Drains connected to vacuum sewerage systems

Plumbing Advisory Note - revised April 2023

This Advisory Note is to notify the plumbing industry that on-site plumbing installations connected to the Riverlea network utility operator vacuum sewerage system must comply with the requirements of AS/NZS 3500.2 - Clause 3.18

Installation of internal sanitary drainage pipework

Clause 3.18 includes the following installation requirements for sanitary drainage systems connected to vacuum systems:

- 1. The installation of a property inspection point raised to surface as close as possible to and upstream of the collection tank.
 - Riverlea have posted information on their website indicating the required location of the property inspection point is upstream of the SA Water Government inspection point (refer to figure 1).
- 2. The junction inlet to the inspection point shall be against the grade of the drain so that the rodding of the drainage pipe work is in the direction away from the infrastructure collection tank.
 - The Walker Corporation have advised the OTR that the junction directly off the collection tank is infrastructure and that this junction has been installed against the grade of the drain. The property inspection point upstream of the GIP should be installed as per the standard IP configuration.
- 3. Where there are multiple drains are connected to the collection tank, spill levels of the overflow relief gullies connected to each property shall be installed at the same level wherever practicable.

- 4. 100mm open vents shall be installed at the following locations:
 - a. Within 10 metres of the collection tank (Provided by the network utility operator as part of the network system)
 - b. At the upstream end of each on-site sanitary drain.

AS/NZS 3500.2:2018

Clause 3.18

Drains connected network utility operator vacuum sewerage systems

What is Network Utility vacuum drainage?

These systems can be used when traditional gravity sewer systems are not possible to install due to high ground water tables.

Each property's sewer will connect to a collection chamber (usually 4 dwellings to 1 chamber) that is then pumped to a central vacuum somewhere in the area. This allows for more flexible installation on the sewer network infrastructure.

Important information

Extra precautions should be put in place during the construction of a new building that is connected to a vacuum drainage system to avoid debris entering the collection tank in the street.

Debris in the collection tank can cause damage to the network and costs associated in repairs may be passed on to the builder.

Continued over page...





Notes

- 1. When used with open vents, air admittance valves may still be installed as additional venting in accordance with AS/NZS 3500.2
- 2. Jump-ups should be avoided.

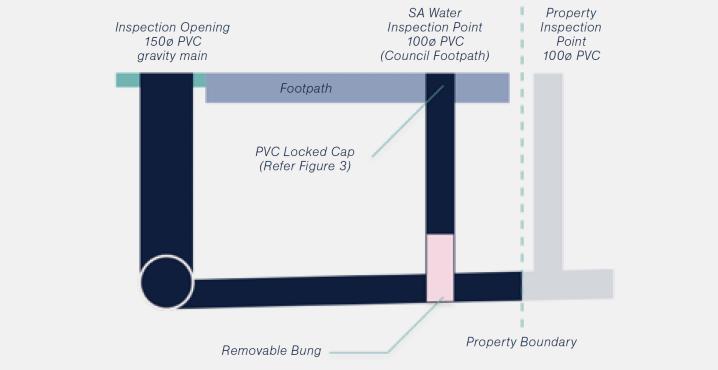


Figure 1: Sewer property connection cross section



Figure 2: Photo of SA Water IP Location

Images used with permission from the Reverlea development

Contact the Office of the Technical Regulator for more information

Online otr.sa.gov.au

Email otrplumbenquiries@sa.gov.au

Phone 1300 760 311

