MEMORANDUM

PROJECT	Rolleston West Residential Subdivision Development	DATE	2 May 2024		
SUBJECT	Suitability Assessment for Fast	Suitability Assessment for Fastrack Application			
ISSUED BY	Tim McLeod	Senior Civil Engineer			
ISSUED TO	Tim Carter	Carter Gro	up Ltd.		
FILE / REF No.	15861				

Suitability of the Proposed Rolleston West Residential Subdivision Development

1. Introduction

This memo provides a summary assessment supporting the suitability of the proposed Rolleston West Residential Subdivision for development, considering aspects of infrastructure requirements, geotechnical conditions, and natural hazards. The insights presented herein are based on my technical assessments carried out during the recent Selwyn District Plan rezoning processes for the proposed development.

Infrastructure

We have, on behalf of the applicant, engaged in extensive discussions with the Council regarding the 3waters infrastructure required to service the site and undertaken preliminary assessments of the load demand for the proposed development. The scale of the proposed development provides a unique opportunity to masterplan the provision of infrastructure to the entire development area.

Council has confirmed the availability of the necessary infrastructure for potable water supply and wastewater servicing. Moreover, the Council is in the process of upgrading the township's water supply and wastewater treatment plant capacity. This proactive approach ensures that the infrastructure will continue to cater to the community's needs as it expands and can accommodate the demands of the Rolleston West Residential Development.

In the Rolleston area, stormwater is typically discharged directly to-ground using soaks pits, and our observation is that the development site is well-suited for this purpose. Effective stormwater management is vital for flood prevention, and the site's ability to manage this on-site is a positive attribute of the proposed development.

The site is strategically located and serviced in terms of electrical power and communications infrastructure, ensuring that the proposed development can be seamlessly connected to these essential services. Orion New Zealand have confirmed that planning work for network upgrades to service Rolleston West including a new zone substation are underway.



3. Natural Hazards and Land Contamination

The proposed development site has undergone thorough assessments for potential natural hazards and contamination issues.

The development area is not prone to any significant flood hazard risks, including those potentially induced by coastal processes or climate change. This is a critical factor in ensuring the long-term sustainability and safety of the proposed development.

The site also exhibits favourable geotechnical characteristics. Assessed as having TC1-like soils, the underlying land in Rolleston is stable and suitable for residential development purposes, with straightforward and cost-effective building foundation requirements and a low likelihood of liquefaction or ground damage in the event of seismic events.

There are no land contamination risks within the development area that would render residential development of the land inappropriate.

4. Conclusion

In conclusion, the proposed Rolleston West Residential Development site is optimally positioned in terms of infrastructure availability and natural hazard risk. The Council's confirmation of service availability and capacity, coupled with the site's favourable geotechnical characteristics, make it an ideal location for residential development.

Drawing from my experience and expertise in civil engineering and land development, I am confident that the proposed development can be successfully and readily implemented at this site, thereby making a positive contribution to the community and the district as a whole.

Tim McLeod

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