2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

This part of the EIS provides a detailed description of the proposed development, including information on the site, design and size of the proposed development. This also includes operational considerations and final restoration schemes. This section also identifies the data required to assess the main effects which the development is likely to have on the environment.

2.1 Site Location

The existing soil recovery site is located in the Townland of Tallagh, Belmullet, County Mayo ca. 2 ½ km north of the town of Belmullet. **Figure 2.1.1** is a Regional Site Location Map taken from the Ordnance Survey 1:50,000 Discovery Series.

Figure 2.1.1: Regional Site Location Map

Figure 2.1.2 is a larger scale, site location map showing the site boundary and other relevant features.

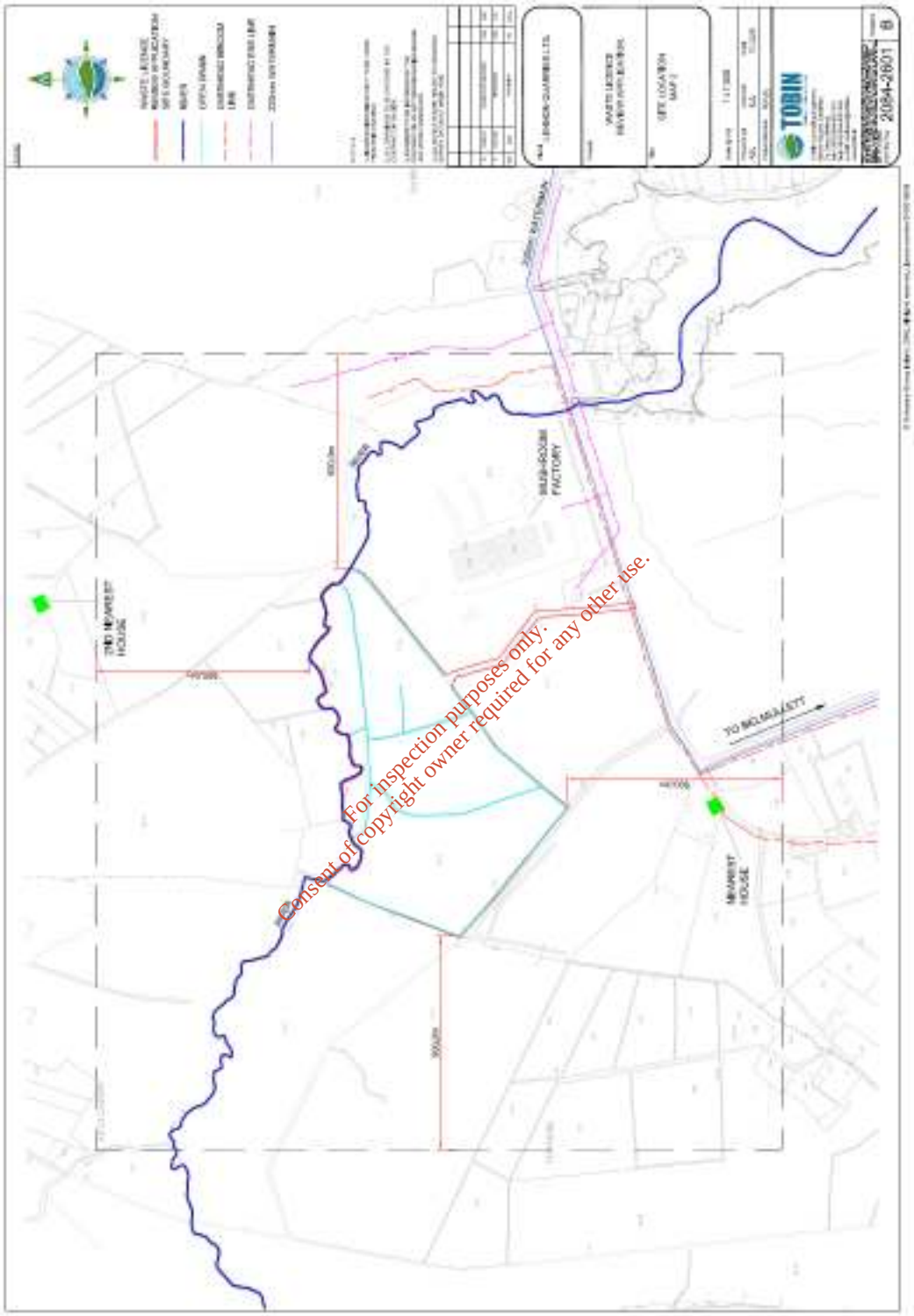


Figure 2.1.2: Site Location Map 2

Two bench marks have been set up at the second entrance gate to the facility and these have the National Grid Reference E470040 N835694 (Bench Mark 1) and E470033 N835690 (Bench Mark 2), these are shown later in this EIS on a map within the section dealing with the Site Layout.

2.2 Land Ownership

The site is owned TJ Lennon- Managing Director of Lennon Quarries. It total he owns ca.. 48.5 hectares. The existing licensed soil recovery site has a total area of 27.22ha, which includes the site access road, the proposed area of deposition (20.48ha) and a proposed buffer zone in the northern section of the site (4.46ha), which separates the area of deposition from the Clooneen River, which flows in an easterly direction, along the northern boundary of the site. The overall site ownership map is shown on **Figure 2.2.1** below.

Figure 2.2.1: Site Ownership Map

2.3 General Site Description and Surrounding Land Use

The 'Site Layout Plan' is shown in **Figure 2.3.1**:

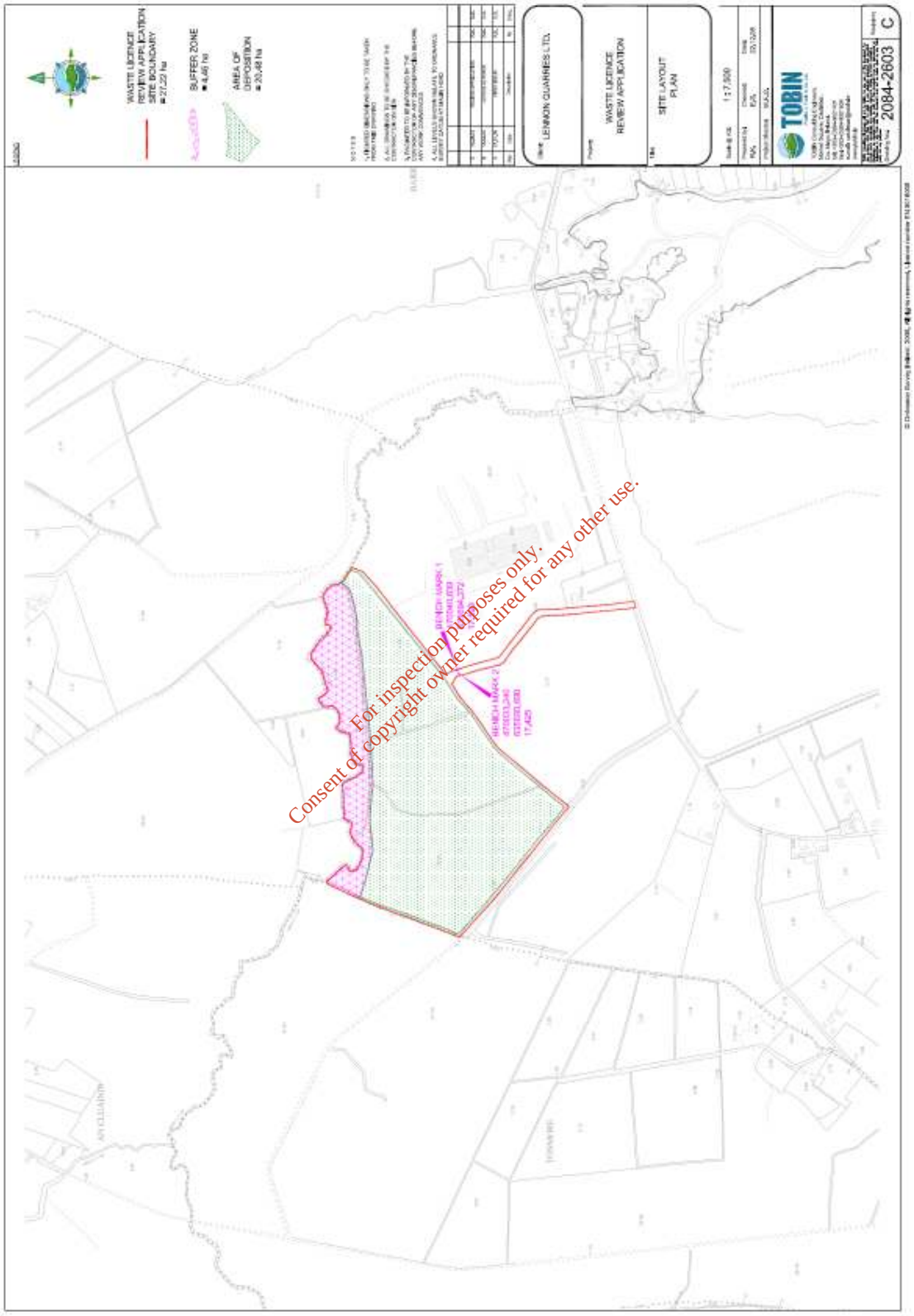


Figure 2.3.1 Site Layout Plan

Figure 2.1.2 shows the general features of the site and surrounding area. The existing soil recovery site which has been in operation since 2006 is located with a typical rugged County Mayo agricultural landscape. Many of the fields in the area have been amalgamated into larger field units and farming is the principal land use in the area, mainly sheep rearing. In addition there is a former Mushroom Farm to the south-east of the site. This consists of plastic tunnels on a hardstanding area for the former growing of mushrooms.

There is evidence locally of peat cutting for domestic use for fuel. There is little if any forestry of tree cover in the area due to the exposed nature of this part of North Mayo.

To the south of the site along the entrance road there is a former chapel, now derelict and used for sheltering animals. The local GAA club and playing pitches is located to the south-west of the existing site. The club has provided a letter of support for the review.

Housing settlement is dispersed with only 1 dwelling within 500 metres of the site boundary, with three others outside 500 metres. All the occupants have been consulted with regards to the review of Waste Licence W0256-01 and all have provided letters of support for the review.

Photo 1 is a view into the site looking from the west towards the north and shows that the lands are marginal agricultural grassland used for grazing sheep. The land would be considered poor agricultural land due to the undulating topography, poor drainage and removal of much of the top soil layers due to peat cutting. There is also widescale evidence that the area has been cut-over for peat in the past but that this has ceased.

Photo 1: View of Existing Site – Marginal Agricultural Land

Photo 2: Sheep Grazing on the Existing Soil Recovery Site with Adjacent Reclaimed Land in the Distance

Photo 2 and Photo 3 show that lands immediately adjacent to the existing land reclamation site have been reclaimed to form productive agricultural land. Therefore there are clearly precedents in the area for land reclamation activities.

Photo 3: View of Site in Foreground looking towards Adjacent Land in a north-easterly direction which has been reclaimed to Productive Agricultural Land.

It is important to stress that were it not for the forefathers in this area and their hard work on the land, there would be little if any productive grassland in North Mayo suitable for livestock grazing.

Agriculture, particularly livestock grazing is a fundamental part of the economy and culture of the local community and this recovery project will further assist in providing productive agricultural land in the area for future generations without having any detrimental impact upon the local environment. In the general vicinity of the site at Tallagh there are many fields which have been reclaimed successfully for agriculture.

Photo 4 and **Photo 5** show the area of the site already reclaimed. **Photo 4** clearly demonstrates that the land is used for agricultural purposes at present with sheep grazing in the foreground and within the un-reclaimed part of the site in the distance. The site would appear to be being farmed on a continuing basis as the land reclamation works progress.

Photo 4: View of Sheep Grazing within the land reclamation site and congregating on the area which has already been reclaimed

Photo 5: View of the area of the site reclaimed for agricultural purposes

Photo 6 shows the view from the portion of site already reclaimed towards the lower portion of the site towards the river. Note the reclaimed land under separate ownership on the far side of the river.

Photo 6: View from the portion of site reclaimed towards the lower portion of the site towards the river (which is excluded from filling). Note the reclaimed land under separate ownership on the far side of the river.

The lands are currently in use for agricultural purposes, but are low lying and of poor quality as evidenced from the site vegetation, drainage channels and watercourses.

The works proposed under the existing waste licence and under the review are for the purpose of land reclamation so as to enable the lands to be effectively used for agricultural purposes. The word 'reclamation' implies claiming back from some unsuitable state. The definition might imply an unsuitable state arising from topography, drainage, poor-quality soils, damage to soils, presence of rock or vegetation etc. The reclamation works will raise the lands by approximately 1 metres.

In regard to the above factors, it is quite clear that the primary objective in carrying out the work is to improve existing agricultural land.

Having inspected the site numerous times, it is our professional opinion that the field unit which it is proposed to fill may be rendered more productive by providing a terrain conducive to improved drainage; we also consider that the field unit itself is of a moderate area in terms of modern agricultural practice, and that the depth of fill and duration of operation are reasonable; we consider therefore that the primary objective of the development to be carried out by the licensee is land reclamation; recovery and not waste disposal.

2.4 Site Infrastructure

Figure 2.4a is a site plan which shows the existing and proposed (as built) site infrastructure to service the existing licensed soil recovery facility. **Figure 2.4b** is a plan of the Surface Water Drainage System and Treatment and Abatement System.

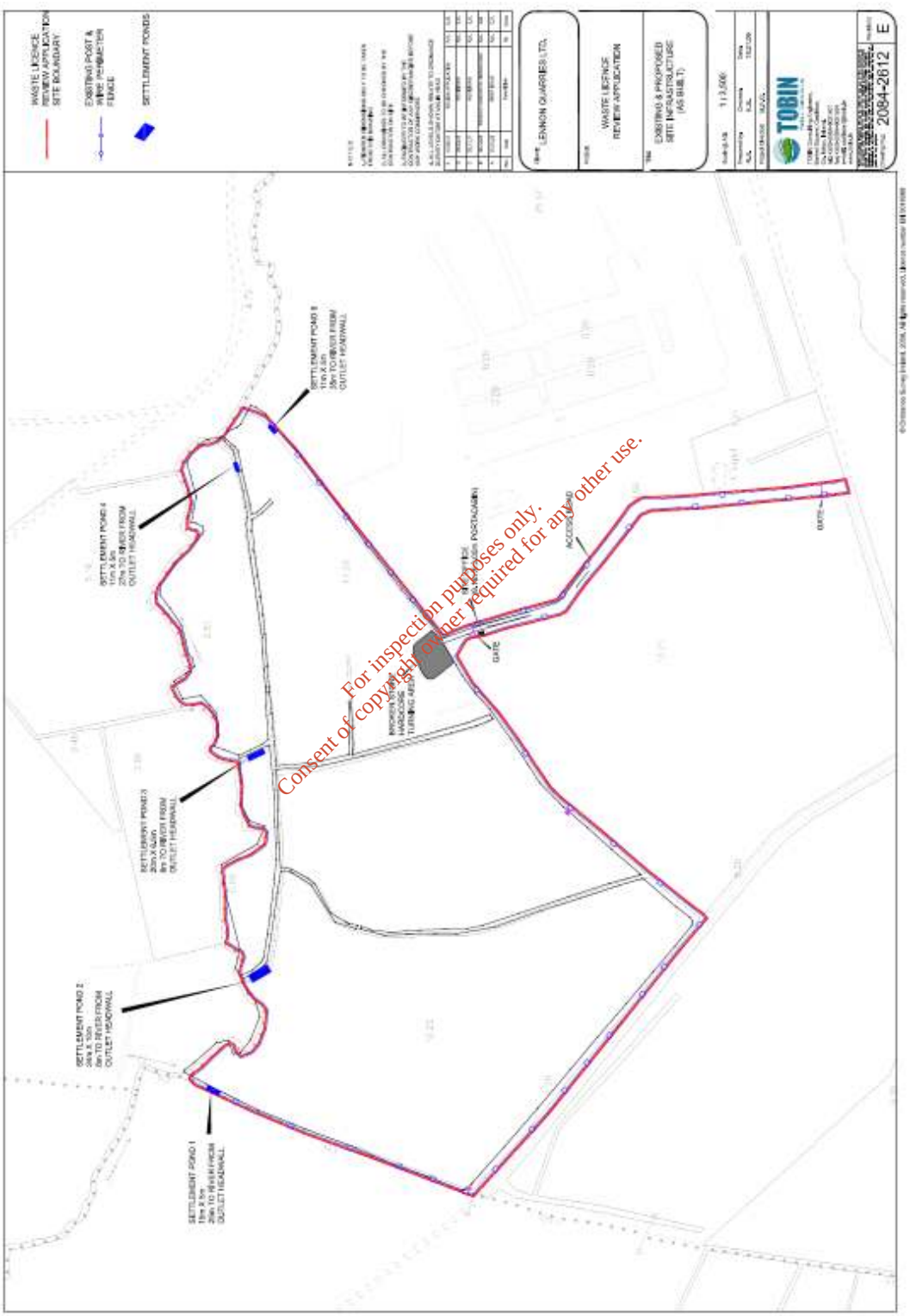


Figure 2.4a: Site Infrastructure Plan

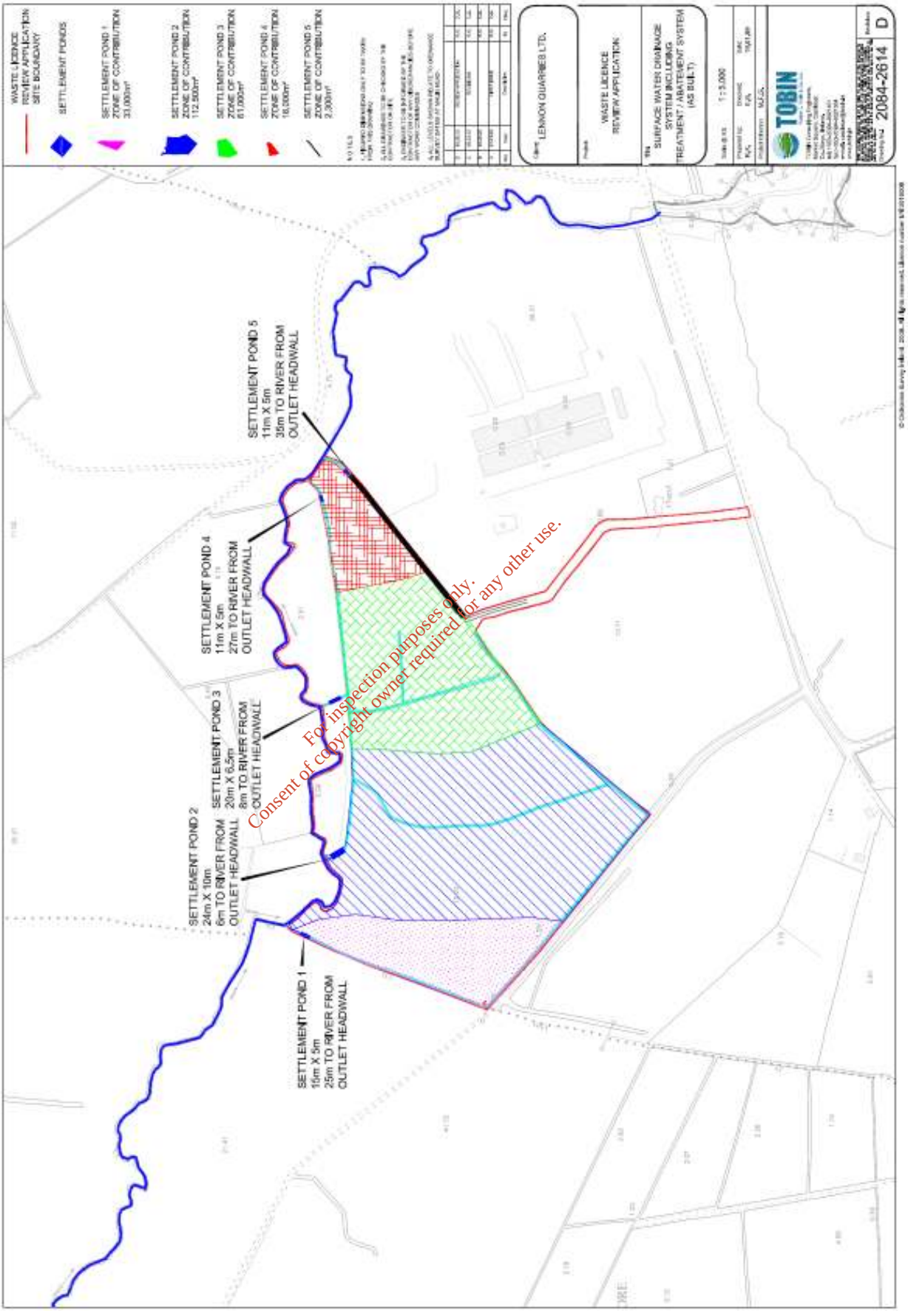


Figure 2.4b: Surface Water Drainage System and Treatment and Abatement System.

The following sections should be read in conjunction with **Figure 2.4a:** Existing and Proposed Site Infrastructure and **Figure 2.4b**: – Surface Water Drainage System, Including Treatment/Abatement System.

2.4.1 Site Security Arrangements, Including Gates and Fencing

The site boundary to which this Application for a Review relates is presently enclosed by a 'Perimeter Post & Wire Fence', as shown on **Figure 2.4a**. There are presently two lockable entrance gates to the facility, one at the junction of the site access road with the main Belmullet-Ballyglass Road, and one at the top of the access road, at the opening to the 'Area of Deposition'. Safety Signs are installed on the Surface Water Settlement Ponds.

2.4.2 Designs for Site Roads

There is an existing hard-core access road, connecting the main Belmullet-Ballyglass Road to the site, as shown on **Figure 2.4a**. This road is the road used as the main access road to the site for haulage trucks delivering material to the site under the existing licence W0256-01 and will remain so, as currently licensed.

A hardcore area is in place (with a surface dressing of clean broken stone), close to the entrance gate. This allows haulage trucks to enter the site, turn, and deposit their material, along the perimeter of the hardcore area.

2.4.3 Design of Hardstanding Areas

The facility accommodation (portocabin & portoloo) will be positioned on the hardstanding area of site access road, as shown on **Figure 2.4a**.

2.4.4 Plant, Site Machinery and Traffic Control

As undertaken under the existing waste licence, a Hitachi 200 excavator is being used intermittently throughout the day/week within the permitted operating hours. Once the haulage trucks deposit their material, the excavator will shift the material, from where it is deposited by the haulage trucks, and spread it over the area of the deposition site.

It is not proposed to install a weighbridge at the facility.

Based on the proposed annual intake of a maximum of 90,000 Tonnes, it is expected that there will be approximately 4,500 truckloads of soil and stone delivered to the site on an annual basis (i.e. a maximum of 90 loads per week). This equates to a maximum of 18 no. truck loads per day. Such a small number of truck movements is not expected to have any effect on traffic in the area of the site. This small quantity of truck arrivals does not justify the expense of installing a weighbridge. The Deputy Facility Manager/Machine Operative on the Waste Licenced site maintains a record of the capacity of each of the trucks, which will allows him to keep an accurate record of volumes/quantities of materials being accepted at the facility on a daily basis.

It is not proposed to install a wheel-wash at the existing facility. It is proposed to develop a hardcore area (with a surface dressing of clean broken stone), close to the entrance gate, as shown on **Figure 2.4a**. This will allow haulage trucks to enter the site, turn, and deposit their material, along the perimeter of the hardcore area. Based on the above, it is not proposed to allow haulage trucks beyond the hardcore area at the entrance to the deposition site. It is therefore not expected that the wheels of the truck will come in contact with soils, etc. Any debris that may be attached to the haulage trucks is expected to fall off during the trucks movement over the hardcore material on the access roadway, i.e. before the trucks move offsite onto the Belmullet-Ballyglass main road.

2.4.5 Refuelling of Machinery

It is not proposed to store any fuel onsite. A fuel tanker will visit the site, when required and fill the onsite plant (Hitachi 200 excavator). Refuelling takes place on the hardstanding area of the site access road, adjacent to the site office. Booms and spill kits are kept adjacent to this.

2.4.6 Waste Inspection and Waste Quarantine Areas

As undertaken under the existing waste licence, the Deputy Facility Manager/Machine Operative will inspect each load, as it is being deposited, to ensure the material is fully compliant with the Waste Licence. If the material is non-compliant, the Deputy Facility Manager/Machine Operative will insist that the material is reloaded onto the haulage truck and removed from the site, for authorised disposal elsewhere. Once the haulage trucks deposit their material, along the perimeter of the hardcore area, the excavator shifts the inert material, from where it is deposited by the haulage trucks and spreads it over the area of the deposition site, in compliance with the Waste Licence. If waste objects are identified within the inert material (whilst shifting/reclaiming the material), which are not compliant with the Waste Licence (eg. pieces of wood, plastic, metal), they are removed and transported to the Waste Quarantine skips, located adjacent to the site office.

2.4.7 Sewerage Infrastructure

There is no sewerage system (existing or proposed) associated with the site. As undertaken under the existing waste licence a portoloo is installed and managed on the site.

2.4.8 Surface Water Drainage System

The site is presently drained by a number of open surface water drains, as can be seen on **Figure 2.4b.** An open drain surrounds the perimeter of the entire deposition site (with the exception of the northwest corner of the site), and a number of open drains are cut into the site in a south-north direction. The open drains, drain into the Clooneen River, which runs along the northern site application boundary, in an easterly direction, at five locations.

5 no. Settlement Ponds have been put in place, as shown on **Figure 2.4b**, to allow suspended solids to drop out of solution, prior to the surface water discharging from the site.

2.4.9 Other Services and Site Accommodation

There are presently no services on the site (i.e. water, eircom, electricity & sewer). **Figure 2.1.2** shows the services within 500m of the site. It is not proposed to bring services on to the site at this time. The site accommodation (Portocabin) is provided with electricity, using a generator, and with water using a holding tank. A Portoloo is provided and managed at the facility. This situation is deemed acceptable, as there will only be one Deputy Facility Manager/Machine Operative on the site during operating hours. The Deputy Facility Manager/Machine Operative has a company mobile phone, operational at all times.

2.4.10 Plant Sheds, Garages and Equipment Compound

There are no installed Plant Sheds, Garages or Equipment Compounds or proposals for these installations at the site and there will be no change to the above in relation to the application for a Review of the Waste Licence.

2.4.11 Fire Control System, Including Water Supply

All materials accepted at the facility are inert and are non-flammable. A fire extinguisher is stored in the cabin of the site plant (Hitachi 200 excavator) and within the site portacabin.

2.4.12 Any Other Waste Recovery Infrastructure

As undertaken under the existing waste licence, the acceptance of Soil & Stone for recovery/reclamation, by spreading the material over the site deposition area, is the only material accepted at the site and as a result no additional infrastructure is required or proposed for the operation of the site.

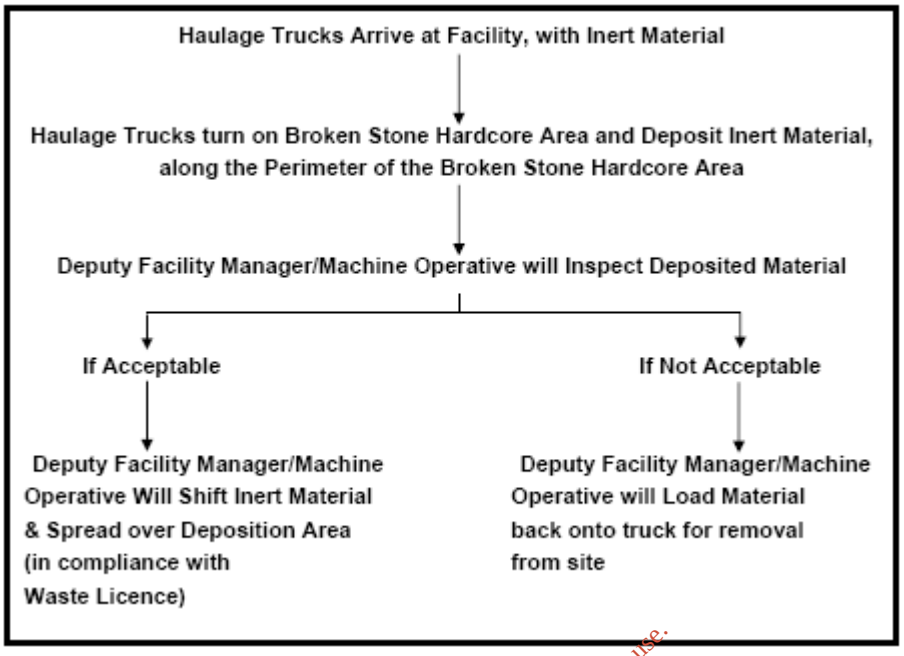
2.5 Facility Operation

The existing licensed facility, per licence W0256-01, is a soil recovery facility, which is licensed for a final topographic level of a 1m Land Raise and with the acceptance of 24,900 tonnes per annum of soil and stone and its recovery, by spreading material over the deposition site area, with a consequential benefit for improving the land for agricultural use.

The application for the Review of the Licence is for the continued operation per the existing waste licence, with no change to the licensed final topographic level of a 1m Land Raise and with the acceptance of up to a maximum of 90,000 tonnes per annum of soil and stone for recovery as described above – this is to allow for the acceptance of the currently available suitable material from a nearby large infrastructural project, which is to provide for material from a well monitored source of incoming soil and stone.

As under the existing waste licence, the facility operates following a very simple process, as shown in the 'Flow Diagram' in **Figure 2.5.1**:

Figure 2.5.1: Site Process Flow Diagram



2.6 Authorised Waste Activity – Existing and Proposed

The Principle Waste Activity currently carried out at the site, and currently licensed under the Waste Management Acts is: Fourth Schedule, Class R4 ***"Recycling or Reclamation of other Inorganic Materials".*** This will the same for the Review of the existing Waste Licence W0256-01

The site operations are currently and will also be covered under the following class of activity:

Fourth Schedule, Class R13 *"Storage of Waste intended for Submission to any activity referred to in a preceding paragraph of this Schedule, other then temporary storage, pending collection, on the premises where such waste is produced"*

2.7 Waste Types – Existing and Proposed

Table 2.7.1 outlines using the current European Waste Catalogue Code(s) the waste types to be handled at the existing soil recovery facility as per Waste Licence W0256-01. There is no change is the material (EWC Waste Category) proposed to be accepted at the site, and it is that material currently licensed to be accepted under the existing waste licence, W0256-01

Table 2.7.1: Waste Types Accepted at the Existing Facility Now and Under the Review

EWC Code (6 Digits)	Waste Description
17 05 04	Soil and stones other than those mentioned in 17 05 03

2.8 Waste Quantities to be Recovered

The existing licensed facility, as per licence W0256-01, is a soil recovery facility, which is licensed for a final topographic level of a 1m Land Raise and with the acceptance of 24,900 tonnes per annum of soil and stone and its recovery, by spreading material over the deposition site area, with a consequential benefit for improving the land for agricultural use.

400 Tonnes/Annum of soil and stone material may be stored on the site (prior to recovery/reclamation), under Class 13 of the Fourth Schedule.

The application for the Review of the Licence is for the continued operation per the existing waste licence, with no change to the licensed final topographic level of a 1m land raise and with the acceptance of up to a maximum of 90,000 tonnes per annum of soil and stone for recovery as set out in **Table 2.8.1** – this is to allow for the acceptance of the currently available suitable material from a nearby large infrastructural project, which is to provide for material from a well monitored source of incoming soil and stone.

Table 2.8.1: Outlining existing and proposed waste quantities to be accepted on site

Waste Type	Existing Tonnage per Annum	Proposed Tonnage Per Annum	Total Over Lifetime of Activity
Soil and Stones 17 05 04	24,900 Tonnes	90,000 Tonnes	265,000 Tonnes to reach licensed 1m land raise

The review creates no proposed change to the content, nature, composition or volume of materials intended for recovery by deposition at the site, and the overall tonnage of 265,000 tonnes for which the existing license was issued remains unaffected. The activity will just take a shorter time span to complete and fully restore to beneficial agricultural use.

There is no change in the scope of the activity, the nature of the activity or potential emissions from the activity (as presently licensed).

The site survey drawings submitted with the Waste Licence Review remain unaltered as there will be no change whatsoever in the proposed topographical levels based on the reclamation of the site occurring over a shorter time period. Therefore there is no change to finished site survey drawings.

2.9 Waste Acceptance Procedures

As undertaken under the existing waste licence, the Deputy Facility Manager/Machine Operative will inspect each load, as it is being deposited, to ensure the material is fully compliant with the Waste Licence. If the material is non-compliant, the Deputy Facility Manager/Machine Operative will insist that the material is reloaded onto the haulage truck and removed from the site, for authorised disposal elsewhere.

Once the haulage trucks deposit their material, along the perimeter of the hardcore area, the excavator shifts the inert material, from where it is deposited by the haulage trucks and spreads it over the area of the deposition site, in compliance with the Waste Licence. If waste objects are identified within the inert material (whilst shifting/reclaiming the material), which are not compliant with the Waste Licence (e.g. pieces of wood, plastic, metal), they will be removed and transported to the Waste Quarantine skips, located adjacent to the site office. The Deputy Facility Manager/Machine Operative maintain a record of all material arriving at the facility, including the following information:

- Date;
- Time;
- Owner Truck;
- Truck Licence Plate No.;
- Waste Collection Permit number;
- Type of Material;
- Origin of Material;
- Quantity of Material;

The Deputy Facility Manager/Machine Operative at the site maintains a record of the capacity of each of the trucks, allowing him to keep an accurate record of volumes/quantities of Soil and Stone accepted at the facility on a daily basis. This then forms the basis of the Annual Environmental Report (AER) which is submitted to the EPA.

2.10 On-Site Waste Handling

On-site Waste Handling is undertaken by the Deputy Facility Manager/Machine Operative. On arrival, haulage trucks deposit the material close to the site entrance (alongside the hardcore turning area) as discussed in Section 2.9. The Deputy Facility Manager/Machine Operative inspects each load, as it is being deposited, to ensure the material is fully compliant with the Waste Licence.

If the material is non-compliant, the Deputy Facility Manager/Machine Operative ensures that the material is reloaded onto the haulage truck and removed from the site, for authorised disposal elsewhere. Once the haulage trucks deposit their material, along the perimeter of the hardcore area, the excavator shifts the inert material, from where it is deposited by the haulage trucks and spreads it over the area of the deposition site, in compliance with the Waste Licence Application Drawings (as outlined in Section 2.11). If waste objects are identified within the inert material, whilst shifting/reclaiming the material, which are not compliant with the Waste Licence (e.g. pieces of wood, plastic, metal), they will be removed and transported to the Quarantine skips, located adjacent to the site office.

2.11 Soil Recovery Method

Figure 2.11.1 presents the *'Topographic Map of the Site"*. The existing waste licence at the site provides that the site is licensed for a 1m Land Raise in order to improve the land for agricultural purposes by spreading out the accepted materials over the surface of the 'Area of Deposition'. The existing licensed soil recovery site has a total area of 27.22ha, which

includes the site access road, the proposed area of deposition (20.48ha) and a proposed buffer zone in the northern section of the site (4.46ha), which separates the area of deposition from the Clooneen River, which flows in an easterly direction, along the northern boundary of the site.

The Application for a Review of the Licence proposes no change to the final topographic level licensed under W0256-01; it is proposed that the same 1m Land Raise, as currently licensed, is maintained. The application for the Review of the Licence is for the acceptance of 90,000 Tonnes per annum of Soil and Stone, for deposition as described above.

Figure 2.11.2 shows the '*Proposed Topographic Map of Application Site, Showing Final Ground Levels*', with 1m Land Raise shown.

Cross Section Locations A-A, B-B, C-C, D-D & E-E are shown on **Figure 2.11.3, Figure 2.11.4,** and **Figure 2.11.5**. The Cross Sections show the Land Raise by 1m, with a slope of 3:1 down to all existing perimeter surface water drains, which will remain untouched. The existing open surface water drains that cut through the Area of Waste Deposition, will also be raised by 1m, as shown on the Cross Section Drawings.

2.12 Hours of Operation

• Proposed Hours of Operation:

8.00am to 6.00pm - Monday to Friday
8.00am to 2.00pm - Saturday
Closed - Sundays & Bank Holidays

• Proposed Hours of Waste Acceptance/Handling:

8.30am to 5.30pm - Monday to Friday
8.30am to 1.30pm - Saturday
Closed - Sundays & Bank Holidays

The difference between the 'Proposed Hours of Operation' and the 'Proposed Hours of Waste Acceptance/Handling' reflect the time allowed for set-up and clean-up works each day.

• Proposed Hours of Construction and Development Works at the Facility and Timeframes:

No Construction and/or Development Works are proposed for the facility under the Application for Technical Review. Upkeep of security arrangements (i.e. fences, gates, signs, etc.) will be carried out during the 'Proposed Hours of Operation'.

• Any Other Relevant Hours of Operation Expected:

There are no other relevant hours of operation known to date. Approval shall be sought from the EPA should any other hours of operation become apparent, other than those listed above.

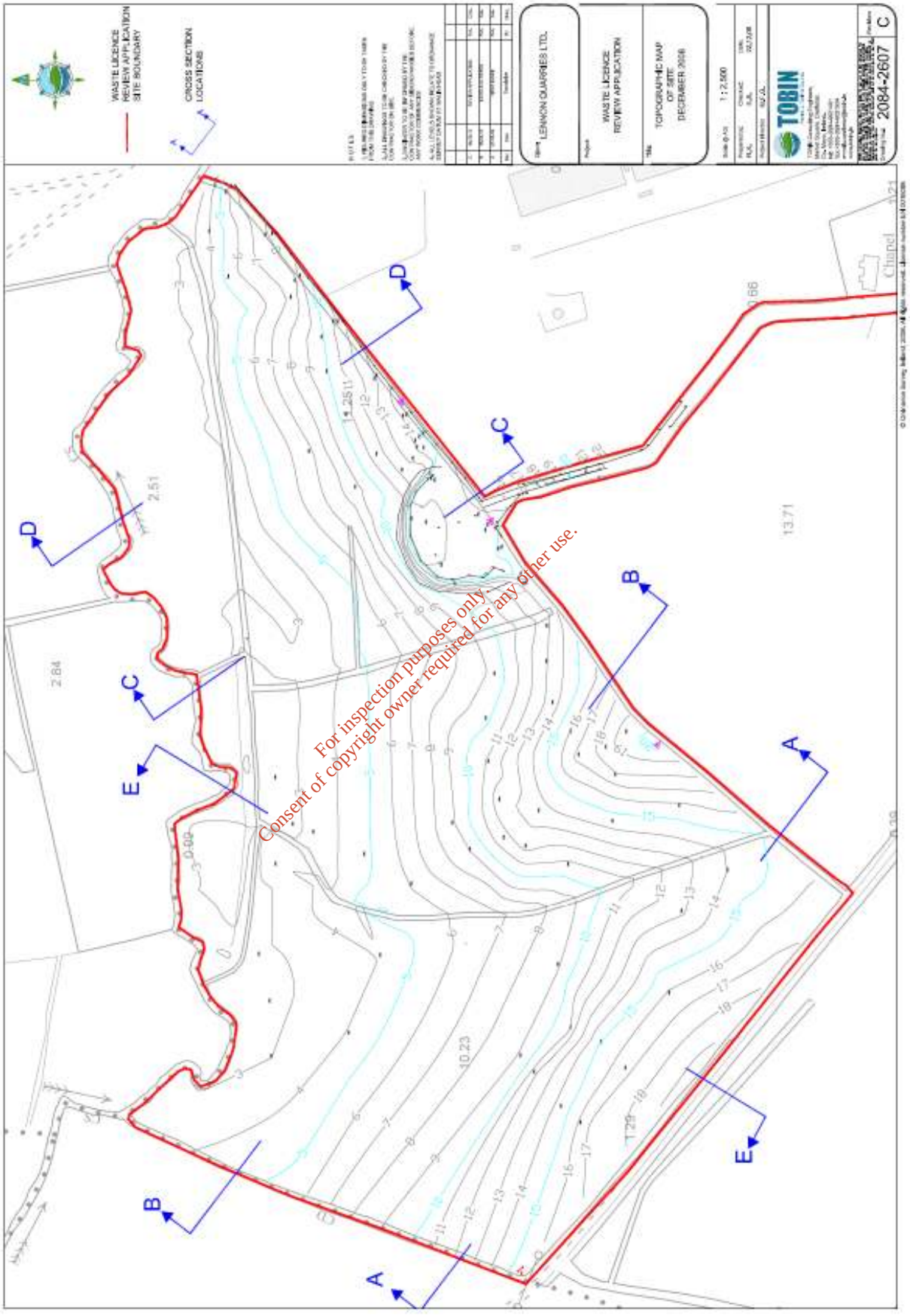


Figure 2.11.1: Topographic Map of the Site

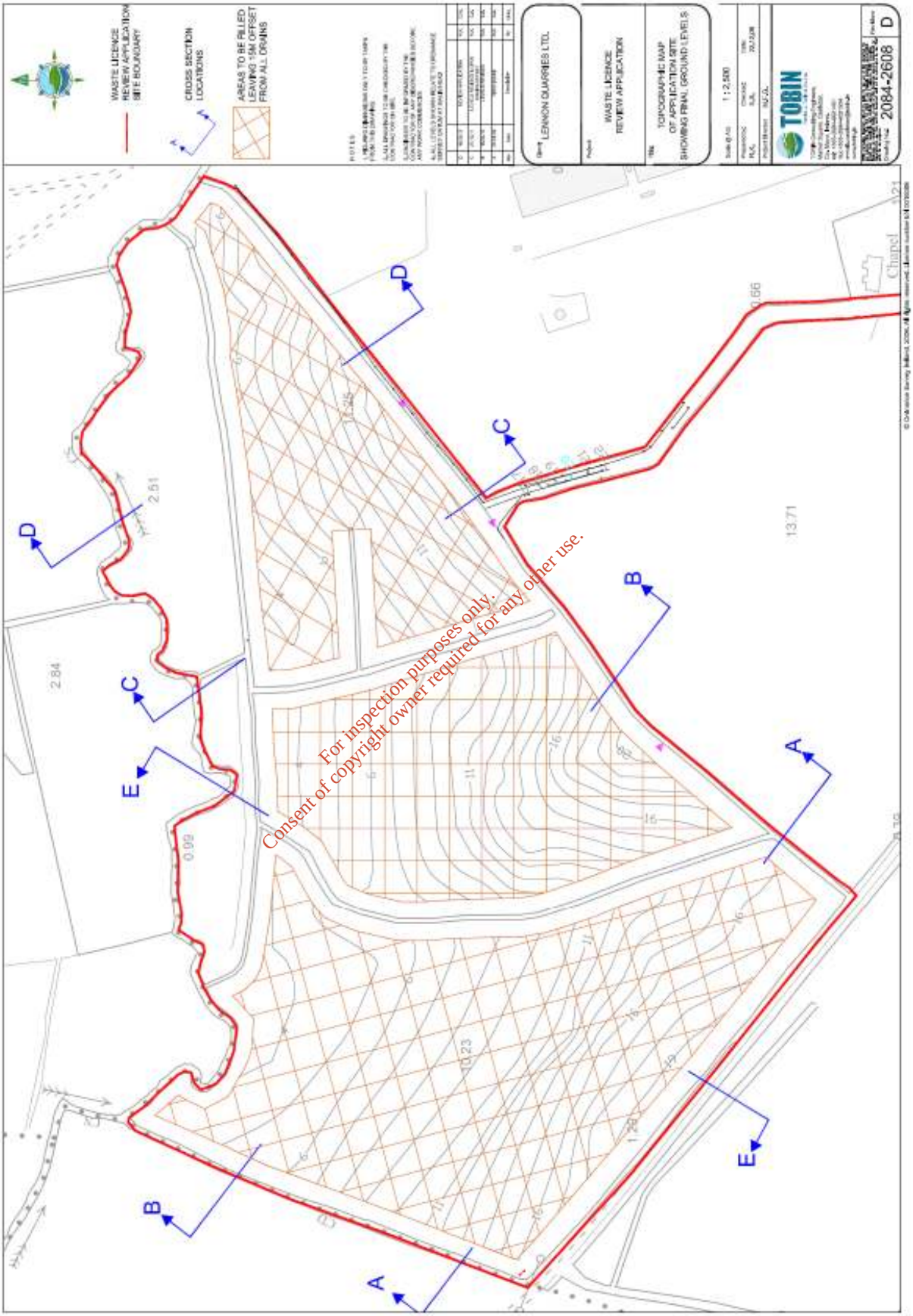


Figure 2.11.2: Proposed Topographic Map of Application Site, Showing Final Ground Levels

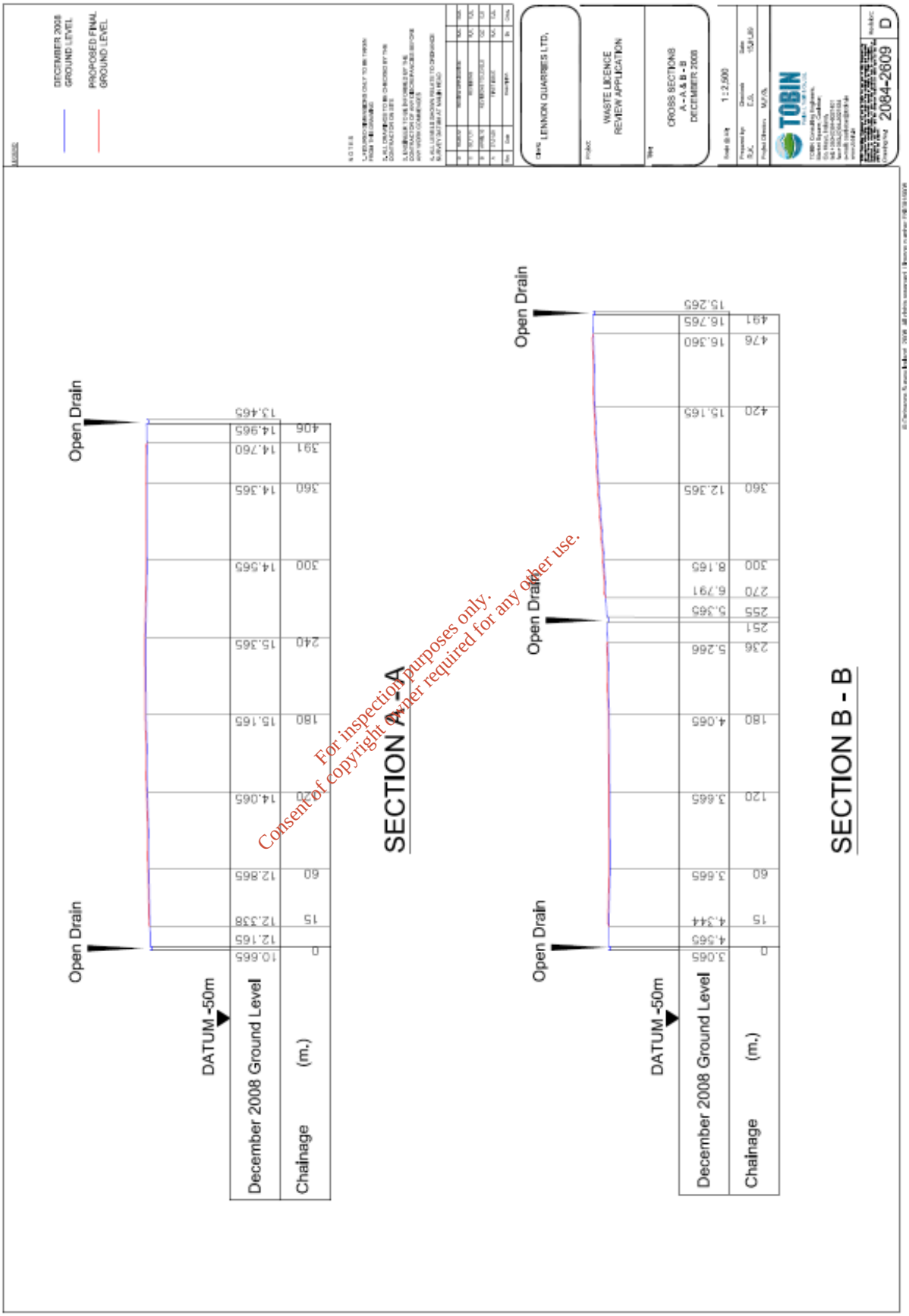


Figure 2.11.3: Cross Sections A-A and B-B

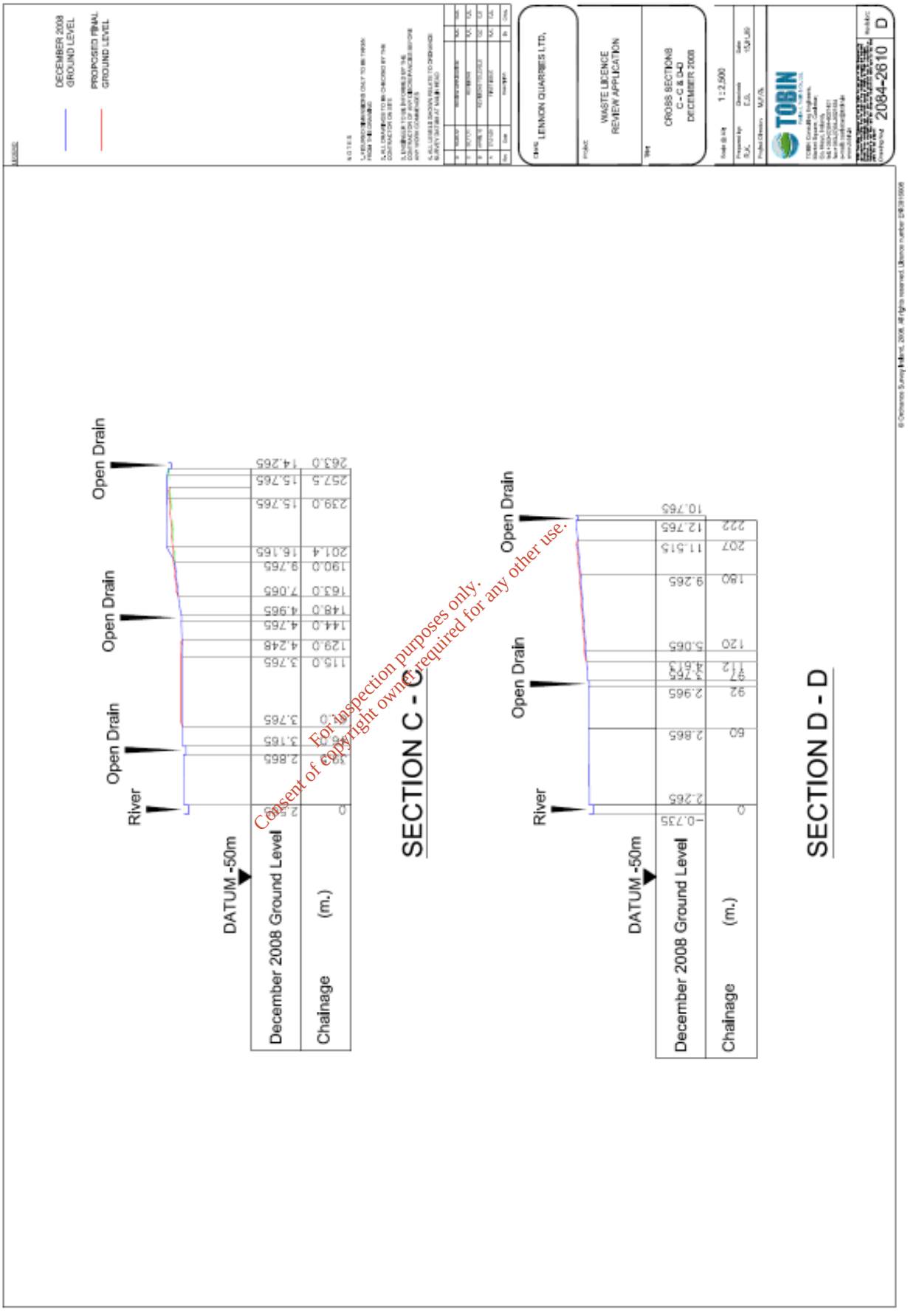


Figure 2.11.4: Cross Sections C-C and D-D

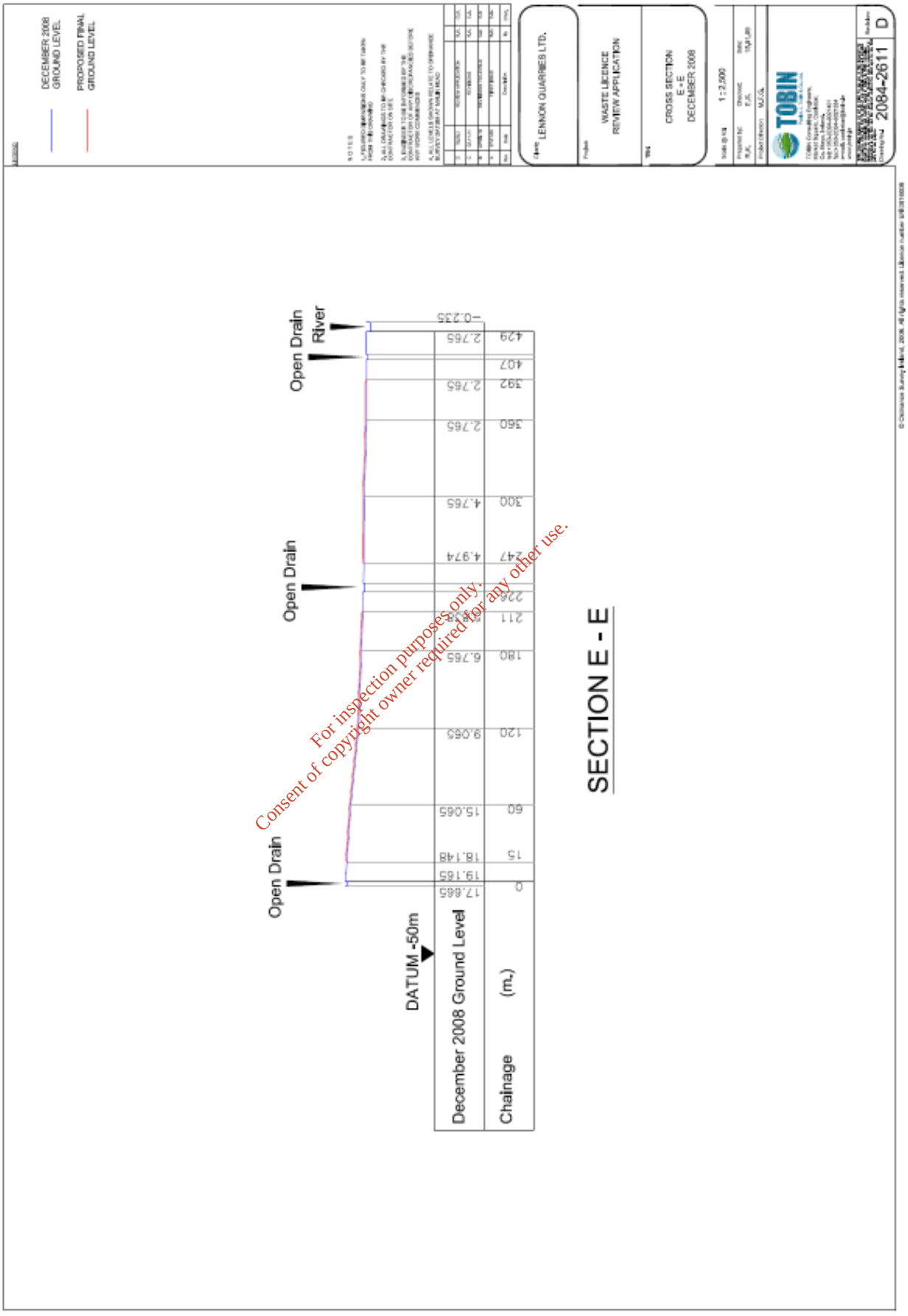


Figure 2.11.5: Cross Section E-E

2.13 Waste Arising

Waste arising on-site, as described below, is managed per the existing waste licence, and there are no changes required with regard to the application for the Review of the Licence.

The only Waste Arising at the facility are those materials moved to/stored in the Waste Quarantine Area (e.g. wood, plastics, metals, etc.) and wastes from the facility portacabin (office, canteen & store).

The wastes from the Quarantine skips are removed by authorised Waste Collection Permit Holders for disposal or recovery to authorised waste facilities.

The waste arising from the portacabin are small, due to the limited nature of the operation (i.e. only one Deputy Facility Manager/Machine Operative onsite). All wastes in the portacabin are divided into 'Recyclable Waste' and 'Landfill Waste' and appropriately disposed of/recovered.

2.14 Raw Materials, Substances, Preparations and Energy

The only fuels required at the Site are Diesel (ca. 100 Litres/week) and Hydraulic Oil (ca. 40 Litres/annum), to run the onsite plant (Hitachi 200 excavator) and the small generator required to provide electricity to the site accommodation (Portocabin). It is not proposed to store any fuel onsite. A fuel tanker will visit the site, when required and fill the onsite plant (Hitachi 200 excavator).

Water will be provided to the facility (Portocabin) by tanker, and stored in a holding tank.

Soil and Stone accepted at the facility is recovered/reclaimed, by being spread out over the site, in compliance with the existing waste licence; there are no 'Product Materials' produced by this recovery/reclamation process. There is no change in this regard in the application for the Review of the Licence.

No chemicals (e.g. Insecticides, Herbicides, Rat Poisons, Cleaning Agents, Water Treatment Chemicals, Cooling Water/Boiling Water Additives, Laboratory Chemicals, etc.) are required or accepted at the facility and there is no change in this regard in the application for the Review of the Licence.

2.15 Energy Efficiency

The only 'Energy' proposed used at the site is that to run the Hitachi 200 excavator and the Generator (to provide electricity to the site Portocabin). To ensure energy efficiency, the facility plant engine is switched off when not in use and the generator only used when necessary to ensure energy efficiency.

2.16 Technical Competence and Site Management

The 'Management Structure' for the Lennon Quarries Ltd. Materials Recovery Facility, subject to the review of Waste Licence W0256-01 is presented below.

Lennon Quarries Ltd., is a local County Mayo owned/operated company, which provides employment to ca. 25 no. people in the Belmullet area. The companyis primarily a quarry/rock aggregate provider, with a large quarry located in Glencastle, Bunnahowen, Ballina, County Mayo. The company branched out into the Waste Management Area in 2005, when they applied for and received Waste Collection Permit CW276 from Mayo County Council.

Lennon Quarries Ltd is a member of the the Soil Recovery Association (SRA) which is a National Organisation affiliated to the Construction Industry Federation (CIF) which represents Members involved in the excavation, transport and recovery of soil and stones at authorised permitted and licensed soil and stone recovery facilities.

The SRA has been instrumental in preparing the new EPA Waste Licence Form and Guidance Notes for Waste Soils Recovery Facilities in conjunction with the EPA. In this regard the SRA had had extensive discussions with the EPA concerning the implementation of the new Regulations including meetings on 12/6/2008 and more recently on 29/1/2009.

In relation to it's site at Tallagh, Belmullet, Co. Mayo, Lennon Quarries Ltd. previously held a Waste Facility Permit from Mayo County Council for the site (Ref.: PER 144). In 2009, Lennon Quarries Ltd applied for a Waste Licence for the operation of the Tallagh site. The Waste Licence was granted in May 2011. The site is operating under the existing waste licence, W0256-01, since grant of the licence. It is this licence, W0256-01, for which Lennon Quarries Ltd are applying for a Review (EPA ref: W0256-02)

.

All personnel working at the Waste Licenced Facility are qualified on the basis of appropriate education, training and experience (as is required) and all are fully aware of the requirements of EPA Waste Licence W0256-01.

In the absence of direct Waste Management Training within Ireland at this time, and based on the Scale and Nature of this facility, alternative/equivalent training of the Waste Licence Site Management has been completed, on the requirements of Waste Licence W0256-01.

Lennon Quarries Ltd. track record in the Waste Management area indicates that they are a company determined to operate in an organised and efficient manner, in strict compliance with the relevant permits/licences, and at all times ensuring that protection of the environment is foremost in their company practices.

- **Mr. T.J Lennon** is the owner/managing director of Lennon Quarries Ltd.
- **Mr. Dermot Lennon** is the 'Facility Manager' of the Tallagh site. It is Mr. D. Lennon's responsibility to ensure that the facility is operated in full compliance with any conditions imposed by the EPA Licence. He is the person in ongoing contact with the EPA in relation to Licence compliance. Licence compliance may require the sub-contracting of works to contractors (eg. upkeep of fencing, gates, etc.) and/or consultants (eg. environmental

monitoring, completion of AER Reports, topographic surveying, etc.). It is Mr. D. Lennon's responsibility to communicate and manage these sub-contracts.

- **Mr. T.J Lennon (Junior)** is the 'Deputy Facility Manager' and 'Machine Operative'. It is Mr. T.J. Lennon (Junior)'s responsibility for the day-to-day operation of the facility. In compliance with the existing Waste Licence W0256-01, he will open and close the facility on a daily basis, accept waste, inspect waste, quarantine unauthorised wastes, record waste arrivals and arisings, spread the imported material over the site and control all abatement/treatment systems onsite.
- **External Consultants** will be contracted to carry out the environmental monitoring and associated reporting conditioned under the EPA Waste Licence. The consultants will report directly to the Facility Manager.

2.17 Accident Prevention & Emergency Response

The Material Recovery Facility is operated in compliance with the latest Health & Safety Regulations. In relation to 'Accident Prevention and Emergency Response', there are 2 contingencies that must be allowed for:

1. Accidental fuel spillage;
2. Fire within the facility.

Notification:

In the event of an emergency the following are to be notified.

1. Fire Services – in the event of a fire or a significant fuel spillage or serious accident involving mobile plant;
2. Ambulance Services/Medical Team – should there be a threat to human life or serious injury;
3. Gardai – In the event of fire, explosion or road accident;
4. Senior Personnel – Lennon Quarries Ltd. Managing Director - Mr. T.J. Lennon and Facility Manager - Mr. Dermot Lennon;
5. Environmental Protection Agency;
6. North Western Fisheries Board – should there be any threat to watercourses in the area of the spillage.

Control of Operations:

In the event of any Accident/Emergency, the Deputy Facility Manager/Machine Operative will take control.

Communications:

It is essential that the following communication systems are available for priority usage during an emergency:

1. Fire Services Radio Link;
2. Garda Radio Link;

3. Ambulance Services Radio Link – linking the mobile units to the medical officers and the hospital;
4. Private lines – either landlines or mobile phones to enable contact between all parties concerned and their respective headquarters.

All parties involved in the Emergency Response Procedure have been issued with these procedures. Any further recommendations by the Agency will be adhered to.

Response Procedures:

1. Accidental fuel spillage:

Fuel is not stored on site and there are no proposals to store fuel on site. A Fuel Tanker will visit the site on a weekly basis (or when required) to fill the onsite plant (Hitachi 200 excavator) and generator (for Portocabin). Refuelling takes place on the hardstanding area of the site access road, adjacent to the site office. Booms and spill kits are kept adjacent to this.

In the event of a larger fuel spillage, either from the site plant or refuelling tanker, the emergency procedures listed below will be followed:

In the event of a threat to surface water the following is to be implemented:

• Inform the North Western Fisheries Board and the EPA;
• Contain any spillage within the perimeter drain locally, as far as possible, by damming with excavated material or booms;
• Pump water held back by the dams into tanker or lined cell;
• Detect source and carry out necessary remedial works;
• Monitor situation hourly until threat is removed.

In the event of a threat to groundwater:

• Inform the EPA;
• Detect source and carry out necessary remedial works;
• Monitor situation daily until threat is removed.

In the event of a threat to outside the site:

• Detect source;
• Inform the EPA;
• Monitor extent of contamination;
• Inform public if risk is posed;
• Take appropriate action to alleviate situation.

2. Fire in the Facility:

Fire within site confines:

• Call Fire Services;

• On arrival of Fire Services liaise with fire officer and follow his directions.

Fire in incoming vehicle:

• Call Fire Services;
• Instruct driver to unload at Inspection Area;
• Initiate on site fire drill;
• On arrival of Fire Services liaise with fire officer and follow his directions.

Fire outside boundary but adjacent to facility:

• Call Fire Services and direct to scene;
• On arrival of Fire Services liaise with Fire Officer and monitor closely for risk of fire spread into facility;

Explosion:

• Evacuate immediate area;
• Call Fire Services, Ambulance Services, Medical team in the event of fire or serious injury;
• Close main gate to incoming traffic;

The Deputy Facility Manager/Machine Operative takes precautions at the site in regard to fire abatement, response, training and awareness. These include:

• To provide and maintain suitable fire extinguishers in the Portocabin and site plant (Hitachi 200 excavator);
• Fire Safety Systems - telephone numbers of local fire, police and hospital are posted at head height on the wall in the site office;
• Emergency Response Procedures;
• Fire Prevention and Containment Design Features.

Lennon Quarries Ltd. carry appropriate 'Liability Insurance' as required.

2.18 Environmental Nuisances

2.18.1 Bird Control

Due to the inert nature of the soil and stone recovered & reclaimed at the licensed facility, bird activity does not present an environmental nuisance and there will be no change in this regard in the application for a Review of the Licence.

2.18.2 Dust Control

The unloading of material from the haulage trucks, and the subsequent movement/spreading of the inert material over the area of the deposition site, may produce dust on the site, during periods of dry weather. It is proposed that during extended periods of dry weather, a tractor with water bowser would be brought onto the site to sprinkle water over hardcore areas and the access road, to dampen down any dust. As the deposition site is located at a distance

from the main Belmullet-Ballyglass Road, it is not expected (even during periods of extended dry weather) that any dust emanating from the site would reach the main road.

2.18.3 Fire Control

Due to the inert nature of the soil and stone recovered & reclaimed at the site, there is very little risk of fire breaking out on the site. However, a fire extinguisher will be stored in the cabin of the site plant (Hitachi 200 excavator) and within the site Portocabin.

2.18.4 Litter Control

Due to the inert nature of the soil and stone recovered at the site, litter does not present an environmental nuisance and there will be no change in this regard in the application for a Technical Review. The Deputy Facility Manager/Machine Operative 'walk the site' once a week and recover any litter identified, for authorised disposal offsite.

2.18.5 Traffic Control

As discussed earlier in this EIS, based on the proposed annual intake of a maximum of 90,000 Tonnes, it is expected that there will be approximately 4,500 truckloads of soil and stone delivered to the site on an annual basis (i.e. a maximum of 90 truckloads per week). Such a small number of truck movements is not expected to have any effect on traffic in the area of the site.

2.18.6 Vermin Control

Due to the inert nature of the soil and stone recovered & reclaimed at the site, vermin do not present an environmental nuisance and there will be no change in this regard in the application for a Review of the Waste Licence.

2.18.7 Road Cleansing

A hardcore area (with a surface dressing of clean broken stone) has been developed close to the entrance gate of the deposition site. This allows haulage trucks to enter the site, turn, and deposit their material, along the perimeter of the hardcore area. Haulage trucks do not proceed It is beyond the hardcore area at the entrance to the deposition site. This avoids the situation of the wheels of the trucks coming in contact with soil deposition area. Minor debris that may be attached to the haulage trucks is expected to fall off during the trucks movement over the hardcore material on the access roadway, before the trucks move offsite onto the Belmullet-Ballyglass main road.

Based on the above, 'Road Cleansing' is not required on the site, or on the surrounding roads and there will be no change in this regard in the application for a Review of the Licence.

2.19 Phasing, Remediation, Decommissioning, Restoration and Aftercare

The site is currently licensed, per licence W0256-01, for soil recovery and deposition with a 1m Land Raise at the site. The Application for a Review of the Licence proposes no change to the final topographic level licensed under W0256-01; it is proposed that the same 1m Land Raise, as currently licensed, is maintained. The site will be phased as per the phasing drawing shown as **Figure 2.19.1.**

The site drawings with existing and proposed levels and cross sections provided in Section 2.11 clearly show the Land Raise by 1m, with a slope of 3:1 down to all existing perimeter surface water drains, which will remain untouched. The existing open surface water drains that cut through the Area of Waste Deposition, will also be raised by 1m, as shown on the Cross Section Drawings.

Following completion of the recovery activity in a particular section, topsoil will be spread evenly over the site to a minimum depth, after firming, of at least 300 mm. Any topsoil which is delivered to the site during the recovery activity will be stockpiled separately for this purpose. The site will then be prepared for seeding by raking or harrowing, and by rolling. The site will then be restored for agricultural purposes. All temporary fences will be removed. The land will be returned to productive agricultural land to be used for grazing probably for sheep or cattle and will be subject to standard agricultural practises.

Once the soil & stone recovery and land reclamation is complete, the site accommodation (Portocabin & Portoloo) will be removed from the site and the materials recovered. The site surface water drainage system (including 5 no. Settlement Ponds) will remain untouched, following facility closure. This will allow the surface water continue to be treated for suspended solids long after the facility has stopped accepting material for recovery/reclamation.

Figure 2.19.1: Phasing Plan

With regards to potential impacts relating to Surface Water and dust, the proposed proposals in the licence review to increase the annual tonnage from 24,900 to 90,000 tonnes provides an **environmental gain**.

The review of Waste Licence W0256-01 ensures that the phasing and restoration of the site will occur over a much shorter time period thereby speeding up the process by which the lands are seeded; stabilised and put back into productive agricultural use. the exact same proposed activity will occur as licensed i.e. a total of 265,000 tonnes of soil and stones but over a shorter time span (i.e. 2.5 – 3 years). This obviously minimises the potential for sedimentation of surface waters (not withstanding the control measures already in place) and it provides even greater compliance with Condition 6.11.3 of Waste Licence W0256-01: *Developed areas shall be seeded as soon as practicable after placement of cover soils, in a manner appropriate to the surrounding area and in any event in accordance with condition 10.2.2.*

Lennons Quarries Ltd. have the support of the local community with regards to the matters contained in the Licence Review. This is in the form of letters of support for the proposed increase in annual tonnage from all the nearest residential dwellings (which would be considered the nearest potential noise and dust sensitive receptors).

Furthermore, there is the full support of the local GAA Club, an adjoining land-use and a major part of the local rural community. Finally, Lennon Quarries have a letter of support from the Fisheries Board for the proposed changes. Therefore Lennon Quarries Ltd. have demonstrated to the Agency that the licence review is supported by the local community as being a positive and pro-active step with environmental gains and benefits.

2.20 Justification of the Activity as a Recovery Activity for the Consequential Benefit to Agriculture.

The existing licensed site at Tallagh, Belmullet, Co. Mayo, formerly operated as an authorised waste permitted facility for the purpose of the consequential benefit to agriculture under a Waste Permit No. Per 144 06/07/2005.

This Waste Permit was granted in January 2006, under the Waste Management (Permit) Regulations, 1998 and authorised the activity under Class 10 of the Fourth Class 10 of the Fourth Schedule of the Waste Management Act 1996 (as amended): "*The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system*"

During the decision process on Waste Licence W0256-01, Carton Rural Consultants were engaged to comment on the soil recovery activity and to determine whether the site met the necessary criteria of having a beneficial impact upon agriculture as a consequence of the land reclamation works.

The conclusion was that the existing and proposed land reclamation works will have a three fold **beneficial impact upon agriculture**: Firstly, the lands will be reclaimed to more productive agricultural lands which will result in a higher potential stocking rate of livestock; greater grass yields and therefore greater potential agricultural benefit. Secondly, the rental value of the land will increase as a consequence of the improvements to the terrain, soils and drainage which will therefore have a consequential benefit to agriculture. Thirdly, the value of the reclaimed land as good agricultural grazing lands will increase as a consequence of the recovery activity which will have a long term agricultural benefit.

They conclude: "*I am satisfied that the works carried out to date are recovery works for the benefit to agriculture and that the proposed works (i.e. the filling of the rest of the site as proposed in the waste licence application) will in my professional opinion have a consequential benefit to agriculture by virtue of the improved land and its increased agronomic value, as it is progressively reclaimed*". **Figure 2.20.1** Contains a copy of the Carton Rural Consultants report:

Figure 2.20.1: Agronomy Report on Land Reclamation Activity at Tallagh

Agronomy Report
on
LAND RECLAMATION ACTIVITY
at
TALLAGH, BELMULLET CO. MAYO

Dated	7th January 2011
On Behalf of:	Lennon Quarries Ltd.
Subject Matter	Appraisal of Agricultural impact of Land Reclamation Activity as part of Application for Waste Licence for Lennon Quarries Ltd. at Tallagh Belmullet Co. Mayo

Contents

1. Carton Rural Consultants Profile

1.1. I James Carton am a director of Carton Rural Consultants, an agricultural and environmental consultancy firm based in Mullingar Co. Westmeath. I hold a degree in Agricultural Science from University College Dublin together with a Diploma in Environmental Assessment. I have been working as an Agricultural Consultant for 14 years.

1.2. As an agricultural consultancy group, we have wide experience in assessing the impact of major infrastructural projects on agriculture, both at an individual farm level and at a regional and national level. In this regard we have carried out studies on behalf of many Local Authorities in relation to major road development projects. We have also carried out studies on behalf of private individuals and companies in relation to industrial projects and land reclamation projects for the consequential benefit to agriculture. In addition we have carried out assessments on the effect of infrastructural projects on behalf of the ESB, the NRA and Iarnrod Eireann.

2. *Methodology*

2.1 Carton Rural Consultants was contracted by Lennon Quarries Ltd. In December 2010 to assess the site and environs of an existing land reclamation activity at Tallagh Co. Mayo. The site has operated since 2006 as a land reclamation activity under a waste permit from Mayo County Council (WCP-MO-09-0276-01). The existing available documentation and correspondence relating to the application was reviewed at our offices in Mullingar Co. Westmeath. The site was visited on 29th December 2010. The entire site area was walked with photographs taken and information recorded on the topography, drainage on the site, soil type and vegetation currently growing on the site together with type and quantity of livestock present. An assessment was made on the current agricultural potential of the site based on agricultural infrastructure present and availability of forage on the site.

2.2 The land in the surrounding area was visually assessed from the local roads network and land use, stock type and farming activity in the area recorded. Statistics from the Central Statistics Office Ireland (CSO) were obtained to give us a picture of farming activity for the DED that the site is located in and also for county Mayo as a whole.

2.3 The soils in the vicinity of the site were identified using data from the Geological Survey of Ireland (GSI), An Foras Taluntais, National Soil Survey of Ireland-Soil Map of West Mayo, scale 1:(126,720).

2.4 The Auctioneers in the area were contacted to ascertain the demand for rented land in the area and confirm the demand for reclaimed land such as that proposed on the site. This was for the purposes of establishing that there is a clear consequential benefit to agriculture from the existing and proposed works (see **Appendix 4** and **5**).

3. Description of Site and Environs.

3.1 Proposed Land Reclamation Site

3.1.1 The land reclamation site is a 20.5 hectare area of land situated at Tallagh Bellmullet Co. Mayo. The site is predominately made up of drained, cut-away peat land with the soil recorded as Blanket Peat -soil series Glenamoy Cutover on the soil maps for the area. The cut-away peat land has been recolonised naturally with mosses, rushes, knot grass and other herbaceous weed species. The site is currently used as part of waste permit (WCP-MO-09-0276-01) for a class 10 activity (land reclamation activity for the consequential benefit to agriculture) and has been in operation since January 2006. A small portion of the site has been infilled satisfactorily as part of this process, and the remainder of the area is currently been used to graze a low number of sheep. The subject lands have little or no agricultural benefit at present due to the poor nutritional value of the grass present on the site and the fact that historic peat extraction on the site has left the topography of the ground uneven and unsuitable for agricultural machinery.

3.1.2 Since the site is not currently used for intensive agriculture, there will be no negative agricultural impact of the land reclamation activity on the immediate site area. In fact since the land reclamation activity involves land levelling, reinstatement of topsoil and reseeding with a good quality grass seed mixture, the end result will be beneficial to the area from an agronomy perspective.

3.2 Soil Type in the Surrounding Area of the Proposed Site.

3.2.1 The most extensive soil types that feature in the area are Blanket Peats, Gleys and Dry Podzols. Moisture holding capacity in the soils is good. **A number of field units in the surrounding area have been reclaimed and improved in the past as evidenced during our site visit.** The use range of these soils depends largely on slope and altitude but generally they are most suitable for grazing stock and production of hay and silage.

3.3 Land Use in the Surrounding Area of the Proposed Site.

3.3.1 The climate at the site is typical of west Connaught with no great extremes of temperature and high levels of rainfall. The land in the District Electoral Division (DED) is most suitable for grazing and hay or silage production. Most of the surrounding area is presently under grass with approximately 3% of the available land area used for non-grass production. **A number of field units in the surrounding area have been reclaimed and improved in the past as evidenced during our site visit.**

3.3.2 There were 12,493 farms identified in Co. Mayo from the 2000 Census of Agriculture* with the average farm size of 21.9 hectares Agricultural Area Used (AAU) being used which is smaller than the national average of 31.4 hectares AAU. The average farm size of the 156 farms identified in the Belmullet DED area is 14.6 hectares. Agriculture in this part of Mayo is predominantly grassland based in nature with cows and cattle making up 64% of the livestock unit equivalents in the DED and sheep accounting for 36% of the total livestock units. Dairy cows account for 17% of the total cattle numbers in the Belmullet DED but no dairy units were evident on the day of the site visit. Horses were not evident in the area on the day of the site visit. Farms in this part of County Mayo are operated as family run businesses with non-family workers representing less than 2% of the total labour input on farms in the area.

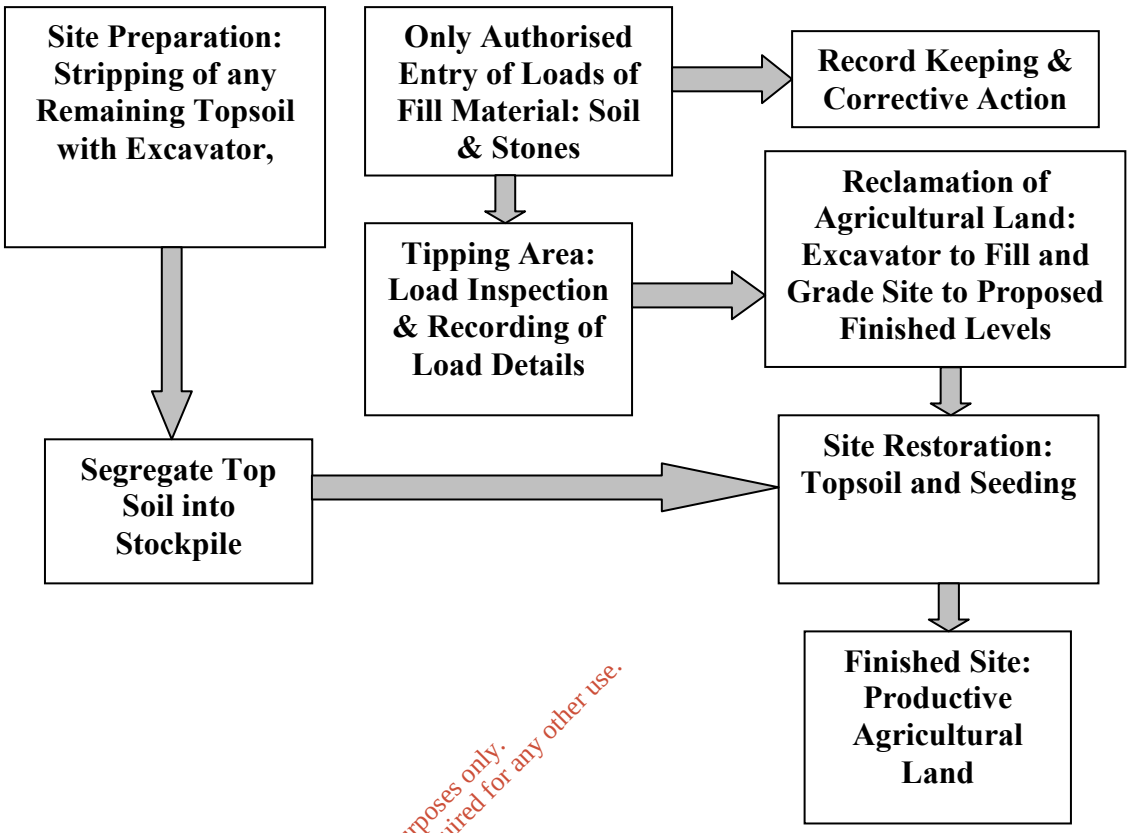
* Figures from the 2000 Census of Agriculture.

4. Works Required to Optimise Agricultural Use of Site in the Future.

4.1 The reclaimed area should be returned to grassland agricultural production once infilling is completed. Due to the long time scale of the project, it is recommended that the site will be divided into phases or subplots and that the site will then be filled and recovered in a structured fashion with no more that one plot being reclaimed at any one time. Each plot will be fully restored and reseeded prior to filling commences in the next plot. The individual area infilled and reclaimed each year is to be reseeded with a good quality grass seed mixture, suitable for grazing sheep and cattle and the land returned to full agricultural production as soon as possible the following spring.

4.2 Any remaining topsoil present on site should stripped from the area to be reclaimed and stored separately for reuse after each area is filled. The infilled area should be overlain with a layer of top-soil ca. 300mm deep, harrowed and sown with a suitable grazing grass-seed mixture with lime and fertiliser applied as required. Animals should be excluded from the reseeded area until the grass is established and growing well. Animals should also be excluded from surface water drains on the site and from the unloading area and the area of the site currently been infilled during that grazing season. The external boundary of the land owned by the applicant at this location is to be fenced to ensure stockproofness and an animal handling facility (holding pen and handling race) is to be provided to facilitate loading/unloading of animals.

Flow-Chart of On-Site Processes



5. *Possible Impacts of Land Reclamation Activity.*

5.0.1 In order to assess the impact that any major development may have on agriculture either at individual farm level or at a local, regional or national level it is necessary to:

- Define the possible impacts
- Assess when these impacts may occur during the recovery operation or upon completion of the land reclamation works.
- Assess what mitigation measures will be provided to prevent and reduce any possible impacts.

5.0.2 The impact on agriculture and farming generally of any substantial development will vary from farm to farm and from development to development depending on a number of factors. The relevant potential impacts are as follows: -

- Noise during construction, operation and upon completion of project.
- Dust during construction, operation and upon completion of project.
- Impact on surface water construction, operation and upon completion of project.
- Impact on groundwater construction, operation and upon completion of project.
- Effect in Agricultural Output construction, operation and upon completion of project.

5.1 Noise

5.1.1 Noise is of significance for certain farm animals with horses more sensitive to noise than other farm animals. Noise will be generated from lorry deliveries to the site and the use of a track machine on the site to move the delivered materials. Grazing cattle and sheep are largely unaffected by noise as they become accustomed to traffic and construction sounds. This is evident from the fact that animals graze contently in fields along busy roads. The site is surrounded by good quality land with well-managed farms adjacent to the site, which do contain farm animals.

5.1.2 The current road network in the area carries heavy goods vehicles as well as domestic car traffic. Modern agricultural machinery generates a variable level of noise that farm animals are exposed to. The animals moved onto the site and on the farms in the area will have grown accustomed to machinery noise and road traffic noise as a result. The impact of noise on farming in the area during operation will therefore be insignificant.

5.2 Dust

5.2.1 The proliferation of dust during operation has a potential nuisance value. If produced in high volumes near milking parlours or on-farm bulk milk storage tanks may constitute a risk as a source of contamination in the milk. Dairy cows constitute 17% of the total bovine numbers in the Belmullet DED.

5.2.2 The mitigation measures to reduce the production of dust have been detailed in the original waste licence application to the EPA. The site will be filled and recovered in a structured fashion with no more that one phase being filled at any one time and then that phase being restored to full agricultural production when infilling goes on to the next phase. The reseeding to grass of individual reclaimed areas as soon as possible after infilling will minimise any longer-term dust issues. In practice all dairies are now required to have sealed entrances and so dust contamination of the milk during operation of the site should not be an issue, particularly given the fact that their appears to be no dairy farms directly adjacent to the site.

5.3 Impact on Surface Water

5.3.1 Surface water from the site is collect via open drains on the boundary of the site and from open drains that intersect the site. These surface water drains discharge into the River Clooneen, which borders the north of the site, with its waters flowing in an easterly direction away from site. In addition to the mains water supply in the area, a high proportion of farm animals depend on surface waters for drinking. Furthermore, consumer demands and quality assurance schemes dictate that high standards of purity be maintained in surface waters.

5.3.2 Buffer zones and settlement ponds are the proposed mitigation measures outlined in the original waste licence application to the EPA to ensure that no contamination of surface waters occurs during the operational phase of the site. Given the operational mitigation measures outlined, the impact on surface waters during operation will be negligible.

5.4 Impact on Groundwater

5.4.1 Any contamination of the groundwater from the operational phase could have a serious affect on farming in the area particularly farm homes and farmyards that receive their water supplies from local groundwater sources. As with surface waters, consumer demands and quality assurance schemes dictate that the highest standards of purity are maintained in groundwater.

5.4.2 The measures to ensure that no contamination of groundwater occurs are outlined in the original waste licence application to the EPA. The material to be accepted at the site is inert waste soil and stones. No groundwater wells were identified in close proximity to the site supplying water for domestic and animal needs. Given that the materials to be deposited are non-leachate forming and given the mitigation measures proposed, the impact of groundwater contamination on farming in the area during operation and upon completion of the project will be negligible.

5.5 Impact on Agriculture Locally and Nationally.

5.5.1 The reclamation of this site will have **positive and beneficial impacts upon agriculture** and agronomy and will provide additional grazing area for stock in the Belmullet area. Local auctioneers have confirmed the strong demand for grazing land for rental in the area, particularly for improved reseeded land (this is outlined in letters contained within **Appendix 4** and **Appendix 5**).

A number of field units in the surrounding area have been reclaimed and improved in the past as evidenced during our site visit. The use range of

these soils depends largely on slope and altitude but generally they are most suitable for grazing stock and production of hay and silage. The existing and proposed land reclamation works will blend in with the existing local landscape.

Farming and agriculture production nationally is carried out over 3,500,000 hectares on in excess of 200,000 farm units. This activity will cause no loss of agricultural production but rather will result in greater farming activity in this immediate area. The impact on agriculture locally and nationally will be positive.

The existing and proposed land reclamation works will have a three fold beneficial impact upon agriculture:

1. The lands will be reclaimed to more productive agricultural lands which will result in a higher potential stocking rate of livestock; greater grass yields and therefore greater potential agricultural benefit.

2. The rental value of the land will increase as a consequence of the improvements to the terrain, soils and drainage which will therefore have a consequential benefit to agriculture.

3. The vale of the reclaimed land as good agricultural grazing lands will increase as a consequence of the recovery activity which will have a long term agricultural benefit. This is independently confirmed by the two separate auctioneers in **Appendix 4** and **Appendix 5**.

6. *Monitoring*

6.1 In recognition of the importance of farming and agriculture to the local economy it is important that detailed monitoring procedures as recommended in the original waste licence application to the EPA is to be carried out on the site, in the adjacent Clooneen river

7. *Conclusion*

7.1 This site at Tallagh Belmullet Co. Mayo has operated since January 2006 as a land reclamation activity under a waste permit from Mayo County Council. The site was used historically for peat extraction. The lands of the proposed deposition site are currently unsuitable for economic agricultural production, as the land is not level; the soil type is poor; and the current forage species present have poor nutritional value. Farming is the principle activity in the surrounding area and there is widescale evidence of other lands in the vicinity of this site having been reclaimed in the past to productive grazing plots. The farms in the area generally concentrate on dry stock production with dairy farming also carried out in the DED but not evident in the immediate area of the proposed site.

7.2 The site will be filled and recovered in a structured fashion with no more that one plot being infilled at any one time and then that plot being restored to full agricultural production before filling commences in the next plot.

7.3 The potential impacts on agriculture have been identified as a potential increase in noise, dust, and potential impacts on surface or groundwater.

7.4 Mitigation measures to cope with all of the potential impacts have been detailed in the original waste licence application to the EPA, and as the site will not be allowed to operate without these safe guards being put in place, the impact of the proposed activity will be insignificant on farming and agriculture generally in the area.

7.5 The existing and proposed land reclamation works will have a three fold **beneficial impact upon agriculture**: Firstly, the lands will be reclaimed to more productive agricultural lands which will result in a higher potential stocking rate of livestock; greater grass yields and therefore greater potential agricultural benefit. Secondly, the rental value of the land will increase as a consequence of the improvements to the terrain, soils and drainage which will therefore have a consequential benefit to agriculture. Thirdly, the value of the reclaimed land as

good agricultural grazing lands will increase as a consequence of the recovery activity which will have a long term agricultural benefit.

7.6 I am satisfied that the works carried out to date are recovery works for the benefit to agriculture and that the proposed works (i.e. the filling of the rest of the site as proposed in the waste licence application) will in my professional opinion have a consequential benefit to agriculture by virtue of the improved land and its increased agronomic value, as it is progressively reclaimed.

Signature _____ Date 07-01-2010 James Carton
B.Agr.Sc., Dip EIA (mgmt.), MACA

Appendix 1 Details of my Qualifications and Experience

2.1 Honours Degree in Agricultural Science B.Agr.Sc., from University College Dublin in 1992

NUI Diploma in Environmental Impact Assessment, from University College Dublin in 1998

NUI Certificate in Sustainable Rural Development, from National University of Ireland Maynooth
in 2000.

Working as an Agricultural Consultant since January 1996 providing Agricultural, Environmental and Rural Consultancy advice to individuals, corporate sector and government agencies

Appendix 2 References

An Foras Taluntais, National Soil Survey of Ireland-Soil Map of West Mayo, scale 1:(126,720).

Central Statistics Office Ireland (CSO) Agricultural Survey 2000, Farm Structure Survey 2007

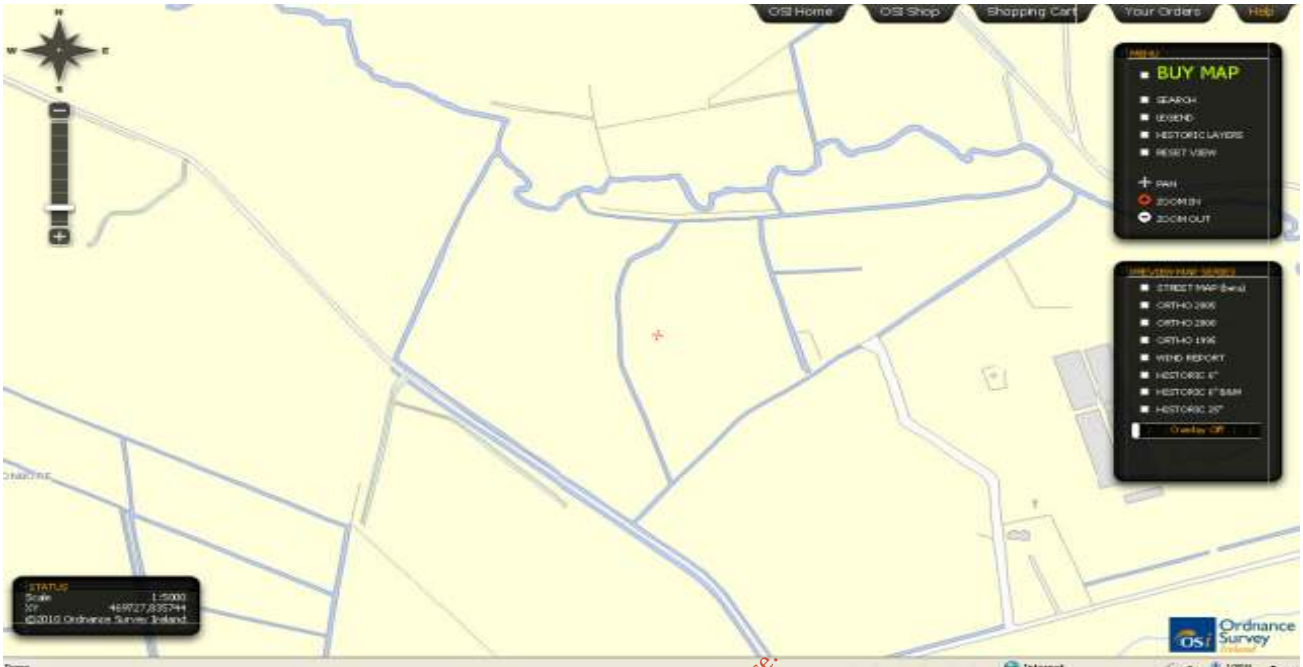
Department of Communications, Energy and Natural Resources Geological Survey of Ireland (GSI) Bedrock Geology maps and Groundwater Vulnerability map

Environmental Protection Agency, Surface water quality maps, ground water quality maps.

Gerry Coyle Auctioneer Belmullet Co. Mayo

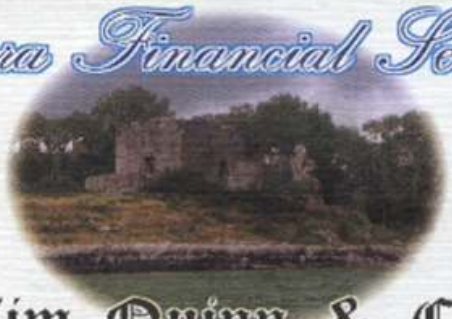
Tim Quinn & Co. Auctioneer Belmullet Co. Mayo

Appendix 3 Map of Site



Appendix 4. Letter from Tim Quinn & Co. Auctioneer.

Carra Financial Services



Tim Quinn & Co.
Auctioneers

04/01/10

To Whom It May Concern,

This is to certify that there is a vibrant demand for good quality grass land to rent on an ongoing basis in the Belmullet area. I have also a list of clients who are interested in purchasing such land and in fact our company has sold a number of farms within the last six months.

I understand Mr. T.J. Lennon has purchased land adjacent to Belmullet with a view of reclaiming a significant portion of it. Obviously this will increase the market value of the property and will greatly enhance its appearance. This is most desirable as a community sports complex was constructed along side the farm earlier this year.

Signed,

Diarmuid

Diarmuid
C/o Tim Quinn Auctioneers

Appendix 5. Letter from Gerard Coyle Auctioneer.

GERARD COYLE

AUCTIONEER VALUER AND ESTATE AGENT
TEL/FAX 097/82280
Ballina Rd. Belmullet Co. Mayo.

Ref.;

To whom it concerns I wish to state the following, I am an Auctioneer and Valuer In the Belmullet area of North Mayo I have continued requests from clients for good quality reclaimed grazing land and the requests far exceed the amount of land available for both purchase and rental. The normal quality of land that comes available in the area is very poor quality bogland and is unsuitable for grazing milk and beef cattle so any reclaimed land would add value to future farming enterprises in the area .

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Gerard Coyle.