

DEV-OX-Attachment X-XX Swanannoa East Outline Development Plan (DRAFT)

Land Use Plan

The design and layout of development is dictated by the flowpaths crossing the Site from east to west where building will be restricted.

Movement Network

A pedestrian connection will be provided in accordance with CPTED standards connecting the spine road to the preschool adjoining to the west.

Future consideration needs to be given to further reducing the posted speed limits on Tram Road on the approaches to the development site.

Open Space and [Stormwater](#)

The site will be required to provide stormwater treatment for rainfall runoff generated during the first 25 mm rainfall depth (volume based treatment devices) or the 10 mm/hour rainfall intensity (flow based treatment devices).

The primary method of stormwater disposal in the area is via soakage into land. However, roof stormwater runoff will be directed to a detention storage tank which will have a restricted orifice outlet slowing the release of stormwater discharged to the downstream network with treatment required for driveway and road areas.

On-site stormwater management will be required to manage flows resulting from the proposed development. Flood hazard mitigation will be achieved by generally locating buildings away from or only on the edge of overland flow paths and setting building finished floor levels to have appropriate freeboard. The southern overland flow path provides key conveyance for floodwaters across the ODP area. Its extent and depth should be confirmed by survey during subdivision design. Lot sizes that intersect with this overland flow path are made as large as possible to create space between building platforms for floodwaters to flow, with building platforms located in a series aligned with the flow direction of the overland flow path. These building platforms should be pre-determined by the developer at subdivision stage to ensure there is minimal impact on the overland flow paths conveyance capacity.

Accessways shall be designed to ensure access to habitable dwellings is achievable in the 2% AEP flood event.

A water race is located approximately 260 m from the south boundary and flows in an easterly direction and up the eastern site boundary. A second water race flows in an eastern direction along the southern boundary. These shall be retained and naturalised with riparian planting.

[Water](#) and [Wastewater](#) Network

There are several wastewater treatment and disposal options available and further discussions are required with the Council as to which is its preference. These options are:

- Privately owned septic tank and pump which would discharge to a pressure sewer main located within the street berm.
- Low Pressure Sewer (LPS) similar to STEP, except do not provide primary treatment (solids settling).
- Gravity Sewer and Pump station;

- Onsite Wastewater Disposal.

Each property will be required to have an onsite potable water storage tank with sufficient capacity for 24 hours supply.

The potable water supply network would be designed in accordance with the WDC Engineering Codes of Practice and SNZ PAS 4509:2008 *New Zealand Fire Service Fire Fighting Water Supplies Code of Practice*. The firefighting water supply classification will be FW2 in keeping with a residential area and Fire hydrants would be placed at no more than 135 m intervals.