

ABERMULE BUSINESS PARK

Site Condition Report

Sections 1 - 3

JUNE 2020



CONTACTS

GEMMA FRANCIS
Principal Consultant

m +44 (0)7590 000223
e gemma.francis@arcadis.com

Arcadis.
Level 1
2 Glass Wharf
Temple Quay
Bristol
BS2 0FR

Abermule Business Park

Site Condition Report

Author Rimjhim Singh 

Checker Ross Scammell 

Approver George Flower 

Report No 10026414-ARC-XX-XX-RP-ZZ-0005-02-Site Condition Report

Date June 2020

VERSION CONTROL

Version	Date	Author	Checker	Approver	Changes
01	17/06/2020	R Singh	R Scammell	G Flower	First issue
02	08/09/2020	A Watts	G Francis	G Flower	Update following SLR review

This report dated 17 June 2020 has been prepared for Powys County Council (the "Client") in accordance with the terms and conditions of appointment dated 23 March 2020 (the "Appointment") between the Client and **Arcadis (UK) Limited** ("Arcadis") for the purposes specified in the Appointment. For avoidance of doubt, no other person(s) may use or rely upon this report or its contents, and Arcadis accepts no responsibility for any such use or reliance thereon by any other third party.

CONTENTS

1	INTRODUCTION	1
1.1	Terms of Reference	1
1.2	Objectives.....	1
1.3	Sources of Information	1
1.4	Limitations.....	1
2	SITE CONDITION REPORT	2
3	REFERENCES	7

APPENDICES

APPENDIX A

Survey Boundary and Location Plan

Existing Site Layout

Site Boundary Plan, depicting boundary for permitted activities

Proposed Site Plan

Proposed Surface Water Drainage Plan

1 INTRODUCTION

1.1 Terms of Reference

Arcadis Consulting (UK) Limited (Arcadis) has been commissioned by Powys County Council to undertake a Site Condition Report (SCR) for Abermule Business Park ('the Site'). This report presents the observations from a site walkover survey and the findings from the Phase 1 Geo-environmental Desk Study (Ref 1) as well as the Geo-environmental and Geotechnical Assessment Report (Ref 2), both completed by Arcadis relating to the site.

Powys County Council (current site operator) wish to apply for a permit for operating a recycling bulking facility comprising different units (bulking shed, storage slab, and wash, green and glass areas) and vehicle parking areas.

1.2 Objectives

The objective of this SCR is to provide documentation to support the permit application for a recycling bulking facility.

Powys County Council has provided a 'Site Boundary Plan' which shows the boundary for permitted activities and is attached as drawing no. 2395/M10/001 in Appendix A.

1.3 Sources of Information

The following sources of information have been used in the compilation of this report:

- Abermule Business Park, Phase 1 Geo-environmental Desk Study, Ref: 0001-UA006590-26-UP32R-01, December 2017 (Ref 1); and
- Abermule Business Park, Geo-environmental and Geotechnical Assessment Report, Ref: 10026414-ARC-00-XX-RP-ZZ-0003-02, May 2019 (Ref 2).

The information contained within the Geo-environmental and Geotechnical Assessment Report can be used to inform the baseline data for the site.

Powys County Council has confirmed that site conditions have not changed since the Phase 1 Geo-environmental Desk Study and Geo-environmental and Geotechnical Assessment Report were written.

1.4 Limitations

This report has been prepared for the client in accordance with the terms and conditions of appointment. Arcadis cannot accept any responsibility for any use of or reliance on the contents of this report by any third party. The copyright of this document, including the electronic format, shall remain the property of Arcadis.

This report has been compiled from a number of sources, which Arcadis believes to be trustworthy. However, Arcadis is unable to guarantee the accuracy of information provided by others. The report is based on information available at the time of writing. Consequently, there is potential for further information to become available, which may change this report's conclusion and for which Arcadis cannot be held responsible.

2 SITE CONDITION REPORT

1.0 SITE DETAILS	
Name of the applicant	Powys County Council
Activity address	Abermule Business Park, Maesderwen Farm, Abermule Village, SY15 6NU
National grid reference	NGR: 315720, 294182
Document reference and dates for Site Condition Report at permit application and surrender	<u>Permit Application:</u> Doc Ref: 10026414-ARC-XX-XX-RP-ZZ-0005-02 Date: June 2020
Document references for site plans (including location and boundaries)	2395/M01/001 Rev B - Survey Boundary and Location Plan, 08/03/17 (Appendix A). 2395/P03/002 - Existing Site Layout, 13/03/18 (Appendix A).

2.0 CONDITION OF THE LAND AT PERMIT ISSUE	
Environmental setting including: <ul style="list-style-type: none"> • Geology • Hydrogeology • Surface waters 	<p><u>Geology</u></p> <p>Made Ground – The ground investigation (Ref 2) recorded shallow Made Ground across the site as both cohesive and granular material with occasional pieces of plastic, glass and metal to a maximum depth of 0.40m bgl.</p> <p>Superficial Deposits – The ground investigation (Ref 2) Alluvial Fan deposits comprising both granular and cohesive deposits were recorded during the ground investigation.</p> <ul style="list-style-type: none"> • <u>Cohesive deposits</u> - Greenish brown slightly sandy gravelly silt and soft to firm greyish and orangish brown slightly sandy gravelly clays to a maximum depth of 4.00m bgl and a maximum thickness of 4m. • <u>Granular deposits</u> - Medium dense to very dense brown and grey sandy clayey sub-angular to sub-rounded fine to coarse gravel up to a maximum depth of 10.00 m bgl and a maximum thickness of 6.00m. <p>Bedrock – During the ground investigation (Ref 2) bedrock was recovered as very dense black slightly silty very sandy fine to coarse angular GRAVEL of mudstone. The depth extent was not proven.</p> <p>Faults – BGS mapping records one inferred fault line at rock head approximately 250m south east of the site, and down throwing to the east.</p>

	<p><u>Hydrogeology</u> Superficial Deposits – Secondary Undifferentiated aquifer. Bedrock – Secondary B aquifer.</p> <p>One groundwater abstraction licence is recorded within 500m of the site, approximately 360m south west of the Site, used for farming and domestic, with Powys County Council being the licence holder.</p> <p>Groundwater flow direction is anticipated to be towards the west and south west consistent with the catchment and flow direction of the River Severn.</p> <p><u>Surface Waters</u> The nearest mapped natural surface water features are located immediately to the east and to the west and approximately 14m south east of the Site boundary (assumed to be field drains). Two ponds are located approximately 70m south and approximately 20m north west of the Site. The River Severn is located approximately 200m north of the Site at its closest point and flows to the south west. The Mule river is approximately 500m east, and there are unnamed streams located approximately 200m to the north west and approximately 20 - 250m southeast of the Site. Several mapped streams/drains appear to be culverted. Surface water courses near to the Site are likely to drain north and Westwards towards the River Severn.</p> <p>The nearest discharge consent is approximately 300m south east of the Site and is for discharge of sewage to the surface water course which runs past the eastern boundary of the Site.</p> <p>The Site is located within an area that is susceptible to extreme flooding from rivers without defences (Zone 2). A high risk, 30-year return area is located in the southwest. A medium risk, 100-year return is located in the centre and north-east of the Site.</p>
<p>Pollution history including:</p> <ul style="list-style-type: none"> • pollution incidents that may have affected land • historical land-uses and associated contaminants • any visual/olfactory evidence of existing contamination • evidence of damage to pollution prevention measures 	<p><u>Pollution Incidents</u> There are no recorded Pollution incidents to controlled waters within approximately 250m of the Site. The closest incident occurred 475.0m north west in relation to a sheep farm resulting in a minor incident.</p> <p><u>Discharge Consents</u> There are no recorded discharge consents within approximately 250m radius of site. The nearest is approximately 300m southeast of site for sewage discharges - final/treatment effluent to the surface water course (The Mule) which runs well beyond the eastern boundary of the site.</p>

Historical Land Uses

Onsite

The site was an open agricultural field with an unnamed road in the north west of the site between circa 1884 and 1964.

The site was labelled as Abermule Business Park with access road from B4386 running in a south-eastern direction and along the south-eastern boundary of the site since circa 2017 mapping (a couple of small structures are also shown along the access road).

Offsite

Circa 1884, the Cambrian Railway which runs in a north-east to south-west orientation is located approximately 3 m south of the site, with an unnamed road to Abermule to the north.

A reservoir is located approximately 80m south of the site on the other side of railway. Three ponds were recorded at 60m and 250m north west and 230m east of the site. Two of these were later infilled circa 1903. The River Severn is approximately 250m north of the site, with a series of farm related buildings located between 20 -200m north east of the site.

Circa 2000, Maesderwen farm to the north has been expanded to include a large commercial building where there were previously smaller farm buildings. 220-250m east of the site was predominantly residential properties and an associated area for commercial use. A former reservoir (south of the site) has been partially or fully infilled and appeared to be vegetated.

Potential sources of contamination

A number of potential sources of contamination were noted within the Phase 1 Desk Study for the site:

- Made Ground associated with abandoned roadway, rubble mounds (potentially containing asbestos containing materials (ACMs)) and use of the Site by the farmer to store farm equipment.
- Spills and leaks from filling/removal of contaminating liquids from underground and above ground storage tanks in compound area and electrical substation.
- Radon gas (naturally occurring).

Radon

The site is located within a medium probability radon area (5% to 10% of homes are estimated to be at or above the action level).

Potential for Collapsible or Compressible Ground and Landslides

- There is a very low potential for compressible ground stability hazards and a very low to moderate potential for compressible ground stability hazards on-site.

	<ul style="list-style-type: none"> On-site there is a very low potential of landslides, however off-site within 250m there are six potential areas of land sliding with a low to high risk. <p><u>Ecologically Sensitive Areas</u> The site is not located within a designated Environmentally Sensitive Area. However, ancient woodland has been identified located approximately 413m to the northwest and 453m to the north of the Site.</p> <p><u>Visual / Olfactory Evidence of Existing Contamination</u> Other than the Made Ground and the presence of non-natural materials recorded, no visual or olfactory evidence of contamination was identified on the site during the ground investigation (Ref 2).</p> <p><u>Evidence of Damage to Pollution Prevention Measures</u> None were observed during the site walkover survey (Ref 1) or ground investigation works (Ref 2).</p>
<p>Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)</p>	<p>None available.</p>
<p>Baseline soil and groundwater reference data</p>	<p>An intrusive ground investigation was carried out by Arcadis to assess the soil and groundwater conditions for this site and was reported within the Abermule Business Park Geo-environmental and Geotechnical Assessment Report (Ref 2).</p> <p>The report concluded that soil samples from Made Ground and natural soils did not record any elevations when screened against commercial end use soil screening values.</p> <p>Arcadis has not been able to confirm whether the possible USTs highlighted in the Phase 1 Desk Study are present on site within the gated compound, however Arcadis has targeted ground investigation data from a nearby exploratory hole (BH104) to assess any potential impact from the USTs and groundwater returned non-detect hydrocarbon impact.</p> <p>Some asbestos was found within Made Ground samples taken from material stockpiles onsite and was recommended to be removed from site and disposed of at an appropriate landfill facility.</p> <p>No contaminant elevations were recorded from tested groundwater samples.</p> <p>Gas monitoring concluded that the site would be classified as a CS1 very low risk site with no protective measures needed. Arcadis notes that 2 of the 6 monitoring wells (BH101 and BH106) were flooded (with groundwater above the level of the slotted response zone) during the post fieldwork monitoring period. Arcadis believes that the data</p>

	<p>obtained from the other wells during the monitoring period provides a sufficient dataset for the purpose of the proposed development, combined with the absence of significant ground gas sources (e.g. landfill material), and therefore the conclusions of the ground gas risk assessment are consistent with the CSM i.e. no ground gas source.</p> <p>The site is located within a medium probability radon area (5% to 10% of homes are estimated to be at or above the action level). It is recommended that the level of protection required is confirmed with the Local Authority Building Control Department, it is likely that basic protection measures will be required.</p> <p>Tested samples were classified as non-hazardous.</p>
Supporting information	<ul style="list-style-type: none"> • Abermule Business Park, Phase 1 Geo-environmental Desk Study (Ref 1) • Abermule Business Park, Geo-environmental and Geotechnical Assessment Report (Ref 2)

3.0 PERMITTED ACTIVITIES	
Permitted activities	A11- Household, Commercial and Industrial Waste Transfer Station.
Non-permitted activities undertaken	Application is for a new site not a former waste site.
<p>Document references for:</p> <ul style="list-style-type: none"> • plan showing activity layout; and • environmental risk assessment. 	<ul style="list-style-type: none"> - Site Boundary Plan (2395/M10/001), depicting boundary for permitted activities, included in Appendix A. - Proposed Site Plan, showing waste storage areas (2395/0000.002), included in Appendix A. - Proposed Surface Water Drainage Plan (2395/0500.001), included in Appendix A. - Environmental Risk Assessment (ref: 416.00798.00038_ERA)

3 REFERENCES

1. Abermule Business Park, Phase 1 Geo-environmental Desk Study, Ref: 0001-UA006590-26-UP32R-01, December 2017.
2. Abermule Business Park, Geo-environmental and Geotechnical Assessment Report, Ref: 10026414-ARC-00-XX-RP-ZZ-0003-02, May 2019.

APPENDIX A

Plans as supplied by Powys County Council:

Survey Boundary and Location Plan

Existing Site Layout

Site Boundary Plan, depicting boundary for permitted activities

Proposed Site Plan

Proposed Surface Water Drainage Plan

This drawing should not be scaled and any dimensions verified on site. All dimensions are in millimetres unless otherwise stated.
 CWIC is the Central Wales Infrastructure Collaboration project between Powys County Council and Ceredigion County Council and all copyrights are vested in each respective Authority.
 This drawing is the property of CWIC Engineering Design Services and is issued on the condition that it is not copied, reproduced, retained or distributed to any unauthorised person, either wholly or in part without the consent in writing of CWIC Engineering Design Services.
 © Howarth & Gordon a hwbllw cronfa 2017 Aeddy Ordnans 100024419 (Cynnyr Sir Ceredigion) & 100025371 (Cynnyr Sir Powys)
 © Crown copyright and database rights 2017 Ordnance Survey 100024419 (Ceredigion County Council) & 100025371 (Powys County Council)

Notes

KEY

— Survey Boundary.

Amendments

Rev	Date	Description	By	Chkd
B	04/10/17	Inclusion of additional area within overall survey boundary. Addition of grid reference.	LMC	SK
A	25/04/17	Extended survey area added.	LMC	DB

Engineering Design Services

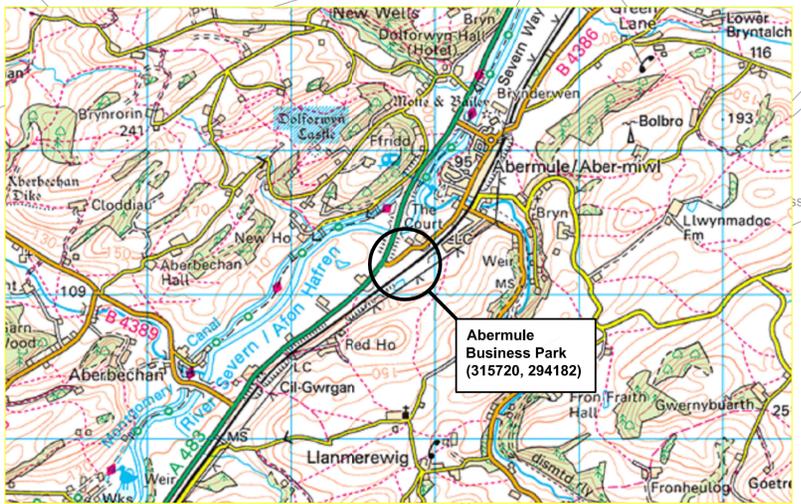
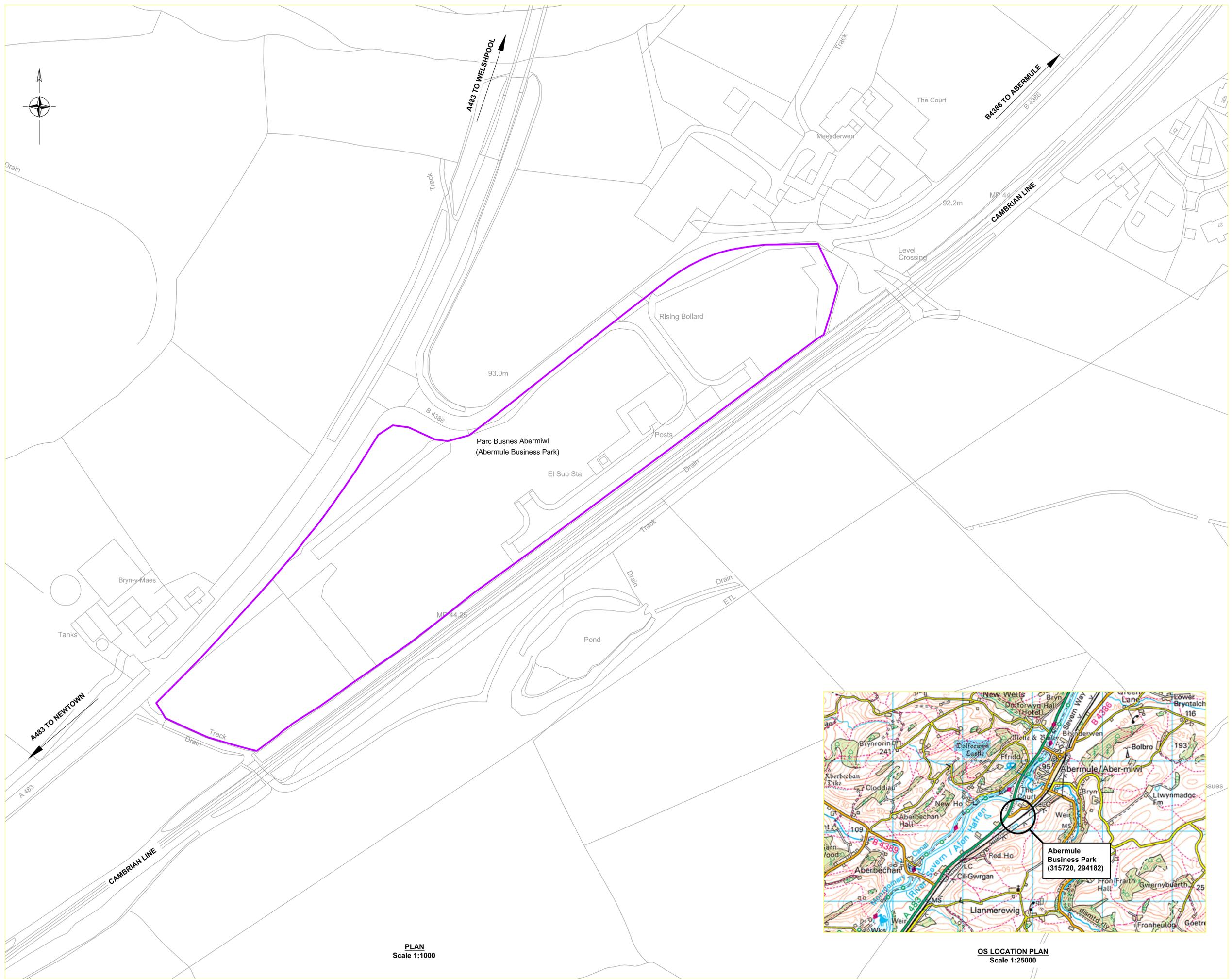
EDS West Manager: Steve Hallows cing mca 01545 572513 hpw@ceredigion.gov.uk
 EDS East Manager: Gareth Price cing cew mca 0845 607 6060 its.helpdesk@powys.gov.uk
 Powys
 Ceredigion
 CWS-CWIC

Abermule Business Park Development - Newtown Bulk Recycling Facility.

Drawing Title: **Survey Boundary and Location Plan.**

By: LMC	Checked: DB	Scale at A1: 1:1000
Date: 08/03/17		

Project Number: H2395	Drawing Number: 2395/M01/001	Revision: B
-----------------------	------------------------------	-------------



PLAN
Scale 1:1000

OS LOCATION PLAN
Scale 1:25000

This drawing should not be scaled and any dimensions verified on site.
 CWC is the Central Wales Infrastructure Collaboration project between Powys County Council and Ceredigion County Council and all copyrights are vested in each respective Authority.
 This drawing is the property of CWC Engineering Design Services and is issued on the condition that it is not copied, reproduced, retained or disclosed to any unauthorised person, either wholly or in part without the consent in writing of CWC Engineering Design Services.
 © Hawthorn's Crown & Associates copyright 2017 Aerial Ordnance
 100224419 (Cynfor Sir Ceredigion) & 100225371 (Cynfor Sir Powys)
 © Crown copyright and database rights 2017 Ordnance Survey
 10024419 (Ceredigion County Council) & 10025371 (Powys County Council)

Notes

ISSUED FOR PLANNING

KEY

-  Business Park Boundary.
-  14" Water Main (STW).
-  Development Exclusion Zone, Water Main.
-  Foul Rising Main (STW).
-  Development Exclusion Zone, Rising Main.
-  Underground Cable (BT).

Rev	Date	Description	By	Chkd

Amendments

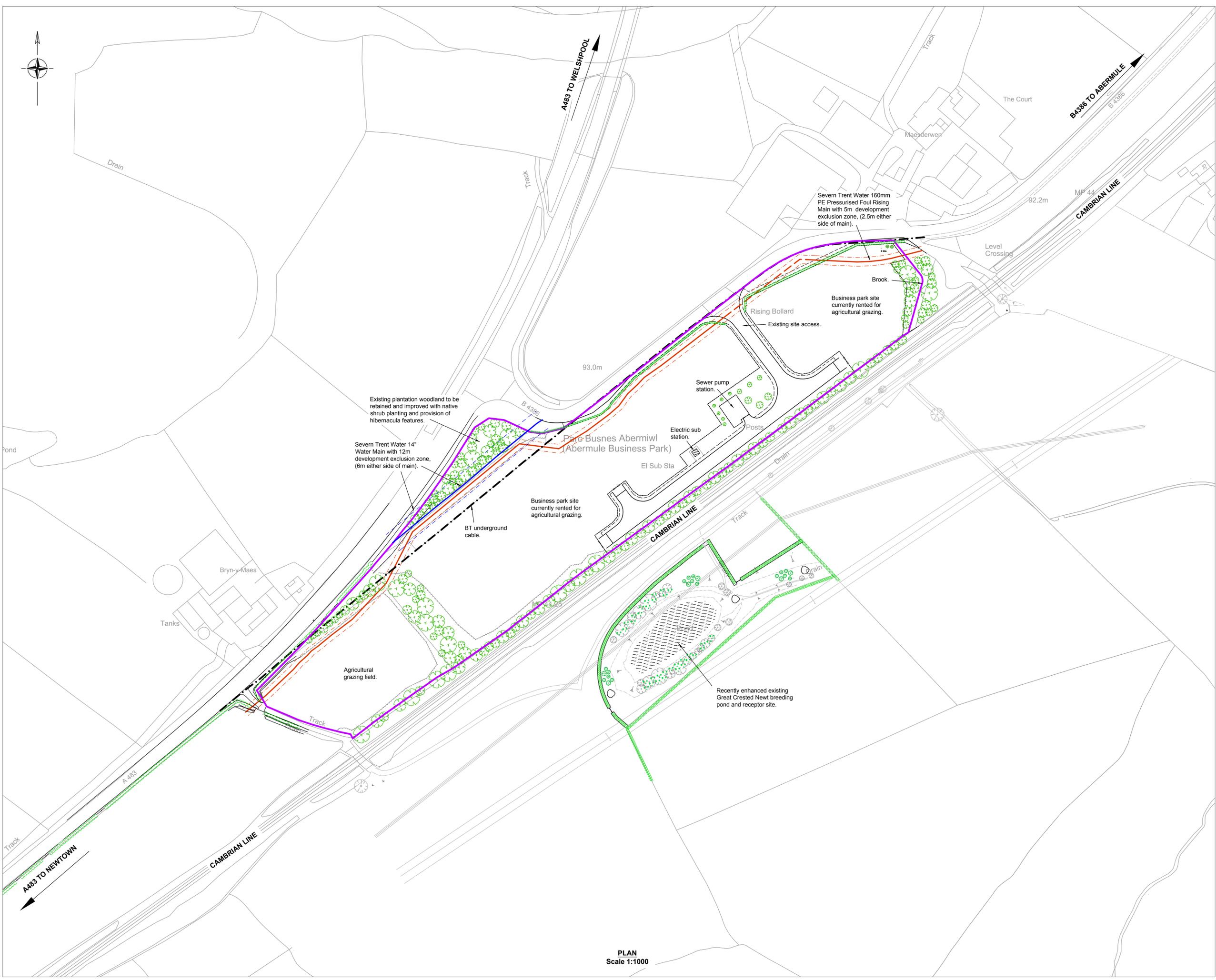
Engineering Design Services
 EDS West Manager : Steve Hollows cing mick
 01545 572513 hgw@ceredigion.gov.uk
 West : Penmorfa, Aberaron, Ceredigion, SA44 0PA
 EDS East Manager : Gareth Price cing clem mick
 0845 607 6060 tjs.helpdesk@powys.gov.uk
 Powys
 100224419 (Cynfor Sir Ceredigion) & 100225371 (Cynfor Sir Powys)
 © Crown copyright and database rights 2017 Ordnance Survey
 10024419 (Ceredigion County Council) & 10025371 (Powys County Council)

Project: **Abermule Business Park Development.**

Drawing Title: **Existing Site Layout.**

By	LMC	Checked	DB	Scale at A1	1:1000
Date	13/03/18				

Project Number	H2395	Drawing Number	2395/P03/002	Revision	
----------------	-------	----------------	--------------	----------	--



PLAN
Scale 1:1000

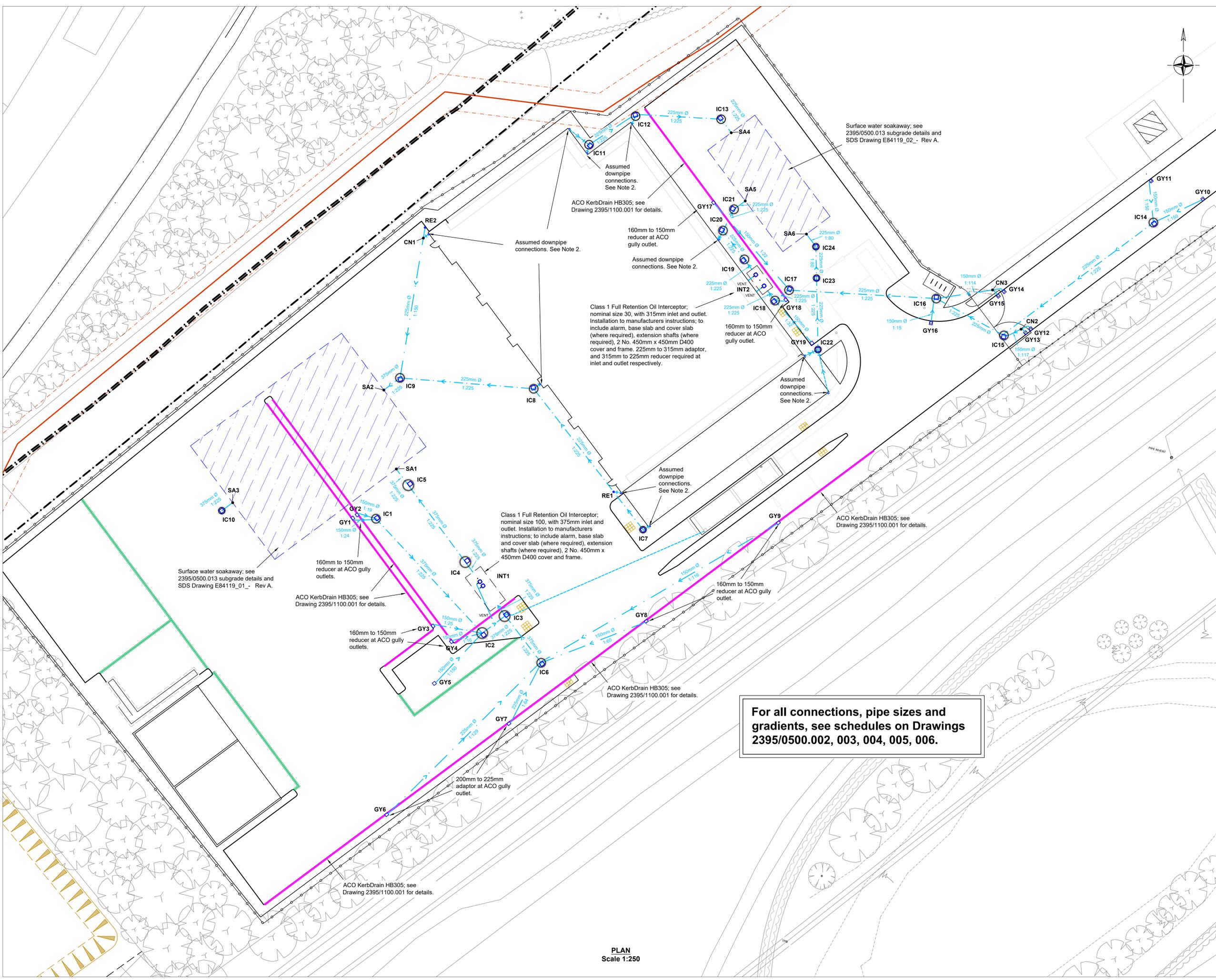
This drawing should not be scaled and any dimensions verified on site.
 All dimensions are in millimetres unless otherwise stated.
 CWC is the Central Wales Infrastructure Collaboration project between Powys County Council and Ceredigion County Council and all copyrights are vested in each respective Authority.
 This drawing is the property of CWC Engineering Design Services and is issued on the condition that it is not copied, reproduced, retained or disclosed to any unauthorised person, either wholly or in part without the consent in writing of CWC Engineering Design Services.
 © Hwallfartty & Coyon a hwallfartty cyfwrdd 2019. All rights reserved.
 © Powys County Council & Ceredigion County Council 2019. All rights reserved.
 100024419 (Cynnyr St Ceredigion) & 100025371 (Cynnyr St Powys)
 © Crown copyright and database rights 2019 Ordnance Survey
 100024419 (Ceredigion County Council) & 100025371 (Powys County Council)

Notes

- 1) Drawing to be used with Drawings 2395/0500.002, 003, 004, 005, 006, 011 & 013, Drawing 2395/1100.001, and SDS Drawings E84119_01 - Rev A & E84119_02 - Rev A.
- 2) Downpipe locations, gullies, connections and quantity subject to design and build of buildings.
- 3) Bed Types to Highway Construction Details. Backfill to drains to be Type 1 Subbase.

KEY

-  PVCu Surface Water Drain to Schedule.
-  Assumed Connection.
-  ACO KerbDrain HB305.
-  Chamber to Schedule.
-  Gully to Schedule.
-  Vent Pipe.
-  SDS Soakaway System.



Surface water soakaway; see 2395/0500.013 subgrade details and SDS Drawing E84119_02 - Rev A.

ACO KerbDrain HB305; see Drawing 2395/1100.001 for details.

160mm to 150mm reducer at ACO gully outlet.

Assumed downpipe connections. See Note 2.

Class 1 Full Retention Oil Interceptor; nominal size 30, with 315mm inlet and outlet. Installation to manufacturers instructions; to include alarm, base slab and cover slab (where required), extension shafts (where required), 2 No. 450mm x 450mm D400 cover and frame. 225mm to 315mm adaptor, and 315mm to 225mm reducer required at inlet and outlet respectively.

Assumed downpipe connections. See Note 2.

Class 1 Full Retention Oil Interceptor; nominal size 100, with 375mm inlet and outlet. Installation to manufacturers instructions; to include alarm, base slab and cover slab (where required), extension shafts (where required), 2 No. 450mm x 450mm D400 cover and frame.

ACO KerbDrain HB305; see Drawing 2395/1100.001 for details.

Surface water soakaway; see 2395/0500.013 subgrade details and SDS Drawing E84119_01 - Rev A.

ACO KerbDrain HB305; see Drawing 2395/1100.001 for details.

160mm to 150mm reducer at ACO gully outlets.

ACO KerbDrain HB305; see Drawing 2395/1100.001 for details.

For all connections, pipe sizes and gradients, see schedules on Drawings 2395/0500.002, 003, 004, 005, 006.

PLAN Scale 1:250

Rev	Date	Description	By	Chkd

Amendments

Engineering Design Services
 EDS West Manager : Steve Hallows cEng MICE 01545 572513 hgw@eredesign.gov.uk
 West: Penmorfa, Aberystwyth, Ceredigion, SA46 0PA
 EDS East Manager : Gareth Price cEng MICE 0845 607 6060 gts.helpdesk@powys.gov.uk
 East: Powys County Council, Powys House, 11th Floor, County Hall, 5th Road East, Llandrindod Wells, Powys, LD1 1SG
 South: Powys Engineering, Caerleon Way, Brecon, Powys, LD3 7NR

Abermule Business Park Development. Recycling Bulking Facility.

Proposed Surface Water Drainage Plan.

By: LN, Checked: DB, Date: 10/07/19, Scale: 1:250

Project Number: H2395, Drawing Number: 2395/0500.001

Drawing Filename: 2395-001 - Bulk Recycling Facility.dwg, Last saved: 16/07/2019



Arcadis (UK) Limited

Level 1
2 Glass Wharf
Temple Quay
Bristol
BS2 0FR
T: +44 (0)117 372 1200

[arcadis.com](https://www.arcadis.com)

