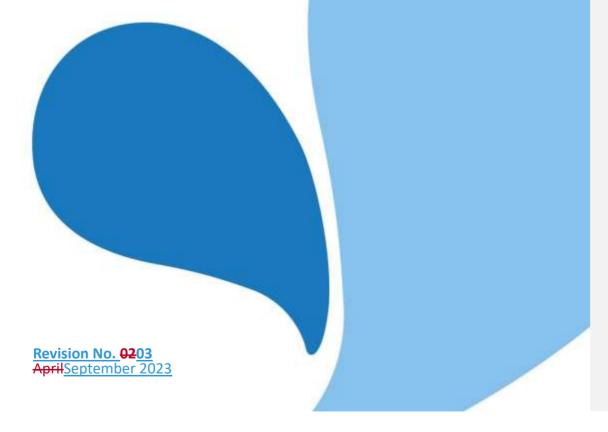


<u>Cambridge Waste Water Treatment Plant Relocation Project</u>
Anglian Water Services <u>Limited</u>

# Environmental Statement Appendix 2.3: Outline Decommissioning

Plan

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#### Contents

<b>11</b> li	ntroduction 1
1.1	Anglian Water Services Limited 1
1.2	Introduction to the relocation project
Backg	
1.3	The relocation site
1.4	Purpose of the Proposed Development
1.5	Outline description of the Proposed Development2
1.6	Environmental mitigation6
1.7	Additional project benefits
	Decommissioning Strategy
	4 <u>7</u> 3
	ecommissioning Strategy Objectives
	<u>8</u> 4
	ambridge WWTP Treatment Process
	cope of the Outline Decommissioning Strategy
	D.76—
	ant to be Decommissioned
	<u>+14</u>
6.1	6.1 Introduction
	14 <del>11 6.2</del>
6.2	Existing redundant plant
6.3	Terminal Pumping Station (TPS) 11 6.414 ——
6.4	Inlet Screen Structure (incl Detritor)
6.5	
6.6	General site utilities
6.7	Primary Settlement Tanks
6.8	Stream D forward feed pumping station including interconnecting pipework



6.9	_Stream C Distribution Chamber
6.10	
6.11	_Activated Sludge Process (ASP) Structures (2 Number)
6.12	_Final Settlement Tanks
6.13	_FE Outfall Pipework
	_Surplus Activated Sludge (SAS)/Primary Thickening Building/SAS Storage Liquor returns pumping station
6.15	_6.15_CHP/Digester/Gas Plant/Centrifuge/Compost Plant/Monsal Plant18_15 6.16
6.16	
6.17	_Sludge Blending Tanks & Drum Thickeners
6.18	
6.19	_Storm Tanks and Storm Lagoon
6.20	Iron Salt Dosing 
6.21	
6.22	
	Appendix A: Redundant Plant at Cambridge WWTP for Possible Re-use
Append <u>27</u> 30	ix B: Existing Cambridge WWTP Ground Contamination Investigation
7.2	_ <del>8.1</del> Introduction <del>27</del> 30
7.3	The existing Cambridge WWTP





#### **11** Introduction

#### 1.1 Anglian Water Services Limited

- 1.1.1 Anglian Water Services Limited (the 'Applicant') is the largest regulated water and water recycling company in England and Wales by geographic area, supplying water and water recycling services to almost seven million people in the East of England and Hartlepool.
- 1.1.2 The Applicant is committed to bringing environmental and social prosperity to the region they serve, through their commitment to Love Every Drop. As a purpose-led business, The Applicant seeks to contribute to the environmental and social wellbeing of the communities within which they operate. As one of the largest energy users in the East of England, they are also committed to reaching net zero carbon emissions by 2030.

#### 1.2 Background-Introduction to the relocation project

1.2.1 The Applicant is proposing to build a modern, low carbon waste water treatment for G1.2.1 Anglian reWater's Cambridge on a new site area north of the A14 between Fen Ditton and Waste Water Treatment Plant Relocation project

(CWWTPRP) ("the Proposed Development") is funded by Homes England, the Government's housing accelerator which seeks to improve neighbourhoods and grow communities by releasing land for development.

Horningsea within the Cambridge drainage catchment area, to replace the plant on Cowley
Road, hereafter referred to as 1.2.2 The Proposed Development involves the
relocation of the existing Cambridge Waste Water Treatment Plant (WWTP) currently
operating at Cowley Road, Cambridge, to a new site between Horningsea, Fen Ditton
and Stow cum Quy, adjacent to the A14 in Cambridgeshire.

- 1.2.23 The relocation will enable South Cambridgeshire District Council and Cambridge City
- would make the site of the existing WWTP available to form part of the Council's long held ambition to development of a new low-carbon city district, on
- known as North East Cambridge. The site at Cowley Road, is Cambridge's last major brownfield site, known as and the wider North East Cambridge- district proposals envisage creating around 8,350 homes and 15,000 jobs over the next 20 years. The site is an important component of the First Proposals (preferred options) for the new
- 1.2.4 North East Cambridge is a highly sustainable location for housing. In addition to the

  Homes England funding, the area has benefitted from Transport Infrastructure Fund
  (TIF) funding for Park & Ride, the completion of Cambridge Guided Bus public
  transport infrastructure, the delivery of the Cambridge North rail station and the
  Chisholm Trail.



## 1.2.5 North East Cambridge is one of three key strategic sites which will form "central building blocks of any future strategy for development" in the proposed Greater Cambridge Local Plan that were being jointly prepared by Cambridge City Council and South

<u>Cambridgeshire District Council that will be</u> subject to public consultation <u>late last year.in</u>

Autumn

2023. The North East Cambridge Area Action Plan has also recently been agreed by the Councils in its (AAP), currently in "Proposed Submission" form-and, will be subject to public consultation prior to submission, once the planning policy framework which ultimately guides the Delevelopment Consent Order is determined of The relocation of the existing waste water treatment facility will enable this new district to come forward and deliver 8,350 homes, 15,000 new jobs and a wide range of community, cultural and open space facilities in North East Cambridge, city district. Further details on this can be found in our Statement of Requirement (Application Document Reference 7.2) which was published in September 2019.

- 1.2.3-The relocation of the waste water treatment plant will also allow The Applicant to continue providing vital waste water services to customers across Cambridge and Greater Cambridge. The new plant will continue storing and treating storm flows and treating sludge to produce renewable energy. It will be designed to deal with a growing population. It offers the opportunity for a joined-up solution for treating waste water from Cambridge and
- 1.2.4 The 1.2.6 The importance of the Proposed Development will be the first waste water project to seek a
- , both regionally and nationally, was recognised by Development Consent Order that is not specifically named in the National Policy
- Statement (NPS). 'The Applicant' sought and obtained a direction from the Secretary of State under section 35 of the Planning Act 2008 ("the 2008 Act"), which confirms that the project will be treated as a Nationally Significant Infrastructure Project ("NSIP") when the application is submitted for Environment, Food and Rural Affairs (DEFRA)

#### 1.2.5 The Proposed Development

1.2.6-This section provides a high-level summary of the Proposed Development. The term in January 2021, who directed that the Proposed

Proposed Development refers to the Cambridge Waste Water Treatment Plant (WWTP) Relocation project in its entirety and all works associated with the development Development is nationally significant and is to be treated as a development for which a Development Consent Order (DCO) is required (see Appendix 1-3 of the Planning Statement, App Doc Ref 7.5).



#### 1.2.7 A detailed description The policy context of the

Proposed Development can be found is described in more detail in the Planning Statement (Application Document Reference 7.5)

#### 1.3 The relocation site

- 1.3.1 The relocation site was selected following comprehensive study and public consultation. The site selection process and consideration of alternatives is described in more detail in Chapter 23: Alternatives of the Environmental Statement (App Doc Ref 5.2.23).
- 1.3.2.8 The purpose of the proposed Cambridge WWTP will be to treat all waste water and wet sludge from the Cambridge catchment just ascurrent environmental conditions at the existing Cambridge WWTP currently does, plus that from the growth indicated and being planned within the catchment in the Local Plan to 2041, with ability to expand beyond to deal with further growth site and at the relocation site are described in Chapter 2: Project Description of the

Environmental Statement (App Doc Ref 5.2.2). 1.2.9 As part of its statutory function, The Applicant operates. The site is located to the north-east of Cambridge and 2km to the east of the existing Cambridge WWTP. as shown on the Works Plans (App Doc Ref 4.3.1). It is situated on arable farmland immediately north of the A14 and east of the B1047 Horningsea Road in the green belt between the villages of Horningsea to the north, Stow cum Quy to the east and Fen Ditton to the south west. Two overhead lines of pylons cross the northern and eastern edges of the main development site and come together with a third line at the north eastern corner of the site. The topography is fairly flat with an approximately 4m fall across the site south west to north east.

#### 1.4 Purpose of the Proposed Development

1.4.1 The Proposed Development for which the DCO is being sought will deliver all the functions of The existing Cambridge WWTP receives at Cowley Road, treating all waste water from the Cambridge catchment either directly from the connected sewerage network or tankered to the plant from homes and businesses that are not connected and wet sludge from the wider region. This waste water is then treated and the treated effluent discharged through an outfall to the nearby River Cam. The existing Cambridge WWTP is an integrated WWTP, as would be the Proposed Development.

Integrated WWTP incorporate a sludge treatment function, in the form of a Sludge

Treatment Centre (STC), which treats the sludge derived from the 1.4.2 In addition, it will have an increased capacity, being intended to treat the waste water from the catchment, and the "wet sludge" produced by other satellite plants which do not have integrated STC.Waterbeach catchment and anticipated housing growth in the combined Cambridge and Waterbeach catchment area.



#### 1.2.10-The Waterbeach New Town development lies to the

north of Cambridge. When built out Waterbeach new town will comprise some 11,000 new homes along with associated business, retail, community and leisure uses. Waste water from Waterbeach will ultimately be treated by the proposed Cambridge WWTP once operational. However, the rate of development at Waterbeach New Town may require a new pipeline (rising main) to be built from Waterbeach to the existing Cambridge WWTP to allow treatment of waste water in advance of the proposed WWTP becoming operational. In that case, either a later connection would be made to the proposed WWTP from a point on the pipeline route, or flows diverted from the existing Cambridge WWTP via 1.4.3 The infrastructure provided as part of the main works will have a design life to at least 2090, and the supporting infrastructure (i.e. the transfer tunnel-, pipelines and outfall) will have a designed capacity sufficient to meet population growth projections plus an allowance for climate change into the 2080s. Furthermore, there is capability for expansion in space that has been provided within the earth bank and by modification, enhancement and optimisation of the design to accommodate anticipated flows into the early 2100s.`

## 1.2.11 In summary1.5 Outline description of the Proposed Development will comprise of:

## 1.5.1 The DCO application is seeking approval for the following main elements of the Proposed Development:

- an integrated waste water and sludge treatment plant.
- a shaft to intercept waste water at the existing Cambridge WWTP on Cowley
- ——Road and a tunnel/ pipeline to transfer it to the proposed WWTP and terminal
- pumping station. Temporary intermediate shafts to launch and recover the micro-tunnel boring machine.
- a gravity pipeline transferring treated waste water from the proposed
   WWTP to a discharge point on the River Cam and a pipeline for storm water
- a twin pipeline transferring waste water from Waterbeach to the existing Cambridge WWTP, with the option of a connection direct in to the proposed WWTP when the existing works is decommissioned.
- ancillary on-site buildings, including \_a Gateway Building with incorporated Discovery Centre, substation building, workshop, vehicle parking including electrical vehicle charging points, fencing and lighting.
- environmental mitigation and enhancements including substantial biodiversity net gain, improved habitats for wildlife, extensive landscaping, a landscaped earth bank enclosing the proposed WWTP, climate resilient drainage system and improved recreational access and connectivity.



- Rrenewable energy generation via anaerobic digestion which is part of the sludge treatment process that produces biogas designed to be able to feed directly into the local gas network to heat homes, or as an alternative potential future option burnt in combined heat and power engines.
- renewable energy generation via solar photovoltaic and associated battery energy storage system.
- other ancillary development such as internal site access, utilities, including gas, electricity and communications and connection to the site drainage system.
- a new vehicle access from Horningsea Road including for Heavy Goods Vehicles (HGV's) bringing sludge onto the site for treatment and other site traffic.
- Temporary construction works including compounds, temporary highway controls, accesses and signage, fencing and gates, security and safety measures, lighting, welfare facilities, communication control and telemetry infrastructure.
- Decommissioning works to the existing Cambridge WWTP to cease its existing operational function and to facilitate the surrender of its operational permits including removal of pumps, isolation of plant, electrical connections and pipework, filling and capping of pipework, cleaning of tanks, pipes, screens and other structures, plant and machinery, works to decommission the potable water supply and works to restrict access to walkways, plant and machinery.
- 1.5.2 Additional elements, together with more information on the above features are provided in Chapter 2: Project Description of the Environmental Statement (App Doc Ref 5.2.2). Principles of Good Design have been used to inform the development of the project, which has been guided by the National Infrastructure Commission's Design Principles, advice from the Design Council and review by the Cambridgeshire Quality Panel, as described in the Design and Access Statement (App Doc Ref 7.6).
- 1.5.3 Construction activities, likely to take 3-4 years, will include the creation of a shaft to intercept waste water at the existing Cambridge WWTP and temporary intermediate shafts between the existing Cambridge WWTP and the proposed WWTP to launch and recover a micro-tunnel boring machine. The sequence and location of construction activities are also detailed in Chapter 2: Project Description of the Environmental Statement (App Doc Ref 5.2.2).
- 1.5.4 Towards the end of the construction period, commissioning of the Proposed Development will commence, lasting for between 6 months and 1 year.
- 1.5.5 The Proposed Development will also involve the decommissioning of the existing



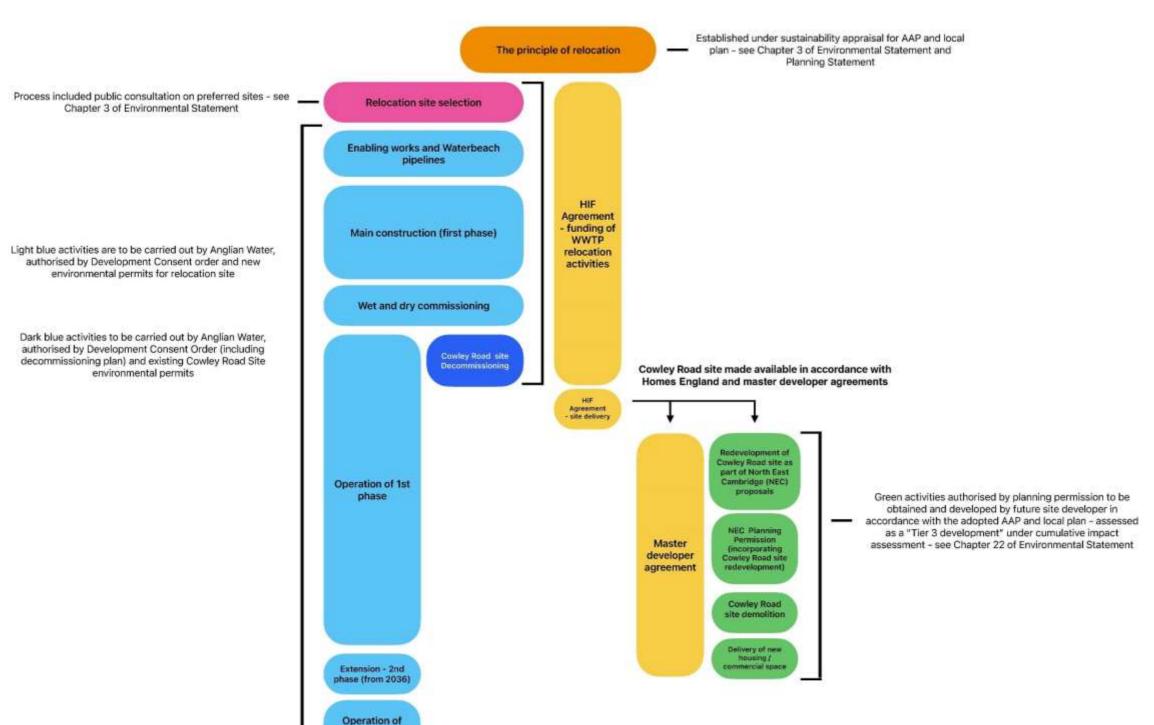
Cambridge WWTP at Cowley Road. This is secured by the Development Consent Order and the Outline Decommissioning Plan (Appendix 2.3, App Doc Ref 5.4.2.3) and involves activities necessary to take the existing plant out of operational use and to surrender its current operational permits.

- 1.5.6 Following decommissioning, the site of the existing plant will be made available in accordance with agreements already in place with Homes England and with the master developer appointed to deliver the redevelopment of North East Cambridge
- 1.5.7 Consent is not sought under the Development Consent Order for the subsequent demolition or redevelopment of the Cowley Road site, which, as described in Chapter
   2: Project Description of the Environmental Statement (App Doc Ref 5.2.2) will be consented under a separate and future planning permission, by master developers, U+I and TOWN, appointed under the agreements described above.
- 1.5.8 The relationship between the Proposed Development, the scope of the proposed DCO and the future demolition and redevelopment of the site at Cowley Road is set out in figure 1.1, below.



extended plant beyond 2080s





Cambridge Waste Water Treatment Plant Relocation Project Appendix 2.3: Outline Decommissioning Plan

Figure 1.1: Scope of the draft DCO and the future



demolition and redevelopment of the site at Cowley Road

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#### 1.6 Environmental mitigation

- 1.6.1 Through the environmental impact assessment process and community and technical stakeholder engagement the Proposed Development has incorporated comprehensive environmental mitigation, secured through the Development Consent Order.
- 1.6.2 This mitigation includes a Landscape, Ecological and Recreational Management Plan

  ("LERMP", Appendix 8.14, App Doc Ref 5.4.8.14) has been developed to complement
  regional and local initiatives, including the Wicken Fen Vision and the Cambridge
  Nature Network. The 22-hectare footprint of the plant is encircled by a landscaped
  and planted earth bank situated within the broader LERMP area of around
  70hectares.

#### 1.7 Additional project benefits

- 1.7.1 In addition to enabling housing growth and future economic development of the Greater Cambridge area the project will also give rise to a number of additional benefits including:
  - significantly reduced carbon emissions compared to the existing Cambridge
     WWTP, being operationally net zero and energy neutral, contributing to
     Anglian Water's ambition of being operationally net zero as a business by 2030.
  - greater resilience and improved storm management, meaning storm overflows and Combined Sewer Overflows (CSOs) are far less likely to occur. This means that, as Greater Cambridge continues to grow, the facility will be able to treat a greater volume of storm flows to a higher standard than would be the case at today's facility.
  - The proposed WWTP is being designed to reduce concentration in final treated
    effluent discharges of phosphorus, ammonia, total suspended solids and
    biological oxygen demand (BOD), compared to the existing Cambridge WWTP.
    This means that when the new facility starts to operate, water quality in the
    River Cam will improve.

#### **2 Decommissioning Strategy**

2.1.1 This Outline Decommissioning Plan supports the suite of management plans prepared to support the DCO application for the Proposed Development. The Plan provides an outline of how plant at the existing Cambridge WWTP will be decommissioned as part of the process to surrender the existing Cambridge WWTP's Environmental Permit. A more detailed plan would be developed as a DCO requirement and to ensure the activities meet the requirements of the Environment Agency to surrender the permit. As biological and other key processes establish at the proposed WWTP, Final Effluent discharge flows will reduce at the existing



Cambridge WWTP. The Final Effluent flows from both sites will be quantity, quality and time constrained. Sludge and Cake imports will be accepted and processed at the existing Cambridge WWTP and in a similar manner to the biological treatment imports will transfer across to the proposed WWTP. Associated permits will be enabled or surrendered at appropriate stages during the above process in line with EA Guidance.

- 2.1.2 The Outline Decommissioning Strategy will be developed into a final detailed plan following the submission of the DCO application. This will then form the core for decommissioning of the works followed by a report to the Environment Agency detailing the work carried out was in accordance with the decommissioning plan. Ground, air and water surveys have already been carried out and at this stage of the program it is envisaged and extremely likely that additional ground, air and water sampling will be required during and after decommissioning so far as is reasonably practicable to demonstrate the land is in a similar state to which the Applicant took ownership in approximately 1904.
- 2.1.3 The Outline Decommissioning Strategy secures the commitments made by the environmental impact assessment work. The final plan will set out the standards, management measures, procedures and best practices required.
- 2.1.4 Once decommissioning is completed a report will be provided to the Environment Agency showing compliance with the Decommissioning Plan and Environment Agency requirements.

#### **3 Decommissioning Strategy Objectives**

- 3.1.1 The overall objectives of this Outline Decommissioning Strategy are to:
  - make safe the existing Cambridge WWTP once the proposed new Cambridge WWTP is complete and to surrender any licenses associated with the works under the Environment Agency's RGN 9: Surrender Guidance;
  - where possible, minimise disruption to the continued safe and efficient operation of the new and existing Cambridge WWTP and local ecological environments;
  - where possible, reduce inconvenience to local communities and stakeholders;
  - where possible, provide an environmental solution to all material and equipment importation and handling that satisfies the Applicant's social responsibility policies.



#### **4 Cambridge WWTP Treatment Process**

- 4.1.1 The existing Cambridge WWTP currently provides capacity for a Population Equivalent (PE) of approximately 215,000. The treatment process stages consist of an inlet Pumping Station (PS), fine screens, grit removal, Primary Settlement Tanks (PST's), and then secondary treatment split into two streams C and D. Both stream C and Stream D comprise aeration lanes followed by Final Settlement Tanks (FST's) Post FTS effluent is discharged in the River Cam via a Final Effluent (FE) pipe. The FE outfall is in the east corner of the site adjacent to a rail line and electrical substation.
- 4.1.2 Historically Streams A and B provided secondary treatment, each comprising Trickling Filter Beds (TFs) Humus Settlement Tanks (HSTs) with a tertiary sand filter serving both streams. Process plant associated with Streams A and B is currently redundant.
- 4.1.3 Most of the treatment pipework is buried except for the effluent feed pipe to the Stream D being constructed, commissioned and placed into operation in 2015.
- 4.1.4 Other buried pipework includes the Storm Tank (ST) feed and return, storm overflow, Stream C gravity feed to the aeration lanes, Stream C Surplus Activated Sludge (SAS) line and Stream effluent line from the FST's to the FE outfall.
- 4.1.5 The site also has an FE Washwater ring main fed by the Washwater PS associated with treatment Stream C and D feed from the FST's. The Washwater system consists of a number of hydrant points and Washwater services around the site e.g., screens and Sludge Treatment Centre (STC).
- 4.1.6 A potable main fed by Cambridge Water services a number of facilities including the Innovations centre, STC and D Works Poly make up plant for sludge thickening.

#### **5 Scope of the Outline Decommissioning Strategy**

- 5.1.1 The existing Cambridge WWTP will require decommissioning as the proposed WWTP becomes operational and effluent flows are transferred there to establish process treatment. An aerial view is shown in Figure 5.1 below.
- 5.1.2 The decommissioning at the existing Cambridge WWTP will occur in planned stages as process treatment capability develops at the proposed WWTP. This is to maintain compliant final effluent discharges at both treatment plants and compliant sludge products at the existing Cambridge WWTP under Hazard Analysis and Critical Control Points (HACCP) until such time process treatment at the existing Cambridge WWTP is no longer required and will be taken offline.
- 5.1.3 There is opportunity to begin decommissioning items of process and mechanical and electrical plant that is currently redundant or superseded by the new 'C-Works' at the existing Cambridge WWTP. A Works and B Works are currently off line and out of



- service, thus providing the opportunity to commence decommissioning of these areas ahead of the remaining operational Works C and D.
- 5.1.4 Decommissioning will generally involve hydraulic isolation of flows, removal of residual treatment matter including primary/secondary/tertiary effluents, sludges, rags, mixed liquors, boiler fuel, treatment chemicals including polyelectrolytes, iron salts, electrical and mechanical isolation of plant including but not limited to Motor Control Centres, pumps, actuated valves, buildings and building services on site. Activated Sludge will be taken from the 'C-Works' to wet commission the Membrane Aerated Biofilm Reactor plant at the proposed WWTP. Removal and disposal of residual process items, matter, solids, liquids etc will in a responsible manner. Items of plant that may be reused will be considered for redeployment as necessary.
- 5.1.5 An inventory has been compiled listing viable plant items that may be 'harvested' for reuse or redeployment by AW including telemetry outstations, programmable logic controllers and human machine interface panels, pumps, blowers and liquid flowmeters see Appendix A in Section 7 of this report.
- 5.1.6 Prior to any decommissioning starting, the Environment Agency shall be informed that decommissioning will commence and provided a copy of the Decommissioning Plan.
- 5.1.7 Decommissioning of plant with potentially explosive atmospheres due to the potential presence of biogas (e.g. digesters), so decommissioning work will be carried out by specialist contractors managed under the Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) following appropriately reviewed and approved safety guidelines and methods.
- 5.1.8 At an appropriate stage during the commissioning of the proposed WWTP and decommissioning of the existing Cambridge WWTP, the Sludge Treatment License will be surrendered under the Environment Agency's RGN 9: Surrender Guidance. In line with this License and Legislation, monitoring of the existing plant will be needed for Hazard Analysis and Critical Control Point (HACCP) and under the Environment
  - Agency's RGN 9: Surrender Guidance for inclusion within the Site Condition Report to be produced in a timely manner upon completion of Decommissioning. Reference shall be made to the Environment Agency's H5 Guidance for Applicants: Site condition report guidance and templates.
- 5.1.9 Drawings detailing underground pipes and plant are available.
- 5.1.10 Equipment taken out of use is decontaminated by flushing, washing or similar with Final Effluent.
- 5.1.11 Soil testing has been undertaken to understand the degree of any pollution caused by site activities and information on what remediation is needed to return the site to a satisfactory state as defined by the initial site report.



- 5.1.12 Appendix B details the scope of ground contamination investigation for the existing Cambridge WWTP.
- 5.1.13 An asbestos survey has been completed.
- 5.1.14 Decommissioning will be undertaken in accordance with the Code of Construction Practice Parts A and B (Appendix 2.1 & 2.2, App Doc Refs 5.4.2.1 and 5.4.2.2) to manage risks to the environment. Where required, during the detailed design stage specific measures may be developed in the Decommissioning Plan; for example, task specific Risk Assessments or Impact Plans will be put in place for decommissioning activities which may cause risk to pollution.



Figure 5.1 Aerial photograph of the existing Cambridge WWTP

- 5.1.15 There are several licenses associated with the works which will be surrendered under the Environment Agency's RGN 9: Surrender Guidance:
  - Sludge Treatment Centre (STC) Interim Industrial Effluent Discharge;
  - The biological treatment works itself or existing Cambridge WWTP Industrial Effluent Discharge; and
  - Monsal/Combined Heat and Power (CHP) Plant Medium Combustion Permit (MCP)
- 5.1.16 There will be an overlap of decommissioning activities at the existing Cambridge WWTP and both biological and other key process commissioning at the proposed WWTP as the two are linked. As biological and other key processes establish at the proposed WWTP, FE discharge flows will reduce at the existing Cambridge WWTP. The FE flows from both sites will be quantity, quality and time constrained in line with Environment Agency indications. Sludge and Cake imports will be accepted and processed at the existing Cambridge WWTP and, in a similar manner to the biological



treatment, sludge imports will transfer across to the Proposed Development Sludge Treatment Centre and Combined Heat and Pasteurisation Plant. Associated permits will be enabled or surrendered at appropriate stages during the above in line with the Environment Agency's Regulatory Guidance Note (RGN) 9: Surrender Guidance. Set out below in Figure 5.1 a) is an outline of the process that would be followed by the Applicant to surrender the Environmental Permitting Regulations (EPR) permits that currently relate to the Cambridge WWTP. The process would begin on notification from the Applicant to the Environment Agency and would take an estimated 6-12 months to conclude. The Applicant would not begin the process until the commissioning of the CWWTP was complete. The Key Stakeholders or this process are, Anglian Water Services, The Environment Agency, Specialist Contractors, Cambridge Water and UKPN. Figure 5.1 below sets out the process that will be followed by the developer after this point for future planning approvals for development, including infrastructure demolition and site preparation. Key Stakeholders for this process include, Developers, Cambridge City Council and South Cambridgeshire District Council.

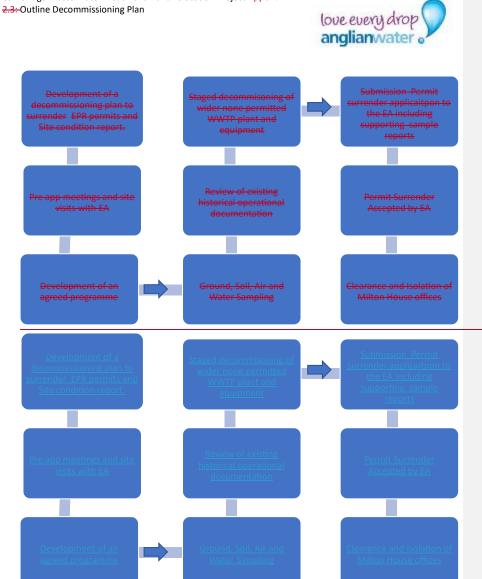


Figure 5.1 a) outline of the process that would be followed by the Applicant to surrender the Environmental Permitting Regulations (EPR) permits



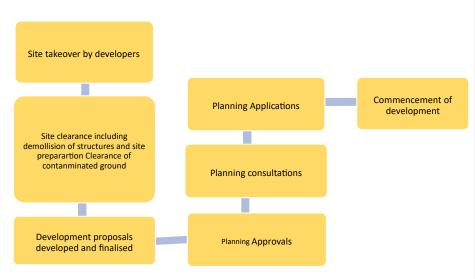


Figure 5.2 b) outline of the process that would be followed by the developer for future planning approvals for development, including infrastructure demolition and site preparation.



#### 6 Plant to be Decommissioned

#### 6.1 Introduction

6.1.1 This section outlines the approach to and scope of activities for each key part of the existing Cambridge WWTP.

#### 6.2 Existing redundant plant

- 6.2.1 No action is required for the existing redundant and previously decommissioned Filter Beds.
- 6.2.2 Though no action required to decommission the existing redundant Humus Tanks, these tanks would need to have rainwater and potentially residue sewage products removed then cleaned. Holes would be punched in to the tanks to avoid future buildup of rainwater.

#### 6.3 Terminal Pumping Station (TPS)

- 6.3.1 Contents Raw sewage including trade effluents.
- 6.3.2 Scope remove pumps, electrically isolate with cables cut and labelled to prevent use and isolate incoming flows (Pipe stopper and concrete infill inlet pipe approx. 16m depth). Washdown wells, chambers, flush pipes all with FE and residual sludge to be removed. Access to walkways and ladders/stairs to be prevented. Hole to be punched into base to prevent rainwater collection. No additional dust, no additional odour or emissions.
- 6.3.3 Labour, Vehicle Movement & Duration:
  - 2 x Electricians 2 x medium vans;
  - 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;
  - 2 x Operatives for tanker jetting & cleaning (2 x tankers); and
  - Durations of works estimated 2 weeks.

#### 6.4 Inlet Screen Structure (incl Detritor)

- 6.4.1 Contents Sewage and sewage products, rags, grit.
- 6.4.2 Scope clean screens and structure with FE, clean screens and structure, electrically isolate with cables cut and labelled to prevent use. Existing pipes to be flushed and capped. Washwater to be isolated. Detritor grit to be removed off site and tank cleaned, mechanical and electrical items isolated and electric cables cut and labelled



to prevent use. Access to walkways and ladders/stairs to be prevented. No additional dust, no additional odour or emissions.

- 6.4.3 Labour, Vehicle Movement & Duration:
  - 2 x Electricians 2 x medium vans;
  - 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;
  - 2 x Operatives for tanker jetting & cleaning (2 x tankers);
  - Durations of works estimated 2 weeks.

#### 6.5 Washwater system

- 6.5.1 Two Washwater systems on the old works.
- 6.5.2 Scope two Washwater systems on the old works; pipelines already flushed by nature of the effluent in the mains. Stream C has a storage tank that needs to be drained, washed and desludged and then mechanically and electrically isolated with cables cut and labelled to prevent use. Hole to be punched into base to prevent rainwater collection. No additional dust, no additional odour or emissions.
- 6.5.3 Labour, Vehicle Movement & Duration:
  - 2 x Electricians 2 x medium vans;
  - 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;
  - 2 x Operatives for tanker jetting & cleaning (2 x tankers); and
  - Durations of works estimated 2 weeks.

#### 6.6 General site utilities

- 6.6.1 UKPN to decommission all incoming power to the old works. The Applicant to decommission the high voltage (HV) network across site. The HV system onsite will have all cables disconnected, cut and pot ended to ensure no reconnection is possible. No additional dust, no additional odour or emissions.
- 6.6.2 Labour, Vehicle Movement & Duration:
  - 2 x HV Engineers 2 x medium vans; and
  - Durations of works estimated 3 weeks.
- 6.6.3 Cambridge Water to decommission the potable water supply.



#### 6.7 Primary Settlement Tanks

- 6.7.1 Contents Settled sewage and sewage products.
- 6.7.2 Scope drain down, desludge and clean tanks. Then mechanically and electrically isolated with cables cut and labelled to prevent use. Access to walkways and ladders/stairs to be prevented. Hole to be punched into base to prevent rainwater collection. No additional odour or emissions.
- 6.7.3 Labour, Vehicle Movement & Duration:
  - 2 x Electricians 2 x medium vans;
  - 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;
  - 2 x Operatives for tanker jetting & cleaning (8 x tankers); and
  - · Durations of works estimated 2 weeks.

## 6.8 Stream D forward feed pumping station including interconnecting pipework

- 6.8.1 Contents secondary effluent and sewage products.
- 6.8.2 Scope remove pumps, electrically isolated with cables cut and labelled to prevent use. Washdown tank, flush pipes and residual sludge to be removed. Access to walkways and ladders/stairs to be prevented. Hole to be punched into base to prevent rainwater collection. No additional odour or emissions. During commissioning of the new works. The flows from D-Stream, will be over pumped from the existing works to shaft 3, then flow to the new works for testing and commissioning.
- 6.8.3 Labour, Vehicle Movement & Duration:
  - 2 x Electricians 2 x medium vans;
  - 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;
  - 2 x Operatives for tanker jetting & cleaning (2 x tankers); and
  - Durations of works estimated 2 weeks.

#### 6.9 Stream C Distribution Chamber

- 6.9.1 Contents Secondary effluent.
- 6.9.2 Scope Tank to be drained, de-sludged and cleaned with pipework flushed. Access to walkways and ladders/stairs to be prevented. Hole to be punched into base to prevent rainwater collection. No additional odour or emissions. The flows from



CStream, will be over pumped from the existing works to shaft 3, then flow to the new works for testing and commissioning.

#### 6.9.3 Labour, Vehicle Movement & Duration:

- 2 x Electricians 2 x medium vans;
- 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;
- 2 x Operatives for tanker jetting & cleaning (2 x tankers); and
- Durations of works estimated 2 weeks.

#### 6.10 Stream C Blowers

6.10.1 The rotating plant elements have been identified for potential reuse by the Applicant.

#### 6.11 Activated Sludge Process (ASP) Structures (2 Number)

- 6.11.1 Contents Secondary Effluent and sewage product.
- 6.11.2 Scope Tanks to be drained, desludged and cleaned including flush pipes. Electrically isolated with cables cut and labelled to prevent use. Hole to be punched into base to prevent rainwater collection. Access to walkways and ladders/stairs to be prevented. No additional dust, no additional odour, or emissions.
- 6.11.3 Labour, Vehicle Movement & Duration:
  - 2 x Electricians 2 x medium vans;
  - 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;
  - 3 x Operatives for tanker jetting & cleaning (8 x tankers); and
  - Durations of works estimated 4 weeks.

#### **6.12 Final Settlement Tanks**

- 6.12.1 Contents Tertiary effluent.
- 6.12.2 Scope Drain down, desludge and clean tanks. Then mechanically and electrically isolated with cables cut and labelled to prevent use. Hole to be punched into base to prevent rainwater collection. Access to walkways and ladders/stairs to be prevented. No additional dust, no additional odour or emissions.
- 6.12.3 Labour, Vehicle Movement & Duration:
  - 2 x Electricians 2 x medium vans;
  - 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;



- 3 x Operatives for tanker jetting & cleaning (6 x tankers); and
- Durations of works estimated 2 weeks.

#### 6.13 FE Outfall Pipework

- 6.13.1 Contents Final effluent.
- 6.13.2 Scope Needs to be isolated, drained and sealed off to at both ends (site and river end) to prevent river flows coming back into the redundant old works. There is an existing stop log system which maybe utilised. 2 x Mechanical. No additional odour or emissions.
- 6.13.3 Labour, Vehicle Movement & Duration:
  - 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck; and
  - Durations of works estimated 1 weeks.

## 6.14 Surplus Activated Sludge (SAS)/Primary Thickening Building/SAS Storage Tank/Liquor returns pumping station

- 6.14.1 Contents Various incl but not limited to Liquid and cake sludges, Poly, Centrate, thickened sludges.
- 6.14.2 Scope To be drained, desludged and cleaned with pipework flushed. Electrically isolated with cables cut and labelled to prevent use. Access to walkways and ladders/stairs to be prevented. No additional dust, no additional odour or emissions.
- 6.14.3 Labour, Vehicle Movement & Duration:
  - 2 x Electricians 2 x medium vans;
  - 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;
  - 2 x Operatives for tanker jetting & cleaning (1 x tankers); and
  - Durations of works estimated 1 weeks.

## 6.15 CHP/Digester/Gas Plant/Centrifuge/Compost Plant/Monsal

6.15.1 The detailed plan for these works will be subject to agreement with the Environment Agency and will incorporate relevant elements of the Applicant's internal Policies for Wastewater Treatment ("POSWASTES") which includes requirements in respect of biosolids.



- 6.15.2 Scope DSEAR Regulations must apply to decommissioning all plant.

  Decommissioning activities to include draining tanks, flushing and purging (removal potentially explosive and odorous gases) pipes. Mechanical and electrical (M&E) items isolated and electric cables cut and labelled to prevent use. Access to walkways and ladders/stairs to be prevented. No additional dust, no additional odour or emissions.
- 6.15.3 Outline Procedure to Decommission the STC, Monsal, Digestion and CHP area:
  - A full survey will be required nearer the time to check viability and confirm interim measures required including but not limited to:
    - 1. Programmable logic control Control Software mods
    - 2. hardwired or other interlink mods
    - 3. 'possible out of spec' operation e.g. with failed plant, known anomalies or temporary operational modifications
  - To allow and support the STC taken offline followed sequentially by the Monsal Plant effectively finishing with a final batch of compliant sludge products within approx. 2 weeks of cessation of live product feed.
  - Following successful commissioning and operation of the new Sludge/CHP areas at the proposed WWTP will trigger the decommissioning of the existing Cambridge WWTP in line with the above;
  - Purging systems likely to contain explosive/hazardous gases with Nitrogen will be undertaken by specialist contractors;
  - There is a potential need for temporary odour control equipment/scrubbers to mitigate possible odour emissions. 6.15.4 Labour, Vehicle Movement & Duration:
  - 2 x Electricians 2 x medium vans;
  - 3 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;
  - 2 x Operatives for tanker jetting & cleaning (3 x tankers); and
  - Durations of works estimated 2 weeks.

#### 6.16 Sludge Import Area

- 6.16.1 Contents sludges.
- 6.16.2 Scope Empty and clean chamber, flush pipework clean. No additional dust, no additional odour or emissions.
- 6.16.3 Labour, Vehicle Movement & Duration:



- 2 x Electricians 2 x medium vans;
- 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;
- 3 x Operatives for tanker jetting & cleaning (6 x tankers); and
- Durations of works estimated 3 weeks.

#### 6.17 Sludge Blending Tanks & Drum Thickeners

- 6.17.1 Contents Thin and Thick sludges.
- 6.17.2 Scope Empty and clean tank, flush pipework clean. Mechanical and electrical items isolated, and electric cables cut and labelled to prevent use. Access to walkways and ladders/stairs to be prevented. No additional dust, no additional odour or emissions.
- 6.17.3 Labour, Vehicle Movement & Duration:
  - 2 x Electricians 2 x medium vans;
  - 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;
  - 2 x Operatives for tanker jetting & cleaning (3 x tankers); and
  - Durations of works estimated 2 weeks.

#### 6.18 Redundant Sand Filter

- 6.18.1 Contents Sand, sludge, tertiary effluent and rainwater.
- 6.18.2 Scope Remove effluent and solids, clean chamber. Mechanical and electrical items isolated, and electric cables cut and labelled to prevent use. Hole to be punched into base to prevent rainwater collection. Access to walkways and ladders/stairs to be prevented. No additional odour or emissions.
- 6.18.3 Labour, Vehicle Movement & Duration:
  - 2 x Electricians 2 x medium vans;
  - 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;
  - 2 x Operatives for tanker jetting & cleaning (6 x tankers); and
  - Durations of works estimated 2 weeks.

#### 6.19 Storm Tanks and Storm Lagoon

6.19.1 Contents – storm water if in.



- 6.19.2 Scope Use washdown area, remove sludge, flush pipes, cap off pipe at ground level. Hole to be punched into base to prevent rainwater collection. No additional dust, no additional odour or emissions.
- 6.19.3 Labour, Vehicle Movement & Duration:
  - 2 x Electricians 2 x medium vans;
  - 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;
  - 2 x Operatives for tanker jetting & cleaning (2 x tankers); and
  - Durations of works estimated 2 weeks.

#### 6.20 Iron Salt Dosing

- 6.20.1 Chemical to be removed by certificated carrier.
- 6.20.2 Contents up to 60m³ Iron Salts depending on usage.
- 6.20.3 Scope Iron salts to be removed by certificated carrier and re distributed at appropriate Anglian Water P Removal Water Recycling Centre. Chemical Bund, Pumps and all chemical pipework to be flushed with Chemical Bund, Pumps and all chemical pipework to be flushed and cleaned. Mechanical and electrical items isolated and electric cables cut and labelled to prevent use. Access to walkways and ladders/stairs to be prevented. No additional dust, no additional odour or emissions. The self-contained iron salt dosing units are by Gee and Co and can be reused elsewhere, this option will be explored at the time of availability.
- 6.20.4 Labour, Vehicle Movement & Duration:
  - 2 x Electricians 2 x medium vans;
  - 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck;
  - 2 x Operatives for tanker jetting & cleaning (1 x tankers); and
  - · Durations of works estimated 1 weeks.

#### 6.21 Innovation centre

- 6.21.1 Contents various effluents and sewage products including sludges.
- 6.21.2 Scope Mechanical and electrical items isolated and electric cables severed cut and labelled to prevent use. Access to walkways and ladders/stairs to be prevented. Hole to be punched into base to prevent rainwater collection. No additional dust, no additional odour or emissions.
- 6.21.3 Labour, Vehicle Movement & Duration:



- 2 x Electricians 2 x medium vans;
- 2 x Mechanical Engineers / Fitters 1 x medium van & 1 x transit truck; and
- · Durations of works estimated 2 weeks.
- 6.21.4 Existing redundant plant items and areas can be decommissioned as a separately ahead of decommissioning currently active process plant. Areas requiring cleaning down as part of the decommissioning process e.g., washdown and removal of process products e.g., sludges, grit etc. can be scheduled to take place concurrently to maximise efficiencies.

#### 6.22 Milton House

- 6.22.1 This section covers Milton House, an existing Anglian Water Operational Office and Building.
- 6.22.2 This building in line with other aspects of the existing Cambridge WWTP will be isolated hydraulically and electrically. Office spaces cleared of equipment and potentially business and security sensitive information.

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## 7 Appendix A: Redundant Plant at Cambridge WWTP for Possible Re-use

7.1.1 This section covers Milton House, an existing Anglian Water Operational Office and Building. This building in line with other aspects of the existing Cambridge WWTP will be isolated hydraulically and electrically. When use of the building ends, office spaces would be cleared of equipment and any business and security sensitive information securely destroyed or moved to / archived in another secure facility by the Applicant.



#### Table 7-1: Sand Filter Works

Iten	n Plant Item Reuse/Business Are	Plant I	tem	Cond	dition Avai	lability	Required	No De	Possible escription	Location	
1	34 No Rotork Actuators Type AG 315F10 415V 3Ph	Sand Filter	· Plant	Cosmetic ok unchecked	s, operation	•	lant not in energised	WR1 var	rious, M&E2 to	o recover	y/n N
2	2 No Aerzen Blowe Ref GM60S Blower 850 mBarG (1989)		Plant	Cosmetic ok unchecked	k, operation	•	lant not in energised	WR vario	ous, M&E to r	ecover	Υ
3	1 No Aerzen Blowe Motor Ref 90Kw 3ph (1989)	-	Plant	Cosmetic ok unchecked	x, operation	•	lant not in energised	WR vario	ous, M&E to r	ecover	N
4	50m Approx. 300m OD St. St. Pipe	m Sand Filter	Plant	As New		·	lant not in energised	WR vari	ous, M&E to r	ecover	N
5	2 No Acoustic Enclosures for Aerzen Blowers above	Sand Filter Plant	Sand Fil	ter Plant	Cosmetically	'aged'	Now - plant n not energised	•	, WR various recover	, M&E to	N
6	2 No Xylem S/F Feed Pumps Ref	Sand Filter Plant	unchecl well - al refurb	ked in wet llow for	Now - plant i use, not ene		WR various, N recover	∕I&E to		Y	
7	Approx. 10,000m3 of large grade (base)	A Works TF beds	good		Now - plant i		WR various		N		

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Incorted Calls	



	clinker filter media					
8	Approx. 25,000m3 of 'fine' grade (upper) clinker filter media	A Works TF beds	good	Now - plant not in use, not energised	WR various	N

<sup>1</sup> WR = Water Recycling

<sup>2</sup> M&E = Mechanical & Electrical

Item	Plant Item	Plant Item	Condition	Availability	Required No	Possible Description	Refurb Location
Re	euse/Business Area y	/n					
9	Rail - approx. 200m of Bullhead Code 50?	A Works TF beds distribution system	good	•	ant not in WR energised	various? Scrap?	N

#### 'A-Works'

7.1.2 No possible reuse of assets. Plant decommissioned.

Table 7-2: 'B-Works'

Ite m No	Plant Item Description	Plant Item Location	Condition	Availability	Possible Reuse/Business Area	Refurb Required y/n
1	3 No TF'S GRANITE media	TF's B Works	poor	now	TF's	N



#### 3-No Scraper Motors -

:	2		B Works	poor	now	replace similar motor	Y - Likely
	TE	BC no access					
3	Sa 3 Cl ta	No Gee and Co Iron alt Dosing plants c/w hemitrollers 2 x 15m3 anks housed within a ngle bunded unit	B Works	Good	1 now, 2nd post 2026	P Site	Y - Pumps and tanks Likely

#### Table 7-3: 'C-Works'

Item	Plant Item	Plant Item	Condition	Aveilabilita	Possible	Refurb
No	Description	Location	Condition	Availability	Reuse/Business Area	Required y/n
1	5 No Atlas Copco Blowers Ref ZS110 I and Motors 105Kw 415V 3Ph	ASP	Good approx. 6 years old	2026 as CRWRC comes online	Other ASP/NSF	Υ
2	2 No Alfa Laval Belt Thickeners Ref tbc	Sludge Thickener Building	Good approx. 4 years old	2026 as CRWRC comes online	Sludge/ Cake	N
2	No Poly Make Up Plants Std Design Siemens	Sludge Thickener Building	Good approx. 4 years old	2026 as CRWRC comes online	Sludge/ Cake	Υ
4	C Works MCC ABB  Panel View Plus 1500	Sludge Thickener Building	Good approx. 4 years old	2026 as CRWRC comes online	Sludge/ Cake	N
5 details	1 No FIT Siemens (head TBC)	Sludge Thickener Building	Good approx. 4 years old	2026 as CRWRC comes online	Sludge/ Cake	N



6	5 No Nivvus FIT OCM Pro CF	Sludge Thickener Building	Good approx. 4 years old	2026 as CRWRC comes online	Sludge/ Cake	N
7	3 No ABB Watermaster  Head Units	Sludge Thickener Building	Good approx. 4 years old	2026 as CRWRC comes online	Sludge/ Cake	N
8	8 No Rotork ACQ	Sludge Thickener Area	Poor - life expired	2026 as CRWRC comes online	Sludge/ Cake	Υ
9	8 No SAS Xylem Pumps Dry Well Subs REF 3202.180 c/w 616 Imp and 22Kw 415V 3Ph Motors	ASP	Good approx. 6 years old	2026 as CRWRC comes online	Other ASP/NSF	N
<u>Item</u>	<u>Plant Item</u>	Plant Item	<u>Condition</u>	<u>Availability</u>	<u>Possible</u>	<u>Refurb</u>
No	<u>Description</u>	<u>Location</u>			Reuse/Business Area	Required y/n
	8 No RAS Xylem Pumps					
<u>10</u>	Dry Well Subs REF 3202.180 c/w 616 Imp and 22Kw 415V 3Ph Motors	<u>ASP</u>	Good approx. 6 years old	2026 as CRWRC comes online	Other ASP/NSF	<u>N</u>
<u>10</u>	Dry Well Subs REF 3202.180 c/w 616 Imp and 22Kw 415V 3Ph Motors  UPS Sentryman 10KVA	Sludge Thickener Building			Other ASP/NSF  Replace Existing or new scheme	<u>N</u>
	Dry Well Subs REF 3202.180 c/w 616 Imp and 22Kw 415V 3Ph Motors	Sludge Thickener Building	old  Good approx. 4 years	online  2026 as CRWRC comes	Replace Existing or new	_
<u>11</u>	Dry Well Subs REF 3202.180 c/w 616 Imp and 22Kw 415V 3Ph Motors  UPS Sentryman 10KVA 4 No FST Scraper Bridges complete approx. 30m	Sludge Thickener Building	Good approx. 4 years old  Average - age	2026 as CRWRC comes online 2026 as CRWRC comes online	Replace Existing or new scheme Replace Existing or new	<u>N</u>

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<u>15</u>	1 No ABB Panel View 1500	Sludge Thickener Building	Good approx. 6 years old	2026 as CRWRC comes online	Replace existing or new scheme	<u>N</u>
	8 No RAS Xylem Pumps					
	Dry Well Subs REF					
	Good approx. 6 2026 as 0	CRWRC comes				
<del>10</del>	3202.180 c/w 616 lmp	ASP			Other ASP/NSF	N N
	·		years old	online online		

and 22Kw 415V 3Ph Motors

<del>ltem</del> No	Plant Item Description	Plant Item Location	Condition	<del>Availability</del>	<del>Possible</del> Reuse/Business Area	Refurb Required y/n
<del>11</del>	UPS Sentryman 10KVA	Sludge Thickener Building	Good approx. 4 years	2026 as CRWRC comes online	Replace Existing or new scheme	H
<del>12</del>	4 No FST Scraper Bridges complete approx. 30m Diameter	<del>FST area</del>	Average age unknown	2026 as CRWRC comes online	Replace Existing or new scheme	<del>Likely</del>
<del>13</del>	<del>2 No Donkin Blowers</del> <del>Ref 1803</del>	Sludge Thickener Building	old almost life expired	<del>2026 as CRWRC comes</del> <del>online</del>	Replace Existing	Y—likely not cost effective due to age
<del>14</del>	2 No ABB Panel View 700	Sludge Thickener Building	Good approx. 6 years old	2026 as CRWRC comes online	Replace existing or new scheme	H
<del>15</del>	1 No ABB Panel View 1500	Sludge Thickener Building	Good approx. 6 years	2026 as CRWRC comes online	Replace existing or new scheme	44

#### Table 7-4: 'D-Works'

Item Plant Item Plant Item Refurb



				Condition	Ava	ilability	Possible		
Reuse/	Busine No	ss Area  Description	Location					I	Required y/n
	1	4 out of 6 DWF Xyle  DWF Pumps Ref  3306/715 c/w 475m  Imp and Motor 100  415V 3 Ph	<u>Inlet Works Wet</u> Well	Aged	from 2	<u>026</u>	Similar Application W	'R M	mp - Y otor - nlikely
	<u>‡</u>	3 out of 4 Storm Pur 4 out of 6 DWF Xylem DWF Pumps Ref 3306/715 c/w 475mm Imp and Motor 100Kw	Well	<del>et Works Wet</del>		Aged	<del>from 2026</del>	<del>Similar</del> <del>Application WR</del>	Pump Y Motor Unlikely
	ltem	415V 3 Ph	Plant Item Descrinti	ion Plani	<del>- Item</del>	Condition	Availability	Possible	Refurb
			<u> </u>	Loca	ation			Reuse/Busines	Required y/n
	<del>2</del>	<u>2</u>	<del>3 out of 4 Storm</del> <del>Pumps</del> Xylem Ref 3531/916 c/w 720mm Imp a	Well	orks	Aged	from 2026	Similar Application WR	Pump - Y Motor - Unlikely
	3		10tor 0916.000 360Kw 415V 3Ph 1 No ABB Panel V					Similar	
		<u>3</u>	550	MCC Room		Aged	from 2026	Application WR	N

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#### Cambridge Waste Water Treatment Plant Relocation Project Appendix 2.3: Outline Decommissioning Plan



<b>4 5</b>		4 Wash plus L 2 No	Grit fiers/Grit Pump	Inlet Works Screenings Area Inlet Works Area	Good dd. 2007	from 2026 from 2026	Similar Application WR Similar Application WR	Y
<u>Item</u>	Plant Item	Plant Item	<u>Condition</u>	<u>Availability</u>	<u>Possible</u>	<u>Refurb</u>		
<u>No</u>	<b>Description</b>	<b>Location</b>			Reuse/Business	Required y/n		
					<u>Area</u>			
<u>€</u>		2 No MAHR	2 No MAHR					
		Inlet Works	Inlet Works					
		<del>Screens, Bar</del>	Screens, Bar					
		Type 4mm Ref	Type 4mm Ref					
		CAM032614.3.3	CAM032614.3.3	Inlet Works	good	from 2026	Similar	Υ
		to suit channel	to suit channel	Area	8004		Application WR	•
		<del>approx.</del>	approx.					
		1.2m wide and	1.2m wide and					
		<del>approx. 4m</del>	approx. 4m					
		<del>Deep</del> 6	Deep					
7		1 No ABB Panel View 6007	1 No ABB Panel View 600	Inlet Works Area	good	from 2026	Similar Application WR	Υ
		<del>000</del> /	000		good			

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Table 7-5: Inlet Works Area

	Plant Item	Plant Item				Refurb
Item			Condition	Availability No	Possible Reuse/Busines  Description Location	Required Area y/n
1 ref tbc	3 No CHP Engines -	CHP Plant Area	Good	from 2026	CHP site	Υ
2 tbc no	2 No Centrifuges ref access	CHP Plant Area	Good	from 2026	CHP site	Υ
3	Various MMIM and MM4 O/S	Throughout site	Good	from 2026	Throughout AW	N
1	Various Pulsar Ultra 3's, 5's and dB 6/10/15 Heads	Throughout site	Good	from 2027	Throughout AW	N
5 miles!	Scrap copper cable - ?	Throughout site	Good	from 2027	Throughout AW	N
6 drives,	Scrap metal, pumps, shafts etc	Throughout site	Good	redundant plant now then operational plant from 2027 onward	Throughout AW ds	N



## Appendix B: Existing Cambridge WWTP Ground Contamination Investigation

#### 7.2 Introduction

- 7.2.1 The below surveys will be carried out in all areas of the existing Cambridge WWTP. Areas will include Streams A, B, C & D. Another key area will be around the sewage treatment centre.
- 7.2.2 The Applicant will proceed with the ground contamination investigation in a staged process, with Streams A & B being carried out early in the construction phase. The remaining streams and the STC area will completed at a later stage and would potentially commence in the summer of 2027.
- 7.2.3 All these activities comply with the Applicant's normal operational procedures to decommission the plant without creating any likely significant effects on nearby sensitive receptors.

#### 7.3 The existing Cambridge WWTP

- 7.3.1 The existing Cambridge WWTP is a brownfield site which has been used previously for commercial or industrial activities. If contamination is likely to be encountered the Principal Contractor and the Environmental Management Plan should define the methods of dealing with it. These are typically Risk Assessments, Method Statements and Impact Plans.
- 7.3.2 Land contamination may have many impacts on a project including health and safety issues; pollution of land, surface and ground water.
- 7.3.3 Contamination can be caused or spread by various means, for example:
  - Windblown contaminated dust such as that from stockpiles and transport movements
  - Stockpiling contaminated material
  - Spillages, for example of oil or chemicals
  - Contaminated dewatering effluent discharged to ground or watercourses

#### 7.4 Signs of Ground Contamination

- 7.4.1 Contamination may be uncovered during operations, especially on sites with an industrial history.
- 7.4.2 Site personnel should observe for signs of contamination during boring, excavation etc.



7.4.3 Smells can indicate contamination with the release of noxious fumes, e.g. petrol, oils, solvents and chemical residues.

#### 7.4.4 Observe for:

- Discoloured soil (for example chemical residues) and / or fibrous texture to the soil (for example asbestos)
- Unusual odours
- Presence of foreign objects (for example chemical, oil or unmarked containers)
- · Evidence of previous soil workings, underground structures and tanks
- · Existence of waste pits
- Made ground (such as artificial ground where level is raised by man's activities)
- · Topsoil adjacent to motorways can be contaminated by traffic emissions
- Old pipes potentially containing asbestos Desk Survey
- 7.4.5 A desk survey for each area will be completed.
- 7.4.6 It is the responsibility of the Local Authority to maintain a contaminated land register of all known contaminated sites within their own district.
- 7.4.7 The Environment Agency also keep records of former landfill sites and locations of historic pollution events.
- 7.4.8 The enabling study for each area, will identify any known contamination within the site which will be used to help identify an appropriate sampling strategy.
- 7.4.9 In addition to the enabling risk assessment, looking at old maps, aerial photography and in the case of Anglian Water Operational sites, speaking to the site manager may bring to light useful information to help identify suitable locations to undertake sampling.
- 7.4.10 GIS data is available with previous Ground Investigations (GI).

#### **Receptors**

- 1. Humans
- 2. Controlled Waters (Surface waters and groundwater).
- 3. Existing and potential ecosystems (Plant and wildlife living in the site or close by).
- 4. Property (Building structures and services)



#### Source (Contaminant)

- 1. Source (Oil, concrete washout and solvents).
- 2. Pathway (Groundwater, sewers and permeable land).
- 3. Receptor (Aquifer, animals and humans).

#### **Establishment of Risks Associated**

- 1. History of the site
- 2. Previous processes, including their location, raw materials, products, waste residues, and methods of disposal.
- 3. Layout of the site, above and below ground
- 4. Presence of waste disposal tips, made ground, abandoned pits and quarries with or without standing water
- 5. Information on geology and hydrology
- 6. Potential uses of sites, past or present, in the area adjacent to the site **Sample** and **Test Plan**
- 7.4.11 After completion of the desk survey and visual survey, the requirement for sampling and complete a sampling and test plan will be confirmed.
- 7.4.12 We will liaise with Environment Agency with regards to the sampling and test plan and ensure it is available for audit on site at the request of the Agency.
- 7.4.13 Results of the laboratory analysis results will be provided in a PDF and Excel format and will show the results of the testing undertaken. We will ensure that any interpretation from the laboratory will be clear and concise enough to stand up to audit from the Environment Agency.
- 7.4.14 During sample collection additional 'suspicions' layers identified will also be sampled. Records showing locations will be kept. **Testing of Sample**
- 7.4.15 As a minimum, all soil samples will be tested for:
  - · Heavy metals (As, Ba, Cd, Cu, Mo, Pb, Hg, Ni, Sb, Se, Zn)
  - Chromium III & VI
  - pH
  - Phenol index
  - Asbestos screen (+ identification and quantification if found)
  - TPH CWG & Chromatographs



- Confirm: has TPH arisen from diesel or petrol?
- BTEX
- Speciated 16 PAHs (US EPA)
- All results corrected to dry weight terms
- Moisture content correction type (i.e. wet or dry correction) and value specified



#### **References**

Environment Agency (2013) *Regulatory Guidance Note (RGN) 9: Surrender Guidance*Environment Agency (2013) H5 Guidance for Applicants: Site condition report – guidance and templates.



### **Get in touch**

You can contact us by:



Emailing at info@cwwtpr.com



Calling our Freephone information line on **0808 196 1661** 



Writing to us at Freepost: CWWTPR

Visiting our website DCO application documents and updates on the application on The Planning Inspectorate website:

https://infrastructure.planninginspectorate.gov.uk/projects/eastern/cambridge-waste-water-treatment-plant-relocation/