



**Cyngor Sir Ynys Môn/Isle of Anglesey County Council**

**Penhesgyn Landfill Site**

**Landfill Exploratory Excavation Works**

**Construction Quality Assurance Report**

**ECL.10097.R02.001 Rev: -**

**June 2024**

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**Prepared for**

**Cyngor Sir Ynys Môn/Isle of  
Anglesey County Council**

**Prepared by**

**Egniol Consulting Ltd  
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## Document Review

Rev	Date	Prepared By	Reviewed By	Approved By
-	20/06/2024	Steve Woodhouse	Michelle Moran	Ian Roberts

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## **1.0 INTRODUCTION**

- 1.0.1 Penhesgyn Recycling Centre operated by the Isle of Anglesey County Council is a multi-faceted waste recycling centre which includes a Household Waste Recycling Centre (HWRC), a Waste Transfer Station (WTS) and the Penhesgyn closed Landfill Site. Each facility operates under a separate Waste Management Licence or Permit.
- 1.0.2 Environmental monitoring is undertaken at the closed landfill site to the requirements of the Environmental Permit (EP) EPR/DP3734DC, Variation EPR/KP3994FG/V007 (May 2021), which includes the monitoring of landfill gas lateral migration. Such monitoring has identified elevated levels of methane in landfill gas monitoring boreholes at the south-east boundary, indicating possible landfill gas lateral migration. On review of existing information, there is a possibility that a number of the monitoring points in this area are located within, or in close proximity to the waste mass which could provide a false representation of gas lateral migration to receptors outside the landfill perimeter and, therefore, could require a revaluation as suitable perimeter monitoring points in this area.
- 1.0.3 To establish whether the monitoring points have been installed within or, within the influence of, the waste mass, required ground investigation work to confirm the extent of the waste mass in relation to the existing perimeter monitoring boreholes.
- 1.0.4 To comply with Government landfill environmental guidance, permit holders are required to have construction quality assurance (CQA) supervision in attendance for aspects of landfill infrastructure engineering.
- 1.0.5 Egniol Consulting Ltd. (Egniol) of Llys Onnen, Parc Menai, Bangor, Gwynedd were appointed by the Isle of Anglesey County Council as Construction Quality Assurance (CQA) Consultants to monitor the Landfill Exploratory Excavation Works at the Penhesgyn Landfill Site to record and collate information, including 'as-built' details of the works undertaken.
- 1.0.6 In accordance with this appointment, Egniol have produced this CQA Report which details the Landfill Exploratory Excavation Works at Penhesgyn Landfill Site during June 2024.

## **2.0 SITE LOCATION AND ADDRESS**

### **2.1 Site Location**

- 2.1.1 The Penhesgyn Landfill site is located at the Recycling Centre in Llansadwrn, on the Isle of Anglesey, approximately 2Km north-east of the town of Menai Bridge, off the B5420.

### **2.2 Site Address**

Penhesgyn Landfill Site,  
Penmynydd Road,  
Llansadwrn,  
Anglesey,  
LL59 5RY.

### **3.0 DESCRIPTION OF THE WORKS**

#### **3.1 Description**

- 3.1.1 The Works comprised the excavation of a number of exploratory trial pits to locate the extremity of the perimeter and side wall of the landfill area in the south-east of the closed landfill site area to determine the perimeter gas monitoring boreholes' locations in relation to the waste mass.
- 3.1.2 The Works commenced on the 10<sup>th</sup> June 2024 and were completed on the 11<sup>th</sup> June 2024.
- 3.1.3 The exploratory excavations were completed close to the perimeter boreholes suspected of being positioned in waste or in close proximity to the landfill perimeter, specifically boreholes BH14 and BH17 (see drawing 5379.SURV.D03 in Appendix 2 for locations). Exploratory excavations were also completed to determine the perimeter of the landfill sidewall in the area.

#### **3.2 Methodology**

- 3.2.1 Prior to any excavator movements on the landfill area to the predetermined locations, each pathway was 'walked' by the CQA Inspector to establish the most suitable access route to each location and to check for any landfill infrastructure, protrusions, ditches etc. which could be damaged along the route.
- 3.2.2 Prior to each excavation, the excavation location areas were visually inspected for evidence of landfill infrastructure, including protrusions and pipework, and scanned using a cable locating tool (CAT) to identify any electrical services in the area.
- 3.2.3 Each trial pit was excavated with a 13Tonne excavator with a 'toothless' bucket attachment by carefully scraping back the top-soils incrementally to minimise the risk of damage to below ground landfill infrastructure/capping system, while investigating for evidence of engineered soils, landfill waste or continued soils.
- 3.2.4 The depth of capping layer was anticipated to be 1m thick. Excavations were planned to be carried out to a maximum depth of 1.5mbgl to take in account potential thicker layer areas formed during previous surface profiling. Where evidence of a capping system (geotextile), emplaced waste or virgin soils was encountered prior to the predetermined maximum depth, the excavation was stopped and discontinued.
- 3.2.5 Each trial pit was continuously inspected during the excavation and, on encountering required depth or exposing required evidence, the excavation was depth measured, photographed and surveyed, then reinstated with the arisings.

#### **3.3 Surveys**

- 3.3.1 Excavations were surveyed to provide accurate locations of the trial pit as shown on drawing ref: ECL.10097.D06.001 in Appendix 3. The location of the existing gas main in the area was also surveyed as shown in drawing referenced above.
- 3.3.2 Multiple survey points and surface levels were taken at each location - Survey data is included in Appendix 3 for information.

## 4.0 CONSTRUCTION QUALITY ASSURANCE

- 4.0.1 The following description of the exploratory trail pits excavated are presented in the order of excavation.
- 4.0.2 Trial pit locations referenced below are shown on drawing ref: ECL.10097.D06.001 in Appendix 3.
- 4.0.3 Photographic evidence of the excavations is located in Appendix 4.

### 4.1 Trail Pit Excavations

#### 4.1.2 BH14 – A

Commenced excavating (approximately 3000mm x 600mm) adjacent to bore hole BH14. Excavation continued incrementally and was stopped at depth of 1250mm when geotextile was exposed - presumed to be the capping system excavation. The excavation was surveyed and reinstated with the arisings.

#### 4.1.3 BH14 – B

Commenced excavating (approximately 3000mm x 600mm) adjacent to bore hole BH14. Excavation continued incrementally removing the soils to a depth of 1500mm. No evidence of capping or waste was discovered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

#### 4.1.4 BH14 – C

Commenced excavating (approximately 3000mm x 600mm) on the landfill side of the landfill gas main, opposite bore hole BH14. Excavation continued incrementally removing the soils to a depth of 800mm where a geotextile was encountered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

#### 4.1.5 BH28 – A

Commenced excavating (approximately 3000mm x 600mm) adjacent to bore hole BH28. Excavation continued incrementally removing the soils to a depth of 1250mm where a geotextile was encountered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

#### 4.1.6 BH15 – A

Commenced excavating (approximately 3000mm x 600mm) adjacent to bore hole BH15. Excavation continued incrementally removing the soils to a depth of 1250mm where a geotextile was encountered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

#### 4.1.7 BH27 – A

Commenced excavating (approximately 3000mm x 600mm) adjacent to bore hole BH27. Excavation continued incrementally removing the soils to a depth of 900mm where a geomembrane was encountered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

#### 4.1.8 Sidewall – 1

Commenced excavating in-between BH15 and BH27 (approximately 3000mm x 600mm) to locate and identify the perimeter sidewall. Excavation continued incrementally removing soils to a depth of 1000mm where a geotextile was encountered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

#### 4.1.9 BH18 – A

Commenced excavating (approximately 3000mm x 600mm) adjacent to bore hole BH18. Excavation continued incrementally removing the soils to a depth of 1500mm. No evidence of capping or waste was discovered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

#### 4.1.10 BH20 – A

Commenced excavating (approximately 3000mm x 600mm) adjacent to bore hole BH20. Excavation continued incrementally removing the soils to a depth of 1300mm. General inert waste was encountered at this point. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

#### 4.1.11 BH19 – A

Commenced excavating (approximately 3000mm x 600mm) adjacent to bore hole BH19. Excavation continued incrementally removing the soils to a depth of 1300mm. General inert waste was encountered at this point. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

#### 4.1.12 BH17 – A

Commenced excavating (approximately 3000mm x 600mm) adjacent to bore hole BH17. Excavation continued incrementally removing the soils to a depth of 1500mm. No evidence of capping or waste was discovered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

#### 4.1.13 BH13 – A

Commenced excavating (approximately 3000mm x 600mm) opposite to bore hole BH13 which is situated in the 'skip yard' of the Household Waste Recycling Facility (HWRC). Excavation continued incrementally removing the soils to a depth of 450mm where a 'pozidrain' was encountered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

#### 4.1.14 BH13 – B

Commenced excavating (approximately 3000mm x 600mm) adjacent to excavation BH13A, opposite to bore hole BH13. Excavation continued incrementally removing the soils to a depth of 900mm where a geotextile was encountered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

#### 4.1.15 Sidewall – 2

Commenced excavating (approximately 3000mm x 600mm) adjacent to bore hole BH17. Excavation continued incrementally removing the soils to a depth of 600mm where a geotextile and the anchor trench was encountered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed

and reinstated with the arisings.

4.1.16 Sidewall – 3

Continuing to trace the sidewall, commenced excavating (approximately 3000mm x 600mm) adjacent to bore hole BH19. Excavation continued incrementally removing the soils to a depth of 300mm where a geotextile and the anchor trench was encountered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

4.1.17 Sidewall – 4

Commenced excavating (approximately 3000mm x 600mm). Excavation continued incrementally removing the soils to a depth of 600mm where a geotextile and the anchor trench was encountered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

4.1.18 Sidewall – 5

Commenced excavating (approximately 3000mm x 600mm). Excavation continued incrementally removing the soils to a depth of 600mm when a geotextile and the anchor trench was encountered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

4.1.19 Sidewall – 6

Commenced excavating (Approximately 3000mm x 600mm). Excavation continued incrementally removing the soils to a depth of 1100mm when a geotextile and the anchor trench was encountered. Photographs were taken and the excavation was measured and recorded. The excavation was surveyed and reinstated with the arisings.

4.1.20 The ground investigation was stopped at this point as the perimeter of the landfill in the localised area of interest was discovered following excavating 5nr trail pits.

4.1.21 Photographic evidence of the excavations is located in Appendix 4.

## **5.0 CONCLUSION**

5.01 The ground investigation work was undertaken to confirm the extent of the emplaced waste mass in relation to the existing perimeter monitoring boreholes at the south-east of the landfill area, where elevated levels of landfill gas (methane) have been recorded during environmental monitoring, indicating possible methane migration.

5.02 A total of 18nr. exploratory trial pits were excavated.

5.03 The ground investigation has fulfilled its purpose and has identified the extent of the landfill in relation to the existing environmental monitoring points.



## **Cyngor Sir Ynys Môn/Isle of Anglesey County Council**

Penhesgyn Landfill Site  
Landfill Exploratory Excavation Works

Construction Quality Assurance Report  
ECL.10097.R02.001 Rev -

June 2024

# Appendix 1

CQA Inspector's Daily Reports

**CQA Inspector's Daily Report**

Site Name: Penhesgyn Landfill site.

Project: (10097) Perimeter site excavation.

Date	Monday 10 <sup>th</sup> June 2024.						
Weather	<table border="1"> <tr> <td>Previous Night</td> <td>Dry.</td> </tr> <tr> <td>a.m</td> <td>Showers / Overcast.</td> </tr> <tr> <td>p.m</td> <td>Overcast.</td> </tr> </table>	Previous Night	Dry.	a.m	Showers / Overcast.	p.m	Overcast.
Previous Night	Dry.						
a.m	Showers / Overcast.						
p.m	Overcast.						
Site Hours: Contractors Arrival Time: CQA Arrival Time: Contractors Departure Time: CQA Departure Time:	07.00 – 16.00. 08.00. 08.00. 16.00. 16.00.						
Contractors Plant / Resources Utilised	Z-axis 130 LCN Excavator / Operator. 1 x CAT scanner. 1 x surveying kit.						
Contract Works Undertaken	<p>Prior to any excavations of trial pits, the area was scanned utilising a CAT scanner and a fully trained operator. (S. Woodhouse – ECL CQA Manager).</p> <p><b><u>BH14-A.</u></b>            Commenced excavating (Approximately 3000mm x 600mm) adjacent to bore hole 14 utilising the 130-excavator.            Excavation continued incrementally removing the soils to a depth of 1250mm when a geotextile was encountered. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and reinstated utilising the arisings recovered from the hole.</p> <p><b><u>BH14-B</u></b>            Commenced excavating (Approximately 3000mm x 600mm) adjacent to bore hole 14 utilising the 130-excavator.            Excavation continued incrementally removing the soils to a depth of 1500mm. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and reinstated utilising the arisings recovered from the hole.</p> <p><b><u>BH14-C</u></b>            Commenced excavating (Approximately 3000mm x 600mm) adjacent to bore hole 14 utilising the 130-excavator.            Excavation continued incrementally removing the soils to a depth of 800mm when a geotextile was encountered. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and reinstated utilising the arisings recovered from the hole.</p> <p><b><u>BH28-A</u></b>            Commenced excavating (Approximately 3000mm x 600mm) adjacent to bore hole 28 utilising the 130-excavator.            Excavation continued incrementally removing the soils to a depth of 1250mm when a geotextile was encountered. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and reinstated utilising the arisings recovered from the hole.</p>						

For Egniol Environmental Ltd: Steve Woodhouse

## CQA Inspector's Daily Report

Site Name: Penhesgyn Landfill site.

Project: (10097) Perimeter site excavation.

### **BH15-A**

Commenced excavating (Approximately 3000mm x 600mm) adjacent to bore hole 15 utilising the 130-excavator.

Excavation continued incrementally removing the soils to a depth of 1250mm when a geotextile was encountered. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and reinstated utilising the arisings recovered from the hole.

### **BH27-A**

Commenced excavating (Approximately 3000mm x 600mm) adjacent to bore hole 27 utilising the 130-excavator.

Excavation continued incrementally removing the soils to a depth of 900mm when a geomembrane was encountered. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and reinstated utilising the arisings recovered from the hole.

### **Sidewall – 1**

Commenced excavating in-between BH15 and BH27 (Approximately 3000mm x 600mm) to locate and identify the perimeter sidewall. Excavation continued incrementally removing soils to a depth of 1000mm when a geotextile was encountered. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and reinstated utilising the arisings recovered from the hole.

### **BH18-A**

Commenced excavating (Approximately 3000mm x 600mm) adjacent to bore hole 18 utilising the 130-excavator.

Excavation continued incrementally removing the soils to a depth of 1500mm. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and reinstated utilising the arisings recovered from the hole.

### **BH20-A**

Commenced excavating (Approximately 3000mm x 600mm) adjacent to bore hole 20 utilising the 130-excavator.

Excavation continued incrementally removing the soils to a depth of 1300mm. General waste was encountered at this point. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and reinstated utilising the arisings recovered from the hole.

### **BH19-A**

Commenced excavating (Approximately 3000mm x 600mm) adjacent to bore hole 19 utilising the 130-excavator.

Excavation continued incrementally removing the soils to a depth of 1300mm. General waste was encountered at this point. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and reinstated utilising the arisings recovered from the hole.

For Egniol Environmental Ltd: Steve Woodhouse

## CQA Inspector's Daily Report

Site Name: Penhesgyn Landfill site.

Project: (10097) Perimeter site excavation.

	<p><b>BH17-A</b>          Commenced excavating (Approximately 3000mm x 600mm) adjacent to bore hole 17 utilising the 130-excavator.          Excavation continued incrementally removing the soils to a depth of 1500mm. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and reinstated utilising the arisings recovered from the hole.</p>
Testing Undertaken	<p>CAT scanning undertaken by S. Woodhouse.          Surveying undertaken by C. Darlington.          Depth checks.          Photographic evidence of all excavations.</p>
Meetings/ Correspondence	<p>Site walkover with Landfill site manager, Michelle Moran (Project Manager).</p>
Health and Safety	<p>No Issue's on site.</p>
Visitors to Site	<p>Michelle Moran, Ian Roberts (Egniol Consulting LTD).</p>
Issues Encountered (and Remedial Actions Taken)	<p>None.</p>
Comments	<p>None.</p>

For Egniol Environmental Ltd: Steve Woodhouse

**CQA Inspector's Daily Report**

Site Name: Penhesgyn Landfill site.

Project: (10097) Perimeter site excavation.

Date	Tuesday 11 <sup>th</sup> June 2024.						
Weather	<table border="1"> <tr> <td>Previous Night</td> <td>Dry.</td> </tr> <tr> <td>a.m</td> <td>Showers / Overcast.</td> </tr> <tr> <td>p.m</td> <td>Showers / Overcast.</td> </tr> </table>	Previous Night	Dry.	a.m	Showers / Overcast.	p.m	Showers / Overcast.
Previous Night	Dry.						
a.m	Showers / Overcast.						
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Site Hours: Contractors Arrival Time: CQA Arrival Time: Contractors Departure Time: CQA Departure Time:	07.00 – 16.00. 08.00. 08.00. 16.00. 16.00.						
Contractors Plant / Resources Utilised	Z-axis 130 LCN Excavator / Operator. 1 x CAT scanner.						
Contract Works Undertaken	<p>Prior to any excavations of trial pits, the area was scanned utilising a CAT scanner and a fully trained operator. (S. Woodhouse – ECL CQA Manager).</p> <p><b><u>BH13-A.</u></b> Commenced excavating (Approximately 3000mm x 600mm) adjacent to bore hole 13 utilising the 130-excavator. Excavation continued incrementally removing the soils to a depth of 450mm when a pozidrain was encountered. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and Reinstated utilising the arisings recovered from the hole.</p> <p><b><u>BH13-B</u></b> Commenced excavating (Approximately 3000mm x 600mm) adjacent to bore hole 13 utilising the 130-excavator. Excavation continued incrementally removing the soils to a depth of 900mm when a geotextile was encountered. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and Reinstated utilising the arisings recovered from the hole.</p> <p><b><u>Sidewall - 2</u></b> Commenced excavating (Approximately 3000mm x 600mm) adjacent to bore hole 17 utilising the 130-excavator. Excavation continued incrementally removing the soils to a depth of 600mm when a geotextile and the anchor trench was encountered. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and Reinstated utilising the arisings recovered from the hole.</p> <p><b><u>Sidewall - 3</u></b> Commenced excavating (Approximately 3000mm x 600mm) adjacent to bore hole 19 utilising the 130-excavator. Excavation continued incrementally removing the soils to a depth of 300mm when a geotextile and the anchor trench was encountered. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and Reinstated utilising the arisings recovered from the hole.</p>						

For Egniol Environmental Ltd: Steve Woodhouse

## CQA Inspector's Daily Report

Site Name: Penhesgyn Landfill site.

Project: (10097) Perimeter site excavation.

	<p><b>Sidewall - 4</b> Commenced excavating (Approximately 3000mm x 600mm) utilising the 130-excavator. Excavation continued incrementally removing the soils to a depth of 600mm when a geotextile and the anchor trench was encountered. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and Reinstated utilising the arisings recovered from the hole.</p> <p><b>Sidewall - 5</b> Commenced excavating (Approximately 3000mm x 600mm) utilising the 130-excavator. Excavation continued incrementally removing the soils to a depth of 600mm when a geotextile and the anchor trench was encountered. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and Reinstated utilising the arisings recovered from the hole.</p> <p><b>Sidewall - 6</b> Commenced excavating (Approximately 3000mm x 600mm) utilising the 130-excavator. Excavation continued incrementally removing the soils to a depth of 1100mm when a geotextile and the anchor trench was encountered. Photographs were undertaken and the excavation was measured and recorded. The excavation was surveyed and Reinstated utilising the arisings recovered from the hole.</p>
Testing Undertaken	CAT scanning undertaken by S. Woodhouse. Surveying undertaken by C. Darlington. Depth checks. Photographic evidence of all excavations.
Meetings/ Correspondence	Site walkover with Landfill site manager, Michelle Moran (Project Manager).
Health and Safety	No Issue's on site.
Visitors to Site	Michelle Moran (Egniol Consulting LTD).
Issues Encountered (and Remedial Actions Taken)	None.
Comments	None.

For Egniol Environmental Ltd: Steve Woodhouse



## **Cyngor Sir Ynys Môn/Isle of Anglesey County Council**

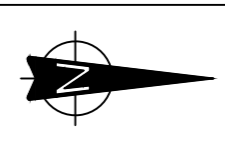
Penhesgyn Landfill Site  
Landfill Exploratory Excavation Works

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# Appendix 2

Borehole Locations



- NOTES**
1. All Survey information provided by Egniol Environmental Ltd.
  2. All dimensions in millimetres and all levels in metres above ordnance datum.
  3. Do not scale from this drawing.
  4. Any anomalies on this drawing should be brought to the attention of Egniol Environmental Ltd.

**Key**

- 6.0 Topographical Contours
- BH9 Borehole Monitoring Point
- BH9 Water Monitoring Point
- Fence Line
- Top of Batter
- Bottom of Batter

**PLEASE NOTE**  
Water Monitoring Locations BH96B, SW9 and SW10 are located to the south of the site and the As-built co-ordinates can be found in the adjacent table.

SW5 (LOCATED IN BETWEEN TREES)

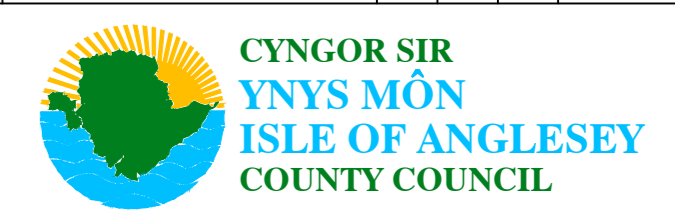


All Monitoring Borehole and Water Sample Locations are to Local Grid Co-ordinates.

Monitoring Borehole Locations		
Borehole I.D.'s	Easting	Northing
BH1	5157.906	5303.375
BH2	5228.768	5380.112
BH3	5279.349	5439.864
BH4	5318.808	5492.211
BH5	5407.673	5432.536
BH6	5485.657	5388.465
BH7	5578.167	5358.108
BH9	5792.651	5357.339
BH10	5750.574	5276.982
BH11	5716.254	5201.142
BH12	5680.675	5136.870
BH13	5666.004	5085.401
BH14	5621.109	5053.065
BH15	5594.390	5032.218
BH15A	5581.081	5027.513
BH16	5577.030	5040.875
BH16A	5571.972	5031.738
BH17	5547.380	5047.918
BH18	5549.903	5033.564
BH19	5527.912	5028.782
BH20	5516.558	5018.116
BH21	5507.075	5007.594
BH22	5383.099	4955.481
BH23	5553.714	5024.058
BH24	5577.413	5012.530
BH25	5588.479	5018.988
BH27	5580.989	5042.940
BH28	5605.268	5035.938
BH29	5576.516	5001.116
BH30	5564.091	5000.899
BH31	5560.940	5001.924
BH50	5175.062	5601.238
BH51	5087.428	5486.804
BH52	5051.609	5392.980
BH53	5860.992	5197.072
BH54	5839.241	5142.462
BHHOUSE	5568.490	5009.009

Water Sample Locations		
Water Sample I.D.'s	Easting	Northing
SW1	5041.936	5388.239
SW2	4963.347	5304.715
SW3	4996.475	5055.871
SW4	5007.627	5060.869
SW5	5214.581	5041.517
SW6	5630.914	5331.117
SW7	5540.404	5191.359
SW8	5457.929	5022.281
SW9	5063.947	4707.944
SW10	4730.794	4396.464
BH1	4984.649	5292.405
BH2	5018.043	5071.678
BH96B	5118.544	4875.527
L1	5050.756	5296.104
L4	5080.621	5071.335
L5	5285.330	5049.782
L6	5370.160	5025.942
L7	5457.527	5079.782
LV	5593.760	5189.176

REV	MODIFICATIONS	BY	CH	AP	DATE



Penhesgyn Landfill Site

Monitoring Locations

DRAWN BY DMD	CHECKED BY GOJR	APPROVED BY IR
DATE 07.01.2015	SCALE @ A1 1:1250	REVISION -

ISSUE  
**Information**

DRAWING NUMBER  
**5379.SURV.D03**





## **Cyngor Sir Ynys Môn/Isle of Anglesey County Council**

Penhesgyn Landfill Site  
Landfill Exploratory Excavation Works

Construction Quality Assurance Report  
ECL.10097.R02.001 Rev -

June 2024

# Appendix 3

Survey Information



Notes

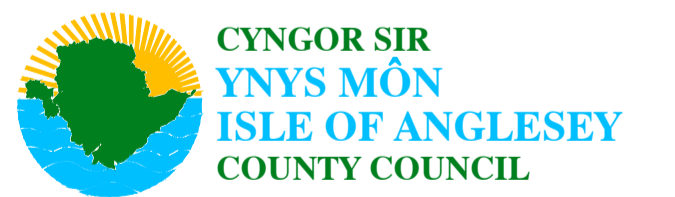
1. All levels in metres Above Ordnance Datum Newlyn.
2. Do not scale from this drawing.
3. Any anomalies on this drawing should be brought to the attention of Egniol Consulting Ltd.
4. Key.

- Trial Pit Locations
- Sidewall Locations
- Piperun 1
- Pipe run 2

Rev	Modification	By	Chk	App	Date
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 LL57 4DF  
 Telephone: 01248 355996  
 Email: info@egniol.com



Penhesgyn Landfill Site

Trial Pit Locations

Drawn by LE	Checked by CD	Approved by MM
Date 14.06.2024	Date 14.06.2024	Date x
Status <b>Information</b>		Scale @ A1 1:500

Drawing Number ECL.10097.D06.001	Revision -
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	Eastings	Northings	Level
14aa	253356.592	374317.469	65.743 stn
14ab	253356.981	374316.908	65.728 stn
14ac	253354.217	374315.223	65.54 stn
14ba	253350.368	374313.873	65.493 stn
14bb	253348.439	374311.967	65.416 stn
14ca	253344.69	374316.886	64.645 stn
14cb	253346.156	374319.24	64.814 stn
28aa	253329.804	374304.33	64.49 stn
28ab	253332.666	374304.599	64.758 stn
15aa	253323.036	374306.501	63.753 stn
15ab	253324.812	374305.789	63.975 stn
sidewall1a	253316.682	374311.538	62.755 stn
sidewall1b	253315.723	374310.41	62.532 stn
27a	253312.155	374317.545	62.478 stn
27b	253313.78	374316.778	62.643 stn
17aa	253278.895	374332.05	59.194 stn
17ab	253277.613	374330.316	58.978 stn
18aa	253276.14	374315.284	59.068 stn
18ab	253277.732	374318.471	59.06 stn
19aa	253270.521	374326.947	58.862 stn
19ab	253272.182	374329.868	58.992 stn
20aa	253258.106	374319.208	58.703 stn
20ab	253256.668	374316.489	58.748 stn
17sidewall	253276.948	374335.204	59.569 stn
17sidewallb	253277.199	374336.561	59.877 stn
13aa	253368.912	374335.264	65.35 stn
13ab	253371.397	374337.958	65.37 stn
13ba	253377.051	374342.309	65.33 stn
13bb	253379.058	374345.457	65.577 stn
sidewall3a	253268.24	374336.284	59.312 stn
sidewall3b	253268.411	374336.879	59.405 stn
sidewall5a	253236.517	374344.386	59.047 stn
sidewall5b	253236.946	374345.376	59.34 stn
sidewall6a	253219.416	374349.579	59.121 stn
sidewall6b	253219.275	374350.613	59.36 stn
sidewall4a	253256.928	374338.264	59.347 stn
sidewall4b	253257.384	374339.914	59.732 stn
piprun2a	253386.449	374370.01	stn
piprun2b	253379.967	374349.434	stn
piprun2c	253369.042	374338.059	stn
piprun2d	253358.379	374325.803	stn
piprun2e	253346.986	374313.385	stn
piprun2f	253337.118	374299.039	stn
piprun1newa	253300.731	374403.999	65.827 stn
piprun1newb	253327.574	374396.08	65.629 stn
piprun1newc	253382.447	374369.767	65.712 stn

piprun1newT

253386.671 374368.918

65.779 stn

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## **Cyngor Sir Ynys Môn/Isle of Anglesey County Council**

Penhesgyn Landfill Site  
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# Appendix 4

Photographic Record of the Works

### PHOTO LOG

<b>Plate No.</b>	<b>Description</b>
<b>1</b>	Excavation Ref: BH14A
<b>2</b>	Excavation Ref: BH14B
<b>3</b>	Excavation Ref: BH14C
<b>4</b>	Excavation Ref: BH15A
<b>5</b>	Excavation Ref: BH27A
<b>6</b>	Excavation Ref: BH28A
<b>7</b>	Excavation Ref: Sidewall 1
<b>8</b>	Excavation Ref: BH18A
<b>9</b>	Excavation Ref: BH20A
<b>10</b>	Excavation Ref: BH19A
<b>11</b>	Excavation Ref: BH17A
<b>12</b>	Excavation Ref: BH13A
<b>13</b>	Excavation Ref: BH13B
<b>14</b>	Excavation Ref: Sidewall 2
<b>15</b>	Excavation Ref: Sidewall 3
<b>16</b>	Excavation Ref: Sidewall 4
<b>17</b>	Excavation Ref: Sidewall 5
<b>18</b>	Excavation Ref: Sidewall 6

**Plate 1**



**Plate 2**



**Plate 3**



**Plate 4**



**Plate 5**



**Plate 6**



**Plate 7**



**Plate 8**



**Plate 9**



**Plate 10**



**Plate 11**



**Plate 12**



**Plate 13**



**Plate 14**



**Plate 15**



**Plate 16**



**Plate 17**



**Plate 18**

