

Our Project Area

Anglian Water is planning to build a modern, low carbon water recycling centre north of the A14, between Fen Ditton and Horningsea, to replace the existing plant on Cowley Road.

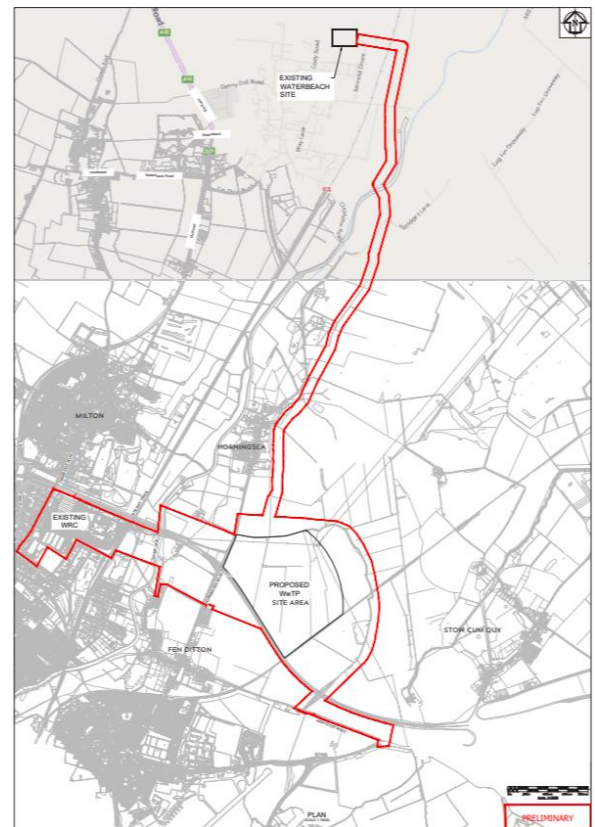
This Factsheet includes information on the area required to deliver the relocation project, including the tunnel and pipelines that will connect the new facility to the sewerage network.

The new facility will continue storing and treating storm flows and treating sludge to produce renewable energy. It will be equipped to deal with a growing population, and offers the opportunity for a joined-up solution for treating waste water from Cambridge and Greater Cambridge.

Background

Our proposals include:

- An integrated waste water and sludge treatment plant.
- A shaft to intercept waste water at the current site on Cowley Road and a tunnel/ pipeline to transfer it to the new site and terminal pumping station.
- A tunnel/pipeline transferring treated waste water to a discharge point on the River Cam, including a transfer pumping station.
- A pipeline transferring waste water from Waterbeach to the new site.
- An upgraded Fen Ditton rising main to connect to the new site.
- Ancillary on-site buildings, including work offices, substation building, workshop, Discovery Centre, vehicle parking including electrical vehicle charging points, fencing and lighting.
- Renewable energy generation via anaerobic digestion which is part of the sludge treatment process that produces gas that will feed directly into the local gas network heating homes.
- Renewable energy generation via solar photovoltaic and battery energy storage system.
- Other associated development such as site access, utilities, connection to the site drainage system, landscaping and off-site highway network alteration measures to reduce potential traffic impacts.
- A new vehicle access including for Heavy Goods Vehicles (HGVs) bringing sludge onto the site for treatment.
- Environmental mitigation and enhancements including improved habitats for wildlife, landscaping, bunds, and increased recreational access and connectivity.



Indicative project boundary

Identifying the relocation site

In 2020, we undertook a detailed site selection process to identify the location for the new facility. This process included consultation with the local community, and our team carefully considered all feedback alongside environmental, community, planning, operational, economic and programme assessments. This decision is explained in our Site Announcement Report, which was posted to local residents in January 2021 and remains available to access via our website (www.cwwtpr.com) or by request.

Refining the project area

Since establishing the site location, we have started our survey and initial assessment work to refine our project area, develop our project design, and inform the scope of our Environmental Impact Assessment (EIA). The work required to refine our project area includes:

- Ground investigation work within the indicative project boundary, such as geophysical surveys, borehole drilling and sampling and trial trenching to confirm underlying ground conditions.
- Ecological surveys of the existing site, the future site and proposed pipeline corridors to identify the presence of any wildlife habitats and species.
- Geophysical surveys to identify any features which may be of archaeological interest and value.
- Capturing and analysing key viewpoints to inform landscaping proposals.
- Engaging with stakeholders and the community through working groups and consultation.

Connecting the new facility

Surface and sub-surface constraints, such as existing above ground structures and geology, are key influences on the alignment of tunnels and the intermediate shafts required to facilitate tunnel construction. Indicative corridors for key pieces of connecting infrastructure are described below.

The existing facility on Cowley Road

Waste water will be transferred from the existing site on Cowley Road to the new facility by tunnel. The tunnel will have an approximate length of 2.5km, an internal diameter of 2.4m, and will be up to 22m deep. The indicative alignment of the transfer tunnel extends eastwards from the existing site to the new facility, crossing below the railway line, the River Cam, Horningsea Road and the A14.

The existing Waterbeach waste water treatment plant and future flows from Waterbeach New Town

The indicative Waterbeach waste water transfer pipeline corridor starts at the existing Waterbeach plant and extends eastwards to cross under the Ely to Cambridge railway line. The corridor then travels southwards, parallel to Long Drove until it crosses the River Cam to the east of Waterbeach railway station. The corridor then continues south, running relatively parallel to Clayhithe Road, before passing to the east of Horningsea village and entering the northern boundary of the new site.

The River Cam

The treated effluent transfer pipeline from the new facility will extend westwards from the new site, crossing Horningsea Road and running parallel to the A14 to a section of the River Cam directly north of the A14 bridge. This new discharge location on the eastern bank of the River Cam is close to the current discharge location. The treated effluent pipeline corridor will have an approximate length of 1.25km.