

7251 Former Legacy Scrap Yard

Response to letter dated 23 April 2021 from The Planning Inspectorate

Ref: APP/H6955/V/20/3262399

Foul Drainage Justification

The nearest mains sewer is approximately 800m away and would not allow for a gravity connection from the site. A pumping station and 800m rising main would not be viable for a 15-plot development. Guidance is 30m x number of dwellings and therefore consideration of sewerage treatment works in lieu of a connection to the public sewer is justified.

We are proposing a Falcon 70 sewerage treatment works to serve the 15-plot development with a discharge into the watercourse. This is indicated on Coopers Drawing No. 7251/SK01_B. The Falcon 70 STW is in full compliance with EN 12566-3 and it exceeded The Royal Commission Standard during EU Testing.

It should be noted that all existing properties within Llwyn Einion Road will be on private septic tanks (some may be discharging to better quality wastewater treatment plants) with details of drainage fields / outfalls to watercourses unknown. The proposal for this 15-plot development will be a high-quality wastewater treatment plant and will be maintained by a management company. A maintenance schedule will ensure its fully operational and telemetry will be provided to inform the management company of any malfunction.

As we understand the phosphates matter is 'new 2021 requirement' and NRW issued interim planning guidance in January outlining phosphate levels for all river Special Areas of Conservation (SACs) across Wales.

Currently Councils, developers and manufacturers are now reviewing the regulations to understand and overcome any implications. We also understand Welsh Government and NRW are in discussions over possible updated guidance to assist with compliance.

Information from Manufacturer:

The Falcon is not currently capable of reducing Phosphate in the effluent however, we do have a Falcon tank at PIA and testing is being conducted right now. This testing will culminate in phosphate removal so we will be able to supply the Falcon with a P reduction system in the near future.

Until the testing is finished, we don't know the exact results but our intention is to achieve P levels of 1.5mg/L or better for all systems. This is quite a conservative target and we expect the average P level in testing to be less than 1mg/L.

Falcon 70 tanks are provided with an air blower failure alarm in the form of a Flashing beacon. If the tank has a pumped outlet, a second beacon is added to warn of high water/pump failure. If required, the tank can also be supplied with a telemetry alarm.

Response to items in letter:

A full justification for not connecting to a mains sewer. Mains sewer is approximately 800m away and would not allow for a gravity connection from the site. A pumping station and 800m rising main would not be viable for a 15-plot development. See Appendix 1 and 2.

Full details of how foul effluent would be treated and what would be discharged in to the nearby watercourse. This is an outline planning application and no detailed design has been undertaken. We are proposing a Falcon 70 sewerage treatment plant to serve the 15-plot development with a discharge into the watercourse. This is indicated on Coopers Drawing No. 7251/SK01_B. The Falcon 70 STP is in full compliance with EN 12566-3 and it exceeded The Royal Commission Standard during EU Testing.

An explanation of how the proposed arrangements would avoid or reduce adverse effects upon the SAC. The Falcon 70 will be maintained by a management company and will be fitted with alarms and telemetry to notify the management company of any failure. This will allow for a prompt response to address any issues.

An assessment identifying the risks to the qualifying features of the SAC, including the likelihood and implications of any failure (permanent or temporary) to effectively treat and manage foul effluent as envisaged. The Falcon 70 will be maintained by a management company and will be fitted with alarms and telemetry to notify the management company of any failure. This will allow for a prompt response to address any issues.

Full details of any mitigation measures proposed, including how they would be guaranteed and maintained in perpetuity. The Falcon 70 will be maintained by a management company which will be set up by the developer. Residents will be required to make annual contributions for the maintenance for the lifetime of the development. A maintenance schedule including any re-builds required within the 100-year lifetime of the development will be produced by the management company and will provide a cost breakdown

Full details of the proposed management arrangements, including details on how such arrangements could be guaranteed and secured in for the lifetime of the development. This is an outline planning

application and no detailed design has currently been undertaken. Residents will be required to make annual contributions for the maintenance for the lifetime of the development. A maintenance schedule including any re-builds required within the 100-year lifetime of the development will be produced by the management company and will provide a cost breakdown.

Full details of the proposed monitoring arrangements This is an outline planning application. The Falcon 70 will be maintained by a management company and will be fitted with alarms and telemetry to notify the management company of any failure. This will allow for a prompt response to address any issues.

Any other information necessary to allow the competent authority to satisfy themselves that the proposed development would not result in an increase in phosphate levels within the SAC catchment area.

Andy Jones
Senior Infrastructure Engineer
COOPERS

13 May 2021

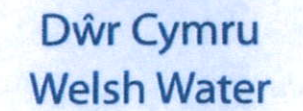
Supporting Information:

1. Welsh Water Sewer Map
2. Welsh Water correspondence – Foul Drainage
3. Manufacturers Product Information
4. Drawing

Appendix 1

Welsh Water Sewer Map

Bronwylfa Rd.



Waste network:			
	Fault chamber		Outfall
	Surface water chamber		Lamphead
	Combined chamber		Storm Overflow
	Combined sewer overflow		Rising main
	Special purpose chamber		Gravity sewer
	Treatment works		Private sewer
	Pumping station		Private sewer subject to Sect. 104 agreement
			Private Sewer Transducer
			Lateral Drain
			Inspection Chamber

NB: Sewer symbol colour indicates the type:
 RED - Combined
 GREEN - Surface Water
 BLUE/IN - Foul

Whilst every reasonable effort has been taken to correctly record the pipe material of DCWW assets there is a possibility that in some cases pipe material (other than Asbestos Cement or Pitch Fibre) may be found to be asbestos cement (AC) or Pitch Fibre (PF). It is therefore advisable that the possible presence of AC or PF pipes be anticipated and considered as part of any risk assessment prior to excavation.

DAE CYMRU Cyf gives this information as to the position of its underground apparatus by way of general guidance only on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon in the event of excavations or other work made in the vicinity of the Company's apparatus and serious of locating the apparatus before carrying out any excavations rests entirely on you. It must be understood that the furnishing of the information is entirely without prejudice to the provision of the New Roads and Streetworks Act 1991 and of the Company's right to be compensated for any damage to its apparatus.

Service pipes are not generally shown but their presence should be anticipated.

**EXACT LOCATIONS OF ALL APPARATUS
TO BE DETERMINED ON SITE.**

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Map Ref: 328958,347634
Map scale: 1:5,000
Printed by: SR
Printed on: 09.04.2015

Appendix 2

Welsh Water Correspondence

Andy Jones

From: Jones Sion <Sion.Jones@dwrcymru.com>
Sent: 06 January 2020 12:57
To: Andy Jones
Cc: Roberts Bryn; Wasik-Evans Miriam; Perry Rhodri
Subject: RE: Legacy Scrap Yard - Wrexham. New site
Attachments: Legacy scrap yard

Good Afternoon Andy,

Thank you for your e-mail. As Miriam explained in her reply, our colleague Rhodri Perry (CC'd) is covering Wrexham area while Alaw Jones is on maternity leave and therefore would recommend any further queries are addressed for his attention in Alaw's absence.

Nonetheless, with respect to the attached, I acknowledge that you're currently liaising with NRW and exploring the options available as an alternative to main sewer for the disposal of foul water flows. For the purposes of your ongoing enquiries, I can confirm there is a public sewerage network to the south of the site and the nearest suitable point of connection would appear to be located a minimum of 500m from the development site boundary, or approximately an additional 200m from the proposed point of your pumping station per attached plan. If minded to pursue a connection to the public sewerage system, a Section 104 application for public sewerage adoption can be requested at the following link - <https://www.dwrcymru.com/en/Developer-Services/Sewerage-Services/Adoption-of-Proposed-Sewerage.aspx> - and any queries on this application process should be directed to Bryn (CC'd), albeit we would not be in a position to comment on the viability of these proposals as part of ongoing enquiries with NRW which is a matter that your development team would present as part of any accompanying evidence base. Likewise, a packaged wastewater treatment plant may be subject to adoption but any discharge consents agreed by NRW would need to be sought by the developer and formed as part of the S104 application. Based on the attached, however, it appears the proposal would entail an alternative system in the form of a soakaway or reed bed which is not regulated and cannot be adopted by DCWW as part of a S104 application.

By way of general feedback, a S98 requisition application is typically more expensive than a S104 application and any subsequent S106 application may be refused if the accompanying technical information (i.e. connection detail) is prejudicial to the public sewer or the development does not benefit from an extant planning permission demonstrating there is a premises to serve; our comments to the planning application would highlight if there is suitable capacity in the public sewerage system and confirmed by objection or recommended planning condition accordingly. Similarly, the tests of reasonableness is not necessarily a matter we would be able to comment on for the purposes of your enquiries with NRW but this may be on the basis of the distance to the nearest point of connection to the public sewer.

I hope this information is of assistance and, if there are any further queries, I trust my colleagues Rhodri and Bryn (CC'd) will be able to advise.

Regards,

Siôn



Siôn Jones 

Development Control Officer | Developer Services | Dwr Cymru Welsh Water

Linea | Cardiff | CF3 OLT | T: 0800 917 2652 | www.dwrcymru.com

We will respond to your email as soon as possible but you should allow up to 10 working days to receive a response. For most of the services we offer we set out the timescales that we work to on our Developer Services section of our website. Just follow this link <http://www.dwrcymru.com/en/Developer-Services.aspx> and select the service you require where you will find more information and guidance notes which should assist you. If you cannot find the

information you are looking for then please call us on 0800 917 2652 as we can normally deal with any questions you have during the call.

If we've gone the extra mile to provide you with excellent service, let us know. You can nominate an individual or team for a Diolch award through our [website](#).



Before you print please think about the **ENVIRONMENT**

From: Wasik-Evans Miriam <Miriam.Wasik-Evans@dwrcymru.com>
Sent: 03 January 2020 12:24
To: Andy Jones <ajones@coopers.co.uk>
Cc: Roberts Bryn <Bryn.Roberts@dwrcymru.com>; Jones Sion <Sion.Jones@dwrcymru.com>
Subject: RE: Legacy Scrap Yard - Wrexham. New site

Hi Andy

Happy New Year to you too.

I've forwarded your email to Sion Jones, Alaw's line manager to review.

Please note that Alaw is currently on maternity leave and any future correspondence for the Wrexham area should be sent to Rhodri Perry Rhodri.perry@dwrcymru.com

Kind regards,



Miriam Wasik-Evans
Lead Engineer | Developer Services
Dŵr Cymru Welsh Water



T: 0800 917 2652 | E: 65807



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W: dwrcymru.com



E: developer.services@dwrcymru.com

From: Andy Jones <ajones@coopers.co.uk>
Sent: 03 January 2020 12:14
To: Wasik-Evans Miriam <Miriam.Wasik-Evans@dwrcymru.com>
Cc: Roberts Bryn <Bryn.Roberts@dwrcymru.com>
Subject: Legacy Scrap Yard - Wrexham. New site

***** External Mail *****

7251 Legacy Scrap Yard
WW Ref: PPA0004484

Hi Miriam

Happy new year, hope you had a good Christmas break.

Please see attached email sent to Alaw / Developer Services on 12th Dec.

We could do with a response ASAP, who will be looking at this as I understand Alaw is now on maternity leave?

Regards

Andy Jones

Senior Infrastructure Engineer

COOPERS

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Appendix 3

Manufacturers Product Information

Falcon is a Submerged Aerated Filter (SAF) sewage treatment plant.



Falcon is designed to receive wastewater (sewage) and process it so that only a clear effluent is discharged into the environment.

It can be used for domestic houses and is also ideally suited for commercial applications such as hotels, restaurants, offices, schools and campsites.

The Falcon has been tested and certified to EN 12566-3.



ADVANTAGES

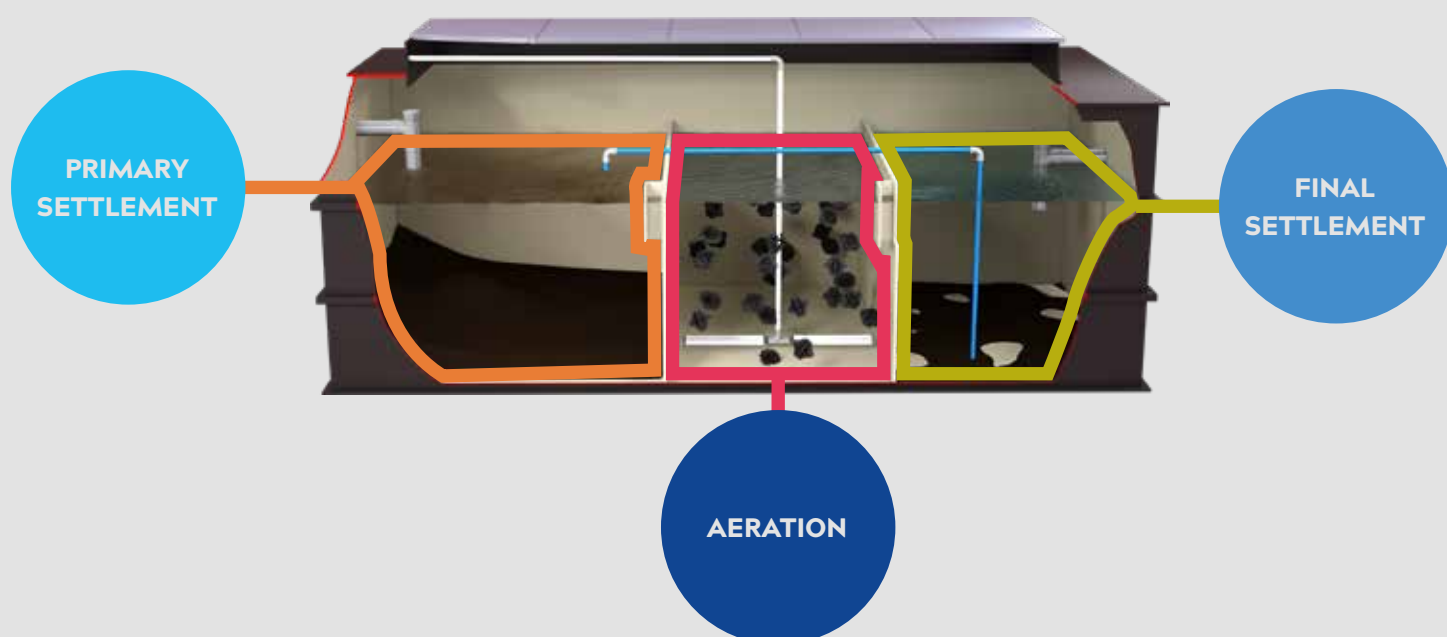
- ✓ Simple and reliable operation
- ✓ Easy and low cost installation
- ✓ Excellent build quality
- ✓ Low noise
- ✓ Low electricity demand
- ✓ Excellent effluent quality
- ✓ No internal moving parts
- ✓ Small visual footprint
- ✓ CE marked
- ✓ EN 12566-3 certified
- ✓ Excellent value for money

Treatment Process Overview

Falcon is a simple and robust system for the treatment of wastewater and has proven itself over many years.

It has no internal moving parts and is a very reliable system.

There are three principal stages to the treatments process:

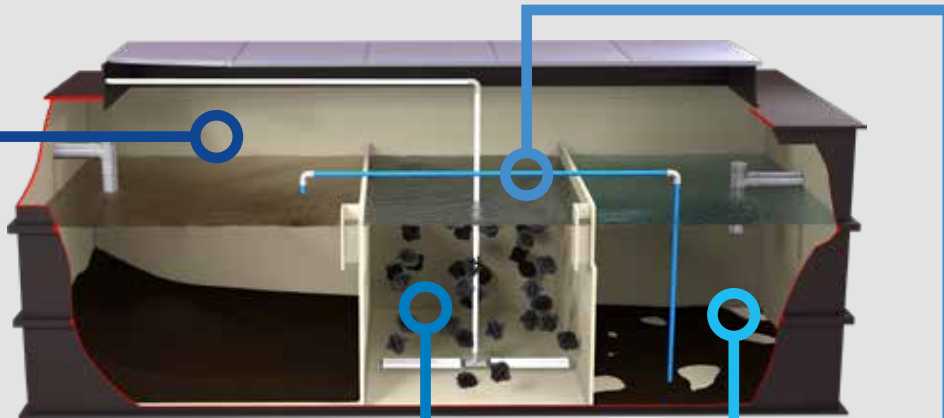


Performance

Falcon has been designed to meet the UK Royal Commission Standard for effluent. Due to its unique design, it far exceeded this standard during EN testing.

Pollutant	Design Effluent Quality (95%ile Basis)	Average Effluent Quality - During EN 12566-3 Testing - 100% Loading
COD	N/A	53.8 mg/L
BOD ₅	20 mg/L	9.9 mg/L
Suspended Solids	30 mg/L	14.7 mg/L
Ammonia (NH ₄ -N)	20 mg/L	6.8 mg/L

Treatment Process Detail



STAGE 1

Wastewater from the building(s) enters the **Primary Settlement Tank (PST)**.

Here solids and liquids are separated with the solids being retained for periodic removal by a tanker.

Liquid wastewater then flows into the Biozone.

STAGE 2

The **Biozone** is the heart of the treatment process and is where the liquid effluent is biologically cleaned.

The Biozone is filled with EDNA media.

Aerobic bacteria and microorganisms clean the wastewater by feeding on the pollutants as it flows through the EDNA matrix.

The bacteria must have a constant oxygen supply and this is provided by an external air blower.

STAGE 3

The wastewater then flows into the **Final Settlement Tank (FST)** where any remaining fine solids settle at the base of the tank forming sludge.

The clear effluent is discharged into the environment (drainage field or watercourse).

STAGE 4

The settled sludge is returned to the Primary Tank via a non-mechanical air lift system. This keeps the bacteria in the Biozone supplied with food even when there is little or no wastewater coming from the building(s) and keeps the system working during low use and holiday periods

EDNA Media

EDNA has been specifically developed to provide the optimum surface area : volume ratio needed for wastewater treatment.

It provides a huge surface area for bacteria to colonise, whilst providing excellent water flow pathways.

The large surface area greatly increases the number of bacteria in the Biozone. This improves the efficiency of the biological filter and reduces the volume required to a minimum.

Self Regulating Biozone

One of the major advantages of Falcon is that the Biozone self regulates depending on how much wastewater the system must process.

As a rough rule, sewage treatment plants require at least 50% of their design load in order to function. It is common however for many sewage treatment plants to be underloaded and fail to produce satisfactory effluent as a result because the bacteria are starved of food.

20%

The design of the Biozone enables Falcon to function at only 20% of its design load (10% on Falcon HH models).

In larger models the Biozone is divided into multiple stages. When fully loaded, bacteria will colonise all the media in each Biozone but when the usage is reduced, bacteria will only colonise as much of the media as the incoming load requires. In this way the Falcon system is able to shut down part of the Biozone and prevent the system from becoming starved due to lack of food/use.

EXAMPLE

A four bedroom house requires a 6PE (6 person) sewage treatment plant.

A 6PE sewage treatment plant should have at least three residents using it.

The house is only occupied by two residents and the sewage treatment plant doesn't function correctly as a result.

The Sludge Management System

All three stage sewage treatment plants produce sludge as part of the treatment process.

There are two types of sludge:

Primary Sludge

Solids from the incoming wastewater that accumulate in the PST.

Secondary Sludge

Dead bacteria and undigested particles that accumulate in the Biozone and FST.

Falcon is able to automatically recycle secondary sludge to optimise performance and reduce maintenance.

Settled Sludge Return (SSR)

Settled sludge is recycled from the bottom of the Final Settlement Tank back to the Primary Settlement Tank using a simple, non-mechanical, air lift.

- 1 In the Final Settlement Tank sludge accumulates in the base.
- 2 Air from the blower is spurred to the Settled Sludge Return (SSR).
- 3 As air rises up the sludge return pipe a vacuum is created that syphons the sludge back to the Primary Settlement Tank.

The return of settled sludge gives the bacteria in the Biozone a food supply even when there is little or no wastewater coming from the building. This makes Falcon better able to handle low occupation stress than other sewage treatment plants.

In conjunction with the Self Regulating Biozone, the Sludge management System makes Falcon ideally suited for sites where there is low usage and/or a fluctuating load. i.e.:

- ✓ Restaurants
- ✓ Hotels
- ✓ Campsites
- ✓ Offices
- ✓ Schools
- ✓ Labour Camps
- ✓ Etc

Variants

Falcon is available in a range of options:

Falcon S (Standard)

The standard units are constructed from polypropylene sheet reinforced with steel.

These tanks are for underground installation only.

Falcon E (Export)

Falcon tanks can be constructed so that they can be packed inside standard shipping containers.

This is the most popular option for export as it greatly reduces the shipping costs.

Falcon C (Containerised)

The Falcon system can be permanently built inside standard open top shipping containers.

This allows the tanks to be shipped easily and once on site they can be installed either below or above ground as the container provides added strength to the system.

They can also be emptied of water and moved to another site and hence can be seen as being a mobile option for wastewater treatment.

Falcon AG (Above Ground)

These are reinforced standard units for installation above ground.

Falcon HH (Half & Half)

This is an adjustable system for sites with a fluctuating seasonal load.

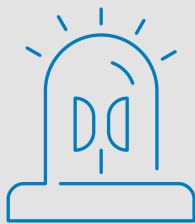
Falcon HH tanks are two smaller tanks built into a single shell.

Underloading is a major problem for many sites as insufficient use will prevent a sewage treatment plant from working adequately. Falcon can function at 20% of its design loading but many sites, such as campsites, drop below 20% of their maximum usage for several months of the year.

Falcon HH allows 50% of the system to be turned off. This maximises performance as it prevents bacteria in the Biozone from being starved and allows the system to function at only 10% of its maximum capability.

Failure Alarm

To comply with EN 12566-3, a sewage treatment plant must have an alarm to alert the user in the event of failure.



All Falcon tanks come with an audio and visual alarm as standard.

Remote and telemetry alarms are available on request.

UV Treatment

For sites where the reuse of wastewater is required, Falcon can be manufactured with an integral UV filter to remove 99% of pathogens in the effluent.

If you are considering effluent reuse, please contact our sales office.

Commercial Use

Falcon is ideally suited for commercial sites as it has been designed to handle wastewater that is stronger than that discharged from domestic properties.

Commercial sites often present the following challenges for wastewater treatment:

- 1 The wastewater production has a higher concentration of pollutants or reduced wastewater volume (both create the same problem).
- 2 The wastewater contains non degradable material (sanitary items, etc.).
- 3 There are fluctuations in use. Week/ weekend or summer/winter usage is not the same.

Unlike most sewage treatment plants, Falcon is designed to be able to process wastewater from domestic and commercial sources. This makes it an ideal choice for the following applications:

- ✓ Restaurants
- ✓ Hotels
- ✓ Campsites
- ✓ Offices
- ✓ Schools
- ✓ Labour Camps
- ✓ Etc



Installation

The compact design and robust construction make installation as simple, quick and low cost as possible.

Falcon is capable of being installed above ground if required.

Shallow and deep inlet inverts are available for most tanks in the range to cater for a range of foul drain depths.

Please contact our office if you would like the details of your nearest approved installer.

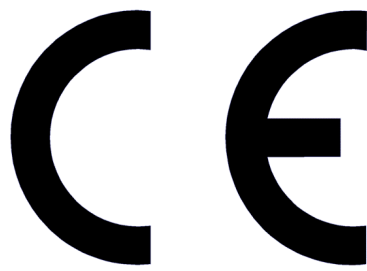
Technical Details

Model	PE	Length (mm)	Width (mm)	In Ground Depth (mm)	Inlet Invert (mm)*	Outlet Invert (mm)**	Power (Kw)
Falcon 60	60	5,600	2,124	1,912	600	700	0.70
Falcon 70	70	6,000	2,124	1,912	600	700	0.70
Falcon 80	80	6,600	2,124	1,912	600	700	0.70
Falcon 90	90	7,500	2,124	1,912	600	700	0.70
Falcon 100	100	7,500	2,524	1,912	600	700	0.70
Falcon 125	125	9,000	2,524	1,912	600	700	0.75
Falcon 150	150	10,500	2,524	1,912	600	700	1.10
Falcon 200	200	12,000	2,524	1,912	600	700	1.10
Falcon 250	250	12,000	2,524	2,412	600	700	2.20
Falcon 300	300	12,000	2,524	2,612	600	700	2.20

The Falcon range extends up to 5,000 PE. Please contact our sales office for details.

*Other inlet inverts available

**Pumped outlet options available



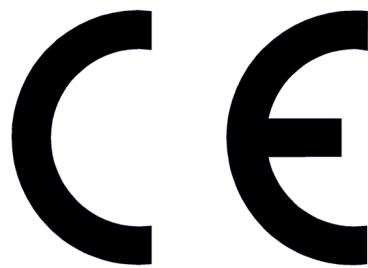
Water Technology Engineering (WTE) Ltd
Unit 2
Bolton Lane
Bolton
York
YO41 5QX

08

EN 12566-3

Falcon 6, 9, 12, 18, 25, 30, 40 & 50

Material	PP		
Treatment Efficiency	COD	91.4%	53.8mg/L
	BOD ₅	96.2%	9.9mg/L
	TSS	95.5%	14.7mg/L
	NH ₄ -N	83.3%	6.8mg/L
Daily Loading	Falcon 6	1.08m ³	0.36Kg BOD
	Falcon 9	1.62m ³	0.54Kg BOD
	Falcon 12	2.16m ³	0.72Kg BOD
	Falcon 18	3.24m ³	1.08Kg BOD
	Falcon 25	4.50m ³	1.50Kg BOD
	Falcon 30	5.40m ³	1.80Kg BOD
	Falcon 40	7.20m ³	2.40Kg BOD
	Falcon 50	9.00m ³	3.00Kg BOD
Initial Type Test	PASS		
Water tightness	PASS		
Crushing resistance (wet pit test)	PASS		



Water Technology Engineering (WTE) Ltd
Unit 2
Bolton Lane
Bolton
York
YO41 5QX

08

EN 12566-3

Appendix 4

Drawings

DO NOT SCALE



2.4m x 35m
vehicular visibility
splay

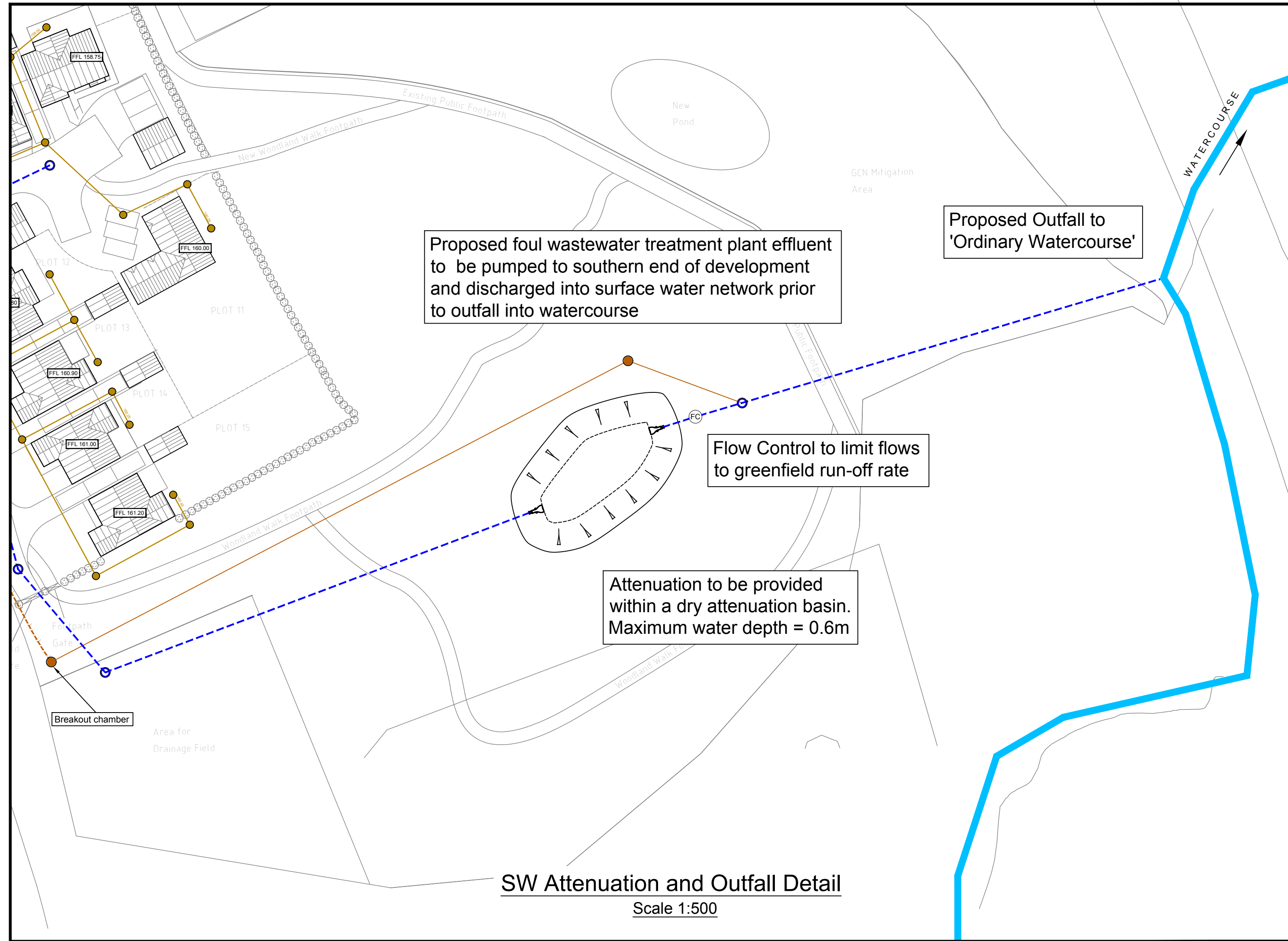
Bush House

Works

Dismantled Railway

Scrap Yard

Surface Water Flow Rates	
Developable Site Area = 10,700sq.m.	
Existing Greenfield Run-off Rates	
1yr	= 2.27 l/s
30yr	= 4.59 l/s
100yr	= 5.62 l/s
QBAR	= 2.58 l/s
Proposed Run-off Rates	
1yr	= 2.27 l/s
30yr	= 4.59 l/s
100yr	= 5.62 l/s
Proposed impermeable areas = 4,500sq.m. (estimate)	
100yr attenuation storage	= approx 300cu.m (+40% climate change)



Note:
Existing manholes in highway verge assumed to be soakaways but should be investigated further. These may prove connectivity to a watercourse and provide another point of connection for consideration

Access for future maintenance to be considered further

Foul Treatment Plant
Falcon (PE70)
2124 x 6010

Sewerage Treatment Plant to accommodate all foul flows from residential development

Highway crossing subject to WBCB approval (TBC)

Rising Main taking pumped effluent discharge from foul wastewater treatment plant to drainage field

Note:
Site levels to be reviewed further at detailed design

Note

- This is a preliminary drainage design demonstrating a drainage solution is achievable to discharge flows from the proposed development. Additional topographical survey and a full site investigation is required prior to undertaking full design.
- Existing slopes and trees along the eastern and western boundary will need to be considered further at detailed design stage.
- The specification in all respects shall be in accordance with the current Wrexham CBC Specification and Construction publication in force in the county at the time of construction.

Drainage Strategy

Proposed Foul

No public sewer network within vicinity of site, therefore a sewerage treatment plant will be required to serve the development.

Natural Resources Wales require that there are no public sewers within 30m x (proposed number of dwellings) for a wastewater treatment plant to be considered. This regulation is complied with based on 15 properties and there being no sewers present within 450m of the site. Therefore a sewerage treatment plant will be required to serve the development.

From British Waterways Code of Practice: Flows and Loads a maximum usage is taken as 66 people (based on 7 No 3 bed & 8 No. 4 bed)

7 x 3 bedroom = 35P
8 x 4 bedroom = 48P
Design Population = 83P

As the design population is over 25 a correction value of 0.8 to allow for the balancing effects can be applied, therefore:

Design Population = 83P x 0.8 = 66P
Expected Volume of Effluent = 66 x 150 litres = 9900 litres / day

We are proposing a single Wastewater Treatment Plant to serve all 15 Plots. This will need to be located a minimum 7m from any habitable building and will require access for a tanker to undertake any future maintenance.

Gravity network to be provided upstream of the treatment plant. This will need to be routed within private land as a private asset will not be acceptable within an adopted highway.

The depth of the incoming pipe into the wastewater treatment plant should be limited to 2.5m if possible. Solutions are available if deeper but not as cost effective. A pumped outfall will be required to take flows from the outfall along a rising main to discharge into the proposed watercourse

Treated effluent to discharge into private pipe in adjacent land which outfalls into the open watercourse. Surface water flows will also discharge into this pipe which will assist with diluting the foul flows.

The entire foul network and wastewater treatment plant will be maintained by a Management Company funded by residents. The developer will be required to set-up a management company.

Proposed Surface Water

1. Infiltration

Infiltration tests undertaken across the site have determined the site is suitable for disposal of surface water via infiltration techniques. However, the site is located within a groundwater protection zone and therefore an alternate means of disposing surface water should be considered.

2. Watercourse

An existing ordinary watercourse (un-named) flows from west to east to the south of the site. Surface Water Drainage Strategy for development is to direct all flows from the proposed development to the watercourse. We understand the proposed outfall location is within the landowners ownership.

Flows to be restricted to greenfield run-off rates

Attenuation will be provided within a dry SUDS basin located within POS.

All surface water serving more than 1 plot will subject to SABS Approval. The developer will be required to set up a management company to maintain the entire network in the future. a SUDS Management Plan will also be required to provide information on maintenance activities and frequency.

Maintenance / Responsibilities

Adoption and maintenance of all drainage components to be considered further at detailed design stage.

Permanent utility vehicle access to the landscaping / SUDS devices to be provided.

Foul Sewers:

All foul sewers to remain private. These will be maintained by a 'Management Company' set-up by the developer.

Foul Wastewater Treatment Plant

To remain private. These will be maintained by a 'Management Company' set-up by the developer.

Foul Effluent Rising Main and Connection to SW Sewer

To remain private. These will be maintained by a 'Management Company' set-up by the developer.

Private Surface Water

To be individual homeowners

Surface Water Network

Subject to SABS approval. SUDS Management Plan to be produced to address frequency and type of maintenance activities

Highway Surface Water

Subject to SABS approval. SUDS Management Plan to be produced to address frequency and type of maintenance activities

Legend

- Proposed Foul Drainage (upstream of STW)
- Proposed Foul Rising Main
- Proposed Foul Drainage
- Proposed Surface Water Drainage
- Falcon (PE 70) Waste Treatment System

PRELIMINARY

B	22.07.20	Drainage strategy updated	AJ	AJ
A	18.09.19	Updated to suit revised Layout	AJ	AJ
Rev.	Date	Revision	By	Appd

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Client	TRAILWALK Ltd			
Project	FORMER LEGACY SCRAP YARD, LLWYNEINON			
Title	Proposed Drainage Layout			
DRAWING NUMBER	7251 / SK01		SCALE at A0	1:250
	DATE	23.05.19	DRAWN	L'W
	CHECKED	ΔI		
				REVISION
				B