

BEFORE A HEARING COMMISSIONER

IN THE MATTER of the Resource Management Act 1991 (RMA)

AND

IN THE MATTER of hearing submissions and further submissions in respect
of Matamata-Piako District Council - Plan Change 58 -
Avenue Business Park

**STATEMENT OF DALI SULJIC ON BEHALF OF WARWICK AND MARION
STEFFERT**

CIVIL ENGINEERING

14 February 2024

Introduction

- 1 My full name is Dali Suljic.
- 2 I am an Engineer at Tektus Consultants Limited, an Auckland based professional consultancy specialising in civil and environmental engineering and planning.
- 3 I have been employed in civil engineering and land development for over 10 years.
- 4 My qualifications are Masters of Engineering (Civil and Environmental) from Cardiff University, Wales. I am a chartered member of Engineering New Zealand and a Chartered Professional Engineer with a practice area in the design of three waters infrastructure.
- 5 My civil engineering experience has included the design of earthworks, sediment control, and three waters (stormwater, wastewater, and water supply) infrastructure for small scale residential and commercial developments, large scale greenfield subdivisions, plan changes and master plans. I was the technical lead in developing the three waters infrastructure servicing strategy for the Queenstown Lakes District Council Te Pūtahi Ladies Mile Masterplan. I was also the technical lead for the design of Stage 1 of the Avenue Business Park subdivision in Morrinsville.
- 6 In relation to this hearing, I am authorised by Warwick and Marion Steffert (**Steffert**) to give evidence in relation to relevant civil engineering matters.

Code of Conduct

- 7 I have read the Environment Court's 'Code of Conduct for Expert Witnesses' as contained in the Environment Court's Consolidated Practice Note 2023 and agree to comply with it. I have complied with it when preparing my written statement of evidence and I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

Executive Summary

- 8 The proposed Plan Change 58 (**PC58**) for land near the western edge of Morrinsville would provide for approximately 10.1 hectares of developable land to the industrial land supply for Morrinsville once expected non-

developable areas such as roads, stormwater and wastewater infrastructure are excluded.

- 9 Below is a summary of the position reached in this evidence on the significant matters:
- (a) The anticipated earthworks operations within PC58 are feasible to create suitable industrial landform.
 - (b) Sediment and erosion controls during earthworks operations can be implemented in a way that appropriately controls the discharge of sediment to the receiving environment.
 - (c) Stormwater management can be implemented to maintain or enhance the existing condition of the surrounding and receiving environment.
 - (d) There are feasible engineering solutions that will deliver the necessary water supply and wastewater infrastructure to accommodate the proposed changes in land use.

Background

- 10 I was engaged by Warwick and Marion Steffert to carry out a high-level engineering assessment for the site in August 2021, providing preliminary professional advice on the civil infrastructure suitability for rezoning of the subject land from Rural to General Industrial Zone.
- 11 I completed a site walkover in June 2022 and was involved in pre-application meetings with Matamata-Piako District Council (**MPDC**) and Waikato Regional Council (**WRC**) representatives between August and November 2022.
- 12 I prepared the Infrastructure Report in support of the proposed PC58 application and have been involved in subsequent meetings and discussions with Council's engineering peer reviewers.

Scope of Evidence

- 13 This evidence relates to a private plan change to the Matamata-Piako District Plan to rezone approximately 13.4 hectares of rural land from Rural Zone to General Industrial Zone on the western side of Morrinsville, between Avenue Road North and SH26.
- 14 My evidence covers:

- (a) Earthworks
 - (b) Erosion and Sediment Control
 - (c) Stormwater
 - (d) Wastewater
 - (e) Water Supply
- 15 In the course of preparing this evidence I have considered:
- (a) The application lodged with Council on 22 December 2022 and further information provided on 1 May 2023 and 30 November 2023;
 - (b) The 14 submissions received and 1 further submission; and
 - (c) The s 42A report dated 7 February 2024.
- 16 My evidence is to be read in conjunction with the PC58 application and further information referred to above, and the evidence presented by the other experts.

Application Site and Surrounding Area

- 17 At present, the PC58 site is generally covered in pasture, farm tracks and a network of stormwater drains. It comprises of low-lying flatter areas to the south and moderately sloping steeper areas to the north.
- 18 Along the eastern boundary lies Stage 1 of the Avenue Business Park development, which is currently under construction. The first sub-stage of this development has been completed and was granted Council Completion Certificates in November 2023. I am involved in this development in a civil engineering design capacity.
- 19 Stage 1 of the Avenue Business Park development included an upgrade of a stormwater drain, in accordance with the Council's servicing standards, that will operate as the main stormwater discharge point for the PC58 site. The Stage 1 development has also included the extension of public road, wastewater, and water supply infrastructure to the eastern boundary of the PC58 site.
- 20 The PC58 site is located within the Morrinsville Stream catchment and is subject to the Morrinsville Stream Catchment Management Plan (CMP) which sets out the requirements for the management of stormwater within its designated boundaries.

- 21 I understand that the Morrinsville township wastewater network, including the Wastewater Treatment Plant, currently has limited capacity to support future growth, and that wastewater network master planning is being progressed by MPDC to identify and plan for the necessary upgrade works in this regard.
- 22 I am also aware that Morrinsville is at present experiencing water supply use restrictions and that there are currently water supply infrastructure upgrades underway to supply additional capacity to the township.

Overview of Plan Change Proposal

- 23 I prepared a concept development plan for PC58 that shows the potential developed form of the site under the proposed General Industrial Zone. The concept plan layout was developed in conjunction with my civil infrastructure assessment and with consideration of the constraints and opportunities presented by the existing environment. In the process, I also collaborated with the wider project team engaged by the Stefferts, following the principles of integrated design. The concept design is the basis for the Avenue Business Park Development Area Plan (**ADAP**) which is proposed to be included in the Matamata-Piako District Plan to guide future development of the PC58 site.
- 24 In my view, and within the scope of my evidence, earthworks, and the extension (and upgrade) of public stormwater, wastewater and water supply infrastructure, will be required to facilitate the proposed development under PC58. I address these requirements further below.

Earthworks

- 25 Bulk earthworks operations will be required to deliver the landform suitable for industrial development.
- 26 I managed the development of a preliminary earthworks model, in conjunction with the concept development plan, to assess the feasibility of PC58 to accommodate industrial development.
- 27 In my view, the anticipated earthworks operations are feasible to create suitable industrial landform under PC58. A detailed earthworks design, developed in conjunction with further geotechnical investigations and assessment, can be carried at the future resource consent stage in accordance with relevant Council standards.

Erosion and Sediment Control

- 28 The implementation of erosion and sediment control practices will be required to facilitate the future anticipated earthworks operations associated with development of the PC58 site.
- 29 In my opinion, the erosion and sediment control practices are well-defined and regulated by both Waikato Regional Council (**WRC**) and MPDC. The design of these practices can be carried out at the future resource consent stage, and implemented throughout the duration of physical works, to appropriately control the discharge of sediment in accordance with best practice standards.

Stormwater

- 30 Future development under PC58 will increase the imperviousness across the land area leading to modified hydrology, and change the characteristics of stormwater runoff-bound contaminants discharged to the receiving environment.
- 31 To ensure that the condition of the receiving and surrounding environment, in the context of stormwater, will be maintained or enhanced, I developed stormwater management objectives and design criteria for PC58. The proposed objectives and design criteria are adhering to the relevant Council documents and standards, the Morrinsville Stream Catchment Management Plan, and are responding to the recommendations of the Ngāti Hauā Iwi Trust Cultural Values Assessment. The proposed specific design criteria are set out in the Infrastructure Report for PC58 and have been included in Appendix 9.6.4 of the proposed PC58 provisions.
- 32 I prepared a concept stormwater management solution, in conjunction with the concept development plan, to demonstrate that the set stormwater management objectives and design criteria can be feasibly implemented within PC58. This included estimating the size of the anticipated stormwater management reserve area which is indicatively shown on the ADAP.
- 33 In my opinion, the proposed PC58 provisions, in conjunction with the relevant Council documents and standards, can ensure that the future development under PC58 maintains or enhances the existing condition of the surrounding and receiving environment in the context of stormwater.

Resource consents will be required from WRC for stormwater discharge and stormwater will also be a key consideration for the subdivision consent that will be required from MPDC. A site-specific Stormwater Management Plan, demonstrating compliance with the relevant Council standards and the set stormwater management objectives and design criteria in detail, can be provided at the future resource consent stage.

Wastewater

- 34 PC58 will require a new wastewater connection to the existing public network.
- 35 I have carried out a preliminary wastewater assessment and identified two potential connection options. One option is a connection to the gravity reticulation constructed as part of Stage 1 of the Avenue Business Park development. Another option is a connection to the existing 200mm diameter gravity reticulation located at the intersection of Avenue Road North and Thames Street (State Highway 26).
- 36 In my view, due to the flat topography of the area and the relatively shallow existing wastewater network, PC58 will require the construction of a new wastewater pump station. An indicative location for this new pump station is shown on the ADAP.
- 37 In my opinion, the connection directly to the existing 200mm diameter gravity reticulation is the preferred option, as the connection to Stage 1 Avenue Business Park development will likely require an upgrade to the existing pump station on Avenue Road North and result in a serial arrangement of local pump stations.
- 38 To alleviate the development effects of PC58 on the existing wastewater network capacities, specific provisions have been proposed that limit the wastewater effluent disposal from future industries through the classification of 'Wet industry' as a Non-Complying Activity¹. Furthermore, the new wastewater pump station can be designed to further minimise the effects on the existing wastewater network capacities through storage and off-peak pumping.

¹ The proposed definition for 'Wet industry' includes any activity that requires more than 10,000 litres of water per day from the municipal supply and/or that discharges more than 10,000 litres of wastewater per day.

39 In my opinion, there are feasible engineering solutions to deliver appropriate wastewater infrastructure for PC58. The relevant wastewater considerations are addressed in the PC58 provisions through Appendix 9.6.4. I expect that the development area would be included in the MPDC development contribution policy to fund the necessary infrastructure upgrades on the existing wastewater network and cater for future growth in Morrinsville including PC58.

Water Supply

40 PC58 will require a new water supply connection to the existing public network.

41 I consider the main connection point to be the water supply reticulation that was installed as part of Stage 1 of the Avenue Business Park development. An additional connection can be made to the existing water supply network on SH26 to improve the overall network connectivity and resilience.

42 I developed a preliminary hydraulic model to assess whether adequate water supply pressures can be achieved for PC58, relative to the current pressures within the existing public water supply network. The model showed that the pressures are generally adequate but identified the potential that the high-lying areas of the PC58 site will be limited to a lower classification (FW2) under the New Zealand Fire Service Firefighting Water Supplies Code of Practice to that (FW3) required by the Waikato Regional Infrastructure Technical Specifications (**RITS**). In my view, specific building fire safety designs, such as providing additional onsite water storage and/or the implementation of sprinklers, can be implemented for these areas and can be addressed at the resource consent/building consent stage. Alternatively, existing infrastructure upgrades or the installation of a local water supply booster pump can be implemented to increase the pressures to RITS requirements.

43 To alleviate the development effects of PC58 on the water supply demand, specific provisions have been proposed that limit the public water supply intake from future industries and require the implementation of rainwater harvesting. 'Wet industry' is proposed to be a Non-Complying Activity and a rule is proposed requiring minimum storage of 10,000 litres of rainwater per site for grey water re-use.

- 44 In my opinion, there are feasible engineering solutions to deliver water supply for PC58. The relevant water supply considerations are addressed in the PC58 provisions through Appendix 9.6.4. I expect that the development area would be included in the MPDC development contribution policy to fund the necessary infrastructure upgrades on the exiting water supply network and cater for future growth in Morrinsville including PC58.

Response to matters raised in Submissions

Fire and Emergency New Zealand

- 45 Fire and Emergency New Zealand has raised concerns over the potential for water reticulation within the high-lying areas of the PC58 site being limited to a lower classification than required under RITS to meet the New Zealand Fire Service Firefighting Water Supplies Code of Practice (Code). They sought Council to limit development unless it is matched by appropriate water supply infrastructure and requested for the proposed PC58 provisions to include a specific requirement for all new buildings to be designed in accordance with the Code.
- 46 In my view, there are feasible engineering design solutions to either achieve the required FW3 pressure for the water supply network within the site, or to deliver site-specific measures that meet the necessary Code requirements including sprinklers, fire cell limits and on-site water storage. These assessments and designs can be carried out at the future resource consent/building consent stage. Appendix 9.6.4 of the PC58 provisions has been amended to specifically refer to water supply for firefighting as being a required design consideration with a note that refers to the Code and the potential for on-site storage requirements.

Peter Hexter

- 47 Peter Hexter has raised concerns around the existing stormwater drainage in the area, suggesting there is an opportunity for improvements, and requested a guarantee that no additional runoff would be added to the drainage system along the shared boundary with his property. He also suggested that the new infrastructure that will be provided to service PC58 could be implemented in a way that accommodates future potential growth in the area.

- 48 In my view, the development of PC58 will not increase stormwater runoff to Mr Hexter's property and will likely improve the overall drainage in the area through the implementation of stormwater management systems that will operate in accordance with the current Council stormwater servicing standards.
- 49 Currently Mr Hexter's property is located within the Rural Zone. In my opinion, in the absence of a clear initiative from MPDC to include Mr Hexter's land into a future growth area plan, it would not be feasible deliver infrastructure as part of PC58 that would cater for further potential expansion of the Industrial Zone. Any such infrastructure would also need to be funded by MPDC or other landowners who would benefit from it.

Warren and Sandra Devonport

- 50 Warren and Sandra Devonport have raised concerns around the proposed location of the Indicative Utility Reserve which is shown on the ADAP and the effects of the associated wastewater pump station on noise and potential wastewater overflow into their property. They have also raised concerns around the ability for the proposed 5m landscape buffer to achieve its intended outcomes should it incorporate a stormwater conveyance function. They have requested that any stormwater conveyance systems, such as swales, be located outside of the landscape buffer.
- 51 In my view, the Indicative Utility Reserve at its current location will have negligible effects on Mr and Ms Devonport's property. The design of the wastewater pump station in accordance with the RITS requirements will ensure that it is protected from flooding and has emergency storage to avoid wastewater overflows. In an unlikely event of the pump station overflow, I expect that the design of the pump station would ensure flows would be directed downstream of Mr and Ms Devonport's property. In my experience, wastewater pump station alarms are generally linked to an electronic control system and do not generate a noise on-site. The pumps are located underground with low operational noise and there is scope to provide additional noise suppression measures such as acoustic fences if required. I anticipate that the pump station maintenance operations will be infrequent and unobtrusive.
- 52 Following discussions with Ms Soanes (the Applicant's landscape expert), I agree that the stormwater conveyance systems, such as swales, would

be located outside the proposed 5m landscape buffer zone in order to achieve the intended function for both the swale and landscape buffer.

Response to matters raised in s42A Report

S42A Report

- 53 The s42A Report requests additional details on the relationship between the proposed landscaping buffer along the Rural Zone boundaries and the likely future landform following completion of bulk earthworks. The s42A Report states *“If 3m of fill is proposed to provide level building sites, this may establish additional building profile above any effective landscaping buffer and these effects should be addressed and assessed further”*².
- 54 In my Infrastructure Report, I have noted that the cut and fill depths will likely range up to 3m based on the preliminary earthworks model developed for the PC58 area. To explain this further, areas in fill are expected to be generally limited to a maximum depth of approximately 1.5m and will predominantly be over the low-lying portion of the site. Areas in cut will predominantly be over the high-lying portion of the site with a cut depth of up to approximately 3m. This is to create flat terraced platforms suitable for industrial lot development. An excerpt from the preliminary earthworks model reflecting this is shown in Figure 1.
- 55 I understand that Ms Soanes will comment on this in relation to the landscaping buffer in her evidence.

² Para 97 s42A Report.

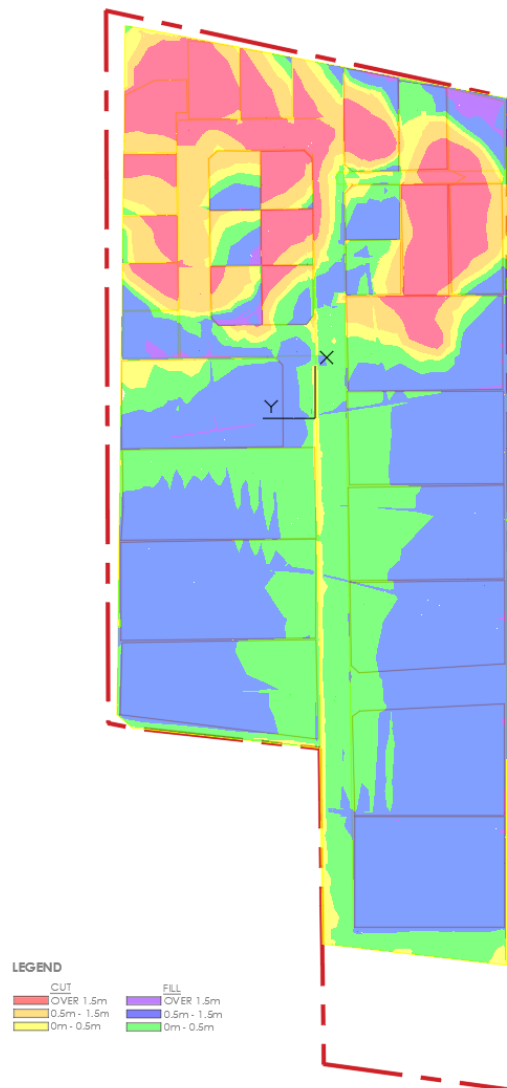


Figure 1 – Preliminary earthworks model excerpt showing likely cut and fill depths of bulk earthwork operations.

Statement of Evidence of Gunasantha Agas

56 In his evidence, Mr Agas prepared a summary of required three waters infrastructure implementation measures that will enable a feasible development within PC58. There are two specific matters that I would like to comment on.

Wastewater Infrastructure Connection

57 As presented in Paragraph 35 of my evidence, there are two potential options for wastewater infrastructure connection. Mr Agas considers that the connection the existing pump station on Avenue Road North should be the preferred solution due to the challenges associated with operation and maintenance of infrastructure within a state highway corridor. Although I remain of the opinion that the connection via SH26 is a better

engineering solution in this case, I do acknowledge the operation and maintenance difficulties raised by Mr Agas. In my view, it would not be prudent to decide on the final solution through the plan change process. A Best Practicable Option approach should be progressed at the future resource consent stage at which point a more detailed assessment of the relative merits of each option can be provided.

Indicative Utility Reserve

58 The Indicative Utility Reserve, which includes a wastewater pump station, has been located adjacent to the Indicative Stormwater Management Reserve. In my view, this represents the most practicable placement as both reserves are located at the topographical low point of the PC58 area, minimising the depth of infrastructure and the supporting bulk earthworks operations. I note that minimising the depth of wastewater infrastructure will also minimise the risk of groundwater infiltration into the system and reduce the overall wastewater flows in the long term. Mr Agas has highlighted that due to its proximity, the risk of wastewater contamination of the stormwater reserve from the pump station overflows is high. However, he notes that any such risks can be appropriately mitigated through the future detailed engineering design process. In my view, the future design of the pump station will be carried out in accordance with RITS which includes measures to minimise the risk of overflows. Therefore, I consider the risk of overflows to be low and no greater than any pump station commissioned within the region in recent years. I consider the Indicative Utility Reserve to be shown in the most appropriate location.

Summary

59 In my opinion, the development within PC58 can meet the required three waters infrastructure implementation measures presented by Mr Agas through the future resource consent process. Specific PC58 provisions through Appendix 9.6.4 have been developed in in this regard with the expectation that the wider three waters infrastructure upgrades will be funded through a development contribution policy.

Conclusion

60 Proposed PC58 seeks to rezone approximately 13.4 hectares land from Rural Zone to General Industrial Zone.

- 61 In my view, the anticipated earthworks operations are feasible to create suitable industrial landform and can be supported by appropriate sediment and erosion control practices.
- 62 In my opinion, there are feasible engineering solutions that will deliver the necessary three waters infrastructure to accommodate the proposed changes in land use.
- 63 In my view, the civil engineering related concerns raised in the submissions and s42A Report have been addressed through my Infrastructure Report and evidence.

A handwritten signature in blue ink, appearing to be 'Dali Suljic', written over a horizontal line.

Dali Suljic

Dated 14 February 2024