


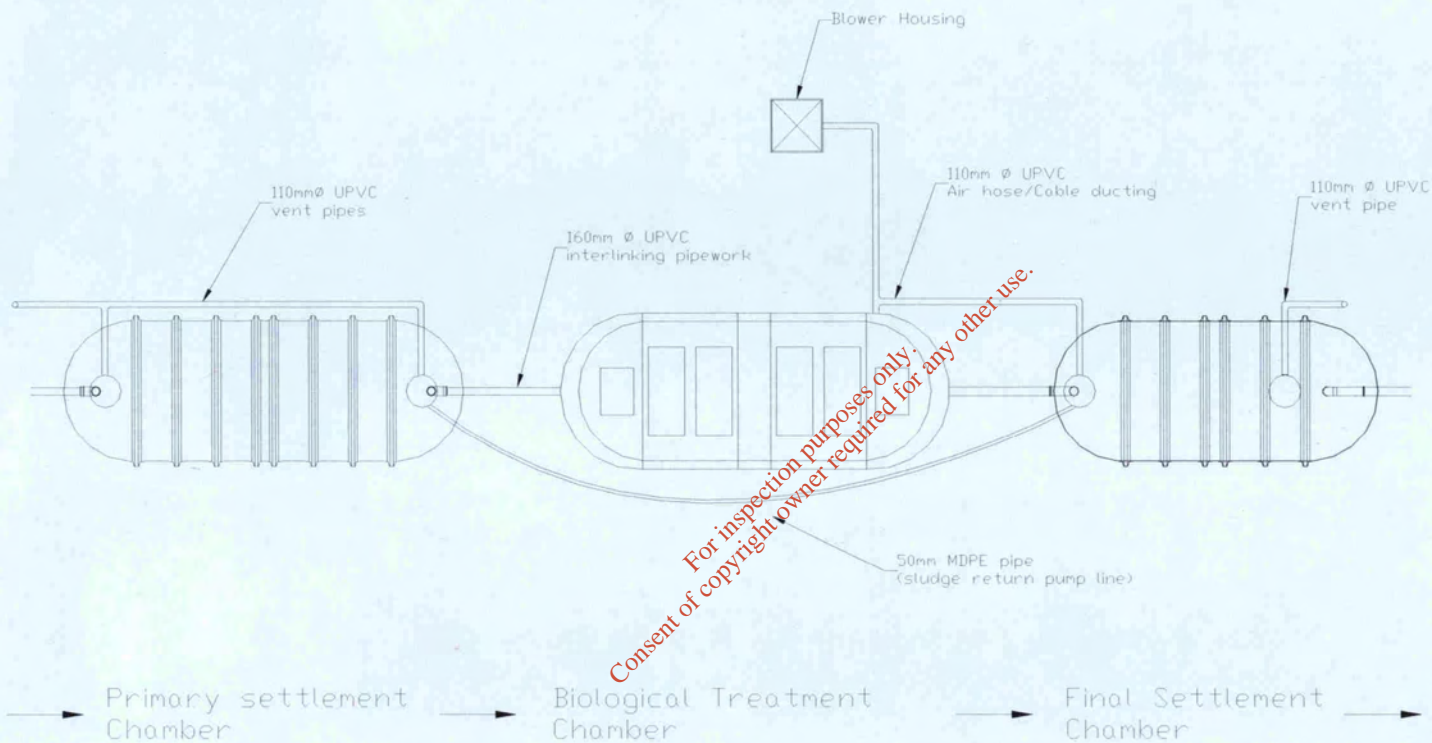
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Notes

Also take note that there is a sludge return pump between the treatment chamber and final settlement chamber, which is installed during commissioning of the system, see drawing Ttp/004. (The following information is provided as guidance only).

If preparing base prior to receipt of individual chambers, please allow $\pm 50\text{mm}$ tolerance on the invert to base dimensions. If a hardcore base of approximately 200mm is laid and consequently lined with polythene, then a base slab of 150-200mm should be sufficient. If this is not the case then a base slab of 200-250mm will be required.

Klargester Ltd. 13 Charlestown Industrial Estate Feeney, Co. Down BT28 8QJ Tel: 028 9028 8789 Fax: 028 9028 0046					
					
PROJECT NAME:	River Valley, Minane Bridge, Co. Cork				
ARCHITECT/CLIENT:	Helton Buckley Ltd Co. Cork				
DRAWING TITLE:	P250 Treatment Plant				
Drawn By:	J. Bellahan	Drawing Number:	MB.M.01	Scale:	NTS
Date:	10/9/98	Checked By:	NTS	Rev:	A



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Klargester
Treatment Systems

Klargester Environmental Ltd.
College Road North, Aston Clinton,
Aylesbury, Bucks, HP22 5EW,
Tel:- 01296 633000
www.klargester.co.uk

SCALE	1:40	SHEET NO	A1
DRAWING NO.	DS0659	ISSUE	1

ISSUE	DATE	DRAWN	MODIFICATION
1	17.06.03	A.L.	INITIAL ISSUE (REPLACES DRAWING DS0604)

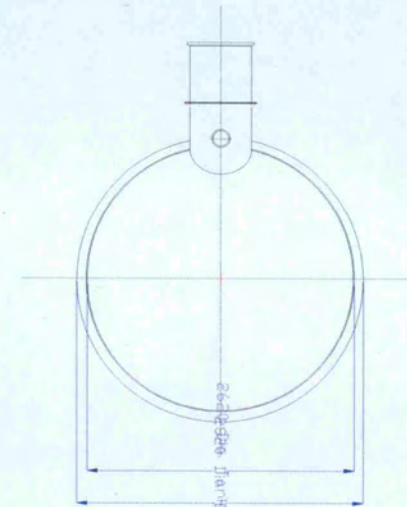
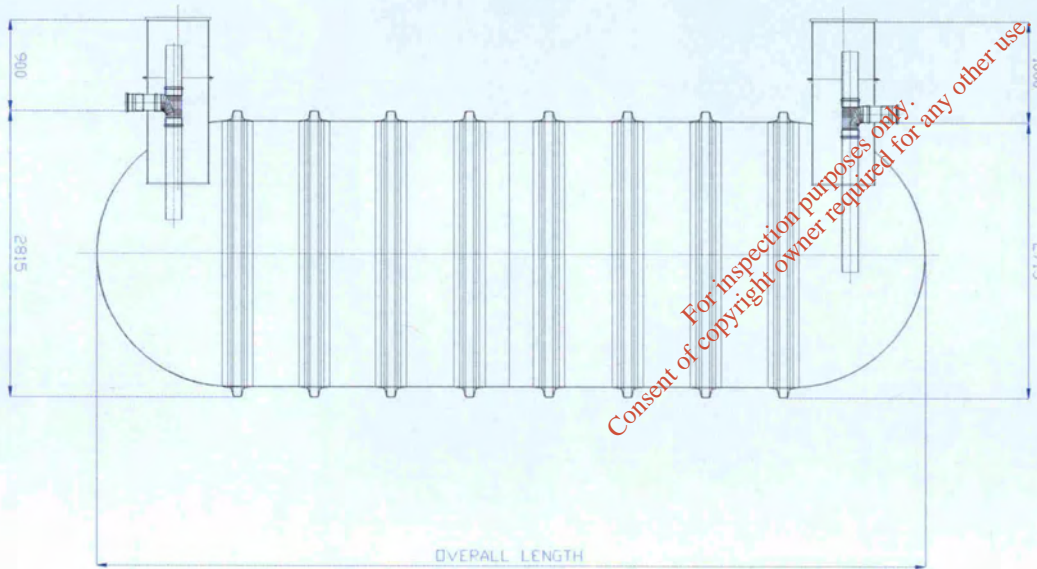
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PD0329 Issue 7 September 2003

NOTES

Inlet Socket UPVC 6" (160)Ø
 Outlet Socket UPVC 6" (160)Ø

Standard Rate Plants			High Rate Plants		
Model No.	Length mm	Capacity (litres)	Model No.	Length mm	Capacity (litres)
AF11L	5090	22,500	AF10H	4320	18,180
AF12L	7740	36,000	AF11H	5090	22,500
AF13L	7740	36,000	AF12H	7740	36,000
AF14L	7740	36,000	AF13H	7740	36,000



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HIGH CAPACITY
 AIRFLOW
 PRIMARY SETTLEMENT
 CHAMBER
 GENERAL DIMENSIONS

SCALE 1:30 SHEET SIZE A2
 DRAWING No. DS0661 ISSUE 2

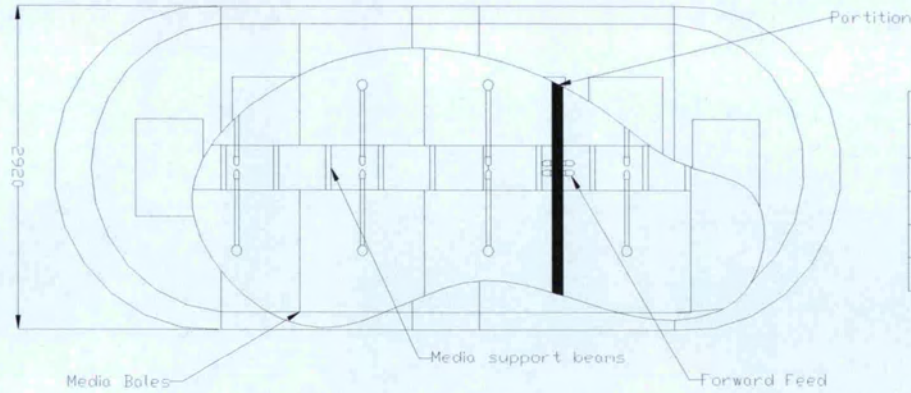
ISSUE	DATE	DRAWN	MODIFICATION
2	10.09.03	J.T.	AMEND OVERALL LENGTH OF AF13L, AF14L, AF12H, AF13H
1	17.06.03	A.L.	INITIAL ISSUE (REPLACES DRAWING DS0606)

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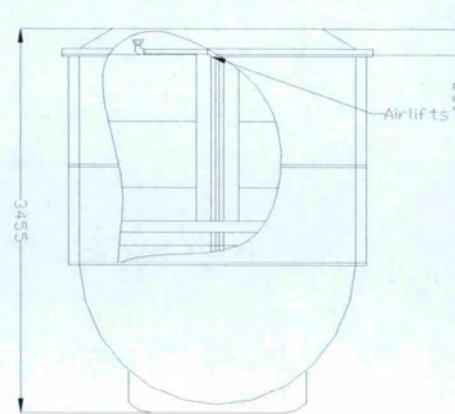
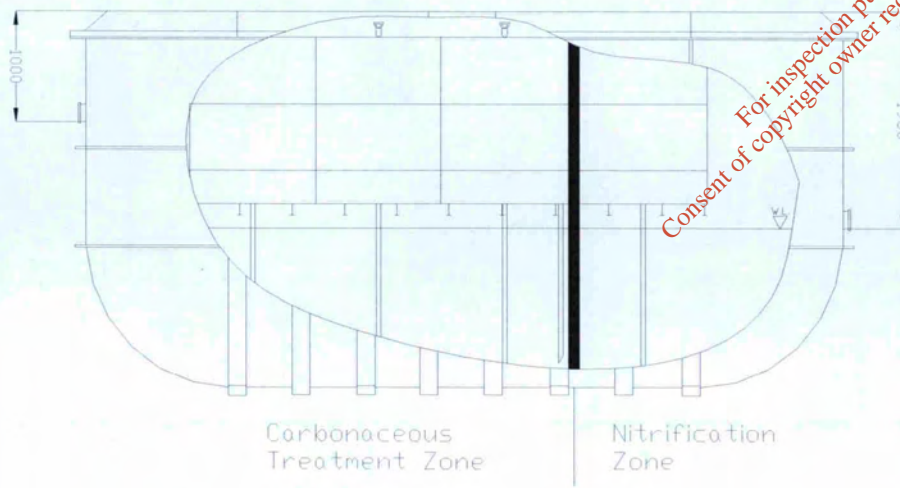


THIRD ANGLE PROJECTION

PD0329 Issue 7 September 2003



Standard Rate Plants		High Rate Plants	
Model No.	Length mm	Model No.	Length mm
AF11L	6825	AF10H	6825
AF12L	7455	AF11H	8065
AF13L	8065	AF12H	9305
AF14L	9925	AF13H	10545



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EXTRA LARGE
AIRFLOW
CARBONACEOUS
NITRIFYING
TREATMENT CHAMBER

SCALE: 1:20 SHEET SIZE: A1

DRAWING No: DS0660

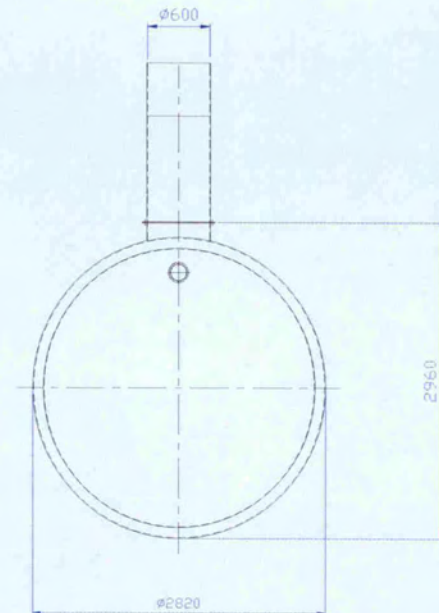
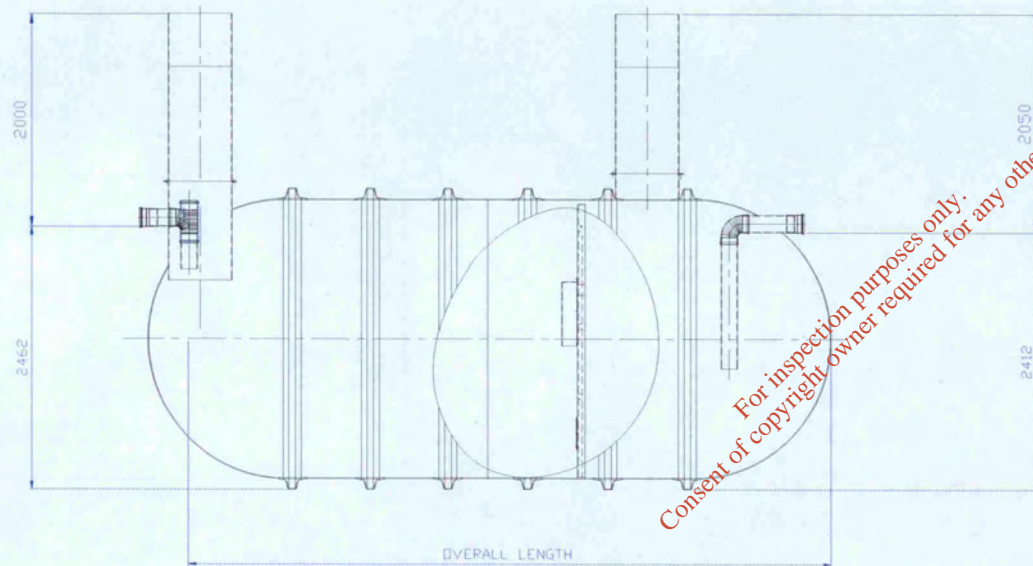
ISSUE	DATE	DRAWN	MODIFICATION
1	17.06.03	A.L.	INITIAL ISSUE (REPLACES DRAWING DS0605)

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THIRD ANGLE PROJECTION

PD0329 Issue 7 September 2003

Standard Rate Plants			High Rate Plants		
Model No.	Length mm	Capacity (litres)	Model No.	Length mm	Capacity (litres)
AF11L	4320	18,180	AF10H	4320	18,180
AF12L	5090	22,500	AF11H	4320	18,180
AF13L	6190	27,000	AF12H	5090	22,500
AF14L	6190	27,000	AF13H	6190	27,000



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NOTES

Inlet Socket UPVC 6" (160)Ø
Outlet Socket UPVC 6" (160)Ø

ISSUE	DATE	DRAWN	MODIFICATION
2	10.09.03	J.T.	AMEND OVERALL LENGTH OF AF13L, AF14L, AF13H
1	17.06.03	A.L.	INITIAL ISSUE (REPLACES DRAWING DS0607)

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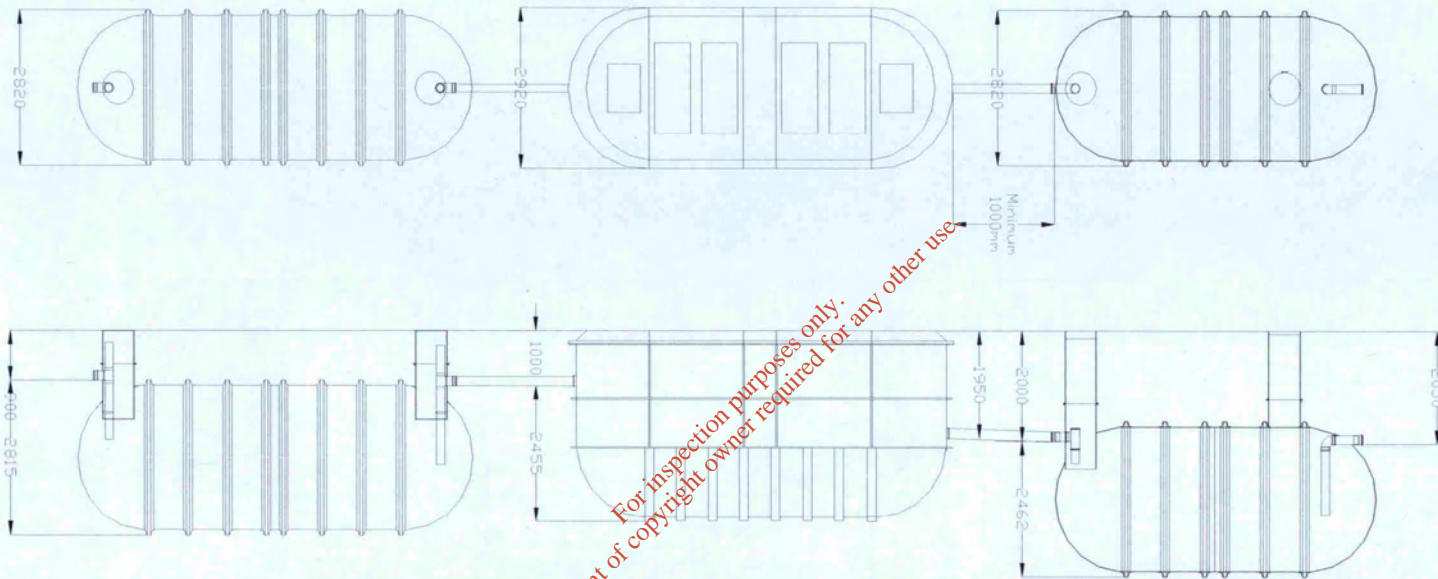
TITLE HIGH CAPACITY AIRFLOW AF11 - AF14 FINAL SETTLEMENT TANK	
SCALE 1:30	SHEET SIZE A2
DRAWING No. DS0662	ISSUE 2

PD0329 Issue 7 September 2003

Primary settlement Chamber

Carbonaceous/Nitrifying Treatment Chamber

Final Settlement Chamber



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Notes
Refer to drawing DS0660, DS0661 & DS0662 for individual chamber detail.
Also take note that there is a sludge return pump between the treatment chamber and final settlement chamber, which is installed during commissioning of the system, see drawing DS0659.
(The following information is provided as guidance only.)

If preparing base prior to receipt of individual chambers, please allow $\pm 50\text{mm}$ tolerance on the invert to base dimensions.
If a hardcore base of approximately 200mm is laid and consequently lined with polythene, then a base slab of 150-200mm should be sufficient.
If this is not the case then a base slab of 200-250mm will be required.

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ISSUE	DATE	DRAWN	MODIFICATION
1	17.06.03	A.L.	INITIAL ISSUE (REPLACES DRAWING DS0608)

SCALE: 1:40 SHEET NO: A1

DRAWING NO: DS0663

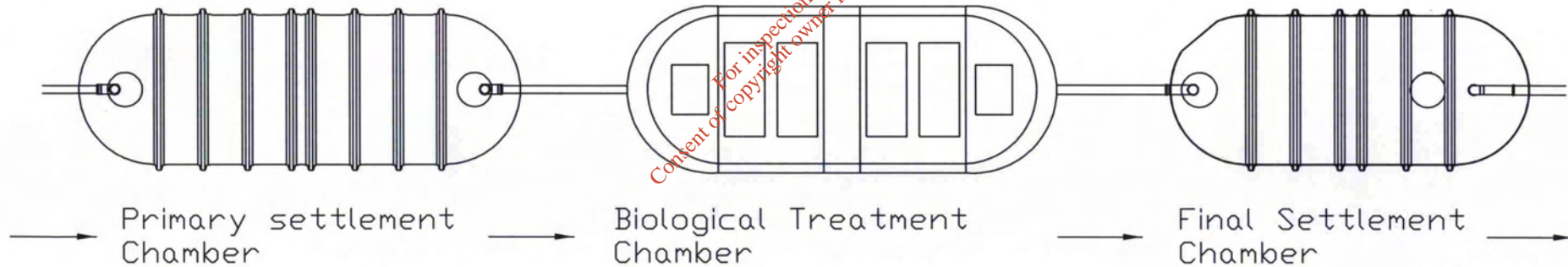
NO. OF SHEETS: 1

Desludge Procedure

Please read the entire instructions before commencing the desludge.

1. Before desludging begins please switch off the blower in the local housing.
2. Always empty the Primary Settlement Chamber (PSC) first.
3. Place the hose at the inlet end of the chamber.
4. Make sure that the hose and end fitting are as far as practical kept away from the sludge return pipework whilst raising and lowering.
5. The hose must be positioned to draw from the very bottom to collect accumulated settled sludges.
6. Ensure equilibrium of levels when desludging, so that the water pressure either side of the baffle is equal.
7. Reduce the level by 300mm in the inlet side of the PSC, then place the hose in the outlet side of the PSC, reducing this level by 300mm.
8. Repeat this procedure until the compartment is completely empty.
9. Remove traces of sludge accumulation on the walls and bottom of the chamber.
10. Continue this procedure in the next tank (Biological Treatment Chamber).
11. Finally in the last tank (Final Settlement Chamber).
12. The Biological Treatment Chamber (middle tank) should be refilled as speedily as is practical using mains water supply.
13. It is advisable to leave the air blower off until normal water level has been achieved.
14. If in doubt please contact, service on 0845 601 5597.

Capacities for Emptying		
PRODUCT	LITRES	GALLONS
150P/90	51760	11385
200P	56080	12336
200P/90	59880	13172
250P	76900	16915
250P/90	81700	17972
300P	82700	18192
300P/90	89600	19710
375P	87250	19193



ISSUE	DATE	DRAWN	MODIFICATION
1	06.12.07	JC	CC526
1	13.06.07	JC	CC350

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THIRD ANGLE PROJECTION

ALL DIMENSIONS ARE IN MILLIMETRES – DO NOT SCALE



TITLE
HIGH CAPACITY
P-RANGE
DESLUDGE DETAILS

SCALE n/a SHEET SIZE A4

DRAWING No. DS0734E ISSUE 2

Accreditation Certificate

Cork County Council

Wastewater Testing Laboratory, Inniscarra, Co. Cork

Testing Laboratory

Registration number: 016T

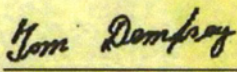
is accredited by the Irish National Accreditation Board (INAB) to undertake testing as detailed in the Schedule bearing the Registration Number detailed above, in compliance with the International Standard ISO/IEC 17025:2005 2nd Edition "General Requirements for the Competence of Testing and Calibration Laboratories" (This Certificate must be read in conjunction with the Annexed Schedule of Accreditation)

Date of award of accreditation: 01:10:2002

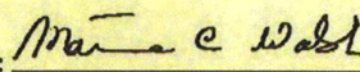
Date of last renewal of accreditation: 20:09:2007

Expiry date of this certificate of accreditation: 20:09:2012

This Accreditation shall remain in force until further notice subject to continuing compliance with INAB accreditation criteria, ISO/IEC 17025 and any further requirements specified by the Irish National Accreditation Board.

Manager: 

Mr Tom Dempsey

Chairperson: 

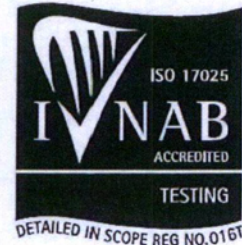
Dr Máire Walsh

Issued on 20th September 2007

Organisations are subject to annual surveillance and are re-assessed every five years. The renewal date on this Certificate confirms the latest date of renewal of accreditation. To confirm the validity of this Certificate, please contact the Irish National Accreditation Board.

The INAB is a signatory of the European co-operation for Accreditation (EA) Testing Multilateral Agreement (MLA) and the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement.

Schedule of Accreditation



(Annex to Accreditation Certificate)

Permanent Laboratory:
Category A

CORK COUNTY COUNCIL

Chemistry Testing Laboratory

Initial Registration Date : 25-April-1991
Postal Address: Waste Water Laboratory
(Address of other locations as they apply) Inniscarra
Co. Cork
Telephone: +353 (21) 4532700
Fax: +353 (21) 4532777
E-mail:
Contact Name: Ms M Cherry
Facilities: Normally not available for Public testing

Schedule of Accreditation



Permanent Laboratory:
Category A

THE IRISH NATIONAL ACCREDITATION BOARD (INAB) is the Irish body for the accreditation of organisations including laboratories.

Laboratory accreditation is available to testing and calibration facilities operated by manufacturing organisations, government departments, educational institutions and commercial testing/calibration services. Indeed, any organisation involved in testing, measurement or calibration in any area of technology can seek accreditation for the work it is undertaking.

Each accredited laboratory has been assessed by skilled specialist assessors and found to meet criteria which are in compliance with ISO/IEC 17025 or ISO/IEC 15189 (medical laboratories). Frequent audits, together with periodic inter-laboratory test programmes ensure that these standards of operation are maintained.

Testing and Calibration Categories:

- Category A:** Permanent laboratory calibration and testing where the laboratory is erected on a fixed location for a period expected to be greater than three years.
- Category B:** Site calibration and testing that is performed by staff sent out on site by a permanent laboratory that is accredited by the Irish National Accreditation Board.
- Category C:** Site calibration and testing that is performed in a site/mobile laboratory or by staff sent out by such a laboratory, the operation of which is the responsibility of a permanent laboratory accredited by the Irish National Accreditation Board.
- Category D:** Site calibration and testing that is performed on site by individuals and organisations that do not have a permanent calibration/testing laboratory. Testing may be performed using
- (a) portable test equipment
 - (b) a site laboratory
 - (c) a mobile laboratory or
 - (d) equipment from a mobile or site laboratory

Standard Specification or Test Procedure Used:

The standard specification or test procedure that is accredited is the issue that is current on the date of the most recent visit, unless otherwise stated.

Glossary of Terms

Facilities:

- Public calibration/testing service:** Commercial operations which actively seek work from others.
- Conditionally available for public calibration/testing:** Established for another primary purpose but, more commonly than not, is available for outside work.
- Normally not available for public calibration/testing:** Unavailable for public calibration/testing more often than not.

Laboratory users wishing to obtain assurance that calibration or test results are reliable and carried out to the Irish National Accreditation Board criteria should insist on receiving an accredited calibration certificate or test report. Users should contact the laboratory directly to ensure that this scope of accreditation is current. INAB will, on request, verify the status and scope.

Scope of Accreditation

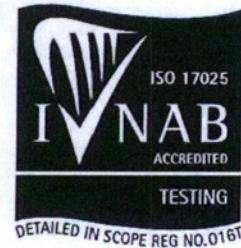


Cork County Council
Chemical Testing Laboratory

Permanent Laboratory:
 Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 Waters	Chemical analysis:	Documented in-house methods based on Standard Methods for the Examination of Water & Wastewater 21 st Edition APHA (See Note 1)
.01 Waters for domestic purposes Surface and ground waters	Biochemical Oxygen Demand 2 - 145,000 mg/l	CP No. 1 Membrane electrode
	Chloride 5 - 1,000 mg/l	CP No. 7 Argentometric method
	ph 2 - 12	CP No. 5 Electrometry
	Suspended Solids 0.5 - 17,500 mg/l	CP No. 3 Gravimetric
	Chemical Oxygen Demand 21 - 135 mg/l 120 - 670,000 mg/l	CP No. 6 Reflux - colourmetric method
	Total phosphorus 0.2 - 5,300 mg/l	US-EPA Approved method/HACH Method CP No.20
	Ammonia 0.1 - 1,000 mg/l NH ₃ - N	Documented in-house method CP22 by Konelab based on Method for the Examination of Waters and Associated Material HMSO:1981

Scope of Accreditation

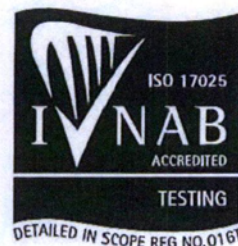


Cork County Council
Chemical Testing Laboratory

Permanent Laboratory:
 Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 Waters		
.01 Waters for domestic purposes <i>Surface and ground waters</i>	Orthophosphate as P (Konelab) Range: 0.005-1.00 mg O-PO4 P/L High Range: 1000 mg O-PO4 P/L Method Detection Limit: 0.02 mg O-PO4 P/L	CP No. 23 Ascorbic Acid Method
	Chloride (Konelab) Range: 25-250 mg/L Cl- High Range Conc.: 86,000 mg/L Cl- Method Detection Limit: 25 mg/L Cl-	CP No. 24 Ferricyanide Method
	Sulphate (Konelab) Range: 30-250 mg/L SO4/L High Range Conc.: 35,000 mg/L SO4/L Method Detection Limit: 30 mg SO4/L	CP No. 25 Documented in-house method by Konelab based on method for the examination of waters and waste waters and associated material HMSO: 1981

Scope of Accreditation



Cork County Council Chemical Testing Laboratory

Permanent Laboratory:
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 Waters	Chemical analysis	Documented in-house methods based on Standard Methods for the Examination of Water & Wastewater 21 st Edition APHA (See Note 1)
.05 Trade Wastes <i>Industrial effluents</i> <i>Urban Wastewater</i> <i>Municipal Wastewater</i>	Biochemical Oxygen Demand 2 - 145,000 mg/l Chloride 5 - 1,000 mg/l pH 2 - 12 Suspended Solids 0.5 - 17,500 mg/l Chemical Oxygen Demand 21 - 135 mg/l 120 - 670,000 mg/l Total phosphorus 0.2 - 5,300 mg/l Ammonia 0.1 - 1,000 mg/l NH3-N	CP No. 1 Membrane electrode CP No. 7 Argentometric method CP No. 5 Electrometry CP No. 3 Gravimetric CP No. 6 Reflux - colourmetric method US-EPA Approved method/HACH Method CP No.20 Documented in-house method CP22 by Konelab based on Method for the Examination of Waters and Associated Material HMSO: 1981.

Notes
1. APHA American Public Health Association, USA, 21st Edition

Scope of Accreditation



Cork County Council Chemical Testing Laboratory

Permanent Laboratory:
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 Waters	Chemical analysis	Documented in-house methods based on Standard Methods for the Examination of Water & Wastewater 21 st Edition APHA (See Note 1)
.05 Trade Wastes Industrial effluents Urban Wastewater Municipal Wastewater	Orthophosphate as P (Konelab) Range: 0.005 - 1.00 mg O-PO4 P/L High Range: 1000 mg O-PO4 P/L Method Detection Limit: 0.02 mg O-PO4 P/L	CP No. 1 Membrane electrode CP No. 23 Ascorbic Acid Method
	Chloride (Konelab) Range: 25-250 mg/L Cl- High Range Conc.: 86,600 mg /L Cl- Method Detection Limit: 25mg / L Cl-	CP No. 24 Ferricyanide Method
	Sulphate (Konelab) Range: 30-250 mg/L SO4 /L High Range Conc.: 35,000 mg/L SO4 /L Method Detection Limit: 30 mg SO4 /L	CP No. 25 Documented in-house method by Konelab based on method for the examination of waters and waste waters and associated material HMSO: 1981

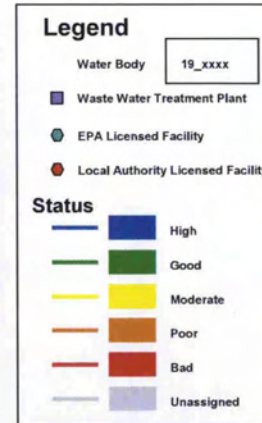
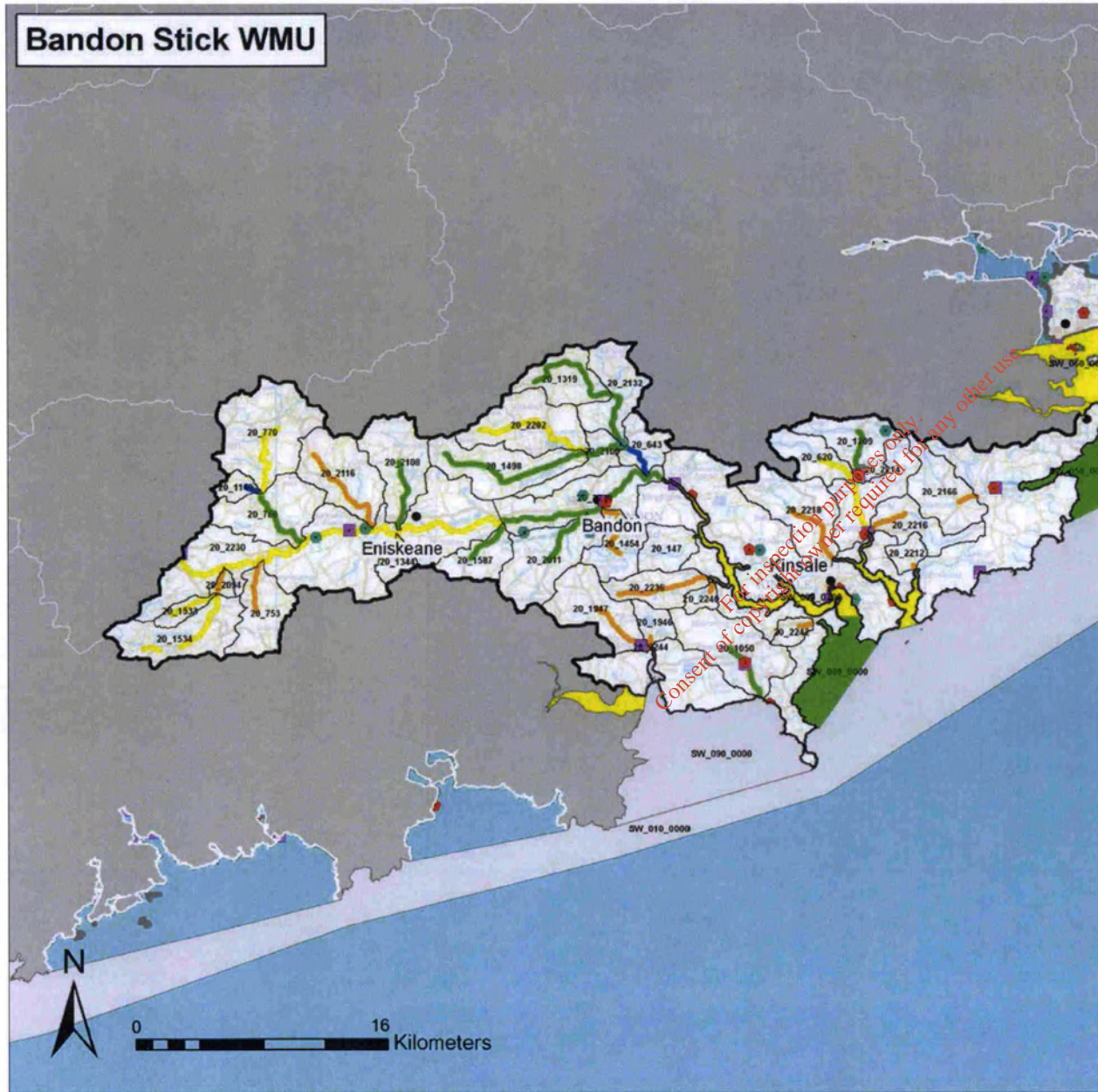
Notes
1. APHA American Public Health Association, USA, 21st Edition

Attachment E4 Minane Bridge Table E4

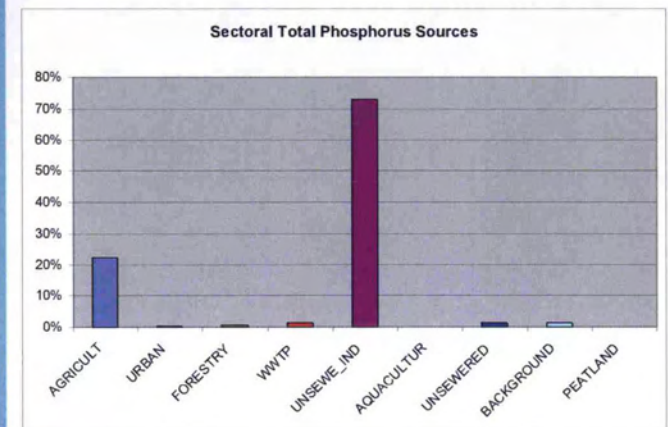
Sample Date	22/10/2009	22/10/2009	08/05/2008	11/09/2008	28/11/2008	28/11/2008	28/11/2008	28/11/2008	28/11/2000	04/05/2010	21/09/2010	01/09/2010	01/11/2010	11/11/2010
Sample	Septic Tank	Minane River D/s	WWTP Final Effluent	WWTP Final Effluent	WWTP Final Effluent	U/sof WWTP	Pre Wetlands	D/s at Church	WWTP Final Effluent	WWTP Final Effluent	WWTP Final Effluent	WWTP Final Effluent	WWTP Final Effluent	WWTP Final Effluent
Sample Code	GT1297	GT1298	GS398	GS887	GS1302	GS1303	GS1301	GS1300						
Flow M ³ /Day	No result	*												
pH	7.3	7.4	8.8	7.3	7.3	7.5	7.6	7.4					7.6	7.6
Temperature °C	No result	*												
Conductivity uS/cm 20°C	589	186												
Suspended Solids mg/L	502	33	32	<2.5	2	2	3	5	59.2	6	32	24	24	
Ammonia-N mg/L	30.3	0.1												
BOD mg/L	794	8	19		2.3	<1	13.5	2.3	2	10	6			
COD mg/L	2548	47												
TN-N mg/L	52.67	3.76		19	10	2.7	27	14.2	8		69	22	22	
Nitrite-N mg/L	<0.1	0.1									35			
Nitrate-N mg/L	<0.5	1.47												
TP-P mg/L	6.9	0.308	2.29	0.8	3.85	<0.2	5.98	<0.2	3.71	11.28	2.76	0.9	0.9	
O-PO4-P mg/L	5.0	0.13												
SO4 mg/L	36.5	<30												
Phenols µg/L	7.892	*												
Atrazine µg/L	43.158	*												
Dichloromethane µg/L	<1	*												
Simazine µg/L	<0.01	*												
Toluene µg/L	137.95	*												
Tributyltin µg/L	not required	not required												
Xylenes µg/L	18.672	*												
Arsenic µg/L	0.7	*												
Chromium ug/L	<20	<20												
Copper ug/L	224.8	<20												
Cyanide µg/L	35	*												
Fluoride µg/L	69	84												
Lead ug/L	<20	<20												
Nickel ug/L	<20	<20												
Zinc ug/L	516.6	<20												
Boron ug/L	982.5	66.3												
Cadmium ug/L	<20	<20												
Mercury µg/L	<0.03	*												
Selenium µg/L	<2.12	*												
Barium ug/L	33.6	<20												

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Bandon/Stick Water Management Unit Action Plan



Name	Bandon/Stick Water management Unit
Area	713km ²
River Basin District	SWRBD
Main Counties	Cork
Protected Areas	1 surface drinking water: Curragalicky Lake 1 UWWTD: Bandon Estuary Lower 1 SAC: Bandon River



Bandon/Stick Water Management Unit Action Plan

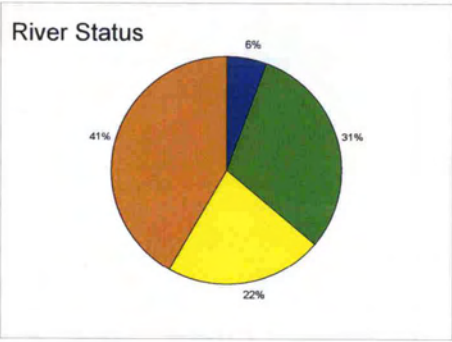
STATUS/IMPACTS	
Overall status	There are 36 river water bodies in this WMU -2 High, 11 Good, 8 Moderate, 15 Poor Status.
Status elements	Q score dictates overall status for wbs with less than good status, physchem dictates 2 moderate wbs and fish status dictates 1 poor wb. The moderate lake status is dictated by macrophytes or chlorophyll.
Possible Impacts - EPA Water Quality	<p>BALLINSPIITTLE – SW_20_1050 2006 - Satisfactory. Status of WB 2009: Good status dictated by Q score and fish status</p> <p>BALLYMAHANE - SW_20_1498 2003 - Continuing satisfactory. The stream entering just downstream of 0200 (Bridge N of Tullyglas), which was grossly polluted in 2000, was clean in 2003; the location, however, was still being used to mix agricultural chemicals. 2009 - Continuing satisfactory. Status of WB 2009: Good status dictated by Q score, good fishery status and good physchem status*****</p> <p>BANDON – SW_20_2230_2; SW_20_2230_1 2003 - Mostly satisfactory with some improvement at one location (0550) since the previous survey. Continuing slightly polluted downstream of Dunmanway (0300, 0400) and moderately polluted downstream of Bandon (0800). Unsightly sludge from a waterworks had accumulated along the left-hand-side of river upstream of Bandon (0700). A protected invertebrate (pearl mussel) lives in part of the river while the fish fauna includes salmonids (salmon and trout) and cyprinids (minnow) as well as sticklebacks. 2009 - Mostly satisfactory, with Good ecological quality, but only Moderate downstream of Dunmanway, Ballineen and Enniskean. SW_20_2230_2 WB Status 2009 : Good status dictated by Q score SW_20_2230_1 WB Status 2009: Moderate status dictated by Q status.</p> <p>BEALANASCARTANE – SW_20_2094; SW_20_1534 2009 - Improved with all three locations sampled Good ecological quality SW_20_2094 WB Status 2009 : Poor Status dictated by Q score - not based on 2009 data?? SW_20_1534 WB Status 2009 : Moderate Status dictated by Q score</p> <p>BLACKWATER (BANDON) – SW_20_760; SW_20_770 2003- Continuing eutrophic in middle reaches (0600) otherwise satisfactory. The protected pearl mussel still survives in parts of this river. 2009 - Satisfactory with Good and High ecological quality. SW_20_760 WB updated Status : Good status dictated by physchem status SW_20_770 WB updated Status : Moderate status is based Q score</p> <p>BRINNY – SW_20_1319; SW_20_2132; SW_20_643 2009 - Satisfactory at the three locations following improvement at Tough Bridge since previous survey. SW_20_1319 WB updated Status ; Good status dictated by Q score. SW_20_2132 WB updated Status ; Good status dictated by Q score SW_20_643 WB updated Status ; High status dictated by Q score.</p> <p>KILBRITTAIN – SW_20_1947 2006 - Continuing satisfactory. WB Status 2009 : Poor status dictated by poor Fish status.</p> <p>MINANE – SW_20_2166 2009 - Unsatisfactory with Poor ecological quality at Ballyfeard - impacted by seriously polluted stream entering from right-hand side immediately downstream of bridge. WB Status 2009 : Poor status dictated by Q score</p> <p>SALL – SW_20_2202 2009 - Continuing satisfactory. WB Status 2009 : Moderate status dictated by physchem status</p> <p>STICK – SW_20_2214 2009 - Satisfactory, with Good ecological quality, at both locations. WB Status 2009 : Moderate status dictated by physchem status</p>

PRESSURES/RISKS	
Nutrient sources	90% of TP comes from unsewered industry and 2% from WWTP, 7% from Agriculture.
Point pressures	10 WWTP Ballineen Sewerage Scheme, Ballinspittle, Bandon WWTP, Belgooly, Kilbrittain, Kinsale, Minane Bridge, Nohoval, Riverstick WWTP, Innishannon WWTP 6 IPPC AIBP Ltd., Carbery Milk Products Ltd., Grainger Sawmills Ltd (1), Grainger Sawmills Ltd (2), Schering-Plough (Ireland) Co Eli Lilly 2 WTP -Bandon Water Supply Scheme, Ballinspittle New Pws; 1 Section 4 (Forestbrook Developments Ltd.); 1 contaminated site - AIBP Limited T/A AIBP Bandon.
Wastewater Treatment Plants (WWTP) and Industrial Discharges	Bandon WWTP - Non-compliant frequency of monitoring or non-compliant effluent standard where sufficient capacity is available Bandon WWTP - Insufficient future (2015) assimilative capacity (BOD), discharge not to a protected area Innishannon WWTP - Insufficient existing capacity, no evidence of impact, discharge to a protected area Kinsale - PE >2,000, discharge to non-coastal water, no secondary treatment or PE > 10,000, discharge to coastal water, no secondary treatment Kinsale - Insufficient existing capacity, no evidence of impact, discharge to a protected area Minane Bridge - Sufficient existing capacity of treatment plant, evidence of impact, discharge not to protected area Riverstick WWTP - Insufficient existing capacity, evidence of impact, not a protected area Riverstick WWTP - Insufficient future (2015) assimilative capacity (BOD), discharge not to a protected area Ballineen Sewerage Scheme - Sufficient existing capacity, evidence of impact, protected area AIBP Ltd IPPC - Risk: d/s Q value is <4 within 3km of outfall. Carbery Milk Products Ltd IPPC - Risks: Existing and future insufficient assim capacity for BOD, Existing and future insufficient assim capacity for nutrients, Historical deterioration in d/s Q value where Q station is within 3km of outfall and d/s Q value is <4 within 3km of outfall. Grainger Sawmills Ltd (1) IPPC – Risks: Historical deterioration in d/s Q value where Q station is within 3km of outfall and d/s Q value is <4 within 3km of outfall. Grainger Sawmills Ltd (2) IPPC - Risks: Historical deterioration in d/s Q value where Q station is within 3km of outfall and d/s Q value is <4 within 3km of outfall. Eli Lilly IPPC - No Risks Schering-Plough (Ireland) Co. IPPC – Risks: Existing and future insufficient assim capacity for BOD and nutrients. Forestbrook Developments Ltd Section 4- No risks
Quarries, Mines & Landfills	6 Quarries and 5 Landfills. 1 WB at risk from 2 quarries and 1 landfill - SW_20_2230.
Agriculture	32 WBs at risk - SW_20_2216, SW_20_147, SW_20_2214, SW_20_2236, SW_20_2218, SW_20_1050, SW_20_2011, SW_20_2166, SW_20_2212, SW_20_2240, SW_20_2242, SW_20_2132, SW_20_1947, SW_20_1454, SW_20_1209, SW_20_643, SW_20_753, SW_20_2108, SW_20_2202, SW_20_1319, SW_20_2116, SW_20_2109, SW_20_1344, SW_20_1498, SW_20_620, SW_20_1533, SW_20_1587, SW_20_1534, SW_20_1946, SW_20_2230, SW_20_2094, SW_20_2244.
On-site systems	There are 9759 septic tanks in this WMU. No water bodies at Risk
Forestry	None at risk
Dangerous substances	None at risk
Morphology	None at risk
Abstractions	None at risk
Other	

SELECTED ACTION PROGRAMME	
NB All relevant basic measures and general supplementary measures/surveys apply	
Point Sources	<p>Bandon WWTP - Priority1 - Improve operation and management. - 2012 Bandon WWTP - Priority3 - Limit future development so that the capacity of the treatment plant is not exceeded. - 2010 Innishannon WWTP - Priority2 - Investigate the need for increase in capacity of treatment plant. - 2012 Kinsale - Priority1 - Provide secondary treatment. - 2012 Kinsale - Priority2 - Investigate the need for increase in capacity of treatment plant. - 2012 Minane Bridge - Priority3 - Investigate the operation of combined sewer overflows in the sewer network. - 2015 Riverstick WWTP - Priority2 - Increase capacity of treatment plant. - 2015 Riverstick WWTP - Priority3 - Limit future development so that the capacity of the treatment plant is not exceeded. - 2010 Ballineen Sewerage Scheme - Priority2 - Investigate the operation of combined sewer overflows in the sewer network. - 2012</p> <p>AIBP Ltd IPPC - Measures in addition to basic measures apply Carbery Milk Products Ltd IPPC - Measures in addition to basic measures apply Grainger Sawmills Ltd (1) IPPC - Measures in addition to basic measures apply Grainger Sawmills Ltd (2) IPPC - Measures in addition to basic measures apply Schering-Plough (Ireland) Co. IPPC - Measures in addition to basic measures apply Section 4s - Review Discharge Licenses</p>
Diffuse Sources	AGRICULTURE - Good Agricultural Practice Regulations and Enforcement
Other	Protection of drinking water, abstraction control and future licensing.

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OBJECTIVES	
Good status 2015	
Alternative Objectives	none



Lake Status – There is 1 lake in this WMU. It has moderate status and has been monitored (Curraghalicky Lake).

Transitional Status – There are 4 TraC water bodies - Outer Cork Harbour - Good status; Oysterhaven Bay - Moderate Status; Lower Bandon Estuary - Moderate Status; Kinsale Harbour - Good Status.

Bandon/Stick Water Management Unit Action Plan

Member State Code	Monitored Y (extrapolated N)	Biological Elements				Supporting Elements			Ecological Status	Chemical Status	Protected Areas					Overall Status	Objectives	
		Macroinvertebrates (Q)	Freshwater Pearl Mussel	Fish	Phytoplankton Diatoms	Morphology	Specific Pollutants	Physico-Chemical			Special Area of Conservation	Special Protection Area		Nutrient Sensitive Water			Objective	Objective date
SW_20_2242		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Poor	Restore		
SW_20_2216		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Poor	Restore		
SW_20_2132	Y	Good	n/a	n/a	n/a	n/a	n/a	High	Good						Good	Protect	2015	
SW_20_1947	Y	Good	n/a	Poor	n/a	n/a	n/a		Poor						Poor	Restore		
SW_20_147		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Poor	Restore		
SW_20_1454		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Poor	Restore		
SW_20_2214	Y	Good	n/a	n/a	n/a	n/a	n/a	Moderate	Good						Moderate	Restore		
SW_20_1209		Good	n/a	n/a	n/a	n/a	n/a		Good						Good	Protect	2015	
SW_20_643	Y	High	n/a	n/a	n/a	n/a	n/a		High						High	Protect	2015	
SW_20_753		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Poor	Restore		
SW_20_2108		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Good	Protect	2015	
SW_20_760	Y	High	n/a	n/a	n/a	n/a	n/a	Good	High						Good	Protect	2015	
SW_20_1140		n/a	n/a	n/a	n/a	n/a	n/a		n/a						High	Protect	2015	
SW_20_2202	Y	Good	n/a	n/a	n/a	n/a	n/a	Moderate	Good						Moderate	Restore		
SW_20_1319	Y	Good	n/a	n/a	n/a	n/a	n/a		Good						Good	Protect	2015	
SW_20_2116		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Poor	Restore		
SW_20_2109		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Good	Protect	2015	
SW_20_2236		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Poor	Restore		
SW_20_1344		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Moderate	Restore		

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Bandon/Stick Water Management Unit Action Plan

Member State Code	Monitored Y (extrapolated N)	Biological Elements				Supporting Elements			Ecological Status	Chemical Status	Protected Areas				Overall Status	Objectives	
		Macroinvertebrates (Q)	Freshwater Pearl Mussel	Fish	Phytoplankton Diatoms	Morphology	Specific Pollutants	Physico-Chemical			Special Area of Conservation	Special Protection Area	Nutrient Sensitive Water	Objective		Objective date	
SW_20_2218		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Poor	Restore	
SW_20_1050	Y	Good	n/a	Good	n/a	n/a	n/a		Good						Good	Protect	2015
SW_20_1498	Y	Good	n/a	Good	n/a	n/a	n/a	Good	Good						Good	Protect	2015
SW_20_620		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Moderate	Restore	
SW_20_770	Y	Moderate	n/a	n/a	n/a	n/a	n/a		Moderate						Moderate	Restore	
SW_20_1533		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Moderate	Restore	
SW_20_1587		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Good	Protect	2015
SW_20_1534	Y	Moderate	n/a	n/a	n/a	n/a	n/a		Moderate						Moderate	Restore	
SW_20_1946		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Poor	Restore	
SW_20_2230_1	Y	Moderate	n/a	n/a	n/a	n/a	n/a	High	Moderate						Moderate	Restore	
SW_20_2094	Y	Poor	n/a	n/a	n/a	n/a	n/a		Poor						Poor	Restore	
SW_20_2011		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Good	Protect	2015
SW_20_2166	Y	Good	n/a	n/a	n/a	n/a	n/a	Good	Good						Poor	Restore	
SW_20_2212		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Poor	Restore	
SW_20_2240		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Poor	Restore	
SW_20_2244		n/a	n/a	n/a	n/a	n/a	n/a		n/a						Poor	Restore	
SW_20_2230_2	Y	Moderate	n/a	n/a	n/a	n/a	n/a	High	Moderate						Good	Protect	2015

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Attachment - Section F - Map 10

- CCC Water Services Data**
- South Cork Chlorine Monitoring Points
- National Parks & Wildlife Service**
- Special Areas of Conservation - Updated 27 Sept 2010
 - Special Protected Areas - Updated 27 Sept 2010
 - Sites & Monuments - updated Nov 2008
 - Natural Heritage Areas - Updated May 2010
 - Proposed Natural Heritage Areas - Updated May 2010
 - SAC Freshwater Pearl Mussel
- OS Vector Maps - Updated March 09 (0 - 15,000m)**
- General Line
 - General Dashed Line
 - Road Centerline
 - Road Fill
 - Building Fill
 - Water Fill
 - Coastal Fill
- OS_RasterfromVector (0 - 25,000m)**
- Raster From Vectors All - updated 03/12/2009

