

**IN THE MATTER** of the Resource Management Act 1991  
**AND**  
**IN THE MATTER** of the hearing of submissions on Oceania Dairy  
consent applications CRC201187 &  
CRC201194

**BY** **MORVEN, GLENAVY, IKAWAI IRRIGATION  
COMPANY LIMITED**

Submitter

**TO** **CANTERBURY REGIONAL COUNCIL**

Local authority

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**STATEMENT OF EVIDENCE OF CRAIG MAXWELL EVANS ON BEHALF OF THE  
MORVEN, GLENAVY, IKAWAI IRRIGATION COMPANY LIMITED**

Dated: 3 July 2020

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## **INTRODUCTION**

### **Qualifications and experience**

1. My name is Craig Evans. I am the Chief Executive Officer of the Morven Glenavy Ikawai Irrigation Company Limited ("**MGI**").
2. I hold a BSc (Hons) degree in Geology; a Graduate Certificate in Environmental Planning; and I have completed a Graduate Certificate of Project Management as part of a Masters of Business Administration (MBA) degree.
3. I have 29-years of experience in management including 18-years as a hydrogeologist and environmental scientist and 6-years project managing large engineering, mining and civil infrastructure developments.

### **SCOPE OF MY EVIDENCE**

4. MGI submitted in support of CRC201187 and CRC201194.
5. I wish to point out a potential conflict of interest as Oceania Dairy Limited is a shareholder of MGI. However, our submission relates to the protection of MGI's infrastructure and environment, rather than the interests of Oceania.
6. I also wish to address a potential conflict of interest between MGI and the submission from Waitaki Irrigators Collective (WIC). MGI is a member of WIC. WIC submitted in opposition to the consents, which is contrary to the submission in support by MGI. On this matter, MGI is not aligned with the views and position of the majority of WIC members. The MGI submission should be treated as independent of WIC.
7. MGI is one of the largest and longest established irrigation schemes in Canterbury, providing water from the Waitaki River to farmers irrigating over 29,000 hectares of land in South Canterbury (refer to Figure 1). The Oceania Dairy factory is situated in the middle of the MGI irrigation scheme, all of the farms that surround the Oceania Dairy Factory are shareholders of MGI.

### **SUBMISSION IN SUPPORT OF CRC201194**

8. Having examined the applicant's dispersion modelling and assessment of environmental effects of the proposed ocean outfall, MGI is of the opinion that

the proposed method of discharge meets the requirements of Section 2 of the RMA to adopt the best practicable option. The discharge into the coastal marine area has a lesser environmental effect than the current discharge onto land.

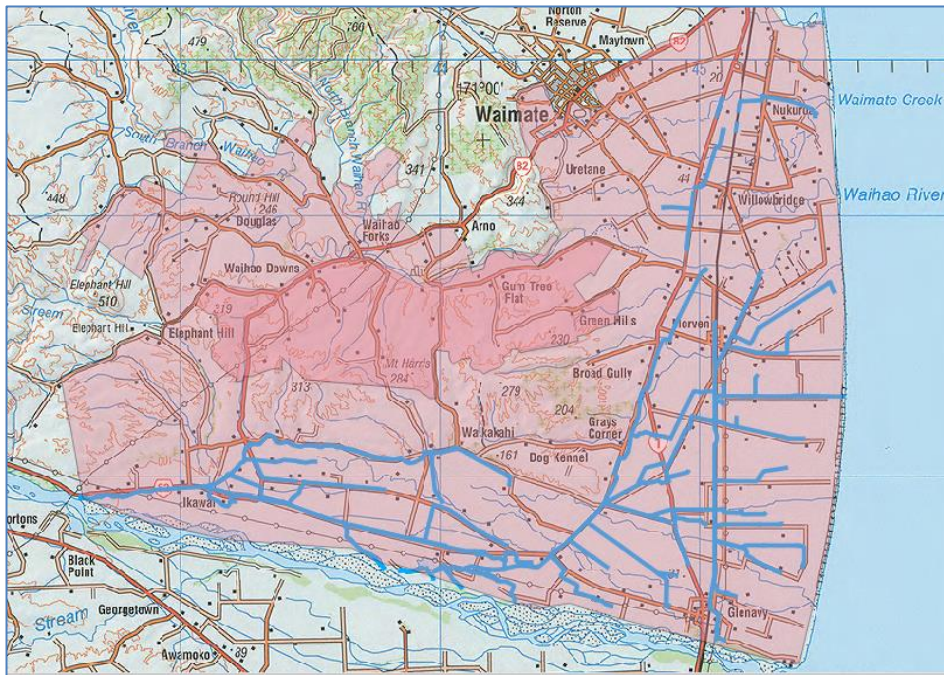


Figure 1: Map showing MGI command area (shaded area).

9. The applicant produces wastewater all year round and there is insufficient land area to sustain the discharge every day of the year. The soils have limited available soil moisture holding capacity, particularly in the winter months and during periods of high rainfall. The irrigation of wastewater onto land in these circumstances will result in leaching to groundwater, at least of the mobile constituents such as the dissolved inorganic nitrogen (including ammoniacal nitrogen). As a hydrogeologist I would be less concerned about the phosphorus constituents as they tend to become bound to the soil.
10. Due to the production of wastewater and the volumes involved, the Applicant is currently having to irrigate wastewater during rainfall events in a highly visible location along State Highway One. It is not uncommon for MGI to receive community complaints or feedback for “irrigating in the rain”. The community cannot generally distinguish between the wastewater irrigation activities of the Applicant and the water irrigation activities of the MGI scheme. MGI farmers do not practice unsustainable water irrigation and so it is in the

interests of MGI to enable Oceania to retire its land irrigation in favour of an ocean discharge.

### **SUBMISSION IN SUPPORT OF CRC201187**

11. In order for the applicant to perform the discharge into the coastal marine area, they must construct a pipeline to the coast. MGI supports the application but has some considerations in regard to the earthworks required for pipeline construction. MGI has existing infrastructure along the proposed pipeline route, plus we are currently constructing a new water pipeline of our own along Archibald Road. This construction will be completed by September 2020.
12. On behalf of Oceania Dairy, Babbage Consultants have conducted consultation with MGI in the years prior to the consent applications being lodged. We even discussed working together to construct both pipelines at the same time, but unfortunately Oceania was unable to make the pre-commitment necessary to meet a 2020 construction timeline. The proposed pipeline will need to cross existing infrastructure and so MGI seeks protection from the proposed activity damaging our infrastructure.
13. The table in Figure 3 provides a schedule of the locations that the proposed pipeline will need to cross existing MGI infrastructure, we also note that it will need to cross Waimate District Council infrastructure (roads and culverts) and Kiwirail as well. The AEE states that there are two locations where the water pipeline must be crossed (pg14). This may have been the case when consultation was performed, but there are now three locations where the new water pipeline must be crossed and another two locations where existing canal or culvert infrastructure must be crossed (Figure 3).
14. During consultation we did suggest to Babbage Consultants that they supply MGI some suitable pipe casings (concrete or steel) and we would be willing to pre-install them underneath the new water pipeline crossings as conduits. This would provide the applicant with significantly cheaper crossings, relative to trenchless methods, and ensure that the MGI infrastructure is protected. Unfortunately, no agreement with Oceania could be reached, who were not prepared to pre-commit the cost just yet. It is now almost too late for this option because the new MGI pipeline crossings will be getting installed during the next few weeks.

15. The MGI pipelines are constructed to a civil engineering standard (NZS 2566 & 2033) that involves the placement of compacted embedment material around the pipeline (Figure 2). The applicant must not disturb this embedment zone or perform excavation that could cause subsidence or failure around the existing pipelines, otherwise the MGI pipes could fail. MGI requires protection against such adverse effects on existing infrastructure, which would be expensive for us to repair and would result in legal action against the parties responsible.

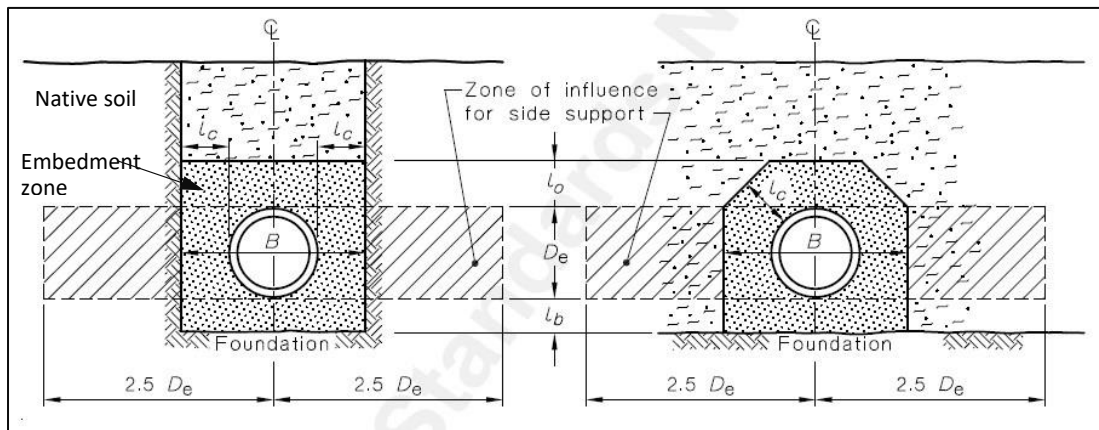
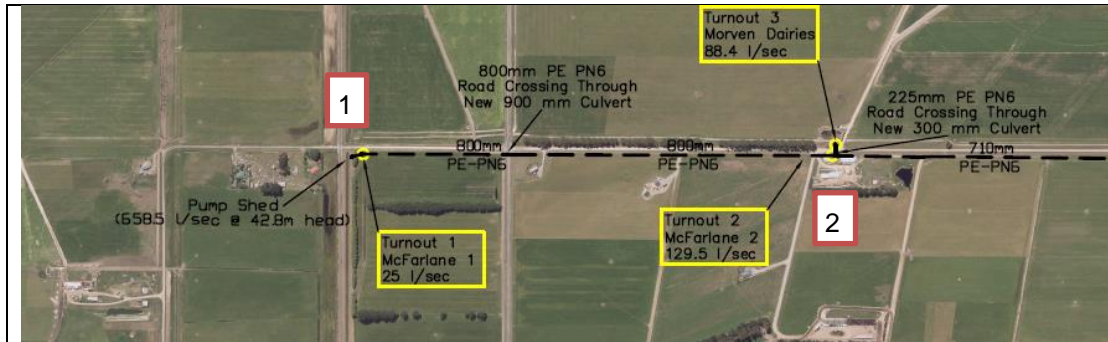


Figure 2: Pipeline embedment zone from NZS 2566.

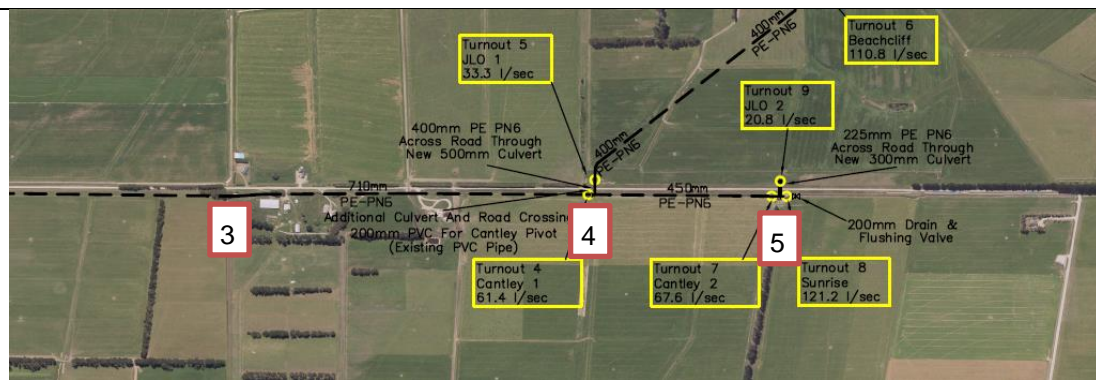
16. The AEE states that the applicant will employ trenchless methods, such as Horizontal Directional Drilling or micro-tunnelling, for the pipeline crossings (pg 14 of AEE). This is an acceptable form of construction to MGI as it will avoid adverse effects on our infrastructure, so we request a condition of consent that ensures such construction methods are employed. The AEE makes reference to two irrigation lines, which as stated in point 15) is no longer accurate, but it also makes reference to "if water is present". I wish to point out that the presence of water is irrelevant to the risk to MGI infrastructure. The risk is the same whether water is present at the time or not, so trenchless methods must be used in any case.

**Craig Evans**

3 July 2020



- 1) Railway and MGI Lower Mainrace siphon crossing (established in 1970's)
- 2) Turnout 3 – new MGI crossing of 225mm PE pipe through a 300mm sleeve



- 3) Existing combined road drainage culvert (Waimate District Council) that was also a combined MGI irrigation water culvert until April 2020 (not used now).
- 4) Turnout 5 – new MGI crossing of 400mm PE pipe through a 500mm sleeve
- 5) Turnout 9 – new MGI crossing of 225mm PE pipe through a 300mm sleeve

Figure 3: Schedule of existing and new (2020) MGI water infrastructure crossings of Archibald Road.