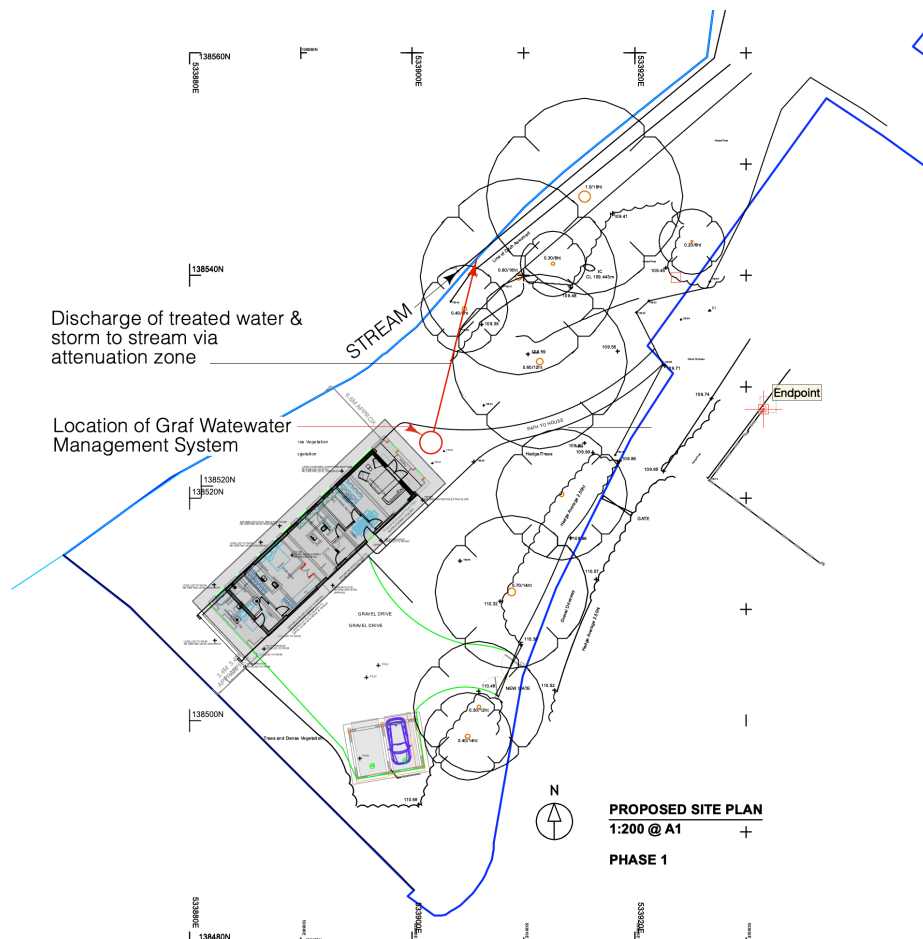


Drainage Strategy for New Dwelling.

Proposed single storey dwelling at Down Park Place, Down Park, Turners Hill Road, Crawley Down. West Sussex. RH10 4HQ

The Original Property, prior to the Replacement of Down Park Place, 2024, had a sewage plant that discharged along with the storm drainage into the stream running to the northern boundary flowing a NE direction. This unit was replaced with a modern 10 person GRAF treatment plant and attenuation zone.

This new application is to have the same GRAF set up with the plant location as indicated on the attached plan extract.



The proposal is to have a modern treatment plan with attenuation filter prior to discharge into the local stream. An example of such a plant and filter system is attached, as detailed by GRAF for a 10 person unit. The porosity value for the adjacent site was calculated as a design value of 1×10^{-6} m/s and as such the attenuation field sizes will be calculated to confirm to these figures.

The plant has been sited in the northern element of the building being both as a good location for vehicular access & maintenance ie tanker de sludge and for the discharge point to the stream. The land falls to this area allowing for gravity drainage. The precise siting will be dictated by building control and final levels.

The one2clean system

The only wastewater underground tank of it's kind!

- ✓ Only one tank with just one chamber required
- ✓ Less energy consumption and less wear
- ✓ No mechanical elements in the wastewater
- ✓ No pumps in the wastewater
- ✓ No electrical components in the wastewater
- ✓ Incredibly low volume of sewage sludge



**EFFICIENCY
FACTOR OF
UP TO 99 %**

one2clean set-up kit

- Conventional wastewater treatment systems require up to three pumping processes. one2clean only requires one pumping process, which saves energy and extends the lifetime of the air compressor – the core part of the system
- Rugged clear water lifter manufactured in one seamless piece. No connectors or screws necessary
- Simple maintenance via an integrated, self-cleaning sampling container



**MINIMAL
OPERATING
COSTS**

one2clean system control

- The one2clean has a compact controller
- The microprocessor control system ensures simple operation and maintenance



Wastewater tank

- Telescopic cover
- State-of-the-art manufacturing for maximum stability
- Suitable for vehicle loading in conjunction with telescopic vehicle dome shaft
- 100% watertight and corrosion-resistant
- Can be installed in groundwater up to the middle of the tank

Storm drainage too can be routed to a new attenuation field with a final discharge to the stream immediately north of the propose building location.

This will help to reduce the storm outfall to the stream since the current discharge is assumed to run straight to the stream. An example of a filter bead attenuation field is likewise attached, also manufactured by GRAF.