



**CORK COUNTY COUNCIL**

**WESTERN DIVISION**

**WATER SERVICES**

**Courthouse, Skibbereen, Co. Cork**

**APPLICATION FOR WASTE**

**WATER DISCHARGE LICENCE**

**CASTLETOWNSHEND, CO. CORK.**

**Application Form**  
**22<sup>nd</sup> June 2009**



**CORK COUNTY COUNCIL**  
**WESTERN DIVISION**  
**WATER SERVICES**

Courthouse, Skibbereen, Co. Cork

**Re: Waste Water Discharge Licence Application for the Agglomeration of Castletownshend**

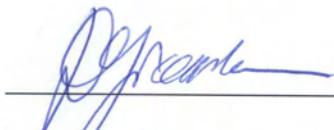
Dear Sir/Madam,

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

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.

  
Declan Groarke  
Senior Executive Engineer

This is a draft document and is subject to revision.



# Waste Water Discharge Licence Application Form

**EPA Ref. N<sup>o</sup>:**

*(Office use only)*

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## 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](http://www.epa.ie) Email: [info@epa.ie](mailto:info@epa.ie)

**Tracking Amendments to Draft Application Form**

Version No.	Date	Amendment since previous version	Reason
V. 1.	11/10/07	N/A	
V. 2.	18/10/07	Inclusion of a Note 1 superscript for Orthophosphate in Tables D.1(i)(b) & D.1(ii)(b).	To highlight the requirement for filtered samples in measurement of O-Phosphate for waste water discharges.
V.3.	13/11/07	Amend wording of Section F.2 to include 'abstraction'.  Amend wording of Checklist in Annex to reflect wording of Regulation 16(5) of S.I. No. 684 of 2007.  Inclusion of unique point code for each point of discharge and storm water overflow.	To accurately reflect the information required  To accurately reflect the Regulations and to obtain the application documentation in appropriate format.  To aid in cross-referencing of application documentation.
V.4	18/04/08	Inclusion of requirement to provide name of agglomeration to which the application relates.  Amend wording of Section B.7. (iii) to reflect the title of Water Services Authority.  Addition of new Section B.9 (ii) in order to obtain information on developments yet to contribute to the waste water works.  Addition of sub-sections C.1.1 & C.1.2 in order to clarify information required for Storm water overflow and pumping stations within the works.  Amend Section D.1 to include a requirement for monitoring data for influent	To accurately determine the agglomeration to be licensed.  To accurately reflect the Water Services Act, 2007.  To obtain accurate population equivalent figures for the agglomeration.  To obtain accurate information on design and spill frequency from these structures.  To acquire information on the population loading onto the plant and to provide information on performance rates within

		to waste water treatment plants, where available. Amend wording of Section E.1 to request information on composite sampling/flow monitoring provisions.	the plant. To acquire accurate information on the sampling and monitoring provisions for discharges from the works.
V.5	07/07/2008	Amend wording of B.7 (iii) to include reference to Water Services Authorities.  Amend Section G.1 to include Shellfish Waters Directive.	To accurately reflect the Water Services Act, 2007 requirements.
V.6	26/08/2007	Amendments to Section D to reflect new web based reporting.  Amended requirements for reporting on discharges under E.1 Waste Water Discharge Frequency and Quantities.  Amendment to Section F.1 to specify the type of monitoring and reporting required for the background environment.  Removal of Annexes to application form.	To clarify the reporting requirements.  To streamline reporting requirements.  To clarify the reporting requirements for ambient monitoring.  To reflect the new web based reporting requirements.

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Environmental Protection Agency  
Application for a Waste Water Discharge Licence  
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 Licence under the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007) or for the review of an existing Waste Water Discharge licence.

The Application Form **must** be completed in accordance with the instructions and guidance provided in the *Waste Water Discharge Licensing Application Guidance Note*. The Guidance Note gives an overview of Waste Water Licensing, outlines the licence 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 Licence must contain the information prescribed in the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007). Regulation 16 of the Regulations sets out the statutory requirements for information to accompany a licence 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 in respect of Regulation 16 requirements, please complete the Regulation 16 Checklist provided in Annex 2.

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 licences, and for the processing of reviews of such licences, appear 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.

Prior to submitting an application the applicant must publish in a newspaper circulating in the area, and erect at the point nearest to the waste water treatment plant concerned or, if no such plant exists, at a location nearest the primary discharge point, a notice of intention to apply. An applicant, not being the local authority in whose functional area the relevant waste water discharge, or discharges, to which the relevant application relates, takes place or is to take place, must also notify the relevant Local Authority, in writing, of their intention to apply.

An application for a licence must be submitted on the appropriate form (available from the Agency) 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 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 licence is an offence under the Waste Water Discharge (Authorisation) Regulations, 2007.



The provision of information in an application for a waste water discharge licence 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 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.

Castletownshend is a small village located 6.5km to the South East of Skibbereen, at the end of secondary regional road the R596. It is situated on the western shore and c.2km from the mouth of a relatively narrow sea inlet, Castlehaven. The settlement is in a protected bay suitable for boating and is used by leisure craft for moorings but there is an element of fishing. It is also a popular tourist centre in the summer period.

In the Skibbereen Electoral Area Local Area Plan(LAP), Castletownshend is designated as a “village”, the strategic aims for which are to encourage and facilitate population growth and support the retention and improvement of key facilities, including the provision of infrastructure.

A preliminary report was carried out by White Young Green Ireland Ltd Consulting Engineers on behalf of the Water Services Investment Programme Division of Cork County Council.

### **Existing Sewerage Scheme**

The existing scheme consists of an old stone culvert acting as a combined sewer taking foul and surface water from the older properties fronting onto Main Street and pavement run-off. The culvert discharges directly into the harbour through an outfall adjacent to the Boat Slip. The total number of properties connecting to this combined sewer is estimated to be 80 units.

Older properties such as the Castle, “Seafield”, and the other properties at the southern end of the village have individual septic tanks, discharging to soakaways and in a few instances, the foreshore. The housing fronting onto Cross Street and the

R595, as well as three houses at the top of Main St, are served by individual septic tanks and soakaways.

The new “The Lawn” development has separate foul and surface water drainage systems. The foul sewer drains to a dedicated treatment plant located 150m to the Northeast of the development with the treated effluent going to an adjacent percolation area. The surface water is also routed to the North East to discharge in the inner harbour, c.650m away. Cork County Council has not taken charge of this development.

### **Proposed Scheme**

Except for the temporary plant associated with the Lawn Development, which the Council has not taken charge of, there is no waster wastewater treatment for the village and the old stone culvert running down Main Street discharges untreated waste water to the harbour at the Quay Wall.

It is proposed to construct:

- A new treatment plant by DBO (capacity 1,000 PE) to be constructed in the NE corner of the designated area, north of Castletownshend, discharging through a marine outfall to the nearby inner harbour.
- Separate foul and surface water sewers on Main Street to replace the old stone culvert which is in extremely poor condition
- A foul pumping station at western quay and another adjacent to the existing outfall at the Boat Slip, to convey sewage from the village to the new treatment plant. Both pumping stations to have emergency overflows.
- The existing network is extended to serve all existing, where practical, and potential future development.

### **Proposed Service Network**

It is proposed to provide separate foul and storm sewers along the length of Main St, replacing the old stone culvert. The separation of surface water from the foul will significantly reduce the pumping capacity required at the Boat Slip, the size of the collection system to the treatment plant and eliminate a requirement for storm water storage at the plant.

The new foul sewer is to be extended along Cross St (South) and out the Coast Road. A separate sewer is to be laid on Cross St (North) to serve the existing housing and potential future development in the area. This sewer connects to the existing gravity network in the Lawn development rather than the pumped Main St. system. It is proposed that a terrace of houses fronting onto Cross Street will be connected to the proposed Coast Road sewer by a branch through the back gardens of the houses.

The existing combined sewers serving St. Barrahanes Avenue and the Mall will be connected to the proposed new Main Street sewer. All properties fronting onto the street would also be redirected to the new pipeline. The new sewer will flow to an underground pump-station located at the Quay, which will pump through a 100mm dia. rising main to a header manhole located on the proposed foul sewer network for the ‘The Lawn’ Phase 2 development. This discharge will be allowed for in the design of the sewers for the proposed development.

A new 150mm gravity foul sewer will convey flows from properties (8 no.) fronting onto the Western Quay to another underground pump station. This will pump through an 80mm dia. rising main, laid in parallel with the gravity sewer, to a header manhole in the Mall, with a short length of new gravity sewer on the Mall connecting this to the existing combined sewer.

The collection system for the existing Phase 1 of the Lawn development will be integrated with the Phase 2 network (by the Developer), with a 300mm gravity sewer conveying all flows to the proposed new treatment plant, c.200m to the northeast.

### **Proposed Wastewater Treatment Plant**

A nominal 1,000 PE treatment plant is proposed. This will deal with flows from the existing and future housing, and the existing and potential future commercial developments commensurate with the population growth.

The proposed plant would incorporate primary treatment and secondary treatment of either Sequence Batch Reactors (SBR) or Extended Aeration (EA) with submerged media and two stage primary settlement. The layout shown on the drawings is therefore indicative only and the final layout will be determined by the design-build-operate contractor's design. The plant design, however, will include for an inlet lift station, coarse screening, grit removal, secondary treatment (extended aeration or sequence batch reactor) and final clarification. Treatment facilities for sludge produced on site will also be provided. The design-build-operate contractor's proposal will be no larger in plan or height than the details shown on the drawings. The maximum height of the control building will be 4.5m above finished ground level and of other structures 2.5m above finished ground level.

It is proposed to provide a 200mm dia. outfall from the Treatment Plant to the edge of the channel in the inner harbour a distance of c.270m, half of which is on the foreshore / seabed.

### **The source of Emissions for the Wastewater Works**

The sources of emissions from Castletownshend are considered domestic. It does not have a school or an industry within the town boundary. It is however a popular tourist centre over the summer period.

The 2006 Census recorded the winter population or permanent residential population of 188. A house count, the water supply figures and anecdotal evidence would indicate a peak summer population of 2/2.5 times this or up to 450 people.

The design PE for the proposed WWTP is 1000 PE.

**The nature and quantities of foreseeable emissions from the wastewater works into the receiving aqueous environment as well as identification of significant effects of the emission to the environment**

The sources of emissions from Castletownshend are considered domestic. It does not have a school or an industry nor does it have any industrial zoned land within the town boundary. It is however a popular tourist centre over the summer period.

The existing scheme consists of an old stone culvert acting as a combined sewer and taking foul and surface water from the older properties fronting onto Main St. The sewage flows directly into the harbour untreated adjacent to the Boat Slip. Similarly there are a number of houses captured adjacent to Western Quay and again this sewage flows untreated into the harbour.

The 2006 Census recorded the winter population or permanent residential population of 188. A house count, the water supply figures and anecdotal evidence would indicate a peak summer population of 2/2.5 times this or up to 450 people.

The population projections in the preliminary report allow for a continuation of 4% annual average growth rate in the permanent population for the next 10 years. The peak summer number has been projected to grow by a similar percentage.

Castle Haven is not designated as a Natural Heritage Area, a Special Area of Conservation, a Proposed Natural Heritage Area or a Special Protected Area.

**The proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the wastewater works**

A new Wastewater Treatment Plant is proposed for Castletownshend. The scheme has received Part 8 Planning and was included in the Water Services Investment Programme 2007-2009. However the Department of the Environment, Heritage and Local Government has unapproved the scheme as an Serviced Land Initiative (SLI) scheme such that the most likely timeframe now is to have the scheme go for construction by March 2013, completion by June 2014.

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

A complete new service network and wastewater treatment plant is proposed to be constructed for Castletownshend. The treatment capacity, the discharge quality and control systems will be improved to ensure that no significant pollution is caused. The influent will undergo secondary treatment prior to discharge.

It is likely that under the DBO contract for Castletownshend Wastewater Treatment Plant, a Performance Management System will be required. Such a system would provide a uniform approach to dealing with performance management issues, including procedures for dealing with plant operation, and in particular for dealing with emergencies or failure to meet treated effluent standards. Failure to meet the specified treated effluent standards may result in final penalties to the operating contractor. As a result, the risk of environmental pollution from the treatment plant should be reduced.

**Measures planned to monitor emission into the environment**

The emissions from the existing sewage system can be monitored through the sampling point SW01 CEND and SW02 CEND.

When the proposed WWTP is constructed, monitoring and sampling of the emissions will be provided in the inlet and outlet works. The sampling will consist of a composite sampler and all emissions will be measured and can be sampled before discharge.

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

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**SECTION B: GENERAL**

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

**B.1 Agglomeration Details**

**Name of Agglomeration:** Castletownshend

**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 licence application relates. It should have the boundary of the agglomeration to which the licence application relates clearly marked in red ink.

<b>Name*:</b>	Cork County Council
<b>Address:</b>	Water Services (Western Division)
	Courthouse
	Skibbereen
	Co. Cork
<b>Tel:</b>	028-21299
<b>Fax:</b>	028-21995
<b>e-mail:</b>	declan.groarke@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.

<b>Name*:</b>	Declan Groarke
<b>Address:</b>	Cork County Council
	Courthouse
	Skibbereen
	Co. Cork
<b>Tel:</b>	028-21299
<b>Fax:</b>	028-21995
<b>e-mail:</b>	declan.groarke@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>	
<b>Tel:</b>	
<b>Fax:</b>	
<b>e-mail:</b>	

\*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 (authorisation) licence application.

**Design, Build & Operate Contractor Details**

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

\*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
	√	

**B.2 Location of Associated Waste Water Treatment Plant**

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

**Proposed Wastewater Treatment Plant**

<b>Name*:</b>	James Dwyer
<b>Address:</b>	Rectory
	Cork Road
	Skibbereen
	Co. Cork
<b>Grid ref (6E, 6N)</b>	E:118620 N:031623
<b>Level of Treatment</b>	Secondary
<b>Primary Telephone:</b>	028-21299
<b>Fax:</b>	028-23836
<b>e-mail:</b>	james.dwyer@corkcoco.ie

\*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.

**Existing Discharge Point**

<b>Type of Discharge</b>	Open Culvert
<b>Unique Point Code</b>	SW01 CEND
<b>Location</b>	Castlehaven
<b>Grid ref (6E, 6N)</b>	E:118671 N:031292

**Proposed Discharge Point**

<b>Type of Discharge</b>	200mm Outfall Pipe
<b>Unique Point Code</b>	SW03P CEND
<b>Location</b>	Castlehaven
<b>Grid ref (6E, 6N)</b>	E:118895 N:031628

**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.

**Existing Secondary Discharge Points**

<b>Type of Discharge</b>	200mm pipe encased in concrete
<b>Unique Point Code</b>	SW02 CEND
<b>Location</b>	Castlehaven
<b>Grid ref (6E, 6N)</b>	E:118652 N:031130

**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.

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

**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>	
<b>Location</b>	
<b>Grid ref (6E, 6N)</b>	

**Attachment B.5** should contain appropriately scaled drawings / maps (≤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.

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

**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
	Norton House
	Skibbereen
	Co. Cork
<b>Tel:</b>	028-40340
<b>Fax:</b>	028-21660
<b>e-mail:</b>	

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

<i>has been obtained</i>	✓	<i>is being processed</i>	
<i>is not yet applied for</i>		<i>is not required</i>	

<b>Local Authority Planning File Reference N<sup>o</sup>:</b>	Part 8 Planning for Castletownshend WWTP, Access Road, Administration Building, Outfalls, Pumping Station and Associated Site Works.  Part 8 Planning for Castletownshend Sewerage Scheme Western Quay Pumping Station
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**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.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.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>	Area Headquarters
	Hospital Grounds
	Skibbereen
<b>Tel:</b>	028-40400
<b>Fax:</b>	028-21006
<b>e-mail:</b>	Info@hse.ie

B.7 (iii) Other Relevant Water Services Authorities

Regulation 13 of the Waste Water Discharge (Authorisation) Regulations, 2007 requires all applicants, not being the water services authority in whose functional area the relevant waste water discharge or discharges, to which the relevant application relates, takes place or is to take place, to notify the relevant water services authority of the said application.

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

<b>Relevant Authority Notified</b>	<b>Yes</b>	<b>No</b>
		✓

**Attachment B.7(iii)** should contain a copy of the notice issued to the relevant local authority.

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

**B.8 Notices and Advertisements**

Regulations 10 and 11 of the Waste Water Discharge (Authorisation) Regulations, 2007 require all applicants to advertise the application in a newspaper and by way of a site notice. See *Guidance Note*.

**Attachment B.8** should contain a copy of the site notice and an appropriately scaled drawing (≤A3) showing its location. **The original application must include the original page of the newspaper in which the advertisement was placed.** The relevant page of the newspaper containing the advertisement should be included with the original and two copies of the application.

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

**B.9 (i) Population Equivalent of Agglomeration**

**TABLE B.9.1 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 Populations**

**Winter Population**

<b>Population Equivalent</b>	<b>188</b>
<b>Data Compiled (Year)</b>	<b>2006</b>
<b>Method</b>	<b>Census</b>

**Summer Population**

<b>Population Equivalent</b>	<b>400/450</b>
<b>Data Compiled (Year)</b>	<b>2007</b>
<b>Method</b>	<b>Preliminary Report &amp; addition of increase in population from Census</b>

**Future Populations**

**Winter Population**

<b>Population Equivalent</b>	<b>280</b>
<b>Data Compiled (Year)</b>	<b>2015</b>
<b>Method</b>	<b>Preliminary Report</b>

**Summer Population**

<b>Population Equivalent</b>	<b>643</b>
<b>Data Compiled (Year)</b>	<b>2015</b>
<b>Method</b>	<b>Preliminary Report</b>

The 2006 Census recorded the winter population or permanent residential population of 188. A house count, the water supply figures and anecdotal evidence would indicate a peak summer population of 2/2.5 times this or up to 450 people. Castletownshend is a popular tourist centre over the summer period. It does not have a school or an industry within the town boundary.

The population projections in the preliminary report allow for a continuation of 4% annual average growth rate in the permanent population for the next 10 years. The peak summer number has been projected to grow by a similar percentage.

**B.9 (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 water habitat.

The only development proposed for Castletownshend is for a Residential Development comprising of 45nr of houses (08/760). Cork County Council's Planning Department has granted planning permission subject to a number of conditions. The main condition concerning the Environment is Condition 8

- No development shall first commence on the subject site until work has first commenced on the new Wastewater Treatment Facility for Castletownshend, unless otherwise agreed in writing by the Planning Authority.
- No dwelling(s) shall be first occupied until the new Wastewater Treatment Facility for Castletownshend and the network collection system is fully operational, unless otherwise agreed in writing by the Planning Authority.

However this development is under appeal to An Bord Pleanala.

Case ref: PL88 .232390.

The case is due to be decided by the 18th of May 2009.

The 2006 Census was used to determine the occupancy rate per house for the permanent residential addresses. The Cork County rural average occupancy in the 2006 Census was 2.96 persons per house. Additional  $45 \times 2.96 = 133.2$  PE

It is considered that all additional PE from pending developments are from domestic activities.

**B.9 (iii) FEES**

State the relevant Class of waste water discharge as per Column 1 of the Second Schedule, 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 €)
Discharges from agglomerations with a population equivalent of 500 to 1,000	€10,000

Appropriate Fee Included	Yes	No
	√	

**B.10 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), 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.

Castletownshend Sewerage Scheme is listed in the Water Services Investment Programme 2007-2009 and according to the programme construction is to commence in 2009. However the Department of the Environment, Heritage and Local Government has unapproved the scheme as an SLI scheme such that the most likely timeframe now is to have the scheme go for construction by March 2013, completion by June 2014.

**Attachment B.10** 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.11 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.

**Attachment B.11** should contain a summary of any relevant correspondence issued in relation to a Section 63 notice.

Attachment included	Yes	No
		√

**B.12 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.

**Foreshore Licence File Reference: MS51/8/1309**

Cork County Council has made an application for a Foreshore Licence for a new outfall pipe in Castle Haven Bay. The draft conditions attached to the Foreshore Licence can be found in attachment B12.

**Attachment B.12** 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
	✓	

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## 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.

#### 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.

#### 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.

### **Existing Sewerage Scheme**

An old stone culvert runs the length of Main Street. This serves as a combined sewer taking foul and surface water from the older properties fronting onto Main Street and pavement run-off. Three properties at the top of the street are not connected to the culvert, but to individual septic tanks.

A combined sewer serving the relatively recently constructed houses at St. Barrahanes Avenue connects to the culvert and four houses at the Northern end of the Mall are served by a sewer which runs in a narrow lane behind the houses fronting onto Main Street connecting to the culvert at the bottom of Main Street.

The culvert is to run to an outfall adjacent the Boat Slip. The other older properties such as the Castle, "Seafield" and other properties at the Southern end of the Mall have individual septic tanks and sea outfalls. The housing fronting onto Cross Street and the R595 are served by individual septic tanks and soakaways.



The new “The Lawn” development has separate foul and surface water drainage systems. The foul sewer drains to a dedicated treatment plant located 150m to the Northeast of the development with the treated effluent going to an adjacent percolation area. The surface water is also routed to the North East to discharge in the inner harbour, c.650m away. Cork County Council has not taken charge of this development.

### **Proposed Service Network**

It is proposed to provide separate foul and storm sewers along the length of Main St, replacing the old stone culvert. The separation of surface water from the foul will significantly reduce the pumping capacity required at the Boat Slip, the size of the transmission system to the treatment plant and eliminate a requirement for storm water storage at the plant.

The new foul sewer is to be extended along Cross St (South) and out the Coast Road. A separate sewer is to be laid on Cross St (North) to serve the existing housing and potential future development in the area. This sewer connects to the existing gravity network in the Lawn development rather than the pumped Main St. system. It is proposed that a terrace of houses fronting onto Cross Street will be connected to the proposed Coast Road sewer by routing it through the back gardens of the houses.

The existing combined sewers serving St. Barrahane's Avenue and the Mall will be connected to the proposed new Main Street sewer. All properties fronting onto the street would also be redirected to the new pipeline. The new sewer will flow to an underground pump-station located at the Quay, which will pump through a 100mm dia. rising main to a header manhole located on the proposed foul sewer network for the ‘The Lawn’ Phase 2 development. This discharge will be allowed for in the design of the sewers for the proposed development.

A new 150mm gravity foul sewer will convey flows from properties (8 no.) fronting onto the Western Quay to another underground pumpstation. This will pump through an 80mm dia. rising main, laid in parallel with the gravity sewer, to a header manhole in the Mall, with a short length of new gravity sewer on the Mall connecting this to the existing combined sewer.

The collection system for the existing Phase 1 of the Lawn development will be integrated with the Phase 2 network (by the Developer), with a 300mm gravity sewer conveying all flows to the proposed new treatment plant, c.200m to the northeast.

### **Proposed Wastewater Treatment Plant**

A nominal 1,000 PE treatment plant is proposed. This will deal with flows from the existing and future housing, and the existing and potential future commercial developments commensurate with the population growth.

The proposed plant would incorporate primary treatment and secondary treatment of both the type Sequence Batch Reactors (SBR) or Extended Aeration (EA) with submerged media and two stage primary settlement. The layout shown on the drawings is therefore indicative only and the final layout will be determined by the

design-build-operate contractor’s design. The plant design, however, will include for an inlet lift station, coarse screening, grit removal, secondary treatment (extended aeration or sequence batch reactors) and final clarification. Treatment facilities for sludge produced on site will also be provided. The design-build-operate contractor’s proposal will be no larger in plan or height than the details shown on the drawings. The maximum height of the control building will be 4.5m above finished ground level and of other structures 2.5m above finished ground level.

It is proposed to provide a 200mm dia. outfall from the Treatment Plant to the edge of the channel in the inner harbour, a distance of c.270m, half of which is on the foreshore / seabed.

The effluent will be treated to meet the following discharge standards:

BOD5	25.0 mg/l
SS	35.0 mg/l
COD	125 mg/l

The following boundary conditions will apply to the operation of the WWTP:

- Noise limit :- 55dBA (day time); 45dBA (night time)
- Odour limit :- 3ouE / m3 on a 98 percentile basis.

**Proposed Pump-station 1 (Boat Slip)**

The proposed pumping station is located at the Quay. The pump-station will be constructed underground.

The following boundary conditions will apply to the operation of the pumping station:

- Noise limit :- 45dBA (all times)
- Odour limit :- 3ouE / m3 on a 98 percentile basis.

It is proposed to use a 200mm dia. pipe as an emergency overflow.

The size of the pump chamber and pumps will be designed to avoid overflows. There will be a stand-by pump. There will be an alarm system in place and sufficient storage within the chamber to allow time for a back up power supply to be put in place when necessary. No report has been carried out with regard to storm water overflows according to DoEHLG ‘Procedures and Criteria in Relation to Storm Water Overflows’, 1995. Details of the proposed pump-station on the Quay can be found in attachment C.1.

**Proposed Pump-station 2 (Western Quay)**

The proposed pumping station is located on the shoreline to the southeast of the village at Western Quay. The pump-station will be constructed underground and the maximum height of the associated control kiosk will be 1m above finished ground level.

The following boundary conditions will apply to the operation of the pumping station:

- Noise limit :- 45dBA (all times)
- Odour limit :- 3ouE / m3 on a 98 percentile basis.

It is proposed to use a 225mm dia. pipe as an emergency overflow. The size of the pump chamber and pumps will be designed to avoid overflows. There will be a stand-by pump. There will be an alarm system in place and sufficient storage within the chamber to allow time for a back up power supply to be put in place when necessary. No report has been carried out with regard to storm water overflows according to DoEHLG ‘Procedures and Criteria in Relation to Storm Water Overflows’, 1995. Details of the proposed pump-station on Western Quay can be found in attachment C.1.

**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.

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

**C.2 Outfall Design and Construction**

Provide details on the primary discharge point & secondary discharge points and storm overflows to include reference, location, design criteria and construction detail.

**Table C.2.1: Details of Existing Discharging Outfalls**

Discharge	Reference	Location	Design Criteria	Construction Details
Primary	SW01 CEND	E:118671, N:031292	Open Culvert	Set in pier wall, flush with wall face
Secondary	SW02 CEND	E:118652, N:031130	200mm diameter outlet pipe	Concrete pipe in concrete surround, discharges below LWL

**Table C.2.2: Details of Proposed Discharging Outfalls**

Discharge	Reference	Location	Design Criteria	Construction Details
Primary	SW03P CEND	E:118895, N:031628	200mm diameter outlet pipe	200mm HDPE

SW03P will take over as the primary discharge point once the new wastewater treatment plant is constructed and commissioned. Until then SW01 will remain the primary discharge point. It must be noted that a stream infiltrates the culvert near the Boat slip therefore the discharge is well diluted prior to discharge from SW01. SW02 is a secondary discharge point and this is discharging waste from 8 no houses. It must be noted that Pump-station 1 (Boat Slip) and Pump-station 2 (Western Quay) will each have an emergency overflow.

**Attachment C.2** should contain any supporting documentation on the design and construction of any and all discharge outfalls, including stormwater overflows, from the waste water works.

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

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**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 emissions 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 D.1(i), (b) & (c) and D.1(ii), (b) & (c) of Annex 1 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 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 D.1(i)(a), (b) & (c), should be completed for the primary discharge point from the agglomeration and Tables D.1(ii)(a), (b) & (c) should be completed for **each** secondary discharge point, where relevant. Table D.1(iii)(a) 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 plant this data should also be provided in response to Section D.1.

Supporting information should form **Attachment D.1**

<b>Attachment included</b>	<b>Yes</b>	<b>No</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
SW01 CEND	Primary - Existing	Cork County Council	Coastal	Castle Haven	None	118671	031292
SW02 CEND	Secondary - Existing	Cork County Council	Coastal	Castle Haven	None	118652	031130
SW03P CEND	Proposed Primary Discharge	Cork County Council	Coastal	Castle Haven	None	118895	031628

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.

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**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 E.1(i) 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 E.1(ii) 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 meters.

When the proposed WWTP is constructed, monitoring and sampling of the emissions will be provided in the inlet and outlet works. The sampling will consist of a composite sampler and all emissions will be measured and can be sampled before discharge.

**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 emission 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.

<b>Attachment included</b>	<b>Yes</b>	<b>No</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
SW-01 CEND	Primary – Discharge	S	118671	031292	N
aSW- 1Coast	Receiving Waters	S	118636	030951	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 16(1)(h) of the Waste Water Discharge (Authorisation) Regulations 2007 requires all applicants in the case of an existing waste water treatment plant 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 16(1)(l) of the regulations requires applicants to give details of compliance with any applicable monitoring requirements and treatment standards.

**Attachment E.4** should contain any supporting information.

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



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

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

Detailed 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).

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. Assessment of Impact on Receiving Surface or Ground Water**

- Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

#### **Existing Primary Discharge Point**

The existing outfall discharges effluent adjacent to the quay wall at the Boat Slip. The outfall is a culvert which is flush with the quay wall. The effluent appears well diluted due to the fact that a stream infiltrates the culvert prior to discharge. The culvert discharges just above high water mark. Castle Haven is not designated as a Natural Heritage Area, a Special Area of Conservation, a Proposed Natural Heritage Area or a Special Protected Area. The location of the existing outfall is in an area of the bay which is not suitable for bathing.

#### **Proposed Primary Discharge Point**

It is proposed to provide a 200mm dia. outfall pipe from the proposed Treatment Plant to the edge of the channel in the inner harbour. Castle Haven is not designated as a Natural Heritage Area, a Special Area of Conservation, a Proposed Natural Heritage Area or a Special Protected Area. The location of the existing outfall is in an area of the bay which is not a recognised location for bathing. Recent sampling (see Attachment E.4) has yielded a result of 7 mg/l for BOD which is below the Urban Waste Water Directive limit of 25 mg/l. This is probably due to the influence of the stream mentioned above. Similarly low levels are evident for all the other parameters. Obviously discharge of raw waste water to the harbour is undesirable and the need for appropriate treatment is desirable. Notwithstanding this, sampling of receiving waters demonstrates yielded quite a low BOD of 1 mg/l.

An application for a Foreshore License has been made to the Department of Agriculture, Fisheries and Food. The following are the specific conditions attached to the license.

1. During excavation for the pipeline, care should be taken to minimise the disturbance to the foreshore. The excavated beach material should be replaced matching, as much as reasonably possible, the surrounding bed profile.
2. No boats should be washed/cleaned in the vicinity of the outfall.
3. The extremity of the outfall should be marked; this may be achieved by the use of a float painted a high visibility yellow.
4. Cork County Council is required to arrange the publication of a local marine notice. This local marine notice should give a general description of operations and approximate dates of operations and approximate dates of commencement and completion. A notice in a locally read newspaper at least two weeks prior to operations will suffice.
5. Archaeological monitoring of the two areas where the outfall pipes are due to be placed be is to be undertaken during the course of the works...
  - o Details of all monitoring of the receiving 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 F.1(i)(a) & (b) 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 F.1(i)(a) & (b). Monitoring of surface water shall be carried out at not less than two points, one upstream from the discharge location and one downstream.
  - o For discharges from secondary discharge points Tables F.1(ii)(a) & (b) should be completed. Furthermore, provide summary details and an assessment of the impacts of any existing or proposed emissions on the surface water or ground (aquifers, soils, sub-soils and rock environment), including any impact on environmental media other than those into which the emissions are to be made.

### **Existing Secondary Discharge Point**

There's one existing secondary discharge point. SW02 is located to the south of the existing primary discharge and adjacent to western quay. This is a 200mm pipe encased in concrete and it extends approximately 30m from the quay wall into bay. This discharges untreated effluent from 8nr of houses. Castle Haven is not designated as a Natural Heritage Area, a Special Area of Conservation, a Proposed Natural Heritage Area or a Special Protected Area. The location of the existing outfall is in an area of the bay which is not used for bathing. The discharge of raw waste water to the harbour area has an undesirable impact on the receiving water and the proposals for the upgrading of Castletownshend Sewerage Scheme includes the collection of this discharge to a pump station whence it will be pumped to proposed WWTP for secondary treatment.

- Provide details of the extent and type of ground emissions at the works. For larger discharges to groundwaters, e.g., from Integrated Constructed Wetlands, large scale percolation areas, etc., a comprehensive report must be completed which should include, inter alia, topography, meteorological data, water quality, geology, hydrology, and hydrogeology. The latter must in particular present the aquifer classification and vulnerability. The Geological Survey of Ireland Groundwater Protection Scheme Dept of the Environment and Local Government, Geological Survey of Ireland, EPA (1999) methodology should be used for any such classification. This report should also identify all surface water bodies and water wells that may be at risk as a result of the ground discharge.

There are no ground-water emissions from the existing or proposed discharges to which this licence application pertains.

- 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 water.

Castletownshend and its environs are not within a designated area and are not designated as sensitive waters under the Urban Wastewater Treatment Directive. South Western River Basin District (SWRBD) has classified Castle Haven as “Probably not at significant risk”.

- 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 effluent being discharge is mainly domestic and with no industrial contribution, it can be assumed that the presence of these substances is negligible. This has been confirmed by results of analysis of receiving water outlined in Table E4.

- In circumstances where water abstraction points exist downstream 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.

No water abstraction points exists downstream of any of the discharge locations.

- 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)

Not applicable – None of the above directives apply in this case.

- o Describe, where appropriate, measures for minimising pollution over long distances or in the territory of other states.

There are no measures in place to minimise pollution over long distances. The emissions from the existing discharge point would be unlikely to impair the environment given the high level of dilution available in the coastal waters.

- o This section should also contain full details of any modelling of discharges from the agglomeration. Full details of the assessment and 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>
		√

**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 <sup>3</sup> /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.

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.

There are no Drinking Water Abstraction Points downstream of the discharge point because it is coastal discharge.

**Attachment F.2** should contain any supporting information.

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## 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 (79/923/EEC).

It is proposed to construct:

- A new treatment plant by DBO (capacity 1,000 PE) to be constructed in the NE corner of the designated area, north of Castletownshend, discharging through a marine outfall to the nearby inner harbor.
- Separate foul and surface water sewers on Main Street to replace the old stone culvert which is in extremely poor condition
- A foul pumping station at western quay and another adjacent to the existing outfall at the Boat Slip, to convey sewage from the village to the new treatment plant. Both pumping stations to have emergency overflows.
- The existing network is extended to serve all existing, where practical, and potential future development.

Castletownshend Sewerage Scheme is listed in the Water Services Investment Programme 2007-2009 and according to the programme, construction is to commence in 2009. It has now come to light that due to the current economic climate the Department of the Environment, Heritage and Local Government has unapproved the scheme and it appears to have been deferred till March 2013 for construction, completion by June 2014.

### Compliance with Council Directives

At present there is no record of non compliance in relation to the emissions from the agglomeration with the council directives. The untreated effluent from the existing primary discharge point appears to be well diluted, due to a stream infiltrating the existing culvert, prior to discharge. A Preliminary Report has been carried out by White Young Green Ltd, Consulting Engineers and a programme of improvements and a new Waste Water Treatment Plant has been proposed for Castletownshend.

Once this new WWTP has been constructed and commissioned the level of treatment, control and monitoring will be improved and hence further facilitate compliance with the Council Directives. The following details the compliance with the applicable directives.

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

The effluent from Castletownshend is mainly tourist and domestic and the industrial contribution can be considered as negligible. For this reason, we can assume that any dangerous substances mentioned in the Dangerous Substances Regulations will not be present in the discharge.

The new WWTP proposed in the programme of improvement shall advance the level of control by increasing the number of sampling and monitoring points. The detection of any dangerous substances will be then facilitated.

#### **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. Cork County Council through the Water Services Investment Programme propose to construct a new wastewater treatment facility at Castletownshend to provide secondary treatment to the effluent prior to discharge to the harbour, thus improving water quality in Castle Haven. Regular monitoring of inlet and outlet flows will be scheduled at the proposed WWTP and a monitoring programme will be implemented to monitor for dangerous substances in the receiving waters. The proposed wastewater treatment plant will comply with this directive.

South Western River Basin District (SWRBD) has classified Castle Haven as “Probably not at significant risk”.

The proposed pump-stations are designed to cater for a range of flows. The size of the pump chamber and pumps will be designed to avoid overflows. There will be a stand-by pump. There will be an alarm system in place and sufficient storage within the chamber to allow time for a back up power supply to be put in place when necessary.

#### **Birds Directive 79/409/EEC**

#### **Habitats Directive 92/43/EEC**

Castle Haven is not designated as a Natural Heritage Area, a Special Area of Conservation, a Proposed Natural Heritage Area or a Special Protected Area. Due to this fact, it is not foreseen that any negative impacts will arise from the agglomeration in relation to these directives.

#### **Groundwater Directives 80/68/EEC & 2006/118/EEC**

The fact that all discharges are to the sea, it is not foreseen that any negative impacts will arise from the agglomeration in relation to these directives.

**Drinking Water Directives 80/778/EEC**

This Directive concerns standards for water intending for human consumption. As there is no drinking water abstraction point in the vicinity of any of the discharge points, this directive is not applicable.

**Urban Waste Water Treatment Directive 91/271/EEC**

As stated in the S.I. No. 254 of 2001, Urban Waste Water Treatment Regulation, 2001:

“A sanitary authority shall ensure by 31 December 2005 that urban waste water entering a collection system shall before discharge be subject to appropriate treatment in the following cases:

- (a) in respect of discharge to freshwater and estuaries from agglomerations with a population equivalent of less than 2,000.
- (b) in respect of discharges to coastal waters from agglomerations with a population equivalent of less than 10000.

The treated effluent quality standard for the Castletownshend Waste Water Treatment Plant is to comply with the E.U. Urban Waste Water Treatment Directive Standards. Which are as follows:

- BOD 25mg/l
- COD 125mg/l
- Total Suspended Solids 35mg/l

Detailed design of the proposed treatment plant has not yet been carried out. A typical plant would consist in this case of screening, aeration, settlement with return of sludge and sludge treatment and removal and will also include storm water storage.

**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.

It is likely that under the contract for Castletonshend Wastewater Treatment Plant, a Performance Management System will be required. Such a system would provide a uniform approach to dealing with performance management issues, including procedures for dealing with plant operation, and in particular for dealing with emergencies or failure to meet treated effluent standards. Failure to meet the specified treated effluent standards may result in final penalties to the operating contractor. As a result, the risk of environmental pollution from the treatment plant may be reduced.



**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/EC 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.

The location of the existing outfall is in an area of the bay which is not used for bathing.

**Shellfish Waters Directive 79/923/EEC**

Castle Haven 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.

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

**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 Phosphorus 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.

Not applicable for discharges into sea.

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

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

**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.

It is proposed to construct:

- A new treatment plant by DBO (capacity 1,000 PE) to be constructed in the NE corner of the designated area, north of Castletownshend, discharging through a marine outfall to the nearby inner harbor.
- Separate foul and surface water sewers on Main Street to replace the old stone culvert which is in extremely poor condition
- A foul pumping station at western quay and another adjacent to the existing outfall at the Boat Slip, to convey sewage from the village to the new treatment plant. Both pumping stations to have emergency overflows.
- The existing network is extended to serve all existing, where practical, and potential future development.

Castletownshend Sewerage Scheme is listed in the Water Services Investment Programme 2007-2009 and according to the programme, construction is to commence in 2009. However the Department of the Environment, Heritage and Local Government has unapproved the scheme as an SEI scheme such that the most likely timeframe now is to have the scheme go for construction by March 2013, completion by June 2014.

**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.

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

**G.4 Storm Water Overflow**

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 storm water overflows.

**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.

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

**SECTION H: DECLARATION**

**Declaration**

I hereby make application for a waste water discharge licence/revised licence, 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 : *Michael Mahony*  
(on behalf of the organisation)

Date : 18/6/09

Print signature name: MIKAL MAHONY

Position in organisation: SENIOR ENGINEER

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**SECTION I: JOINT DECLARATION**

**Joint Declaration** <sup>Note1</sup>

I hereby make application for a waste water discharge licence/revised licence, 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.

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## ANNEX 1 – TABLES / ATTACHMENTS

### Section A - Non Technical Summary

Attachment A1 – CEND A1-01 – Site Location Map of Agglomeration

### Section B - General

Attachment B1 – CEND B1-01 – Castletownshend Agglomeration Boundary Map

Attachment B2 – CEND B2-01 – Site Location of Proposed Waste Water Treatment Plant

Attachment B2 – CEND B2-02 – Site Layout of Proposed Waste Water Treatment Plant

Attachment B3 – CEND B3-01 – Existing & Proposed Primary Discharge Point

Attachment B4 – CEND B4-01 – Existing Secondary Discharge Point

Attachment B6 – Part 8 Planning Permission – County Managers Report on the Castletownshend Sewerage Scheme and a County Managers Report on the Castletownshend Sewerage Scheme Western Quay Pumping Station

Attachment B8 – CEND B8-01 – Location of Site Notices

- Site Notice
- Press Notice

Attachment B9 – Application Fee

Attachment B12 – Foreshore License Specific Conditions

### Section C – Infrastructure & Operation

Attachment C1 - CEND C1-01 – Proposed Waste Water Treatment Plant Process Layout Plan

Attachment C1 - CEND C1-02 – Proposed Waste Water Treatment Plant Sections

Attachment C1 - CEND C1-03 – Proposed Main Pump-Station Details

Attachment C1 - CEND C1-04 – Proposed Western Quay Pump-Station Details

Attachment C1 - CEND C1-05 – Existing & Proposed Sewerage Network

## **Section E – Monitoring**

Attachment E2 - Monitoring Programme

Attachment E2 - CEND E2-01 – Locations of Sampling Points

Attachment E4 - Sampling Data

## **Tables D – Discharges to the Aquatic Environment**

Tables D.1 (i)(a), (b) & (c) Emission to Surface Water – Primary Discharge

Tables D.1 (ii)(a), (b) & (c) Emission to Surface Water – Secondary Discharge

## **Tables E – Monitoring**

Tables E.1 (i) Wastewater Frequency and Quality of Discharge – Primary & Secondary Discharge

## **Tables F – Existing Environment & Impact of the Discharges**

Tables F.1 (i)(a) Surface/Ground Water Monitoring – Primary Discharge

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

Tables F.1 (ii)(a) Surface/Ground Water Monitoring – Secondary Discharge

Tables F.1 (ii)(b) Surface/Ground Water Monitoring (dangerous substances) – Secondary Discharge

# **ANNEX 2 – Checklist**

## **Checklist for Regulation 16/17 Compliance**

# SECTION A

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Attachment A.1

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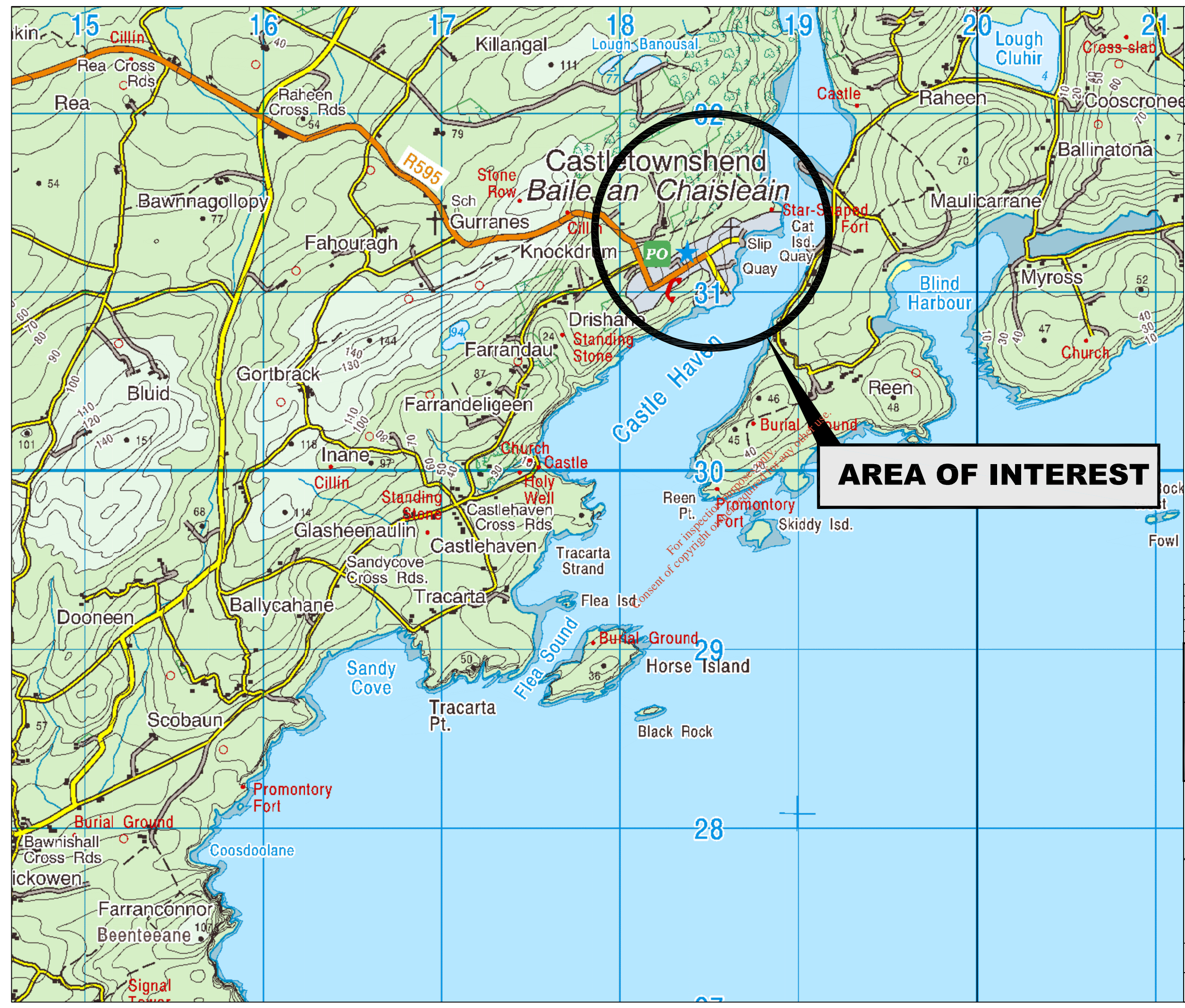
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## **Attachment A1**

### **Map:**

- **CEND A1-01** - Site Location Map

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**AREA OF INTEREST**

- NOTES**
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COURTHOUSE, SKIBBEREEN.  
  
M. MURRELL,  
DIRECTOR OF SERVICES  
WEST CORK

Job Title:  
CASTLETOWNSHEND\_WASTE\_WATER  
DISCHARGE\_LICENCE\_APPLICATION

Drawing Title:  
ATTACHMENT\_A.1  
AGGLOMERATION\_LOCATION\_MAP

Prepared By: D.O'DONOVAN	Checked By: D.GROARKE	Date: JUNE 2009
Drawing number: CEND_A1_01	Scales: 1/20000	Rev: -

# SECTION B

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Attachment B.1

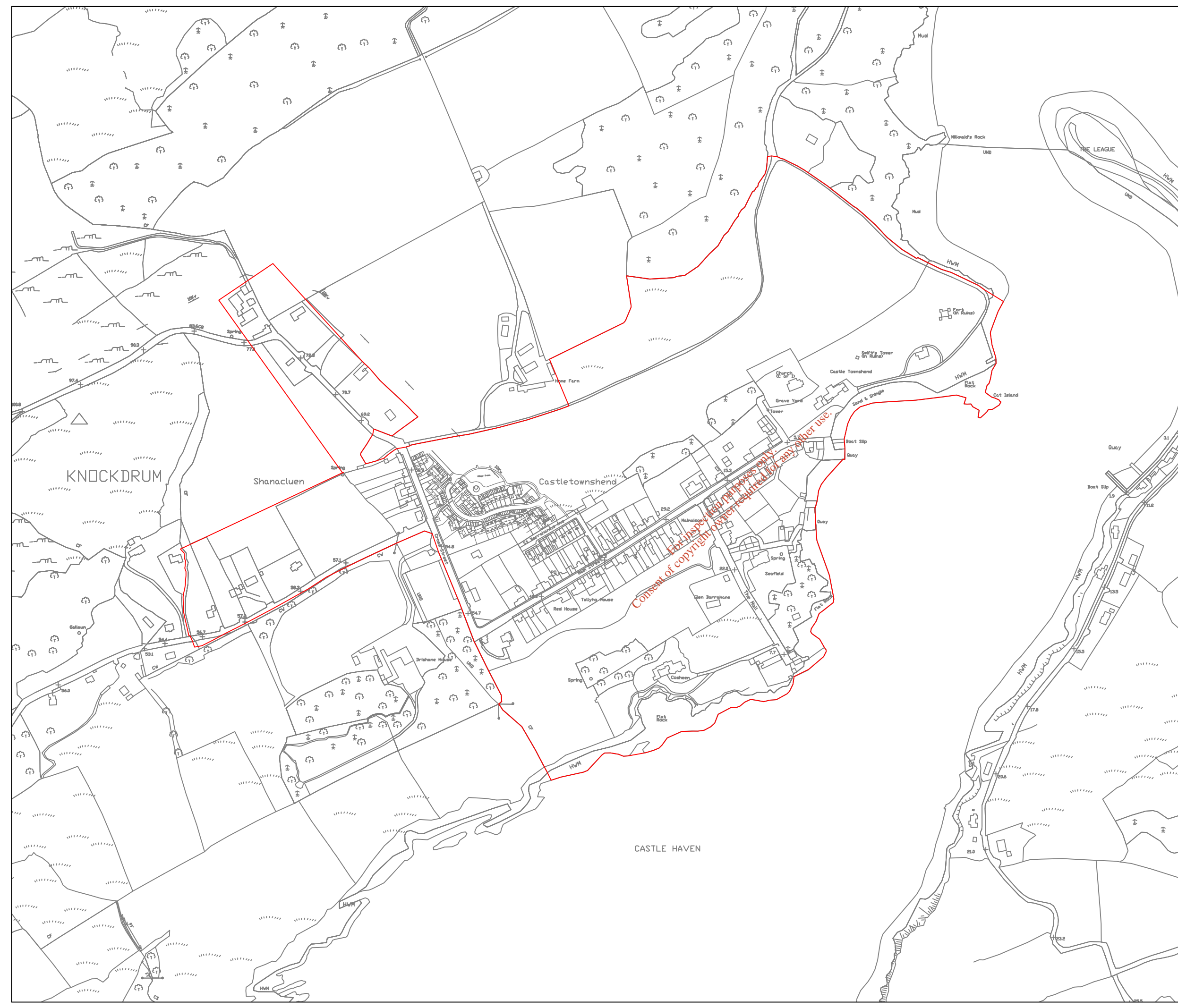
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## **Attachment B1**

### **Map:**

- **CEND B1-01** – Castletownshend Agglomeration Boundary Map

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**LEGEND**

— AGGLOMERATION BOUNDARY

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COURTHOUSE, SKIBBEREEN.  
  
M. MURRELL,  
DIRECTOR OF SERVICES  
WEST CORK

Job Title:  
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DISCHARGE\_LICENCE\_APPLICATION**

Drawing Title:  
**ATTACHMENT\_B.1  
AGGLOMERATION\_BOUNDARY**

Prepared By: D.O'DONOVAN	Checked By: D.GROARKE	Date: JUNE.2009
Drawing number: CEND_B1_01	Scales: 1/5000	Rev: -

## Attachment B.2

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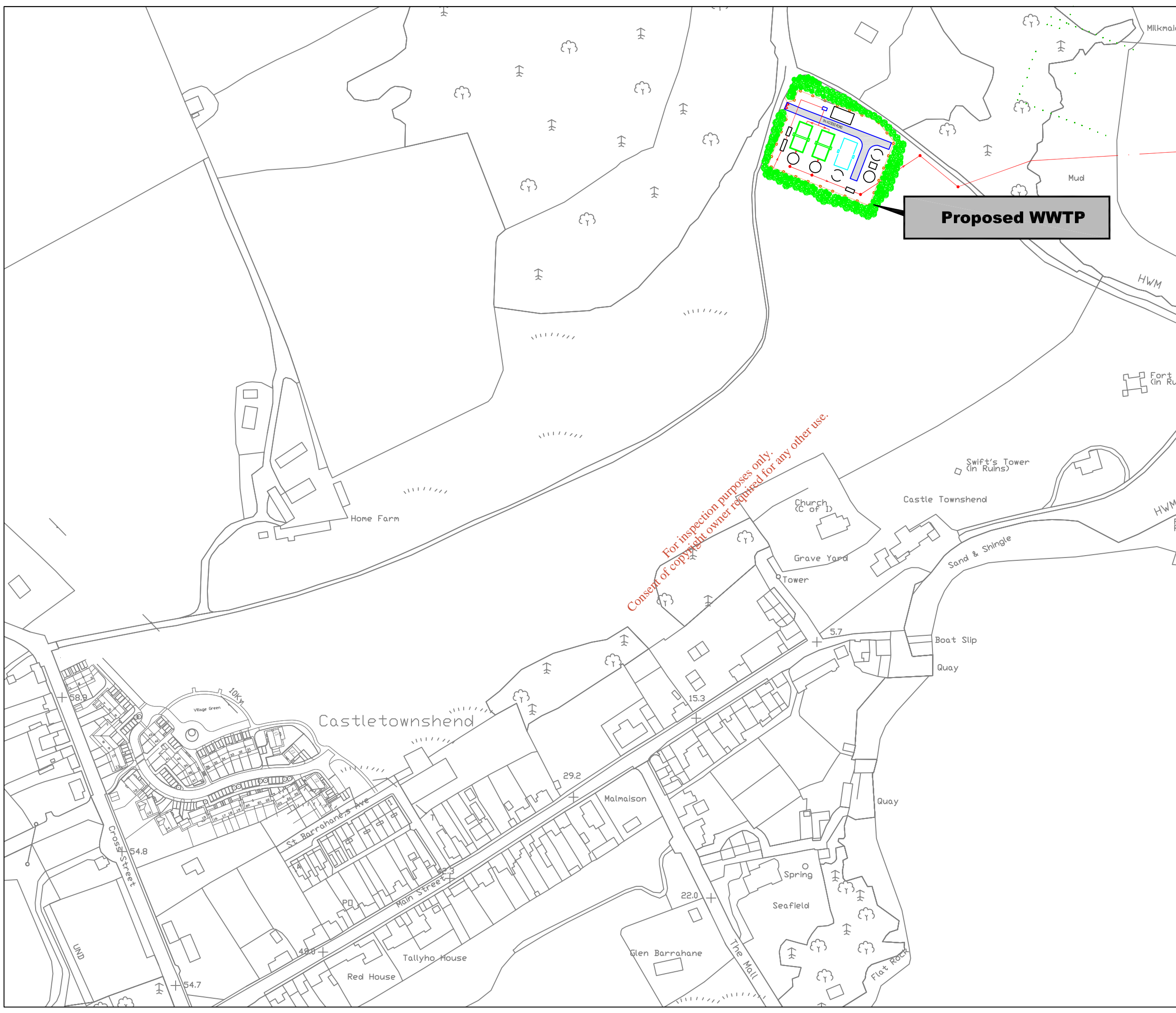


## **Attachment B1**

### **Map:**

- **CEND B2-01** – Site Location of Proposed Wastewater Treatment Plant
- **CEND B2-02** – Layout Plan of Proposed Wastewater Treatment Plant

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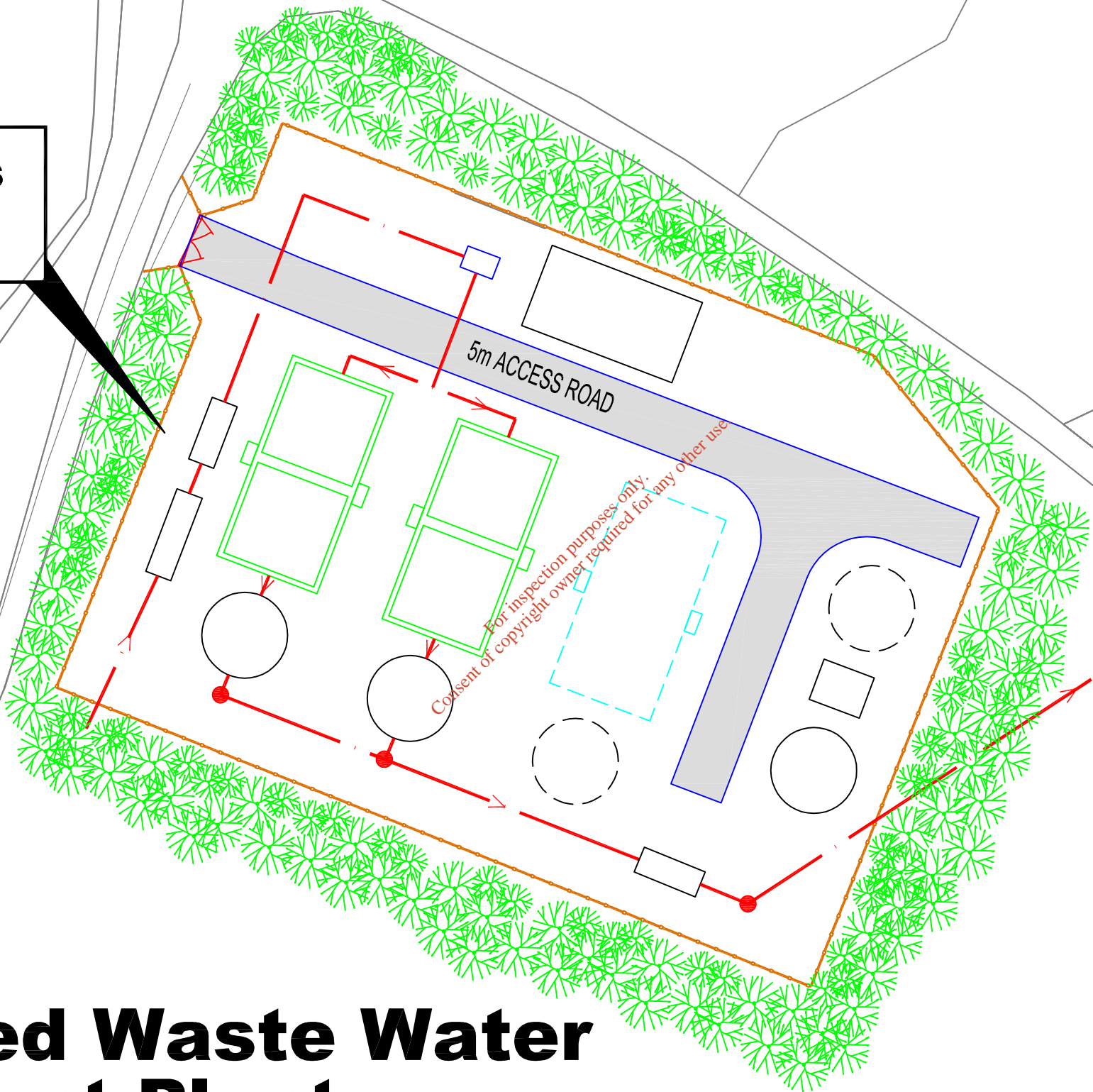
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COURTHOUSE, SKIBBEREEN.  
  
M. MURRELL,  
DIRECTOR OF SERVICES  
WEST CORK

Job Title:  
**CASTLETOWNSHEND\_WASTE\_WATER  
DISCHARGE\_LICENCE\_APPLICATION**

Drawing Title:  
**ATTACHMENT\_B.2  
SITE\_LOCATION\_OF\_PROPOSED  
WASTE\_WATER\_TREATMENT\_PLANT**

Prepared By: D.O'DONOVAN	Checked By: D.GROARKE	Date: JUNE.2009
Drawing number: CEND_B2_01	Scales: 1/2500	Rev: -

**WWTP SITE CO-ORDS**  
**E: 118620**  
**N: 031623**



# Proposed Waste Water Treatment Plant

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Job Title:  
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Drawing Title:  
 ATTACHMENT\_B2  
 LAYOUT\_PLAN\_OF  
 PROPOSED\_WWTP

Prepared By: D.O'DONOVAN	Checked By: D_GROARKE	Date: JUNE.2009
Drawing number: CEND_B2-02	Scales: 1/500	Rev: -

## Attachment B.3

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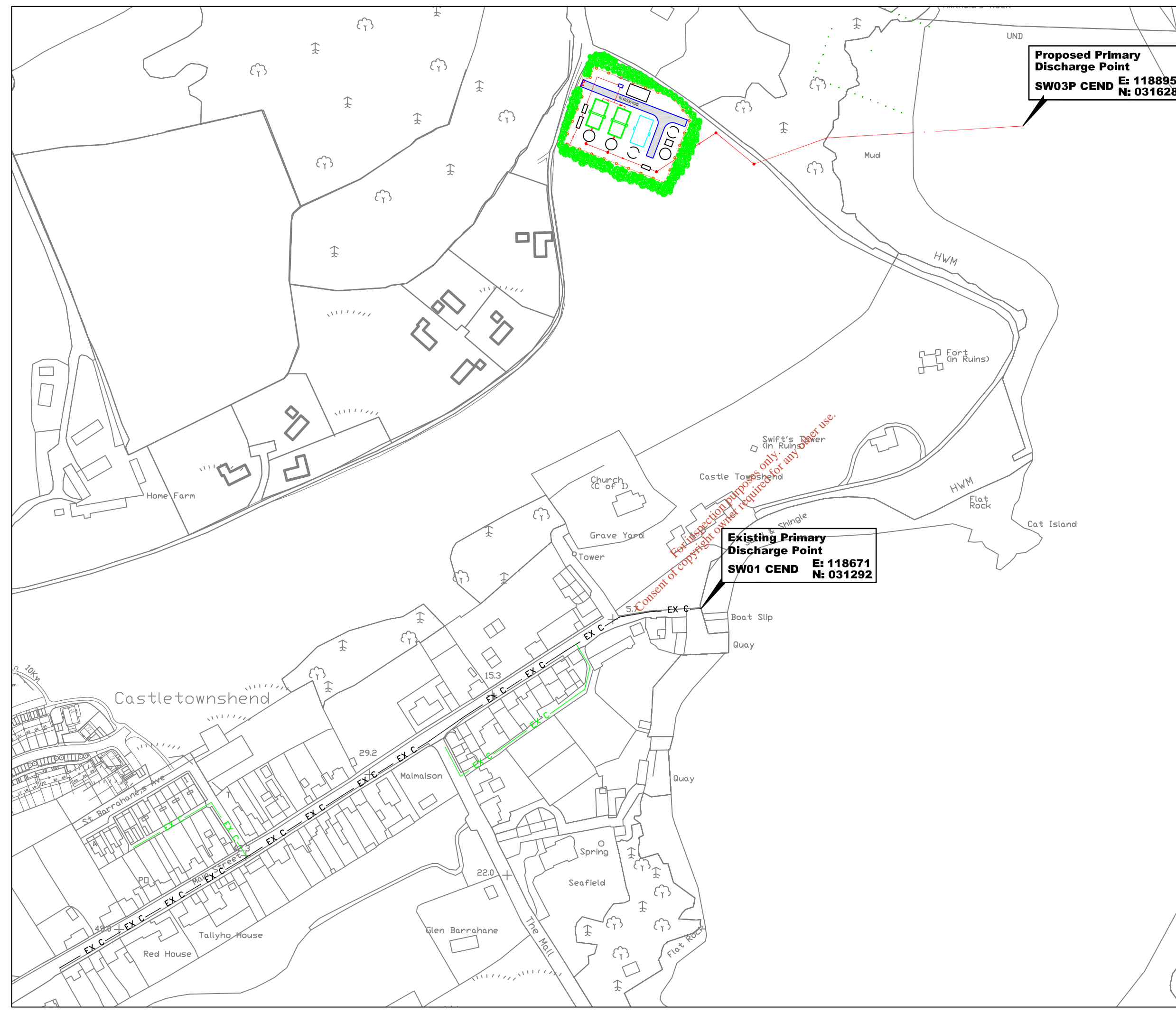
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## Attachment B3

### Map :

- **CEND B3-01** – Existing and Proposed Primary Discharge Points

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M. MURRELL,  
DIRECTOR OF SERVICES  
WEST CORK

Job Title:  
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DISCHARGE\_LICENCE\_APPLICATION**

Drawing Title:  
**ATTACHMENT\_B3  
EXISTING\_&\_PROPOSED  
PRIMARY\_DISCHARGE\_POINTS**

Prepared By: D.O'DONOVAN	Checked By: D.GROAKE	Date: JUNE.2009
Drawing number: CEND_B3-01	Scales: 1/2500	Rev: -

## Attachment B.4

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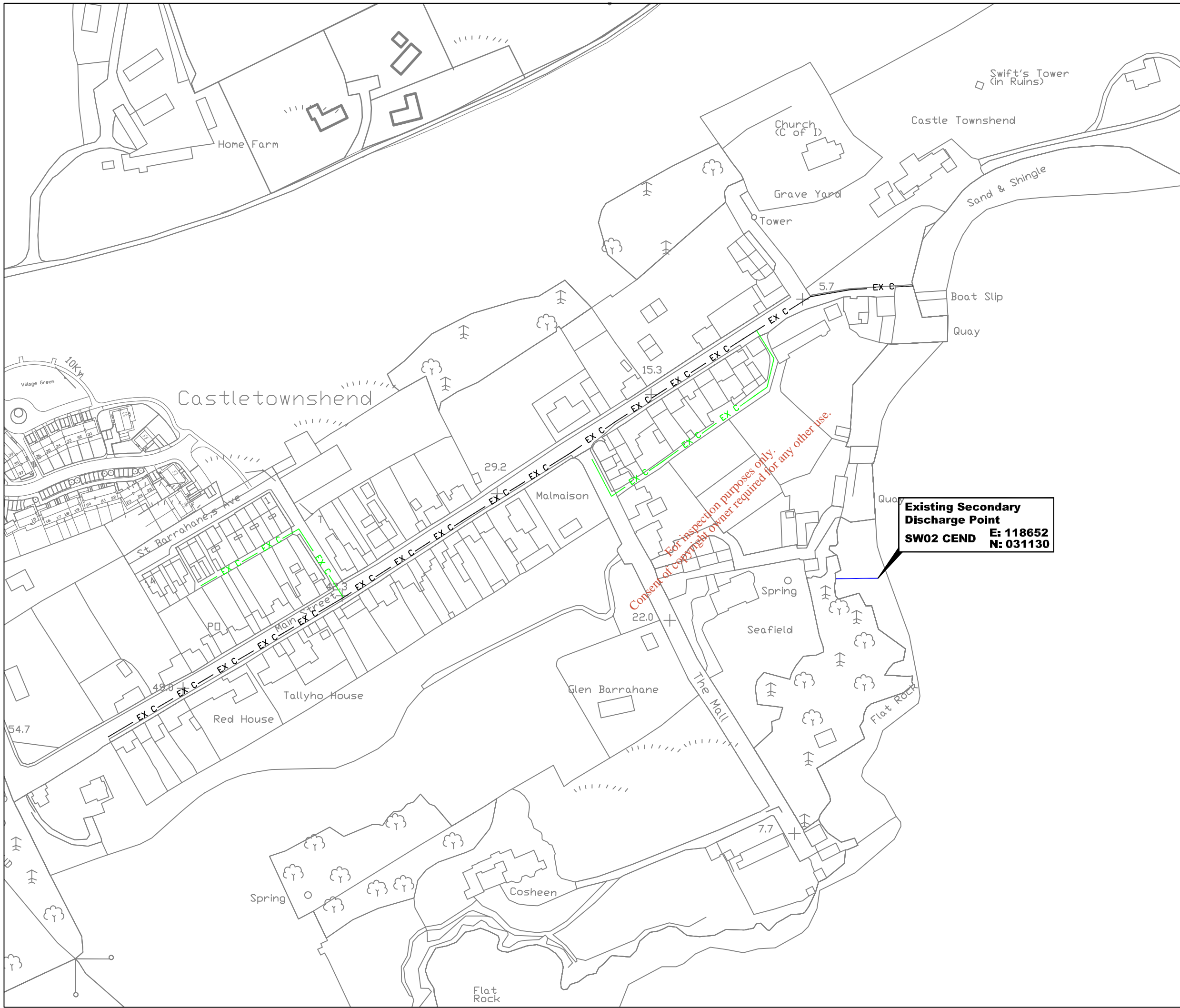
## Attachment B4

### Map :

- **CEND B4-01** – Existing Secondary Discharge Point

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**Existing Secondary Discharge Point**  
**SW02 CEND E: 118652 N: 031130**

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 M. MURRELL,  
 DIRECTOR OF SERVICES  
 WEST CORK

Job Title:  
**CASTLETOWNSHEND\_WASTE\_WATER  
 DISCHARGE\_LICENCE\_APPLICATION**

Drawing Title:  
**ATTACHMENT\_B4  
 EXISTING  
 SECONDARY\_DISCHARGE\_POINT**

Prepared By: D.O'DONOVAN	Checked By: D_GROARKE	Date: JUNE.2009
Drawing number: CEND_B4-01	Scales: 1/2000	Rev: -