

Sofidel Biomass Boiler, Baglan Paper Mill

Baglan Energy Park, Briton Ferry

Flood Consequences Assessment

April 2024

Project Information	
Project:	Sofidel Biomass Boiler, Baglan Paper Mill
Report Title:	Flood Consequences Assessment
Client:	Sofidel UK Limited
Instruction:	The instruction to undertake this Flood Consequences Assessment was received from Nick Roberts of Axis P.E.D Ltd acting on behalf of the Client.
File Ref:	15807-FCA-02

Approval Record	
Author:	Megan Williams BSc (Hons) MSc MCIWEM
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Document History		
Revision	Date	Comment
01	26/03/2024	Draft issue
02	11/04/2024	Updated following receipt of NRW pre-app response

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This report will remain valid for a period of twelve months (from the date of last issue) after which the source data should be reviewed in order to reassess the findings and conclusions on the basis of latest available information.

Contents

Introduction1

Existing Conditions1

Development Proposals2

Flood Zone Category and Policy Context.....2

Consultation 3

Sources of Flooding and Probability.....3

Conclusions7

Appendices

Appendix A Location Plan and Aerial Image

Appendix B LiDAR Extract

Appendix C Historical BGS Borehole Record

Appendix D DCWW Sewer Plan

Appendix E Proposed Development Plan

Appendix F NRW Maps

Appendix G NRW Modelled Flood Depth Mapping

Figures

Figure 1 – 0.1% AEP (2116) MHWS Event – Defended - Flood Depths4

Figure 2 – 0.1% AEP (2116) MHWS Event – Undefended - Flood Depth.....5

Introduction

Waterco has been instructed to prepare a Flood Consequences Assessment (FCA) in respect of a proposed 8MW thermal biomass boiler at Baglan Paper Mill, Brunel Way, Baglan Energy Park, Briton Ferry, Neath, SA11 2FP.

The purpose of this report is to outline the potential flood risk to the site, the impact of the proposed development on flood risk elsewhere, and the proposed measures which could be incorporated to mitigate the identified flood risk (if any). This report has been prepared in accordance with the guidance contained in Planning Policy Wales (PPW) and Technical Advice Note 15 (TAN15): Development and Flood Risk.

Existing Conditions

The site covers an area of approximately 1,860m² and is located at National Grid Reference (NGR): 273141, 192810. A location plan and an aerial image are included in Appendix A.

Online mapping (including Google Maps / Google Streetview imagery, accessed March 2024) shows that the site comprises a boiler house building, containing a gas fired boiler which serves the existing paper mill together with a hardstanding yard. The site is bordered by the existing paper mill to the north, east and west, and a loading area for biomass fuel to the south.

Access to the site is provided from an internal access road leading off Central Avenue to the north-east of the site.

Local Topography

Topographic levels to metres Above Ordnance Datum (m AOD) have been derived from a 1m resolution [Natural Resources Wales] (NRW) composite 'Light Detecting and Ranging' (LiDAR) Digital Terrain Model (DTM). A review of LiDAR data shows that the site is relatively flat with levels ranging from 7.67m AOD in the north-west to approximately 7.54m AOD in the south. A LiDAR extract is included in Appendix B.

Ground Conditions

The British Geological Survey (BGS) online mapping (1:50,000 scale) indicates that the site is underlain by superficial tidal flat deposits, generally comprising clay, silt and sand. The superficial deposits are identified as being underlain by the South Wales Middle Coal Measures Formation consisting of mudstone, siltstone and sandstone.

The geological mapping is available at a scale of 1:50,000 and as such may not be accurate on a site-specific basis.

The closest publicly available historical BGS borehole record (BGS reference: SS79SW662) is located 320m south-east of the site and is included together with a borehole location plan in Appendix C. The borehole record identifies:

- Loose grey fine silty sand from ground level to 1.5 metres below ground level (m.bgl)
- Compact grey fine silty sand between 1.5m.bgl and 3.81m.bgl
- Compact dark grey fine silty sand from 3.81m.bgl to the base of the borehole (6.1m.bgl).

Groundwater seepage was encountered at approximately 1.65m.bgl.

Local Drainage

Public sewer records have been obtained from Dwr Cymru Welsh Water (DCWW) and are included in Appendix D. The DCWW sewer records show that there are 2no. combined rising mains (700mm and 1200mm in diameter) and a foul rising main (110mm diameter) located approximately 80m south of the site.

Development Proposals

The proposed development is for a 8MW thermal biomass boiler, positioned within the existing main boiler house, which will also accommodate a control and electrical room. A fuel storage building would be annexed to the eastern end of the boiler house building. A proposed development plan is included in Appendix E.

Flood Zone Category and Policy Context

Flood Zone Category

The Welsh Government Development Advice Map, included in Appendix F, shows that the site is located within Flood Zone B - an area known to have been flooded in the past evidenced by sedimentary deposits.

The NRW 'Flood Map for Planning' (Appendix F) shows that the site is located within an area outside of the extreme flood extent (Flood Zone 1), meaning it has a less than 0.1% annual probability of flooding from rivers and the sea, including the effects of climate change.

Development Vulnerability Classification

The proposed development (associated with industrial land use) is considered to be 'less vulnerable' development in accordance with Figure 2 of the Welsh Government's Technical Advice Note 15 – Development and Flood Risk (TAN15). TAN15 states that less vulnerable development can be considered in Flood Zone B subject to the satisfaction of the acceptability criteria (demonstrating that all developable areas are above the 0.1% annual probability flood level).

Local Policy

The Neath Port Talbot County Borough Council Local Development Plan 2011 -2026 (adopted January 2016) contains the following policies relating to flood risk:

'Policy SP 1**Climate Change**

...In relation to the consequences of climate change:

1. Likely increased food risk will be taken into account and addressed by ensuring that there is greater resilience by avoiding development on land that is at risk from flooding in the first instance in accordance with the sequential approach set out in national guidance or in locations that could increase the risk of flooding elsewhere...'

Local guidance documents including the Neath Port Talbot County Borough Council Strategic Flood Consequences Assessment (SFCA) (August 2013) and the Neath Port Talbot County Borough Council Preliminary Flood Risk Assessment (PFRA) (March 2011 and its 2017 addendum) have been reviewed for site specific information.

Consultation

A pre-planning opinion request was submitted to NRW in March 2024. In their response, provided as Appendix F, NRW have stated that:

'Flood Risk

The site lies within Zone B of the Development Advice Maps (DAM) contained within Technical Advice Note (TAN) 15: Development and Flood Risk (2004).

We recommend you consult with the Local Authority's Drainage Engineers who may be able to provide information on issues such as localised flooding from drains, culverts and small watercourses.

We are not aware of any records of historical flooding affecting the site.'

Sources of Flooding and Probability**Fluvial & Tidal**

The nearest watercourse is the River Neath which is located approximately 280m north-west of the site. The River Neath flows south-west to Swansea Bay and is tidally influenced in this location. Other watercourses in the area include Baglan Brook which is located approximately 425m north of the site and flows north-west in this location. Baglan Brook joins the River Neath and its flows are regulated by the Seaway Parade pumping station in Baglan (Grid reference: SS 74795 92152).

The development site is not located in an area which benefits from formal flood defences.

Fluvial flooding could occur if the River Neath or Baglan Brook overtopped their banks during or following an extreme rainfall event. Tidal flooding could occur if the River Neath overtopped its banks during extreme

tidal conditions.

The NRW 'Flood Map for Planning' (Appendix F) shows that the site is located within an area outside of the extreme flood extent (Flood Zone 1), meaning it has a less than 0.1% annual probability of flooding from rivers or the sea, including the effects of climate change.

NRW Modelled Data

Modelled outputs have been obtained from NRW in March 2024 and have been processed by Waterco to create flood depth and extent mapping. The flood depth and extent mapping is included in Appendix G. The modelled outputs have been taken from the NRW Port Talbot Combined 2017 Model which considers flood risk from the River Neath and its tributaries (including Baglan Brook).

The model considered a defended and undefended scenario. The undefended scenario represents the removal of all flood defences which are present in Port Talbot. These defences are not located within the vicinity of the site (>4km away) and their removal are therefore unlikely to impact the flood regime pertaining to this site. For the purpose of the undefended runs, the Seaway Parade pump has been left as active.

Defended

As shown in Figure 1, the site is estimated to be flood free during all events up to and including the 0.1% Annual Exceedance Probability (AEP) plus climate change (CC) up to the year 2116 event.

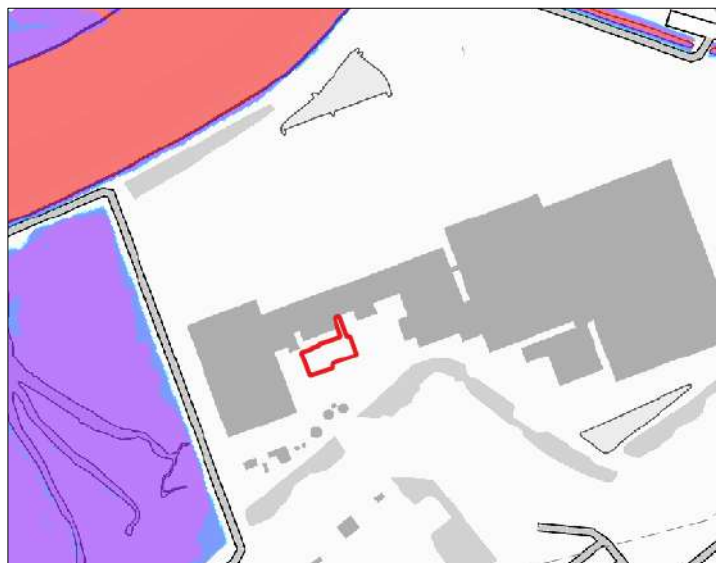


Figure 1 – 0.1% AEP (2116) MHWS Event – Defended - Flood Depths

Undefended

As shown in Figure 2, the site is estimated to be flood free during all events up to and including the undefended 0.1% AEP plus CC up to the year 2116 event.

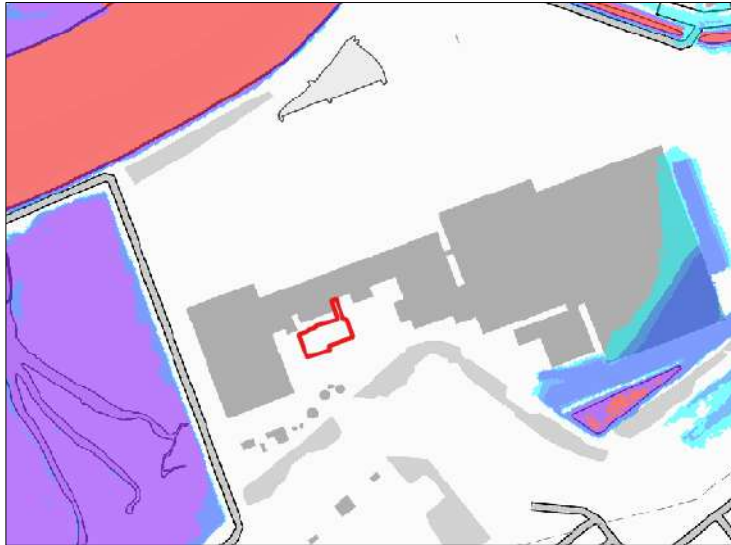


Figure 2 – 0.1% AEP (2116) MHWS Event – Undefended - Flood Depth

The NRW model outputs concur with the published Flood Map for Planning and shows the site to be flood free during all events up to and including the fluvial / tidal 0.1% AEP plus climate change event. The risk of fluvial and tidal flooding is therefore considered to be very low.

Surface Water

Surface water flooding occurs when rainwater does not drain away through the normal drainage system or soak into the ground. It is usually associated with high intensity rainfall events but can also occur with lower intensity rainfall or melting snow where the ground is saturated, frozen or developed, resulting in overland flow and ponding in depressions in topography. Surface water flooding can occur anywhere without warning. However, flow paths can be determined by consideration of contours and relative levels.

The NRW 'Flood Risk from Surface Water & Small Watercourses' map (Appendix F) shows that the site is at very low risk of surface water flooding, meaning it has a less than 0.1% annual probability of flooding.

The SFCA and PFRA contain records of surface water flooding at or near to the site.

There are no distinct flow routes in the area which would direct any potential surface water flooding towards the site. It can therefore be concluded that the risk of surface water flooding is very low.

Sewer

Flooding from sewers can occur when a sewer is overwhelmed by heavy rainfall, becomes blocked, is damaged, or is of inadequate capacity. Flooding is mostly applicable to combined and surface water sewers.

The DCWW sewer records show that there are 2no. public combined rising mains (700mm and 1200mm in diameter) and a 110mm public foul rising main located approximately 80m south of the site. There are no public gravity sewers within the vicinity of the site.

Flows within rising mains are controlled by upstream pumping stations and therefore the risk of an exceedance event is very low.

There are no records of sewer flooding affecting the site. It can therefore be concluded that the risk of sewer flooding is very low.

Groundwater

Groundwater flooding occurs when water levels underneath the ground rise above normal levels. Prolonged heavy rainfall soaks into the ground and can cause the ground to become saturated. This results in rising groundwater levels which leads to flooding above ground.

As previously stated, the site is underlain by superficial tidal flat deposits, generally comprising clay, silt and sand. A nearby borehole at a similar elevation to the site identifies the presence of groundwater at 1.65m.bgl.

Groundwater levels correspond with river levels. As such, a high water table may be present when river levels in the River Neath are high.

The PFRA states *'There are however no specific areas of historical groundwater flooding recorded in the NPT area.'*

The site will be wholly hardstanding, limiting the vertical migration of groundwater. There are no records of groundwater flooding at or near to the site. It can therefore be concluded that the risk of groundwater flooding is very low.

Artificial Sources

The Neath Canal is located approximately 1.35km north of the site at its nearest point where it feeds into the River Neath. The Neath Canal is separated from the site by Baglan Brook. As such, any potential flooding from the canal would be intercepted by Baglan Brook and would not reach the site.

The NRW 'Flood Risk from Reservoirs' map (Appendix F) shows that the site is not at risk of flooding from reservoirs.

It can therefore be concluded that the risk of flooding from artificial sources is very low.

Summary of Potential Flooding

It can be concluded that the risk of flooding from all sources is very low. Therefore, no flood risk mitigation measures are considered necessary, and the development complies with TAN15.

As the site is flood free during all events up to and including the 0.1% AEP plus CC fluvial and tidal events, the development will not remove flood storage from the floodplain and will not increase flood risk elsewhere.

Conclusions

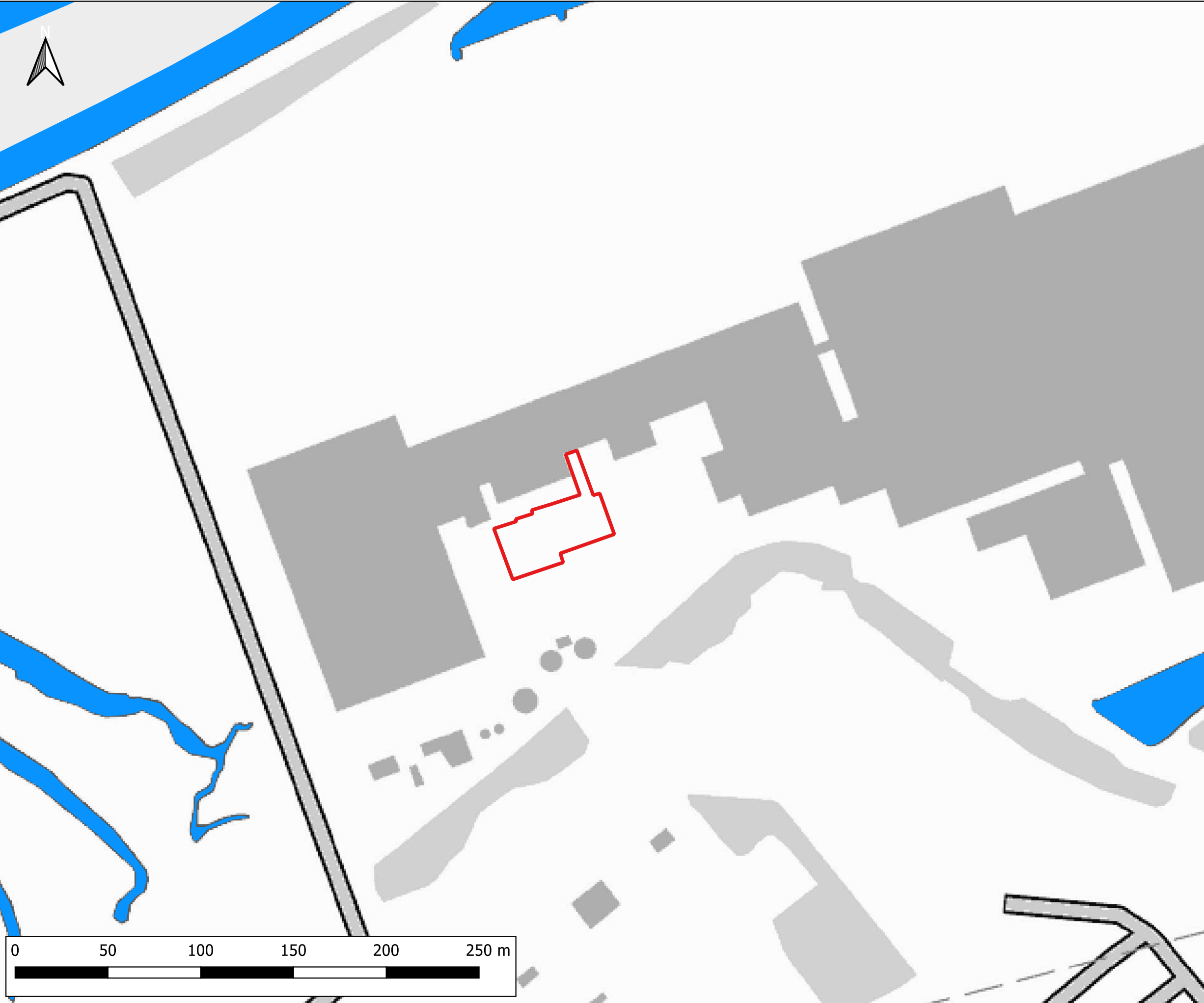
The proposed development is for a 8MW thermal biomass boiler, positioned within the existing main boiler house, which will also accommodate a control and electrical room. A fuel storage building would be annexed to the eastern end of the boiler house building.

The site is located within Flood Zone B on the Welsh Government Development Advice Map – an area known to have been flooded in the past evidenced by sedimentary deposits. The NRW ‘Flood Map for Planning’ shows that the site is located within an area outside of the extreme flood extent (Flood Zone 1), meaning it has a less than 0.1% annual probability of flooding from rivers and the sea, including the effects of climate change.

Modelled outputs for the River Neath and its tributaries have been obtained from NRW and shows that the site is flood free during all events up to and including the undefended 0.1% AEP plus CC (year 2116) event. The risk of flooding from all sources has been assessed and the flood risk to the site is considered to be very low.

No flood risk mitigation measures are considered necessary.

Appendix A Location Plan and Aerial Image



Notes:
1) All dimensions are in metres and all levels in metres above Ordnance Datum unless stated otherwise

LEGEND

- Site Boundary
- Watercourses
- Waterbodies

CLIENT:

Sofidel UK Limited

www.waterco.co.uk

SCHEME:

Sofidel Biomass Boiler, Baglan Paper Mill

PLOT TITLE:

Location Plan

PLOT STATUS:		FINAL		DATE:	21-03-2024
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MJW	AW	MW	1:2000	

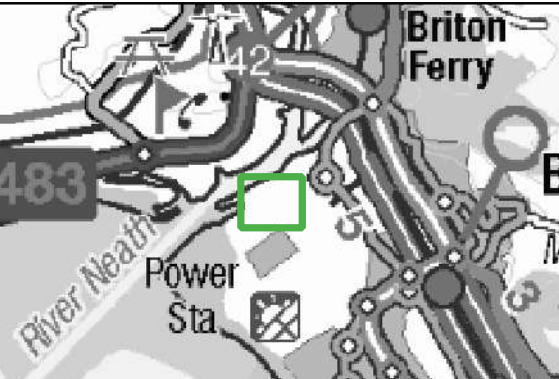
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Notes:
1) All dimensions are in metres and all levels in metres above Ordnance Datum unless stated otherwise

LEGEND

Site Boundary



CLIENT:
Sofidel UK Limited



SCHEME:
Sofidel Biomass Boiler, Baglan Paper Mill

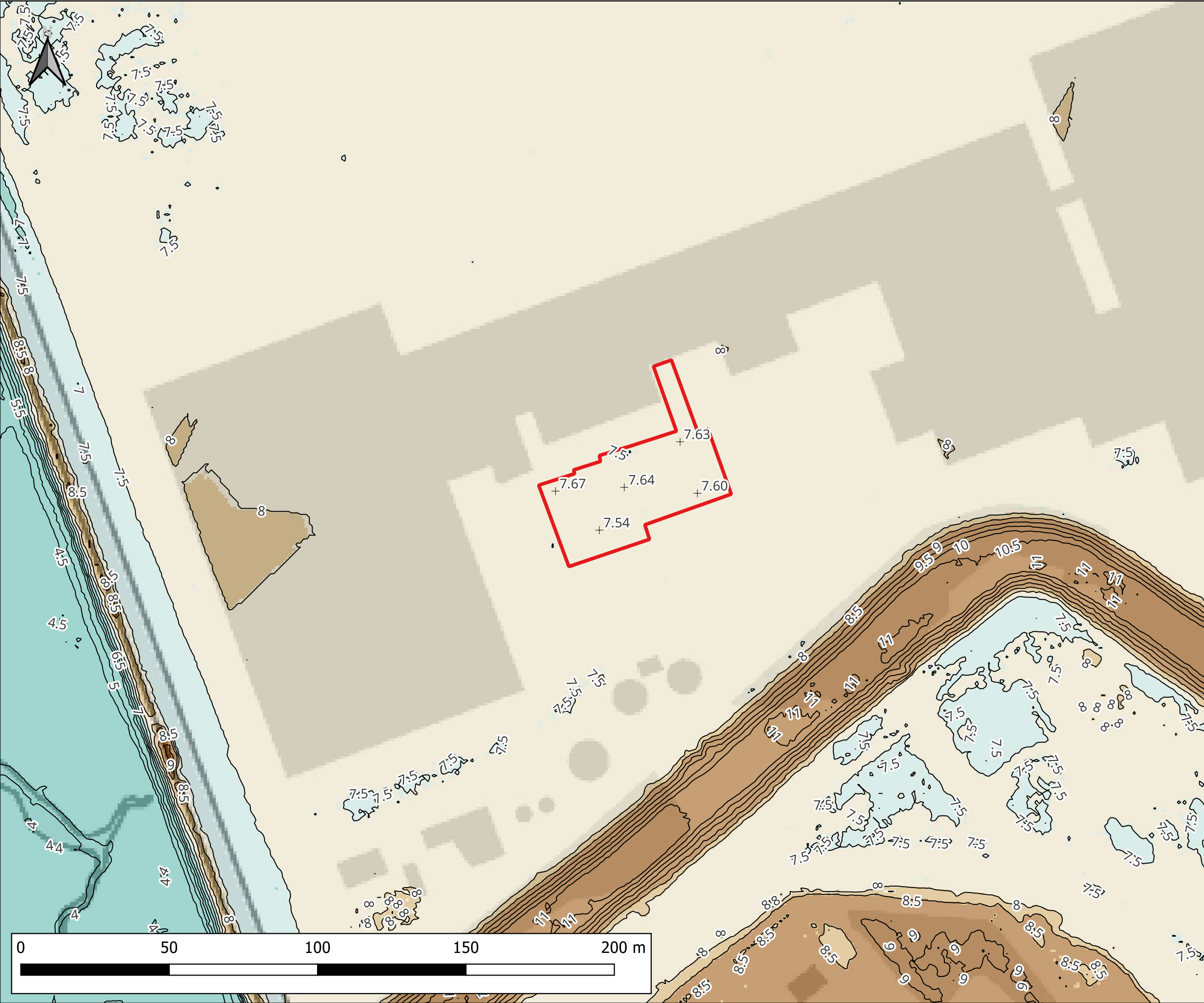
PLOT TITLE:
Aerial Plan

PLOT STATUS:	FINAL	DATE:	21-03-2024
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DRAWN:	CHECKED:	APPROVED:	PLOT SCALE AT A3:
MJW	AW	MW	1:2000

PLOT NAME:	REVISION:
15807_Aerial_Plan	-

Appendix B LiDAR Extract



Notes:
1) All dimensions are in metres and all levels in metres above Ordnance Datum unless stated otherwise

LEGEND

Site Boundary

+ Site Levels (m AOD)

— 0.5m contour

Ground Elevations (m AOD)

	<= 7.0
	7.0- 7.5
	7.5 - 8.0
	8.0 - 8.5
	> 8.5

CLIENT:

Sofidel UK Limited


www.waterco.co.uk

SCHEME:

Sofidel Biomass Boiler, Baglan Paper Mill

PLOT TITLE:

LiDAR Plan
1m Resolution
Data from Natural Resources Wales

PLOT STATUS:		DATE:	
FINAL		21-03-2024	

DRAWN:	CHECKED:	APPROVED:	PLOT SCALE AT A3:
MJW	AW	MW	1:1300

PLOT NAME:	REVISION:
15807_LiDAR_Plan	-

Appendix C Historical BGS Borehole Record

RECORD OF BOREHOLE No: 3

Location : *NEATH VALLEY SEWER*

Borehole Dia : 6"

Contract No. : 459

Casing : 6" to 20'-0"

Type of Boring : *Shell and Auger*

Ground Level : 25.42' O.D.

Date (started) : 23.5.59.

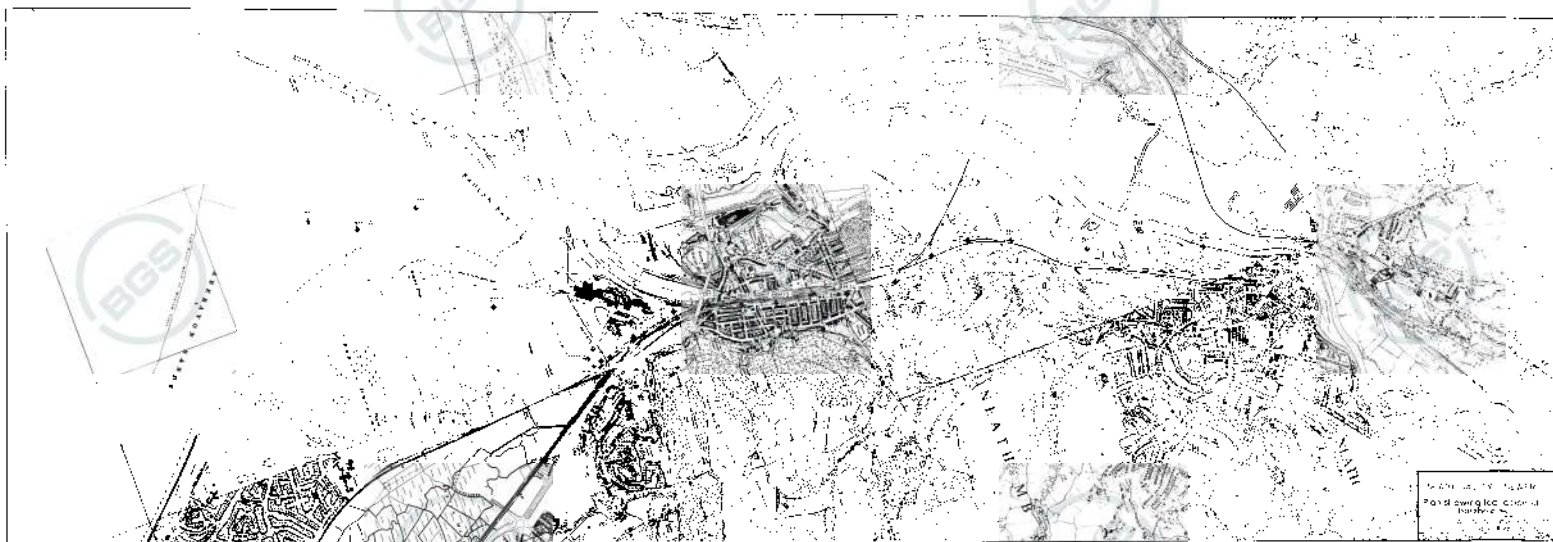
Date & Time	Depth of Casing	Water Level	SAMPLES			STRATA		DESCRIPTION OF STRATA
			Depth	Type	No.	Legend	Depth	
							0'-0"	
			2'-6"	D	1		5'-0"	Loose grey fine silty SAND.
			5'-0" (N=23)	D	2		5'-0"	
			7'-6"	D	3		7'-6"	Compact grey fine silty SAND.
			10'-0" (N=30)	D	4			
			12'-6"	D	5		12'-6"	
			15'-0" (N=29)	D	6		7'-6"	Compact dark grey fine silty SAND.
			17'-6"	D	7			
(23.5.59) 18.30	20'-0"	5'-0"	20'-0" (N=32)	D W	8"		20'-0"	
						End.		

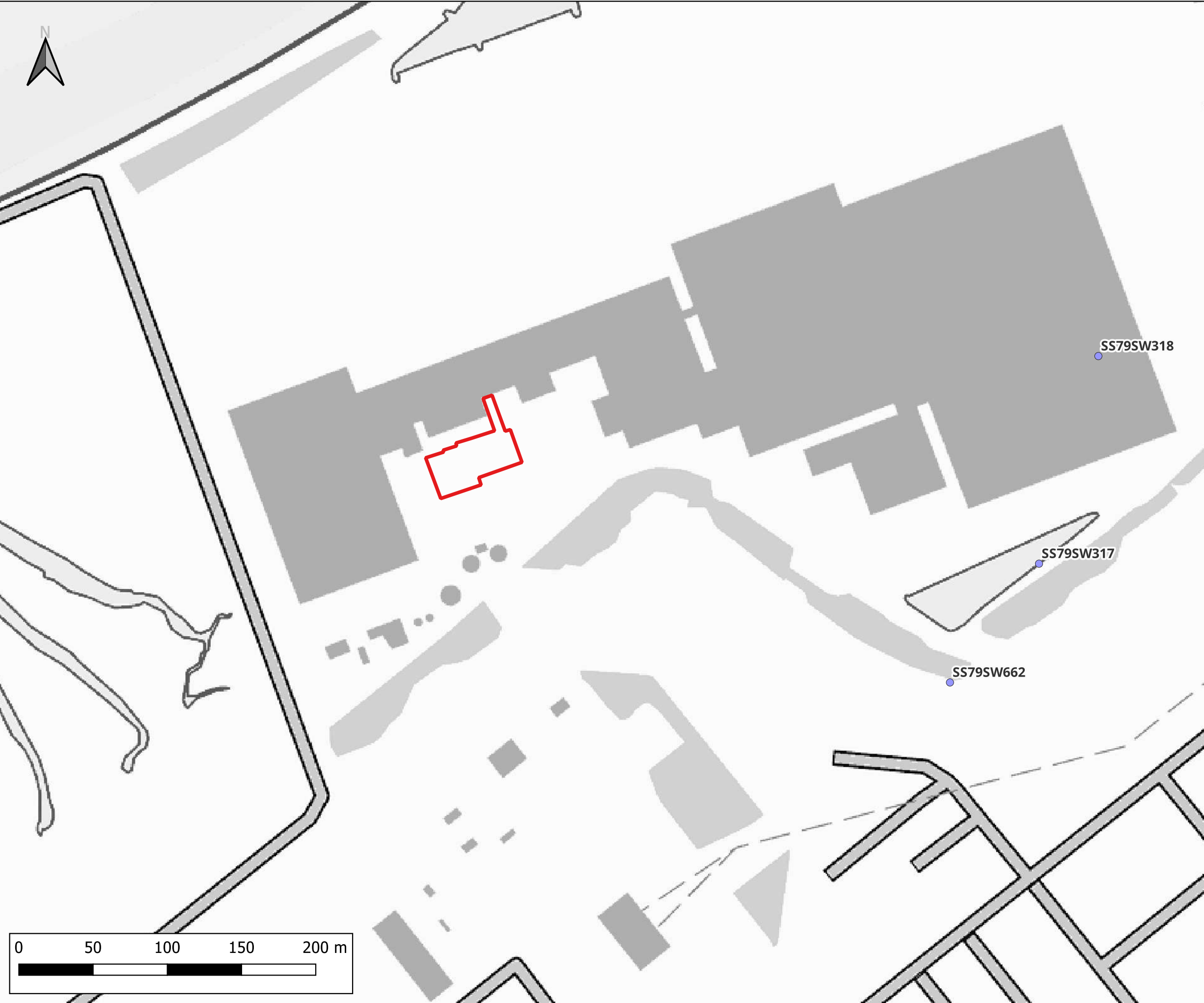
REMARKS:

Ground water seepage first encountered at 5'-6" B.G.L.

SCALE 1" = 5'

Foundation Engineering Ltd.





Notes:
1) All dimensions are in metres and all levels in metres above Ordnance Datum unless stated otherwise

LEGEND

- Site boundary
- BGS Hisotrical Borehole Record

CLIENT:

Sofidel UK Limited

www.waterco.co.uk

SCHEME:

Sofidel Biomass Boiler, Baglan Paper Mill

PLOT TITLE:

Historical BGS Borehole Location Plan
Data from British Geological Survey (BGS)

PLOT STATUS:		DATE:	
FINAL		22-03-2024	

DRAWN:	CHECKED:	APPROVED:	PLOT SCALE AT A3:
MJW	AW	MW	1:2500

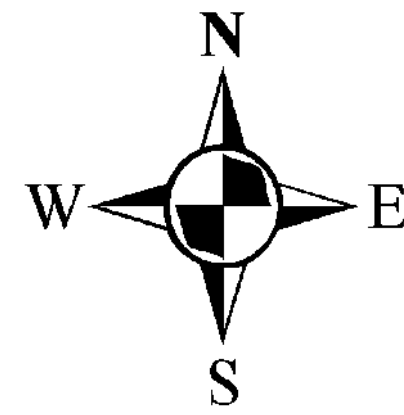
PLOT NAME:	REVISION:
15807_BGS_Borehole_Location_Plan	-

Appendix D DCWW Sewer Plan



Dŵr Cymru
Welsh Water

Briton Ferry Paper Mill, Brunel Way, Briton
Ferry SA11 2HZ



LEGEND(Representative of most common features)

Waste network:	Foul chamber	Outfall
Surface water chamber	LH	Lamp hole
Combined chamber	Storm Overflow	
Combined sewer overflow	Rising main	
Special purpose chamber	Gravity sewer	
Treatment works	Private sewer	
Pumping station	Private sewer subject to Sect. 104 adaptation agreement	
	Private Sewer Transfer	
	Lateral Drain	
	Inspection Chamber	

NB: Sewer symbol colour indicates the type.
RED - Combined
GREEN - Surface Water
BROWN - Foul
Purple - Former S24 sewers (for indicative purposes only)

Notes:

Whilst every reasonable effort has been taken to correctly record the pipe material of DCWW assets, there is a possibility that in some cases, pipe material (other than Asbestos Cement or Pitch Fibre (PF)) may be found to be asbestos cement (AC) or Pitch Fibre (PF). It is therefore advisable that the possible presence of AC or PF pipes be anticipated and considered as part of any risk assessment prior to excavation

Dŵr Cymru Cyllynafdy (the Company) gives this information as to the position of its underground apparatus by way of general guidance only and on the basis of the best information available and to the best of its knowledge and belief. The accuracy of the information is not guaranteed and the Company is not responsible for any loss or damage caused by reliance on the information. The accuracy of the information is not guaranteed and the Company is not responsible for any loss or damage caused by reliance on the information. The accuracy of the information is not guaranteed and the Company is not responsible for any loss or damage caused by reliance on the information.

Service pipes are not generally shown but their presence should be anticipated.

EXACT LOCATIONS OF ALL APPARATUS TO BE DETERMINED ON SITE.

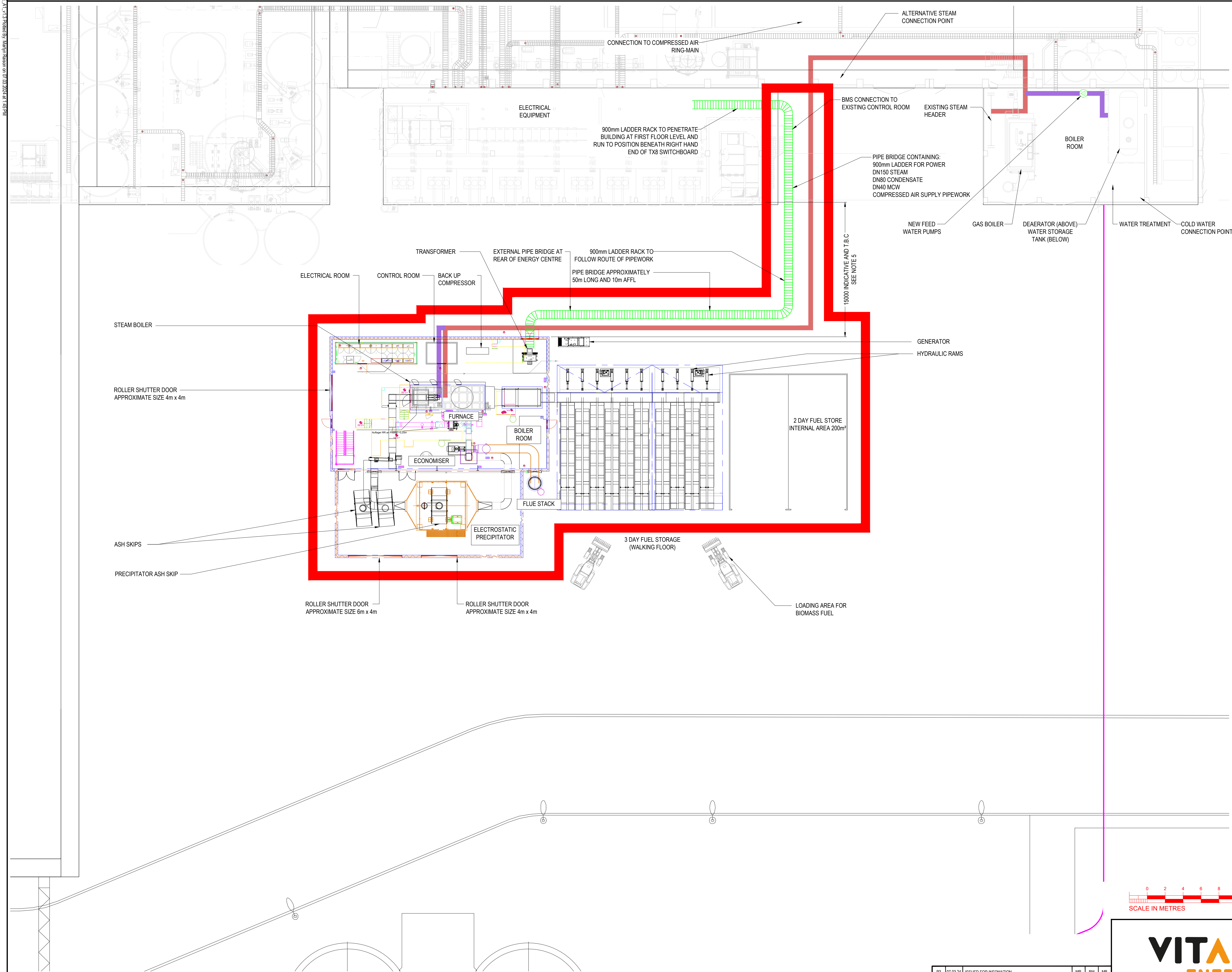
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Map Ref: 273120,192800
Map scale: 1:1000
Printed by: Trisha Sherman
Printed on: 07 Mar 2024

Appendix E Proposed Development Plan

File: A1_1_3_Powered By: Martin Reason on 07.03.2024 at 14:55 PM

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HEALTH AND SAFETY INFORMATION

ALL WORKS SHALL BE CARRIED OUT BY COMPETENT PEOPLE. IN ADDITION TO THE HAZARDS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, THE DESIGNERS HAVE REVIEWED THE H&S RISKS AND DEVELOPED A DESIGNERS RISK ASSESSMENT. THE CONTRACTOR SHALL REFER TO THE CONSTRUCTION PHASE PLAN AND ADOPT THE H&S AND DESIGNERS RISK ASSESSMENT FINDINGS IN THE DEVELOPMENT OF THEIR RAMS, BEFORE UNDERTAKING ANY WORKS. PLEASE ALSO NOTE THE FOLLOWING -

DIFFICULT TO MANAGE
THESE MAY BE COMMON RISKS BUT BE IN AWWARD LOCATIONS, EG. SCAFFOLDING, DELIVERIES, PROXIMITY OF GAS MAINS OR POWER LINES, WORKING IN CLOSE PROXIMITY TO THE PUBLIC ETC.

BURIED MEDIUM VOLTAGE AND GAS PIPEWORK IN VICINITY OF NEW CONSTRUCTION

UNUSUAL
THESE MAY BE COMMON RISKS OCCURRING IN UNUSUAL CIRCUMSTANCES. THEY MIGHT ALSO BE UNUSUAL BECAUSE OF THE NATURE OF THE CONSTRUCTION METHOD OR SITE CONDITIONS, EG. UNSTABLE OR CONTAMINATED GROUND, ASBESTOS, LEAD PAINT, SILICA DUST ETC.

WORK UNDERTAKEN ON ACTIVE SITE WITH HGV. TRAFFIC AND REQUIRED ACCESS TO BE CONSIDERED

NOT LIKELY TO BE OBVIOUS TO A CONTRACTOR OR DESIGNER.
THE CONTRACTOR, AT THE PRICING STAGE, AS WELL AS DURING THE DESIGN CYCLE MAY NOT BE AWARE OF SOME OF THE LESS OBVIOUS RISKS EG. STRUCTURAL ISSUES ASSOCIATED WITH WORKING AROUND EXISTING FOUNDATIONS, FRAGILE ROOFS OR FRAGILE SURFACES ETC.

NOT KNOWN AT THIS TIME OR NOTHING SIGNIFICANT

OPERATIONAL ACCESS - HORIZONTAL, VERTICAL, PEDESTRIAN, VEHICLE / PLANT
ARE THERE SIGNIFICANT ISSUES REGARDING ACCESS ? IF YES OUTLINE BELOW OR REFER TO APPROPRIATE DOCUMENT ETC.

ACCESS BY LORRY REQUIRED TO BOTH FUEL STORAGE AND ASH SKIPS

OPERATIONAL HANDLING / LIFTING STRATEGY
HAVE YOU IN SO FAR AS REASONABLY PRACTICABLE REDUCED MANUAL LIFTING? IDENTIFY ANY ITEMS THAT MAY REQUIRE EXCESSIVE LIFTING ARRANGEMENTS TO BE PUT IN PLACE AS WELL AS IDENTIFY ANY UNUSUAL RISKS ASSOCIATED WITH HANDLING AND LIFTING.

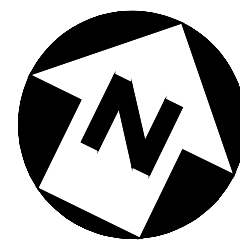
EQUIPMENT OF SIGNIFICANT SIZE AND WEIGHT, CRANAGE, LIFT AND SHIFT TO BE CONSIDERED.

HEALTH AND SAFETY FILE INCLUSIONS
IDENTIFY ANY HAZARDS / SIGNIFICANT RISKS ASSOCIATED WITH MAINTENANCE OR REMOVAL / DEMOLITION OF THE CONTENTS OF THIS DRAWING AT A LATER DATE.

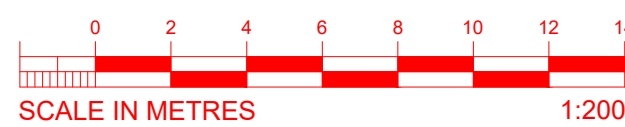
EQUIPMENT OF SIGNIFICANT SIZE WILL REQUIRE CRANAGE, SUITABLE SIZE ACCESS FOR PLANT MAINTENANCE WILL BE REQUIRED.

LEGEND

- STEAM
- FEEDWATER
- BLOW DOWN BOILER WATER



- NOTES:
- ALL DIMENSIONS ARE APPROXIMATE. ACCURATE DIMENSIONS TO BE TAKEN ON SITE.
 - PIPE AND SERVICES SIZES ARE INDICATIVE
 - VEHICLE TRACKING TO BE COMPLETED TO CONFIRM TURNING AREAS
 - EXTENT OF GROUND WORKS AND FOUNDATIONS TO BE CONFIRMED
 - MINIMUM DISTANCE BETWEEN NEW BIOMASS BUILDINGS AND EXISTING BUILDINGS SUBJECT TO FIRE RISK ASSESSMENT AND INSURER REQUIREMENTS.
 - SURFACE DRAINAGE TO BE MODIFIED AS REQUIRED. BLOW DOWN TO DRAIN TO EXISTING DISCHARGE FROM BOILER ROOM. FOUL DRAINAGE AND SEWERAGE TO BE CONFIRMED.
 - OVERALL BUILDING HEIGHT 24m.
 - WALKING FLOOR AND FUEL STORE WILL BE CAST IN SITU CONCRETE WITH EXTERNAL CLADDING.



ISSUED FOR INFORMATION

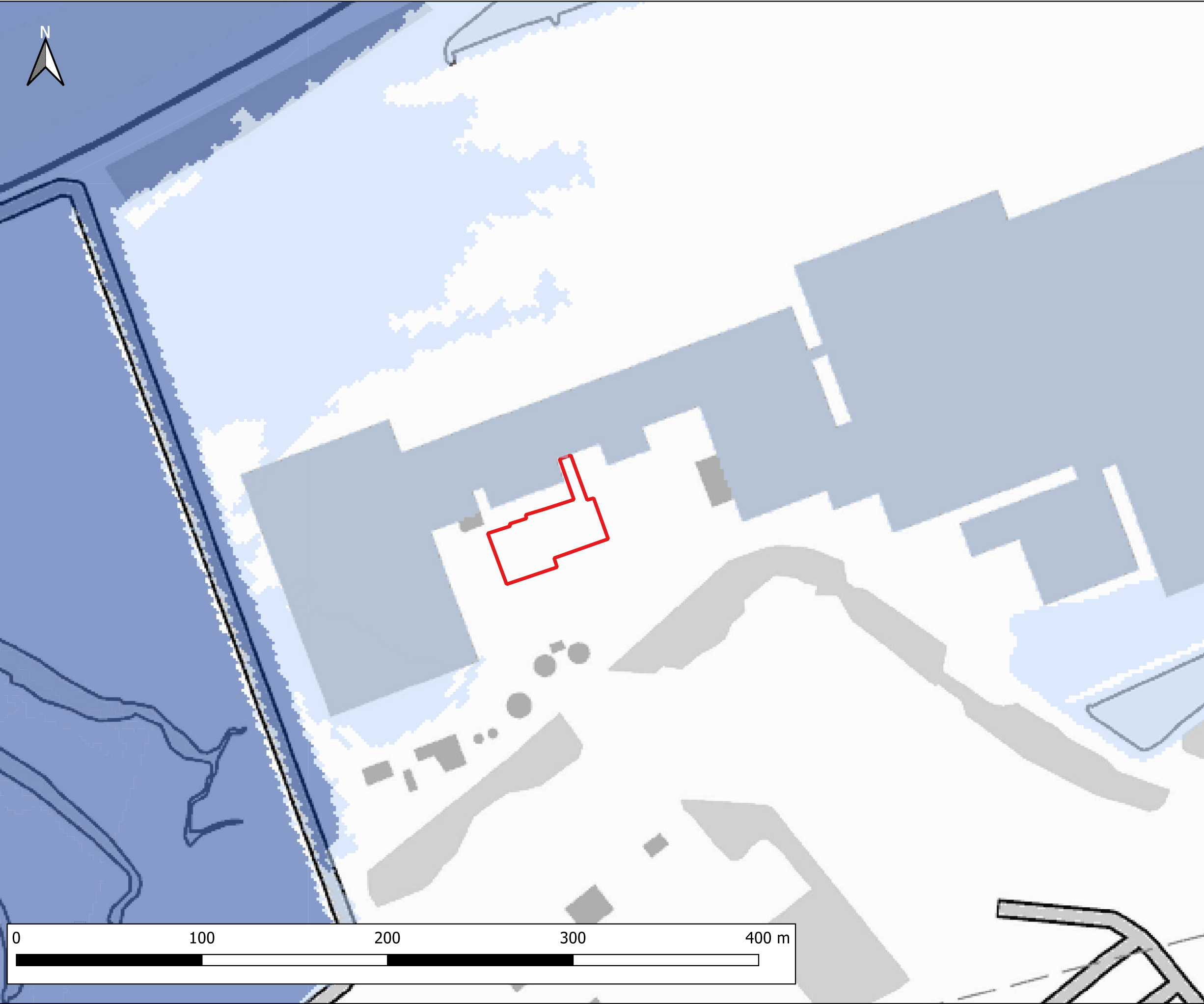
P3	07.03.24	ISSUED FOR INFORMATION	MR	BM	MB
P2	23.02.24	ISSUED FOR INFORMATION	MR	JMM	MB
P1	02.02.24	ISSUED FOR INFORMATION	MR	JMM	MB
REV	DATE	DESCRIPTION	DRN	CHK	APP

**VITAL
ENERGI**

Vital Energi, Century House, Roman Road, Blackburn, Lancashire, BB1 2LD
Tel: +44 (0)1254 296 000 Fax: +44 (0)1254 296 040

Project: SOFIDEL EPC				
Title: AGROFORST SITE LAYOUT				
DATE	07.03.2024	SCALE	1:200	SHEET
INFORMATION			Status: S2	Stage: 3
50795-VE-SW-XX-SI-M-5001			Drg-No: Rev: P3	

Appendix F NRW Maps & Correspondence



Notes:
1) All dimensions are in metres and all levels in metres above Ordnance Datum unless stated otherwise

LEGEND

Site Boundary

NRW Flood Map for Planning

Flood Zone 2

Flood Zone 3

CLIENT:

Sofidel UK Limited

www.waterco.co.uk

SCHEME:

Sofidel Biomass Boiler, Baglan Paper Mill

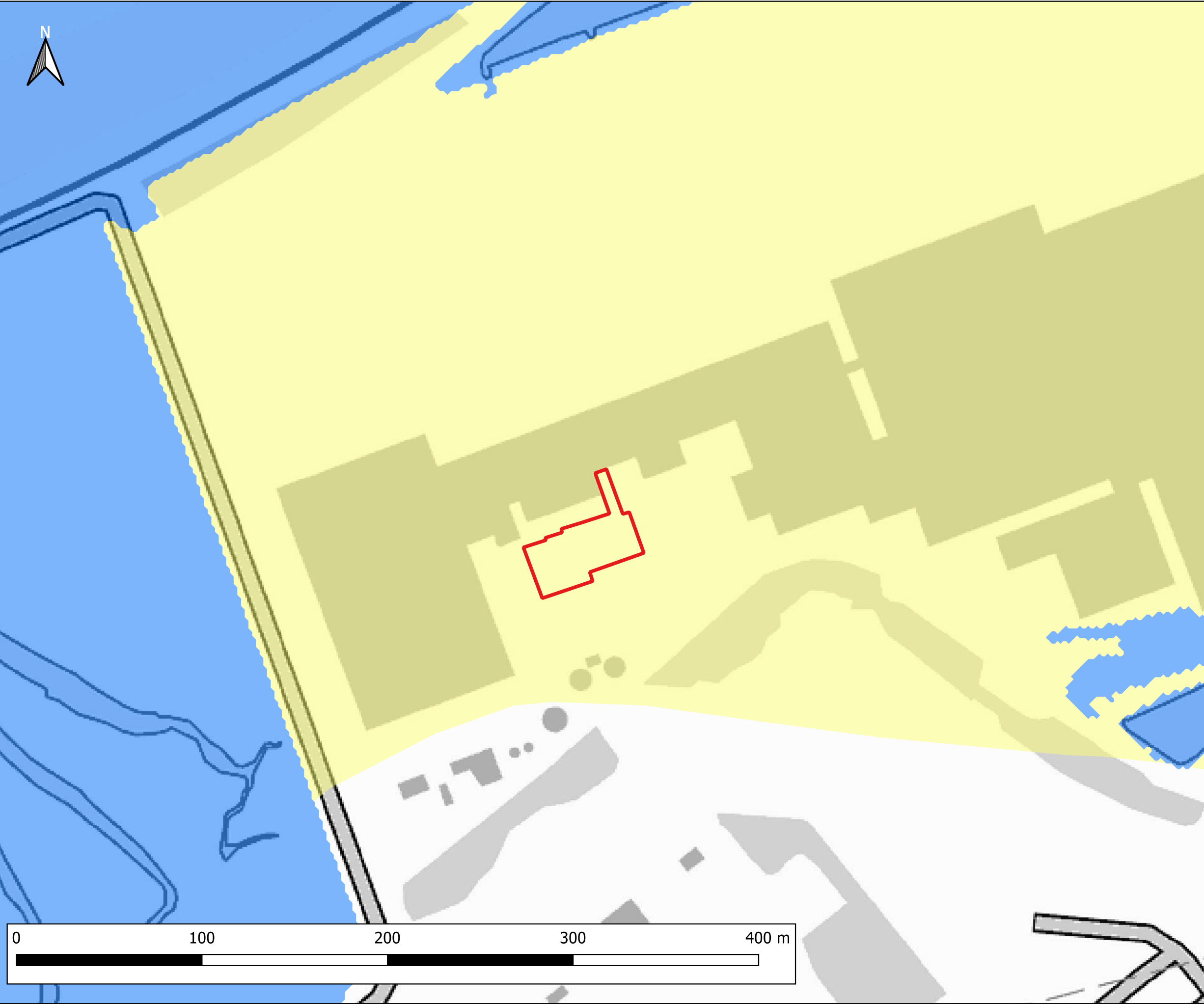
PLOT TITLE:

NRW Flood Map for Planning
Data accessed March 2024

PLOT STATUS:		FINAL		DATE:	21-03-2024
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DRAWN:	CHECKED:	APPROVED:	PLOT SCALE AT A3:
MJW	AW	MW	1:2000

PLOT NAME:	15807_NRW_FMfP	REVISION:	-
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Notes:
1) All dimensions are in metres and all levels in metres above Ordnance Datum unless stated otherwise

LEGEND

Site Boundary

Development Advice Map (TAN15)

Zone A

Zone B

Zone C1

Zone C2

CLIENT:

Sofidel UK Limited

www.waterco.co.uk

SCHEME:

Sofidel Biomass Boiler, Baglan Paper Mill

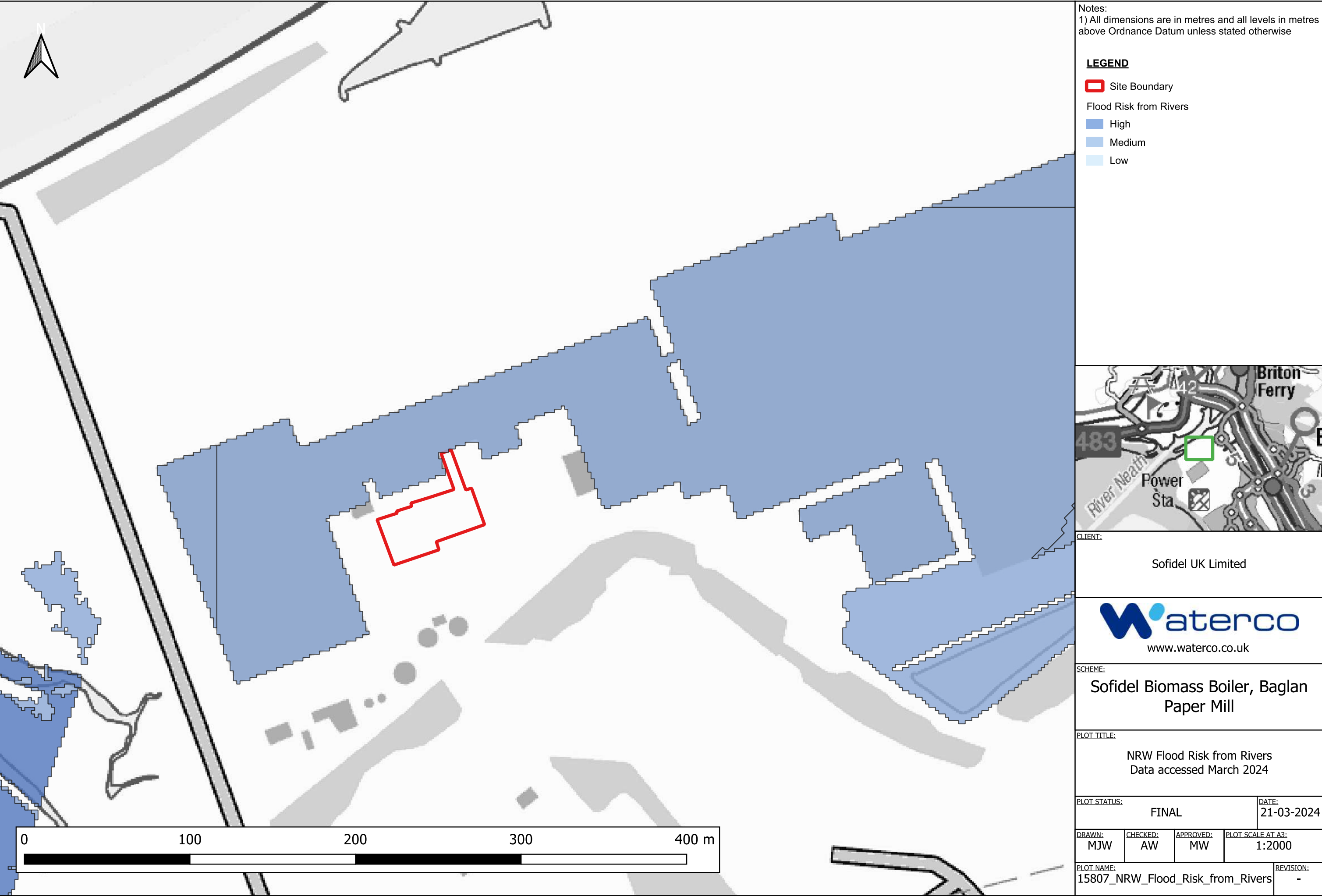
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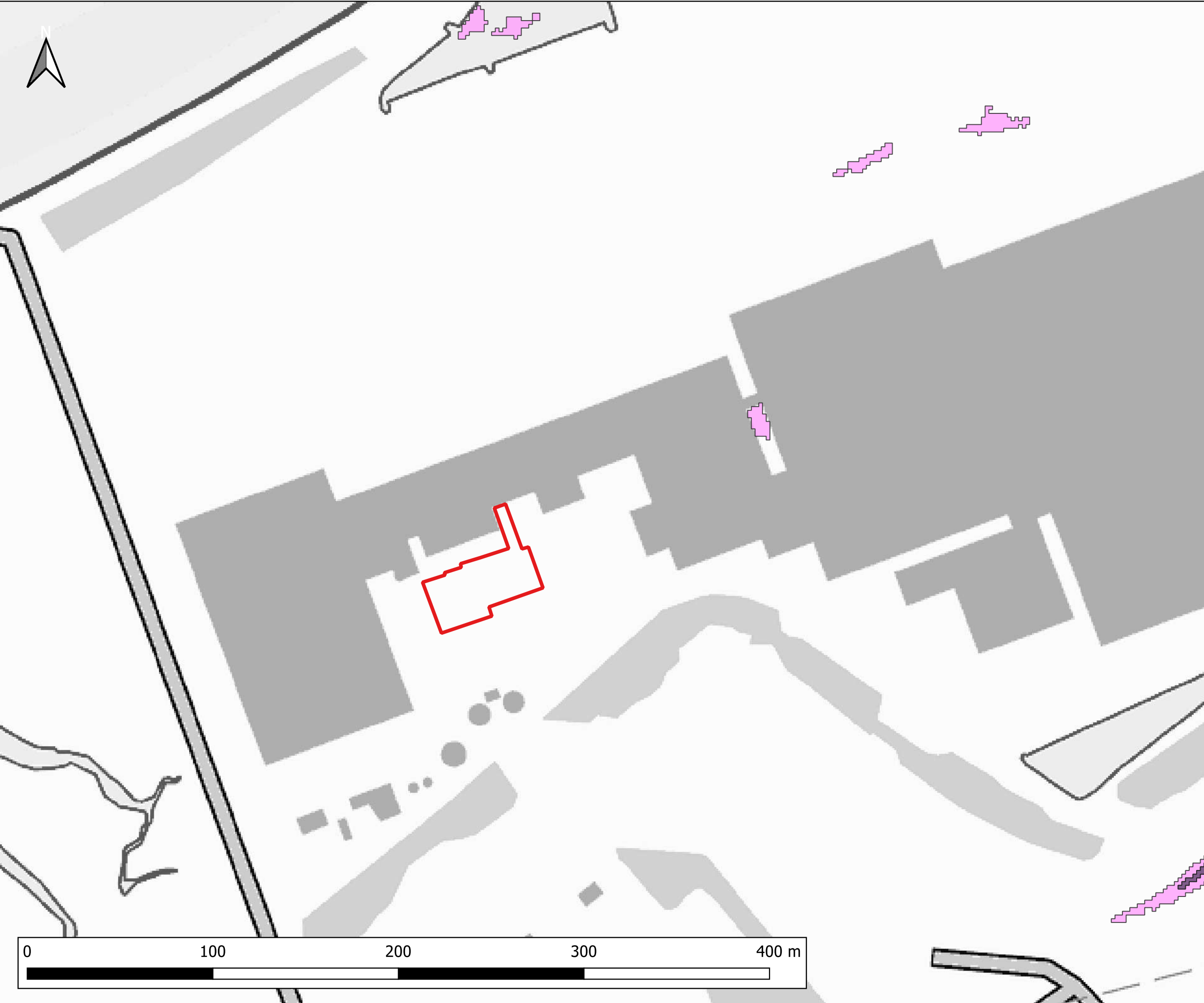
NRW Development Advice Map
Data accessed March 2024

PLOT STATUS:		DATE:	
FINAL		21-03-2024	

DRAWN:	CHECKED:	APPROVED:	PLOT SCALE AT A3:
MJW	AW	MW	1:2000

PLOT NAME:	REVISION:
15807_NRW_DAM_Map	-





Notes:
1) All dimensions are in metres and all levels in metres above Ordnance Datum unless stated otherwise

LEGEND

Site Boundary

Flood Risk from Surface Water & Small Watercourses

High

Medium

Low

CLIENT:

Sofidel UK Limited

www.waterco.co.uk

SCHEME:

Sofidel Biomass Boiler, Baglan Paper Mill

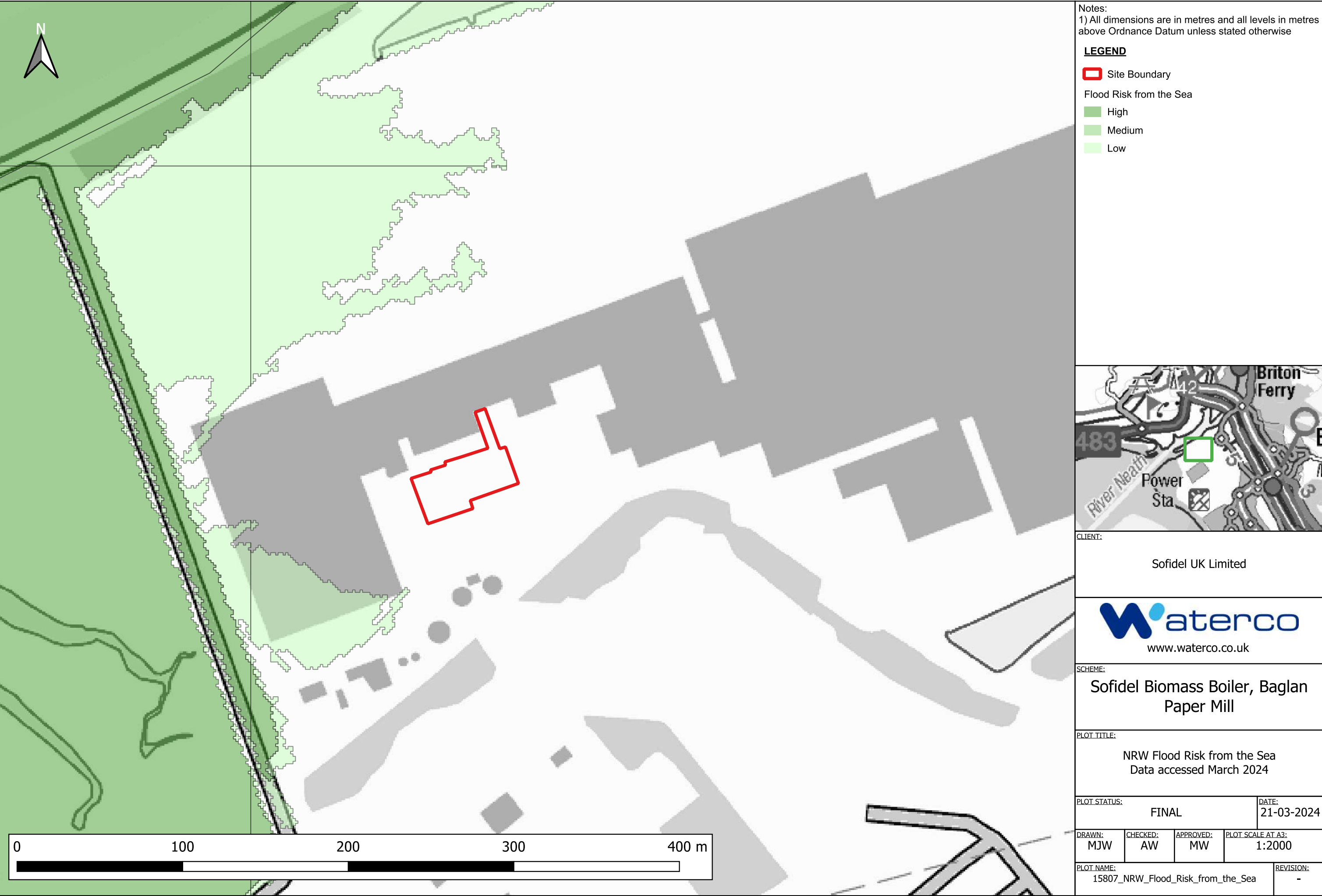
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NRW Flood Risk from Surface Water & Small Watercourses
Data accessed March 2024

PLOT STATUS:		DATE:	
FINAL		21-03-2024	

DRAWN:	CHECKED:	APPROVED:	PLOT SCALE AT A3:
MJW	AW	MW	1:2000

PLOT NAME:	REVISION:
15807_NRW_Flood_Risk_from_Surface_Water	-





Notes:
1) All dimensions are in metres and all levels in metres above Ordnance Datum unless stated otherwise

LEGEND

Site Boundary

Flood Risk from Reservoirs Extent

Inset map showing the location of the site (indicated by a green square) relative to the River Neath, Power Station, and Briton Ferry.

CLIENT:

Sofidel UK Limited

www.waterco.co.uk

SCHEME:

Sofidel Biomass Boiler, Baglan Paper Mill

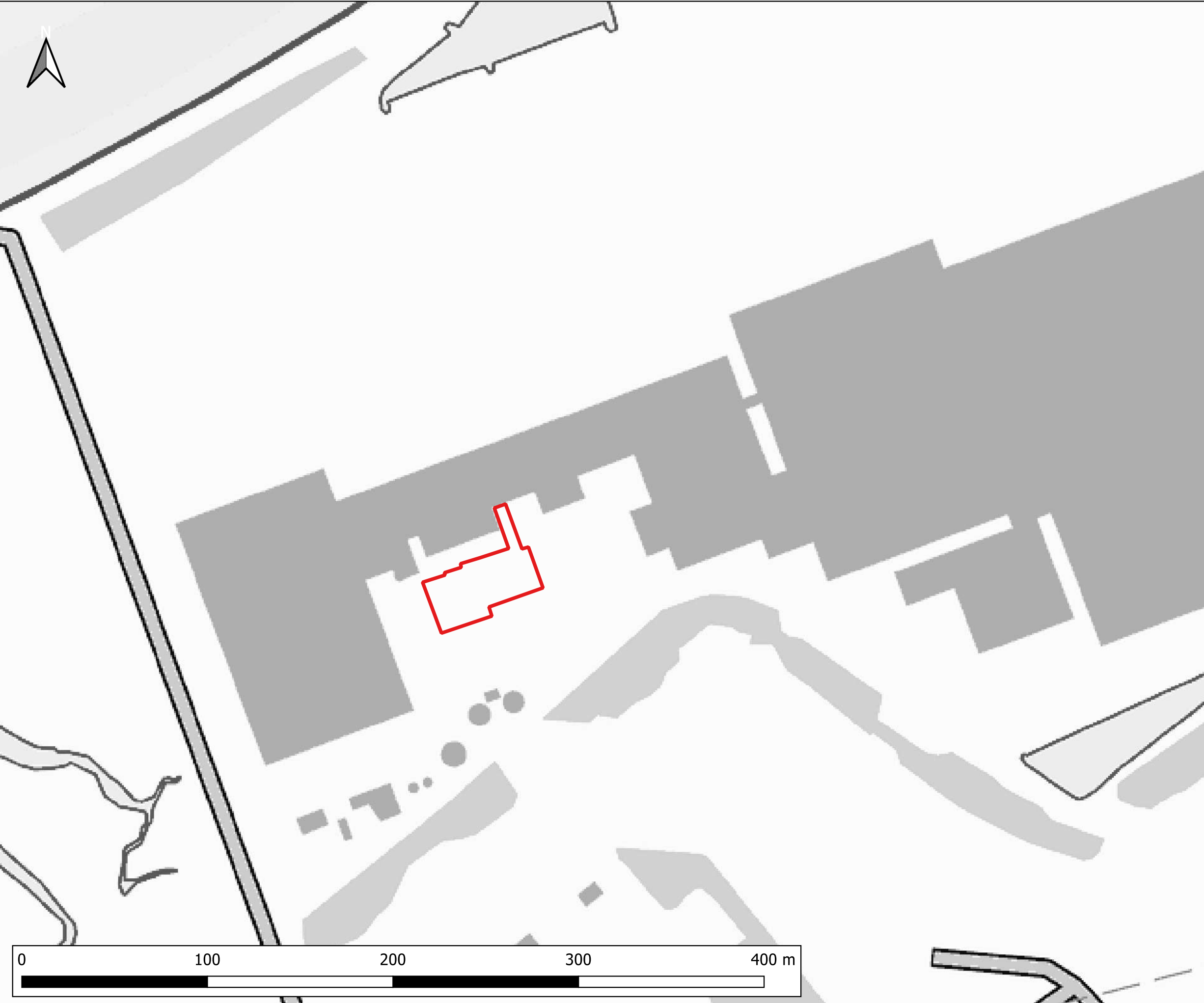
PLOT TITLE:

NRW Flood Risk from Reservoirs
Data accessed March 2024

PLOT STATUS:		DATE:	
FINAL		21-03-2024	

DRAWN:	CHECKED:	APPROVED:	PLOT SCALE AT A3:
MJW	AW	MW	1:2000

PLOT NAME:	REVISION:
15807_NRW_Flood_Risk_from_Reservoirs	-



Notes:
1) All dimensions are in metres and all levels in metres above Ordnance Datum unless stated otherwise

LEGEND

Site Boundary

NRW Historic Flood Map

CLIENT:

Sofidel UK Limited



www.waterco.co.uk

SCHEME:

Sofidel Biomass Boiler, Baglan Paper Mill

PLOT TITLE:

NRW Historic Flood Risk
Data accessed March 2024

PLOT STATUS:			DATE:
FINAL			21-03-2024

DRAWN:	CHECKED:	APPROVED:	PLOT SCALE AT A3:
MJW	AW	MW	1:2000

PLOT NAME:	REVISION:
15807_NRW_Historic_Flood_Risk	-

Baglan Energy Park

Ein cyf/Our ref: CAS-252188-S3C2
Eich cyf/Your ref: Baglan Energy Park

Dyddiad/Date: 09 April 2024

Annwyl Syr/Madam/Dear Sir/Madam,

BWRIAD/PROPOSAL: The proposed development is for a 8MW biomass boiler . The development is located with Flood Zone B on the Welsh Government Development Advice Map. We are seeking free pre-planning advice relating to flood risk. Furthermore, please can you advise if there are any records of historical flooding affecting the site.

LLEOLIAD/LOCATION: Brunel Way, Baglan Energy Park, Briton Ferry, Neath, SA11 2FP.

Thank you for consulting Cyfoeth Naturiol Cymru / Natural Resources Wales about the above pre-application enquiry, which we received on 21/03/2024.

We have considered your enquiry in relation to our Development Planning Consultations Topics document (September 2018). We advise the following matters are relevant to your site / proposed development and suggest you consider these further prior to the submission of any planning application:

Flood Risk

The site lies within Zone B of the Development Advice Maps (DAM) contained within Technical Advice Note (TAN) 15: Development and Flood Risk (2004).

We recommend you consult with the Local Authority's Drainage Engineers who may be able to provide information on issues such as localised flooding from drains, culverts and small watercourses.

We are not aware of any records of historical flooding affecting the site.

Other Matters

Please note, the view expressed in this letter is a response to a pre-planning enquiry only. We trust these comments will prove helpful, but they should not set a precedent for any

future Natural Resources Wales' response to any formal application for planning permission or other legal consent. Such applications shall be assessed on the information submitted and regulations of relevance at that time. The details contained in this letter are based on the information available to date.

As part of our discretionary advice service we can provide further advice relating to land contamination, groundwater and flood risk prior to your planning application being submitted. There is a charge for this service. Further details are available on our [website](#).

If you have any queries on the above, please do not hesitate to contact us.

Yn gywir / Yours faithfully

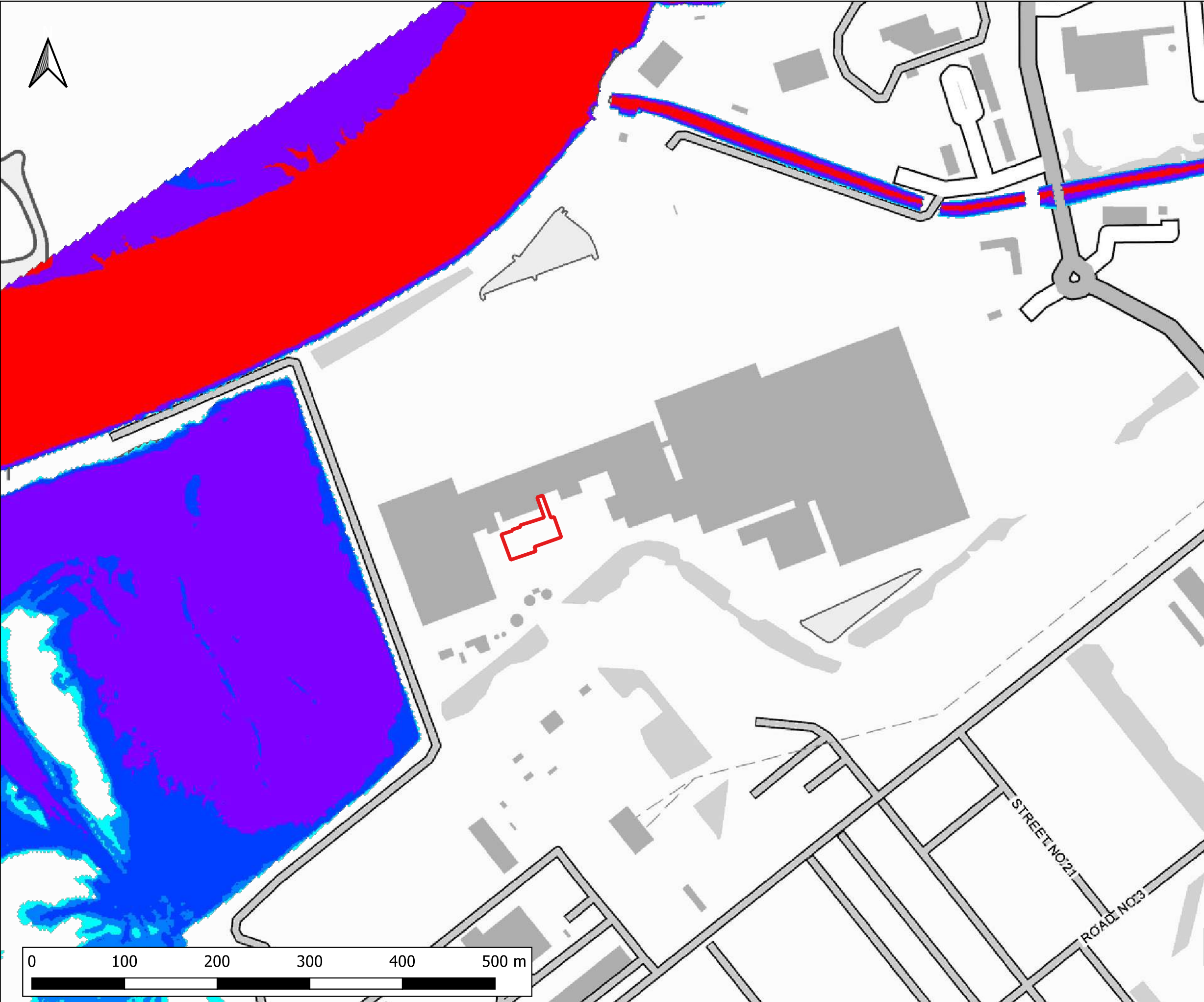
Scott O'Connor

Cynghorydd - Cynllunio Datblygu/Advisor - Development Planning
Cyfoeth Naturiol Cymru/Natural Resources Wales

E-bost/E-mail: swplanning@cyfoethnaturiolcymru.gov.uk
Ffôn/Phone: 03000 65 4183

Croesewir gohebiaeth yn Gymraeg a byddwn yn ymateb yn Gymraeg, heb i hynny arwain at oedi./Correspondence in Welsh is welcomed, and we will respond in Welsh without it leading to a delay.

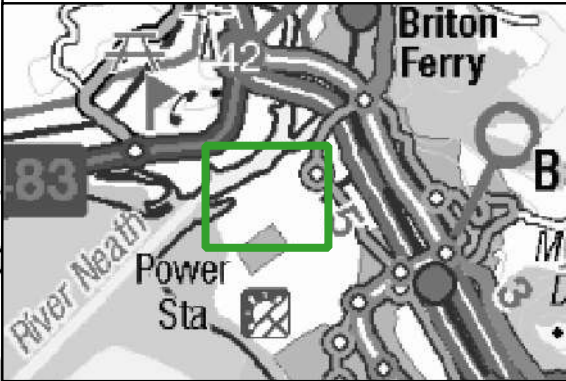
Appendix G NRW Modelled Flood Depth Mapping



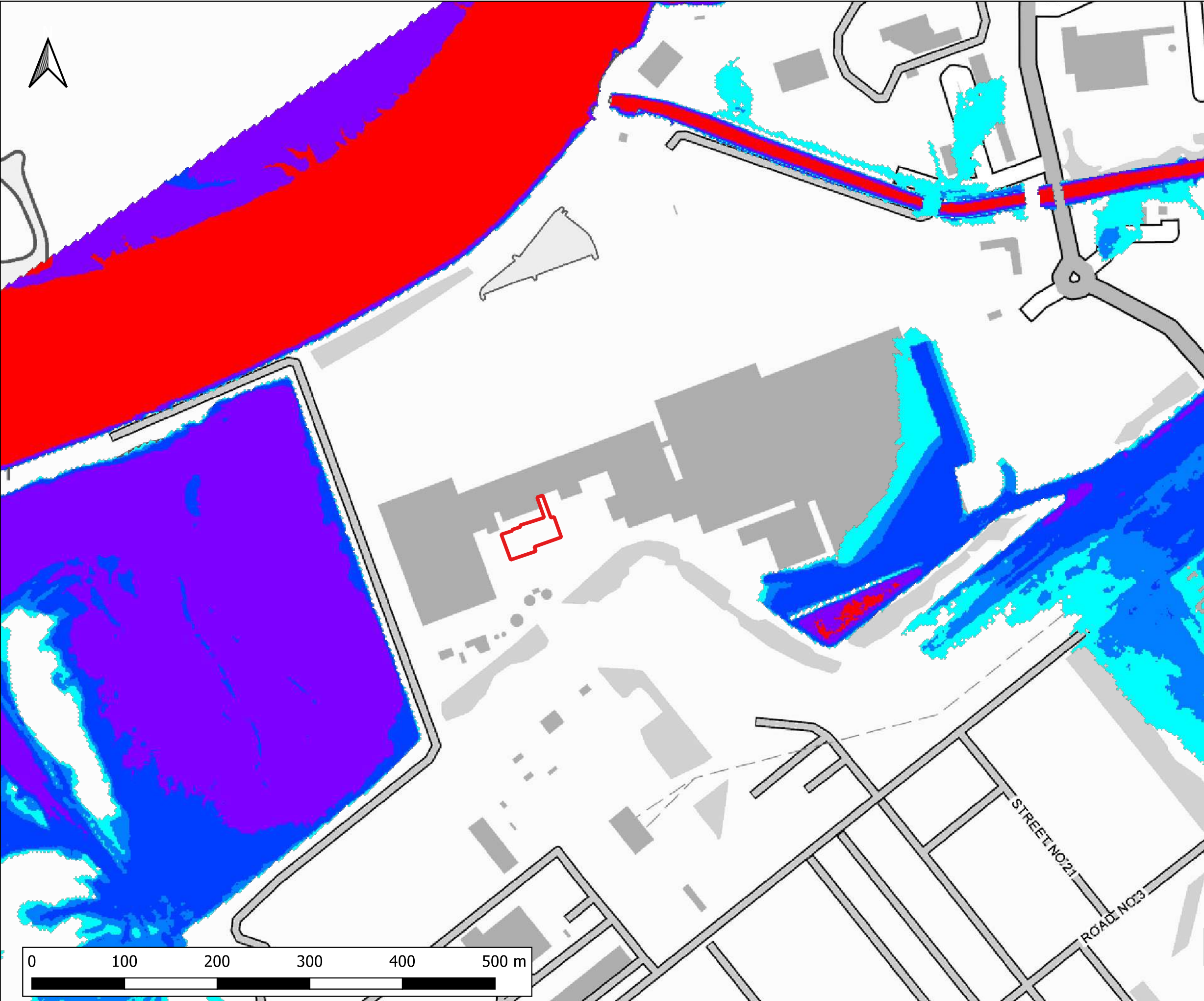
Notes:
1) All dimensions are in metres and all levels in metres above Ordnance Datum unless stated otherwise

LEGEND

- Site boundary
- Flood Depth
- <= 0.3m
 - 0.3m - 0.6m
 - 0.6m - 1.2m
 - 1.2m - 2.4m
 - > 2.4m



CLIENT:			
Sofidel UK Limited			
 www.waterco.co.uk			
SCHEME:			
Sofidel Biomass Boiler, Baglan Paper Mill			
PLOT TITLE:			
PORT TALBOT COMBINED 2017 MODEL MAXIMUM FLOOD DEPTH 0.1% AEP (2116) MHWS EVENT DEFENDED SCENARIO			
PLOT STATUS:			DATE:
FINAL			22-03-2024
DRAWN:	CHECKED:	APPROVED:	PLOT SCALE AT A3:
MJW	AW	MW	1:4000
PLOT NAME:			REVISION:
15807_DEF_2116_Q1000_MHWS			-



Notes:
1) All dimensions are in metres and all levels in metres above Ordnance Datum unless stated otherwise

LEGEND

Site boundary

Flood Depth

- <= 0.3m
- 0.3m - 0.6m
- 0.6m - 1.2m
- 1.2m - 2.4m
- > 2.4m

CLIENT:

Sofidel UK Limited

www.waterco.co.uk

SCHEME:

Sofidel Biomass Boiler, Baglan Paper Mill

PLOT TITLE:

PORT TALBOT COMBINED 2017 MODEL
MAXIMUM FLOOD DEPTH
0.1% AEP (2116) MHWS EVENT
UNDEFENDED SCENARIO

PLOT STATUS:		DATE:	
FINAL		22-03-2024	

DRAWN:	CHECKED:	APPROVED:	PLOT SCALE AT A3:
MJW	AW	MW	1:4000

PLOT NAME:	REVISION:
15807_UNDEF_2116_Q1000_MHWS	-