

Policy

PRESSURE SEWER SYSTEMS

TEAM:	Assets
RESPONSIBILITY:	Assets Manager
ADOPTED:	29 October 2020
REVIEW:	Initially three years then every five years or as required
CONSULTATION:	None required
RELATED DOCUMENTS:	Council documents <ul style="list-style-type: none">• Ashburton District Plan• Pressure Sewer Systems Customer Guide• Revenue and Financing Policy 2018• Trade Waste Bylaw 2013• Waste Water Drainage Bylaw 2016 Legislation <ul style="list-style-type: none">• Building Act 2004• Local Government Act 2002• NZ Building Code Clause G13• Public Works Act 1981

Policy objective

The objective of this policy is to detail the use of pressure sewer systems as a wastewater reticulation, the ownership of on-property equipment, responsibilities for installation and for operation and maintenance.

This policy should be read alongside the Council document *Pressure Sewer Systems Customer Guide*.

Definitions

Council means Ashburton District Council.

Dwelling has the same meaning as the definition of ‘residential unit’ as defined in the Ashburton District Plan.

On-property equipment collectively refers to a grinder pump, collection tank, electrical & control system and individual discharge pipe up to the boundary kit.

Pressure sewer system, for the purposes of this policy, is defined as: a wastewater reticulation system where individual pumps and associated collection tanks located on private property at

every residence or connection in the pressure sewer network convey wastewater to a common discharge point.

The term ‘Pressure Sewer System’ collectively refers to the on-property equipment and the conveyance pipework network located in public road reserves.

Public pressure sewer network refers to the conveyance pipework network located in public road reserves including all appurtenances, from (and including) the boundary kit to the common discharge point.

Single-property pumped systems and ‘pump ups’ are not pressure sewer systems for the purposes of this policy and are therefore excluded from this policy.

Pump ups are defined as properties that have (or are planned to have) public gravity wastewater reticulation at or adjacent to the property boundary, but for whatever reason cannot discharge to that gravity reticulation by means of a gravity lateral connection and require a pump to discharge wastewater to the gravity reticulation.

‘Smart’ control equipment refers to a control system that communicates to a centralised monitoring system (via the cloud) and allows for remote control and monitoring of each pump station and wider network.

Policy statement

1. Introduction

- 1.1 Pressure sewer systems are alternatives to conventional gravity sewer systems. There may be advantages to a pressure sewer system over a conventional gravity sewer system in areas with geotechnical and technical constraints.
- 1.2 Council’s preference is for gravity sewer systems to be utilised, however acknowledges there are circumstances where pressure sewer may be more appropriate.
 - 1.2.1 Where pressure sewer systems are utilised for residential development, Council must own and control the on-property collection tank, pump, and ‘smart’ control equipment;
 - 1.2.2 Where pressure sewer systems are utilised for commercial or industrial development, the private property owner shall own and operate all on-property equipment, excluding the ‘smart’ control equipment.
- 1.3 This policy should be read alongside the Pressure Sewer Systems Customer Guide, available on Council’s website ashburtondc.govt.nz.
- 1.4 This policy contains guidance for those wishing to apply, and details the roles and responsibilities of both Council and the property owner in the ownership, installation, and maintenance of pressure sewer.
- 1.5 Applications for the use of pressure sewer systems must be made in writing to Council’s Assets Manager who will assess them against the requirements in this policy. The form is included in the Customer Guide.
- 1.6 This policy only applies to systems approved after the commencement date of this policy, or as

otherwise determined by Council.

2. Use of pressure sewer

- 2.1 Pressure sewer systems may only be installed within the Wastewater Service Areas as defined in the Revenue and Financing Policy.
- 2.2 Applications for the use of pressure sewer will only be approved where there is a clear demonstrable benefit to Council of using pressure sewer in lieu of gravity reticulation, accounting for financial, technical (e.g. hydraulic), environmental and safety-related attributes. Assessments of the benefits of pressure sewer shall incorporate a whole of life assessment of costs and benefits.
- 2.3 Appendix One contains the criteria which will be considered when assessing applications. The process for assessment is detailed in the Customer Guide.

3. Ownership

3.1 Residential Development

- 3.1.1 Council shall own all on-property equipment, and all public pressure sewer network assets.
- 3.1.2 Delineation of private and Council ownership shall be at the point of entry of the household drain into the collection tank.
- 3.1.3 The property developer, body corporate and/or property owner must hand over to Council ownership of the equipment identified above as Council assets as vested assets at the time of subdivision or upon satisfactory completion.

3.2 Commercial / Industrial Development

- 3.2.1 The landowner shall own all on-property equipment excluding the 'smart' control equipment which shall be owned by Council along with the public pressure sewer network assets.
- 3.2.2 Delineation of private and Council ownership shall be at the property side connection to the boundary kit.
- 3.2.3 The property developer, body corporate and/or property owner must hand over to Council ownership of the equipment identified above as Council assets as vested assets at the time of subdivision or upon satisfactory completion.

4. Installation responsibility

- 4.1 The installation of on-property pressure sewer equipment shall be the responsibility of the private property owner, including where applicable, the property developer, builders or other entities deemed to be the private property owner's agent.
- 4.2 Only pressure sewer on-property equipment pre-approved by Council shall be installed and discharge wastewater to the public pressure sewer network.
- 4.3 All on-property installations shall include provision of smart control equipment compatible with Council's prevailing systems.

5. Operational and maintenance responsibility

5.1 The private property owner shall be responsible for:

- the cost and supply of power to the pressure sewer equipment;
- maintaining adequate access to the pressure sewer equipment for maintenance as required;
- complying with Council's Wastewater and Trade Waste Bylaw, and;
- complying with the pressure sewer equipment supplier's guidelines for use of the pressure sewer equipment, with specific regard to not putting prohibited items (including wet wipes and sanitary products) into the pressure sewer equipment, toilets, or down the sewer drain.

5.2 Operation and maintenance of Council owned parts of the pressure sewer system, including the on-property equipment (where applicable), will be undertaken by Council or authorised agents.

5.3 Council may monitor pumped volumes and/or pump run hours to determine appropriate use of the pressure sewer system. Council may make modifications to operating parameters as deemed necessary for efficient operation of the public pressure sewer network.

6. Private pump stations and pump ups

6.1 Private pump stations and pump ups, as per the definition in this policy, shall be treated as private and are not considered pressure sewers for the purposes of this policy.

7. Swimming pools and other high flow connections

7.1 Swimming pool and spa pool installations can produce high flows during filter backwash and cleaning cycles. The private property owner shall be responsible for designing, installing and maintaining a suitable means of ensuring that high flows do not inundate or otherwise adversely impact on pressure sewer on-property equipment.

7.2 Generally, it is expected that high flows will be attenuated in a buffer tank. Details of the method of attenuating high flows shall be submitted in writing to the Assets Manager, or approved representative. Approval from the Assets Manager, or approved representative, shall be obtained.

8. Number of connections to pressure sewer equipment

8.1 The number of connections of single residential lots to on-property pressure sewer equipment is limited to one.

8.2 For multi-unit title residential dwellings, commercial, industrial and other non-residential connections, the requirements for the on-property equipment will be determined on a case by case basis, by the Assets Manager, or approved representative.

8.3 The general principles for determining the requirements of non-standard, non-residential connections will be to use duplex or quad (2 or 4 pump) installations and to size the required operational and emergency storage volumes of the collection tank as appropriate to the specifics of the site.

8.4 The private property owner shall be responsible for determining the requirements of non-standard, non-residential connections, to the satisfaction of the Assets Manager, or approved representative.

9. Modifications to properties

- 9.1 Changes to wastewater flow from a property, for example due to changes in land use or building extensions, may require review and upgrade of the pressure sewer pumping unit and associated equipment. Also, this may require review of the wastewater development contribution.
- 9.2 Responsibility for meeting any costs associated with a review and any necessary upgrades or modifications lies with the property owner, and ownership of any modified or upgraded equipment is to be determined in accordance with Section 3.

Appendix One

Criteria which will be considered when assessing applications shall include, but not necessarily be limited to:

- Availability of an appropriate gravity solution e.g. can development be served by gravity;
- Number of network pump stations that might otherwise be required;
- Ground conditions, e.g. height of water table, presence of rock;
- Topography, e.g. relatively flat land, undulating etc.;
- Compatibility with existing servicing, e.g. impacts from the ultimate discharge;
- Population density / zoning (i.e. areas with a higher development density than currently permissible under Residential D are unlikely to be considered);
- Risk, e.g. operational risks associated with proposed infrastructure;
- Staging, and impacts from future growth;
- Whole of life cost analysis.

Note:- Council reserves the right to consider other factors relevant to the proposal when undertaking assessments of the acceptability of a low pressure sewer solution for a given development.