

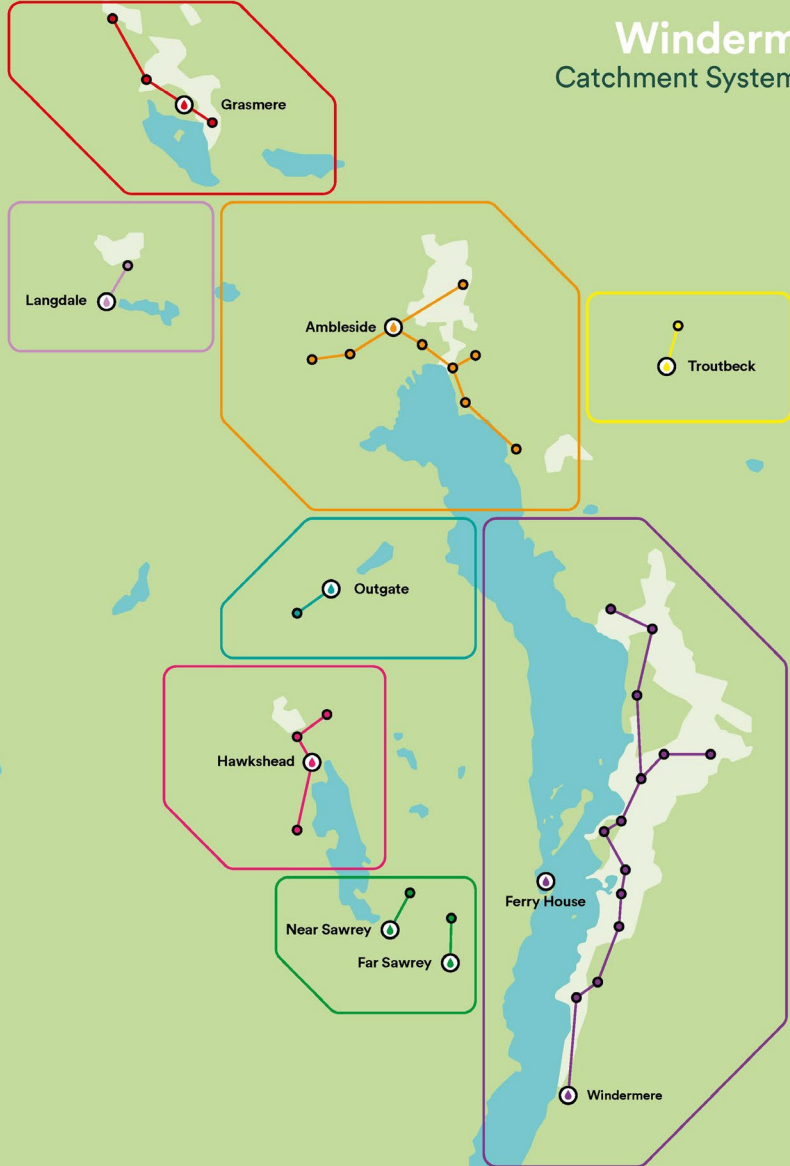


Troutbeck Information Session

First Time Sewerage & Troutbeck Wastewater Treatment Works Upgrades

Troutbeck © National Trust Images/James Dobson

Windermere Catchment System Map



Improving water quality in Windermere

Scope:

- ✓ 6 Storm Overflows upgraded
- ✓ 9 WwTW upgraded and improved (Windermere WwTW already at 0.25mg/l phosphorus)

Benefits:

- ✓ 89% reduction in storm spills – 489 fewer spills per year
- ✓ 49% reduction in phosphorus
- ✓ All WwTW permitted to high phosphorus standards – 0.25 - 0.5mg/l

What's happening at the works?

- We have installed a temporary treatment solution to improve water quality at Troutbeck Wastewater Treatment Works, called a **FujiClean**
- This work upgraded our current provision for properties that are already connected to our works and is an innovative, chemical-free treatment process
- We are now moving onto phase 2 of these works which will involve two larger, permanent **FujiClean** units
- These **Fujiclean** units will help to improve water quality in line with EA requirements



What is a FujiClean?

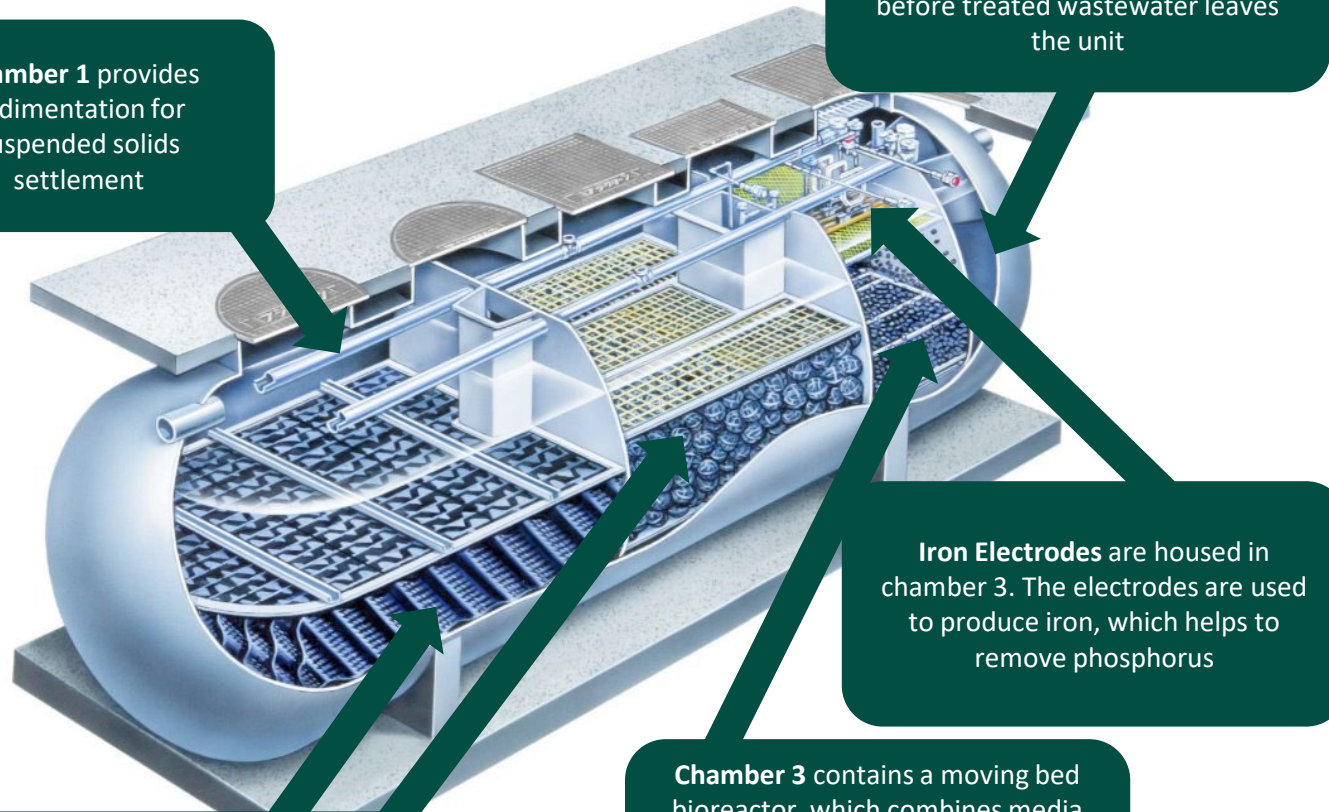
Chamber 1 provides sedimentation for suspended solids settlement

Chamber 4 is the final clarification chamber which enables final settlement of suspended solids before treated wastewater leaves the unit

Iron Electrodes are housed in chamber 3. The electrodes are used to produce iron, which helps to remove phosphorus

Chamber 3 contains a moving bed bioreactor, which combines media and aeration to provide aerobic treatment to facilitate both carbonaceous treatment and nitrification of ammonia

Chambers 1 & 2 incorporate filter medias which capture organic matter and enable organic decomposition using anaerobic bacteria



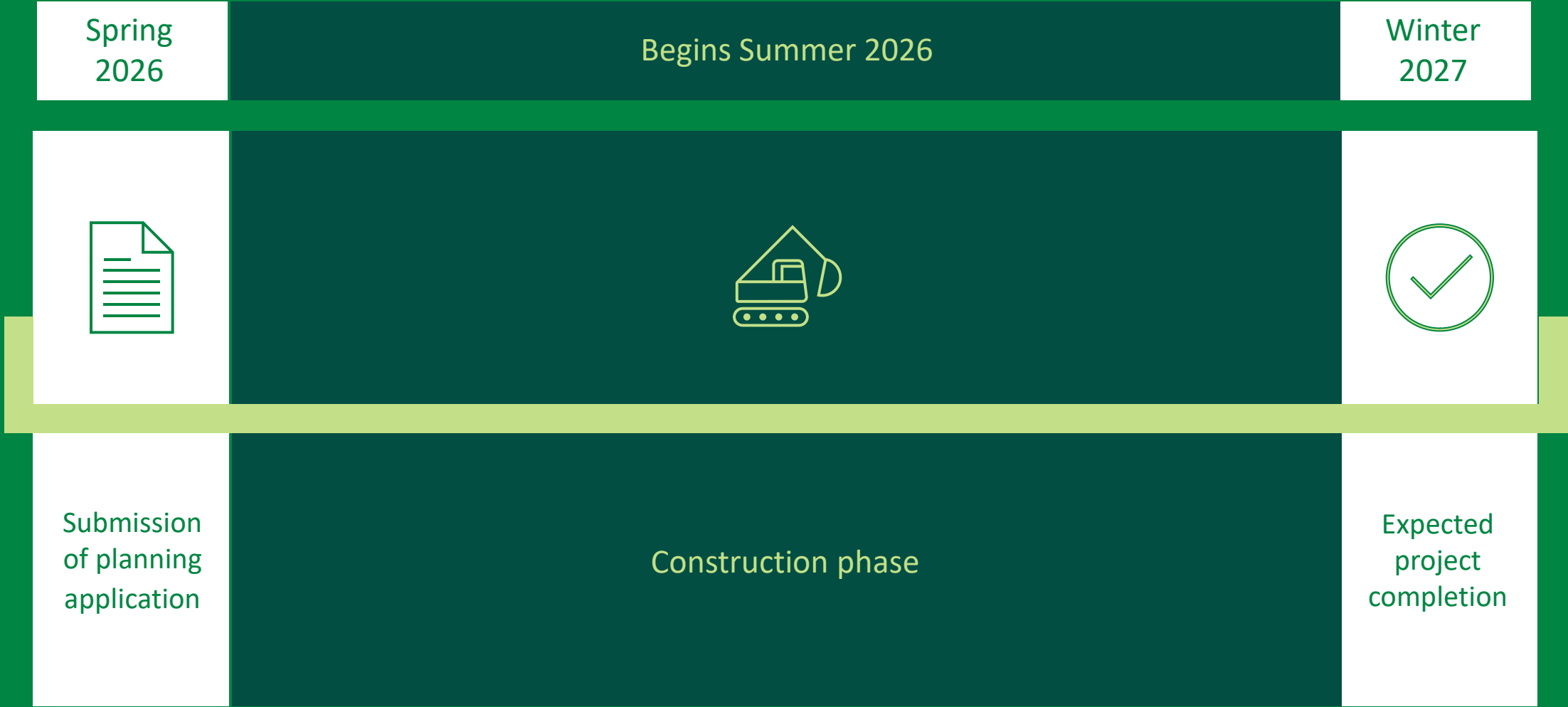
Why do we like it?

- ✓ “Treatment works in a box”
- ✓ Chemical-free phosphorus removal, no requirement for deliveries
- ✓ Modular system, can be buried or above ground
- ✓ Alternative to septic tank treatment with improved effluent quality
- ✓ Low energy
- ✓ Extended desludge period – less frequent tanker visits

What will it look like?



How long will it take?



First Time Sewerage

Where are we up to?

- We re-opened the community application on Tuesday 16th December 2025 to ensure that all interest across the whole village was captured. This closed on 31st March 2026, receiving a total of 95 applications enabling us to further explore options for the village
- We understand the appetite for a mains sewer connection in Troutbeck
- Since then, we have been working extensively in the background to explore multiple options to find the best solution to lay a new mains sewer in Troutbeck



Answering your questions

Why are you not looking at building the sewer in fields?

At this initial stage we always look to lay new pipes in the highway, this is due to it being much easier to build, access and maintain a sewer when in a public highway. However, this may change during the detailed design phase of the project.

I share a septic tank, can I still be part of first time sewerage scheme?

Yes you can. You can either disconnect your property from the septic tank (as long as you have permission from the landowner where the tank is situated), or everyone connected to the septic tank can connect to the new mains sewer network.

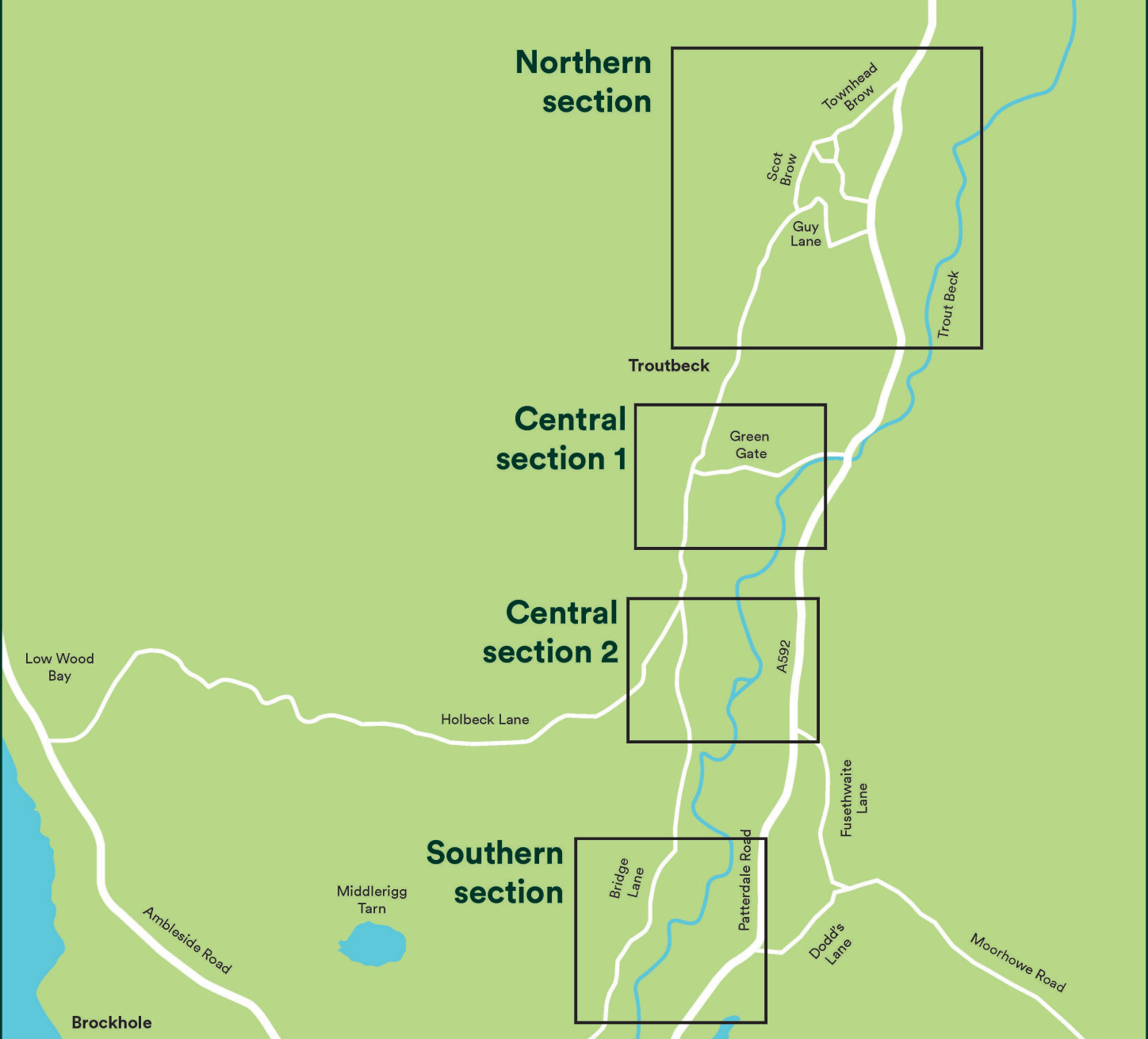
Why are you not looking at building the new sewer to connect at Calgarth pumping station?

This is now a possibility that has been explored by our engineering team

New network to treatment facility option



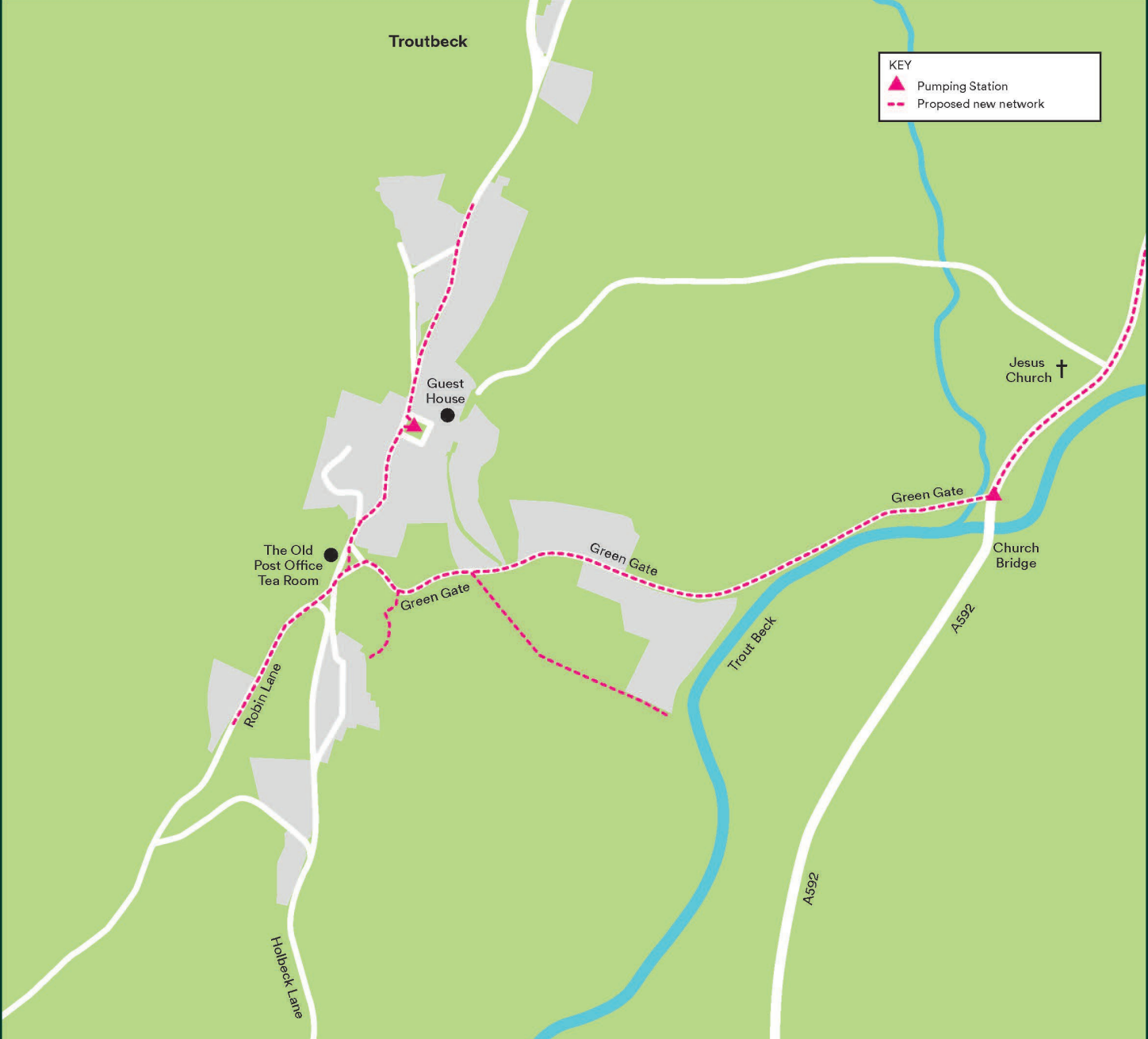
Satellite treatment facility option overview



Satellite treatment facility option - Northern section



Satellite treatment facility option - Central section 1



Satellite treatment facility option - Central section 2



Satellite treatment facility option - Southern section



Troutbeck to Calgarth



Holbeck Lane to Low Wood Bay



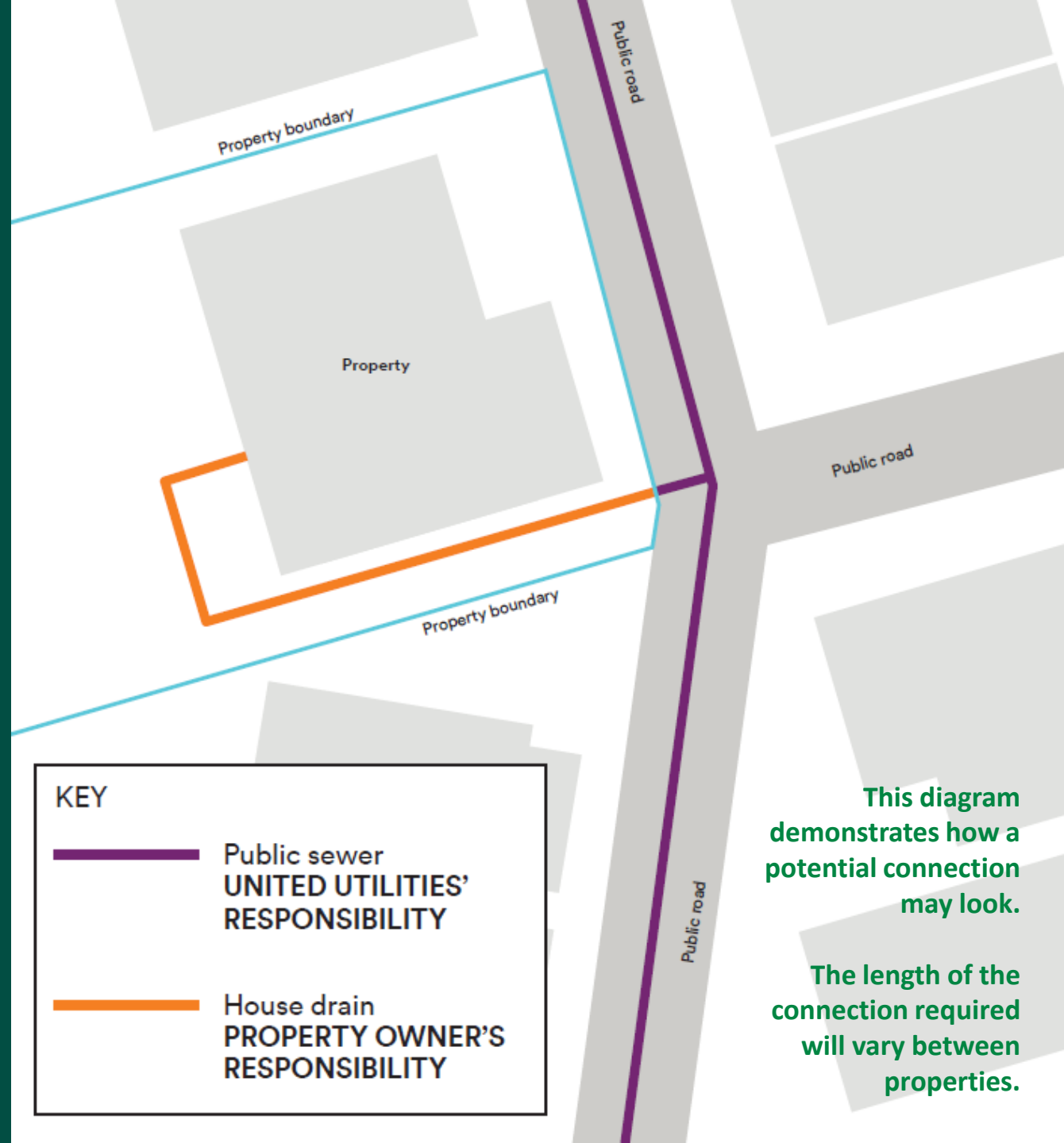
What could it mean for me?

United Utilities is responsible for:

- Building and maintaining the new public sewer, which is foul only
- Up to 15 metres connection from the sewer towards property boundary

Property owner is responsible for:

- Building and maintaining the pipes (and pumps if required) within their property boundary
- Safely decommissioning, disposing or repurposing of the current septic tank
- Ensuring that the connection is foul only and any surface water (e.g. water from gutters and driveway run off) is separated out



How much will it cost me?

This will vary depending on each individual property and includes factors such as how far away your property is from the new sewer, if your property is below the level of the new sewer (a private pumping station may be required) and if surface water currently goes into your septic tank. We have outlined some potential costs below as estimates

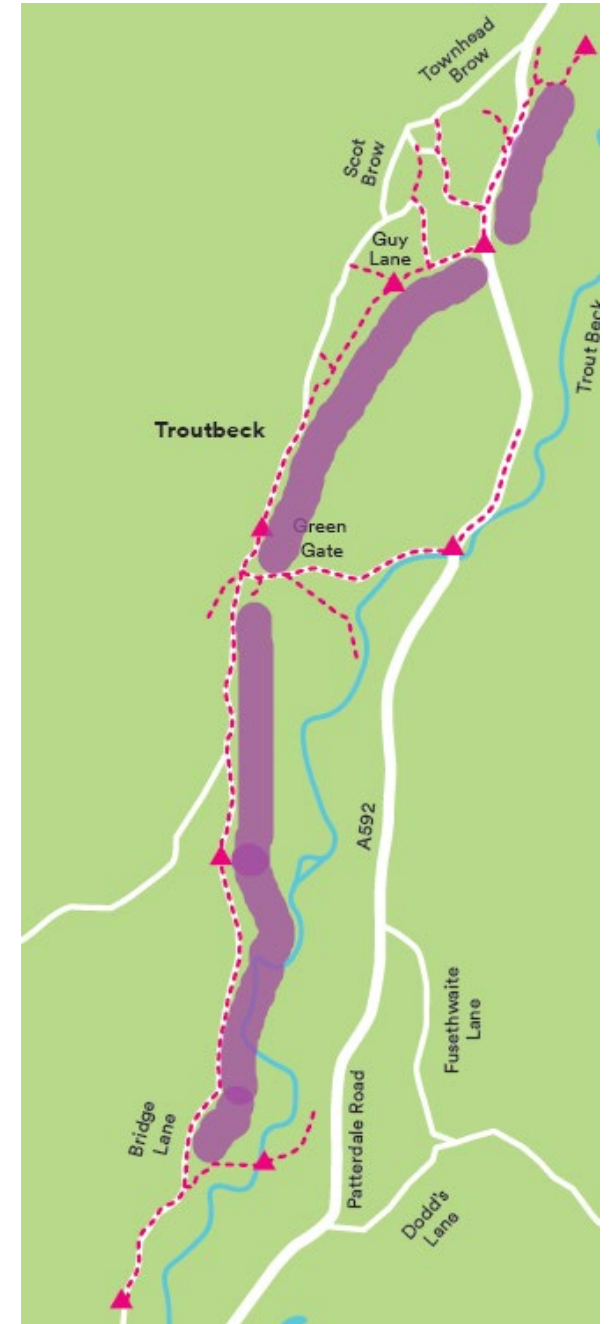
To lay a new sewer on your private land and to separate out surface water

***Approx. £500 - £800 per metre**

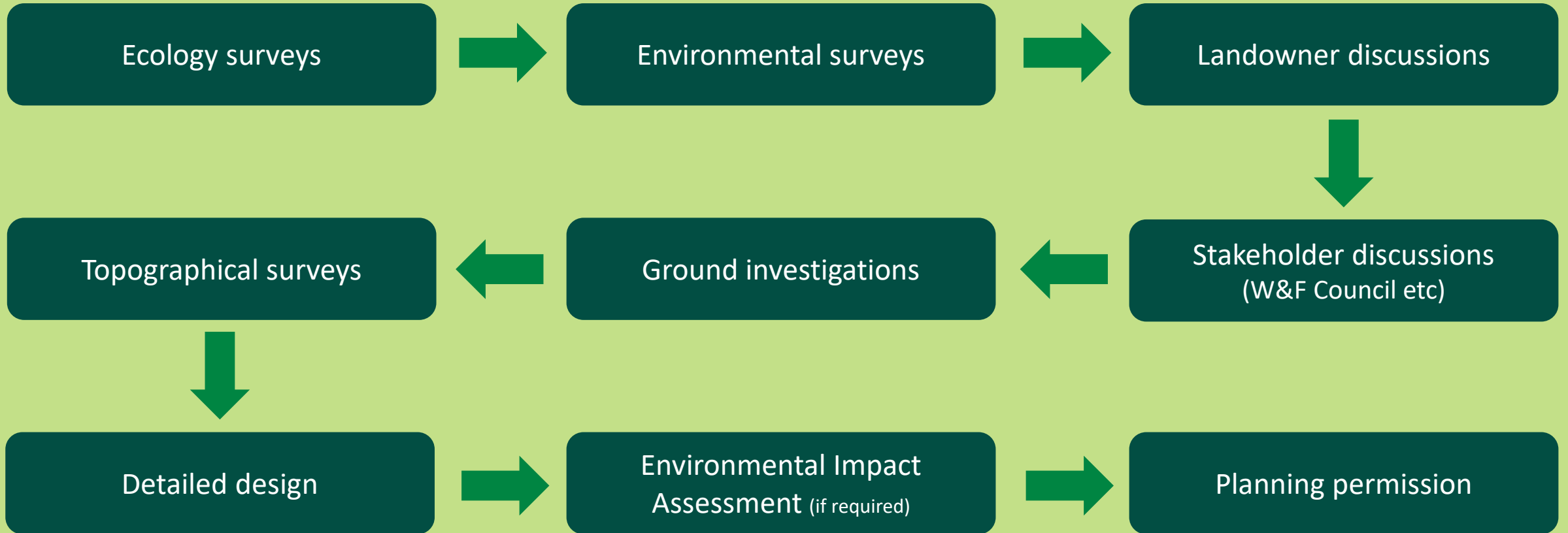
To purchase a private pumping station
(if required, dependant on individual property)

***Retail at approx. £1500**

*All prices provided are indicative only and subject to your final design and contractor pricing.



What are the next steps?



Q & A

Please feel free to ask us any questions that you may have