



CORK COUNTY COUNCIL
WESTERN DIVISION
WATER SERVICES

Courthouse, Skibbereen, Co. Cork

Re: Waste Water Discharge Certificate Application
for the Agglomeration of Glandore

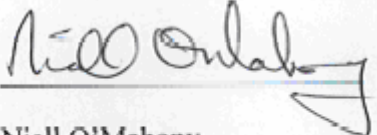
Dear Sir/Madam,

Please find enclosed Cork County Council's Waste Water Discharge Certificate Application for the agglomeration of Glandore.

The following documentation is enclosed:

- 1 Nr. Signed original in hardcopy
- 1 Nr. Copy in hardcopy
- 2 Nr. CD-ROM with all documentation in electronic searchable PDF (OCR'd format)
- 1 Nr. CD-ROM with GIS Data, Tabular Data

The content of the electronic files is a true copy of the original hardcopy.



Niall O'Mahony,
Senior Engineer.

Comhairle Contae Chorcaí Cork County Council

Environmental Directorate,
Inniscarra, Co. Cork.
Tel. No. (021) 4532700 • Fax No. (021) 4532727
Web: www.corkcoco.ie
An Stiúrthóireacht Comhshaoil,
Inis Cara, Co. Corcaigh.
Fón: (021) 4532700 • Faics: (021) 4532727
Suíomh Gréasáin: www.corkcoco.ie



Mr. Frank Clinton,
Program Manager,
Office of Climate, Licensing & Resource Use,
Environment Protection Agency,
Headquarters,
PO Box 3000,
Johnstown Castle Estate,
County Wexford.

16th December, 2009

Re: Waste Water Discharge (Authorisation) Regulations 2007 – fees payable in respect of applications to be submitted by 22nd December, 2009.

Dear Mr. Clinton,

I refer to the 72 certificate applications and 3 discharge authorisation licence applications which will be submitted by the council under the above regulations before the 22nd December next.

I note that the fees payable in respect of these applications amount to €246,000 and refer you to our letter of 7th November 2008 (sent by Ted O'Leary, Senior Executive Officer) seeking a rebate/reduction, as is provided for under Art 38 (3) of the regulations. I note that since that letter the council has paid a further € 570,000 in applications fees meaning that the total amount paid by the council to date amounts to € 1,245,000.

As you will appreciate, in the current economic climate, the amount payable in respect of this final batch of applications is a significant sum that was not budgeted for in 2009. Moreover we have paid a substantial amount in fees already and have made our case for a reduction/rebate. Accordingly, I must advise that we are not submitting payment in respect of these applications as we anticipate the rebate due to the council exceeds the fees payable.

Yours faithfully,

Louis Duffy,
Director of Service,
Environment & Emergency Services Directorate



This is a draft document and is subject to revision.



Waste Water Discharge Certificate of Authorisation Application Form

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Ref. N^o:
(Office use only)

Environmental Protection Agency
PO Box 3000, Johnstown Castle Estate, Co. Wexford
Lo Call: 1890 335599 Telephone: 053-9160600 Fax: 053-9160699
Web: www.epa.ie Email: info@epa.ie

Tracking Amendments to Draft Application Form

Version No.	Date	Amendment since previous version	Reason
V. 1.	12/06/2009	N/A	
V.2.	17/06/2009	<p>Delete reference to Design Build and Operate</p> <p>Delete the requirement to provide contact information for the associated waste water treatment plant</p> <p>Replace references to the Water Services investment Programme with the Small Schemes Programme</p> <p>Update references to new legislation</p> <p>Inclusion of the requirement to submit information on private WWTPs within the agglomeration.</p>	<p>To accurately reflect the information required for the small schemes programme</p> <p>To accurately reflect the information required and the scale of the waste water works</p> <p>To accurately reflect the information required for the small schemes programme</p> <p>To reflect changes in legislation</p> <p>To obtain an overview of all discharges within the agglomeration.</p>

For inspection purposes only. Consent of copyright owner required for any other use.

Environmental Protection Agency
Application for a Waste Water Discharge Certificate of Authorisation
Waste Water Discharge (Authorisation) Regulations, 2007.

CONTENTS

	Page
ABOUT THIS APPLICATION FORM	4
PROCEDURES	5
SECTION A: NON-TECHNICAL SUMMARY	7
SECTION B: GENERAL	9
SECTION C: INFRASTRUCTURE & OPERATION	166
SECTION D: DISCHARGES TO THE AQUATIC ENVIRONMENT	188
SECTION E: MONITORING	20
SECTION F: EXISTING ENVIRONMENT & IMPACT OF THE DISCHARGE(S)	222
SECTION G: PROGRAMMES OF IMPROVEMENTS	255
SECTION H: DECLARATION	288
SECTION I: JOINT DECLARATION	299

ABOUT THIS APPLICATION FORM

This form is for the purpose of making an application for a Waste Water Discharge Certificate of Authorisation under the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007) or for the review of an existing Waste Water Discharge Certificate of Authorisation.

The Application Form **must** be completed in accordance with the instructions and guidance provided in the *Waste Water Discharge Certificate of Authorisation Application Guidance Note*. The Guidance Note gives an overview of Waste Water Certificates of Authorisation, outlines the certification application process (including the number of copies required) and specifies the information to be submitted as part of the application. The Guidance Note and application form are available to download from the licensing page of the EPA's website at www.epa.ie.

A valid application for a Waste Water Discharge Certificate of Authorisation must contain the information prescribed in the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007). Regulation 24 of the Regulations sets out the statutory requirements for information to accompany a Certificate of Authorisation application. The application form is designed in such a way as to set out these questions in a structured manner and not necessarily in the order presented in the Regulations. In order to ensure a legally valid application with respect to Regulation 24 requirements, please complete the Regulation 24 Checklist provided in the following web based tool: http://78.137.160.73/epa_wwd_licensing/

This Application Form does not purport to be and should not be considered a legal interpretation of the provisions and requirements of the Waste Water Discharge (Authorisation) Regulations, 2007. **While every effort has been made to ensure the accuracy of the material contained in the Application Form, the EPA assumes no responsibility and gives no guarantee, or warranty concerning the accuracy, completeness or up-to-date nature of the information provided herein and does not accept any liability whatsoever arising from any errors or omissions.**

Should there be any contradiction between the information requirements set out in the Application Form and any clarifying explanation contained in the accompanying Guidance Note, then the requirements in this Application Form shall take precedence.

PROCEDURES

The procedure for making and processing of applications for waste water discharge Certificates of Authorisation, and for the processing of reviews of such Certificates, appears in the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007) and is summarised below. The application fees that shall accompany an application are listed in the Third Schedule to the Regulations.

An application for a Certificate of Authorisation must be submitted on the appropriate form (available from the Agency website – <http://www.epa.ie/whatwedo/licensing/wwda/>) with the correct fee, and should contain relevant supporting documentation as attachments. The application should be based on responses to the form and include supporting written text and the appropriate use of tables and drawings. Where point source emissions occur, a system of unique reference numbers should be used to denote each discharge point. These should be simple, logical, and traceable throughout the application.

The application form is divided into a number of sections of related information. The purpose of these divisions is to facilitate both the applicant and the Agency in the provision of the information and its assessment. **Please adhere to the format as set out in the application form and clearly number each section and associated attachment, if applicable, accordingly.** Attachments should be clearly numbered, titled and paginated and must contain the required information as set out in the application form. Additional attachments may be included to supply any further information supporting the application. Any references made should be supported by a bibliography.

All questions should be answered. Where information is requested in the application form, which is not relevant to the particular application, the words "not applicable" should be clearly written on the form. The abbreviation "N/A" should not be used.

Additional information may need to be submitted beyond that which is explicitly requested on this form. Any references made should be supported by a bibliography. The Agency may request further information (under notices provided for in the Regulations) if it considers that its provision is material to the assessment of the application. Advice should be sought from the Agency where there is doubt about the type of information required or the level of detail.

Information supplied in this application, including supporting documentation will be put on public display and be open to inspection by any person.

Applicants should be aware that a contravention of the conditions of a waste water discharge Certificate of Authorisation is an offence under the Waste Water Discharge (Authorisation) Regulations, 2007.

The provision of information in an application for a waste water discharge Certificate of Authorisation which is false or misleading is an offence under Regulation 35 of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007).

Note: Drawings. The following guidelines are included to assist applicants:

- All drawings submitted should be titled and dated.
- All drawings should have a unique reference number and should be signed by a clearly identifiable person.
- All drawings should indicate a scale and the direction of north.
- All drawings should, generally, be to a scale of between 1:20 to 1:500, depending upon the degree of detail needed to be shown and the size of the facility. Drawings delineating the boundary can be to a smaller scale of between 1:1000 to 1:10560, but must clearly and accurately present the required level of detail. Drawings showing the waste water treatment plant location, if such a plant exists, can be to a scale of between 1:50 000 to 1:126 720. All drawings should, however, be A3 or less and of an appropriate scale such that they are clearly legible. Provide legends on all drawings and maps as appropriate.
- In exceptional circumstances, where A3 is considered inadequate, a larger size may be requested by the Agency.

It should be noted that it will not be possible to process or determine the application until the required documents have been provided in sufficient detail and to a satisfactory standard.

For inspection purposes only.
Consent of copyright owner required for any other use.

SECTION A: NON-TECHNICAL SUMMARY

Advice on completing this section is provided in the accompanying Guidance Note.

A non-technical summary of the application is to be included here. The summary should identify all environmental impacts of significance associated with the discharge of waste water associated with the waste water works. This description should also indicate, where applicable, the hours during which the waste water works is supervised or manned and days per week of this supervision.

The following information must be included in the non-technical summary:

A description of:

- the waste water works and the activities carried out therein,
- the sources of emissions from the waste water works,
- the nature and quantities of foreseeable emissions from the waste water works into the receiving aqueous environment as well as identification of significant effects of the emissions on the environment,
- the proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the waste water works,
- further measures planned to comply with the general principle of the basic obligations of the operator, i.e., that no significant pollution is caused;
- measures planned to monitor emissions into the environment.

Supporting information should form **Attachment N° A.1**

Non-Technical Summary

Glandore is located on the northern coastline of Glandore Harbour and is accessed from Leap between Clonakilty and Skibbereen on the N71. The main function of the village has been as a holiday centre with holiday homes and leisure activities. The majority of properties in the village are domestic dwelling with the remainder being community associated properties such as a hotel, pubs and restaurants.

Waste water works and the activities carried out therein

The waste water works in Glandore was constructed in the 1980's. There is a combination of a gravity collection network and 2 pumping station located within the agglomeration boundary. The treatment plant is located below the Road adjacent to the public toilets and the harbour. Treatment is by means of a septic tank with a discharge to Glandore Harbour via a 150mm dia. ductile iron pipe surrounded in concrete.

Sources of emissions from the waste water works

The majority of the properties in the village are dwelling houses with the remainder being community based properties such as a hotel, pubs and restaurants.

The existing PE is currently estimated at 100 winter population and 285 peak summer population with a subsequent peak dry weather flow (DWF) of 62.7m³ per

day in the summer. For the purpose of this application the relevant PE chosen for the licence period is 490PE, this being the PE estimated at the end of that period.

Nature and quantities of foreseeable emissions from the waste water works into the receiving aqueous environment as well as identification of significant effects of the emissions on the environment

The sources of wastewater in the village would all be considered domestic wastewater. The majority of the properties in the village are dwellings with the remainder being community based properties where all the wastewater from the properties would be considered domestic. Wastewater currently treated via septic tanks are assumed to receive primary treatment prior to discharge.

Based on a peak summer population equivalent of 285 and a discharge volume of 60gBOD/person/day the total BOD reaching the treatment plant is estimated at 17.1kg/day BOD in the peak summer and 6kg/day in the winter.

The main function of a septic tank is to act as primary settlement tank removing some of the BOD and the majority of the suspended solids. The EPA publication 'Primary, secondary and tertiary treatment' (EPA 1997) estimates that typically 50-70% of suspended solids are removed in primary settlement tanks; BOD is reduced by 20-50% and the bacterial count by 25-75%. According to the National Urban Waste Water Study (NUWWS) the reduction to the BOD load would be approximately 30% and approximately 50% to the Suspended Solids load. This would result in a peak BOD discharge to the bay of 12kg/day.

Proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the waste water works

The wastewater treatment plant has a design PE of 325. The existing PE being served by the treatment plant is 285. The treatment plant is being desludged on a regular basis by Cork County Council. We will be seeking funding during the licence period to increase the capacity of the septic tank to cater for the future summer peak.

Further measures planned to comply with the general principle of the basic obligations of the operator, i.e., that no significant pollution is caused;

At present all treatment plants under the control of Cork County Council are monitored and maintained by full time Cork County Council personnel and are desludged when deemed necessary, thus reducing the possibility of environmental damage.

Measures planned to monitor emissions into the environment.

The emissions from the existing treatment plant can be monitored through the sampling point SW01 GLAN (see Map GLAN B3-01 for location).

SECTION B: GENERAL

Advice on completing this section is provided in the accompanying Guidance Note.

B.1 Agglomeration Details

Name of Agglomeration: Glandore
--

Applicant's Details

Name and Address for Correspondence

Only application documentation submitted by the applicant and by the nominated person will be deemed to have come from the applicant.

Provide a drawing detailing the agglomeration to which the Certificate of Authorisation application relates. It should have the boundary of the agglomeration to which the Certificate of Authorisation application relates clearly marked in red ink.

Name*:	Cork County Council
Address:	Water Services (Western Division)
	Courthouse
	Skibbereen
	Co. Cork
Tel:	028 21299
Fax:	028 21995
e-mail:	niall.omahony@corkcoco.ie

*This should be the name of the Water Services Authority in whose ownership or control the waste water works is vested.

*Where an application is being submitted on behalf of more than one Water Services Authority the details provided in Section B.1 shall be that of the lead Water Services Authority.

Name*:	Niall O'Mahony
Address:	Cork County Council
	Courthouse
	Skibbereen
	Co. Cork
Tel:	028 21299
Fax:	028 21995
e-mail:	niall.omahony@corkcoco.ie

*This should be the name of person nominated by the Water Services Authority for the purposes of the application.

Co-Applicant's Details

Name*:	Not Applicable
Address:	
Tel:	
Fax:	
e-mail:	

*This should be the name of a Water Services Authority, other than the lead authority, where multiple authorities are the subject of a waste water discharge Certificate of Authorisation application.

Attachment B.1 should contain appropriately scaled drawings / maps ($\leq A3$) of the agglomeration served by the waste water works showing the boundary clearly marked in red ink. These drawings / maps should also be provided as

geo-referenced digital drawing files (e.g., ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. These drawings should be provided to the Agency on a separate CD-Rom containing sections B.2, B.3, B.4, B.5, C.1, D.2, E.3 and F.2.

Attachment included	Yes	No
	√	

B.2 Location of Associated Waste Water Treatment Plant(s)

Give the location of the waste water treatment plant associated with the waste water works, if such a plant or plants exists.

Name*:	James Dwyer
Address:	Cork County Council
	The Rectory
	Skibbereen
	Co Cork
Grid ref (6E, 6N)	122473E, 035253N
Level of Treatment	Primary

*This should be the name of the person responsible for the supervision of the waste water treatment plant.

Attachment B.2 should contain appropriately scaled drawings / maps ($\leq A3$) of the site boundary and overall site plan, including labelled discharge, monitoring and sampling points. These drawings / maps should also be provided as geo-referenced digital drawing files (e.g., ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. These drawings should be provided to the Agency on a separate CD-Rom containing sections B.1, B.3, B.4, B.5, C.1, D.2, E.3 and F.2.

Attachment included	Yes	No
	√	

B.3 Location of Primary Discharge Point

Give the location of the primary discharge point, as defined in the Waste Water Discharge (Authorisation) Regulation, associated with the waste water works.

Discharge to	Surface
Type of Discharge	150mm DI pipe
Unique Point Code	SW01 - GLAN
Location	Rushanes
Grid ref (6E, 6N)	122484E, 035226N

Attachment B.3 should contain appropriately scaled drawings / maps ($\leq A3$) of the discharge point, including labelled monitoring and sampling points associated with the discharge point. These drawings / maps should also be provided as geo-referenced digital drawing files (e.g. ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. This data should be provided to the Agency on a separate CD-Rom containing the drawings and tabular data requested in sections B.1, B.2, B.4, B.5, C.1, D.2, E.3 and F.2.

Attachment included	Yes	No
	√	

B.4 Location of Secondary Discharge Point(s)

Give the location of **all** secondary discharge point(s)* associated with the waste water works. Please refer to Guidance Note for information on Secondary discharge points.

Discharge to	Not Applicable
Type of Discharge	
Unique Point Code	
Location	
Grid ref (6E, 6N)	

*Where a septic tank is in existence simultaneous to a package plant within an agglomeration, discharges from the septic tank shall be considered as a secondary discharge.

Attachment B.4 should contain appropriately scaled drawings / maps ($\leq A3$) of the discharge point(s), including labelled monitoring and sampling points associated with the discharge point(s). These drawings / maps should also be provided as geo-referenced digital drawing files (e.g. ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. This data should be provided to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.5, C.1, D.2, E.3 and F.2.

Attachment included	Yes	No
		√

B.5 Location of Storm Water Overflow Point(s)

Give the location of **all** storm water overflow point(s) associated with the waste water works.

Type of Discharge	Not Applicable
Unique Point Code	
Location	
Grid ref (6E, 6N)	

Attachment B.5 should contain appropriately scaled drawings / maps ($\leq A3$) of storm water overflow point(s) associated with the waste water works, including labelled monitoring and sampling points associated with the discharge point(s). These drawings / maps should also be provided as geo-referenced digital drawing files (e.g. ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. This data should be provided to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, C.1, D.2, E.3 and F.2.

Attachment included	Yes	No
		√

B.6 Planning Authority

Give the name of the planning authority, or authorities, in whose functional area the discharge or discharges take place or are proposed to take place.

Name:	Cork County Council
Address:	Planning Department
	Norton House
	Skibbereen
	Co Cork
Tel:	028 40340
Fax:	028 21660
e-mail:	

Planning Permission relating to the waste water works which is the subject of this application:- (tick as appropriate)

has been obtained		is being processed	
is not yet applied for		is not required*	√

* pre Part 8 Planning Legislation

Local Authority Planning File Reference N^o:	Not Applicable
---	----------------

Attachment B.6 should contain *the most recent* planning permission, including a copy of *all* conditions, and where an EIS was required, copies of any such EIS and any certification associated with the EIS, should also be enclosed. Where planning permission is not required for the development, provide reasons, relevant correspondence, etc.

Attachment included	Yes	No
		√

B.7 Other Authorities

B.7 (i) Shannon Free Airport Development Company (SFADCo.) area

The applicant should tick the appropriate box below to identify whether the discharge or discharges are located within the Shannon Free Airport Development Company (SFADCo.) area.

Attachment B.7(i) should contain details of any or all discharges located within the SFADCo. area.

Within the SFADCo Area	Yes	No
		√

B.7 (ii) Health Services Executive Region

The applicant should indicate the **Health Services Executive Region** where the discharge or discharges are or will be located.

Name:	Health Service Executive
Address:	Area Headquarters
	Hospital Grounds
	Skibbereen
Tel:	028 40400
Fax:	028 21006
e-mail:	info@hse.ie

B. 8(i) Population Equivalent of Agglomeration

TABLE B.8.1 POPULATION EQUIVALENT OF AGGLOMERATION

The population equivalent (p.e.) of the agglomeration to be, or being, served by the waste water works should be provided and the period in which the population equivalent data was compiled should be indicated.

Existing

Population Equivalent	285
Data Compiled (Year)	2009
Method	House count

Proposed

Population Equivalent	490
Data Compiled (Year)	2009
Method	House count

Glandore would have a very small population in the winter in comparison with the summer months. The above figure is an average population of the village using a method of counting the number of properties and applying a pe of 3 per property. For the purposes of this application the relevant PE chosen for the licence period is 490 being the PE estimated at end of that period.

B.8 (ii) Pending Development

Where planning permission has been granted for development(s), but development has not been commenced or completed to date, within the boundary of the agglomeration and this development is being, or is to be, served by the waste water works provide the following information;

- information on the calculated population equivalent (p.e.) to be contributed to the waste water works as a result of those planning permissions granted,
- the percentage of the projected p.e. to be contributed by the non-domestic activities, and
- the ability of the waste water works to accommodate this extra hydraulic and organic loading without posing an environmental risk to the receiving waters.

The following is a list of developments that have planning permissions granted within the agglomeration and have not yet been constructed.

- 33 Dwelling houses
- 10 Apartments for short term letting
- Rowing Club Pavilion

It can be estimated that approximately 130pe will be added to the wastewater scheme once construction is complete. These would all be considered domestic wastewater. If

all of the above mentioned developments are constructed the septic tank will be over loading during the summer months. We will be seeking funding during the licence period to increase the capacity of the septic tank to cater for this future summer peak.

B.8 (iii) FEES

State the relevant Class of waste water discharge as per Regulation 5, and the appropriate fee as per Columns 2 or 3 of the Third Schedule of the Waste Water Discharges (Authorisation) Regulations 2007, S.I. No. 684 of 2007.

Class of waste water discharge	Fee (in €)
Less than 500pe	€3,000

Appropriate Fee Included	Yes	No
		√*

* Please see copy of attached letter sent by registered post to Mr F. Clinton, Programme Manager, Licencing Unit EPA on December 18th 2009

B.9 Capital Investment Programme

State whether a programme of works has been prioritised for the development of infrastructure to appropriately collect, convey, treat and discharge waste water from the relevant agglomeration. If a programme of works has been prioritised provide details on funding (local or national small schemes programme) allocated to the capital project. Provide details on the extent and type of work to be undertaken and the likely timeframes for this work to be completed.

We will be seeking funding during the licence period to increase the capacity of the septic tank to cater for the future summer peak.

Attachment B.9 should contain the most recent development programme, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

Attachment included	Yes	No
		√

B.10 Significant Correspondence

Provide a summary of any correspondence resulting from a Section 63 notice issued by the Agency in relation to the waste water works under the Environmental Protection Agency Acts, 1992 and 2003, as amended by Section 13 of Protection of the Environment Act, 2003.

Not applicable

Attachment B.10 should contain a summary of any relevant correspondence issued in relation to a Section 63 notice.

Attachment included	Yes	No
		√

B.11 Foreshore Act Licences.

Provide a copy of the most recent Foreshore Act licence issued in relation to discharges from the waste water works issued under the Foreshore Act 1933.

Attachment B.11 should contain the most recent licence issued under the Foreshore Act 1933, including a copy of *all* conditions attached to the licence and any monitoring returns for the previous 12-month period, if applicable.

MS51/8/721 Laying, maintaining and using a sewerage outfall discharge pipe.

Attachment included	Yes	No
		√

*For inspection purposes only.
Consent of copyright owner required for any other use.*

SECTION C: INFRASTRUCTURE & OPERATION

Advice on completing this section is provided in the accompanying Guidance Note.

C.1 Operational Information Requirements

Provide a description of the plant, process and design capacity for the areas of the waste water works where discharges occur, to include a copy of such plans, drawings or maps (site plans and location maps, process flow diagrams) and such other particulars, reports and supporting documentation as are necessary to describe all aspects of the area of the waste water works discharging to the aquatic environment. Maps and drawings must be no larger than A3 size.

Description of the waste water treatment plant and design capacity

The waste water works in Glandore was constructed in the 1980's. There are 2 pumping stations associated with the scheme.

The treatment plant is located below the public toilets in the centre of the village adjacent to the harbour. Treatment is by means of a septic tank with a discharge to Glandore Harbour via a 150mm dia. ductile iron pipe which is surrounded in concrete.

In order to assess the design capacity (Design Population) of the septic tank the following calculation was used:

$$C = 180P + 2000$$

where C is the capacity of the tank (in litres) and P is the design population. Using this formula the septic tank can sufficiently cater for a population of 325 persons.

It should be noted that this formula was obtained from BS6297 1983, this standard has been superseded in 2007 (BS6294 2007) however the new standard does not give any formulae for assessing the capacity of septic tanks. So for the basis of this application BS6297 1983 is used.

C.1.1 Storm Water Overflows

For each storm water overflow within the waste water works the following information shall be submitted:

- An assessment to determine compliance with the criteria for storm water overflows, as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995 and any other guidance as may be specified by the Agency, and
- Identify whether any of the storm water overflows are to be decommissioned, and identify a date by which these overflows will cease, if applicable.

There are no storm water overflows within the waste water works.

C.1.2 Pumping Stations

For each pump station operating within the waste water works, provide details of the following:

- Number of duty and standby pumps at each pump station;
- The measures taken in the event of power failure;

- Details of storage capacity at each pump station;
- Frequency and duration of activation of emergency overflow to receiving waters. Clarify the location where such discharges enter the receiving waters.

There are two pumping stations within the agglomeration in Glandore.

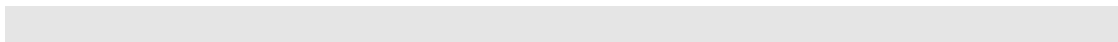
The first pumping station is located inside the quay wall and collects wastewater from the properties on the western side of the village. These would include the hotel and all the permitted developments which have not yet been constructed. The capacity of the pump sump is approximately 6m³ and has a 225mm diameter emergency overflow to the harbour via a surface water culvert.

The second is located east of the septic tank, south of the public road. This pumping station collects wastewater from the properties on the eastern portion of the village on the southern side of the road. The capacity of the pump sump is approximately 6m³ and has a 225mm diameter emergency overflow to the harbour.

Both pumping stations have a duty and standby arrangement. There are no measures taken in the event of power failure. The pumping stations have been working satisfactory with no problems reported.

Attachment C.1 should contain supporting documentation with regard to the plant and process capacity, systems, storm water overflows, emergency overflows, etc., including flow diagrams of each with any relevant additional information. These drawings / maps should also be provided as geo-referenced digital drawing files (e.g. ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. This data should be provided to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, D.2, E.3 and F.2.

Attachment included	Yes	No
		√



SECTION D: DISCHARGES TO THE AQUATIC ENVIRONMENT

Advice on completing this section is provided in the accompanying Guidance Note.

Give particulars of the source, location, nature, composition, quantity, level and rate of discharges arising from the agglomeration and, where relevant, the period or periods during which such discharges are made or are to be made.

Details of all discharges of waste water from the agglomeration should be submitted via the following web based link: http://78.137.160.73/epa_wwd_licensing/. The applicant should address in particular all discharge points where the substances outlined in Tables 'Emissions to Surface/Groundwaters and 'Dangerous Substances Emissions' are emitted

Where it is considered that any of the substances listed in Annex X of the Water Framework Directive (2000/60/EC) or any of the Relevant Pollutants listed in Annex VIII of the Water Framework Directive (2000/60/EC) are being discharged from the waste water works or are seen to be present in the receiving water environment downstream of a discharge from the works (as a result of any monitoring programme, e.g., under the Water Framework Directive Programme of Measures) the applicant shall screen the discharge for the relevant substance.

D.1(i) Discharges to Surface Waters

Details of all discharges of waste water from the agglomeration should be supplied via the following web based link: http://78.137.160.73/epa_wwd_licensing/. Tables 'Discharge Point Details', 'Emissions to Surface/Groundwaters and 'Dangerous Substances Emissions', should be completed for the primary discharge point from the agglomeration and for each secondary discharge point, where relevant. Table 'Discharge Point Details' should be completed for each storm water overflow. Individual Tables must be completed for each discharge point.

Where monitoring information is available for the influent to the waste water treatment plant this data should also be provided in response to Section D.1(i).

Supporting information should form **Attachment D.1(i)**

Attachment included	Yes	No
	√	

D.1(ii) Discharges to Groundwater

Details of all discharges of waste water from the agglomeration should be supplied via the following web based link: http://78.137.160.73/epa_wwd_licensing/. Tables 'Discharge Point Details', 'Emissions to Surface/Groundwaters and 'Dangerous Substances Emissions', should be completed for the primary discharge point from the agglomeration and for **each** secondary discharge point, where relevant. Table 'Discharge Point Details' should be completed for **each** storm water overflow. Individual Tables must be completed for each discharge point.

Where monitoring information is available for the influent to the waste water treatment plant this data should also be provided in response to Section D.1(ii).

Supporting information should form **Attachment D.1(ii)**

Attachment included	Yes	No
		√

D.1 (iii) Private Waste Water Treatment Plants

Provide information on all independently owned/operated private waste water treatment plants operating within the agglomeration. Submit a copy of the Section 4 discharge licence issued under the Water Pollution Acts 1977 to 1990, as amended for each discharge.

There are no private waste water treatment plants within the agglomeration boundary.

D.2 Tabular Data on Discharge Points

Applicants should submit the following information for each discharge point:

Table D.2:

PT_CD	PT_TYPE	LA_NAME	RWB_TYPE	RWB_NAME	DESIGNATION	EASTING	NORTHING
Point Code Provide label ID's	Point Type (e.g., Primary/ Secondary/ Storm Water Overflow)	Local Authority Name (e.g., Donegal County Council)	Receiving Water Body Type (e.g., River, Lake, Groundwater, Transitional, Coastal)	Receiving Water Body Name (e.g., River Suir)	Protected Area Type (e.g., SAC, candidate SAC, NHA, SPA etc.)	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference
SW01	Primary	Cork County Council	Coastal	Glandore Harbour	None	122484	035226

An individual record (i.e. row) is required for each discharge point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at www.epa.ie. This data should be submitted to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, C.1, E.3 and F.2.

SECTION E: MONITORING

Advice on completing this section is provided in the accompanying Guidance Note.

E.1 Waste Water Discharge Frequency and Quantities – Existing & Proposed

Provide an estimation of the quantity of waste water likely to be emitted in relation to all primary and secondary discharge points applied for. This information should be included in Table 'Discharge Point Details' via the following web based link: http://78.137.160.73/epa_wwd_licensing/.

Provide an estimation of the quantity of waste water likely to be emitted in relation to all storm water overflows within the agglomeration applied for. This information should be included in Table 'Discharge Point Details' via the following web based link: http://78.137.160.73/epa_wwd_licensing/.

Indicate if composite sampling or continuous flow monitoring is in place on the primary or any other discharge points. Detail any plans and timescales for the provision of composite sampling and continuous flow monitoring.

E.2. Monitoring and Sampling Points

Programmes for environmental monitoring should be submitted as part of the application. These programmes should be provided as Attachment E.2.

Reference should be made to, provision of, sampling points and safe means of access, sampling methods, analytical and quality control procedures, including equipment calibration, equipment maintenance and data recording/reporting procedures to be carried out in order to ensure accurate and reliable monitoring.

In determining the sampling programme to be carried out, the variability of the discharge and its effect on the receiving environment should be considered.

Details of any accreditation or certification of analysis should be included.

Attachment E.2 should contain any supporting information.

Attachment included	Yes	No
	√	

E.3. Tabular data on Monitoring and Sampling Points

Applicants should submit the following information for each monitoring and sampling point:

PT_CD	PT_TYPE	MON_TYPE	EASTING	NORTHING	VERIFIED
Point Code Provide label ID's assigned in section E of application	Point Type (e.g., Primary, Secondary, Storm Water Overflow)	Monitoring Type M = Monitoring S = Sampling	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used
aSW01	Receiving Waters/ Ambient	Sampling	122813	035089	N

An individual record (i.e., row) is required for each monitoring and sampling point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at www.epa.ie. This data should be submitted to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, C.1, D.2 and F.2.

E.4 Sampling Data

Regulation 24(i) of the Waste Water Discharges (Authorisation) Regulations 2007 requires all applicants in the case of an existing discharge to specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application.

Regulation 24(m) requires applicants to give details of compliance with any applicable monitoring requirements and treatment standards.

Attachment E.4 should contain any supporting information.

Attachment included	Yes	No
	√	

SECTION F: EXISTING ENVIRONMENT & IMPACT OF THE DISCHARGE(S)

Advice on completing this section is provided in the accompanying Guidance Note.

Clear and concise information is required to enable the Agency to assess the existing receiving environment. This section requires the provision of information on the ambient environmental conditions within the receiving water(s) upstream and downstream of any discharge(s) and/or the ambient environmental conditions of the groundwater upgradient and downgradient of any discharges.

Where development is proposed to be carried out, being development which is of a class for the time being specified under Article 24 (First Schedule) of the Environmental Impact Assessment Regulations, the information on the state of the existing environment should be addressed in the EIS. **In such cases, it will suffice for the purposes of this section to provide adequate cross-references to the relevant sections in the EIS.**

F.1. Impact on Receiving Surface water or Groundwater

- Details of monitoring of the receiving surface water should be supplied via the following web based link: http://78.137.160.73/epa_wwd_licensing/. Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details' should be completed for the primary discharge point. Surface water monitoring locations upstream and downstream of the discharge point shall be screened for those substances listed in Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details'. Monitoring of surface water shall be carried out at not less than two points, one upstream from the discharge location and one downstream.
- Details of monitoring of the receiving ground water should be supplied via the following web based link: http://78.137.160.73/epa_wwd_licensing/. Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details' should be completed for the primary discharge point. Ground water monitoring locations upgradient and down gradient of the discharge point shall be screened for those substances listed in Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details'. Monitoring of ground water shall be carried out at not less than two points, one upgradient from the discharge location and one downgradient.
- For discharges from secondary discharge points Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details' should be completed.

Not applicable as there are no secondary discharge points within the agglomeration boundary.

- Describe the existing environment in terms of water quality with particular reference to environmental quality standards or other legislative standards. Submit a copy of the most recent water quality management

plan or catchment management plan in place for the receiving water body. Give details of any designation under any Council Directive or Regulations that apply in relation to the receiving surface or groundwater.

Glandore Harbour and its environs are not within a designated area and are not designated as sensitive waters under the Urban Wastewater Treatment Directive.

- Provide a statement as to whether or not emissions of main polluting substances (as defined in the *Dangerous Substances Regulations S.I. No. 12 of 2001*) to water are likely to impair the environment.

The Dangerous Substances Regulations define the main polluting pesticides, solvents and metals which have significant effects on the environment. As the load to the WWTP is mainly domestic with no industrial contribution it can be assumed that the presence of these substances is negligible. The main parameters which impact the receiving environmental are limited to BOD, suspended solid and bacteria (total and faecal Streptococci).

- In circumstances where drinking water abstraction points exist downstream/down gradient of any discharge describe measures to be undertaken to ensure that discharges from the waste water works will not have a significant effect on faecal coliform, salmonella and protozoan pathogen numbers, e.g., Cryptosporidium and Giardia, in the receiving water environment.

Not applicable as there are no water abstraction points downstream/down gradient of the agglomeration boundary.

- Indicate whether or not emissions from the agglomeration or any plant, methods, processes, operating procedures or other factors which affect such emissions are likely to have a significant effect on –
 - (a) a site (until the adoption, in respect of the site, of a decision by the European Commission under Article 21 of Council Directive 92/43/EEC for the purposes of the third paragraph of Article 4(2) of that Directive) –
 - (i) notified for the purposes of Regulation 4 of the Natural Habitats Regulations, subject to any amendments made to it by virtue of Regulation 5 of those Regulations,
 - (ii) details of which have been transmitted to the Commission in accordance with Regulation 5(4) of the Natural Habitats Regulations, or
 - (iii) added by virtue of Regulation 6 of the Natural Habitats Regulations to the list transmitted to the Commission in accordance with Regulation 5(4) of those Regulations,
 - (b) a site adopted by the European Commission as a site of Community importance for the purposes of Article 4(2) of Council Directive 92/43/EEC¹ in accordance with the procedures laid down in Article 21 of that Directive,

- (c) a special area of conservation within the meaning of the Natural Habitats Regulations, or
- (d) an area classified pursuant to Article 4(1) or 4(2) of Council Directive 79/409/EEC²;

¹Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ No. L 206, 22.07.1992)

²Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (OJ No. L 103, 25.4.1979)

Not Applicable - None of the above directives apply in this case.

- o This section should also contain details of any modelling of discharges from the agglomeration. Any other relevant information on the receiving environment should be submitted as **Attachment F.1**.

Attachment included	Yes	No
		√

F.2 Tabular Data on Drinking Water Abstraction Point(s)

Applicants should submit the following information for each downstream or downgradient drinking water abstraction point. The zone of contribution for the abstraction point should be delineated and any potential risks from the waste water discharge to the water quality at that abstraction point identified.

ABS_CD	AGG_SERVED	ABS_VOL	PT_CD	DIS_DS	EASTING	NORTHING	VERIFIED
Abstraction Code	Agglomeration served	Abstraction Volume in m ³ /day	Point Code Provide label ID's	Distance Downstream in meters from Emission Point to Abstraction Point	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used

Note: Attach any risk assessment that may have been carried out in relation to the abstraction point(s) listed.

Not applicable as there are no water abstraction points downstream or down gradient of the agglomeration.

An individual record (i.e. row) is required for each abstraction point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at www.epa.ie. This data should be submitted to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, C.1, D.2 and E.3.

Attachment F.2 should contain any supporting information.

SECTION G: PROGRAMMES OF IMPROVEMENTS

Advice on completing this section is provided in the accompanying Guidance Note.

G.1 Compliance with Council Directives

Provide details on a programme of improvements to ensure that emissions from the agglomeration or any premises, plant, methods, processes, operating procedures or other factors which affect such emissions will comply with, or will not result in the contravention of the;

- Dangerous Substances Directive 2006/11/EC,
- Water Framework Directive 2000/60/EC,
- Birds Directive 79/409/EEC,
- Groundwater Directives 80/68/EEC & 2006/118/EC,
- Drinking Water Directives 80/778/EEC,
- Urban Waste Water Treatment Directive 91/271/EEC,
- Habitats Directive 92/43/EEC,
- Environmental Liabilities Directive 2004/35/EC,
- Bathing Water Directive 76/160/EEC, and
- Shellfish Waters Directive (2006/113/EC).

Dangerous Substances Directive 2006/11/EC

The wastewater entering into the septic tank is all considered domestic and would therefore not contain any dangerous substances and would therefore consider this Directive to be not applicable in this case.

Water Framework Directive 2000/60/EC

Water Framework Directive 2000/60/EC – The objectives of the Water Framework Directive (WFD) are to protect all high status waters, prevent further deterioration of all waters and to restore degraded surface and ground waters to good status by 2015. The discharge from the septic tank in Glandore is to Glandore Harbour. This is a transitional water and is of moderate status, with a 1b (probably at risk) risk assessment status.

Birds Directive 79/409/EEC & Habitats Directive 92/43/EEC

The area around Leap and Glandore is well known for its hills, woodlands, rivers and islands. There are many small inlets and bays and secluded sandy beaches. But, Glandore Harbour is not a designated SAC, NHA or SPA so therefore these Directives do not apply.

Groundwater Directives 80/68/EEC & 2006/118/EC

Not applicable as the discharge from the agglomeration is to surface waters.

Drinking Water Directives 80/778/EEC

This Directive is concerned with standards of water intended for human consumption. As there is no drinking water abstraction point in the vicinity of the discharge point, this directive is not applicable.

Urban Waste Water Treatment Directive 91/271/EEC

The Environmental Protection Agency Act, 1992 (Urban Wastewater Treatment) Regulations, 1994 (S.I. No. 419 of 1994) were issued to give effect to EU Council Directive 91/271/EEC concerning urban wastewater treatment. The Regulations specify that wastewater arising from populations of less than 2,000 shall, by the end of 2005, be subject to appropriate treatment prior to discharge. Appropriate treatment is defined as

...any process and/or disposal system which after discharge allows the receiving waters to meet the relevant quality objectives and the relevant provisions of the Directive and of other Community Directives.

This requirement applies to freshwater and estuarine discharges. It also applies to coastal discharges from agglomerations of more than 10,000.

The septic tank at Glandore is appropriate treatment as the discharge is to coastal waters with consequent high dilutions.

Environmental Liabilities Directive 2004/35/EC

The Environmental Liabilities Directive is about preventing and remedying environmental damage. It aims to hold operators whose activities have caused environmental damage financially liable for remedying this damage.

Bathing Water Directive 76/160/EEC

In Ireland the legislation governing the quality of bathing waters is set out in the Quality of Bathing Waters Regulations, 1992 (S.I. 155 of 1992) and amendments which transpose the EU Directive 76/160/EEC concerning the quality of bathing water.

The Directive, which came into force over thirty years ago, is intended to protect public health and the environment at locations where bathing is not prohibited and is traditionally practised by a large number of bathers, by enforcing the achievement of a number of standards, chemical, physical and microbiological.

Shellfish Waters Directive (2006/113/EC)

Glandore Harbour is not designated, "Shellfish Waters", under the Quality of Shellfish Waters Regulations 2006.

Attachment G.1 should contain the most recent programme of improvements, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

Attachment included	Yes	No
		√

G.2 Compliance with the European Communities Environmental Objectives (Surface Waters) Regulations 2009

Provide details on a programme of improvements, including any water quality management plans or catchment management plans in place, to ensure that improvements of water quality required under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 are being achieved. Provide details of any specific measures adopted for waste water works specified in Phosphorus Measures Implementation reports and the progress to date of those measures. Provide details highlighting any waste water works that have been previously identified as the principal sources of pollution under the Phosphorous Regulations (S.I. No. 258 of 1998).

Attachment G.2 should contain the most recent programme of improvements and any associated documentation requested under Section G.3 of the application.

Attachment included	Yes	No
		√

G.3 Impact Mitigation

Provide details on a programme of improvements to ensure that discharges from the agglomeration will not result in significant environmental pollution.

Attachment G.3 should contain the most recent programme of improvements, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

Attachment included	Yes	No
		√

G.4 Storm Water Overflows

Provide details on a programme of improvements to ensure that discharges other than the primary and secondary discharges comply with the definition of 'storm water overflow' as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007.

There are no stormwater overflows within the agglomeration boundary of Glandore.

Attachment G.4 should contain the most recent programme of improvements, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

Attachment included	Yes	No
		√

SECTION H: DECLARATION


Declaration

I hereby make application for a waste water discharge Certificate of Authorisation/revised Certificate of Authorisation, pursuant to the provisions of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007).

I certify that the information given in this application is truthful, accurate and complete.

I give consent to the EPA to copy this application for its own use and to make it available for inspection and copying by the public, both in the form of paper files available for inspection at EPA and local authority offices, and via the EPA's website.

This consent relates to this application itself and to any further information or submission, whether provided by me as Applicant, any person acting on the Applicant's behalf, or any other person.

Signed by :  Date : 11-12-09
(on behalf of the organisation)

Print signature name: Moira MURRELL

Position in organisation: Director of Service

For inspection purposes only.
Consent of copyright owner required for any other use.

SECTION I: JOINT DECLARATION

Joint Declaration ^{Note1}

I hereby make application for a waste water discharge Certificate of Authorisation /revised Certificate of Authorisation, pursuant to the provisions of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007).

I certify that the information given in this application is truthful, accurate and complete.

I give consent to the EPA to copy this application for its own use and to make it available for inspection and copying by the public, both in the form of paper files available for inspection at EPA and local authority offices, and via the EPA's website.

This consent relates to this application itself and to any further information or submission whether provided by me as Applicant, any person acting on the Applicant's behalf, or any other person.

Lead Authority

Signed by : _____ **Date :** _____
(on behalf of the organisation)

Print signature name: _____

Position in organisation: _____

Co-Applicants

Signed by : _____ **Date :** _____
(on behalf of the organisation)

Print signature name: _____

Position in organisation: _____

Signed by : _____ **Date :** _____
(on behalf of the organisation)

Print signature name: _____

Position in organisation: _____

Note 1: In the case of an application being lodged on behalf of more than a single Water Services Authority the following declaration must be signed by all applicants.

Table of Contents of Annex 1

ATTACHMENTS

Section A – Non Technical Summary

Attachment A1 - GLAN A1-01 - Site Location Map of Agglomeration

Section B - General

Attachment B1 - GLAN B1-01- Agglomeration Boundary Map

Attachment B2 - GLAN B2-01 – Site Location Map of Wastewater Treatment Plant

Attachment B3 - GLAN B3-01 – Primary Discharge Point

Section C - Infrastructure & Operation

Attachment C1 - GLAN C1-01- Pumping Stations Locations

Section E - Monitoring

Attachment E2 – Monitoring Programme

Attachment E4 – Sampling Data

TABLES

Tables D

Tables D1(i)(a), (b) & (c) Emission to Surface/Ground Water – Primary Discharge

Tables E

Table E.1 (i) Wastewater Frequency and Quality of Discharge - Primary Discharge

Tables F

Table F.1(i)(a) Surface/Ground Water Monitoring – Primary discharge

Table F.1(i)(b) Surface/Ground Water Monitoring (dangerous substances) – Primary discharge

For inspection purposes only. Consent of copyright owner required for any other use.

Attachment A.1

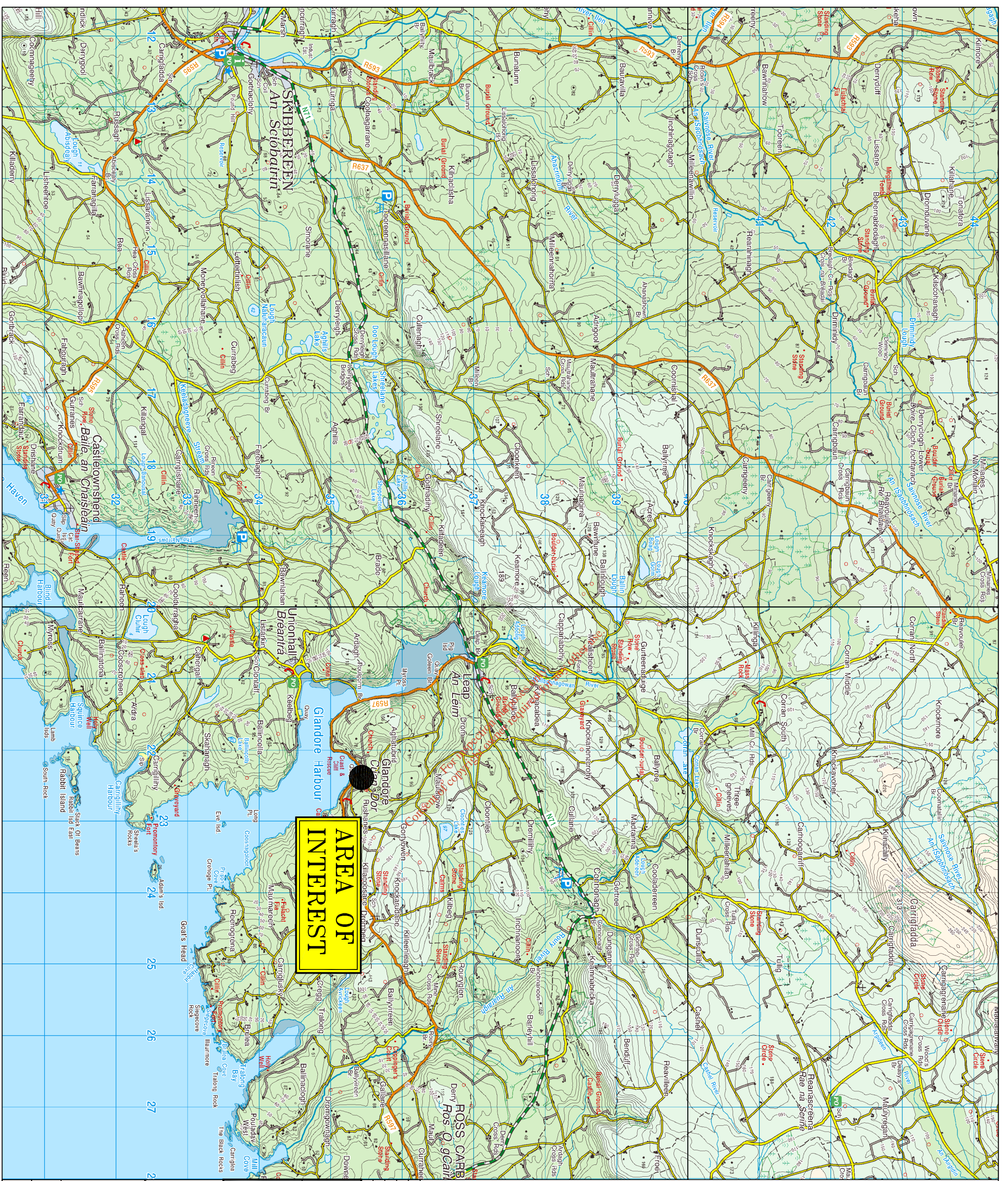
*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment A1

Map:

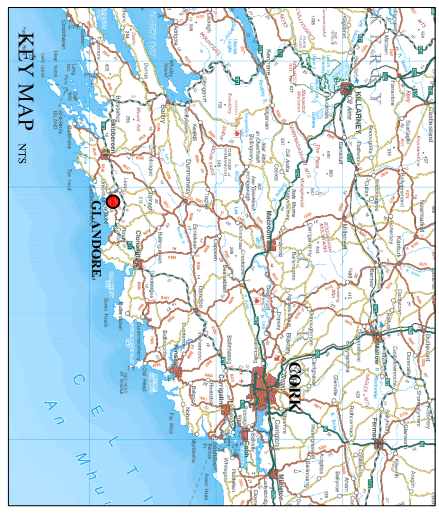
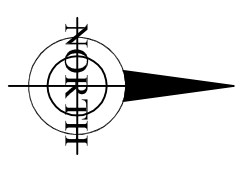
- GLAN A1.01 - Site Location Map

*For inspection purposes only.
Consent of copyright owner required for any other use.*



NOTES

1. Drawings to be read in conjunction with Licence application
2. Includes Ordnance Survey Ireland data reproduced under OSI Licence number Cork County Council CMA2004/07
Unauthorised reproduction infringes Ordnance Survey Ireland and Government of Ireland



Cork County Council,
Western Division.

N.O'MAHONY,B.E.
SENIOR ENGR. (WATER SERVICES),
COURTHOUSE, SKIBBEREEN.
M. MURRELL,
DIRECTOR OF SERVICES
WEST CORK

Job Title:
GLANDORE_WASTE_WATER
DISCHARGE_CERTIFICATE
APPLICATION

Drawing Title:
ATTACHMENT_A1
AGGLOMERATION_LOCATION_MAP

Prepared By: OOB	Checked By: DG	Date: DEC.2009
Drawing number: GLAN_A1_01	Scales: 1/50000	Rev: -

Attachment B.1

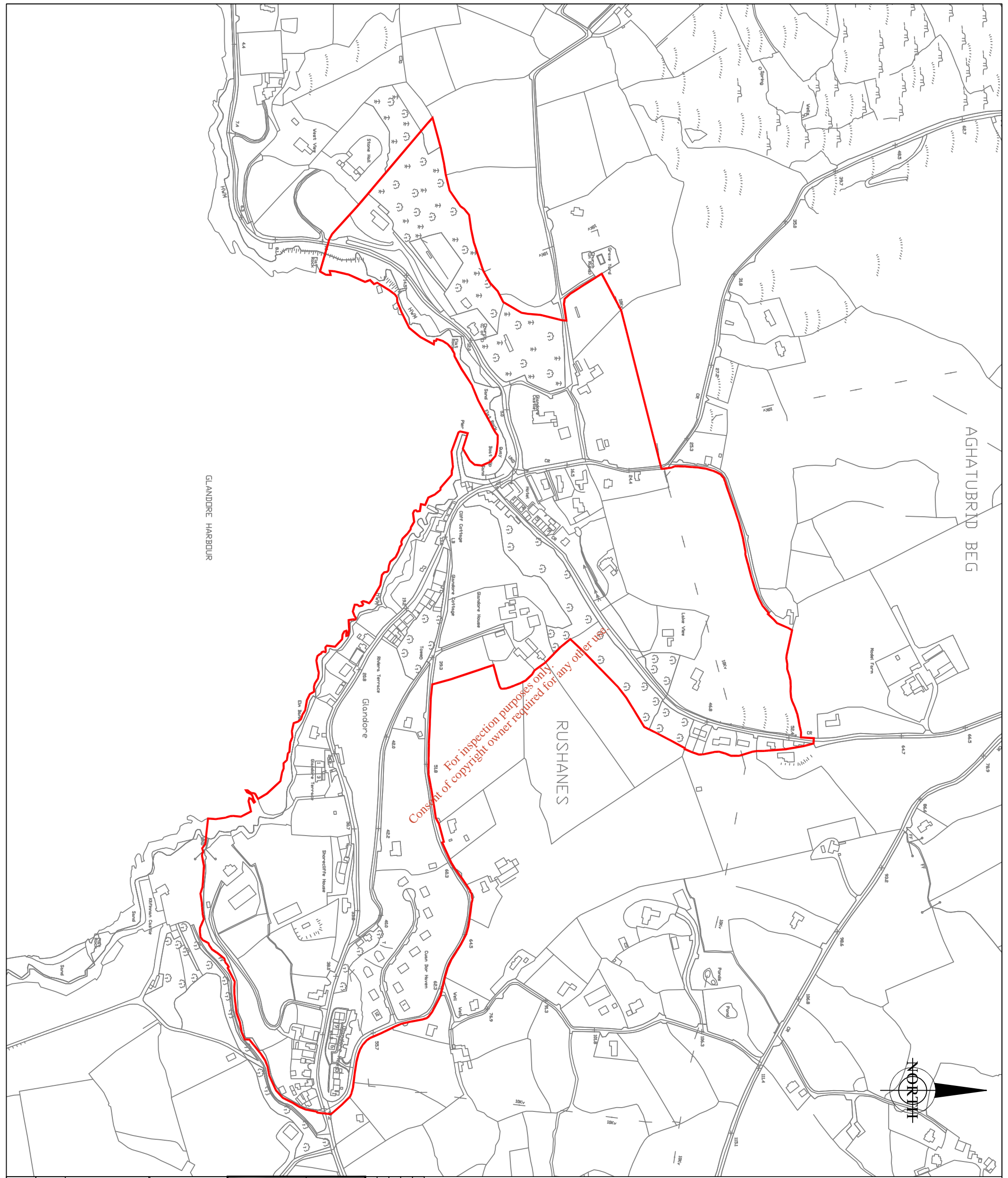
*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment B1

Map:

- GLAN B1.01 – Agglomeration Boundary Map

*For inspection purposes only.
Consent of copyright owner required for any other use.*



NOTES

1. Drawings to be read in conjunction with Licence application
2. Includes Ordnance Survey Ireland data reproduced under OSI Licence number Cork County Council CCM42004/07
Unauthorised reproduction infringes Ordnance Survey Ireland and Government of Ireland

LEGEND
 AGGLOMERATION BOUNDARY

**Cork County Council,
 Western Division.**



N. O'MAHONY, B.E.
 SENIOR ENGR. (WATER SERVICES),
 COURTHOUSE, SHIBBERKEN,
 M. MURRELL,
 DIRECTOR OF SERVICES
 WEST CORK

Job Title:
 GLANDORE_WASTE_WATER
 DISCHARGE_CERTIFICATE
 APPLICATION

Drawing Title:
 ATTACHMENT_B.1
 AGGLOMERATION_BOUNDARY
 SERVED_BY_WASTE_WATER
 TREATMENT_PLANT

Prepared By	Checked By	Date:
OOB	DG	DEC.2009
Drawing number: GLAN_B1_01	Scales: 1:5000	Rev

Attachment B.2

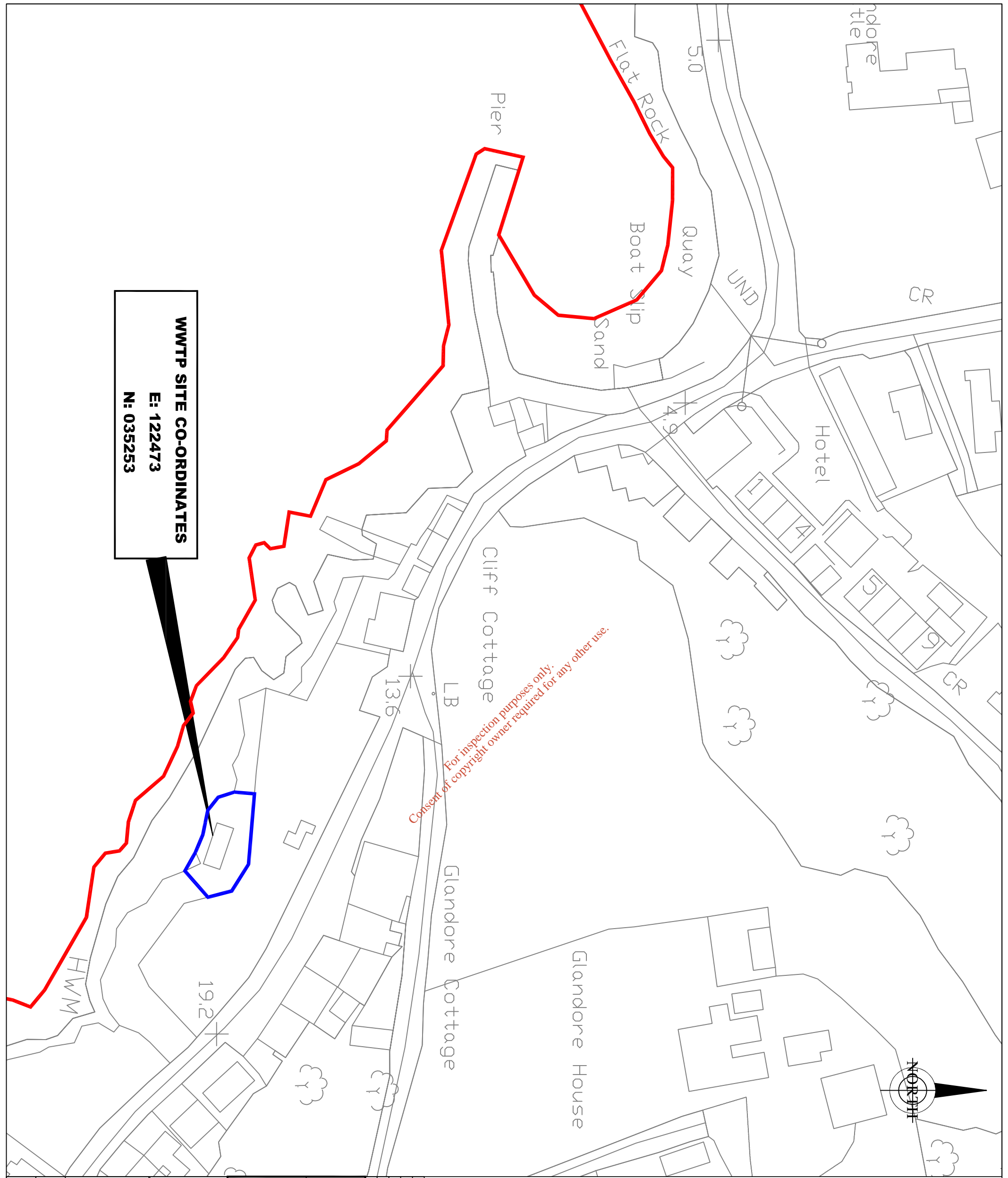
*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment B2

Map :

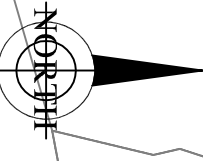
- **GLAN B2.01** - Site Location Map of Wastewater Treatment Plant

*For inspection purposes only.
Consent of copyright owner required for any other use.*



WWTTP SITE CO-ORDINATES
E: 122473
N: 035253

*For inspection purposes only.
 Consent of copyright owner required for any other use.*



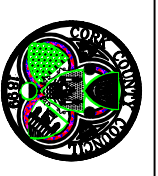
NOTES

1. Drawings to be read in conjunction with Licence application
2. Includes Ordnance Survey Ireland data reproduced under OSI Licence number Cork County Council CCM42004/07
 Unauthorised reproduction infringes Ordnance Survey Ireland and Government of Ireland

LEGEND

- AGGLOMERATION BOUNDARY
- SITE BOUNDARY

**Cork County Council,
 Western Division.**



**N. O'MAHONY, B.E.,
 SENIOR ENGR. (WATER SERVICES),
 COURTHOUSE, SHIBBERDEN,
 M. MURRELL,
 DIRECTOR OF SERVICES
 WEST CORK**

Job Title:
 GLANDORE_WASTE_WATER
 DISCHARGE_CERTIFICATE
 APPLICATION

Drawing Title:
 ATTACHMENT_B.2
 WASTE_WATER_TREATMENT
 PLANT_SITE_LOCATION

No.	Date	Drawn	Checkd	Revision Description

Prepared By: OOB	Checked By: DG	Date: DEC.2009
Drawing number: GLAN_B2_01	Scales: 1:1000	Rev: -

Attachment B.3

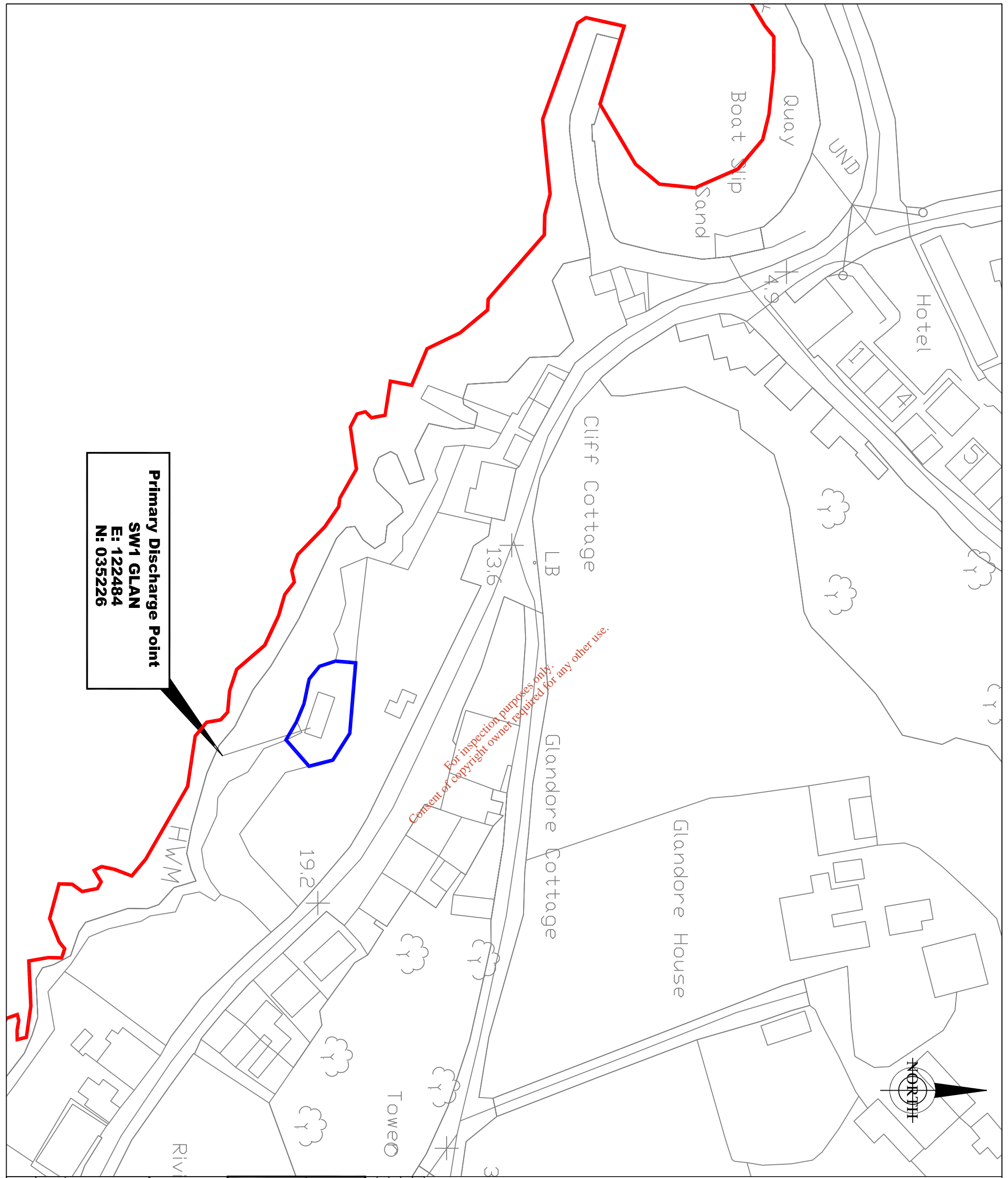
*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment B3

Map :

- **GLAN B3.01** – Primary Discharge Point

*For inspection purposes only.
Consent of copyright owner required for any other use.*



For inspection purposes only.
Consent of copyright owner required for any other use.

Primary Discharge Point
SW1 GLAN
E: 122484
N: 035226

NOTES

1. Drawings to be read in conjunction with Licence application
2. Includes Ordnance Survey Ireland data reproduced under OSI Licence number Cork County Council CCM42004/07
 Unauthorised reproduction infringes Ordnance Survey Ireland and Government of Ireland

LEGEND

- AGGLOMERATION BOUNDARY
- SITE BOUNDARY

No.	Date	Drawn	Checked	Revision Description

Cork County Council,
Western Division.

N. O'MAHONY, B.E.
 SENIOR ENGR. (WATER SERVICES),
 COURTHOUSE, SHIBBERDEN,
 WEST CORK.

M. MURRELL,
 DIRECTOR OF SERVICES
 WEST CORK.

Job Title:
 GLANDORE_WASTE_WATER
 DISCHARGE_CERTIFICATE
 APPLICATION

Drawing Title:
 ATTACHMENT_B3
 PRIMARY_DISCHARGE_POINT
 LOCATION

Prepared By: OOB	Checked By: DG	Date: DEC.2009
Drawing number: GLAN_B3_01	Scales: 1:1000	Rev: -

Attachment C.1

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment C1

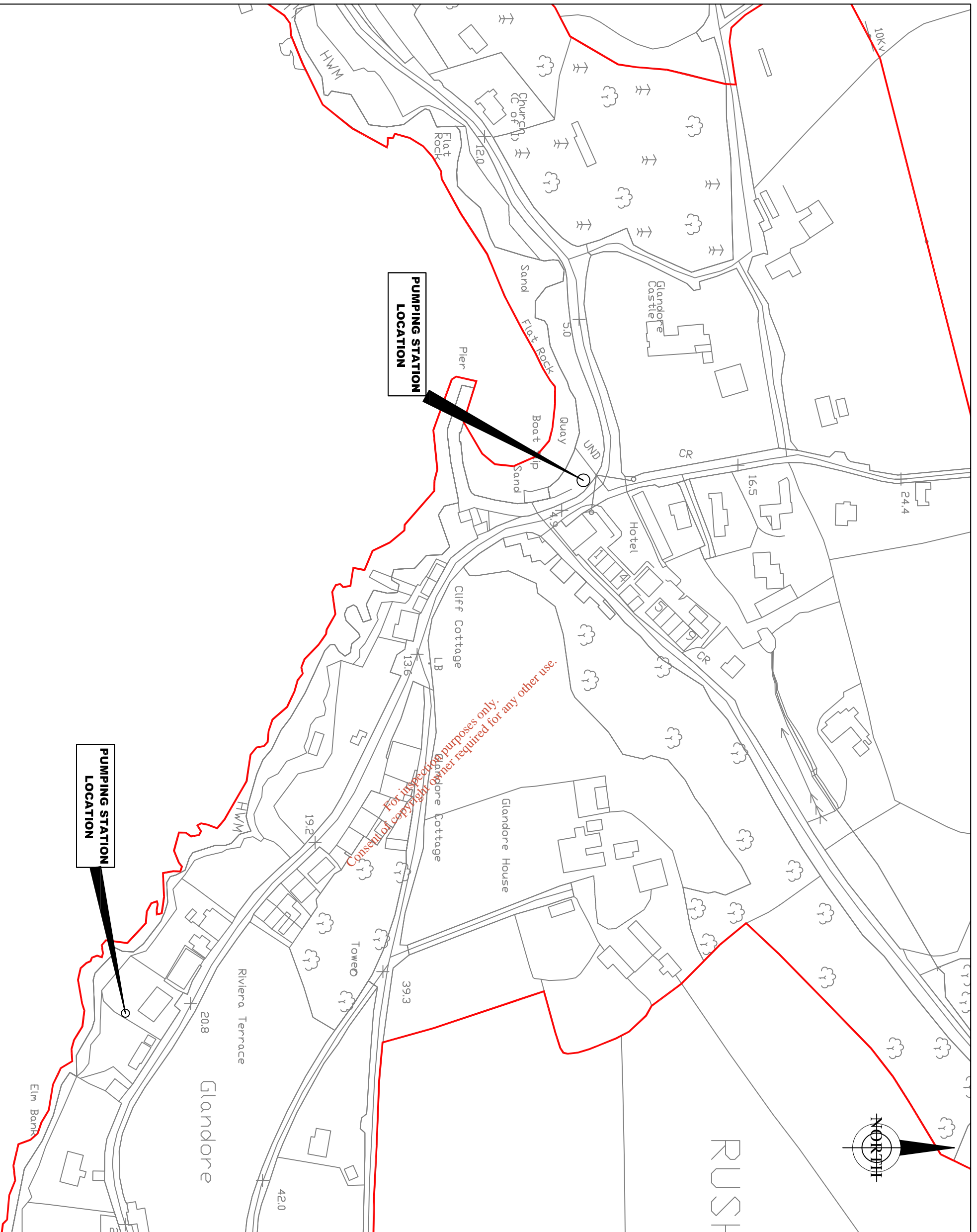
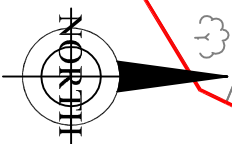
Map :

- **GLAN C1.01** – Pumping Stations Locations

*For inspection purposes only.
Consent of copyright owner required for any other use.*

NOTES

1. Drawings to be read in conjunction with Licence application
2. Includes Ordnance Survey Ireland data reproduced under OSI Licence number Cork County Council CCM42004/07
Unauthorised reproduction infringes Ordnance Survey Ireland and Government of Ireland



LEGEND
 AGGLOMERATION BOUNDARY

No.	Date	Drawn	Checkd	Revision Description

**Cork County Council,
 Western Division.**



N. O'MAHONY, B.E.
 SENIOR ENGR. (WATER SERVICES),
 COURTHOUSE, SHIBBERDEN,
 M. MURRELL,
 DIRECTOR OF SERVICES
 WEST CORK

Job Title:
 GLANDORE WASTE WATER
 DISCHARGE CERTIFICATE
 APPLICATION

Drawing Title:
 ATTACHMENT_C.1
 PUMPING_STATIONS
 LOCATIONS

Prepared By: OOB	Checked By: DG	Date: DEC.2009
Drawing number: GLAN_CL_01	Scales: 1:2000	Rev: -

Attachment E.2

For inspection purposes only.
Consent of copyright owner required for any other use.

Attachment E.2

- Sampling Data

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment E.2 - Glandore Waste Water Discharge Certificate
Application – Monitoring and Sampling Points

Upstream and downstream samples are not relevant in this case as the discharge is below low tide water level. Sampling of receiving waters was carried out south east of the outfall point at a small beach on the Harbour.

There is no drinking water abstraction point downstream of the plant and therefore the Abstraction Directive is not applicable.

The recent sample analysis has been carried out by the Laboratory of Cork County Council which is accredited for a number of analytical tests under the Irish National Accreditation Board (INAB) under the ISO 17025 international standard. It is currently accredited for the following parameters under that standard system:

- pH
- Biochemical Oxygen Demand
- Chemical Oxygen Demand
- Suspended Solids
- Ammonia
- Ortho Phosphate
- Total Phosphate
- Chloride
- Sulphate

It is proposed to sample the influent and effluent from treatment plants where accessible and receiving waters once a year in the future for the following parameters at the Cork County Council Laboratory in Skibbereen:

- pH
- Biochemical Oxygen Demand
- Chemical Oxygen Demand
- Suspended Solids
- Ammonia
- Ortho Phosphate
- Total Nitrogen

Consent of copyright owner required for any other use.
For inspection purposes only.

Attachment E.4

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment E.4

- Sampling Data

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment E4 Glandore Table E4

Sample Date	06/10/2009	
Sample	ambient at Glandore Harbour	
Sample Code	GT1225	
Flow M ³ /Day	No result	
pH	7.8	
Temperature °C	No result	
Conductivity uS/cm 20 °C	45600	
Suspended Solids mg/L	58	
Ammonia-N mg/L	0.6	
BOD mg/L	2	
COD mg/L	<21	
TN-N mg/L	0.53	
Nitrite-N mg/L	<0.1	
Nitrate-N mg/L	<0.5	
TP-P mg/L	0.123	
O-PO4-P mg/L	<0.05	
SO4 mg/L	saline interference	
Phenols µg/L	No result	
Atrazine µg/L	No result	
Dichloromethane µg/L	No result	
Simazine µg/L	No result	
Toluene µg/L	No result	
Tributyltin µg/L	No required	
Xylenes µg/L	No result	
Arsenic µg/L	No result	
Chromium ug/L	<20	
Copper ug/L	<20	
Cyanide µg/L	No result	
Fluoride µg/L	702	
Lead ug/L	<20	
Nickel ug/L	<20	
Zinc ug/L	<20	
Boron ug/L	2271	
Cadmium ug/L	<20	
Mercury µg/L	No result	
Selenium µg/L	No result	
Barium ug/L	<20	

saline interference

Agglomeration details

Leading Local Authority	Cork County Council
Co-Applicants	
Agglomeration	Glandore
Population Equivalent	490
Level of Treatment	Primary
Treatment plant address	Rushanes, Glandore, Leap, Co. Cork.
Grid Ref (12 digits, 6E, 6N)	122473 / 035253
EPA Reference No:	

Contact details

Contact Name:	Niall O'mahony
Contact Address:	Water Services West Cork County Council Courthouse Skibbereen Co. Cork
Contact Number:	028-21299
Contact Fax:	028-21995
Contact Email:	niall.omahony@corkcoco.ie

Consent of copyright owner required for any other use.
For use for official purposes only.

Table D.1(i)(a): EMISSIONS TO SURFACE/GROUND WATERS (Primary Discharge Point)

Discharge Point Code: SW-1

Local Authority Ref No:	SW01-GLAN
Source of Emission:	Primary
Location:	Glandore Harbour
Grid Ref (12 digits, 6E, 6N)	122484 / 035226
Name of Receiving waters:	Glandore
Water Body:	Coastal Water Body
River Basin District	South Western RBD
Designation of Receiving Waters:	None
Flow Rate in Receiving Waters:	0 m ³ .sec ⁻¹ Dry Weather Flow 0 m ³ .sec ⁻¹ 95% Weather Flow
Additional Comments (e.g. commentary on zero flow or other information deemed of value)	Zero flow as receiving water is Coastal

Emission Details:

(i) Volume emitted			
Normal/day	107.8 m ³	Maximum/day	323.4 m ³
Maximum rate/hour	13.48 m ³	Period of emission (avg)	60 min/hr 24 hr/day 365 day/yr
Dry Weather Flow	0.004 m ³ /sec		

For inspection purposes only. Consent of copyright owner required for any other use.

Table D.1(i)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of The Emission (Primary Discharge Point)

Discharge Point Code: SW-1

Substance	As discharged			
	Unit of Measurement	Sampling Method	Max Daily Avg.	kg/day
pH	pH	Grab	= 9	
Temperature	°C	Grab	= 0	
Electrical Conductivity (@ 25°C)	µS/cm	Grab	= 0	
Suspended Solids	mg/l	Grab	= 250	26.95
Ammonia (as N)	mg/l	Grab	= 25	5.39
Biochemical Oxygen Demand	mg/l	Grab	= 210	22.64
Chemical Oxygen Demand	mg/l	Grab	= 460	49.56
Total Nitrogen (as N)	mg/l	Grab	= 50	5.4
Nitrite (as N)	mg/l	Grab	= 0	0
Nitrate (as N)	mg/l	Grab	= 0	0
Total Phosphorous (as P)	mg/l	Grab	= 12	1.3
OrthoPhosphate (as P)	mg/l	Grab	= 10	1.1
Sulphate (SO ₄)	mg/l	Grab	= 0	0
Phenols (Sum)	µg/l	Grab	= 0	0

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45µm filter paper
 For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

For inspection purposes only.
 Consent of copyright owner required for any other use.

Table D.1(i)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of The Emission (Primary Discharge Point)

Discharge Point Code: SW-1

Substance	As discharged			
	Unit of Measurement	Sampling Method	Max Daily Avg.	kg/day
Atrazine	µg/l	Grab	= 0	0
Dichloromethane	µg/l	Grab	= 0	0
Simazine	µg/l	Grab	= 0	0
Toluene	µg/l	Grab	= 0	0
Tributyltin	µg/l	Grab	= 0	0
Xylenes	µg/l	Grab	= 0	0
Arsenic	µg/l	Grab	= 0	0
Chromium	µg/l	Grab	= 0	0
Copper	µg/l	Grab	= 0	0
Cyanide	µg/l	Grab	= 0	0
Flouride	µg/l	Grab	= 0	0
Lead	µg/l	Grab	= 0	0
Nickel	µg/l	Grab	= 0	0
Zinc	µg/l	Grab	= 0	0
Boron	µg/l	Grab	= 0	0
Cadmium	µg/l	Grab	= 0	0
Mercury	µg/l	Grab	= 0	0
Selenium	µg/l	Grab	= 0	0
Barium	µg/l	Grab	= 0	0

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45µm filter paper

For Phenols: USEPA Method 604, AWWA Standard Method 6246, or equivalent.

For inspection purposes only.
Consent of copyright owner required for any other use.

TABLE E.1(i): WASTE WATER FREQUENCY AND QUANTITY OF DISCHARGE – Primary and Secondary Discharge Points

Identification Code for Discharge point	Frequency of discharge (days/annum)	Quantity of Waste Water Discharged (m ³ /annum)
SW-1	365	39347

For inspection purposes only.
Consent of copyright owner required for any other use.

TABLE E.1(ii): WASTE WATER FREQUENCY AND QUANTITY OF DISCHARGE – Storm Water Overflows

Identification Code for Discharge point	Frequency of discharge (days/annum)	Quantity of Waste Water Discharged (m ³ /annum)	Complies with Definition of Storm Water Overflow
---	-------------------------------------	--	--

For inspection purposes only.
Consent of copyright owner required for any other use.

TABLE F.1(i)(a): SURFACE/GROUND WATER MONITORING

Primary Discharge Point

Discharge Point Code:	SW-1
MONITORING POINT CODE:	aSW-1a
Grid Ref (12 digits, 6E, 6N)	122795 / 035091

Parameter	Results (mg/l)				Sampling method	Limit of Quantitation	Analysis method / technique
	01/01/09	06/10/09					
pH		= 7.8			Grab	2	Electrochemical
Temperature	= 0				Grab	0.5	Electrochemical
Electrical Conductivity (@ 25°C)		= 45600			Grab	0.5	Electrochemical
Suspended Solids		= 58			Grab	0.5	Gravimetric
Ammonia (as N)		= 0.6			Grab	0.02	Colorimetric
Biochemical Oxygen Demand		= 2			Grab	0.06	Electrochemical
Chemical Oxygen Demand		< 21			Grab	8	Digestion & Colorimetric
Dissolved Oxygen	= 0				Grab	0.2	Electrochemical
Hardness (as CaCO ₃)	= 0				Grab	1	Titrimetric
Total Nitrogen (as N)		= 0.53			Grab	0.5	Digestion & Colorimetric
Nitrite (as N)		< 0.1			Grab	0.1	colorimetric
Nitrate (as N)		< 0.5			Grab	0.5	Colorimetric
Total Phosphorous (as P)		= 0.123			Grab	0.2	Digestion & Colorimetric
OrthoPhosphate (as P)		< 0.05			Grab	0.02	Colorimetric
Sulphate (SO ₄)		= 0			Grab	30	Turbidimetric
Phenols (Sum)	= 0				Grab	0.1	GC-MS2

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45µm filter paper
 For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

Additional Comments:	saline interference in sulphate,,fluoride ,suspended solids test default of 01/01/09 and 0 where results are not available
----------------------	---

TABLE F.1(i)(b): SURFACE/GROUND WATER MONITORING (Dangerous Substances)

Primary Discharge Point

Discharge Point Code:	SW-1
MONITORING POINT CODE:	aSW-1a
Grid Ref (12 digits, 6E, 6N)	122795 / 035091

Parameter	Results (µg/l)			Sampling method	Limit of Quantitation	Analysis method / technique
	01/01/09	06/10/09				
Atrazine	= 0			Grab	0.96	HPLC
Dichloromethane	= 0			Grab	1	GC-MS1
Simazine	= 0			Grab	0.01	HPLC
Toluene	= 0			Grab	0.02	GC-MS1
Tributyltin	= 0			Grab	0.02	GC-MS1
Xylenes	= 0			Grab	1	GC-MS1
Arsenic	= 0			Grab	0.96	ICP-MS
Chromium		< 20		Grab	20	ICP-OES
Copper		< 20		Grab	20	ICP-OES
Cyanide	= 0			Grab	5	Colorimetric
Flouride		= 702		Grab	100	ISE
Lead		< 20		Grab	20	ICP-OES
Nickel		< 20		Grab	20	ICP-OES
Zinc		< 20		Grab	20	ICP-OES
Boron		= 2271		Grab	20	ICP-OES
Cadmium		< 20		Grab	20	ICP-OES
Mercury	= 0			Grab	0.2	ICP-MS
Selenium	= 0			Grab	0.74	ICP-MS
Barium		< 20		Grab	20	ICP-OES

Additional Comments:	TBT value is 0.02ug/l as Sn saline interference in sulphate, flouride ,suspended solids test default of 01/01/09 and 0 where results are not available
----------------------	--

Annex 2: Check List For Regulation 16 Compliance

Regulation 16 of the waste water discharge (Authorisation) Regulations 2007 (S.I. No. 684 of 2007) sets out the information which must, in all cases, accompany a discharge licence application. In order to ensure that the application fully complies with the legal requirements of regulation 16 of the 2007 Regulations, all applicants should complete the following.

In each case, refer to the attachment number(s), of your application which contains(s) the information requested in the appropriate sub-article.

Regulation 16(1) In the case of an application for a waste water discharge licence, the application shall -		Attachment Number	Checked by Applicant
(a)	give the name, address, telefax number (if any) and telephone number of the applicant (and, if different, of the operator of any treatment plant concerned) and the address to which correspondence relating to the application should be sent and, if the operator is a body corporate, the address of its registered office or principal office,		
(b)	give the name of the water services authority in whose functional area the relevant waste water discharge takes place or is to take place, if different from that of the applicant,		
(c)	give the location or postal address (including where appropriate, the name of the townland or townlands) and the National Grid reference of the location of the waste water treatment plant and/or the waste water discharge point or points to which the application relates,		
(d)	state the population equivalent of the agglomeration to which the application relates,		
(e)	specify the content and extent of the waste water discharge, the level of treatment provided, if any, and the flow and type of discharge,		
(f)	give details of the receiving water body, including its protected area status, if any, and details of any sensitive areas or protected areas or both in the vicinity of the discharge point or points likely to be affected by the discharge concerned, and for discharges to ground provide details of groundwater protection schemes in place for the receiving water body and all associated hydrogeological and geological assessments related to the receiving water environment in the vicinity of the discharge.		
(g)	identify monitoring and sampling points and indicate proposed arrangements for the monitoring of discharges and, if Regulation 17 does not apply, provide details of the likely environmental consequences of any such discharges,		
(h)	in the case of an existing waste water treatment plant, specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application,		
(i)	describe the existing or proposed measures, including emergency procedures, to prevent unintended waste water discharges and to minimise the impact on the environment of any such discharges,		
(j)	give particulars of the nearest downstream drinking water abstraction point or points to the discharge point or points,		
(k)	give details, and an assessment of the effects, of any existing or proposed emissions on the environment, including any environmental medium other than those into which the emissions are, or are to be made, and of proposed measures to prevent or eliminate or, where that is not practicable, to limit any pollution caused in such discharges,		
(l)	give detail of compliance with relevant monitoring requirements and treatment standards contained in any applicable Council Directives of Regulations,		
(m)	give details of any work necessary to meet relevant effluent discharge standards and a timeframe and schedule for such work.		
(n)	Any other information as may be stipulated by the Agency.		
Regulation 16(3) Without prejudice to Regulation 16 (1) and (2), an application for a licence shall be accompanied by -		Attachment Number	Checked by Applicant
(a)	a copy of the notice of intention to make an application given pursuant to Regulation 9,		
(b)	where appropriate, a copy of the notice given to a relevant water services authority under Regulation 13,		
(c)	Such other particulars, drawings, maps, reports and supporting documentation as are necessary to identify and describe, as appropriate -		
(c) (i)	the point or points, including storm water overflows, from which a discharge or discharges take place or are to take place, and		
(c) (ii)	the point or points at which monitoring and sampling are undertaken or are to be undertaken,		
(d)	such fee as is appropriate having regard to the provisions of Regulations 38 and 39.		

Regulation 16(4) An original application shall be accompanied by 2 copies of it and of all accompanying documents and particulars as required under Regulation 16(3) in hardcopy or in an electronic or other format as specified by the Agency.		Attachment Number	Checked by Applicant
1	An Original Application shall be accompanied by 2 copies of it and of all accompanying documents and particulars as required under regulation 16(3) in hardcopy or in electronic or other format as specified by the agency.		Yes
Regulation 16(5) For the purpose of paragraph (4), all or part of the 2 copies of the said application and associated documents and particulars may, with the agreement of the Agency, be submitted in an electronic or other format specified by the Agency.		Attachment Number	Checked by Applicant
1	Signed original.		Yes
2	2 hardcopies of application provided or 2 CD versions of application (PDF files) provided.		Yes
3	1 CD of geo-referenced digital files provided.		Yes
Regulation 17 Where a treatment plant associated with the relevant waste water works is or has been subject to the European Communities (Environmental Impact Assessment) Regulations 1989 to 2001, in addition to compliance with the requirements of Regulation 16, an application in respect of the relevant discharge shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency		Attachment Number	Checked by Applicant
3	2 CD versions of EIS, as PDF files, provided.		Yes
1	EIA provided if applicable		Yes
2	2 hardcopies of EIS provided if applicable.		Yes
Regulation 24 In the case of an application for a waste water discharge certificate of authorisation, the application shall –		Attachment Number	Checked by Applicant
(a)	give the name, address, telefax number (if any) and telephone number of the applicant and the address to which correspondence relating to the application should be sent and, if the operator of the waste water works is a body corporate, the address of its registered office or principal office	B.1	Yes
(b)	give the name of the water services authority in whose functional area the relevant waste water discharge takes place or is to take place, if different from that of the applicant,	Not applicable	Yes
(c)	give the location or postal address (including where appropriate, the name of the townland or townlands) and the National Grid reference of the location of the discharge point or points to which the application relates,	B.2	Yes
(d)	state the population equivalent of the agglomeration to which the application relates,	B.8(l)	Yes
(e)	in the case of an application for the review of a certificate, specify the reference number given to the relevant certificate in the register,	Not applicable	Yes
(f)	specify the content and extent of the waste water discharge, the level of treatment provided and the flow and type of discharge,	C, D	Yes
(g)	give details of the receiving water body, its protected area status, if any, and details of any sensitive areas or protected areas, or both, in the vicinity of the discharge point or points or likely to be affected by the discharge concerned,	F.1	Yes
(h)	identify monitoring and sampling points and indicate proposed arrangements for the monitoring of discharges and of the likely environmental consequences of any such discharges,	E.3	Yes
(i)	in the case of an existing discharge, specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application,	E.4	Yes
(j)	describe the existing or proposed measures, including emergency procedures, to prevent unauthorised or unexpected waste water discharges and to minimise the impact on the environment of any such discharges,		Yes
(k)	give particulars of the location of the nearest downstream drinking water abstraction point or points to the discharge point or points associated with the waste water works,	Not applicable	Yes
(l)	give details of any designation under any Council Directive or Regulations that apply in relation to the receiving waters,		Yes
(m)	give details of compliance with any applicable monitoring requirements and treatment standards,	E.1, E.4	Yes
(n)	give details of any work necessary to meet relevant effluent discharge standards and a timeframe and schedule for such work,	G.1	Yes
(o)	give any other information as may be stipulated by the Agency, and	Not applicable	Yes
(p)	be accompanied by such fee as is appropriate having regard to the provisions of Regulations 38 and 39.		Yes