

Comhairle Cathrach Chorcaí Cork City Council

Halla na Cathrach, Corcaigh - City Hall, Cork - T12 T997

Thomas Tobler & Fiona Walsh, 57 Gilabbey Street, Cork, T12 A5X4.

26/07/2023

RE: Section 5 Declaration R774/23 57 Gilabbey Street, Cork, T12 A5X4.

A Chara,

With reference to your request for a Section 5 Declaration at the above-named property, received on 14th April 2023, and further information received 27th June 2023 and 25th July 2023, I wish to advise as follows:

In view of the above and having regard to:

- Sections 2 and 3 of the Planning and Development Act 2000 (as amended), and
- Articles 6, and 9 of the Planning and Development Regulations 2001(as amended), and
- Schedule 2, Part 1, Class 1 of the Planning and Development Regulations 2001 (as amended),

The Planning Authority considers that –

the proposed solar panels to the front of the house as per the plans and particulars submitted with the Section 5 declaration application to the Planning Authority on the 14/04/2023, 27/06/2023 and 26/07/2023 IS DEVELOPMENT and IS EXEMPTED DEVELOPMENT.

Under Section 5(3)(a) of the Planning and Development Act, 2000, you may, on payment of the appropriate fee, refer this declaration for review by An Bord Pleanála within 4 weeks of the date it is issued, 26th July 2023.



Is mise le meas,

Kate Magner

Development Management Section

Community, Culture and Placemaking Directorate

Cork City Council

774/23

To be read in conjunction with the previous planning report dated 27/04/2023 which requested further information detailed below.

FURTHER INFORMATION REQUESTED

- S.I. No. 493 of 2022 "PLANNING AND DEVELOPMENT ACT 2000 (EXEMPTED DEVELOPMENT) (NO. 3) REGULATIONS 2022" amend the planning regulations to allow solar panels on residential properties under exempted development provided they are within the designated limitations and conditions (as per table above).
- (a) Based on these amendments, please submit drawings of a scale 1:100 showing the distance between the plane of the roof and the solar panels which you are proposing. Please indicate the distance in cm between these elements.
- (b) Based on these amendments, please submit drawings of a scale 1:100 showing the distance between the edge of the roof and the solar panels which you are proposing. Please indicate the distance in cm between these elements.

RESPONSE TO FURTHER INFORMATION

A response to the Further Information was received by the Planning Authority on 27/06/2023 (Response to 1(b)) and on 26/07/2023 (Response to 1(a)). These details are as follows:

- (a) Two side elevations (one at a smaller scale) have been submitted to show the distance between the panels and the existing plane of the roof.
- (b) A google earth roof image with dimensions on same. There has been no scale provided. The dimension of this drawing show that it will be 0.89m from the side edges; 0.69m from the top plane of the roof profile; and 0.65m from the lower front edge of the roof.

PLANNING ASSESSMENT

The revised drawings and particulars show that the distance between the panels and the plane of the roof does not exceed 15cm (it is 10.5cm); while the google image shown shows that the panels will not come closer than 50cm to the edge of the roof. In this case it will be 0.89m from the side edges; 0.69m from the top plane of the roof profile; and 0.65m from the lower front edge of the roof. The proposal therefore appears to comply with the limitations and conditions for the placing of solar panels within the curtilage of a house.

RECOMMENDATION

In view of the above and having regard to —

- Sections 2 and 3 of the Planning and Development Act 2000 (as amended), and
- Articles 6, and 9 of the Planning and Development Regulations 2001 (as amended), and
- Schedule 2, Part 1, Class 1 of the Planning and Development Regulations 2001 (as amended)

It is considered that the proposed solar panels to the front of the house as per the plans and particulars submitted with the Section 5 declaration application to the Planning Authority on the 14/04/2023, 27/06/2023 and 26/07/2023 is development and is exempted development.

MND oyle

Mary Doyle Executive Planner 26/07/2023

Kate Magner -rom: Thomas Tobler < Sent: Tuesday 25 July 2023 14:36 To: Kate Magner Subject: Re: Energywise Ireland - Solar PV Quotation Attachments: Side Elevation View.pdf; Side Elevation View Blown up.pdf [EXTERNAL EMAIL] This email originated from outside Cork City Council. Do not follow guidance, click links or attachments unless you recognise the sender and know the content is safe. Hi Kate, I have received these side elevation drawings from Energywise, hopefully they will be sufficient. Thanks, Tom On Tue, 11 Jul 2023 at 10:58, Kate Magner Hi Tom, That's great, we won't issue the declaration until after you send in that drawing. All the further information requested can be considered then. Kind regards,

From: Thomas Tobler

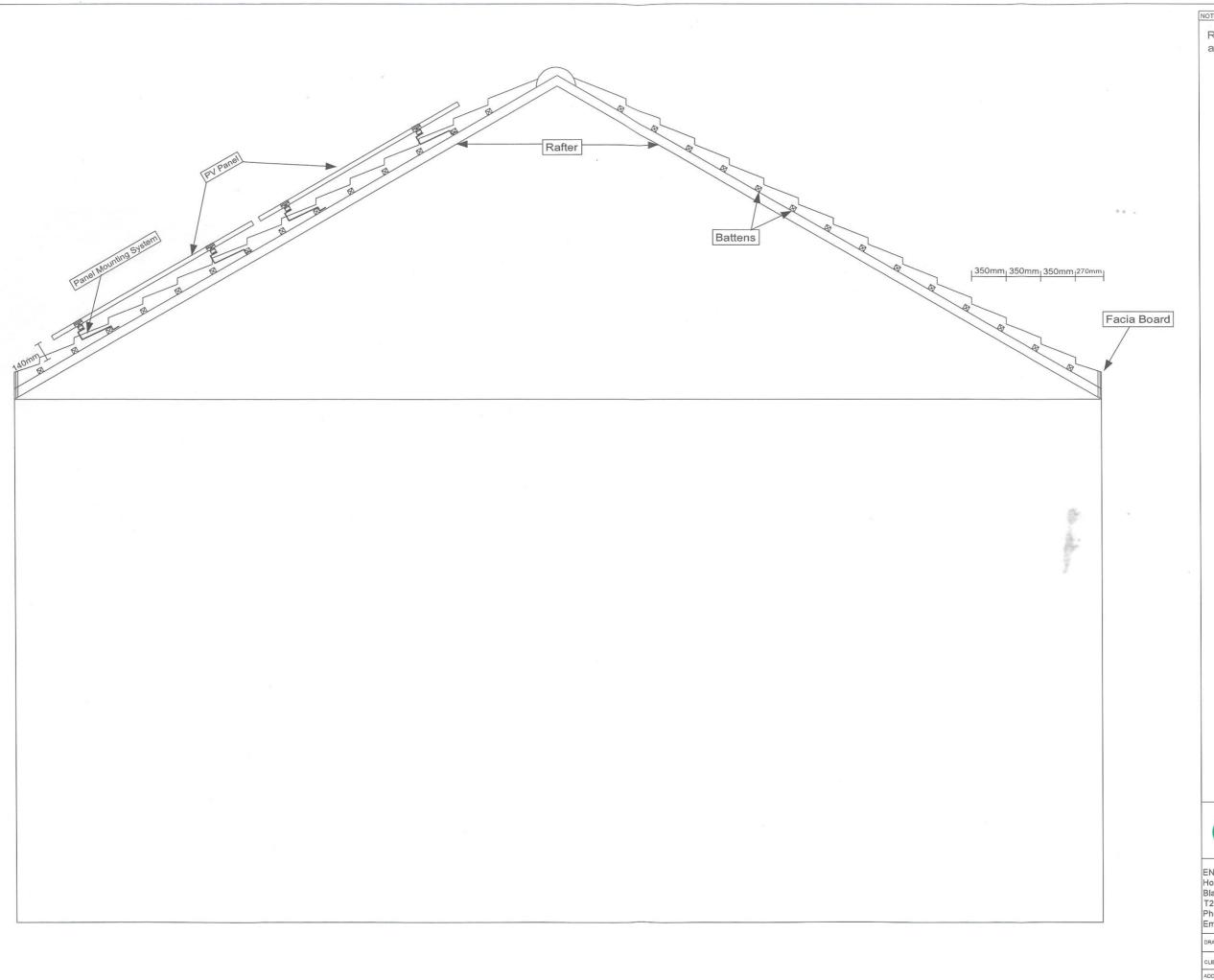
Kate

Sent: Tuesday, July 11, 2023 10:14 AM

To: Kate Magner < kate magner@corkcity.ie >

Subject: Ré: Energywise Ireland - Solar PV Quotation

[EXTERNAL EMAIL] This email originated from outside Cork City Council. Do not follow guidance, click links or attachments unless you recognise the sender and know the content is safe.



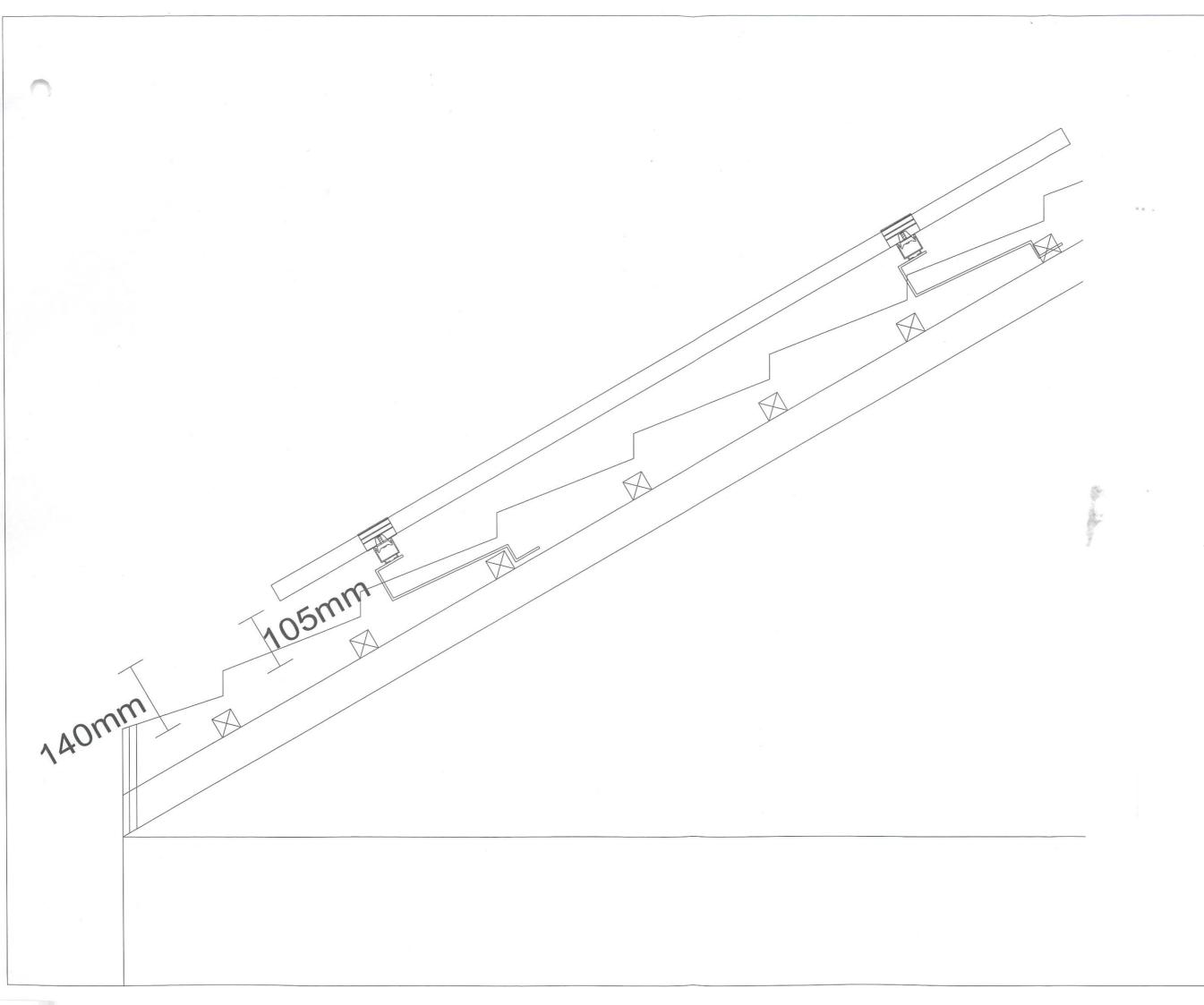
Roof slope taken at 30 degrees



ENERGYWISE IRELAND Hollymount Industrial Estate Blarney Road, Cork, Ireland T23NA44 Phone: 021 4308185 Email: info@energywiseireland.ie

C,C CLIENT: Thomas Tabler ADDRESS: Gillabbey Street, The Lough, Co. Cork, T12 A5X4

DRAWING DESCRIPTION : Side elevation PV layout





ENERGYWISE IRELAND Hollymount Industrial Estate Blarney Road, Cork, Ireland T23NA44 Phone: 021 4308185 Email: info@energywiseireland.ie

Thomas Tabler ADDRESS: Gillabbey Street, The Lough, Co. Cork T12 A5X4

DRAWING DESCRIPTION : Side Elevation PV Layout

Kate Magner Froi... Thomas Tobler Sent: Tuesday 27 June 2023 14:33 To: Kate Magner Subject: Re: Energywise Ireland - Solar PV Quotation Attachments: PV Layout.pdf; pv layout dimensions.pdf [EXTERNAL EMAIL] This email originated from outside Cork City Council. Do not follow guidance, click links or attachments unless you recognise the sender and know the content is safe. Hi Kate, I have had trouble getting a response from Energywise, hence the delayed reply. They have eventually provided the attached drawings. Let me know if either of these are acceptable to the planners. Thanks very much for your help, Tom. On Mon, 15 May 2023 at 16:04, Kate Magner Hi Tom, Please see the response from the planner below. "Once they put a proper scale on it, I should be able to accept. While there are dimensions written on the drawing, I have no scale, e.g., 1:100/1:250, to actually measure it and to know that it is what they say it is. This is important when assessing whether the previously advised limitations and conditions are being fully met. I would also suggest they write in the exact dimensions from the proposed panels to the edges of the roof structure as well for quicker clarity, but the key is really to include a legend detailing at what scale that these drawing have been drawn up. It is black and white I am afraid so I can't sign off that it does meet the exemptions without such specifics.

Kind regards,

These documents can be made available publicly as well so there is absolute need to ensure the proper process for such assessment and how we have come to the end conclusions/declarations based on the details provided."







ENERGYWISE IRELAND Hollymount Industrial Estate Blarney Road, Cork, Ireland T23NA44 Phone: 021 4308185 Email: info@energywiseireland.ie

Address: Gillabbey St, The Lough, Co. Cork T12 A5X4





Comhairle Cathrach Chorcaí Cork City Council

Halla na Cathrach, Corcaigh - City Hall, Cork - T12 T997

Thomas Tobler & Fiona Walsh, 57 Gilabbey Street, Cork, T12 A5X4.

27/04/2023

RE: Section 5 Declaration R774/23 57 Gilabbey Street, Cork T12 A5X4.

A Chara,

With reference to your request for a Section 5 Declaration at the above-named property, received on 14th April 2023, I wish to advise under the provisions of section 5(2)(b) of the Planning and Development Act 2000, as amended, that further information is required in order to properly assess this application.

1. S.I. No. 493 of 2022 "PLANNING AND DEVELOPMENT ACT 2000 (EXEMPTED DEVELOPMENT) (NO. 3) REGULATIONS 2022" amend the planning regulations to allow solar panels on residential properties under exempted development provided they are within the designated limitations and conditions (as per the table below).

Development within the curtilage of a house

Development within the continue of a notice					
Column 1	Column 2				
Description of Development	Conditions and Limitations				
(c) The placing or erection on	1. The distance between				
a roof of a house, or within	the plane of the roof and the				
the curtilage of a house, or on	solar photo-voltaic or solar				
a roof of any ancillary	thermal collector panels shall				
buildings within the curtilage	not exceed 50cm in the case of a				
of a house (this class does not	flat roof or 15cm in any other				
include apartments) of a solar	case.				
photo-voltaic and/or a solar					
thermal collector installation	2. The solar photo-voltaic or				
	solar thermal collector panels				
	shall be a minimum of 50cm				
	from the edge of a roof on				
	which it is mounted.				

Part 1, Schedule 2 of the Planning and Development Regulations 2001(as amended)



- (a) Based on these amendments, please submit drawings of a scale 1:100 showing the distance between the plane of the roof and the solar panels which you are proposing. Please indicate the distance in cm between these elements.
- (b) Based on these amendments, please submit drawings of a scale 1:100 showing the distance between the edge of the roof and the solar panels which you are proposing. Please indicate the distance in cm between these elements.

Is mise le meas,

Sate lagre

Kate Magner

Development Management Section

Community, Culture and Placemaking Directorate

Cork City Council

PLANNER'S RE Ref. R774/23	PORT	Cork City Council Development Management Strategic Planning and Economic Development	
Application type	Section 5 Declaration		
Description	"Is the installation of an 8 panel solar PV system (405 Watt panel – 3.24kW system) on the roof of 57 Gillabbey Street development and if so, is it exempted development?		
Location	57 Gillabbey Street		
Applicant	Thomas Tobler and Fiona Walsh.		
Date	08/08/2023		
Recommendation	Further Information		

In this report 'the Act' means the Planning and Development Act 2000 (as amended) and 'the Regulations' means the Planning and Development Regulations 2001 (as amended), unless otherwise indicated.

1. Requirements for a Section 5 Declaration

Section 5(1) of the Planning and Development Act 2000 as amended states,

5.—(1) If any question arises as to what, in any particular case, is or is not development or is or is not exempted development within the meaning of this Act, any person may, on payment of the prescribed fee, request in writing from the relevant planning authority a declaration on that question, and that person shall provide to the planning authority any information necessary to enable the authority to make its decision on the matter.

The requirements for making a section 5 declaration are set out in the Act.

2. The Question before the Planning Authority

In framing the question to the planning authority, the applicant states in Q2 of the application form:

"Is the installation of an 8 panel solar PV system (405 Watt panel – 3.24kW system) on the roof of

57 Gillabbey Street development and if so, is it exempted development?

3. Site Description

The property in question is an end of terrace 2 storey residential unit.

4. Planning History

There is no known history at this site.

5. Legislative Provisions

5.1 The Act

Section 2(1),

"works" includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal and, in relation to a protected structure or proposed protected

structure, includes any act or operation involving the application or removal of plaster, paint, wallpaper, tiles or other material to or from the surfaces of the interior or exterior of a structure.

Section 3(1),

In this Act, "development" means, except where the context otherwise requires, the carrying out of any works on, in, over or under land or 'the making of any material change in the use of any structures or other land'

Section 4(1)(h),

The following shall be exempted developments for the purposes of this Act-development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures;

Section 4(2),

Section 4(2) provides that the Minister may, by regulations, provide for any class of development to be exempted development. The principal regulations made under this provision are the Planning and Development Regulations 2001-2013.

Section 5(1).

(See section 1 of this report)

Section 177U (9) (screening for appropriate assessment)

In deciding upon a declaration or a referral under section 5 of this Act a planning authority or the Board, as the case may be, shall where appropriate, conduct a screening for appropriate assessment in accordance with the provisions of this section.

5.2 The Regulations

Article 6 (1)

Subject to article 9, development of a class specified in column 1 of Part 1 of Schedule 2 shall be exempted development for the purposes of the Act, provided that such development complies with the conditions and limitations specified in column 2 of the said Part 1 opposite the mention of that class in the said column.

Article 9 (1)

Development to which article 6 relates shall not be exempted development for the purposes of the Act –

- (a) (i) if the carrying out of such development would... contravene a condition attached to a permission under the Act or be inconsistent with any use specified in a permission under the Act
- (a) (viii) consist of or comprise the extension, alteration, repair or renewal of an unauthorised structure or a structure the use of which is an unauthorised use,

Article 10 (1)

Development which consists of a change of use within any one of the classes of use as specified in Part 4 of Schedule 2, shall be exempted development for the purposes of the Act, provided that the development, if carried out would not –

- (c) be inconsistent with any use specified or included in such a permission, or
- (d) be development where the existing use is an unauthorised, save where the change of use consists of resumption of a use which is not unauthorised and which has not been abandoned

Part 1 Schedule 2 Exempted Development for the purposes of Article 6 – sub-article (4)

Development within the curtilage of a house				
Column 1	Column 2			
Description of Development	Conditions and Limitations			
(c) The placing or erection on	1. The distance between			
a roof of a house, or within	the plane of the roof and the			
the curtilage of a house, or on	solar photo-voltaic or solar			
a roof of any ancillary	thermal collector panels shall			
buildings within the curtilage	not exceed 50cm in the case of a			
of a house (this class does not	flat roof or 15cm in any other			
include apartments) of a solar	case.			
photo-voltaic and/or a solar				
thermal collector installation	2. The solar photo-voltaic or			
	solar thermal collector panels			
	shall be a minimum of 50cm			
	from the edge of a roof on			
	which it is mounted.			

6. ASSESSMENT

6.1 Development

The first issue for consideration is whether or not the matter at hand is 'development'.

'Development' as defined in the Act (3)(1) comprises two possible chief components: 'the carrying out of any works on, in, over or under land', or 'the making of any material change in the use of any structures or other land'. In order to ascertain whether or not the subject use is considered to be development as so defined, consideration must first be given to whether any works on, in, over or under land have or will be carried out, and secondly to whether any material change in the use of any structures or other land have or will take place.

'Works' is defined in section 2(1) of the Act as 'the carrying out of any works on, in, over, or under land' including 'any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal, and in relation to a protected structure or proposed protected structure, includes any act or operation involving the application or removal of plaster, paint wallpaper, tiles or other material to or from the surfaces of the interior or exterior of a structure.'

I consider that the proposed addition of solar panels onto the existing front façade roof is considered as works as it involves the alteration of the façade.

6.2 Exempted development

The next issue for consideration is whether or not the matter at hand is exempted development. The proposed works are not listed within Schedule 2 Part 1 of the Planning and Development regulations 2001 (as amended) which lists Exempted Development.

S.I. No. 493 of 2022 "PLANNING AND DEVELOPMENT ACT 2000 (EXEMPTED DEVELOPMENT) (NO. 3) REGULATIONS 2022" included an amendment to allow solar panels on residential properties under exempted development provided they are within the designated limitations and conditions (as per table above).

No details as to whether the distance between the plane of the roof and the solar panels has been provided. This must not exceed 15cm in the case of the pitched roof of this property.

No details as to whether the distance between the edge of the roof and the solar panels has been provided. This must be a minimum of 50cm from the edge of a roof on which it is mounted.

Drawings to be submitted before a decision can issue as to whether they comply or not.

7. ENVIRONMENTAL ASSESSMENT

7.1 Screening for Environmental Impact Assessment

Having regard to the contents of Article 103 (as amended by Article 14 of the Planning and Development (Amendment) (No 3) Regulations 2011) and Schedule 7 of the Planning and Development Regulations 2001 (as amended) it is considered that the proposed development by reason of its nature, scale and location would not be likely to have significant effects on the environment. Accordingly, it is considered that an environmental impact statement is not required to be submitted.

7.2 Screening for Appropriate Assessment

Section 177U (9) of the Act requires planning authorities to screen applications for a section 5 declaration for appropriate assessment. The provisions of the *Habitats Directive*, the *Appropriate Assessment Guidelines for Planning Authorities 2009* (revised 2010) and the Act are noted. The relevant European sites are the Cork Harbour SPA (site code 004030) and the Great Island Channel cSAC (site code 001058). Having regard to the location of the proposed development site relative to these European sites and related watercourses and to the nature and scale of the proposed development it is considered that the proposed development would not affect the integrity of the European sites referred to above. Accordingly, it is considered that appropriate assessment is not required.

8. Conclusion

The question has been asked whether "... the installation of an 8 panel solar PV system (405 Watt panel – 3.24kW system) on the roof of 57 Gillabbey Street development and if so, is it exempted development?"

Having considered the particulars submitted with the application and the relevant legislation as set out above, it is considered that further information with regard to the specific distances between the plane of the roof and the edge of the roof and the proposed solar panels are required to permit the Planning Authority to assess and issue a declaration.

9. RECOMMENDATION

Further Information

- 1. S.I. No. 493 of 2022 "PLANNING AND DEVELOPMENT ACT 2000 (EXEMPTED DEVELOPMENT) (NO. 3) REGULATIONS 2022" amend the planning regulations to allow solar panels on residential properties under exempted development provided they are within the designated limitations and conditions (as per table above).
- (a) Based on these amendments, please submit drawings of a scale 1:100 showing the distance between the plane of the roof and the solar panels which you are proposing. Please indicate the distance in cm between these elements.
- (b) Based on these amendments, please submit drawings of a scale 1:100 showing the distance between the edge of the roof and the solar panels which you are proposing. Please indicate the distance in cm between these elements.

MDoyle

Mary Doyle Executive Planner

COMHAIRLE CATHRACH CHORCAÍ CORK CITY COUNCIL

Community, Culture & Placemaking Directorate, Cork City Council, City Hall, Anglesea Street, Cork. R-Phost/E-Mail planning@corkcity.ie

Fón/Tel: 021-4924709

Líonra/Web: www.corkcity.ie

SECTION 5 DECLARATION APPLICATION FORM

under Section 5 of the Planning & Development Acts 2000 (as amended)

1. NAME OF PERSON MAKING THE REQUEST	
1. INAME OF PERSON WARRING THE REQUEST	DEVELOPMENT BEAMS OF BETAIT
Thomas Tobler and Fiona Walsh	DEVELOPMENT MANAGEMENT
Thomas robici and ribita waish	CCP
2. POSTAL ADDRESS OF LAND OR STRUCTURE FOR WHICH DECLARATION	NIS SOUGHT 4 APK 2023
57 Gillabbey Street, Cork, T12 A5X4	
	GALLER CO.
	CORK CITY COUNCIL
	The state of the s

3. QUESTION/ DECLARATION DETAILS

PLEASE STATE THE SPECIFIC QUESTION FOR WHICH A DECLARATION IS SOUGHT:

Sample Question:

Is the construction of a shed at No 1 Wall St, Cork development and if so, is it exempted development?

Note: only works listed and described under this section will be assessed under the section 5 declaration.

Is the installation of an 8 Panel solar PV system (405 Watt Panel - 3.24kW System) on the roof of 57 Gillabbey St development and is so, is it exempted development?

ADDITIONAL DETAILS REGARDING QUESTION/ WORKS/ DEVELOPMENT:

(Use additional sheets if required).

Installation will be on the street-facing roof, see photo attached. 8 x LONGi Hi-MO 5 solar Pv panels will be installed, see brochure attached.

DEVELOPMENT MANAGEMENT CCP

1 4 APR 2023

1 of 4

CORK CITY COUNCIL

if so please supply details: NoNo	edings con	nected to un	s site:			
5. Is this a Protected Structure or within the	Is this a Protected Structure or within the curtilage of a Protected Structure?					
If yes, has a Declaration under Section 57 requested or issued for the property by t			CT THE TOTAL THE TAX T			
6. Was there previous relevant planning application of the second of the	plication/s	on this site?				
7. APPLICATION DETAILS	·					
Answer the following if applicable. Note: Floor ar walls and should be indicated in square meters (sq		äsured from	the inside of the external			
(a) Floor area of existing/proposed structure	a) Floor area of existing/proposed structure/s N/A					
(b) If a domestic extension, have any previous extensions/structures been erected at the location after 1 st October, 1964, (including for which planning permission has been obtained)?	nis -	Yes If yes, pleas m)	No e provide floor areas. (sq			
(c) If concerning a change of use of land and	l / or buildi	ng(s), please	state the following:			
Existing/ previous use (please circle) 7. LEGAL INTEREST	Proposed/	existing use (please circle)			
Please tick appropriate box to show applicant's legal interest in the land or structure	A, Owr	ner X	B. Other			
Where legal interest is 'Other', please state your interest in the land/structure in question						
If you are not the legal owner, please state the name of the owner if available						
8. I / We confirm that the information contained Signature:	in the app	lication is tru	e and accurate:			
Date:14/04/2023						

ADVISORY NOTES:

The application must be accompanied by the required fee of €80

The application should be accompanied by a site location map which is based on the Ordnance Survey map for the area, is a scale not less than 1:1000 and it shall clearly identify the site in question.

Sufficient information should be submitted to enable the Planning Authority to make a decision. If applicable, any plans submitted should be to scale and based on an accurate survey of the lands/structure in question.

The application should be sent to the following address:

The Development Management Section, Community, Culture & Placemaking Directorate, Cork City Council, City Hall, Anglesea Street, Cork.

- The Planning Authority may request other person(s) other than the applicant to submit information on the question which has arisen and on which the declaration is sought.
- Any person issued with a declaration may on payment to An Bord Pleanála refer a declaration for review by the Board within 4 weeks of the date of the issuing of the declaration.
- In the event that no declaration is issued by the Planning Authority, any person who made a request may on payment to the Board of such a fee as may be prescribed, refer the question for decision to the Board within 4 weeks of the date that a declaration was due to be issued by the Planning Authority.

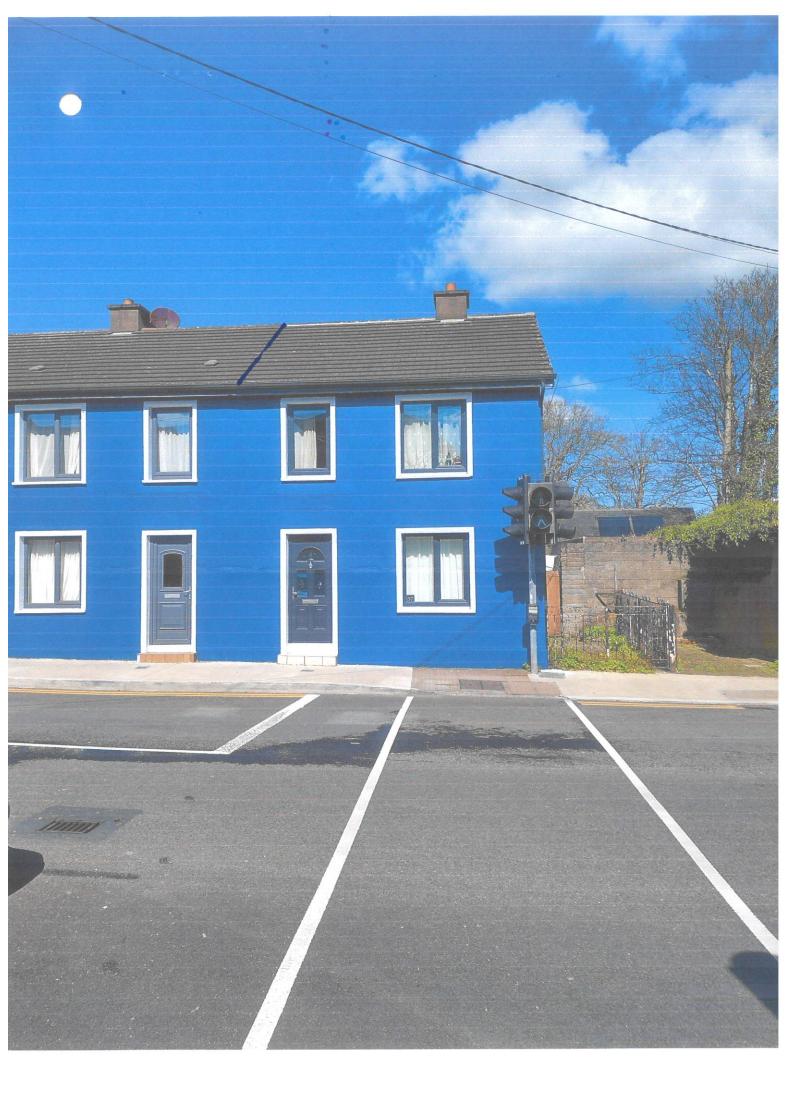
The application form and advisory notes are non-statutory documents prepared by Cork City Council for the purpose of advising as to the type information is normally required to enable the Planning Authority to issue a declaration under Section 5. This document does not purport to be a legal interpretation of the statutory legislation nor does it state to be a legal requirement under the Planning and Development Act 2000 as amended, or Planning and Development Regulations 2001 as amended.

DATA PROTECTION

"Cork City Council is committed to fulfilling its obligations imposed by the Data Protection Acts 1988 to 2018 and the GDPR. Our privacy statement and data protections policy is available at https://www.corkcity.ie/en/council-services/public-info/qdpr/.

We request that you read these as they contain important information about how we process personal data.

Folio Number: CK149120F Application Number: P2021LR071081U 566940 mE, 571550 mN The Property Registration Authority An tÚdarás Clárúcháin Maoine Folio: CK149120F This map should be read in conjunction with Registry maps are based on OSi topographic mapping. Where registry maps are printed at a scale that is larger than the OSI published scale, accuracy is limited to that of the orignial OSi map scale. For details of the terms of use and limitations as to scale, accuracy and other conditions relating to Land Registry maps, see www.pral.le. This map incorporates Ordnance Survey Ireland (OSI) mapping data under a licence from OSI. Copyright © OSI and Government n_n_n_n Gillabbey Terrace of Ireland. 00000 (centre-line of parcel(s) edged) Freehold Leasehold SubLeasehold Dean Street Burdens (may not all be represented on map) Right of Way / Wayleave Turbary Pipeline Well 0 Pump 0 Septic Tank Soak Pit Saint Finn Barr's Road A full list of burdens and their symbology can be found at: www.landdirect.te The registry operates a non-conclusive boundary system. The Registry Map identifies properties not boundaries meaning neither the Noonan Road description of land in a register nor its identification by reference to a registry map is conclusive as to the boundaries or extent. (see Section 85 of Noonan Road the Registration of Title Act, 1964). As inserted by Section 62 of the Registration of Noonan Road Deed and Title Act 2006. 566620 mE, 571290 mN Date Printed: 07/07/2021 1:1000 Scale Creation Date: 07 July 2021 07:18:28 Application Number: P2021LR071081U Page 6 of 9





LR5-54HPB 390~410M

- · Suitable for distributed projects
- Advanced module technology delivers superior module efficiency
 - •M10 Gallium-doped Wafer •Integrated segmented ribbons •9 busbar Haif-cut Cell
- Excellent outdoor power generation performance
- · Aesthetic appearance with all black module design



12-year Warranty for Materials and Processing



25-year Warranty for Extra Linear Power Output

Complete System and **Product Certifications**

EC 61215, EC 61730, UL 61730

ISO9001:2015: ISO Quality Management System

ISO14001: 2015: ISO Environment Management System

ISO45001: 2018: Occupational Health and Safety

TS62941: Guideline for module design qualification and type approval







