



Report of the Chief Planning Officer

CITY PLANS PANEL

Date: 4th July 2013

Subject: PRE-APPLICATION Reference PREAPP/12/01142 – Proposal for Anaerobic Digestion Plant at Knostrop Waste Water Treatment Works, Pontefract Lane, Leeds

Electoral Wards Affected:

Burmantofts & Richmond Hill

Yes

Ward Members consulted
(referred to in report)

Specific Implications For:

Equality and Diversity

Community Cohesion

Narrowing the Gap

RECOMMENDATION: This report is brought to Panel for information. The developer's representative will be asked to present the emerging scheme to allow Members to consider and comment on the proposals.

1.0 INTRODUCTION:

- 1.1 This pre-application presentation relates to the proposed development of an anaerobic digestion facility to process food waste at Knostrop Waste Water Treatment Works. The proposal has been submitted by Kelda Water Services who are a sister company of Yorkshire Water. The proposal would be connected to an existing substation and contribute to the energy demands of the Works.
- 1.2 The proposals will be presented to Panel by the developer's planning consultant, from RPS Group, to allow Members to comment on the evolving scheme and raise any issues, prior to the intended submission of a full planning application.

2.0 SITE AND SURROUNDINGS:

- 2.1 The proposal is situated on the operational land of the Knostrop Waste Water Treatment Works (WWTW) on Pontefract Lane. The proposed development site covers an area of approximately 4 hectares and is located to the north-west of the wider WWTW. Currently the site is occupied by an earth mound; a proportion of it

would remain behind the proposal; some of it would be used within the development; and the remainder would be relocated within the WWTW. There is a small woodland area adjacent to the western boundary of the site with WWTW buildings to northern, eastern and southern sides.

- 2.2 The site is identified within the Natural Resources and Waste Local Plan (NRWLP) as an existing industrial area that is a preferred location for waste management use. In addition, the development area is located within the boundary of the Aire Valley Area Action Plan (AVAAP) that will provide the future planning framework to guide the regeneration of an area of the Aire Valley. The site does not have a specific designation within the AVAAP. However, a key aspiration of the AVAAP is to promote the area as an Urban Eco Settlement (renewable and low carbon energy developments).
- 2.3 The WWTW is located within a predominantly industrial area. The closest residential area is Halton Moor approximately 750m north of the development site, with a number of structures between the two sites and vacant land allocated for employment. There are a number of bridleways listed as Public Right of Ways (PROW) to the north-east and east, the closest 220m to the north-east. The A63 is situated roughly 210m to the north.
- 2.4 Neither the proposed site nor the wider WWTW are situated within a conservation area. The draft Leeds City Council Green Infrastructure Network identifies the woodland just beyond the western boundary as a Local Corridor that has potential for enhancement. The closest listed building is Thwaite Mills, which is approximately 800m to the south-west. Within a 2km radius there are three Leeds Nature Areas (LNA). The closest, at a distance of approximately 1km north-east of the site, is Temple Newsam Estate Woods.

3.0 PROPOSAL

- 3.1 An ambition of Yorkshire Water and Kelda Water Services is to contribute to the significant demand for energy created by the WWTW through renewable energy/low carbon energy production. The first step towards this ambition was the successful planning application for a wind turbine, which is currently being constructed. The second phase of renewable/low carbon energy contribution is the proposed anaerobic digestion (AD) plant.
- 3.2 The proposed development comprises the construction of a 5MW (p) AD plant. The proposal includes a reception hall (approximately 15.9m high to the ridge); a digester (approximately 8m high); 2 reception tanks (approximately 7m high); digestate storage (approximately 16m high), flue stack; weighbridge; weighbridge office (approximately 2.5m high); and, welfare office (approximately 2.5m high). In addition to this, the proposal incorporates a pasteurisation tank and several pieces of ancillary plant and equipment to the south (on the WWTW operational side) of the reception hall and tanks that would aid in the process.
- 3.3 To enable the project, the removal of a large proportion of an existing landscaped earth mound would be necessary. The portion of the mound to remain is proposed to be positioned to the south of the development and will be graded back to avoid a large retaining wall. Some of the material would remain within the development site for landscaping. The earth surplus is to be relocated within the sewerage works. The land identified for this purpose will be included as a part of any future planning application and is labeled 'area B' on the attached plan.

- 3.4 The AD plant is intended to process 48,000 tonnes of organic waste per annum. The electricity generated would be fed into an existing on-site substation and used to power the Water Treatment Works. This waste is anticipated to be sourced from the local area and would be delivered in covered HGVs.
- 3.5 The AD plant would provide conditions that encourage the natural breakdown of organic matter by bacteria in the absence of air, which will produce biogas and digestate. The biogas would be burned and used to generate electricity and the digestate, once pasteurised, will be used as organic fertiliser. During the process 30-60% of the digestible material is anticipated to be converted into biogas.
- 3.6 The site would be accessed separately from the WWTW via Knowsthorpe Road off Pontefract Lane. The applicant anticipates that 39 HGV loads would arrive at the site per day (78 two way trips). This accounts for both food waste deliveries to the site and vehicles removing digestate. It is envisaged that 10 people would be employed on a shift basis.

4.0 RELEVANT PLANNING POLICIES

- 4.1 The introduction of the National Planning Policy Framework (NPPF) has not changed the legal requirement that applications for planning permission must be determined in accordance with the Development Plan unless material considerations indicate otherwise. The policy guidance in Annex 1 to the NPPF is that due weight should be given to relevant policies in existing plans according to their degree of consistency with the NPPF. The closer the policies in the plan to the policies in the Framework, the greater the weight that may be given. In relation to national waste policy, Planning Policy Statement 10 (PPS10) is also relevant. All policies outlined below are considered to align fully with the NPPF and PPS10.
- 4.2 The proposals will be considered in the context of both national planning policy and the Development Plan. At the time of writing the Development Plan includes the Leeds Unitary Development Plan (Review 2006) (UDP), policies as saved by directions of the Secretary of State, dated September 2007 and June 2009, the Natural Resources and Waste Local Plan and any material guidance contained in the emerging Local Development Framework (LDF).
- 4.3 Natural Resources and Waste Local Plan
- 4.3.1 General Policy 1: Presumption in favour of sustainable development;
- 4.3.2 Energy 3: Heat and powder energy recovery from low carbon methods will be supported in principle subject to proposals meeting criteria contained within policy Waste 9;
- 4.3.3 Waste 3: Sequential approach for developing a city wide network of waste management sites and facilities;
- 4.3.4 Waste 4: Permanent waste management facilities will be treated as an industrial use of land;
- 4.3.5 Waste 5: Waste uses within existing industrial areas;
- 4.3.6 Waste 6: Strategic waste management sites are suitable for major residual waste treatment, including energy recovery;
- 4.3.7 Waste 9: Potential impacts of the planned development must be avoided or mitigated against;
- 4.3.8 Water 7: Surface water run off;
- 4.3.9 Land 1: Information concerning the status of the site in terms of contamination shall be submitted with any application;

4.3.10 Land 2: Development should conserve trees wherever possible and also introduce new tree planting. Where on site planting can not be achieved off-site planting or a contribution will be sought.

4.4 Leeds Unitary Development Plan Review 2006

- 4.4.1 Policy GP5: Refers to detailed planning considerations and any loss of amenity;
- 4.4.2 Policy N49: Development that introduces harm to the wildlife or habitat will be resisted. Design of new development, including landscaping, should minimise its potential adverse impact;
- 4.4.3 Policy N51: The design of new development, including landscaping, should wherever possible enhance existing wildlife habitats;
- 4.4.4 Policy T2: Refers to maintenance of highway safety;
- 4.4.5 Policy LD1: Outlines the parameters for an acceptable landscaping schemes;
- 4.4.6 Policy BD5: All new buildings should be designed with consideration given to both their own amenity and that of their surroundings.

4.5 Core Strategy

The Core Strategy sets out strategic level policies and vision to guide the delivery of development investment decisions and the overall future of the district. On 26th April 2013 the Council submitted the Publication Draft Core Strategy to the Secretary of State for examination and an Inspector has been appointed. It is expected that the examination will commence in September 2013.

As the Council has submitted the Publication Draft Core Strategy for independent examination some weight can now be attached to the document and its contents recognising that the weight to be attached may be limited by outstanding representations which have been made which will be considered at the future examination.

- 4.5.1 General Policy: The Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework;
- 4.5.2 Spatial Policy 1: Location of development - to deliver the spatial development strategy based on the Leeds settlement hierarchy;
- 4.5.3 Spatial Policy 4: Regeneration priority programme areas. Priority will be given to developments that improve ... access to employment and skills development, enhance green infrastructure and greenspace, upgrade the local business environment...;
- 4.5.4 Spatial Policy 5: Aire Valley Leeds urban eco-settlement;
- 4.5.5 Spatial Policy 8: Economic development priorities. (viii) Supporting development in existing locations/sites for general industrial and warehouse, particularly in locations which take full advantage of existing services, high levels of accessibility and infrastructure...;
- 4.5.6 Spatial Policy 13: Strategic green infrastructure;
- 4.5.7 Policy P10: Design. New development for buildings and spaces, and alterations to existing, should ... provide good design that is appropriate to its location, scale and function;
- 4.5.8 Policy P12: The character, quality and biodiversity of Leeds' townscapes and landscapes, including their historical and cultural significance, will be conserved and enhanced to protect their distinctiveness through stewardship and the planning process;
- 4.5.9 Policy T2: New development should be located in accessible locations that are adequately served by existing or programmed highways, by

- public transport and with safe and secure access for pedestrians, cyclists and people with impaired mobility;
- 4.5.10 Policy G1: Enhancing and extending green infrastructure;
- 4.5.11 Policy G8: Protection of important species and habitats;
- 4.5.12 Policy G9: Biodiversity improvements;
- 4.5.13 Policy EC3: Safeguarding existing employment land and industrial areas.
- 4.5.14 Policy EN3: Low carbon energy. The Council supports appropriate opportunities to improve energy efficiency and increase the large scale (above 0.5MW) commercial renewable energy capacity, as a basis to reduce greenhouse gas emissions. This includes wind energy, hydro power, biomass treatment, solar energy, landfill gas, and energy from waste;
- 4.5.15 Policy EN5: Managing flood risk;
- 4.5.16 Policy EN6: Sets out the broad strategy for managing waste in Leeds. The strategy will be implemented through more detailed policies and related documents as set out in the Natural Resources and Waste Local Plan.

4.6 Aire Valley Area Action Plan

- 4.6.1 The Aire Valley Area Action Plan (AVAAP) aims to promote the regeneration of the Aire Valley in relation to its natural environment and as a place to live and work. The latest proposals map does not show the site within an area allocated for a particular use but a key aspiration of the AVAAP is to promote the area as an Urban Eco Settlement (renewable and low carbon energy developments). Due to the AVAAP being in a relatively early stage of preparation, its policy content would currently be likely to attract minimal weight.

4.7 National Planning Policy Framework and Planning Policy Statement 10: Planning for Sustainable Waste Management

- 4.7.1 The National Planning Policy Framework (NPPF) and Planning Policy Statement 10 – Planning for Sustainable Waste Management (PPS10) are the relevant national guidance in this case.
- 4.7.2 The NPPF includes policy guidance on sustainable development, economic growth, transport, design, enhancing the natural and historic environment and climate change. The NPPF advocates a presumption in favour of sustainable development and supports the delivery of renewable and low carbon energy. This is considered central to the economic, social and environmental dimensions of sustainable development.
- 4.7.3 PPS10 sets out the Government’s policy on waste, which is to protect the environment by producing less waste and using it as a resource wherever possible. This is to be achieved by more sustainable waste management, moving the management of waste up the ‘waste hierarchy’ of prevention, preparing for reuse, recycling, other recovery, and disposing only as a last resort.

5.0 HISTORY OF NEGOTIATIONS AND PLANNING HISTORY

- 5.1 The applicant submitted this pre-application enquiry on the 20th November 2012. A pre-application meeting was held with the developer and their agent on the 30th November 2012.
- 5.2 The proposal also went before the Aire Valley Planning Board on the 6th December 2012. The Board agreed that this proposal was acceptable, in principle, as it

complied with the Natural Resources and Waste Local Plan. However, the Board were not shown detailed design proposals and the layout has changed significantly since this meeting. It was agreed that a pre-application presentation to the City Plans Panel might be necessary at a more advanced stage.

- 5.3 Burmantofts & Richmond Hill Ward Members were consulted by email on 21st November 2012. One supportive comment was received.
- 5.4 08/03836/FU: Erection of 1 wind turbine, with hardstandings, new and upgraded access tracks and electrical sub-station. Approved on 20.10.2009 The turbine will be sited approximately 400m to the south-east of the proposed development.
- 5.5 07/05223/FU: Landscape bunding to water treatment works. Approved on 15.11.2007
- 5.6 21/42/96/MIN: Detached electricity sub station to water treatment works. Approved on 29.02.1996

6.0 ISSUES

Members are asked to consider the following matters in particular:

- 6.1 The principle of the proposal is considered acceptable as the development site is allocated in the Natural Resources and Waste Local Plan (NRWLP) as an existing industrial site suitable for waste treatment facilities. The site and other land within the Knostrop WWTW is identified within policy Waste 5, which states that such land will be treated as preferred locations where new waste management facilities, as defined in Policy WASTE 3, will be supported. Furthermore, a key aspiration of local and national policy is to encourage renewable and low carbon energy developments.

Do Members agree that the proposed use of the site would be appropriate in principle?

- 6.2 Members will note from the site description (section 2 of this report) that the development is proposed to be located in the Aire Valley/Cross Green Area. As the largest employment area in Leeds, Cross Green currently houses a range of waste management sites. The larger sites currently operational are:
 - The wider Knostrop Waste Water Treatment Works including an effluent treatment plant;
 - Recycling sites for soil, crushed brick, concrete, tarmac and stone at Knowsthorpe Road and Knowsthorpe Lane;
 - Skip Hire and general waste transfer station at Knowsthorpe Lane.

Waste sites with extant planning permission but not yet implemented are as follows:

- Energy from waste (incinerator) plants at Pontefract Lane (Veolia) and (shortly) Skelton Grange (Biffa)

In addition to the above, a planning application has recently been submitted by Clean Power, which is currently being validated, concerning an Energy Recovery Centre comprising of anaerobic digestion, gasification and pyrolysis (energy from waste) at Bridgewater Road with rear access via Knowsthorpe Gate.

Given the above and the sensitivity of this area, cumulative impact will be addressed through the application process.

Do Members have any comments concerning cumulative impact?

- 6.3 As previously outlined, the proposal is to replace, in part, the landscaped mound that is visible from certain points along Pontefract Lane. From parts of Pontefract Lane a relatively large building, a control room, several large round tanks and a stack will be visible. The majority of the ancillary equipment would be on the southern side of the development, so would not be visible from outside of the WWTW apart from perhaps the top sections of some flues.

When reviewing the proposed design Members should consider the following:

- The backdrop the proposal will be set against – when considering the local context, the equipment associated with the wider WWTW complex could be considered to be of similar appearance and scale to the plant proposed.
- Considering the context of the development site and the distance between the proposal and Pontefract Lane, is this a suitable location for such a proposal?
- Do the potential low carbon energy benefits outweigh any perceived harm?
- Could any key views of the site from along Pontefract Lane be improved with landscaping?

Do Members consider that the form, massing and location of the proposal is acceptable?

- 6.4 Vehicles would access the site separately from those visiting the WWTW. There is an existing unadopted access road off Knowsthorpe Road immediately to the north-west of the development site. The Local Planning Authority (LPA) would expect a number of improvements to the access road, including providing a minimum forward visibility of 33m around the first bend, to increase safety of vehicle movements.

Do Members consider the proposed access arrangements suitable?

- 6.5 The proposal incorporates a large proportion of an existing mound being removed. The mound was formed due to the removal of soils for development elsewhere on the site and was only relatively recently planted with a mix of native tree and shrub planting. To avoid the large scale loss of this planting, it has been suggested that some of it could be replanted as part of any new planting proposals in association with this scheme.

A green infrastructure study has been undertaken as part of the AVAAP. The study has highlighted that the tree belt adjacent to the western boundary of the development site is an important green infrastructure corridor. With its associated existing mature tree belt, this forms a distinctive and positive feature in the Green Infrastructure of the Aire Valley. However, the trees have generally been poorly managed with some loss and no replanting. To offset the inevitable loss of landscaping from the mound through the proposal, officers would expect to see detailed plans of how the tree belt could be improved and managed long term.

The current proposal includes a landscaped bund to the north-eastern boundary of the site, which fronts Pontefract Lane. This is proposed to be formed from some of the soils that may be removed to facilitate the development. Additional planting is also proposed along the tree line to the west.

Do Members have any comments concerning the landscape proposals as set out by the applicant?

6.6 In addition to applying for planning permission, the applicant would have to apply for a permit from the Environment Agency (EA). Pollution prevention and control would be overseen by the EA and discussions with them would determine the final flue stack height. However, through various modelling exercises, the applicant can submit a planning application with a relatively accurate estimation of the stack height. In order to minimise any potential conflicts between the planning and permitting regimes, the LPA and EA have recommended submitting both the planning application and permit at the same time to respective organisations, in line with national guidance.

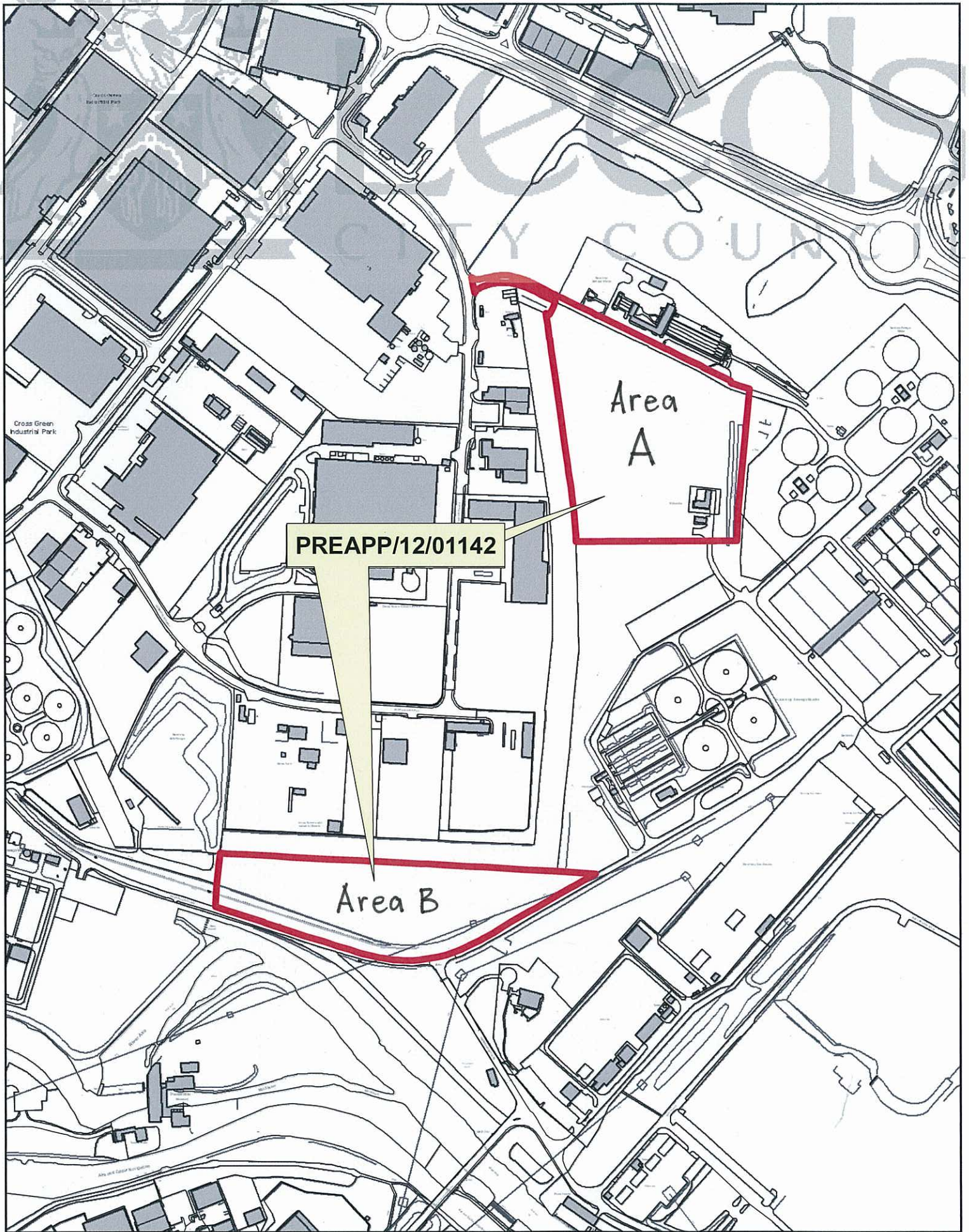
The anaerobic digesters would be silent. However, noise may be generated by vehicles, loading/unloading and pumps associated with processing the biogas. To enable the LPA to make a full assessment of the potential noise transmission from the site and the necessity of mitigation measures, a noise survey would be expected to accompany any forthcoming application.

There is potential for the feed stock to generate odour and encourage pests. To avoid causing harm, the reception hall is currently proposed to be fully enclosed with fast moving roller shutter doors and operate a negative pressure system. A full air quality assessment and proposed measures to control pests would be expected to accompany any forthcoming planning application.

Do Members have any comments regarding impact upon amenity?

Background Papers:

Application files: PREAPP/12/01142.

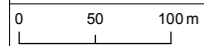


PREAPP/12/01142


Area A

Area B


CITY PLANS PANEL



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Legend
 Proposed Application Boundary

D	Areas A & B Amended	18.06.13	MD	SQ
D	Area B Added & A Amended	13.01.13	RJ	SQ
C	Amendment to Application Boundary	12.12.12	MD	SQ
B	Amendment to Application Boundary	10.12.12	MD	SQ
A	Amendment to Application Boundary	12.11.12	MD	SQ
Rev	Description	Date	Initial	Checked



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Client **KELDA WATER SERVICES**

Project **KNOSTROP STW ANAEROBIC DIGESTION PLANT**

Title **RED LINE BOUNDARY PLAN**

Status	Drawn By	PM/Checked By
PRELIMINARY	MD	SQ
Job Ref	Scale @ A3	Date Created
JER5415	1:5,000	JUN 13

Drawing Number	Rev
JER5415-002	E

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