

1.0 INTRODUCTION, SCOPE & METHODOLOGY

Golder Associates Ireland Ltd (“Golder”) have been commissioned to prepare this Remedial Environmental Impact Assessment Report [rEiAR] to accompany a substitute consent application for consent for an existing quarry over approximately 28.8 hectares [ha.] at Windmillhill, Rathcoole, Co. Dublin. This rEiAR is submitted on instruction of Mr. Laurence Behan, owner and operator of this quarry who will be the applicant for substitute consent.

It is noted that this rEiAR has been prepared in tandem with an EiAR to accompany an application under Section 37L of the Planning and Development Act, 2000 as amended for further development of the existing quarry as a quarry by the same applicant.

The quarry the intended subject of application for substitute consent, lies at the centre of a contiguous, established landholding of approximately 73 ha. That landholding is centered on the townland of Windmillhill and covers much of that townland area with protruding minor position of that ownership units extending north westerly into the townland of Steelstown and south easterly into the townland of Carrigeen.

The centre of the landholding has been the subject of historic, current and intended future extraction and is roughly rectangular in shape with a south to north orientation onto the N/M7. The southern boundary is delineated by the local Windmillhill Road and the western and eastern boundaries of this area are delineated by the Windmillhill townland boundaries. This area extends to 46.14 ha. and constitutes the EIA project boundary for this quarry.

The lands the subject of this rEiAR [the subject lands] at 46.14 ha. entirely encompasses the substitute consent application area of 28.8 ha. The reserve at this quarry is greywacke rock, overlain by boulder clay, currently worked to an average depth of 173 mAOD. The reserve is excavated by blasting and mechanical means, primarily processed by mobile plant at the working face. Excavated material is transported to a centrally located existing administration and processing plant area over approximately 5 ha. that holds further processing plant (washing, screening, grading, bagging), an asphalt production plant and concrete plant. This plant and processing area is an established part of the quarry area and has also been formerly used for the recovery of inert Construction and Demolition (C&D) waste.

Figure 1.1 shows the regional location of the Site, whilst Figure 1.2 provides a depiction of the substitute consent application area and the EIA project boundary and

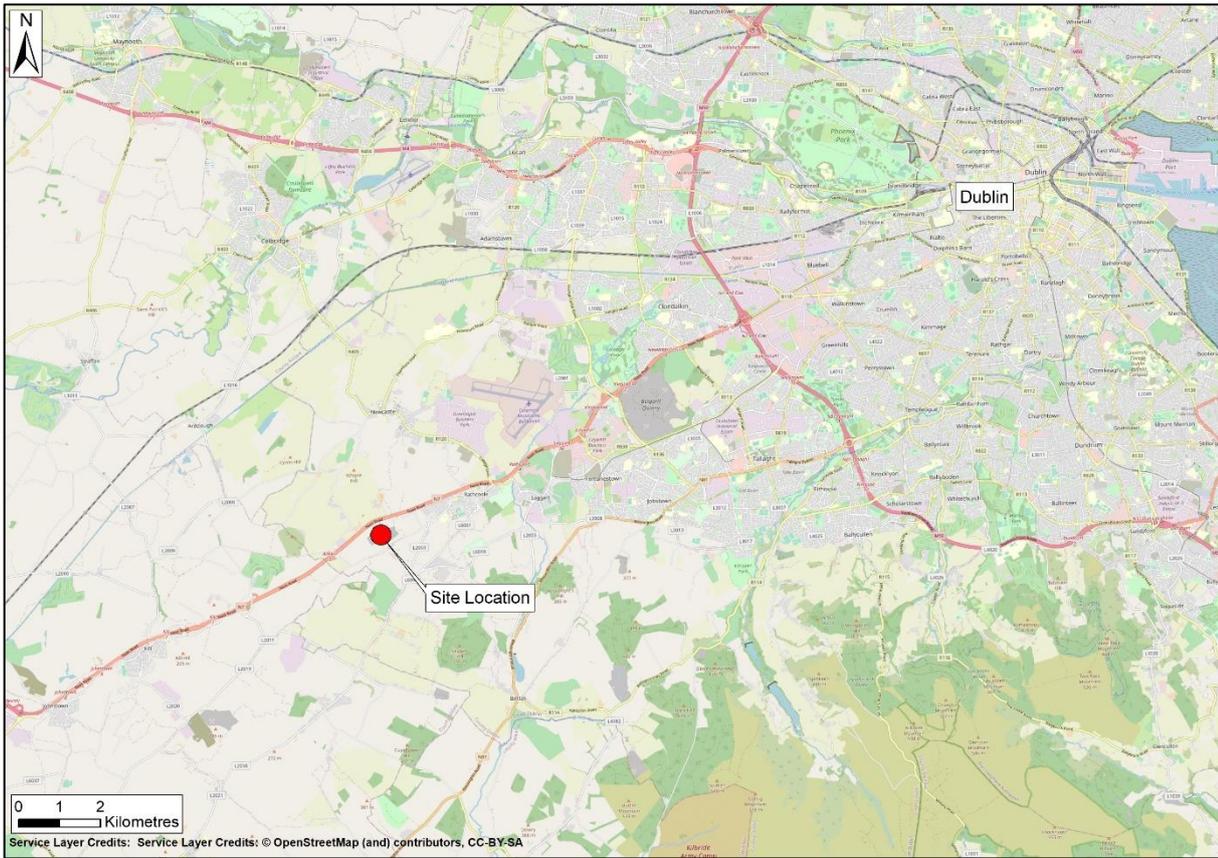


Figure 1.1: Regional Site location.

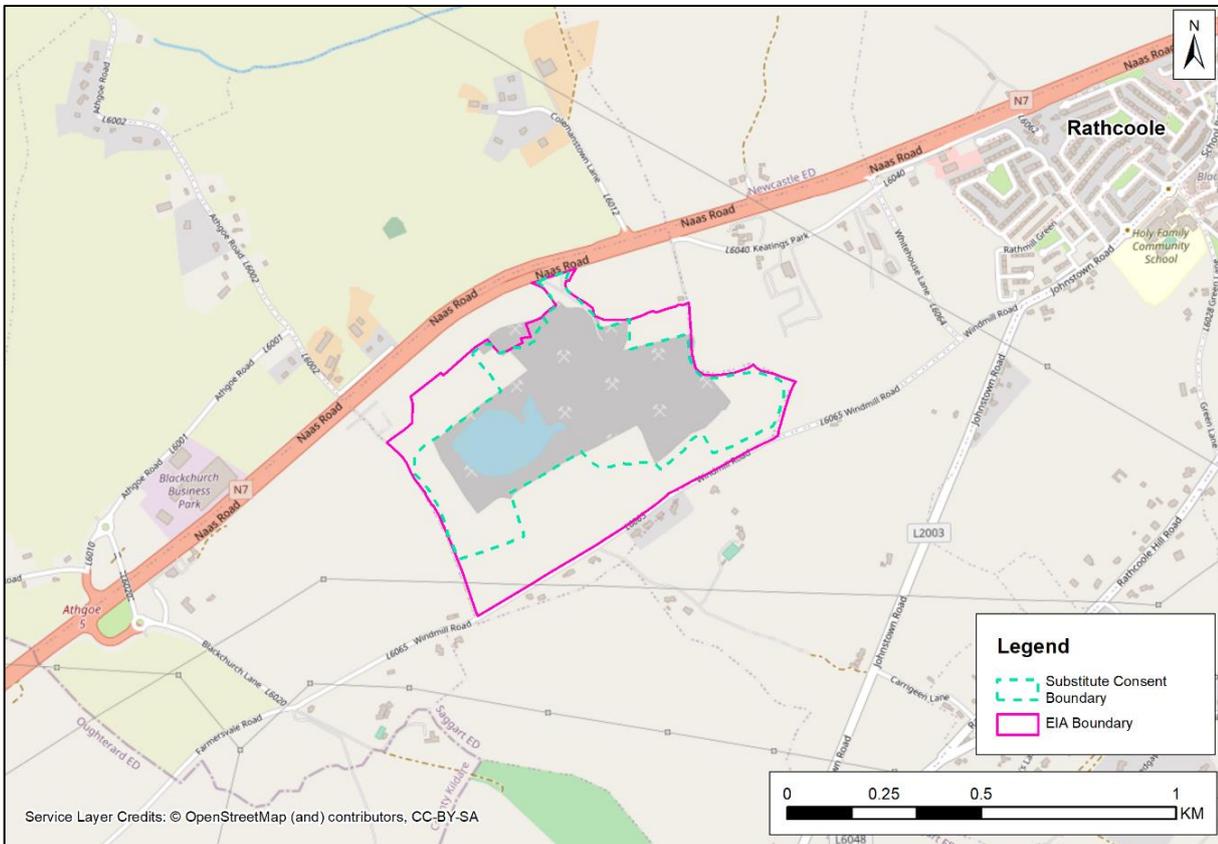


Figure 1.2: Substitute consent application area and the lands the subject of the rEiAR.

1.1 Requirement for rEIAR

Certain proposed developments, due to their typology, and scale automatically attract the requirement for EIA by a competent authority as part of that authority's formal assessment of the development proposal when that proposal seeks permission, consent or licensing. As set out in the next section, a hierarchical suite of European and national legislation and guidance govern EIA and direct EIAR content.

Remedial EIA and rEIAR arise where retrospective consent for development that ought to have attracted the requirement for EIA has been undertaken. The consent for that type of development is substitute consent, itself the subject of dedicated legislative provision that in the first instance only allows the seeking of substitute consent after the granting of leave to make such an application or upon direction notice from an authority.

In this instance the substitute application that this rEIAR accompanies is by Order of the High Court [2018 No. 929 JR] of August 2020 that set aside a previous substitute consent application decision (ref. PL06.SU0068) granted relief including:

“...that a fresh application for substitute consent submitted by the Applicant to the Respondent pursuant to the Record of Executive Business and Managers Order of South Dublin County Council dated 9th August 2012 in respect of the determination made and notice issued under section 261A(2)(a), 261A(3)(a) and 261A(7) of the Planning and Development Act, 2000 as amended in relation to the quarry at Windmill Hill Rathcoole county Dublin...”

A copy of this Order is at Appendix 1.1.

Section 261A of the Planning and Development Act 2000, as amended is entitled 'Further matters in relation to control of quarries' and succeeded Section 261 'Control of quarries'. It is necessary to set out the treatment of the quarry under Section 261 and Section 261A to illustrate the substitute consent application parameters arising from the above Order as this rEIAR has been prepared to accompany that application.

1.1.1 Section 261 Control of quarries

Set out here is a summary of the Section 261 process to set a context for this quarry. As a summary, it does not purport to be a full rendition of Section 261 and is set out without prejudice to Section 261 of the Planning and Development Act 2000, as amended and the planning applications arising which are public record.

Section 261 commenced in 2004 and required that 'the owner or operator of a quarry' that was in operation under planning pre '63 status or had a planning permission over 5 years of age supply details of their quarry operation to their local authority, i.e. to 'register' their quarry with their local authority. The details required to be supplied consisted of a form containing high level information such as; age of extraction use, location, extent, rate of extraction, traffic, hours of operation and a map indicating the 'area of the quarry, including the extracted area'.

Upon receipt of registration information, the local authority were bound to apply a registration number to that quarry and carry out an assessment. In summary, the assessment was to determine whether the quarry was Pre '63 (was in operation before the advent of the requirement to seek planning permission) or held planning permission. The authority also assessed the compliance of the site against its planning permission. The authority then had alternative options to notify to the registering owner or operator:

- That the quarry was pre '63 and would be subject to the imposition of conditions on the operation of the quarry, or was required to seek planning permission with EIAR (then an Environmental Impact Statement (EIS)).

- That the quarry held planning permission and the authority were considering imposing new or revised conditions on its operation. Those conditions are considered the same as conditions imposed on planning permissions.

It also occurred that certain quarries registered were found to not hold planning permission or pre '63 status and were required to close.

The local authority was required to advertise the commencement of S.261 and their intentions in respect of each registered quarry.

1.1.2 Section 261 registration of the quarry, South Dublin County Council ref. SDQU5/04

Mr. Laurence Behan registered the quarry on 25 April 2005 as being operated by L Behan & Sons Ltd. with an estimated 'site boundary' of 73 ha. and a 'workable area' of 39.27 ha. This registration further recorded that the quarry was pre '63. The registration was assigned ref. SDQU05/04 by South Dublin County Council.

31 August 2005 the local authority required further information on registration including 'revised map indicating (a) site boundary in red, (b) extractable area in blue, (c) 'total extracted area in green'. This request was responded to on 10 October 2005 and acknowledged by letter 19 October 2005.

27 October 2005 Mr. Laurence Behan's agent supplied the original 'full planning permission for the operation of the quarry' ref. 'A.14.11547 and is dated 20th May 1968' and enclosed a copy of that permission. A copy of this permission is at Appendix 1.2.

This information altered the status of the quarry leading the local authority to require resubmission of the registration form to include reference to the 1968 permission and their advertising of their intention to impose revised conditions on the continued operation of the quarry. The revised registration form was submitted 05 October 2006 and the notice of the authority's intention was published in the Irish Times 27 Jan 2007.

27 April 2007 South Dublin County Council issued the final operating conditions for the quarry. There were 36 no. conditions. A copy of these conditions is at Appendix 1.3. Of note, is condition no. 1 that refers to the original information received for registration and the maps submitted in response to further information and condition no. 35 that limited extraction to within the blue line on the revised site location sheet no.1 dated 23/04/05 submitted as Additional Information on 10 October 2005. Please see Figure 1.3, a copy of the further information map received by the local authority on 10 October 2005.

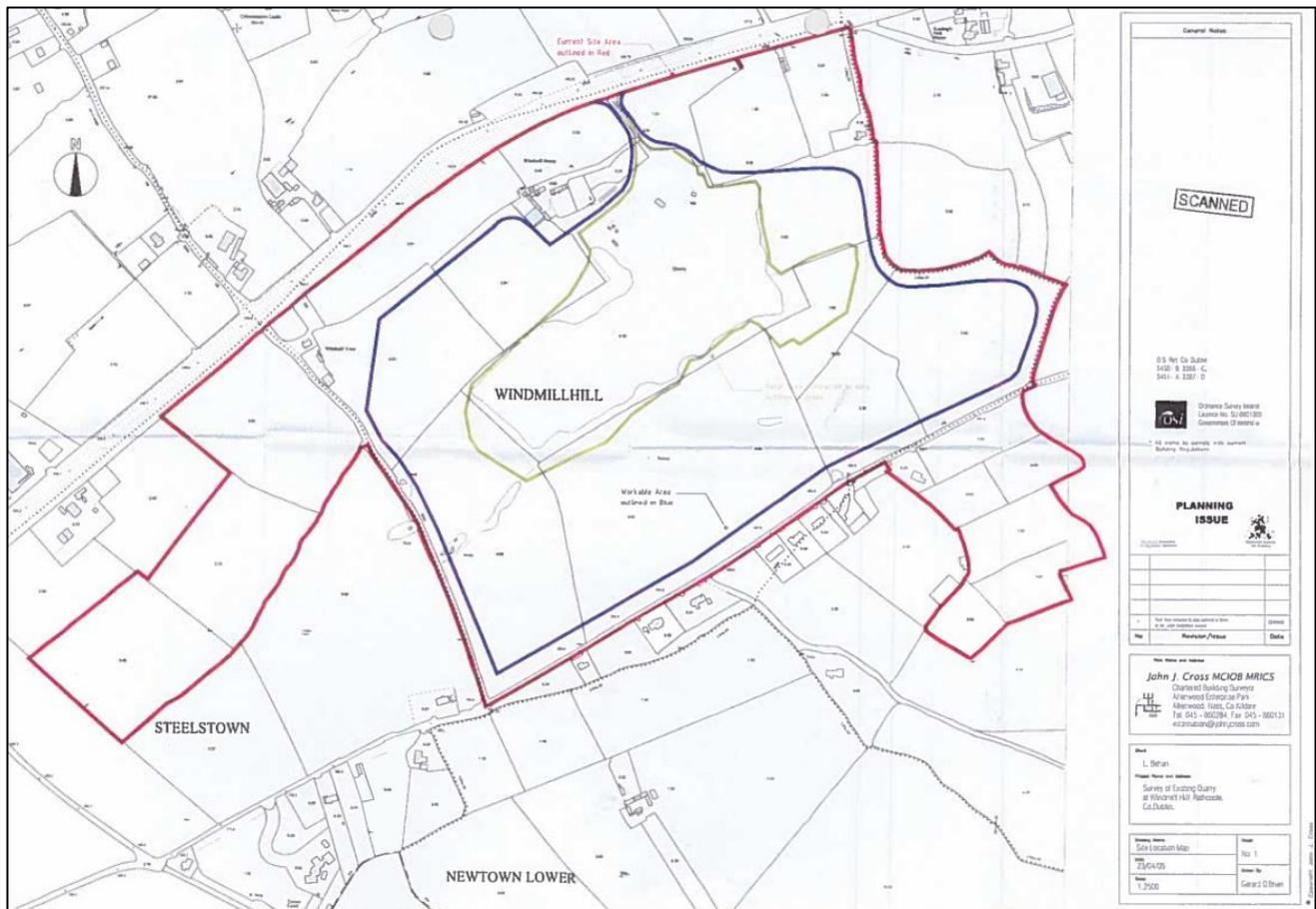


Figure 1.3: Copy of S.261 registration map submitted 10 October 2005, in response to request for further information for S.261 registration ref. no. SDQU05/4 ‘revised map indicating (a) site boundary in red, (b) extractable area in blue.

1.1.3 Section 261A Further control of quarries

Set out here is a summary of the Section 261A treatment of the quarry. The summary of S.261A at the outset does not purport to be a full rendition of Section 261A and is set out without prejudice to Section 261A of the Planning and Development Act 2000, as amended and the planning applications arising which are public record.

Section 261A commenced in 2011. **S.261A(1)** required that each local authority publish notice that it intended to review ‘every quarry’ in its administrative area to determine (a) whether the following was required but not carried out:

- i) An Environmental Impact Assessment (EIA);
- ii) A determination as to whether an EIA was required; and
- iii) An Appropriate Assessment (AA).

For the remainder of this section, EIA and AA are referred to as ‘environmental assessments’. The potential outcomes of that review were:

S261A(b) where environmental assessment or a determination for EIA required and not carried out + 261 registration undertaken and pre ’63 status or conditions exist: the authority will issue notice that substitute consent is required to be sought.

S261A(c) where environmental assessment or a determination for EIA required and not carried out + 261 registration not undertaken where the quarry is post '63 and no planning permission exists: the authority will issue notice that enforcement action will arise requiring cessation of activity and remedial site measures.

S261A(d) where environmental assessment or a determination for EIA required and not carried out + the development giving rise to that requirement was after 03 July 2008: the authority will issue notice that enforcement action will arise requiring cessation of activity and remedial site measures.

Section 261A(1)(f) required notice of the determination to be issued to the owner or operator and S261(1)(g) allowed for review of that notice upon request to An Bord Pleanála.

Section 261A(2)(a) required that each local authority, having regard to certain matters, make determination as to whether;

- i) development was carried out after 01 February 1990 that would have required EIA or determination as to whether EIA was required and not carried out, or
- ii) development was carried out after 26 February 1997 that would have required EIA or determination as to whether EIA was required and not carried out

Section 261A(3)(a) required that a notice be issued within a certain time limit where an authority made a determination under S261A(2)(a)(i) and / or S261A(2)(a)(ii) and the quarry was found to be pre '63 or had a planning permission and fulfilled registration requirements under S.261. That notice concludes with a requirement to seek substitute consent with relevant environmental assessment from An Bord Pleanála.

The remainder of S261A(3) requires that the notice be issued to the owner / operator of the quarry, anybody who made submission to the process and a copy sent to An Bord Pleanála. The owner or operator of the quarry or anybody who made submission to the process may apply to An Bord Pleanála for a review of that notice.

Section 261A(4)(a) required that a notice be issued within a certain time limit where an authority made a determination under S261A(2)(a)(i) and / or S261A(2)(a)(ii) and the quarry was found; to have commenced after 01 October 1964 and had no planning permission, or the registration requirements under S.261 were not fulfilled. That notice concludes with an intention to issue an enforcement notice for cessation of quarrying and remediation.

The remainder of S261A(4) requires that the notice be issued to the owner / operator of the quarry and anybody who made submission to the process. The owner or operator of the quarry or anybody who made submission to the process may apply to An Bord Pleanála for a review of that notice.

Section 261A(5) required that a notice be issued within a certain time limit where the authority has made a determination under S261A (2)(a) that development occurred after 03 July 2008 that a notice would issue. That notice concludes with an intention to issue an enforcement notice for cessation of quarrying and remediation notwithstanding whether the quarry was found to be pre '63 or had a planning permission and fulfilled registration requirements under S.261.

The remainder of S261A(5) requires that the notice be issued to the owner / operator of the quarry and anybody who made submission to the process. The owner or operator of the quarry or anybody who made submission to the process may apply to An Bord Pleanála for a review of that notice.

Section 261A(6) sets out the matters that can be applied for review to An Bord Pleanála; the determination under S261A(2), decisions under S261A(3)(a) or (4)(a), the determination and / or decision under S261A(5)(a).

The remainder of S261A(6) sets out review procedures such as; suspension of notice operation until review conclusion, local authorities being required to supply information to the board upon request, and the review decision shall be provided to the person who requested the review and the local authority.

Section 261A(7) requires that where a notice has been issued under S261A(3)(a) requiring application for substitute consent and no review has been received by an Bord Pleanála, or a review has confirmed determination under S261A(2)(a) and decision under S261A(3)(a), the application for substitute consent shall be made within prescribed time limits.

Section 261A(8) requires that where a notice has been issued under S261A(3)(a) requiring application for substitute consent and a review by an Bord Pleanála has not been concerned with or confirmed determination under S261A(2)(a) or decision under S261A(3)(a) has been set aside, the local authority shall issue an enforcement notice for the cessation of quarrying.

Section 261A(9) and (10) relate to the review of a notice issued under S261A(4)(a) where notice of enforcement notice was issued.

Section 261A(11), (12) and (13) relates to the review of a notice issued under S261A(5)(a) where notice of enforcement notice was issued where development was after 03 July 2008.

Section 261A(14) requires that subject to section 177E(2A), where an application for substitute consent is made, it shall be made in relation to that development in respect of which the planning authority has made a determination under (2)(a).

Section 261A(15) explicitly requires that applications for substitute consent after direction under subsections (3), (10), or (12) comply with the provision of Part XA.

Section 261A(16) to (24) generally facilitate and apply to quarries that seek leave to apply for substitute consent.

1.1.4 Section 261A review of the quarry South Dublin County Council ref. SDQU5/04 & An Bord Pleanála Quarries Review ref. PL06S.QV0090

09 August 2012 the Record of Executive Business and Managers Order of South Dublin County Council is prepared. This is the local authority's planning officer's endorsed report and recommendation in respect of a determination pursuant to S261A for ref. SQD05A/04.

It was determined under S261A(2)(a) that development took place for which an EIA and AA was required but not carried out.

It was further recorded that the quarry was properly registered under Section 261 (ref. SDQ05A/04) that resulted in the imposition of new conditions to supersede those of the original planning permission for the quarry in 1968 (Reg. Ref. A.14).

This report recorded a decision after Section 261A(3)(a) that a notice would issue requiring the seeking of substitute consent to be accompanied by remedial Environmental Impact Statement (EIS now called EIAR) and Natura Impact Statement (NIS) for the respective purposes of EIA and AA as part of the substitute consent application consideration.

In accordance with the requirements of S261A, this notice was issued to the operator and copy issued to An Bord Pleanála who assigned this notice ref. PL06S.QB0360 on 22 August 2012. In view of a review received in respect of this notice, this notice was closed 03 October 2012 as 'review received'.

As allowed, the operator requested review of the determination and decision by An Bord Pleanála. This review was received 30 August 2012 and assigned ref. PL06S.QV0090.

31 May 2013 the review decided:

(i) confirm the planning authority's determination under Section 261A(2)(a)(i) that EIA was required but not carried out.

(ii) set aside the planning authority’s determination under Section 261A(2)(a)(ii) that AA was required but not carried out.

(iii) confirm the planning authority’s decision under Section 261A(3)(a) insofar as it relates to EIA

An application for substitute consent for ‘a quarry’ over 40.875 ha. on behalf of Laurence Behan was made 24 October 2013 and assigned ref. PL06S.SU0068. A copy of the site location map part of this application is at Figure 1.4.

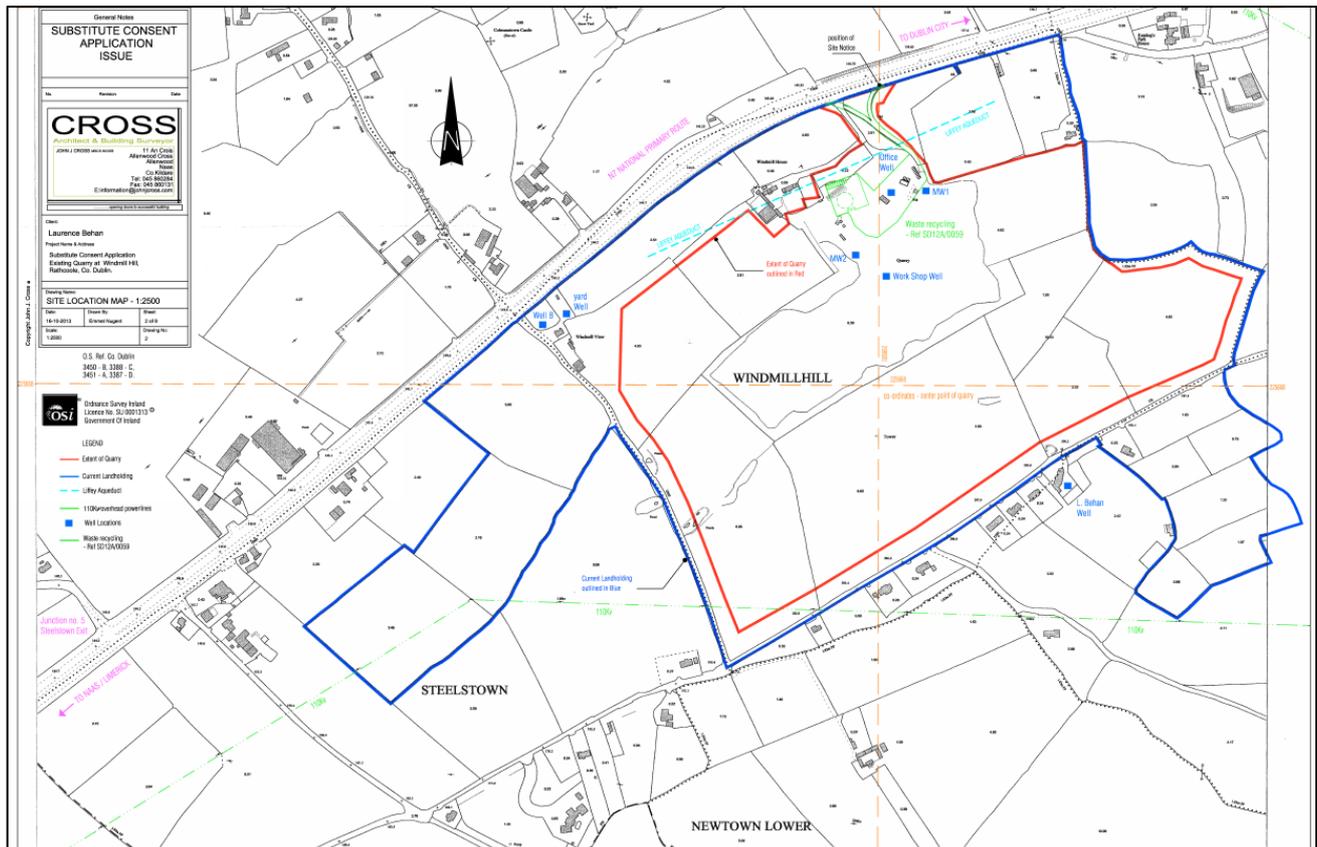


Figure 1.4: Copy of substitute consent application ref. PL06S.SU0068, site location map. Application made 2013, refused 2018, decision quashed by High Court Order 2020.

In respect of the substitute consent application ref. PL06S.SU0068, An Bord Pleanála requested information from South Dublin County Council. A comprehensive responding report dated 14 November 2013 was submitted that included drawing no. SCB-1 (November 2013), prepared by south Dublin County Council technical staff and consisting of an indicative overlay of boundary areas referred to in that report that included; the proposed substitute consent boundary, then existing quarry area and land ‘anticipated’ to be included in the substitute consent application. A copy this map is at Figure 1.5.

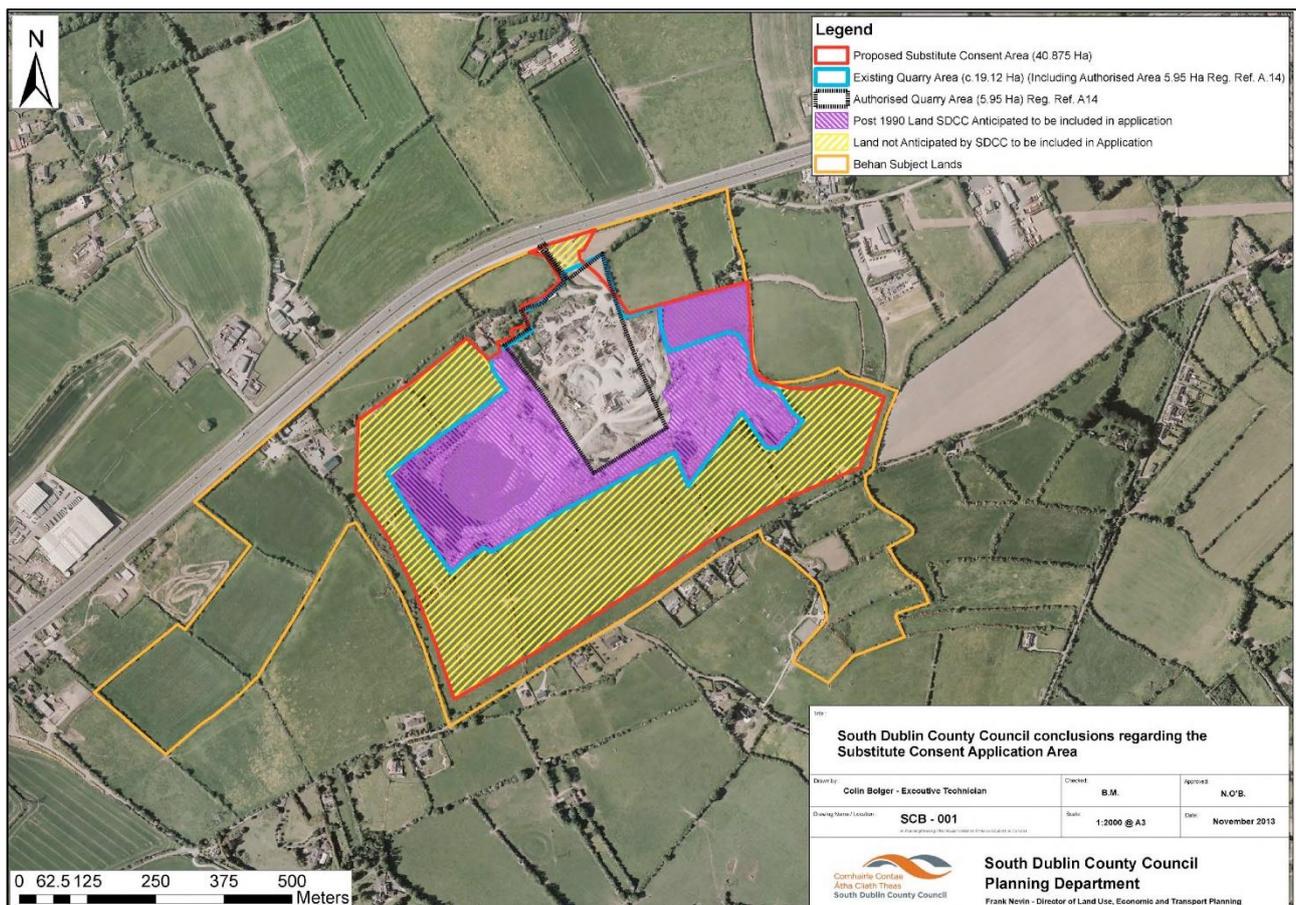


Figure 1.5: Copy of drawing no. SCB-1 (November 2013), prepared by south Dublin County Council technical staff to accompany local authority response to request for information in respect of substitute consent application ref. PL06S.SU0068.

An application was made, also on behalf of Laurence Behan for further development of the quarry under S.37L on 25 November 2015 and assigned ref. PL06S.DQ0003. The development was stated to consist of: ‘(A) to continue the development of a quarry having a total site area of 40.875 Hectares, (B) Reinstatement of worked out quarry to agricultural use by means of the importation of inert sub soil and top soil amounting to a total of 11,151,570 cubic metres.’ A copy of the site location map part of this application is at Figure 1.6.

It is noted that by letter 02 December 2015, An Bord Pleanála requested a report from South Dublin County Council setting out their views on the effects of the proposed development on the environment and the proper planning and sustainable development of the functional area of the authority. A responding report was prepared and submitted under cover 21 January 2016.

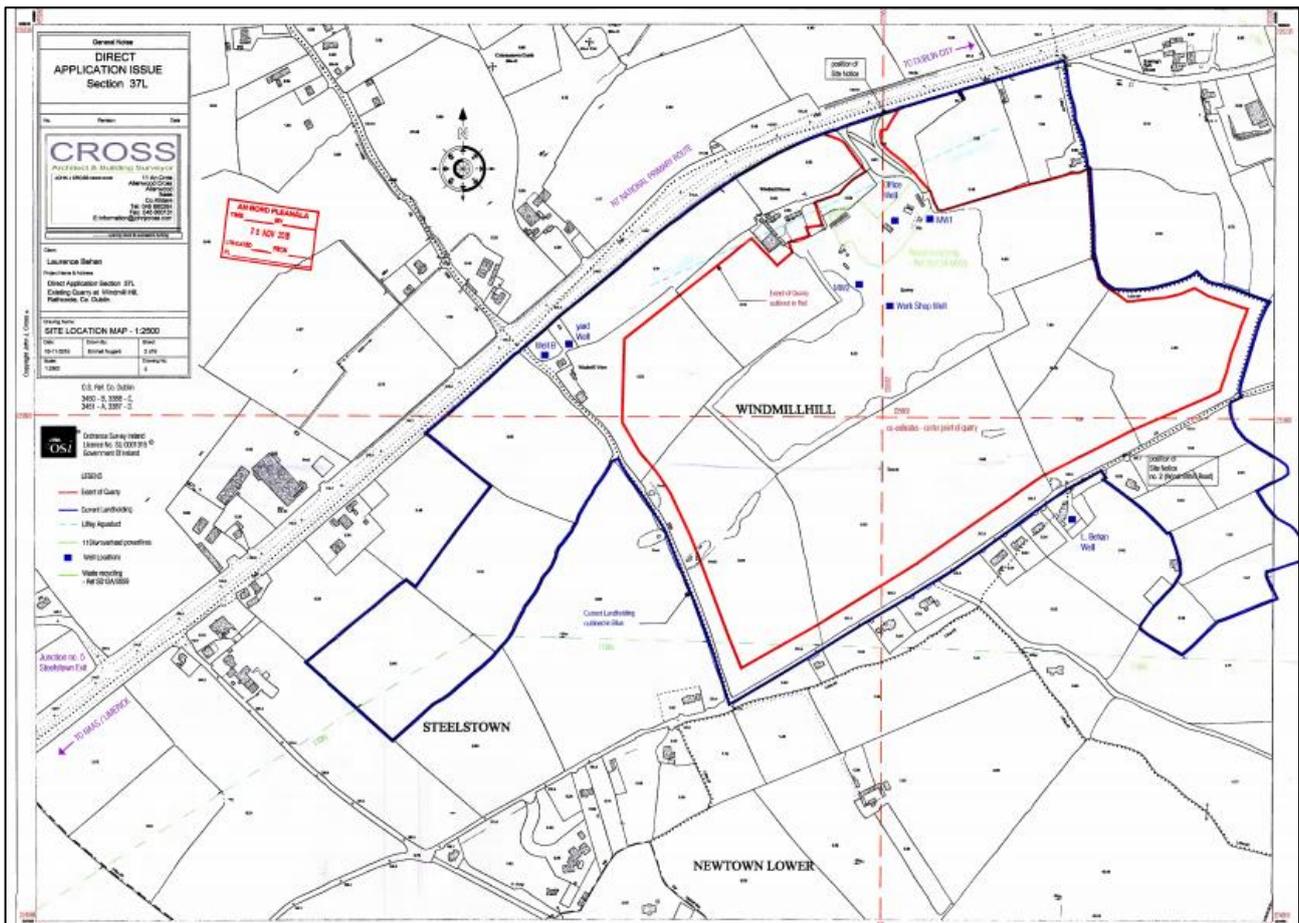


Figure 1.6: Copy of S.37L application ref. PL06S.DQ0003, site location map. Application made 2015, refused 2018, decision quashed by High Court Order 2020.

1.1.5 Substitute consent application and EIA project boundary

The application for substitute consent, made 24 October 2013, assigned ref. PL06S.SU0068 was refused 21 September 2018. The application for further development of the quarry under S.37L, made on 25 November 2015, assigned ref. PL06S.DQ0003 was also refused 21 September 2018. These application decisions were quashed by High Court Order [2018 No. 929 JR].

Therefore, having regard to Section 1.1 above and the Order of the High Court [2018 No. 929 JR] of August 2020: the determination under S261A(2)(a) and decision at S261A(3) by South Dublin County Council under ref. SDQ05A/04 as reviewed under PL06S.QV0090 have given rise to the ‘fresh’ application for substitute consent, accompanied by this rEiAR.

The substitute consent planning application unit extends to 28.8 ha. and reflects the extracted area of the quarry, all contained within the S.261 workable area registration boundary at Figure 1.3.

The substitute consent planning application boundary unit (28.8 ha.) that this rEiAR accompanies is significantly smaller than that for which substitute consent was previously sought (40.875 ha.) as it reflects the extracted area and does not include areas yet to be extracted.

As noted at the outset, the application for substitute consent that this rEiAR accompanies is to be made concurrent with an application for further development of quarry under S.37L over an area of 26.98 ha. which is fairly contiguous with the existing extracted area. That application is accompanied by an EiAR.

In view of this rEIAR and the EIAR being concurrently prepared for much of the same operational lands it is submitted that a single EIA project boundary for the purposes of assessment by experts of works past and proposed is consistent and will facilitate EIA of each development within the same EIA project envelope.

The EIA project boundary envelopes an area of 46.14 ha. that encloses previous quarry application areas, current workings and intended future workings.

The EIA project boundary is therefore larger than the associated planning application units in order to capture:

- The currently proposed substitute consent and S.37L application boundaries and associated infrastructure; and
- The workable area registered under S.261 for which conditions were imposed.

To a lesser extent, the EIA project boundary was chosen to capture previous applications on the lands as they may include information useful to construct the history and baseline of the current development proposals. In this regard, it was assumed that the most relevant information would derive from the rEIS and EIS submitted for the previous substitute consent and S.37L applications (refs. PL06S.SU0068 and PL06S.DQ0003), therefore the current EIA project boundary largely coincides with those EIA project boundaries.

1.1.6 Definition of a quarry for S.261 and S.261A

It is noted that S.261(13) are definitions for that Section. This includes 'quarry'; "has the meaning assigned to it by section 3 of the Mines and Quarries Act, 1965." This definition is set out here, Section 3, Mines and Quarries Act, 1965

"In this Act "mine" means an excavation or system of excavations made for the purpose of, or in connection with, the getting, wholly or substantially by means involving the employment of persons below ground, of minerals (whether in their natural state or in solution or suspension) or products of minerals.

(2) In this Act "quarry" means an excavation or system of excavations made for the purpose of, or in connection with, the getting of minerals (whether in their natural state or in solution or suspension) or products of minerals, being neither a mine nor merely a well or bore-hole or a well and bore-hole combined.

(3) "Mine" and "quarry" include, respectively, any place on the surface surrounding or adjacent to the shafts of the mine or to the quarry occupied together with the mine or quarry for the storage or removal of the minerals or for the purposes of a process ancillary to the getting of minerals, including the breaking, crushing, grinding, screening, washing or dressing of such minerals but, subject thereto, does not include any place at which any manufacturing process is carried on.

(4) For the purposes of this Act, any place occupied by the owner of a mine or quarry and used for depositing refuse from it shall form part of the mine or quarry, but any place so used in connection with two or more mines or quarries, and occupied by the owner of one of them, or by the owners of any two or more in common, shall be deemed to form part of such one of those mines or quarries as the Minister may direct.

(5) For the purposes of this Act any line or siding (not being part of a railway) serving a mine or quarry shall form part of the mine or quarry, but, if serving two or more of them, shall be deemed to form part of such one of them as the Minister may direct.

(6) For the purposes of this Act a conveyor or aerial ropeway provided for the removal from a mine or quarry of minerals or refuse shall form part of the mine or quarry."

European Union (Environmental Impact Assessment and Habitats) (No. 2) Regulations 2011 (S.I. No. 584 of 2011) inserted a discreet 'quarry' definition into Section 2 'Interpretation' of the Planning and Development Act, 2000 as amended as follows:

“quarry” means an excavation or system of excavations made for the purpose of, or in connection with, the getting of minerals (whether in their natural state or in solution or suspension) or products of minerals, being neither a mine nor merely a well or bore-hole or a well and bore-hole combined, and shall be deemed to include—

(i) any place on the surface surrounding or adjacent to the quarry occupied together with the quarry for the storage or removal of the minerals or for the purposes of a process ancillary to the getting of minerals, including the breaking, crushing, grinding, screening, washing or dressing of such minerals but, subject thereto, does not include any place at which any manufacturing process is carried on;

(ii) any place occupied by the owner of a quarry and used for depositing refuse from it but any place so used in connection with two or more quarries, and occupied by the owner of one of them, or by the owners of any two or more in common, shall be deemed to form part of such one of those quarries as the Minister may direct;

(iii) any line or siding (not being part of a railway) serving a quarry but, if serving two or more quarries shall be deemed to form part of such one of them as the Minister may direct;

(iv) a conveyor or aerial ropeway provided for the removal from a quarry of minerals or refuse.

S.261A commenced in 2011 and therefore the above definition of a quarry applies to that section and to the quarry the subject of substitute consent that this rEIAR accompanies.”

1.2 Structure and Content of the rEIAR

EIA is a process undertaken for certain types of development. It provides a means of drawing together the findings from a systematic analysis of the likely significant environmental effects of a scheme to assist local planning authorities, statutory consultees and other key stakeholders in their understanding of the impacts arising from the development.

The following subsections outline the evolution of EIA Directives and their interpretation in the Irish jurisdiction, statutory provisions and guidance that provide the purpose and content of the rEIAR which is summarised at the end of this section.

1.2.1 EIA Directives and Transposition

The requirement for an Environmental Impact Assessment [EIA] process arises from European Union [EU] Directives required to be adhered to by member States and transposed into national laws.

The original EIA Directive 85/337/EEC has been amended and superseded by Directives 97/11/EC, 2003/35/EC, 2009/31/EC to Directive 2011/92/EU.

Having regard to the transposition of the original environmental assessment Directive into Irish Law it is determined by reference to the Planning and Development Act, 2000 as amended [P&D Act] that the appointed day at which the requirement for same arose is the 1st of February 1990.

On 16th April 2014 Directive 2011/92/EU was amended by Directive 2014/52/EU of the European Parliament and of the Council [2014 EIA Directive].

The amending 2014 EIA Directive consists of 16 no. Articles and 5 no. Annexes that define EIA and the supporting information and processes available and required for EIA determination in the form of reasoned conclusion by the competent authority.

This is the environmental impact assessment report [EIAR] by the developer defined at Article 1 and required under Article 3. This report relates to lands of 46.14 ha. that enclose lands that have been the subject of extraction with a site area of 28.8 ha. Extraction area of that magnitude attracts automatic requirement for EIA as an Annex 1 project and is therefore subject to an assessment in accordance with articles 5 through 10.

Article 5 of the 2014 EIA Directive sets down the minimum information to be supplied in an EIAR including those matters at Annex IV as follows;

- (a) a description of the project comprising information on the site, design, size and other relevant features of the project;*
- (b) a description of the likely significant effects of the project on the environment;*
- (c) a description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;*
- (d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;*
- (e) a non-technical summary of the information referred to in points (a) to (d); and*
- (f) any additional information specified in Annex IV relevant to the specific characteristics of a particular project or type of project and to the environmental features likely to be affected.”*

The 2014 EIA Directive required that “Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 16 May 2017.”

The requirement for the current rEIAR arises as a result of grant of leave for substitute consent under the Planning and Development Act, 2000 as amended [P&D Act]. Therefore, the competent authority undertaking EIA is An Bord Pleanála.

1.2.2 Statutory Provisions

As stated above the requirement for the current rEIAR arises as a result of a High Court Order that allowed a ‘fresh’ substitute consent application for a quarry reviewed under S.261A of the Planning and Development Act, 2000 as amended. The procedures and considerations for substitute consent are also contained in the Planning and Development Act, 2000 as amended [P&D Act]. Therefore the planning and development statutes and related policy and guidance are relied upon to contextualise and define this report.

The report of the assessment of environmental effects to be prepared and submitted by a developer is referred to as an Environmental Impact Assessment Report (EIAR) in the current planning and development statutes after the transposition of the 2014 EIA Directive.

In this instance the development to which this report refers is that which has been already undertaken and thus this report is of experienced effects hence its definition as a remedial report (rEIAR).

The P&D Act describes an rEIAR to be submitted in instances of substitute consent application at S.177F(1) as follows;

“A remedial environmental impact statement shall contain the following:

(a) a statement of the significant effects, if any, on the environment, which have occurred or which are occurring or which can reasonably be expected to occur because the development the subject of the application for substitute consent was carried out;

(b) details of—

(i) any appropriate remedial measures undertaken or proposed to be undertaken by the applicant for substitute consent to remedy any significant adverse effects on the environment;

(ii) the period of time within which any proposed remedial measures shall be carried out by or on behalf of the applicant;

(c) such information as may be prescribed under section 177N”.

Regulations have been made to administer EIA. For the purposes of this rEIAR and the statutes under which the requirement for its preparation has arisen, the following Statutory Instruments are relevant and have informed this report:

- European Communities (Environmental Impact Assessment) Regulations (1989-2006)
- European Union (Environmental Impact Assessment and Habitats) Regulations (2011- 2019)
- European Communities (Environmental Impact Assessment) Regulations (2011 – 2020)
- Planning and Development Regulations (2001 – 2021)

1.2.3 Guidance

Under the P&D Act the minister may make regulations and issue guidance. Summarily, Sections 28 and 29 of the P&D Act require that planning authorities and An Bord Pleanála have regard to guidelines and comply with policy directives, respectively in the performance of their functions.

In addition, the minister may issue clarifications of certain procedural matters in the form of Circulars to planning authorities. **Circular EUIPR 04/2020** issued 24 December 2020 is considered relevant for mention in this rEIAR. This circular informs authorities of Amendments to Substitute Consent procedures by Sections 6, 7 and 8 of the Planning and Development, and Residential Tenancies, Act 2020, & by the Planning and Development (Amendment) (No. 2) Regulations 2020. At the time of writing of this rEIAR, these pieces of legislation are only recently enacted and have been reviewed. It is determined that the alterations arising primarily relate to extant applications for substitute consent, applications for leave to make and application for substitute consent and matters to be considered in deciding applications for substitute consent. None of the legislative alterations bring changes to this rEIAR.

The structure and content of this rEIAR is in accordance with the following guidance:

Guidelines issued by the Housing, Local Government and Heritage Department

- 2020 *Environmental Assessments and Planning in Ireland – Planning Leaflet 11*, Office of the Planning Regulator
- 2018 August *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*, Department of Housing, Planning and Local Government
- 2012 July *Section 261A of Planning and Development Act, 2000 and related provisions Supplementary Guidelines for Planning Authorities*, Department of the Environment, Community and Local Government

- 2012 January *Section 261A of Planning and Development Act, 2000 and related provisions Guidelines for Planning Authorities*, Department of the Environment, Community and Local Government
- 2009 December (revision February 2010) *Appropriate Assessment of Plans and Projects in Ireland*, Department of Environment, Heritage and Local Government
- 2009 November *The Planning System and Flood Risk Management Guidelines for Planning Authorities*, Department of Environment, Heritage and Local Government
- 2004 April *Quarries and Ancillary Activities Guidelines for Planning Authorities*, Department of the Environment, Heritage and Local Government

Guidance issued by the Environmental Protection Agency [EPA]

- August 2017 *DRAFT Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* [Draft 2017 EPA Guidance which updated the Draft Guidance of May 2017]
- September 2015 *DRAFT Revised Guidelines on the Information to be Contained in Environmental Impact Statements*
- September 2015 *DRAFT Advice Notes For Preparing Environmental Impact Statements*
- 2006 *Environmental Management Guidelines, Environmental Management in the Extractive Industry (Non-Scheduled Minerals)*
- 2003 September *Advice Notes On Current Practice In The Preparation Of Environmental Impact Statements*
- 2002 March *Guidelines On The Information To Be Contained In Environmental Impact Statements*

1.2.4 Purpose & Content of rEIAR

Taking the description of an rEIAR as in the Planning & Development Act 2000, as amended and the definition of an EIAR in the same Act together with that by reference to Articles 3 and 5 of the 2014 EIA Directive this rEIAR is:

A remedial environmental impact assessment report of the effects, if any, on the environment, which have occurred or which are occurring or which can reasonably be expected to occur because the development the subject of the application for substitute consent was carried out. The report is prepared to aid An Bord Pleanála in environmental impact assessment.

In addition to the aforementioned Directives, statutory provisions and guidance; the contents of this rEIAR including baseline data, then anticipated potential environmental effects and remedial mitigation measures have been fully informed by preceding and subsequent planning and license applications and outcomes related to the subject lands.

The rEIAR has been prepared in a 'Grouped Format' structure having regard to the prescribed environmental factors of the EIA Directive and the 2017 EPA Guidance; "Population and Human Health; Biodiversity, Land & Soils, Water, Air, Climate, Material Assets, Cultural Heritage, Landscape, Interactions."

In this way each aspect of the environment is presented as a separate section referring to the environment as it existed before development commenced, the existing development, experienced and / or likely impacts, and employed / proposed remedial mitigation measures.

The rEIAR has therefore been systematically organised to provide the information and environmental aspect chapters identified in Table 1.1.

Table 1.1: Overall structure of the rEIAR.

Content	Chapter
Context and Requirement for rEIAR	1.0 Introduction
A description of the existing environment.	2.0 Project Description; and As appropriate in the respective discipline chapters.
A description of the project.	2.0 Project Description
Identification of experienced / likely significant impacts during construction and operation of the development and a description of the measures employed / envisaged in order to avoid, reduce and, if possible, remedy significant adverse impacts.	3.0 Population and Human Health 4.0 Ecology and Biodiversity 5.0 Land, Soils and Geology 6.0 Water 7.0 Air Quality and Climate 8.0 Noise and Vibration 9.0 Cultural Heritage 10.0 Landscape and Visual Impact 11.0 Traffic 12.0 Material Assets
Sets down the cumulative and in combination significant effects of the project and considers expected / experienced effects deriving from the vulnerability of the project to risks of major accidents and/or disasters that are relevant to the project concerned	Cumulative: As appropriate in the respective discipline chapters. In combination: 13.0 Interactions Major accidents and/or disasters: 2.0 Project Description

Alternatives are examined by reference to locations, design and processes, as appropriate.

Likely and significant impacts arising from the existence of the development, its use of natural resources, the emission of pollutants and the creation of nuisances are identified, described as direct, indirect, secondary, cumulative; by duration as short, medium and long-term, permanent and temporary; and by type as positive and negative, as appropriate.

A Non-Technical Summary (NTS) accompanies the rEIAR and provides a summary of the key findings of the EIA in non-technical language.

Table 1.2 identifies the data and information to be included by the developer in the rEIAR as describes in Annex IV of the amended EIA Directive, and the location of this information within the document.

Table 1.2: Requirements of 2014/52/EU Annex IV and where these have been addressed in this rEIAR.

Item	Requirement of Annex IV item	Reference in rEIAR
1	Description of the project, including in particular: (a) a description of the location of the project; (b) a description of the physical characteristics of the whole project, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases; (c) a description of the main characteristics of the operational phase of the project (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used; (d) an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation) and quantities and types of waste produced during the construction and operation phases.	(a) and (b) Chapter 2 – ‘Project Description’ (c) and (d) Chapter 2 – ‘Project Description’, and identified in the relevant technical chapters
2	A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.	Section 1.8– ‘Alternatives’

Item	Requirement of Annex IV item	Reference in rEIAR
3	A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.	A 'Baseline Conditions' section has been provided in each technical chapter along with a section which summarises a 'Do-Nothing' scenario without development.
4	A description of the factors specified in Article 3(1) likely to be significantly affected by the project: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.	Each relevant study area which has been scoped into the rEIAR is provided within a dedicated technical chapter. Chapters 3 – 12.
5	A description of the likely significant effects of the project on the environment resulting from, inter alia: (a) the construction and existence of the project, including, where relevant, demolition works; (b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources; (c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste; (d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters); (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources; (f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change; (g) the technologies and the substances used. The description of the likely significant effects on the factors specified in Article 3(1) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the project. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project.	(a), (b) and (c) Each technical chapter, as appropriate (d) Chapter 3 (Pop. and Human Health), Chapter 9 (Cultural Heritage), and Chapter 2 (in relation to accidents and disasters) (e) Each technical chapter, as appropriate (f) Chapter 7 (Air Quality and Climate) (g) Each technical chapter, as appropriate Descriptions of effects are identified in each technical chapter, as appropriate
6	A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.	Assessment methodology is identified in each technical chapter, as appropriate, or a common framework and terminology has been identified in Section 1.7. Difficulties encountered in compiling the rEIAR have been identified in each technical chapter, as appropriate
7	A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.	The identification of remedial mitigation measures is identified in each technical chapter, as appropriate.
8	A description of the expected significant adverse effects of the project on the environment deriving from the vulnerability of the project to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to Union legislation such as Directive 2012/18/EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or relevant assessments carried out	Chapter 2, Section 2.4 (Major Accidents and Disasters)

Item	Requirement of Annex IV item	Reference in rEIAR
	pursuant to national legislation may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.	
9	A non-technical summary of the information provided under points 1 to 8.	Submitted as a separate document with this application
10	A reference list detailing the sources used for the descriptions and assessments included in the report.	Final Section of each technical chapter.

1.3 Summary description of development the subject of rEIAR

The lands the subject of this rEIAR extend to approximately 46.14 ha. at the centre of a landholding in the control of the applicant of approximately 73 ha. This Remedial Environmental Impact Assessment Report [rEIAR] has been prepared to accompany a substitute consent application for an existing quarry at Windmillhill, Rathcoole, Co. Dublin.

The substitute consent application is to be made concurrent with an application for further development of the quarry for extraction to be made under S.37L of the Planning and Development Act, 2000 as amended that is accompanied by an EIAR.

As stated above, the lands the subject of this rEIAR extend to 46.14 ha. that reflect historic operational site information including the extractable area declared under S.261 quarry registration in 2005. The quarry area that makes up the application for substitute consent planning unit currently extends to approximately 28.8 ha. at the centre of the EIA project area that is generally bounded by the N/M7 to the north and the local Windmillhill Road to the south. The eastern and western EIA project boundaries are demarcated by the Windmillhill townland boundary that consist of field boundaries and the entrance to a dwelling called 'Four Winds' that is within the ownership of the developer to the east; and the former local Athgoe Road to the west.

The current quarry site is accessed toward the centre of its northern boundary from the N/M7 and has been accessed from that road since grant of planning permission for stone quarrying on site in 1968 (under Reg. Ref. 11547). The current quarry void is centrally located within the EIA unit and roughly rectangular in shape with an east – west orientation, parallel to the N/M7 and local Windmillhill Road. At the centre of the current quarry area is the existing administration and processing plant area over approximately 5 ha.

At baseline in 1990 the quarried area has been determined in the Land, Soils and Geology Section of this rEIAR to extend to 10.1 ha. and at 2021 to have expanded laterally to 28.8 ha. with an average working depth of 173 mAOD.

1.3.1 Development of Subject Site from Baseline to Current Time

Section 3.6.1 of the 2017 Draft EPA EIAR Guidance states that together with the description of the project “...the description of the baseline scenario is the second of the two factual foundations of the EIAR.”

In this instance the rEIAR presented relates to development already undertaken. For this reason the baseline scenario required to be described has passed.

In deference to S.261A and the requirement for Environmental Impact Assessment arising since the 1st February 1990 we have set the baseline of this rEIAR at that appointed day.

The reader is reminded that historic extraction of the subject lands was evidenced in previously submitted S.261 registration information and High Court Order [2018 No. 929 JR]. That Order recorded first extraction evidence on the lands in 1710. In addition, planning permission for 'stone quarrying' was granted 28 June 1968 (Reg. Ref. A.14 /11547).

In order to retrospectively build a narrative of the development of the subject lands over their extraction lifetime we have reviewed and primarily rely upon publicly available resources; historic mapping and photography; permitting and licensing histories; and historic monitoring records described in Section 2.0 of this rEIAR.

1.4 Limitations & Difficulties in Compiling the Specified Information (Schedule 6 of SI 600 of 2001, as amended)

Limitations and difficulties encountered in preparing this rEIAR having regard to the Planning and Development Regulations and Section 3.7.2 of the 2017 EPA Guidelines relate to the lack of monitoring and survey data from the period that the subject lands were excavated and material processed. Golder Associates were allowed full access to all records held by the substitute consent applicant [the developer], who has possessed the lands the subject of this rEIAR and their surrounding landholding since the 1960s when he inherited the lands. The developer, upon taking possession of the lands, continued (and continues, alongside his children) to operate the quarry therein and it was he (Laurence Behan) who secured the above 1968 permission for stone quarrying at the lands, which was the first permission on the lands since the commencement of the Local Government (Planning and Development) Act, 1963.

Historic planning application and license files were inspected at the offices of South Dublin County Council 21 October 2020. Notwithstanding, consistent topographical survey and monitoring data for the subject lands from years preceding about 2005 and S.261 registration of the quarry does not exist.

In this instance the subject lands and processing plant have variously been the subject of, or part of previous planning applications, an rEIS, EIS and Screening for AA which themselves contain monitoring, impact and mitigation analyses which are part relied upon to discern the environmental impact of development on the subject lands before, during and after their extraction phases.

Conditions imposed 27 April 2007 under S.261 registration (ref. SDQA5/04) apply to the operational site as registered under S.261 that allow for a compilation of emission thresholds. Throughout this rEIAR, monitoring and survey data and analysis, previously submitted in earlier planning applications, or monitoring records held by the applicant are relied upon to model the subject site throughout its lifetime and discern impacts on the environment of the subject site.

Further relevant difficulties or survey limitations specific to each study area have been identified therein, as appropriate.

Conservative assessments have been applied where information concerning methodology or program could not be fully determined.

As appropriate, information from publicly available sources has been used in the course of this assessment. This includes mapping sources such as the Environmental Protection Agency, Geological Survey of Ireland, Department of Communication, Climate Action and Environment, etc., and other information including Census returns. Due care has been taken in the review of these data sets however no responsibility can be taken for inaccuracies which may be present within this public data.

1.5 rEIAR Contributors and Guarantee of Competency and Independence

S177F(1A) requires that the rEIAR be prepared by experts with the competence to ensure its completeness and quality.

In the interests of consistency and the leveraging of existing specialist knowledge of the subject site, alongside the applicant, competent experts have been retained to compile this rEIAR. It was not possible to draw those experts from the earlier rEIS and EIS as they were not available, though they generously supplied information they held in respect of those reports.

Notwithstanding the quashing of previous substitute consent and S.37L applications (refs. PL06S.SU0068 and PL06S.DQ0003) decisions, the environmental assessments that gave rise to those outcomes by both the local authority and An Bord Pleanála were reviewed to identify the following group of experts, all of whom are particularly experienced in environmental assessment of quarry and mining projects.

The rEIAR was completed by a project team led by Golder, who also prepared a number of the chapters.

The members of the team and their respective inputs are presented in Table 1.3.

In accordance with EIA Directive 2014/52/EU, we confirm that experts involved in the preparation of the rEIAR are fully qualified and competent in their respective field. Each has extensive proven expertise in the relevant field concerned, thus ensuring that the information provided herein is complete and of high quality.

Table 1.3: rEIAR Contributors.

Discipline	Lead Specialist	Qualifications	Accreditations	Years of professional experience
Population & Human Health; Material Assets	Kevin McGillicuddy	BA (Mod) Botany MSc Environmental Science	PIEMA	8+
Land, Soils & Geology, and Water	Barry Balding	BA (Mod) Natural Science (Geology) MSc Applied Geophysics	PGeo Institute of Geologists Ireland EurGeol European Federation of Geologists	30+
Biodiversity	Freddy Brookes	MSc Aquatic Ecosystem Management	Member of the Chartered Institute of Ecology and Environmental Management (MCIEEM) Member of the Institute of Fisheries Management (MIFM)	12+
Air Quality; and Climate	Rachel Lansley	MSc Environmental Monitoring and Analysis, BSc Physical Geography	Chartered Scientist (CSci), Member of the Institution of Environmental Sciences (IES) and the Institute of Air Quality Management (IAQM)	13+
Noise and Vibration	Simon Waddell	BSc (Hons.) Environmental Geoscience PG Dip Acoustics and Noise Control	Member of Institute of Acoustics (MIOA)	9+
Cultural Heritage & Archaeology	Conor Ryan	BA (Jt. Hons.) Archaeology and Geography	Associate of the Chartered Institute for Archaeologists (ACIfA)	7+

Discipline	Lead Specialist	Qualifications	Accreditations	Years of professional experience
Landscape & Visual	Richard Barker (Macro Works)	MLA, PG Dip Forestry, BA Env	Corporate Member Irish Landscape Institute	15+
Traffic & Transport	Peter Monahan	BE MSc RSA Cert Comp CEng FIEI	Chartered Engineer (CEng) – Engineers Ireland Fellow of Engineers Ireland (FIEI) – Engineers Ireland Fellow Consulting Engineer (FConsEI) – Association of Consulting Engineers of Ireland	25+
Interactions	All relevant Lead Specialists			
Introduction, Project Description, and Planning	Cliona Ryan	BA (Hons), MRUP, MBA	Irish Planning Institute (IPI)	15+

1.6 The Applicant/Developer

The developer for the purposes of this rEIAR and applicant for the purposes of substitute consent is Mr. Laurence Behan. As noted above, Laurence Behan now alongside his own children has exclusively operated the quarry since the early 1960s when he inherited the landholding and quarry. As also noted above, it is the developer who secured the 1968 permission (Reg. Ref. A.14 / 11547) for stone quarrying at the lands, which was the first permission on the lands since the commencement of the Local Government (Planning and Development) Act, 1963.

It was also the developer who personally S.261 registered (ref. SDQA5/04) the quarry site 25 April 2005 and supplied the application form and map of the quarry at that time, recording that it was operated by L. Behan and Sons Ltd. Subsequent to registration there was a request for further information and the developer then engaged the services of a consulting engineer to undertake correspondence on his behalf who latterly re-supplied the registration form and updated the registration map (repeated at Figure 1.3 in this rEIAR).

On 27 April 2007 the developer received final conditions (36 no.) under which the site registered under S.261 (ref. SDQA5/04) was to operate and continues to operate to today.

Since the developer's taking over of the quarry and associated lands, he has sought to improve and expand the operational capabilities of the quarry. Besides securing washing, screening, grading and bagging plants to produce all grades of construction aggregate from dimension stone to fine fill, he has sought alternative related commercial uses.

In December 1988 under Reg. Ref. 88A/709 permission was granted for a 'mobile asphalt mixing plant in existing quarry' to Laurence Behan. Asphalt production continues today and the asphalt plant lies within a now centrally located plant and processing area of approximately 5 ha. in extent that also holds the site's current and former site and shipping offices, portacabins and (shipping) containers.

Between 2005 and 2012 the central plant and processing area facilitated the intake of inert soil and stones (C&D) waste under successive waste permits (ref no. WPR051) at a rate of 500 tonnes per annum. Latterly a certificate of registration (ref. COR-DS-12-0002-01) alongside planning permission Reg. Ref. SD12A/0059, granted in May 2013 after appeal (ref. PL06S.241259) allowed intake of 10,000 tonnes per annum of the same inert waste that was segregated, processed, recycled and reused as raw materials for the existing on-site asphalt manufacturing plant up to June 2018.

In order to maintain control over the site's supply chain and costs, the developer and companies that run the quarry site maintain a fleet of heavy goods vehicles and drivers.

Also, within this central plant and processing area is a demountable concrete batching plant, brought to site in 2018 and a storage / drying shed used to store clean, dry aggregate erected in 2019. These items, occurred on site subsequent to S.261 registration and whilst within the substitute consent application area for reason of occurring in the centre of the quarry site, and considered for the purposes of rEIAR and EIAR assessments, are excluded from the substitute consent application as they constitute development that is not exempted development and is therefore bound to be the subject of a separate consent process.

As stated at section 1.3. Golder Associates have had full access to the quarry site, associated lands, offices and records, including access to the developer and employees of companies operating the quarry site in order to inspect and monitor and to prepare this rEIAR and concurrent EIAR.

1.7 rEIAR Process - Prediction of Impacts and Effects and Assessment of Remedial Mitigation Measures

1.7.1 Determining the Extent of the Assessment

It is necessary to define the extent of the rEIA in both spatial and temporal terms, and this has been done as described below.

Geographical Extent

The rEIA directly covers the physical extent of the Site as shown in the EIA boundary plan (Figure 1.2). Also, as many predicted impacts can extend beyond the immediate EIA boundary, for example the use of the Site for foraging by a species that is primarily located off-site.

For certain topic areas a wider 'zone of influence' has been considered, as described in the individual topic chapters.

The geographical extent of the EIA boundary also includes the cumulative impacts from related and unrelated development activities in both the construction and operational phases.

Temporal Extent

As identified in Section 1.2.1 and 1.3.1, the original EIA Directive (85/337/EEC) was transposed into Irish Law through the Planning and Development Act, 2000 as amended (P&D Act), and the appointed day at which the requirement for same arose is 01 February 1990.

Therefore, the baseline for this rEIAR has been set to 01 February 1990, and the rEIA process will assess environmental impacts from that date to the present.

1.7.2 Prediction of Impacts and Effects Prior to Mitigation

Prediction methods are required to identify and assess the significant effects of the development on the environment. The predictive methods used for each technical discipline are detailed in the respective chapter. For several topic areas, predictive methods have been developed by professional bodies. Where these are available they have been identified in the individual chapters as appropriate.

For topics where there is no topic specific guidance available, a common framework of assessment criteria and terminology has been used based on the EPA's draft Guidelines on the Information to be Contained in EIARs (EPA, 2017)¹.

¹ Environmental Protection Agency (2017) Guidelines on the information to be contained in Environmental Impact Assessment Reports, Draft, August 2017

This common framework follows a 'matrix approach' to environmental assessment which is based on the characteristics of the impact (magnitude and nature) and the value (sensitivity) of the receptor. The terms used in the common framework are described below. Details of how these specifically relate to the individual topic areas are provided, where appropriate, within the respective topic chapters.

The descriptions for value (sensitivity) of receptors are provided in Table 1.4.

Table 1.4: Environmental value (sensitivity) and descriptions.

Value (sensitivity) of receptor / resource	Typical description
High	High importance and rarity, national scale, and limited potential for substitution.
Medium	Medium or high importance and rarity, regional scale, limited potential for substitution.
Low	Low or medium importance and rarity, local scale.
Negligible	Very low importance and rarity, local scale.

The descriptions for magnitude of impact are provided in Table 1.5.

Table 1.5: Magnitude of impact and typical descriptions.

Magnitude of impact (change)		Typical description
High	Adverse	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements.
	Beneficial	Large scale or major improvement of resource quality; extensive restoration; major improvement of attribute quality.
Medium	Adverse	Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements.
	Beneficial	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality.
Low	Adverse	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements.
	Beneficial	Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring.
Negligible	Adverse	Very minor loss or alteration to one or more characteristics, features or elements.
	Beneficial	Very minor benefit to or positive addition of one or more characteristics, features or elements.

The approach followed to derive effects significance from receptor value and magnitude of impacts is shown in Table 1.6. Where Table 1.6 includes two significance categories, evidence is provided in the topic chapters to support the reporting of a single significance category.

Table 1.6: Significance Matrix.

	Magnitude of Impact (Degree of Change)				
		Negligible	Low	Medium	High
Environmental value (Sensitivity)	High	Slight	Slight or moderate	Moderate or large	Profound
	Medium	Imperceptible or slight	Slight or moderate	Moderate	Large or profound
	Low	Imperceptible	Slight	Slight	Slight or moderate
	Negligible	Imperceptible	Imperceptible or slight	Imperceptible or slight	Slight

A description of the significance categories used is provided in Table 1.7.

Table 1.7: Significance categories and typical descriptions.

Significance Category	Typical Description
Profound	An effect which obliterates sensitive characteristics.
Large	An effect which, by its character, magnitude, duration or intensity alters a significant proportion of a sensitive aspect of the environment.
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Imperceptible	An effect capable of measurement but without significant consequences.

The approach to assigning significance of effect included reasoned argument, the professional judgement of competent experts and using effective consultation to ensure the advice and views of relevant stakeholders were taken into account.

The assessment of the significance of environmental effects covered the following factors:

1. The receptors/resources (natural and human) which would have been affected and the pathways for such effects;
2. The geographic importance, sensitivity or value of receptors/resources;
3. The duration (long or short term); permanence (permanent or temporary) and changes in significance (increase or decrease);
4. Reversibility - e.g. is the change reversible or irreversible, permanent or temporary;
5. Environmental and health standards (e.g. local air quality standards) being threatened; and
6. Feasibility and mechanisms for delivering mitigating measures, e.g. Is there evidence of the ability to legally deliver the environmental assumptions which are the basis for the assessment?

Following the assessment of the level of effect significance, remedial measures will be presented that will be used to further avoid, prevent or reduce the magnitude of the potential impact. If necessary, the significance of

the effect taking into account the remedial measures is then assessed to give the residual effect significance. Any monitoring that will be required to measure the success of the remedial measures will also be presented.

Residual effects of 'large' or 'profound' significance are considered to be 'significant' for the purposes of this assessment.

The effects of the Development are also considered cumulatively with those that could foreseeably have resulted from other known developments that have occurred in the assessment study area.

1.8 The Need for the Development and Consideration of Alternatives

The greywacke rock reserve at the subject location is of a proven good quality capable of being used as aggregate fill and for further processing to asphalt products. Therefore, the reserve material assumed to be present at the subject site and now extracted provided suitable aggregates for construction purposes.

As with all aggregate extraction development the nearer the supply of aggregate to the market, the more economically viable it is and given the nature of aggregate deposits, quarries can only be worked where the sediments occur. Aligned to this economic situation is the environmental and social preferability of locally sourced aggregates. Aggregates sourced close to their market are preferable to those sourced at more remote locations as this lessens road traffic and associated environmental impacts and economic costs. Socially, the local sourcing of construction aggregate strengthens the local economy through job provision and associated spending and exploits advantages and opportunities inherent in local supply chains.

Aggregates are an essential material for the construction industry and are used in all major development plans (housing, road surfacing, infrastructure etc.). As such, they are of major significance to the overall growth of their local areas and the country and an important economic resource despite fluctuations in levels of construction due to wider economic forces, or the Covid-19 pandemic suspension of construction in place at the time of writing this rEIAR.

The purpose of this rEIAR is to assess the site with regard to experienced / potential impacts on the environment, and to recount / propose measures to avoid, reduce or remedy undesirable potential impacts, as appropriate.

In this case, the quarry site represents the sole land asset upon which the developer's companies and employees rely. The developer has a personal intergenerational association with the lands and is a quarry operator and employer who wishes to maintain this asset. The continued quarry use and sustainable further development is contingent on further planning permission to secure future reserve especially as the substitute consent process is restricted to extant development. The reader is reminded that concurrent application with EIAR is to be submitted for a relatively minor lateral expansion of the existing quarry void and a deepening of the existing quarry to secure the quarry land use and future reserve.

Maintaining the quarry site and adjacent suitable lands as a viable quarry with associated processing plants will ultimately realise the sustainable extraction potential of this extant, established quarry and will maintain those direct and indirect jobs which had only lately returned to pre-recession levels.

1.8.1 Site Selection

In this instance the rEIAR has arisen as a direct requirement of an application for leave for substitute consent. In other words, the subject site is not a proposed site but rather an existing extraction and processing site. In view of the retrospective nature of the substitute consent process we cannot point to a site selection methodology employed in choosing the subject site. As such site selection is outside the control of the developer having originated from their inheritance of the extant quarry land in the 1960s and the expansion of same to today.

The existence of the established quarry and processing complex suggests that the persistent, continuous use of the subject lands for a quarry was more feasible, in environmental and economic impact terms, than developing a new greenfield quarry.

1.8.2 Alternative Designs Considered at the Subject Site

In common with the site selection methodology alternative design proposals are precluded due to the retrospective nature of the rEIAR. A review of historic aerial photography and information supplied by the developer suggests that since the 1960s the subject lands were extracted from their centre, roughly emanating where the established plant and processing area occurs in a westerly and then easterly direction, and it is known from late 2020 topological survey data that extraction is to approximately two benches to an average depth of 173 mAOD. It is assumed that the direction of extraction workings was dictated by the proximity of processing and direction of deposit. As such, the subject site now has an established form and layout and the only event conceived and contained within this rEIAR is the restoration of this area to have regard to EIA requirement for mitigation of foreseeable impacts.

APPENDIX 1.1

2018 No. 929 JR - Final Perfected

THE HIGH COURT

JUDICIAL REVIEW

2018 No. 929 JR

Thursday the 27th day of August 2020

BEFORE MR. JUSTICE BARRETT

BETWEEN

LAURENCE BEHAN

APPLICANT

AND

AN BORD PLEANÁLA

RESPONDENT

The Motion of Counsel for the Applicant pursuant to Notice of Motion herein dated the 16th day of November 2018 having been at hearing before the Court on the 25th 26th 27th and 28th days of February 2020 in the presence of Counsel for the Respondent

Whereupon and having read said Notice the Statement filed herein on the 9th day of November 2018 signed by the Solicitor for the Applicant the Order herein dated the 12th day of November 2018 giving leave to the Applicant to apply for *inter alia* an Order of Certiorari by way of application for judicial review quashing the decision of the Respondent made on 21st September 2018 by which it refused to grant substitute consent pursuant to an application made under section 177E of the Planning and Development Act 2000 as amended (“the 2000 Act”) to it on the 24th October 2013 the Affidavit of Laurence Behan filed herein on the 9th day of November 2018 the Affidavits (2) of Geraldine Fahy both filed herein on the 8th day of January 2020 the Statement of Opposition filed herein on the 26th day of

THE HIGH COURT

April 2019 on behalf of the Respondent the Affidavit of Gerard Egan filed herein on the 26th day of April 2019 and the documents and exhibits referred to in said respective Affidavits and having heard what was offered by Counsel for the Applicant and Counsel for the Respondent and having read the written submissions of Counsel for the Applicant and Counsel for the Respondent

The Court was pleased to reserve judgment herein

And judgment having been delivered on the 12th day of March 2020

And the matter coming before the Court this day in the presence of Counsel for the Applicant in relation to finalisation of the Order and on hearing said Counsel and there being no attendance in Court by or on behalf of the Respondent

THE COURT DOETH GRANT an Order of Certiorari in respect of the decision of the Respondent made on 21st September 2018 by which it refused to grant substitute consent pursuant to an application made under section 177E of the Planning and Development Act 2000 as amended (“the 2000 Act”) to it on the 24th October 2013 following the issue of a notice pursuant to section 261A(3)(a) of the 2000 Act by the planning authority South Dublin County Council on 31st May 2013 for the quarry at Windmill Hill Rathcoole County Dublin having An Bord Pleanála Reference No. PL 06S.SU0068 Register Reference No. SDQU05A/4 and also in breach of s.126 of the Planning and Development Act 2000 as amended

THE COURT DOETH GRANT an Order of Certiorari in respect of the decision of the Respondent made on 21st September 2018 by which it refused permission for continued development at the site having An Bord Pleanála Reference No. PL. 06S.QD.0003

THE COURT DOETH DECLARE that the application for substitute consent made on behalf of the Applicant to the Respondent on the 24th October 2013 An Bord Pleanála Reference No. PL06S.SU0068 was invalid as it was not in compliance with the requirements of Section 177E(2) of the 2000 Act as amended

THE HIGH COURT

and the regulations made under section 177N as amended as such non-compliance constituted a material defect in the application which could not be readily rectified through the submission of additional documentation and also in breach of s.126 of the Planning and Development Act 2000 as amended

THE COURT DOTH DECLARE that the decision of the Respondent made on 21st September 2018 in respect of the application for substitute consent having An Bord Pleanála Reference No. PL 06S.SU0068 was contrary to and in breach of the provisions of sections 177E of the 2000 Act and Articles 228(1) (3) and (4) of the Planning and Development Regulations 2001 as amended (“the 2001 Regulations”) and was therefore *ultra vires* and invalid and also in breach of s.126 of the Planning and Development Act 2000 as amended

THE COURT DOTH DECLARE that the decision of the Respondent made on 21st September 2018 refusing to grant substitute consent having An Bord Pleanála Reference No. PL 06S.SU0068 was contrary to natural and constitutional justice and in breach of the Applicant’s rights also in breach of s.126 of the Planning and Development Act 2000 as amended and was contrary to and in breach of the Charter of Fundamental Rights of the European Union (2000/C364/01) and in breach of the Applicant’s rights as provided for therein and also in breach of the right to good administration a general principle of European Union law

AND BY CONSENT IT IS ORDERED that a fresh application for substitute consent submitted by the Applicant to the Respondent pursuant to the Record of Executive Business and Managers Order of South Dublin County Council dated 9th August 2012 in respect of the determination made and notice issued under section 261A (2)(a), 261A(3)(a) and 261A(7) of the Planning and Development Act 2000 as amended in relation to the quarry at Windmill Hill Rathcoole County Dublin shall be deemed to have been made within the time limits prescribed therein where the application is made not later than twelve weeks from the date of

THE HIGH COURT

perfection of this Order or such further period as the Board may allow

AND BY CONSENT IT IS ORDERED that a fresh application to the Respondent for continued development in relation to the site at Windmill Hill Rathcoole County Dublin pursuant to the notice dated 11 August 2015 issued by the Respondent in respect of section 37L of the Planning and Development Act 2000 as amended shall be deemed to have been made within the time limits prescribed therein where the application is made not later than twelve weeks of the date of perfection of this Order or such further period as the Board may allow

AND BY CONSENT IT IS ORDERED that in accordance with Article 228(3) of the Planning and Development (Amendment) (No 3) Regulations 2011 the Respondent do refund the fee in respect of the invalid application for substitute consent pursuant to section 261A of the Planning and Development Act 2000 as amended submitted by the Applicant on 24th October 2013 (An Bord Pleanála Reference No. PL06S.SU0068)

AND BY CONSENT IT IS ORDERED that in accordance with Article 268(3) of the Planning and Development (Amendment) (No. 2) Regulations 2015 the Respondent do refund the fee in respect of the application for continued development pursuant to section 37L of the Planning and Development Act 2000 as amended submitted by the Applicant on 25th November 2015 (An Bord Pleanála Reference No. PL06S.QD0003)

AND BY CONSENT IT IS ORDERED that the Applicant do recover against the Respondent the costs of the within proceedings to include all reserved costs herein such costs to be adjudicated upon by the Office of the Legal Costs Adjudicator in default of agreement between the parties

THE HIGH COURT

AISLING O'NEILL

REGISTRAR

28TH AUGUST 2020

BKC Solicitors
Solicitors for the Applicant

Philip Lee
Solicitors for the Respondent

APPENDIX 1.2

A.14.11547 - 1968 Permission

DUBLIN COUNTY COUNCIL
 Local Government (Planning and Development) Act, 1963
REGISTER
 (Part I)

Plan Number
 115471

Folio
 A 14 /

1. LOCATION	Midmill Hill Rathcoole.					O.S. No. F	Grid Ref.
2. PROPOSAL Subject of Application	Stone Quarrying.						
3. APPLICATION Type and Date	Type of Application	Application Date	Further Particulars Requested	Further Particulars Received			
	Permission	11-1-68. P274-27/2/68	2	22/3/68	2		
4. SUBMITTED BY Name and Address	Name Lawrence Selan Address Midmill House, Rathcoole.						
5. PROPOSER'S NAME AND ADDRESS	Name Do Address As above						
6. DECISION	O.C.M. & Date	Notified	Effect	S.26(2) (e)	S.26(2) (g)	S.26(2) (h)	
	1709.20.5.68	20-5-68	To grant Permission to S.P.T.O.				
7. GRANT	Date of Grant	Sent	Effect	S.26(2) (e)	S.26(2) (g)	S.26(2) (h)	
	28-6-68	9-7-68	Permission granted - S.C.S				
8. APPEAL	Notification to Co. Council	DATE OF MINISTER'S DECISION	Effect of Decision of Minister				
9. S.26(3) APPLICATION	DATE OF APPLICATION	DATE OF MINISTER'S DECISION	Effect of Decision of Minister				
10. COMPENSATION	Claim	Ref. in Part II. (Compensation Register)					
11. ENFORCEMENT	Section	Ref. in Part III. (Enforcement Register)					
12. PURCHASE NOTICE							
13. REVOCATION OR AMENDMENT							
14.							
15.							
16.							

Date of issue of copy
 Registrar
 Co. Accountant's Receipt No.

51

Reasons for Conditions

- (1) For the purpose of protecting the water supply against from damage due to urban infiltration.

Conditions

- (1) That the access road to the site, where it crosses the existing line of the main Dublin Corporation water conduit, be adequately strengthened or reinforced to the requirements of the County Council and Dublin Corporation Waterworks Department and that details of these proposed works be submitted to and approved by the County Council and Dublin Corporation Waterworks Department before the further development of the quarry site takes place.
- (2) That details of any proposed blasting operations be submitted to and approved by both Dublin County Council and Dublin Corporation Waterworks Department before any such blasting operations take place.

- (3) That adequate visibility signs be provided where the access road to the site abuts the main road (Dublin Corporation).
- (4) That you ensure that no debris such as slurry or water is deposited on the carriageway in the vicinity of the junction by vehicles entering or leaving the site.
- (5) That the site be reinstated and adequately landscaped to the requirements of the County Council on completion of the quarrying operations.

- (2) In the interests of public safety and protection of the main water supply conduit.

R.F.M.

- (3) In the interests of public safety and protection of the main water supply conduit.

- (4) For the purpose of avoiding the creation of road surface conditions on the dual carriageway which could be hazardous to other road users.
- (5) For the purpose of preserving and improving the amenities of the area.

P/274/68

P.C.11547

Sub: A. 14.

27th Feabhra, 1968.

Laurence Behan Esq.,
Windmill House,
Rathcoole,
Co. Dublin.

RE/ Proposed Quarry at Windmill Hill, Rathcoole.

Sirs,

With reference to your letter of the 29th December, 1967, regarding permission in connection with above, I am to inform you that the application can be considered under the Local Government (Planning and Development) Act, 1963 the following information must be submitted:-

- (a) A site map which shows the total extent of the applicant's holding and any dwelling on the holding and in the immediate vicinity.
- (b) Contours, or spot levels, sufficient to show the height relationship of the site to the Naas Road.
- (c) An indication of the period over which the quarry may be worked, the depths to which it may be worked, and the phasing of openings in the area indicated.
- (d) Proposals for reinstatement and landscaping of the site.

Mise, le meas,

a.s. Runjal

APPENDIX 1.3

SDCC 2007 Operating Conditions

**SOUTH DUBLIN COUNTY COUNCIL
COMHAIRLE CONTAE ÁTHA CLIATH THEAS**

Halla an Chontae, Tamhlacht,
Baile Átha Cliath 24.
Telefon: 01-4149000
Facs: 01-414 0102
For SMS queries text "counter" &
your message to 086 1731707



Planning Department,
County Hall, Tallaght,
Dublin 24.
Telephone: 01-4149000
Fax 01-414 0102
Email: cccouter@sdublincoco.ie
On-line: www.southdublin.ie

The Secretary,
L. Behan & Sons Limited,
Windmill House,
Rathcoole,
County Dublin.

23rd April, 2007.

**RE: Section 261(6) of the Planning & Development Act 2000
Quarry at Windmill Hill, Rathcoole, County Dublin.
Register Reference No.: SDQU05A/4 Registration Date: 25th April 2005**

Dear Sir/Madam,

With reference to the above please find enclosed herewith a copy of the Statutory Notice and Schedule of Conditions, setting out the Planning Authority's decision to modify and to add to the conditions attaching to the existing planning permission in respect of the quarry at Windmill Hill, Rathcoole, County Dublin, and the reasons in that regard.

As the registered owner/operator you may appeal to An Bord Pleanála against the decision of the Planning Authority within 4 weeks beginning on the date of the decision, in accordance with the statutory provisions for the making of appeals to An Bord Pleanála as provided for in chapter III of the Planning and Development Act 2000, as amended, and the regulations made thereunder.

Yours faithfully,

PP. A. Shanahan

Tom Doherty,
Director of Service - Planning

**Contact South Dublin County Council 24 hours a day at www.southdublin.ie
Email at cccouter@sdublincoco.ie
SMS-text "cccouter" and your query to 086 1731707**

Halla an Chontae, Tamhlacht,
Baile Átha Cliath 24.
Telefon: 01-4149000
Facs: 01-414 0102
For SMS queries text "counter" &
your message to 086 1731707

SOUTH DUBLIN COUNTY COUNCIL
COMHAIRLE CONTAE ÁTHA CLIATH THEAS



Planning Department,
County Hall, Tallaght,
Dublin 24.
Telephone: 01-4149000
Fax 01-414 0102
Email: ccounter@sdublincoco.ie
On-line: www.southdublin.ie

IN THE MATTER OF THE PLANNING AND DEVELOPMENT ACT, 2000.

NOTICE PURSUANT TO SECTION 261(6) OF
THE PLANNING AND DEVELOPMENT ACT, 2000

TAKE NOTICE that for the purpose of the exercise of its functions under the Planning and Development Act, 2000, South Dublin County Council as the Planning Authority for the area hereby gives notice of the Council's decision to modify the planning permission Register Reference Number A.14 by the deletion of the existing 5 No. conditions imposed in 1968, and by adding new conditions numbers 1 to 36 as set out in the schedule attached hereto, in respect of the lands in the Townland of Windmill Hill, Rathcoole, in the County of Dublin, registered as a quarry in accordance with Section 261 of the Planning and Development Act 2000 under Register Reference Number SDQU05A/4.

Following the decision of the planning authority, under Section 261(6), it should be noted that the registered owner/operator may appeal to An Bord Pleanála against the decision to impose, restate, add to or modify conditions, within 4 weeks beginning on the date of the Council's decision, in accordance with the statutory provisions for the making of appeals to An Bord Pleanála as provided for in Chapter III of the Planning and Development Act, 2000, as amended, and the Regulations made thereunder.

Dated the 23rd day of April 2007.

Signed: _____

South Dublin County Council,
County Hall,
Town Centre,
Tallaght,
Dublin 24.

To: L. Behan & Sons Limited,
Windmill House,
Rathcoole,
County Dublin.

**L. Behan – Quarry at Windmill Hill, Rathcoole.
Register Reference SDQU05A/4**

SCHEDULE OF CONDITIONS

01	<p>GENERAL</p> <p>Quarrying operations on the lands shall be carried out in accordance with the plans, particulars and specifications as described in the documents lodged with the application for registration of the quarry under Section 261 of the Planning and Development Act 2000, as revised by Additional Information received on 10 October 2005 and 27th October 2005, including the revised Site Location Map Sheet No. 1 dated 23/04/05, received on 10 October 2005, save as the conditions hereunder require.</p> <p>Reason: To ensure that the development is carried out in accordance with appropriate environmental standards and practices, and to enable effective control to be maintained, in the interests of amenity and the proper planning and sustainable development of the area.</p>
02	<p>DIGITAL TERRAIN MODEL</p> <p>Within three months of the date of this decision a Digital Terrain Model of the entire lands within the site boundary, as shown on Site Layout Plan Figure 1_FI1 Drawing Ref. 337, shall be submitted to the Planning Authority. The Digital Terrain Model shall be prepared by a professionally qualified surveyor agreed by the Planning Authority, and shall include details of all areas, a) that have been excavated to date, b) that have been prepared for excavation, and c) that have been rehabilitated. A comprehensive photographic record of the quarry workings, and views of the quarry from public roads in the vicinity of the site, the viewing positions of which shall be shown on a map to a suitable scale, shall also be submitted.</p> <p>Reason: To ensure effective development management of the quarrying operations in the interest of residential amenity and the proper planning and sustainable development of the area.</p>
03	<p>OPERATING HOURS</p> <p>Quarrying operations, other than blasting, shall be carried out only between 05.00 and 21.00 hours on Monday to Friday inclusive and between 05.00 and 14.00 hours on Saturday. No such activity shall take place outside these hours or on Sundays or public holidays.</p> <p>Reason: In the interest of amenity and the proper planning and sustainable development of the area.</p>
04	<p>NOISE</p> <p>a) Free-field noise levels attributable to the operation of the entire quarry complex, when measured at the nearest noise sensitive receptor, shall not exceed 55 dB(A) (1 hour L_{Aeq}) between 08.00 - 20.00 hours 45 dB(A)(1 hour L_{Aeq}) between 20.00 – 08.00 hours</p> <p>b) There shall be no tonal or impulsive noise at sensitive receptors between 20.00 – 08.00 hours due to activities carried out on the site.</p> <p>c) A quarterly survey and assessment programme shall be undertaken to assess the impact of noise emissions arising from the operation of the entire quarry complex. The</p>

	<p>scope and methodology of this survey and assessment programme shall be submitted to the planning authority for its written agreement within three months of the date of this decision. The results obtained from the assessment programme shall be submitted quarterly for the written agreement of the planning authority. The operator shall carry out any amendments to the programme required by the planning authority following this quarterly review.</p> <p>Reason: In the interests of amenity, public health and the proper planning and sustainable development of the area.</p>
<p>05</p>	<p>VIBRATION AND AIR OVERPRESSURE</p> <p>a) Ground-borne Vibration levels from blasting shall not exceed a peak particle velocity of 12 mm/second, measured in any three mutually orthogonal directions at any sensitive receptor location.</p> <p>b) Blasting shall not give rise to air overpressure values in excess of 125 d(B)(Lin)_{max peak} with a 95% confidence limit at any sensitive receptor location. No individual air overpressure value shall exceed the limit value by more than five dB (Lin).</p> <p>c) Blasting shall only be carried out between 09.00 and 18.00 hours on Monday to Friday inclusive. Blasting shall not take place outside these hours or on Sundays or public holidays.</p> <p>d) Advance notification of each blasting operation shall be provided to all landowners and occupiers within 500 metres of the quarry, as delineated by the blue coloured line indicated on the revised Site Location Map Sheet No. 1 dated 23/04/05 submitted as Additional Information on 10 October 2005.</p> <p>e) A suitable monitoring programme shall be developed to assess the impact of quarry blasts. Details of this programme shall be submitted for the written agreement of the planning authority within three months of the date of this decision. This programme shall provide for monitoring to be carried out whenever a blast occurs, and shall include an annual review of all blast monitoring data, to be undertaken by a competent person, the results of which shall be submitted to the planning authority within two weeks of completion for its written agreement. The operator shall carry out any amendments to the programme required by the planning authority following this annual review.</p> <p>Reason: To ensure the protection of residential amenity and public health, in the interest of the proper planning and sustainable development of the area.</p>
<p>06</p>	<p>SUPPRESSION AND CONTROL OF DUST</p> <p>a) Total dust deposition (soluble and insoluble) measured at the site boundary shall not exceed 350mg/m²/day (when averaged over a 30 day period). The Bergerhoff Method (German Standard VDI 2119, 1972) shall be used to measure dust deposition. Continuous monitoring of dust deposition shall be carried out. Any emission which does not comply with the above standards shall be notified to the Planning Authority immediately.</p> <p>b) Within six months of the date of this decision details of satisfactory arrangements for the suppression and control of dust arising from the open working, processing and the handling and transportation of mineral and / or product, and stripping of overburden, shall be submitted for the written agreement of the Planning Authority. The location of sensitive receptors and prevailing wind directions shall be taken into account when locating haul roads, tips, stockpiles and processing plant. The area of excavated land not covered by vegetation shall be kept to a minimum. The stripping of overburden shall be carried out only during favourable weather conditions. The deposition of dust on</p>

	<p>surrounding lands in excess of allowed limits, or spillage on to public roads shall be prevented at all times.</p> <p>c) A monthly survey and monitoring programme of dust shall be undertaken to provide for compliance with the above limits. Details of this programme, including the location of dust monitoring stations, shall be submitted for the written agreement of the planning authority within three months of the date of this decision. This programme shall include an annual review of all dust monitoring data, to be undertaken by a competent person, the results of which shall be submitted to the planning authority within two weeks of completion for its written agreement. The operator shall carry out any amendments to the programme required by the planning authority following this annual review.</p> <p>Reason: To ensure the protection of amenity and public health, in the interest of the proper planning and sustainable development of the area.</p>
<p>07</p>	<p>MONITORING RESULTS</p> <p>All data recorded from monitoring of noise emissions, blasting and dust deposition shall be submitted to the Planning Authority in a suitably formatted and readable form on a quarterly basis, within ten working days of the end of each quarter. The monitoring quarters to be January – March, April – June, July – September and October – December. Where any data is missing this fact must be recorded and a reason given for its omission.</p> <p>Reason: To ensure the protection of residential amenity and public health, in the interest of the proper planning and sustainable development of the area.</p>
<p>08</p>	<p>COMMUNICATION AND CONSULTATION</p> <p>a) The names, job functions and phone numbers (both fixed line and mobile numbers) of all key personnel for the operation of this quarry shall be provided to South Dublin County Council. All changes in personnel or particulars must also be notified to the Council as soon as they occur.</p> <p>b) The operator shall provide all landowners and occupiers within 500 metres of the quarry, as delineated by the blue coloured line indicated on the revised Site Location Map Sheet No. 1 dated 23/04/05 submitted as Additional Information on 10 October 2005, with appropriate contact details which may be used in the event that any such person wishes to inform the operator of any incident, such as the discovery of flyrock on lands outside the quarry, or otherwise to make a complaint in respect of an aspect of the quarry operation.</p> <p>c) A public notice shall be erected and maintained at the entrance to the quarry. This notice shall contain the name of the operating company and contact details, including out of hours contact, which may be used in the event that any person wishes to contact the operator in respect of any aspect of the quarry operation.</p> <p>Reason: In the interests of amenity, public health, and the proper planning and sustainable development of the area.</p>

09	<p>ACCESS FOR MONITORING</p> <p>Access shall be granted to any authorised officer of the Planning Authority, the Health Services Executive, or the Environmental Protection Agency, or their successors, to enter on to the subject lands during permitted operating hours for the purpose of carrying out inspections of the quarrying operations including examining any monitoring equipment installed in accordance with this decision. Authorised officers shall check in with the quarry manager or his/her representative prior to such inspections.</p> <p>Reason: In the interests of amenity, pollution control and public health.</p>
10	<p>UPDATED DIGITAL TERRAIN MODEL</p> <p>Five years from the date of this decision and at five-yearly intervals thereafter the quarry operator shall submit to the Planning Authority an up to date Digital Terrain Model of the entire lands within the site boundary as shown on Site Location Map Sheet No. 1 dated 23/04/05. The Digital Terrain Model shall be prepared by an professionally qualified surveyor approved by the Planning Authority, and shall include details of all areas i) that have been excavated to date, ii) that have been prepared for excavation, and iii) that may have been rehabilitated.</p> <p>Reason: To ensure effective development management in the interest of amenity and the proper planning and sustainable development of the area.</p>
11	<p>ANNUAL ENVIRONMENTAL AUDIT</p> <p>On an annual basis (by the end of February each year) for the permitted lifetime of the quarry, three copies of an environmental audit shall be submitted to the Planning Authority. This audit shall be carried out at the expense of the operator by suitably qualified and experienced independent environmental auditors, whose names shall be submitted to the Planning Authority for prior approval, and shall contain the following:</p> <ul style="list-style-type: none"> a) A record of all movements of heavy vehicles outside the permitted operating hours. b) A record of surface water quality, and groundwater quality and levels, measured at monthly intervals. c) A full record of any breaches over the previous year of dust, noise, vibration / air overpressure, and water quality standards. d) A written record of all complaints received, including actions taken on each complaint. <p>Reason: To ensure that the quarry shall be operated in compliance with the stated standards in the interests of amenity, pollution control, public health and the proper planning and sustainable development of the area.</p>
12	<p>FUTURE CHANGED STANDARDS</p> <p>Notwithstanding the current environmental standards for noise, vibration, and dust, contained in the Environmental Protection Agency document "<i>Environmental Management in the Extractive Industry (Non-Scheduled Minerals)</i>", should these standards be revised in the future or should new standards be introduced, either by legislation, or in the form of guidance from the Environmental Protection Agency or it's successor, the quarry operations shall be carried out in compliance with the revised standards.</p> <p>Reason: In the interests of amenity, pollution control, public health, and the proper planning and sustainable development of the area.</p>
13	<p>CONTROL OF EXTERNAL LIGHTING</p>

	<p>External lighting for the entire site shall be designed, installed and operated, so as to prevent interference with air navigation or nuisance to adjoining occupiers and road users and to avoid over-lighting, and where feasible shall be of a type that deflects light downwards from the horizontal.</p> <p>Reason: In the interests of amenity, traffic and public safety, and the proper planning and sustainable development of the area.</p>
14	<p>ADVANCE WARNING SIGNS</p> <p>Metal advance warning signs shall be erected and maintained in good and clean condition at the site entrance / exit. The material, content, design and location of these signs shall be agreed with the Planning Authority.</p> <p>Reason: In the interests of traffic safety.</p>
15	<p>MAINTENANCE OF PUBLIC ROADWAY</p> <p>No waste, debris, excavated materials or dust caused by the haulage of material either to or from the site shall be deposited on the public roads, footpaths, margins etc. in the vicinity of the site. The quarry operator shall be responsible for maintaining the public roadways in the vicinity of the site entrances / exits in a clean state, free from mud and other debris caused by the haulage of such material.</p> <p>Reason: In the interests of traffic safety and amenity.</p>
16	<p>WHEEL WASHING FACILITY</p> <p>(a) A paved surface shall be provided at the site exit to the public road, and shall be kept free from soil, sand and gravel deposits at all times.</p> <p>(b) A wheel washing facility shall be installed at an appropriate location along this paved surface. It shall be provided with a continuous water supply facility together with a suitable sump arrangement for the drawing off of waste waters arising. It shall be kept properly maintained and cleaned at regular intervals, such that trucks, on exiting the wheel wash, shall not have mud or dust adhering to their tyres.</p> <p>(c) All heavy goods vehicles exiting the site shall use the wheel washing facility, and shall travel only on the paved surface to the exit.</p> <p>Reason: In order to prevent dust emissions in the interests of amenity, traffic safety, and the proper planning and sustainable development of the area.</p>
17	<p>SURFACE WATER RUN-OFF</p> <p>All surface water run-off from roofs, entrances, driveways, parking areas etc. shall be collected and disposed of within the site to soak pits, drains or adjacent watercourses. In particular, no such surface water run-off shall be allowed to flow on to the public roadway or adjoining properties, or to discharge to any effluent disposal system or public foul sewer.</p> <p>Reason: To prevent water pollution in the interests of public health and the protection of natural heritage and the proper planning and sustainable development of the area.</p>
18	<p>DISCHARGES TO SURFACE OR GROUND WATERS</p> <p>a) No effluent from the site shall discharge to surface or ground waters other than in accordance with the terms of a current licence granted under the relevant provisions of</p>

	<p>the Local Government (Water Pollution) Acts, 1977–1990 or as may be amended from time to time.</p> <p>b) Only clean uncontaminated storm water shall be discharged to surface waters. Interceptor traps shall be fitted to the storm water drainage system where appropriate, to prevent accidental spillages of oils, greases, solvents or other contaminated matter entering the watercourses or soak ways or groundwater.</p> <p>c) Where it is proposed to discharge surface water from impermeable surfaces (roads, roofs etc) to existing drains or watercourses then the discharge shall be limited to a rate of 6 litres per second per hectare of impermeable surface to reduce the risk of downstream flooding. This shall be achieved by constructing attenuation storage, preferably a pond, and restricting the outflow discharge by means of a 'Hydrobrake' or equivalent device. Details of the design shall be submitted for the written agreement of the planning authority.</p> <p>Reason: To prevent water pollution and flooding in the interests of public health and the protection of natural heritage and the proper planning and sustainable development of the area.</p>
19	<p>SURFACE WATER RUN-OFF FROM OPEN CUT AREAS</p> <p>Adequate precautions shall be taken to prevent surface water run-off from open cut areas flowing directly to any stream or watercourse. All such water shall be trapped and held in settling lagoons until such time as the suspended solids are deposited and the colour of the discharge water indicates that it will not cause any discolouration of the receiving waters. Where possible appropriate measures shall be taken to prevent water from entering excavations. Adequate clearance from watercourses and wells shall be maintained</p> <p>Reason: To prevent water pollution in the interests of public health and the protection of natural heritage and the proper planning and sustainable development of the area.</p>
20	<p>SURFACE WATER FROM THE PLANT AREA, QUARRY FLOOR AND INTERNAL HAUL ROADS</p> <p>a) All surface water from the plant area, quarry floor and internal haul roads shall be directed to sumps and discharged from there to settling lagoons.</p> <p>b) The settling lagoons shall be of an adequate size and properly maintained to ensure the efficient removal of suspended solids.</p> <p>c) Site roads and approaches to river crossings shall be regularly brushed or scraped and kept free from dust and mud deposits.</p> <p>Reason: To prevent water pollution in the interests of public health and the protection of natural heritage and the proper planning and sustainable development of the area.</p>
21	<p>GROUND WATER LEVELS</p> <p>a) A groundwater level monitoring programme shall be implemented at the quarry. Groundwater levels shall be recorded at monthly intervals, and reported to the Planning Authority on a quarterly basis.</p> <p>b) Within three months of the date of this decision, or such other period as may be agreed with the Planning Authority, a hydrological / hydrogeological report in respect of the quarry, prepared by a suitably qualified person having appropriate experience, shall</p>

	<p>be submitted to the Planning Authority. The report shall detail all measures proposed to be taken to protect groundwater resources. The report shall have regard to all relevant requirements arising under the Water Framework Directive.</p> <p>Reason: In the interest of public health, the protection of ground water resources, and the proper planning and sustainable development of the area.</p>
22	<p>PREVENTION OF POLLUTION</p> <p>a) All over-ground oil or other chemical storage tanks shall be adequately banded to protect against spillage. Bunding shall be impermeable and capable of retaining a volume in excess of 110% of the capacity of the largest tank.</p> <p>b) Bunds shall be tested at intervals of not more than three years and documentation of tests shall be available for inspection by the Planning Authority.</p> <p>c) All refueling shall take place on impermeable areas that drain through an interceptor from tanks that are banded or double skinned.</p> <p>d) All waste oil and chemicals shall be removed from the site and disposed of to the satisfaction of the Water Pollution Control Section of the Local Authority.</p> <p>e) A spill kit shall be maintained on site with adequate supply of containment booms and absorbent materials to deal with any spillage.</p> <p>f) The operator shall ensure that blasting practice minimises the risk of occurrence of nitrate/ammonia residues by proper blast design and implementation, appropriate disposal of any excess explosives, and selection of the appropriate type of explosives.</p> <p>Reason: To prevent water pollution in the interests of public health and the protection of natural heritage and the proper planning and sustainable development of the area.</p>
23	<p>SETTLEMENT PONDS</p> <p>Settlement ponds shall be regularly cleaned out by the operator as necessary for the efficient operation of the ponds in an environmentally acceptable manner. Silt removed from the settlement ponds shall be periodically covered with topsoil and seeded with grass to prevent subsequent dispersal. Appropriate measures shall be put in place to prevent silt leaving the site in any drain or watercourse during the cleaning process.</p> <p>Reason: To minimise dust in the interest of the proper planning and sustainable development of the area.</p>
24	<p>DETAILS OF DRAINAGE ARRANGEMENTS</p> <p>Within six months of the date of this decision full details, including detailed drawings and specifications, of all existing and proposed foul and surface water drainage arrangements on the entire site, showing full compliance with the requirements set out in the conditions attached hereto, shall be submitted for the written approval of the Planning Authority.</p> <p>Reason: To prevent water pollution in the interests of public health and the protection of natural heritage and the proper planning and sustainable development of the area.</p>
25	<p>RECORDS OF TYPES AND QUANTITIES OF WASTES</p> <p>Detailed records of the types and quantities of all wastes generated by the development shall be maintained and made available for inspection by the Planning Authority upon</p>

	<p>request. Any treatment / disposal of waste shall be carried out in compliance with the Waste Management Acts 1996–2006, or as may be amended from time to time.</p> <p>Reason: In the interests of public health, safety and the proper planning and sustainable development of the area.</p>
26	<p>PHASING PROGRAMME</p> <p>Within three months of the date of this decision or such other period as may be agreed with the Planning Authority, a detailed programme outlining the proposed phasing of the quarry workings shall be submitted for the written agreement of the Planning Authority. The proposed phasing shall be detailed on a suitable site plan which shall indicate the areas that have been worked and the depth of the workings, the proposed phasing of extraction for the remaining extractable area, and the proposed timing of the rehabilitation of all the areas. This phasing programme shall be updated and submitted for the written agreement of the Planning Authority at five-yearly intervals.</p> <p>Reason: To ensure the satisfactory rehabilitation of the site in the interests of amenity and the proper planning and sustainable development of the area.</p>
27	<p>REHABILITATION AND LANDSCAPING</p> <p>a) Within six months following approval by the Planning Authority of a programme for the phasing of the quarry workings, or such further period as the Planning Authority may permit, the operator shall submit for the written agreement of the Planning Authority, a comprehensive plan for the rehabilitation of the entire quarry following the cessation of quarrying works. This plan shall include detailed proposals for the rehabilitation and landscaping of existing worked out portions of the quarry, and indicative proposals for the rehabilitation and landscaping of future worked out portions of the quarry. The plan shall be updated and submitted for the written agreement of the Planning Authority at five-yearly intervals.</p> <p>b) The proposals shall, inter alia, provide for the phased carrying out of rehabilitation and landscaping operations within a definite period or periods related to the anticipated pace of extraction operations, and shall provide for the grading of surface levels, surface and sub-surface drainage and attenuation as per the Greater Dublin Strategic Drainage Study guidelines, planting and seeding works, and details of future maintenance.</p> <p>c) The proposals shall be prepared by a competent professional person with experience in the remediation / rehabilitation of quarries, and shall be supported by detailed maps, section drawings, and graphic material.</p> <p>d) The source of all material proposed to be used in respect of all rehabilitation works, together with full details of the type of material and the quantities involved, shall be submitted as part of the rehabilitation and landscaping proposals.</p> <p>Reason: To ensure the satisfactory rehabilitation of the site in the interests of amenity and the proper planning and sustainable development of the area.</p>
28	<p>LANDSCAPING AND BOUNDARY TREATMENT</p> <p>a) Within six months of the date of this decision a comprehensive landscaping scheme to screen views of the quarry workings or otherwise ameliorate the visual impact of the workings, shall be submitted for the written agreement of the Planning Authority. The scheme shall include detailed drawings and specifications of proposals for appropriate landscaping and boundary treatment, including tree planting and mounding, and a satisfactory time frame for the implementation of the scheme. A survey of all trees and</p>

	<p>hedgerows on the lands carried out by a competent professional person to B.S. 5837 shall be submitted as part of the scheme. The agreed scheme shall be implemented to the satisfaction of the Planning Authority.</p> <p>b) The proposals shall be prepared by a competent professional person with experience in the design of such landscaping schemes, and shall be supported by detailed maps, section drawings, and graphic material.</p> <p>Reason: In the interests of amenity and the proper planning and sustainable development of the area.</p>
29	<p>REHABILITATION ON CESSATION OF WORKS</p> <p>a) Following the cessation of quarrying operations, all buildings, plant and surface equipment shall be removed from the site within 12 months of the date of such cessation, and all rehabilitation works shall be completed within 36 months of the date of such cessation. The whole of the surface area (including the slopes and sections containing deposition accruing from the operation of the quarry) shall be rehabilitated by the appropriate land shaping of the ground in relation to the contours of adjoining land.</p> <p>b) Specifications and drawings indicating the proposed works to rehabilitate the site, detailing existing contours and the grading and levels of the final contours to which the rehabilitation shall be carried out, shall be submitted to the Planning Authority for agreement in writing.</p> <p>c) The proposals shall be prepared by a competent professional person with experience in the remediation / rehabilitation of quarries, and shall be supported by detailed maps, section drawings, and appropriate graphic material.</p> <p>d) The works shall not commence until such agreement has issued in writing and the agreed works shall be completed to the satisfaction of the Planning Authority.</p> <p>e) Any change of use of the lands shall be subject to a separate grant of planning permission for such use.</p> <p>Reason: To ensure the satisfactory rehabilitation of the site in the interests of amenity and the proper planning and sustainable development of the area.</p>
30	<p>STORAGE OF TOPSOIL</p> <p>All topsoil removed in the course of quarrying operations shall be separately retained from waste materials (including sub-soil and overburden) so that it can readily be re-used by spreading evenly over the worked surface or backfilled. Topsoil to be used for on-going landscaping shall be stockpiled in a manner so as to ensure that the soil flora and fauna are not destroyed.</p> <p>Reason: To ensure the satisfactory rehabilitation of the site in the interests of amenity and the proper planning and sustainable development of the area.</p>
31	<p>SECURITY FOR COMPLIANCE WITH CONDITIONS</p> <p>Within six months of the date of this decision the operator shall lodge with South Dublin County Council a bond of an insurance company or other form of equivalent security acceptable to the Planning Authority in the amount of €500,000 (Five Hundred Thousand Euro), together with an agreement empowering the Planning Authority to apply such security (or part thereof) to the satisfactory completion of the rehabilitation and aftercare works in the event that the operator fails to secure and rehabilitate the site in the future</p>

	<p>to the satisfaction of the Planning Authority. The value of the bond or alternative security shall be adjusted annually by reference to the Tender Price Index.</p> <p>Reason: To ensure the satisfactory rehabilitation of the site in the interests of amenity and the proper planning and sustainable development of the area.</p>
<p>32</p>	<p>ARCHAEOLOGICAL IMPACT ASSESSMENT</p> <p>a) An Archaeological Impact Assessment (AIA) shall be prepared in relation to the Recorded Monument located on the quarry lands, Stone Windmill (Ruin) (RM), Map Ref. Number 358 in the Record of Protected Structures.</p> <p>The AIA shall be prepared by a suitably qualified archaeologist (licensed under the National Monuments Acts 1930-94) and shall be based on desk study/ field survey, aerial photography and if necessary geophysical survey, etc.</p> <p>b) The AIA shall be submitted to the Heritage and Planning division of the Department of the Environment, Heritage and Local Government and to the Planning Authority within six months of the date of this decision. In the event that the AIA indicates significant archaeological potential the archaeologist may be required to carry out further research and/or excavate test trenches. Upon completion of this work the archaeologist shall submit a written report to the Planning Authority and the Department of the Environment, Heritage and Local Government.</p> <p>c) No site preparation or excavation or other works impacting directly upon, or in the vicinity of the Recorded Monument, shall be carried out at any time unless approval to proceed has been received in writing from the Planning Authority, following prior consultation with the Heritage and Planning Division of the Department of the Environment Heritage and Local Government.</p> <p>d) The costs of any archaeological investigation shall be at the expense of the quarry owner / operator.</p> <p>REASON: To facilitate the investigation of any remains of archaeological or historic interest discovered on the site in the interests of the proper planning and sustainable development of the area.</p>
<p>33</p>	<p>DISCOVERY OF REMAINS OF ARCHAEOLOGICAL OR HISTORIC INTEREST</p> <p>At all times during the stripping of topsoil on the site a suitably licensed archaeologist shall be present to monitor the work. In the event of any remains of archaeological or historic interest being discovered on the site, the Planning Authority shall be informed immediately. All works affecting these remains shall cease immediately and shall not recommence until approval in writing has been received from the Planning Authority, following consultation with the Heritage and Planning Division of the Department of the Environment, Heritage and Local Government.</p> <p>REASON: To facilitate the investigation of any remains of archaeological or historic interest discovered on the site in the interests of the proper planning and sustainable development of the area.</p>
<p>34</p>	<p>QUARRY ABUTTING ROADWAY</p> <p>Where the face of the quarry working abuts a public road and is below the level of the roadway the distance from the edge of the excavation to the adjoining road boundary shall be not less than 30 metres.</p>

	Reason: To ensure that public roads are not undermined in the interests of traffic and public safety.
35	<p>EXTENT OF AREA TO BE EXTRACTED</p> <p>The extraction of rock on the subject lands shall be limited to the area within the blue coloured line as indicated on the revised Site Location Map Sheet No. 1 dated 23/04/05 submitted as Additional Information on 10 October 2005. No extraction of rock shall be undertaken on any part of the lands outside the said area unless a separate planning permission has been granted for such development.</p> <p>Reason: In the interest of amenity and the proper planning and sustainable development of the area.</p>
36	<p>ACCESS TO QUARRY</p> <p>No access to the lands for the purposes of quarry operations shall be provided from the minor public road adjoining the quarry lands to the south, unless a separate planning permission for such development is granted.</p> <p>Reason: To prevent endangering public safety by reason of traffic hazard having regard to the substandard condition of the road and in the interests of residential and rural amenity.</p>