

Council Policy



2.40 Pressure Sewerage Policy

*A printed copy of this policy may not be current as Council regularly reviews and updates its policies. The latest controlled version can be obtained from the Policy Register in the policy section of Council's intranet or by contacting Council's Coordinator Local Laws and Policy Development for a hard copy of the latest version. **A hard copy of this electronic document is uncontrolled.***

Where there is a delegation identified in this policy, the reader will need to confirm if an alternative delegation exists in any Register of Delegation. If there is a perceived conflict between the delegation/s identified in this policy and of those contained in a Register of Delegation, then the delegation/s in the Register takes precedence. The Chief Executive Officer will, if necessary, be the sole arbiter in resolving any issues of conflict.

1. Purpose

This policy provides a framework to guide development affecting new and existing sewerage infrastructure in relation to pressure sewers across Toowoomba Regional Council.

2. Scope and applications

The scope of this policy is limited to:

- Sewer usage
- Sewer applications
- Sewer connections
- Sewer extensions
- Sewer disconnections
- Design of sewer networks
- Design Approval Process
- Construction of sewer networks
- Easements
- Maintenance
- Ownership

These aspects are in relation to pressure sewer systems.

3. Content

3.1 Sewer Usage

3.1.1 Gravity sewer is the mandatory collection system unless it can be proven otherwise. Council may permit the use of pressure sewer systems where they are fully justified. Circumstances where pressure sewer systems can be considered are detailed in the current Water Services Association of Australia (WSAA) Code 07. Pressure sewer systems will only be considered where it is:

- Being used to overcome specific site constraints.
- Traditional gravity sewer is not viable.
- Represents a significantly lower cost alternative than conventional gravity sewerage systems.
- In smaller catchments where a Council pump station could be avoided.
- For servicing properties that are otherwise unsewered and rely upon on site treatment and disposal on soils that are unsuitable for the proposed lot sizes.

Council shall place an additional sewer charge on these properties to cover maintenance of these systems.

3.1.2 Pressure sewers may be used for non-residential lots where effluent quality and quantity is equivalent to residential. For large industrial or commercial development, pressure sewers will only be considered once alternative configurations have been eliminated.

3.1.3 Adoption of any pressure sewer system is required to demonstrate how it meets the requirements as set out in this policy.

3.2 Sewer Application

- 3.2.1 All applications are to be made in accordance with the Plumbing & Drainage Act 2002. Such an approval under this Act is deemed an approval under the Water Supply (Safety & Reliability) Act 2008.
- 3.2.2 All works involving building over or near Council infrastructure must comply with the Queensland Development Code Mandatory Policy 1.4 requirements and Council policies.
- 3.2.3 All work on existing infrastructure or live sewer works in relation to connections, relocation, renewal, maintenance and/or repair must be undertaken by Council or as approved by Council.

3.3 Sewer Connections

- 3.3.1 For subdivisions, the full cost of constructing new sewers, connecting new sewerage infrastructure and providing property connections shall be at the developers cost.
- 3.3.2 The full cost of providing property connections to existing infrastructure to service private property shall be at the expense of the property owner. All connections other than a standard connection will require a written quotation.
- 3.3.3 There shall be at least one system installed for each property. However, one system may be permitted to service more than one building within the property.
- 3.3.4 All requests for a connection will be considered by Council upon written request. The applicant is responsible for all costs in accordance with Council's fees and charges.
- 3.3.5 The on-property components will be constructed upon appropriate application by the property owner. The design and construction for the on property components will not occur until the property owner's building application has been approved and construction has commenced.
- 3.3.6 The upgrade of any electrical systems to cater for the increased load shall be at the property owner's expense.
- 3.3.7 If on-property components are required to be relocated for building extension purposes or for any other reason, the full cost of such works shall be met by the property owner. Written application must be made to Council for approval and a written quotation.
- 3.3.8 Strata / group titles
 - Existing lots will be provided one service (DN40) unless application is made to Council for a larger service and / or additional services.
- 3.3.9 Amalgamated lots
 - Obsolete services shall be disconnected. Only one service (DN40) to be connected unless application is made to Council for a larger service.
- 3.3.10 The resident's plumber will be required to connect to the Council provided Connection Point. That connection is to be made as per conditions in the plumbing approval.

- 3.3.11 If the on-property components are required to be larger than standard, the receiving system will be checked against design standards and upgraded appropriately at the cost of the property owner/developer.

3.4 Sewer Extensions

- 3.4.1 For subdivisions, the full cost of sewer main extensions is the responsibility of the developer.
- 3.4.2 The full cost of sewer main extensions to service private property shall be carried out at the expense of the property owner.
- 3.4.3 All work associated with relocation or renewal of sewer infrastructure shall be carried out by Council prior to the commencement of any building works by the developer. Relocation of sewer infrastructure or renewal and protection of sewer infrastructure as a result of development or subdivision shall be at developers or land owners cost.

3.5 Sewer Disconnections

- 3.5.1 Applications must comply with Plumbing and Drainage Act, 2002 and a Form 1 application is required for disconnection.
- 3.5.2 The applicant is responsible for all costs associated with the disconnection.
- 3.5.3 Disconnection of sewer services to allotments with an existing structure will not be approved.
- 3.5.4 Existing services shall be disconnected upon application to Council by the owner and payment of the disconnection fee as per Council's fees and charges.

3.6 Design of Sewer Networks

- 3.6.1 Design of pressure sewer systems shall be in accordance with this policy, the current Water Services Association of Australia (WSAA) Code 07 and Toowoomba Regional Council Addendum for WSA 07.
- 3.6.2 Any pressure sewer system design needs to include a flushing program that sets out the frequency of any flushing and the flushing points to be used, particularly covering the early stages of development. Accordingly any new development submission must include the frequency of flushing based on the number of houses connected at any time within the area being served. A table will be required to provide a guide to maintenance activities. If the flushing requirements for the development are too onerous, Council may refuse handover until they become less onerous.
- 3.6.3 A Radio Survey report shall be provided at the application stage(s) by the developer that includes but is not limited to:
- Hub locations.
 - Communication protocols.

3.7 Design Approval Process

- 3.7.1 The Proponent/ Developer (and their system Designer) of a pressure sewer system will need to go through the following two stage process to gain approval.
- Hold an initial meeting with Council to agree the key parameters for a study of the potential technologies that can be used to service the development.

The Developer and/or the developer's designer are required to bring the following to that initial meeting:

- A clear indication of the preferred type of pressure sewer technology for the particular application.
- A preliminary pressure sewer layout drawing.
- The Designer's preliminary notes, including preliminary estimates of actual pump heads likely to be incurred at the individual homes.
- A summary of capital and operational costs, clearly demonstrating that pressure sewer will be more cost effective than conventional gravity sewerage. All assumptions made in that process need to be identified.
- Details of the flows likely to be discharged into Council's sewerage system and these should also set out all of the stages of the particular development so that a discharge point can be determined.
- Details of the Designer's experience with pressure sewer systems, including examples of where they have designed these systems before.
- Adjoining land zonings.
- Topographic considerations, including catchment boundaries and contour information.
- Past and future development profiles, including land release projections, etc.
- Likely study area description.
- Any other information that may be pertinent to the proposed development and future surrounding developments.

Following the initial meeting, Council will indicate in writing if pressure sewer systems can be pursued in the Development Application.

- Second meeting with Council so that final approval to use pressure sewer technology in the Development Application will be given conditional upon:
 - The production of a final design that meets the design requirements, as set out in the design manual.
 - A hydraulic computer model of the pressure sewer system which identifies and confirms pipe sizes and details the anticipated pressures at the differing contour points for the development.
 - Proof that no odour will be generated in relation to sewage discharged from the pressure sewer system and further verification that the quality of effluent produced will not add difficulties to the treatment plant. This includes details of any in main treatment or odour suppression equipment.
 - Confirmation of the pumping units to be used in the development, and the number of spare units being provided. These units will need to meet the requirements spelt out in this policy.
 - Environmental impacts of the proposal.

- How the remainder of the subdivision is to be serviced, if the application is only for part of the development.
- Details of flushing points and the preparation of a flushing program during the growth of the development. The frequency of this flushing needs to be indicated in the form of a full flushing program.
- Details of pipes, valves and fittings.

Final approval will be given by Council in writing.

3.8 Construction of Sewer Networks

- 3.8.1 Construction of pressure sewer systems shall be in accordance with this policy, the current Water Services Association of Australia (WSAA) Code 07 and Toowoomba Regional Council Addendum for WSA 07.
- 3.8.2 The full cost of the pressure sewer system shall be met by the developer, including any changes required to the existing sewerage network. The developer will be required to contribute sufficient funds to Council for the construction of the unconstructed elements (the on-property components) based on a standard connection and the number of lots at development application stage.
- 3.8.3 The cost of upgrading the on-property components from that of a standard connection shall be met by the property owner e.g. to cater for swimming pools, spas or for any other reason.
- 3.8.4 Council will not accept handover of any unauthorised pressure technology.
- 3.8.5 The developer will be responsible for the construction and testing of hub locations and other requirements as stated in the Radio Survey. Demonstration that the system operates and communicates with Councils existing system is required at developers cost, including required upgrades.
- 3.8.6 On Maintenance Inspections and Maintenance Period.

Works approved for 'On Maintenance' will be placed 'On Maintenance' for a period of 12 months, or as otherwise advised by Council, from the date of formal notification by Council.

During this period, responsibility and liability for rectification of defects and for any damage that may occur, regardless of the cause, lies with the developer, not the Council. Steps must be taken by the developer to prevent damage occurring during the maintenance period including damage likely to be caused during on site construction.

Before reticulation pipelines can be accepted 'On Maintenance', testing certification for the following is required:

- Verification that the lines have been cleaned by the use of compressed air.
- Verification that the lines have been flushed clean (using water) and have been left full.
- Verification that the sealed pipes have been raised and pressure tested as laid out in WSA 07.

The developer will be responsible for the costs of the flushing program during the 'On Maintenance' period.

3.8.7 Council Off Maintenance Inspection.

The purpose of the 'Off Maintenance inspection' is to ensure that the constructed works have performed satisfactorily during the 'On Maintenance Period'. Any further defects identified during Off Maintenance Inspections are to be rectified at the developer's cost before works are certified as being Off Maintenance.

3.8.8 Defects in Live Sewers.

Any defects identified in live sewers during the Maintenance period are to be rectified by the Council at Developer's cost.

3.8.9 Within each specific development, the designer must stipulate and clearly identify what type (brand) of pumping units the design has been based upon. Once approved, only that type of technology will be used for the remainder of that development, unless it can be clearly identified and agreed upon by both Council and the applicant that the design is not suitable. Specifications and Guidelines covering the type of technologies allowed by Council can be obtained by contacting Council.

3.9 Easements

3.9.1 The installation of pipelines for sewage, apart from the standard connection, is to have easements created where they traverse private property.

3.9.2 The easement instrument must reserve the right for Council to enter the easement at any time without notice for the purpose of constructing, extending, maintaining, controlling, management of the work, inspecting or replacing.

3.9.3 Easements are to remain clear with no buildings or other structures.

3.10 Maintenance

3.10.1 In the case of a house blockage, it is the responsibility of the property owner to establish whether the blockage is in the private house drain within the property, in the sewer extension, or in the main line.

3.10.2 If the blockage is located within the property house drainage, the property owner must proceed at own cost. If the blockage is found to be in the standard connection or main line, rectification work will be carried out by Council.

3.10.3 Council will not accept responsibility for any costs incurred by the owner in relation to locating the blockage where the blockage was found to be located in the house drainage.

3.10.4 Each property will be entitled to one complimentary call out per financial year. Any additional call outs will be paid for at cost by the property owner. If the call out is due to equipment failure which has been determined to not be caused by the user, no additional fee will be charged. Servicing will be carried out by Council on an as needs basis.

If it is found that the fault is caused by the property owner's activities, Council will determine the appropriate fee.

3.10.5 The number of pressure sewer technologies available in the market is increasing. It is impractical for Council to hold spares for all of these. Council will at any time only

support a limited range of authorised technologies. Council should be contacted for authorised technologies.

3.11 Ownership

3.11.1 Council will own the system including the on-property components and will carry out maintenance as required. The property owner is to provide electricity to the unit and pay power costs.

4. Relevant laws

Local Government Act 2009

Plumbing & Drainage Act 2002

Water Act 2000

Water Supply (Safety & Reliability) Act 2008

5. Related policies/documents

1.01 Strategic Policy

2.01 Policy Framework

2.03 Water Infrastructure Policy

2.04 Waste Water Infrastructure Policy

6. Related forms

Toowoomba Regional Council Addendum to the WSA Code 07 for Pressure Sewerage

7. Definitions

Term	Definition
Boundary kit	Valve at the property boundary incorporating isolation valve, non-return valve and inspection tee piece.
Collection tank	On-property storage tank for the collection and storage of flows from the customer sanitary drain(s).
Control panel	The box incorporating the electrical controls and alarm components for the pump. Council – Toowoomba Regional Council (TRC).
Emergency storage	That capacity in the storage vessel above the high level alarm point.
On-property components	Includes the boundary kit, collection tank, pump unit, property discharge line and control / alarm panel.
Pump unit	Comprises of grinder pump used to pump liquid and macerated solids.
Standard connection	A DN40 property connection (or property discharge line) suitable for a single dwelling equivalent to 1 ET.

8. Policy details

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9. Revision history

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