Pressure Sewer System Policy

1 Purpose

There are situations where conventional gravity sewerage may not be viable. As an alternative a Pressure Sewer System may be permitted. A Pressure Sewer System is defined as comprising of:

- An individual pumping unit located on each property for collecting and pumping sewage from an individual property
- Each individual pumping unit is connected to Council's pressure sewerage reticulation system
- A reticulation system capable of supporting a number of such individual pumping units and conveying the domestic sewage to the nominated discharged point in a time frame that minimises any odour generation. This reticulation system will be operating under pressure, not gravity
- Pumping units that have been specifically designated as pressure sewerage pumping units within the wider water industry
- The pump will also contain a grinder to minimise blockages in the pipe system, and an alarm system to warn the resident that the unit is not operating within pre-set parameters
- The sanitary drains (house drains) flow by gravity into the collection/pumping unit. From the collection/pumping unit, flows are then moved to the designated system discharge point via the collective pressure generated by pumps located in each unit
- Valving that allows the property to be isolated from the system and to also provide reverse flow protection, preventing flow from other properties entering into the individual system under pressure

Typically, pressure sewer systems require much smaller pipelines than conventional gravity sewerage systems, and are also laid shallower (generally following the contours of the land). Pressure sewer systems do not contain manholes or lamp holes as these facilities are not needed or suitable.

This policy documents Council's requirement in regards the installation of a Pressure Sewer System.

2 Policy

Council may permit the use of a Pressure Sewer System where they are fully justified. Council may place an additional sewer charge on these properties charge to cover maintenance of these systems.

2.1 When a Pressure Sewer System will be considered

Pressure sewer systems will only be considered where:

a) A traditional gravity sewer is not viable
b) It is being used to overcome specific site constraints (e.g. areas of hard rock, high water table or low lying land)
c) It is demonstrated to have a significantly lower total life cycle cost to Council, users, and the community
d) The designer provides a life cycle cost comparison between conventional sewer and the pressure sewer system that demonstrates the above point. And to be based on a minimum 50 year life cycle, and include the replacement/refurbishment of the pump well
e) Council sewerage strategy does not preclude the use

2.2 Requirements for a Pressure Sewer System

All pressure sewer systems must:

a) Be designed in accordance with this policy, Council's Pressure Sewer System Procedure and Pressure Sewer System Technical Specification
b) Provide 95% coverage of usable land on an allotment
c) Cater for a total and specific catchment only
d) Be designed and installed using only Council approved "On-Property" works (eg pumping units, boundary kits etc.)

2.3 Requirements and responsibilities of developers and property owners

1. Developers are required to:
   a) Provide a positive covenant on each property title relating to the Pressure Sewer System, as defined by Council
   b) Pay a bond to Council for the "On-Property" works for each allotment
2. Property owners are bound by all the conditions as set out in the Pressure Sewer System Procedure and the Home Owners Manual - Pressure Sewer Systems.

3 Definitions

Sanitary drains: pipelines installed by licenced plumbers which convey sewage from buildings to a connection point (also called house drains, house sewer or house service line)

Pumping units: this includes the pumps, storage vessel, alarm system, pump pressure switches, etc. and is installed on the property

4 Key Responsibilities

General Manager
To lead staff through delegated authority in their understanding of this Policy.

Director Sustainable Infrastructure and Group Leader Strategic Asset Management
To ensure the commitment made within this Policy is implemented and met.

Water Services Team Leader
To oversee compliance with, and coordination of the Policy.

Council Officers
To promote the use of, and knowledge of this Policy.

5 References

- *Local Government Act 1993;*
- *Local Government (General) Regulation 2005*;
- AS / NZS 3500 *National Plumbing and Drainage Code*;
- *National Construction Code 2016 – Volume 3 – Plumbing Code of Australia;*
- *Pressure Sewer System Procedures;*
- *Pressure Sewer System Technical Specification;*
- *Home Owners Manual - Pressure Sewer Systems;*
- *Pressure Sewerage Code of Australia WSA 07–2007;*
- *Water Metering Service Installation Policy;*
- *Backflow Prevention and Cross Connection Control Policy - Containment Only*

6 Details of Approval and revision

- **Approval date: 10/08/2017**
- **Responsible Section: Water and Sewer**
- **Superseded policies/procedures:**
- **Next review date: 10/08/2021**

Table of amendments

Amendment	Authoriser	Approval ref	Date

7 Appendices

- Pressure Sewer System Procedure
- Pressure Sewer System Technical Specification
- Home Owners Manual – Pressure Sewer Systems