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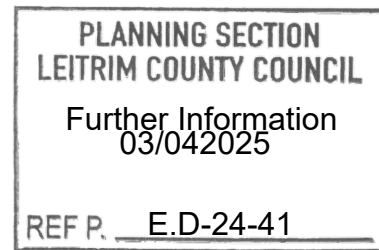
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ANN MULCRONE BSC (Surv) DipEE MPhil(UDRP) MIPI
Managing Partner

27th March 2025

Leitrim Co Co,
Planning Officer
Áras An Chontae
St. Georges Terrace
Carrick on Shannon
Co Leitrim
N41 PF67



Re: Reference for a Declaration of Exemption under Section 5 of the Planning and Development Act 2000 as to whether:

The change of use of Rossinver Convent, Gubalaun, Co Leitrim, F91 A718 from established use as a convent to *Temporary use by or on behalf of the Minister for Children, Equality, Disability, Integration and Youth to accommodate or support displaced persons or persons seeking international protection* is or is not exempt development and whether any minor works to the property to facilitate such use are exempt.

E.D-24-41

Dear Sir/Madam,

We act on behalf of Goodwill Properties Ltd, Suite 35 Clifton House, Fitzwilliam Street Lower, Dublin 2, CRO 772740.

1. We enclose the following

1. Legal Opinion Michael O'Donnell BL
2. Sworn Affidavit Paula Gallagher
3. Appropriate Assessment Screening Roger Goodwillie
4. Outline of future proposal for upgrade of the waste water treatment
5. Photos

2. Further Information Response

We refer to your request for further information dated the 12th December 2024 and we respond as follows in the same sequences as set out in your letter.

Item 1

Having regard to the foregoing, you are requested to demonstrate that Goodwill Properties Ltd. have sufficient legal interest in the subject property to submit the section 5 declaration or to submit the legal consent of the owner of the property to the making of same.

Goodwill Properties Ltd is the owner of the subject property. Please also see reference to the ownership issue addressed in the Legal Opinion of M O'Donnell BL. Wherein he states this information is not a current requirement for a section 5 Declaration.

Item 2

On the basis of the narrative provided in the Advice Note above, you are requested to demonstrate to the Planning Authority through further legal submissions that the use of the convent was not abandoned by the sale of the subject property by the religious order to a private individual and that it has not been used as a private residence for at least the past 18-19 years which would be considered a change of use of the subject property and could possibly be considered an unauthorised use. As the convent use was a pre 1963 use, there is also an argument that the reinstatement of the convent use would require planning permission.

We hereby submit the legal opinion of Michael O'Donnell B.L who sets out clearly the law in respect of abandonment of use and states that there are two tests to be satisfied for abandonment to occur:

- " 1 *There must be cessation of the use*
- 2 *There must be an intention not to resume the previous use.*

In my opinion neither of these requirements have arisen."

In addition we hereby submit the sworn affidavit from Paula Gallagher the previous owner of the Convent wherein she swears the following:

"I Paula Gallagher lived in Rossinver Convent from 2005 to 2024. While I lived in the Convent, I never sought to formally change the use and maintained and respected

the spiritual ethos of the Convent.”

The facts and the law support the case that the Convent use has not been abandoned and therefore our client is entitled to rely on the established convent use as the basis of the S5 declaration for exemption as follows:

A change of use of the convent to temporary use *by or on behalf of the Minister for Children, Equality, Disability, Integration and Youth to accommodate or support displaced persons or persons seeking international protection in accordance with **Class 14(h)** of the Planning and Development Regulations 2001 as consolidated* which allows for development consisting of a change of use: -

*‘(h) From use as a hotel, motel, hostel, guesthouse, holiday accommodation, **convent**, monastery, Defense Forces barracks or other premises or residential institution providing overnight accommodation, or part thereof, or from the change of use specified in paragraph (i) of the said premises or institution, or part thereof, to use **as accommodation for protected persons,***

Item 3

You are requested to demonstrate to the Planning Authority through further legal submissions whether or not the works proposed, primarily consisting of internal works/reconfigurations, are subject to, and affected by, the provisions of Article 9(1)(a) of the Planning and Development Regulations 2001, as amended, which relates to ‘Restrictions on Exemption’. This outlines that the following development to which Article 6 relates, shall not be exempted development, if the carrying out of such development would, inter alia:

(viii) Consist of or comprise the extension, alteration, repair or renewal of an unauthorised structure or a structure the use of which is an unauthorised use. (Emphasis added)

Mr. O'Donnell BL has dealt with this issue in detail in his Legal Opinion.

“In respect of Article 9(1)(a) there is no unauthorised development and no such finding has or could be made. It has been shown that the manner in which the structure was used did not amount to development and therefore the issue of precluding exempted development does not arise.

Development can only arise where there has been a material change of use, and where no change of use much less a material change of use has occurred for the purpose of Section 3 there is no development.

Article 9(1)(a) has therefore no application. Further in my opinion in order for Article 9(1)(a)(Viii) to apply there is a requirement for a finding of unauthorised development.

This can only be given by a court. As is clearly shown in Sand Gravel V Kildare Co Co. there has been no such finding nor could there be any basis for such finding and in the planning search conducted as part of the conveyance no such determination has occurred."

It is further acknowledged by the Council that they were aware of the fact that Paula Gallagher was the owner of the Convent and they refer to the planning history P04/1708 wherein she is the applicant. It is noted that there is no question of unauthorized use of the Convent at any time during this planning process and the established use as a convent remains in situ and was accepted for planning purposes by the Council. The Managers Order in respect of P04/1708, which is dated 23rd August 2005 grants planning permission for works to **"Rossinver Convent."** The Manager's Order is determinative of the issue raised. We hereby submit the Managers Order ref P04/1708.

Item 4

The last record of a planning application by a religious order was in 2002, ref. P02/758. Planning permission was granted to Sr. Ita Flynn, The Franciscan Sisters of the Atonement to retain a 6-bedroom extension that had been constructed between 1974-1976. This was permitted subject to 4 no. conditions. This included condition no. 2 which required that the septic tank was to be upgraded or replaced as the original on-site system did not have adequate capacity to cater for the extra loading generated by use of the additional bedrooms. The planning file does not indicate if this condition was ever complied with.

Having regard to the nature of the change of use now proposed, you are requested to submit a report by a suitably qualified engineer indicating the nature of wastewater treatment and disposal which currently serves the subject property and the capacity of said system. This requirement is relevant to the final item of further information.

We refer to the legal Opinion of Michael O'Donnell in this matter:

"In respect of compliance with conditions the issue raised dates back to development which took place over 50 years ago and improperly raises a question in respect of a potential breach of a planning permission which amounts to a criminal offence by the Franciscan Sisters of Atonement. The correct approach in my opinion is to consider whether there is any evidence that the conditions were not complied with. There is no evidence of any such non compliance no evidence of any adverse effect on any recipient, no objection or any complaint.

It is to say the least; unlikely that a religious order would not as with all the other conditions have complied. It is an impossible task to request that some confirmation

as to the extent of compliance could be furnished some 50 years after the event and where presumably after being satisfied that the development was authorised the Council granted planning permission for certain works in 2002. It was expressly to avoid these issues that the time limits of 7 years now applies to such issues and the legislation provides that “no proceedings may be brought after this period”.

We set out in our supplementary submission of the 10th December 2024 that:

The question of Building Regulations and Fire Cert and any necessary upgrade to the septic tank will be addressed under separate codes.

Having considered the question of the upgrade of the septic tank with Michael O’Donnell B.L. it is considered that it did not form part of the reference which is concerned with use and that notwithstanding as it comprises a structure and as any upgrade of that structure would not materially alter the character of the structure, in so far as it appears that any works to be carried out will have no effect on the external appearance of the structure that prima facie it would fall within the provisions of Section 4(1)(h) of the Planning and Development Act as amended.

Section 4. —(1) The following shall be exempted developments for the purposes of this Act—

(h) Development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures;

We have commissioned an Appropriate Assessment Screening of the established development and of the proposed upgrade in the wastewater treatment by Roger Goodwillie, ecologist. This item is addressed in response to item 5. Suffice it to say that there is no requirement for an Appropriate Assessment arising from the on site inspection of the ecologist of the existing site or of the proposed upgrading of the septic tank. Therefore there is no preclusion to exemption arising under Article 6(viiB) and any upgrade of the septic tank comprises exempt development as provided for within Section 4(i)(h) of the Planning And Development Act 2000 as consolidated. It does not comprise mitigation, as there is no effect on the SAC to be mitigated.

Item 5

Article 9(1)(a) of the Planning and Development Regulations 2001, as amended, which relates to ‘Restrictions on Exemption’. This outlines that the following development to which

Article 6 relates, shall not be exempted development, if the carrying out of such development would, inter alia:

(viiB) comprise development in relation to which a Planning Authority or An Bord Pleanála is the competent authority in relation to appropriate assessment and the development would require an appropriate assessment because it would be likely to have a significant effect on the integrity of a European site,

The nearest Natura 2000 site is Lough Melvin Special Area of Conservation (SAC Site Code: 000428), which is located approximately 700 metres north of the subject site. As outlined above, there is uncertainty with regard to the adequacy of the wastewater treatment system to serve the 11 no. bedroom property, the occupancy of which is likely to intensify considerably as outlined in this application. Having regard to the proximity of the property to a Natura 2000 site and to uncertainty with regard to the adequacy of the wastewater treatment system to cater for projected loadings which would arise from the proposed change of use, without mitigation measures being undertaken, the Planning Authority are not satisfied that the proposed change of use would not affect the qualifying interests and conservation objectives of Lough Melvin Special Area of Conservation. To assist the Planning Authority in these considerations, you are requested to submit a Screening Statement for Appropriate Assessment as prepared by a suitably qualified and experienced ecologist.

We hereby submit and refer to the Appropriate Assessment Screening Report undertaken by Roger Goodwillie, ecologist.

The conclusion of the AA Screening (Roger Goodwillie) is that there is no requirement for an Appropriate Assessment.

There is no likelihood that this development as proposed will have significant impacts on the integrity and functioning of the Natura 2000 site network; neither will there be any effects on achieving the conservation objectives. This is so by itself or in combination with other adjacent developments and is a finding of no significant effect. No additional mitigation is required.

We trust that the above information satisfies the Further Information Request. Please do not hesitate to contact me if you have any further queries. We look forward to a favourable decision in due course.

Yours sincerely,



Ann Mulcrone

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24th March 2025

To Ann Mulcrone

Reid Associates

2 Connaught place

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Dun Laoghaire

Querist :Goodwill Properties

Clifton House,

Fitzwilliam Street Lower,

Dublin 2

D02 XT91

Re: Rossinver Convent, Gubalaun, Rossinver, Co. Leitrim, F91 A718

Agent: Reid Associates

OPINION

Introduction

I have previously advised in respect of the property known The Convent Rossinver, Co Leitrim and I have been asked to advise in respect of a Request for Further Information from Leitrim Co Co issued pursuant to Section 5(2)(b) of the Planning and Development Act 2000. In so far as is appropriate I will deal with each of the issues raised in the sequence in which they appear in the letter of the 12th December 2024.

1. Legal Interest

In my opinion there is no requirement to demonstrate a legal interest in lands the subject of an application for a Declaration under Section 5 of the Planning and Development Act 2000. Such requirement may arise in the proposed Planning Act but this has not come into force.

Notwithstanding the above as the land has been purchased by the querist, it having been characterised by the previous owner as a convent and used as such, it is appropriate that this documentation be furnished by the querist, not only to show sufficient legal interest but also to demonstrate the basis of the use represented in the sale, namely that of "A Convent" and the

manner in which the convent building was used following its sale to Ms Gallagher and which formed the basis of the representations governing the sale.

2 Use of the Convent has not been abandoned

The use of the convent was not abandoned following its sale to Ms Gallagher.

In order for abandonment to occur two requirements must be complied with:

1. There must be cessation of the use
2. There must be an intention not to resume the previous use.

In my opinion neither of these requirements have arisen.

In respect of the continuance of the use, the sale by the Franciscan Sisters of Atonement provided for all of the elements of the Convent and in particular the Chapel to be retained and were in fact retained by Ms Gallagher. The retention of the essential spiritual ethos elements of the Convent were important and these were maintained and were untouched and unaltered when purchased by Goodwill properties Ltd.

The manner in which the building was used maintaining and incorporating these elements untouched and unaltered is such as to be unimpeachable evidence that the use of the building in terms of the previous use had not ceased but in fact had continued unaltered.

The position would be different if the sacred spaces in the convent had been converted to residential use but this did not occur.

Accordingly applying the principles set out by Costelloe J. in Dublin Co Co V Tallaght Blocks Ltd., Hartley V The Minister for Local Government and Housing, there was no cessation of use and certainly no change of use much less a material change of use in planning terms. If the test that was applied in Lynch J in Galway Co Co V Lackagh Rock & Others is applied here whereby no development occurred where there was no material change of use, consequently the previous use continues both as a matter of fact and law.

It is unnecessary therefore to consider the second limb of the test namely the intention to abandon but I will deal with this issue for the sake of comprehensiveness.

Intention can only be imputed from the manner in which the structure was treated and whether an intention can be imputed from the actions of the previous occupier/ owner. In this case there is no evidence of an intention to abandon the use. The contrary is the case. The structure was retained in precisely the same manner when in use as a convent and remains laid out as such until sold to Goodwill Property Ltd. in 2024. All the spiritual/religious spaces remained unaltered and the retention and use was important to the previous owner which has confirmed the position.

If as increasingly arise there remained one nun only from the original community of nuns the use following the purchase by Ms. Gallagher would not change the nature and extent or impact of the use in planning terms, following the judgement of Lynch in Lackagh Rock the uses were identical.

There was therefore no intention to abandon the use. The intention on the contrary was to preserve the use as a convent which was the manner in which it was used until it was sold to

goodwill Property Ltd. Therefore it could not be said that the use was abandoned either as a matter of fact or law.

3 Article 9(1)(a)

In respect of Article 9(1)(a) there is no unauthorised development and no such finding has or could be made. It has been shown that the manner in which the structure was used did not amount to development and therefore the issue of precluding exempted development does not arise.

Development can only arise where there has been a material change of use, and where no change of use much less a material change of use has occurred for the purpose of Section 3 there is no development. Article 9(1)(a) has therefore no application. Further in my opinion in order for Article 9(1)(a)(Viii) to apply there is a requirement for a finding of unauthorised development. This can only be given by a court. As is clearly shown in Sand Gravel V Kildare Co Co. There has been no such finding nor could there be any basis for such finding and in the planning search conducted as part of the conveyance no such determination has occurred.

4. Query re Compliance

In respect of compliance with conditions the issue raised dates back to development which took place over 50 years ago and improperly raises a question in respect of a potential breach of a planning permission which amounts to a criminal offence by the Franciscan Sisters of Atonement. The correct approach in my opinion is to consider whether there is any evidence that the conditions were not complied with. There is no evidence of any such non compliance no evidence of any adverse effect on any recipient, no objection or any complaint.

It is to say the least, unlikely that a religious order would not as with all the other conditions have complied. It is an impossible task to request that some confirmation as to the extent of compliance could be furnished some 50 years after the event and where presumably after being satisfied that the development was authorised the Council granted planning permission for certain works in 2002. It was expressly to avoid these issues that the time limits of 7 years now applies to such issues and the legislation provides that “no proceedings may be brought after this period”.

Yours faithfully,

sent by e-mail thus bears no signature

Michael O’ Donnell BL

I, Paula Gallagher, lived in Rossinver Convent from 2005 to 2024.

While I lived in the convent, I never sought to formally change the use and maintained and respected the spiritual ethos of the convent.

Paula Gallagher

Paula Gallagher

Anthony Feeney
Anthony Feeney
Peace Commissioner
27-01-2025

Proposed development of Rossinver Convent,
Gubalaun, Rossinver,
Co. Leitrim

Appropriate Assessment (screening)

Report for Reid Associates

March 2025

1. INTRODUCTION

The purpose of this report is to describe the ecology of the site and to examine the proposed work for possible ecological impacts on the integrity of the Natura 2000 network, in particular on the Lough Melvin SAC which lies in the same catchment. It was commissioned by Goodwill Properties to answer a request for such a report by Leitrim County Council (Ref E.D-24-41).

The development site is close (350m) to one of the inflowing rivers to Lough Melvin and the application has to have due regard to Article 6 (3) of the EU Habitats Directive which states:

Article 6 (3): Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the [Natura 2000] site in view of the [Natura 2000] site's conservation objectives.

This is transposed into national legislation by Regulation 31 of the European Communities (Natural Habitats) Regulations 1997.

The Report will assess the impacts on the integrity of the Natura 2000 sites and will be continued into a full NIS (Stage 2) if required. It begins with a description of the flora and fauna of the site to determine if any ecological connection or parallels exist between the area and items of interest in the local Natura 2000 sites.

The description is derived from a field visit in January 2025, having examined the available files and online sources of information for the local Natura 2000 sites. All work was undertaken by Roger Goodwillie, a full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM). He qualified in Botany as B.A. (Mod.), M.Sc. and has been a practising ecologist for 40 years

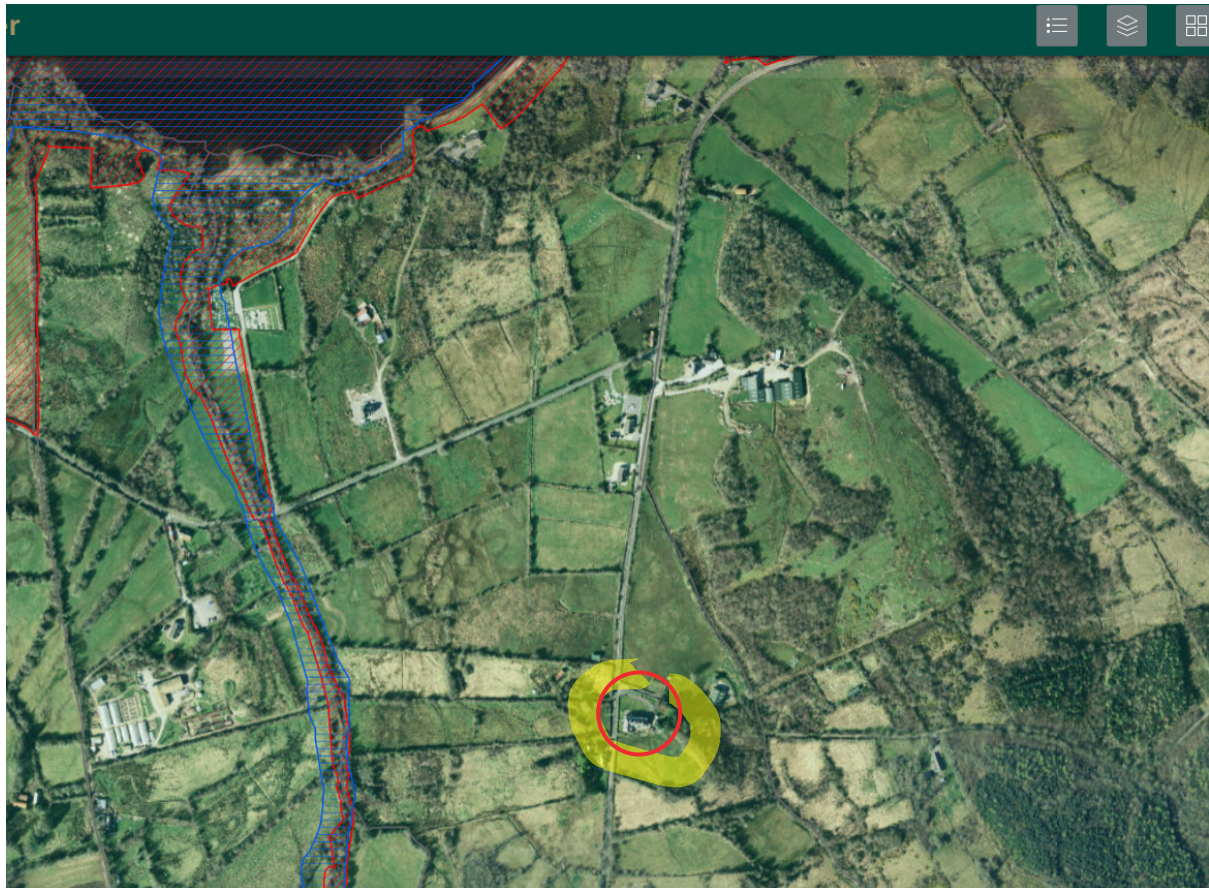
The sources of information used to collect data on the Natura 2000 network of sites include:

- Ordnance Survey of Ireland mapping and aerial photography available from www.osi.ie, Google Earth and Bing aerial photography.
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie including; the Natura 2000 network Data Form; Site Synopsis; Generic Conservation Objective data.
- Online database of rare, threatened and protected species o Publicly accessible biodiversity datasets.
- Status of EU Protected Habitats in Ireland. (National Parks & Wildlife Service, 2013).

2. DESCRIPTION OF AREA

2.1 Habitats & flora

The existing convent building is set on a low ridge with a damp, rushy field slightly higher to the south and a group of trees to the east, currently housing a septic tank. The land drops to the north and, beyond the R281 road to the west.



Location of existing building with regard to Lough Melvin SAC (hatched red)

The immediate surrounds are gardened and partly mown but nearby fields are predominantly of wet grassland (GS4 in Fossitt 2000) in which soft rush *Juncus effusus* dominates the vegetation. The field south of the building had been mown in 2024 and the rush growth somewhat depressed. Re-growth of the sward shows:

Common bent	<i>Agrostis capillaris</i>
Fescue grass	<i>Festuca ?ovina</i>
Sweet vernal grass	<i>Anthoxanthum odoratum</i>
Purple moor-grass	<i>Molinia caerulea</i>
Sharp-flowered rush	<i>J.acutiflorus</i>
Carnation sedge	<i>Carex panicea</i>
Oval sedge	<i>C.leporina</i>
Tormentil	<i>Potentilla erecta</i>

Milkwort

Polygala serpyllifolia

Sphagnum moss (*S. palustre*) occurs occasionally as isolated plants.

A dense woodland of willows *Salix cinerea* occurs on the eastern side of this field, merging northwards into the clump of planted trees (including Sitka spruce), the site of the septic tank. A few scattered brambles *Rubus fruticosus* occur here but there is no obvious vegetational effect of wastewater.

2.2 Fauna

Signs of large mammals were not seen on site but badger, Irish hare, Irish stoat and pine marten have been recorded close by, the latter two within 1km (NBDC data). Pipistrelle bats are similarly present, recorded 750m away, and are likely to feed in the woodland around the site.

The bird life is likely to include meadow pipit and willow warbler in summer along with woodland species like coal and long-tailed tit, song thrush, redpoll and goldcrest. Only blackbird, robin and chaffinch were seen on the site visit. Woodcock winter in wet woodland, such as occurs widely, and would be expected.

2.2 Evaluation

The site has no significant ecological interest and does not include any rare or protected plants (NPWS Flora Protection Order Map Viewer) in its vicinity. No invasive alien plants are present.

Although the site is poorly drained with a clayey, retentive soil there are no overland watercourses around or below the property. The nearest stream is at 90m to the east which flows along the roadside for 700m before discharging to Lough Melvin at Mogue Bridge. Another wooded stream valley occurs to the west at 300m.

The lake itself is about 720m away by direct line and 800m by stream.

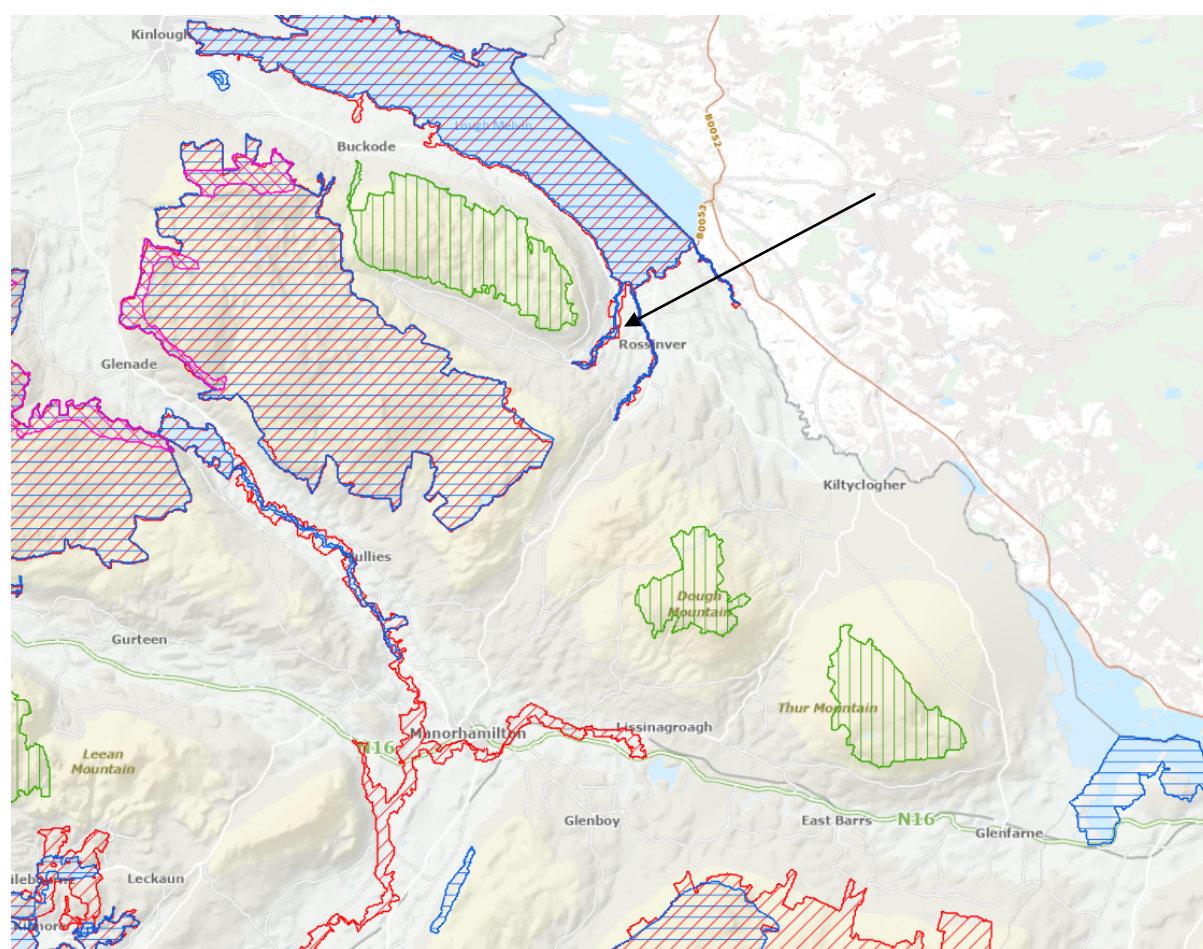
3. APPROPRIATE ASSESSMENT

3.1 Introduction

Appropriate assessment was introduced by the EU Habitats Directive as a way of determining if a planned project is likely to have a significant effect on the integrity of one of the Natura 2000 sites so far designated (i.e. the candidate SAC's and SPA's), or their

conservation objectives. In this case there are six Natura sites within 15km of the project area. These are shown on the map below:

Name of site	Site Code	Distance
Lough Melvin SAC	0428	300m
Arroo Mountain SAC	1403	3.3km
Glenade Lough	1919	10.2km
Ben Bulbin, Gleniff and Glenade complex SAC	0623	11.0km
Lough Gill SAC	1976	8.7km
Boleybrack Mountain SAC	2032	12.8km



Position of site in relation to nearby Natura 2000 sites (red)

In the Irish context the assessment has been interpreted as a four-stage process. Firstly, a screening exercise (Stage 1) determines if a project could have significant effects on a Natura site. If it does or the situation is unclear, a Natura Impact Statement (Stage 2) is provided to the planning or regulatory authority, giving details of necessary mitigation. Examples of significant effects are a loss of habitat area, fragmentation of the habitat, disturbance to species using the site and changes in water resources or quality. If such negative effects come to light in the assessment, alternative solutions are investigated by

the proponent (Stage 3) and modifications made unless the project is deemed to be driven by 'imperative reasons of overriding public interest' in its current form. In this case Stage 4 then deals with compensatory action.

The following guidance documents have been used in the screening process:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DEHLG 2009, Revised February 2010).
- EU Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC (EC, 2007).
- Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (EC, 2002).
- Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive 9. (EC 2000).
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10.
- Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive (International Workshop on Assessment of Plans under the Habitats Directive, 2011).
- Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC.
- The Status of EU Protected Habitats and Species in Ireland 2013 (Department of Arts, Heritage and the Gaeltacht, 2013). 2/43/EEC (EC, 2000.)
- Court of Justice EU Case C-323/17. Directive 92/43/EEC Article 6(3) — Screening in order to determine whether or not it is necessary to carry out an assessment of the implications, for a special area of conservation, of a plan or project — Measures that may be taken into account for that purpose.
- Appropriate Assessment Screening for Development Management OPR Practice Note PN01. March 2021

3.2 Project description

The project is a residential one to accommodate protected persons by or on behalf of the Minister for Children, Equality, Disability, Integration and Youth. A maximum of 38 residents is proposed, resulting in a 38 PE demand for wastewater treatment.

The existing wastewater treatment consists of a septic tank which was in place to serve the established convent and is of suitable size for this community. It will be replaced by a tertiary treatment unit as designed by the Wastewater Technical Services report. The plant (Sepcon BAF) would be located at the summit of the field to the south of the building and treated effluent would flow to a polishing filter built above ground level because of the poor soil conditions.

During construction care will be taken to prevent any outflow of sediment to the adjacent road.

3.3 Screening of Natura sites

The project is in the catchment of the Ballagh River which flows into the southern end of Lough Melvin SAC. Although there are no surface watercourses the poorly draining soils could allow surface rain wash to reach the stream under certain conditions.

The other sites are all in different catchments and several are above Rossinver in altitude. There is no way that they could be affected significantly by the project.

3.4 Lough Melvin SAC (See Appendix)

Lough Melvin is an excellent example of a natural, post-glacial salmonid lake which fits neatly into the EU Habitats Directive classification as 3130 Oligotrophic to Mesotrophic Standing Waters. It hosts a unique fish community with a relict population of the Arctic Char (*Salvelinus alpinus*), a species constituting an arctic-alpine element of the Irish fauna. Also occurring are Atlantic Salmon (*Salmo salar*) and three races of Brown Trout (*Salmo trutta*) – Ferox, Sonaghen and Gillaroo. The lake's inflowing and outflowing streams are used for spawning by these trout races and are included in the site.

All these fish species are listed in the Irish Red Data Book (King et al 2011), and Salmon is also included in Annex II of the E.U. Habitats Directive. A plant species listed in the Flora Protection Order 2022 (globe flower *Trollius europaeus*) grows within the site.

Some of the low-lying land around the lake shore is classified as *Molinia* meadows, also a Habitats Directive habitat.

3.5 Conservation objectives

SAC

Four qualifying features are listed for the designation, i.e.

6410 Salmon *Salmo salar*

1355 Otter *Lutra lutra*

3130 Oligotrophic to mesotrophic standing waters with vegetation of the
Littorelletea uniflorae and/or Isoëto-Nanojuncetea

1106 *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (Molinion
caeruleae)

Each of the above interests has conservation objectives listed in NPWS (2021). Broadly these may be expressed as follows:

1. To restore or maintain the Annex I habitats for which the SAC has been selected at favourable conservation condition

2. To maintain or restore the Annex II species for which the SAC has been selected at favourable conservation condition.

The favourable conservation condition of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future
- the conservation status of its typical species is favourable.

The favourable conservation condition of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

3.6 Potential effects

The project site does not support any of the listed habitats or species for the Natura 2000 sites so its development will have no direct impacts on it. Indirectly it could produce an effluent that would tend to enrich the lake habitat. Currently the lake status under the Water Framework Directive is regarded as moderate and one of the Conservation Objectives is to reduce the phosphate content of the water which even in 2007 was showing a tendency to increase (Barry & Foy 2009). The Ballagh River had a water quality of Q5 when last sampled in 1990 (EPA data).

The operation of a tertiary treatment plant as proposed in this case will remove any potential input of nutrients to the stream and lake water. It is essential in the long-term to deal with such effluents in the prevailing soil conditions.

4. CONCLUSION OF SCREENING

There is no likelihood that this development as proposed will have significant impacts on the integrity and functioning of the Natura 2000 site network; neither will there be any effects on achieving the conservation objectives. This is so by itself or in combination with other adjacent developments and is a finding of no significant effect. No additional mitigation is required.

The further, more detailed, stages of appropriate assessment are not required.

References

Barry, C.D. & Foy, R.H. (2009) Water Quality and Limnology of Lough Melvin 1990-2007. Interreg IIIA.

DEHLG. 2009. Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (Revised February 2010).

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APPENDIX: SITE SYNOPSIS

Site Name: Lough Melvin SAC Site Code: 000428

Lough Melvin is situated in the extreme north-west of Co. Leitrim, about 4 km south of Bundoran. The area is underlain by sedimentary calc-limestone, shale and sandstone. Lough Melvin is an oligo-mesotrophic lake and is approximately 13 km long by 3 km wide. The mean depth of the lake is 8.5 m, the maximum depth being 45 m. A number of inflowing and outflowing streams and rivers are included in the site, for instance, the Drowes River links the lake to Donegal Bay. Several large islands occur on the lake. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes): [3130] Oligotrophic to Mesotrophic Standing Waters [6410] *Molinia*

Meadows [1106] Atlantic Salmon (*Salmo salar*) [1355] Otter (*Lutra lutra*) The lake has a good diversity of aquatic plants, including Quillwort (*Isoetes lacustris*), Shoreweed (*Littorella uniflora*), Alternate Water-milfoil (*Myriophyllum alterniflorum*), Water Lobelia (*Lobelia dortmanna*), Canadian Waterweed (*Elodea canadensis*) and several species of pondweed (*Potamogeton gramineus*, *P. lucens* and *P. x nitens*). Swamp vegetation is generally sparse, being best developed in the sheltered bay areas. Species include Reeds (*Phragmites australis*), Common Spike-rush (*Eleocharis palustris*) and Common Club-rush (*Scirpus lacustris*). The most extensive terrestrial habitat in the site is lowland wet grassland. This is highly variable throughout the site in both its species composition and species richness. Grassland ascribable to the E.U. Habitats Directive Annex I type Molinia Meadows has been reported by the Irish Semi-natural Grasslands Survey (2009) from Gubacreeny (site no. 802) and Gubalaun (site no. 804). Common species include Jointed Rush (*Juncus articulatus*), Soft Rush (*J. effusus*), Marsh Pennywort (*Hydrocotyle vulgaris*), Yellow Iris (*Iris pseudacorus*), Water Mint (*Mentha aquatica*), Silverweed (*Potentilla anserina*), Creeping Soft-grass (*Holcus mollis*) and Devil's-bit Scabious (*Succisa pratensis*). Wet deciduous woodland, dominated by Alder (*Alnus glutinosa*), Goat Willow (*Salix caprea*) and Downy Birch (*Betula pubescens*), is common in places. Ground flora species under these canopies include Lesser Burdock (*Arctium minus*), Wild Angelica (*Angelica sylvestris*) and Common Spike-rush (*Eleocharis palustris*). Version date: 9.2.2016 1 of 2 000428_Rev16.Docx Drier woodland exists in other areas, with Hazel (*Corylus avellana*), Ash (*Fraxinus excelsior*), Holly (*Ilex aquifolium*) and Hawthorn (*Crataegus monogyna*). Some stands have a rich ground flora that includes Primrose (*Primula vulgaris*), Wood-sorrel (*Oxalis acetosella*), Bluebell (*Hyacinthoides non-scripta*), Honeysuckle (*Lonicera periclymenum*) and Sanicle (*Sanicula europaea*). The fern community is well developed too, with such species as Male-fern (*Dryopteris filix-mas*) and Hart's-tongue (*Phyllitis scolopendrium*) present. Four plant species which are listed in the Irish Red Data Book, Globeflower (*Trollius europaeus*), Marsh Helleborine (*Epipactis palustris*), Blue-eyed-grass (*Sisyrinchium bermudiana*) and Tea-leaved Willow (*Salix phylicifolia*), are found in this site. Globeflower is also protected under the Flora (Protection) Order, 2015. The main interest of the site is the unique fish community which the lake supports. Lough Melvin is an excellent example of a natural, post-glacial salmonid lake. A relict population of the Arctic Char (*Salvelinus alpinus*), which constitutes an arctic alpine element of the Irish fauna, occur there, as does the Atlantic Salmon (*Salmo salar*). Both of these species are listed in the Irish Red Data Book, and Salmon is listed on Annex II of the E.U. Habitats Directive. Lough Melvin has three races of Brown Trout (*Salmo trutta*) - Ferox, Sonaghen and Gillaroo - which have distinctive characteristics and separate spawning grounds. The lake's inflowing and outflowing streams which are used for spawning by these Brown Trout races are included in the site. Otter have been recorded from the Drowes River and the main inflowing rivers, and are likely to be widespread throughout the site. Recently, Pine Marten has been recorded from within the site. Both of these species are listed in the Irish Red Data Book, and Otter is listed on Annex II of the E.U. Habitats Directive. Moderate numbers of waterfowl use the lake and Greenland White-fronted Goose, a species listed on Annex I of the E.U. Birds Directive, have occasionally been reported from the site. The lake is used for boating, fishing and water abstraction, while much of the terrestrial part of the site is used for grazing. Consequently, the main threats to the site are from agricultural pollution and recreational pressure. Lough Melvin is an example of a lake type that is of conservation significance and that is listed on Annex I of the E.U. Habitats Directive. The site is also important for Molinia Meadow grassland, Otter and for the presence of a unique fish community, including Atlantic Salmon, a species that is listed on Annex II of the E.U. Habitats Directive, and for a diverse flora which includes a number of rare plants, most notably, the protected Globeflower.



Site Characterisation & Assessment Report For Wastewater Treatment System

Completed for

Frank Murphy

Rossinver House,
Rossinver,
Gublaun,
Co. Leitrim
F91 A718

Completed by: Wastewater Technical Services Ltd.
Moyglare Rd, Kilcock, Co Kildare. Ph: 01 6287300

Scope of Report.

The findings of this report are the result of a desk study and geological field interpretation. Interpretations and conclusions included in the report are based on knowledge of the ground conditions following detailed investigations, as well as the regional soils, subsoils and bedrock geology, and the experience of the author. Wastewater Technical Services Ltd has prepared this report in line with the best current practice and with all reasonable skill, care and diligence in consideration of the limits imposed by the survey techniques used and resources devoted to it by agreement with the client. The interpretive basis of the conclusions contained in this report should be taken into account in any future use of this report.

Wastewater Technical Services Ltd accepts no responsibility for any matters arising if any recommendations contained in this document are not carried out, or are partially carried out, without further advice being obtained from Wastewater Technical Services Ltd.

Contents

1. Site Characterisation Report
2. Aquifer Category Map
3. Bedrock Type Map
4. Soil Type Map
5. Groundwater Vulnerability Map
6. Site Location & Groundwater Direction
7. Photos of test holes & trial hole
8. Site Specific Report for proposed sewage system & percolation
9. Qualification
10. Professional Indemnity Insurance

Frank Murphy - Rossinver House
13 double bedrooms and 4 single bedrooms

QTY	Source	Per Person / Per day		Totals - Per Day	
		Litres	BOD5 grams	Litres	BOD5 grams
	Domestic				
	1 Bed House / Apartment = 4 PE	150	60	0	0
	2 Bed House / Apartment = 4 PE	150	60	0	0
	3 Bed House / Apartment = 5 PE	150	60	0	0
	4 Bed House / Apartment = 6 PE	150	60	0	0
	5 Bed House / Apartment = 7 PE	150	60	0	0
	6 Bed House / Apartment = 8 PE	150	60	0	0
	Industrial				
	Office and/or factory without canteen	30	20	0	0
	Office and/or factory with canteen	60	30	0	0
	Open industrial site e.g quarry (excluding canteen)	40	25	0	0
	Schools				
	Staff - Non- residential with cooking on site	60	30	0	0
	Staff - Non- residential with no canteen	40	20	0	0
	Pupils - Non- residential with cooking on site	60	30	0	0
	Pupils - Non- residential with no canteen	40	20	0	0
	Boarding school: (I) residents	180	20	0	0
	(II) day staff (includes mid-day meal)	60	20	0	0
	Hotels				
30	Guests	180	75	5400	2250
	Guests (no meals)	180	45	0	0
	Resident staff	180	60	0	0
	Day staff	60	30	0	0
	Conference	40	20	0	0
	Restaurant full meals:			0	0
	(I) luxury catering	25	25	0	0
	(II) prepared catering	15	15	0	0
	(III) snack bars	10	10	0	0
	(IV) function rooms incl. buffets	10	10	0	0
	(V) fast food	10	10	0	0
	Pubs & Clubs				
	Residents	200	60	0	0
	Day staff	60	30	0	0
	Bar drinkers	10	10	0	0
	Bar meals	10	10	0	0
	Amenity Sites				
	Restaurants	15	15	0	0
	Function rooms	10	10	0	0
	Toilet blocks (per use)	5	10	0	0
	Toilet blocks (long stay car parks)	10	15	0	0
	Golf clubs	20	10	0	0
	Squash, with club house	25	15	0	0
	Swimming	10	10	0	0
	Football club	30	20	0	0
	Caravan Sites:				
	(I) Touring	50	35	0	0
	(II) Static not serviced	75	35	0	0
	(III) Static fully serviced	150	55	0	0
	(IV) Tent sites	50	35	0	0
	Hospitals				
	Residential elderly people	250	60	0	0
	Residential elderly people plus nursing	300	65	0	0
	Nursing homes (convalescent)	350	75	0	0
				Litres	BOD5 grams
	Cumulative Totals			5400	2250
	Population Equivalent			36	38
	Design Population Equivalent				38

Reduced loading from 250 lts

APPENDIX A: SITE CHARACTERISATION FORM

File Reference:

1.0 GENERAL DETAILS (From planning application)

Prefix: First Name: Surname:

Address:
Site Location and Townland:

Number of Bedrooms: Maximum Number of Residents:

Comments on population equivalent

Design is based on 13 double rooms and 4 single rooms. An increased loading rate on 180lts has been used as the dwelling is used as a bed and breakfast. Design population of 38 is used.

Proposed Water Supply:

Mains ☒ Private Well/Borehole ☐ Group Well/Borehole ☐

2.0 GENERAL DETAILS (From planning application)

Soil Type, (Specify Type):

Subsoil, (Specify Type):

Bedrock Type:

Aquifer Category: Regionally Important | Locally Important Poor

Vulnerability: Extreme ☐ High ☐ Moderate ☐ Low ☒

Groundwater Body: Status:

Name of Public/Group Scheme Water Supply within 1 km:

Source Protection Area: ZOC ☐ SI ☐ SO ☐ Groundwater Protection Response:

Presence of Significant Sites
(Archaeological, Natural & Historical):

Past experience in the area:

Comments:

(Integrate the information above in order to comment on: the potential suitability of the site, potential targets at risk, and/or any potential site restrictions).

Existing convent onsite which is served by a traditional style septic tank and percolation. There are no obvious signs of the percolation area. The area is covered with trees and scrub.
Limited space available for a percolation area onsite. Lough Melvin SAC 350m West.

Note: Only information available at the desk study stage should be used in this section.

3.0 ON-SITE ASSESSMENT

3.1 Visual Assessment

Landscape Position:

Slope: Steep (>1:5) ☐ Shallow (1:5-1:20) ☒ Relatively Flat (<1:20) ☐

Slope Comment

Surface Features within a minimum of 250m (Distance To Features Should Be Noted In Metres)

Houses:

1 house West @ 64m from proposed percolation area

Existing Land Use:

Agricultural field

Vegetation Indicators:

Rushes in most of the surrounding fields

Groundwater Flow Direction:

Ground Condition:

Soft & wet under foot

Site Boundaries:

Hedge on Western boundary, forested area on Eastern boundary, fence on Southern boundary

3.0 ON-SITE ASSESSMENT

3.1 Visual Assessment (contd.)

Roads:

R282 on Western boundary
Local lane on Southern boundary

Outcrops (Bedrock And/Or Subsoil):

None within 250m

Surface Water Ponding:

Surface water ponding in parts of the field

Lakes:

Lough Melvin 800m North of proposed percolation area

Beaches/Shellfish Areas:

None within 250m

Wetlands:

None within 250m

Karst Features:

None within 250m

Watercourses/Streams:*

Ballagh River 320m west of proposed percolation area

*Note and record water level

3.0 ON-SITE ASSESSMENT

3.1 Visual Assessment (contd.)

Drainage Ditches:*

Drainage ditch in lower part of forested area.

Springs:*

None within 250m

Wells:*

None within 250m

Comments:

(Integrate the information above in order to comment on: the potential suitability of the site, potential targets at risk, the suitability of the site to treat the wastewater and the location of the proposed system within the site).

Initially the site seems possible for groundwater discharge. The raised hill area behind the house is the only suitable area for a percolation. Minimum separation distances should be maintained.

*Note and record water level

3.2 Trial Hole (should be a minimum of 2.1m deep (3m for regionally important aquifers))

To avoid any accidental damage, a trial hole assessment or percolation tests should not be undertaken in areas which are at or adjacent to significant sites, (e.g. NHAs, SACs, SPAs, and/or Archaeological etc.), without prior advice from National Parks and Wildlife Service or the Heritage Service.

Depth of trial hole (m):

Depth from ground surface
to bedrock (m) (if present):

Depth from ground surface
to water table (m) (if present):

Depth of water ingress: Rock type (if present):

Date and time of excavation: Date and time of examination:

Depth of
Surface and

Subsurface Percolation Tests	Soil/Subsoil Texture & Classification**	Plasticity and dilatancy***	Soil Structure	Density/ Compactness	Colour****	Preferential flowpaths
0.1 m <input type="text"/>	Topsoil					
0.2 m <input type="text"/>						
0.3 m <input type="text"/>						
0.4 m <input type="text"/>	Water ingress 0.3m BGL					
0.5 m <input type="text"/>						
0.6 m <input type="text"/>	Sandy CLAY	Threads 4,4,4 Ribbons 90,80,90 Dilatant	Massive	Firm	Light grey	
0.7 m <input type="text"/>						
0.8 m <input type="text"/>						
0.9 m <input type="text"/>						
1.0 m <input type="text"/>						
1.1 m <input type="text"/>						
1.2 m <input type="text"/>						
1.3 m <input type="text"/>						
1.4 m <input type="text"/>	Silty CLAY	Threads 3,2,3 Ribbons 70,70,70 Dilatant	Massive	Hard	Dark grey	
1.5 m <input type="text"/>						
1.6 m <input type="text"/>						
1.7 m <input type="text"/>						
1.8 m <input type="text"/>						
1.9 m <input type="text"/>						
2.0 m <input type="text"/>						
2.1 m <input type="text"/>	Base of hole @ 2.0m					
2.2 m <input type="text"/>						
2.3 m <input type="text"/>						
2.4 m <input type="text"/>						
2.5 m <input type="text"/>						
2.6 m <input type="text"/>						
2.7 m <input type="text"/>						
2.8 m <input type="text"/>						
2.9 m <input type="text"/>						
3.0 m <input type="text"/>						
3.1 m <input type="text"/>						
3.2 m <input type="text"/>						
3.3 m <input type="text"/>						
3.4 m <input type="text"/>						
3.5 m <input type="text"/>						

Likely Subsurface Percolation Value:

Likely Surface Percolation Value:

Note: *Depth of percolation test holes should be indicated on log above. ('Enter Surface or Subsurface at depths as appropriate).

** See Appendix E for BS 5930 classification.

*** 3 samples to be tested for each horizon and results should be entered above for each horizon.

**** All signs of mottling should be recorded.

3.2 Trial Hole (contd.) Evaluation:

Water ingress observed at various levels in the test hole.
Water ingress starts at 0.3m BGL.

3.3(a) Subsurface Percolation Test for Subsoil

Step 1: Test Hole Preparation

Percolation Test Hole

	1	2	3
Depth from ground surface to top of hole (mm) (A)	300	300	300
Depth from ground surface to base of hole (mm) (B)	700	700	700
Depth of hole (mm) [B - A]	400	400	400
Dimensions of hole [length x breadth (mm)]	300 x 300	300 x 300	300 x 300

Step 2: Pre-Soaking Test Holes

Pre-soak start	Date			
	Time			
2nd pre-soak start	Date			
	Time			

Each hole should be pre-soaked twice before the test is carried out.

Step 3: Measuring T_{100}

Percolation Test Hole No.

	1	2	3
Date of test			
Time filled to 400 mm			
Time water level at 300 mm			
Time (min.) to drop 100 mm (T_{100})	0.00	0.00	0.00
Average T_{100}			0.00

If $T_{100} > 480$ minutes then Subsurface Percolation value >120 – site unsuitable for discharge to ground

If $T_{100} \leq 210$ minutes then go to Step 4;

If $T_{100} > 210$ minutes then go to Step 5;

Step 4: Standard Method (where $T_{100} \leq 210$ minutes)

Percolation Test Hole	1			2			3		
Fill no.	Start Time (at 300 mm)	Finish Time (at 200 mm)	Δt (min)	Start Time (at 300 mm)	Finish Time (at 200 mm)	Δt (min)	Start Time (at 300 mm)	Finish Time (at 200 mm)	Δt (min)
1			0.00			0.00			0.00
2			0.00			0.00			0.00
3			0.00			0.00			0.00
Average Δt Value			0.00			0.00			0.00
	Average $\Delta t/4 =$ [Hole No.1] 0.00 (t_1)			Average $\Delta t/4 =$ [Hole No.2] 0.00 (t_2)			Average $\Delta t/4 =$ [Hole No.3] 0.00 (t_3)		

Result of Test: Subsurface Percolation Value = 0.00 (min/25 mm)

Comments:

Unable to carry out subsurface percolation test as test holes filled up with ground water and didn't soak away with 24hrs

Step 5: Modified Method (where $T_{100} > 210$ minutes)

Percolation Test Hole No.	1					
Fall of water in hole (mm)	Time Factor = T_f	Start Time hh:mm	Finish Time hh:mm	Time of fall (mins) = T_m	$K_{fs} = T_f / T_m$	T - Value = $4.45 / K_{fs}$
300 - 250	8.1			0.00		
250 - 200	9.7			0.00		
200 - 150	11.9			0.00		
150 - 100	14.1			0.00		
Average	T- Value		T- Value Hole 1 = (T_1)		0.00	

Percolation Test Hole No.	3					
Fall of water in hole (mm)	Time Factor = T_f	Start Time hh:mm	Finish Time hh:mm	Time of fall (mins) = T_m	$K_{fs} = T_f / T_m$	T - Value = $4.45 / K_{fs}$
300 - 250	8.1			0.00		
250 - 200	9.7			0.00		
200 - 150	11.9			0.00		
150 - 100	14.1			0.00		
Average	T- Value		T- Value Hole 3 = (T_2)		0.00	

Percolation Test Hole No.	2					
Fall of water in hole (mm)	Time Factor = T_f	Start Time hh:mm	Finish Time hh:mm	Time of fall (mins) = T_m	$K_{fs} = T_f / T_m$	T - Value = $4.45 / K_{fs}$
300 - 250	8.1			0.00		
250 - 200	9.7			0.00		
200 - 150	11.9			0.00		
150 - 100	14.1			0.00		
Average	T- Value		T- Value Hole 2 = (T_2)		0.00	

Result of Test: Subsurface Percolation Value =

0.00 (min/25 mm)

Comments:

3.3(b) Surface Percolation Test for Soil

Step 1: Test Hole Preparation

Percolation Test Hole	1	2	3
Depth from ground surface to top of hole (mm)	0	0	0
Depth from ground surface to base of hole (mm)	400	400	400
Depth of hole (mm)	400	400	400
Dimensions of hole [length x breadth (mm)]	300 x 300	300 x 300	300 x 300

Step 2: Pre-Soaking Test Holes

Pre-soak start	Date			
	Time			
2nd pre-soak start	Date			
	Time			

Each hole should be pre-soaked twice before the test is carried out.

Step 3: Measuring T_{100}

Percolation Test Hole No.	1	2	3
Date of test			
Time filled to 400 mm			
Time water level at 300 mm			
Time to drop 100 mm (T_{100})	0.00	0.00	0.00
Average T_{100}			0.00

If $T_{100} > 480$ minutes then Surface Percolation value >90 – site unsuitable for discharge to ground

If $T_{100} \leq 210$ minutes then go to Step 4;

If $T_{100} > 210$ minutes then go to Step 5;

Step 4: Standard Method (where $T_{100} \leq 210$ minutes)

Percolation Test Hole	1			2			3		
Fill no.	Start Time (at 300 mm)	Finish Time (at 200 mm)	ΔT (min)	Start Time (at 300 mm)	Finish Time (at 200 mm)	ΔT (min)	Start Time (at 300 mm)	Finish Time (at 200 mm)	ΔT (min)
1			0.00			0.00			0.00
2			0.00			0.00			0.00
3			0.00			0.00			0.00
Average ΔT Value			0.00			0.00			0.00
	Average $\Delta T/4 =$ [Hole No.1] 0.00 (T_1)			Average $\Delta T/4 =$ [Hole No.2] 0.00 (T_2)			Average $\Delta T/4 =$ [Hole No.3] 0.00 (T_3)		

Result of Test: Surface Percolation Value = 0.00 (min/25 mm)

Comments:

Unable to carry out surface percolation test as test holes filled up with ground water and didnt soakaway with 24hrs

Step 5: Modified Method (where $T_{100} > 210$ minutes)

Percolation Test Hole No.	1					
Fall of water in hole (mm)	Time Factor = T_f	Start Time hh:mm	Finish Time hh:mm	Time of fall (mins) = T_m	$K_{fs} = T_f / T_m$	T – Value = $4.45 / K_{fs}$
300 - 250	8.1			0.00		
250 - 200	9.7			0.00		
200 - 150	11.9			0.00		
150 - 100	14.1			0.00		
Average	T- Value	T- Value Hole 1 = (T_1)				0.00

Percolation Test Hole No.	2					
Fall of water in hole (mm)	Time Factor = T_f	Start Time hh:mm	Finish Time hh:mm	Time of fall (mins) = T_m	$K_{fs} = T_f / T_m$	T – Value = $4.45 / K_{fs}$
300 - 250	8.1			0.00		
250 - 200	9.7			0.00		
200 - 150	11.9			0.00		
150 - 100	14.1			0.00		
Average	T- Value	T- Value Hole 2 = (T_2)				0.00

Result of Test: Surface Percolation Value =

0.00 (min/25 mm)

Percolation Test Hole No.	3					
Fall of water in hole (mm)	Time Factor = T_f	Start Time hh:mm	Finish Time hh:mm	Time of fall (mins) = T_m	$K_{fs} = T_f / T_m$	T – Value = $4.45 / K_{fs}$
300 - 250	8.1			0.00		
250 - 200	9.7			0.00		
200 - 150	11.9			0.00		
150 - 100	14.1			0.00		
Average	T- Value	T- Value Hole 3 = (T_3)				0.00

Comments:

3.4 The following associated Maps, Drawings and Photographs should be appended to this site characterisation form.

1. Discovery Series 1:50,000 Map indicating overall drainage, groundwater flow direction and housing density in the area.
2. Supporting maps for vulnerability, aquifer classification, soil, subsoil, bedrock.
3. North point should always be included.
4. (a) Scaled sketch of site showing measurements to Trial Hole location and
 - (b) Percolation Test Hole locations,
 - (c) wells and
 - (d) direction of groundwater flow (if known),
 - (e) proposed house (incl. distances from boundaries)
 - (f) adjacent houses,
 - (g) watercourses,
 - (h) significant sites
 - (i) and other relevant features.
5. Site specific cross sectional drawing of the site and the proposed layout¹ should be submitted.
6. Photographs of the trial hole, test holes and site including landmarks (date and time referenced).
7. Pumped design must be designed by a suitably qualified person.

¹ The calculated percolation area or polishing filter area should be set out accurately on the site layout drawing in accordance with the code of practice's requirements.

4.0 CONCLUSION of SITE CHARACTERISATION

Integrate the information from the desk study and on-site assessment (i.e. visual assessment, trial hole and percolation tests) above and conclude the type of system(s) that is (are) appropriate. This information is also used to choose the optimum final disposal route of the treated wastewater.

Slope of proposed infiltration / treatment area:

flat

Are all minimum separation distances met?

✓

Depth of unsaturated soil and/or subsoil beneath invert of gravel (or drip tubing in the case of drip dispersal system)

0.90

Percolation test result: Surface: 0.00

Sub-surface: 0.00

Not Suitable for Development ☒

Suitable for Development ☐

Identify all suitable options

1. Septic tank system (septic tank and percolation area) (**Chapter 7**)
2. Secondary Treatment System (**Chapters 8 and 9**) and soil polishing filter (**Section 10.1**)
3. Tertiary Treatment System and Infiltration / treatment area (**Section 10.2**)

Discharge Route ¹

Discharge to groundwater via percolation area.

5.0 SELECTED DWWTs

Propose to install: Tertiary Treatment System and Infiltration /treatment area

and discharge to: Ground Water

Invert level of the trench/bed gravel or drip tubing (m) 0.60

Site Specific Conditions (e.g. special works, site improvement works testing etc.

The site failed the percolation test. As there is an existing convent on site a practical solution has to be provided. The proposal in this report is a recommendation based on experience, best use of best available space and guidance from the EPA Code of Practice 2021.

Waste Water Treatment system - Based on a PE of 38, I propose to use a SEPCON BAF PE38 concrete sewage treatment system. This system is EN 12566-3 & SR66 certified. Only grey and foul water should enter the sewage treatment system.

Percolation Area - Based on a PE of 38 & a subsurface soakage test which failed. I propose to use a 95m² sand filter and minimum of 950m² infiltration bed. Willow trees should be planted all around the edge of the infiltration bed to assist with soakage. Separation distances should be maintained from the water ingress at 0.3m BGL
Site improvement works are required to ensure a level area for the infiltration bed. An infiltration drain must be installed on the higher part of the site to divert surface water away from the location of the percolation area.

¹ A discharge of sewage effluent to "waters" (definition includes any or any part of any river, stream, lake, canal, reservoir, aquifer, pond, watercourse or other inland waters, whether natural or artificial) will require a licence under the Water Pollution Acts 1977-90. Refer to Section 2.4.

6.0 TREATMENT SYSTEM DETAILS

SYSTEM TYPE: Septic Tank Systems (Chapter 7)

Tank Capacity (m ³)	<input type="text"/>	Percolation Area		Mounded Percolation Area	
		No. of Trenches	<input type="text"/>	No. of Trenches	<input type="text"/>
		Length of Trenches (m)	<input type="text"/>	Length of Trenches (m)	<input type="text"/>
		Invert Level (m)	<input type="text"/>	Invert Level (m)	<input type="text"/>

SYSTEM TYPE: Secondary Treatment System (Chapters 8 and 9) and polishing filter (Section 10.1)

Secondary Treatment Systems receiving septic tank effluent (Chapter 8)

Media Type	Area (m ²)*	Depth of Filter	Invert Level
Sand/Soil	<input type="text"/>	<input type="text"/>	<input type="text"/>
Soil	<input type="text"/>	<input type="text"/>	<input type="text"/>
Constructed Wetland	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other	<input type="text"/>	<input type="text"/>	<input type="text"/>

Packaged Secondary Treatment Systems receiving raw wastewater (Chapter 9)

Type	<input type="text" value="Sepcon BAF"/>
Capacity PE	<input type="text" value="38"/>
Sizing of Primary Compartment	<input type="text"/> m ³

Polishing Filter*: (Section 10.1)

Surface Area (m ²)*	<input type="text"/>	Option 3 - Gravity Discharge Trench length (m)	<input type="text"/>
Option 1 - Direct Discharge Surface area (m ²)	<input type="text"/>	Option 4 - Low Pressure Pipe Distribution Trench length (m)	<input type="text"/>
Option 2 - Pumped Discharge Surface area (m ²)	<input type="text"/>	Option 5 - Drip Dispersal Surface area (m ²)	<input type="text"/>

SYSTEM TYPE: Tertiary Treatment System and infiltration / treatment area (Section 10.2)

Identify purpose of tertiary treatment

Slow soakage and restricted space.

Provide performance information demonstrating system will provide required treatment levels

As per manufacturers specifications

Provide design information

As per manufacturers specifications

DISCHARGE ROUTE:

Groundwater	<input checked="" type="checkbox"/>	Hydraulic Loading Rate * (l/m ² .d)	<input type="text" value="60.00"/>	Surface area (m ²)	<input type="text" value="950.00"/>
Surface Water **	<input type="checkbox"/>	Discharge Rate (m ³ /hr)	<input type="text"/>		

* Hydraulic loading rate is determined by the percolation rate of subsoil

** Water Pollution Act discharge licence required

6.0 TREATMENT SYSTEM DETAILS

QUALITY ASSURANCE:

Installation & Commissioning

The Sepcon BAF sewage treatment system & proposed percolation area should only be installed by a competent person. The installation of the sewage system should be supervised by a suitably qualified person.

On-going Maintenance

The Sepcon BAF & percolation area should be serviced annual or as otherwise directed by the manufacturer. De-sludging of the treatment system should be carried out as required.

7.0 SITE ASSESSOR DETAILS

Company: Waste Water Technical Services Ltd

Prefix: Mr First Name: Ken Surname: Lannery

Address: Moyglare Rd
Kilcock
Co Kildare

Qualifications/Experience: QQI Site Suitability Wastewater Treatment, QQI Onsite Wastewater Treatment & Disposal

Date of Report: 31-Jan-2025

Phone: 087 2889381 E-mail: wastewaterts@gmail.com

Indemnity Insurance Number: PI/C/12392/18/1

Signature: Ken Lannery Digitally signed by Ken Lannery
Date: 2025.01.31 10:06:56 Z

Photo of Trial Hole



Photo of Site



Photos of Subsurface Percolation Test Holes

Subsurface Test Hole # 1



Subsurface Test Hole # 2



Subsurface Test Hole # 3



Photos of Surface Percolation Test Holes

Surface Test Hole # 1



Surface Test Hole # 2



Surface Test Hole # 3





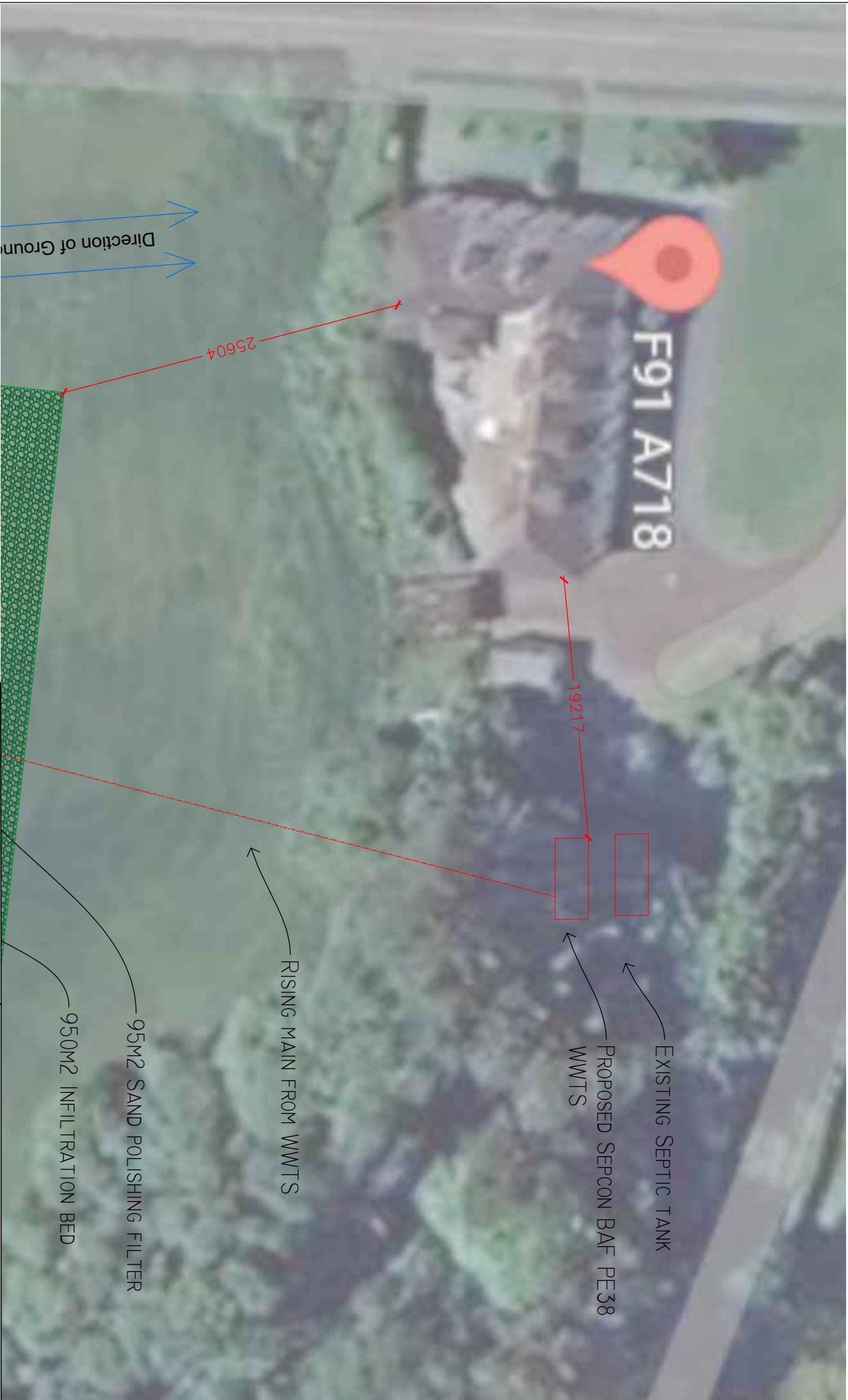
Project Name: **Frank Murphy**

Drawing Title: - **Site Layout**

Address:		Project No:	Client Ref:
Date:		Scale: 1:500 on A3	Rev. no:
			Dwg No.

Sepcon
SEWAGE TREATMENT SYSTEMS

Moyglare Rd, Killock, Co Kildare
Ph: 01 6287300 Email: info@sepcon.ie
Web: www.sepcon.ie

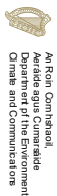




SEWAGE TREATMENT SYSTEMS

Moyglare Rd, Killock, Co Kildare
Ph: 01 6287300 Email: info@sepcon.ie
Web: www.sepcon.ie

Project Name: Frank Murphy			
Drawing Title: - Site Layout			
Address:		Project No:	Client Ref:
Date:		Scale: 1:250 on A3	Rev. no:
			Dwg No.



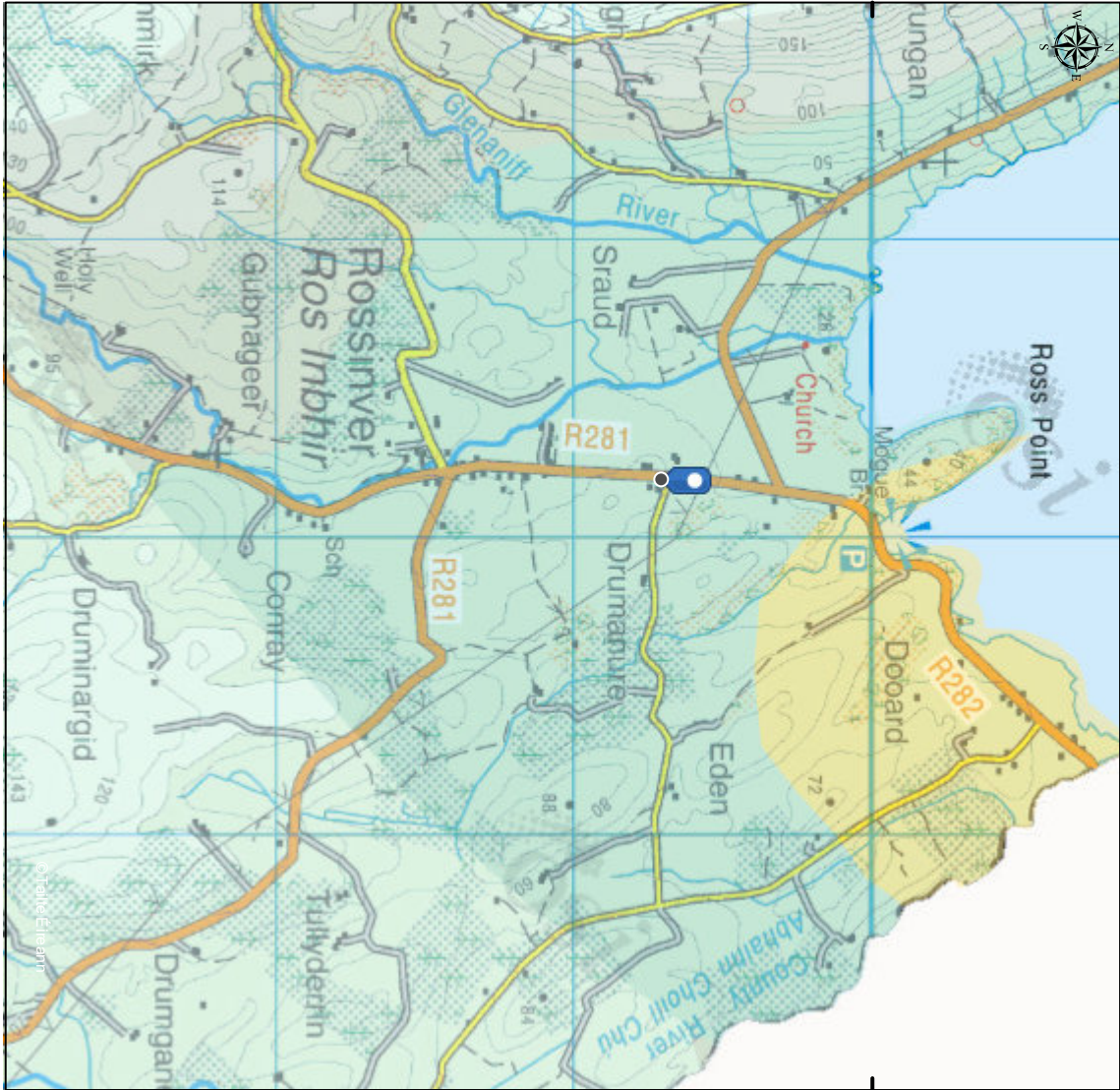
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Snapshot Date: January 21, 2025

ME_GSI_Sand_and_Gra...

- Pl - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones
- Pu - Poor Aquifer - Bedrock which is Generally Unproductive
- Lake
- Unclassified

Finvi

Frank Murphy - Bedrock Map



Ar Roinn Domhanóil,
Ardáidís agus Cumraíodas
Gníomhaíochtaí
Gníomhaíochtaí

MAINTAINED BY THE G.S.I.



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Legend

Groundwater Rock Units

	Basalts & other Volcanic rocks		Dinantian Mudstones and Sandstones (Cork Group)
	Permo-Triassic Sandstones		Devonian Kiltoran-type Sandstones
	Permo-Triassic Mudstones and Gypsum		Devonian Old Red Sandstones
	Westphalian Sandstones		Granites & other Igneous Intrusive rocks
	Westphalian Shales		Silurian Metasediments and Volcanics
	Namurian Shales		Ordovician Metasediments
	Namurian Sandstones		Ordovician Volcanics
	Namurian Undifferentiated		Cambrian Metasediments
	Dinantian Shales and Limestones		Precambrian Quartzites, Gneisses & Schists
	Dinantian Mixed Sandstones, Shales and Limestones		Precambrian Marbles
	Dinantian Sandstones		
	Dinantian Pure Sandstones		
	Dinantian Pure Bedded Limestones		
	Dinantian Upper Impure Limestones		
	Dinantian Dolomitised Limestones		
	Dinantian Pure Unbedded Limestones		
	Dinantian Lower Impure Limestones		
	Dinantian (early) Sandstones, Shales and Limestones		

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Public Supply Source

Protection Areas

SI-Inner Protection

Area

 SO-Outer Protection

Area

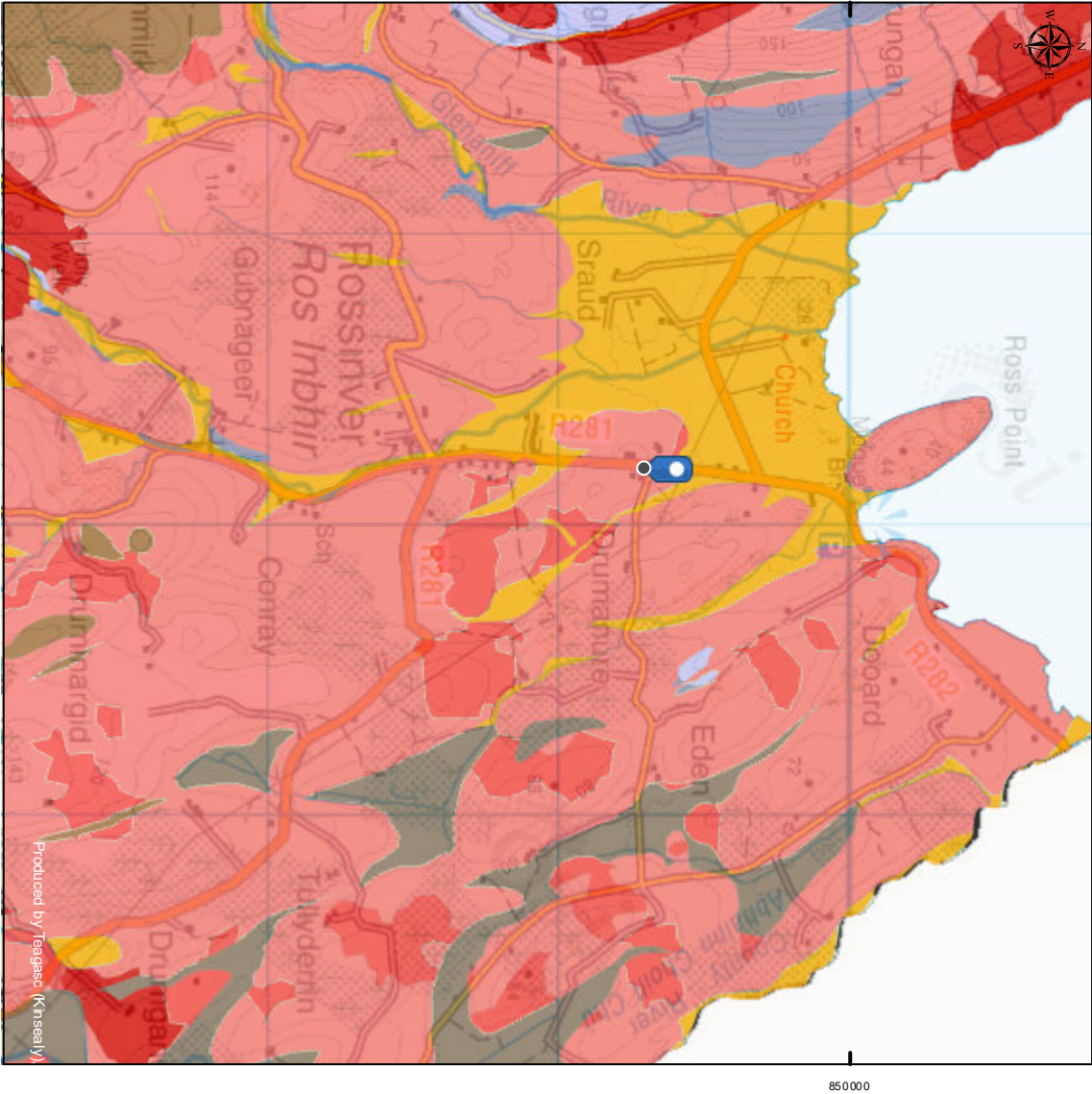
Group Scheme

Preliminary Source

Protection Areas

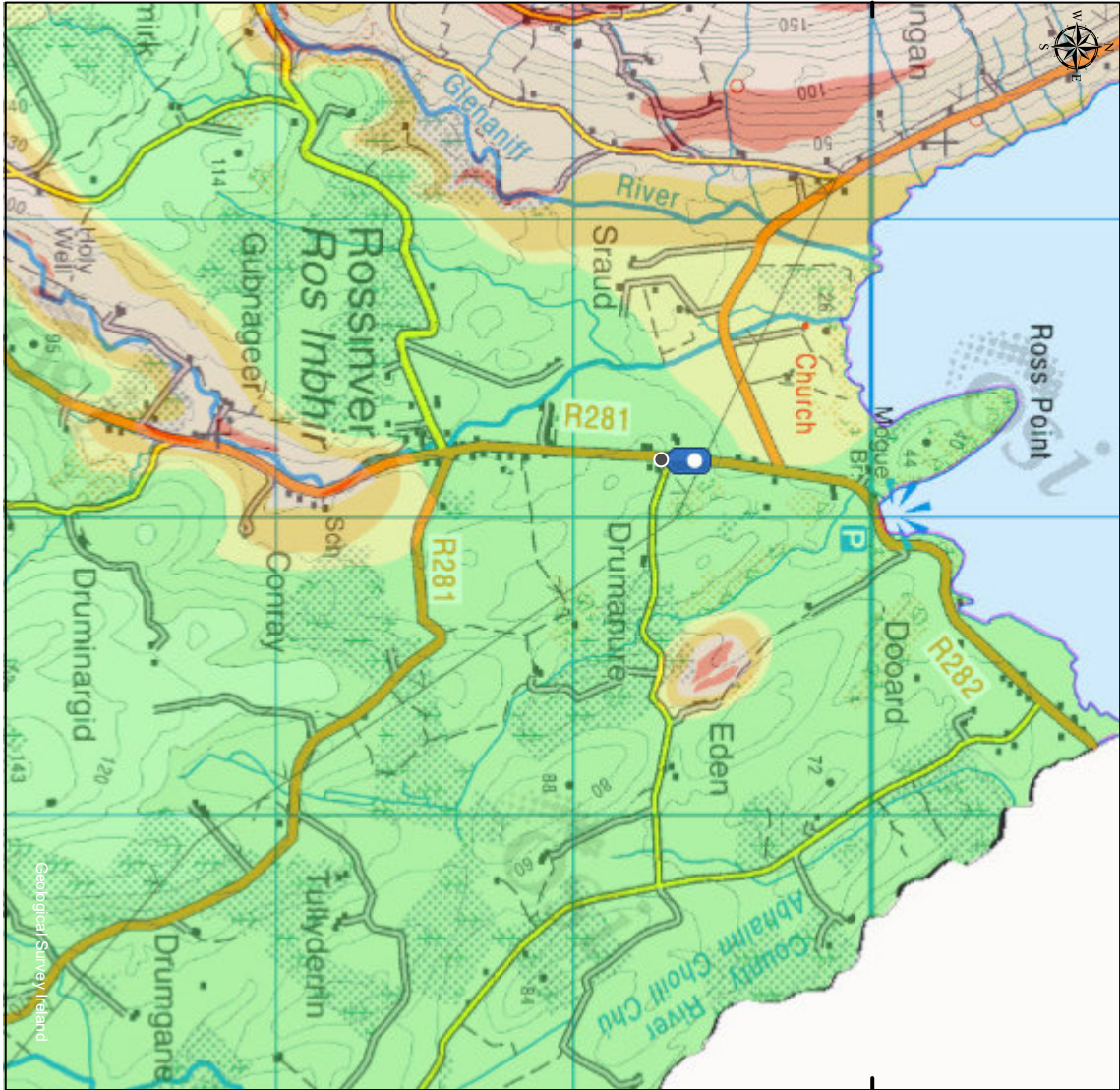
Sector Data (Geological Survey) licensed under a Creative Commons Attribution (CC BY 4.0) licence | Environment

Frank Murphy - Soil Map



Legend

TEAGASC_Soils_50K_L...	
<div></div> AminDW - Deep well drained mineral (Mainly acidic)	<div></div> BminSP - Shallow poorly drained mineral (Mainly basic)
<div></div> AminPD - Mineral poorly drained (Mainly acidic)	<div></div> BminSPPT - Shallow peaty poorly drained mineral (Mainly basic)
<div></div> AminPDPT - Peaty poorly drained mineral (Mainly acidic)	<div></div> BminSRPT - Shallow, rocky, peaty/non-peatymi... complexes (Mainly basic)
<div></div> AminSW - Shallow well drained mineral (Mainly acidic)	<div></div> BktPt - Blanket peat
<div></div> AminSP - Shallow poorly drained mineral (Mainly acidic)	<div></div> FenPt - Fen peat
<div></div> AminSPT - Shallow peaty poorly drained mineral (Mainly acidic)	<div></div> RsPt - Raised Peat
<div></div> AminSRPT - Shallow, rocky, peaty/non-peatymi... complexes (Mainly acidic)	<div></div> Cut - Cutover/cutaway peat
<div></div> AminSRPT - Shallow, rocky, peaty/non-peatymi... complexes (Mainly acidic)	<div></div> AlluMIN - Alluvial (mineral)
<div></div> AminSRPT - Shallow, rocky, peaty/non-peatymi... complexes (Mainly acidic)	<div></div> AlluMRL - Alluvial (marl)
<div></div> AminSRPT - Shallow, rocky, peaty/non-peatymi... complexes (Mainly acidic)	<div></div> Lac - Lacustrine type soils
<div></div> BminDW - Deep well drained mineral (Mainly basic)	<div></div> Scree - Scree
<div></div> BminPD - Mineral poorly drained (Mainly basic)	<div></div> AeOUND - Aeolian undifferentiated
<div></div> BminPDPT - Peaty poorly drained mineral (Mainly basic)	<div></div> MarSands - Marine sand and gravel
<div></div> BminSW - Shallow well drained mineral (Mainly basic)	<div></div> MarSed - Marine/estuarine sediments
<div></div> BminSW - Shallow well drained mineral (Mainly basic)	<div></div> Made - Made ground
<div></div> BminSW - Shallow well drained mineral (Mainly basic)	<div></div> Water - Water
<div></div> BminSW - Shallow well drained mineral (Mainly basic)	<div></div> Unclass



An Roinn Domhanoil,
Ardáidís agus Cumradair
Ardáidís agus Cumradair
Orainne agus Cumradair

Geological Survey of Ireland



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TEASTAS CUSPÓRA SHAINIÚIL LEIBHÉAL 6 LEVEL 6 SPECIFIC PURPOSE CERTIFICATE

i
in

Oiriúnacht Suíomh Láithreáin i gcomhair Cóireáil Fuoílluisce Site Suitability for Wastewater Treatment

le Tuillteanas
with Merit

Bronnta ar
Awarded to

KENNETH LANNERY

ar
on

14 Deireadh Fómhair 2018
14 October 2018

Príomhfheidhmeannach
Chief Executive

6S2241
F1404712
38906N

Bronnta ag Dearbhú Cáilíochta agus Cáilíochtaí Éireann faoi Chuid 4 den Acht um Cháilíochtaí agus Dearbhú Cáilíochta (Oideachas agus Oiliúint) 2012
Awarded by Quality and Qualifications Ireland under Part 4 of the Qualifications and Quality Assurance (Education and Training) Act 2012

FET Creidiúntí/Credits 10
NFQ Leibhéal/Level 6
EQF Leibhéal/Level 5



www.QQI.ie

Mar fheidhmiú ar a cumhachtaí reachtúla tá an Ollscoil tar éis an dámhachtain
In the exercise of its statutory powers, the University has conferred this award of

Certificate in On-site Wastewater Treatment and Disposal

Special Purpose Award Level 7

10 ECTS Credits


a bhronnadh ar
on

Ken Lannery

Dáta na Comhairle Acadúla
Date of Academic Council

20th June 2022

I bhfianaise air sin cuirtear séala na hOllscoile ar an bpár seo.
In witness whereof the seal of the University is impressed upon this parchment.



Uachtarán
President



Leas-Uachtarán um Ghnóthaí Acadúla
Vice President for Academic Affairs

Date: 19/08/2024

Our Ref:

WAST03

COVER NOTE**To whom it may concern**

Our Client: Waste Water Technical Services Ltd
Address: Moyglare Road, Kilcock, Co Kildare

We act as insurance brokers for the above named client and are pleased to confirm that the following insurance cover is currently in force:

Professional Business: Percolation testing only for the purposes of this insurance

Professional Indemnity Insurance Policy

Insurance Company:	Lloyds Insurance Company S.A
Policy Number:	PI/C/12392/24/1
Renewal Date:	31-08-2025.
Limit of Indemnity:	€ 1,000,000
Excess:	€ 1,500
Territorial Limits:	Worldwide excluding USA/Canada

This letter is provided as a courtesy to our client as a matter of information only and confers no rights to the holder. We accept no duty of care or responsibility to any third party. This letter does not purport to set out all of the policy terms, conditions, warranties and exclusions. Full policy documents are available on request.

Yours sincerely,



Barry Brady
Certified Insurance Practitioner
E: barry.brady@mib.ie
PH: 0494327088

MARTIN INSURANCE BROKERS

Dublin Road, Cavan

T: 049-4332944

E: info@martininsurance.ie

Crotty Insurance Brokers Ltd

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by the Central Bank of Ireland



Convent Cross remains over the front entrance as a symbol that the Convent use has not been abandoned there have been no changes to the interior layout and the chapel layout Remains in situ.



The layout of the Chapel has remained in place without alteration and the alter alcove and the higher alter level remains. As photographed Jan 2025