

**Deephams Sewage Works, Edmonton**

in the London Borough of Enfield

planning application no.14/02612/FUL

**Strategic planning application stage II referral**

Town & Country Planning Act 1990 (as amended); Greater London Authority Acts 1999 and 2007; Town & Country Planning (Mayor of London) Order 2008.

**The proposal**

The proposal is for the redevelopment of the existing Sewage Treatment Works to provide a new works with higher capacity and the ability to treat sewage to a higher standard.

**The applicant**

The applicant is **Thames Water Utilities Ltd**, and the agent is **Savills**.

**Strategic issues**

The strategic issues in this case are **water quality, wastewater infrastructure, transportation** and **sustainable development**.

**The Council's decision**

In this instance Enfield Council has resolved to grant permission subject to conditions and S106 agreement.

**Recommendation**

That Enfield Council be advised that the Mayor is content for it to determine the case itself, subject to any action that the Secretary of State may take, and does not therefore wish to direct refusal or direct that he is to be the local planning authority.

**Context**

1 On 18 July 2014 the Mayor of London received documents from Enfield Council notifying him of a planning application of potential strategic importance to develop the above site for the above uses. This was referred to the Mayor under Category 2B of the Schedule to the Order 2008:

2B(2) *"Waste development where the development occupies more than one hectare."*

2 On 27 August 2014 the Mayor considered planning report D&P/2932b, and subsequently advised Enfield Council that the application broadly complied with the London Plan, for the reasons set out in paragraph 65 of the above-mentioned report, but asked that account be taken of the comments made in that paragraph to address deficiencies.

3 A copy of the above-mentioned report is attached. The essentials of the case with regard to the proposal, the site, case history, strategic planning issues and relevant policies and guidance are as set out therein, unless otherwise stated in this report. On 18 November 2014 Enfield Council decided that it was minded to grant planning permission and on 24 December 2014 it advised the Mayor of this decision. Under the provisions of Article 5 of the Town & Country Planning (Mayor of London) Order 2008 the Mayor may allow the draft decision to proceed unchanged, direct Enfield Council under Article 6 to refuse the application or issue a direction to Enfield Council under Article 7 that he is to act as the Local Planning Authority for the purposes of determining the application. The Mayor has until 7 January 2015 to notify the Council of his decision and to issue any direction.

4 The environmental information for the purposes of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 has been taken into account in the consideration of this case.

5 The decision on this case, and the reasons will be made available on the GLA's website [www.london.gov.uk](http://www.london.gov.uk).

## Update

6 At the consultation stage Enfield Council was advised that the application broadly complied with the London Plan, for the reasons set out in paragraph 65 of the above-mentioned report, but asked that account be taken of the comments made in that paragraph to address deficiencies:

- **Principle of development:** The proposal is supported by London Plan Policy 5.14. The permission should secure that any 'spare' land is only given permanent permission for works or buildings associated with sewage treatment. The applicant should confirm what the increase in additional storm capacity is and if any further capacity is required to future proof the scheme.
- **Sustainable energy:** The proposal is broadly in accordance with London Plan Policy 5.2, but further details should be provided on the layout of the CHP plant room and details of the investigation of PV technology should be provided with a view to improving the carbon savings achieved.
- **Transport:** A travel plan is required for the construction phase and ongoing operation and this should be secured in the S106 agreement. A construction logistics plan is also required and should be secured by a condition. The document should address the potential of utilising the River Lea Navigation during the development. Cycle parking should be monitored for potential increase in cycle parking and options should be identified for further provision. Disabled parking should be provided on site for staff and visitors.

7 Since the initial consultation, further details on the scheme have been provided to the Council which address the points raised above. Taking each of the outstanding points in turn, the following is noted:

## Principle of development

8 The Environment Agency has commented on the scheme in relation to the capacity of the proposed storm drains. They confirm that the proposed size of the drains would meet their

requirements and would be acceptable. The application does not include land other than that identified for the redevelopment of the sewage works or education centre and therefore the issues raised regarding the principle of the development have been resolved.

## **Sustainable development**

9 At consultation stage, officers requested that a plan was submitted identifying the size and layout of the CHP plant room. The applicant has responded on this point saying that the CHP and Thermal Hydrolysis Plant (THP) will not be provided in a plant room, as they would be located outside the buildings. They have however confirmed that there will be sufficient space in the associated motor control centre kiosks associated with the CHP units to provide control equipment for a third CHP unit should one subsequently be approved and installed.

10 In addition, the stage 1 report requested investigation of the possibility for the installation of solar PVs. While they haven't been included in the scheme at this stage, a condition is proposed that requires an assessment of how PV technology could be incorporated into the scheme once construction is complete. While it is unfortunate that PV panels haven't been included at this stage, given the complexity of the site and the development, a condition is considered acceptable in this case.

## **Transport**

11 At consultation stage, a number of reports were requested to be secured through condition or legal agreement. The travel plan, blue badge parking spaces and electric charging points are all included in the draft S106 which is welcomed. The travel plan is secured for both construction and post-construction phases which will allow for additional parking as necessary and is welcomed.

12 Deliveries and servicing to site will be restricted through planning condition, and TfL have confirmed that they are supportive of this approach.

13 These details address the concerns raised in the stage 1 report.

## **Response to consultation**

14 The application was advertised by site and press notices and consultation letters which were sent to 3,798 surrounding properties. Four letters of objection were received and their concerns are summarised as follows:

- The development would have an effect on local ecology
- The site is too close to neighbouring properties
- The delivery would increase pollution
- There is a general dislike of the proposal
- The development will increase odour and pollution to an extent that will affect the lifestyle of residents
- The proposal will effect property prices in Edmonton
- The plant should be closed and relocated outside London
- There is a possibility of contamination from building works
- The works should include an upgrade of the perimeter fence which is in need of repair
- There is a pungent smell of raw sewage/odour from the site.

15 One letter of support was received which raised the following points:

- Support the upgrade because of Thames Water's promise to reduce smell. Since phase 1, local residents have noticed a reduction in smell

- It generally makes sense to upgrade Deephams on one site.

16 Statutory consultees have provided the following comments:

- **Environment Agency:** Requested further information on flood risk, ground contamination, ecology, biodiversity and waste management. Overall the scheme is supported subject to the imposition of conditions regarding flood risk and contamination.
- **Natural England:** The application is in close proximity to the Chingford Reservoirs Site of Special Scientific Interest (SSSI). They are satisfied that the proposed development carried out in strict accordance with the details submitted will not damage the interesting features for which the site has been classified. They advise that the SSSI does not represent a constraint in determining the application and no objection is raised.
- **English Heritage (archaeological):** Raised no objection but requested a condition to require a programme of archaeological investigation for the works to take place within. This has been attached to the draft decision notice.
- **Canal & River Trust:** Requested that a condition is secured to avoid pollution of waterways from the sewage. This has been attached to the draft decision notice.
- **National Grid:** No objection raised.
- **Lee Valley Regional Park Authority:** The authority supports the application given the improvements to water quality and reduction of odours.
- **London Borough of Waltham Forest:** They note the impacts in the construction phase will be negligible and that the replacement CHP will improve air quality. The improvements to odour emissions will benefit the residents of Waltham Forest and no overall objections raised.

17 The statutory and non-statutory responses to the Council's consultation do not raise any material planning issues of strategic importance that have not already been considered at consultation stage and/or in this report.

## **Article 7: Direction that the Mayor is to be the local planning authority**

18 Under Article 7 of the Order the Mayor could take over this application provided the policy tests set out in that Article are met. In this instance the Council has resolved to grant permission with conditions and a planning obligation, which satisfactorily addresses the matters raised at stage I, therefore there is no sound planning reason for the Mayor to take over this application.

## **Legal considerations**

19 Under the arrangements set out in Article 5 of the Town and Country Planning (Mayor of London) Order 2008 the Mayor has the power under Article 6 to direct the local planning authority to refuse permission for a planning application referred to him under Article 4 of the Order. He also has the power to issue a direction under Article 7 that he is to act as the local planning authority for the purpose of determining the application. The Mayor may also leave the decision to the local authority. In directing refusal the Mayor must have regard to the matters set out in Article 6(2) of the Order, including the principal purposes of the Greater London Authority, the effect on health and sustainable development, national policies and international obligations, regional planning guidance, and the use of the River Thames. The Mayor may direct refusal if he considers that to grant permission would be contrary to good strategic planning in Greater London. If he decides to direct refusal, the Mayor must set out his reasons, and the local planning authority

must issue these with the refusal notice. If the Mayor decides to direct that he is to be the local planning authority, he must have regard to the matters set out in Article 7(3) and set out his reasons in the direction.

## **Financial considerations**

20 Should the Mayor direct refusal, he would be the principal party at any subsequent appeal hearing or public inquiry. Government Planning Practice Guidance emphasises that parties usually pay their own expenses arising from an appeal.

21 Following an inquiry caused by a direction to refuse, costs may be awarded against the Mayor if he has either directed refusal unreasonably; handled a referral from a planning authority unreasonably; or behaved unreasonably during the appeal. A major factor in deciding whether the Mayor has acted unreasonably will be the extent to which he has taken account of established planning policy.

22 Should the Mayor take over the application he would be responsible for holding a representation hearing and negotiating any planning obligation. He would also be responsible for determining any reserved matters applications (unless he directs the council to do so) and determining any approval of details (unless the council agrees to do so).

## **Conclusion**

23 Having regard to the details of the application, including the Environmental Statement, the matters set out in Enfield Council's committee report, consultation responses, the draft conditions and draft S106 agreement, the scheme is acceptable in strategic planning terms.

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**Deephams Sewage Works, Edmonton**

in the London Borough of Enfield

planning application no. 14/02612/FUL

**Strategic planning application stage 1 referral**

Town & Country Planning Act 1990 (as amended); Greater London Authority Acts 1999 and 2007; Town & Country Planning (Mayor of London) Order 2008

**The proposal**

The proposal is for the redevelopment the existing Sewage Treatment Works to provide a new works with higher capacity and treating sewage to a higher standard.

**The applicant**

The applicant is **Thames Water Utilities Ltd** and the agent is Savills.

**Strategic issues**

The proposals are supported by London Plan policy **water quality and wastewater infrastructure** and are considered an important improvement in London's strategic infrastructure. Further clarification and action is required in relation to, **water quality and wastewater infrastructure, sustainable energy** and **transport**.

**Recommendation**

That Enfield Council be advised that while the application is generally acceptable in strategic planning terms the application does not comply with the London Plan, for the reasons set out in paragraph 65 of this report; but that the possible remedies set out in that paragraph could address these deficiencies.

**Context**

On 18 July 2014 the Mayor of London received documents from Enfield Council notifying him of a planning application of potential strategic importance to develop the above site for the above uses. Under the provisions of The Town & Country Planning (Mayor of London) Order 2008 the Mayor has until 27 August 2014 to provide the Council with a statement setting out whether he considers that the application complies with the London Plan, and his reasons for taking that view. The Mayor may also provide other comments. This report sets out information for the Mayor's use in deciding what decision to make.

The application is referable under Category 2B of the Schedule to the Order 2008:

- 2B (2): "Waste development where the development occupies more than one hectare".

Once Enfield Council has resolved to determine the application, it is required to refer it back to the Mayor for his decision as to whether to direct refusal; take it over for his own determination; or allow the Council to determine it itself.

The environmental information for the purposes of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 has been taken into account in the consideration of this case.

The Mayor of London's statement on this case will be made available on the GLA website [www.london.gov.uk](http://www.london.gov.uk).

## **Site description**

The Deephams sewage treatment works (Deephams STW) comprises a 35 hectare site within the Upper Lee Valley Opportunity Area, approximately 1.2 kilometres east of Edmonton town centre. The site is bounded by: residential development at Pickett's Lock Lane, and the Lee Valley Regional Park to the north; the Lee Navigation Canal and William Girling Reservoir to the east; Bestways Business Park and industrial land at Central Leaside to the south; and, suburban residential hinterland to the west.

The Lee Valley Regional Park boundary encompasses the Lee Navigation Canal and William Girling Reservoir, wrapping round the site to the north and east. Land at the east of the site, extending across the Canal and into the Regional Park, is also identified as an area of Metropolitan Importance for Nature Conservation by the local development plan.

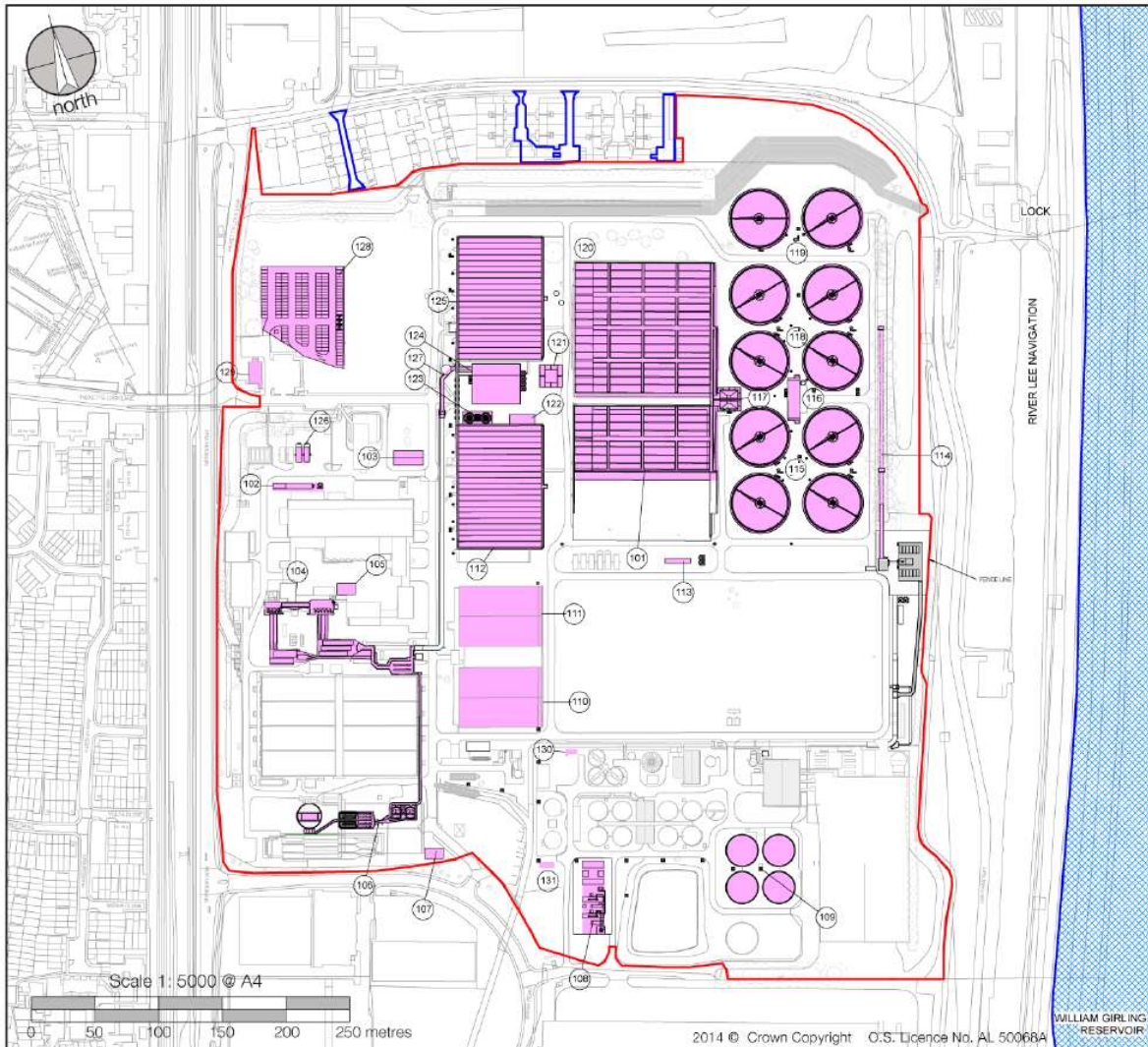
The Deephams STW has a current capacity of 874,000 population equivalent, and whilst the inlet works and storm tanks at the west of the site have recently been upgraded, the majority of the treatment works infrastructure dates from the 1950s and 60s. Wastewater from the treatment processes at the site is discharged into Salmons Brook to the south, which flows into the River Lee further downstream.

The site is bordered by Pickett's Lock Lane, Meridian Way (A1055), Arda Road and Lee Park Way. The primary vehicle access to the site is via Meridian Way. The nearest part of the Transport for London Road Network (TLRN) and Strategic Road Network (SRN) is some 1.2km and 1km from the site respectively.

There are existing bus stops within walking distance of the development on Pickett's Lock Lane (to the south of Meridian Way) and Bounces Road. These bus stops serve route W8 and 92. Measured on a scale of 1 – 6 where 6 is the highest, the site has a public transport accessibility level (PTAL) of 1b which is considered low. There are three National Rail Stations that are not considered by PTAL as they are not in walking distance to the station. These include Angel Road station, Edmonton Green station, and Ponders End station.

## **Details of the proposal**

The proposal is to upgrade the existing sewage treatment works to improve the quality of wastewater discharged from the site, and to increase the capacity of the works from 891,000 (2011 base year) to 989,000 population equivalent. The capacity has been increased since the pre-application stage to accommodate population growth, with the population forecast within the catchment being calculated by Thames Water using projections derived from GLA 2012 demographic projections issued in December 2012 and updated in February 2013 – a further 10% was added to the forecast to provide for uncertainty and variation in the forecasts.



**KEY TO PROPOSED STRUCTURES:**

- 101. AERATION LANES WITH IFAS SYSTEM
- 102. HIGH VOLTAGE SWITCH ROOM
- 103. CONTROL ROOM
- 104. ODOUR CONTROL COVERS TO INLET WORKS
- 105. ODOUR CONTROL UNIT
- 106. ODOUR CONTROL COVERS TO TOTTENHAM LOW LEVEL INLET WORKS
- 107. ODOUR CONTROL UNIT
- 108. CHP
- 109. NEW ODOUR CONTROL COVERS TO 4<sup>th</sup> EXISTING SECONDARY DIGESTORS
- 110. EXISTING PRIMARY SETTLEMENT TANKS CONVERTED TO STORM TANKS
- 111. EXISTING PRIMARY SETTLEMENT TANKS CONVERTED TO STORM TANKS
- 12. PRIMARY SETTLEMENT TANKS WITH ODOUR CONTROL COVERS
- 113. FINAL SETTLEMENT TANKS MCC KIOSK
- 114. FINAL EFFLUENT CHANNEL
- 115. FINAL SETTLEMENT TANKS 7 TO 10
- 116. RAS SAS PUMPING STATION
- 117. FLOW SPLITTER CHAMBER FS2
- 118. FINAL SETTLEMENT TANKS 5 & 6
- 119. FINAL SETTLEMENT TANKS 1 TO 4
- 120. AERATION LANES WITH IFAS SYSTEM
- 121. FLOW SPLITTER CHAMBER FS1
- 122. ODOUR CONTROL UNIT
- 123. SLUDGE STORAGE TANKS
- 124. FTFT PUMPING STATION, MCC ROOM & BLOWER HOUSE
- 125. PRIMARY SETTLEMENT TANKS WITH ODOUR CONTROL COVERS
- 126. POWER GENERATORS WITH SET UP TRANSFORMERS
- 127. FTFT INLET CHANNEL

- 128. CONSTRUCTION COMPOUND TO BE RETAINED AS PARKING/STORAGE AREA
- 129. EDUCATION CENTRE (REFURBISHED EXISTING BUILDING)
- 130. SLUDGE SCREENS
- 131. WASTE GAS BURNER

- PLANNING APPLICATION AREA
- OTHER LAND IN OWNERSHIP OF APPLICANT
- WORKS FOR WHICH PLANNING PERMISSION IS BEING SOUGHT

**Figure 3.2 :  
PROPOSED SITE LAYOUT**

Drawing No. : TW/1023/240614/PS3.2      Revision: **A**

Drawn by: NM

Date: 240614

The upgrade of sewage treatment infrastructure at Deephams Sewage Works comprises the following elements:



- Demolition of redundant plant and buildings.
- The phased development of primary settlement tanks, aeration lanes with integrated fixed film activated sludge (IFAS) media.
- Development of final settlement tanks, pumping stations, blower house and control room buildings, odour control covers to primary settlement tanks, inlet works, anoxic zones and secondary digesters, 3 odour control units.
- Combined heat and power units, additional storm storage.
- Education centre and guided route.
- Ancillary plant, kiosks, buildings, car parking, hard and soft landscaping and above
- Temporary 2-storey site offices and site compounds during construction.

The treatment plant currently employs 24 staff and staff numbers will return to the status quo when the upgrade is complete. Construction will occur in five phases and staff numbers will vary during these phases, with a minimum of 54 and maximum of 252.

## Case history

The application was subject to the GLA pre-application meeting process and an advice report was issued on 29 January 2013 (D&P/2932a).

## Strategic planning issues and relevant policies and guidance

The relevant issues and corresponding policies are as follows:

- Waste water infrastructure *London Plan;*
- Blue Ribbon Network *London Plan;*
- Opportunity Areas *London Plan;*
- Urban design *London Plan;*
- Inclusive access *London Plan; Accessible London: achieving an inclusive environment SPG;*
- Sustainable development *London Plan; Sustainable Design and Construction SPG; Mayor's Climate Change Adaptation Strategy; Mayor's Climate Change Mitigation and Energy Strategy; Mayor's Water Strategy;*
- Air quality and odour *London Plan; draft Early Minor Alteration to the London Plan; the Mayor's Air Quality Strategy;*
- Biodiversity *London Plan; the Mayor's Biodiversity Strategy;*
- Transport and parking *London Plan; the Mayor's Transport Strategy;*

For the purposes of Section 38(6) of the Planning and Compulsory Purchase Act 2004, the development plan in force for the area is the 2010 Enfield Core Strategy; the saved policies of the 1994 Enfield Unitary Development Plan; and, the 2011 London Plan.

The following are also relevant material considerations:

- The National Planning Policy Framework and Technical Guide to the National Planning Policy Framework;

- The National Policy Statement for Waste Water;
- Further Alterations to the London Plan (FALP); and,
- The Upper Lee Valley Opportunity Area Planning Framework (July 2013)

## **Principle of development**

### National Policy Statement for Waste Water

The National Policy Statement for Waste Water strongly supports the upgrade of the existing sewage treatment works at Deephams, indicating potential for an increased capacity from 874,000 to 941,000 population equivalent. At the same time, the statement highlights the need for the site to improve discharged water quality in order to comply with the introduction of more stringent European and national statutory requirements.

The National Policy Statement for Waste Water further states *“The proposed new sewage treatment works at Deephams in North East London may exceed the threshold set out in the Planning Act 2008 for waste water treatment works.”*

### Application status for the purpose of the Planning Act 2008

For new waste water treatment plants, the Planning Act 2008 states that applications are classed as nationally significant where these would *“have a capacity exceeding a population equivalent of 500,000”*. For the alteration of an existing waste water treatment plant, the capacity threshold for national significance is triggered by an *“increase by more than a population equivalent of 500,000”*.

Following legal advice to the applicant, the development proposals are considered to be an upgrade to the existing Deephams Sewage Treatment Works (STW) and are therefore an alteration, rather than the creation of a new wastewater treatment plant. On this basis, and given that the capacity increase envisaged is in the order of a population equivalent of 67,000, the application does not trigger the national infrastructure project threshold as defined by the Act 2008.

## **Assessment of proposals**

### Treatment capacity

The proposals have evolved over several years and have been designed to meet the projected population increases identified in the London Plan and detailed in 2012 population projections, giving a capacity of 989,000 Population Equivalent. Constructively, section 3.9 of the Planning Statement acknowledges the Further Alterations to the London Plan (Jan 2014) which sets out increased population projections to 2036. The Mayor has also published his Infrastructure Investment Plan (July 2014) which projects further significant population increases to 2050. It is also likely that the areas of Hertfordshire and Essex served by Deephams STW will also see increases in population and other development that will add loads to the works.

Given that STWs should be considered as essential and permanent infrastructure it is essential that provision is available for further increases in capacity in the long term. Section 3.9, and the supplied layout plans confirm that land within the current works will be freed up and available to meet future treatment needs. It is important that this land remains available for long term likely expansion. Temporary uses of the currently spare land are likely to be acceptable but no permanent development other than in connection with sewage treatment should be permitted.

### Storm storage tanks

Paragraphs 3.7.31–3.7.32 of the Planning Statement state that the capacity of the storm tanks will be increased. This is welcomed in principle. The increase is proposed by moving from the existing storm tanks to utilise the current primary settlement tanks. From a plan view, the area of the two sets of tanks appears to be similar, the applicant should clarify what the increase in additional storm capacity is, and if any further capacity were to be required, especially given predictions that our climate is likely to have more intense storms, that such capacity could be located within the unused portion of the STWs.

#### Education centre

The proposals include the provision of an education centre. This is welcomed as it is widely recognised that sewage treatment processes are relevant to a range of National Curriculum subjects.

#### Phasing

The proposed construction will take place over a 3.5–4 year period. Whilst this appears to be a long time frame, it is considered acceptable as it is vital that the works remains operational during the construction phases.

#### Strategic policy

The proposals are to reconstruct the STW on the existing site to provide an increase in capacity and an increase in the standard of treatment. The proposals also include provision to cover some of the elements of the operation and thus reduce odour and to increase the volume of storm storage and thus reduce the amount and frequency of storm sewer overflows to the river system that do not get full treatment.

The effluent from the works, and any storm overflows are discharged into the Salmons brook which in turn discharges to the Pymmes Brook and then the River Lee Navigation. As the Lee Navigation flows through the Lee Valley Park and the Queen Elizabeth Park, any improvement to water quality will be particularly beneficial. As such these proposals are supported in principle by London Plan policy 5.14.

London Plan Policy 5.14 strongly supports the upgrade of the Capital's sewage treatment capacity to improve water quality and to ensure that adequate wastewater infrastructure capacity is available to support new development. This policy also states that new sewage (including sludge) treatment capacity should utilise the best available techniques and energy capture methods.

The Upper Lee Valley Opportunity Area Planning Framework supports the strategic aspiration to deliver 15,000 new jobs and 5,000 new homes within the Upper Lee Valley, and reflects the desire to upgrade existing infrastructure within the Opportunity Area in accordance with the principles of London Plan Policy 5.14.

Within the context of aspirations for the Upper Lee Valley Opportunity Area, GLA representations of 1 October 2012 (reference: PDU/2932/KT/01), made during Thames Water's site selection consultation process (July to October 2012), strongly supported the principle of meeting the need for increased wastewater capacity by upgrading and intensifying the existing Deephams STW site.

#### **Conclusion**

The proposals are supported by London Plan policy 5.14, and should be considered as an important improvement in London's strategic infrastructure. The proposals have been well thought

out and maintain a reserve of land giving capacity for longer term enhancement of sewage treatment capacity and quality.

## **Sustainable development**

### Sustainable energy

The applicant has broadly followed the energy hierarchy and sufficient information has been provided to understand the proposals as a whole. The proposals are broadly acceptable, but further information is required before the carbon savings can be verified.

As part of the effluent upgrade works a number of efficiency improvements are proposed. These include: low head flow to full treatment pump station, improved gravity flow, high efficiency motors and various improvement to the process which are expected to reduce electricity consumption. Losses in the heat delivery process are also expected to be reduced by relocating the CHP plant closer to the digesters being served.

The applicant has estimated that the efficiency improvements will outbalance the increased electricity demand from the effluent quality upgrade. A reduction in 7% of electricity consumption and 11% in heat demand has been estimated, equivalent to approximately 2,200 tonnes carbon dioxide (CO<sub>2</sub>)/year or 2.5kg CO<sub>2</sub>/population equivalent.

The applicant has identified that the proposed Lee Valley district heating network is within the vicinity of the development and is proposing to design the system on site to allow connection to the wider network either for heat import or export:

- Import - heat could be imported from the network to top up the onsite CHP generation during winter peak heat demand, as an alternative to the current approach which involves the use of solid fuel boilers.
- Export - while biogas and heat generation on site currently does not exceed onsite demand, biogas generation may increase going forward with the integration of a Thermal Hydrolysis Plant (THP). Should this materialise, excess heat (especially in summer) may potentially be exported to the Lee Valley heat network.

The applicant has stated the intention to include the facility for high temperature heat off take as part of the CHP system upgrade and this is welcome.

The applicant has provided records of communication with the developer of the Lee Valley district heating network over the last two years confirming that communication is ongoing to ensure compatibility of systems for future connection. This is welcomed. These communications should continue as the design progresses to ensure design compatibility.

The applicant is proposing to replace the existing CHP engines with two new modulating units (approximately 3.1MWe capacity). These are sized based on the biogas generated on site. Solid fuel gas boilers will be maintained as back-up, although their use is expected to be significantly reduced.

The applicant has stated the intention to build redundancy in the plant room safeguarding space for an extra CHP engine and the THP plant, should this upgrade be agreed by Ofwat (this work will be subject to a separate planning application). The applicant should provide a plan of the plant room to illustrate the space allocation for the proposed units, future expansion and connection to the Lee Valley district heating network.

The applicant has stated that the introduction of a gas connection to the south of the site to allow the replacement of the back-up oil boilers with low carbon natural gas alternatives will be considered as the design progresses.

The applicant has investigated opportunities for integrating further renewables on site (beyond the use of biogas) and has identified that potentially some of the space freed by the upgrade works could be used for the installation of photovoltaic (PV). The applicant is currently not proposing to install any PV stating that the contribution from this technology would be minimal and the space available should be safeguarded for the potential integration of the THP plant in the future and/or increase the capacity of the sewage works following population growth.

The applicant should provide further information on the potential for integration of PV on the site including a quantification of the potential carbon savings. It is accepted that space for expansion of plant should be safeguarded, however the applicant should consider the opportunity to achieve further carbon savings through the installation of solar PV where viable.

Based on the energy assessment submitted at stage 1, the applicant is predicting a 49% reduction in carbon emissions from efficiency and CHP system upgrade, equivalent to a 54% reduction in carbon emissions per population equivalent.

The proposals are broadly acceptable however the comments above should be addressed before all energy issues are resolved.

#### Air quality and odour

The proposals include the provision to cover and treat several parts of the new works, notably the inlet works, primary settlement tanks and various other elements of the process.

As odour is one of the most contentious and unpleasant aspect of a sewage treatment works, the reduction in odour is welcomed and supported. The applicant's planning statement section 8.6 states that the total European Odour Units/second will be reduced by 85%, whilst the sustainability statement section 4.5 states that the number of properties most affected by odour will be reduced by 99%. These measures are welcomed and a method of monitoring the odour improvements, connected to a mechanism to rectify any shortcoming should be secured by condition.

#### Flood Risk

A flood risk assessment has been prepared which confirms that some small areas of the site are at low risk of fluvial and surface water flooding. However as a sewage treatment works is considered a water compatible use in the NPPF, this level of flood risk is acceptable. The site is also potentially at risk of reservoir flooding given its location close to major reservoirs in the Lee Valley, however this risk is monitored and managed to a high degree presenting a very low likelihood of flooding.

#### Surface Water Run-off

The FRA states that the development will include a brown roof, rainwater harvesting, permeable car park and attenuation tanks generating 4585m<sup>3</sup> of storage. This is stated as approximately enough storage to capture the rainfall from the impermeable portion (11.23ha) of the site for a 1 in 100 year storm. This approach is considered to be good practice and is in line with London Plan Policy 5.13 and should be secured via an appropriate condition attached to any planning permission.

## Blue Ribbon Network

The scheme seeks to improve the quality of wastewater discharged from the site in to Salmons Brook. The level of improvement required in this case is ultimately driven by new European and national statutory water quality requirements, and standards to be implemented by the Environment Agency from 2017 as part of a new discharge consent for the Deephams sewage treatment works.

Whilst it is acknowledged that there are a great many factors influencing water quality within Salmons Brook, and the River Lee (to which it flows), the improvement of discharge from this site is likely to have positive effects for biodiversity, and the proposal is therefore strongly supported in accordance with the associated aims of London Plan policies 5.14 and 7.28. The applicant should, nevertheless, maintain an ongoing dialogue with the Environment Agency with respect to the construction, phasing and delivery of this development, and develop a strategy to ensure that there would be no temporary deterioration of water quality during implementation.

## **Transport**

### Road network

TfL is satisfied that this development will not adversely affect the capacity and safety of the local and strategic highway network.

### Public Transport & Travel Planning

The development would not adversely impact upon the public transport network, but the currently poor public transport accessibility of the site present challenges to more sustainable travel which should be addressed in the travel plan. A travel plan should be required for the construction phase of development and also for the ongoing operation of the sewage treatment plant. The travel plan should be secured, enforced, monitored and reviewed as part of the S106 agreement.

### Walking and cycling

It is noted in the transport assessment that staff will be encouraged to access the site through alternative means other than the private motor vehicle. This will be addressed in the travel plan.

The applicant is proposing 20 cycle parking spaces and provide cycle facilities (showers, lockers and changing areas) for staff. The London Cycling Design Standards sets out good practice regarding the provision of cycling infrastructure and covered parking should be provided for staff. There is the potential to increase cycle parking at the site which is welcomed by TfL and this will be addressed in the travel plan. It is TfL's view that more cycle parking may need to be provided if demand necessitates.

### Construction Logistics Plan

Given the scale and location of the development, a construction logistics plan (CLP) is also required. The CLP should include the cumulative impacts of construction traffic, likely construction trips generated, and mitigation proposed. Details should include site access arrangements, booking systems, construction phasing, vehicular routes and scope for load consolidation or modal shift in order to reduce the number of road trips generated. The CLP should also address the potential of utilising the River Lea Navigation.

### Parking

The overall level of parking proposed is considered to be appropriate given the scale of the operation and that electric vehicle charging points are proposed for a minimum of 20% of the car parking proposed, which is welcomed. It is noted that only three disabled parking bays are proposed, TfL requires that disabled parking is provided in accordance with the London Plan (2011) for staff and visitors alike.

TfL anticipates that cycle parking, disabled parking and a travel plan (construction and post construction) should be secured, monitored, and reviewed as part of a Section 106 agreement. A construction logistics plan should be secured by way of condition.

## **Community Infrastructure Levy**

The Mayor has introduced a London-wide community infrastructure levy (CIL) to help implement the London Plan, particularly policies 6.5 and 8.3. The Mayoral CIL formally came into effect on 1 April 2012, and it will be paid on commencement of most new development in Greater London granted planning permission on or after that date. The Mayor's CIL will contribute towards the funding of Crossrail.

The Mayor has arranged boroughs into three charging bands. The rate for Enfield is £20 per sq.m. The required CIL should be confirmed once the components of the development, or phase thereof, have themselves been finalised.

London borough councils are also able to introduce CIL charges which are payable in addition to the Mayor's CIL. Enfield Council has yet to adopt a scheme, but expects to consult on a preliminary draft charging schedule in early 2013. Further details are available on the Council's website.

## **Local planning authority's position**

Not known at this stage.

## **Legal considerations**

Under the arrangements set out in Article 4 of the Town and Country Planning (Mayor of London) Order 2008 the Mayor is required to provide the local planning authority with a statement setting out whether he considers that the application complies with the London Plan, and his reasons for taking that view. Unless notified otherwise by the Mayor, the Council must consult the Mayor again under Article 5 of the Order if it subsequently resolves to make a draft decision on the application, in order that the Mayor may decide whether to allow the draft decision to proceed unchanged, or direct the Council under Article 6 of the Order to refuse the application, or issue a direction under Article 7 of the Order that he is to act as the local planning authority for the purpose of determining the application and any connected application. There is no obligation at this present stage for the Mayor to indicate his intentions regarding a possible direction, and no such decision should be inferred from the Mayor's statement and comments.

## **Financial considerations**

There are no financial considerations at this stage.

## **Conclusion**

London Plan policies on waste water infrastructure, energy, air quality, blue ribbon network and transport are relevant to this application. The application complies with some of these policies but not with others, for the following reasons:

- **Principle of development:** The proposals are supported by London Plan policy 5.14, and are considered an important improvement in London's strategic infrastructure. The proposals have been well thought out and maintain a reserve of land giving capacity for longer term enhancement of sewage treatment capacity and quality.

Temporary uses of the currently spare land are likely to be acceptable but no permanent development other than in connection with sewage treatment should be permitted

The area of the two sets of storm storage tanks appears to be similar from a plan view, the applicant should clarify what the increase in additional storm capacity is, and if any further capacity were to be required, especially given predictions that our climate is likely to have more intense storms, that such capacity could be located within the unused portion of the sewage treatment works.

- **Sustainable energy:** The proposals are broadly acceptable, but further information is required before the carbon savings can be verified. The applicant has stated the intention to build redundancy in the plant room safeguarding space for an extra CHP engine and the THP plant, the applicant should provide a plan of the plant room to illustrate the space allocation for the proposed units, communication with the Lee Valley district heating network developer should continue as the design progresses to ensure design compatibility; and the applicant should provide further information on the potential for integration of photovoltaic on the site including a quantification of the potential carbon savings.
- **Transport:** A travel plan is required for the construction phase and ongoing operation and this should be secured in the S106 agreement; cycle parking should be monitored for potential increase in cycle parking and options should be identified for further provision; a construction logistics plan (CLP) is required and this should be secured by condition and address the potential of utilising the River Lea Navigation during the phased development of the site; disabled parking should be provided in accordance with the London Plan (2011) for staff and visitors.

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