



ENVIRONMENTAL IMPACT STATEMENT
FOR THE INTENSIFICATION OF
DERRYCLURE LANDFILL
CO. OFFALY
Volume 1 of 3 – Non-Technical Summary

ORIGINAL

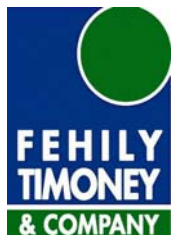
Prepared for:

Offaly County Council
Charleville Road
Tullamore
Co. Offaly

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October 2008





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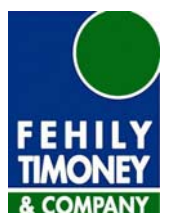
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Abstract: This document comprises part of the EIS for the proposed intensification of Offaly County Council's landfill at Derryclure, Co. Offaly. The site operates under a waste licence from the Environmental Protection Agency (W0029-02). This document forms Volume 1 of the EIS – Non Technical Summary.

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PREAMBLE

Offaly County Council proposes to intensify activities at Derryclure landfill from 40,000 tonnes to 100,000 tonnes per annum. The landfill straddles the two townlands of Derryclure and Killeigh, Co Offaly. The development is subject to the requirements of the Planning and Development Acts 2000 – 2006.

Other associated activities as part of the development include the extension of operational hours at the facility and upgrade of the facility entrance.

The site currently operates under a waste licence (W0029-02) issued by the Environmental Protection Agency. A review of this licence will be required as part of the proposed development.

As part of these works, an environmental impact statement is required to be submitted to An Bord Pleanála for approval. An EIS is a report that contains the information required so that the environmental impacts of a project can be assessed. It describes the proposed development, predicts the relevant possible or certain impacts of the proposal on the environment and outlines safeguards to mitigate or otherwise control any impacts that may be significant. It informs the Environmental Impact Assessment process, a procedure which entails the systematic consideration of the impacts of a proposed project on the environment and human beings.

Offaly County Council has appointed Fehily Timoney & Company to prepare the EIS for submission to An Bord Pleanála.

This EIS has been prepared in accordance with the following legislation and guidance documents:

- Council Directive 85/337 on the Assessment of the Effects of Certain Public and Private Projects on the Environment (as amended by Directive 97/11)
- The Planning and Development Acts 2000-2006
- *Guidelines on the Information to be contained in Environmental Impact Statements* (EPA, 2002)
- *Advice notes on Current Practice (in the preparation of Environmental Impact Statements)* (EPA, 2003).

This EIS has been prepared using the grouped format structure recommended in the *Guidelines on the Information to be Contained in Environmental Impact Statements*. It comprises three volumes:

- Volume 1: Non-Technical Summary (this volume)
- Volume 2: Main Report
- Volume 3: Appendices

1. INTRODUCTION

1.1 The Applicant

The Applicant is Offaly County Council, Áras an Chontae, Charleville Road, Tullamore, Co Offaly.

1.2 The Need for the Development

The intensification of waste intake at Derryclure landfill will provide much needed capacity for the Midlands Region, given the pending closures of Ballydonagh, Ballaghveny and Kylestalesha landfills respectively. Offaly County Council also wishes to assist other local authorities to dispose of their waste in the short term.

Intensification, as sought in this application will allow Offaly County Council to continue to invest in the necessary infrastructure to maintain Derryclure as a viable facility.

1.3 Pre-submission Consultations

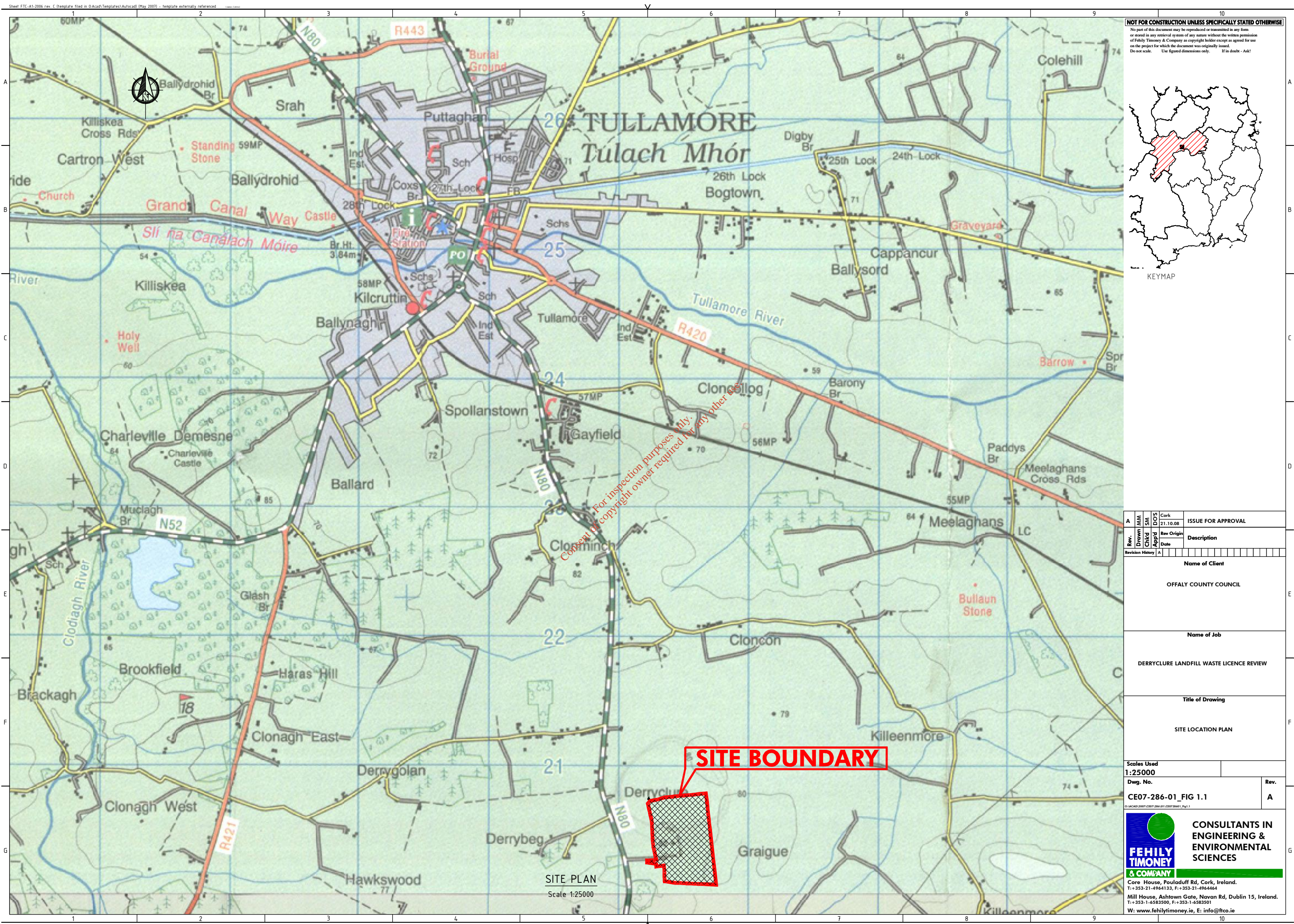
A number of statutory and non-governmental bodies were consulted during the preparation of this EIS, including An Bord Pleanála and the Environmental Protection Agency. Letters were also sent to 17 statutory bodies, non-government organisations and public representatives to inform them of the proposal. A number of submissions were received in relation to the proposed development. The issues raised have been addressed, where practicable, in the relevant sections of the main volume of this EIS.

1.4 Alternatives to the Proposed Development

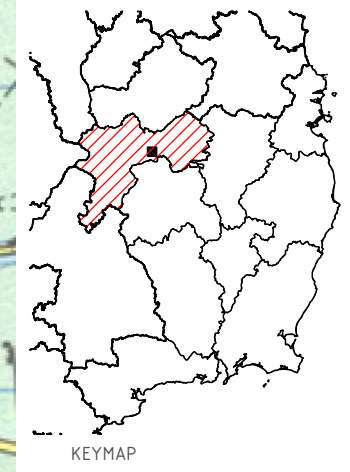
Alternatives to the proposed development were examined as part of the EIS preparation.

The relocation of waste acceptance activities to an alternative site was considered by Offaly County Council including the development of a new Greenfield site. This option was rejected on the grounds of conflict with national policy, time constraints and economic viability.

The 'do nothing' scenario would result in a shortfall of landfill capacity in the Midlands Region in the short and medium term.



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Rev.	Drawn	Chkd	Appd	Rev Origin	Date	Description
Revision History	A					

Name of Client
OFFALY COUNTY COUNCIL

Name of Job
DERRYCLURE LANDFILL WASTE LICENCE REVIEW

Title of Drawing
SITE LOCATION PLAN

Scales Used
1:25000

Dwg. No.
CE07-286-01_FIG 1.1

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SITE PLAN
 Scale 1:25000

2. DESCRIPTION OF THE DEVELOPMENT

2.1 Existing Development

Derryclure landfill is in operation since 1977 and consists of an unlined cell which is based on the 'dilute and disperse' principle and more recently fully engineered landfill cells. The site itself occupies a total area of 29.6 ha. At the current permissible annual intake (40,000 tpa), the remaining lifetime of the landfill is approximately 24 years.

The site was initially licensed by the EPA in November 1999. A licence review was granted by the EPA in 2003 allowing the development of an additional nine lined landfill cells. The first of these was constructed in 2006, with landfilling to this cell commencing in late 2006. This coincided with closure of the unlined cell which was capped in 2008.

Existing infrastructure at the site includes:

- Unlined cell (70,000 m²)
- Lined cells (27,500 m²)
- Administration office and welfare facilities
- Weighbridge and weighbridge office
- Landfill gas management system
- Leachate management system
- Surface water management system
- Civic amenity facility

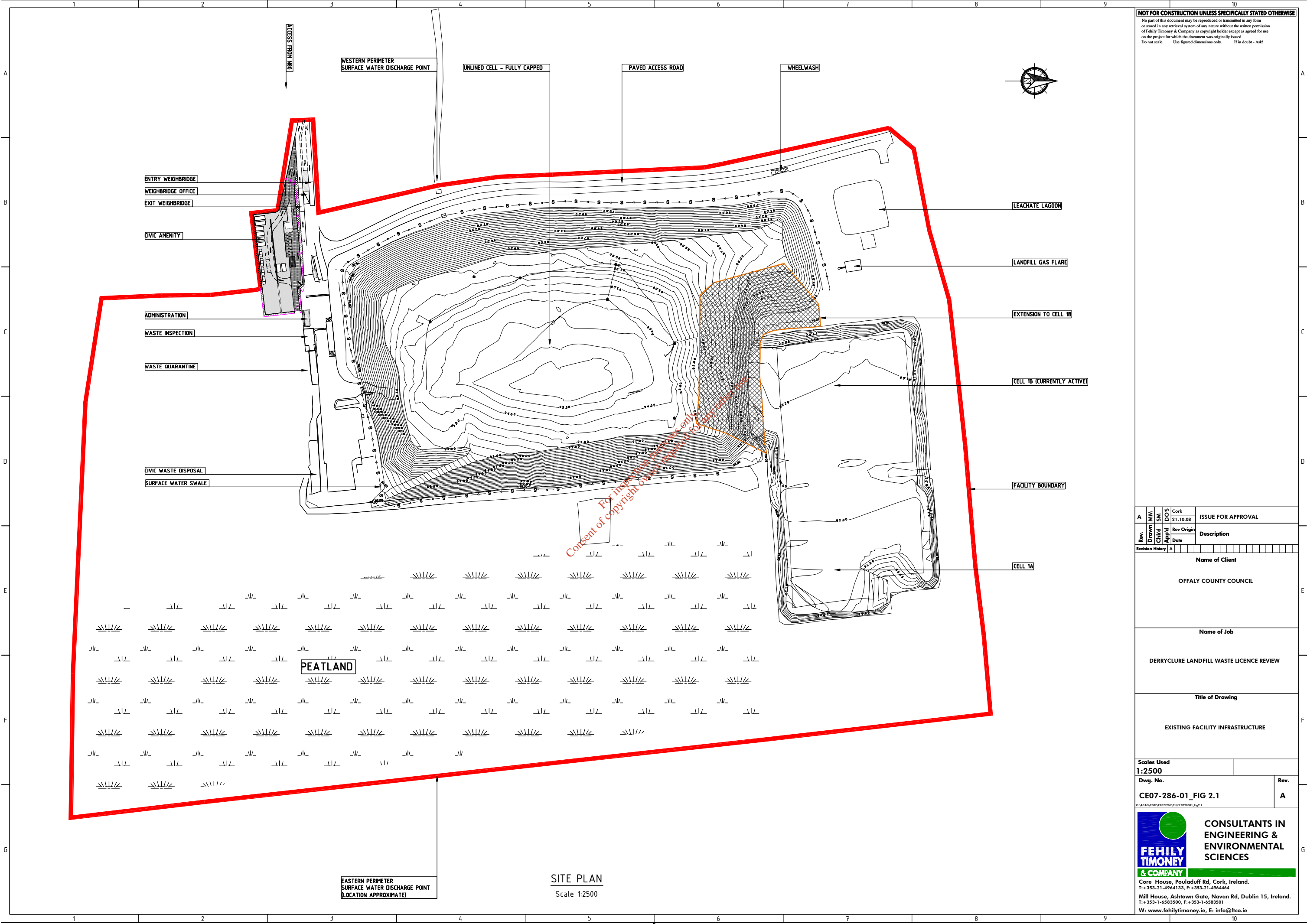
Figure 2.1 shows the layout of existing facility infrastructure. Figure 2.3 shows the layout of future infrastructure, once the facility has been developed to the extent permitted under its current waste licence.

2.2 Proposed Development

The proposed development consists of the following elements:

- Intensification of landfilling activities from 40,000 tonnes per annum to 100,000 tonnes per annum
- Extension of the hours of operation at the facility to 07:00 to 19:30 Monday to Friday inclusive and 8.00 to 18.00 on Saturday

It should be noted that no additional physical development will be required as part of the proposed development. The intensification of landfilling activities will take place in cells which are permitted under the current waste licence. As stated above Offaly County Council has received permission to develop the remaining cells as identified on Figure 2.3.



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SITE PLAN
Scale 1:2500

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OFFALY COUNTY COUNCIL

Name of Job
DERRYLURE LANDFILL WASTE LICENCE REVIEW

Title of Drawing
EXISTING FACILITY INFRASTRUCTURE

Scales Used
1:2500

Dwg. No.
CE07-286-01_FIG 2.1

Rev.
A

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Revision History						
Name of Client						
OFFALY COUNTY COUNCIL						
Name of Job						
DERRYCLURE LANDFILL WASTE LICENCE REVIEW						
Title of Drawing						
FUTURE FACILITY INFRASTRUCTURE						
Scales Used						
1:2500						
Dwg. No.						Rev.
CE07-286-01_FIG 2.3						A
 CONSULTANTS IN ENGINEERING & ENVIRONMENTAL SCIENCES Core House, Pouladuff Rd, Cork, Ireland. T: +353-21-4964133, F: +353-21-4964464 Mill House, Ashtown Gate, Navan Rd, Dublin 15, Ireland. T: +353-1-6583500, F: +353-1-6583501 W: www.fehilytimoney.ie, E: info@fteo.ie						

3. THE MAIN EFFECTS OF THE DEVELOPMENT AND THEIR MITIGATION

The main environmental impacts (both positive and negative) associated with the intensification of Derryclure landfill are outlined below.

3.1 Impacts on the Human Environment

The landfill is located approximately 5 km south of Tullamore town on the N80 Tullamore-Killeigh road in a rural area comprising a mixture of farm houses and detached residential single-family dwellings. Housing is mainly located to the west of the landfill around Derrybryan Wood and to the north west of the along the N80 to Tullamore as well as along the third class road connecting the N80 to the R421 via Derrygolan.

Other population centres in the area include Killeigh village located 4 km south and Killurin 6 km to the south west of the site. There are no schools, shops or other public buildings located within 1 km of the landfill footprint.

There will be positive and negative socio-economic impacts from the proposed development. These may affect properties in the vicinity of the development, other built development, agriculture and employment.

Positive impacts for nearby residents will include a reduction of the life of the landfill from 24 years to approximately 9.5 years which will significantly improve the amenity of the local area as well as the creation of 2 to 3 additional jobs at the facility.

3.1.1 Impacts on Air and Climate

The intensification of waste acceptance at the landfill has the potential to increase dust emissions if good housekeeping practices are not implemented. However, control measures which are currently in place at the site will continue to be applied.

Increased landfilling rates will not result in a significant increase in landfill gas volumes. A positive impact of the proposed development will be the peaking of landfill gas production sooner which would make landfill gas utilisation more feasible.

The proposed development has the potential to increase odour emissions at the facility. Offaly County Council has recently implemented a number of odour control measures at the site including the imminent installation of the horizontal gas extraction system in the active cells which will draw odorous compounds to the landfill gas flare, significantly reducing odour emissions from the site.

While there are no negative impacts on climate, a positive effect of the development is that increased waste intakes will make the flaring/utilisation of landfill gas for the generation of electricity more feasible. Being a renewable energy source, landfill gas utilisation would displace an equivalent quantity of fossil fuel that would otherwise be used.

3.1.2 Noise Impacts

Noise emissions are monitored on an annual basis in accordance with the existing waste licence, results of which indicate that the existing development is not significantly impacting on the surrounding noise environment.

This intensification of activities will result in some marginal increases in noise levels due to greater levels of activity at the site, including waste delivery and waste emplacement which will have an imperceptible impact on noise emissions from the site, but will result in a positive impact by shortening the noise emissions of the site from long-term to medium-term.

3.1.3 Traffic Impacts

The intensification of waste intake will result in an additional 25 trucks per day using the facility. The results of the traffic impact assessment carried out indicate that this increase will not significantly impact on the operation of the receiving roads network.. A right-turn lane on the N80 at the site entrance will be constructed individual proposed development. At time of writing, Offaly County Council had commenced enabling works to provide this right turning lane.

3.2 **Impacts on Geology, Hydrogeology and Hydrology**

The increase in waste intake at the site will result in a decrease in leachate volumes generated at the site due to greater absorbency in the waste body. A positive impact will be that the site will be restored and capped sooner which will prevent the infiltration of rain water into the waste body, thus reducing the risk to groundwater.

3.3 **Impacts on Archaeology and Cultural Heritage**

The proposed development will not have a significant impact on archaeology, architecture or cultural heritage in the surrounding area as all intensification activities will occur within the existing footprint of the facility.

3.4 Impacts on Ecology & Landscape

A detailed ecological assessment was conducted of the entire site and no habitat of high ecological or of conservation importance was found. As the proposed development does not require the construction of any additional physical infrastructure beyond that permitted under the current waste licence, there will be no negative impact on ecology at the facility.

A potential positive impact on ecology and the visual impacts is that the site will be filled and restored in a shorter timeframe allowing the development of a natural habitat that will foster biodiversity of flora and fauna and improve the visual amenity of the site.

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4. THE DEVELOPMENT AND ITS IMPACTS IN CONTEXT

The proposed development at Derryclure landfill has the potential to have positive and negative impacts on the receiving environment.

Potential Negative Effects

- Increase in noise levels during operation
- Potential for a decrease in local air quality due to dust and landfill gas emissions during operation
- Slight increase in traffic levels

Mitigation measures to eliminate or minimise the potential negative effects outlined above have been identified and suggested in the relevant sections of Volume 2 of the EIS.

Potential Positive Effects

- Early closure of the landfill, improving the overall amenity of the area for surrounding residents
- Early capping and restoration of the facility improving in the long-term visual impact of the facility
- Quantities of leachate produced will reduce, implying less risk of pollution to groundwater and less overall environmental impact as energy inputs related to management, transport, disposal and treatment of leachate will be lessened
- Peak landfill gas quantities will increase which will make landfill gas utilisation more feasible at the facility. This would have the benefit of generating electricity from a renewable source, displacing an equivalent quantity of fossil fuel that would otherwise be used.
- Creation of 2 – 3 jobs resulting in a direct positive impact on the local economy

In general, the intensification of waste intake at Derryclure landfill will have a positive impact on the socio-economic situation in the area as it will ensure continued provision of waste management services for the Midlands region in the medium term while minimising the impact on local residents and the environment in the long-term.