

Cambridge Waste Water Treatment Plant Relocation Project
Anglian Water Services Limited

Appendix 2.2: Code of Construction Practice Part B

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1 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

- 1.2.1 The Applicant is proposing to build a modern, low carbon waste water treatment for Greater Cambridge on a new site area north of the A14 between Fen Ditton and Horningsea within the Cambridge drainage catchment area, to replace the plant on Cowley Road, hereafter referred to as the existing Cambridge Waste Water Treatment Plant (WWTP).
- 1.2.2 The relocation will enable South Cambridgeshire District Council and Cambridge City Council's long held ambition to develop a new low-carbon city district on Cambridge's last major brownfield site, known as North East Cambridge. The site is an important component of the First Proposals (preferred options) for the new Greater Cambridge Local Plan that were subject to public consultation late last year. The North East Cambridge Area Action Plan has also recently been agreed by the Councils in its Proposed Submission form and will be subject to public consultation prior to submission, once the Development Consent Order is determined. 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. 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 Greater Cambridge, including Waterbeach. The proposal is for both waste water from the existing Waterbeach waste water treatment plant and future flows from Waterbeach New Town to be treated at the proposed Cambridge waste water treatment plant.

- 1.2.4 The Proposed Development will be the first waste water project to seek a 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.

1.3 The Proposed Development

- 1.3.1 This section provides a high-level summary of the Proposed Development. The term Proposed Development refers to the Cambridge Waste Water Treatment Plant (WWTP) Relocation project in its entirety and all works associated with the development.
- 1.3.2 A detailed description of the Proposed Development can be found in Chapter 2 of the Environmental Statement (App Doc Ref 5.2.2).
- 1.3.3 The purpose of the proposed WWTP will be to treat all waste water and wet sludge from the Cambridge catchment just as 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.
- 1.3.4 As part of its statutory function, the Applicant operates the existing Cambridge WWTP. The existing Cambridge WWTP receives 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. 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 waste water from the catchment, and the “wet sludge” produced by other satellite plants which do not have integrated STC.
- 1.3.5 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 the transfer tunnel.
- 1.3.6 In summary the Proposed Development will comprise of:
- 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 overflows.
- 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.
- renewable 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.

2 Code of Construction Practice

- 2.1.1 This Code of Construction Practice (CoCP) describes the minimum standards and measures, based upon current legislation and best practice, which will be adopted by the Applicant and its Principal Contractors to manage, mitigate and monitor potential impacts during the construction phase of the development. Compliance with the CoCP will be secured through a requirement of the DCO as set out in paragraph 3.1.17 of Part A (Appendix 2.1, App Doc Ref 5.4.2.1).
- 2.1.2 The purpose of the CoCP is essentially twofold:
- to provide effective planning, management and controls during the construction period with the aim of controlling potential impacts on the local community along with the natural and historic environments; and
 - to set out a framework for engagement with the local community and their representatives throughout the construction period.
- 2.1.3 The CoCP comprises 2 parts, Part A: General requirements and Part B site-specific measures.
- 2.1.4 Part A of the CoCP sets out overarching and general principles including the following:
- legislative requirements, guidelines and Best Practice Measures to be implemented and followed during construction;
 - where relevant obligations which will be imposed upon the Principal Contractor(s), subcontractors and suppliers when undertaking work on behalf of the Applicant; and
 - plans, control measures and monitoring procedures for managing potential environmental impacts relating to the construction period.
- 2.1.5 Part B of the CoCP, which is this document, sets out site specific measures that supplement and refine the general requirements in Part A. The need for site specific measures for certain locations is due to the varying factors, including, but not limited to, the presence of sensitive receptors which require specific mitigations measures and the need for specific construction activities or construction methodologies not widely used across the rest of the Proposed Development.
- 2.1.6 For the purpose of the CoCP, the term 'construction' includes all site preparation works, engineering and construction activities associated with the construction of the Proposed Development, including deliveries and waste removal. Wet and dry commissioning of the new infrastructure also falls within the remit of this document. The only decommissioning activities within its scope, however, relate to the activities required to take the existing Cambridge WWTP on Cowley Road out of service and to rescind the associated Environment Agency permits. Demolition activities are not included.

- 2.1.7 Details of the Proposed Development and construction activities, including the overall construction programme, are set out in Chapter 2 Project Description (App Doc Ref 5.2.2), and not therefore repeated here. This document should be read alongside the ES but is not intended to duplicate the assessment set out therein.
- 2.1.8 This document should also be read alongside the DCO Plans (App Doc Ref 4) including the Scheme Order Limits, Design Plans, Works Plans, Rights of Way Plans, Hedgerow Regulations and Tree Protection Plans and the Access and TRO plans.
- 2.1.9 New habitats and ecological features will be created as part of the Proposed Development. The Landscape, Ecological and Recreational Management Plan (LERMP) (Appendix 8.14, App Doc Ref 5.4.8.14), identifies the immediate and long-term commitments to manage the planting, protection and enhancement of biodiversity and recreational areas around the proposed WWTP.
- 2.1.10 The CoCP is submitted for approval by the Secretary of State as part of the DCO application (App Doc Ref 2.1) which states that construction works shall be carried out in accordance with the measures set out in the CoCP along with a requirement for the preparation and approval of a Construction Environmental Management Plan(s) (CEMP) which will be supported by a series of topic-based management plans to be appended to it. The topic-based management plans are set out in Section 4 of Part A.
- 2.1.11 Part B of the CoCP is divided into the following sections based upon different parts of the Proposed Development:
- treated effluent pipeline and outfall to the River Cam;
 - transfer tunnel;
 - proposed Cambridge WWTP;
 - Waterbeach pipeline; and
 - the existing Cambridge WWTP.
- 2.1.12 Each section follows the same format for ease of reference. It provides further details of the proposed site-specific measures under a set of standard headings, based upon the topic areas covered within Part A of the CoCP. Where no additional site-specific measures or deviations from Part A have been identified or are proposed, it notes that the general mitigation measures set out therein are applicable.

3 Site Specific Measures

3.1 Treated effluent and storm pipelines and outfall to the River Cam

Topic area	Site specific measures
Site Set Up and General Arrangements	<p data-bbox="443 432 607 544">Set Up, Security and Safety</p> <p data-bbox="645 432 2036 584">Temporary fencing will be erected during the construction period. This will comprise temporary hoarding or an opaque sheeting. The construction compound will be secured in line with the Construction Design Regulations (CDM). Temporary fencing will also be used to prevent access into ecological mitigation areas - see Ecology and Nature Construction.</p> <div data-bbox="645 600 2036 735" style="border: 1px solid black; padding: 5px;"> <p data-bbox="645 600 2036 719">Within the construction working area the construction methodology will be planned to avoid lifting over the river as far as is practical. If this is not possible, controls will be put in place during the lifting operation to protect users of the river, whilst maintaining navigation.</p> </div> <p data-bbox="645 743 2036 927">The usable width of the River Cam will be narrowed during construction of the outfall for a period of around 4 months. Whilst the navigable area will be narrowed the River Cam will remain navigable to all permitted users throughout this period. An Outfall Management and Monitoring Plan will be produced which will set out all measures and monitoring related to the construction of the outfall. Further details are set out in the sections below.</p> <p data-bbox="645 951 1541 986">The measures set out in Part A of the CoCP will also be implemented.</p>
Site Lighting	<p data-bbox="645 1007 2036 1126">Temporary LED tower lights no taller than 8 metres in height will be used if required whilst the works are undertaken. Lighting levels will not exceed 200 lux. Temporary lighting will not be used for any longer than is required.</p> <p data-bbox="645 1126 2036 1201">The measures set out in Part A to ensure that any potential impacts upon nearby receptors are minimised will also be implemented.</p>
Working Hours	<p data-bbox="645 1209 1514 1244">Core working hours for winter and summer will be complied with.</p>
Community Engagement	<p data-bbox="645 1289 1899 1361">As set out above an Outfall Management and Monitoring Plan will be prepared. This will include requirement for the following:</p>

- notification to river users of the works via communication protocols to be agreed with the Conservancy;
- identification of relevant stakeholders;
- phasing plans to minimise the impact of construction works on specific events ie major rowing events;
- navigation warning signs. The plan will set out the required navigation marks including lighting and river bank warning signs.

Flood risk	<p>Appropriate signage will be displayed on the river to inform river users of the proposed construction works.</p> <p>Site set up to be as agreed with the Environment Agency including the setting of temporary river works structure heights.</p> <p>The construction compounds should be located in Flood Zone 1 where possible;</p> <p>Any loose items within laydown or storage areas within Flood Zones 2 and 3 should be secured to prevent them becoming a debris hazard in a flood event</p> <p>Any material with contaminant potential to be stored should be in Flood Zone 1 if possible, otherwise above design flood levels.</p>
	<p>Completion of the river works to maximise July -August when river levels are typically lower and river users fewer outside of term time.</p>
	<p>A temporary compound will be located within the Flood Zone. Mitigation measures will be put in place to ensure that it does not increase flood risk elsewhere and can be made safe for the duration of construction activities.</p> <p>The measures will be incorporated into the CEMP and as approved by the Environment Agency through the Environmental Permit (Flood Risk Activities)</p>
Ecology and Nature Conservation	<p>As set out above, an Outfall Management and Monitoring Plan will be prepared. This will be in accordance with the outline OMMP (App Doc Ref 5.4.8.23) This plan will be a live document and updated to integrate requirements below and those specified by related permits and consents including:</p>

- Environmental permit (flood risk activities)
- Environmental permit (Discharges to surface water)
- Land drainage consent (for works to the ordinary watercourse)
- Conservation licence (water vole)

A minimum buffer of 10 metres will be maintained between the outfall construction compound and the ditches located adjacent to the riverbank. An outline Outfall Management and Monitoring Plan is provided as Appendix 20.x (App Doc Ref 5.4.8.23)

The Outfall Management and Monitoring Plan will include a fish rescue strategy. The timing and approach will be agreed with the Environment Agency. Fish rescue will be carried out by a suitably experienced ecologist. Fish rescue will be carried out prior to dewatering of the cofferdam.

There will be no works in the River Cam during the fish spawning period (February to June). Works are planned for July to October.

Welded wire mesh fencing (Herptile fencing) (or similar) will be combined with opaque sheeting (on the path side of the fence) to ensure that reptiles are not impacted. This will prevent people and/or dogs from accessing the ditch areas.

License will be obtained from Natural England before works adjacent to the River Cam commence and all mitigation measures set out there in will be adhered to whilst construction works are carried out. This includes creation of replacement ecological habitat (Work No. 39, Works Plan Sheet 2, App Doc Ref 4.3) prior to the displacement activities.

Water voles have been identified along the banks of the River Cam and within the ditch crossed by the outfall/treated effluent pipelines. Appropriate mitigation measures will be put in place prior to construction commencing. New habitat will be created sufficiently in advance of construction commencing to allow the habitat to establish and mature.

Plant material from the drainage ditch will be transferred to new drainage ditches created for water vole compensatory habitat or a suitable receptor site, prior to displacement. Any plant material to be transferred to any newly created waterbodies/receptor site should be checked by a suitably experienced ecologist to ensure it is not a species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) or Schedule 2 of the Invasive Alien Species (Enforcement and Permitting) Order 2019.

Following temporary disturbance of the ditch adjacent to the River Cam, the banks will be re-established by planting native locally sourced vegetation.

Plants of particular botanical interest are present next to the River Cam, in particular strawberry clover present near the tow path. Prior to construction, plants of interest that would be directly affected by the construction will be translocated. The translocation of individual plants will be undertaken during the winter period in dry conditions under the supervision of an ECoW.

A minimum buffer of 10 metres will be maintained between the temporary public rights of way routes (PRoW) and the ditches located adjacent to the riverbank. See Traffic and Access and the ditches located adjacent to the riverbank.

Areas of reed present in the location of the permanent outfall will be translocated (where possible) to an area downstream of the river bank protection works within Work No. 32 on the River Cam or to the created ditches in Work No. 39 location (Works Plan Sheet 2, App Doc Ref 4.3). These works will be in accordance with measures approved by the Environment Agency through the Environmental Permit (Flood Risk Activities). The translocation approach will be set out in the Outfall Management and Monitoring Plan.

The measures set out in Part A of the CoCP will also be implemented.

Historic Environment

No works will be undertaken within 50 metres of the moated site at Biggin Abbey. This area should be demarcated on a figure in the CEMP covering these activities and the restriction communicated to the workforce.

The outfall compound will need to have screening/hoarding to minimise the visual impact compatible with the requirements in the Flood Risk Assessment (FRA) (Appendix 20.1, App Doc Ref 5.4.20.1).

Temporary fencing will be erected as set out under Site Set Up and General Arrangements above.

The measures set out in Part A of the CoCP will also be implemented.

Land Quality

Land drainage in areas temporarily required during construction will be appropriately reinstated once the final effluent and storm pipelines have been installed.

Bank stabilisation measures will be put in place on the eastern side of the River Cam in the vicinity of the outfall in the form of sheet piling with capping beam. These measures will be as approved by the Environment Agency through the Environmental Permit (Flood Risk Activities).

The measures set out in Part A of the CoCP will also be implemented.

Water Quality

Silt laden water will not be discharged into the River Cam or the adjacent ditch. Areas likely to generate sediment/ sediment laden run-off, such as during the removal of bed material and placement of scour protection within the river, will be carried out behind a suitable cofferdam using appropriate silt and sediment removal techniques to achieve a compliant water quality standard prior to any discharge back to the watercourse.

Appropriate monitoring will be put in place whilst the works are carried out. The monitoring regime will be agreed with the Environment Agency in advance of the works.

Dewatered water will be returned to the river subject to appropriate treatment before it is discharged. Dewatering from temporary excavations will meet the requirements of the regulatory position statement for temporary dewatering from excavations to surface water. In the event the conditions of the RPS cannot be met the Environment Agency will need to be contacted for an appropriate permit. Records will be retained for 2 years that show compliance with the RPS.

In the event that locally excavated materials prove to be unsuitable for pipe bedding in any of the sections of pipeline, a more uniform, sandy or granular material will be used. Additional measures will be used to protect groundwater if required, including the use of clay plugs or partitions (also referred to as clay stanks) across the trench at suitable locations. However, such measures are not expected to be necessary.

	<p>Relevant licenses for the River Works will be obtained save for those disapplied by the DCO and covered by it from the Environment Agency, IDB and LLFA and the Conservancy prior to commencement. Construction works will thereafter be carried out in accordance with the license requirements.</p>
Flood Risk	<p>A Flood Risk Assessment (Appendix 20.1, App Doc Ref 5.4.20.1) has been prepared and is submitted as part of this DCO application.</p>
	<p>Where feasible, works will not be carried out in the months with elevated flooding risks. The construction compound has been set-back from the edge of the drainage ditch (10m to the boundary fence).</p>
	<p>Areas of higher risk, such as equipment and facilities and material stockpiles, will generally be located on the east side of the compound.</p>
	<p>Drainage paths will be reviewed and constraints, where higher velocities are possible, avoided. Biodegradable oil will be used in all machinery.</p>
	<p>The new outfall will be constructed within a sheet pile cofferdam to provide dry conditions for construction. It will be designed to maintain the flood protection levels currently provided by the river bank (with an adequate free board to prevent over topping). Construction work within the cofferdam is expected to take up in the regional of 4 months.</p>
	<p>An Environment Agency environmental permit for a flood risk activity will be applied for before construction works commence. The works will be carried out in accordance with the conditions of the permit.</p>
	<p>The measures set out in Part A of the CoCP will also be implemented.</p>
Transport and Access	<p>It is proposed to temporarily stop up and divert footpath 85/6 whilst construction of the outfall and terminus of the final effluent pipeline take place. A small temporary diversion of footpath 85/8 will also be required. Full details of the proposals are set out in Schedule 6 of the DCO application and shown on the Rights of Way Plans (App Doc Ref 4.6). The diversions are likely to be required for a maximum period of 11 months.</p>

The landowner/tenant access to the adjacent field to the north of the working area will be maintained through the creation of an underpass.

The final access arrangements for land holding R037 will be agreed with the landowner.

It is proposed to install the final effluent and storm pipelines to the outfall via open cut techniques. Traffic management measures will be put in place along Horningsea Road when this is undertaken. These will be agreed with Cambridgeshire County Council (CCC). Liaison will take place with the local community prior to the works being carried out in accordance with the Community Liaison Plan (See Part A for details). Full details of the proposed diversion are set out in the Construction Traffic Management Plan (CTMP), (Appendix 19.7, App Doc Ref 5.4.19.7).

Access to the construction working area for the final effluent and storm pipelines and outfall will be via the access constructed to the proposed Cambridge WWTP. A dedicated plant crossing point will be installed across Horningsea Road.

Appropriate control measures will be put in place, as set out in the CTMP (Appendix 19.7, App Doc Ref 5.4.19.7).

The measures set out in Part A of the CoCP will also be implemented.

Noise and Vibration

A piling method statement will be prepared before any works in the river commence. This will be agreed with the Environment Agency and other relevant stakeholders, including Natural England. The method statement will specify the type of piling technique proposed, the rationale for this, the timing of the works and appropriate mitigation measures. It is proposed that a piling mat will be formed and that all piling will be done from the river bank. Condition surveys will be carried out and vibration monitoring put in place where appropriate and as agreed with stakeholders.

The noise and vibration assessment, reported in the ES Chapter 17 (App Doc Ref 5.2.17) found noise levels greater than SOAEL during works undertaken at the final effluent outfall during the proposed working hours between 06:00 and 07:00 within the summer core construction hours. A restriction of construction working hours will be implemented for these activities to minimise noise impacts due to works undertaken at the final effluent outfall. Works during Core Hours should start no earlier than 07:00 at this work site.

The measures set out in Part A of the CoCP will also be implemented.

Air Quality	No specific measures required. The measures set out in Part A of the CoCP will be implemented.
Waste Management	Any sediment removed from the river bed must have an appropriate waste exemption or environmental permit if the dredging spoil is recovered or disposed on land that is not immediately next to the dredging location. This must be in place prior to the commencement of the river works. The measures set out in Part A of the CoCP will be implemented.

3.2 Transfer Tunnel

Topic Area	Site Specific Measure
Site Set Up and General Arrangements	<p data-bbox="434 331 613 386">Set Up, Security and Safety</p> <p data-bbox="636 331 1937 513">Access to the construction working areas around each shaft external to the existing Cambridge WWTP boundary (as identified on the General Arrangement Plans and Works Plan, App Doc Ref 4.2 and 4.3) will be tightly controlled to ensure that no unauthorised access takes place. CCTV will be installed, and the compound patrolled by security personnel. Access to the shaft within Cambridge WWTP will be controlled through the existing site security control measures which are in place.</p> <p data-bbox="636 536 1937 609">Solid hoarding will be provided at shaft 4 and its associated construction compound area (General Arrangement Plan(s), App Doc Ref 4.2 refer) and Noise and Vibration below.</p> <p data-bbox="636 632 1937 865">The Applicant will require that specific measures are put in place during the construction of the transfer tunnels in line with its standard guidance in respect of ‘confined spaces working’. This will include an initial risk assessment to identify safe working practices including appropriate emergency response procedures along with the monitoring of air quality. A ‘Permit to Work’ system in line with Health and Safety Executive requirements will also be put in place. Close liaison with the emergency services will take place before the works commence on site.</p> <p data-bbox="636 887 1937 925">The measures set out in Part A of the CoCP will also be implemented.</p>
Site Lighting	<p data-bbox="636 951 1937 1104">Temporary LED tower lights up to a maximum of 8 metres will be required around the shafts. The hours which this lighting will need to operate will reflect the activities being carried at each shaft including periods of continuous working where required. Lighting levels for welfare accesses and egresses will not exceed 50 lux. Lighting levels for the shafts will not exceed 200 lux.</p> <p data-bbox="636 1126 1937 1193">The measures set out in Part A of the CoCP. to ensure that any potential impacts upon nearby receptors are minimised will also be implemented.</p>
Working Hours	<p data-bbox="636 1222 1937 1375">Core working hours, winter and summer will be complied with in respect of shafts 2 and 4. No works will take place between 23:00 and 07:00 or outside of the working week at shaft 4. There will be periods of continuous working at shafts 3 and 5. The transfer of material between the new tunnel and the proposed Cambridge WWTP site will operate during the core working hours, Monday to Friday.</p>

Topic Area	Site Specific Measure
	Shaft 4 will be used for the removal of tunnelling machinery only. This will take place once works have finished at shaft 3 and again when works have finished at shaft 5. This will be done in accordance with the core working hours, with no works to commence before 07.00 and only during the working week.
Community Engagement	No site specific measures required. The measures set out in Part A of the CoCP will be implemented.
Ecology and Nature Conservation	No site specific measures required. The measures set out in Part A of the CoCP will be implemented.
Historic Environment	<p>Solid hoarding will be installed around shafts 4 and 5 to mitigate the potential for adverse visual impacts on Poplar Hall and Poplar Hall Farm.</p> <p>The measures set out in Part A of the CoCP will be implemented.</p>
Land Quality	No site specific measures required. The measures set out in Part A of the CoCP will be implemented.
Water Quality Transport and Access	<p>Dewatering of the tunnel shafts will be required. All necessary consents and permits will be obtained before construction works associated with the tunnels and shafts commence.</p> <p>The measures set out in Part A of the CoCP will also be implemented.</p> <p>Access routes will be as defined in the CTMP (Appendix 19.7, App Doc Ref 5.4.19.7).</p> <p>Deliveries to shaft 4 will be timed in accordance with the limitations set out under Working Hours above. Access to shaft 4 will be via the new temporary access road, from Horningsea Road, that will be installed for the construction works and not via the existing access road to Poplar Hall Farm.</p> <p>The measures set out in Part A of the CoCP will also be implemented.</p>
Noise and Vibration	<p>Working hours around shaft 4 will be amended as set out above.</p> <p>Solid Hoarding will be installed at shaft 4 to minimise noise impacts on Red House Close, Poplar Hall and Poplar Hall Farm.</p>

Topic Area	Site Specific Measure
	<p>Settlement monitoring equipment will be placed on Red House Close with agreement of the landowner.</p> <p>The measures set out in Part A of the CoCP will also be implemented.</p>
Air Quality	<p>Stockpiles associated with shaft 5 will be ‘back bladed’ with the back of an excavator bucket, to shape and compact the surface of the stockpile to control dust.</p> <p>The measures set out in Part A of the CoCP will also be implemented.</p>
Waste Management	<p>No site specific measures required. The measures set out in Part A of the CoCP will be implemented.</p>

3.3 Proposed Waste Water Treatment Plant (WWTP)

Topic Area	Site Specific Measure
<p>Site Set Up and General Arrangements</p> <p>Set Up, Security and Safety</p>	<p>The site of the proposed Cambridge WWTP will be secured to prevent unauthorised access. The site security measures will be reviewed with the police before works start on site. There will be a 24/7 security presence on site once the enabling works have been completed and the main site construction working area has been established. All site entrances/exits will be barrier-controlled and a security guard present. CCTV will be installed with views of the internal site and perimeter. This will be monitored 24/7. The Construction Manager will be contacted if an intruder is detected.</p> <p>The measures set out in Part A of the CoCP will also be implemented.</p>
<p>Site Lighting</p>	<p>Temporary lighting will be required. LED flood lights will be installed in the construction compound. These will comprise a mix of lights attached to buildings within the compound, on storage containers and tower lights as required. The lights would be located a maximum of 8 metres above grounds levels. Lighting levels would be a maximum of 50 lux. Temporary lighting will also be required within the working area for the proposed Cambridge WWTP. This will</p>

Topic Area	Site Specific Measure
Working Hours	<p>comprise tower lights, up to 8 metres in height. Maximum lux levels will not exceed 300 lux. The maximum level will only be used for short periods where required to ensure the activity being undertaken can be done so safely.</p> <p>The measures set out in Part A of the CoCP will be also implemented.</p>
Community Engagement	<p>No site specific measures required. The measures set out in Part A of the CoCP will be implemented.</p>
Ecology and Nature Conservation	<p>Tree protection measures will be erected in accordance with the detailed set in the Arboricultural Report (Appendix 8.17, App Doc Ref 5.4.8.17) and Tree Protection Plans before works commence. The tree protection measures will thereafter be retained until the works are complete.</p> <p>The tree with bat roosting potential will protected during construction works. This will be in accordance with the Natural England conservation license.</p> <p>New and replacement landscaping will be planted in accordance with the measures set out in the Landscape, Ecological and Recreation Management Plan (LERMP) (Appendix 8.14, App Doc Ref 5.4.8.14).</p> <p>Crossings of the ditch with hedgerow running to the eastern side of the proposed WWTP will be minimised to 2 crossings each up to 6m width. The crossing locations will target existing gaps in the hedge. Crossing of the ditch (incorporating a temporary culvert not exceeding an 8m length of the ditch) will be in accordance with a permit from the Swaffham Internal Drainage Board.</p> <p>Prior to removal the hedgerow will be surveyed and the best sections retained for use elsewhere within the Proposed Development.</p> <p>Reptile fencing (with reptile-proof vehicular access points) will be installed around the periphery of the working area for the WWTP.</p>

Topic Area	Site Specific Measure
	<p>A translocation programme will then be implemented to relocate all reptiles within the fenced area to suitable habitats outside of the fencing.</p> <p>An annex badger sett will be lost during construction. A protected species licence will be obtained from Natural England and all necessary mitigation measures complied with during construction.</p> <p>With respect to the Low Fen Drove Way CWS the following protective measures are required and will be implemented:</p> <ul style="list-style-type: none"> • Wildlife sensitive construction lighting (<2700K, directional only with no upward orientation or light spill) • Dust control measures in line with those set out in CoCP Part A (such as wetting materials); • No removal of vegetation from the CWS; • Routing of works through existing pathways that cross the CWS; and • Provision of a buffer of a minimum of 10m between works areas and extent of CWS. <p>The measures set out in Part A of the CoCP will also be implemented.</p>
Historic Environment	No site specific measures required. The measures set out in Part A of the CoCP will be implemented.
Land Quality	No site specific measures required. The measures set out in Part A of the CoCP will be implemented.
Water Quality	Site specific drainage measures for the construction phase will be incorporated into the CEMP. This will include the identification of measures to manage any potential for flooding and the potential for contamination. These measures may include temporary Sustainable Drainage Systems (SuDS) or conventional drainage to contain surface water and silt during the construction of the proposed Cambridge WWTP. Water to be recycled where possible and used for wheel washing/ in bowsers.

Topic Area	Site Specific Measure
	<p>Monitoring of water levels in Black Ditch will be undertaken for a period prior to, during and following all dewatering activities required for construction at the proposed Cambridge WWTP. There will not be any dewatering to the Black Ditch itself. The scope of the monitoring including its duration will be agreed with all relevant stakeholders before works which could potentially impact the ditch commence.</p> <p>The temporary lagoon for storing the water during testing will be lined to prevent leakage if required or if located in a sensitive location. Further management and mitigation measures to protect water quality will be set out in the Outline Commissioning Plan as relevant (Appendix 2.4, App Doc Ref 5.4.2.4).</p> <p>Consent for the ditch crossings and works within 9m of IDB watercourses will be obtained prior to commencement. Construction works will thereafter be carried out in accordance with the license requirements.</p> <p>Regular contact will be maintained with the owner of the private borehole during construction. Measures to maintain supply to the property will be put in place if required. These will be outlined in the CEMP.</p> <p>Wet testing of tanks and pipes will follow industry standards in relation to testing activities including any visual inspections of equipment under test to check for signs of structural deficiency prior to commencement of testing activities</p> <p>The measures set out in Part A of the CoCP will also be implemented.</p>
Flood risk	<p>Temporary culverts associated with the construction period will be inspected for debris build up on a weekly basis to minimise risk of flood risk.</p> <p>Land drains encountered in construction should be logged and marked on maps.</p> <p>The measures set out in Part A of the CoCP will also be implemented.</p>

Topic Area	Site Specific Measure
Transport and Access	<p>Access will be as identified in the CTMP (Appendix 19.7, App Doc Ref 5.4.19.7). When construction works start, the area of land required for the construction of the proposed WWTP will be accessed for an initial period via Horningsea Road and Low Fen Drove Way whilst the new permanent access road is constructed as part of the enabling phase. Once this has been constructed, then the area of land required for the construction of the proposed WWTP will be accessed via the new access road.</p> <p>Temporary very localised diversions will need to be put in place whilst improvements works are carried out along Horningsea Road. These are not expected to be required for more than 4 months.</p> <p>The measures set out in Part A of the CoCP will be implemented.</p>
Noise and Vibration	<p>No site specific measures required. The measures set out in Part A of the CoCP will be implemented.</p>
Odour	<p>To minimise odour during the commissioning process odour ducting and odour treatment will be put in place before the commissioning process commences.</p> <p>To ensure effective odour control during the testing and commissioning of the proposed WWTP, regular site inspections by the person accountable for odour issues on site will be undertaken to minimise the risk of causing nuisance and/or loss of amenity. The frequency of site inspections should be increased when activities with a higher potential to produce odour are being carried out , e.g., works during high temperature days. An inspection log will be kept and made available to the overseeing authority on request on request.</p> <p>The sludge required to begin biological treatment (seeding) will be transported from the existing Cambridge WWTP in sealed tankers and pumped into the tanks through a closed process, minimising the likelihood of odour release to air.</p>

Topic Area	Site Specific Measure
	Measures to minimise potential odour impacts will be set out in the detailed. An Outline Commissioning Plan has been prepared and submitted as part of this application (Appendix 2.4, App Doc Ref 5.4.2.4).
Air Quality	No site measures required. The measures set out in Part A of the CoCP will be implemented.
Waste Management	No site specific measures required. The measures set out in Part A of the CoCP will be implemented.

3.4 Waterbeach Pipeline

Topic Area	Site Specific Measure
Site Set Up and General Arrangements	Site Set Up, Security and Safety A temporary construction compound will be located within Flood Zone 2. Temporary storage areas will be required in Flood Zone 3. Mitigation measures will be put in place to ensure that they do not increase flood risk elsewhere and can be made safe for the duration of construction activities - see Water Resources below.
	Remote security measures will be put in place at the site compound. This may take the form of a security robot.
	The construction working area will be demarcated by a post and rope fence unless otherwise identified in the CEMP.
	Laydown areas will be used along the route of the pipeline. These will be similarly demarcated unless identified in the CEMP. The Burgess Drove laydown area will be secured.
	Launch and recovery pits for equipment deployed for trenchless construction techniques to be greater than 8m from the top of bank of main river or from the landward extent of an existing flood defence whichever is applicable.

Topic Area	Site Specific Measure
Site Lighting	Temporary mobile lighting will be required. Lighting within compounds will comprise LED tower lights and PIR security lights. These will not be taller than 8 metres in height with a maximum lighting level of 200 lux. Temporary lighting will also be required for the Burgess Drove laydown area and for the HDD launch and reception pits associated with the main crossings points i.e., the A14, railway crossings, and river Cam. The specification of this lighting will be the same as for the main compound area. Lighting to the HDD pits will only be needed whilst the pipeline is installed, for a maximum period of 4 weeks. Where the pipeline is installed via open cut task lighting in for the form of tower lights (no higher than 8 metres with a maximum lighting level of 200 lux) may be required during the winter months. This lighting will be moved as the sections of open cutting progress and is unlikely to be used in any one area for more than 2 weeks.
Working Hours	Winters and summer core working hours will apply along with period of continuous working associated HDD crossings. Short period of out of hours working are also expected.
Community Engagement	No site specific measures required. The measures set out in Part A of the CoCP will be implemented.
Agricultural land	<p>The installation and final position of air valves within the pipeline will be agreed with the landowners to avoid or minimise impacts to agricultural activities.</p> <p>Refer to ‘Transport and access’ in relation to access requirements for farm holdings</p>
Ecology and Nature Conservation	<p>The HDD pits will be set back a minimum of 10 metres from the edge of the River Cam.</p> <p>Where the pipeline crosses drainage ditches via open cut techniques a flume crossing will be put in place. The working area will also be narrowed to a maximum of 10 metres.</p> <p>HDD will be used to install the section of the pipeline adjacent to Bannold Drove (App Doc Ref 4.2 General Arrangement Plans) to reduce potential impacts upon badger. Badger sett closure licenses will be applied for and works carried out in accordance with the approach agreed with Natural England.</p>

Topic Area	Site Specific Measure
	<p>To minimise the effects on fish, open cut techniques will only be used at smaller watercourses and ditches where fish are less likely to be present. Where open cut crossing methods are used measures will be implemented to exclude fish from the working area as it is dewatered. Open cut crossings will be temporary (maximum of 5 days from preparation to restoration) minimising the potential for any long-term effect from barriers to fish passage.</p> <p>Measures will be implemented to protect trees and scrub adjacent to the construction working area of the pipeline. Some limited tree and hedgerow removals are required in order to facilitate the installation of the pipeline. These are detailed in the Hedgerow Regulations and Tree Preservation Plans (App Doc Ref 4.8) and the supporting Arboricultural Report (Appendix 8.17, App Doc Ref 5.4.8.17). Tree protection measures will be put in place in accordance with the specifications set out in the Arboricultural Report and Tree Preservation Plans (Appendix 8.17, App Doc Ref 5.4.8.17 and App Doc Ref 4.8). This includes protection of the veteran tree.</p> <p>In relation to bats all works need to comply with the conservation licence for bats. The timing of works to avoid the most sensitive periods (i.e. avoiding hibernation and maternity) will minimise disturbance. Use of acoustic screening and preventing light spill onto the roost may reduce the disturbance also. Maintaining a dark commuting route from the roost to foraging areas will prevent access loss. A compensation (alternative roost feature) bat box on a nearby but less disturbed tree will be installed.</p> <p>Hedgerow will be reinstated following completion of the works. Replacement tree planting on a like for like basis will be carried out outside the zone of easement for the pipeline unless an alternative species is proposed due to disease risks or at the request of the landowner.</p> <p>Where tree and hedgerow removal is required, appropriate replanting will take place.</p> <p>The measures set out in Part A of the CoCP will also be implemented.</p>
Flood risk	The construction compounds should be located in Flood Zone 1 where possible;

Topic Area	Site Specific Measure
	<p>Any loose items within laydown or storage areas within Flood Zones 2 and 3 should be secured to prevent them becoming a debris hazard in a flood event</p> <p>Any material with contaminant potential to be stored should be in Flood Zone 1 if possible, otherwise above design flood levels.</p>
Historic Environment	<p>Appropriate fencing will be installed around the windmill mound located to the south of the A14 (HE1050) to avoid impact from construction activities.</p> <p>The measures set out in Part A of the CoCP (App Doc Ref 5.4.2.1) will also be implemented.</p>
Land Quality	<p>Land drainage will be appropriately reinstated once the pipeline has been installed.</p> <p>New permanent drainage features may also be installed to ensure that land quality is protected in accordance with the requirements set out in the draft DCO (App Doc Ref 2.1 refers).</p> <p>The measures set out in Part A of the CoCP (App Doc Ref 5.4.2.1) will also be implemented.</p>
Landscape and visual impact	<p>The hedgerow section removed for works to complete the crossing under the existing railway (near to Fen Road) should be retained for reinstatement in this location.</p> <p>Hedgerows to be removed should be translocated under the supervision of an Ecological Clerk of Works (ECoW) during the winter months.</p> <p>Hedgerows should be translocated in as large sections as possible to reduce damage to roots. Hedgerows to be translocated should be a minimum of 2m in length and less than 5m wide. Sites where hedgerows are to be translocated should have similar ground conditions to the existing hedgerow site.</p>

Topic Area	Site Specific Measure
	<p>Hedgerows will be replanted as soon as possible after being excavated from the existing site. In the event that removed hedgerow needs to be temporarily stored a suitable location and care plan will be prepared by a suitably experienced ecologist.</p>
Water Quality	<p>A site compounds and temporary storage will be required in the flood zone whilst construction place. As far as possible the installation of the pipeline will be carried out in drier months to reduce potential flood risk. The Principal Contractor for the works will be required to sign up to the Environment Agency flood warning and emergency procedures will be put in place in accordance with the Emergency Preparedness Plan (Section 5 of Part A of the CoCP refers). Loose items within the compound or in the laydown areas will be secured or moved to prevent them becoming potential floating debris in a flood event. Any materials or equipment with the potential to result or cause contamination will be stored above the flood level.</p> <p>The pipeline will be pressure tested with potable water (drinking water) prior to being commissioned to minimise the potential for leakages. Chlorine will be removed before the water is discharged into any land drains. All necessary discharge consents will be obtained and the requirement thereof adhered to.</p> <p>In the event that locally excavated materials prove unsuitable for pipe bedding in any sections of the pipeline, a more uniform, sandy or granular material will be used. Additional measures will be used to protect groundwater if required, including the use of clay plugs or partitions (also referred to as clay stanks) across the trench at suitable locations. However, such measures are not expected to be necessary.</p> <p>There is a private borehole approximately 210 metres from the pipeline. Regular contact will be maintained with the owner during construction. Measures to maintain supply to the property will be put in place if required. These will be outlined in the CEMP. A non-derogation agreement will be entered into with the owners at their request.</p>

Topic Area	Site Specific Measure
	<p>The measures set out in Part A of the CoCP (App Doc Ref 5.4.2.1) will also be implemented.</p> <p>Transport and Access</p> <p>Access to the pipeline route will be as identified in the CTMP (Appendix 19.7, App Doc Ref 5.4.19.7).</p> <p>In order to install the pipeline a number of Public Rights of Way (PRoW) will need to be temporarily stopped up/diverted – FR130/6, FR130/8, FR130/10, FR130/16, FR130/12 and FR247/10. Full details of the footpaths to be temporarily diverted or temporarily closed along the full length of the pipeline are shown on the Rights of Way Plans (App Doc Ref 4.6) and in Part 3 (Streets) of the DCO application.</p> <p>As far as it is practical, controlled crossings will be put in place whilst the works are undertaken to keep PRoW useable thereby minimising diversions. It is not expected that any PRoW will be impacted for more than 1 week with the exception of FP130/6 as continued access will be required to the working area to the South.</p> <p>Final access arrangements for the following farm holdings will be agreed with the landowner as per the Land Plans (App Doc Ref 4.4), parcel numbers: 012a-012m, 021a-021o, 036a-036d, 037a-037c, 039a-039c, 042a-042f, 044a-044d, 046a-046d and 055a.</p> <p>The measures set out in Part A of the CoCP (App Doc Ref 5.4.2.1) will also be implemented.</p>
Noise and Vibration	<p>There is the potential for some noise disturbance from the construction compound and from activities associated with Horizontal Directional Drill (HDD) where continuous working is required as the drill shot cannot be paused once it is started. Appropriate mitigation to control noise emissions from significant noise emitting construction plant and equipment such as shielding individual items of noisy plant or equipment will be used as required.</p>

Topic Area	Site Specific Measure
	<p>Solid site hoarding/acoustic barriers provided around Horizontal Directional Drill (HDD) pit locations and HDD plant during continuous working periods.</p> <p>Waterbeach compound will require sections of solid hoarding/screening will be required along the boundaries facing nearest receptors in Waterbeach on Capper Road and off Burgess Drive. Western and southern boundaries only to mitigate impacts of noise.</p> <p>Settlement monitoring of the major infrastructure crossings i.e. the railway and A14 will be carried out if required by Network Rail/National Highways in accordance with the protective provisions of the DCO.</p> <p>The measures set out in Part A of the CoCP (App Doc Ref 5.4.2.1) will also be implemented.</p>
Odour	<p>During works to connect to the pumping station there may be a need to open up parts of an existing sewerage network to the open air which can result in new odour releases which may be smelt at nearby receptor locations. Any odour releases from this connection would be very temporary.</p>
Air Quality	<p>In order to mitigate the impacts from open cut installation of the Waterbeach pipeline which includes soil stripping and stockpiling activities, the following mitigation measures will be implemented:</p> <ul style="list-style-type: none"> • Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and window sills within 100 m of site boundary; • Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local authority when asked; and

Topic Area	Site Specific Measure
	<ul style="list-style-type: none"> • Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions. <p>The measures set out in Part A of the CoCP will be implemented.</p>
Waste Management	No site specific measures required. The measures set out in Part A of the CoCP (App Doc Ref 5.4.2.1) will be implemented.
Cumulative Effects	Any site specific measures required as a result any overlapping Waterbeach New Town Train Station, Waterbeach New Town and Waterbeach New own East construction activities will be included within a detailed CEMP. These measures will be developed and agreed through engagement with the developers.

3.5 Existing Cambridge Waste Water Treatment Plant

Topic Area	Site Specific Measure
Site Set Up and General Arrangements	<p>Site Set Up, Security and Safety</p> <p>The measures set out in Part A of the CoCP (App Doc Ref 5.4.2.1) will be implemented in relation to all mobilisation, construction, and decommissioning activities.</p>
	<p>Site Lighting</p> <p>Temporary LED tower lights approximately 8 metres in height will be used whilst the works are undertaken, especially around shaft 3. Lighting levels will not exceed 200 lux.</p>
	<p>Working Hours</p> <p>Core working hours, winter and summer, continuous working (for the railway crossing, over pumping call out and tunnel construction) and out of hours working will be undertaken.</p>
	<p>Community Engagement</p> <p>The measures set out in Part A of the CoCP (App Doc Ref 5.4.2.1) will be implemented in relation to all mobilisation, construction, and decommissioning activities.</p>

Topic Area	Site Specific Measure
	Engagement will be undertaken with the Local Highway Authority and local community with regard to the rising and gravity main diversions adjacent to Cowley Road. The measures set out in Part A of the CoCP will also be implemented.
Ecology and Nature Conservation	No site specific measures required. The measures set out in Part A of the CoCP (App Doc Ref 5.4.2.1) will be implemented in relation to all mobilisation, construction, and decommissioning activities.
Historic Environment	No site specific measures required. The measures set out in Part A of the CoCP (App Doc Ref 5.4.2.1) will be implemented in relation to all mobilisation, construction, and decommissioning activities.
Land Quality	Any further site-specific measures will be identified in the approved Decommissioning Plan which is currently provided as an outline document as part of the DCO application (Outline Decommissioning Plan, Application Document Reference 5.4.2.3).
	The measures set out in Part A of the CoCP (App Doc Ref 5.4.2.1) will be implemented in relation to all mobilisation, construction, and decommissioning activities.
Water Quality	Any further site-specific measures will be identified in the approved Decommissioning Plan which is currently provided as an outline document as part of the DCO application (Outline Decommissioning Plan, Appendix 2.3, App Doc Ref 5.4.2.3).
	The measures set out in Part A of the CoCP(App Doc Ref 5.4.2.1) will be implemented in relation to all mobilisation, construction, and decommissioning activities.
Transport and Access	Access will be as identified in the CTMP. A CTMP is included as part of the DCO application (Application Document Reference 5.4.19.7).
	Temporary traffic management measures may be required on Cowley Road whilst the existing mains are diverted.

Topic Area	Site Specific Measure
	<p>Vehicle movements related to all mobilisation, construction, and decommissioning activities within the existing Cambridge WWTP will be controlled by an approved CTMP. A CTMP is included as part of the DCO application (Application Document Reference 5.4.19.7).</p>
Noise and Vibration	<p>No site specific measures required. The measures set out in Part A of the CoCP will be implemented in relation to all mobilisation, construction, and decommissioning activities.</p>
Odour	<p>Odour may be released when connecting the new transfer tunnel to the existing sewerage and when the existing waste water flows are diverted to the proposed Cambridge WWTP during construction. The action of opening up existing sewers may result in temporary odour releases. This is not expected to last for a period of more than four weeks. In order to mitigate this potential impact an air extraction system will be put in place and a mobile odour filtration unit located adjacent to the sewer shafts.</p> <p>To ensure effective odour control during the tie in works, regular site inspections by the person accountable for odour issues on site will be undertaken to minimise the risk of causing nuisance and/or loss of amenity. An inspection log will be kept and made available to the overseeing authority on request.</p> <p>As set out in CoCP Part A (App Doc Ref 5.4.2.1), an Outline Decommissioning Plan has been prepared (Appendix 2.3, App Doc Ref 5.4.2.3). During the decommissioning process tanks will be drained through the existing treatment process as far as reasonably practical. Any residual sludge that cannot be pumped to the sludge treatment process within the primary settlement tanks, aeration tanks or final settlement tanks will be removed via suction pump and either taken offsite for treatment or treated onsite via a temporary pasteurisation process such as a quick lime dosing plant. These processes are often sealed, however the resulting cake can be odorous. This cake will remain on site for as little time as possible. Odour suppression equipment will be utilised where appropriate to minimise any offsite impacts.</p>

Topic Area	Site Specific Measure
	<p>Any further site-specific measures will be identified in the approved Decommissioning Plan which is currently provided as an outline document as part of the DCO application (Outline Decommissioning Plan, Application Document Reference 5.4.2.3).</p> <p>During decommissioning of the sludge treatment centre all sludge tanks will be emptied and treated through the existing process as far as reasonably practical. Residual sludge or grit will be removed via suction pump. Sludge will and either treated offsite or within an onsite treatment process as above. This process, along with the above, will be for relatively short interventions. Grit will be removed off site and the wash water pumped to the existing wastewater treatment process on site for treatment.</p> <p>The sludge required to begin biological treatment (seeding) will be transported from the existing Cambridge WWTP in sealed tankers and pumped into the tanks through a closed process, minimising the likelihood of odour release to air. Any further site-specific measures will be identified in the approved Decommissioning Plan which is currently provided as an outline document as part of the DCO application (Outline Decommissioning Plan, Application Document Reference 5.4.2.3).</p>
Air Quality	No site specific measures are require. The measures set out in Part A of the CoCP (App Doc Ref 5.4.2.1) will be implemented in relation to all mobilisation, construction, and decommissioning activities.
Waste Management	No site specific measures required. The measures set out in Part A of the CoCP (App Doc Ref 5.4.2.1) will be implemented in relation to all mobilisation, construction, and decommissioning activities.
Cumulative Effects	Any site specific measures required as a result any overlapping construction activities associated with developments that could give rise to cumulative effects will be included within a detailed CEMP. These measures will be developed and agreed through engagement with the developers identified through a review of emerging developments whereby their construction could overlap with the construction of the Proposed Development. These include but may not be limited to the Vitrum Building St Johns Innovation Park Cowley Road, Redevelopment of the existing car showroom 59 Cowley Road, Taylor Vinters Merlin Place 460 Milton Road Cambridge Cambridgeshire, Cambridge Science Park Milton Cambridge South Cambridgeshire CB4 0WA.

4 References

Anglian Water Services Ltd Code of Practice for Pipelaying 1999.

Bactec - Explosive Ordnance Threat Assessment Report 2013.

BIM 360 ref: River model report April 2022

British Standards Institution BS 5837 Trees in relation to design, demolition and construction 2021.

British Standard BS 5228-1:2009 and A1:2014 Code of practice for Noise and Vibration Control on Construction and Open Sites Part 1 Noise, The British Standards Institution Part 2: Vibration, The British Standards Institution.

British Standard 6472-1:2008 Guide to Evaluation of human exposure to vibration in buildings- Vibration sources other than blasting 2008.

British Standard BS5489-1:2020 Design of Road Lighting. Lighting of roads and public amenity-code of practice 2020.

British Standard BS3882:2015 Specification for Topsoil 2015.

British Standards Institution British Standards Institution (2014) BS EB 12464-2:2014 Light b and lighting. Lighting of work places. Outdoor work places. London, British Standards Institution. Control of Pollution Act 1974.

BS EN 12464-1-2021 (Indoor). Internal lighting for construction areas such as offices and toilets.

CIRIA C753 SuDs manual

CIRIA-C786 guide titled 'Culvert, screen and outfall Manual'

Control of Substances Hazardous to Health Regulations 2002 (SI 2002/2677) as amended in 2004.

Controlled Waste (England and Wales) Regulations 2012

Construction (Design and Management) Regulations Managing health and safety in construction 2015.

Control of Pollution (Oil Storage) (England) Regulations 2001.

Clean Air Act 1993.

CL: AIRE 'Control of Asbestos Regulations 2012: Interpretation for Managing and Working with Asbestos in Soil and Construction & Demolition materials: Industry Guidance (CAR-SOIL) 2016.

CL: AIRE 'The Definition of Waste: Development Industry Code of Practice v2' March 2011.

Construction Industry Research and Information Association (CIRIA) C532 Control of Water Pollution from Construction Sites – Guidance for Consultants and Contractors. 2001.

Construction Industry Research and Information Association (CIRIA) C741 Good Practice on Site – Guidance for Consultants and Contractors. 2015.

Construction Industry Research and Information Association (CIRIA) C681: Unexploded Ordnance (UXO): A guide for the construction industry 2009.

Department for Environment, Food and Rural Affairs (Defra)- Land use planning: Good practice guide for handling soils 2000.

Department for Environment, Food and Rural Affairs (Defra) - Code of Construction Code of Practice for the Sustainable Use of Soils on Construction Sites 2009.

Department for Environment, Food and Rural Affairs (Defra) Preventing the spread of plant and animal diseases 1991.

Department of Trade and Industry Site Waste Management Plans – Guidance for Construction Contractors and Clients Voluntary Code of Practice 2004.

Department for Transport Safety at Street Works and Road Works; A Code of Practice 2013.

Environment Act (1995).

Environment Agency Guidance for Pollution prevention for businesses¹ with particular reference to the Pollution Prevention Guidelines (PPG) PPG1 (general guide to the prevention of water pollution), PPG3 (use and design of oil separators in surface water drainage systems), PPG5 (works near or liable to affect watercourses) and PPG6 (working at construction and demolition sites). The PPGs contain a mix of regulatory requirements and good practice advice. Whilst these PPGs have been withdrawn by the Environment Agency, they are still considered good practice advice to avoid pollution of watercourses.

Environment Agency Guidance on the Classification and Assessment of Waste Technical Guidance WM3 Version 1.2 October 2021.

Environment Agency's Groundwater Protection Technical Guidance (2017)

Environmental Quality Standards Directive 2008/105/EC

Environment Protection Action 1990.

Environmental Permitting (England and Wales) Regulations 2016.

Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2018.

Explosive Ordnance Threat Assessment Report, June 2013.

<https://www.gov.uk/guidance/pollution-prevention-for-businesses>¹

Health and Safety at Work Act 1974.

Health and Safety Executive (HSE) Dangerous substances and explosive atmospheres Regulation 2002.

Health and Safety Executive (HSE) (2010) HSG 168 Fire safety in construction. Guidance for clients, designers and those managing and carrying out construction work involving significant fire risks.

Health and Safety Executive (HSE) Guidance Note GS6 Avoiding Danger from Overhead Power lines.

Health and Safety Executive (HSE)- The Safe Use of Vehicles in Construction Sites 2009. Health and Safety Executive (HSE)- Control of Asbestos Regulations 2012.

Great Created Newt Mitigation Guidelines (Natural England) 2001.

Land Contamination Risk Management (LCRM) Regulations 2021.

Institute of Air Quality Management (IAQM)-Guidance on the assessment of dust from demolition and construction 2014.

Institute of Lighting Professionals –Guidance Note 1 for the Reduction of Obtrusive Light Guidance 2021.

Institute of Lighting Professionals –Guidance Note 8 Bats and Artificial Lighting 2018.

National Joint Utilities Group -Guidance for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees Volume 4 issued 2007.

New Roads and Street Works Act (1991)

Protection of Badgers Act 1992

Regulatory Reform (Fire Safety) Order 2005.

Road Traffic Regulation Act 1994.

SEPA guide titled 'Engineering in the Water Environment - Temporary Construction Methods': [wat_sg_29.pdf](#) ([sepa.org.uk](#))

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009.

The Contaminated Land (England) Regulations 2006 (as amended). The Control of Substances Hazardous to Health Regulations (SI 2002/2677).

The Hazardous Waste (England and Wales) Regulations 2005 (as amended by The Waste (England and Wales) Regulations 2011)

The Invasive Alien Species (Enforcement and Permitted) Order Regulation 2019.

The Office of the Deputy Prime Minister, The Department for Transport, The National Assembly for Wales (2003) Safeguarding Aerodromes, Technical Sites and Military Explosives Storage Areas:

The Town and Country Planning (Safeguarded Aerodromes, Technical Sites and Military Explosives Storage Areas) Direction 2002. Wildlife and Countryside Act 1981.

Wildlife Research Conservation Unit – Water Vole Conservation Handbook 3rd Edition (2011).

5 List of Abbreviations

Anglian Water Services	Anglian Water Services Limited
BAPA	Basic Assessment Protection Agreement
BPG	Best Practice Guidance
BPM	Best Practical Means
BS	British Standard
CCS	Considerate Contractor's Scheme
CEMP	Construction Environmental Management Plan
CLOCS	Construction Logistics and Community Safety
CIRIA	Construction Industry Research and Information Association
CoCP	Code of Construction Practice
CoPA	Control of Pollution Act 1974
CSCS	Construction Skills Certificate Scheme
CTMP	Construction Traffic Management Plan
CWWTP	Cambridge Waste Water Treatment Plant (existing)
CWWTPRP	Cambridge Waste Water Treatment Plant Relocation Project
Defra	Department for Environment, Food and Rural Affairs
DCO	Development Consent Order
ECoW	Ecological Clerk of Works
EIA	Environmental Impact Assessment
EMA	Environmental Management Plan
EMS	Environmental Management System
EPA	Environmental Protection Act 1990
ES	Environmental Statement
FRA	Flood Risk Assessment
HGV	Heavy Goods Vehicle
HSE	Health and Safety Executive
IQAM	Institute of Air Quality Management
LCRM	Land Contamination Risk Management
MMC	Motor Control Centre
MMP	Materials Management Plan
NJUG	National Joint Utilities Group
PRoW	Public Right of Way
PPE	Personal Protective Equipment
PPG	Pollution Prevention Guidance
PLC	Primary Local Controls
TRO	Traffic Regulation Order
WRAP	Waste and Resources Action Programme
WRC	Water Recycling Centre
WSI	Written scheme of investigation
WWTP	Waste Water Treatment Plant
UXO	Unexploded Ordnance

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**

You can view all our 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/>