TECHNICAL NOTE

WATER | ENVIRONMENT

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PROJECT	Littlebourne, Evenhill Littlebourne, Canterbury	CLIENT	Gladman	
TITLE	Environment Agency consultation response	REFERENCE	21045-NUT-TN-02	C02

AUTHOR	CHECKER	APPROVER
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REV	COMMENTS	DATE	AUTH	CHKR	APPR
C02	Updated STC supporting documentation	20/12/2023	GL	CMG	GL

1 Introduction

1.1 Water Environment has undertaken a detailed Nutrient Neutrality Assessment and Mitigation Strategy (NNAMS)[1] for the Outline application relating to provision of up to 300 dwellings with associated infrastructure, greenspace, amenities, access roads and parking.

1.2 This Technical Note responds to the planning consultation comments from the Environment Agency (EA).

2 Environment Agency (EA)

2.1 The EA responded to a statutory consultation on the 12th May 2023[2] objecting to the proposals on the basis that the development includes a Package Treatment Plant (PTP) when the site is located in an area served by public sewers.

2.2 This is incorrect. As set out in the NNAMS, the development includes an onsite Wastewater Treatment Works (WwTW) - otherwise known as a Water Recycling Centre (WRC) - which will be designed, constructed, and operated by Severn Trent (ST) Connect, an OfWAT regulated water company.

2.3 ST Connect responded to the EA objection on the 26th July 2023 (included in the appendix of this Technical Note for completeness) and confirms:

> *As a 'Statutory Undertaker' appointed by Ofwat, ST Connect would operate and maintain the WRC 'In perpetuity' and adopt the sewers leading to it, subject to them being constructed to the required standards. These would become part of ST Connects Ofwat-regulated operating estate, and therefore be considered "public" assets.*

2.4 The EA maintained the objection in a letter of the 8th September 2023, on the basis of the same misunderstanding that the development proposes a private system, and does not make any reference to

[1] Water Environment Ltd (04/10/2023) Nutrient Neutrality Assessment and Mitigation Strategy. Ref: 21045-NUT-RP-01 C02
[2] Environment Agency (12 May 2023) Ref: KT/2023/130653/01-L01

the ST Connect response of the 26th July 2023. To reiterate, the development proposals do not include a private wastewater treatment system. The system proposed by ST Connect will be Mains drainage.

2.5 The approach to construct a public WRC as part of this development is widely accepted, not only in nutrient neutrality areas, and Water Environment alone have been involved in approximately 10 developments in the past 4 years which have been granted planning permission and include new onsite WRCs. The EA have been involved in all these projects and did not raise any objections.

2.6 Locally, the proposed South Canterbury urban extension (Canterbury City Council Ref: CA//16/00600) was granted planning permission on the 6th July 2023 and includes an onsite WwTW/WRC by ST Connect, with the treated effluent discharging to the Lampen Stream. The consultation included extensive discussions with the EA and Natural England with regards to the foul drainage strategy and the onsite WwTW. Following submission of a NNAMS in December 2021 which included in the onsite WWTW, the EA maintained no objection and recommended an additional planning condition in January 2022[3] in respect of foul drainage which specifically references the proposed foul sewer network and WwTW (included in the Appendix).

2.7 Most recently, the EA have also commented on proposals for up to 550 dwellings at Kingsnorth Green, south of Ashford which was granted planning permission on appeal, dated 6th November 2023 (Ashford Borough Council Ref: 15/00856/AS). The proposed development includes an onsite WRC operated by ST Connect which will discharge into the Whitewater Dyke, a tributary of the River Stour. The EA confirmed on the 12th May 2023[4] that they had no objections to the proposed development, subject to suitable conditions (consultation response included in the Appendix).

2.8 The EA letter of the 8th September 2023 goes on to make reference to the discharge from the WRC into the Nail Bourne and that the EA will not 'usually' grant a permit to discharge into a seasonally dry watercourse. As noted in the ST Connect letter, this will be addressed as follows:

> *The WRC would require a discharge permit from the EA. To support such an application, a detailed water quality and monitoring program would be undertaken to ascertain the current standard of that in the proposed receiving watercourse. This in enables permit condition requirements to be assessed by the EA and the WRC to then be designed to provide the necessary treatment level required to meet these.*

2.9 The ST Connect Letter of support[5] goes on to confirm that the treated effluent will, in fact, discharge into the Little Stour, not the Nail Bourne:

> *Foul sewage from all properties will be collected and conveyed through a separate foul-only sewerage system to the onsite water recycling centre (WRC). Following treatment to the required standards, final effluent will be discharged into a drainage system out falling into the Little Stour.*

2.10 Regardless, regarding seasonally dry watercourses, the EA addressed this point directly in the consultation response on Kingsnorth Green which states that enquiries should be made for an appropriate permit, which is the case for all these development sites.

2.11 These are only two specific, local, and recent examples of development sites with onsite WwTWs/WRCs, but as noted above, onsite WRCs have been widely accepted across the country, including for Gladman, the applicant for the proposed development at Littlebourne, at development sites in Canterbury and Somerset.

[3] Environment Agency (13 January 2022) Ref: KT/2022/129163/01-L01
[4] Environment Agency (12 May 2023) Ref: KT/2022/130347/02-L02
[5] ST Connect (December 2023) Letter of support Wastewater strategy. (Included in the NNAMS)

3 Conclusions

3.1 A Package Treatment Plant (PTP) is not proposed, as suggested in the EA consultation response. A Water Recycling Centre is proposed which will be operated by an OfWAT regulated water company and will therefore be 'Mains' drainage. This approach has been accepted across the country on numerous planning consents and there are no differences in the principle of the approach being taken for this development site than at other sites which have recently been accepted by the EA in the Stodmarsh catchment. Therefore there is no reason for the EA to object to the proposals.

Appendix

ST Connect letter dated 26th July 2023
EA consultation letter for South Canterbury urban extension Ref: KT/2022/129163/01-L01
EA consultation letter for Kingsnorth Green Ref: KT/2022/130347/02-L02

ST Connect

26 July 2023

Severn Trent Services (Water & Sewerage) Limited

Severn Trent Centre
2 St John's Street
Coventry
CV1 2LZ

www.st-connect.co.uk

Canterbury City Council
Development Control
Council Offices Military Road
Canterbury
Kent
CT1 1YW

Ref: Land At The Hill, Bekesbourne Lane, East Of Bekesbourne Hill, Bekesbourne, Canterbury, CT4 5EA.

ST Connect is the trading name of Severn Trent Services (Water & Sewerage) Ltd.

ST Connect are an Ofwat-regulated water company, appointed by the Secretary of State to provide wastewater and surface water management services in England and Wales. We have a strong track record for operating wastewater treatment assets and are part of the wider Severn Trent Group, which in its portfolio has one of the UK's largest water and sewerage companies.

ST Connect has been requested to provide a response to EA letter, ref; KT/2023/130653/01-L01, Canterbury City Council planning ref; CA/23/00484, regarding the foul water treatment proposal for the land mentioned above, whereby the EA have objected to the application.

For new housing and infrastructure developments ST Connect is aware of the requirement to connect to an existing foul sewer network and utilise an existing WwTW facility (as opposed to a Package Treatment Plant) where these exist and that are within the calculated distance, plus have capacity to take the flow.

However, the capability for nutrient removal for developments to achieve 'Nutrient neutrality' is also now required to be considered. In the case of the proposed development and the nearby Newnham Valley Preston works, it would seem to be that the existing permitted DWF into the works is already being exceeded by over 1000m^3/day *(1)*. There is also no permit constraint on Total Phosphorus (TP), with recorded readings of 23.22 mg/l AA *(1)*.

The lack of nutrients constraint in the Newnham Valley Preston WwTW permit regarding Final Effluent (FE) prevents Nutrient Neutrality (NN) calculations to balance for this development. The only way for this to be so would be for these works be upgraded to be able to receive higher influent flows and to also have permitted constraints imposed upon its FE composition regarding TP. This would in practice likely require significant investment to upgrade the WwTW and a use of chemicals to strip out the nutrients to a lower level, assuming that Southern Water Services Ltd. would be inclined to do this. Whilst unaware of Southern WS's investment program, Ofwat's mechanisms of how water companies can spend their money during each Asset Management Period (AMP) are well documented. An upgrade program for these works would have been required to be included in the business plan at the start of the current Asset Management Period (AMP), which began before NN became the issue it now is, so is probably unlikely. Details for the next AMP are yet to be agreed and published by water companies.

ST Connect

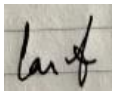
The proposed water recycling facility (WRC) by ST Connect for the above planning application is not a Package Treatment Plant. It is a new modular sewage treatment works design, which can be scaled to meet varying sizes of developments from a few hundred homes to several thousand. Following influent inlet screening to remove 'rag & grit', it utilises an activated sludge process that allows natural bacteria in a sequential batch reactor process to treat foul sewage and produce a FE low in phosphorus and nitrogen without the use of chemicals. Additional membrane filtration can also be employed to further reduce levels of nutrients in the FE if required. The sludge is removed from the plant at regular intervals and disposed of at a suitable treatment facility, the frequency dependent upon the size of the plant and influent load. Only foul sewer water would be treated at the WRC. All surface water would be handled by suitable surface water management systems, provided as part of the development.

The WRC would require a discharge permit from the EA. To support such an application, a detailed water quality and monitoring program would be undertaken to ascertain the current standard of that in the proposed receiving watercourse. This in enables permit condition requirements to be assessed by the EA and the WRC to then be designed to provide the necessary treatment level required to meet these.

As a 'Statutory Undertaker' appointed by Ofwat, ST Connect would operate and maintain the WRC 'In perpetuity' and adopt the sewers leading to it, subject to them being constructed to the required standards. These would become part of ST Connects Ofwat-regulated operating estate, and therefore be considered "public" assets.

(1)AECOM Kent Water for Sustainable Growth Study, May 2017 – is being the latest publicly available information.

Yours faithfully



Ian Fendell
Compliance Manager
ST Connect

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creating a better place

Environment Agency

Canterbury City Council
Development Control
Council Offices Military Road
Canterbury
Kent
CT1 1YW

Our ref: KT/2022/129163/01-L01
Your ref: CA/16/00600/OUT

Date: 13 January 2022

Hybrid planning application for the proposed south Canterbury urban extension

Land North And South Of New Dover Road, Canterbury, Extending North To Canterbury-Dover Railway Line, West To Nackington Road And South To A2

Thank you for consulting us.

We consider that planning permission could be granted to the proposed development as submitted, if all of our conditions are met. We maintain all the conditions we requested in our previous reply, KT/2016/121046/01-L01, dated 29/03/2016, along with the additional condition below.

Condition 7:
Development here by approved shall not commence until a foul drainage strategy, detailing how the developer intends to ensure that appropriate foul drainage is implemented (with connection to the proposed foul sewer network and WwTW), has been submitted to and approved by, the local planning authority in consultation with the water undertaker and EA. The development shall be constructed in line with the agreed detailed design and recommendations of the strategy. No occupation of any premises can take place until the installed scheme is confirmed as meeting the agreed specifications and connections are made to the sewer network.

Reason:
To ensure that the development does not contribute to, or is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution in line with paragraph 174 of the National Planning Policy Framework.

If you require any further information, please do not hesitate to contact us.

Yours faithfully,

Abbie Philpott
Planning Advisor

KSLPLANNING@environment-agency.gov.uk

creating a better place for
people and wildlife

Environment Agency

Ashford Borough Council
Development Control
Civic Centre Tannery Lane
Ashford
Kent
TN23 1PL

Our ref: KT/2022/130347/02-L02
Your ref: 15/00856/AS

Date: 12 May 2023

Dear Planning Team

Outline application for a development comprising of up to 550 dwellings in a mix of size, type and tenure. Provision of local recycling facilities. Provision of areas of formal and informal open space. Installation of utilities, infrastructure to serve the development including flood attenuation, surface water attenuation, water supply, waste water facilities, gas supply, electricity supply (including sub-station, telecommunications infrastructure and renewable energy). Transport infrastructure including highway improvements in the vicinity of Ashford Road/Magpie Hall Road/Steeds Lane, Pound Lane and Bond Lane, plus an internal network of roads and junctions, footpaths and cycle routes. New planting and landscaping both within the proposed development and on its boundaries as well as ecological enhancement works. Associated groundworks.

Land at Pound Lane, Magpie Hall Road, Bond Lane and, Ashford Road, Kingsnorth, Kent

Thank you for consulting us on the above. We have no objection subject to the following conditions being included in any permission granted.

Due to the scale, nature and setting of this proposal and the supporting information submitted, we do not object to the proposal in principle providing the following conditions are placed on any permitted development.

Foul Drainage

We note from the submitted documents that foul drainage is proposed be to treated on-site by a new treatment works, with treated effluent **discharged to the Stour** via its tributaries. However, it is unclear whether these tributaries flow year round, and as such whether the proposed discharge would actually be **to ground** for parts of the year. The above point should be clarified and, if necessary, enquiries made for an appropriate permit.

Condition 1: No development of any phase of this proposal shall commence until a strategy to deal with foul water drainage is submitted to, and approved in writing by, the local planning authority.

Reason: To ensure that the development does not contribute to, or is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution in line with paragraph 174 of the National Planning Policy Framework.

Informative:
All applications to the LPA involving non-mains foul drainage should include all relevant information on foul drainage proposals:
https://www.gov.uk/government/publications/foul-drainage-assessment-form-fda1

Any foul drainage discharges to the environment in this area and on this scale will require an Environmental Permit.
Discharges to surface water and groundwater: environmental permits - GOV.UK (www.gov.uk)

The applicant should submit sufficient information to us to show that a permit could be achieved for this design of foul drainage in this locality. The granting of planning permission does not guarantee that a discharge permit will be granted.

Drainage
Condition 2: No infiltration of surface water drainage into the ground is permitted other than with the written consent of the Local Planning Authority. The development shall be carried out in accordance with the approved details.

Reason: To ensure that the development does not contribute to, or is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution caused by mobilised contaminants in line with paragraph 174 of the National Planning Policy Framework.

Informative:
Only clean uncontaminated water should drain to the surface water system. Roof drainage shall drain directly to the surface water system (entering after the pollution prevention measures). Appropriate pollution control methods (such as trapped gullies and interceptors) should be used for drainage from access roads and car parking areas to prevent hydrocarbons from entering the surface water system. There should be no discharge into land impacted by contamination or land previously identified as being contaminated. There should be no discharge to made ground. There must be no direct discharge to groundwater, a controlled water.

Land Contamination
Condition 3: If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the Local Planning Authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to and approved in writing by the Local Planning Authority. The remediation strategy shall be implemented as approved.

Reason: To ensure that the development does not contribute to, or is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution from previously unidentified contamination sources at the development site in line with paragraph 174 of the National Planning Policy Framework.

Re-use of Materials

The CLAIRE Definition of Waste: Development Industry Code of Practice (version 2) provides operators with a framework for determining whether or not excavated material arising from site during remediation and/or land development works are waste or have ceased to be waste. Under the Code of Practice:

- excavated materials that are recovered via a treatment operation can be re-used on-site providing they are treated to a standard such that they are fit for purpose and unlikely to cause pollution
- treated materials can be transferred between sites as part of a hub and cluster project formally agreed with the EA
- some naturally occurring clean material can be transferred directly between sites.

Developers should ensure that all contaminated materials are adequately characterised both chemically and physically, and that the permitting status of any proposed on site operations are clear. If in doubt, the Environment Agency should be contacted for advice at an early stage to avoid any delays.

The Environment Agency recommends that developers should refer to:

- the Position statement on the Definition of Waste: Development Industry Code of Practice and;
- The Environmental regulations page on GOV.UK

Please provide a copy of the final decision notice.

Yours faithfully

Ms Jennifer Wilson
Planning Specialist

[redacted]

End