

Pressure Sewerage System

Property Owners' Manual for
Industrial and Commercial Customers
and Conditions of Connection



City West Water
LIMITED

This manual is intended to assist you with the correct operation of the pressure sewerage system at your property.

It is suggested you store it in a safe place and refer to it when you are unsure of your sewerage system's operations. It is recommended that you familiarise yourself with this manual.

If you have any queries
please phone:
1800 132 642 (24 hours)

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1. Introduction

This document is the Property Owners Manual for the Pressure Sewer System (PSS) installed on your property. This information is provided to assist you with its safe, long-term and reliable

operation. This document needs to be read in conjunction with the document "Williamstown North Industrial Area Pressure Sewerage System Connection Information Kit".

2. The components of a pressure sewer system

For a schematic showing the location and relationship of onsite

components refer to the diagram on page 16 of this document.

2.1 Property boundary assembly

Under no circumstances should you attempt to operate the valves within the property boundary assembly. City West Water Limited or your nominated maintenance

service provider will operate these valves when required. The property boundary assembly is not to be covered.

2.2 Collection/pump unit

The collection/pump unit consists of a package of sewer components installed on a property, including a collection tank, grinder pump, level switches, pipe work, valves and other components within the unit. The grinder pumps break up solids (Section 6.2) and allow them to be pumped down the property discharge line and pressure sewer lateral into City West Water's pressure

reticulation sewer. The majority of this collection/pump unit is buried within your property, but the top needs to protrude from the ground. Covering the collection/pump unit may lead to system failures. At all times the collection/pump unit should protrude 120mm out of the ground. This will also allow repairs and service particularly if an emergency response is required.

2.3 Control/alarm panel

Power to the collection/pump unit is provided from your electrical distribution box and controlled via the control/alarm panel. The control/alarm panel also provides

an audible and visual alarm to provide you adequate warning that the grinder pump needs to be serviced. To turn off the audible alarm (refer Section 3.1)

2.4 Pressure sewer lateral

The pressure sewer lateral is the main that connects a pressure

reticulation sewer to a property boundary assembly.

2.5 Property discharge line

The property discharge line is the pressure sewer line located on private property that connects

the collection/pump unit to the property boundary assembly.

3. Emergency contact numbers

For repairs to your collection/pump unit, property discharge line, property boundary assembly and control/alarm panel, City West Water and your local maintenance service provider must be contacted. Call City West Water on 1800 132 642.

City West Water will attend the site to determine whether the problem lies within your system or our reticulation system and advise you accordingly. If the problem lies within your system you may attempt

to resolve it using information contained in this manual. If you cannot resolve the issue, you must contact your service provider to attend and carry out all necessary maintenance works.

4. What to do if the alarm sounds

If the control/alarm panel sounds you should take the following steps:

4.1 Turning off the audible alarm

Turn off the audible alarm by pressing the button on the underside of the control/alarm panel. This audible alarm does have a time switch and will only operate for a period of approximately 10 minutes. You cannot turn off the red light. It will be turned off when a fault is repaired and the collection/pump

unit is functioning correctly, or the pump lowers the water level in the collection/pump unit to below the alarm set point. Contact City West Water and your maintenance service provider and report that the alarm has been activated. You should then minimise wastewater generation during this time (See Section 4.3.).

4.2 Power failures and blackouts

If the alarm sounds immediately after a power failure or blackout turn the alarm off and wait for one hour after power has been restored before calling City West Water and the maintenance service provider. The alarm could sound when the power is restored

simply due to the fact that the sewage has built up to a high level whilst there has been no pumping during the blackout. You are advised to minimise your wastewater generation during power failures and blackouts.

4.3 Minimising wastewater generation

You can minimise wastewater generation when the alarm is on by:

- Keeping showers relatively brief
- Practice good water saving techniques such as not leaving taps running
- Do not use washing machines or bucket the water from the tub onto the lawn as a short-term measure.
- Do not use automated dishwashers

Minimising wastewater generation does not mean you cannot use the system. Toilets can still be flushed and normal cooking can proceed.

4.4 Frequent sounding alarms

If you notice that the alarm sounds frequently and then turns off, investigate. Determine if there is any sudden discharge. If the alarm happens when it rains, it could be that rainwater is entering the collection/pump unit. This should not happen

and you are asked to report occurrences to City West Water. In the meantime keep using your sewerage system as normal and switch off the audible alarm when it occurs. The light will go off when there is no longer an alarm condition.

5. Repairs to the collection/pump unit

Ensure that your nominated maintenance service provider has 24 hour access to the pressure sewerage system located within the property to arrange the following:

- (a) all repairs to the collection/pump unit, property discharge line, property boundary assembly and control/alarm panel
- (b) repairs on the owners sanitary drain.

5.2 Maintenance and repair costs

Maintenance of the PSS within the property will be at your full cost.

5.3 Repair arrangements

Repairs to the pressure sewerage system located within the property are usually simple. In many cases, repairs should take around one hour to complete. If additional complications are identified, this

estimated repair time may be extended. It is recommended that you confirm repair times with your nominated maintenance service provider.

5.4 Burst pipes

If the property discharge line bursts, (this will become evident by wet ground or water erupting from the ground), you should immediately contact your nominated maintenance service provider and turn off the power to

the grinder pump. This is achieved by turning the switch (circuit breaker) off in your electrical distribution box. You should then minimise wastewater generation as previously suggested in Section 4.3.

5.5 Wet areas around the collection/pump unit

If you notice that the ground around the collection/pump unit is wet, you should contact your

nominated maintenance service provider and have them inspect the site.

6. Special precautions

6.1 Unoccupied property

When you are going on holidays or no one will be at your property for more than one week, the collection/pump unit will need to be flushed out prior to the absence. This will ensure that it does not become a source of odours. It is suggested that:

- You run clean water into the collection/pump unit until the pump activates and runs for about 30 seconds (typically

this can be achieved by filling up a bathtub and then releasing it into the sewerage system). After that time, turn off the water and allow the grinder pump to run until it shuts off automatically.

- Do not turn off the power to the collection/pump unit. If the unit were to be turned off this would not allow the alarm to function.

6.2 Substances that should not be discharged into your Pressure Sewerage System

Certain substances are not to be discharged into this or any other property sewerage system under any circumstances. To do so may result in a blockage of the property discharge line or pressure sewer lateral. These include:

- Cooking oil and fats
 - Glass
 - Metal
 - Seafood Shells
 - Rocks
 - Nappies, socks, rags or clothes
 - Chemicals*
 - Plastic Objects
 - Paints (Water soluble and oil based)
 - Sanitary Napkins or Tampons
 - Kitty Litter
 - Flammable Materials
 - Lubricating Oil and/or Grease
 - Petrol, Diesel
- * Other than those used in normal domestic product such as dishwashing powder, detergents and hair dyes.

If new or additional trade waste is to be discharged as part of the works, then you may be required to enter into a Trade Waste Agreement with City West Water.

If you are in any doubt about any substances entering the sewerage system you should call City West Water on 1800 132 642.

7. Frequently asked questions

7.1 Roof and rain water

These collection/pump units have not been designed to accommodate rain water, which should never be put into any sewerage system. Rain water entering the system will lead to alarms being tripped and possibly causing the collection/pump

unit to overflow. If you notice the alarm regularly coming on after or during rain you should contact your licensed plumber or your nominated maintenance service provider, who will investigate the situation. Refer to Section 4.4.

7.2 Building modifications and landscaping

7.2.1 Extensions to the property

The property discharge line can be moved to accommodate extensions to the building/factory or the construction of a shed etc. When contemplating any modifications to the building/factory, the owner must contact City West Water. There can be no

building over the collection/pump unit property boundary assembly or the property discharge line. If you are planning to build within one metre of the collection/pump unit or pressure sewer lateral you will need to contact City West Water.

7.2.2 Other buildings on the property

Where permitted by local council or City West Water it may be possible to service additional small buildings from a single collection/pump unit. This is

dependent upon the nature of the land. The property owner should seek advice in the planning stages of their development.

7.2.3 Landscaping

Landscaping over the property discharge line and pressure sewer lateral is permitted, but the collection/pump unit lid is not to be covered. If the property discharge line requires repairs your nominated maintenance service provider will need access to this pipeline. This may mean that landscaping will need to

be removed. In this case your nominated maintenance service provider should endeavour to minimise disruption to the garden. It is also important that sufficient space is left to access the collection / pump pit unit, pressure sewer lateral and other components, in case maintenance is required.

7.2.4 Garages, car parks and garden sheds

Ensure that temporary or permanent structures are not built over the property discharge line or pressure sewer lateral. A minimum horizontal clearance of 600mm is required to either side of the property discharge line and the pressure sewer lateral and minimum of one metre clearance

from the collection / pump pit unit. You are to ensure no additional loading is placed on the pressure property discharge line, sewer lateral or collection / pump pit unit. If you are planning to build within one metre of the collection / pump pit unit you will need to contact City West Water.

7.2.5 Property parties and additional visitors

Sudden increases in wastewater discharge loads on your collection / pump pit unit through high water usage will not impact

upon the pressure sewerage system. However the unit might have to pump more frequently.

7.2.6 High water consumption for manufacturing processes and discharge of trade waste

If you are contemplating increasing your water consumption, it could result in large volumes of sewage being discharged quickly into the collection / pump unit. In some instances the rate of discharge might be more than the grinder pumps capacity. If this were to occur the alarm would sound until the grinder pump catches up. An additional

collection / pump pit unit that regulates inflow into the collection / pump unit can be installed to prevent the alarm sounding. Your appointed Consulting Engineer will advise you if this is required.

Your collection tank is required to be designed to provide emergency storage for a minimum of 8 hours.

7.3 Power supply

You are responsible for providing and maintaining the power supply, independent circuit breaker and power cable to the pump control/ alarm panel for the Pressure

Sewer System on your property. You are also responsible for the payment of power usage charges associated with this collection / pump pit unit.

7.4 Depth of sanitary drains

There is a limit to the depth of sanitary drains that pressure pump units can control.

The plumber will need to confirm with the pump supplier the maximum permitted depth of the sanitary drain.

Pressure Sewerage Systems

8. Conditions of Connection

1. Definitions

In these conditions:

connecting works means all parts of:

- (a) the sanitary drains between any fixtures or appliances on your property and the collection pit and grinder pump (subject to item 5.5)
- (b) the collection pit and grinder pump
- (c) the pressure pipeline between the grinder pump and our Property Boundary Assembly
- (d) the electricity control panel for the grinder pump
- (e) the electrical wiring between the main electrical switchboard on the property and the grinder pump in the collection pit

property boundary assembly means the pipes, pit and fittings located 1 metre inside your front property boundary which we use or intend to use to convey sewage from your connecting works into our Pressure Sewer System pipelines.

we, us and **our** refer to City West Water.

you and **your** refer to the owner or occupier of the property connected, or to be connected, to our Pressure Sewer System.

2. Customer Charter

Our Customer Charter is available at our website www.citywestwater.com.au

3. Design

3.1 The Pressure Sewer System shall be separated into two components, an **In-Street Reticulation** component and an **On-Property Connection** component.

3.2 **In-Street Reticulation** Component

For this scheme the **Reticulation Pressure Sewer network** to the property boundary assembly on the property will be designed and installed by City West Water.

3.3 **On-Property Connection** Component

You are required to engage a licensed plumber who will undertake the design of your On-Property Connection Component. The design will form part of the plumbing application.

The On-Property design concerns the design of the property service connection upstream of our property boundary assembly and includes:

- (1) collection pit
- (2) grinder pump
- (3) electrical panel and alarm
- (4) the pressure pipeline between the grinder pump and our property boundary assembly
- (5) any additional gravity property sanitary drain discharging into the collection tank
- (6) additional detention tank (if required)

This will be carried out after the in-street reticulation works have been commissioned.

- 3.4 The **connecting works** must thereafter be operated and maintained in accordance with good practice any specifications we provide to you.

4. Licensed Plumber and Electrician

- 4.1 All plumbing work of a particular class or type referred to in the Plumbing Regulations 1998 which these conditions require to be undertaken must be done by a plumber licensed by the Plumbing Industry Commission to carry out work of that class or type who is also authorised to issue certificates of compliance (plumber).
- 4.2 All electrical work which these conditions require you to undertake must be done by an appropriately licensed electrician who is also authorised to issue certificates of compliance.

5. Installation

- 5.1 You must not begin to install the **connecting works** until we have authorised you to install them. A plumbing application needs to be lodged for City West Water's assessment.
- 5.2 The connecting **works** must be installed by a licensed plumber and appropriately qualified electrical contractor.
- 5.3 You must not, at any time, connect any additional fixtures or appliances to the **connecting works** which were not provided for in the **on-property connection** design, without first obtaining our consent.
- 5.4 If an additional property boundary assembly is required, we will arrange for it to be installed at your cost.
- 5.5 You must arrange for installation of the connecting works, at your cost, in accordance with the plans authorised and these conditions.

- 5.6 The connecting works must be installed so that they comply, in all respects, with the:
- (a) Plumbing Regulations 1998 (Vic)
 - (b) Water Industry Regulations 2006 (Vic)
 - (c) *Building Act 1993* (Vic)
 - (d) Relevant AS/NZS series of standards applicable to sewer connection branch and connecting works from time to time
 - (e) WSAA Pressure Sewerage Code of Australia WSA 07-2007
 - (f) City West Water Supplement to the WSAA Pressure Sewerage Code of Australia WSA 07-2007
- and any other technical requirements which we specify.
- 5.7 If any part of the connecting works are to be installed outside the boundaries of your property, you must obtain, at your cost, any permit or authorisation (including any permit to open a road) which may be required under any law, to undertake the necessary work.

6. Compliance with laws and directions

You must, at your cost, comply:

- (a) with any directions we may reasonably give you, from time to time, about installing, operating, maintaining, repairing or replacing the connecting works
- (b) with the installation and operating requirements of the manufacturer or supplier of any component of the connecting works
- (c) with the requirements of all laws and lawful directions relating to some or all of the connecting works.

7. Property Service Plan

You (or your plumber on your behalf) must lodge an "as constructed" property service plan of works with Casey Inspection Services or any other nominated representative of City West Water services, at the address we will give you when you apply to connect your property within 7 days after the connecting works have been completed and a Plumbing Industry Commission certificate of compliance issued.

8. Building near or over our assets

- 8.1 In addition to any offence which you may commit under the *Water Industry Act 1994*, you must not, without our separate permission, cause or permit any structure to be built, or any filling to be placed:
- (a) within one metre laterally of any of our works
 - (b) on land over which an easement exists:
 - (i) in favour of us
 - (ii) for water supply or sewerage purposes.
- 8.2 You are required by law to remove any such structure or filling if we ask you to, within such time as we determine.
- 8.3 If you do not remove the structure or filling within the time we have determined, we have legal power:
- (a) to enter your land and remove the structure or filling; and
 - (b) to recover the reasonable costs we incur from you.

9. Operation and maintenance

- 9.1 We will keep any property boundary assembly in repair and good working order, at our cost, except for any damage caused by you.
- 9.2 You must operate, maintain, repair and, if necessary, replace the connecting works, so as to ensure that they are in good working order, in accordance with any operational requirements of:
- (a) the manufacturer or supplier of any component of the connecting works; and
 - (b) any reasonable operating requirements of which we notify you.
- 9.3 You must ensure that there is a continuous supply of electricity to the grinder pump.
- 9.4 If we require you to, you must install a generator temporarily to supply electricity to the grinder pump during any interruption to the supply of electricity.

10. Notification of failures

You must notify us immediately on 1800 132 642 if either:

- (a) the property boundary assembly or
 - (b) the connecting works,
- cease to function properly.

11. Notification of changed circumstances

You must notify us immediately on 1800 132 642 if:

- (a) you are unable to fulfil any of your obligations under these Conditions
- (b) you alter any part of the connecting works.

12. Discharging trade waste prohibited

By law you must not discharge trade waste into our sewer, or a sanitary drain connected to our sewer, unless you have separately obtained a Trade Waste Agreement or Trade Waste Consent from us.

13. Amendments

13.1 We may amend these conditions by writing to you. We may do so if we consider that any change, or proposed change, to relevant laws or our regulatory obligations require an amendment to be made.

13.2 We may also amend these conditions from time to time if we consider that it is necessary to:

- (a) ensure that we are able to continue to comply with any law relating to health, safety or the environment, or our agreement with our bulk supplier of sewage transfer and treatment services or
- (b) manage or eliminate the risk of a significant effect on:
 - (i) the health or safety of anyone or
 - (ii) any part of the environment or
 - (iii) any of our works.

14. Indemnity

14.1 You must indemnify us against:

- (a) all damages, losses, penalties, costs and expenses whatsoever, which we suffer or incur and
- (b) all proceedings, prosecutions or demands brought or made against us by anyone,

as a result of you failing to perform any of your obligations under these conditions, except to the extent that the failure has been caused by our negligence.

- 14.2 You must not bring any proceeding or make any demand against us for any damage, loss, cost or expense of any kind whatsoever which you incur, directly or indirectly, as a result of us amending these conditions under item 9.
- 14.3 You must pay us any costs we reasonably incur in:
- (a) making good any damage to our assets or works directly or indirectly caused by your failure to comply with these conditions; and
 - (b) inspecting our assets or works to see if such damage has been caused.

15. Our plans

If we supply you with any plan with these conditions, or for the purpose of a connection being made to our assets:

- (a) we do not represent that the plan, or any of the information it contains, is accurate, adequate or complete
- (b) you must indemnify and release us from any liability which might otherwise arise in relation to any such plan and
- (c) you (or your plumber on your behalf) must :
 - (i) make independent inquiries about the location of each asset and boundary and about each relevant dimension shown on the plan and
 - (ii) prove the location of every asset on the land by hand, before commencing work.

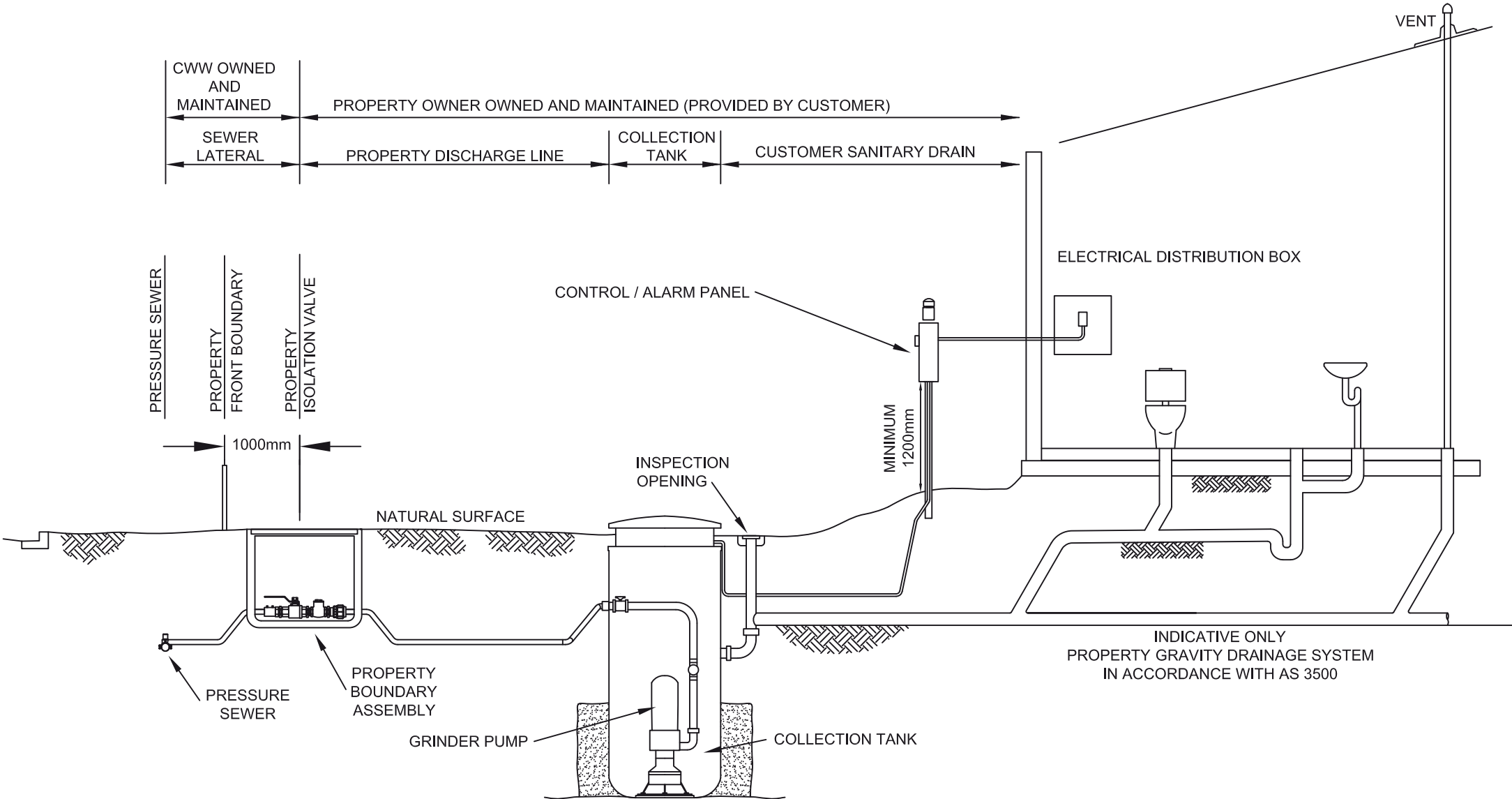
9. Glossary of terms

This document refers to a number of terms you may not be familiar with. They are explained here.

Collection/ pump unit	A package of sewer components installed on a property, including a collection tank, grinder pump, level switches, pipework, valves and other components within the unit
Collection tank	That part of a collection / pump pit unit which collects and stores flows from the customer sanitary drain(s)
Control/alarm panel	The power and control panel that controls the operation of the grinder pump and which contains audible and visual alarm components. The panel also contains a dedicated circuit breaker for power disconnection
Customer sanitary drain	A gravity pipeline installed by a licensed plumber within a property boundary and operated by a property owner to carry sewage from buildings to the connection point, constructed to plumbing code standards. Also called house drain, house service line, house sewer, sanitary connection, property drain, or sanitary drain
Detention Tank	An auxiliary collection tank (if required) designed to provide emergency storage for flows from the customer sanitary drain(s).
Electrical cable	A cable that delivers power from the building electrical distribution box to the control/alarm panel
Electrical distribution box	A board that disseminates the main power supply to the property and is the primary source for metering

Grinder pump	A mechanical device designed to pump liquid and in the process reduce the size of solids contained in the sewage
Pressure reticulation sewer	A common main which transfers sewerage from a number of properties to a downstream point in a Pressure Sewer System
Pressure sewer lateral	A main that connects a pressure reticulation sewer to a property boundary assembly
Pressure sewer reticulation	Pressure sewerage system – see below
Pressure sewerage system	A complete system wherein partially treated sewerage is conveyed under pressure generated by pumping units located on each property to a sewerage treatment facility or another sewerage system
Property boundary assembly	A fitting assembly that connects a pressure sewer lateral to a property discharge line and provides a means of isolating pressure sewer reticulation from a property discharge line and associated collection/pump unit
Property discharge line	A pressure sewer line located on private property that connects the collection/pump unit to the property boundary assembly
Pump control/ power cable	A cable that delivers power from the control/ alarm panel to the grinder pump located within the collection tank and transmits control signals between the panel and the pump

10. Schematic of typical on property components
– industrial/commercial



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