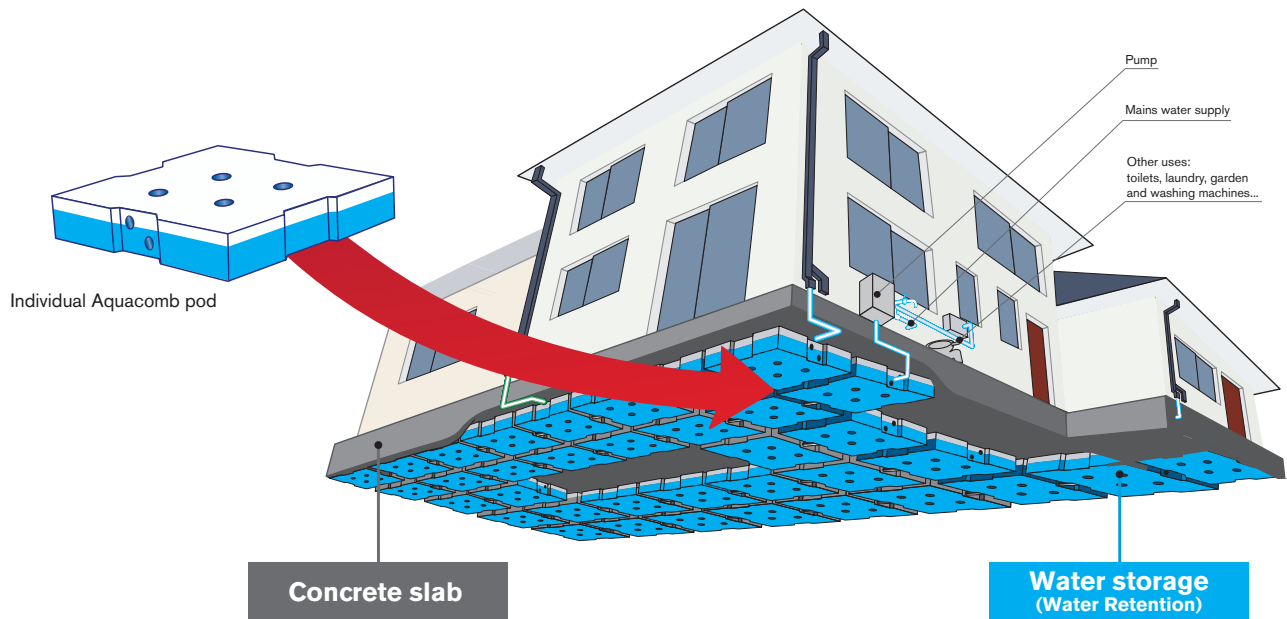




Pump Installation & Commissioning Plumbers Guide



This document is prepared for use by a qualified plumber, and individual installation plans should be referred to when necessary.

Before You Begin

1. Installation of Aquacomb® is site-specific. Ensure you have the correct and relevant Aquacomb plans/schematics for the installation.
2. Ensure potable water is available to fill up at least 30% of the system after installation. For example, if the Aquacomb system is designed to manage 10KL, at least 3KL should be available for commissioning purposes.
3. Refer to thr pod layout plan and

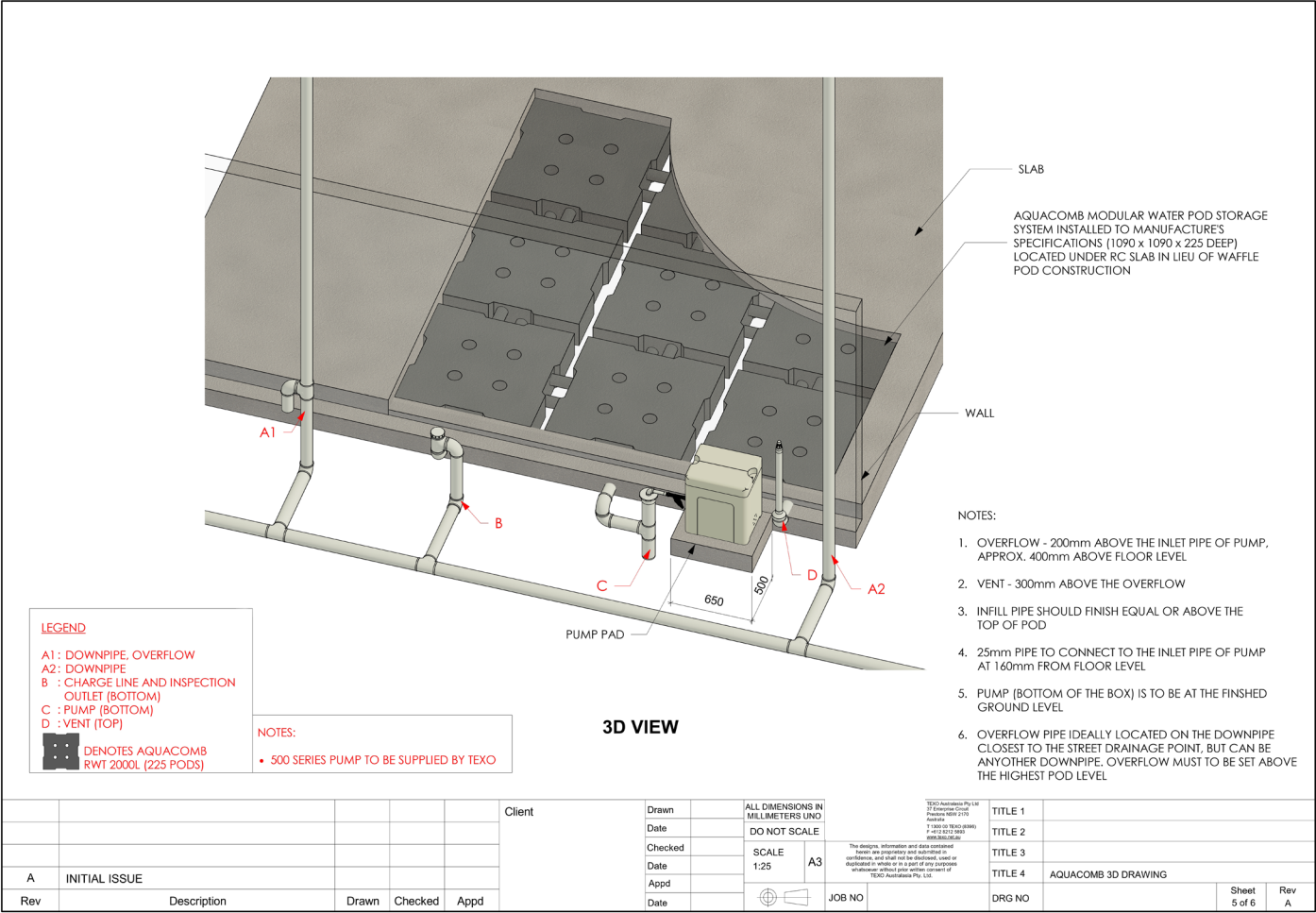
a. Identify all pipework connections

b. Ensure that the inground pipework and the overflow are positioned as per the plan

c. Ensure the following are free of debris

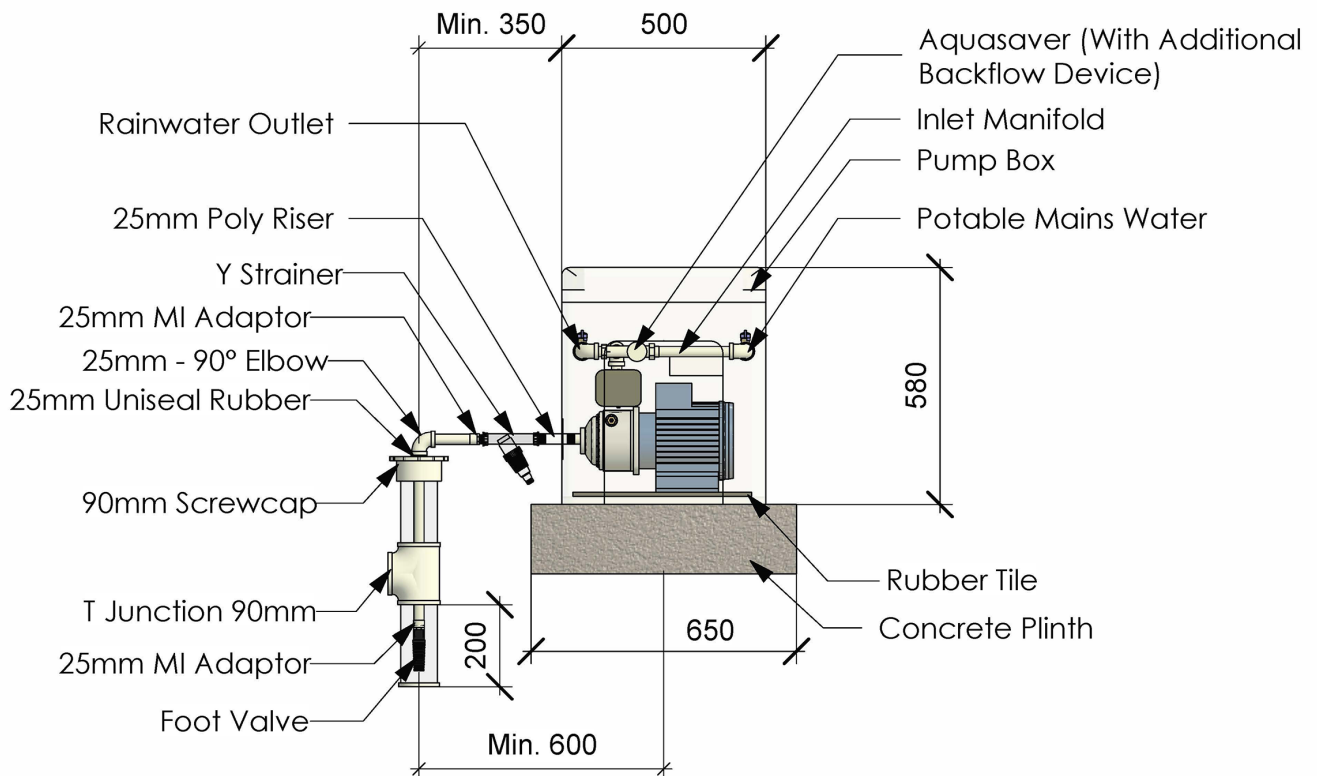
i. inspection opening/charging point

ii. vent lines



Pump Installation

1. Check your plinth and pipework measurements are correct, ensuring the orientation of your change over water supply feed (mains) is correct, relevant to the suction line/pump-well.
(Right or left-handed)
2. Install pump box/housing by drilling out the appropriate size holes for the water and power supply. Ensure you have the pump box in the correct orientation before drilling holes.
3. Place the pump in the box/housing and connect the inlet manifold to the water supply pipework using approved water connections. (Connections must be made by a licensed plumber.)
4. Attach the 25mm poly riser and filter assembly to pump inlet.
5. Measure depth of pump-well to horizontal centre of filter assembly cut the appropriate length of 25mm pressure pipe allowing for 25mm elbow, foot valve and 25mm M.I connector (do not glue the M.I adaptor/foot valve to pipe dropper yet).
6. Cut the 90mm pump-well riser allowing for the 25mm elbow and top assembly of pump-well. Glue the 90mm coupling to pump-well riser.
7. Push your 25mm pipe dropper through the uni-seal rubber (lubricate the uni-seal with a silicone "o" ring grease) in cap assembly then glue the M.I adaptor/foot valve to pipe dropper. Screw the 90mm cap assembly with pipe dropper to the 90mm coupling on the pipe-well.
8. Measure and cut 25mm horizontal pipe between elbow and 25mm M.I adaptor and attach to filter assembly. Glue all fittings.



Pump with Suction Lift (Left-Handed)

Diagram for illustrative purposes only.

Pump Commissioning

1. Prime Pump. Remove prime screw from pump housing. Invert the "Y" strainer and remove bottom cap. Fill the assembly with water until water comes out of prime screw point. Replace prime screw and tighten. Replace bottom cap on "Y" strainer and revert strainer to correct position tightening the unions.

Make sure that the system is approximately 30%* full of water as a minimum for commissioning purposes. You can fill the system with fresh mains water via a hose through the vent line, inspection opening, down pipe or the pump-well.

*Indicative only. Please refer to individual installation plans.

2. Test water connections on Manifold assembly.
3. Turn off the potable water supply ball valve on manifold.
4. Open a rainwater hose tap on house.
5. Plug in pump and switch it on. Water should begin to be sucked and pumped to hose tap. Wait for full flow of water and the elimination of air in system then shut off hose tap. (If pump turns off before full flow of water is achieved. Switch the pump off and on again to repeat initial prime. If prime has not been achieved, check that all suction supply line joints are leak free. Air must not enter the suction pipework.)
6. Turn on the hose tap again. Pump should turn on at the detection of a pressure drop. Turn off the hose tap, and pump should run for 5-20 seconds depending on size of rainwater service, until pressure has built up sufficiently. Repeat this a few times to ensure correct operation.
7. Turn on the potable water mains supply ball valve on manifold.
8. Checking for mains change over. While hose tap is on and pump is running, switch the power supply off to pump. The water flow should not be interrupted but a pressure drop might be noticed. Then turn the pump on at power supply. Pump should then run. Repeat this a few times to ensure correct operation.
9. Access the house and flush all toilets and any fixtures using rainwater to eliminate air in the system.
10. Commissioning is now complete. Leave all valves on and power on pump assembly and check for any leaks. Screw pump box lid onto pump box.

Water Quality Recommendations

As with any water management system, the quality of the water entering the system will determine the level of cleaning and service required by the owner in the long term. It is recommended, (as with any rain water collection system) that leaf diverters, first flush devices, leaf-gutter guards and charged line flush point pit be specified and installed into each system.

A well designed stormwater system utilising charged lines will incorporate a flush point in a pit. This is recommended for the maintenance and cleaning of gutters and stormwater drainage. All stormwater drainage must be installed with grade to this point.

A good design will incorporate these features as standard items, ensuring trouble free usability over many years.



Gutter guard



First Flush and Filter



Leaf Diverter

Pre-System Filtration

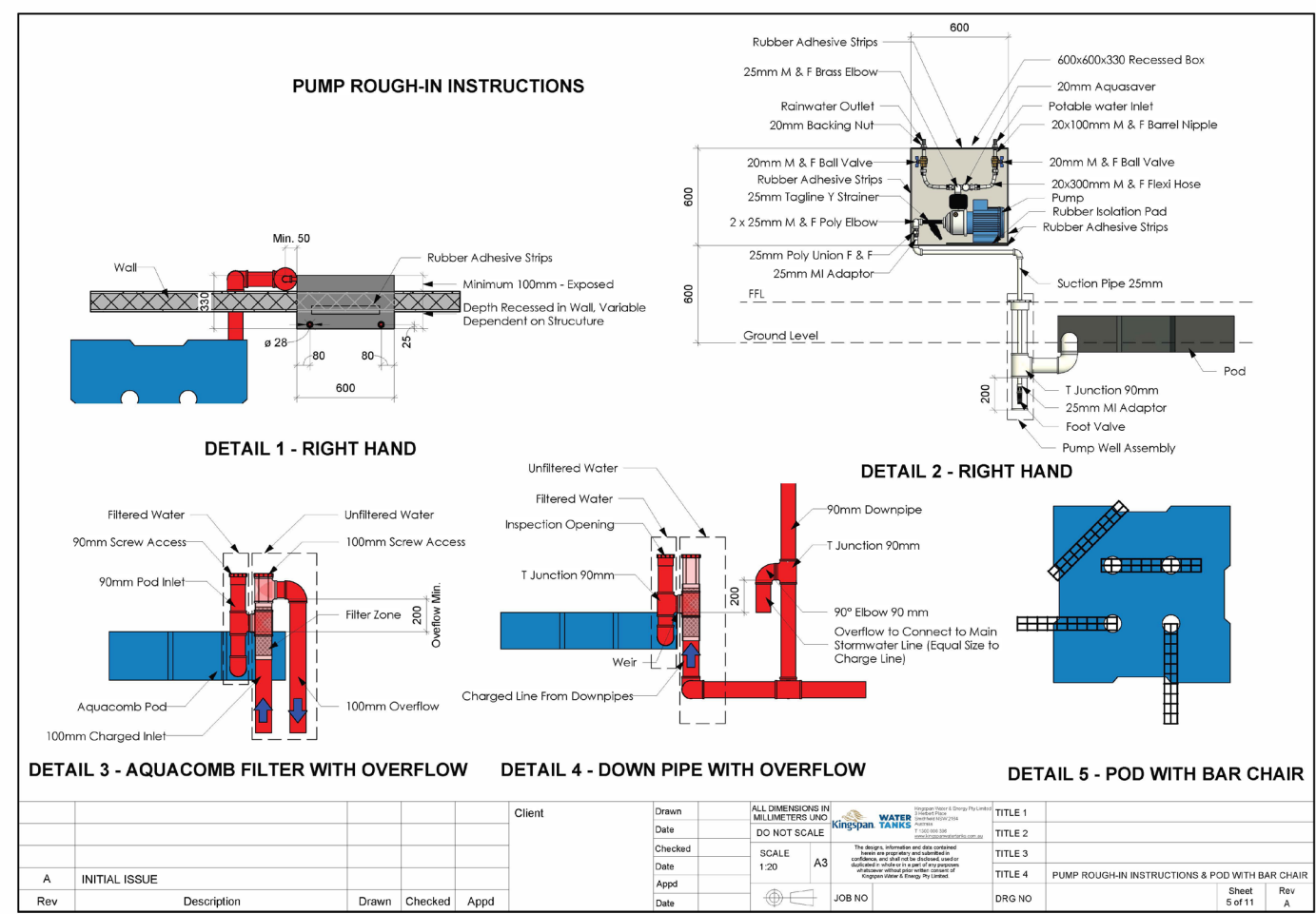
A 1mm aperture screen filtration must be provided at the inlet to the Aquacomb® pod system to prevent the ingress of organic material, minimising the requirement to clean the Aquacomb® pods. This is also a warranty requirement. The filtration is in addition to recommended rainwater harvesting protections at the downpipe and the recommended charge line flush point. The Aquacomb® pods are designed for inspection and cleaning as an additional failsafe.

Backflow Protection

The Aquacomb® system is an in-slab rainwater storage system. Backflow protection is required for connections with the mains water system in accordance with plumbing regulations. The installing plumber must ensure the installation and any backflow prevention devices comply with current regulations.

Appendix 1

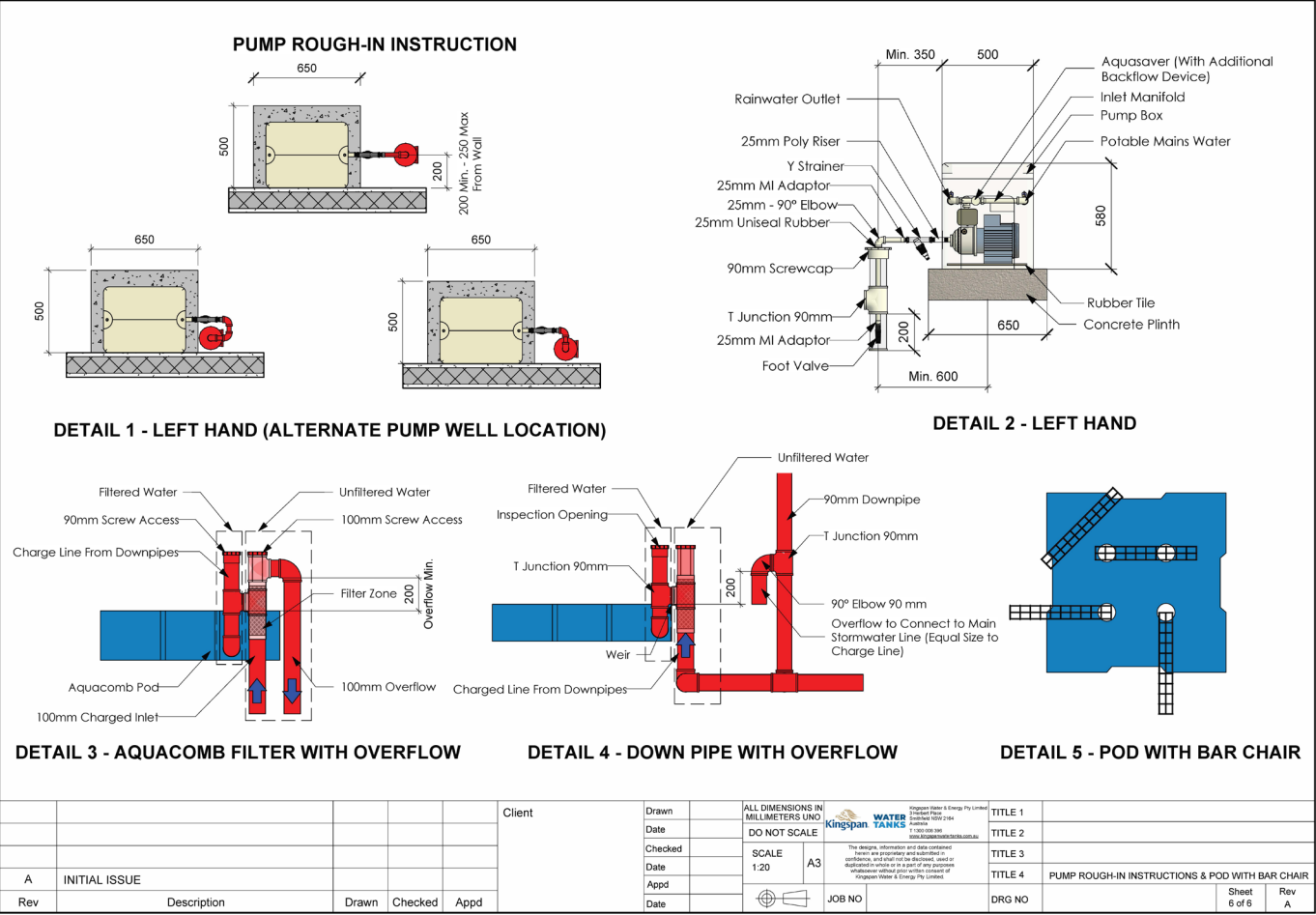
Design Schematic



Wall mounted pump rough-in guide

Appendix 2

Design Schematic



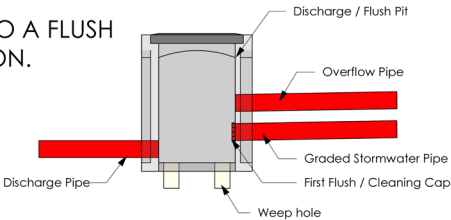
Pump rough-in guide

Appendix 3

Standard Conditions

NOTES:

- 1. POINT A OVERFLOW - INSTALLED A MINMUM OF 200mm ABOVE WEIR OF INFILL. OVERFLOW CAN BE INSTALLED ON DOWNPIPE NEAREST YOUR DISCHARGE POINT / PIT
- 2. POINT B INFILL PIPE - THE WEIR OF INFILL PIPE MUST BE AT THE TOP OF THE PODS AS A MINIMUM AND THE WHOLE ASSEMBLY SHOULD BE ABOVE FINISHED GROUND
- 3. POINT C PUMP WELL - THE PUMP WELL MUST BE INSTALLED AS PER DETAILS
- 4. POINT D VENT - THE VENT TERMINATES AT MINIMUM 300mm ABOVE OVERFLOW
- 5. PUMP MUST BE INSTALLED ON A CONCRETE PLINTH ABOVE GROUND LEVEL.
- 6. ALL CHARGED DOWN PIPE LINES SHOULD BE INSTALLED WITH A GRADE TO A FLUSH POINT / PIT. A FIRST FLUSH DEVICE SHOULD BE INSTALLED AT THIS LOCATION.
- 7. GUTTER GUARDS OR LEAF DIVERTERS MUST BE INSTALLED TO PREVENT LEAF DEBRIS AND VERMIN ENTERING THE SYSTEM.



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