
From: Cathy Edwards
Sent: 15 November 2019 14:44
To: Hilary Saunders
Subject: NYM19/431/FL

Hi Hilary,

We have read the EA comments and are happy to work with them to find a suitable treatment plant. In the unlikely event that our land does fail a percolation test, there are alternatives available, such as piping the water away which we can take advice on.

Please find attached a certificate received from the Filterpod supplier. If the Filterpod turns out to be unsuitable we will find another plant to ensure that we only discharge fully treated water.

regards

Cathy



Prüfinstitut für
Abwassertechnik
GmbH

PERFORMANCE RESULTS

Water Technology Engineering Ltd.
Unit 2, Bolton, York, Yorkshire, YO41 5QX, United Kingdom

EN 12566-3

Small wastewater treatment systems for up to 50 PT

Small wastewater treatment system Filter Pod 1
Aerobic biological gravity Filter

Test report PIA2012-159B11

Nominal organic daily load	0.30	kg BOD ₅ /d
Nominal hydraulic daily load	0.90	m ³ /d
Material	polyethylene	
Watertightness (Annex A)	pass	
Structural behaviour (PIT Test)	pass (also wet conditions)	
Durability	pass	
Treatment efficiency (nominal sequences)	COD	93.1 %
	BOD ₅	96.8 %
	SS	96.7 %
	NH ₄ -N	71.0 %
Electrical consumption	0.0	kWh/d

Performance tested by:

PIA – Prüfinstitut für Abwassertechnik GmbH
(PIA GmbH)
Hergenrather Weg 30
52074 Aachen, Germany

This document replaces neither the declaration
of performance nor the CE marking.



Notified Body
No.: 1739



Certified according to
ISO 9001:2008



Prüfinstitut für Abwassertechnik GmbH

Geprüft - tested - teste

Elmar Lancé

October 2014

From: Cathy Edwards
Sent: 16 October 2019 10:30
To: Hilary Saunders; Planning
Subject: Silpho Brow Farm West NYM/2019/0431/FL

Hi Hilary,

We have seen the latest comments by the EA, and will provide the full FD1 assessment as requested. This is likely to be later this week.

It is very clear from the evidence in our possession that a new system is not needed at all, however we have no problem installing a separate toilet/shower facility for visitors and staff with its own waste disposal.

We have already investigated suitable alternative sewage treatment plants, and the most suitable one for our very low and intermittent use is the 5 person Filterpod, with a double chamber tank preceding it. The Filterpod exceeds the relevant regulations (EN 12566 -3) and both it and the twin chamber tank are supplied by WTN Ltd., who are based near York.

The Filterpod is also one of the most environmentally friendly treatment plants available. I have attached the brochure.

The tanks will be able to be sited within the curtilage of the garden, just below the orchard. Their approved installer visited us yesterday and says that either a standard septic tank or the Filterpod treatment plant are the best options for our very low and intermittent use. An advantage of the Filterpod being that additional units can be added if ever this was needed.

In order to keep the visitor/volunteer/staff usage separate from the existing domestic house sewage waste, it will be necessary to construct a separate toilet and shower facility. Fortunately, there is an existing concreted hard standing area adjacent to the portacabin, between the cabin and the house. The size is approximately 3 metres by 2 metres. This area would be ideal for 2 toilets and a shower, (one toilet for people to walk in with their muddy boots, and adjacent to it a toilet and shower which will be for resident use only). This would be constructed as a "lean to" the existing modern barn, and from a drainage viewpoint it is virtually a straight line across the yard to the garden where the new waste treatment plant is likely to be located.

The toilet/shower lean to can be constructed from breeze block to match the attached modern barn building. We will supply a drawing and exact dimensions for the proposed building.

Responses

We have no problem whatsoever with objections or concerns, however many of the statements made about us by the principal objector appear to us to be irrelevant and incorrect. We would greatly prefer it if they had limited their statements to the planning issues but as they have chosen not to do so we feel that we should respond.

They have chosen to place items such as their Facebook comments in the public domain, and again, we feel that these posts, screenshots of some of these we have supplied, should be published in the interests of both impartiality and fair play.

While most people who know us are aware of the true situation, anyone who does not know us might actually *believe* some of the things which have been said, hence our concerns.

Once again, my apologies for having to burden you with this, but I'm sure that you will understand our concerns.

Objections

We have had a chat with our other neighbour, and have agreed to sit down with them and have a good discussion about their and our concerns.

Septic tank issues

We have no wish to burden you with issues that appear to us to be a neighbour dispute (rather than an actual planning concern) but the current situation which has been ongoing since the 26th July (see email from the principal objector to one of our Trustees of that date) is concerning to us.

I do not propose to address any of the peripheral statements contained in this email, other than to say that we do not consider any of them to be either relevant or correct, but for the avoidance of doubt, we do not possess any form of chemical toilet/portaloos etc., nor has anything of that nature ever been on the site.

We do not of course know what the principal objector may have said to the EA or Dalton's, however if the information supplied to them was incorrect then they will not be aware of the true situation.

On receipt of the above email we immediately contacted the Environment Agency, who were helpful, but no-one was able to answer our questions as they said they did not get involved in routine testing. We gave them the addresses and details of ourselves and the neighbour, and they said someone would get back to us, however this had not happened at the time that this communication was originally drafted.

The principal objector produced (as part of one of their objections to our planning application) an undated letter from the installers, R.A. Dalton. Telephone calls and emails to Dalton's to try and clarify their letter and ask for advice have achieved nothing as they did not get back to us, so the situation is exactly the same now as when we received the principal objector's email.

We note that the Environment Agency states "When looking at whether the capacity of a package STW is sufficient – we assess the maximum potential load going into it. A separate tank may be required for either excess load, or to separate from the neighbours altogether".

We know that there is no excess load coming from our usage because our numbers here are always kept below the 5 person capacity we have purchased. It would not be in our interests to overload our own sewage system. This is backed up by the fact that the system was estimated to need emptying annually and in fact so far it has only needed to be emptied bi-annually, indicating that the system is not being used at capacity.

If our shared system did fail a test then this failure could be due to any number of reasons.

Since the writing of this draft the Environment Agency have now told us in writing that they have not carried out any tests on our system. This contradicts the statement made by the principal objector in their email of the 26th July.

We then sent the following email to the principal objector:

We are sorry to hear that you have concerns about our use of the shared septic tank system, and can assure you that we are always careful to ensure that our use is well within its capacity – it would not be in any of our interests for it to be overused.

In an effort to move forward, we have asked a contractor to quote us for a separate waste treatment plant to cater for a separately constructed toilet and shower unit for visitor, staff and student use.

Details of this will be submitted to the Planning Authority and will no doubt shortly be on public view.

Given your concerns overall, it has occurred to us that an amicable way forward may be for you to purchase our 5/12ths part of the shared system from us, and we will install a new system to cater for our farmhouse.

If you find this agreeable, please let us know within 7 days and we will progress the matter.

Regards

Garry

The principal objector then replied, stating that she had referred the matter to her solicitor, who was away at present.

Knowing, as we now do, that the system cannot have failed an E.A. test because no such test took place, we replied to the effect that the delay was fine, and asking for a copy of the test report.

The principal objector then replied, refusing to provide a copy of the test report.

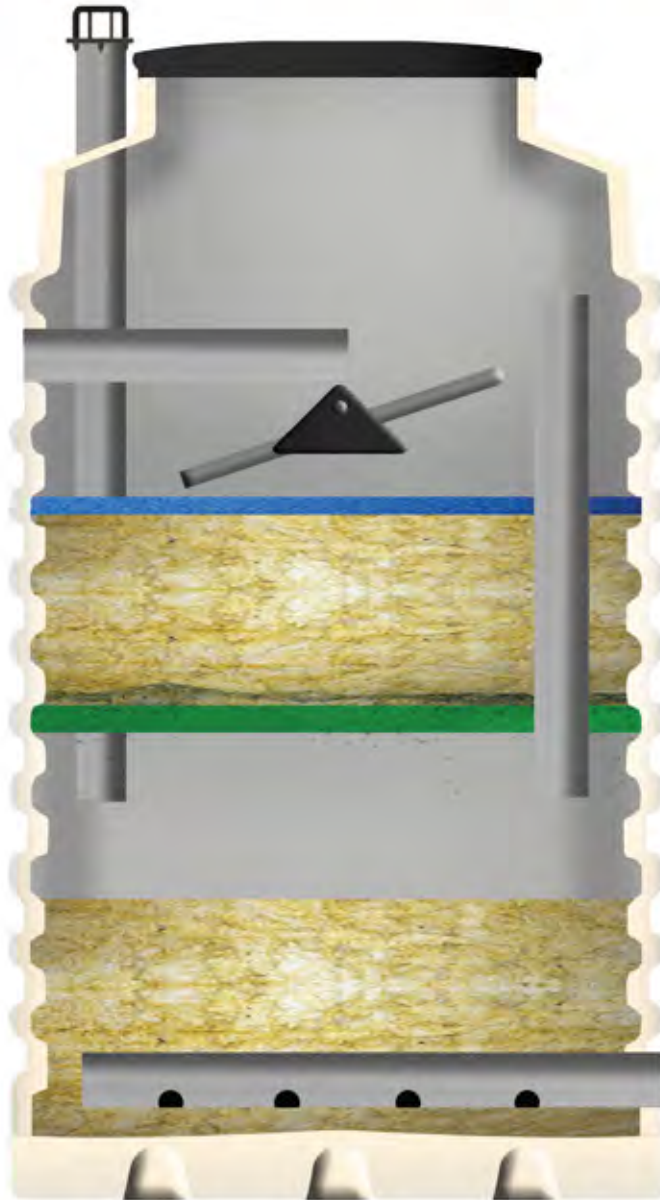
NYMNP

16/10/2019



FILTERPod

WASTEWATER TREATMENT SYSTEM



Electricity Required	NO
Primary Tank	YES
Average Desludge Interval	12 Months
Average Service Interval	12 Months
Tank Warranty	10 Years

Your Local Distributor is:

ADVANTAGES

- Zero electricity treatment process
- Sustainable wastewater treatment system
- No machinery required for the treatment process
- Lowest running costs of any wastewater treatment system
- Long emptying interval
- Lowest carbon footprint of any system
- Excellent effluent quality
- Passive process with extremely low failure rate
- Able to handle absence periods (holidays)
- Fast start-up period
- Ability to handle intermittent loadings (peak and low flows) i.e. holiday homes.
- Compact and underground installation Suitable for high water table sites
- Low visual footprint
- Easy to install
- Low maintenance
- Noise free

INTRODUCTION

FilterPod is a non-electric sewage treatment plant.

It is capable of receiving wastewater from properties not connected to mains drainage and processing it so that only a clear effluent is discharged into the environment.

It is a two tank system.

The first tank is the Primary Tank which separates solid and liquid waste. In many cases an

existing septic tank can be utilised as the Primary Tank.

FilterPod is the second tank and converts the liquid waste into clean and clear effluent.

The FilterPod has been tested and is certified to **EN 12566-3**.

OUR FILTER TECHNOLOGY

The most plentiful supply of oxygen is in the air itself. At 10°C, air contains around 289 mg/L oxygen, whereas the greatest amount of dissolved oxygen possible in water at 10°C is 11 mg/L. At 10°C there is 2,566% more oxygen in air than is dissolved in water.

This is the key to why our non-electric sewage treatment plants are so efficient – they treat wastewater in air where there is more available oxygen for the pollutant digesting microbes.

There can only ever be a limited amount of oxygen in water. Conventional

sewage treatment plants are full of water and therefore require a large amount of electricity to force oxygen into the water. This is usually done via the use of air blowers.

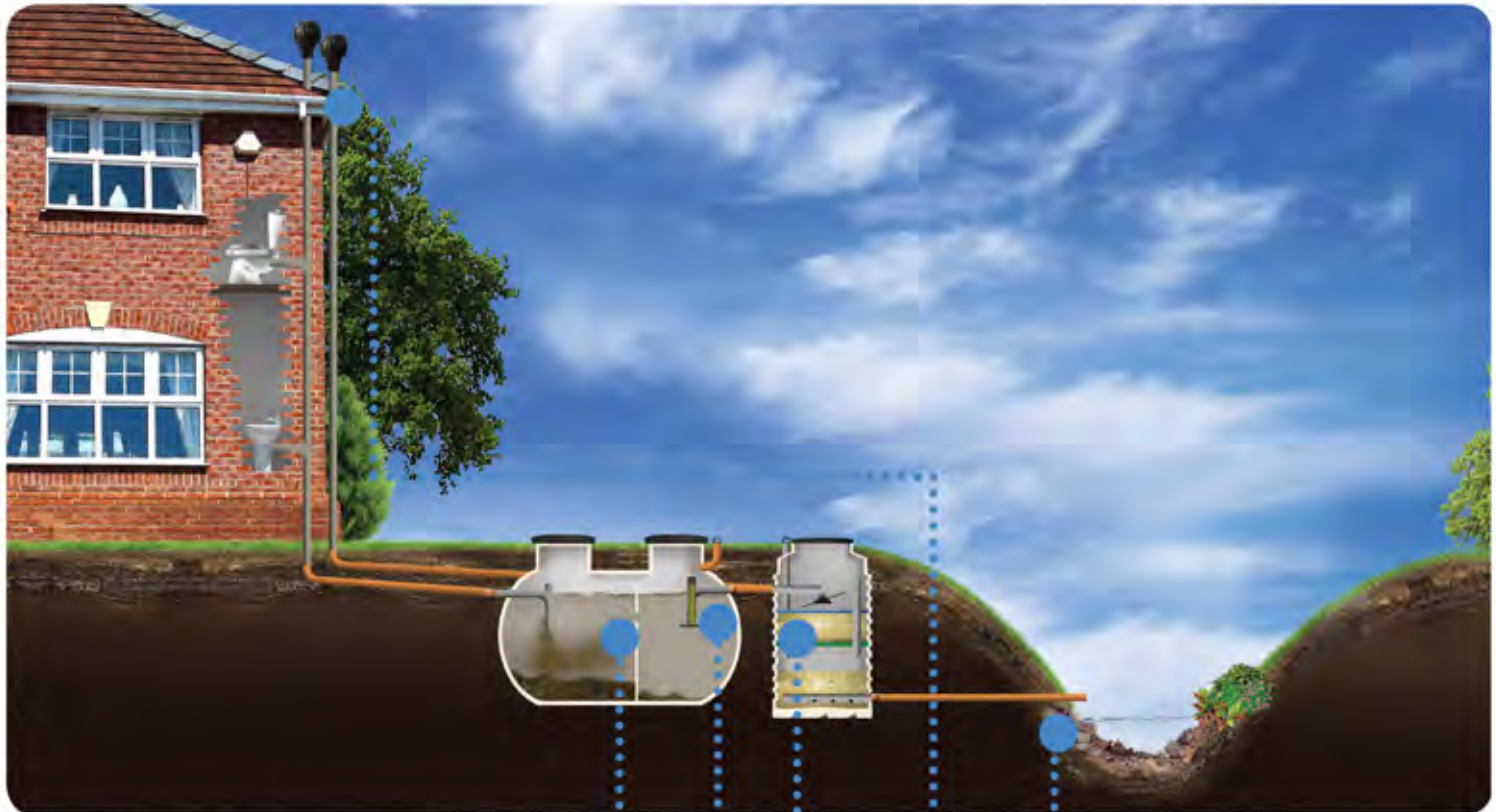
In nature, waste is broken down in the soil not in water. This is because air is able to permeate into the soil bringing with it the essential oxygen. Soil is aerobic, moist and has a large surface area (to act as a home for bacteria) making it an excellent environment for the breakdown of waste. FilterPod treats waste in the same way as nature. The unique RDX filter media has a huge surface area and is highly

OUR FILTER TECHNOLOGY (continued)

absorbent to both air and water – just like soil. This creates an excellent environment for the bacteria which then feed off the pollutants in the wastewater. As the bacteria remove the pollutants the wastewater is cleaned.

To ensure a constant supply of oxygen in the RDX media FilterPod uses naturally created air drafts to continually draw air through the system.

Description of How the System Works



Tank cross sections for graphical representation only

1. Wastewater from the building enters the Primary Tank. Here solids and liquids are separated. The solids are retained and the liquid effluent flows into the FilterPod.

2. A filter in the outlet of the Primary Tank screens the wastewater preventing solids entering the FilterPod.

3. Dirty liquid effluent is distributed over the RDX media in the FilterPod.

4. The tall air outlet vent, aided by the wind fan, creates a natural draught that continuously pulls air through the tank.

5. Aerobic bacteria colonise the RDX media and digest the pollutants in the effluent. Once the effluent reaches the bottom of the tank it is clear and odourless and is discharged into the environment.

Fan Box

On a small minority of sites it may be impossible to install the required air outlet vent and in these circumstances a Fan Box may be fitted.

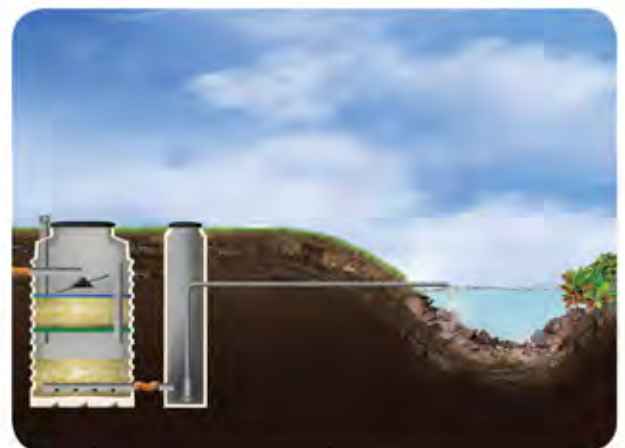
The Fan Box uses a very low wattage fan to pull air through the FilterPod.

Effluent Discharge

The standard system discharges under gravity to either a drainage field or watercourse.

If required a pump station can be installed after the filter to raise the level of the discharge.

The pump can be solar powered on many sites.



PERFORMANCE

FilterPod has been designed to meet the UK Royal Commission Standard for effluent of:

BOD ₅	20 mg / L
Suspended Solids	30 mg / L
Ammonia	20 mg / L

During independent testing FilterPod achieved an **average** effluent quality that was almost twice as clean as the Royal Commission Standard:

BOD ₅	10 mg / L
Suspended Solids	12 mg / L
Ammonia	11 mg / L

TECHNICAL DETAILS

FilterPod Tank

Model	PE	Diameter (m)	Height (m)	In Ground Depth (m)	Inlet Invert (m)	Outlet Invert (m)
FilterPod 1	5	1.150	2.050	2.000	0.575	1.800

Primary Tank

Model	PE	Diameter (m)	Length (m)	Height (m)	Inlet Invert (m)	Outlet Invert (m)
PT_2.0	5	1.225	2.050	1.710	0.550	0.575

INSTALLATION

FilterPod is easy to install and is suitable for high water table sites.

When installed on dry sites there is no requirement for a concrete backfill.

When installing the FilterPod on wet sites a partial concrete backfill is required and a Bracing Kit can be supplied.

WTE recommend that for peace of mind the FilterPod is installed by trained contractors. Please contact our office for details on your nearest trained installer.

MAINTENANCE

The FilterPod sewage treatment plant requires servicing every twelve months.

The servicing is done by trained service engineers to ensure that the system functions correctly giving the owner piece of mind.

Please contact our service partner **Sapphire Environmental** (+44 (0) 1757 289 681) for details on servicing.

ADDITIONAL ITEMS

Sample Chamber - All sewage treatment plants require a sample chamber to be installed after the system.

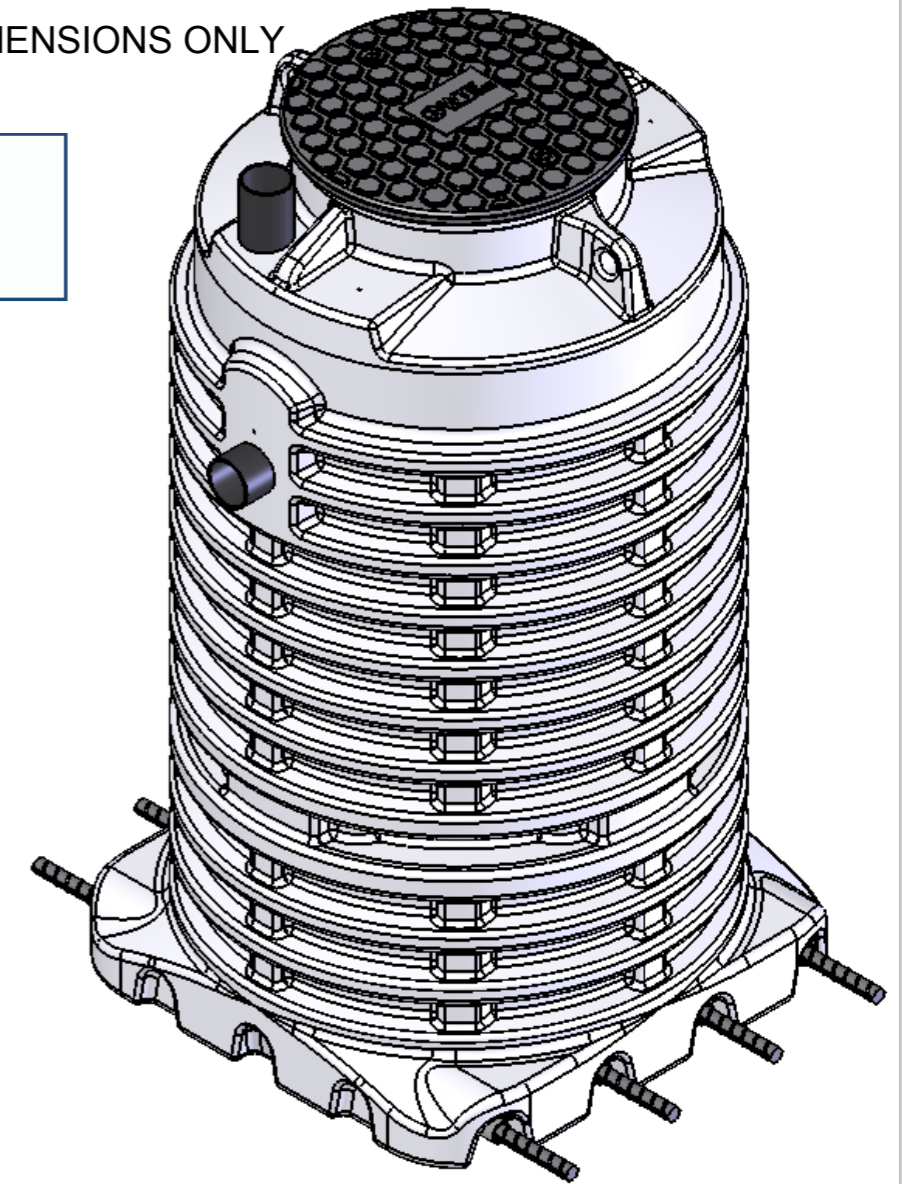
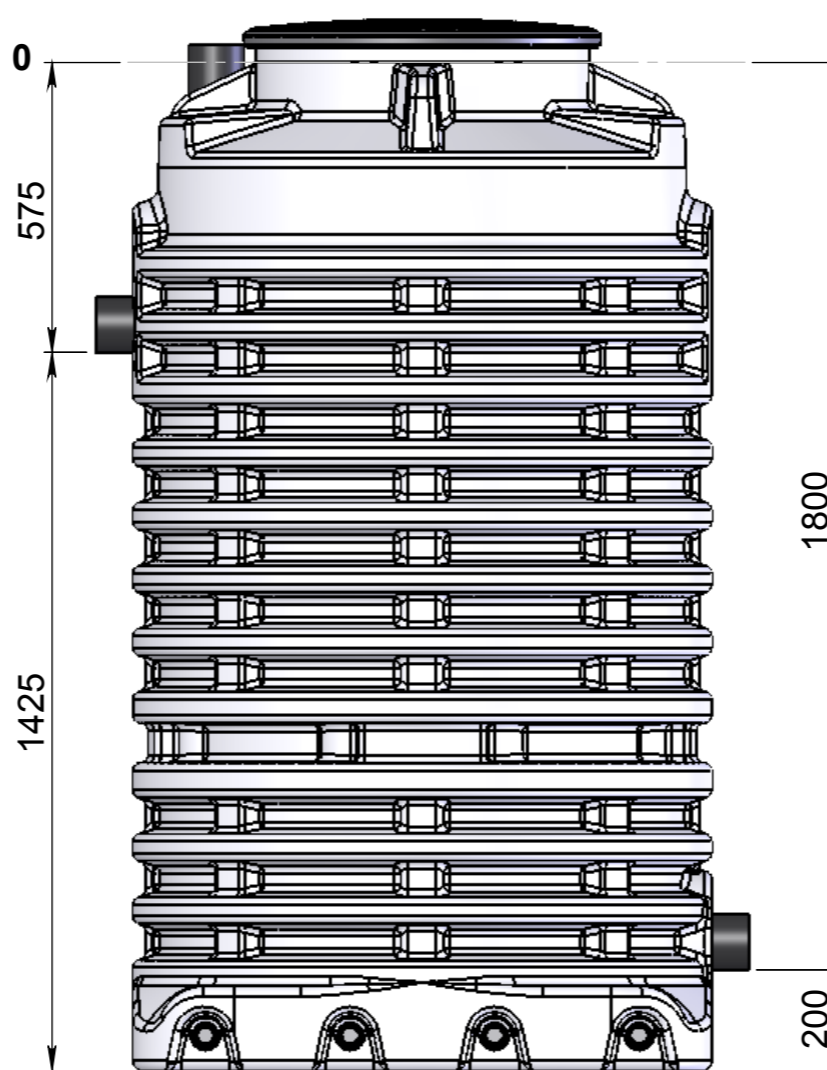
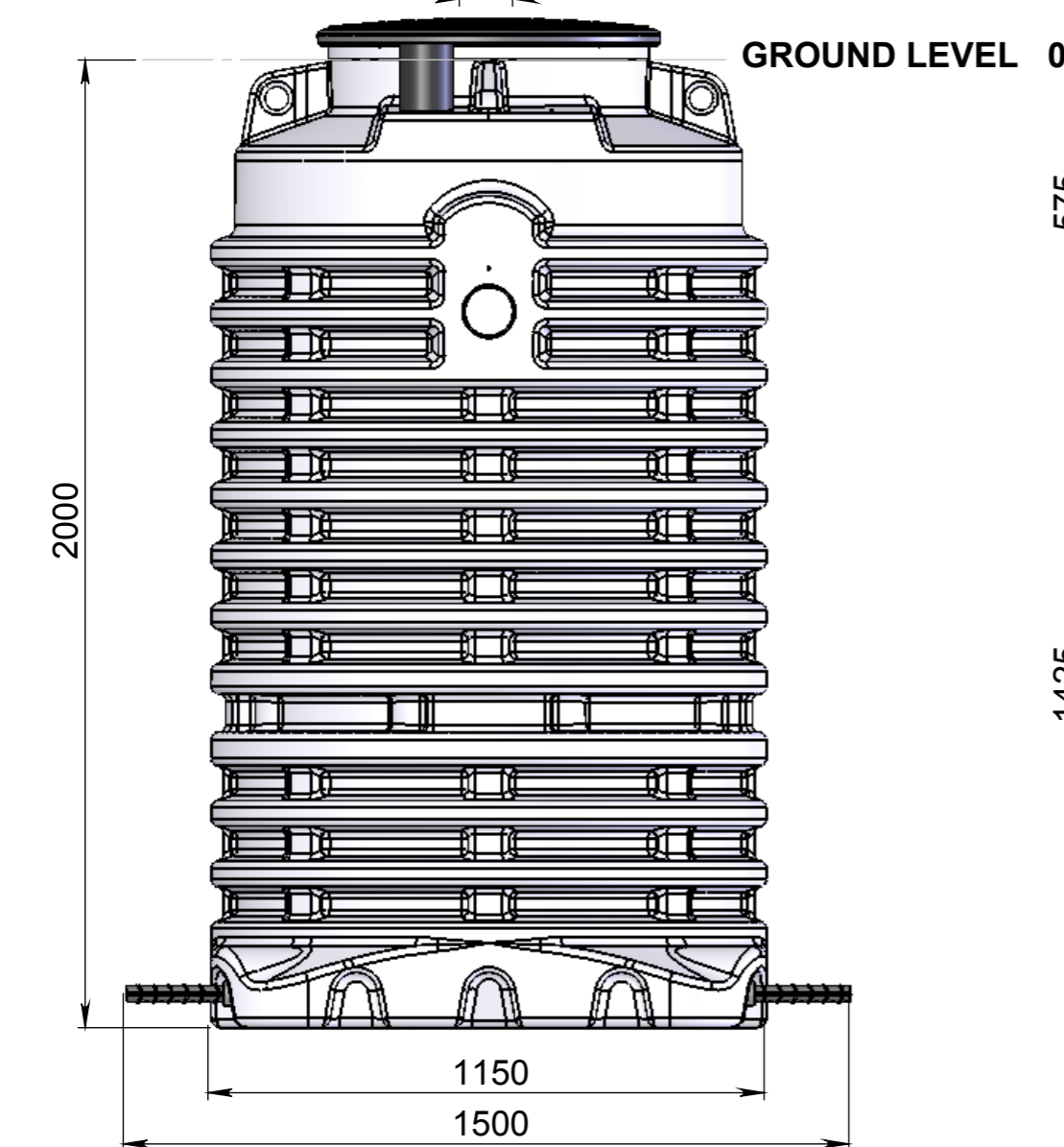
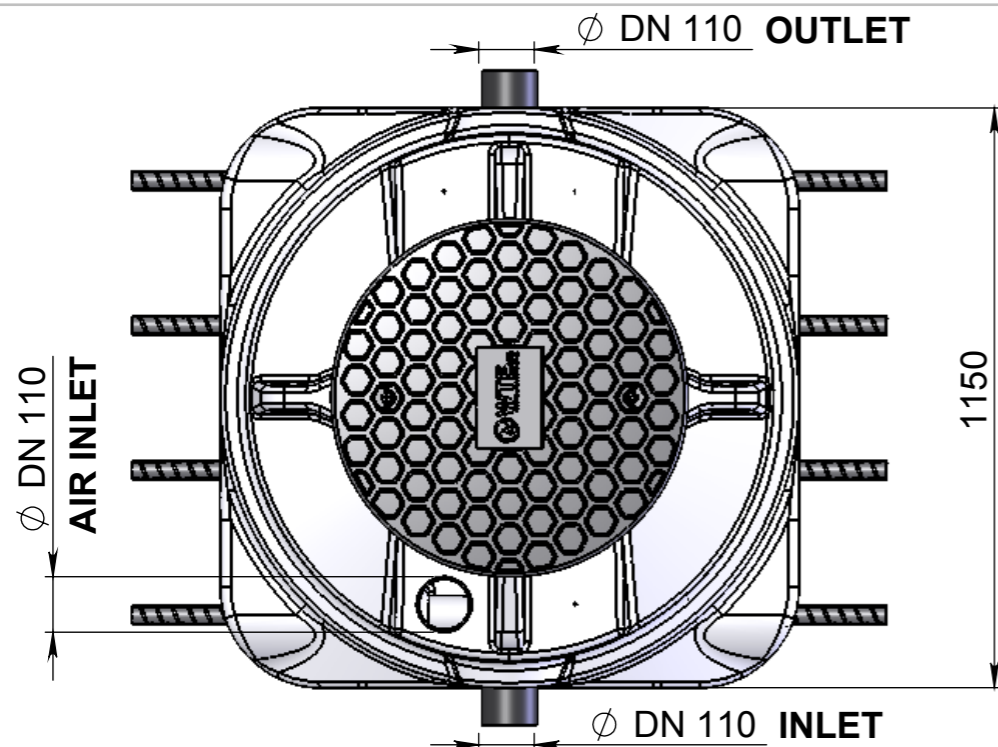
Pump Station - For sites that cannot discharge under gravity a pump station will be required. It can also act as a sample chamber.

High Level Alarm - This will alert the owner to a pump failure. This is only required for systems with a pump station.

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DIMENSIONS AND SPECIFICATION ARE SUBJECT TO CHANGE WITHOUT NOTICE.

NOT TO SCALE - NOMINAL DIMENSIONS ONLY



NOTE RE. WEIGHT OF FILTER POD AND ANCILLARY COMPONENTS:

THIS FILTER POD WEIGHS 190Kg ± 5% INCLUSIVE OF MEDIA.

IN ADDITION ALLOW 56 Kg FOR REBAR AND STEEL TUBE RESTRAINTS.

THE LIFTING EYES ARE INTENDED ONLY FOR SAFE USE WHEN THE TANK IS DRY (I.E. NO WATER).

NYMNPA
16/10/2019



Water Technology Engineering Ltd.
Unit 2, Bolton Lane
York, YO41 5QX
Yorkshire, UK

Title
FilterPod_S_5 - Nominal Installation
Dimensions

Document type		Created by	
Drawing		dfc	
Document status		Approved by	
Installer Drawing		mdc	
Date of Issue	Client ID	Lang	Form
21/08/2018	0000	en	A3
Document number		Rev	Sheet
0702H-SA-2001-00-03		H	1/1



Model	Tank O/D (mm)	Total Height (mm)	In Ground Depth (mm)	Base to Inlet (mm)	Base to Outlet (mm)	Inlet Invert (mm)	Outlet Invert (mm)	Weight (Kg)
Primary Tank_Pod_Twin_2.5	1,150 (Tank 1)	2,000	2,000	1,450 (Tank 1)	1,450 (Tank 1)	550	550 (Tank 1)	
	1,150 (Tank 2)			1,450 (Tank 2)	1,425 (Tank 2)		575 (Tank 2)	
FilterPod_K_5	1,150	1,500	1,500	980	200	520	1,300	
FilterPod_K_6	1,320	1,500	1,500	980	200	520	1,300	
FilterPod_K_9	1,590	1,500	1,500	980	200	520	1,300	
FilterPod_K_12	1,820	1,500	1,500	980	200	520	1,300	
FilterPod_K_16	2,080	1,500	1,500	980	200	520	1,300	
FilterPod_K_20	2,310	1,500	1,500	980	200	520	1,300	
FilterPod_S_5	1,150	2,000	2,000	1,425	200	575	1,800	

NYMNP

16/10/2019

NYMNPA

25/09/2019

From:
To: [Hilary Saunders; Planning](#)
Subject: Silpho Brow NYM/2019/0431/FL
Date: 25 September 2019 14:59:49

Hi Hilary,

I have just realised that you don't really have any photos of our land, the ponies and the way we graze them. Please see the attached, which also show that all the ponies, including several in their late twenties, are quite plump and certainly do not need more grass, which can be confirmed by our vet if need be.

Also attached is a photo showing one of our stables, with a laminitic pony who had spent the night there.

regards

Cathy

NYMNPA

25/09/2019



NYMIPA
25/09/2019



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