

Application Number: FYR13/0534/F
Large scale major
Parish/Ward: Chatteris Town Council
Date Received: 16 July 2013
Expiry Date: 10 March 2014
Applicant: Pretoria Energy

Proposal: Erection of an anaerobic digester plant with maize clamps involving the construction of a new access and the formation of a surface water reservoir

Location: Land east of Greys Farm, Iretons Way, Chatteris

Site Area: 13 ha

Reason before Committee: Number of objections received

1. EXECUTIVE SUMMARY/RECOMMENDATION

This application seeks full planning permission for the erection of an anaerobic digester plant, maize clamps and the formation of a surface water reservoir. The plant will produce 4Mw of energy from maize for use both on the site and export to the gas grid. The application site consists of 13ha of agricultural land and is located to the south of Fenland adjoining the boundary with East Cambs DC.

The proposal has the potential to impact on the area in terms of visual impact, noise, odour and highways. However the applicant has supplied sufficient information and justification that the Local Planning Authority, in conjunction with the relevant statutory consultees, are content that there are adequate measures proposed and available to protect the residential amenity of local residents and with suitable landscaping the proposal can satisfactorily be mitigated against adverse visual impact.

The NPPF supports the delivery of renewable and low carbon energy and associated infrastructure. This is central to the economic, social and environmental dimensions of sustainable development.

Local and National Policies have been considered in determining this application and all aspects of the proposal have been considered in line with relevant policies. The application is recommended for approval subject to the imposition of conditions which should ensure that the development will not have a detrimental effect on residential amenity or visual amenity.

2. HISTORY

None of relevance

3. **PLANNING POLICIES**

3.1 **National Planning Policy Framework:**

Section 10: Meeting the challenge of climate change, flooding and coastal change.

Section 11: Conserving and enhancing the natural environment.

Section 12: Conserving and enhancing the historic environment.

3.2 **Fenland Local Plan Core Strategy (September 2013):**

CS14: Responding to climate change and managing the risk of flooding in Fenland

3.3 **Fenland District Wide Local Plan:**

E1 Open countryside development

E3 Landscaping

E6 Archaeological sites

E8 Residential amenity

E20 Environmental protection

EMP4 New business opportunities outside DAB

EMP6 Creation of industrial/commercial uses

3.4 **Cambridgeshire and Peterborough Minerals and Waste Core Strategy.**

Policy CS26 and CS42 of the adopted

4. **CONSULTATIONS**

4.1 ***Chatteris Town Council:***

Recommend refusal. In light of the additional information the Town Council now wishes to recommend refusal of the application on the grounds of lack of information (where will the finished product end up), highway safety due to the number of vehicle movements on to the highway (particularly when the site is under construction) and concerns about the odours which will be generated.

4.2 ***Sutton Parish Council:***

Comments as follows:

1. The compound effect of additional traffic within the village and on the A142 is a concern.

2. The production of methane next door to Mepal Outdoor Centre is a concern.

3. Further information relation to odour from the site and its potential impact on local residents is required.

4. Clarification for the need for a reservoir.

5. Clarification on the safety of the storage of methane.

6. Request that a condition be imposed, if approved, to permit for agri-industrial process only and no alternative industrial processes.

7. Supports construction of new road.

4.3 **County Archaeology:**

Recommended that the site is subject to an archaeological evaluation to be commissioned and carried out prior to the granting of planning permission. An informed judgement can then be made as to whether any planning consent will need to include provisions for the recording and, more importantly, the preservation of important archaeological assets in situ.

Confirmed that all fieldwork has been completed and although provided some valuable information on the prehistoric character of the area it is considered that no further archaeological fieldwork is necessary.

4.4 **Natural England:**

Raised initial objection relating to 5 points:

1. Disposal of leachate.
2. Capacity of CHP unit is not shown therefore unable to anticipate affect that atmospheric emissions from this facility could have on Ouse Washes SSSI site.
3. Queries relating to the FRA and disposal of surface water.
4. Inadequate ecological appraisal regarding the reservoir site.
5. Further information regarding use of the large reservoir.

Following receipt of further information, Natural England is able to withdraw its previous objection.

The withdrawal of NE's objection to this application does not necessarily mean that all natural environment issues have been adequately addressed, but are satisfied that the specific issues that have been raised in previous correspondence have been met.

4.5 **County Minerals & Waste:**

Initial objection relating to evidence of quality of minerals on site and justification of need for the reservoir.

Additional information supplied has clarified both points and objection has now been removed. This is subject to the imposition of planning conditions relating to the removal of minerals from the site and limiting the facility to the anaerobic digestion of farm crops only.

4.6 **Public Rights of Way CCC:**

The proposed development will use Byway Open to All Traffic No 27, Chatteris (Blockmoor Drove), as access. A public byway has public vehicular rights as well as equestrian and pedestrian rights. The design of the new junction with the roundabout and of that section of access road which will run over the byway must take this into account. Any works on the byway must be agreed before they commence.

If planning permission is granted the following points should be included as informatives.

* Byway Open to All Traffic No 27, Chatteris must remain open and unobstructed at all times (it is an offence under s 137 of the Highways Act 1980 to obstruct a public highway).

* No alteration to the byway's surface is permitted without our consent (it is an offence to damage the surface of a public footpath under s 1 of the Criminal Damage Act 1971). Any works affecting the byway must have the prior consent of Cambridgeshire County Council.

* A Byway Open to All Traffic will normally be maintained by the County Council to the standard required for pedestrian and equestrian use. If a higher standard is required for access to the development then the developer will be responsible for this.

* The granting of planning permission does not entitle a developer to obstruct a public right of way (Circular 1/09 para 7.1).

4.7 **Police Architectural Liaison Officer:**

Having assessed the information provided by the applicant/applicant's agent and carried out research as to crime levels in the area, which is low, confirm no comment to make at this present time concerning these proposals in respect of crime prevention and fear of crime.

Care will be needed when the construction phase begins so that adequate site compound security is maintained to combat theft of diesel and metals from this fairly remote location.

4.8 ***Environmental Protection (FDC):***

Environmental Health has no objection to the principle of the development subject to the adequate control of noise and odour.

Issues relating to noise and odour need addressing by way of a construction management plan, noise impact assessment and noise management plan.

A new Odour Management Plan will be requested by way of a condition to capture any possible effects on Mepal Outdoor Centre.

Conditions to include control over operational hours and activities, delivery times etc.

4.9 ***Environmental Protection (ECDC):***

Adequate noise and odour information will be required to ensure that there will be no adverse impact on residential amenity of nearby properties.

With regards to noise the site should be able to meet the required noise level and will have sufficient room for any necessary mitigation should it be required. If the noise emitted is controlled by the use of a noise limit and a condition for a noise management plan there should be adequate control in place to protect nearby residential amenity.

Accept that it is difficult to predict the likely odour impact at this activity, but consider that there is not enough evidence not to permit the development and that adequate pollution control can be achieved through conditions.

4.10 **Environment Agency:**

Considers that planning permission should only be granted to the proposed development as submitted if planning conditions are included. Without such conditions the proposed development on this site poses an unacceptable risk to the environment and they would object to the application.

The 2 conditions relate to a scheme for surface water disposal and pollution prevention/control.

With regards to disposal of surface water detailed calculations are required once infiltration tests have been undertaken to demonstrate that the dimensions of the proposed infiltration swale are adequate and will not increase in flood risk elsewhere and do not pose a risk to groundwater quality.

From the information supplied the operator intends to use maize (energy crop) as the feedstock into the AD plant. This operation will not fall under the Environmental Permitting Regulations and will therefore not require a permit from the agency in respect of the operation of the AD Plant. However construction of silage clamps will need to comply with required standards.

Supports the construction of an irrigation storage reservoir on site as it has the potential to relieve the pressure on summer water. Construction method of reservoir will have to comply with the Reservoirs Act 1975.

The storage of anaerobic liquid digestate should meet the requirements of SSAFO regulations (The Water Resources (Control of Pollution, Silage, Slurry and Agricultural Fuel Oil) Regulations 2010).

The silage clamps should also meet the requirements of SSAFO and will need to meet the durability life requirement of 20 years with maintenance. It is a legal requirement for the applicant to notify the EA regarding their proposals that will need EA approval and will be dealt with by the Land and Water Team.

4.11 **Local Highway Authority:**

Vehicle Movements:

The applicant has confirmed that the general vehicle movements quoted in the technical reports should be double to reflect two-way trafficking. The expected level of movements is not considered unacceptable, and no further observations in this context.

What remains unclear is the level of produce delivery movements which would access the site via the by-ways/ local agricultural droves to the south and west. This would be difficult to quantify and it is reasonable to assert that a proportion of existing agricultural delivery vehicles would use the by-ways in any event (from field to storage/ storage to producer). This element does not therefore overly concern the LHA.

Reservoir Construction:

The applicant has confirmed that the proposed reservoir will generate the 'equivalent' of around 3200 two-way vehicle movements in the construction process, but states that the excavated material will be retained on site in the overall construction and landscaping process. A Construction Method Statement should be provided in the fullness of time demonstrating that this is indeed the case, secured by appropriate Grampian Condition.

However, for the avoidance of doubt, there is no objection to the export of material from the site as a whole via the A142 junction, albeit the junction and access road improvements would need to be undertaken before such processes commenced.

Public Right of Way:

The co-existence of the right of way and the new access road is acceptable. The right of way will need to be subject to increase in width and public rights dedicated over the entire new road width to ensure that future users can use both sides of the carriageway, and legally approach the A142 roundabout in an appropriate manner.

The legal process relating to increased dedication of the width of the right of way will need to be commenced and completed in conjunction with the S278 Highway Works Agreement.

Again, in terms of construction detail, where the right of way is affected, CCC will require details of the layout/ levels/ forms of construction/ drainage and lighting etc to be submitted and agreed in writing.

Access Layout and Infrastructure

The revised details for the access to the roundabout have been confirmed as acceptable by CCC Accident Investigation Team via the Road Safety Audit process.

The works at the A142 roundabout will necessitate the completion of an S278 Highway Works Agreement between the developer and CCC (and also for the works affecting the right of way), prior to the commencement of the development.

Requests appropriate conditions to ensure that all highway works are fully considered and implemented in a timely manner.

4.12 Middle Level Commissioners:

The Board's drain may be affected by the proposal and details regarding access for maintenance will need to be taken into account. Consent has not been sought for any encroachment within the access strip or for other items requiring the Board's consent.

Any drainage issues that require the Board's consent will be dealt with as part of the Board's post application process.

4.13 ***Tree Officer FDC:***

Due to scale of the project and likely impact on the landscape a definitive landscape proposal should be agreed prior to the granting of any permission. Species selected for the landscaping should be capable of attaining the heights required for screening of the plant and the belts of vegetation should include an understorey for low level screening and to provide structure and diversity.

A management plan for the long term maintenance of the scheme to ensure any losses are replaced and the screening is kept intact is required. Such a scheme could include management practices such as coppicing the front boundary of the belts (once established) to improve the variety of habitat types available for wildlife and long term to develop a variable age structure.

Content with the proposal for the new planting. Whilst Fenland is generally known for extensive uninterrupted views, the planting could be seen as an extension of the wooded area around Mepal Outdoor Centre. The developer is proposing to irrigate the tree belt with water (run off) harvested from the site and given good supplies of water, there should be rapid growth from the trees.

4.14 ***Landscape Partnership:***

The Landscape Partnership was consulted on the submitted Landscape Visual Assessment and made the following observations:

One of the key characteristic of the Fens landscape is 'notable for its large-scale, flat, open landscape with extensive vistas to level horizons. The level, open topography shapes the impression of huge skies which convey a strong sense of place, tranquillity and inspiration.

One of the Landscape Opportunities set out in the NCA is to 'protect the long views and open expansive unwooded character of the landscape and work to visually mitigate the impact of large structures including unsympathetic buildings and

energy infrastructure that are highly visible in this flat landscape’.

The proposed development incorporates large scale buildings, most notably the digester tanks which would be experienced as a combined visual massing which would be very large in close proximity. The clamps would be contained by large concrete walls and the height and form of the clamps and reservoir would be clearly apparent in otherwise flat landscape. The banks are steep, which further accentuates the difference with the flat landform. Whilst there are similar characteristics within river dyke banks, these are linear and approximately 2.5kms from the development.

The report highlight some important localised variations to the key characteristics of the Fens. The trees and scrub around the Mepal Outdoor Centre and the adjacent Ireton’s Way, and the small groupings around farmsteads are a localised feature, which helps to provide some screening and provide the basis for extending as additional mitigation measure. The landscape has also already been influenced by the gravel workings, which whilst in operation, has an intrusive influence on the landscape. The Block Fen / Langwood Fen proposals will create further disturbance to the local landscape.

Once restoration has been fully completed, these workings would provide an overall enhancement to landscape character, but this would not be for many years.

Due to the open unwooded character of the landscape it is more difficult to provide sufficient mitigation ‘in character’ to remove the adverse effects that the proposed development would create.

It is considered, that the applicant has taken into account the pattern of vegetation that is present and recommended small narrow linear belts of woodland, to reflect the existing local landscape character and features. Whilst there is the potential to provide a small amount of additional planting, it will not be sufficient to mitigate all of the identified adverse effects.

Consider that there are significant effects to the Landscape Elements of Landform, Land Cover and Land Use that can only be partly mitigated. There would also be significant effects at the local scale on the 'large-scale, flat, open landscape with extensive vistas to level horizons and huge skies' and fields and pattern of the landscape.

In relation to Policy E1 of the Fenland District Wide Local Plan 1993, which states that 'development likely to detract from the unique open character of the Fenland landscape will not normally be permitted', it is considered that the proposed development would detract from the open character of the Fenland landscape. However, this conclusion on the landscape and visual effects needs to be considered in planning balance with the renewable energy benefits of the development and within the context of a landscape that will continue to change in forthcoming years.

The effects on views are predominantly limited to the public bridleway of Blockmore Drove and public bridleway of Horseley Fen Drove, Ireton's Way, Wenny's House and public footpath along the Old Bedford River. Of these, it is the views in close proximity that would be most affected, with 'significant adverse' effects occurring at Viewpoints 3, 4, 6, 7 and 8, which, with the exception of Viewpoint 4, cannot be mitigated.

There is general agreement with the conclusion of the LVA in paragraph 4.14, which states 'the local impacts are considered to be significant, although with negative impacts reducing rapidly with increasing distance from the site'. However, we would disagree with this being a rapid change, but rather a more gradual reduction and that the 'local impacts' extend to an area of approximately 1km radius where the effects would be 'significant'.

4.15 Local Residents/businesses:

9 households/businesses have made representation as follows:

- Potential increase in noise and odour pollution from plant;
- increase in traffic to and from the site;
- use of internal roads is inappropriate for amount of traffic to and from the site;
- risk of ground contamination from the process;
- excess nitrates on land could cause algae pollution on the adjoining lakes at Mepal Outdoor Centre;
- ecology report is inadequate as the impact on Mepal Outdoor Centre has not been addressed;
- potential impact on viability of centre;
- water table of the lakes must not be reduced;
- potential impact on local water courses;
- additional noise could impact on the adjacent sailing tuition centre;
- the proposal conflicts with the approved Block Fen/Langwood Fen Master Plan;
- more information needed on future landscaping;

- why is the surface water reservoir necessary;
- the development will result in the loss of agricultural land and the waste of edible material;
- the development should be located on an industrial estate not the open countryside;
- potential environmental impact resulting from the development;
- could a cycle route be introduced between Mepal and Chatteris.

5. SITE DESCRIPTION

- 5.1 The application site is currently open agricultural land with a site area of 13 ha. It is located immediately on the boundary of the Mepal Outdoor Centre with residential properties to the west and east. The site is mainly featureless with some landscaping features mainly along the public byway which runs to the east of the site and borders the Mepal Outdoor Centre together with some frontage vegetation along the A142 which now screens the Outdoor centre and the opposite mineral workings along Block Fen Drove. The site consists of Grade 1 agricultural land where the reservoir is located and grade 2 agricultural land where the AD plant is proposed to be located.

6. PLANNING ASSESSMENT

Planning permission is being sought for the erection of an anaerobic digester (AD) plant with associated plant and machinery together with the formation of a reservoir. The application site on which the AD plant is proposed encompasses an area of 7.3 ha including the maize clamps and a further 5.9 ha for the construction of the surface water reservoir.

The structures proposed consist of the following:

- 3 x silage clamps each approx 200 m long x 50 m wide
- 4 x primary digester tanks each 8.4 m high x 22.4 m in diameter
- 3 x secondary digester tanks each 12.8 m high x 33.9 m in diameter
- 1 x digestate storage tank 12.8 m high x 36.7 m diameter
- 1 x gas scrub unit 2.9 m high x 2.5 m wide x 14.1m long with 11.5 m high chimneys
- 1 x digestate processing/removal building 10.6 m high x 12.5m wide x27.7m long
- 4 x feed hoppers 3.8 m high
- 2 x machine buildings 2.9 m high x 6.4 m wide x 6 m long
- 2 x EMSR buildings 2.6 m high x 6.17 m wide x 2.44 m long
- 2 x pump assembly buildings 2.9 m high x 6.4 m wide x 6 m long
- 1 x back up generator
- 1 x secondary feed input system
- 1 x gas preparation equipment
- 1 x CHP unit 3 m wide x 12.18 m long with an overall height of 8 m
- 3 x flares 9 m high
- 1 x site office 3.2 m high x 4 m wide x 12 m long
- 1 weighbridge
- 2 x leachate storage tanks
- 1 x reservoir pumping station

Overview of the process

1. Grow maize feed stock in adjacent, local and regional areas.
2. Harvest maize over 6 week period, harvesters cut and shred the whole maize plant which is transferred to tractors and trailers or directly to HGV's.
3. Adjacent and local maize transported to site during harvest period, regional maize placed in Environment Agency notified temporary field silage clamps.

4. Site silage clamp filled and covered with protective sheeting and excess air is expelled from the maize.
5. An anaerobic environment is formed within the silage clamps to stop the break down of the maize and emission of odour.
6. A basis feed stock containing digestive bacteria is placed in the primary digester tanks which are heated to 38 degrees which is provided by the onsite CHP engine unit.
7. Maize is transferred from the silage clamps into the feeder hoppers which regulate the inflow of maize into the primary digester.
8. Maize is held within the primary digester for 60 days where bacteria break down the plant matter and release methane gas which is collected.
9. After 60 days the digestate (consumed maize) is transferred to the secondary digester where it continues to release lower yields of methane gas.
10. Digestate is separated into both liquid and solid constituents.
11. Solid digestate is returned to agricultural fields by tractor and trailers, generally back-loaded onto deliveries.
12. Liquid digestate is first sent to a storage tank before being transferred to the reservoir.
13. Liquid digestate is applied to agricultural fields via an irrigation network.
14. A small proportion of the gas produced in the primary digester is used in the combined heat and power unit (CHP) to provide heat and electricity to the plant.
15. Excess electricity is sent to the National Grid Network.
16. The vast majority of the gas produced in the primary digester is cleaned and upgraded to National Grid standard and injected into the gas network.

To connect the AD plant to the local National Grid network a new gas pipeline would be installed under a separate planning application. The energy capacity of the plant is 4Mw.

The AD plant will be located in close proximity to the A142 which has good transport links. The energy generated from the plant will be used to run the operations of the plant and surplus energy (gas) will be exported to the National Grid. AD offers a sustainable system where naturally occurring bacteria break down biodegradable materials in the absence of oxygen to produce a methane rich biogas. The biogas can be converted into electricity and heat leaving a nutrient rich organic fertilizer called a digestate. The process takes place in sealed tanks.

The AD plant will process approximately 80,000 tonnes of organic material per annum in the form of maize grown locally and regionally as part of the existing crop growing operations in the area. The AD plant will extract the energy value from the crop feedstocks before returning the remaining digestate back to land to grow further crops.

Production of Maize

The plant will require an annual throughput of 80,000 tonnes of maize. 60,000 tonnes will be stored on site with a further 20,000 tonnes stored off site. The maize will be grown on farms around the Fenland area with approximately 20,000 tonnes being produced in Manea, 20,000 tonnes from local farmers in the vicinity and a further 40,000 tonnes from satellite farms in the east, north and west of the site.

The key considerations are:

- Principle of development
- Environmental impact/Minerals safeguarding
- Reservoir Construction
- Residential amenity
- Landscape and visual impact
- Noise impact
- Odour impact
- Highway/public right of way impact
- Flooding and drainage
- Archaeology
- Ecology and biodiversity
- Other considerations

Principle of Development

The application site is located in open countryside on the boundary of Fenland District Council and East Cambs District Council and is identified as such in the Fenland District Wide Local Plan 1993 and the Fenland Local Plan Core Strategy September 2013. In such locations there is strict control over new development and it is generally restricted to that which is essential to the efficient operation of agriculture, horticulture, outdoor recreation and limited other uses specified within the Core Strategy. In determining this application it is therefore necessary to consider whether the proposed development is acceptable in principle, in a countryside location such as this.

Policy E1 of the Fenland District Wide Local Plan 1993 seeks to ensure that development does not detract from the unique, open character of the fenland landscape. It states that development should be sited to minimise its visual impact and should be able to assimilate into the rural landscape and be capable of adequate screening.

Policy CS14 of the Fenland Local Plan Core Strategy 2013 considers that renewable energy proposals will be supported and considered in the context of sustainable development and climate change. Proposals for renewable energy technology, associated infrastructure and integration of renewable technology on existing or proposed structures will be assessed both individually and cumulatively on their merits taking account of the surrounding landscape, residential and visual amenity, noise, highway safety, biodiversity conditions and high quality agricultural land.

All of the above issues will be individually addressed within this report.

Environmental Impact/Mineral Safeguarding

The proposal comprises approx. 7.3ha for the area of plant and maize clamps and 5.9 ha for the surface water reservoir. The reservoir is considered to fall within the remit of Part 1(b) of Schedule 2 of the EIA Regs, being "Water management projects for agriculture, including irrigation and land drainage projects", where the area exceeds 1ha. Under Circular 02/99 it is considered that projects of less than 5 ha are unlikely to require EIA unless there are other mitigating circumstances. Therefore the 5ha 'threshold' guidance is exceeded by 0.9 ha.

The proposed AD plant will produce gas for the grid therefore the proposal might be considered to fall within the remit of para 3(b) of schedule 2 being "Industrial installations for carrying gas, steam and hot water" where the area exceeds 1ha. Under Circular 02/99 the advice is that EIA is more likely to be required where it is proposed to store more than 100,000 tonnes of fuel.

Given the level of information contained within the application it is considered that a full EIA is not required as part of this application coupled with the fact that the site will not be storing more than 100,000 tonnes of fuel.

Whilst the overall site area consists of both grade 1 and grade 2 agricultural land, the area is predominantly agricultural in nature and the loss of 13 ha of land to an agriculturally related process and reservoir is not considered to be significant. The plant will produce digestate which is waste from the organic material used in the process and will be spread on surrounding fields to fertilise them thus reducing the need for chemical fertilisers. Some of the digestate will flow into the reservoir and this will need careful odour control measures.

There is a potential for odour and noise from the plant and additional traffic movements to and from the site and it will be important to ensure that all potential environmental impact can be safely controlled through evidenced reports and surveys.

The environmental sensitivity of geographical areas likely to be affected by development must be considered in particular sites in a 'sensitive area' as defined in the EA Regulations. The guidance indicates a 2Km buffer for SPA's, SSSI's etc and the application site is 2.3 Km/2.5Km from the Ouse Washes SSSI, SAC and SPA. The site is an area of high archaeological potential and this will be covered later in the report. The site is also partly in an area of Mineral Safeguarding for sand and gravel.

Mineral Safeguarding

The site falls partly within the Mineral Safeguarding Area for sand and gravel designated through the Cambridgeshire and Peterborough Minerals and Waste Core Strategy (2011). MSA's identify areas of economically viable mineral deposits to ensure that mineral resources are adequately taken into account in all land use planning decisions.

The wider Block Fen area is known to have extensive good quality economic sand and gravel reserves and the development of an AD plant with a site area of 13 ha has potential to sterilize underlying sand and gravel reserves. The construction of a reservoir has the potential to require the removal of minerals from the land and evidence is required to prove the quality of the mineral resource and calculations regarding possible mineral removal. Two main areas of concern were identified namely, quality of minerals and need for the reservoir.

Consequently trial holes were dug on the site to establish the level of the water table depth in connection with the construction of the reservoir. The water table was established at a depth of between 1.7 m and 1.6 m below ground level. Evidence as provided that the mineral had a low gravel content and was not of economic quality or quantity and that the reservoir was integral to the functioning of the plant and technology to be used.

The County Minerals Department reviewed the information supplied and accepts the explanation regarding the proven need for a reservoir and considers the development acceptable provided 2 conditions are imposed relating to the non removal of any minerals from the site and that the AD plant is used for the anaerobic digestion of farm crops only.

Reservoir Construction

The development includes the construction of a 12.5 million gallon surface water reservoir which has given rise to some concerns from the Environment Agency and the County Minerals Team. The County Minerals Team concerns have been addressed previously in this report.

The Environment Agency has raised concerns over the construction method of the reservoir in connection with the water table in the area, The reservoir will be located over a secondary aquifer and will contain liquid digestate with high pollution potential. It is strongly recommended secondary containment comprising: a double liner; intra-liner drainage layer falling at 1 in 100 to a pumpable sump. This is necessary as the plastic frequently has small holes. Polluting liquid seeps through the holes and degrades causing gas ballooning and geomembrane failure. There should be mushroom style gas vents above the maximum water level to release any small amounts of gas. If the above is provided then there should not be a need to place a second bund around the reservoir bund.

During the detailed design stage of the reservoir the Environment Agency will review, under their suggested conditions, the pollution prevention measures that the applicant intends to use. Again these details will require submitting prior to the commencement of development on site.

Residential amenity

The main possible impacts on nearby residents relate to noise and odour. Comprehensive reports have been submitted to ensure that both noise and odour are controlled both during construction and future operations on the site at a level that will not cause a statutory nuisance to residents. There is a residential unit at Mepal Outdoor Centre and local farms in close proximity.

Environmental Health has recommended conditions be placed on any permission granted in order to control activities at the AD plant to protect the amenity of nearby residential properties. Whilst these conditions are discussed in more detail in subsequent sections of this report (noise and odour) it should be noted that they are put in place to protect the amenity of residential properties. These conditions also consider the potential implications of the construction phase upon residential amenity. With adequate conditions in place the amenity of nearby residents should be protected and refusal cannot be recommended on these grounds.

The proposal will require an external lighting scheme and a condition will be imposed to ensure that an appropriate scheme of lighting is agreed and no light spill will have an adverse impact on neighbouring residents.

Landscape and visual impact

The site lies in open countryside and therefore it will be necessary to ensure that proposal addresses Policy E1 of the Fenland District Wide Local Plan 1993 and Policy CS14 of the Fenland Local Plan Core Strategy 2013. Due to the scale of the proposal it is considered that there could be a significant adverse effect on the landscape and views within the local setting of the development. In order to assess this an appropriate Landscape and Visual Assessment has been undertaken by the applicant. Visualisations within the landscape have also been provided.

The Local Planning Authority has engaged its own consultant to review the assessment and whose conclusions are reported at point 4.13 above. They generally conclude that there will be significant visual impacts from the development and a balanced view will have to be taken regarding the provision of a renewable energy plant.

The Council's Arboricultural Officer considers that the landscaping proposals, including the new planting is acceptable. Whilst Fenland is generally known for extensive uninterrupted views, the planting could be seen as an extension of the 'wooded' area around the Mepal Outdoor Centre. The choice of native species including understorey species (to be managed long term as coppice) will provide increased species diversity and greater foraging opportunities for wildlife. The applicant is proposing to irrigate the tree belts with water (runoff) harvested from the site and given good supplies of water, there should be rapid growth from the trees. The details contained within the Planting and Landscape Maintenance Schedule are acceptable.

The maize clamps will cover a very large area of the site being 165 m x 210 m. The earth bund will be 4.5 m high with internal walls of 4.35 m. It is sited behind the AD plant in respect of views from the A142 and therefore would not impact greatly and whilst storage could rise to 6 m within the clamps these would be seen in general from distant views apart from people using the nearby public byway. This aspect of the proposal would be similar to other 'artificial' agricultural processes which are carried out in the area such as polytunnels and silage clamps.

Noise impact

Local residents have raised concerns over the potential for noise nuisance from the construction and operation of the site and relevant noise assessments have been produced. The noise report has lacked some detailed information but Environmental Protection considers that through conditions relating to hours of operation, site management plans and noise levels then the site should be able to meet the requirement to protect residential amenity. Whilst the predicted noise levels indicate that the noise from the site will potentially be louder than the background it is not considered sufficient to warrant a refusal due to the predicted level of the noise.

In conclusion Environmental Protection are not overly concerned regarding noise impacts mainly due to the distances involved and the existing road noise at the nearest residential property but all issues can be addressed with the use of suitable conditions.

Environmental Protection have recommended the imposition of planning conditions in relation to both the constructional and operational phases of the development and advised that there is no reason to recommend refusal of the planning application on noise grounds. The suggested conditions also make allowances for the investigation of the source/cause of noise issues in the event that a complaint is received by the LPA. It is considered that the imposition of this suite of conditions will minimize the potential for noise issues and addresses the noise issues raised by objectors, whilst allowing the investigation and potential mitigation of a noise complaint from neighbouring properties if the noise level is found to exceed the conditioned limit.

Odour impact

A further concern of local residents relate to the potential for odour nuisance from the plant and comprehensive odour reports have been provided. These have been assessed by Environmental Protection and also the Environment Agency and have resulted in conditions to control any potential for odour during construction and operation of the site.

In their supporting case the applicant has clearly stated that the AD plant involves a largely sealed process but accepts that the digestate is likely to give rise to some odour, albeit limited in its release. The release of odours that have the potential to be detrimental to residential amenity arise from the storage of silage on the site and the spreading of digestate onto the fields as a fertiliser. Whilst these odours are considered to be low in intensity and agricultural in nature it is considered prudent in this case to impose planning conditions to overcome any possible nuisance. These include that the feeder to the AD plant being sealed when not being filled; that the AD process shall be fully enclosed and that an investigation be made into the source of the odour if a complaint is received by the LPA.

It is considered that the information submitted by the applicant in respect of odour release is sufficient and that there are no grounds to recommend refusal of the application on the basis of odour subject to the imposition of the suggested conditions. It is recommended that on completion of the development, within ?? period of operation that a validation report is undertaken to ensure the effectiveness of the odour control measures and to identify if further measures are required.

The Odour Impact Assessment has only considered the impact of odour from maize and therefore it is recommended that this site is conditioned not to handle other materials without further Odour Impact Assessment and approval from the relevant planning authority.

It is also recommended that the site is conditioned to undertake daily monitoring of any unsealed sources of odour and fugitive leaks on site and that daily monitoring is recorded in a log book that is kept available on site.

The other source of potential odour is from the reservoir where the liquid digestate will be mixed with the surface water to form a diluted fertiliser. It is recommended that the reservoir should be regularly inspected, as set out in an Odour Management Plan, to ensure anaerobic conditions do not occur and is not causing a problem.

The Odour Management Plan must make reference to Mepal Outdoor Centre to ensure there is no adverse impact at this site and must be agreed prior to the commencement of the development.

Highway/public right of way impact

The proposal involves the creation of a further road off the A142 and the upgrading the existing vehicular byway No.27, Chatteris (Blockmoor Drove). This byway has public vehicular rights as well as equestrian and pedestrian rights. The design of the new junction with the roundabout and of that section of access road which will run over the byway must take this into account.

There is no objection in principle from the LHA to the co-existence of the right of way and the proposed access road. The provision of a separate footpath link is proposed running between the roundabout and the right of way where it diverges south from the access road. Full details of the construction of the new road over the right of way will need to be submitted and agreed in writing prior to commencement of the development.

The use of the 4th arm of the roundabout has been subject to a Stage 1 safety audit by CCC Accident Investigation Team and did not identify any fundamental issue with the proposal.

The Transport Statement figures (daily) are as follows:

17 deliveries from local sources	(34 HGV movements per day)
34 deliveries from Manea	(68 tractor movements per day)
6 export movements	(12 HGV movements per day)
3-4 staff	(6-8 movements per day)

Accordingly the total level of 2-way vehicle movements will be around 120 – 122 per 12 hours day, which is considered acceptable by the Local Highway Authority in relation to the standard of the access proposed via the A142 roundabout.

It is still unclear the level of produce delivery movements which would access the site via the by-ways/local agricultural droves to the south and west. This would be difficult to quantify and is of no major concern to the LHA.

Confirmation has been received that during the construction of the reservoir the traffic generation will be around 3,200 two-way vehicle movements however it is anticipated that all materials will remain on the site. However if any materials were removed from the site then the LHA has no objection provided all highway works are undertaken and complete prior to the commencement of construction on site. A Section 278 Highway Works Agreement will need to be entered into between the applicant and the LHA.

The development is acceptable to the LHA subject to a number of conditions to protect highway safety and to maintain highway efficiency.

Flooding and drainage

The site is located within Flood Zone 3 and within the Sutton & Mepal Internal Drainage Board area. A Flood Risk Assessment (FRA) has been prepared in accordance with the recommendations contained within the NPPF and in accordance with FDC's policy requiring FRA's to accompany planning submissions.

All surface water run-off will, when complete, and during normal events, discharge into the surface water reservoir and not directly in the IDB system. Surface water from the site will be attenuated in the swales detailed in the FRA and indicated on the site layout drawings.

An overtopping/breach analysis of the reservoir will be carried out during the detailed design phase and will be in accordance with the Environment Agency's requirements and their suggested planning conditions and with the input of the IDB at that time.

A majority of the works will not be constructed within or below the groundwater table which includes the process tanks and reservoir. Some items of drainage and leachate storage tanks may be constructed below the water table but the duration and extent of any de-watering will be negligible. Water from construction excavations would be discharged to the on-site drainage swales.

Archaeology

When consulted the Historic Environment Team at Cambridgeshire County Council commented that records indicate that the site is located in a landscape of high archaeological potential. To the west are the nationally important Neolithic enclosures and bowl barrow at Horseley Fen. Both of these monuments are designated Scheduled Monuments and benefit from statutory protection. Additional non designated enclosures, linear features and barrows are located around and between the Scheduled Monuments. Ring ditches recorded to the immediate south are further evidence for the importance of this site in the Bronze Age. It is likely that heritage assets or archaeological significance will survive within the area and there is potential for nationally important heritage assets to be located within the proposed development area.

Therefore an archaeological evaluation was carried out during the application process and confirmation has been received that all the fieldwork has been completed and although providing some valuable information on the prehistoric character of the area no further archaeological fieldwork is necessary.

Ecology and biodiversity

Due to the proximity of the Ouse Washes and other 'sensitive' areas a preliminary ecological appraisal was submitted with the application. This was to provide a scoping assessment of the likely impacts the proposed scheme might have upon notable and/or protected species and habitats and where such features might be affected to identify the need for any follow up detailed/specialist surveys and/or mitigation to ameliorate the potential impacts.

The potential receptors included the Ouse Washes, Mepal Gravel Pits County Wildlife Site, Block Fen Gravel Pits County Wildlife Site, Sutton and Mepal Pumping Station Drains Wildlife Site, on site general grassland and flora, trees and shrubs, badgers, bats, water voles, brown hare, skylark and grey partridge.

The conclusions are that the site is of low biodiversity value although ground conditions, boundary hedgerows and associated individual trees could provide nesting potential for birds. Recommendations have been made as to timings for ground clearance and further surveys to be undertaken as work progresses.

There is a potential water vole habitat within a field drain bordering the site and a condition will be imposed to ensure that a 10 m buffer zone is maintained in this area to prevent adverse impact on the species.

Natural England raised several concerns over the initial report which instigated the production of further information and subsequently Natural England has withdrawn its objection. The withdrawal of Natural England's objection to the application does not necessarily mean that all natural environment issues have been adequately addressed, however they are satisfied that the specific issues they raised have been met.

This application is in close proximity to the Ouse Washes SSSI. However given the nature and scale of the proposal Natural England is satisfied that there is not likely to be an adverse effect on this site as a result of the proposal being carried out in strict accordance with the full details of the applications.

Other considerations

To achieve a balanced decision on this proposal consideration has been given on advice from information set out by DEFRA relating to the government's action plan on its anaerobic digestion strategy. The most up to date report (August 2013) is the second annual report on progress under the AD Strategy and Action Plan which was published in June 2011. The Strategy/Action Plan is designed to deliver the Government's commitment to increase the energy from waste produced through anaerobic digestion.

The number of plants in the UK has risen to 110 up from 68 since the baseline was established as part of the AD Strategy in September 2011. More than 200 AD projects currently have received planning permission. There are two operational AD plants in England designed to inject into the gas grid.

The Government's Bioenergy Strategy lays out the framework for the support of bioenergy and the importance of robust sustainability criteria and lifecycle analyses. There are only 6 crop-only AD plants in the UK currently and Ministers continue to be concerned about the effect that the widespread use of crops as a feedstock for AD might have as the industry grows.

This proposal requires 5,000 acres of maize production in the local and regional area and whilst the land will remain in agricultural use this land will need careful crop rotation to mitigate against potential environmental risks and to maximise the sustainability of land use.

Conclusion

The proposal relates to the production of renewable energy by means of an anaerobic digester plant fed solely by maize. The report has clearly outlined the potential issues relating to noise, odour, highways and residential amenity and application has addressed many of the concerns. With the use of appropriate additional conditions the Local Planning Authority is content that the development will not have any significant adverse impact on residential amenity, highway safety or visual impact.

RECOMMENDATION

Grant (subject to suitable conditions)

Please note the full list of conditions will be updated to Members prior to planning committee.

- 1. The development permitted shall be begun before the expiration of 3 years from the date of this permission.**

Reason - To ensure compliance with Section 51 of the Planning and Compulsory Purchase Act 2004.

- 2. No works shall commence on site until the off-site highway improvement works comprising the alterations to the A142/ Block Fen roundabout and byway No.27, Chatteris, shall be laid out and constructed in accordance with a detailed engineering scheme to be submitted to and approved in writing by Local Planning Authority and such a scheme shall include layout, levels, forms of construction and surface water drainage.**

Reason: To ensure that the highway network is adequate to cater for the development proposed.

- 3. No works shall commence on site until a Construction Method Statement for all traffic associated with the development during the period of construction has been submitted to and approved in writing by the Local Planning Authority, and such a scheme together with proposals to control and manage traffic using the agreed route, and to ensure that no other local roads are used by construction traffic unless otherwise agreed in writing by the LPA.**

Reason: In the interests of maintaining highway efficiency and safety.

- 4. Prior to the first occupation of the development the proposed on-site parking / loading, unloading / turning / waiting areas shall be laid out, demarcated, levelled, surfaced and drained in accordance with a detailed scheme to be submitted to and approved in writing by the LPA, and thereafter retained for that specific use.**

Reason: To ensure the permanent availability of the parking / manoeuvring area, in the interests of highway safety.

5. **Temporary facilities shall be provided clear of the public highway for the parking, turning, loading and unloading of all vehicles visiting the site during the period of construction in accordance with a detailed scheme to be submitted to and approved in writing by the LPA.**

Reason: In the interests of highway safety.

6. **Working hours for the AD plant are limited to:**

**07:00 – 19:00 each day Monday – Saturday
08:00 – 13:00 Sundays and bank holidays**

Unless otherwise agreed in writing with the LPA.

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

7. **Prior to commencement of development a management plan shall be submitted and agreed in writing with the Local Planning Authority (LPA) regarding mitigation measures for the construction phase – these shall include, but not be limited to, a schedule of works, plant to be used, times of use etc, and shall be adhered to at all times during the construction phase, unless otherwise agreed in writing with the Local Planning Authority (LPA).**

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

8. **The use of plant and machinery during the construction phase shall be limited to 07:00 - 18:00 each day Monday - Friday and 08:00 - 13:00 on Saturdays unless prior written agreement with the LPA has been given.**

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

9. **Deliveries to the site during the construction phase shall be limited to 07:00 - 18:00 each day Monday - Friday and 08:00 - 13:00 on Saturdays unless prior written agreement with the LPA has been given.**

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

10. All mobile mechanical handling equipment operated within the site that require the use of reversing alarms shall be fitted with broadband reversing alarms or similar.

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

11. Prior to commencement of development a management plan shall be submitted and agreed in writing with the LPA regarding mitigation measures for the operation of the site – these shall include but not be limited to, the selection of suitable plant items with regards to the proposed use and the nature of the site, and the housing, where possible, of plant within enclosures or buildings. The management plan shall be implemented and adhered to at all times, unless otherwise agreed in writing with the LPA.

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

12. All doors to the CHP (Combined Heat & Power) generators shall remain closed, except to allow ingress and egress.

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

13. The specific rated noise level emitted from the site shall not exceed the existing background noise level or 35dB(A), whichever is the higher. The noise levels shall be measured and/or calculated at the boundary of any nearby residential dwelling. The noise level shall be measured and/or calculated in accordance with BS4142.

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

14. Delivery and collection times during the operational phase shall be limited to:

07:00 – 19:00 each day Monday – Saturday
08:00 – 13:00 Sundays and bank holidays

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

15. Prior to commencement of development an odour management plan shall be submitted to and agreed in writing with the LPA regarding mitigation measures for the operation of the site – these shall include but not be limited to methods of control for each likely odour source, including the location of any storage of digestate (eg enclosed) etc, and shall be implemented and adhered to at all times during the operation of the site, unless otherwise agreed in writing with the LPA.

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

16. Within 3 months of the acceptance of the first load of materials to feed the digester an Odour Validation report shall be submitted to the Local Planning Authority to demonstrate that the site is not exceeding a 98th percentile hourly mean concentration of 1.5 ouE m⁻³ at the nearest sensitive receptor locations.

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

17. TBA

18. The feeder to the AD plant shall be sealed when not being filled.

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

19. Liquid digestate shall be stored in a sealed container and removed by tanker via a sealed pipe connection, to ensure the process is completely enclosed.

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

20. The application of any liquid digestate to the adjoining land shall be via the injection method and good agricultural practice guidelines followed, unless otherwise agreed in writing with the LPA.

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

21. **The silage clamps shall remain closed at all times except when being filled/emptied.**

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

22. **Solid digestate shall be removed from the site daily.**

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

23. **A filter shall be used to remove excessive solids from the surface water, prior to it entering the reservoir. This filter shall be maintained in accordance with the manufacturers instructions and shall be cleaned daily.**

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

24. **No external lighting shall be erected or installed unless full details have been submitted to and approved in writing by the Local Planning Authority. The external lighting shall be erected and installed in accordance with the approved details and thereafter retained and maintained.**

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

25. **Prior to commencement of development on site, an acoustic fence shall be erected on the northern edge of the Mepal Outdoor Centre between its boundary and the new road details of which shall be submitted to and approved in writing by the Local Planning Authority. The fence shall then be maintained and retained in perpetuity.**

Reason: To safeguard the residential amenity of neighbouring occupiers in accordance with Policy E20 the Fenland District Wide Local Plan 1993 and Policy CS16 of the Fenland Local Plan Core Strategy (September 2013).

26. 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 the developer has submitted, and obtained written approval from the Local Planning Authority for, and amendment to the remediation strategy detailing how this unsuspected contamination shall be dealt with. The development shall then be carried out in full accordance with the amended remediation strategy.

Reason - To control pollution of land and controlled waters in the interests of the environment and public safety.

27. Mineral shall not be removed from the site.

Reason: to comply with Policy CS26 and CS42 of the adopted Cambridgeshire and Peterborough Minerals and Waste Core Strategy.

28. For the avoidance of doubt, nothing other than maize shall be accepted as feed stock for the digester unless a further Odour Impact Assessment has been submitted to and approved by the Local Planning Authority.

Reason: the application has been assessed on the basis of crop transportation and digestion only and has been considered against policies on this basis, the use of alternative products may give rise to adverse impacts which would need to be assessed.

29. Development shall not begin until a scheme for surface water disposal has been submitted to and approved in writing by the LPA. Infiltration systems shall only be used where it can be demonstrated that they will not pose a risk to groundwater quality. The scheme shall be implemented as approved.

Reason: To protect and prevent the pollution of controlled waters (particularly the underlying Secondary A Aquifer) in line with NPPF, paragraphs 109, 121) and Environment Agency Groundwater Protection Policy (GP3:2012).

30. Prior to the commencement of any development, a scheme for the provision and implementation of (i) pollution control (including full details of leachate storage tanks), (ii) surface water and (iii) foul water drainage shall be submitted and agreed in writing with the LPA. The works/scheme shall be constructed and completed in accordance with the approved plans/specifications at such time(s) as may be specified in the approved scheme.

Reason: To ensure a satisfactory method of drainage and reduce the risk of pollution to the water environment in line with NPPF, paragraphs 109, 121) and Environment Agency Groundwater Protection Policy (GP3:2012).

- 31. Should development not commence before November 2014, then a new Extended Phase 1 Habitat Survey must be carried out and submitted to the Local Planning Authority prior to the commencement of any development on the site.**

Reason

To ensure compliance with the Habitats Regulations 2010 and all other general legislation which underpins nature conservation.

- 32. Site clearance works at the site shall only take place outside the bird and hare breeding season of March to September inclusive.**

If this is not possible a nesting bird survey must be undertaken by an experienced ecologist 24-48 hours prior to clearance. The report must demonstrate that no nesting birds will be affected by any clearance and this report shall be submitted to and acknowledged in writing by the Local Planning Authority prior to the works being undertaken.

Reason

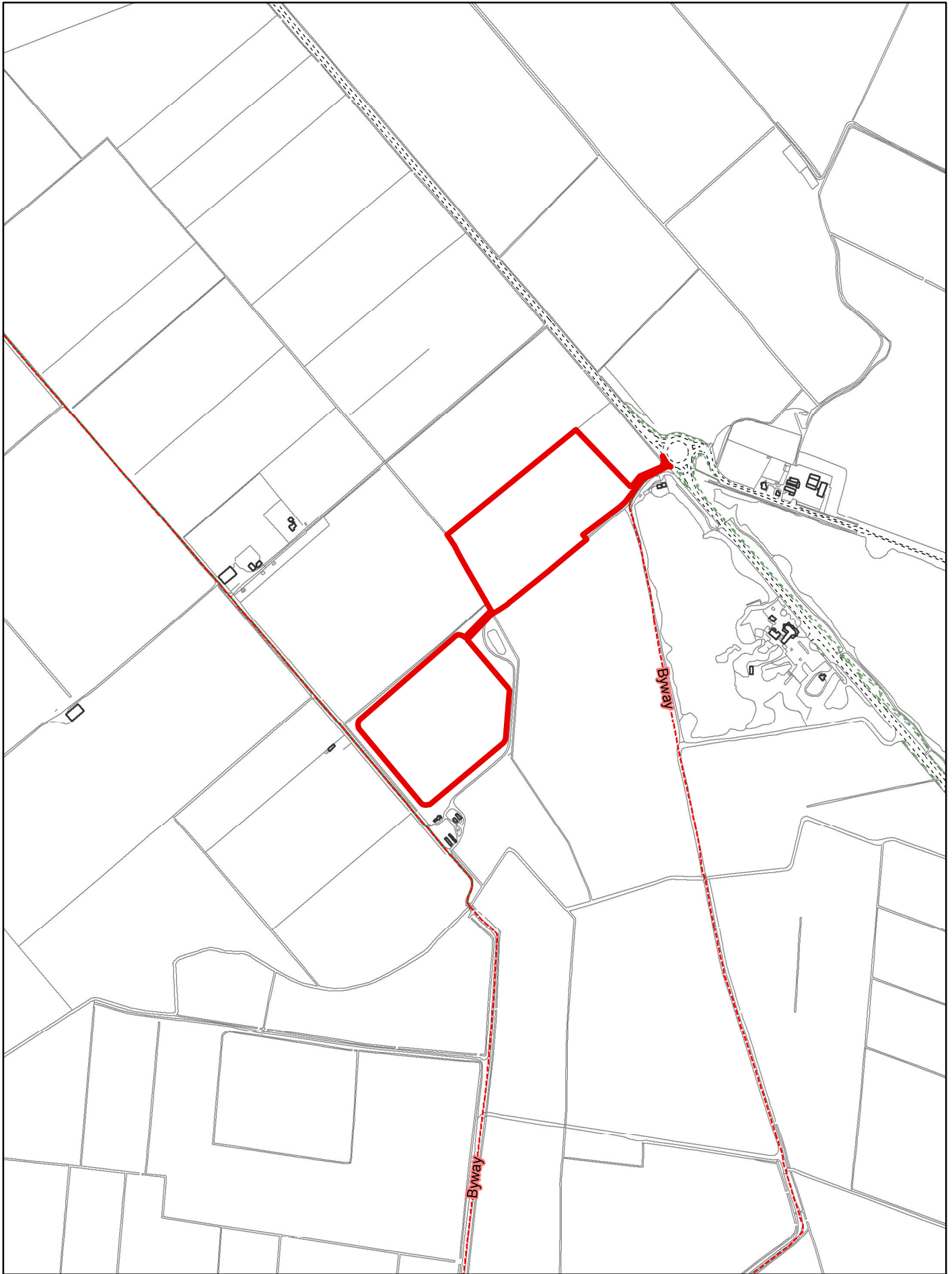
To ensure compliance with Section 1 of the Wildlife and Countryside Act with respect to nesting birds and to provide biodiversity mitigation in line with the aims of the National Planning Policy Framework.

- 33. A check for leverets within hare forms should be undertaken prior to works commencing. If any are found they should be clearly marked and avoided until the leverets are independent of their mothers.**

Reason – To ensure compliance with the Habitats Regulations 2010 and all other general legislation which underpins nature conservation.

- 34. A 10 m buffer zone should be maintained from the edge of the field drain on the south western boundary of the site to avoid disturbance to water voles.**

Reason – To ensure compliance with the Habitats Regulations 2010 and all other general legislation which underpins nature conservation.



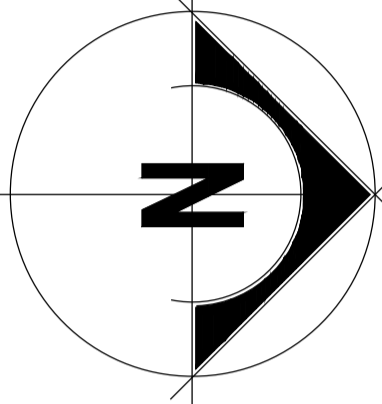
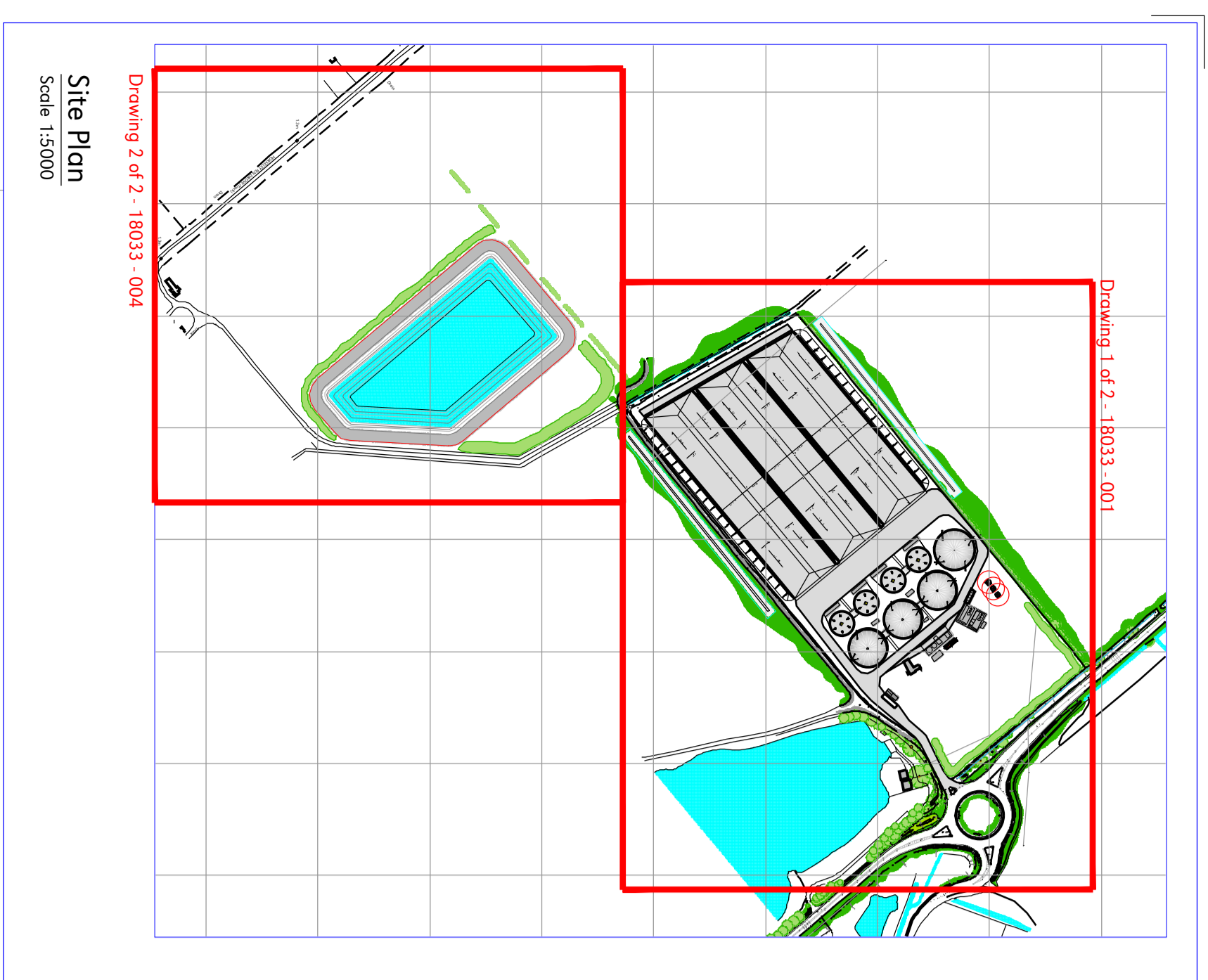
Created on: 05/08/2013

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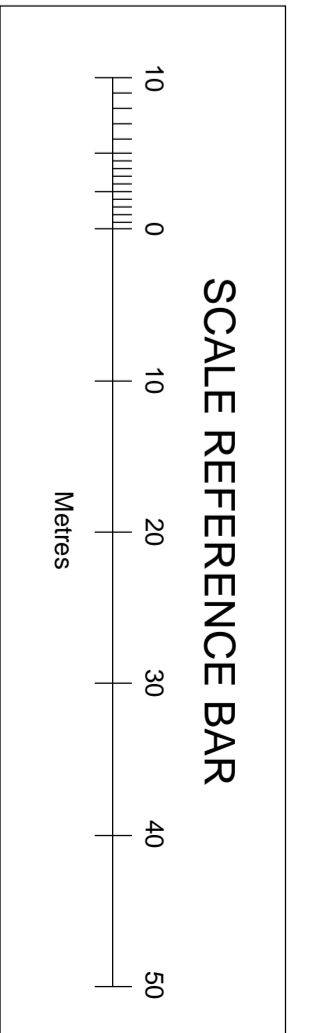
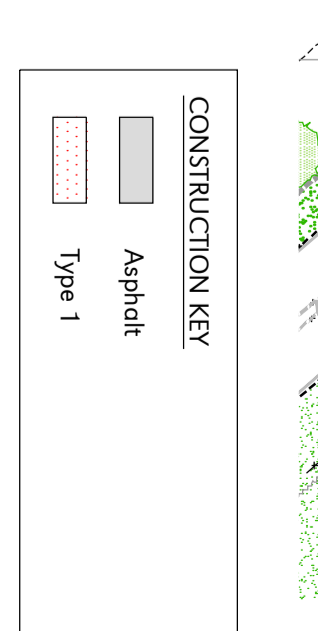




- Notes:**
- All levels are above AOD (New Ordnance Datum).
 - All levels are above AOD.
 - To be read in conjunction with all other relevant planning application documents.
 - Any proposed works to be undertaken in accordance with the Environment Act 1995 and the Environment Act 2003, and any other relevant legislation.
 - Final design by process provider.

- PLANT LEGEND**
- 1 Sludge Clamp
 - 2 Feed Hopper
 - 3 Primary Digester
 - 4 Machine Building
 - 5 S&S Building
 - 6 Secondary Digester
 - 7 Digestion Storage Tank
 - 8 Pump Assembly Building
 - 9 Back Up Generator
 - 10 Secondary Feed Inlet System
 - 11 Gas Inlet/Outlet Equipment
 - 12 CHP
 - 13 Digestion Processing & Removal Building
 - 14 Gas Scrub Unit
 - 15 Flare
 - 16 Site Office
 - 17 Warehouse
 - 18 Car Park (Inc. Spaces)
 - 19 Leachate Storage Tank
 - 20 Reservoir Pumping Station

- DRAINAGE KEY**
- Surface Water Drainage (SW)
 - Leachate Drainage (LD)
 - Leachate Gully



FOR PLANNING

Rev	Date	Chd	Description
J	20/12/11	RPS	Byway access amended
I	2/12/11	RPS	Leachate storage tank
H	13/11/11	RPS	Leachate storage tank
G	13/11/11	RPS	Leachate storage tank
F	02/09/11	RPS	Finalize 1, Preliminary Tender Package
E	29/08/11	RPS	Key Terminal Address
D	25/08/11	RPS	Site Boundary Information Added
C	16/05/11	JBR	Second Issue
B	15/05/11	JBR	Layout amended to suit Agreement layout
A	01/03/11	JBR	Layout amended to suit Agreement layout

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Client:
Pretoria Energy Ltd

Project:
AD Plant
Mepal, Chatteris
Cambridgeshire

Drawing Title:
Proposed Site Layout &
Drainage Drawing 1 of 2

Scale: UNO
1:500 (AO)

Date: 15.05.2012

Drawn By: RPS

Checked By: RPS

Drawing No.: 18033/001

Rev: J

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