

This is a draft document and is subject to revision.



# Waste Water Discharge Certificate of Authorisation Application Form

EPA Ref. N<sup>o</sup>:  
(Office use only)

**Environmental Protection Agency**  
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### Tracking Amendments to Draft Application Form

Version No.	Date	Amendment since previous version	Reason
V. 1.	23/03/09	N/A	

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

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## 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](http://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/](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.**

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## 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.

Coolcower is situated 2.2km south east of Macroom Town in County Cork. There are some 20 houses within this locality, with some trading as holiday accommodation. 13 houses are connected to a treatment plant in form of a simple septic tank serving approximately 40 PE, discharging domestic waste only into River Lee, the other houses have own private individual arrangement. The area was home to one of the world's largest producers of semi-conductors. The company was called General Instruments limited (GIL) had occupied the site west of the houses mentioned above since early 1970's . GIL has its own Waste Treatment Plant built within its own site (see drawing A1-Map1). This WWTP was built in early 1970's with a capacity of 1000 PE. Since 2003/04 when GIL relocated its Irish operation elsewhere, the industrial complex became home to some light industries such as manufacturers of Artificial limbs and Timber frames for the building traders, this has reduced the plant designed capacity to its present loading of 100 PE. The plant discharges into River Lee. Both the WWTP and the septic tank have been taken in charge by Cork County Council since they were built. The WWTP was designed by Bowen Water Technology ,refer to drawing number C1\_Dwg01.

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. The Waste Water

Works can be

The Waste Water Works and the activities carried out therein.

The Coolcower Agglomeration can be split up into 2 catchments, detailed as follows:

Catchment 1: This Catchment is serving a total of 13 houses only. In general the sewage from all premises is collected via the existing sewer network and is treated in conjunction at the Septic tank which was built in 1954. The septic tank does not receive any other sludge imported from other municipal waste water sources or septic tanks.

The existing system comprised of the following main items;

- Pipe network .
- Inlet
- 55 year old Septic Tank.
- Outlet and outfall

The current load on the septic tank is approximately 40 PE which provides preliminary treatment only. The passage of sewage through a septic tank helps in the removal of suspended solids but there is very little biological activity and the removal of BOD is not significant. This septic tank discharges to an outfall which discharges into the adjacent River Lee .

The septic tank currently does not have any sampling regime in place.

Catchment 2

The second catchment is an industrial complex and is served by a WWTP which was built in early 1970's . The plant consists of the following main items :

INLET  
INLET PUMP SUMP  
SETTLEMENT TANK  
AN AERATION TANK  
AN ANOXIC TANK  
PICKET FENCE THICKENER  
PHOSPHORIC ACID DOSING SYSYTEM  
METHANOL DOSING SYSTEM  
OUTLET.

The Plant does not have any sampling regime in place at present.

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



## SECTION B: GENERAL

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

### B.1 Agglomeration Details

<b>Name of Agglomeration:</b>	<b>Coolcower-Near Macroom</b>
-------------------------------	-------------------------------

#### 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.

<b>Name*:</b>	Cork County Council
<b>Address:</b>	County Hall
	Carrigrohane Road
	Cork
<b>Tel:</b>	021 4276891
<b>Fax:</b>	021 4276321
<b>e-mail:</b>	Cork County Council

\*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.

<b>Name*:</b>	Patricia Power
<b>Address:</b>	Director of Services: Operational Water Services
	Floor 5 (Tower)
	County Hall
	Cork
<b>Tel:</b>	021 4285285
<b>Fax:</b>	021 4276321
<b>e-mail:</b>	Patricia.power@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

<b>Name*:</b>	Not applicable
<b>Address:</b>	Not applicable
	Not applicable
	Not applicable
	Not applicable
<b>Tel:</b>	Not applicable
<b>Fax:</b>	Not applicable
<b>e-mail:</b>	Not applicable

\*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.

## Design, Build & Operate Contractor Details

<b>Name*:</b>	Not applicable
<b>Address:</b>	Not applicable
	Not applicable
	Not applicable
<b>Tel:</b>	Not applicable
<b>Fax:</b>	Not applicable
<b>e-mail:</b>	Not applicable

\*Where a design, build & operate contract is in place for the waste water works, or any part thereof, the details of the contractor should be provided.

**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
	x	

### 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.

<b>Name*:</b>	Faughna Keohane
<b>Address:</b>	Area Engineer
	Town Hall, Macroom
	County Cork
<b>Grid ref (6E, 6N)</b>	184608 E 081499 N
<b>Level of Treatment</b>	Primary via Septic Tank
<b>Primary Telephone:</b>	024 41047
<b>Fax:</b>	024 92573
<b>e-mail:</b>	Faughna.keohane@corkcoco.ie

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

<b>Name*:</b>	Faughna Keohane
<b>Address:</b>	Area Engineer
	Town Hall, Macroom
	County Cork
<b>Grid ref (6E, 6N)</b>	135048 E 071274 N
<b>Level of Treatment</b>	Secondary via WWTP
<b>Primary Telephone:</b>	024 41047
<b>Fax:</b>	024 92573
<b>e-mail:</b>	Faughna.keohane@corkcoco.ie

**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
	X	

### 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.

<b>Discharge to</b>	Surface Water
<b>Type of Discharge</b>	Outfall to River Lee
<b>Unique Point Code</b>	SW1CLCR
<b>Location</b>	Coolcower
<b>Grid ref (6E, 6N)</b>	135610 E 071470 N

**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
	X	

#### 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.

<b>Discharge to</b>	Surface Water
<b>Type of Discharge</b>	Pipe to River Lee.
<b>Unique Point Code</b>	SW2CLCR
<b>Location</b>	Coolcower
<b>Grid ref (6E, 6N)</b>	134850E 071260N

**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
	x	

#### 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.

<b>Type of Discharge</b>	Not applicable
<b>Unique Point Code</b>	Not applicable
<b>Location</b>	Not applicable
<b>Grid ref (6E, 6N)</b>	Not applicable

**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
		x

## 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.

<b>Name:</b>	Cork County Council
<b>Address:</b>	Planning Department
	County Hall
	Carrigrohane Road
	Cork
<b>Tel:</b>	021 4276891
<b>Fax:</b>	021 4867007
<b>e-mail:</b>	Planning info@corkcoco.ie

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

<b>has been obtained</b>		<b>is being processed</b>	
<b>is not yet applied for</b>		<b>is not required</b>	<b>x</b>

<b>Local Authority Planning File Reference N<sup>o</sup>:</b>	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.

<b>Attachment included</b>	<b>Yes</b>	<b>No</b>
		<b>x</b>

## 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.

<b>Within the SFADCo Area</b>	<b>Yes</b>	<b>No</b>
		<b>x</b>

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.

<b>Name:</b>	Health Service Executive
<b>Address:</b>	Áras Sláinte
	Wilton Road
	Cork
<b>Tel:</b>	021 4545011
<b>Fax:</b>	021 4927228
<b>e-mail:</b>	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.

<b>Population Equivalent</b>	140
<b>Data Compiled (Year)</b>	2009
<b>Method</b>	House Count

**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.

**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.

<b>Class of waste water discharge</b>	<b>Fee (in €)</b>
	3000

<b>Appropriate Fee Included</b>	<b>Yes</b>	<b>No</b>
		<b>X*</b>

\*please see copy of attached letter sent by registered post to Mr F. Clinton ,Programme Manager , Licencing Unit EPA on December 18<sup>th</sup> 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 Water Services Investment Plans) 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.

The DEHLG has requested that all local authorities prepare a list of assessment of needs. Cork County Council's list is awaiting approval of elected members, The outcome of the department review will not be known before March 2010.

Coolcower is included on the list as part of bundle 3 with contract titled: '**Sewerage schemes upgrade**'.

**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
		X

### 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
		X

### 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.

NOT APPLICABLE

**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.

Attachment included	Yes	No
		X

## 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.

The Coolcower Agglomeration are spread over two separate areas in terms of occupation (Residential & Industrial), each area has a different sewage treatment system.

Area 1 (Domestic Sewage/ residential ): is the 13 houses which make up the residential area of this agglomeration .The sewage from all 13 Houses is collected via an existing sewer system and is treated at the Septic tank which was built in 1954. The septic tank does not receive any other sludge imported from other municipal waste water sources or septic tanks. The effluent is then discharged via the outlet to River Lee. The current load on the septic tank is approximately 40 PE which provides preliminary treatment only. The passage of sewage through a septic tank helps in the removal of suspended solids but there is very little biological activity and the removal of BOD is not significant. This septic tank discharges to an outfall which discharges into the adjacent River Lee .

The septic tank currently does not have any sampling regime in place.

The existing system comprised of the following main items :

- Pipe network .
- Inlet
- 55 year old Septic Tank.
- Outlet and outfall

Area 2 (Industrial ):

The second area is an industrial complex which is served by a WWTP built in early 1970's . The plant consists of the following main items :

INLET  
INLET PUMP SUMP  
SETTLEMENT TANK  
AN AERATION TANK  
AN ANOXIC TANK  
PICKET FENCE THICKENER  
PHOSPHORIC ACID DOSING SYSTEM  
METHANOL DOSING SYSTEM  
OUTLET.

The Plant does not have any sampling regime in place at present.



C.1.1 Storm Water Overflows  
NOT APPLICABLE

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.

C.1.2 Pumping Stations  
NOT APPLICABLE

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.

**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
	X	

**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/](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/](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
	x	

### 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/](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
		<b>x</b>

### 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
SW1CL CR	Primary	Cork County Council	River	River Lee	None	135610	071470
SW2CL CR	Secondary					134850	071260

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](http://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/](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/](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
	<b>X</b>	

### 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
SW1	Primary,	S=Sampling	135562	71559	N
SW2	Secondary,	S = Sampling	135057	71287	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](http://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 Discharge (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
	<b>x</b>	

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## **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/](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/](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.

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.

## Existing Environment & Impact of Discharges

The receiving water Body of Coolcower Waste Water Treatment System is the River Lee. All effluent from the treatment system is discharged via the primary discharge point into the River Lee. There are no discharges to ground or any other media.

The River Lee (Water Body Code IE\_SW\_19\_1901, EPA River Code 19L03) is contained within Hydrometric Area 19. The River Lee rises approximately 6km west of Ballingearry village, in the mountainous terrain at Gougane Barra Lake. The River flows in an easterly direction through Ballingearry village, feeding Lough Allua before eventually discharging to Cork Harbour. The river is approximately 72km long. The River Lee at Inchigeelagh is a fast – flowing river, which drains a large upland area including Gougane Barra Lake.

The River Lee has “Good” status and has been classified as being “Not at Risk” or strongly expected to achieve good status by 2015 under the Water Framework Directive Article 5 Characterisation (2004).

The 1998 Phosphorus Regulations set targets for phosphorus levels and biological quality (Q-values) for rivers and lakes. Where water quality is satisfactory it must be maintained and where water quality is unsatisfactory it must be improved. For levels of phosphorus the baseline Q-value determines the median molybdate-reactive phosphorus (MRP) to be achieved.

Water quality in the River Lee is monitored by the EPA in a number of different stations. EPA station 0100 Inchinossig Bridge is located approximately 750m upstream of the discharge points. Water quality in this station had a Q4-5 value from 1986 to 2002. The Q-value dropped in 2005 to Q4 and has maintained that value in 2008.

EPA station 0300 at Dromcarra, is located approximately 9km upstream of the Coolcower Waste Water Treatment System discharge point. Water quality in this station has had a constant value of Q4 since 2002. The monitoring results are shown in Table F1.1 below.

<i>Biological Quality Ratings (Q Values)</i>											
Station									2002	2005	
0300									4	4	

Table F1.1 EPA Monitoring Results

A biological Quality Rating of Q4 represents satisfactory water quality. Eutrophication is unlikely to occur in water bodies with a biological quality rating of Q4 or higher.

Schedule 5 of the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. No. 272 of 2009) sets out “Criteria for Calculating Surface Water Ecological Status and Ecological Potential.” These are summarised for river water bodies in Table F1.2 below.

<i>Biological quality elements</i>	<i>Classification system</i>	<i>Ecological quality ratio</i>	
		<i>High-Good boundary</i>	
		<i>Rivers (All Types)</i>	
Benthic invertebrate fauna	Quality rating system (Q-value)	0.85	
Phytobenthos	Trophic diatom index (TDI)	0.93	
<i>Thermal conditions</i>		<i>River water body</i>	
Temperature		Not greater than 1.5°C rise in ambient temperature outside the mixing zone	
<i>Oxygenation conditions</i>		<i>River water body</i>	
Biochemical Oxygen Demand (BOD) (mgO <sub>2</sub> /l)		Good status ≤ 1.3 (mean) or ≤ 2.2 (95%ile)	
Dissolved oxygen lower limit		95%ile > 80% Saturation	
Dissolved oxygen upper limit		95%ile < 120% Saturation	
<i>Acidification Status</i>		<i>River Water Body</i>	
pH (individual values)		Soft Water 4.5 < pH < 9.0 Hard Water 6.0 < pH < 9.0	
<i>Nutrient conditions</i>		<i>River Water body</i>	
Total Ammonia (mg N/l)		Good status ≤ 0.065 (mean) or ≤ 0.090 (95%ile)	
Molybdate Reactive Phosphorus (MRP) (mg P/l)		Good status ≤ 0.035 (mean) or ≤ 0.075 (95%ile)	

Table F1.2 Criteria for Calculating Surface Water Ecological Status and Ecological Potential

- 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.

Cork County Council have monitored the main polluting substances as part of this application as defined in the *Dangerous Substances Regulations, 2001 (S.I. No. 12/2001)*. The results are presented in Attachment E.

- 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.



There are 2 drinking water abstraction points on the River Lee. These are located downstream of the discharge points and are at Inniscarra Reservoir and at Lee Road Waterworks. These are approximately 20km and 33km respectively downstream of the primary discharge point. No mitigating measures are in place.

- 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 –
- 
- 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.
- 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.
- 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/EEC<sup>1</sup> 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/EEC<sup>2</sup>;

<sup>1</sup>Council 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)

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

### **Assessment of Relevant Legislation Applicable to Coolcower Discharge**

The following assesses the relevant European Union Directives and Irish Statutory Legislation that is applicable to the discharge standards at Coolcower.

- 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 (Not applicable),
- Drinking Water Directives 80/778/EEC (Not applicable),
- Urban Waste Water Treatment Directive 91/271/EEC,
- Habitats Directive 92/43/EEC,
- Freshwater Fish Directive 2006/44/EC & Salmonid Regulations S.I. No. 293/1988
- Nitrates Directive 91/676/EEC
- Bathing Water Directive 76/160/EEC, and
- Shellfish Waters Directive 79/923/EEC

#### Dangerous Substances Directive 2006/11/EC

Council Directive 2006/11/EC recognises the need for action to be taken by member states to protect the aquatic environment from pollution, in particular that caused by certain persistent, toxic and bioaccumulable substances. The discharge from Coolcower is primarily from domestic sources. Cork County Council has monitored for the main polluting substances, as part of this application, as defined in the Dangerous Substances Regulations, 2001 (S.I. No. 12/2001). The results are presented in **Attachment E**.

#### 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 water status by 2015. Cork County Council carried out some limited monitoring on the outlet flows to measure compliance against the relevant standards. Ambient monitoring was also carried out on the River Lee (for this application). Copies of the Water Quality Management Plans for this area has been included in **Attachment F**.

#### Birds Directive 79/409/EEC

The directive aims to conserve and manage populations of wild birds throughout Europe partly through the designation of Special Protection Areas (SPA) for birds and their habitats. The discharge point is not located within an SPA.

#### Groundwater Directives 80/68/EEC and 2006/118/EC

Not applicable as there are no emissions to groundwater.

### Drinking Water Directive 801/68/EEC

In view of the importance for public health of water for human consumption, it is necessary to lay down quality standards with which such water must comply. There are 2 drinking water abstraction points on the River Lee. These are located downstream of the discharge points and are at Inniscarra Reservoir and at Lee Road Waterworks. These are approximately 20km and 33km respectively downstream of the primary discharge point. The most significant parameters, which may occur, are BOD, suspended solids, nitrates, ammonium, phosphates, total coliforms, faecal coliforms, faecal streptococci and salmonella. Given the distance between the proposed WWTP and the abstraction point at Inniscarra, it is extremely unlikely that the discharge will have any significant impact on water quality used for public water supply.

### The Urban Waste Water Treatment Directive 91/271/EEC and Amendment Directive 98/15/EEC

The Urban Waste Water Treatment Regulations, (S.I. 254 of 2001) gives effect to provisions of the Urban Wastewater Treatment Directive (91/271/EEC). The 2001 Irish Regulations in relation to the collection and treatment of urban wastewater.

Article 7 (a) states that "Member States shall ensure that, by 31 December 2005, urban waste water entering collecting systems shall before discharge be subject to appropriate treatment as defined in Article 2 (9) in the following cases:

- for discharges to fresh-water and estuaries from agglomerations of less than 2 000 PE.,
- for discharges to coastal waters from agglomerations of less than 10,000 PE."

Appropriate treatment is described as that which will allow compliance with other relevant Directives.

The combined (Residential and Industrial) PE of the Coolcower agglomeration is approximated to be 140.

### Habitats Directive 92/43/EEC

The aim of this Directive is to contribute towards ensuring bio-diversity through the conservation of natural habitats and of wild fauna and flora. The discharge point is not located within an SAC.

### Freshwater Fish Directive 2006/44/EC & Salmonid Regulations S.I. No. 293/1988

The River Lee has been designated as a salmonid river under the European communities Regulation, 1988. Under these regulations monthly monitoring for a range of specified parameters is required and limits are specified for these parameters. The regulations carry some weight due to their strict limits and the consequent suitability of a watercourse for other uses should it meet these limits.

### Nitrates Directive 91/676/EEC

Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources obliges member states to identify Nitrate Vulnerable Zones within which restricted agricultural practices will apply. With respect to surface waters, the Directive notes that sensitive waters shall be identified where nitrate levels exceed the maximum concentration

specified in the Surface Water Directive. The whole country is designated as a nitrate vulnerable zone; therefore the nitrate directive is applicable.

Bathing Water Directive 76/160/EEC

There are no designated bathing waters in the vicinity of the discharge.

EU Shellfish Waters Directive (79/923/EEC); and EU Directive on Health Conditions and the Placing on the Market of live Biovalve Molluscs (91/67/EEC) and associated amendments

There are no designated shellfish waters in the vicinity of the primary discharge.

- 
- 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.**

<b>Attachment included</b>	<b>Yes</b>	<b>No</b>
	<b>X</b>	

**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_SE RVED	ABS_VOL	PT_CD	DIS_OS	EASTING	NORTHING	VERIFIED
SW_Lee288 Main_Lee_L ower,LWB: Inniscarra Reservoir	Cork Harbo ur and City	35323	-	20km	153489	072309	N
SW_Lee288 Main_Lee_1 Lower	Cork City	49600	-	33km	164738	071444	N

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

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](http://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).

The DEHLG has requested that all local authorities prepare a list of assessment of needs. Cork County Council's list is awaiting approval of elected members, The outcome of the department review will not be known before March 2010. Coolcower Agglomeration is included on the list as part of bundle 3 with contract titled ' **Sewerage scheme upgrade** '.

**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
		x

### G.2 Compliance with Water Quality Standards for Phosphorus Regulations (S.I. No. 258 of 1998)

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 Water Quality Standards for Phosphorous Regulations (S.I. No. 258 of 1998) are being achieved. Provide details of any specific measures adopted for waste water works specified in Phosphorous Measures Implementation reports and the progress to date of those measures. Provide details highlighting any waste water works that have been identified as the principal sources of pollution under the P regulations.

**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.

The DEHLG has requested that all local authorities prepare a list of assessment of needs. Cork County Council's list is awaiting approval of elected members, The outcome of the department review will not be known before March 2010. Coolcower Agglomeration is included on the list as part of bundle 3 with contract titled '**Sewerage scheme upgrade**'.

**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.

**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 :** \_\_\_\_\_  
*(on behalf of the organisation)*

**Print signature name:** \_\_\_\_\_

**Position in organisation:** \_\_\_\_\_

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**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:** \_\_\_\_\_

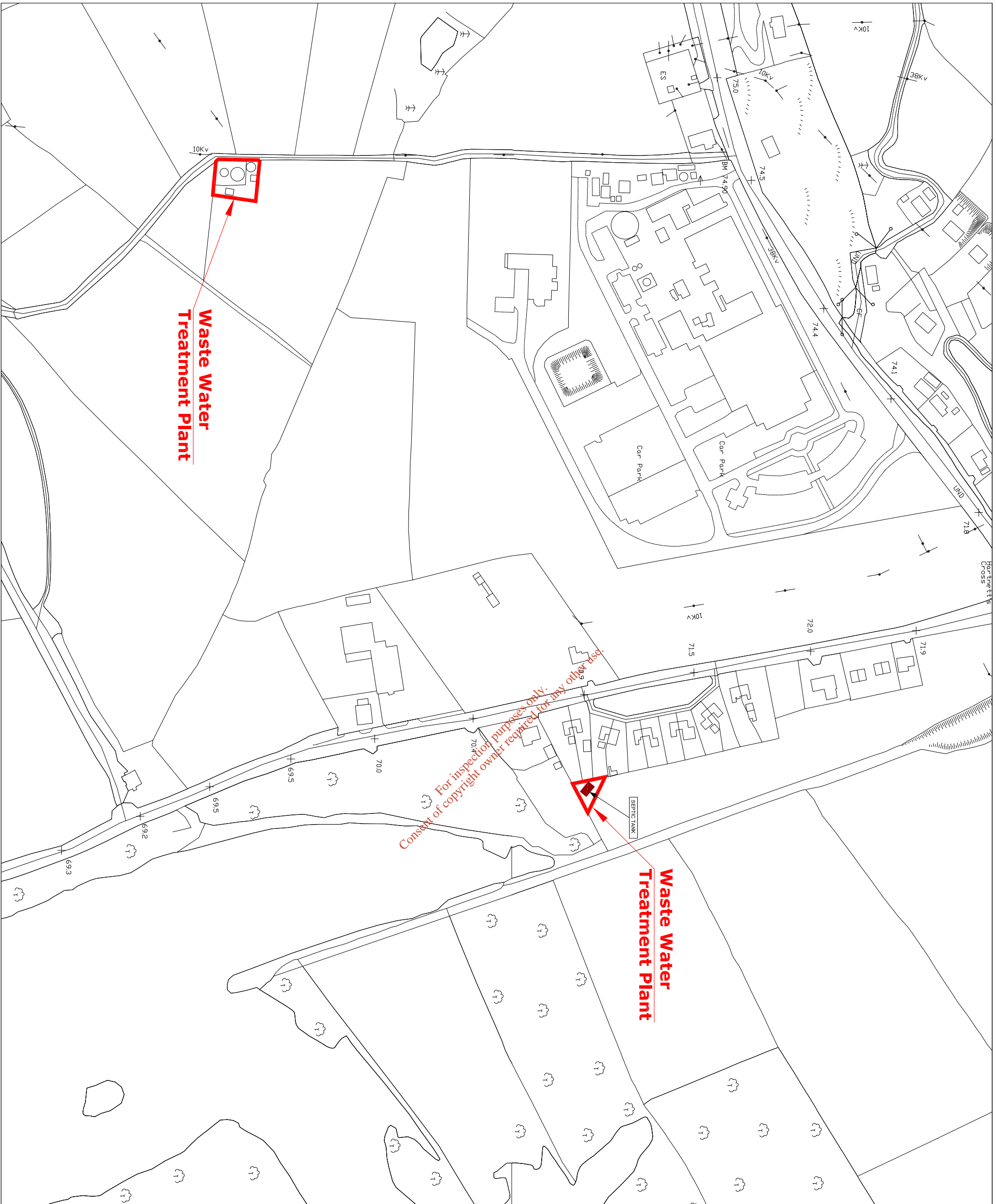
**Position in organisation:** \_\_\_\_\_

**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.



ATTACHMENTS TABLE OF CONTENTS		
ATTACHMENTS	ITEM	TITLE
A.1	Map 1	Location Plan of WWTP
A.1	Map 2	Location of WWTP
B.1	Map 3	Agglomeration Boundary
B.2	Map 4	Location of WWTP
B.2	Map 5	Location of Upstream and Downstream Monitoring Points
B.3	Map 6	Location of Primary Discharge Point
B.3	Map 7	Location of Upstream and Downstream Monitoring Points
B.4	Map 8	Location of Secondary Discharge point
B.4	Map 9	Location of Upstream and Downstream Monitoring Points
C.1	Dwg01	Operational Information Requirements
E.2	Text	Laboratory Accreditation
E.2	Map 10	Location of Upstream and Downstream Monitoring Points
E.4	Table	Sampling data
Online Data	Table	Online Data

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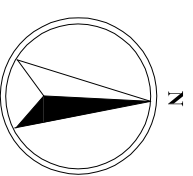
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**Key Map**  
Not to Scale

OS Number: 1206



Rev.	Date	By	Description



**CORK COUNTY COUNCIL**  
SOUTHERN DIVISION

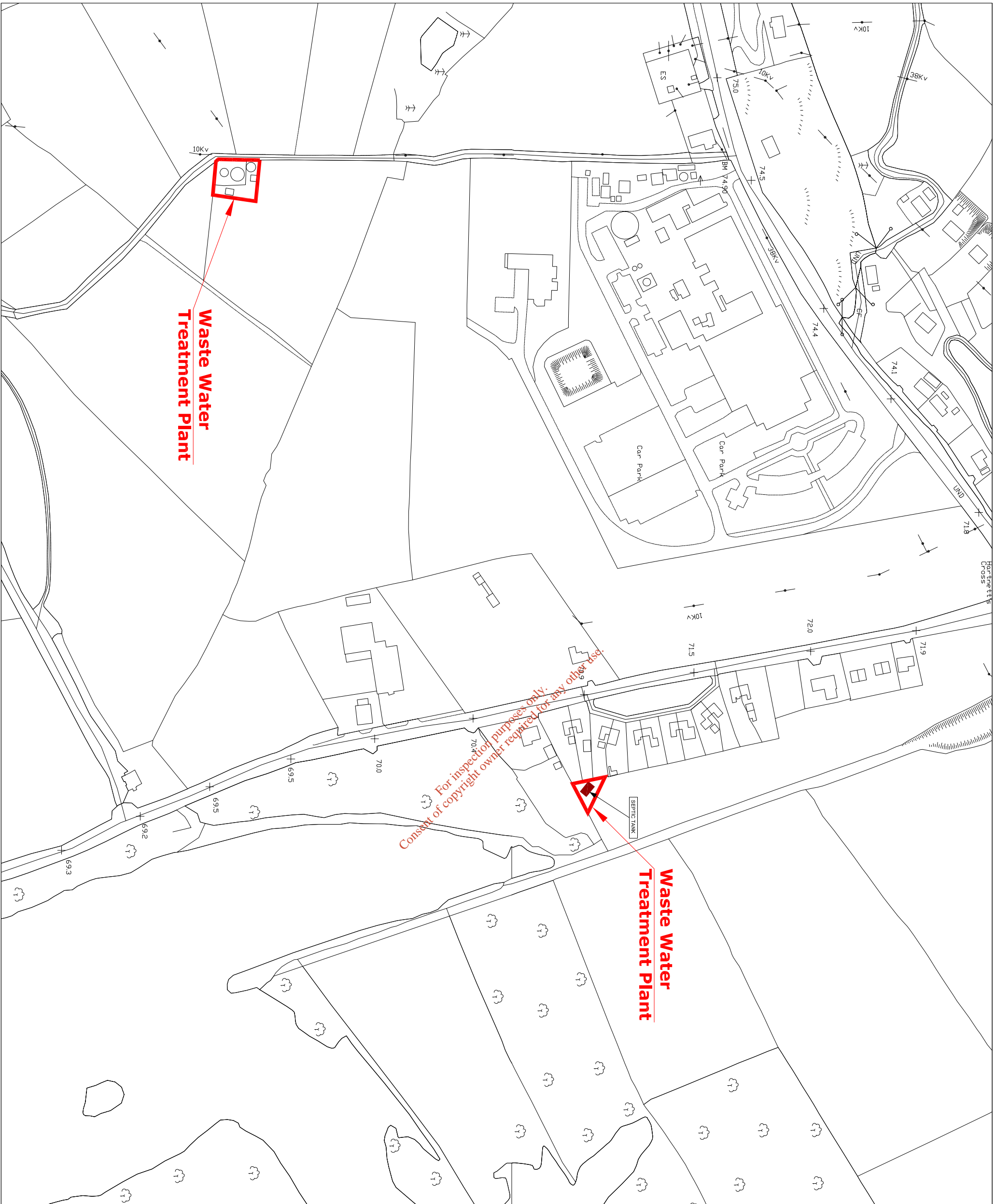
Niall O Keefe, B.E. Chief Executive  
County Engineer  
County Hall, Cork.

Patricia Power,  
Director of Services,  
Area Operations South

Project: **COOLCOWER WWTP**  
**WASTE WATER**  
**DISCHARGE LICENCE APPLICATION**

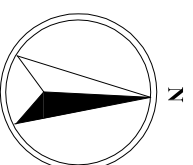
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Attachment A1\_Map1  
Location Plan of Waste Water Treatment Plant

Designed: MS	Checked: MH	Scale: 1:3,000 @ A3	Drawing No: A1_Map1
Drawn: MM	Approved: MH	Date: NOV 09	Status: 0
File Path:			Rev: 0



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**CORK COUNTY COUNCIL**  
SOUTHERN DIVISION  
Niall O'Keefe, B.E. Chief Executive  
County Engineer  
County Hall, Cork.  
Patricia Power,  
Director of Services,  
Area Operations South

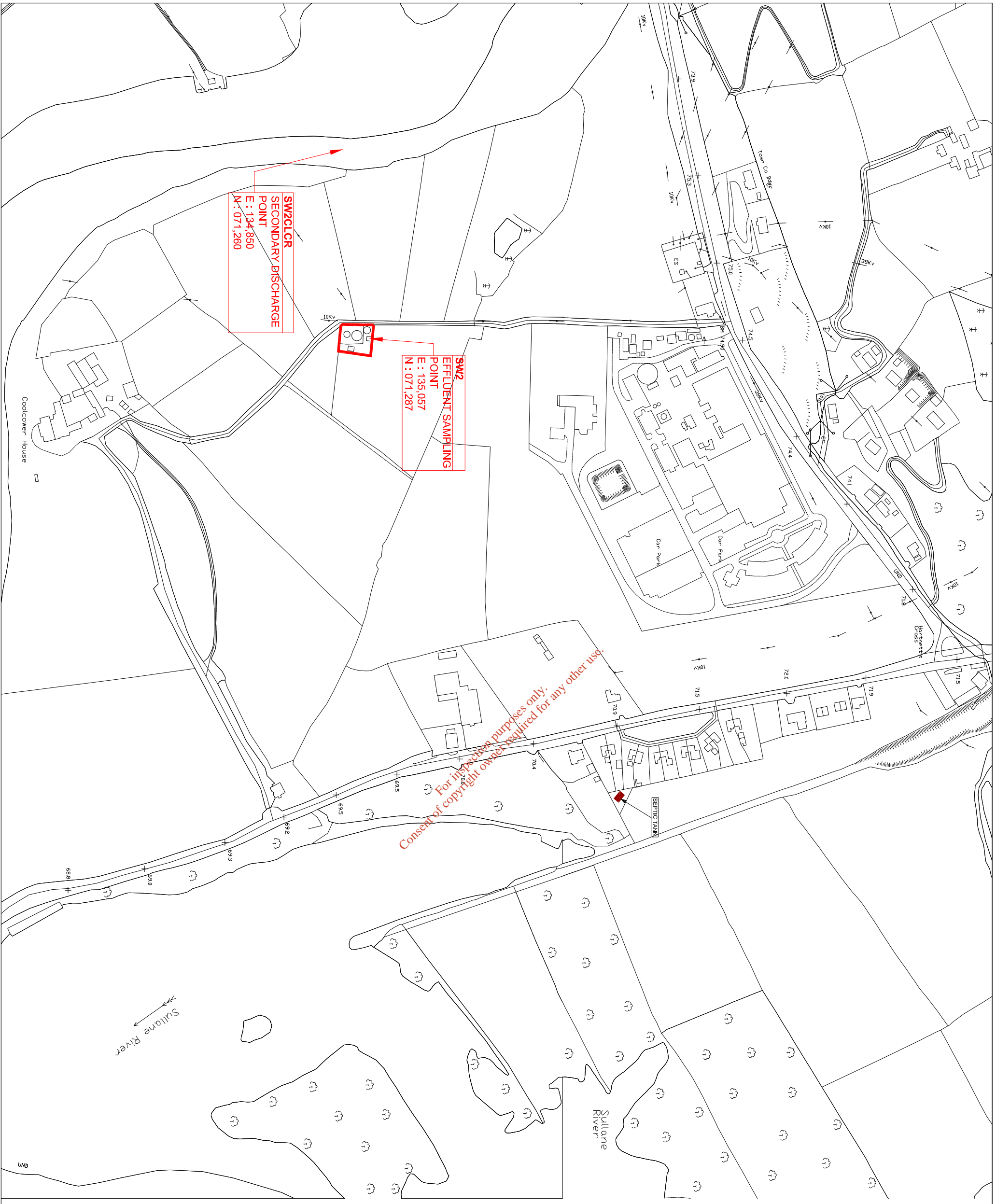
Project: **COOLCOWER WWTP**  
**WASTE WATER**  
**DISCHARGE LICENCE APPLICATION**

Title: Application Form  
Attachment A1\_Map2  
Location Plan of Waste Water Treatment Plant

Designed: MS	Checked: MH	Scale: 1:3,000 @ A3	Drawing No: A1_Map2
Drawn: MM	Approved: MH	Date: Nov 09	Status: 0
File Path:			Rev: 0

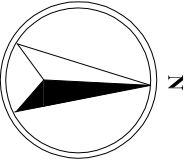

Rev.	Date	By	Description





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County Hall, Cork.

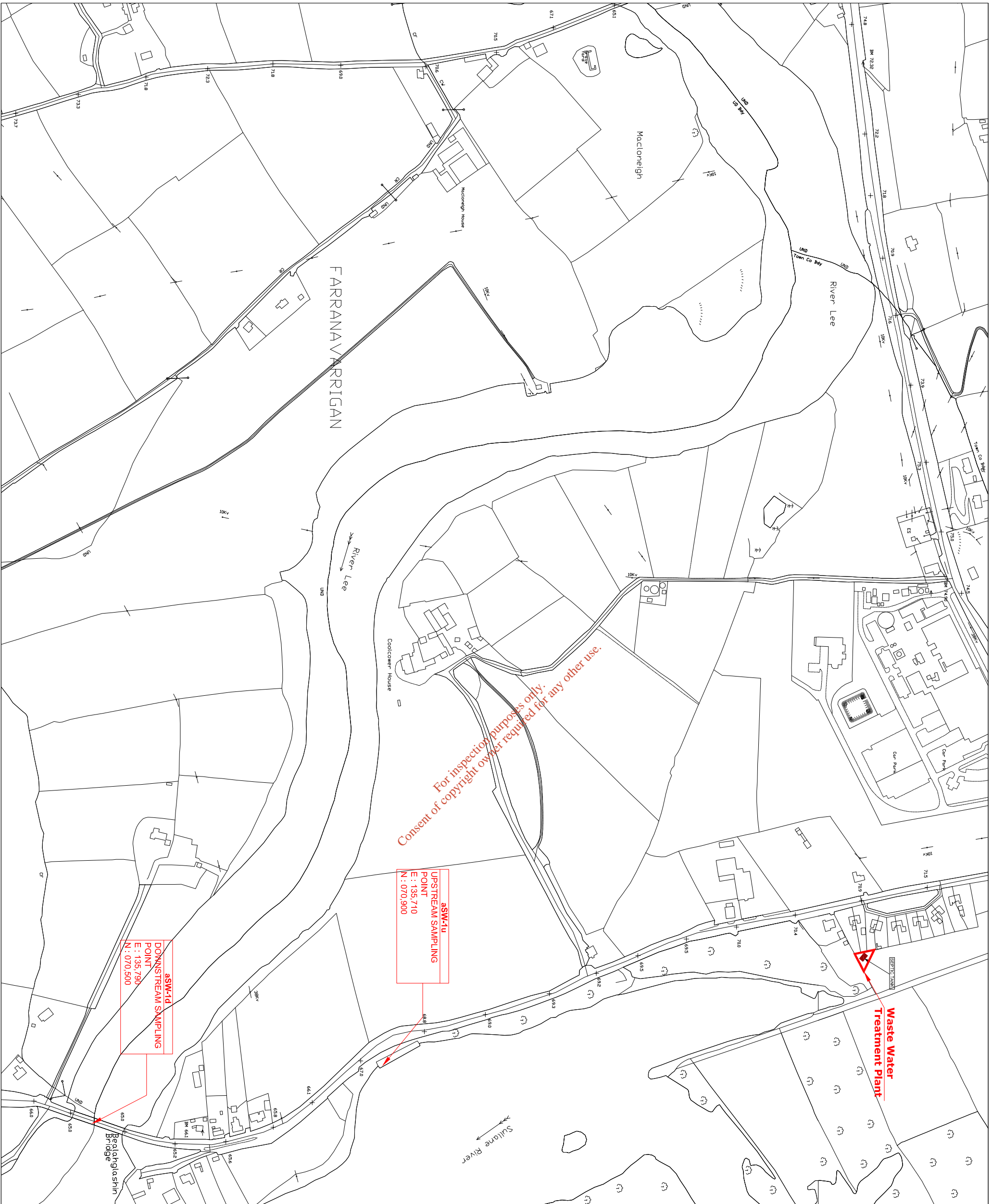
Patricia Power,  
Director of Services,  
Area Operations South

Project: **COOLCOWER WWTP  
WASTE WATER  
DISCHARGE LICENCE APPLICATION**

Title: **Application Form  
Attachment B4\_Map8  
Location of Secondary Discharge Point**

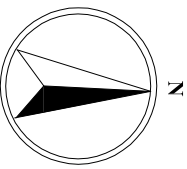
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Drawn: MM	Approved: MH	Date: Nov 09	Status: 0

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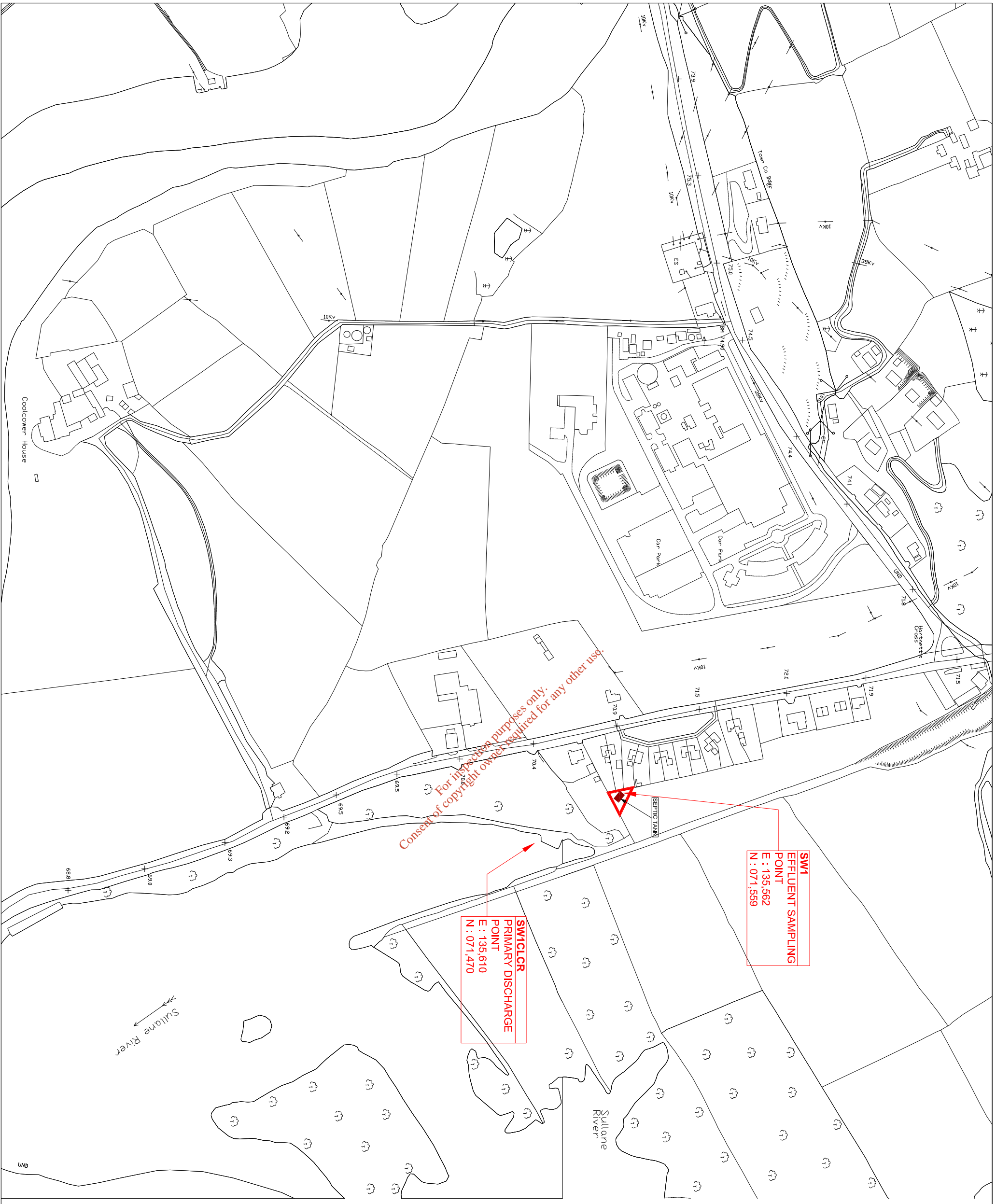


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WASTE WATER  
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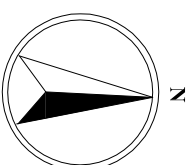
Title: Application Form  
Attachment B3\_Map7  
Location of Upstream & Downstream  
Monitoring Points

Designed: MS	Checked: MH	Scale: 1:5,000 @ A3	Drawing No: B3_Map7
Drawn: MM	Approved: MH	Date: NOV 09	Status: 0



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Patricia Power,  
Director of Services,  
Area Operations South

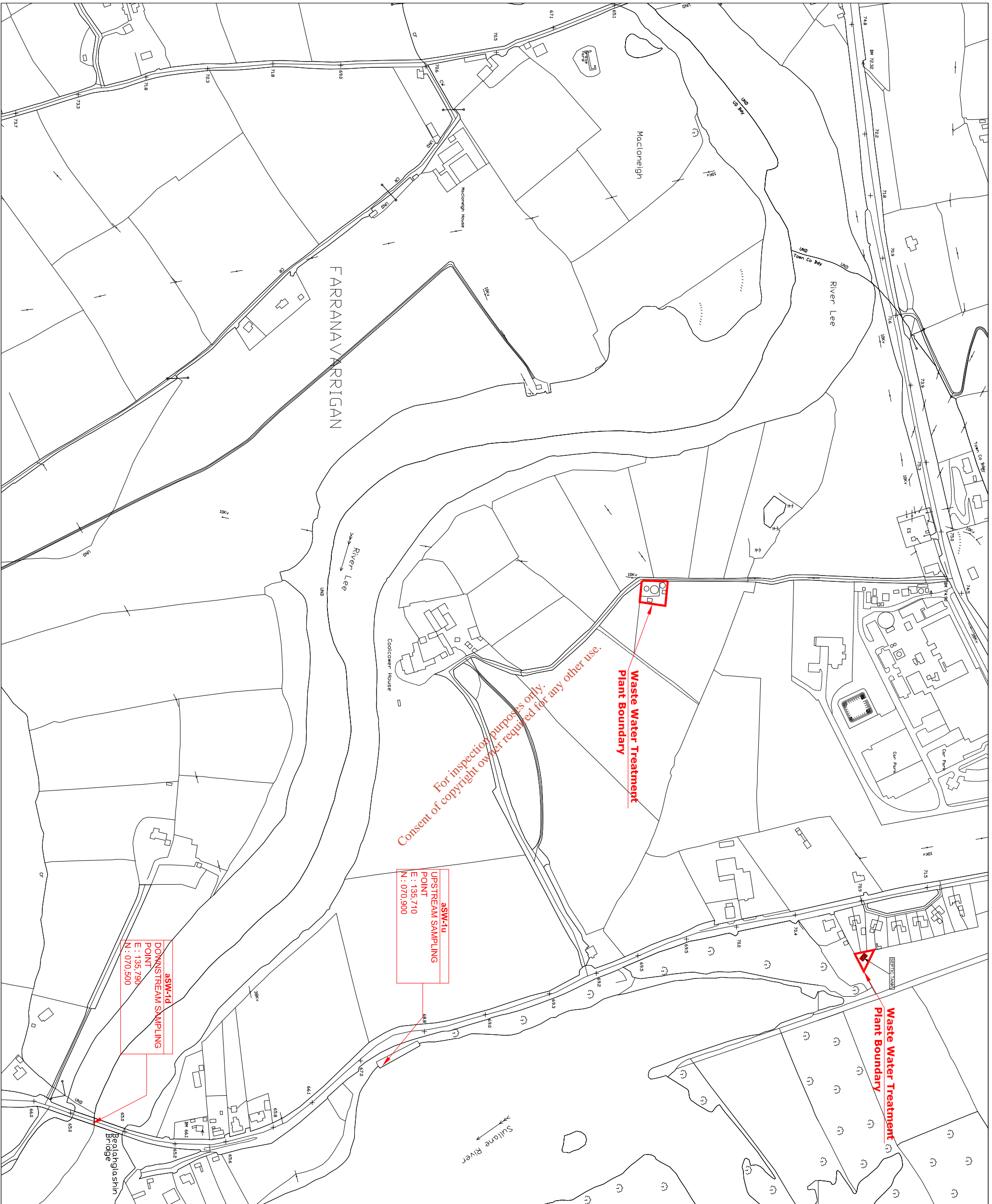
Project: **COOLCOWER WWTP  
WASTE WATER  
DISCHARGE LICENCE APPLICATION**

Title: Application Form  
Attachment B3\_Map6  
Location of Primary Discharge Point

Designed: MS	Checked: MH	Scale: 1:4,000 @ A3	Drawing No: B3_Map6
Drawn: MM	Approved: MH	Date: NOV 09	Status: 0

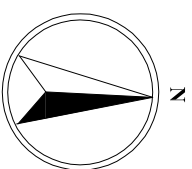
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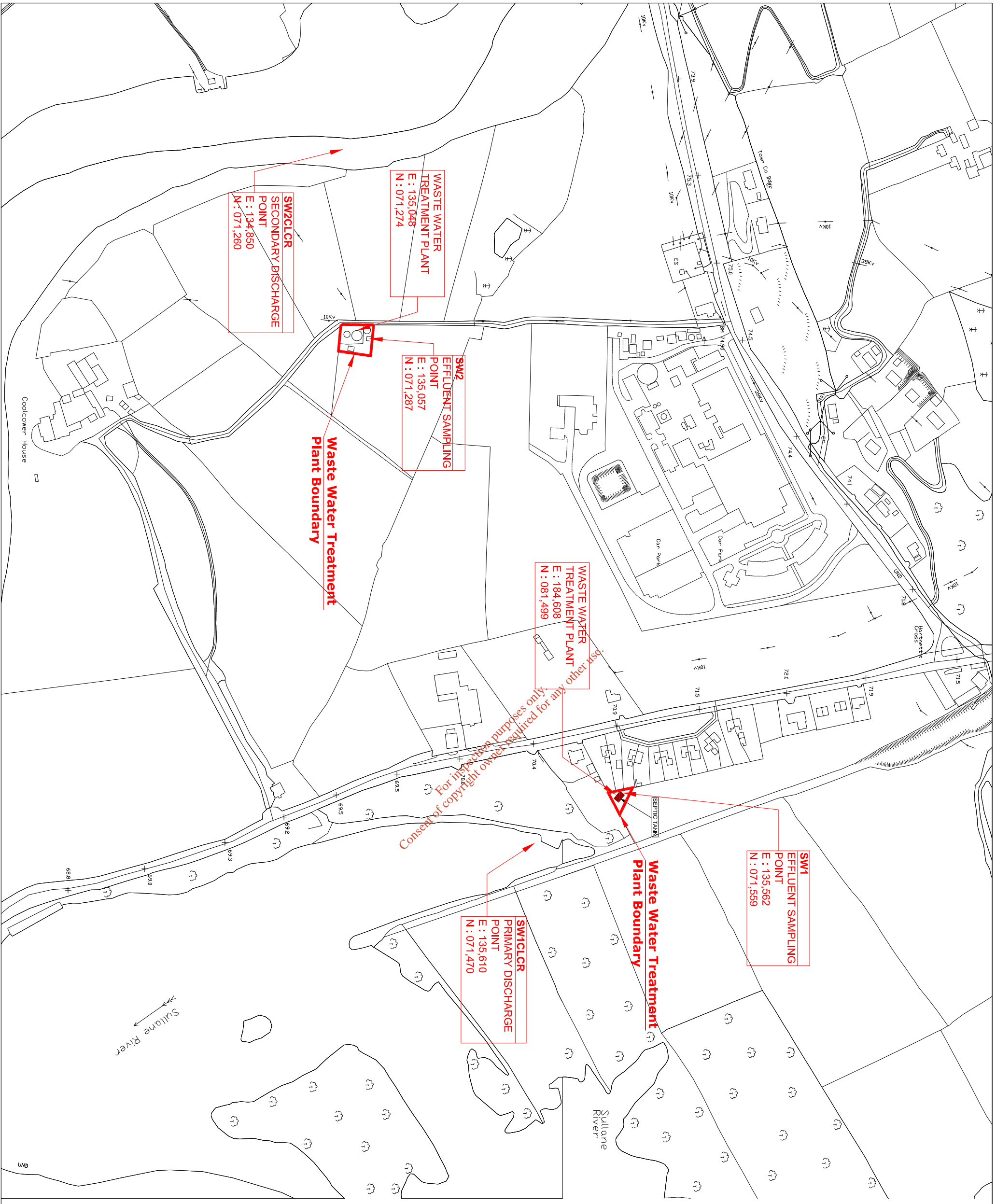
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Project: **COOLCOWER WWTP  
WASTE WATER  
DISCHARGE LICENCE APPLICATION**

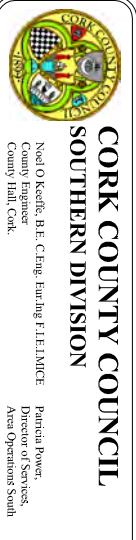
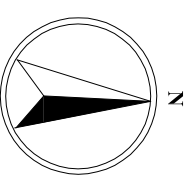
Title: **Application Form  
Attachment B2\_Maps  
Location of Upstream & Downstream  
Monitoring Point**

Designed: MS	Checked: MH	Scale: 1:5,000 @ A3	Drawing No: B2_Maps
Drawn: MM	Approved: MH	Date: NOV 09	Rev: 0
File Path:	Status: —		



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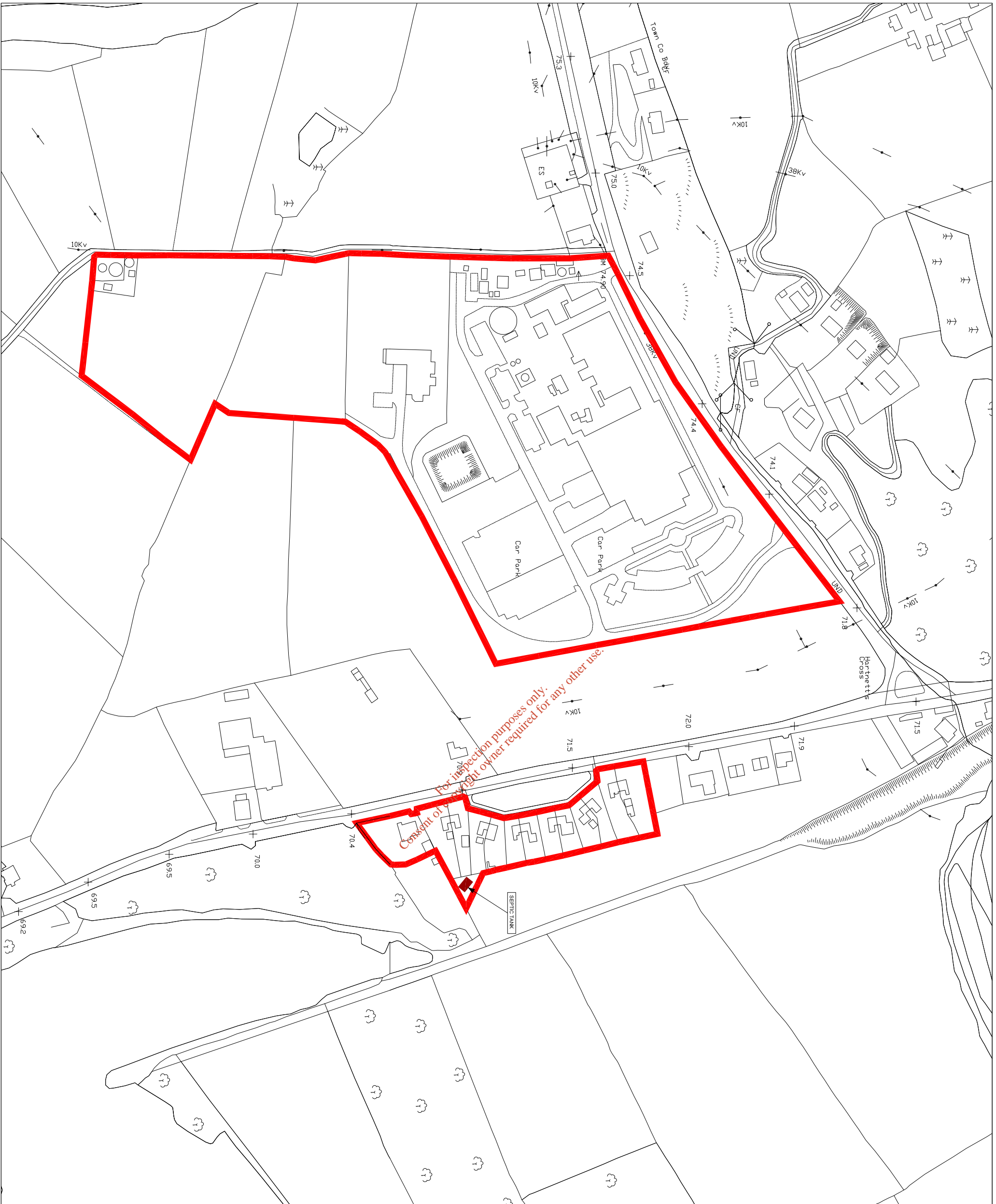
Project: COOLCOWER WWTP  
WASTE WATER  
DISCHARGE LICENCE APPLICATION

Title: Application Form  
Attachment B2\_Map4  
Location of Waste Water Treatment Plant

Designed: MS	Checked: MH	Scale: 1:4,000 @ A3	Drawing No: B2_Map4
Drawn: MM	Approved: MH	Date: Nov 09	Status: 0

Rev	Date	By	Description

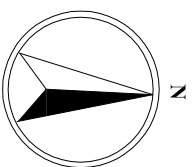




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**AGGLOMERATION  
BOUNDARY**



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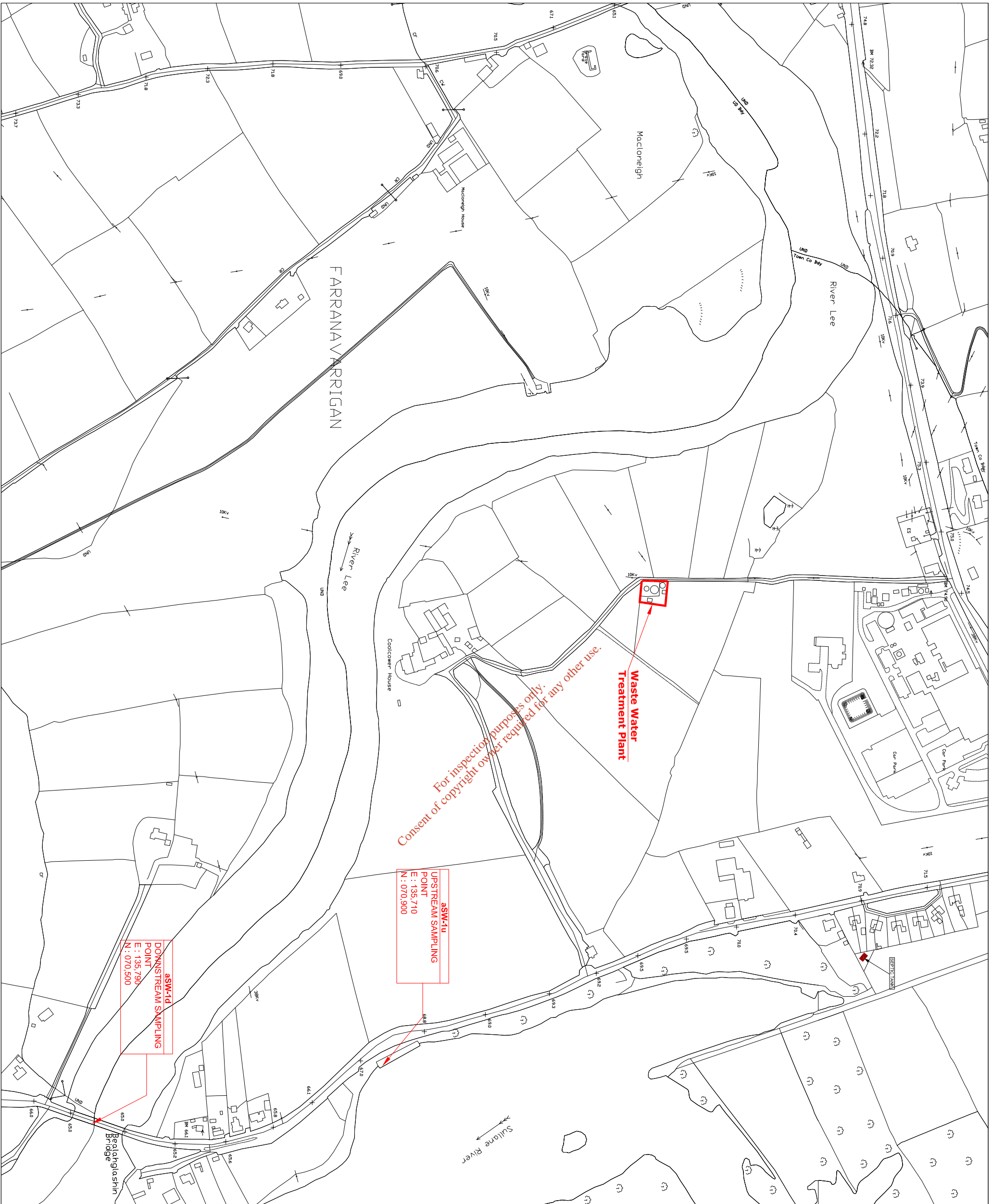
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Area Operations South

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WASTE WATER  
DISCHARGE LICENCE APPLICATION**

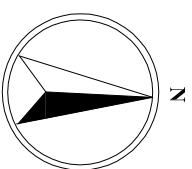
Title: **Application Form  
Attachment B1\_Map3  
Agglomeration Boundary Served By  
Waste Water Treatment Works**

Designed: MS	Checked: MH	Scale: 1:3,000 @ A3	Drawing No: B1_Map3
Drawn: MM	Approved: MH	Date: Nov 09	Status: 0



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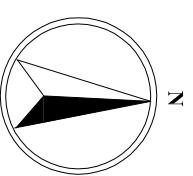
Project: **COOLCOWER WWTP  
WASTE WATER  
DISCHARGE LICENCE APPLICATION**

Title: **Application Form  
Attachment B4\_Map9  
Location of Upstream & Downstream  
Monitoring Points**


Designed: MS	Checked: MH	Scale: 1:5,000 @ A3	Drawing No: B4_Map9
Drawn: MM	Approved: MH	Date: NOV 09	Status: 0

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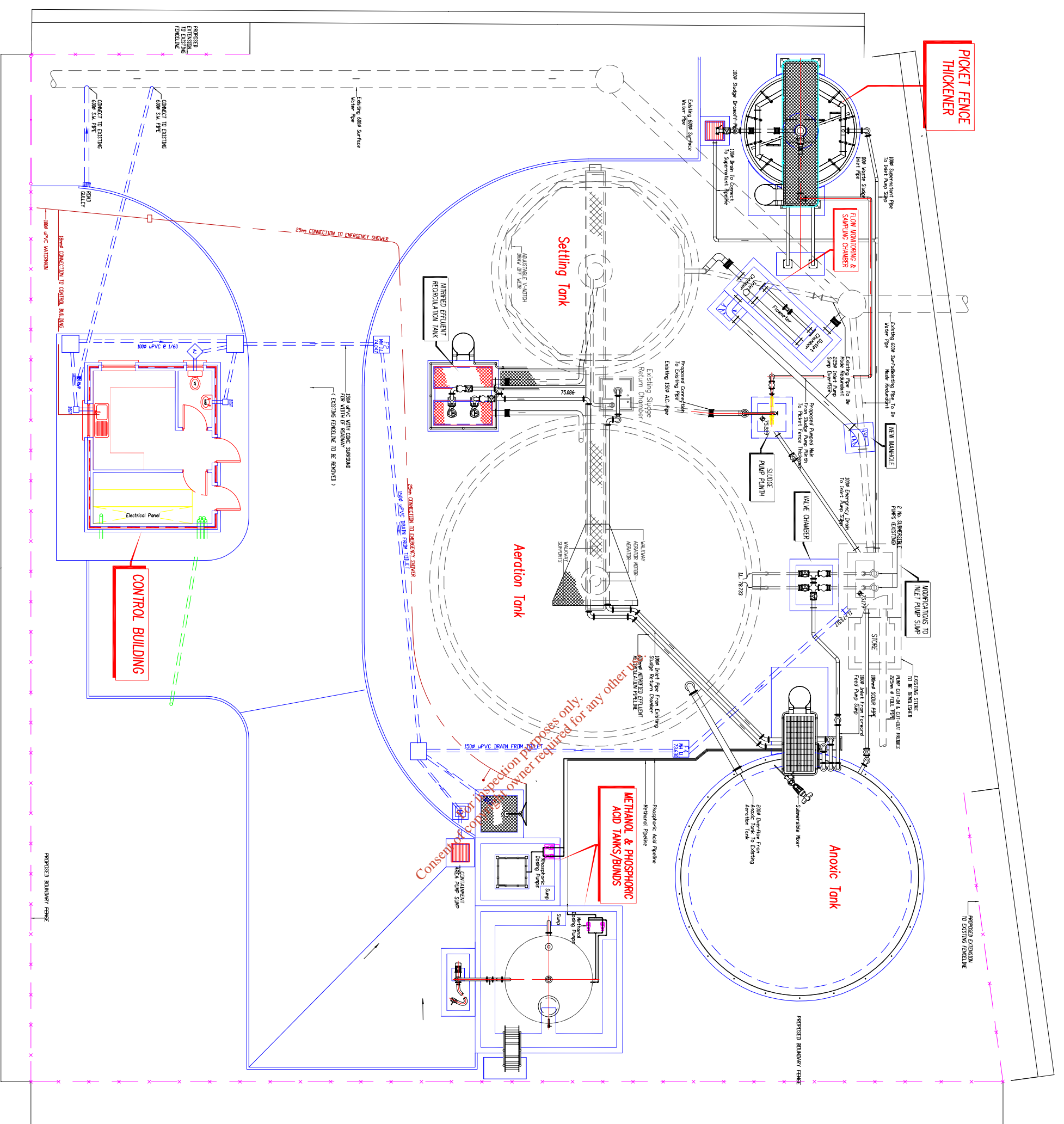
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WASTE WATER  
DISCHARGE LICENCE APPLICATION**

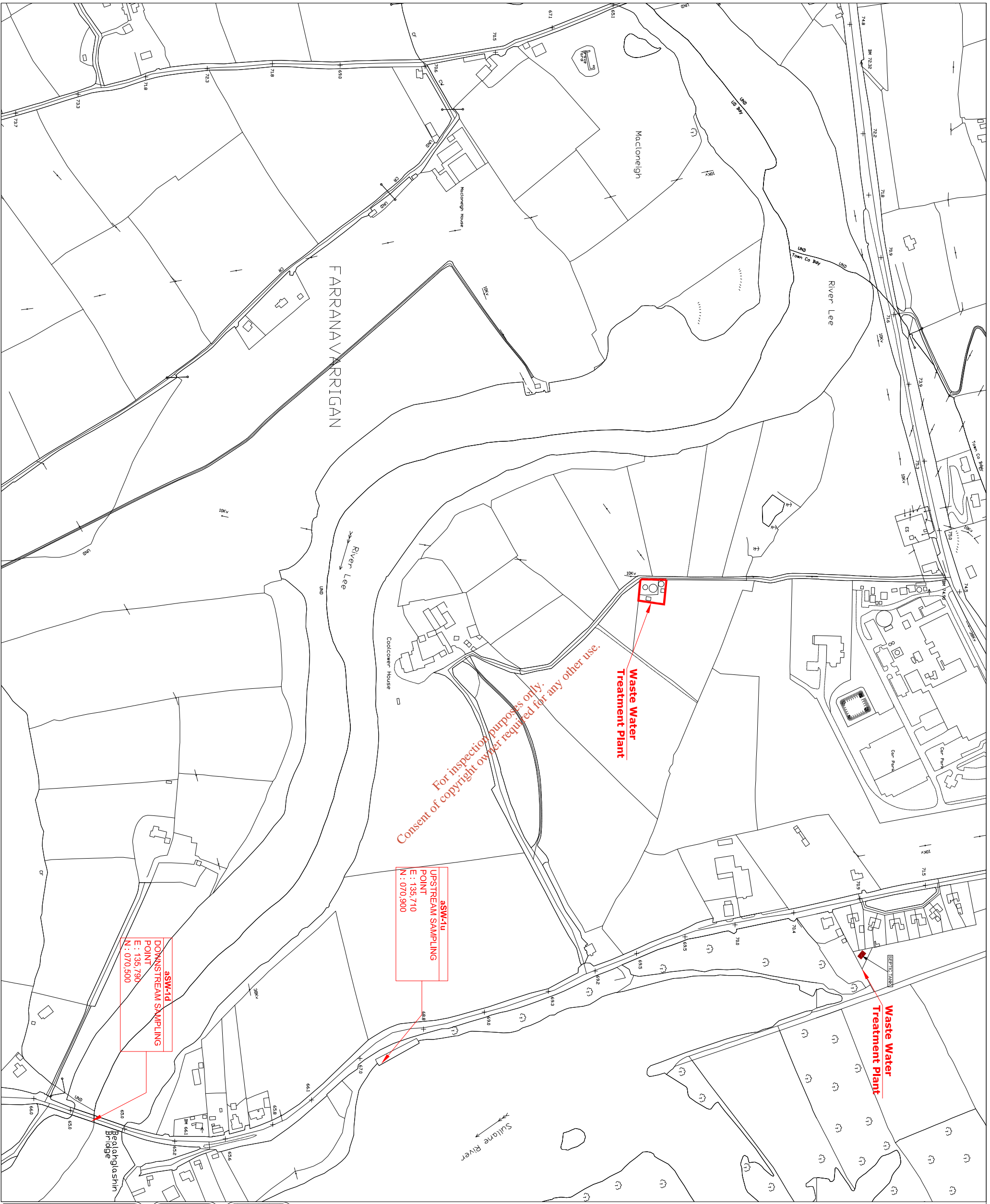
Title: **Application Form  
Attachment C1\_Dwg01  
Operational Information Requirements**

Designed: MS	Checked: MH	Scale: Not to Scale @ A3	Drawing No: C-1_Dwg01
Drawn: MM	Approved: MH	Date: NOV 09	Rev: 0
File Path:			



Proposed Site Layout Plan Scale 1:50





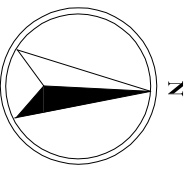
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**ASW-11u**  
UPSTREAM SAMPLING POINT  
E : 135 710  
N : 070 900

**ASW-11d**  
DOWNSTREAM SAMPLING POINT  
E : 135 790  
N : 070 500

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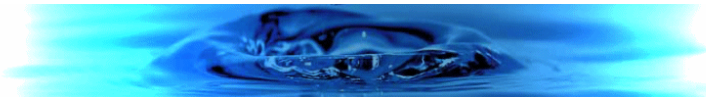
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Project: **COOLCOWER WWTP**  
**WASTE WATER**  
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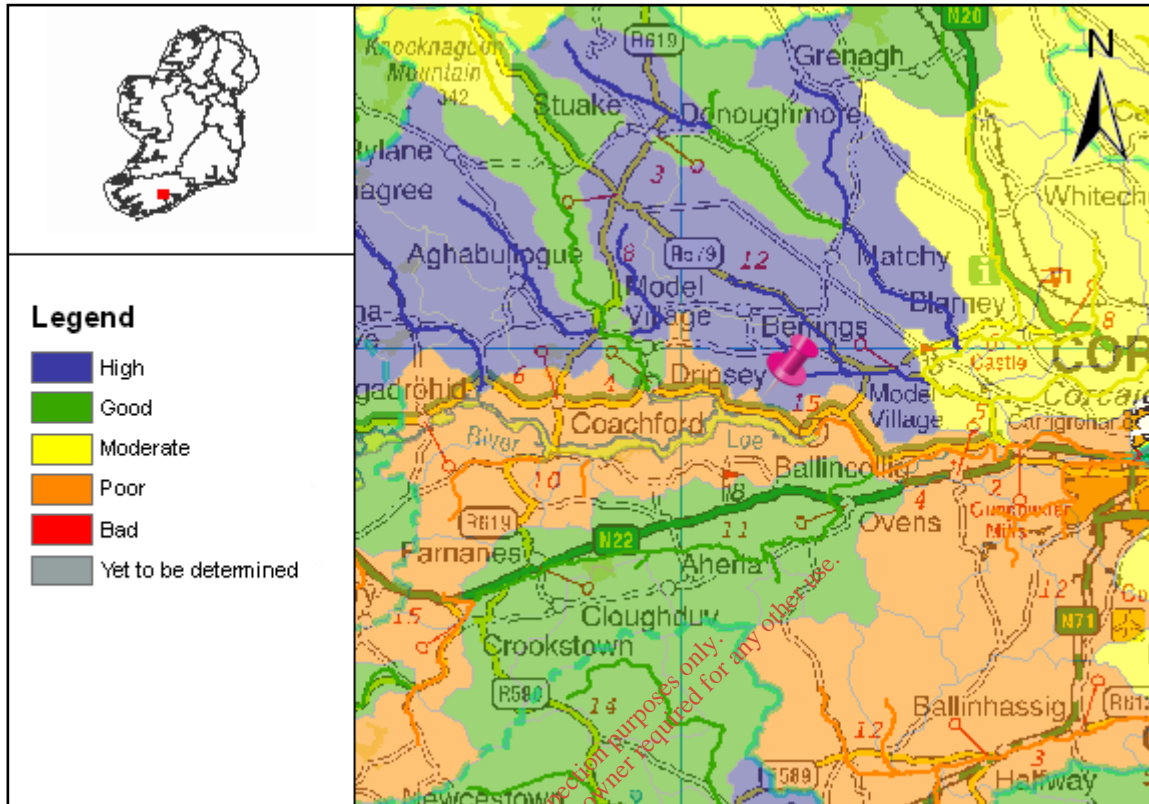
Title: Application Form  
Attachment E2\_Map10  
Location of Upstream & Downstream  
Monitoring Points

Designed: MS	Checked: MH	Scale: 1:5,000 @ A3	Drawing No: E2_Map10
Drawn: MM	Approved: MH	Date: NOV 09	Rev: 0
File Path:	Status: —		

Rev	Date	By	Description



**Full Report for Waterbody Lee, Trib of Lee**



Date Reported to Europe: 22/12/2008

Date Report Created 17/12/2009



**Summary Information:**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Lee, Trib of Lee

**WaterBody Code:** IE\_SW\_19\_1663

**Overall Status:** Poor

**Overall Objective:** Restore

**Overall Risk:** 1a At Risk

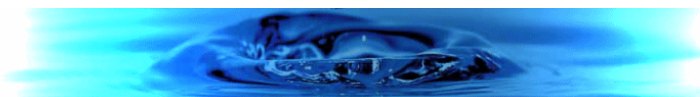
**Applicable Supplementary Measures:** Unsewered; Urban & Industrial; Morphology; Forestry;  
Report data based upon Draft RBMP, 22/12/2008.



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**Status Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Lee, Trib of Lee

**WaterBody Code:** IE\_SW\_19\_1663

**Overall Status Result:** **Poor**



	<b>Status Element Description</b>	<b>Result</b>
EX	Status from Monitored or Extrapolated Waterbody	
	<b>Biological Elements</b>	
Q	Macroinvertebrates (Q-Value)	<b>Poor</b>
F	Fish	n/a
DI	Phytobenthos (Diatoms)	n/a
FPM	Status value as determined by Margartifera	n/a
	<b>Supporting Elements</b>	
MOR	Hydromorphology	n/a
SP	Specific Pollutants	n/a
PC	General Physico-Chemical	n/a
	<b>Chemical Status</b>	
PAS	Chemical Status	n/a
	<b>Overall Ecological Status</b>	
O	Overall Ecological Status	<b>Poor</b>

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**Risk Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Lee, Trib of Lee

**WaterBody Code:** IE\_SW\_19\_1663

**Overall Risk Result:** **1a** At Risk



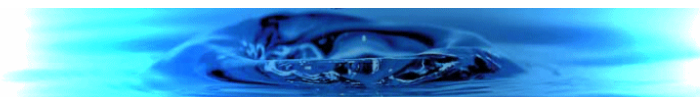
<b>Risk Test Description</b>		<b>Risk</b>
<b>Point Risk Sources</b>		
RP1	WWTPs (2008)	<b>1a</b> At Risk
RP2	CSOs	<b>1b</b> Probably At Risk
RP3	IPPCs (2008)	<b>2b</b> Not At Risk
RP4	Section 4s (2008)	<b>1a</b> At Risk
RPO	Overall Risk from Point Sources - Worst Case (2008)	<b>1a</b> At Risk
<b>Diffuse Risk Sources</b>		
RD1	EPA diffuse model (2008)	<b>1b</b> Probably At Risk
RD2a	Road Wash - Soluble Copper	<b>2b</b> Not At Risk
RD2b	Road Wash - Total Zinc	<b>2b</b> Not At Risk
RD2c	Road Wash - Total Hydrocarbons	<b>2b</b> Not At Risk
RD3	Railways	<b>2b</b> Not At Risk
RD4a	Forestry - Acidification (2008)	<b>2b</b> Not At Risk
RD4b	Forestry - Suspended Solids (2008)	<b>2b</b> Not At Risk
RD4c	Forestry - Eutrophication (2008)	<b>2a</b> Probably Not At Risk
RD5a	Unsewered Areas - Pathogens (2008)	<b>2a</b> Probably Not At Risk
RD5b	Unsewered Phosphorus (2008)	<b>2b</b> Not At Risk
RD5	Overall Unsewered (2008)	<b>2b</b> Not At Risk
RD6a	Arable	<b>2a</b> Probably Not At Risk
RD6b	Sheep Dip	<b>2b</b> Not At Risk
RD6c	Forestry - Dangerous Substances	<b>2b</b> Not At Risk
RDO	Diffuse Overall -Worst Case (2008)	<b>1b</b> Probably At Risk

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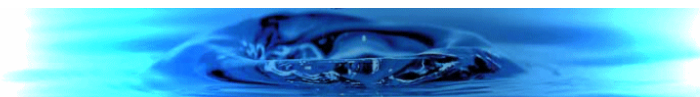


<b>Morphological Risk Sources</b>		
RM1	Channelisation (2008)	2b Not At Risk
RM2	Embankments (2008)	2b Not At Risk
RM3	Impoundments	1a At Risk
RM4	Water Regulation	2b Not At Risk
RM0	Morphology Overall - Worst Case (2008)	1a At Risk
<b>Q/RDI or Point/Diffuse</b>		
QPD	Q class/EPA Diffuse Model or worst case of Point and Diffuse (2008)	1a At Risk
<b>Hydrology</b>		
RHY1	Water balance - Abstraction	1a At Risk
<b>Overall Risk</b>		
RA	Rivers Overall - Worst Case (2008)	1a At Risk

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Date Report Created 17/12/2009



**Objectives Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Lee, Trib of Lee

**WaterBody Code:** IE\_SW\_19\_1663

**Overall Objective:** Restore

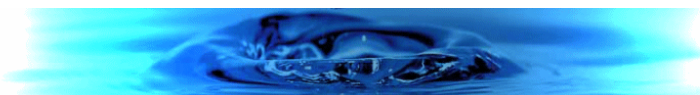


<b>Objectives Description</b>		<b>Result</b>
<b>Objectives</b>		
OB1	Objective 1 - Protected Areas	Restore
OB2	Objective 2 - Protect High and Good Status	Not Applicable
OB3	Objective 3 - Restore Less Than Good Status	Not Applicable
OB4	Objective 4 - Reduce Chemical Pollution	Not Applicable
OBO	Overall Objective	Restore
<b>Deadline</b>		
YR	Default Year by which the objective must be met	2015
EX	Revised Objective Deadline	2015
OBO	Overall Objective and Deadline	Restore - 2015

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**Basic Measures Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Lee, Trib of Lee

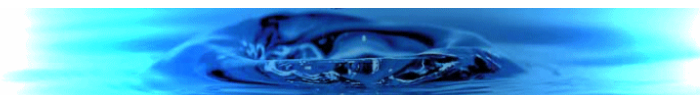
**WaterBody Code:** IE\_SW\_19\_1663



<b>Basic Measures Description</b>		<b>Applicable</b>
<b>Key Directives</b>		
BA	Bathing Waters Directive	No
BI	Birds Directive	No
HA	Habitats Directive	No
DW	Drinking Waters Directive	Yes
SEV	Major Accidents and Emergencies (Seveso) Directive	Yes
EIA	Environmental Impact Assessment Directive	Yes
SE	Sewage Sludge Directive	Yes
UW	Urban Waste Water Treatment Directive	Yes
PL	Plant Protection Products Directive	Yes
NI	Nitrates Directive	Yes
IP	Integrated Pollution Prevention Control Directive	Yes
<b>Other Stipulated Measures</b>		
CR	Cost recovery for water use	Yes
SU	Promotion of efficient and sustainable water use	Yes
DWS	Protection of drinking water sources	Yes
AB	Control of abstraction and impoundments	Yes
PT	Control of point source discharges	Yes
DI	Control of diffuse source discharges	Yes
GWD	Authorisation of discharges to groundwater	No
PS	Control of priority substances	Yes
MOR	Control of physical modifications to surface waters	Yes
OA	Controls on other activities impacting on water status	Yes
AP	Prevention or reduction of the impact of accidental pollution incidents	Yes

Date Reported to Europe: 22/12/2008

Date Report Created 17/12/2009



**Urban and Industrial Discharges Supplementary Measures Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Lee, Trib of Lee

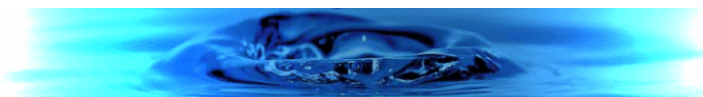
**WaterBody Code:** IE\_SW\_19\_1663



	<b>Point discharges to waters from municipal and industrial sources</b>	<b>Result</b>
PINDDIS	Is there one or more industrial discharge (Section 4 licence issued by the local authority or IPPC licence issued by the EPA) contained within the water body?	Yes
PINDDISR	Are there industrial discharges (Section 4 licence issued by the local authority or IPPC licence issued by the EPA) that cause the receiving water to be 'At Risk' within the water body?	Yes
PB1	Basic Measure 1 - Measures for improved management.	Yes
PB2	Basic Measure 2 - Optimise the performance of the waste water treatment plant by the implementation of a performance management system.	Yes
PB3	Basic Measure 3 - Revise existing Section 4 license conditions and reduce allowable pollution load.	Yes
PB4	Basic Measure 4 - Review existing IPPC license conditions and reduce allowable pollution load.	Yes
PB5	Basic Measure 5 - Investigate contributions to the collection system from unlicensed discharges.	Yes
PB6	Basic Measure 6 - Investigate contributions to the collection system of specific substances known to impact ecological status.	Yes
PB7	Basic Measure 7 - Upgrade WWTP to increase capacity.	Yes
PB8	Basic Measure 8 - Upgrade WWTP to provide nutrient removal treatment.	No
PS1	Supplementary Measure 1 - Measures intended to reduce loading to the treatment plant.	Yes
PS2	Supplementary Measure 2 - Impose development controls where there is, or is likely to be in the future, insufficient capacity at treatment plants.	Yes
PS3	Supplementary Measure 3 - Initiate investigations into characteristics of treated wastewater for parameters not presently required to be monitored under the urban wastewater treatment directive.	Yes
PS4	Supplementary Measure 4 - Initiate research to verify risk assessment results and determine the impact of the discharge.	Yes
PS5	Supplementary Measure 5 - Use decision making tools in point source discharge management.	No
PS6	Supplementary Measure 6 - Install secondary treatment at plants where this level of treatment is not required under the urban wastewater treatment directive.	No
PS7	Supplementary Measure 7 - Apply a higher standard of treatment (stricter emission controls) where necessary.	Yes

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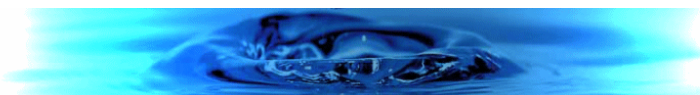


PS8	Supplementary Measure 8 - Upgrade the plant to remove specific substances known to impact on water quality status.	Yes
PS9	Supplementary Measure 9 - Install ultra-violet or similar type treatment.	No
PS10	Supplementary Measure 10 - Relocate the point of discharge.	Yes

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**Physical Modifications Supplementary Measures Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Lee, Trib of Lee

**WaterBody Code:** IE\_SW\_19\_1663

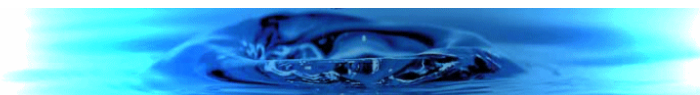


	<b>Physical Modifications Supplementary Measures</b>	<b>Applicable</b>
	<b>Reduce</b>	
SM1	Codes of Practice	Yes
SM2	Support for voluntary initiatives	Yes
	<b>Remediate</b>	
SM3	Channelisation impact remediation schemes	No
SM4	Channelisation investigation	No
SM5	Overgrazing remediation	No
SM6	Impassable barriers, impact confirmed, investigation into feasibility of remediation required	No
SM7	Impassable barriers investigation	Yes

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Date Reported to Europe: 22/12/2008

Date Report Created 17/12/2009



**Unsewered Properties Supplementary Measures Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Lee, Trib of Lee

**WaterBody Code:** IE\_SW\_19\_1663

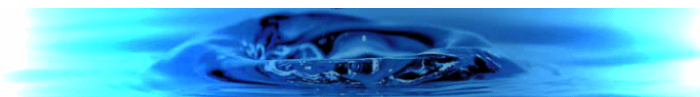


<b>Supplementary Measures for Unsewered Properties</b>		<b>Applicable</b>
SP1	Amend building regulations	Yes
SP2	Establish certified expert panels for site investigation and certification of installed systems	Yes
SP3	Assess applications for new unsewered systems by applying risk mapping/decision support systems and codes of practice	Yes
SP4	Carry out an inspection programme in prioritised locations for existing systems and record results in an action tracking system	No
SP5	Enforce requirements for percolation	No
SP6	Enforce requirements for de-sludging	Yes
SP7	Consider connection to municipal systems	No

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**Forestry Measures Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Lee, Trib of Lee

**WaterBody Code:** IE\_SW\_19\_1663

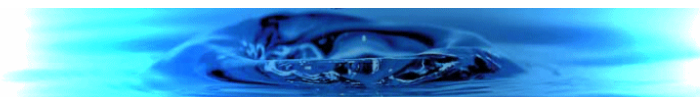


	<b>Forestry Measures for</b>	<b>Applicable</b>
	Forestry	
SF1	Management Instruments - Ensure regulations and guidance are cross referenced and revised to incorporate proposed measures	No
SF2	Acidification - Avoid or limit afforestation on 1st and 2nd order stream catchments in acid sensitive areas	No
SF3	Acidification - Revise the Acidification Protocol to ensure actual minimum alkalinities are detected and revise boundary conditions for afforestation in acid sensitive areas	No
SF10	Pesticide Use - Pre-dip trees in nurseries prior to planting out	No
SF11	Pesticide Use - Maintain registers of pesticide use	No
SF12	Acidification - Restructure existing forests to include open space and structural diversity through age classes and species mix, including broadleaves	No
SF13	Acidification - Mitigate acid impacts symptomatically using basic material	No
SF14	Acidification - Manage catchment drainage to increase residence times and soil wetting	No
SF15	Acidification - Implement measures to increase stream production.	No
SF16	Eutrophication - Establish riparian zone management prior to clearfelling	No
SF17	Eutrophication and Sedimentation - Enhance sediment control	No
SF18	Eutrophication - Manage catchment drainage to increase residence times and soil wetting, including no drainage in some locations	No
SF19	Sedimentation - Establish riparian zone management prior to clearfelling	No
SF20	Sedimentation - Enhance sediment control	No
SF21	Sedimentation - Manage catchment drainage to increase residence times and soil wetting, including no drainage in some locations	No
SF22	Hydromorphology - Enhance drainage network management, minimise drainage in peat soils	No
SF23	Pesticide Use - Develop biological control methods	No

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SF4	Eutrophication and Sedimentation - Avoid or limit forest cover on peat sites	No
SF5	Eutrophication and Sedimentation - Change the tree species mix on replanting	No
SF6	Eutrophication and Sedimentation - Limiting felling coup size	No
SF7	Eutrophication and Sedimentation - Establish new forest structures on older plantation sites	No
SF8	Hydromorphology - Audit existing drainage networks in forest catchments	No
SF9	Pesticide Use - Reduce pesticide usage	No

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### Attachment E4 Coolcover Table E4

Sample Date	10/11/2009	10/11/2009	10/11/2009
Sample	Coolcover Septic Tank discharge	Coolcover IDA WWTP discharge	Downstream
Sample Code	GT1357	GT1358	GT1359
Flow M <sup>3</sup> /Day	*	*	*
pH	6.6	6.5	7.1
Temperature °C	*	*	*
Conductivity uS/cm 20°C	758	443	97
Suspended Solids mg/L	1434	127	<2.5
Ammonia-N mg/L	35.8	7.5	<0.1
BOD mg/L	502	19	2
COD mg/L	1289	106	<21
TN-N mg/L	71.66	47.08	1.24
Nitrite-N mg/L	<0.1	3.88	<0.1
Nitrate-N mg/L	<0.5	29.02	0.74
TP-P mg/L	8.11	0.668	<0.05
O-PO4-P mg/L	4.93	result not for reporting	<0.05
SO4 mg/L	156.6	<30	<30
Phenols µg/L	<0.10	<0.10	*
Atrazine µg/L	<0.01	<0.01	*
Dichloromethane µg/L	<1	<1	*
Simazine µg/L	<0.01	<0.01	*
Toluene µg/L	<0.28	<0.28	*
Tributyltin µg/L	not required	not required	not required
Xylenes µg/L	<0.73	<0.73	*
Arsenic µg/L	1.1	0.4	*
Chromium ug/L	49.32	<20	<20
Copper ug/L	162.2	332.6	<20
Cyanide µg/L	6	6	*
Fluoride µg/L	104	2470	58
Lead ug/L	64.2	144.5	<20
Nickel ug/L	36.9	66.5	<20
Zinc ug/L	674.5	1234.7	<20
Boron ug/L	<20	<20	<20
Cadmium ug/L	<20	<20	<20
Mercury µg/L	<0.03	<0.03	*
Selenium µg/L	<2.12	<2.12	*
Barium ug/L	304.9	84.97	<20

results were not for reporting

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