

Pump control - incorporating high level alarm - visual and audible - and 230VAC power.  
 Post for pump control box support.  
 Sleeve with float cord and power supply - to pump chamber and UV unit (if installed) - with power plug pulled through.

Tuf-Tite riser system, or alternate.  
 Camloc - non-corrodible.  
 Non-return / check value.  
 Chamber shown with plastic riser with sealed lid.  
 Shut-off value.  
 Refer to landscaping note.

Discharge - for example, for recirculation to septic tank, or to drip line land application area (LAA).

Flexible pipe.  
 Pump lifting rope.  
 High level alarm float switch.  
 SS hose clamp or bolt eyelet fixed to pipe for float cord height adjustment.  
 Submersible wastewater/ dirty water pump with appropriate head capacity or high head dripper pump.  
 Pump control float.

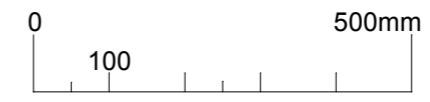
100mm DWV inlet from house laid @ 1:60 fall; or LDPE from lined AES bed.

Check valve/non-return valve.

Two compartment pump chamber - to comply with AS/NZS1546.1:2008.

Emergency volume = +30% of AES bed volume to 1/2 diameter of AES pipe.  
 Total emergency volume =

Working volume =



**NOTES**  
**General**  
 · Advanced Enviro-Septic (AES) pipes, fittings and bed to be constructed/installed in accordance with the AES Installation Manual.  
 · AES pipes and fittings are supplied by Environment Technology Ltd, Et.  
 · All associated pipework to comply with NZ Building Code G13, Foul Water, Acceptable Solutions, relevant standards and local/regional council requirements.  
 · Unless otherwise stated all dimensions are in millimetres and all dimensions are minimums except pipe diameters and fittings.

**Venting of AES Pipework to Maintain Aerobic Internal Conditions**  
 · The high level air exhaust vent to be 100, 80, or 65mm diameter DWV pipe, suitably supported on an adjacent building or post, to be 3m vertically elevated above the air entry vent. 2 x 50mm DWV pipe can be used in internal building framing. Support to be provided to 1 meter below the top of the DWV vent pipe.  
 · The low level air entry vent to be 100mm DWV, positioned as close as practical to the AES bed and isolated with respect to air passage wherever practical from upstream influent pipework. Refer to the specific design of each project.  
 · The location of air entry and exit vents can be remote from the AES bed with additional pipework to suit topography, building structures or landscaping. Air exit vents should be positioned considering potential downdrafts or adjacent disturbed air flows.

**AES Bed Construction**  
 · An areal extension to the AES bed may be required to suit the permeability of the receiving soil in passive installations. These extensions may be on any or all sides of the bed. Refer to the AES bed dimensions noted on the specific design. N/A or not applicable denotes an extension is not required in this design.  
 · A minimum of 50mm of fall is required between the septic tank outlet invert and the invert of the inlet to the AES bed or distribution box.  
 · Trees/large shrubs cannot be planted on the AES bed.  
 · AES bed 'System Sand' specification is usually met with within the local concrete sand specification. Refer ET website [www.et.nz/system-sand-suppliers/](http://www.et.nz/system-sand-suppliers/) for Et tested AES System Sand suppliers. Et offers cost free sand sieve analysis upon receipt of a two cupful size sample.

**Pump Chamber**  
 · Sensitive installations may require twin pumps and alternate duty pump controllers.  
 · Pump installations should detail simple replacement procedures using weather proof 3 pin plugs and sockets in suitable sized ducts for easy owner replacement.

**CROSS SECTION**

Scale @A3	1:10
Scale @A4	1:20
Dwg: AES PC01	
Version: 01	



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