

Ms. Caroline Murphy, Inspector, Office of Climate, Licensing & Resource Use, Environmental Protection Agency, Headquarters, PO Box 3000, Johnstown Castle Estate, Co. Wexford.

Environmental Protection

21st January 2014

## <u>Re:</u> Notification under Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment Your Ref: W0285-01

Dear Ms. Murphy,

I acknowledge receipt of your letter of the 20<sup>th</sup> November 2013 regarding the above.

I attach hard copy of the Grant of Permission dated 26<sup>th</sup> March 2012 and Planner's Report dated 21<sup>st</sup> February 2012 together with copy of Environmental Impact Assessment by CD. The decision of Westmeath County Council to grant planning permission was not appealed to An Bord Pleanála.

فية: ولا تعريج: ولا تعريج:

Yours sincerely,

McCague. Senior Planner.

County Buildings, Mullingar, County Westmeath Áras an Chontae, an Muileann gCearr, Contae na h-Iarmhí tel: 044 9332000 | fax: 044 9342330 | email: info@westmeathcoco.ie | web: www.westmeathcoco.ie





Comhairle Chontae na h-Iarmhí

TO: Bio Agrigas Ltd C/O Colin Bolger Marlin Architects, Marlinstown Office Park, Mullingar.

#### RE/ PLANNING AND DEVELOPMENT ACTS 2000-2010 NOTIFICATION OF FINAL GRANT

Planning Register Number:	11/5055
Valid Application Receipt Date:	25/05/2011

In pursuance of the powers conferred upon them by the above mentioned Acts, Westmeath County Council have by Order dated 22/02/2012 GRANTED PERMISSION to the above named, for the development of land, namely:-

Bio-energy facility containing a Reception Building, Reception Area, Engine room, Pumps and Heat Exchangers, Administration Building containing Office, Staff and Amenity and Changing facilities. Permission is also sought for Tank Farms to include 2 No. Anaerobic Digestors, 2 No. Post Digestion Storage Tanks, 5 No.pre-storage tanks, Gas flare and cas cleaning vessel. Ancillary facilities will include 1 No. Weighbridge, ESB Substation, Post Digestion Loading Area, Wheel Wash Area, on site Waste Water Treatment System, fencing, gates New entrance road to proposed N4 Grade Separation Scheme and Internal Roads with all associated works including landscaping, boundaries and services above and below ground. Permission is also sought for temporary Road Access on to the R156 Killucan road from the proposed development during the construction of the new N4 Grade Separation Scheme. The process of Anaerobic Digestion is the subject of an application for a Waste Licence, all of which is described in detail in an accompanying Environmental Impact Statement All of the relevant waste recovery activities as per the fourth schedule of the Waste (EIS). Management Act 1996 -2003, to which this application relates. at Newdown, The Downs, Mullingar. for the reasons and considerations set out in Schedule 1 and subject to the 14 conditions set out in Schedule 2 hereto.

Signed on behalf of Westmeath County Council

WINDOR

Planning.

26/3/2012 Date

It should be noted that outline permission is permission subject to the subsequent permission consequent of the Planning Authority and that until such permission consequent has been obtained to detailed plans of the development proposed, the development is NOT AUTHORISED. It should be noted that any subsequent application for permission consequent must be made not later than 3 years beginning on the date of the grant of the outline permission.

#### NOTE:

The permission herein granted shall, except in the case of an outline permission or where otherwise stated in the Notification of Final Grant, on the expiration of the period of 5 years beginning on the date of the granting of permission, cease to have effect as regards: -

(i) In case the development to which the permission relates is not commenced during the period, the entire development and

(ii) In case such development is so commenced, so much thereof as is not completed within that period. County Buildings, Mullingar, County Westmeath

Áras an Chontae, an Muileann gCearr, Contae na h-Iarmhi

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MidlandsIreland.ie

#### Schedule One.

#### File Ref: 11/5055

Having regard to the provisions of The County Development Plan 2008-2014, it is considered that, subject to compliance with the conditions set out in the attached Schedule (Schedule Two), the proposed development would not be contrary to the proper planning and sustainable development of the area.

#### Schedule Two. File Ref: 11/5055

1. The development shall be carried out strictly in accordance with the plans and details received by the Planning Authority on 25<sup>th</sup> May 2011 as amended by revised plans and details received on the 23<sup>rd</sup> December 2011 except as may otherwise be required in order to comply with the following conditions.

Reason: In the interests of orderly development and clarity.

#### 2. **Development Contribution**

Prior to the commencement of development or as otherwise agreed in writing with the Planning Authority, the developer shall pay the sum of £32,731.00 (Thirty Two Thousand, Seven Hundred and Thirty One Euro), as set out below, to the Planning Authority as a contribution, in accordance with the Council's Development Contribution Scheme adopted in 2007, in respect of public infrastructure and facilities benefiting development in the area of the Planning Authority, and that is provided or that it is intended will be provided by, or on behalf of, the Council.

The contribution payable will be based on the contribution rate applicable at the time of payment and <u>not</u> the rate in existence when permission is granted. The amount of the development contribution will be updated annually on the 1<sup>st</sup> January in accordance with changes in the Wholesale Price Index (Building and Construction), (Capital Goods) and penalty interest for late payment, in accordance with the terms of the Council's Development Contribution Scheme:-

Class of Infrastructure	Rate per unit/m <sup>2</sup>	m²	Amount of Contribution
GA. Development not coming within any of the foregoing classes	€35.50	922 m <sup>2</sup>	€32,731.00
Total			€32,731.00

Reason: It is considered reasonable that the developer should contribute towards the expenditure incurred or proposed to be incurred by Westmeath County Council in respect of the provision/improvement of public services/infrastructure benefiting development in the area of the Planning Authority.

3. All existing hedgerows and trees on site shall be maintained, except any treatment that necessitates the achievement of above mentioned sight lines and replacement boundary treatment shall be of an indigenous native species hedge secured by timber post and wire

fencing. The remaining site boundaries shall be of a planted indigenous native species hedge secured by timber post and wire fencing.

Reason: To ensure the amenity afforded by existing hedges is maintained and to ensure the development integrates into the existing landscape.

- 4. The modifications and mitigation measures in the reports of ORS Consultants reports received by Westmeath County Council on the 25<sup>th</sup> May 2011 and revised reports received on the 23<sup>rd</sup> December 2011 shall be implemented in full by the applicants. **Reason: In the interest of public health.**
- 5i. Prior to commencement of development, a landscaping scheme and detailed planting schedule shall be submitted to the planning authority for written agreement. This scheme shall include details of all existing trees and hedgerows on the site, specifying those proposed for retention, together with measures for their protection during the period in which the development is carried out. The site shall be landscaped in accordance with the agreed scheme, which shall also include a timescale for implementation.
- ii. Details of site boundary treatments shall be submitted for the written agreement of the planning authority.

#### Reason: In the interest of visual amenity.

- 6i. Prior to commencement of development, details of the materials, colours and textures of all the external finishes to the proposed development shall be submitted to the planning authority for agreement.
- ii. A sample of the proposed external finishing-material and colours to be used shall be submitted to and agreed with the Planning Authority prior to commencement of development. **Reason: In the interest of orderly development and the visual amenities of the area.**
- 7. No sign, banner or advertisement shall be erected or displayed on the proposed structures or within the curtilage of the site without a prior grant of planning permission. Reason: In the interest of visual amenity.

#### 8. Engineering Conditions;

- i. Proposed access road from R-156 shall be upgraded as required for HGV access and maintained by applicant.
- ii. Road drainage shall not be impeded as a result of works carried out at junction of R-156 and L-56031.
- iii. Wheel wash facility must be provided on site before commencement of any development on site. All vehicles leaving site must use this facility. No muck is to be dragged onto the public road.
- iv. Surface water and foul water shall be disposed of on a separate system basis.
- v. No construction shall take place over existing underground services.
- vi. The applicant shall indemnify the County Council from any damage that may arise to the existing services where connections are being made.
- vii. All water service pipes shall be laid at a minimum depth of 600mm below final finished ground level. Meter boxes, meters and stopcocks shall be so laid as to maintain this minimum dept of 600mm. This provision shall be certified by a suitably qualified person with professional indemnity insurance and certification shall be submitted to the Planning Authority within 3 months of completion of installation.
- viii. Prior to the commencement of any development the applicant/developer shall submit documentary evidence which shall be signed by a commissioner for Oaths to provide for the achievement of 2.4m x 90m sightlines and sightlines at the junction of the L-56031 with the

R156 involves works on lands outside of the applicants control, documentary evidence shall be submitted confirming the agreement of the relevant landowner to the works necessary to achieve the above mentioned sightlines which shall be signed by a Commissioner for Oaths.

Prior to the commencement of any development the applicant/developer shall submit a section through the junction between the R-156 and L-56031 detailing the existing and proposed vertical alignment shall be submitted for approval by the planning authority.

Reason: In the interests of orderly development and traffic safety.

The construction roadworks for the N4 The Downs Grade Separation are underway and access from this development (file ref 11/5055) (either Construction or Operational) will not be permitted from the realigned R156 until the roadworks are complete with normal maintenance transferred by the contractor to Westmeath County Council and consent to this access is given in writing by the Senior Engineer of Westmeath National Road Design Office which shall be submitted for the written agreement of the planning authority.

Reason: The proposed new entrance road to the N4 The Downs Grade Separation Scheme as shown on drawing number 111/001/201 submitted by the applicant is premature pending the completion of construction of the new N4 The Downs Grade Separation Scheme.

#### 10. Environment Conditions

ix.

9.

i. No development shall commence until an IPPC licence has been granted for the facility.

- ii. All existing hedgerows and trees etc. on site shall be maintained, except any treatment that necessitates the achievement of above mentioned sight lines and replacement boundary treatment shall be of an indigenous native species hedge secured by timber post and wire fencing. The remaining site boundaries shall be of a planted indigenous native species hedge secured by timber post and wire fencing.
- iii. Applicant shall comply with the following?
  - (a) All raw materials delivered to the site to be accepted at a designated bunded concrete reception area for unloading directly into the reception tank.
  - (b) All feedstocks delivered to the facility shall be delivered in a fully enclosed sealed containers. All operations associated with the delivery and treatment of feedstock shall take place within the fully enclosed facility.
  - (c) Prior to commencement of development, details of lighting arrangements for the overall site which shall be designed to minimize light spillage outside the site, shall be submitted to the Planning Authority for written agreement.
  - (d) Construction and demolition waste shall be managed in accordance with a construction waste and demolition management plan, which shall be submitted to and agreed in writing with the planning authority prior to commencement of development. This plan shall be prepared in accordance with the "Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects", published by the Department of the Environment, Heritage and Local Government in July 2006. The plan shall include details of waste to be generated during site clearance and construction phases, and details of the methods and locations to be employed for the prevention, minimisation, recovery and disposal of this material.
- iv. During the construction phase of the proposed development;

(a) Bunded storage areas shall be provided for the containment of oil, fuel storage tanks, chemicals and any other materials which pose a risk to water during the construction period. The bunded area shall be equivalent to a volume of 110% of the capacity of largest container stored. The proposed method of drainage of the bunded area shall be to the satisfaction of the Planning Authority.

(b) The developer shall ensure that adequate measures are in place (and agreed with the Planning Authority) to prevent water with high suspended solids content, caused by the construction of the proposed development from discharging into streams and watercourses.

(c) Arrangements for the collection, storage and disposal of all foul sewage effluent arising from any temporary site sanitary facilities shall be submitted to and agreed with the Planning Authority prior to commencement of development.

- Prior to commencement of development, the developer shall put in place monitoring ν. arrangements for the measurement of noise emissions, dust deposition and suspended solids of surface water run-off associated with the initial construction phase of the development. During the construction phase of the development, the developer shall submit to the planning authority, on a frequency to be determined by the planning authority, the results of the monitoring programme. Monitoring locations for the above shall be agreed in writing with the planning authority prior to commencement of development.
- vi. Dust deposition during the initial construction phase of the proposed development shall not exceed 350 milligrammes per square metre per day (DIN standard) when measured at the site boundaries and averaged over 30 days. The site access road to be kept clean so that no muck or debris is allowed onto the public road.
- All oil and hydrocarbons to be stored in a bunded area. The bund to be designed to BS 8007: vii. 1987 code of practice for the design of concrete structures for retaining aqueous liquids.
- The wheels and underside of all construction traffic leaving the site shall be cleaned, as viii. required, to prevent soiling of public roads. In the event that any public roads become soiled by construction traffic from the site, these roads shall be cleaned immediately.
- All existing hedgerows and trees etc. on the site shall be maintained, except any treatment that ix. necessitates the achievement of above mentioned sight lines and replacement boundary treatment shall be of an indigenous native species hedge secured by timber post and wire fencing. The remaining site boundaries shall be of a planted indigenous native species hedge secured by timber post and wire fencing.
- A weighbridge to be used on the site to record all materials imported/exported to and from the х. site.
- Dust deposition shall not exceed 240mg/m3 day beyond the boundary of the site. This limit xi. shall be based on a 30 day composite sample
- All organic fertiliser generated on site for use on agricultural lands shall be applied to those xii. lands in accordance with the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010.
- A separate collection system for clean and dirty shall be provided. The dirty water collection xiii. system shall discharge to a dirty water collection tank where it shall be used in the digestion process or spread on agricultural land in accordance with the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010.
- Hazardous waste/material encountered during the course of demolition or excavation works xiv. shall be disposed of in accordance with the Waste Management Act 1996 as amended. In the interests of the environment proper planning and sustainable Reason: development.

#### 11. **Road Design**

i. The applicant shall upgrade the existing L-56031 public roadway in accordance with Table 1 helow:

Layer	Depth	Material to BS 594987:2007	NRA Specification
Double Surface Dressing		Double Surface Dressing Layer, 14mm first layer 6mm second layer, Standard Cationic Emulsion, 1.6l/m <sup>2</sup> and 0.6l/m <sup>2</sup> first and second layers respectively. Minimum PSV60	Clause 919
Wearing course	25mm	AC 10 close surface. Pen 70/100	Clause 906

Tabla 1

Base course	40mm	AC 20 dense binder/HDM. Pen 70/100	Clause 906
Roadbase	80mm	AC 32 dense base/HDM. Pen 70/100	Clause 906
Sub-base	150mm	Туре В	Clause 804
Capping	300mm	6F2, crushed rock	Clause 613

ii. Minimum road width of 4m with allowance for passing bays at 250m centres.

- iii. Prior any work on the proposed development commences, the existing boundary fence and hedge shall be removed on the left and right hand side of the junction entrance to the L-56031 from the R156. Sightlines of 150m x 2.4m shall be provided and maintained at all times from the proposed access point. The existing hedge boundary shall be removed only to the extent necessary to achieve sight distance. The new boundary fence shall be constructed not less than 6 meters from the centre line of the adjoining public road. All new road boundaries shall be with a hedgerow of mixed native species, interspersed with semi-mature trees of a native species planted on the inside secured by a timber post and wire fence.
- iv. The applicant shall achieve and maintain sightlines at the location of the proposed entrance of the temporary access road with the L-56031. These sightlines shall be provided in accordance with the following table:

X	Y	Applicable for:
		15 <sup>2</sup> .
2.4 metres	90 metres	County Roadse

(X distance is measured from the metalled edge of the major road at the proposed entrance, Y distance is measured from the middle of the lane where the emerging vehicle is stopped to a point Y metres on all approaches for the full road width of that approach. The eye height to be 1.05 metres and the object height to be 15 metres.)

- v. The applicant shall agree to restrict the use of the proposed temporary access junction, from the facility, with the L-56031 on completion of any proposed access road to the Downs Separation Scheme, to two axle vehicles. Details of such an agreement shall be agreed with the Planning Authority prior any building works
- vi. The applicant has failed to comply with the further information request No. 8(v). Prior to commencement of any building works the applicant shall submit documentary evidence confirming the agreement of the relevant landowner to the works necessary to achieve all necessary sightlines. This documentary evidence shall be signed by a Commissioner of Oaths.
- vii. Prior to commencement the applicant shall enter into a legally binding agreement with Westmeath County Council for the upgrading of the L-56031 in accordance with the construction specification detailed in Item, Table 1 of this report.
- viii. The upgrade of the L-56031 to the specification as per Item1 Table 1 above, shall be certified by a Consultant Engineer.
   Reason: In the interests of the traffic safety, proper planning and sustainable development.

#### 12. Archaeology

i. Prior to the commencement of development the applicant is required to engage the services of a suitably qualified archaeologist to carry out an archaeological assessment of the development site. No sub-surface work should be undertaken in the absence of the archaeologist without his/her express consent. The archaeologist should carry out any relevant documentary research and inspect the site. Test trenches shall be excavated at locations chosen by the archaeologist (licensed under the National Monuments Acts 1930-2004), having consulted the site drawings, the results of the geophysical survey and the National Monument Service.

ii.

iii. Having completed the work, the archaeologist should submit a written report to the Planning Authority and to the office of the Department of Arts, Heritage and the Gaeltacht prior to the commencement of any development. Where archaeological, material/features are shown to be present, preservation in situ, preservation by record (excavation) or monitoring may be required.

# Reason: In the interest of archaeological heritage and proper planning and sustainable development.

13. Prior to the commencement of any development the applicant/developer shall submit details of more preventative measures and the development of a more robust mitigation measures in the event of a failure in the integrity of the tank farms. Efforts to minimize the effects on soils, geology and hydrogeology in the event of a serious failure of these facilities to be submitted for the written agreement of the planning authority.

# Reason: In the interest of public health and proper planning and sustainable development.

14. This permission relates exclusively to the construction of a bio-energy facility containing a reception building, reception area, engine room pumps and heat exchangers. Administration building containing office, staff and amenity and changing facilities. Permission is also sought for tank farms to include 2 no. anaerobic digestors, 2 no. post digestion storage tanks, 5 no. pre-storage tanks, gas flare and gas cleaning vessel. Ancillary features will include 1 no. weigh bridge, ESB substation, post digestion loading area, wheel wash area, on site waste water treatment system, fencing, gates, new access road to proposed N4 grade separation scheme and internal roads with an associated works including landscaping, boundaries and services above and below ground. Permission is also sought for temporary road access on to the R-156 Killucan road from the proposed development during the construction of the new N4 Grade separation scheme. The process of anaerobic digestion is the subject of an application for a waste licence all of which is described in detail in an accompanying Environmental Impact Statement (EIS). All of the relevant waste recovery activities as per the fourth schedule of the Waste Management Act 1996-2003 to which this application relates in accordance with the attached conditions and does not relate to the remainder of the building or the site. Any such uses insofar as they are not already authorised shall require a separate grant of permission.

Reason: To avoid any misunderstanding as to the proper construction of this permission.

## Westmeath County Council MEMORANDUM

To:	County Manager
From:	Yvonne Haughey, Executive Planner
Date:	21 <sup>st</sup> February 2012
Applicant	Applicant: Bio Agrigas Ltd
Development Description	Permission for bio-energy facility containing a reception building, reception area, engine room, pumps and heat exchangers. Administration building containing office, staff and amenity and changing facilities. Permission is also sought for tank farms to include 2 no. anaerobic digestors, 2 no. post digestion storage tanks, 5 no. pre-storage tanks, gas flare and gas cleaning vessel. Ancillary features will include 1 no. weigh bridge, ESB substation, post digestion loading area, wheel wash area, on site waste water treatment system, fencing, gates, new access road to proposed N4 grade separation scheme and internal roads with all associated works including landscaping, boundaries and services above and below ground. Permission is also sought for temporary road access on to the R-156 Killucan road from the proposed development during the construction of the new N4 Grade separation scheme. The process of anaerobic digestion is the subject of an application for a waste licence all of which is described in detail in an accompanying Environmental Impact Statement (EIS). All of the relevant waste recovery activities as per the fourth schedule of the Waste Management Act 1996- 2003 to which this application relates at Newdown, The Downs, Mullingar.

#### SITE LOCATION / DESCRIPTION

The application site is located to the forth of an existing agricultural commercial premises with the surrounding lands mainly agriculture at Newdown, The Downs, Mullingar, Co. Westmeath, which is accessed from the Dublin Sligo Road (N4) and is located approximately 6km east of Mullingar town. The site is bounded to the north by the Regional Road, The Downs to Killucan road (R156), to the east by agricultural land, to the west by agricultural lands and proposed N4 The Downs Grade Separation and to the South by N4 Dual Carriageway. The site comprises an overall area of 2.30 ha and consists of parts of two fields north of the existing Flynn's Feeds in Newdowns townland. At present the main field is split between pasture and tillage and has a slight fall to the northeast while the access roadway runs through further tillage, alongside a field boundary. The site is located c. 300m northeast of the N4 and c. 400m south of the R156. The Royal Canal runs southeast-northwest c. 600m south of the area of proposed development to the south of the N4. The surrounding landscape to the east and south comprises marginal wetland terrain. The proposed development will be located to the north of the exiting agricultural business operating on the landholding and adjacent pig farm with the surrounding lands remaining as agriculture.

Site notices were clearly visible at each site entrance at time of site inspection.

#### THE PROPOSAL

The development comprises;

The proposed facility will consist of an Anaerobic Digestion (AD) Plant designed to process some 20,000 tonnes of non-hazardous organic wastes originating in the local area. The Bioenergy Facility will be capable of producing approximately **1 Mega Watts (MW)** of electrical power. An EIS has

been submitted with the application. The Facility will be operated under a Waste Licence to be issued by the Environmental Protection Agency (EPA).

The anaerobic digesters will be designed to receive c. 20,000 tonnes/year of liquid wastes sourced in the local area including agri-industry processing wastes, food processing wastes and will also process Category 2 ABP material. The plant will consist of an anaerobic digestion facility that will possess up to a maximum of 20,000 tonnes of organic feedstock and produce electricity to use at the existing Tom Flynn Feed's facility and to sell any excess to the national grid. The organic feedstock will be primarily taken from existing sources, such as the adjacent pig farm and silage produced from the surrounding lands. Approximately less than half the material required will be delivered by vehicles using the public road network.

The planned bioenergy facility will combine anaerobic digestion technology to treat non hazardous organic feedstock, generate electrical power and heat and to produce a useful solid soil conditioner. Deliveries will only be accepted for processing from sources of wastes that have been previously characterised as suitable for treatment at the facility. The non-hazardous organic feedstock planned to be treated at the waste facility are currently disposed of through land spreading and/or export.

Type of Feedstock	Annual Quantity t/y	Dry Matter Content
Pig Slurry	3,000	8%
Dairy Cow Slurry	2,000 stiller	8.5%
Maize Silage	2,000 23 200	33%
Grass Silage	3,000 × × × ×	30%
Fodder beet	2,000,1100	20%
Category 2 ABP- Belly Grass	5,000	14%
Bakery Waste – Bread, Dough Fat	3,000	40%
Total	15 20,000	22%
	10 NV	

The Facility has been designed for continuous operation 24 hours a day throughout the year. Scheduled shut down periods will be kept to a minimum to allow the facility to operate at maximum efficiency. Waste will be accepted at the Facility in fully enclosed tankers and covered trailers between the hours of 0800 - 1900 hours, Monday to Friday, 0800 - 1300 hours on Saturday approximately, with no deliveries on Sundays or public holidays except in emergency situations.

An Environmental Impact Statement (EIS) has been submitted with this application.

#### RELEVANT PLANNING HISTORY

SITE PLANNING HISTORY

None noted.

#### LANDHOLDING HISTORY;

81/904: T Flynn, signage- Granted
84/4: T Flynn, workshop - Granted
91/083; T Flynn, workshop extension, stores & display- Granted
92/125: T Flynn, retain two cattle sheds & machinery display area - Granted
92/378: T Flynn, revised landscaping, new diesel pump & new tanks - Granted
93/411: T Flynn, slatted shed - Granted
94/522: T Flynn, mill & blending plant - Granted
94/669: T Flynn, relocate mill & blending plant - Granted
95/333: T Flynn, extend storage building - Granted
95/448: T Flynn, use of lands for sale, display & leasing of motor vehicles - Refused
96/944: T Flynn, use of lands for sale, display & leasing of motor vehicles - Granted
97/394: T Flynn, install 2 X 50,000 litre oil tanks etc. - Granted

**99/209:** T Flynn, demolish existing shed & construct new grain storage warehouse - Granted **00/855:** T Flynn, forecourt canopy, 1 petrol pump dispenser & underground tank - Refused **01/476:** Obelisk Communication for 30m co-sharing antenna support structure - Granted **01/840**: T Flynn, erecting forecourt over pump islands - Granted

02/90: T Flynn, construct a grain store with drying facility & sampling equipment - Granted 05/5415: T. Flynn & sons, expand existing agri-centre to include a 408 sq. m. single storey extension to existing building and change of use of existing storage area to retail giving a total of 450 sq. m. of additional retail area and 138 sq. m. of storage area, provision of 511 sq. m. outdoor garden centre compound & extension to existing carpark – Refused

06/5422; Obelisk communications ltd, erecting a 30m co-sharing antenna support structure carrying - 6 panel antennas, 4 600mm transmission link dishes plus an additional 3 panel antennas + 2 600mm link dishes for future requirements - with no. 2 associated equipment containers, access track & secure fencing conditional

06/5592; T Flynn, constructing a single storey extension to existing building for use as a store and workshop and all associated site works and services - Conditional 07/5267; Incomplete application.

07/5445; Thomas Flynn & Sons Ltd, Permission for to erect 2 no. advertising signs (overall dimensions 4m high by 3m wide) 1 no. sign to be erected at the east bound carriageway of N4 approximately 450m west of junction of Thomas Flynn & Sons site entrance and 1 no sign to be erected 300m east of the junction of Thomas Flynn & Sons site entrance and to omit condition No.7 of permission 06/5592 (sale of petroleum product is limited to the sale of diesel for agricultural vehicles only) - Refused

Permitted development in the vicinity predominantly consists of detached rural dwellings on half acre plots, agricultural related developments and rural enterprises.

#### PRE-PLANNING CONSULTATION

PPM 2898 – A pre-planning meeting was held with the area planner on 3/2/11. Principle of proposal discussed. Issues raised with regard to visual impact, odours, impact on residential amenity, traffic/access issues. Waste licence/EIS required

#### INTERNAL REPORTS

#### WCC Area Engineer 21/2/12

- No objection subject to conditions.

#### WCC Fire Officer Report 15/6/11

- Will require a Fire Safety Cert for Administration building and Reception Building
- No work to commence until decision has been made on Fire Safety Cert
- Adequate water for fire fighting required

#### Access Officer Report 14/6/11

#### WCC Environment 11/1/12

- No objection subject to conditions.

#### WCC Road Design 27/1/12;

- No objection subject to conditions.

#### NRDO 16/2/12;

- Condition to be applied

REFERRALS

#### HSE – Environmental Health Officer 21/2/12;

Mitigating measures to be conditioned.

#### DoEHLG 28/6/11 – Heritage Division

- No objection subject to conditions.

#### An Taisce 13/6/11

Evaluation is required to ensure that adverse odours, effluent, traffic and other impacts are obviated

#### Inland Fisheries Ireland 17/2/12

No objection subject to conditions.

The application was also referred to Waterways Ireland, WCC B.Solon - No comments received todate.

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#### REPRESENTATIONS

None noted.

#### OBSERVATIONS/SUBMISSIONS

None noted.

#### EUROPEAN POLICY

# A Unprovious programmed f The Renewable Energy Directive 2009/28/EC

The EU developed a framework to promote the use of renewable energy throughout its member states. Ireland has a renewable energy target of 16% by 2020. Overall 20% of EU energy consumption should be renewable sources by 2020. National policy needs to be distributed to reach targets among electricity, heat and transport markets. Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources in the internal electricity market. This Directive requires each member state to commit to specific targets for renewable energy production. The Directive follows on from the EU White Paper, "Energy for the future: Renewable Sources of Energy", which was published in November 1997. Member States are required to adopt national targets for renewables that are consistent with reaching the Commission's target of 22 per cent of electricity produced from renewable energy sources by 2010. The indicative target set for Ireland under the Directive is 13.2 per cent. The Irish Government in 2006 announced that it was increasing this national target to 15 per cent. Separate to the Directive, a further national target of 33 per cent has been set to be achieved by 2020. Subsequently revised by the Carbon Budget of 2008 to increase to 40% by 2020.

#### Habitat Directive

The EU Directive (92/43/EEC) on the Conservation of Natural Habitats and of Wild Flora and Fauna requires Ireland to propose relevant areas of designation as Special Areas of Conservation for the conservation of listed habitats and species, and to maintain their favourable conservation status. The Habitats Directive was transposed into Irish law by the European Communities (Natural Habitats) Regulations, 1997 (S.I. 94 of 1997).

#### **Birds** Directive

The EU Directive 79/409/EEC on the Conservation of Wild Birds requires that special measures be taken to conserve the habitats of listed migratory and wetland species in order to ensure their survival and reproduction in their area of distribution. The Birds Directive also requires the avoidance of pollution or deterioration of habitats generally outside specially protected sites.

#### - Nitrates Directive & Regulations

It is recognised and accepted that the land spreading of biosolids has led to groundwater contamination and the deterioration of surface water quality. Ireland is therefore committed, through the full implementation of the Nitrates Directive (91/676/EEC), to reducing water pollution caused or induced by nitrates from agricultural sources and to preventing further such pollution. The provision of an alternative organic waste treatment facility will reduce the need for the storage of such wastes over the recommended non application periods and would reduce the quantum of organic nitrogen to be applied to the available national land bank through land spreading.

These Regulations will give further effect in Ireland to the following EU Directives;

- Directive 75/442/EEC Waste Management Framework Directive.
- Directive 76/464/EEC Directive on the control of pollution caused by certain dangerous substances discharged into the aquatic environment of the Community
- Directive 80/68/EEC Protection of Groundwater.
- Directive 91/676/EC Protection of waters against pollution caused by Nitrates from Agricultural Sources (Nitrate-Vulnerable Zones.)
- Directive 2000/60/EC Establishing a framework for community action in the field of water policy – Water Framework Directive (WFD).

#### - Water Framework Directive (WFD)

Ireland is required under the WFD (2000/60/EC) to maintain high status waters where they exist, preventing any deterioration in the existing status of waters and achieving at least good status in relation to all waters by 2015. This general improvement in water quality will be achieved through the implementation of a programme of measures across the country.

#### – Drinking Water Quality

Groundwater is often the only source of drinking water in rural areas. Reports have shown that such groundwater sources, particularly Group Water Supplies, can be of poor bacteriological quality. The reduction in the quantity of organic wastes applied to land should lead to an improvement in groundwater quality.

#### - Animal By-Products Regulations

It is proposed that the Newdown Bioenergy Facility will accept and treat Category 2 ABP material. The EU Regulation (EC) 1774/2002 and the implementing Statutory Instrument S.I. No. 248 of 2003 allows for the treatment of Category 2 material in biogas or composting plants among other disposal routes. The proposed Bioenergy Facility at Newdown will be required to operate under and in accordance with an approval granted for the purposes of Article 15 of the European Regulation.

## NATIONAL POLICY

#### - The National Development Plan 2007-2013

The National Development Plan integrates strategic development frameworks for regional development, for rural communities, for all-island co-operation and for protection of the environment with common economic and social goals. The Plan will decisively tackle economic and social infrastructure deficits in areas such as Transport, Energy, Housing, Water, Education and Health. Over the lifetime of the NDP, emphasis will be placed on an increase in renewable energy production in rural areas, especially projects that create environmentally sustainable enterprise and generate employment. The Plan will promote use of renewable energy resources and increased energy efficiency. The 2010 target for the contribution of renewable energy sources to electricity production is set at 15%.

#### - Green Paper on Sustainable Energy, September 1999.

In December 2003 the Minister for Communications Marine & Natural Resources launched the consultation document "Options for Future Renewable Energy Policy, Targets and Programmes". The purpose of the review was to stimulate debate in developing future renewable energy policy in Ireland, focusing on setting new targets for renewables for the period 2005 to 2010 and beyond to 2020. These targets were announced in September 2005, this increased the target for installed capacity of renewable energy generation to at least 1,450MW by 2010. This figure is in line with the International commitment under the EC Directive 2001/77/EC for 13.2% of electricity consumption to be sourced from renewable technologies by 2010. An Energy Green Paper entitled "Towards a Sustainable Energy Future for Ireland" was published for consultation on 1st October 2006. This paper puts forward energy policies that will serve the country over the next decade and beyond. The Government proposes to deliver an energy policy for the 21st century. The policy has three pillars: security of supply, sustainability and competitiveness.

#### - Changing Our Ways, 1998

'Changing Our Ways' outlines the Government's policy objectives for managing waste from 1998 to 2013. The national waste management policy advocates an integrated national approach to waste management in order to reduce the reliance on landfill. The waste management hierarchy gives priority to prevention, followed by waste minimisation, re-use, recycling and recovery. 'Changing Our Ways' promotes the development of waste recovery facilities'

employing environmentally beneficial technologies, as an alternative to landfill, including the development of composting and other feasible biological treatment facilities.

#### Sustainable Development – A Strategy for Ireland 1997

This policy document promotes the development of renewable energy sources, including maximising the efficiency of energy generation and emphasising the use of renewable resources. It also seeks to minimise greenhouse gas emissions and other pollutants both by clean generation and by more sustainable energy consumption.

#### - The National Climate Charge Strategy (DoeHLG) 2007-2012

This document identifies compliance with the Kyoto Protocol as one of the main objectives in the energy sector. It encourages the expansion of the renewable energy sector in order to reduce emissions. Energy is identified as a means of achieving this reduction in emissions. 15% of electricity to be generated from renewable sources by 2010 and 33% by 2020.

#### - The National Spatial Strategy 2002-2020

This strategy provides that in economic development the environment provides a resource base that supports a wide range of activities that include agriculture, forestry, fishing, aqua-culture, mineral use, energy use, industry, services and tourism. For these activities, the aim should be to ensure that the resources are used in sustainable ways that put as much emphasis as possible in their renewability.

#### - White Paper – Delivering a Sustainable Energy Future for Ireland 2007-2020

This paper sets out a strategic goal to accelerate the growth of renewable energy sources, reduce reliance on fossil fuels and to increase the ratio of renewable energy sources in the overall production of electricity to 33% by 2020. It sets out a clear path for meeting the Government's goals of ensuring safe and secure energy supplies, promoting a sustainable energy future, and supporting competitiveness. The second annual Carbon Budget was presented by the government on the 15th October 2008. This contained an undertaking to modify the Energy White Paper and increase the 2020 target for electricity generation from renewable sources to 40% from 33%.

#### **REGIONAL POLICY**

- Midland Regional Planning Guidelines 2010-2022

Goal 8: To promote the development of the Region in the delivery of renewable energy particularly recognising the regions existing energy infrastructure.

Policy 31 Encourage the development of the Midlands Region as a key driver in the delivery of renewable energy.

Policy 32 Support the Midland Energy Agency to assist the Local Authorities and other stakeholders in delivering energy efficiency solutions, stimulating the increased uptake of renewable energy sources and promotion of clean and sustainable transport.

Policy 35 Subsidiary Plans will seek to facilitate the minimisation of emissions to the air of greenhouse gases in accordance with the Kyoto Protocol, any subsequent international agreement and the National Climate Change Strategy. In this regard, the Authority will support any appropriate initiatives taken to provide for more sustainable forms of energy use.

#### LOCAL POLICY

#### Westmeath County Development Plan 2008-2014

#### **P-IF16** It is the policy of the Planning Authority to promote renewable forms of energy where it is consistent with the proper planning and sustainable development of an area. **P-IF17** It is the policy of the Council to favour the use of renewable energy as a contribution to the energy demand of all new buildings.

#### **Bio-energy**

- Bio-energy There are many bio energy fuel sources, and several conversion alternatives (i.e. indirect sources that can be converted into bio fuel). All dry resources; wood and wood residues (forest or sawmill residues) and dry agricultural residues such as straw can be combusted to produce heat, electricity or both, and can also be cofired in existing solid fuel systems. Energy crops, principally short rotation coppice, can also produce dry fuels for combustion. Wet resources can be processed through anaerobic digestion, producing a methage the gas for combustion. Such resources include agricultural slurries, sewage sludge, food and catering wastes and the biodegradable fraction of municipal solid waste. An additional particular bio-energy resource is landfill gas, which can be collected at landfill sites and then compared to extract its energy value.

**P-RDE8** It is the policy of the Council to support the development of the bio-energy industry.

#### Section 2.5.4 - Natural Heritage

County Westmeath supports a range of diverse and species rich habitats including peatlands, lakes, woodlands, grasslands, eskers and hedgerows. The value of these habitats is recognised in the high number of sites within the county designated by the State for nature conservation value.

- O-EH2 To protect, manage and enhance the natural heritage, biodiversity, landscape and environment of County Westmeath in recognition of its importance as a nonrenewable resource, unique identifier and character of the county and as a natural resource asset.
- **O-EH3** It is a key objective to ensure as far as possible that development does not impact adversely on wildlife habitats and species. In the interests of sustainability, biodiversity should be conserved for the benefit of future generations.

#### Section 2.5.4 - Special Protection Areas (SPAs) & Special Areas of Conservation (SACs)

- **P-EH7** To protect and conserve wild bird species and their habitats, especially rare or vulnerable species and regularly occurring migratory species.
- **P-EH8** To protect and conserve proposed candidate Special Areas of Conservation. The most valuable wildlife habitats in Westmeath form part of a national network of protected areas and some species of wild plants and animals are protected by law.

- P-EH9 To protect plant, animal, species and habitats which have been identified by the Habitats Directive, Birds Directive, Wildlife Act (1976) and (Amendment Act) 2000, and the Flora Protection Order S.I No. 94 of 1999.
- **P-EH10** To require appropriate environmental assessment such as EIA (Environmental Impact Assessment) or ecological appraisal for developments not directly connected with or necessary to the management of a European site, or a proposed European Site and which are likely to have significant effects on the site individually or cumulatively.

#### Section 2.5.4 - Natural Heritage Areas

- To protect and conserve Natural Heritage Areas and proposed Natural Heritage **P-EH12** Areas.
- **P-EH14** To consult with appropriate prescribed bodies and Government agencies when assessing development proposals affecting designated sites of national importance.

#### Section 2.5.4 - Local Sites of Biodiversity Value

**P-EH16** It is the Policy of the Council to conserve the existing wide range of flora, fauna and wildlife habitats in the county through the preservation of ecological corridors and ecological networks. These are the habitats that link the areas of high nature conservation value.

#### Section 2.5.4 - Geology

**P-EH17** The Council recognise the need to identify sites of geological and geomorphologic interest in the County and to protect these sites in the interest of protecting our Owner ret tion P geological heritage.

#### 2.3.2 Flood Risk

- It is the policy of the Council to ensure that new development is not itself subject to **P-IF11** an inappropriate risk of flooding and does not increase flood risk or flood damage at other locations.
- **P-IF12** To ensure that development that is sensitive to the effects of flooding will generally not be permitted in flood prone or marginal areas.
- To liaise with the Office of Public Works (OPW) on all issues involving river **O-IF20** drainage and flood relief, especially when dealing with any applications in the vicinity of important drainage channels.
- **O-IF23** To ensure that development, including raising ground levels, in areas liable to flooding should only be carried out where it can be demonstrated that it does not measurably reduce the floodplain.

#### 2.6.2 Energy as a rural diversification opportunity

At present, most of Ireland and the world's, energy needs are met by fossil fuels; oil, coal and natural gas. Reserves of these fuels are finite, and the present trend of increasing fossil fuel consumption is unsustainable. In the meantime, combustion of fossil fuels contributes to problems such as air pollution and acid rain, with consequent damage to the environment and human health. The emission of greenhouse gases caused by fossil fuel combustion contributes to climate change. The development of renewable energy resources, replacing the need for conventional power plants, can help to conserve limited fossil fuel reserves, reduce environmental damage and slow the rate of climate change.

Renewable energy production provides for sustainable diversification from more conventional forms of agriculture.

**P-RDE7** It is the policy of the Planning Authority to promote renewable forms of energy production where it is consistent with the proper planning and development of an area. Furthermore it is the policy of the Planning Authority to assess any proposals for such development in relation to a specific

evaluation of each site, including an evaluation of the potential impact of the development on the landscape and the amenities of the residents in the locality.

#### Section 2.5.5 - Landscape Character Assessment

#### The application site is located within character area 5 'Royal Canal Corridor' of the Landscape Character Assessment typology map.

#### **Royal Canal Corridor**

The Royal Canal has been a historic feature of the Westmeath landscape since the early 1800s running east- west through the county and is an important amenity feature. The canal runs largely through low-lving areas with the surrounding corridor typified by grassland, peatland and some areas of conifer plantation. The canal corridor is largely rural in nature apart from the urban centre of Mullingar. To the west of Mullingar the canal traverses a rural landscape of high scenic quality with undulating landform and mature vegetation cover of hedgerows and treelines. Some large conifer plantations border the canal towpath are feature of the landscape and dominate the visual corridor where present. The canal corridor includes features of vernacular architecture such as stone bridges, lock keeper's cottages, lock gates and milestones which enhance the waterway.

#### ASSESSMENT

#### Environmental Impact Statement

The proposal falls within the scope of Part 2, Schedule 5 Development for the purposes of Part 10 (Environmental Impact Assessment) of the 2001, Planning and Development Regulations 2001-2006. The application is accompanied by an EIS, as required under these regulations. The relevant policies contained in the Westmeath County Development Plan have been set out above. A pre-planning consultation was carried out in respect of the development as required under section 2.6.2 of the County Development Plan 2008-2014. The proposed development is also the subject of a waste licence application to the Environmental Protection Agency (EPA).

#### **Public Consultation**

A public information meeting was held at the Downs GAA hall on the 26<sup>th</sup> April 2011. The applicants state that a number of statutory and non-statutory organisations were consulted, a list of the bodies consulted is provided under section 1.5 of Chapter 1 of the EIS.

#### **Appropriate Assessment:**

An Appropriate Assessment is now a standard legal requirement for all plans and projects likely to have a significant impact on European sites (Special Areas of Conservation (SAC) or Special Protection Area (SPA). Given the works proposed as part of this application and its distance from the nearest Nautra site (River Boyne and River Blackwater (Site Code 2299) which lies 6.6km away at a tributary near Clonlost) it is considered that the proposal would not give rise to significant adverse direct, indirect or secondary impacts on the integrity of any nearby Natura 2000 sites having regard to their conservation objectives, arising from the development.

#### Letters of Contract

Appendix H of the EIS contains signed documentation indicating the individuals / companies who are willing to supply the feedstock to the Bioenergy Facility and accept the digestate / soil conditioner for placement on their lands subject to compliance with the respective nutrient management plans. 1)Paul Flynn (1,000tonnes p/a), 2)Paul Connor (2,000tonnesp/a), 3) WmButtimer & Sons (4,000 tonnes p/a), 4) Frances Flynn (900 tonne p/a), 5), Mathew Glennon (2,700 tonne p/a), 6) Matt Dardis (700 tonne p/a), 7), Leo & Rose Wight (350 tonne p/a), 8) Michael Fay (600 tonne p/a), 9) William Fay (650 tonnes p/a), 10), Pat Lynam (1,250 tonne p/a), 11) John Flynn (6,000 tonne p/a), 12) John Scalley (3,500 tonne p/a).

#### General Information;

The proposed anaerobic digesters will be designed to receive c. 20,000 tonnes/year of feedstock sourced in the local area including agri-industry slurries, energy crops, food processing wastes and will also process Category 2 ABP material. The locations of feedstock suppliers and receiver locations for the product have been identified within the application. All of the feedstock suppliers and the product receivers are within 50 kilometres of the proposed development site.

Agricultural biogas production offers several environmental benefits. Electricity and heat are reduced from a renewable energy source, thus CO2 emissions that enhance the greenhouse effect are reduced. Anaerobic Digestion raises the NH4-N content and decreases the carbon content of animal manure, therefore its fertilising qualities improve and less mineral N-fertiliser is needed. Production of mineral N-fertiliser is an energy consuming process connected with high CO2 emissions from burning fossil fuels. Due to the reduced carbon content, greenhouse gas emissions during manure storage decline, the use of organic wastes as co-substrates instead of their dumping additionally reduces methane emissions. The Bioenergy Facility associated with this application facilitates primarily agricultural feedstock.

The EPA have recognised the importance of AD as highlighted in the EPA discussion document published in January 2005 entitled 'Anaerobic Digestion: Benefits for Waste Management, Agriculture, Energy and the Environment'. Anaerobic digestion extracts energy in the form of biogas from organic waste. The process provides several environmental benefits. Digestion of agricultural slurries yields a substance that has a lower pollution potential and is more suitable than raw slurries for plant uptake. Global warming dividends arise because electricity generated from biogas displaces fossil fuel generated electricity and thus reduces dioxide emissions to the environment.'

The AD process can be used to turn residues from livestock farming, food processing industries, waste water treatment sludge, water treatment plant sludge among other organic wastes into biogas. The biogas can be used to generate heat and/or electricity and fibre which can be used as a soil conditioner. AD has the potential to geliver multiple environmental benefits, including reduced water pollution, lower greenhouse gas emissions, and reduced odours from agricultural slurries. In places that have high concentrations of animal waste threatening water quality centralised AD can play a significant role in managing the problem.

#### Need for Proposed Development & Regulatory Background

The food processing and agricultural industries in Ireland generate substantial quantities of nonhazardous organic wastes and sludges. Circa 132 million wet tonnes of agricultural slurries, wastewaters, effluent and sludges are generated in Ireland annually. These industrial and agricultural organic wastes are, in the absence of alternative disposal or treatment options, disposed of presently by land spreading or by landfilling.

#### **Description of Design, Size and Scale**

The development site including the entrance road from the proposed N4 Downs grade separation will occupy c. 2.3 ha. The proposed development is located to the rear of an existing agri related business within the centre of the landholding. The site will be constructed and graded over its extent with the lowest finished levels being proposed at the north-eastern end of the site, 94.50m OD, rising gradually to a height of 96.50m OD at the south-western end of the site.

#### Components of the proposed development;

#### 1. Administration

The administration area is located at the western margin of the proposed facility and will comprise a single storey office and staff facilities. There is one weighbridge located to the south of this building

on the main access road for weighing of vehicles entering and exiting the facility. The weighbridges will be manned from the administration building.

#### 2. Waste Acceptance

The waste acceptance building is located in the south western corner of the site, within the waste acceptance building offloading of the waste will take place only when the waste vehicle is suitably parked and the doors to the reception building are closed. An air curtain, or similar, immediately inside the reception building and extractor fans with associated biofilters will mitigate against any odour. Pits located to the north of the site will accept maize and grass silage to be fed into the hoppers associated with the digesters. A slurry tank located to the north west of the site will accept slurries from cattle and pigs in the area, which will be subsequently pumped directly to the digesters.

#### 3. Process

The process area will comprise the following:

- **Reception Building** \_
- Mixing Tank
- Test Digesters
- Raw Material Storage
- Pre-Storage
- Digesters ----
- **Digestate Storage** ---
- ---Biofilter
- Recycle Water
- Hygenisation \_
- Gas Cleaning Evaporation
- Cogeneration
- Flare

inspection purpose only any other use 4. Storage The two post digestion storage tanks are located to the south of the facility which will store the liquid fraction product prior to dispatch for use in the agricultural and horticultural industries. The storage area provides for the storage of materials between November and March when land spreading is currently prohibited.

#### 5. Principal Processes & Activities

The planned bioenergy facility will combine anaerobic digestion technology to treat nonhazardous organic wastes, generate electrical power and produce a useful soil conditioner. The facility will comprise a number of distinct process units namely;

- Waste acceptance \_\_\_
- Waste conditioning
- Waste processing
- Hygienisation
- **Biogas** treatment
- **Cogeneration Unit** ---
- Biofilter and odour control system \_\_\_\_
- Storage

#### Processes

Waste arriving at the facility will be processed in the following way:

#### - Waste Acceptance

All waste vehicles entering and exiting the facility will be weighed on a calibrated weighbridge. Each waste load arriving at the facility will be registered by weight, waste type and supplier. Analytical data regarding testing conducted at source prior to arrival at the facility will also be documented on arrival. A visual assessment of each load will be conducted where suspect loads will be directed for quarantine. Any wastes not deemed acceptable at the site will be returned to the waste producer.

Once a preliminary waste analysis is confirmed to be within the defined parameters for acceptable waste, the waste load will pass into the reception bin and is auger fed to the mixing tanks. Waste which fails to meet the strict waste acceptance criteria will not be accepted into the facility for treatment, and will be returned to the waste producer. All wastes entering the facility which meets the initial waste acceptance criteria will be directed to the waste reception building. The waste reception building will utilise an air curtain, or similar, immediately inside the door, any malodorous air will be directed to a biofilter via an extraction fan.

#### - Waste Conditioning

One tank is foreseen for the storage of liquid waste streams which can be pumped directly towards the mixing tank. The solid waste streams are first crushed and collected in a storage container with a push floor. The solid waste streams are transported to the mixing tank via a series of transport screws. The liquid, pre-treated, waste streams and dilution water are subsequently mixed in the mixing tank. A top entry mixer ensures an intensive mixing of the three separate flows, solids, liquids and dilution water. The mixing tank also acts to remove heavy objects like stones which sink to the bottom of the tank and are removed through a scraper.

The water requirement for the facility is as follows

- Anaerobic Digestion: 3,000m3 per year (This will primarily be recycled water from the rainwater harvesting, leachate storage tank from the Silage storage pits)
- Biogas Cleaning: 800m3 per year (ranwater preferably (softened water))
- Odour Treatment: 800m3 per year (rainwater and/or tap water)

The input mix is pumped from the mixing tank to the hydrolysis tank where the first degradation of the biomass is achieved. Hydrolysis is theoretically the first step of AD, during which the complex organic matter (polymers) is decomposed into smaller units (mono- and oligomers). During hydrolysis, polymers like carbohydrates, lipids, nucleic acids and proteins are converted into glucose, glycerol, purines and pyridines. Hydrolytic microorganisms excrete hydrolytic enzymes, converting biopolymers into simpler and soluble compounds. A variety of micro organisms are involved in hydrolysis, which is carried out by exoenzymes, produced by those microorganisms which decompose the undissolved particulate material. The products resulted from hydrolysis are further decomposed by the micro organisms involved and used for their own metabolic processes.

From the pre-storage tanks all material will pass through a macerator where shredding of waste will occur and particle sizes will be reduced to < 12mm to ensure easier transport of waste though pipes and the heat exchanger. The input mix is further pumped towards the digesters.

#### - Waste Processing

The anaerobic degradation of the organic waste streams will occur under thermophilic conditions which mean that the temperatures are maintained between 50°C to 55°C. In order to maintain the design temperature of 54°C, a recycled digestate is heated up in the heat exchanger using the HT heat from the CHP unit. The heated recycled digestate is mixed with the influent flow by means of an inline mixer. Operation temperature influences the toxicity of ammonia. Ammonia toxicity increases with increasing temperature and can be relieved by decreasing the process temperature.

The digesters consist of a Continuously Stirred Tank Reactor (CSTR) with a double membrane roof as gas storage. The mixing is done by four side entry mixers, 2 mixers at mid-height and 2 mixers at the gas-liquid phase to avoid crust formation. The produced biogas is sent to a desulphurisation unit and afterwards to the CHP unit.

#### - Hygienisation

The effluent from the digester is hygienised in order for the liquid and solid digestate to be used as an agricultural product. Before entering the hygienisation unit, the digestate is continuously heated up in a heat exchanger using the HT-heat form the CHP unit. The heated digestate is pumped into an isolated circular tank where the temperature is maintained at 70°C for at least a one hour period.

#### \_ **Biogas Treatment**

In order to avoid corrosion in the CHP exhaust line and to achieve low SOx emissions, the biogas is first desulphurised before entering the CHP. The biogas flow is sent to the biogas washer with a compressor. After the desulphurisation, the biogas is dehumidified in a condensate separator and compressed before entering the CHP. A safety flare is foreseen for burning the biogas during maintenance of the CHP engines. Biogas production must be maintained as stable and constant as possible. Inside the digester, biogas is formed in fluctuating quantities and with performance peaks. When biogas is utilised in e.g. a CHP unit, the demand for biogas can vary during the day. To compensate for all these variation, the applicant states it is necessary to temporarily store the produced biogas, in appropriate storage facilities.

The biogas storage established on top of digesters, using a gas tight membrane, which has also the function of digester cover. The biogas storage facilities can be operated at low, medium or high pressure. All biogas storage facilities must be gas tight and pressure-resistant, and in case of storage facilities which are not protected by buildings, they must be UV-, temperature- and weather proof. Before starting-up the biogas plant, the gas storage tanks must be checked for gas tightness. For safety reasons, they must be equipped with safety valves (under-pressure and over-pressure) to prevent damages and safety risks. Explosion protection must also be guaranteed and an emergency flare is required. The gas storage facility must have the minimum capacity corresponding to one fourth of the daily biogas production. owner

#### **Cogeneration Unit**

The biogas produced during the digestion process is desulphurised in a BELGAS® washer and sent to the CHP units. It is planned to use two CHP whits to facilitate the process, the type of engine selected is the Jenbacher J316GMD. With this selection, one CHP engine will run at 100% charge and the other at a charge of 65%. The use of the different heat sources from the CHP unit is summarised below:

- Part of the HT heat is used for maintaining the temperature in the anaerobic reactor at 54°C.
- Part of the HT heat is used for the hygienisation process
- The applicant states that the remaining heat can be used by the applicant as they envisage that the remaining heat could be put to use external to the application site and could facilitate premises in the area.

#### **Biofilter and odour control system**

In the biofilters the odour components in the air are removed by the bacteria which grow on the substrate inside the biofilters. The biofilters are kept damp using some of the process water.

#### **Occupants/Staffing**

There will be approximately 10 full time employees at the proposed facility not including visitors to the site which could be up to 6 visitors some days. Such visitors may comprise general visitors, customers, local authority and Environmental Protection Agency staff. Additional staff movements at the proposed facility may be generated by deliveries, general maintenance staff, cleaning contractors, security and monitoring personnel.

#### **On-Site Waste/Personnel Movements**

All waste material transported to the proposed facility will be directed to the waste acceptance building for unloading. Movement of materials on-site during the digestion process will be conducted by means of a pumped piping network and belt conveyor system.

#### - De-sludging

De-sludging of process tanks will be required at regular intervals. The process of digester tank desludging will be detailed in the facility SOP's.

#### - Connection to Substation

There is a requirement for a connection to the 20kVa Line located immediately to the north of the site. A connection application has been completed and forwarded to ESB Networks

#### – Water

The potable water requirements for the facility will be supplied via a 100mm dia watermain located on the existing site. Water required for the biogas cleaning may have to softened before use.

#### - Sanitary Services

All foul water generated at the facility will be facilitated by an onsite percolation and distribution systems.

– Human Beings

The three principal aspects of the community surrounding the subject site can be defined as follows: The resident community The working community The visiting community

#### The resident community

The site of the proposed development is located south of the established residential area along the Killucan Road, to the east of Mullingar. There is also residential units located to the south and southeast along the existing N4 Dublin Sligo dual carriage way. As such, the wider residential community will become aware of any impact as a result of the proposed development.

#### The working community

The working community in the vicinity of the subject site is mainly located in the existing commercial premises to the south of the site consisting of Flynn Fuels, Flynn Feed and Flynn Machinery. The remaining employment would be agricultural based and Genesis/ Mullingar Pewter located on the N4.

#### The visiting community

The visiting community is likely to consider the area as a typical residential with commuter on the N4 and going to and from Mullingar and Dublin - Sligo.

Given the overall scale of the proposed development, some potential adverse impacts may occur locally during the construction phase. It is expected that these short term temporary localised impacts may be experienced by the resident, working and visiting communities. Such impacts would include an increase in daytime noise levels in the area as a result of the machinery being used for construction purposes and also by construction traffic depending on its frequency and routing. The adjoining resident communities may experience the above impacts in a number of ways. The community may experience a slight change in mobility as a result of increased traffic on the road network.

The site is bounded to the north by the Regional Road, The Downs to Killucan road (R156), to the east by agricultural land, to the west by agricultural lands and proposed N4 The Downs Grade Separation and to the South by N4 Dual Carriageway. The nearest residence is to the south, which is in excess of 110m. The remaining residences are located in all directions from the site circa 300m from the application site however the majority of dwellings are located in excess of 500m from the site boundaries. In order to safeguard residential amenity the applicant will be requested to assess odour and noise issues as a result of the proposed development for all dwellings located within 300m of the application site. Further information is requested in this regard.

------Climate The potential effects of extreme weather events for this development have not been discussed. This is particularly relevant as there are a number of drainage channels in the vicinity of the proposed development which appear to be connected to the Royal Canal. In November 2009, more than twice the average rainfall amounts were measured at almost all Irish Weather Stations, and over three times the normal amount fell in some places. At the meteorological weather station in nearby Mullingar, the annual rainfall for 2009 was 28% greater than the average for the period 1961 - 1990. It is considered appropriate that due regard be given to the effects of excessive rainfall on drainage channels which in turn may be adversely affected during construction and operational phases of the development. Further information is requested in this regard.

## - Air Quality

Odour Monitoring Ireland was commissioned by ORS Consulting Ltd to perform a dispersion modelling assessment of proposed emission limit values for a range of pollutants which could potentially be emitted from the proposed anaerobic digestion facility to be located in Bio Agrigas Ltd, Newdown. The assessment allowed for the examination of proposed short and long term ground level concentrations (GLC's) of compounds as a result of the operation of proposed emission points – Gas utilisation engine 1 (AEP1), Gas utilisation engine 2 (AEP2), Odour control unit 1 to 3 (AEP3). The main compounds assessed included Carbon monoxide, Oxides of nitrogen, Sulphur dioxide, Total particulates, total non methane volatile organic compounds (as Benzene) and Odour. It is stated within the EIS that a detailed impact and dispersion modelling assessment, in which the EIS concludes that it was demonstrated that no significant environmental impact will exist if the source characteristics and emission limit value in the waste gases are achieved?

**Issues relating to Air Quality** It has been observed that the results of the dispersion air quality modelling performed on behalf of the developer refers only to the operational phase of the proposed facility. The potential impacts on air quality during construction phase have not been comprehensively discussed. It is considered appropriate that due consideration be given to air quality issues which might arise during the construction phase and mitigation measures outlined which may be required. Further information is requested in this regard.

#### Noise

ORS Environmental Consultants conducted an assessment into the likely noise impacts associated with the construction and operational phase of a proposed bio energy facility.

The EIS under section six states that in order to assess the current noise climate in the vicinity of the site measurements were taken at the nearest noise sensitive locations to the site. In total, the existing noise climate was monitored at four locations. In all cases the sound level meter (SLM) was located 1.5 meters above ground level and at least 2 meters away from any sound reflecting objects.

#### Monitoring Locations

- NSL 1 Located c.495m to the north west of the proposed plant
- NSL 2 Located c.500m to the north east of the proposed plant
- NSL 3 Located c.360m to the south west of the proposed plant
- NSL 4 Located c.370m to the south east of the proposed plant

It is stated within the EIS that during the construction phase of the proposed development, noise levels at the site when measured at noise sensitive locations in the vicinity shall not exceed 75dB(A) between 07:00 and 19:00 hours Monday to Saturday inclusive, excluding public holidays and Sunday, and 45dB(A) at any other time.

**Issues raised Noise and Vibration Assessment** 

- The Noise Sensitive Locations as outlined in Appendix C are noted, however, there are 2 dwellings and a third at advanced construction stage that have not been considered. These properties are located southeast by east from the proposed site on the same side of the N4 as the proposed development. The properties NSL3 and NSL4 are on opposite carriage way of the existing N4 and are protected from the proposed location by existing wooden fence and vegetative screening along the N4 boundary approximately 2 metres high.
- Only one measurement i.e. 30 minute daytime, 15 minute night-time, was taken per Noise Sensitive Location. We query whether this is statistically representative. Guidance documents recommend sampling over different days at different times or at least over a typical 4 hour daytime period and a minimum of 2 hours during night-time.
- The weather conditions for sampling period in March are described as 'neutral', providing little detail. There are discrepancies between this and the summary report for March by Met Eireann.
- A single frequency of 500Hz have been assumed for a number of sources, including Bioscrubbers, Digester Fans, Pre-digestion Storage Pupps which are an integral part of the operation of the facility. The frequency and togal impacts of these potential noise sources requires further consideration.
- The report has not considered in detail the specifics relating to vibration from the construction phase. Information has not been provided on ground type and states that 'piling or rock breaking' is not anticipated. This is not based on specific information. Further information on ground type should be available so that an informed decision can be made on construction works necessary. Further information is requested in this regard.

## Soils, Geology & Hydrology

This section of the EIS has been prepared by ORS Consulting Engineers and assesses the impact the proposed development is likely to have on the soils, geology and hydrogeology in the vicinity of the proposed development and the potential impacts that may arise during both the construction and operational phases. It is stated that the operational phase of the development is not expected to pose any significant risk to groundwater flow or the prevailing hydrological conditions in the locality. It is stated that it is not anticipated that there will be any adverse impact on the prevailing groundwater quality as there will be no discharges from the proposed process to groundwater at this location.

#### Issues raised relating to Soils, Geology, Hydrogeology Assessment

 Drift Geology- It is stated under section 7.3.2.2. of the EIS "As the proposed development has not progressed to detailed design stage yet, no site investigative work has been completed".

In order to assess the impacts of the proposed development on ground water it is considered important that the appropriate soil quality investigations be completed.

Hydrogeology - It is stated under section <u>7.3.2.5.</u> "As the proposed development is not as yet subject to detailed design, no site investigation works have been carried out and no subsurface data of the site is available".

Prior to any assessment of the adequacy or otherwise of mitigation measures for potential adverse effects created by the development, it is necessary in the first instance to detail the nature of the hydrogeology. Therefore, it is considered that this section of the EIS is inadequate.

- **Bedrock Geology** - It is stated under section <u>7.4.1.2</u> "Depth of bedrock beneath the proposed facility is unknown. It is expected that construction on the site will not affect the bedrock".

Further site investigations may be required to determine the effects of bedrock depth and types on hydrology. You are requested to address this issue.

*It is stated under section* "No sites or features designated or identified as being of geological interest will be affected by the construction of the proposed facility. The geology in the locality is of low sensitivity and therefore predicted effects will have negligible or no significance to geology"

As no site investigative work has been completed it is difficult to substantiate this statement without further study of the proposed development area.

- Hydrology & Hydrogeology - It is stated under section <u>7.4.1.3.</u> "Locally important aquifers are generally not a significant source of water" and "This system has subject to a full site suitability assessment by a registered assessor".

It is impossible to comment on the suitability of such a system as the statement itself is unclear. A comprehensive assessment of the potential effects of such a treatment system on the hydrology and hydrogeology is requested in order for the planning authority to assess the suitability of such a system.

Furthermore, it has been stated in this EIS that

- The area underlying the proposed site itself is classified as being of moderate vulnerability.
- The hydro-geological classification of the bedrock beneath the subject site was obtained from the GSI. This area is considered to contain a locally important aquifer.
- No source protection areas in vicinity of the site.

This section of the EIS requires further investigation. A survey of local wells and predicted impacts of the proposed development on the groundwater which supplies these wells shall also be carried out and detail of same submitted to the planning authority.

*It is stated under section* <u>7.4.3</u> "Groundwater is not utilised in the immediate area and there are no wells hydraulically down gradient of the proposed development".

The nature of the bedrock, drift geology, etc. will largely determine the flow of groundwater. Therefore, based on the above statement, it is difficult to see how an observation of the gradient of the landscape alone will affect local wells. In addition to this, it has been observed that there are wells in the vicinity of the proposed development.

It is stated under section 7.5.2."There are no foreseeable impacts on geology, no mitigation measures are recommended".

With regard to soils, hydrology and geology the assessment of the receiving environment has not received due consideration. The applicant will be requested to undertake the appropriate assessments to determine the predicted impacts of this development on soils, hydrology and geology.

Cultural Heritage

Irish Archaeological Consultancy Ltd has prepared this report for ORS Consulting Engineers on behalf of Bio Agrigas Ltd to assess the impact, if any, on the archaeological, architectural and cultural heritage resource of a proposed Bio-Energy Plant at Newdown, County Westmeath. 'Cultural Heritage' where used generically, is an over-arching term applied to describe any combination of archaeological, architectural and cultural heritage features, where the term 'archaeological heritage' is applied to objects, monuments, buildings or landscapes of an (assumed) age typically older than AD1700 (and recorded as archaeological sites within the Record of Monuments and Places). The term 'cultural heritage', where used specifically, is applied to other (often less tangible) aspects of the landscape such as historical events, folklore memories and cultural associations.

There are six recorded monuments located within 1km radius of the site, including three ringforts (WM027-002, WM020-105 and WM020-106), two earthwork sites (WM027-001 and WM027-004) and a trackway (WM027-003). Two burnt mounds were recently identified in close proximity to the proposed access road to the proposed development area (Licence Refs: 11E020 and 08E0325). There are no protected structures listed in the townland of Newdown.

Due to the archaeological nature of the surrounding landscape and the topography of the proposed development area, the planning authority concur with the mitigation measures proposed which include archaeological testing be undertaken across the proposed development area to determine the presence or absence of previously unknown archaeological features. The applicant will be conditioned in this regard.

## Ecology

The impact of the proposed development is stated as being 'total' on a part of the site in that the existing habitat will be removed and replaced by hard standing, tanks and storage pits. It is stated within the EIS that the land has no feature of heritage or biodiversity interest this cannot be seen as a significant negative impact. There will be no impact on groundwater and the aerial effluents produced by combustion are carbon dioxide and water. The area is not designated as of ecological interest and the closest such site is the Royal Canal, a pNHA (Code 2103). This lies 1km to the southwest and there is no ecological connection between the two as the stream from the bog edge passes under the Canal. The nearest Natura site is the River Boyne and River Blackwater (Site Code 2299) which lies 6.6km away at a tributary near Clonlost. Once again there is no ecological connection with it. Since there will not be negative impacts on flora or fauna from the development there are no specific actions required to mitigate them. However the boundary hedge will have a benefit to local wildlife by adding to the habitat available. Suitable native species include oak, ash, alder, hawthorn and grey willow Salix cinerea.

It is stated within the EIS that the fauna of the site is very limited because of the lack of cover and the uniformity of the habitat. The only mammal that there was evidence of was brown rat though foxes and hares are likely to visit in the course of feeding. Frogs may also be present in summer but there is no breeding water closer than the bog drains. Birdlife is similarly limited and only farmland birds such as rook, jackdaw, hooded crow and woodpigeon were seen on the site visit. Starling, redwing and meadow pipit flew over, as did a few black-headed gull. A fringe of nettle Urtica dioica occurs around the existing feed plant and this species is also abundant along the hedges to the west. The hedges are based on a bank and consist mostly of hawthorn Crataegus monogyna and bramble Rubus fruticosus with occasional beech trees Fagus sylvatica of small size. A field away, at the end of the access road, there are a few ashes Fraxinus excelsior and some wild rose Rosa canina grows here too. The planning authority consider the mitigation measures proposed to be appropriate.

Material Assets

The nearest settlement to the development is the town of Mullingar, a number of other settlements in the area include Killucan, Coralstown and The Downs. The proposed facility will provide employment opportunities, both directly on the site, and indirectly for spin-off and service providers during both construction and operational phases. There is an electrical supply to the northeast corner of the site adjacent to the site boundary. From this an existing 20kVA electrical distribution line crosses the site in a northsouth direction. The waste-to-energy plant will convert the thermal energy produced by the combustion of the waste to produce a 1MW of electricity. The line on the proposed site will be installed as an underground cable and hence will not have any visual impact. Planning permission is not required for an underground cable of this size and the final route for the cable will be determined by the ESB. Connection to the National Grid may be the subject of a separate application. This will be the responsibility of the ESB. There is no gas main on the area of the proposed development. It is not envisaged that the development will require connection to this main. The process water requirements will be in two stages (i) Start up Demand (priming the system) and (ii) Operational Demand. To prime the system will take a period of approximately 45 days. This process will be continuous i.e. 24 hours a day, 7 days a week, meaning no peak demand will occur. After the 45 day start-up period the waste will enter the building and receive further treatment. This process will be continuous meaning no peak demand will occur. A rainwater harvesting system is proposed to be installed to supply the required water for toilets in the building and some of the required process water.

At peak operation it is envisaged that 10 persons would be employed on site throughout the day. Potable water will be supplied by connection to the existing watermain to the Southwest of the proposed site. To ensure a regular supply of water for the treatment process a water storage tank will be provided. A water storage tank for fire fighting purposes shall also be installed. There is no foul sewage system on the site at present. During the construction phase effluent generated on site will discharge to temporary sewage containment facilities prior to transport and treatment off site. During operation, domestic sewage from toilets, changing and kitchen areas will discharge via the foul drainage system into on site effluent treatment systems, from which it will then be discharged to percolating area. All surface water runoff will be contained and treated on site.

Within the site adequate provision will be made for the installation of refuse collection bins. Domestic waste generated on site will be recycled where appropriate or treated in the anaerobic digestion process. Provisions for the installation of recycling collection bins will be provided on site where necessary. Domestic waste generated on site from canteen areas etc will be recycled where appropriate. Any hazardous waste generated on site including cleaning agents, oils, batteries, paints etc will be sent to an Environmental Protection Agency approved waste disposal company for appropriate disposal/recovery. Some site utilities will require upgrading for the development of the waste-to-energy facility. Among the changes that will be required will be the relocation of the existing 20kVA line which crosses the site in a North to South direction, connecting the electricity transmission network to the existing commercial premises.

Section 10.8.4. of the EIS states that "There is no foul sewage system on the site at present. During the construction phase effluent generated on site will discharge to temporary sewage containment facilities prior to transport and treatment off site."

No detail or information on this facility has been provided and if incorrectly operated could be a potential source of pollution. The applicant will be requested to address this issue by way of further information.

Eandscape & Visual Impact

The Landscape and Visual Impact Assessment report was compiled by ORS Consulting Engineers. Trees on site are confined to those contained within the hedgerows which form the field boundary along the north-western edge of the site and along the strip of land which will form the access road to the site. There are no significant woodlands or stands of trees on or around the site. The primary hedgerow tree species are Beech (Fagus Sylvatica) and are typical of those contained within the surrounding hedgerows, with a single Spruce tree (Pinea) located on the site boundary. The subject site itself is agricultural in the form of pasture. The immediate surrounding environment, located between the R156 Killucan Road to the north and the N4 National Route to the south, is also agricultural land with a mix of pasture and tillage. Flynn Feeds agri-industrial premises is located immediately to the south of the site. Further south the land is primarily agricultural with pockets of residences along the N4, with the Royal Canal located further to the south. To the east the agricultural land reduces in quality with much of the area covered in scrub woodland and marshland. To the north and north-west, located along the R156 Killucan Road, are a number of residences forming ribbon development along the road, which also includes a school, shop and GAA sports pitches. The ground levels on the subject site fall gently from a height of approximately 97.5 metres O.D. at the southwestern boundary to a height of approximately 94 metres O.D. metres along the north-eastern boundary. The ground levels along the strip of land which will form the entrance / access road to the site is generally at a height of approximately 96 metres O.D.

The landscape character of the general area is of land in extensive agricultural use with pockets of residential units forming ribbon development along the approach roads to the town centre. The primary visual features on or around the site are the Flynn Feed agri-industrial storage buildings located adjacent to the south-west boundary of the subject site. There are also existing overhead powerlines which run in a northerly direction across the site. There are no protected views or scenic routes in relation to the site. The proposed development will consist of the installation of an anaerobic digestion /bioenergy facility into the landscape. Access to the site will be off the proposed R156Killucan Road, which will run in a norther south direction approximately 225 metres to the west of the subject site.

#### The proposed buildings / structures of site comprise:-

- Administration Building (approximately 3.65 metres high/ overall dimensions 16m x 10.9m)
- Waste reception building (approximately 11.9 metres high/ overall dimensions 24m x 31m)
- 5 pre-storage tanks (approximately 10m high/ overall dimensions20.8m x 11.6m)
- 2 anaerobic digester tanks (approximately 12.2 metres high/ overall dimensions 24.7m x 24.7m)
- 2 post digestion storage tanks ( approximately 12.9 metres high/ overall dimensions 32m x 32m )
- 3 silage storage pits
- Slurry Tank
- Leachate Tank
- Post digestion loading area (approximately 7.6 metres high/ overall dimensions10m x 5.5m)
- Gas flare stack (approximately 7 metres high)
- Gas cleaning vessel (approximately 8.7 metres high)
- ESB transformer building (approximately 3.4 metres/ high overall dimensions 7.4m x 4.2m)
- Associated delivery yard, car parking, lighting, weigh-bridge, landscaping etc.

Based on site assessment and examination of visual impact assessments carried out together with the scale of the proposal and mitigation measures proposed it is not considered that the proposed development would negatively impact upon the visual amenity of the surrounding area. It should be noted however that the EIS failed to have regard to the WCC landscape character Assessment typology map. The applicant will be requested to submit detailed landscape proposals and planting schedule together with the provision of a minimum 5 metre bermed strip along all site boundaries in order to further reduce potential visual impact. The colours of the materials for the external treatment of the structures are considered to be important to aid in the integration of the proposal. Further information is requested in this regard.

#### Roads & Traffic

ORS Consulting Engineers conducted a Traffic and Transport Assessment so as to examine the traffic activity arising from the proposed development. The plant will consist of an anaerobic digestion facility that will possess up to a maximum of 20,000 tonnes of organic feedstock and produce electricity to use at the existing Tom Flynn Feed's facility and to sell any excess to the national grid. The organic feedstock will be primarily taken from existing sources, such as the adjacent pig farm and silage produced from the surrounding lands. Approximately less than half the material required will be delivered by vehicles using the public road network.

The proposed site is located between the N4 dual carriageway and the R156 Killucan Road on the applicants land. The N4 dual carriageway lies to the south of the proposed site. The R156 runs to the north of the site. The R156 and N4 connect at the N4 'The Downs' at grade junction. It is proposed to close off this at-grade junction along with eight others and construct a new grade separated junction to improve the safety and capacity of the junctions along the N4.

It is proposed that the access into the proposed development will access the road network via the new link road between the proposed N4 Grade Separated Junction and the R156. If the proposed N4 scheme is not completed before the bio-gas plant, then an alternative access will be provided via upgrading an existing farm access on the R156.

As part of the Government's National Development Plan and the Transport 21, it is proposed to redesign the N4/R156 junction to a Grade Separated Janction. The N4 'The Downs' grade separation development proposes the closure of the existing N4/R156 Killucan Road junction, the construction of a new grade separated junction located approximately 700m east of the existing N4/R156 junction, the construction of a single carriageway road to connect the new grade separated junction to the existing R156. The nine existing central reserve openings along the N4 between Clongawny and Newdown will be closed. The existing N49unctions with local roads L1703 at Clongawny, LS05026 at Newdown, Old N4 at Newdown and LT56031 at Newdown and the combined access to two properties at Clongawny will be closed. The grade separated junction will be a dumb-bell style grade separated junction comprising two roundabouts at the top of slip roads and an overbridge. A 745m reduced single carriageway connector road will be constructed from the northern roundabout of the grade separated junction to an existing R156/LS05603 junction. A roundabout will be constructed at this junction. The local roads LT56031 at Newdown and the old N4 at Newdown will be re-aligned for 230m and 350m respectively to tie in to the roundabouts at the new grade separated junction. A 480m access road will be constructed from the re-aligned old N4 at Newdown to provide access to three properties. A 350m access road will be constructed at Clongawny to provide local access for two properties to the L1703.

The reconstruction scheme described above is currently at tender stage for a design build contract. Based on the phasing of the proposed Anaerobic Digestion Plant it is proposed that the site access would be via the new link road between the grade separated junction and the roundabout on the R156. If this is not the case then an alternative access is also proposed via an alternative access directly off the R156 will be provided. The alternative access proposed will access the development off the R156 via an existing access lane. This lane will require upgrading to ensure that it is as safe as possible for vehicles expected to arrive and depart the site. This laneway is currently marked via a public road sign on the R156. The lane way is along a straight stretch of road and sightlines in the order of 2.4m x 160m are achievable. In order to improve safety at the access, two-way vehicle movements will be facilitated by increasing the width of the minor road access and the gradient into the site will also be revised. A future link road between the national road N4 interchange and the R156 will be constructed through the applicants land holding. It is the applicant's intention to reconfigure the site access and connect to the proposed link road when it is suitable to do so.

TOTOAL	ARRIVALS	DEPARTURES
GENERATION FOR AD	(PER SHIFT)	(PER SHIFT)
FACILITY FROM FIRST		
PRINCIPLE		
Assume maximum traffic		
during (08:00-18:00 shift) no		
deliveries of waste anticipated		
during the nighttime shifts.		
Delivery of Waste Material	3	3
Staff	6	6
Ancillary Trips	5	5
Total traffic generation per	14	14
shift		
Total traffic generation per		
shift multiplied by a factor of		
2 for total traffic generation		
over 24 hours		
Total Traffic generation per	24	24
Day		
	offic	

WCC NRDO office have raised an issue with the proposed access to the application site in that the planning application is within the study area for the N4 The Downs Grade Separation Scheme and recommend refusal in relation to the following aspect of the planning application:

"The proposed new entrance road to the proposed N4 Grade Separation Scheme shown on drawing number 111/001/201 submitted by the applicant is premature pending the construction of the proposed N4 The Downs Grade Separation Scheme No access can be permitted from the proposed development to the proposed realigned R156 Connector Road as shown on the attached drawing B0756500/ENG/002 as this proposed scheme has not yet commenced construction. The construction of the proposed N4 The Downs Grade Separation Scheme is subject to future NRA approvals and funding." This issue shall be raised through further information request however it is considered taking into account the relatively low traffic volumes and nature of the proposal that the development can safely be accessed from the R-156 whilst pending the N4 The Downs Grade Separation Scheme. Further information is requested in this regard.

#### Assessment of Alternative Sites

The principal criteria for assessing the viability that the applicant focused on were:

- Alternative processes
- Alternative locations
- Alternative designs

It is accepted based on the alternatives that the subject site is suitable with regard to capacity to host an Anaerobic Digestion Facility in close proximity to Mullingar – Grid Connection Point to produce a 1MW electricity supply. A number of alternative locations were considered for the proposed Bio energy Facility and assessed on the basis of Land Use, Proximity to electricity grid, Outlet for heat from electricity production, Landscape and visual capacity, Transport Infrastructure and Residential Amenity. It should be noted that all sites selected are within the lands in the ownership of the applicant. Option 2 is the location of the proposed development, and is considered to be an acceptable site selection in terms of least visual impact.

#### <u>Further Information Request & Conclusion;</u> Further information was requested on the 19<sup>th</sup> July 2011 as follows;

- 1i. In order to safeguard residential amenity you are requested to assess odour and noise issues as a result of the proposed development for all dwellings located within 300m of the application site.
- *ii.* You are requested to submit detailed landscape proposals and planting schedule together with the provision of a minimum 5 metre bermed strip along all site boundaries in order to further reduce potential visual impact.
- *iii.* You are requested to submit samples of the proposed materials and colours of same for the external treatment of the structures, which would aid in the integration of the proposal.

Environment section of WCC considers the applicants response to be satisfactory subject to conditions. Landscape plan has been submitted. Applicants will be conditioned to revise landscape proposals to provide for semi-mature tree and native hedging outside proposed security fencing. Type of fencing proposed shall be conditioned. Proposed colour finish has been stated. The applicants will be conditioned to submit samples.

2. The council have concerns with regard to the proposed access to the application site in that the planning application is within the study area for the N4 The Downs Grade Separation Scheme and the proposed new entrance road to the proposed N4 Grade Separation Scheme shown on drawing number 111/001/201 submitted by the applicant is premature pending the construction of the proposed N4 The Downs Grade Separation Scheme. No access can be permitted from the proposed development to the proposed realigned R156 Connector Road as shown on the attached drawing B0756500/ENG/002 as this proposed scheme has not yet commenced construction. You are requested to address this issue and liaise with the NRDO office.

The NRDO office raises no objection subject to conditions being attached in the event of a grant of permission.

**3i.** *Drift Geology-* It is stated under section <u>7.3.2.2.</u> of the EIS "As the proposed development has not progressed to detailed design stage yet, no site investigative work has been completed". In order to assess the impacts of the proposed development on ground water it is considered important that the appropriate soil quality investigations be completed. You are requested to address this issue.

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*Hydrogeology* - It is stated under section <u>7.3.2.5.</u> "As the proposed development is not as yet subject to detailed design, no site investigation works have been carried out and no subsurface data of the site is available".

Prior to any assessment of the adequacy or otherwise of mitigation measures for potential adverse effects created by the development, it is necessary in the first instance to detail the nature of the hydrogeology. Therefore, it is considered that this section of the EIS is inadequate. You are requested to address this issue.

- *iii.* Bedrock Geology It is stated under section <u>7.4.1.2</u> "Depth of bedrock beneath the proposed facility is unknown. It is expected that construction on the site will not affect the bedrock". Further site investigations may be required to determine the effects of bedrock depth and types on hydrology. You are requested to address this issue.
- *iv.* It is stated under section "No sites or features designated or identified as being of geological interest will be affected by the construction of the proposed facility. The geology in the locality is of low sensitivity and therefore predicted effects will have negligible or no significance to geology"

As no site investigative work has been completed it is difficult to substantiate this statement without further study of the proposed development area. You are requested to address this issue.

- Hydrology & Hydrogeology It is stated under section 7.4.1.3. "Locally important aquifers v. are generally not a significant source of water" and "This system has been subject to a full site suitability assessment by a registered assessor".
  - a) It is difficult to comment on the suitability of such a system as the statement itself is unclear. A comprehensive assessment of the potential effects of such a treatment system on the hydrology and hydrogeology is requested in order for the planning authority to assess the suitability of such a system. Please submit this information.
  - b) Furthermore, it has been stated in this EIS that:
    - The area underlying the proposed site itself is classified as being of moderate 0 vulnerability.
    - The hydro-geological classification of the bedrock beneath the subject site was 0 obtained from the GSI. This area is considered to contain a locally important aauifer.
    - No source protection areas in vicinity of the site. 0

This section of the EIS requires further elaboration. A survey of local wells and predicted impacts of the proposed development on the groundwater which supplies these wells shall also be carried out and detail of same submitted to the planning authority. You are requested to address these issues.

It is stated under section 7.4.3 "Groundwater is not utilised in the immediate area and there vi. are no wells hydraulically down gradient of the proposed development".

The nature of the bedrock, drift geology, etc. will large determine the flow of groundwater. Therefore, based on the above statement, it is difficult to see how an observation of the gradient of the landscape alone will affect local wells. In addition to this, it has been observed that there are wells in the vicinity of the proposed development. You are requested to address this issue.

It is stated under section 7.5.2" There are no foreseeable impacts on geology, no mitigation vii. measures are recommended".

With regard to soils, hydrology and geology the assessment of the receiving environment has not received due consideration. You are therefore requested to undertake the appropriate assessments to determine the predicted impacts of this development on soils, hydrology and geology.

The HSE raises no objection to applicants response to further information request subject to conditions.

- 4i. The Noise Sensitive Locations as outlined in Appendix C are noted, however, there are 2 dwellings and a third at advanced construction stage that have not been considered. These properties are located southeast by east from the proposed site on the same side of the N4 as the proposed development. The properties NSL3 and NSL4 are on opposite carriage way of the existing N4 and are protected from the proposed location by existing wooden fence and vegetative screening along the N4 boundary approximately 2 metres high. You are requested to address this issue.
- Only one measurement i.e. 30 minute daytime, 15 minute night-time, was taken per Noise ii. We query whether this is statistically representative. Guidance Sensitive Location. documents recommend sampling over different days at different times or at least over a typical 4 hour daytime period and a minimum of 2 hours during night- time. You are requested to address this issue.
- The weather conditions for sampling period in March are described as 'neutral', providing iii. little detail. There are discrepancies between this and the summary report for March by Met Eireann. You are requested to address this issue.
- A single frequency of 500Hz have been assumed for a number of sources, including iv. Bioscrubbers, Digester Fans, Pre-digestion Storage Pumps which are an integral part of the operation of the facility. The frequency and tonal impacts of these potential noise sources requires further consideration. You are requested to address this issue.

The report has not considered in detail the specifics relating to vibration from the construction phase. Information has not been provided on ground type and states that 'piling or rock breaking' is not anticipated. This is not based on specific information. Further information on ground type should be available so that an informed decision can be made on construction works necessary. You are requested to address this issue.

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The HSE raises no objection to applicants response to further information request subject to conditions.

5. It has been observed that the results of the dispersion air quality modelling performed on behalf of the developer refers only to the operational phase of the proposed facility. The potential impacts on air quality during construction phase have not been comprehensively discussed. It is considered appropriate that due consideration be given to air quality issues which might arise during the construction phase and mitigation measures outlined which may be required.

The HSE raises no objection to applicants response to further information request subject to conditions.

6. The potential effects of extreme weather events for this development have not been discussed. This is particularly relevant as there are a number of drainage channels in the vicinity of the proposed development which appear to be connected to the Royal Canal. In November 2009, more than twice the average rainfall amounts were measured at almost all Irish Weather Stations, and over three times the normal amount fell in some places. At the meteorological weather station in nearby Mullingar, the annual rainfall for 2009 was 28% greater than the average for the period 1961 – 1990. It is considered appropriate that due regard be given to the effects of excessive rainfall on drainage channels which in turn may be adversely affected during construction and operational phases of the development. You are requested to address the aforementioned issues.

The HSE raises no objection to applicants response to further information request subject to conditions.

7. Section 10.8.4. of the EIS states that "There is no foul sewage system on the site at present. During the construction phase effluent generated on site will discharge to temporary sewage containment facilities prior to transport and treatment off site."

No detail or information on this facility has been provided and if incorrectly operated could be a potential source of pollution. You are requested to address this issue.

The HSE raises no objection to applicants response to further information request subject to conditions.

- 8i. You are requested to submit road construction details for the approval of the Planning Authority for the upgrading of the L-56031 access road. The CBR of the sub grade shall be tested and the depth of the capping layer required shall be determined from the CBR results. Details of minimum 4m carriageway width, passing bays provided at 200m and road drainage shall be submitted.
- ii. You are requested to provide details for the junction of the temporary access road from the proposed development with the L-56031. To include achievement of sightlines to meet with County Development Plan requirements.
- *iii.* The applicant shall confirm his willingness to enter into a legally binding agreement with Westmeath County Council for the upgrading of the L-56031.
- iv. You are requested to show how he intends to achieve sightlines at the junction of the temporary access road from the proposed development with the L-56031. A sightline of 2.4m x 90m is required.
- v. Where the achievement of the above sightlines and sightlines at the junction of the L-56031 with the R156 involves works on lands outside of the applicants control, documentary

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evidence shall be submitted confirming the agreement of the relevant landowner to the works necessary to achieve the above mentioned sightlines which shall be signed by a Commissioner for Oaths.

vi.

Section through the junction between the R-156 and L-56031 detailing the existing and proposed vertical alignment shall be submitted for approval by the planning authority. 2.4m x 150m sightlines shall be provided and maintained at all times in accordance with Westmeath County Development Plan 2008-2014.

The area engineer raises no objection to applicants response to further information request subject to conditions.

9i.

The developer shall submit a detailed project waste management plan for the construction phase. The focus of the plan shall be to maximise reuse or recycling of waste and minimise the amount of waste consigned to landfill. Priority shall be given to re-use or recovery of waste in preference to disposal. When preparing the plan, regard shall be had to the following documents:

- "Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects" published by the Department of the Environment, Heritage and Local Government (July 2006), and
- "Construction and Demolition Waste Management, a Handbook for Contractors and Site Managers" published by FÁS and the Construction Industry Federation (2002).

The plan shall as a minimum address the followings

- (a) All demolition and construction wastes and ing on the site shall be segregated into different clearly marked skips (such as canteen waste, timber, plastics, plaster board, waste solvent tubes, blocks, etc).
- (b) All surplus waste and clean soil and topsoil to be removed off-site shall be brought to an authorised site or facility.
- (c) A register shall be maintained of the movement of waste off-site, to include an estimation of the quantities of waste removed, name and waste collection permit number of the Contractor/s engaged to collect the waste, details of the recovery or disposal facility or facilities used. The developer shall retain all recovery or disposal receipts.
- (d) A prohibition on the burning or burying of waste on the site.

All waste generated during construction, including surplus excavation material to be taken off-site, shall only be recovered or disposed at a site which has a current Waste Licence or Waste Permit in accordance with the Waste Management Acts, 1996 as amended. This shall not apply to disposal of waste excavation material within the applicant's site boundary.

- *ii.* The developer shall submit proposals, to the Planning Authority, for the monitoring of dust levels during the construction phase.
- *iii.* You are requested to submit details of the impacts and mitigation measures that the developer shall put in place to protect the tributary of the Riverstown river that drains the proposed development site.

Environment section of WCC raises no objection to applicants response to further information request subject to conditions.

- 10i. There is insufficient information present regarding the topic of WATER as per Schedule 6 (2)
  (b) of the 2001 Planning Regulations. The section on hydrology as per Section 7.3.2.4 is totally inadequate and this lack of information is contrary to the European EIS Directives and Regulations. It is noted that a tributary of the Riverstown River (a salmonoid watercourse) drains this site. A full description of these waters should be included in the EIS.
- ii. Concern is also raised regarding the directing of all local waters for this facility and the effect that this may have on the local aquatic ecology due to the possible insufficient recharging of local surface and ground waters. You are requested to carrying out a study,

which shall be submitted for the written agreement of the planning authority. You are requested to liaise with Inland Fisheries Ireland in this regard.

Inland Fisheries Ireland raise no objection to applicant's response to further information request subject to conditions.

11. The EIS should include a section describing the inter-relationship between the likely significant effects in accordance with Schedule 6 2(b) of the Planning and Development Regulations 2001-2010, the interaction of the impacts should also be assessed. Please address this issue.

The applicants have submitted a summary outlining interrelationships and refer to specific chapters of the EIS. Response is considered poor.

12. Please indicate if data from the Mullingar Meterological station are taking into consideration in relation to predicted impacts to air quality.

The applicant states that Meterological data was not utilised as the generated data at this station does not comply with the data quality requirements for use in advanced dispersion models. Mullingar Meterological station does not generate 24hr cloud cover data which does not allow for the computation of specific boundary layer height mixing calculations for use in predicting downwind ground level concentrations.

13. In relation to Table 5.4.1 – Assessment of Air Quality impacts for pollutants from proposed emission points AEP 1 to AEP 3, please indicate if an account has been taken in the model of cumulative impacts of any other emissions.

The applicant states in terms of development there will be no other scheduled emission points to atmosphere. Emission points AEP 1 and 2 are exhaust emissions from Generator sets and these have been accounted for in the air dispersion model. Emission from AEP3 are as a result of treated odour emissions from odour control units 1 to 3 grouped together into one emission point.

- 14i. Landscape and Visual Impact Section of the EIS chapter 11 should refer to Westmeath County Development Plan Landscape Character Areas (section 2.5.5 refers). Please address this section of the EIS to have regard to Landscape Character Areas.
- *ii.* The visual analysis assessment does not appear to include the view from the proposed overbridge. Please submit views to address same.

Revised Landscape and Visual Impact Section of the EIS chapter has been submitted and is considered to be acceptable. Visual analysis assessment which includes the view from the proposed over bridge has been submitted.

15. The applicant has submitted details for stormwater attenuation with a discharge rate of 9.51/s/ha. You are requested to submit revised stormwater attenuation design details for a discharge rate of 51/s/ha to cater for a 100year storm event.

The area engineer raises no objection to applicants response to further information request subject to conditions.

#### **Recommendation;**

It is recommended that permission be granted in accordance with the attached schedule.

#### Schedule One.

#### File Ref: 11/5055

Having regard to the provisions of The County Development Plan 2008-2014, it is considered that, subject to compliance with the conditions set out in the attached Schedule (Schedule Two), the proposed development would not be contrary to the proper planning and sustainable development of the area.

#### Schedule Two. File Ref: 11/5055

- 1. The development shall be carried out strictly in accordance with the plans and details received by the Planning Authority on 25<sup>th</sup> May 2011 as amended by revised plans and details received
  - by the Planning Authority on 25<sup>th</sup> May 2011 as amended by revised plans and details received on the 23<sup>rd</sup> December 2011 except as may otherwise be required in order to comply with the following conditions.

#### Reason: In the interests of orderly development and clarity.

#### 2. **Development Contribution**

Prior to the commencement of development or as otherwise agreed in writing with the Planning Authority, the developer shall pay the sum of  $\epsilon 32,731.00$  (Thirty Two Thousand, Seven Hundred and Thirty One Burge), as set out below, to the Planning Authority as a contribution, in accordance with the Council's Development Contribution Scheme adopted in 2007, in respect of public infrastructure and facilities benefiting development in the area of the Planning Authority, and that is provided or that it is intended will be provided by, or on behalf of, the Council.

The contribution payable will be based on the contribution rate applicable at the time of payment and <u>not</u> the rate in existence when permission is granted. The amount of the development contribution will be updated annually on the 1<sup>st</sup> January in accordance with changes in the Wholesale Price Index (Building and Construction), (Capital Goods) and penalty interest for late payment, in accordance with the terms of the Council's Development Contribution Scheme:-

Class of Infrastructure	Rate per unit/m <sup>2</sup>	m²	Amount of Contribution
GA. Development not coming within any of the foregoing classes	€35.50	922 m <sup>2</sup>	€32,731.00
Total			€32,731.00

Reason: It is considered reasonable that the developer should contribute towards the expenditure incurred or proposed to be incurred by Westmeath County Council in respect of the provision/improvement of public services/infrastructure benefiting development in the area of the Planning Authority. 3. All existing hedgerows and trees on site shall be maintained, except any treatment that necessitates the achievement of above mentioned sight lines and replacement boundary treatment shall be of an indigenous native species hedge secured by timber post and wire fencing. The remaining site boundaries shall be of a planted indigenous native species hedge secured by timber post and wire fencing.

# Reason: To ensure the amenity afforded by existing hedges is maintained and to ensure the development integrates into the existing landscape.

- The modifications and mitigation measures in the reports of ORS Consultants reports received by Westmeath County Council on the 25<sup>th</sup> May 2011 and revised reports received on the 23<sup>rd</sup> December 2011 shall be implemented in full by the applicants.
   Reason: In the interest of public health.
- 5i. Prior to commencement of development, a landscaping scheme and detailed planting schedule shall be submitted to the planning authority for written agreement. This scheme shall include details of all existing trees and hedgerows on the site, specifying those proposed for retention, together with measures for their protection during the period in which the development is carried out. The site shall be landscaped in accordance with the agreed scheme, which shall also include a timescale for implementation.
- ii. Details of site boundary treatments shall be submitted for the written agreement of the planning authority.

### Reason: In the interest of visual amenity.

- 6i. Prior to commencement of development, details of the materials, colours and textures of all the external finishes to the proposed development shall be submitted to the planning authority for agreement.
- A sample of the proposed external finishing material and colours to be used shall be submitted to and agreed with the Planning Authority prior to commencement of development.
   Reason: In the interest of orderry development and the visual amenities of the area.
- No sign, banner or advertisement shall be erected or displayed on the proposed structures or within the curtilage of the site without a prior grant of planning permission.
   Reason: In the interest of visual amenity.

#### 8. Engineering Conditions;

- i. Proposed access road from R-156 shall be upgraded as required for HGV access and maintained by applicant.
- ii. Road drainage shall not be impeded as a result of works carried out at junction of R-156 and L-56031.
- iii. Wheel wash facility must be provided on site before commencement of any development on site. All vehicles leaving site must use this facility. No muck is to be dragged onto the public road.
- iv. Surface water and foul water shall be disposed of on a separate system basis.
- v. No construction shall take place over existing underground services.
- vi. The applicant shall indemnify the County Council from any damage that may arise to the existing services where connections are being made.
- vii. All water service pipes shall be laid at a minimum depth of 600mm below final finished ground level. Meter boxes, meters and stopcocks shall be so laid as to maintain this minimum dept of 600mm. This provision shall be certified by a suitably qualified person with professional indemnity insurance and certification shall be submitted to the Planning Authority within 3 months of completion of installation.

- viii. Prior to the commencement of any development the applicant/developer shall submit documentary evidence which shall be signed by a commissioner for Oaths to provide for the achievement of 2.4m x 90m sightlines and sightlines at the junction of the L-56031 with the R156 involves works on lands outside of the applicants control, documentary evidence shall be submitted confirming the agreement of the relevant landowner to the works necessary to achieve the above mentioned sightlines which shall be signed by a Commissioner for Oaths.
- ix. Prior to the commencement of any development the applicant/developer shall submit a section through the junction between the R-156 and L-56031 detailing the existing and proposed vertical alignment shall be submitted for approval by the planning authority.
   Reason: In the interests of orderly development and traffic safety.

9. The construction roadworks for the N4 The Downs Grade Separation are underway and access from this development (file ref 11/5055) (either Construction or Operational) will not be permitted from the realigned R156 until the roadworks are complete with normal maintenance transferred by the contractor to Westmeath County Council and consent to this access is given in writing by the Senior Engineer of Westmeath National Road Design Office which shall be submitted for the written agreement of the planning authority.

Reason: The proposed new entrance road to the N4 The Downs Grade Separation Scheme as shown on drawing number 111/001/201 submitted by the applicant is premature pending the completion of construction of the new N4 The Downs Grade Separation Scheme.

#### 10. Environment Conditions

- i. No development shall commence until an PPC licence has been granted for the facility.
- ii. All existing hedgerows and trees etc. On site shall be maintained, except any treatment that necessitates the achievement of above mentioned sight lines and replacement boundary treatment shall be of an indigenous native species hedge secured by timber post and wire fencing. The remaining site boundaries shall be of a planted indigenous native species hedge secured by timber post and wire fencing.
- iii. Applicant shall comply with the following:
  - (a) All raw materials delivered to the site to be accepted at a designated bunded concrete reception area for unloading directly into the reception tank.
  - (b) All feedstocks delivered to the facility shall be delivered in a fully enclosed sealed containers. All operations associated with the delivery and treatment of feedstock shall take place within the fully enclosed facility.
  - (c) Prior to commencement of development, details of lighting arrangements for the overall site which shall be designed to minimize light spillage outside the site, shall be submitted to the Planning Authority for written agreement.
  - (d) Construction and demolition waste shall be managed in accordance with a construction waste and demolition management plan, which shall be submitted to and agreed in writing with the planning authority prior to commencement of development. This plan shall be prepared in accordance with the "Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects", published by the Department of the Environment, Heritage and Local Government in July 2006. The plan shall include details of waste to be generated during site clearance and construction phases, and details of the methods and locations to be employed for the prevention, minimisation, recovery and disposal of this material.
- iv. During the construction phase of the proposed development;

(a) Bunded storage areas shall be provided for the containment of oil, fuel storage tanks, chemicals and any other materials which pose a risk to water during the construction period. The bunded area shall be equivalent to a volume of 110% of the capacity of largest container stored. The proposed method of drainage of the bunded area shall be to the satisfaction of the Planning Authority.

(b) The developer shall ensure that adequate measures are in place (and agreed with the Planning Authority) to prevent water with high suspended solids content, caused by the construction of the proposed development from discharging into streams and watercourses.

(c) Arrangements for the collection, storage and disposal of all foul sewage effluent arising from any temporary site sanitary facilities shall be submitted to and agreed with the Planning Authority prior to commencement of development.

- v. Prior to commencement of development, the developer shall put in place monitoring arrangements for the measurement of noise emissions, dust deposition and suspended solids of surface water run-off associated with the initial construction phase of the development. During the construction phase of the development, the developer shall submit to the planning authority, on a frequency to be determined by the planning authority, the results of the monitoring programme. Monitoring locations for the above shall be agreed in writing with the planning authority prior to commencement of development.
- vi. Dust deposition during the initial construction phase of the proposed development shall not exceed 350 milligrammes per square metre per day (DIN standard) when measured at the site boundaries and averaged over 30 days. The site access road to be kept clean so that no muck or debris is allowed onto the public road.
- vii. All oil and hydrocarbons to be stored in a bunded area. The bund to be designed to BS 8007: 1987 code of practice for the design of concrete structures for retaining aqueous liquids.
- viii. The wheels and underside of all construction traffic leaving the site shall be cleaned, as required, to prevent soiling of public roads. In the event that any public roads become soiled by construction traffic from the site, these roads shall be cleaned immediately.
- ix. All existing hedgerows and trees etc. on the site shall be maintained, except any treatment that necessitates the achievement of above mentioned sight lines and replacement boundary treatment shall be of an indigenous native species hedge secured by timber post and wire fencing. The remaining site boundaries shall be of a planted indigenous native species hedge secured by timber post and wire fencing.
- x. A weighbridge to be used on the site to record all materials imported/exported to and from the site.
- xi. Dust deposition shall not exceed 240mg/m3/day beyond the boundary of the site. This limit shall be based on a 30 day composite sample.
- xii. All organic fertiliser generated on site for use on agricultural lands shall be applied to those lands in accordance with the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010.
- xiii. A separate collection system for clean and dirty shall be provided. The dirty water collection system shall discharge to a dirty water collection tank where it shall be used in the digestion process or spread on agricultural land in accordance with the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010.
- xiv. Hazardous waste/material encountered during the course of demolition or excavation works shall be disposed of in accordance with the Waste Management Act 1996 as amended.
   Reason: In the interests of the environment proper planning and sustainable development.

#### 11. Road Design

i. The applicant shall upgrade the existing L-56031 public roadway in accordance with Table 1 below:

Layer		Depth	Material to BS 594987:2007	NRA Specification
Double Dressing	Surface		Double Surface Dressing Layer, 14mm first layer 6mm second layer, Standard Cationic	Clause 919
			Emulsion, 1.6l/m <sup>2</sup> and 0.6l/m <sup>2</sup> first and second	

Table 1

		layers respectively. Minimum PSV60	
Wearing course	25mm	AC 10 close surface. Pen 70/100	Clause 906
Base course	40mm	AC 20 dense binder/HDM. Pen 70/100	Clause 906
Roadbase	80mm	AC 32 dense base/HDM. Pen 70/100	Clause 906
Sub-base	150mm	Type B	Clause 804
Capping	300mm	6F2, crushed rock	Clause 613

ii. Minimum road width of 4m with allowance for passing bays at 250m centres.

- iii. Prior any work on the proposed development commences, the existing boundary fence and hedge shall be removed on the left and right hand side of the junction entrance to the L-56031 from the R156. Sightlines of 150m x 2.4m shall be provided and maintained at all times from the proposed access point. The existing hedge boundary shall be removed only to the extent necessary to achieve sight distance. The new boundary fence shall be constructed not less than 6 meters from the centre line of the adjoining public road. All new road boundaries shall be with a hedgerow of mixed native species, interspersed with semi-mature trees of a native species planted on the inside secured by a timber post and wire fence.
- iv. The applicant shall achieve and maintain sightlines at the location of the proposed entrance of the temporary access road with the L-56031. These sightlines shall be provided in accordance with the following table:

		to the	
X	Y	Applicable for:	
2.4 metres	90 metres	County Roads	

(X distance is measured from the metalled edge of the major road at the proposed entrance, Y distance is measured from the middle of the lane where the emerging vehicle is stopped to a point Y metres on all approaches for the full road width of that approach. The eye height to be 1.05 metres and the object height to be 1.15 metres.)

- v. The applicant shall agree to restrict the use of the proposed temporary access junction, from the facility, with the L-56031 on completion of any proposed access road to the Downs Separation Scheme, to two axle vehicles. Details of such an agreement shall be agreed with the Planning Authority prior any building works
- vi. The applicant has failed to comply with the further information request No. 8(v). Prior to commencement of any building works the applicant shall submit documentary evidence confirming the agreement of the relevant landowner to the works necessary to achieve all necessary sightlines. This documentary evidence shall be signed by a Commissioner of Oaths.
- vii. Prior to commencement the applicant shall enter into a legally binding agreement with Westmeath County Council for the upgrading of the L-56031 in accordance with the construction specification detailed in Item, Table 1 of this report.
- viii. The upgrade of the L-56031 to the specification as per Item1 Table 1 above, shall be certified by a Consultant Engineer.
  Reason: In the interests of the traffic safety, proper planning and sustainable development.

#### 12. Archaeology

i. Prior to the commencement of development the applicant is required to engage the services of a suitably qualified archaeologist to carry out an archaeological assessment of the development site. No sub-surface work should be undertaken in the absence of the archaeologist without his/her express consent.

- ii. The archaeologist should carry out any relevant documentary research and inspect the site. Test trenches shall be excavated at locations chosen by the archaeologist (licensed under the National Monuments Acts 1930-2004), having consulted the site drawings, the results of the geophysical survey and the National Monument Service.
- iii. Having completed the work, the archaeologist should submit a written report to the Planning Authority and to the office of the Department of Arts, Heritage and the Gaeltacht prior to the commencement of any development. Where archaeological, material/features are shown to be present, preservation in situ, preservation by record (excavation) or monitoring may be required.

## Reason: In the interest of archaeological heritage and proper planning and sustainable development.

13. Prior to the commencement of any development the applicant/developer shall submit details of more preventative measures and the development of a more robust mitigation measures in the event of a failure in the integrity of the tank farms. Efforts to minimize the effects on soils, geology and hydrogeology in the event of a serious failure of these facilities to be submitted for the written agreement of the planning authority.

# Reason: In the interest of public health and proper planning and sustainable development.

14. This permission relates exclusively to the construction of a bio-energy facility containing a reception building, reception area, engine room, pumps and heat exchangers. Administration building containing office, staff and amenity and changing facilities. Permission is also sought for tank farms to include 2 no. anacrobic digestors, 2 no. post digestion storage tanks, 5 no. pre-storage tanks, gas flare and gas deaning vessel. Ancillary features will include 1 no. weigh bridge, ESB substation, post digestion loading area, wheel wash area, on site waste water treatment system, fencing, gates, new access road to proposed N4 grade separation scheme and internal roads with all associated works including landscaping, boundaries and services above and below ground. Permission is also sought for temporary road access on to the R-156 Killucan road from the proposed development during the construction of the new N4 Grade separation scheme. The process of anaerobic digestion is the subject of an application for a waste licence all of which is described in detail in an accompanying Environmental Impact Statement (EIS). All of the relevant waste recovery activities as per the fourth schedule of the Waste Management Act 1996-2003 to which this application relates in accordance with the attached conditions and does not relate to the remainder of the building or the site. Any such uses insofar as they are not already authorised shall require a separate grant of permission.

## Reason: To avoid any misunderstanding as to the proper construction of this permission.

Note;

Please attach as an addendum;

- $\Rightarrow$  Fire Officers Report 15/6/11
- $\Rightarrow$  Access Officers Report14/6/11

File ref 11/5055 4 Hais **Executive** Planner

Senior Executive Engineer

p) Director of Services County Manager

 $\frac{21/21/2}{Date}$   $\frac{21/02/2012}{Date}$   $\frac{22/2/2012}{Date}$   $\frac{22/2/2012}{Date}$   $\frac{21/02/2012}{Date}$   $\frac{21/02/2012}{Date}$ 

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