

Appendix 15A: Asbestos Refurbishment Survey Report

ASBESTOS REFURBISHMENT SURVEY REPORT

Of

Castletroy WWTP

Limerick CIP

Castletroy

Limerick

On behalf of

Irish Water

Unit 2BeaT Centre,
Stephenstown Industrial Estate,
Balbriggan, Co. Dublin
Tel: (01) 6905907
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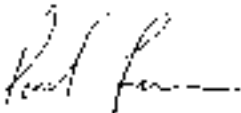
Directors: Deirdre Corry, Keith Foran **Company Reg no:** 354843



Project Number
23777/D

DOCUMENT CONTROL

Client	Irish Water
Project Title	23777 Limerick CIP (Bunlicky, Castletroy, Foynes & Glin) Asbestos Surveys
Document Title	Asbestos Refurbishment Report Castletroy WWTP
Report No.	23777/D

Rev	Status	Author(s)	Revision History	Approved By	Issue Date
D01	Final	 Anthony Maunsell	Initial Release to Client	 Paul Foran	22 nd May 2018

Contents

1. Executive summary
2. Scope of the project
3. General site and survey information
4. Conclusions and actions
5. Survey results

1 EXECUTIVE SUMMARY

OHSS carried out an asbestos survey to HSG264 requirements for the purposes of identifying asbestos containing materials in the premises(s) prior to the refurbishment of the area. It should be noted that this survey only includes areas within the scope of the survey and should not be read as an extensive assessment of all possible asbestos containing materials (ACMs) in the premises.

The findings of this survey are contained within the summary tables and risk assessment in the results section of this report.

- No asbestos containing materials were identified during the survey of Castletroy WWTP.

The survey undertaken complies with the legal duty to identify the presence of asbestos containing materials and carryout a risk assessment in respect of these materials at the premises. The risk assessment will form part of the overall safety management system for the contractor carrying out any asbestos works. The results of the risk assessment must be communicated to the employees and made available to them. This report may be used by the Project Supervisor for Design Process and the designers to highlight the presence of asbestos containing materials found in the buildings.

Where following the refurbishment work, asbestos containing materials remain in situ it may be necessary to undertake a management survey of the areas.

While every effort has been taken to ensure the accuracy of this report OHSS do not accept responsibility for any omissions or areas of the building not addressed in the report. This report is intended to assist in reducing the possibility of accidents and ill health by bringing to the client's attention identified asbestos containing materials. Within the constraints of time and resources every effort has been made to identify ACM's. It is not implied that all other hazards are under control at the time of inspections.

THIS REPORT SHOULD BE READ IN ITS ENTIRETY AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE APPROVAL OF OHSS AND THE CLIENT.

Questions arising from the survey report should be directed, in the first instance, to the author of this report, who will clarify any technical issues raised.

Further information on previous surveys should be sought from the client.

1.1.1 ABBREVIATIONS

Throughout the report the following terms and abbreviations may be used:

ACM	Asbestos containing material.
AND	Asbestos not detected.
MMMF	This describes any machine made mineral fibre, fibreglass, Rockwool, ceramic fibres and other such material.
MA	Material Assessment Score as defined in HSG264 relates to the friability of the product. It is used to indicate the level of risk posed by the product
AIB	Asbestos Insulating Board.
AC	Asbestos Cement
Chrysotile	Commonly known as white asbestos.
Amosite	Commonly known as brown asbestos.
Crocidolite	Commonly known as blue asbestos.
Amphibole	Generic name for all asbestos types, excluding Chrysotile.
BOHS	British Occupational Hygiene Society
INAB	Irish National Accreditation Board

2 SCOPE OF WORK

2.1 GENERAL

The scope of the survey included;

A refurbishment asbestos survey of Castletroy WWTP to facilitate planned works at the property.

The purpose of the survey is to identify and risk assess asbestos containing materials (ACM's) in the premises or area where planned refurbishment works are to take place. The survey aims to provide sufficient information for designers and the project supervisor for design process to take account of identified asbestos risks. The design team must take account of known locations where ACM's are identified and plan to eliminate the risk or prevent exposure to asbestos during the construction phase. Asbestos is a particular risk within the definitions of "particular risk" in the Safety Health and Welfare at Work (Construction) Regulations 2013 and should be highlighted in the design risk assessments accompanying the Preliminary Safety and Health Plan.

The surveyor undertook as far as reasonably practicable to, record the location, extent and product type of any presumed or known ACMs. All areas identified in the survey were inspected and the information recorded on the accessibility, condition and surface treatment of any presumed or known ACMs. The asbestos type was identified either by collecting representative samples of suspect materials for laboratory identification, or by making a presumption based on the product type and its appearance or previous sampling of similar products..

2.2 BUILDING DETAILS AND CONSTRUCTION TYPE

Constructed in the 1990's Castletroy WWTP is a Multi-Building Waste Water Treatment Plant of modern construction.

3 GENERAL SITE AND SURVEY INFORMATION

Client Details: Irish Water

Client Address: Irish Water
Colville House
Dublin.

Site Address: Limerick CIP
Castletroy WWTP
Castletroy
Limerick

Commissioned By: Marcus Fagan

Surveyor: Anthony Maunsell

Staff Consulted during the survey Marcus Fagan

Date of Survey: 1st and 14th May 2018

Date of Report: 22nd May 2018

Description of the Areas Surveyed: All buildings of Castletroy WWTP.

Excluded Areas: As per the clients requirements the following areas were not accessed;

Outside the site boundary was not accessed during the survey.

Survey Methodology:

Onsite inspection bulk sampling and risk assessment were conducted in accordance with OHSS documented in-house work instructions.

Analysis of asbestos fibres in bulk materials is carried out at the OHSS laboratory. OHSS is accredited by INAB and meet the requirements of International Standard BS EN ISO/IEC 17025 for the sampling and analysis of asbestos fibres in bulk materials.

The surveyor conducted a systematic inspection of the nominated areas. Where access for sampling purposes was not possible, a visual assessment has been made if possible. For similar/repetitive elements, a representative bulk sampling protocol has been adopted following visual examination and assessment.

Bulk Samples were obtained using fibre suppression techniques in order to minimise respirable fibre release. Each sample was double bagged, uniquely labelled on site and then returned to the laboratory for analysis using plane and polarised light microscopy and dispersion staining techniques as defined in UK HSE Guidelines HSG248 and the OHSS documented in-house work instructions.

The results of the survey together with the laboratory bulk sample analysis records are given in further sections to this report.

The Safety Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010 allows materials to be 'presumed' to contain asbestos. Therefore in the asbestos survey, materials can be presumed to contain asbestos.

There are two levels of 'presumption':

1. **Strongly presumed:** in this case the material looks as if it is an ACM, or that it might contain asbestos. This conclusion can be reached through visual inspection alone by an experienced, well-trained surveyor, familiar with the range of asbestos products. Examples of 'strong

presumption' are:

- where laboratory analysis has confirmed the presence of asbestos in a similar construction material;
- materials in which asbestos is known to have been commonly used in the manufactured product at the time of installation (eg corrugated cement roof and wall sheeting, cement gutters and drainpipes, cement water tanks, ceiling tiles, insulating boards);
- materials which have the appearance of asbestos but no sample has been taken, eg thermal insulation on a pipe where fibres are clearly visible
- where the laboratory has sampled the same material in a different location and subsequent laboratory analysis has found that it does not contain asbestos.

2. **Presumed:** is the 'default' situation where a material is **presumed** to contain asbestos because there is insufficient evidence (eg no analysis) to confirm that it is asbestos free, or where a surveyor decides that it is easier under the planned management arrangements to presume certain materials contain asbestos. Many non-asbestos materials will also be presumed to contain asbestos using this system.

There is a further default situation where materials must be **presumed** to contain asbestos. **The default applies to areas which cannot be accessed or inspected. In this situation any area not accessed or inspected must be presumed to contain asbestos, unless there is strong evidence that it does not.**

The risk assessment process (also known as risk algorithms) designed by HSE, allow asbestos containing materials to be ranked according to a Material Assessment algorithm and the HSE have related the scores obtained in the Materials



Assessment algorithms in HSG 264 to a number of risk categories that may be used to guide the employers as to the best course of action to take to mitigate the risk. These are further explained in our risk assessment sheets contained within this report.

These scores can then be ranked and so decisions can be taken as to what actions are required to control the risks from asbestos containing materials during refurbishment.

4 CONCLUSIONS AND ACTIONS

While the survey did not identify asbestos containing materials in the building it should be noted that asbestos containing materials may be concealed or buried on site. Staff undertaking refurbishment work should be trained in asbestos awareness and should any suspect materials be found this should be brought to the attention of the project supervisor for construction stage and the designers.

4.1 REFERENCES

Safety Health and Welfare at Work Act 2005

Safety Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010

Safety Health and Welfare at Work (Construction) Regulations 2013

HSG264 The Survey Guide, HSE Books

HSG248 The Analysts Guide, HSE Books

HSG247 The Contractors Guide, HSE Books



Project Number: 23777/D

5 SURVEY RESULTS



Survey Results

Unit 2BeaT Centre,
Stephenstown Industrial Estate,
Balbriggan, Co. Dublin
Tel: (01) 6905907
Fax: (01) 8020439
Email: info@ohss.ie
Website: www.ohss.ie





Customer Site
Survey Date
Valid Until
Commissioned by

Irish Water
 Castletroy WWTP
 1/5/2018
 1/5/2019
 J.B. Barry

Type
Report Number
Surveyor
Review Date
Method

Refurbishment
 23777/D
 Anthony Maunsell
 1/5/2019
 WI-02 & WI-03



AREAS INSPECTED

Area(s) inspected during the survey where no ACM's were identified.

Risk Assessment	289615	Location	RA:289615 Control Building Entranccec All Walls Floor and Ceiling
Risk Assessment	289616	Location	RA:289616 Control Building Office All Walls Floor and Ceiling
Risk Assessment	289617	Location	RA:289617 Control Building Toilet All Walls Floor and Ceiling
Risk Assessment	289618	Location	RA:289618 Control Building Laboratory All Walls Floor and Ceiling
Risk Assessment	289619	Location	RA:289619 Control Building Canteen All Walls Floor and Ceiling
Risk Assessment	289620	Location	RA:289620 Control Building Locker Room All Walls Floor and Ceiling
Risk Assessment	289621	Location	RA:289621 Control Building Attic All Walls Floor and Ceiling
Risk Assessment	289622	Location	RA:289622 Control Building Electrical Room All Walls Floor and Ceiling
Risk Assessment	289623	Location	RA:289623 Control Building Facade Windows
Risk Assessment	289624	Location	RA:289624 Tanks All Walls and Floor
Risk Assessment	289625	Location	RA:289625 Bell Press Ground Floor Store All Walls and Floor
Risk Assessment	289626	Location	RA:289626 Bell Press Ground Floor Store Ceiling
Risk Assessment	289627	Location	RA:289627 Bell Press Ground Floor Stairwell Ceiling
Risk Assessment	289628	Location	RA:289628 Bell Press Ground Floor Chemical Room Ceiling
Risk Assessment	289629	Location	RA:289629 Bell Press 1st Floor Press Room Ceiling
Risk Assessment	289630	Location	RA:289630 Bell Press 1st Floor Control Room Ceiling



Customer
Site
Survey Date
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Commissioned by

Irish Water
 Castletroy WWTP
 1/5/2018
 1/5/2019
 J.B. Barry

Type
Report Number
Surveyor
Review Date
Method

Refurbishment
 23777/D
 Anthony Maunsell
 1/5/2019
 WI-02 & WI-03



AREAS INSPECTED

Area(s) inspected during the survey where no ACM's were identified.

Risk Assessment	289631	Location	RA:289631 Bell Press 1st Floor Toilet Ceiling
Risk Assessment	289632	Location	RA:289632 Bell Press Facade Windows
Risk Assessment	289633	Location	RA:289633 Intake All Walls Floor and Ceiling
Risk Assessment	289634	Location	RA:289634 Intake All Walls Floor and Ceiling

Client and Survey Details

Client : Irish Water	Date of Survey : 01 May 2018
Site : Castletroy WWTP	Review Survey : 01 May 2019
Address : Castletroy WWTP	Surveyor : Anthony Maunsell
Castletroy	Method : WI-02 WI-03
Limerick	Report No. : 23777/D

Location Details 289615 No Asbestos Found

Building/Area : Control Building
 Room/Section : Entrance
 Location : All Walls Floor and Ceiling
 Description : Solid and Plasterboard
 Sample No. :
 Confirmation : --N\A--
 Access : Full Access
 Normal Use :
 Recommendations :



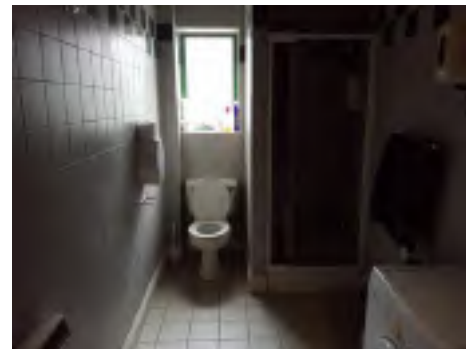
Location Details 289616 No Asbestos Found

Building/Area : Control Building
 Room/Section : Office
 Location : All Walls Floor and Ceiling
 Description : Solid and Plasterboard
 Sample No. :
 Confirmation : --N\A--
 Access : Full Access
 Normal Use :
 Recommendations :



Location Details 289617 No Asbestos Found

Building/Area : Control Building
 Room/Section : Toilet
 Location : All Walls Floor and Ceiling
 Description : Solid and Plasterboard
 Sample No. :
 Confirmation : --N\A--
 Access : Full Access
 Normal Use :
 Recommendations :



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Client and Survey Details

Client : Irish Water	Date of Survey : 01 May 2018
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Address : Castletroy WWTP	Surveyor : Anthony Maunsell
Castletroy	Method : WI-02 WI-03
Limerick	Report No. : 23777/D

Location Details 289618 No Asbestos Found

Building/Area : Control Building
 Room/Section : Laboratory
 Location : All Walls Floor and Ceiling
 Description : Solid and Plasterboard
 Sample No. :
 Confirmation : --N\A--
 Access : Full Access
 Normal Use :
 Recommendations :



Location Details 289619 No Asbestos Found

Building/Area : Control Building
 Room/Section : Canteen
 Location : All Walls Floor and Ceiling
 Description : Solid and Plasterboard
 Sample No. :
 Confirmation : --N\A--
 Access : Full Access
 Normal Use :
 Recommendations :



Location Details 289620 No Asbestos Found

Building/Area : Control Building
 Room/Section : Locker Room
 Location : All Walls Floor and Ceiling
 Description : Solid and Plasterboard
 Sample No. :
 Confirmation : --N\A--
 Access : Full Access
 Normal Use :
 Recommendations :



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Client : Irish Water	Date of Survey : 01 May 2018
Site : Castletroy WWTP	Review Survey : 01 May 2019
Address : Castletroy WWTP	Surveyor : Anthony Maunsell
Castletroy	Method : WI-02 WI-03
Limerick	Report No. : 23777/D

Location Details 289621 No Asbestos Found

Building/Area : Control Building
 Room/Section : Attic
 Location : All Walls Floor and Ceiling
 Description : Solid and Plasterboard
 Sample No. :
 Confirmation : --N\A--
 Access : Full Access
 Normal Use :
 Recommendations :



Location Details 289622 No Asbestos Found

Building/Area : Control Building
 Room/Section : Electrical Room
 Location : All Walls Floor and Ceiling
 Description : Solid and Plasterboard
 Sample No. :
 Confirmation : --N\A--
 Access : Full Access
 Normal Use :
 Recommendations :



Location Details 289623 No Asbestos Found

Building/Area : Control Building
 Room/Section : Facade
 Location : Windows
 Description : Putty
 Sample No. : AMB20180501001
 Confirmation : Sample Taken
 Access : Full Access
 Normal Use :
 Recommendations :



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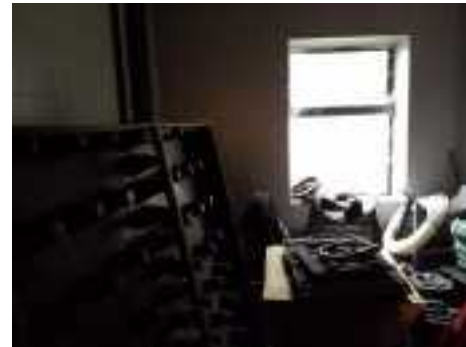
Location Details 289624 No Asbestos Found

Building/Area : Tanks
 Room/Section :
 Location : All Walls and Floor
 Description : Solid and Tiled
 Sample No. :
 Confirmation : --N\A--
 Access : Full Access
 Normal Use :
 Recommendations :



Location Details 289625 No Asbestos Found

Building/Area : Bell Press
 Room/Section : Ground Floor Store
 Location : All Walls and Floor
 Description : Solid and Tiled
 Sample No. :
 Confirmation : --N\A--
 Access : Full Access
 Normal Use :
 Recommendations :



Location Details 289626 No Asbestos Found

Building/Area : Bell Press
 Room/Section : Ground Floor Store
 Location : Ceiling
 Description : Stipple
 Sample No. : AMB20180514001
 Confirmation : Sample Taken
 Access : Full Access
 Normal Use :
 Recommendations :



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Client and Survey Details

Client : Irish Water	Date of Survey : 01 May 2018
Site : Castletroy WWTP	Review Survey : 01 May 2019
Address : Castletroy WWTP	Surveyor : Anthony Maunsell
Castletroy	Method : WI-02 WI-03
Limerick	Report No. : 23777/D

Location Details 289627 No Asbestos Found

Building/Area : Bell Press
Room/Section : Ground Floor Stairwell
Location : Ceiling
Description : Stipple
Sample No. : AMB20180514002
Confirmation : Sample Taken
Access : Full Access
Normal Use :
Recommendations :



Location Details 289628 No Asbestos Found

Building/Area : Bell Press
Room/Section : Ground Floor Chemical Room
Location : Ceiling
Description : Stipple
Sample No. : AMB20180514003
Confirmation : Sample Taken
Access : Full Access
Normal Use :
Recommendations :



Location Details 289629 No Asbestos Found

Building/Area : Bell Press
Room/Section : 1st Floor Press Room
Location : Ceiling
Description : Stipple
Sample No. : AMB20180514004
Confirmation : Sample Taken
Access : Full Access
Normal Use :
Recommendations :



Client and Survey Details

Client : Irish Water	Date of Survey : 01 May 2018
Site : Castletroy WWTP	Review Survey : 01 May 2019
Address : Castletroy WWTP	Surveyor : Anthony Maunsell
Castletroy	Method : WI-02 WI-03
Limerick	Report No. : 23777/D

Location Details 289630 No Asbestos Found

Building/Area : Bell Press
 Room/Section : 1st Floor Control Room
 Location : Ceiling
 Description : Stipple
 Sample No. : AMB20180514005
 Confirmation : Sample Taken
 Access : Full Access
 Normal Use :
 Recommendations :



Location Details 289631 No Asbestos Found

Building/Area : Bell Press
 Room/Section : 1st Floor Toilet
 Location : Ceiling
 Description : Stipple
 Sample No. : AMB20180514006
 Confirmation : Sample Taken
 Access : Full Access
 Normal Use :
 Recommendations :



Location Details 289632 No Asbestos Found

Building/Area : Bell Press
 Room/Section : Facade
 Location : Windows
 Description : Putty
 Sample No. : AMB20180501004
 Confirmation : Sample Taken
 Access : Full Access
 Normal Use :
 Recommendations :



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Address : Castletroy WWTP	Surveyor : Anthony Maunsell
Castletroy	Method : WI-02 WI-03
Limerick	Report No. : 23777/D

Location Details 289633 No Asbestos Found

Building/Area : Intake
 Room/Section :
 Location : All Walls Floor and Ceiling
 Description : Solid
 Sample No. :
 Confirmation : --N\A--
 Access : Full Access
 Normal Use :
 Recommendations :



Location Details 289634 No Asbestos Found

Building/Area : Intake
 Room/Section :
 Location : All Walls Floor and Ceiling
 Description : Solid
 Sample No. :
 Confirmation : --N\A--
 Access : Full Access
 Normal Use :
 Recommendations :



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Sample Analysis

Unit 2BeaT Centre,
Stephenstown Industrial Estate,
Balbriggan, Co. Dublin
Tel: (01) 6905907
Fax: (01) 8020439
Email: info@ohss.ie
Website: www.ohss.ie

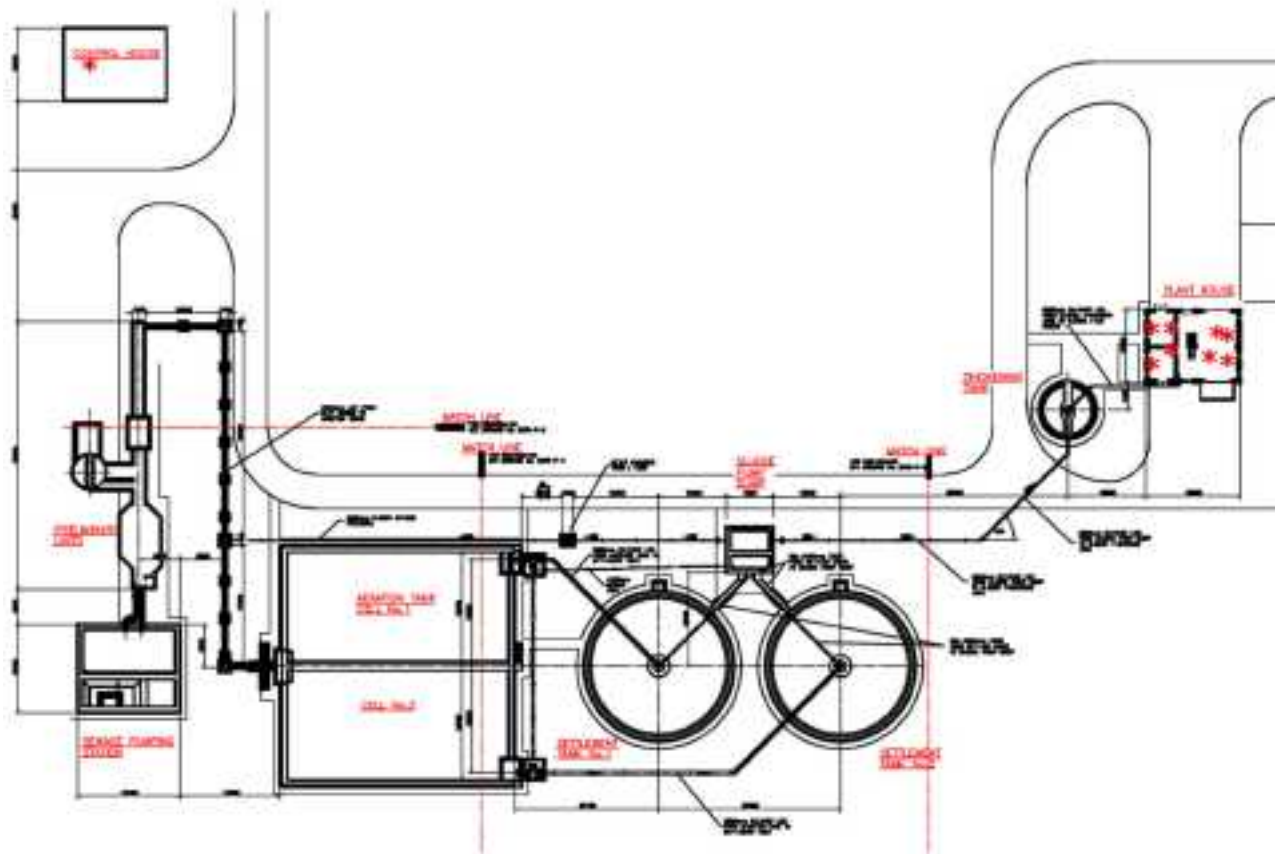








Drawings

Unit 2BeaT Centre,
Stephenstown Industrial Estate,
Balbriggan, Co. Dublin
Tel: (01) 6905907
Fax: (01) 8020439
Email: info@ohss.ie
Website: www.ohss.ie





Drawing Legend		Drawing Revisions			Date	Scale	Project Number	Castletroy WWTP			
Contains Asbestos		Not Accessed Presumed To Contain Asbestos		Rev #	Revision Description	Date	22/05/18			This drawing is for illustration purposes only	23777/D
Sample Point Location	*	No Access Under Fixed Floor Coverings Investigate Prior To Disturbance					Drawing No				Drawn By
							1 of 1			AM	
									QMF 139 Rev 1		