

WEPCo Coleg Sir Gâr, Pibwrlwyd

Flood Consequence Assessment



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1 Introduction

Stantec Hydrock Limited have been commissioned by WEPCo to undertake a Flood Consequences Assessment (FCA) with Building Research Establishment Environment Assessment Methodology (BREEAM) input, to be submitted with a detailed planning application for the site at Coleg Sir Gâr, Pibwrlwyd.

The development proposals comprise the development of new further and higher education facilities at the existing Pibwrlwyd campus.

This report has been completed in accordance with Technical Advice Note 15: Development and Flood Risk (TAN 15) through:

- » Assessing whether the proposed development is likely to be affected by flooding from tidal, fluvial, surface water, groundwater, sewers and artificial sources;
- » Assessing whether the proposed development is appropriate in the suggested locations; and
- » Detailing measures necessary to mitigate any flood risk identified, to ensure that the proposed development and occupants would be safe, and that flood risk would not be increased.



2 Existing Site Conditions

2.1 Site Location

The site is located within the existing Pibwrlwyd Campus, Pibwrlwyd Lane, Carmarthen, and covers an area of approximately 15.4 hectares. The existing site currently comprises greenspace, buildings, and car parking in the west, and agricultural fields in the east.

The approximate site address and Ordnance Survey Grid Reference are shown within **Table 1** and the site location shown in **Figure 1**.

Table 1: Site Referencing Information

Site Referencing Information	
Site Address	Coleg Sir Gâr - Pibwrlwyd Campus, Pibwrlwyd Lane, Carmarthen, SA31 2NH
Grid Reference	SN 41137 18304 241137, 218304



Figure 1: Site Location



2.2 Topography

A site-specific topographic survey was conducted by HSP Consulting in 2023 (**Appendix A**). This shows site that the site falls from the north to south, with ground levels in the north situated at an elevation of 33.7 m AOD, and ground levels in the southwestern corner situated at an elevation of 5 m AOD. **Figure 2** shows the Light Detection and Ranging (LiDAR)-derived elevation data with 1 m-resolution contours.

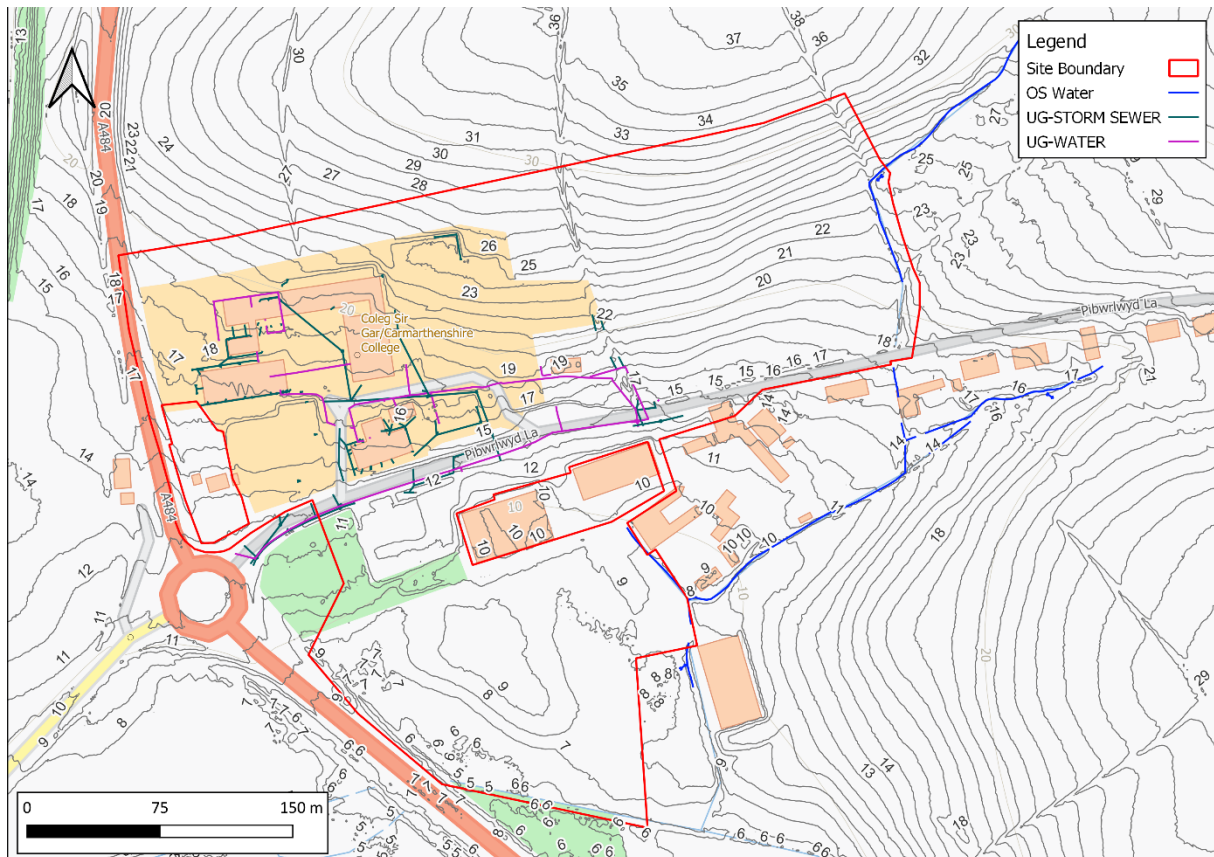


Figure 2: Site Topography

2.3 Geology and Hydrogeology

A review of the British Geological survey's (BGS) online GeoIndex mapping shows the site to be underlain by bedrock geology comprising Arenig rocks (undifferentiated) - mudstones, siltstones and sandstones. This is superimposed by superficial deposits comprising Devensian glaciofluvial sand and gravel in the west, and Devensian till (diamicton) in the east.

According to MAGIC mapping, the bedrock deposits on site are classified as a Secondary B Aquifer. Secondary B Aquifers are defined as 'mainly lower permeability layers that may store and yield limited amounts of groundwater through characteristics like thin cracks (called fissures) and openings or eroded layers'. Superficial deposits on site are designated as a Secondary A Aquifer, as reported within the Coleg Sir Gâr, Pibwrlwyd Campus: Ground Investigation Summary document (HSP2024-C4103-G-LR2590).



According to Soilscales mapping the site is located within 'slowly permeable, seasonally wet acid loamy and clayey soils', which are characterised by impeded drainage.

Ground conditions at the site are summarised in Table 2 of the Civil and Structural RIBA Stage 2 Report (Ref: CSG-HYDnS-XX-XX-RP-CS-0001). Within this summarised information, it reports that groundwater was encountered at various depths, with the shallowest depth being approximately 0.34 m below ground level (bgl).

2.4 Hydrology

The closest Main River to the site is the Afon Tywi/River Towy, located approximately 225 m west of the site. The Afon Tywi is managed under the jurisdiction of Natural Resources Wales (NRW). There is also a Main River approximately 300 m south of the site, named Nant Pibwr, which is a tributary of the Afon Tywi. The topographic mapping indicates the presence of two land drains, one in the centre of the site and another along the eastern site boundary. The land drain transecting the centre of the site drains into two parallel-running 225 mm diameter underground stormwater pipes, and subsequently into an underground water network along Pibwr Lane. The land drain along the eastern site boundary drains into the Nant Pibwr south of the site. There are no other known watercourses or significant features located in the vicinity of the site boundary.

The Bro Tywi reservoir is located 1.1 kilometres south of the site.



3 Proposed Development

The proposals comprise the demolition of the existing campus buildings and the development of new facilities. Proposed development includes:

- » Construction workshops and yards in the east;
- » Two main buildings (north and south) in the centre of the site connected via a hall;
- » Sports facilities;
- » Car parking in the west;
- » A service access road in the north;
- » General landscaped space; and
- » A coach drop-off area in the south.

Additionally, temporary car parking is proposed in the south of the site, that is currently labelled as existing grassland. The temporary car parking is proposed for the college for circa 3 years, whilst new facilities and car parking is being constructed.

Proposed site access is via Pibwrlwyd Lane. For reference, sketch masterplans at this stage are included in **Appendix B**.

Based on the newly adopted Technical Advice Note 15 (2025), the proposed development is classified as 'Highly Vulnerable' development.



4 Planning Policy

4.1 National Planning Policy

Planning applications are required to adhere to details set forth by the following:

- » Planning Policy Wales (2024);
- » Technical Advice Note 15 (TAN 15¹): Development, flooding and coastal erosion (2025); and
- » Flood Consequence Assessments: Climate Change Allowances.

Natural Resources Wales (NRW) defines the fluvial flood zones as follows:

- » Flood Zone 1 (Low Risk) comprises land assessed as having a $\leq 0.1\%$ chance of flooding from rivers in any given year (equivalent to the ≥ 1 in 1,000-year return period flood event), including an allowance for climate change.
- » Flood Zone 2 (Medium Risk) comprises land assessed as having a 0.1-1% chance of flooding from rivers in any given year (equivalent to the 1 in 1,000 - 1 in 100-year return period flood event), including an allowance for climate change.
- » Flood Zone 3 (High Risk) comprises land assessed as having a $\geq 1\%$ chance of flooding from rivers in any given year (equivalent to the ≤ 1 in 100-year return period flood event), including an allowance for climate change.
- » TAN 15 Defended Zones comprise areas where flood risk management infrastructure provides a minimum standard of protection against flooding from rivers of 1 in 100-year return period flood event with an allowance for climate change and a freeboard.

4.1.1 TAN 15 (2025)

The TAN provides 'technical guidance which supplements the policies set out in PPW and Future Wales in relation to flooding and coastal erosion' by providing a framework within which 'flood risk arising from rivers, the sea and surface water, and the risk of coastal erosion can be assessed.'

4.1.1.1 Vulnerability to Flooding

According to Figure 4 of TAN 15, the proposed development constitutes a 'Highly Vulnerable' vulnerability classification under 'Hospitals and GP Surgeries'.

4.1.1.2 Flood Frequency Thresholds

Figure 5 of TAN 15 summaries frequency thresholds for different types of development to ensure new development remains flood free during the 1% river flood (i.e. a flood with a 1 in 100 chance of

¹ [Technical Advice Note 15: Development, flooding and coastal erosion](#)



occurring in any year) and the 0.5% flood from the sea (i.e. a flood with a 1 in 200 chance of occurring in any year), plus an allowance for climate change over the lifetime of development.

Vulnerability Category		Flood Event Type	
		Rivers	Sea
Highly Vulnerable Development	Emergency Services (command centres and hubs)	0.1% + CC	1% + CC
	All Other Types	1% + CC	0.5% + CC
Less Vulnerable Development		1% + CC	0.5% + CC
Water Compatible Development that may be occupied by people		1% + CC	0.5% + CC

TAN 15 states that these thresholds may be applied with more flexibility with regard to redevelopment, changes of use, conversions and extensions, where the ability to substantially redesign a development is limited.

4.1.1.3 Tolerable Conditions

Figure 6 of TAN 15 summaries tolerable conditions in an extreme flood event for different types of new development when assessed against the 0.1% extreme flood event, including an allowance for climate change.

Types of new development	Maximum depth of flooding (mm)	Maximum velocity of flood waters (metres/sec)
Highly Vulnerable Development	600	0.15
Less Vulnerable Development	600	0.30

Infrastructure associated with Highly Vulnerable Development, e.g., car parks, access, paths, and roads

Water Compatible Development (limited to those built elements of development that may be occupied by people)



4.2 Second Deposit Revised Carmarthenshire Local Development Plan (2018-2033)²

Within the Carmarthenshire Local Development Plan (LDP), the Coleg Sir Gâr, Pibwrlwyd site is allocated under **Policy PrC1/MU2** for mixed-use development, including employment, commercial leisure, education associated with Coleg Sir Gâr, and residential.

Flood risk is addressed in the Carmarthenshire LDP through Strategic Policy SP16 – Climate Change, and Policy CCH5 – Flood Risk Management and Avoidance.

Policy SP16:

This policy states that development proposals will be supported if they respond, adapt, increase resilience, and minimise the causes and impacts of climate change. This includes avoiding, or where appropriate, minimising the risk of flooding including through the incorporation of measures (such as Sustainable Drainage Systems (SuDS) and flood resilient design).

Policy CCH5:

This policy states that for development located within areas of identified flood risk will only be permitted in exceptional circumstances, including:

- » In areas at risk of fluvial, pluvial, coastal and reservoir flooding, where it can be demonstrated that the development meets the justification tests set out within National Policy and is supported by robust technical evidential statement;
- » Where it would not have a detrimental effect on the integrity of existing fluvial, pluvial, or coastal flood defences, or would impede access to existing and future defences for maintenance and emergency purposes;
- » It would not lead to an unacceptable increase in the risk of flooding on the site or elsewhere will not be permitted; or
- » In areas subject to flood risk from localised sources, a drainage strategy is submitted which demonstrates to the Council's satisfaction that the impacts can be managed or alleviated.

Proposals should seek to incorporate effective and environmentally sympathetic flood risk mitigation measures, such as SuDS.

Proposals where there is the potential for floodplain reconnection should be incorporated into the development to ensure that opportunities are maximised, and that floodplain storage and water flow are not adversely affected.

² <https://www.carmarthenshire.gov.wales/media/1231094/2nd-deposit-revised-ldp-written-statement-eng.pdf>



4.3 South West Wales Stage 1 Strategic Flood Consequences Assessment (2022)³

The South West Wales Stage 1 Strategic Flood Consequences Assessment (SFCA) was joint commissioned by the following local planning authorities:

- » Carmarthenshire County Council;
- » Neath Port Talbot Council;
- » Pembrokeshire County Council;
- » Swansea County Council;
- » Brecon Beacons National Park Authority;
- » Pembrokeshire Coast National Park Authority.

The SFRA identifies areas at risk of flooding from all sources including the likely impact of climate change and preparation appropriate policies for the management of flood risk.

The SFCA also provides guidance on the requirements for site-specific FCAs. A site-specific FCA is required in the following circumstances:

- » Proposals for development (including minor development and change of use) in Flood Zones 2 and 3 of the FMfP, with the exception of highly vulnerable development in Flood Zone 3 which is not permitted;
- » Proposals for development within TAN 15 Defended Zones;
- » Proposal for development within critical drainage areas identified by the LLFA or LPA; and
- » At the request of the LPA, NRW, or LLFA where there is reasonable flood risk concern to proposed development.
- » In the case of minor flood risk from Surface Water and Small Watercourses, the LLFA may waive the requirement for an FCA although there remains a requirement to consider flood risk in a SuDS approval application.
- » An FCA may also be required by the LLFA for Ordinary Watercourse Consent or by NRW for a Flood Risk Activity Permit for Main River watercourses. In these circumstances, the Justifications Tests do not apply and the LLFA or NRW will be able to provide guidance on their requirements for a proportionate FCA.

The site-specific FCA requirements are outlined in full in Section 12 of TAN 15. The assessment of flood risk in the FCA should help the planning authority determine whether the risk and consequences of flooding are acceptable and can be appropriately managed over the lifetime of development. An assessment of a range of potential flooding scenarios up to and including the 0.1% AEP flood event

³ https://www.carmarthenshire.gov.wales/media/1231250/1-hri-jbau-xx-xx-rp-hm-0002-a1-c01-stage_1_sfca.pdf



should be included with an allowance for climate change in line with current Welsh Government guidance.

4.4 Climate Change Considerations

Under TAN 15 and local planning policy, it must be demonstrated that any proposed development at the site would be safe over its intended lifetime. This could include measures to ensure the development is flood resistant/resilient and that safe access and egress is provided for the following flood events, also known as 'design flood events':

- » 1 in 100-year (1% AEP) fluvial flood event accounting for the future impacts of climate change;
- » 1 in 200-year (0.5% AEP) tidal / coastal flood event accounting for the future impacts of climate change;
- » 1 in 30-year (3.3% AEP) pluvial (surface water) event accounting for the future impacts of climate change; and
- » 1 in 100-year (1% AEP) pluvial (surface water) event accounting for the future impacts of climate change.

Table 2 and Table 3 provide the latest climate change uplifts for fluvial and surface water flooding, as per the NRW Climate Change Allowances and Flood Consequence Assessments guidance⁴.

Table 2. Peak River Flow Allowances for the West Wales River Basin District

	Total Potential change anticipated by the 2020s	Total potential change anticipated by the 2050s	Total potential change anticipated by the 2080s
Upper end estimate	25%	40%	75%
Change factor / central estimate	10%	25%	30%
Lower end estimate	5%	10%	15%

Table 3. Change to extreme rainfall intensity (compared to a 1961-90 baseline)

	Total potential change anticipated for 2020s (2015-2039)	Total potential change anticipated for 2050s (2040-2060)	Total potential change anticipated for 2080s (2070-2115)
Upper end estimate	10%	20%	40%
Central estimate	5%	10%	20%

⁴ Flood Consequences Assessments: Climate change (gov.wales)



5 Sources of Flood Risk

5.1 Fluvial Flooding

The NRW Online Flood Map for Planning (FMfP) (Rivers), presented in **Figure 3** below, indicates that the majority of the site is located in Flood Zone 1 relative to fluvial flood risk, land defined as having less than 0.1% annual probability of flooding. The south of the site is shown to be within Flood Zone 2 and 3 however, this area is shown to be kept as existing grassland. The proposed temporary car parking in the south of the site will be situated outside of the Flood Zone extents.

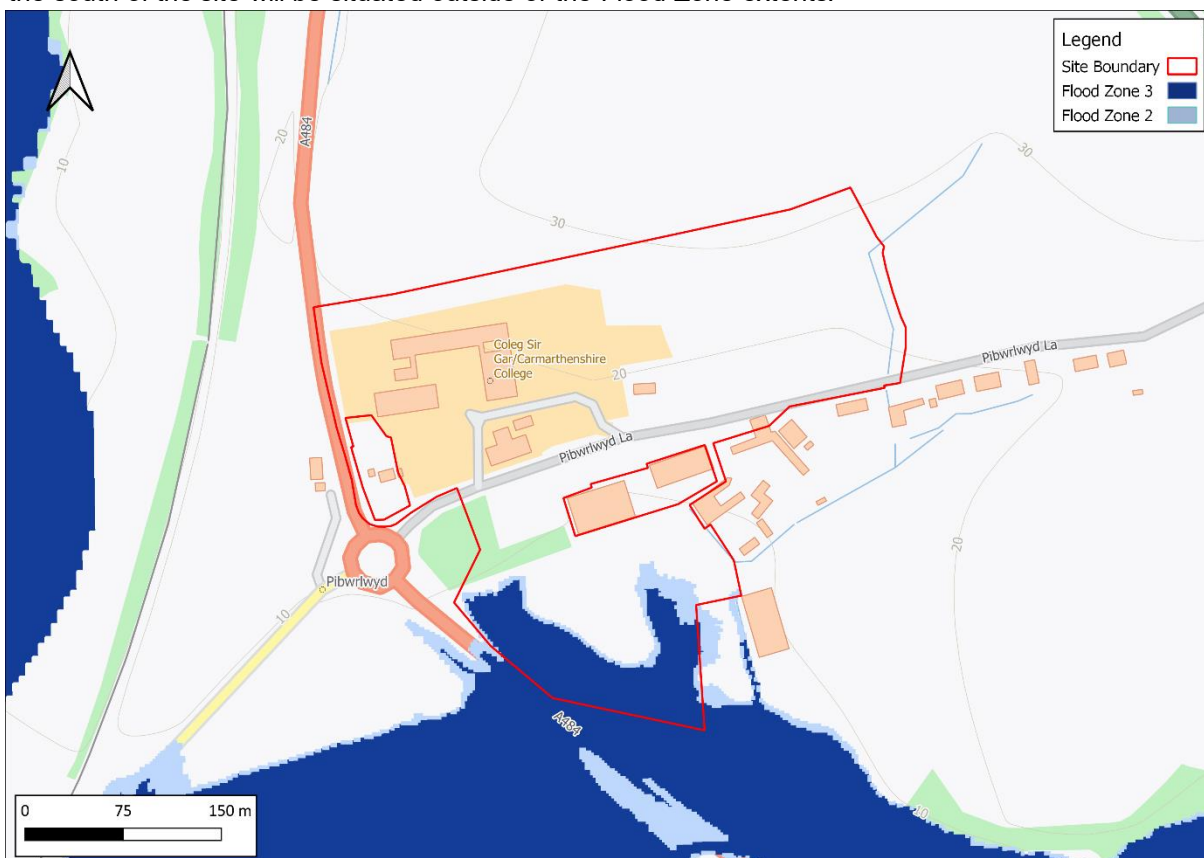


Figure 3: NRW Flood Map for Planning (Rivers) (September 2025)

5.1.1 NRW Data

A review of NRW Data mapping within the detailed FMfP, demonstrated that modelling was carried out for the production of flood extents only. Therefore, there was no available data to be extracted within the site boundary, and the site is considered to be outside the extents of any modelled flood event.

The site is therefore concluded to be at 'low' risk of fluvial flooding.

5.2 Tidal Flooding

The NRW Online FMfP (Sea), indicates that the site is located within Flood Zone 1 (**Figure 4**). The site is located 225 m from the Afon Tywi, and 300 m from the Nant Pibwr, both tidally-influenced Main



Rivers. However, as the minimum site elevation is 11.90 m AOD, several metres above the maximum Flood Zone extents, the site is concluded to be at 'low' risk of tidal flooding, which is not considered to alter as a result of climate change during the lifetime of the development. The south of the site is shown to be within Flood Zone 2 and 3 however, this area is shown to be kept as existing grassland. The proposed temporary car parking in the south of the site is confirmed to be situated outside of the flood zone extents.

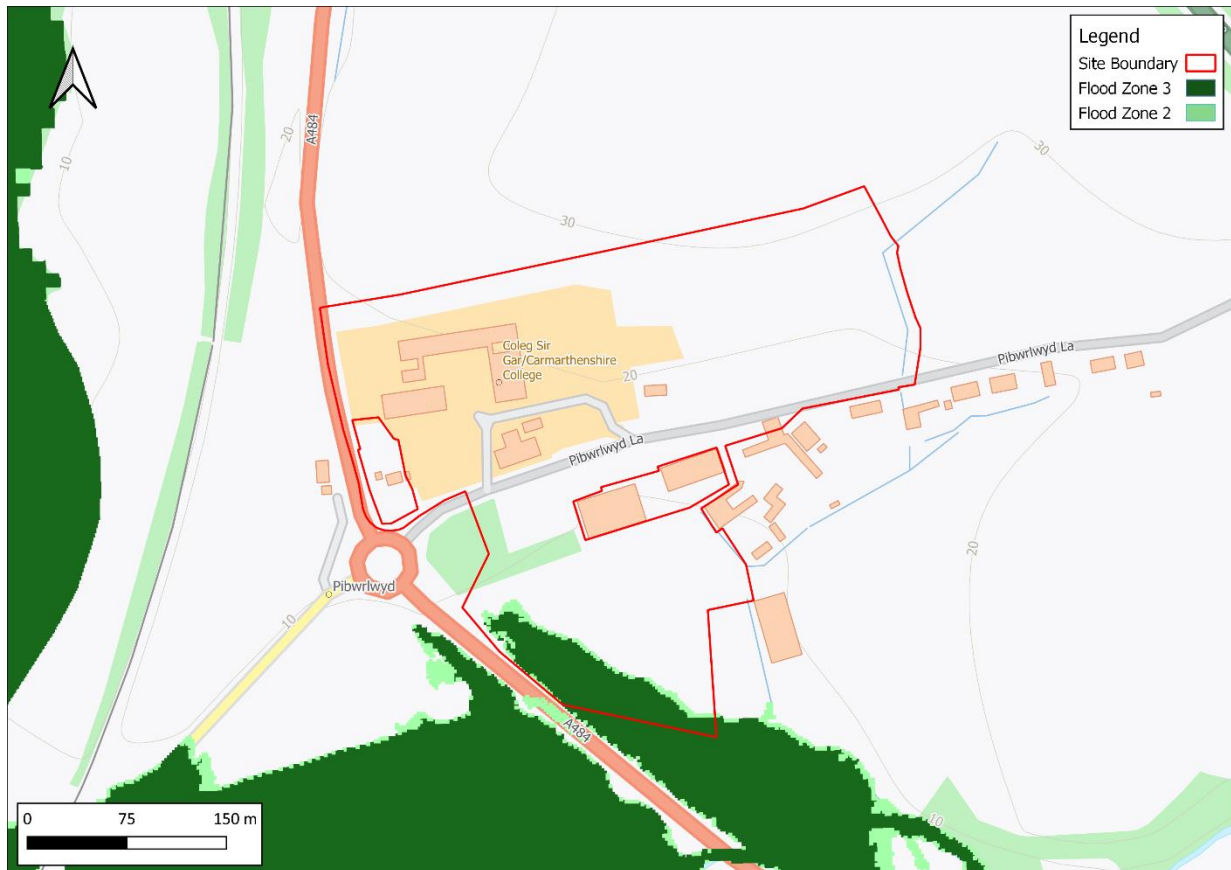


Figure 4: NRW Detailed Flood Map for Planning (Seas) (September 2025)

5.3 Surface Water Flooding

Surface water (pluvial) flooding is caused by rainfall levels exceeding the natural infiltration properties of the surrounding soils. Flooding can also occur owing to the absence of a natural method of drainage such as watercourses or ditches, or where soil infiltration rates are low. Flooding often results in ponding of water at low points that lack sufficient drainage or when surface water flow routes are blocked by an obstruction.

The NRW Flood Map for Planning (Surface Water and Small Watercourses) presented in **Figure 5**, indicates that the majority of the site is located within Flood Zone 1, land assessed as having less than 0.1% chance of flooding in any given year.



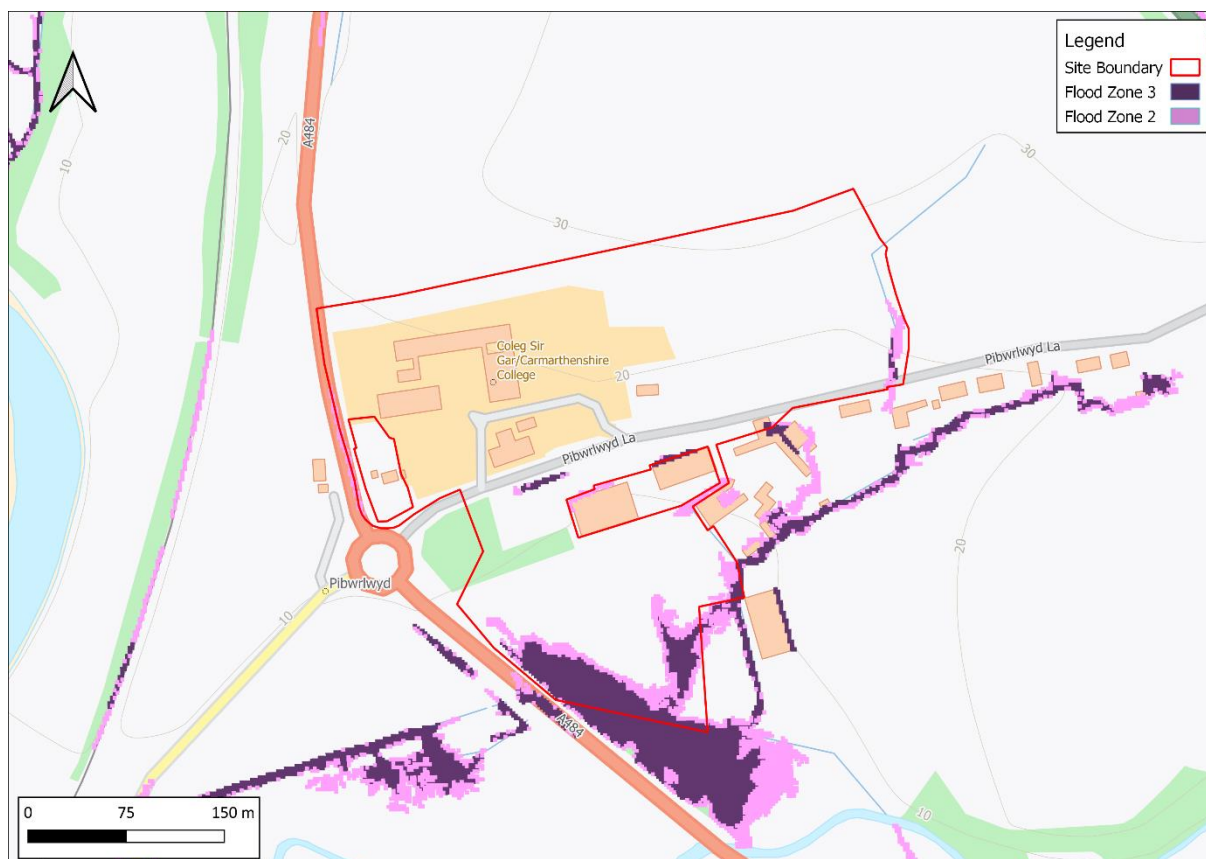


Figure 5: Flood Map for Planning - Surface Water and Small Watercourses (September 2025)

The area to the east of the site boundary, is indicated to be in surface water and small watercourse Flood Zone 2. This is associated with the land drain that runs along the eastern site boundary. There is also an area to the immediate west of the site boundary, along the A484, in surface water and small watercourse Flood Zone 2. Additionally, there is an area along Pibwrlwyd Road that is shown to be within Flood Zone 2 and 3 which is shown to be associated with a storm sewer along the road.

A large area of flooding is shown within the south of the site, which is shown to be associated with a small watercourse to the south of the site. However, this area is shown to be kept as existing grassland and does not affect the proposed development. The proposed temporary car parking in the south of the site is confirmed to be situated outside of the flood zone extents.

The topographic survey and LiDAR-derived site elevations indicate that there is a land drain that transects the western and eastern areas of the site (**Figure 2** and **Appendix A – Topographic Survey**). Part of the drainage strategy that will be completed by Hydrock, now Stantec is to explore the viability of draining the site into the central land drain. This should conform to the Welsh Government's statutory SuDS guidance⁵.

⁵ [statutory-national-standards-for-sustainable-drainage-systems.pdf \(gov.wales\)](https://gov.wales/statutory-national-standards-for-sustainable-drainage-systems.pdf)



In Wales, central rainfall estimates for the 2080s Epoch predicts that rainfall intensity will increase by 20% (**Table 3**). Whilst the potential effects of climate change could increase the frequency, depth and extent of surface water flooding, given the current low risk identified, any increase in flood risk is considered unlikely to be of a magnitude which would result in a significant increase in the risk of on-site surface water flooding, as any surface water runoff will likely continue channelled into the existing land drains on, or in proximity to, the site, or flow overland as shallow 'sheet-flow' with the prevailing topography towards the south and away from the site. Furthermore, the drainage strategy that will be implemented on site is required to be designed to store and convey flows for the 1% AEP + climate change flood event. Betterment upon existing rates back to greenfield is also likely to be required by the SuDS Approval Body (SAB).

As such, given the low risk identified by the NRW mapping, the site is concluded to be at 'low' risk of surface water flooding.

5.4 Groundwater Flooding

Groundwater flooding is caused by the emergence of water originating from sub-surface permeable strata. A groundwater flood event results from a rise in groundwater level sufficient for the water table to intersect the ground surface and inundate low lying land. Periods of prolonged rainfall may also be a cause of groundwater flooding, with aquifers and soils becoming saturated.

The generally low permeability of the geology at the site, due to the bedrock deposit classification as a Secondary B Aquifer, is unlikely to be conducive to significant groundwater emergence. The topography of the site also means that during times of high river levels, any groundwater which has hydraulic connectivity with the Rivers Towy or Nant Pibwr are unlikely to reach the site. Any other subsurface groundwater flows are likely to be directed downhill and away from the site towards the Nant Pibwr.

According to BGS historical Borehole records there are no publicly available boreholes located within, or in close proximity to, the site development site boundary. A review of SFCA Flood Risk from Groundwater mapping (Figure 6), which has a resolution of 5 m, shows that the south west of the site is located in an area where groundwater levels are at least 0.5 m below ground level (bgl), which means there is a risk of flooding to subsurface assets but surface manifestation of groundwater is unlikely. Groundwater levels are indicated to be at least 5 m bgl in the northwest of the site, which means flooding from groundwater is not likely. The east of the site is classified as being at 'low' risk of groundwater flooding. However, within Table 2 of the Civil and Structural RIBA Stage 2 Report (Ref: CSG-HYDnS-XX-XX-RP-CS-0001), ground conditions are summarised. This reports that groundwater was encountered at various depths, with the shallowest depth being approximately 0.34 m below ground level (bgl). As a precaution, it is recommended that the developers use dewatering measures



during the construction phase to minimise the effect of any potential groundwater ingress.

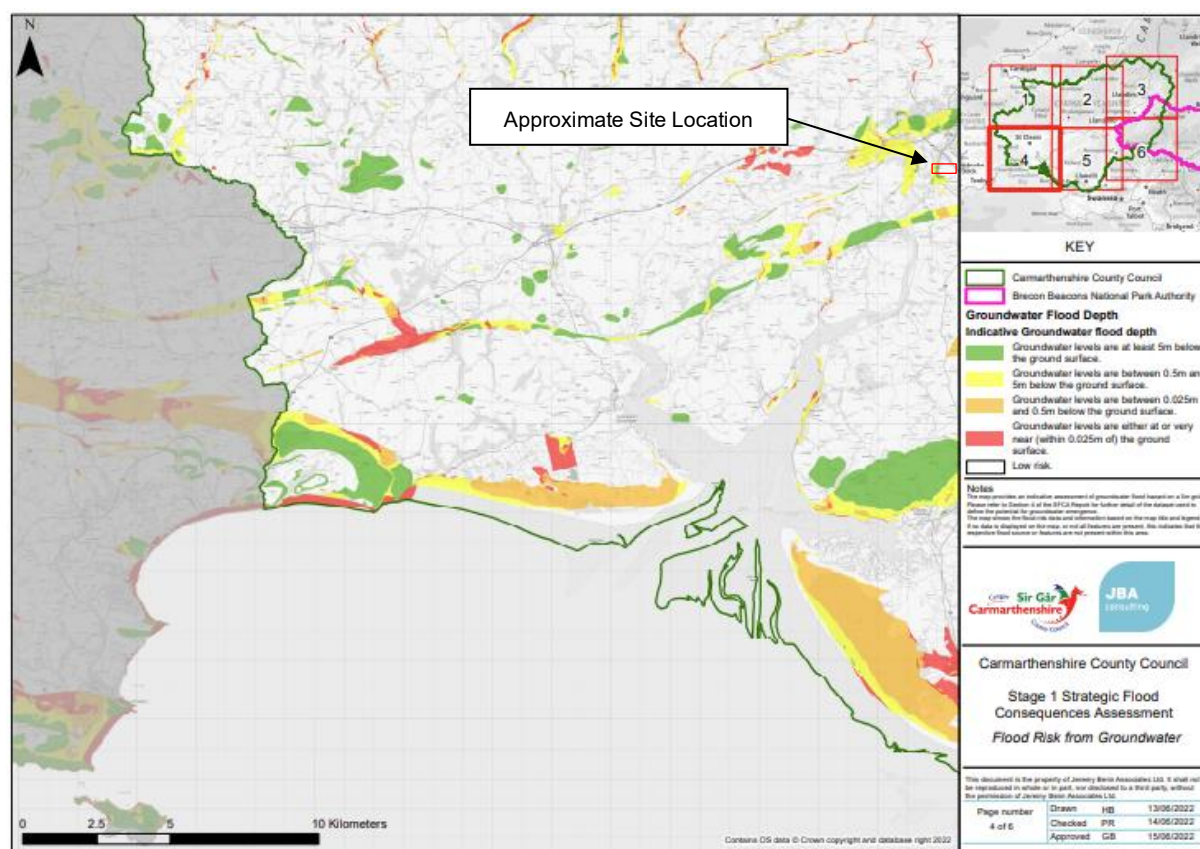


Figure 6: SFCA Flood Risk from Groundwater

Considering the above information, the site is concluded to be at 'low' risk of groundwater flooding.

5.5 Sewer Flooding

Flooding can occur owing to the failure of existing foul or surface water drainage infrastructure. If flows within the drainage system exceed the designed capacity or foreign matter causes blockages, overflow to the surface can occur, leading to flooding.

Table 0-2 of the SFCA comprises a record of sewer flooding incidents by electoral ward. These records were provided by Dŵr Cymru Welsh Water. There is no indication that the site is at risk of sewer flooding.

TAN 15 does not specify sewer flood risk other than that it should be considered within a FCA.

As such, the site is concluded to be at 'low' risk of surface water flooding.

5.6 Artificial Sources Flood Risk

NRW Mapping presents the maximum extent that may be affected in the event of an uncontrolled release of water (failure) from a reservoir. The mapping indicates that the majority of the site is located outside of the area that would be at risk of flooding from a reservoir failure (**Figure 7**). A small area in the south of the site is shown to be within the flood extent however, this area is proposed to be kept as



existing grassland. The proposed temporary car parking in the south of the site is confirmed to be situated outside of the flood zone extents.

The NRW also state that reservoir flooding is extremely unlikely to happen. All large reservoirs must be inspected and supervised by reservoir panel engineers as determined by the Reservoirs Act 1975 in England and Wales. It is assumed that any local reservoirs are regularly inspected, and essential safety work is carried out. TAN 15 therefore indicates that the Bro Tywi reservoir, located 1.1 km south of the site, presents minimal risk.

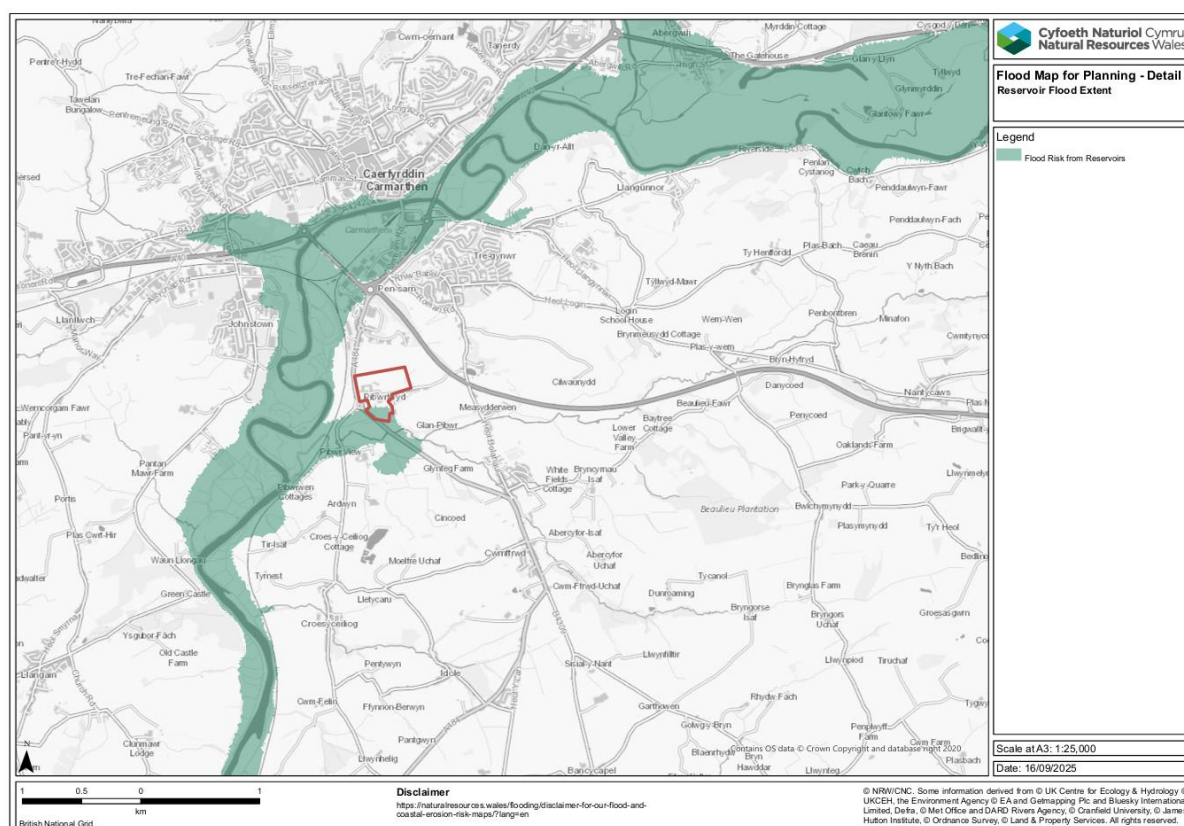


Figure 7: NRW's Flood Risk from Reservoirs (September 2025)

As such, it can be concluded that the risk of flooding from artificial sources to the site is 'low'.

5.7 Summary

The site is at 'low' risk of fluvial and tidal flooding in accordance with the NRW Flood Map for Planning.

The western and eastern portions of the site are divided by a land drain, as shown within **Figure 2** and **Appendix A - Topographic Survey**. The drainage strategy is exploring the opportunity to utilise this topographic feature to drain the site, while maintaining compliance with the SuDS guidance. The capacity of this drain, in addition to the inflows from the surrounding catchment will be assessed before adopting this strategy to ensure there are no direct impacts of the proposals to the surrounding land.

Where possible, the ground floor thresholds of any proposed buildings should set above the adjacent ground levels by a minimum of 150mm, either by raising the floor levels above the existing ground levels or sloping ground levels away from the building, as per building standards. This will address any



residual risks of surface water flooding (e.g., blockage of the proposed drainage network serving the site or exceedance of the drainage design capacity) by directing runoff away from the building.

Access and egress to the site will be provided from Pibwrlwyd Lane through the centre of the site. This access route is indicated to be at 'low' or negligible risk of flooding from all assessed sources and therefore safe access and egress is concluded to be achievable.

The NRW Recorded Flood Extents Mapping does not indicate that the site has flooded historically.

The site is considered to be at 'low' risk of flooding from fluvial, tidal, surface water, groundwater, sewer and artificial sources.



6 Land Drain Capacity Assessment

From the project NPR information and client brief, it is understood that land to the north of the site forms part of the draft local development plan and is allocated as future residential development (**Figure 9**).



Figure 8: Draft Local Development Plan Masterplan (source - Welsh Gov NPR, May 23)

Some of this land falls towards the college campus which in turn means that it partially drains through the site. In order to limit the risk of constraining or sterilising these parcels in terms of surface water runoff, the proposed drainage strategy for the site should look to accommodate this development by considering the Greenfield drainage regime and how this can be maintained post development.

A land drain capacity assessment has therefore been conducted to:

- » Identify the watershed area draining into the existing land drains and calculate likely inflows;
- » Determine if the Coleg Sir Gâr land drains have capacity to take the calculated inflows;
- » Determine whether the known pipe diameters can take the calculated inflows;
- » Set out the parameters for consideration in proposed development drainage strategy so that the greenfield drainage regime may be maintained without increasing flood risk; and
- » Assess whether there is any additional capacity to drain additional land in the west of the site.

For reference, Watersheds 1 and 2 (W1 and W2) are shown in **Figure 10**. These are subdivided further to distinguish between those areas that comprise the site, and those that drain from further upstream/north of the site,



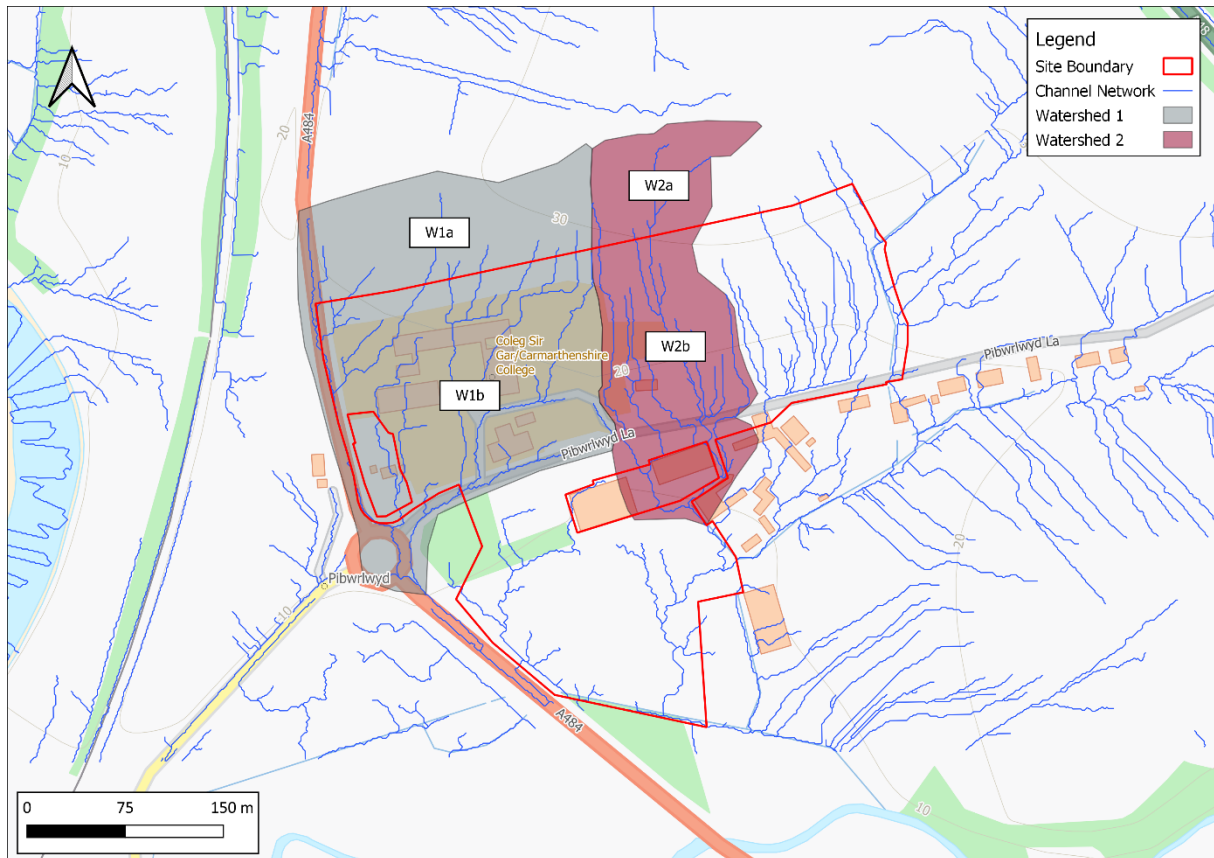


Figure 9: Coleg Sir Gâr watersheds and channel networks

6.1 Greenfield Runoff Rates

Greenfield runoff rates (rural) were calculated for the following watershed areas:

- » The existing Coleg Sir Gâr site campus (W1); and
- » The expansion land to the east of the Coleg Sir Gâr campus (W2).

Notably these catchments are split by an existing informal access track and two parallel land drainage ditches (See also Sec 6.3).

Peak flows were calculated using the ReFH2 Greenfield Runoff Rate method⁶, and then converted to greenfield runoff rates using the following equation:

$$\frac{10 \times Q_p}{A}$$

⁶ [Greenfield Runoff Rates and Volumes - ReFH Technical Guide](#)



Where Q_p is the peak flow, and A is the watershed area. The results for W1 and W2 (including subdivided catchments) are included in **Table 4** in litres per second (l/s).

Table 4: Greenfield runoff rates for named Watersheds

Greenfield runoff rate [l/s]*	3.3% AEP	3.3% AEP + 30% CC	1% AEP	1% AEP + 30% CC	0.1% AEP
W1a (north of site)	28.55	37.11	35.74	46.46	52.75
W1b (site)	44.82	58.27	56.12	72.95	82.82
W1 Total	73.37	95.38	91.86	119.42	135.57
W2a (north of site)	13.82	17.97	17.29	22.48	25.51
W2b (site)	27.08	35.20	33.88	44.05	49.97
W2 Total	40.90	53.17	51.18	66.53	75.48

**The calculated l/s/ha rate used and pro-rated within the calculations was 21.7*

6.2 Existing Site Runoff Rates

The existing site runoff rates were calculated by including the proportion of existing urban area within the watersheds. Within ReFH2, the urban area was assigned an impervious runoff rate of 1, i.e., fully impervious, and results were adjusted accordingly. Runoff rates based on the existing site, including urban areas, are included in **Table 5**.

Table 5: Existing site runoff rates for named Watersheds, including urban area

Existing site runoff rate [l/s]*	3.3% AEP	3.3% AEP + 30% CC	1% AEP	1% AEP + 30% CC	0.1% AEP
W1a	37.31	48.50	46.33	60.23	67.15
W1b	58.58	76.15	72.75	94.57	105.43
W1 (Combined)	95.88	124.65	119.08	154.80	172.58
W2a	17.82	23.16	22.13	28.76	32.07
W2b	34.91	45.38	43.35	56.35	62.83
W2 (Combined)	52.73	68.55	65.48	85.12	94.90

**The calculated l/s/ha rate used and pro-rated within the calculations was 28.5*

Section 8.3 of the TAN15 guidance states 'Development in one part of a catchment may increase run-off and hence flood risk elsewhere, therefore, the aim should be for new development not to create additional run-off when compared with the undeveloped situation, and for redevelopment to reduce run-off where possible'. In line with the TAN15 guidance, the development proposals intend to revert to greenfield runoff rates, through the use of Sustainable Drainage Systems (SuDS), reducing site runoff rates relative to the existing condition. Please refer to the separate drainage strategy for further information.



6.3 Land Drain Capacity

In the centre of the site are two land drains that run from north to south, parallel with each other, named here as D1 (**West**) and D2 (**East**). These land drains drain into two 0.225 m diameter parallel-running culverts, P1 (W) and P2 (E), which join a singular culvert south of the site (**Figure 2**). The capacity of the land drains, along with the parallel culverts located in W2's catchment were assessed, in order to determine whether these drains had sufficient capacity to contain the greenfield runoff and existing site runoff rates calculated above. The results of the capacity assessment are shown in **Table 6**, below.

Table 6: Land drain capacity assessment

Capacity [l/s]	D1 (W)	D2 (E)	P1 (W)	P2 (E)
Q	1760	680	100	120
Total Combined Q	2440		220	

The results of this capacity assessment show both the land drains (D1 and D2) and pipes (P1 and P2) have capacity to withstand greenfield or existing site condition flows from W2 during a 1% AEP + 30% CC design storm event, with some additional capacity to take more flow, if required.

6.4 Proposed Drainage Strategy Considerations

Should the northern land parcels be developed in future then it is anticipated that they will be provided with an active surface water drainage system that sustainability manages and discharges runoff in line with the National SuDS Standards for Wales at that time. In the predeveloped state in the interim, Greenfield runoff directed by the existing topography will continue to find its way south towards the proposed college development site. As such land drainage measures need to be integrated into the proposed drainage strategy to deal with these flows, so they do not present a flood risk to the site. Considering the proposals:

- » For the eastern catchment (W2) this is likely to take the form of a single combined ditch course on a similar route to the existing ditches culverted only where access across the ditch is required.
- » For the western catchment (W1), there are no land drainage ditches present or obvious routes available to provide one considering the location of 3rd party land to the south western corner of the development site and so piped land drainage is anticipated to safely direct the flows to the land to the south as per the pre-development drainage regime.

Based on average gradient of 1:10 (existing average site fall North-South), a single ditch might have the following typical dimensions for each catchment:

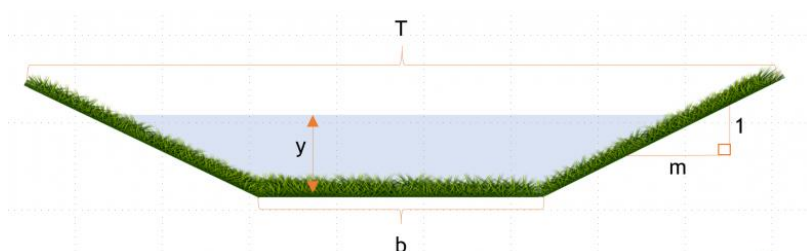


Figure 10: Typical swale/ditch arrangement (wiki.sustainabletechnologies, accessed Dec 2024)



Table 7: Proposed ditch dimensions for W2

Variable	W2
m	3
y [m]	0.3
b [m]	0.375
t [m]	0.75

These parameters will vary with gradient and routing. It is anticipated that a 225 mm diameter pipe would also be adequate at the point at which flows entered the site however this would require checking with gradient, levels etc as part of the hydraulic drainage design for the site and increase in size the further down the catchment it extends.



7 BREEAM Assessment

7.1 Overview

This section specifically addresses the requirements of the Building Research Establishment Environment Assessment Methodology (BREEAM) Pol 03 'Surface Water Run-Off' report. A total of five BREEAM credits can be achieved under this category, which is split into three parts:

- » Flood Risk (2 credits)
- » Surface water run off (2 credits)
- » Minimising watercourse pollution (1 credit)

7.2 Pol 03 - Flood Risk

As set out in Section 5.1 and 5.2 of this report, the majority of the site is located within Flood Zone 1, which therefore indicates a low probability of flooding from Main Rivers and the sea. Due to the offset distance and elevational difference between the site and the most proximal area identified within Flood Zone 2 or greater, climate change is not anticipated to affect flood risk to the site for the lifetime of the development. The site was also found to be at a low risk of flooding from all other sources and there are no known historical flood incidents at the site.

Based on this, the scheme is concluded to meet the requirements necessary to achieve the two credits under Pol 03 - Flood Risk.

7.3 Pol 03 - Surface Water Run Off

Assessment of the 2 available credits for surface water run-off will be addressed within the site drainage strategy.

7.4 Pol 03 - Minimising Watercourse Pollution

Assessment of the 1 available credit for minimising watercourse pollution will be addressed within the site drainage strategy.



8 Conclusions

Stantec Hydrock Limited have been commissioned by WEPCo to undertake a FCA, to be submitted with a detailed planning application for the site at Coleg Sir Gâr, Pibwrlwyd.

The majority of the site lies entirely within Flood Zone 1 and is therefore classified as having a low risk of flooding from tidal and/or fluvial sources. Although the south of the site is shown to be within Flood Zone 2 and 3, this area is proposed to be kept as existing grassland. The proposed temporary car parking in the south of the site is confirmed to be situated outside of the flood zone extents. The site is considered to be at low risk of flooding from surface water and all other assessed sources.

This report therefore demonstrates that, in respect to flood risk, the proposed development:

- » Is suitable in the location proposed;
- » Will be adequately flood resistant and resilient;
- » Will not place additional persons at risk of flooding;
- » Will not increase flood risk elsewhere as a result of the proposed development through the loss of floodplain storage or impedance of flood flows; and
- » Will put in place measures to ensure surface water is appropriately managed.

This report concludes that in flood risk context, the proposals are safe and appropriate and do not increase flood risk.

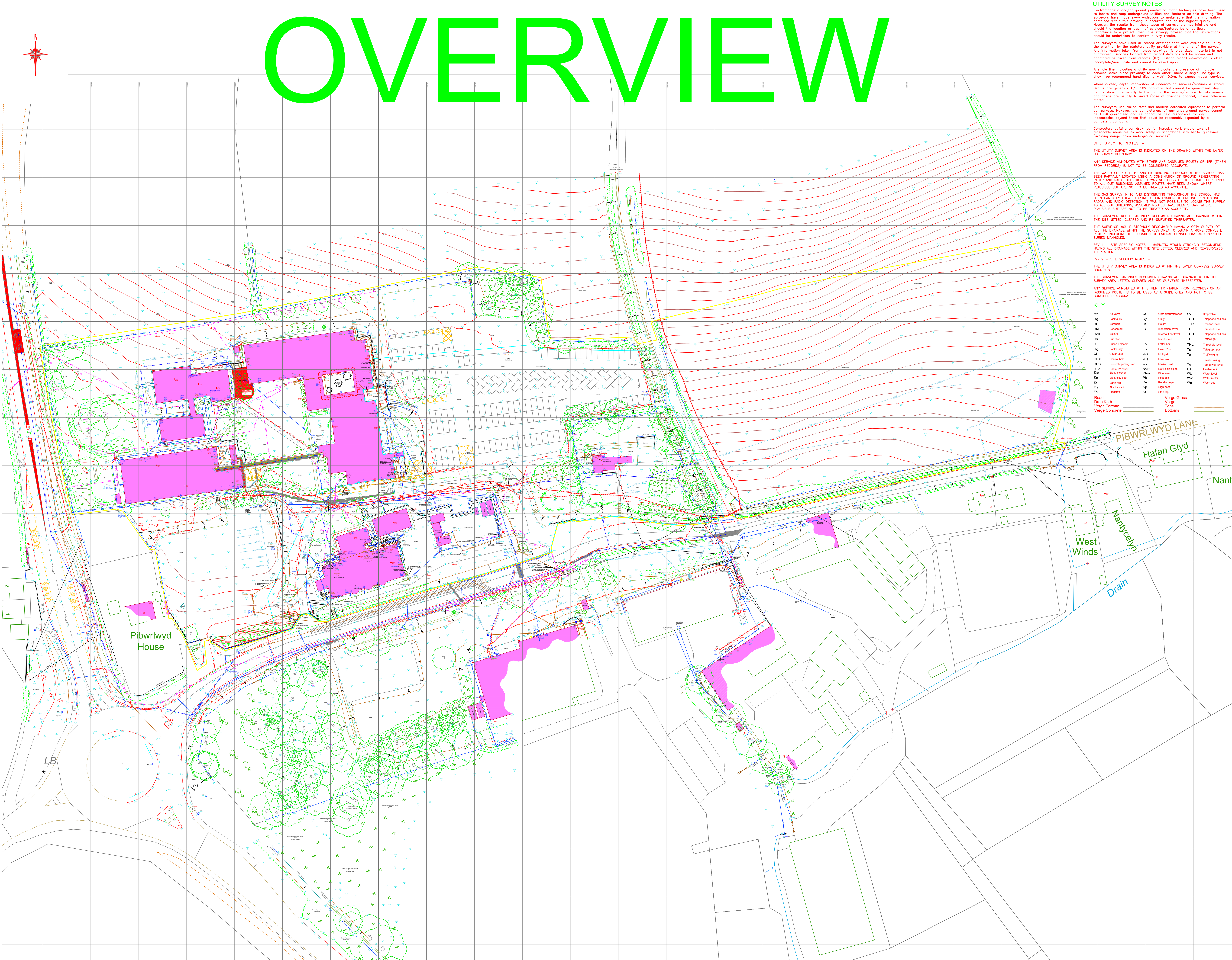


Appendix A

Topographic Survey



OVERVIEW



UTILITY SURVEY NOTES

Electromagnetic and/or ground penetrating radar techniques have been used to locate and map underground utilities and features at this drawing. The surveyors have made every endeavour to make sure that the information provided is of the highest quality. However, the results from these types of surveys are not infallible and should be treated with caution. It is strongly advised that trial excavations should be undertaken to confirm survey results.

The surveyors have used all record drawings that were available to us by the client or by the statutory utility providers at the time of the survey. Any information taken from these drawings (ie pipe sizes, material) is not guaranteed. Services located from record drawings will be shown and avoided as far as possible from records (R). Historic record information is often incomplete/inaccurate and cannot be relied upon.

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The surveyors use skilled staff and modern calibrated equipment to perform our surveys. However, the completeness of any underground survey cannot be 100% guaranteed and we cannot be held responsible for any inaccuracies beyond those that could be reasonably expected by a competent company.

Contractors utilising our drawings for intensive work should take all reasonable measures to work safely in accordance with HSE guidelines 'Working safely on underground services'.

SITE SPECIFIC NOTES

THE UTILITY SURVEY AREA IS INDICATED ON THE DRAWING WITHIN THE LAYER US-SURVEY BOUNDARY.

ANY SERVICE ANNOTATED WITH EITHER A/R (ASSUMED ROUTE) OR TR (TAKEN FROM RECORDS) IS NOT TO BE CONSIDERED ACCURATE.

THE WATER SUPPLY IN TO AND DISTRIBUTING THROUGHOUT THE SCHOOL HAS BEEN PARTIALLY LOCATED USING A COMBINATION OF GROUND PENETRATING RADAR AND RADIO DETECTION. IT WAS NOT POSSIBLE TO LOCATE THE SUPPLY TO ALL OUT BUILDINGS. ASSUMED ROUTES HAVE BEEN SHOWN WHERE PLausible BUT ARE NOT TO BE TREATED AS ACCURATE.

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THE SURVEYOR WOULD STRONGLY RECOMMEND HAVING A CCTV SURVEY OF ALL THE DRAINAGE WITHIN THE SURVEY AREA TO OBTAIN A MORE COMPLETE PICTURE INCLUDING THE LOCATION OF LATERAL CONNECTIONS AND POSSIBLE BURIED MANHOLES.

REV 1 - SITE SPECIFIC NOTES - MAPMATIC WOULD STRONGLY RECOMMEND HAVING ALL DRAINAGE WITHIN THE SITE SET, CLEARED AND RE-SURVEYED THEREAFTER.

Rev 2 - SITE SPECIFIC NOTES -

THE UTILITY SURVEY AREA IS INDICATED WITHIN THE LAYER US-REV2 SURVEY BOUNDARY.

THE SURVEYOR STRONGLY RECOMMEND HAVING ALL DRAINAGE WITHIN THE SURVEY AREA SET, CLEARED AND RE-SURVEYED THEREAFTER.

ANY SERVICE ANNOTATED WITH EITHER TR (TAKEN FROM RECORDS) OR AR (ASSUMED ROUTE) IS TO BE USED AS A GUIDE ONLY AND NOT TO BE CONSIDERED ACCURATE.

KEY

Av	Air valve	G	Girth circumference	Sv	Stop valve
Bg	Basin gully	Gv	Gully	TGB	Telephone cut box
BH	Boundary	HL	Height	TTL	Tree top level
BM	Benchmark	IC	Inspection cover	THL	Threshold level
BL	Basin level	IFL	Internal floor level	TGB	Telephone cut box
Bs	Bus stop	IL	Invert level	TL	Traffic light
BT	British Telecom	Lb	Letter box	THL	Threshold level
Bp	Base point	Lp	Letter post	Tp	Telephone post
CL	Cover level	MG	Manhole	Ts	Traffic signal
CBX	Control box	MH	Manhole	TT	Traffic paving
CPS	Concrete paving slab	Mtr	Manhole post	Tu	Top of wall level
CTV	Cable TV cover	NVP	No visible post	UTL	Unable to lift
ES	Electric cover	Pnw	Pipe level	WL	Water level
EP	Electric post	Pp	Pipe level	WM	Water meter
Er	Earth rod	Re	Rodding eye	Wo	Wash out
Fn	Fire hydrant	Sp	Stop post		
Fa	Flagstaff	St	Stop top		
Rd	Road				
Drop Kerb					
Verge Grass					
Verge Tarmac					
Verge Concrete					

GENERAL NOTES

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3. Should there be any discrepancy between details indicated on this drawing and those indicated on other drawings the Engineer should be informed PRIOR to construction on site.
4. Until technical approval has been obtained from the relevant Authorities it should be understood that all drawings issued are preliminary and NOT for construction. Should the contractor start site work prior to approval being given, it is entirely at his own risk.
5. All dimensions shown are in millimetres unless noted otherwise.
6. This drawing is based on Mapmatic Drawing Number, 5363/001, dated 02.11.2022.
7. All survey information is provided by the surveying company and HSP cannot accept any liability for any discrepancies there in. All survey information to be verified on site by contractor. Should discrepancies be identified, HSP to be notified immediately.

KEY FOR UNDERGROUND SERVICES

Red water	Blue water
Other	Other
Electric	Electric
Telephone	Telephone
Cable TV	Cable TV
Unidentified	Unidentified
Water	Water
Cable/Coaxial TV	Cable/Coaxial TV
Communications	Communications
Heating Pipe	Heating Pipe
Empty duct	Empty duct
Rain Gully	Rain Gully
Vents	Vents
Traffic Signal	Traffic Signal
Gas Lines	Gas Lines
Water Recovery	Water Recovery
Offices	Offices
Foot	Foot
Where chamber extends are significantly greater than the cover size, their approximate extents are shown by:	

ABBREVIATION KEY

AR	Assumed Route	PTS	Pipe to Ground
BD	Base Band	PTS	Pipe to Surface
BD	Building	RE	Roofing Eye
BL	Basin Level	RPIP	Rainwater Pipe
CL	Cover Level	SV	Stop Valve
CR	Cable Rise	SP	Soft Vent Pipe
CP	Cover Pipe	TE	Trapped Exit
EDT	End of Trace	TFR	Taken From Records
EP	Electricity Pole	TP	Telephone Pole
FI	Fire Hydrant	UFF	Unable to Find
G	Gully	UTL	Unable to Lift
GV	Gas Valve	UTS	Unable to Survey
HOR	Head of Run	UTT	Unable to Trace
HL	High Level	VP	Vent Pipe
IC	Inspection Chamber	WL	Water Level
I	Invert Level	WM	Water Meter
MH	Manhole	WVO	Wash Out Valve
PR	Pipe Riser	D	Depth

Station	Easting (m)	Northing (m)	Level (m)
10	241021.000	21621.000	21.000
11	241022.000	21622.000	21.000
12	241023.000	21623.000	21.000
13	241024.000	21624.000	21.000
14	241025.000	21625.000	21.000
15	241026.000	21626.000	21.000
16	241027.000	21627.000	21.000
17	241028.000	21628.000	21.000
18	241029.000	21629.000	21.000
19	241030.000	21630.000	21.000
20	241031.000	21631.000	21.000

PO3 DRS 19.08.25	Survey Area Extended	LAB
PO2 DRS 13.02.24	Additional areas added to the original survey	LAB
PO1 DRS 02.11.22	Original Survey	LAB

REV	BY	DATE	DETAILS	CHKD

STATUS	-SELECT-
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CLIENT	Gleeds Survey Management Services Ltd
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PROJECT	Pibwrlwyd Campus, Pibwrlwyd Lane, Carmarthen, SA31 2NH
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TITLE	Topographical and Utility Survey Sheet 1 of 7
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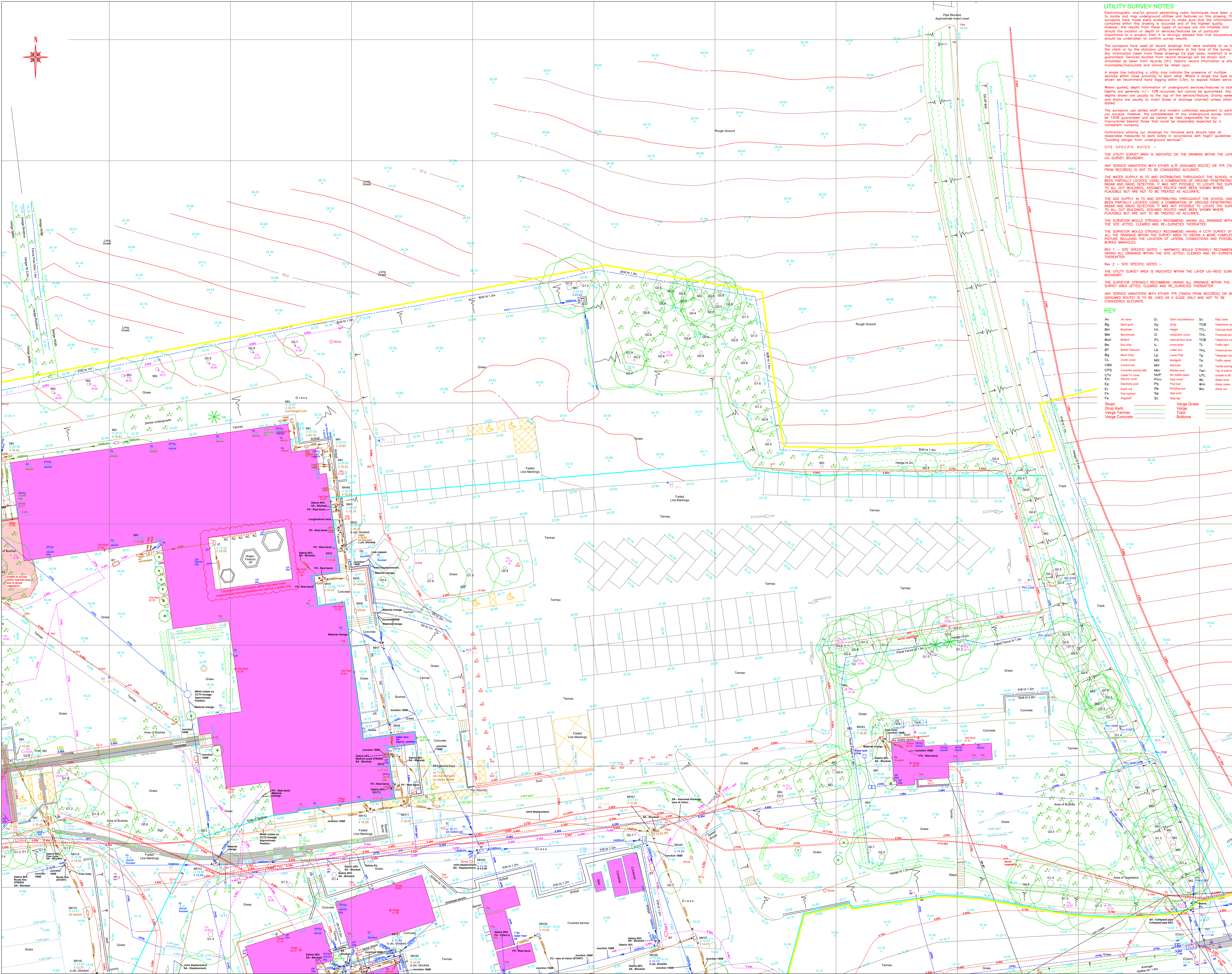
hsp consulting

Lawrence House, 6 Meadowbank Way, Eastwood, Nottingham, NG16 3SB Tel: 01773 535555 www.hspconsulting.com
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SCALE	1:200	PROJECT NO.	C4103	SHEET	SIZE A0
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DATE	23.07.2025	DRAWN	DRS	CHECKED	LAB
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DRAWING NO.	C4103-HSP-XX-XX-DR-D-5100	REV	P03
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REV 2 - SITE SPECIFIC NOTES -

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KEY

Av	Assumed Route	PTG	Pipe to Ground
Ba	Base Band	PTG	Pipe to Surface
BD	Back Band	RE	Roofing Edge
BL	Back Level	RSP	Roofing Pipe
CL	Cable Level	SV	Stop Valve
CR	Cable Riser	SVP	Stop Valve Pipe
DP	Down Pipe	TE	Trapped Exit
EDT	End of Trace	TFR	Taken From Records
EP	Electric Pole	TP	Telephone Pole
FI	Fire Hydrant	UTF	Unable to Find
G	Gas	UTS	Unable to Survey
GV	Gas Valve	UL	Unable to Lift
HDR	Head of Run	UTT	Unable to Trace
HL	High Level	UP	Up
IC	Inspection Chamber	WL	Water Level
I	Invert Level	WV	Water Valve
MH	Manhole	WVO	Wash Out Valve
PR	Pipe Riser	D	Depth

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KEY FOR UNDERGROUND SERVICES

Surface water	Green	Green	Green
Other	Blue	Blue	Blue
Gas	Red	Red	Red
Electric	Yellow	Yellow	Yellow
Cable TV	Orange	Orange	Orange
Underground	Purple	Purple	Purple
Water	Light Blue	Light Blue	Light Blue
Cable TV	Dark Blue	Dark Blue	Dark Blue
Communications	Light Green	Light Green	Light Green
Drainage Pipe	Dark Green	Dark Green	Dark Green
Empty Duct	Light Yellow	Light Yellow	Light Yellow
Fire Duct	Light Red	Light Red	Light Red
Yard	Light Blue	Light Blue	Light Blue
Pipe	Light Green	Light Green	Light Green
Traffic Signal	Light Yellow	Light Yellow	Light Yellow
Vegetation	Light Green	Light Green	Light Green
Others	Light Blue	Light Blue	Light Blue
Field	Light Green	Light Green	Light Green

ABBREVIATION KEY

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I	Invert Level	WV	Water Valve
MH	Manhole	WVO	Wash Out Valve
PR	Pipe Riser	D	Depth

Station	Easting (m)	Northing (m)	Level (m)
MH1	24224.00	27084.00	21.20
MH2	24224.00	27084.00	21.20
MH3	24224.00	27084.00	21.20
MH4	24224.00	27084.00	21.20
MH5	24224.00	27084.00	21.20
MH6	24224.00	27084.00	21.20
MH7	24224.00	27084.00	21.20
MH8	24224.00	27084.00	21.20
MH9	24224.00	27084.00	21.20
MH10	24224.00	27084.00	21.20
MH11	24224.00	27084.00	21.20
MH12	24224.00	27084.00	21.20
MH13	24224.00	27084.00	21.20
MH14	24224.00	27084.00	21.20
MH15	24224.00	27084.00	21.20

P02 DRS 10.02.25 Survey Area Extended LAB
P02 DRS 10.02.24 Additional areas added to the original survey LAB
P01 DRS 02.11.22 Original Survey LAB

REV BY DATE DETAILS CKD

STATUS -SELECT-

CLIENT

Gleeds Survey Management Services Ltd

PROJECT

Pibwrlwyd Campus,
Pibwrlwyd Lane,
Carmarthen, SA31 2NH

TITLE

Topographical and Utility
Survey
Sheet 2 of 7



Lawrence House, 6 Meadowbank Way, Eastwood, Nottingham, NG16 3SB
Tel: 01773 535555 www.hspconsulting.com

SCALE 1:200 PROJECT NO. C4103 SHEET SIZE A0

DATE 23.07.2025 DRAWN LAB CHECKED LAB

DRAWING NO. C4103-HSP-XX-XX-DR-D-5100 REV P03



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THE UTILITY SURVEY AREA IS INDICATED ON THE DRAWING WITHIN THE LAYER UG-SURVEY BOUNDARY.

ANY SERVICE ANNOTATED WITH EITHER A/R (ASSUMED ROUTE) OR T/R (TAKEN FROM RECORDS) IS NOT TO BE CONSIDERED ACCURATE.

THE WATER SUPPLY IN TO AND DISTRIBUTING THROUGHOUT THE SCHOOL HAS BEEN PARTIALLY LOCATED USING A COMBINATION OF GROUND PENETRATING RADAR AND RADIO DETECTION. IT WAS NOT POSSIBLE TO LOCATE THE SUPPLY TO ALL OUT BUILDINGS. ASSUMED ROUTES HAVE BEEN SHOWN WHERE PLAUSIBLE BUT ARE NOT TO BE TREATED AS ACCURATE.

THE GAS SUPPLY IN TO AND DISTRIBUTING THROUGHOUT THE SCHOOL HAS BEEN PARTIALLY LOCATED USING A COMBINATION OF GROUND PENETRATING RADAR AND RADIO DETECTION. IT WAS NOT POSSIBLE TO LOCATE THE SUPPLY TO ALL OUT BUILDINGS. ASSUMED ROUTES HAVE BEEN SHOWN WHERE PLAUSIBLE BUT ARE NOT TO BE TREATED AS ACCURATE.

THE SURVEYOR WOULD STRONGLY RECOMMEND HAVING ALL DRAINAGE WITHIN THE SITE JETTED, CLEARED AND RE-SURVEYED THEREAFTER.

THE SURVEYOR WOULD STRONGLY RECOMMEND HAVING A CCTV SURVEY OF ALL THE DRAINAGE WITHIN THE SURVEY AREA TO OBTAIN A MORE COMPLETE PICTURE INCLUDING THE LOCATION OF LATERAL CONNECTIONS AND POSSIBLE BURIED MANHOLES.

REV 1 - SITE SPECIFIC NOTES - MAPMATIC WOULD STRONGLY RECOMMEND HAVING ALL DRAINAGE WITHIN THE SITE JETTED, CLEARED AND RE-SURVEYED THEREAFTER.

THE UTILITY SURVEY AREA IS INDICATED WITHIN THE LAYER UG-REV2 SURVEY BOUNDARY.

THE SURVEYOR STRONGLY RECOMMEND HAVING ALL DRAINAGE WITHIN THE SURVEY AREA JETTED, CLEARED AND RE-SURVEYED THEREAFTER.

ANY SERVICE ANNOTATED WITH EITHER T/R (TAKEN FROM RECORDS) OR A/R (ASSUMED ROUTE) IS TO BE USED AS A GUIDE ONLY AND NOT TO BE CONSIDERED ACCURATE.

KEY

Er	Earth rod	Re	Redding eye	Wo	Wash out
Fh	Fire hydrant	Sp	Sign post		
Fs	Flagstaff	St	Stop sign		
Road			Verge Grass		
Drop Kerb			Verge		
Verge Tarmac			Tops		
Verge Concrete			Bottoms		

GENERAL NOTES

1. Do not scale.
2. This drawing is to be read in conjunction with all other relevant drawings.
3. Should there be any discrepancy between details indicated on this drawing and those indicated on other drawings the Engineer should be informed PRIOR to construction on site.
4. Until technical approval has been obtained from the relevant Authorities it should be understood that all drawings issued are preliminary and NOT for construction. Should the contractor start site work prior to approval being given, it is entirely at his own risk.
5. All dimensions shown are in millimetres unless noted otherwise.
6. This drawing is based on Mapmatic Drawing Number, 5363/001, dated 02.11.2022.
7. All survey information is provided by the surveying company and HSP cannot accept any liability for any discrepancies there in. All survey information to be verified on site by contractor. Should discrepancies be identified, HSP to be notified immediately.

KEY FOR UNDERGROUND SERVICES

Surface water	Green	Green	Green	Green	Green
Other	Blue	Blue	Blue	Blue	Blue
Electric	Red	Red	Red	Red	Red
Telephone	Yellow	Yellow	Yellow	Yellow	Yellow
Cable TV	Orange	Orange	Orange	Orange	Orange
Underground	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue
Water	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue
Close Circuit TV	Light Green	Light Green	Light Green	Light Green	Light Green
Communications	Light Yellow	Light Yellow	Light Yellow	Light Yellow	Light Yellow
Drainage Pipe	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue
Empty Duct	Light Green	Light Green	Light Green	Light Green	Light Green
Fire Duct	Light Red	Light Red	Light Red	Light Red	Light Red
Yards	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue
Pipe	Light Green	Light Green	Light Green	Light Green	Light Green
Traffic Signal	Light Yellow	Light Yellow	Light Yellow	Light Yellow	Light Yellow
Drainage Level	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue
Vegetation	Light Green	Light Green	Light Green	Light Green	Light Green
Offices	Light Yellow	Light Yellow	Light Yellow	Light Yellow	Light Yellow
Field	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue

Where character extents are significantly greater than the cover note, their approximate extents are shown thus:

ABBREVIATION KEY

AR	Assumed Route	PTG	Pipe to Ground
BD	Base Band	PTG	Pipe to Surface
BE	Base End	RE	Roof Edge
BL	Base Level	RWP	Roadway Pipe
CL	Cable Level	SV	Stop Valve
CR	Cable Riser	SVF	Stop Valve Flange
DP	Down Pipe	TE	Trapped Exit
EDT	End of Trace	TFR	Taken From Records
EP	Electric Pole	TP	Telephone Pole
FI	Fire Hydrant	UTF	Unable to Find
GO	Gravel	UTS	Unable to Survey
GV	Gas Valve	UL	Unable to Lift
HDR	Head of Run	UTT	Unable to Trace
HL	High Level	UP	Up
IC	Inspector Chamber	WL	Water Level
I	Invert Level	WM	Water Meter
MH	Manhole	WOC	Wash Out Valve
PR	Pipe Riser	D	Depth

Station	Easting (m)	Northing (m)	Level (m)
100	24224.000	27000.000	12.000
101	24224.000	27000.000	12.000
102	24224.000	27000.000	12.000
103	24224.000	27000.000	12.000
104	24224.000	27000.000	12.000
105	24224.000	27000.000	12.000
106	24224.000	27000.000	12.000
107	24224.000	27000.000	12.000
108	24224.000	27000.000	12.000
109	24224.000	27000.000	12.000
110	24224.000	27000.000	12.000
111	24224.000	27000.000	12.000
112	24224.000	27000.000	12.000
113	24224.000	27000.000	12.000
114	24224.000	27000.000	12.000
115	24224.000	27000.000	12.000
116	24224.000	27000.000	12.000
117	24224.000	27000.000	12.000
118	24224.000	27000.000	12.000
119	24224.000	27000.000	12.000
120	24224.000	27000.000	12.000

PO3	DRS 10.02.25	Survey Area Extended	LAB
PO2	DRS 10.02.24	Additional areas added to the original survey	LAB
PO1	DRS 02.11.22	Original Survey	LAB

REV	BY	DATE	DETAILS	CHKD

STATUS	-SELECT-
--------	----------

CLIENT

Gleeds Survey Management Services Ltd

PROJECT

Pibwrlwyd Campus,
Pibwrlwyd Lane,
Carmarthen, SA31 2NH

TITLE

Topographical and Utility
Survey
Sheet 4 of 7

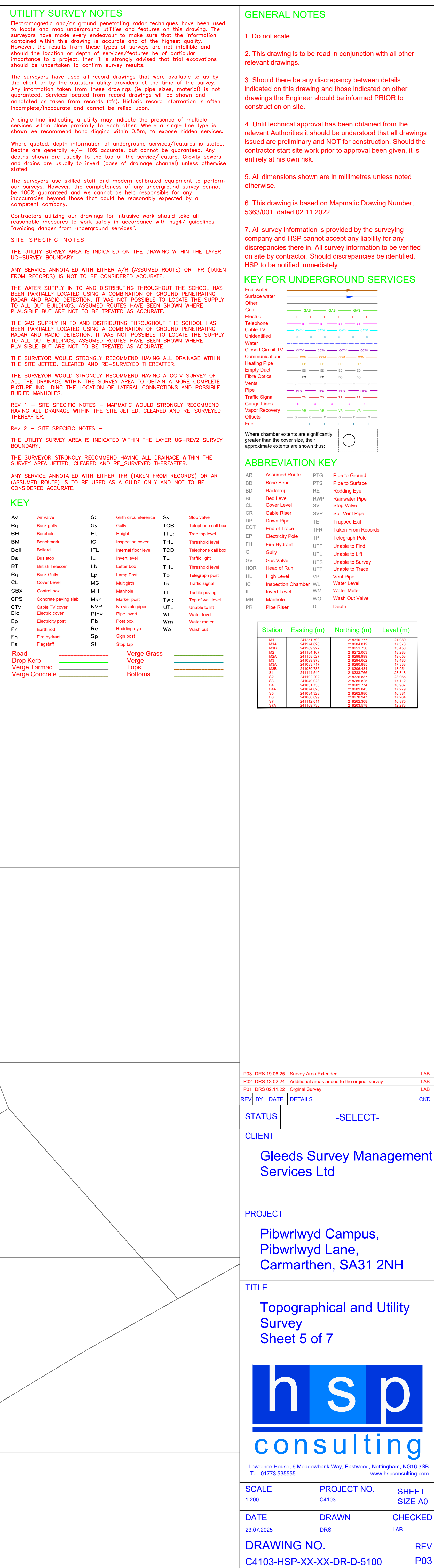


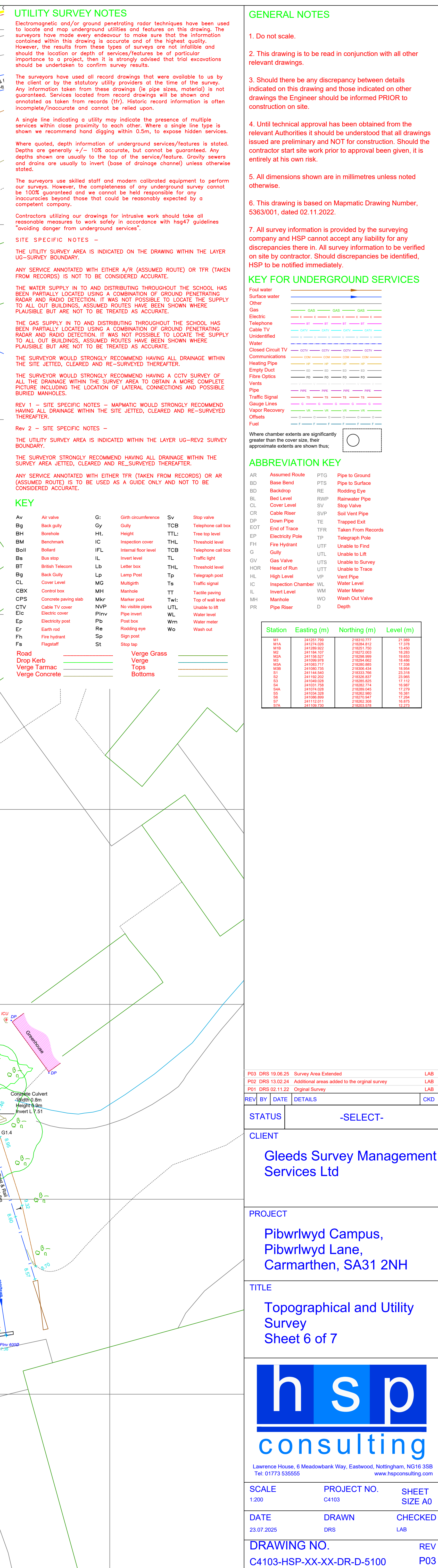
Lawrence House, 6 Meadowbank Way, Eastwood, Nottingham, NG16 3SB
Tel: 01773 535555
www.hspconsulting.com

SCALE	PROJECT NO.	SHEET
1:200	C4103	SIZE A0

DATE	DRAWN	CHECKED
23.07.2025	DRS	LAB

DRAWING NO.	REV
C4103-HSP-XX-XX-DR-D-5100	P03

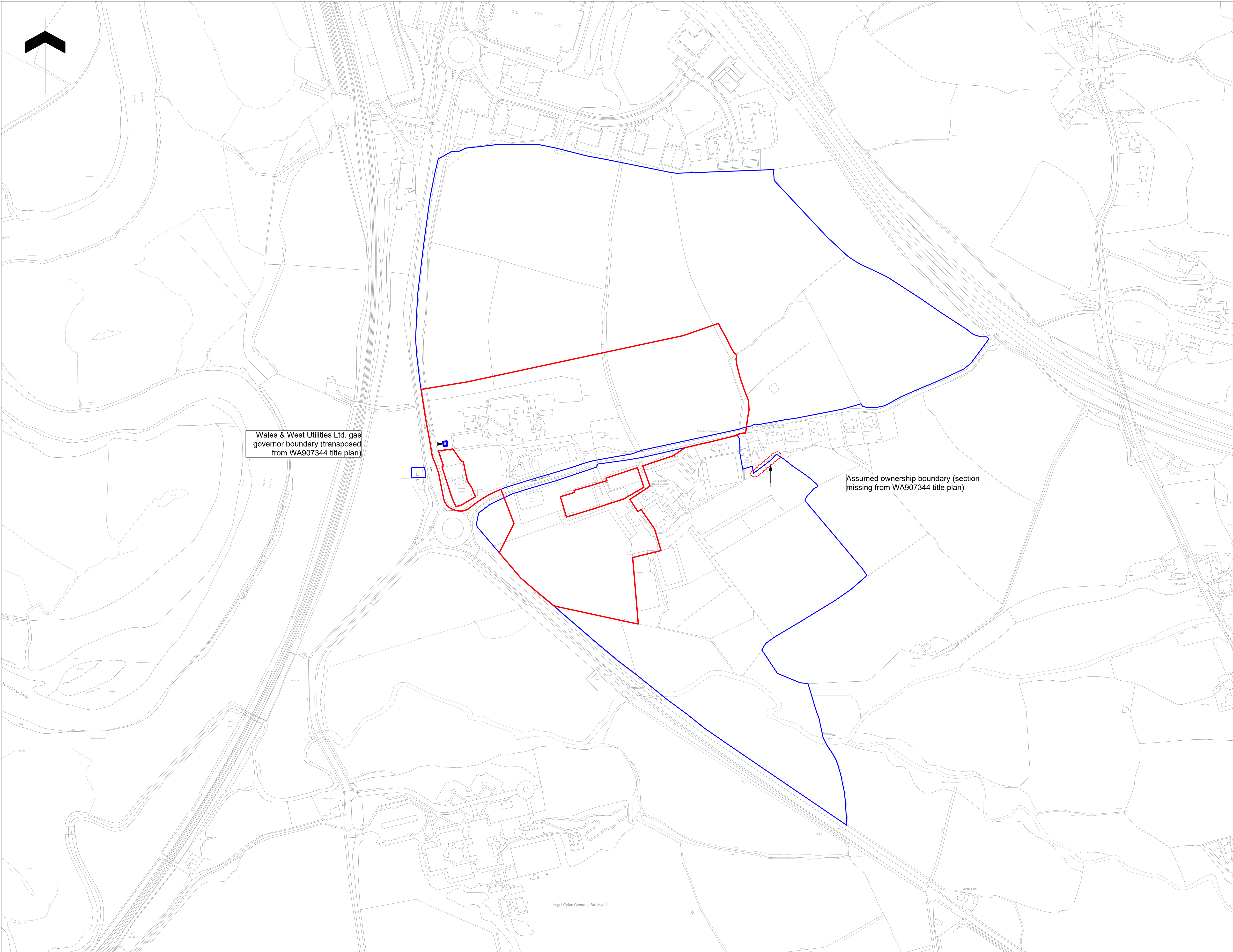




Appendix B

Proposed Site Layout





Ordnance Survey licence AC0000848283



Note
1. Do not scale from this drawing
2. To be read in conjunction with Project Risk Register
3. To be read in conjunction with all other Landscape Architect's drawings
Note: Applicant Ownership Boundary interpreted from third party data. Please refer to HM Land Registry Title Plan WA907344 for details

- KEY**
- Planning Application Boundary
 - College Ownership Boundary

ID	RISK	MITIGATION	DATE MITIGATED
RESIDUAL PROJECT RISKS			

DATE	REV	DESCRIPTION OF REVISION	DRAWN BY	APPROVED BY
REVISIONS				

STATUS - DRAWING PURPOSE
S2 - Issued for Pre-Application Consultation

Ares Landscape Architects LTD
Gatecrasher,
51 Eyre Lane
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e: hello@aresdesign.co.uk
w: aresdesign.co.uk

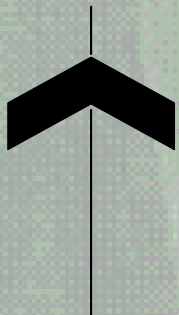
CLIENT:
The Welsh Education Partnership (WEPco)

PROJECT TITLE :
Coleg Sir Gâr, Pibwrlwyd

DRAWING TITLE :
Site Location Plan

DRAWING SCALE: 1:2500
PAPER SIZE: A1
DRAWN BY: JJ
APPROVED BY: BH
DRAWN DATE: 05/11/2024
ALA PROJECT CODE: ALA824

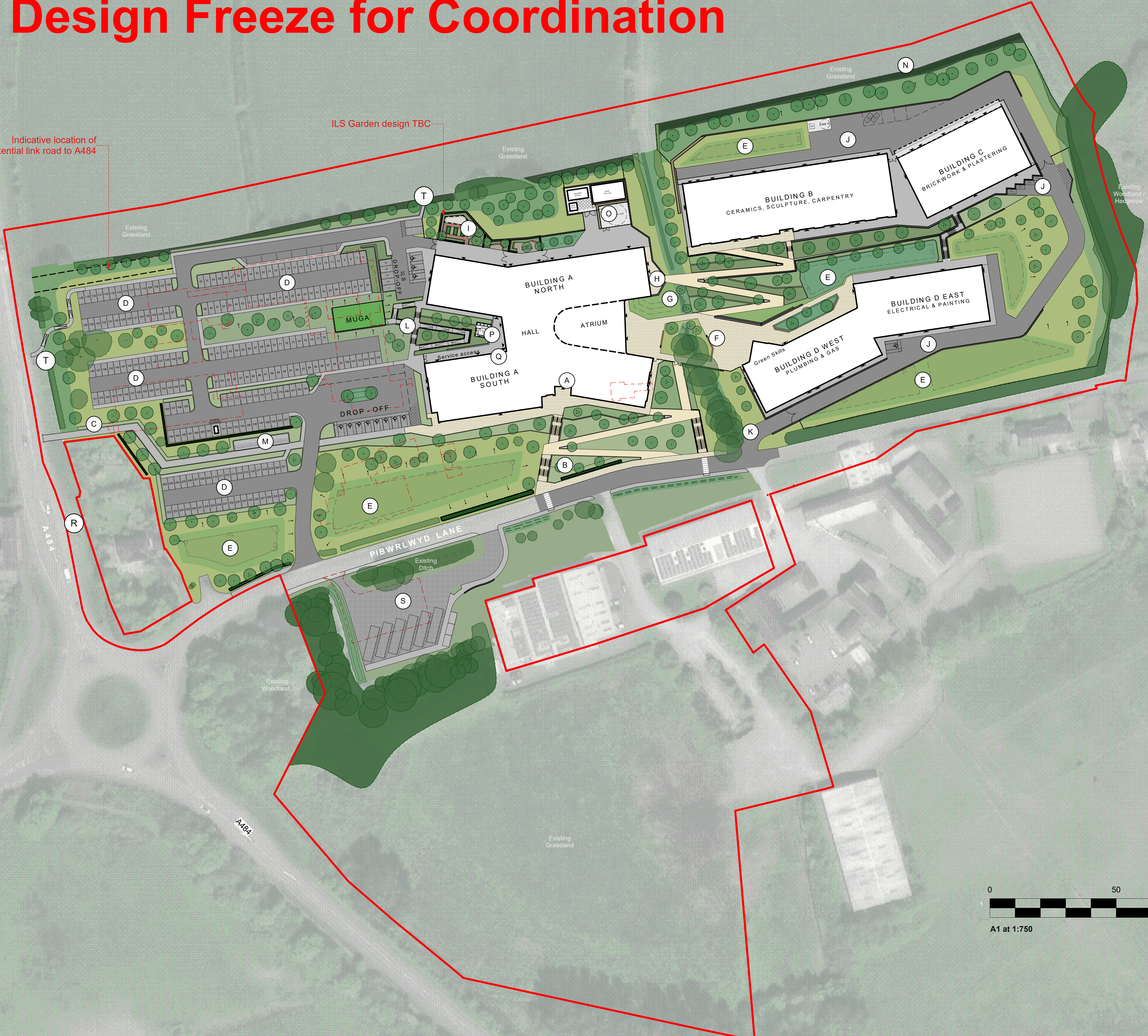
DRAWING NUMBER :
CR0301-ALA-ZZ-ZZ-D-L-20000
REVISION :
P01



Design Freeze for Coordination

Indicative location of potential link road to A484

ILS Garden design TBC



Note
1. Do not scale from this drawing
2. To be read in conjunction with Project Risk Register
3. To be read in conjunction with all other Landscape Architect's drawings

- KEY Site**
- Planning Application Boundary
 - Existing Building to be demolished
 - Existing Vegetation
 - (A) Main Entrance
 - (B) Southern Pedestrian Approach From Piwrlwyd Lane
 - (C) Western Pedestrian Approach From existing bus stop on A484
 - (D) Vehicle Parking TBC nr. standard spaces TBC nr. accessible spaces
 - (E) SuDS Features Feature raingardens to central public realm spaces and infiltration basins to external landscape areas
 - (F) Central Plaza External plaza space with planting and amphitheatre seating
 - (G) Terraced Landscape Terraced landscape with lawn and incidental art features
 - (H) Art Terrace
 - (I) ILS Garden With external classroom and horticulture areas, feature trees, communal and secluded seating
 - (J) Construction Yard To rear of workshops
 - (K) Service Access Road Access for service, maintenance, emergency and other vehicular users requiring access to workshops
 - (L) ILS Pedestrian Access
 - (M) Covered Cycle Shelter TBC nr. spaces
 - (N) Boundary Hedge Planting
 - (O) Plant Compound & Substation
 - (P) Subterranean Bin Store
 - (Q) Plant Room
 - (R) Existing Bus Stop
 - (S) Coach Drop-off and Pedestrian Crossings
 - (T) Pedestrian Footpath Connection to A484

ID	RISK	MITIGATION	DATE MITIGATED
RESIDUAL PROJECT RISKS			

DATE	REV	DESCRIPTION OF REVISION	DRAWN BY	APPROVED BY
REVISIONS				

STATUS - DRAWING PURPOSE
S2 - Issued for Pre-Application Consultation

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CLIENT:
The Welsh Education Partnership (WEPco)

PROJECT TITLE:
Coleg Sir Gâr, Piwrlwyd

DRAWING TITLE:
Illustrative Masterplan

DRAWING SCALE: 1:750
PAPER SIZE: A1

DRAWN BY: JJ
APPROVED BY: BH

DRAWN DATE: 05/11/2024
ALA PROJECT CODE: ALA824

DRAWING NUMBER: CR0301-ALA-ZZ-ZZ-D-L-20001
REVISION: P01

