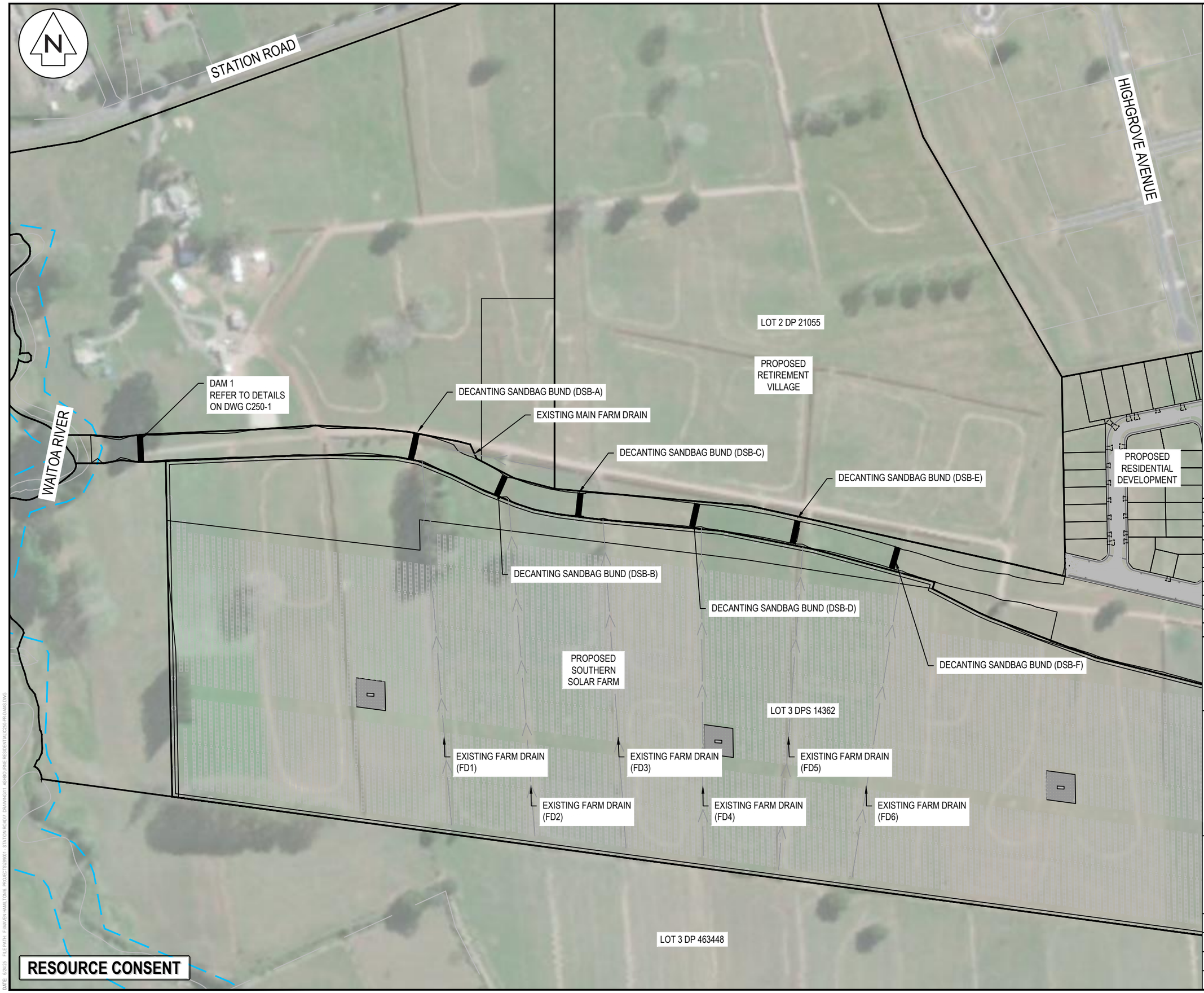
Ben McKay
Project Geotechnical Engineer
MEngNZ

Reviewed and authorised by:

Harshad Phadnis
Associate Geotechnical Engineer
CPEng, CMEngNZ

Distribution: 1 electronic copy to Maven Ltd via email
Original held at CMW Geosciences

Attachments: Maven Dam Drawings
Maven Dam Calculations



RESOURCE CONSENT

Notes

1. All Dams are less than 4m in height and stores/holds less than 20,000m³ of water. All Dams are NOT Classifiable under Building Act 2004 and the Building (DAM) Regulations 2022.
2. Exact location of these Temporary Dams are to be confirmed at construction stage

Rev	Description	By	Date
B	FOR FAST TRACK APP	NDL	06/2025
A	FOR INFORMATION	RK	06/2025

	By	Date
Survey		
Design		
Drawn	RK	06/2025
Checked	MHS	06/2025

Maven Waikato
07 242 0601
info@maven.co.nz
www.maven.co.nz
Level 1 286 Victoria Street, Hamilton New Zealand

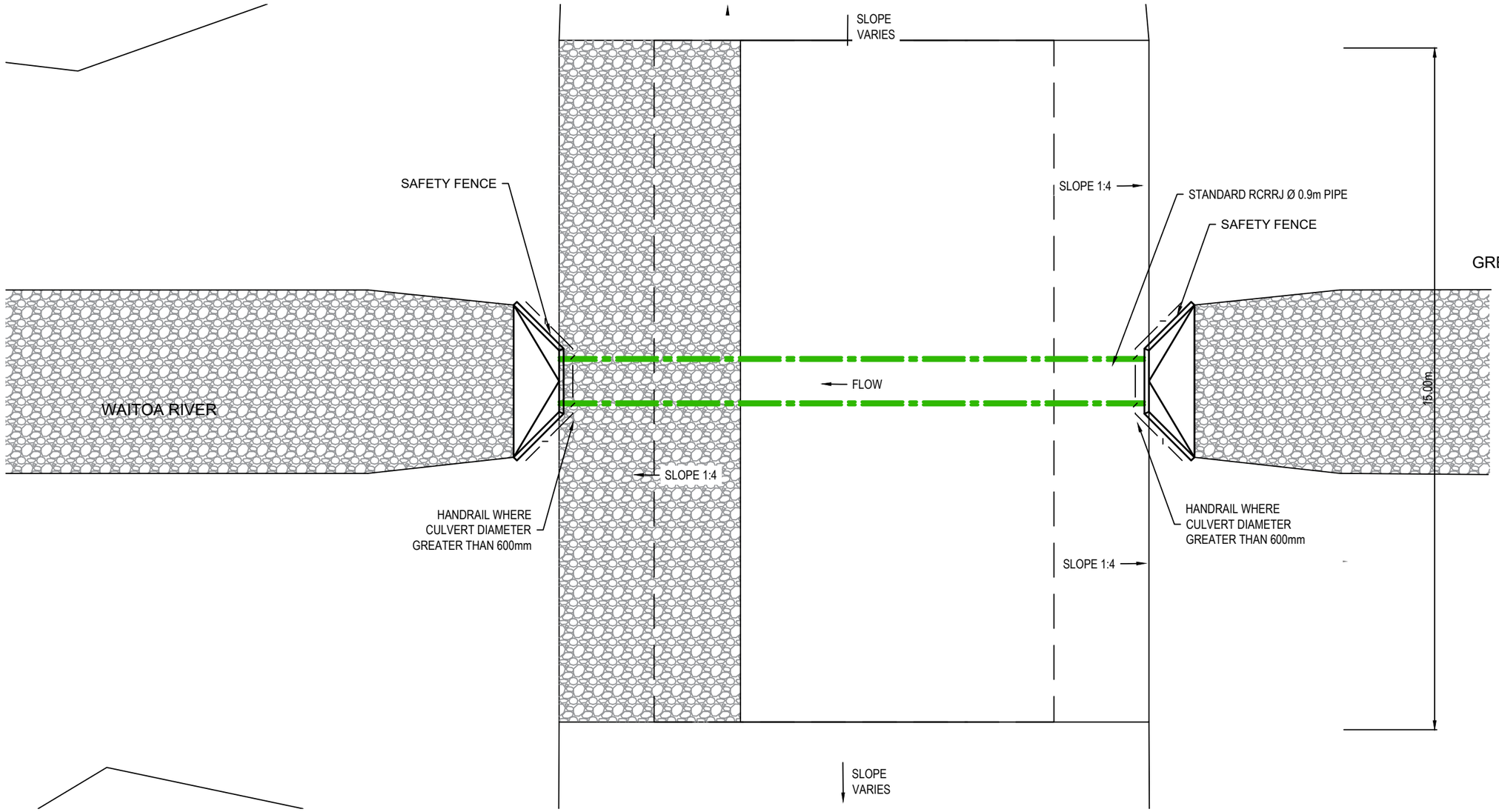
Project

ASHBOURNE RESIDENTIAL FOR MATAMATA DEVELOPMENTS

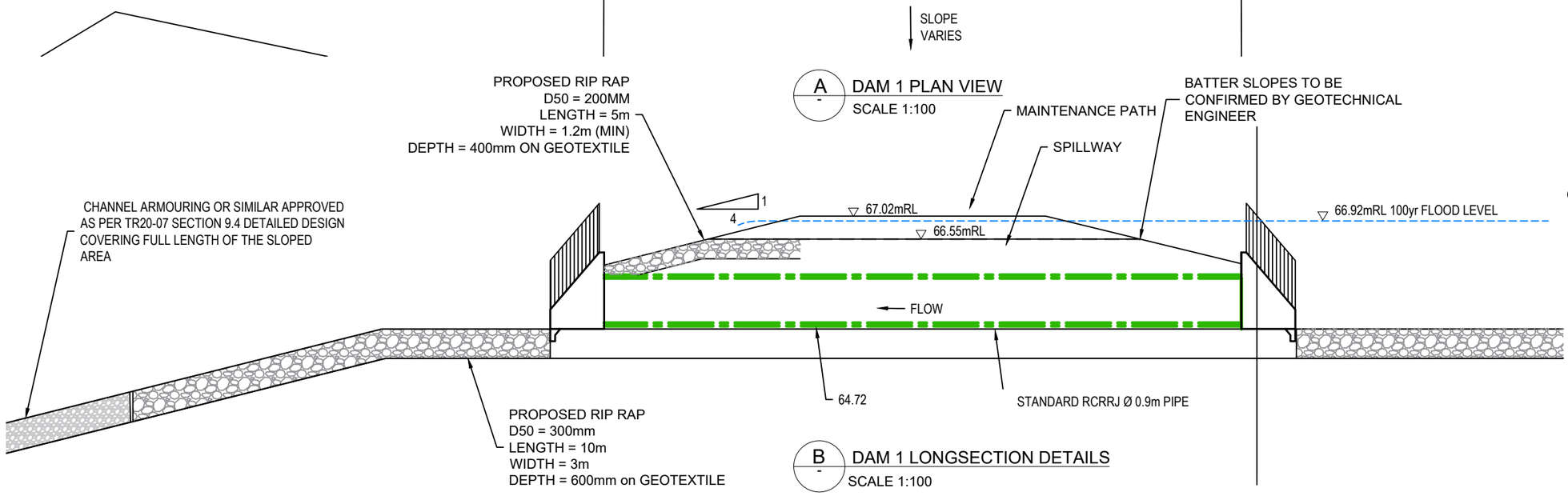
Title

PROPOSED DAMS

Project no.	289001
Scale	1:3000 @ A3
Cad file	C250-PR-DAMS.DWG
Drawing no.	C250 Rev B



A DAM 1 PLAN VIEW
SCALE 1:100



B DAM 1 LONGSECTION DETAILS
SCALE 1:100

RESOURCE CONSENT

Notes

1. All works to be in accordance with Waikato Regional Infrastructure Technical Specifications.
2. Co-ordinates in terms of NZ Geodetic Datum Mount Eden 2000.
3. Levels in terms of the New Zealand Vertical Datum 2016.
4. It is the contractors responsibility to locate all services that may be affected by his operations.
5. All concrete SW pipe to be installed in accordance with AS/NZS 3725:2007 for buried concrete pipes and AS/NZ 4058:2007 for precast concrete pipes (pressure and non-pressure) as stipulated in the RITS 2018
6. Approved hardfill is to be used in backfilling of all stormwater lines within the road reserve.
7. Heavy duty manhole lids and frames to be used in trafficked areas.
8. All catchpit leads shall be laid at 1% unless otherwise specified.
9. All concrete lines are to be Class 4 RCRRJ unless otherwise specified.
10. All lines to be abandoned shall be sealed at each end. Timing of all sealing to be coordinated with council staff.
11. Pipe lengths shown on plan are from upstream pipe invert to downstream pipe invert.
12. Final Greenway cross section subject to detailed design.

Legend

EX GROUND LEVEL
PR GROUND LEVEL

Rev	Description	By	Date
B	FAST TRACT APP	RK	06/2025
A	FAST TRACK APP	MS	04/2025

	By	Date
Survey	MAVEN	05/2024
Design	MHS	11/2024
Drawn	RJM	11/2024
Checked	DJM	11/2024

Maven Waikato
07 242 0601
info@maven.co.nz
www.maven.co.nz
Level 1 286 Victoria Street, Hamilton
New Zealand

Project
ASHBOURNE RESIDENTIAL FOR MATAMATA DEVELOPMENTS

Title
PROPOSED DAM 1 GREENWAY DETAILS

Project no.	289001		
Scale	AS SHOWN		
Cad file	C250-PR-DAMS.DWG		
Drawing no.	C250-1	Rev	A

Ben McKay

From: Min Shon [redacted]
Sent: Monday, 30 June 2025 1:35 pm
To: [redacted]
Cc: Caleb Pearson; Dean Morris; Raatite Kanimako
Subject: FW: Draft Ashbourne EcIA
Attachments: ATT00001.png

Hi Chad,

Please see below:

- The Greenway is connected to the residential development Basin B and served as an overall attenuation device for Basin B, as well as a diversion for inflow from the solar farm and upstream catchments.
- The proposed greenway is sized to accommodate the 100-year ARI cc stormwater event flows less the 10-year ARI cc event from the Residential Area B.
- A low-flow channel is incorporated at the base of the proposed greenway to replicate existing flow conditions and support continuous baseflows through the corridor. The channel is designed to have a width of approximately 2 to 3 meters and a depth of 0.5 to 1 meter, providing a defined conveyance path for low flows while maintaining ecological connectivity.
- **Peak Storage Volume** Greenway & Basin B (10year ARI cc) 17,503.3m^3
- **Peak Water level** (100-year ARI cc): 66.92m RL
- **Peak Flow Rate** (100-year ARI cc): 7.57m^3/s (note rip rap at entry, exit, through the spillway and through the steep bank will or have been designed to control and cater for the incoming high flow during this extreme event).
- **Treatment**: RG and Soakage upstream will provide for treatment in line with both Regional and District requirements for Res Catchment B. for the solar farms, its mainly utilizing the existing natural drains and swales as means for treatment during these low flow events.

Please let me know if you have any questions.

Thank you

Regards,

Min Shon
ENGINEER

MAVEN

MAVEN WAIKATO LIMITED
[redacted]
www.maven.co.nz
Level 1, 286 Victoria Street, Hamilton Central

From: Dean Morris [redacted]
Sent: Monday, 30 June 2025 10:54 am
To: Min Shon [redacted]; Raatite Kanimako [redacted]
Subject: Fw: Draft Ashbourne EcIA