



**Goetre Primary School,
Merthyr Tydfil**

**Archaeological and
Heritage Desk-Based
Assessment**

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On behalf of:
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Crynodeb Gweithredol

- S1 Paratowyd yr adroddiad hwn gan The Environmental Dimension Partnership Ltd. (EDP) ac mae'n cyflwyno canlyniadau Asesiad-Desg Archeolegol a Threftadaeth. Mae wedi'i gynhyrchu i gyd-fynd â Chais Cynllunio i ddatblygu'r safle ar gyfer ysgol newydd.
- S2 Nid yw'r Safle yn cynnwys unrhyw asedau hanesyddol dynodedig (h.y. Safleoedd Treftadaeth y Byd, Adeiladau Rhestredig, Tirweddau Hanesyddol Cofrestredig, Parciau a Gerddi Hanesyddol neu Ardaloedd Cadwraeth). Fel y cyfryw, ni fydd unrhyw ased hanesyddol dynodedig yn cael ei heffeithio'n ffisegol gan y Datblygiad Arfaethedig o fewn y Safle.
- S3 Nodwyd dim effeithiau ar arwyddocâd asedau hanesyddol dynodedig nac ychwaith Adeiladau Rhestredig Lleol heb eu dynodi o fewn yr ardal o dan sylw gan y Datblygiad Arfaethedig o ganlyniad i newid o fewn eu gosodiadau.
- S4 Mae gan y Safle un cofnod CHA ar hyd pen deheuol y Safle ar hyd Lôn Goetre. Mae'r cofnod CHA yn gysylltiedig â Thramffordd Morlais o'r 19eg ganrif (**03173.2m**), fodd bynnag nid oes unrhyw olion wedi goroesi o'r ased hanesyddol o fewn, neu yng nghyffiniau'r Safle. O ganlyniad, ni fyddai'r Datblygiad Arfaethedig yn effeithio'n ffisegol ar yr ased hanesyddol.
- S5 Fel y tystiwyd gan Ymchwiliad Safle 2023, awyrluniau, a delweddau LiDAR, mae cloddiad y pwll a'i mewnlennad a thirlunio dilynol yn ystod adeiladu Ysgol Uwchradd Pen-Y-Dre rhwng 1963-1970au yn dangos bod y Safle wedi cael ei amharu'n llwyr, ac o ganlyniad byddai gwaith o'r fath wedi dileu unrhyw botensial o ddyddodion archeolegol i fodoli o fewn y Safle.
- S6 Nid yw 'Pwll Goetre' wedi cael ei chofnodi fel ased hanesyddol gan y CHA neu'r Comisiwn Brenhinol ar Henebion Cymru (CBHC) ac nid yw'r dyddodion tir modern a gofnodwyd ar draws y Safle o unrhyw werth archeolegol. O ganlyniad, ni fydd unrhyw effeithiau ar weddillion archeolegol yn deillio o'r Datblygiad Arfaethedig. Nid oes unrhyw ymchwiliad archeolegol a/neu liniaru yn cael ei argymhell na'i warantu ar gyfer y Safle yn seiliedig ar y dystiolaeth a'r asesiad a ddarperir yn yr adroddiad hwn.
- S7 Mae'r Safle wedi'i leoli o fewn Tirwedd o Ddiddordeb Hanesyddol Eithriadol Merthyr Tudful (TDHE). Daw'r asesiad i'r casgliad y byddai'r cynigion yn cyd-fynd yn dda gyda chymeriad y TDHE a ni fyddai'n arwain at golli unrhyw ased hanesyddol sy'n cyfrannu at ei harwyddocâd treftadaeth. Yn sgil hyn, ni fyddai'r cynnig yn cael unrhyw effaith ar y TDHE.

Executive Summary

- S1 This report has been prepared by The Environmental Dimension Partnership Ltd (EDP) and presents the results of an Archaeological and Heritage Desk-Based Assessment. It has been produced to accompany a Planning Application for the development of the Site for a school.
- S2 The Site does not contain any designated historic assets (i.e. World Heritage Sites, Scheduled Monuments, Listed Buildings, Registered Historic Landscapes, Registered Historic Parks and Gardens or Conservation Areas). As such, no designated historic assets would be physically affected by the Proposed Development within the Site.
- S3 No impacts have been identified to the significance of designated historic assets nor non-designated Locally Listed Buildings within the Study Area from the Proposed Development from change within their settings.
- S4 The Site contains one HER record situated along the southern end of the Site along Goitre Lane. The HER record is associated with the 19th century Morlais Tramroad (**03173.2m**), however, no remains survive of the historic asset within or, in the vicinity of the Site. As such, the historic asset would not be physically affected by the Proposed Development.
- S5 The Site holds no potential for archaeological remains pre-dating the c.1826 construction of 'Goitre Pond'. The excavation of the pond and its subsequent infilling and landscaping earthworks during the construction of Pen-Y-Dre High School, between 1963-1970s, as attested to by the 2023 SI, aerial photographs and LiDAR imagery, demonstrate that the Site has been entirely disturbed and such works will have removed any potential archaeological deposits within the Site.
- S6 'Goitre Pond' itself is not recorded as a historic asset by either the HER nor Royal Commission on the Ancient and Historical Monuments of Wales (RCAMHW) and the recorded modern made ground deposits across the Site are of no archaeological value. Therefore, it is concluded that no impacts to archaeological remains would occur from the Proposed Development. No archaeological investigation and/or mitigation is recommended nor warranted for the Site, based on the evidence and assessment provided in this report.
- S7 The Site is located within the Merthyr Tydfil Landscape of Outstanding Historic Interest (LOHI). The assessment concludes that the proposals would accord well with the character of the LOHI and would not result in the loss of any of its extant historic assets that contribute to its heritage significance. As such the proposal would have no effect on the LOHI.

Section 1 Introduction

- 1.1 This report has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of Morgan Sindall ('the Client') and presents the results of an Archaeological and Heritage Desk-Based Assessment (DBA) of land to the north of Goitre Lane, Merthyr Tydfil (hereafter referred to as 'the Site'). It has been produced to accompany a planning application for a new primary school within the Site (i.e. 'the Proposed Development'), to replace the existing Goetre Primary School located c.500m south-west of the Site.
- 1.2 This report follows the aims and objectives set out in a Written Scheme of Investigation (WSI) (EDP, 2023).
- 1.3 The first aim of this assessment is to consider the available historical and archaeological resources for the Site and to establish its likely potential to contain historic assets in accordance with Welsh Government guidance in Planning Policy Wales (PPW) Edition 11, Technical Advice Note 24 (TAN 24) and local planning policy.
- 1.4 In accordance with best practice guidance, desktop sources have been augmented through the completion of a heritage walkover of the Site, undertaken in December 2023.
- 1.5 The second aim of this assessment is to identify and assess possible changes to the setting of surrounding historic assets as a result of the Proposed Development, and to determine whether, and to what extent, those changes will affect their heritage significance.
- 1.6 The report also assesses the potential for change to the character of the Merthyr Tydfil Landscape of Outstanding Historic Interest (LOHI).

SITE DESCRIPTION

- 1.7 The Site is approximately 3.7 hectares (ha) in extent and is centred on National Grid Reference (NGR) 304955, 208278. The Site's location and current conditions are shown on **Plan EDP 1**.
- 1.8 The Site is located to the north of Merthyr Tydfil, within Gurnos parish, which encompasses the Gurnos housing estate established from the mid-20th century. It is bound by Pen-Y-Dre High School to the north, open grassland to the east, Goitre Lane to the south and open grassland, a school outbuilding and drive to Pen-Y-Dre High School to the west.
- 1.9 The current ground conditions within the Site comprises predominantly an open, relatively flat, marshland/grassland (**Image EDP A1.1**). Exceptions to this include: the southern edge of the Site, which drops beyond the limit of the former infilled 19th century 'Goitre Pond' to Goitre Lane, orientated roughly north-east to south-west (**Image EDP A1.2**); the north-west limit of the Site, which extends upslope to the drive of Pen-y-Dre High School (**Image EDP A1.3**); and the south-east corner of the Site, which drops beyond the limit of the former lake to an area of grassland, adjacent to the north side of Goitre Lane (**Image EDP A1.4**). The Site also features an existing modern culverted water feature which

flows from beyond the north-east Site boundary into the Site. The modern culverted water feature runs through the Site southwards to the south-east corner, where an exposed section was identified during the heritage walkover to run surface water out of the Site via the remains of the former sluice gate to 'Goitre Pond' (**Image EDP A1.5-A1.6**). Remains of the sluice gate are located beyond the Site boundary and comprise of one side of its stone abutments (**Image EDP A1.6**).

- 1.10 The topography of the Site is relatively flat, however, a north-south downwards slope is present along its northern end, from 295m to 290m above Ordnance Datum (aOD). The slope ceases at the northern end of the relatively flat grassland/marshland plateau area, which covers the extent of the infilled 'Goitre Pond'. The topography of the Site becomes flat at this point and remains relatively level across the Site's grassland/marshland area until the southern fenced boundary of the infilled 'Goitre Pond', where a marked drop to the present-day street level of Goitre Lane occurs. As such, the lowest part of the Site is located at its southern boundary, along Goitre Lane.
- 1.11 The British Geological Society (BGS) records the solid geology of the Site as mixed mudstone, siltstone and sandstone formations, orientated roughly north-south from the west to east sides of the Site (BGS 2023). The solid geological formations recorded within the Site formed between 330-317 million years ago between the Pendleian Substage and Langsettian Substage. Recorded superficial geological deposits across the Site comprise till (Diamicton) which was formed during the Devensian Stage between 0.118-0.116 million years ago (*ibid*).
- 1.12 A Site Investigation (SI) was undertaken within the Site by Intégral Géotechnique (Wales) Limited in 2023, to accompany the Proposed Development's planning application (Intégral Géotechnique. 2023). The SI comprised 10 windowless sample boreholes, 15 trial pits and six shell and auger boreholes. The SI works provide direct evidence for the stratigraphic sequence contained within the Site.
- 1.13 The results of the SI identified a shallow topsoil underlain by various depths of made ground deposits, associated with the infilling of the former 'Goitre Pond'. Made ground deposits increase in thickness towards the centre of the Site (within the interior of the former pond) and decrease in thickness towards the edges of the Site (i.e. the former pond's boundaries). Made ground deposits within the interior of the former pond's extent, were also found to be underlain by a thin layer of organic peat deposits, which represent the base of the former pond. The Site's superficial till deposits were recorded underlying both made ground and peat deposits. For reference, the Site's general stratigraphic sequence is summarised in **Table EDP 1.1**.

Table EDP 1.1: Site General Stratigraphic Sequence (after Intégral Géotechnique, 2023)

Layer	Minimum and Maximum Recorded Encountered Depths (below ground level (bgl))	Depth/Thickness (bgl)
Topsoil	0-0.3m	0-0.3m
Made Ground	0.3-4.8m	0.0-4.5m
Peat	1.5-5.0m	0.2-0.5m
Till (Natural Superficial Geology)	0.3m onwards	N/A

- 1.14 The SI data indicates that made ground is situated below topsoil across the Site, reflecting infilling and landscaping of ‘Goitre Pond’ and the subsequent creation of playing fields for the Pen-Y-Dre High School during the 1960s-1970s. The findings from the 2023 SI in relation to the archaeological potential of the Site are discussed in **Section 4**.

PROPOSED DEVELOPMENT

- 1.15 The description of the Proposed Development is as follows:

“Construction of a new Primary School including access, landscaping, play / sports pitches, parking, external works, swale, plant and associated works at Land to the North of Goitre Lane, Merthyr Tydfil.

The proposals include a new school to replace the existing Goetre Primary School which is located to the south west of the site off Gurnos Road.”

- 1.16 The following third party plans provided by the Client are utilised in this report:

- GPS-LAW-X-X-DR-A-06900_P05-Proposed Site Plan (**Appendix EDP 2**);
- CC2538-CAM-XX-XX-DR-C-0600-P02 - Proposed Levels Plan (**Appendix EDP 3**);
- CC2538-CAM-XX-XX-DR-C-0500-P02 - Proposed Drainage Strategy Plan (**Appendix EDP 4**); and
- Set of three Proposed Site Sections: ‘CC2538-CAM-XX-XX-DR-C-1200-P01; CC2538-CAM-XX-XX-DR-C-1201-P01; CC2538-CAM-XX-XX-DR-C-1202-P01’ (**Appendix EDP 5**).

CONSULTATION

- 1.17 The Site is located within the Merthyr Tydfil LOHI. Cadw were consulted in December 2023 in respect of whether the assessment would be required to make recourse to the Assessment of the Significance of the Impact of Development on Historic Landscape (ASIDOHL2) methodology in order to assess the impact on the development proposals on the LOHI.

- 1.18 In subsequent correspondence Cadw accepted that, whilst the Site was located within the LOHI, the proposals would largely conform to the pre-existing character of the Historic Landscape Characterisation Area (HLCA) in which it is located. As such, it was determined that an ASIDOHL assessment would not be necessary in this instance. Instead, it was agreed that consideration of the special character of the LOHI would be considered within this Archaeological and Heritage Assessment with regard to the potential effects from development and making reference to the 2017 Cadw guidance *The Settings of Historic Assets in Wales*.

Section 2

Legislation and Planning Guidance

INTRODUCTION

- 2.1 The following section summarises the key legislation and national/local planning policies which are of relevance to this assessment.

LEGISLATION

Archaeology

- 2.2 The *Ancient Monuments and Archaeological Areas Act 1979* addresses the designation and management of scheduled monuments, providing for the maintenance of a schedule of monuments (and archaeological remains) which are protected.
- 2.3 The designation of archaeological and historic sites as scheduled monuments applies only to those that are deemed to be of national importance and is generally adopted only if it represents the best means of protection.
- 2.4 The 1979 Act does not address the concept of ‘setting’, just their physical remains, and, therefore, for scheduled monuments, the protection of ‘setting’ is a matter of policy in the same way it is for a conservation area.
- 2.5 In Wales, the written consent of the Welsh Minister is required for development that would impact upon a scheduled monument, and applications for Scheduled Monument Consent are submitted to Cadw, the Welsh Government’s Historic Environment Service.

PLANNING POLICY

National Planning Policy

- 2.6 The Welsh Government published *Future Wales: The National Plan 2040* on 24 February 2021 (Welsh Government 2021a), which highlights in the foreword from the Minister for Housing and Local Government that it forms a “*framework for planning the change and development our country will need over the next two decades*”.
- 2.7 In terms of the Welsh Government’s objectives, the sixth ‘Future Wales Outcomes’ on page 55 states that:
- “Development plans will have a forward thinking, positive attitude towards enabling economic development, investment and innovation. Increased prosperity and productivity will be pursued across all parts of Wales, building on current activity and promoting a culture of innovation, social partnership, entrepreneurialism and skills-development in sustainable industries and sectors. The culture, heritage and environment of Wales will play a positive, modern role in the economy by attracting the interest and expenditure of tourists and providing a distinctive and trusted brand for Welsh businesses.”*

2.8 National planning guidance concerning the treatment of the historic environment across Wales is detailed in Section 6.1 of Chapter 6 Distinctive and Natural Places of *Planning Policy Wales Edition Eleven* (PPW 11), which was published on 24 February 2021 (Welsh Government, 2021b).

2.9 At paragraph 6.1.2, it identifies the historic environment as comprising individual historic features, such as archaeological sites, historic buildings and historic parks, gardens, townscapes and landscapes, collectively known as ‘historic assets’.

2.10 At paragraph 6.1.6, the Welsh Government’s specific objectives for the historic environment are outlined. Of these, the following is of relevance to the current assessment:

“Conserve archaeological remains, both for their own sake and for their role in education, leisure and the economy.”

2.11 At paragraph 6.1.7, it is observed that:

“It is important that the planning system looks to protect, conserve and enhance the significance of historic assets. This will include consideration of the setting of an historic asset which might extend beyond its curtilage. Any change that impacts on an historic asset or its setting should be managed in a sensitive and sustainable way.”

2.12 As such, with regard to decision making, it is stated (at paragraph 6.1.9) that:

“Any decisions made through the planning system must fully consider the impact on the historic environment and on the significance and heritage values of individual historic assets and their contribution to the character of place.”

Archaeological Remains

2.13 Moving on to the treatment of archaeological remains through the planning process, PPW 11 states at paragraph 6.1.23 that:

“The conservation of archaeological remains and their settings is a material consideration in determining planning applications, whether those remains are a scheduled monument or not.”

2.14 It then adds at paragraph 6.1.24 that:

“Where nationally important archaeological remains are likely to be affected by proposed development, there should be a presumption in favour of their physical protection in situ. It will only be in exceptional circumstances that planning permission will be granted if development would result in a direct adverse impact on a scheduled monument (or an archaeological site shown to be of national importance).”

2.15 At paragraph 6.1.25 it states that:

“In cases involving less significant archaeological remains, planning authorities will need to weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development.”

2.16 Paragraph 6.1.26 recommends that:

“Where archaeological remains are known to exist or there is a potential for them to survive, an application should be accompanied by sufficient information, through desk-based assessment and/or field evaluation, to allow a full understanding of the impact of the proposal on the significance of the remains. The needs of archaeology and development may be reconciled, and potential conflict very much reduced, through early discussion and assessment.”

2.17 In situations where planning approval would result in archaeological remains being destroyed by development, paragraph 6.1.27 of PPW 11 states the following regarding the relevant planning authority’s obligations:

“If the planning authority is minded to approve an application and where archaeological remains are affected by proposals that alter or destroy them, the planning authority must be satisfied that the developer has secured appropriate and satisfactory provision for their recording and investigation, followed by the analysis and publication of the results and the deposition of the resulting archive in an approved repository. On occasions, unforeseen archaeological remains may still be discovered during the course of a development. A written scheme of investigation should consider how to react to such circumstances or it can be covered through an appropriate condition for a watching brief.

Where remains discovered are deemed to be of national importance, the Welsh Ministers have the power to schedule the site and in such circumstances scheduled monument consent must be required before works can continue.”

2.18 Regarding Historic Landscapes at Paragraph 6.1.21 PPW 11 states that:

“The register should be taken into account in decision making when considering the implications of developments which meet the criteria for Environmental Impact Assessment or, if on call in, in the opinion of the Welsh Ministers, the development is of a sufficient scale to have more than a local impact on the historic landscape. An assessment of development on a historic landscape may be required if it is proposed within a registered historic landscape or its setting and there is potential for conflict with development plan policy.”

Technical Advice Note 24 (TAN 24)

2.19 Additional heritage guidance in Wales is set out in Technical Advice Note 24 (TAN 24): The Historic Environment (Welsh Government, 2017).

2.20 TAN 24 sets out that it provides *“guidance on how the planning system considers the historic environment during development plan preparation and decision making on planning applications”*.

2.21 It clarifies the policies and distinctions made in PPW (2021). A definition for a ‘historic asset’ is given as:

“An identifiable component of the historic environment. It may consist or be a combination of an archaeological site, a historic building or area, historic park and garden or a parcel of historic landscape. Nationally important historic assets will normally be designated.”

- 2.22 Effects through changes within the setting of a designated historic asset are covered in TAN 24 at paragraphs 1.23 to 1.29. These paragraphs define the setting of an historic asset as comprising:

“...the surroundings in which it is understood, experienced, and appreciated embracing present and past relationships to the surrounding landscape. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral. Setting is not a historic asset in its own right but has value derived from how different elements may contribute to the significance of a historic asset.”

- 2.23 TAN 24 also identifies factors to consider when assessing effects on setting. Paragraph 1.26 requests that it is:

“...for the applicant to provide the local planning authority with sufficient information to allow the assessment of their proposals in respect of scheduled monuments, listed buildings, conservation areas, registered historic parks and gardens, World Heritage Sites, or other sites of national importance and their settings”.

- 2.24 Paragraph 1.29 goes on to state that:

“The local planning authority will need to make its own assessment of the impact within the setting of a historic asset, having considered the responses received from consultees as part of this process. A judgement has to be made by the consenting authority, on a case-by-case basis, over whether a proposed development may be damaging to the setting of the historic asset, or may enhance or have a neutral impact on the setting by the removal of existing inappropriate development or land use.”

- 2.25 Of relevance to this report is Section 4 of Tan 24, which is concerned with archaeological remains. This section outlines advice regarding consultation, archaeological assessment and the preservation, recording and understanding of archaeological evidence.

Local Planning Policy

- 2.26 The Site is located within the administrative boundary of Merthyr Tydfil County Borough Council (MTCBC). The current Local Development Plan (LDP) was adopted in January 2020 and covers the period from 2016-2031 (MTCBC 2023).
- 2.27 The current LDP Written Statement (2016-2031) includes 18 objectives “to realise the vision, support local well-being objectives and address key issues”. The objectives were determined “having regard to local issues raised through consultation, the evidence base and national policy”. Of these, ‘Objective 9: Heritage and Cultural Assets’ states the following: “To protect, enhance and promote all heritage, historic and cultural assets”.

- 2.28 Objective 9 of the current LDP is achieved via the inclusion of 'Policy CW1: Historic Environment' in the LDP's Written Statement (MTCBC 2020). Policy CW1 is outlined below:

"Policy CW1: The Historic Environment

The integrity of our historic environment assets will be conserved and enhanced. Development proposals will only be permitted where it can be demonstrated they would preserve or enhance the architectural quality, character or the historic or cultural importance of our designated historic environment assets.

Development affecting undesignated historic environment assets including, Locally Listed Buildings or structures, Landscapes of Outstanding Historic Interest in Wales, Urban Character Areas and Archaeologically Sensitive Areas should have regard to their special character and archaeological importance."

- 2.29 The LDP Written Statement (2016-2031) also contains a housing allocation policy within the south-east portion of the Site, under policy 'SW3.13 – Pen y Dre Fields, Gurnos'. The housing allocation policy states the following:

"This 1.55-hectare site is located in the community of Gurnos. The site is allocated for 40 dwellings and is anticipated to deliver affordable housing and other planning obligations in accordance with Policy SW9. The Council's Engineers have advised that the principle of development is considered acceptable. New highways, drainage infrastructure or ground works will be required to bring forward an acceptable development proposal however, this does not represent an insurmountable constraint.

A 450mm trunk water main for which protection measures will be required in the form of an easement width or diversion traverses the site. Off-site sewers will be required in order to connect to the existing network.

The site is adjacent to an existing open space that has recently received investment. The interface between the two developments should be respected and adequate buffer planting considered. This open space contains known occurrences of Japanese Knotweed on its boundary.

- A Road Safety Audit/Transport Assessment (dependent on the exact nature of proposals) should be carried out to identify the required local highway network improvements required.*
- A Ground Investigation Report will be required, including a contamination survey, due to various past activities on site.*
- Areas of the site lie in a Development Low Risk Coal Area. A coal mining risk assessment will therefore be required.*
- An Ecological Impact Assessment will be required in order to ascertain any potential mitigation, compensation and/or enhancement required.*

- *An Assessment of the Significance of Impacts of Development on Historic Landscape (ASIDOHL) and a Desk Based Assessment would be required which sets out how archaeology on the site will be considered. Cadw should also be consulted.*

The site is projected to deliver 40 units over a two-year period during the middle of the Plan period.”

Section 3

Methodology

INTRODUCTION

- 3.1 This report has been produced in accordance with the Standard and Guidance for Historic Environment Desk-Based Assessment issued by the Chartered Institute for Archaeologists (CIfA, 2020). These guidelines provide a national standard for the completion of Desk-Based Assessments.

ARCHAEOLOGICAL ASSESSMENT METHODOLOGY

- 3.2 The assessment initially involved the consultation of publicly available archaeological and historical information gathered from relevant documentary and cartographic sources. The principal sources of information comprised the following:
- Known archaeological sites, monuments and findspots from the Glamorgan-Gwent Archaeological Trust (GGAT) Historic Environment Record (HER) (December 2023 data search);
 - Cadw's Historic Environment Service for information on designated historic assets;
 - The National Monuments Record of Wales (NMRW), as held by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW);
 - Historic maps held by the Glamorgan Archives and from online sources;
 - Aerial photographs, which are held by the Central Register of Aerial Photography for Wales (CRAPW) at Cardiff;
 - Environment Agency LiDAR datasets; and
 - Relevant books, articles and previous assessment reports on the Site.
- 3.3 The assessment provides a synthesis of relevant archaeological information for the Site and Study Area to allow for additional contextual information regarding its archaeological interest and/or potential to be gathered. The Archaeological Assessment utilises a 1km buffer around the Site boundary, as stated in the December 2023 WSI (report reference edp7081_r001 EDP 2023).
- 3.4 The information gathered from the repositories and sources identified above was checked and augmented through the completion of a heritage walkover of the Site and surrounding area, undertaken in December 2023. This walkover considered the nature and significance of known and/or potential archaeological assets within the Site, identified visible historic features and assessed possible factors that may affect the survival or condition of known or potential archaeological assets.

- 3.5 The report includes an assessment of the Site's likely archaeological interest or potential, made with regard to current best practice guidelines, in order to understand the likely impact(s) of the Proposed Development on the archaeological resource, whether directly or indirectly.
- 3.6 Throughout the report, where referenced and relevant, designated historic assets are referenced by their Cadw reference number, non-designated historic assets are referenced by their Preferred Reference Number and previous archaeological events are referenced by their Event Number. The distribution of designated historic assets, non-designated historic assets and previous archaeological events are presented in **Plan EDP 1 to 3**.

ASSESSMENT OF SIGNIFICANCE

- 3.7 The assessment of significance of known/recorded archaeological remains within the Site makes reference (where relevant) to the four 'heritage values' identified by Cadw within its *Conservation Principles* document (Cadw 2011). These are:
- The asset's *evidential value*, which is defined as those elements of the historic asset that can provide evidence about past human activity, including its physical remains or historic fabric;
 - The asset's *historical value*, which is defined as those elements of an asset which might illustrate a particular aspect of past life or might be associated with a notable family, person, event or movement;
 - The asset's *aesthetic value*, which is defined as deriving from the way in which people draw sensory and intellectual stimulation from the historic asset; and
 - The asset's *communal value*, which is defined as deriving from the meanings that a historic asset has for the people who relate to it, or for whom it figures in their collective experience or memory.

SETTING ASSESSMENT METHODOLOGY

- 3.8 In addition to the potential for direct impacts on the fabric of an asset, when assessing the impact of proposals on historic assets, it is important to ascertain whether change within their 'setting' would lead to a loss of 'significance'. This assessment of potential indirect effects (in terms of 'setting') is made according to Cadw's guidance *Setting of Historic Assets in Wales* which was published in May 2017.
- 3.9 In simple terms, the guidance states that setting "*includes the surroundings in which it is understood, experienced and appreciated, embracing present and past relationships to the surrounding landscape*". It must be recognised from the outset that 'setting' is not a historic asset and cannot itself be harmed. The guidance states that the importance of setting "*lies in what it contributes to the significance of a historic asset.*"

- 3.10 As such, when assessing the indirect impact of proposals on historic assets, it is not a question of whether their setting would be affected, but rather a question of whether change within the asset's 'setting' would lead to a loss of 'significance'.
- 3.11 Set within this context, where the objective is to determine the potential for development to have an indirect effect on historic assets beyond the boundary of a development site, it is necessary to first define the significance of the asset in question – and the contribution made to that significance by its 'setting', in order to establish whether there would be a loss, and therefore harm.
- 3.12 The guidance identifies that change within a historic asset's setting need not necessarily cause 'harm' and that it can be positive or in fact neutral.
- 3.13 Cadw's guidance (Cadw, 2017b) sets out a four-stage approach to the identification and assessment of setting effects; i.e.:
- **Stage 1:** Identify the historic assets which might be affected;
 - **Stage 2:** Define and analyse the setting, to understand how it contributes to the asset's heritage significance;
 - **Stage 3:** Evaluate the potential impact of development; and
 - **Stage 4:** Consider options to mitigate or improve that potential impact.
- 3.14 Therefore, the key issue to be determined is whether, and to what extent, the proposed development would affect the contribution that setting makes to the heritage significance of the asset under consideration, as per **Stage 2** of the Cadw guidance.

LIDAR DATA

- 3.15 Airborne LiDAR data (light detection and ranging) was utilised as a source of primary data for the current assessment. LiDAR scanning records height data and has applications in the recording of archaeological earthworks.
- 3.16 A Digital Terrain Model (DTM) for the Site was acquired from the Welsh Government LiDAR 2020-2022 tile Index (Welsh Government, 2023). Resolution of the data is at one data point for each 1m², a high resolution which, for archaeological prospection, is appropriate for the identification of archaeological earthworks.
- 3.17 The DTM was processed using the Relief Visualisation Toolbox (ver. 2.2 1. ZRC SAZU, 2019). This software allows for a range of visualisation techniques to be applied to the data. Different techniques have varying degrees of successful application, depending on the nature of the environment where the data was collected. As such, the whole suite of visualisations was produced and then, the individual images appraised as to their usefulness in the current context. This appraisal identified that of the visualisation techniques Sky View Factor (SVF) produced the best quality and most useful imagery for the Archaeological Assessment.

Sky View Factor Imagery

- 3.18 The relief visualisation technique for SVF Imagery is based on the use of diffuse illumination. The technique uses the portion of the visible sky not obscured by the relief of the landscape topography above a certain observation point. The technique applies the assumption that the diffuse illumination is isotropic, in that the places that see a large portion of the sky are brighter than those where only a small portion of the sky is visible.
- 3.19 As stated by ZRC SAZU 2010:
- “Applying the SVF for visualization purposes gives advantages over other techniques because it reveals relief features without any “sharp edges” while preserving the perception of general topography. Rather than just presenting or visualizing the same information in a new way, it extracts new information that can be further processed.”*
- 3.20 This technique was used to produce useful images for the assessment, providing an additional source of data on the Site’s archaeological potential (**Plan EDP 4**), which was used for guiding the December 2023 walkover survey.

Section 4

Baseline Information

INTRODUCTION

- 4.1 The following section details and contextualises known historic assets within the Site and Study Area.

DESIGNATED HISTORIC ASSETS

Setting Assessment Stage 1

- 4.2 The Site does not contain any designated historic assets (i.e. World Heritage Sites, Scheduled Monuments, Listed Buildings, Registered Historic Landscapes, Registered Historic Parks and Gardens or Conservation Areas). The location of designated historic assets within the Study Area is shown on **Plan EDP 1**.
- 4.3 Within the 1km Study Area, the following designated historic assets are present:
- One Scheduled Monument comprising the Merthyr Tramroad: Morlais Castle Section (**GM594**), located c.760m north of the Site;
 - One Listed Building comprising the Grade II listed Gwaelodygaeth House (**11487**), located c.950m south of the Site;
 - One Registered Park and Garden comprising the Grade II* listed Cyfarthfa Castle ornamental park and garden (**PGW(Gm)1(MER)**), located c.560m south-west of the Site; and
 - Two Conservation Areas comprising the 'Cyfarthfa, Merthyr Tydfil Conservation Area' and the 'Council Street and Urban Street Conservation Area', located c.560m south-west and c.940m south-east of the Site, respectively.
- 4.4 The designated historic assets listed above are located a considerable distance from the Site boundary from a minimum distance of c.560m. They are separated from the Site boundary by the intervening modern urban residential housing estates of Gurnos and Galon Uchaf, within which the Site is situated. Hence, the Site shares no intervisibility with any of the designated historic assets nor, as modern landscaped playing fields, does the Site contain any historical elements that have any historical or functional association with any of the assets. As such, the Site does not form part of the setting of these assets. Therefore, the Site does not provide a contribution to their significance.
- 4.5 Given its scale, the development, as proposed, would not be visible from or in close conjunction with, any of the assets listed above. As such, none of them would have their settings or significance affected by development and, therefore, they are not considered any further in this report.

NON-DESIGNATED HISTORIC ASSETS

Locally Listed Buildings

- 4.6 MTCBC maintain a Locally Listed Buildings (LLB) list, which contains buildings and/or structures within the County Borough. LLBs are referenced by their assigned Local List number. The significance of these structures in a local context is explained as follows on the MTCBC website (MTCBC,2023b):

“The Local List is a building or structure within the County Borough which is considered by the public, and Council to be an important part of Merthyr Tydfil’s heritage due to its architectural, historic or archaeological significance. Locally Listed Buildings are considered to contribute to the environmental and cultural heritage of the County Borough. The Council, via development proposals, will seek to preserve and enhance these important buildings.”

Setting Assessment Stage 1

- 4.7 No LLBs are recorded within the Site. Within the Study Area three LLBs and one proposed LLB are recorded. The location of LLBs within the Study Area is shown on **Plan EDP 2**. These include:
- Post-medieval 19th century Gyrnos Tower (**MT130**), located c.250m north-west of the Site;
 - Post-medieval 19th century Icehouse to Cyfarthfa Castle ornamental park and garden (**MT115**), located c.840m south-west of the Site;
 - Post-medieval 19th century Gurnos Farmhouse and outbuildings (**MT64**), located c.520m north-west of the Site; and
 - Proposed post-medieval 19th century limekiln, on the west bank of the River Tref Fechan (**MT112**) located c.970m north-west of the Site.
- 4.8 A review of their associated HER records and historic mapping evidence, outlined below, indicates that LLBs within the Study Area are located from a minimal distance of c.250m from the Site boundary. They are separated from the Site boundary by the intervening modern urban residential housing estates of Gurnos and Galon Uchaf, within which the Site is situated. The Site shares no intervisibility with any of the LLBs nor has any historical or functional association with any of them. As such, the Site does not form part of their settings and does not provide a contribution to their significance.
- 4.9 Given the scale of the development, none of the settings of these assets would be affected by development within the Site and therefore they are not considered any further in this report.

Archaeology

- 4.10 A chronological overview of known non-designated historic assets within the Site and Study Area is provided below.

Pre-Industrial (c.500,000BC – AD 1750)

- 4.11 There are no prehistoric records on the HER within the Site or Study Area.
- 4.12 The Site and surrounding landscape, which encompasses Merthyr Tydfil, are located within a natural basin at the head of the Taff Valley. As described in the description of the Merthyr Tydfil LOHI by GGAT, the Site and surrounding area during the early prehistoric period was part of a glacial environment during much of the Pleistocene, which featured minimal human activity. During later prehistory (Holocene), the Site and surrounding landscape is suggested to have largely featured native woodland. Human activity from the Neolithic period is recorded in the wider area with evidence of woodland clearance and farming practices (Caseldine,1990).
- 4.13 Recorded Roman archaeological remains on the HER are limited to a segment of the projected course of a Roman road (**RR621-02b**) orientated roughly north-east to south-west c.310m east of the Site at its nearest point. The nearest recorded Roman settlement is located c.1.4km south of the Site at the Penydarren Roman auxiliary fort, to which the projected alignment of the Roman road on the HER runs through (RomanBritain.co.uk,2023). No further Roman archaeological remains area recorded within the Study Area.
- 4.14 As suggested in the description of the LOHI, throughout the early medieval and much of the medieval period, until the c.18th century, the Site and the surrounding landscape probably comprised a predominantly forested area. The late medieval and early post-medieval period onwards saw the enclosure of the valley bottom floor and lower slopes to form individual farmsteads, which may have included the Site as part of their farmland.
- 4.15 Notwithstanding the limited number of HER records in the Study Area from the prehistoric through to the 19th century, no remains from prior to the early 19th century are anticipated to be present within the Site. This is due to the substantial truncation and/or disturbance caused by the creation of the 19th century 'Goitre Pond' across the Site and earthworks associated with its infilling and landscaping into playing fields from 1963-1970s. Evidence for this activity is discussed below.

Industrial (AD 1750 – Present)

18th Century

- 4.16 There is no recorded evidence on the HER for archaeological remains within the Site dated to the 18th century. The Site likely continued to comprise part of wider farmland at this time.
- 4.17 Within the Study Area and wider landscape from the mid-late 18th century onwards, the change to coal from charcoal as a fuel source in iron working and the exploitation of local sources of ironstone, limestone and coal, led to a rapid change in both land use and land organisation in and around Merthyr Tydfil (GGAT,2023). As a result, the surrounding

landscape became deforested not only due to the industrialisation of the area, but also to supply land for the growing urban population. Such change also brought about the industrialisation of agricultural production, with the reorganisation of field enclosures and creation of 'model farms', such as Gurnos Farm (**MT64**, and **GGAT03166m**) c.520m north-west of the Site, during the early 19th century (*ibid*).

19th Century

- 4.18 The Site contains one HER record situated along its southern end of the Site along Goitre Lane dated to the 19th century. Meanwhile, a number of HER records located within the surrounding Study Area date to the 19th century.
- 4.19 From the early 19th century, the central and southern parts of the Site comprised a water management feature, known as 'Goitre Pond'. Meanwhile, the northern part of the Site featured a sloped partially wooded and grassland area to the north-west of the pond as well as farmland beyond. According to the description of GGAT's Historic Landscape Characterisation Area for 'Gurnos and Galon Uchaf (**HLCA 050**)', 'Goitre Pond' was created by 1826 to serve as a reservoir for the supply of water to Penydarren Ironworks c.1.4km to the south. The pond is first depicted on the 1850 Merthyr Tydfil Tithe Map (**Plan EDP 5**), in which its associated tithe award details how it was owned by the 'Penydarren Iron Company'. Between 1901-1905 a boat house is also depicted on the south side of the pond on historic maps. However, no associated remains were identified during the December 2023 heritage walkover, as discussed below (**Image EDP A1.7**).
- 4.20 The HER record located within the Site is associated with a segment of the former 'Morlais Tramroad' (**03173.2m**), which according to the HER was constructed in 1803 and remained in use until the c.1870s. The length of the tramroad associated with the HER record, ran from the Penydarren Ironworks at its southern end (c.1.4km south of the Site) northwards to Morlais Castle Quarries, north of Pontsam Road (c.790m north of the Site). Its function was to provide quarried limestone and lime from Morlais Castle Quarries to the Penydarren Ironworks. The HER indicates that the tramroad was removed over the course of the 20th century, which is supported by the findings of the survey of the Morlais Tramroad in 2006 (**E001995**) (Roberts & Jones, 2006). As such, no remains associated with the tramroad survive within the Site. The alignment of the former tramroad now comprising of a modern road.
- 4.21 Within the Study Area HER records can be divided into four groups:
- Limekilns representing 19th century industrial activity along the Morlais Tramroad are recorded c.330m north-west of the Site (e.g. **GGAT03134m**);
 - Post-medieval farming practices and landscape organisation represented by the Gurnos Farm 'model farm' of the 1820s (**MT64**) and its associated workers' cottages (**GGAT03166m**) located c.510-520m north-west of the Site, as well as four records for remnants of drystone field boundaries (**GGAT03155m**, **GGAT03197m**, **GGAT03133m**) and a coppiced woodland (i.e. 'Gurnos Wood') (**GGAT03135m**) recorded c.300-620m north-west to north of the Site;

- A stray archaeological findspot for a contentiously dated quern stone on the HER, recorded c.370m north-west of the Site within Gynnos Wood (**GGAT03128m**); and
- Three HER records within the 19th century parkland estate of Cyfarthfa Castle, representing an ornamental pond (**GGAT06426m**), a group of four reservoirs (**GGAT06427m**) and excavated greenhouses (**GGAT10364m**), located 900-990m south-west of the Site.

4.22 None of the HER records dated to the 19th century contained within the Study Area indicate that any associated remains extend into the Site boundary.

20th Century

4.23 There is no recorded evidence on the HER for archaeological remains within the Site or Study Area dated to the 20th century.

4.24 The Site continued to contain 'Goitre Pond' until 1963. A Merthyr Express newspaper, dated to 11 May 1963, records the draining of the pond, followed by its infilling and landscaping into the 1970s. Historic maps indicate that the infilling and subsequent landscaping of the pond occurred alongside the construction of the adjacent Pen-y-Dre High School to the north of the Site (**Plan EDP 5**). Such works would have most likely removed any buried remains associated with the boat house depicted on consulted 1901-1905 OS Maps. The Site was subsequently used as school playing fields until recently when it became disused as an open area of marshland/grassland. The infilled early 19th century pond itself is not recorded on the HER or RCAHMW as a historic asset.

4.25 The 20th century within the surrounding Study Area is characterised by the urbanisation of the landscape. This occurred predominantly via the construction of the Galon Uchaf housing estate within the eastern half of the Study Area from the 1920s and the Gurnos housing estate from the 1950s onwards. As such, the Site is situated within an urban environment today.

RCAHMW RECORDS

4.26 No RCAHMW records are located within the Site. Consulted RCAHMW records within the Study Area solely date to the late post-medieval and modern periods, and range between 150m-1000m from the Site boundary. They are associated with historic extant and demolished buildings dating from the early 19th century to the 1970s. Such records are associated with houses, chapels, public baths, housing estates, a cricket ground, hospital etc. None of these features extend into the Site and, as such, they have no relevance to the archaeological potential of the Site and are not discussed any further.

PREVIOUS ARCHAEOLOGICAL EVENTS

4.27 Of relevance to the Site, one previous event for a field visit along the course of the former Morlais Tramroad in 2006 is recorded (**E001995**). The event is associated with the wider 2005-2010 '*Southeast Wales Industrial Ironworks Project*' by GGAT. The project spans the entire area contained within the administrative boundary of MTCBC. The event recorded the

degree of preservation of the former tramroad, to which extant remains are concentrated towards its northern end at Morlais Castle (Roberts & Jones, 2006). Therefore, no extant remains of the Morlais Tramroad are recorded within the Site or within its immediate vicinity (*ibid*).

- 4.28 Within the Study Area, previous fieldwork events are limited to those surveys undertaken for the 2005-2010 'Southeast Wales Industrial Ironworks Project' (e.g. **GGATE005392**) or works undertaken to record extant and buried parkland estate features within Cyfarthfa Park from c.730m south-west of the Site. Such works have included a geophysical survey (**GGATE007433**), evaluations (**GGATE007433**, **GGATE007109**), a building recording (**GGATE007483**) and a watching brief (**GGATE007482**). Remaining events comprise desk-based research (e.g. **GGATE006653**). Overall, events within the Study Area are highly localised and provide no further insight into the archaeological potential of the Site, and as such are discussed no further.

Geotechnical Site Investigation (SI)

- 4.29 As outlined in paragraphs 1.11-1.12, a SI was undertaken within the Site by Intégral Géotechnique (Wales) Limited in 2023, to accompany the Proposed Development's planning application (Intégral Géotechnique, 2023). The SI works provided direct evidence for the stratigraphic sequence contained within the Site, which elucidates the depth and shape of the former pond's basin as well as indicates the level of groundworks which have occurred within the Site from 1963-1970s.
- 4.30 The results of the SI identified a shallow topsoil underlain by various non-uniform depths of made ground deposits, associated with the infilling and landscaping of the former 'Goitre Pond' between 1963-1970s. Made ground deposits increase in thickness towards the centre of the Site (within the interior of the former pond) and decrease in thickness towards the edges of the Site (i.e. the former pond's boundaries).
- 4.31 Such made ground deposits are indicated by Intégral Géotechnique to represent imported materials, which span up to 4.5m thick, but generally show a marked difference in average depths for the west and east side of the former 'Goitre Pond'. The average depth of the west side of the infilled pond is recorded to feature made ground deposits up to c.4.0m bgl, while the east side of the infilled pond features made ground deposits up to c.2.7m bgl (*ibid*).
- 4.32 Made ground deposits within the interior of the former pond's extent, were also found to be underlain by a thin layer of organic peat deposits, between 0.2-0.5m thick (*ibid*). These deposits represent the base of the former pond. Although it is acknowledged that such peat deposits feature the potential for paleoenvironmental remains, such remains would only date to the 19th century and would be of no archaeological value.
- 4.33 Overall, the SI indicates that imported modern made ground deposits, dated to the 1960s, lie across the Site below existing topsoil and span up to 4.5m in depth. Such deposits reflect the substantial degree of disturbance and truncation that has occurred across the Site during the latter 20th century. The recorded profile of the pond indicates the extent of truncation initially caused to any archaeological bearing deposits within the Site during the creation of the pond and the overlying made ground deposits associated with its infilling and subsequent landscaping, indicate that the natural ground surface has been removed

and material redeposited with the present subsoil's upper parts being modern imported material. As such, any potential archaeological bearing deposits are likely have been entirely removed.

CARTOGRAPHIC EVIDENCE

Historic Maps

- 4.34 Historic maps have been used to aid the establishment of the Site's 19th century history (AD 1850) onwards and identify land use change over time. Available historic maps include the 1850 Merthyr Tydfil Tithe Map and historic OS maps only.
- 4.35 The historic maps which highlight key changes to land use within the Site are outlined below and presented in **Plan EDP 5**. For reference, the publication date of each historic map is referred to below.

1850 Merthyr Tydfil Tithe Map

- 4.36 The 1850 Tithe Map shows most of the Site to be located within the extent of the former 'Goitre Pond' (The Genealogist,2023). The pond is labelled as a 'pond' (plot 1886) to 'Goytra Farm', which was situated c.360m south-west of the Site at the time. The pond and the farm, however, were under the occupation of 'Penydarren Iron Company', whom owned Pennydarren Iron Works c.1.4km south of the Site as discussed above. As such, the pond likely served as a water management feature, providing water to the ironworks at this time.
- 4.37 The remainder of the Site within its north-west part is shown to have comprised Cyfarthfa Castle's estate pound (plots 1884-1885) (The Genealogist,2023). Both plots are recorded under a separate occupier/tenant and owner, being one of the leading industrialist families of the area at the time, the Crawshay family.
- 4.38 Of note, the Morlais Tramroad along the southern end of the Site, is shown to be located within plot 1893, under the ownership of the Penydarren Iron Company.

1885-1887 OS Map

- 4.39 The 1885-1887 OS Map depicts no change across the Site. The water management feature of 'Goitre Pond' remains extant, with a sluice gate depicted at the south-eastern end of the pond beyond the Site boundary. The Morlais Tramroad is also depicted as extant across the southern end of the Site, albeit, it likely had ceased in function by this time, based on current baseline evidence as discussed above. The area of land adjacent to the north-west edge of the pond is shown as shrubland/woodland.

1901 OS Map

- 4.40 The 1901 OS Map shows no additional change, with the exception of a boat house depicted for the first time at the centre of the southern edge of 'Goitre Pond' within the Site. The boat house is depicted until the consulted 1905 OS Map.
- 4.41 The boat house is no longer extant and no associated buried remains (e.g. foundations) are anticipated to be present within the Site as attested to by substantial earthworks and

landscaping between 1963-1970s, as identified on consulted aerial photographs and LiDAR imagery, discussed below.

1968-1986 OS Map

- 4.42 The 1968-1986 OS Map shows that 'Goitre Pond' had been drained and infilled to be used as playing fields for the 1970s built Pen-y-Dre High School to the north of the Site. The landscaping also included the clearance of wooded vegetation to the north-west of the pond.
- 4.43 Subsequent historic maps provide no further historical insight, reflecting the Site's continued land use as playing fields until its recent disuse.

Summary

- 4.44 Historic maps illustrate the Site's continued land use from the mid-19th century to the mid-late 20th century as a water management feature. The Site was then subject to major landscape change from 1963-1970s within the draining, infilling and landscaping of 'Goitre Pond' to form playing fields to Pen-y-Dre High School. The Site now comprises disused marshland/grassland.

GOOGLE EARTH SATELLITE IMAGERY

- 4.45 Historic Google Earth satellite imagery from 2001 was reviewed and assessed for additional information, where relevant (GE,2023).
- 4.46 No additional land use change is visible until the most recent 2023 satellite imagery, which shows groundworks within the north-west corner of the Site via topsoil stripping down to the northern edge of the former 'Goitre Pond'. Such works were visible during the December 2023 heritage walkover, however, were limited to topsoil stripping and spoil heap management.

AERIAL PHOTOGRAPHS

- 4.47 Available aerial photographs dated between 1945-1991 (held by CRAPW) were consulted to further inform the Site's history over the 20th century and elaborate, where possible, on the Site's development sequence outlined above using historic maps and satellite imagery. Aerial photographs, which illustrate notable changes to the Site's layout and changes in land use over time are outlined below. Aerial photographs are referenced by their date, sortie and frame numbers.

1947 4709 RAFCPE UK_1997 4362

- 4.48 The aerial photograph shows a pattern of modern land drains running downslope within the north-west corner of the Site to 'Goitre Pond'. It provides insight into modern land drainage practices within the north-west corner of the Site, prior to the Site's major landscaping practices from 1963-1970s.

1967 6711 MAL 71_67 064; 1968 6804 MAL 13_68 121; and 1977 7707 ADAS 667 1745

- 4.49 These three aerial photographs between 1967-1977 provide insight into the substantial level of ground disturbance the Site has been subjected to during the pro-longed infilling and reworking of the Site to function as playing fields to Pen-y-Dre High School by the latter 1970s. The entirety of the Site is shown to be exposed, indicating substantial movement of deposits across the Site. Such activity will have had a major impact on the presence of any archaeological remains present within the Site and have removed any archaeological bearing deposits within the Site for pre-19th century remains dated prior to the construction of 'Goitre Pond'.

1983 8354 1_PRU_RAF_0351 008

- 4.50 The aerial photograph provides the first visualisation of the Site in use as playing fields for the Pen-y-Dre High School.

Summary

- 4.51 Consulted aerial photographs primarily provide insight into the substantial degree of earthworks and landscaping practices undertaken within the Site during the 1960s-1970s. Such groundworks would have had a substantial impact on any archaeological remains present within the Site and have removed any archaeological bearing deposits within the Site for pre-19th century remains dated prior to the construction of 'Goitre Pond'.

LIDAR IMAGERY

- 4.52 The analysis of available Welsh Government LiDAR 2020-2022 tile index data indicates that the Site features earthworks reflective of its use as playing fields since the latter 1970s (**Plan EDP 4**).
- 4.53 Visible earthworks comprise of linear, roughly north-south, equal distance striations across the Site as well as a square outline of a feature within the centre of the Site and a raised linear east-west orientated trackway bordering the northern edge of the now disused playing fields. These features are associated with the Site's most recent land use as playing fields.
- 4.54 A square object is also visible adjacent to the west Site boundary. Comparison with available aerial photographs indicate that this feature along with the linear striation connected to its southern side, is associated with a former long jump sandpit at the west end of the now disused playing fields.
- 4.55 Within the eastern end of the Site, the possible alignment of the modern culverted water feature, identified during the December 2023 heritage walkover is also visible. In addition, the sluice gate to the infilled 'Goitre Pond' at its south-east end and its associated water course (beyond the Site boundary) are also clearly shown.
- 4.56 Overall, LiDAR imagery identified no archaeological features or earthworks of interest or significance within the Site and the LiDAR illustrates clearly the relandscaping of the Site during the 1960s-1970s.

HERITAGE WALKOVER SURVEY

- 4.57 A heritage walkover survey of the Site was undertaken in December 2023. Dry and partial overcast weather conditions were consistent throughout the walkover. Sufficient visibility persisted throughout the survey to allow effective on-site assessment of Site ground conditions.
- 4.58 The heritage walkover confirmed the Site's ground conditions as detailed in paragraph 1.8. A modern culverted drainage run (**Image EDP A1.5**) and stone abutments that are probably remains of the sluice gate to the former 'Goitre Pond' (**Image EDP A1.6**) were identified, which are located beyond the Site boundary. No extant archaeological remains or evidence of earthworks of potential archaeological interest or significance were identified. No extant remains were identified for the former boat house to 'Goitre Pond', mapped on consulted historic OS Maps (**Image EDP A1.7**).
- 4.59 The Site was observed to comprise unmanaged marshland and grassland following its disuse as playing fields to the adjacent Pen-y-Dre High School to the north of the Site (**Image EDP A1.1**).

SUMMARY OF ARCHAEOLOGICAL POTENTIAL

- 4.60 The Site does not contain any 'designated heritage assets', as defined in Annex 2 of the NPPF (i.e. World Heritage Sites, Scheduled Monuments, Listed Buildings, Conservation Areas, Registered Parks and Gardens or Registered Battlefields) (DLUHC 2023b).
- 4.61 The Site contains one HER record for a segment of the former 'Morlais Tramroad' (**03173.2m**), situated along the southern end of the Site along Goitre Lane. The tramroad was constructed in 1803 and remained in use till c.1870s. The HER indicates that the tramroad was removed over the course of the 20th century and its course is now equivalent to the road Goitre Lane. As such, no remains associated with the tramroad survive within the Site.
- 4.62 A review of previous archaeological events within the Study Area identified that no insight into the Site's archaeological potential is provided from such events.
- 4.63 The Site most likely consisted of forest/farmland up to the 19th century. Major land use change occurred by 1826, with the creation of the water management feature of 'Goitre Pond' across the majority of the Site. The north-west corner of the Site, lay beyond the pond and was utilised as agricultural land for the Cyfarthfa Castle estates. The pond continued to be in use until 1963, and had a boathouse in the early 20th century. The pond was drained in 1963 and the entirety of the Site subject to a prolonged period of substantial groundworks, associated with its infilling and subsequent landscaping to create playing fields for the Pen-y-Dre High School. The Site was in use as playing fields for the school until recently. The Site currently resides as an area of disused marshland/grassland.
- 4.64 The water management feature of the c.1826-1963 'Goitre Pond' is not recorded as a historic asset by either the HER or RCAHMS. The 2023 SI by Intégral Géotechnique, provided direct evidence for the Site's stratigraphic sequence, in which, the Site has been

identified to feature average made ground deposit depths of c.4.0m bgl within the western half of the Site and c.2.7m bgl across the eastern half of the Site, within the interior of the former pond (Intégral Géotechnique, 2023). As such, the presence of made ground deposits below existing topsoil across the Site indicates that any potential archaeological bearing deposits will have been removed by the creation and subsequent infilling and landscaping of the pond for creation of playing fields for the Pen-y-Dre High School.

- 4.65 Overall, there is no potential for archaeological remains pre-dating the c.1826 construction of 'Goitre Pond'. The excavation of the pond and its subsequent infilling and landscaping earthworks between 1963-1970s, as attested to by the 2023 SI, aerial photographs and LiDAR imagery, demonstrate that the Site has been entirely disturbed and has removed any potential archaeological bearing deposits within the Site. Furthermore, the imported infill material (made ground) recorded across the Site is of no archaeological interest and no discrete historic assets have been identified within the Site.

HISTORIC LANDSCAPE CHARACTERISATION

- 4.66 The Site lies within the Merthyr Tydfil LOHI, as defined by Cadw and the Welsh Archaeological Trusts.
- 4.67 GGAT have further defined this landscape of historic interest into Historic Landscape Character Areas (HLCA), assessing the importance of each. Those in relation to the Site are shown on **Plan EDP 6**.
- 4.68 The LOHI is summarized by GGAT as occupying a natural basin at the head of the Taff valley. Its topography comprises high hills and ridges which reach 450m aOD on all sides, while the built form of the area is constrained to the basin floor and valleys.
- 4.69 The Merthyr Tydfil landscape is strongly characterised by its industrial heritage, having been *"probably the largest iron-making town in the world in the early to mid- 19th century"*, as such, the town, and its wider landscape was *"rapidly transformed from a modest village in the 1750s to the largest town in Wales by 1801"*. Although there has been extensive recent land reclamation and sanitisation of waste tips in the more recent years, the Merthyr Tydfil LOHI still retains its industrial landscape character, and so is defined by *"the remains of large ironworks, remnants of the associated coal mining industry, water power 30east, an early iron bridge, communication systems, including early tramroads, tips, terraced industrial housing, and the ironmasters house, Cyfarthfa Castle"*.

Direct Effects Upon the Merthyr Tydfil LOHI

- 4.70 The Site itself is located within **HLCA 050: Gurnos and Galon Uchaf**; this character area is summarized by GGAT as a *"A mid 20th century urban landscape characterised by council housing estates with associated commercial, educational and health facilities, built on former agricultural land with some industrial features."* The area is largely defined by housing estates of local authority housing created during the early 1960s which are laid out in varying patterns, with a focus on the Prince Charles Hospital in the west part of the area.

- 4.71 Large schools are also noted as distinctive features of the HLCA. Reference is made to their playing fields which preserve to an extent the former open nature of the HLCA. GGAT note that most of the area was owned by The Penydarren Iron Company, and used for agricultural purposes, as well containing leats and reservoirs including the former Goitre Pond in the Site. The former industrial character of the HLCA is also indicated by the present road system, which reflects the location of 19th century transport corridors including the tramway route to the Penydarren Iron Works from Morlais Castle Quarries.
- 4.72 The Proposed Development of the Site for a new school will accord well with the existing character of the HLCA such that it is partially defined by the presence of modern school buildings. Some of the openness of the Site will be lost but the eastern part of it would remain as a green open space. More broadly, open spaces would continue to be characteristic of the HLCA with playing fields to the north and north-east of the Site and further south (**HLCA 050B** on **Plan EDP 6**) continuing to define this aspect of the HLCA's character.
- 4.73 The development would not result in the loss of any extant historic features that contribute to the LOHI's industrial heritage. The Goitre Pond is no longer discernable in the landscape having been infilled and is best understood from historic maps and aerial views. As such, no remains of the pond exist that would be removed by the proposed development.
- 4.74 In conclusion the proposed development would have no direct effect on the character of **HLCA 050**.

Indirect Effects Upon the MTLOHI

- 4.75 The Site is located well-within **HLCA 050** and is separated from most other HLCAs by wide extents of urban development. The nearest HLCA is **HLCA 056** (c.235m to the north) which defines a modern road corridor and so has no extant historic features that could have their setting affected by the development of the Site.
- 4.76 Some c.270m to the north is **HLCA 052** which has a more open, rural character than HLCA 050. However, the proposed development would sit within the existing urban landscape and would not stand out in views from that area, with the existing Pen-y-Dre High School located between the HLCA and the Site. As such the development would result in no change to the character of the wider setting of **HLCA 052**.
- 4.77 Located within the urban landscape it is concluded that the proposed development would not result in any change that would be noticeable from any of the other HLCAs of the LOHI and their character, such that it relates to their heritage significance would be unchanged. With the lack of any meaningful change to the character of **HLCA 050** it is concluded that overall, the proposed development would not result in any change to the LOHI that would result in a loss of its historic character or significance.

Section 5 Impact Assessment

INTRODUCTION

- 5.1 As outlined in paragraph 1.14, the Proposed Development would comprise the construction of a new primary school and associated infrastructure within the Site. Of note, this would include the following key elements, as shown on **Appendix EDP 2**:
- Construction of a low-rise, single-storey 'T-shaped' primary school building across the centre of the Site;
 - Hard landscaping of hardstanding surfaces (e.g. car park, playground, paths);
 - Soft landscaping (e.g. sports pitches, grassland areas and scattered tree planting); and
 - Insertion of a new roundabout within the south-east corner of the Site, along Goitre Lane.
- 5.2 The Proposed Development's 'Proposed Site Sections', provided in **Appendix EDP 5** indicates that most of the development would be built up from existing ground levels within the Site. However, some truncation of existing ground levels via lowering parts of the Site to a maximum of c.1.1m bgl at completion is proposed.
- 5.3 Furthermore, additional intrusive groundworks and therefore disturbance and truncation of underlying stratigraphic deposits is indicated for the Proposed Development, via the construction of a 'rainwater harvesting tank' and 'cellular attenuation tank' within the Proposed Development's 'Proposed Drainage Strategy Plan', provided in **Appendix EDP 4**. No detailed information with regards to the dimensions and depths of below-ground structures was provided at the time of the production of this Archaeology Desk-Based Assessment.
- 5.4 An assessment of potential impacts to known historic assets as well as unknown archaeological remains is undertaken below, utilising **Appendix EDP 2-5**.

DESIGNATED HISTORIC ASSETS

- 5.5 No World Heritage Sites, Scheduled Monuments, Listed Buildings, Registered Historic Landscapes, Registered Historic Parks and Gardens or Conservation Areas are present within the Site. Therefore, none will be physically affected by the Proposed Development within the Site.
- 5.6 No setting impacts have been identified in relation to designated historic assets within the Study Area from the Proposed Development. The Site does not form part of the setting nor contribute to the significance of such assets.

NON-DESIGNATED HISTORIC ASSETS

- 5.7 One HER record is recorded within the Site, associated with the 19th century Morlais Tramroad (**03173.2m**). However, as discussed in **Section 4**, no remains survive of the historic asset within the Site. As such, the historic asset would not be physically affected by the Proposed Development.
- 5.8 No setting impacts have been identified in relation to LLBs within the Study Area from the Proposed Development. The Site does not form part of the setting nor contribute to the significance of such assets.

ARCHAEOLOGICAL REMAINS

- 5.9 As discussed in **Section 4**, there is no potential for archaeological remains pre-dating the c.1826 construction of 'Goitre Pond'. The excavation of the pond and its subsequent infilling and landscaping earthworks between 1963-1970s, as attested to by the 2023 SI, aerial photographs and LiDAR imagery, demonstrate that the Site has been entirely disturbed and has removed any potential archaeological bearing deposits within the Site. 'Goitre Pond' itself is not recorded as a historic asset by either the HER nor RCAMHW and the recorded modern made ground deposits across the Site are of no archaeological value. Nor have any other discrete historic assets been identified within the Site. Therefore, it is concluded that no impacts to archaeological remains would occur from the Proposed Development.
- 5.10 The identified sluice to 'Goitre Pond', which is not recorded as a historic asset by the HER or RCAMHW, is located beyond the Site's south-eastern boundary. Therefore, it would not be subject to any impact from proposals apart of the Proposed Development.
- 5.11 Based on current baseline evidence and assessment provided in this report, no archaeological investigation or mitigation is recommended nor warranted for the Site.

Section 6 Conclusions

- 6.1 This report has been prepared by The Environmental Dimension Partnership Ltd (EDP) and presents the results of an Archaeological and Heritage Desk-Based Assessment of the Site. It has been produced to accompany a planning application for the development of a new primary school.
- 6.2 The Site most likely consisted of woodland/farmland up to the early 19th century. Major land use change occurred by 1826, with the creation of the water management feature of 'Goitre Pond' across the majority of the Site. The pond remained in use until 1963 when it was drained and the entirety of the Site was subject to a prolonged period of substantial groundworks through to the latter 1970s, associated with its infilling and subsequent landscaping to create playing fields for the adjacent Pen-y-Dre High School. The Site continued to be in use as playing fields until recently. The Site currently resides as an area of disused marshland/grassland. Of note 'Goitre Pond' is not recorded as a historic asset by either the HER nor RCAMHW.
- 6.3 The Site does not contain any designated historic assets (i.e. World Heritage Sites, Scheduled Monuments, Listed Buildings, Registered Historic Landscapes, Registered Historic Parks and Gardens or Conservation Areas). As such, no designated historic assets would be physically affected by the Proposed Development within the Site.
- 6.4 No setting impacts have been identified in relation to designated historic assets nor non-designated LLBs within the Study Area from the Proposed Development. The Site does not form part of either their settings nor contribute to the significance of these assets.
- 6.5 The Site contains one HER record situated along the southern end of the Site along Goitre Lane. The HER record is associated with the 19th century Morlais Tramroad (**03173.2m**), however, no remains survive of the historic asset within the Site or in its vicinity. As such, the tramroad is now entirely historical and thus would not be affected by the Proposed Development.
- 6.6 The Site holds no potential for archaeological remains pre-dating the c.1826 construction of 'Goitre Pond'. The excavation of the pond and its subsequent infilling and landscaping earthworks between 1963-1970s, as attested to by the 2023 SI, aerial photographs and LiDAR imagery, demonstrate that the Site has been entirely disturbed and has removed any potential archaeological bearing deposits within the Site. 'Goitre Pond' itself is not recorded as a historic asset by neither the HER nor RCAMHW and the recorded modern made ground deposits across the Site are of no archaeological value. Therefore, it is concluded that no impacts to archaeological remains would occur from the Proposed Development. Based on current baseline evidence and assessment provided in this report, no archaeological investigation and/or mitigation is recommended nor warranted for the Site.
- 6.7 The Site is located within the Merthyr Tydfil LOHI. The assessment concludes that the proposals would accord well with the character of the LOHI and would not result in the loss of any of its extant historic assets that contribute to its heritage significance. As such the proposal would have no effect on the LOHI.

- 6.8 Overall, the Proposed Development is considered to be compliant with national and local planning policies set out in **Section 2** of this Archaeological and Heritage Desk-Based Assessment.

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Appendix EDP 1 Images



Image EDP A1.1: South-west facing view across the Site from the top of the hill adjacent to the north-east of the Site boundary.



Image EDP A1.2: East facing view of southern end of the Site illustrating the difference in height from the south end of the former infilled 'Goitre Pond' (left) and Goitre Lane (right).



Image EDP A1.3: North facing view across Site from the central southern part of the Site towards the raised north-west corner of the Site, which rises to the present-day car parks for Pen-y-Dre High School.



Image EDP A1.4: West facing view of the south-east corner of the Site, beyond the limits of the former 'Goitre Pond'.



Image EDP A1.5: South-east facing view of culverted surface water feature within the south-east corner of the Site.



Image EDP A1.6: North facing view of the sluice gate remains to the former 'Goitre Pond', located beyond the south-east Site boundary. Remains of the west side stone abutment are visible.



Image EDP A1.7: South-east facing view of the central southern edge of the Site. Image to show the location for the 1901-1905 depicted boat house on historic OS Maps (**Plan EDP 5**). Heritage walkover identified no extant remains associated with the former boat house.

Appendix EDP 2

Proposed Site Plan Layout

- Existing trees shown as indicated on ArbTS Tree Constraints Plan.

- Note:
All materials to be agreed.

Trees and planting areas shown indicatively.
Site plan subject to further detail design by
Landscape Architect.

Further advice/input required regarding extent of permeable paving and SUDs features needed across the site

- +288.260 Existing Site Levels
● +291.450 Proposed Site Levels

Site levels indicative only and are subject to detail design by civil engineer in line with previous cut-fill exercises

- | | |
|---|---|
| | Proposed Site Application Boundary |
| | 39,769m2 or 3.97ha |
| | Adjoining land owned by applicant |
| | External Area of School to the boundary fence |
| | 32,208m2 or 3.20ha |

P05	Layout updated to include latest Consultants info	13/11/2023
P01	Hydrant tank and end revised, fords added over Swale, Electrical Bus Station location revised	09/11/2023
P03	Red/Blue lines amended, car park spaces amended, existing lines removed and new SS location included following DTM Conversion. Lines amended to match DTMs	07/11/2023
P02	Application Red and Blue Line amendments. Swale location updated in line with Cambria latest information	01/11/2023
P01	Application Red Line added and other minor amendments added to help site labelling	30/10/2023
P02	Initial Issue WIP	27/10/2023
REVISION / DRAWN BY [CHECKED] [APPROVED] DATE		
RIBA PLAN OF WORK WORKSPACE LEVEL OF MODEL DEFINITION (LOD) Stage 3 - Spatial Co-ordination LOD 3 - Approximate Model		
PURPOSE OF ISSUE - SUITABLE FOR ... STATUS or SUITABILITY P01 - Initial Info SS - Suitable for Review/Comment		



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LONDON 0207 138 3560
WREXHAM 01978 357 887
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CLIENT
Morgan Sindall

PROJECT TITLE
Goetre Primary School

DRAWING TITLE
Proposed Site Plan Layout

PROJECT No 19623 SCALE @ A1
1 : 500

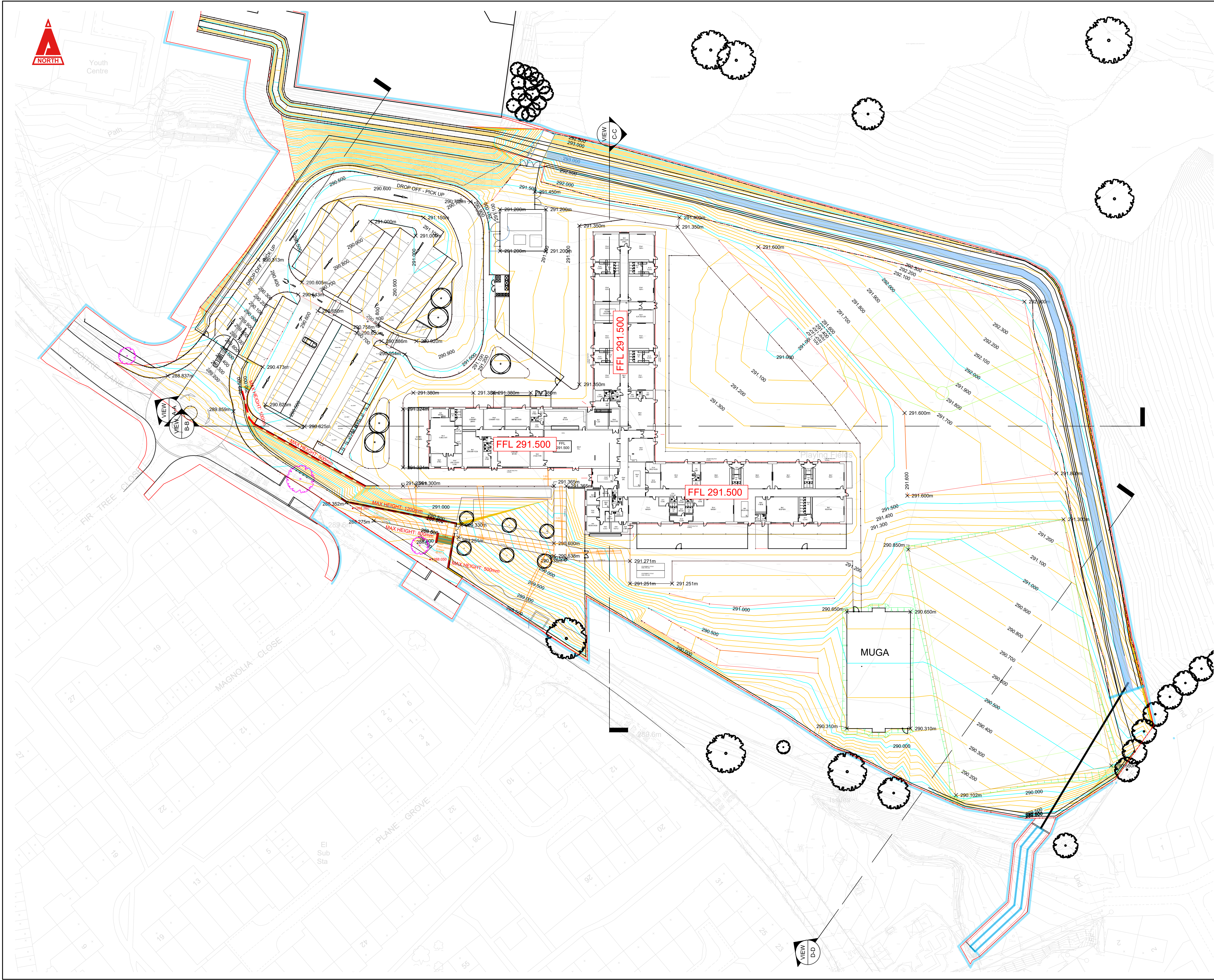
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	GPS-LAW-X-X-DR-A-069001	P05

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Appendix EDP 3

Proposed Levels Plan



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 THIS SYMBOL IS USED TO HIGHLIGHT INSTANCES
OF RISK WITHIN THE CONSTRUCTION PROCESS.
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KEY:

- PROPOSED MAJOR CONTOUR 0.5m
- PROPOSED MINOR CONTOUR 0.1m
- PROPOSED RETAINING WALLS

P02	ISSUED FOR RIBA STAGE 2.	LW	BW	BW
			13/11/23	
P01	ISSUED FOR RIBA STAGE 2.	LW	BW	BW
			18/10/23	
Rev.	Description	By	Chk	App

Client:

**MORGAN
SINDALL**

Project:

GOETRE PRIMARY SCHOOL

Drawing Title:

PROPOSED LEVELS PLAN

Drawing No.

CC2538 CAM XX XX DR C 0600

Project	Originator	Vol.	Level	Type	Role	Number
Status:	S1 PRELIMINARY	Scale @A1:	1:500	Rev:	P02	

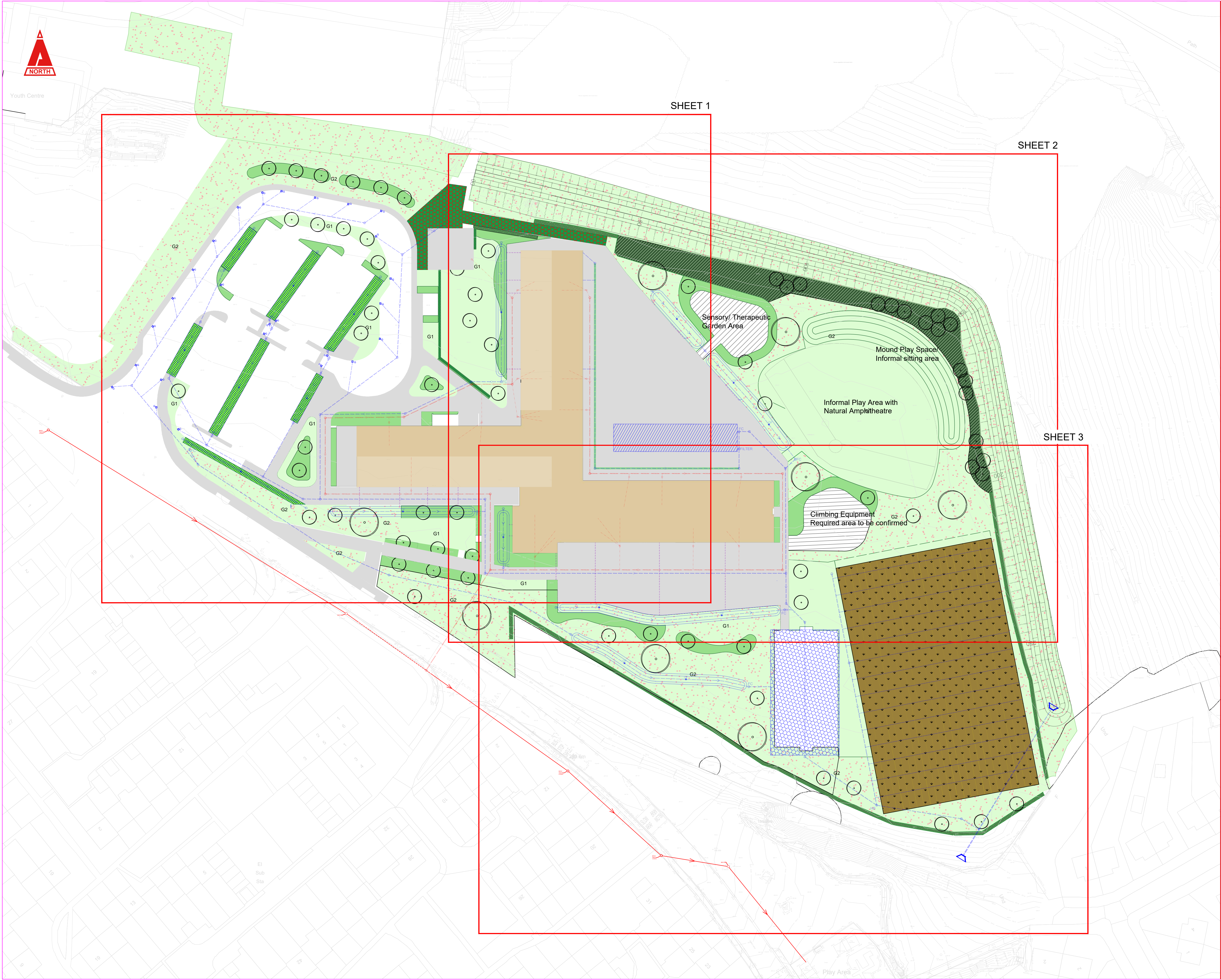
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Appendix EDP 4

Proposed Drainage Strategy Plan



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 THIS SYMBOL IS USED TO HIGHLIGHT INSTANCES OF RISK WITHIN THE CONSTRUCTION PROCESS. ALWAYS CHECK FOR LATER REVISIONS OF THIS DRAWING.

- KEY:
-  PROPOSED SW DRAINAGE
 -  PROPOSED FW DRAINAGE
 -  OVERFLOW COWL
 -  CHANNEL DRAIN
 -  RAINWATER HARVESTING FEED
 -  RAINWATER INLET
 -  RAINWATER HARVESTING AREA
 -  PERMEABLE PAVING
 -  PERMEABLE MUGA
 -  PERMEABLE BOD PAVE 85
 -  RAINWATER HARVESTING TANK
 -  CELLULAR ATTENUATION TANK
 -  SPORTS PITCH
 -  PEN-Y-DRE SWALE
 -  ROAD CONSTRUCTION
 -  FOOTPATH CONSTRUCTION
 -  ORIFICE FLOW CONTROL CHAMBER WITH WIER WALL AND MESH GUARD (PLASTIC)
 -  HYDROBRAKE FLOW CONTROL CHAMBER WITH LEVEL OVERFLOW
 -  SURFACE WATER CULVERT HEADWALL
 -  SURFACE WATER ROAD GULLY

- NOTES:
- DRAINAGE STRATEGY SUBJECT TO CONSULTATION WITH SAB.
 - DRAINAGE RATES, ATTENUATION STORAGE EXTENT OF ABOVE GROUND SUDS SUBJECT TO SAB INPUT.
 - ASSUME FOR COSTING ALL LEVEL THRESHOLD TO HAVE THRESHOLD CHANNELS.

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			14/11/23		
P01	ISSUED FOR RIBA STAGE 2.		DC	BW	BW
			27/09/23		
Rev.	Description		By	Chk	App

Client:

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Project:

GOETRE PRIMARY SCHOOL

Drawing Title:

PROPOSED DRAINAGE STRATEGY PLAN

Drawing No.

CC2538 CAM XX XX DR C 0500

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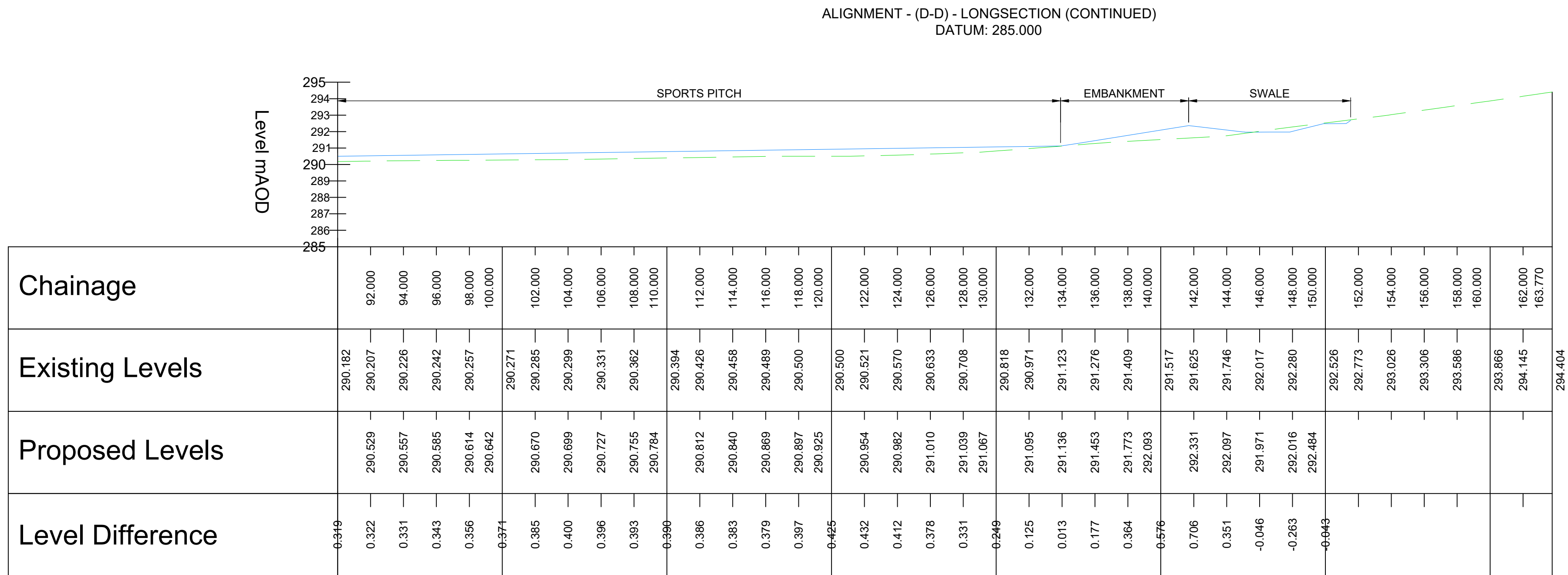
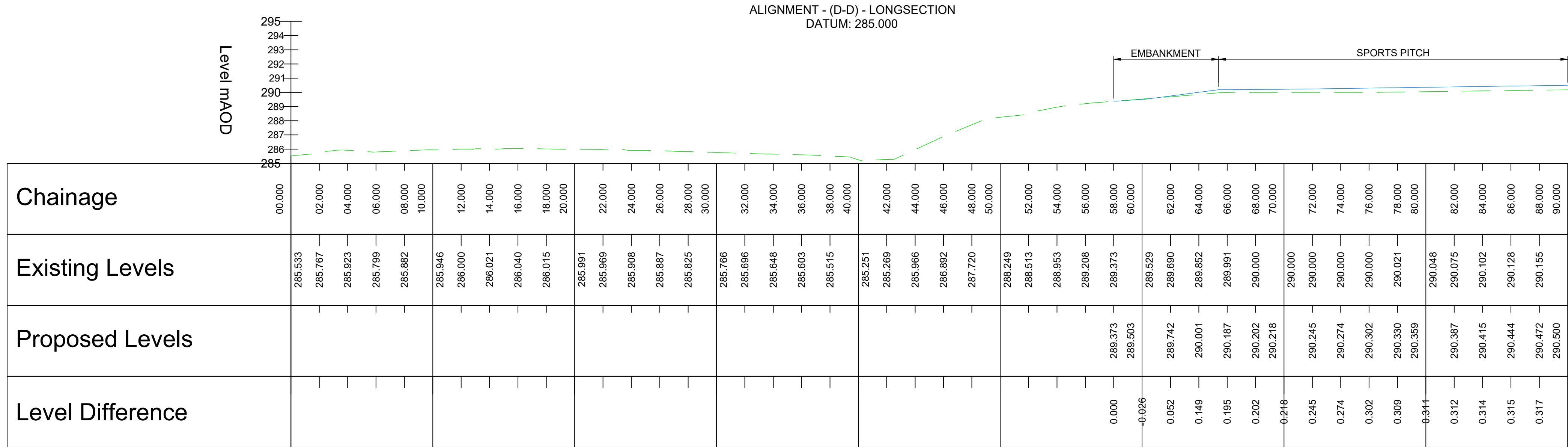
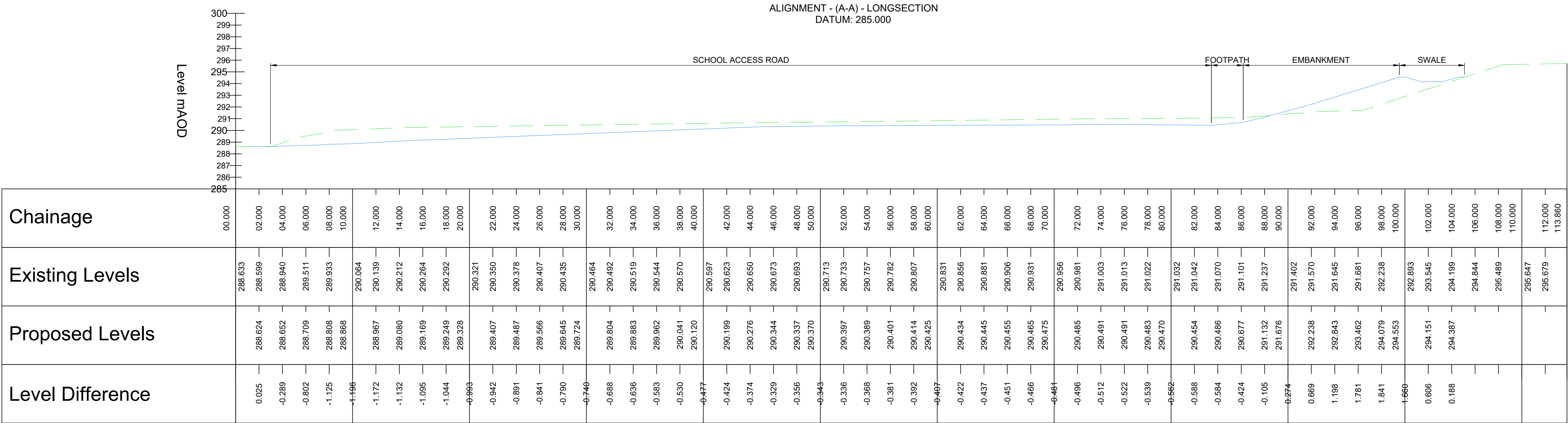
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Appendix EDP 5

Proposed Site Sections



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KEY:

— PROPOSED GROUND LEVEL

- - - EXISTING GROUND LEVEL

P01	ISSUED FOR RIBA STAGE 2.	LW	BW	BW
			13/11/23	
Rev.	Description	By	Chk	App

Client:

MORGAN SINDALL

Project:

GOETRE PRIMARY SCHOOL

Drawing Title:

PROPOSED SITE SECTIONS
SHEET 1 OF 3

Drawing No.

CC2538 CAM XX XX DR C 1200

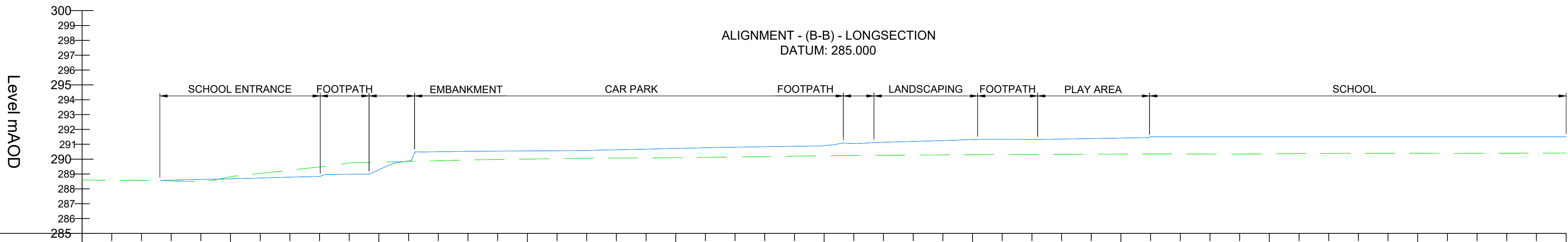
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Status:	Scale @A1:	Rev.
S1 PRELIMINARY	1:200	P01

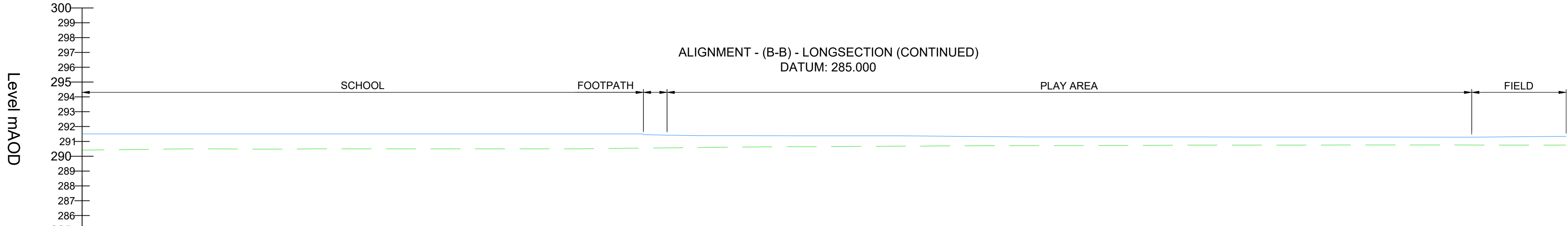
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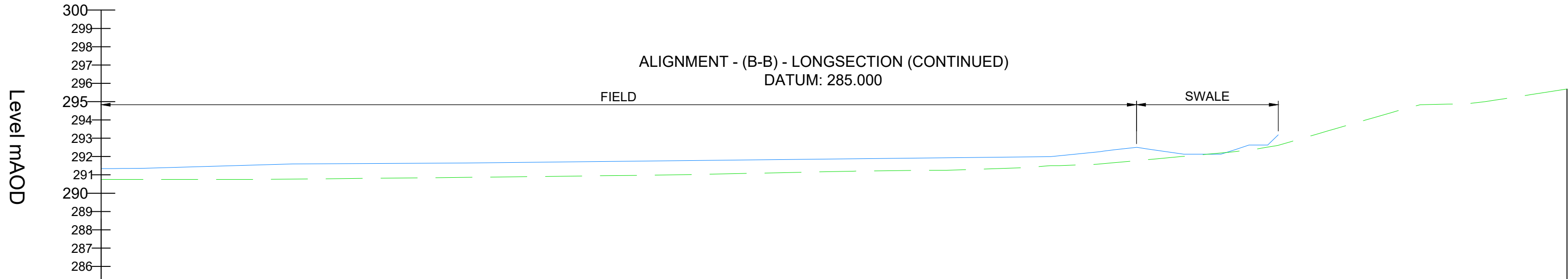
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Chainage		290.410	290.435	290.460	290.485	290.496	290.489	290.481	290.483	290.495	290.500	290.500	290.500	290.500	290.500	290.509	290.529	290.550	290.571	290.592	290.612	290.633	290.639	290.646	290.659	290.671	290.683	290.696	290.702	290.708	290.713	290.716	290.722	290.728	290.735	290.746	290.750	290.750	290.757	290.758	290.750	290.757	290.757	290.755	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750	290.750
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Chainage	202.000	204.000	206.000	208.000	210.000	212.000	214.000	216.000	218.000	220.000	222.000	224.000	226.000	228.000	230.000	232.000	234.000	236.000	238.000	240.000	242.000	244.000	246.000	248.000	250.000	252.000	254.000	256.000	258.000	260.000	262.000	264.000	266.000	268.000	270.000	272.000	274.000	276.000	278.000	280.000	282.000	284.000	286.000	288.000	
Existing Levels	290.750	290.750	290.750	290.750	290.750	290.764	290.783	290.803	290.822	290.841	290.864	290.888	290.912	290.935	290.959	290.982	291.011	291.053	291.095	291.137	291.179	291.213	291.240	291.250	291.310	291.377	291.501	291.561	291.718	291.900	292.083	292.270	292.548	293.082	293.660	294.237	294.790	294.864	295.044	295.353	295.683	296.008	296.333	296.658	296.983
Proposed Levels	291.358	291.410	291.469	291.528	291.586	291.607	291.616	291.625	291.635	291.644	291.666	291.688	291.710	291.732	291.753	291.775	291.797	291.819	291.841	291.863	291.884	291.906	291.928	291.950	291.972	292.001	292.202	292.431	292.302	292.130	292.371	292.816													
Level Difference	0.599	0.608	0.660	0.719	0.778	0.822	0.824	0.814	0.803	0.793	0.760	0.778	0.776	0.775	0.773	0.771	0.765	0.744	0.724	0.704	0.684	0.672	0.666	0.678	0.640	0.594	0.500	0.641	0.714	0.402	0.047	0.101	0.268												

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 THIS SYMBOL IS USED TO HIGHLIGHT INSTANCES OF RISK WITHIN THE CONSTRUCTION PROCESS. ALWAYS CHECK FOR LATER REVISIONS OF THIS DRAWING.

KEY:

 PROPOSED GROUND LEVEL

 EXISTING GROUND LEVEL

P01	ISSUED FOR RIBA STAGE 2.	LW	BW	BW
			13/11/23	
Rev.	Description	By	Chk	App

Client:

MORGAN SINDALL

Project:

GOETRE PRIMARY SCHOOL

Drawing Title:

PROPOSED SITE SECTIONS
SHEET 2 OF 3

Drawing No.

CC2538 CAM XX XX DR C 1201

Project	Originator	Vol.	Level	Type	Role	Number
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Status:	Scale @A1:	Rev.
S1 PRELIMINARY	1:200	P01

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Constructive Thinking

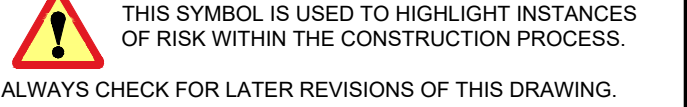
Civil & Structural Engineers
Cambria House
16 Plas St. Pol de Leon
Penarth Marina
Cardiff, CF64 1TR

T 029 2009 3333
E admin@cambria.co.uk
W www.cambria.co.uk
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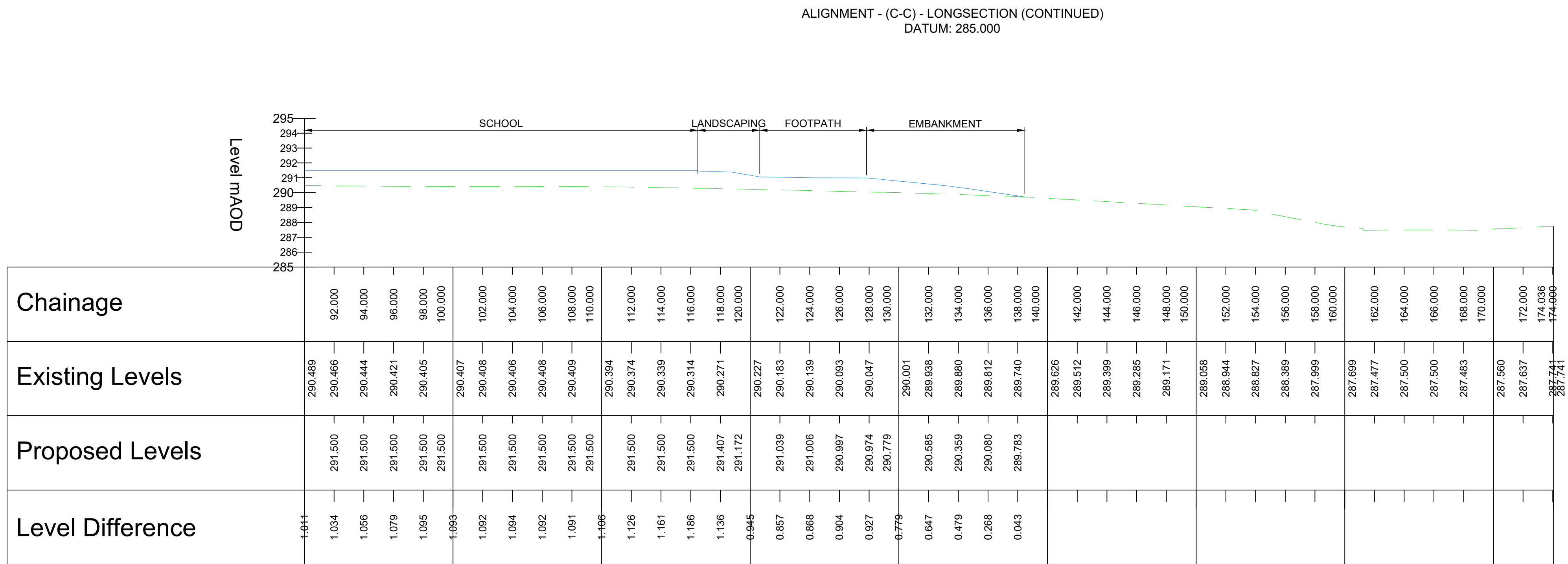
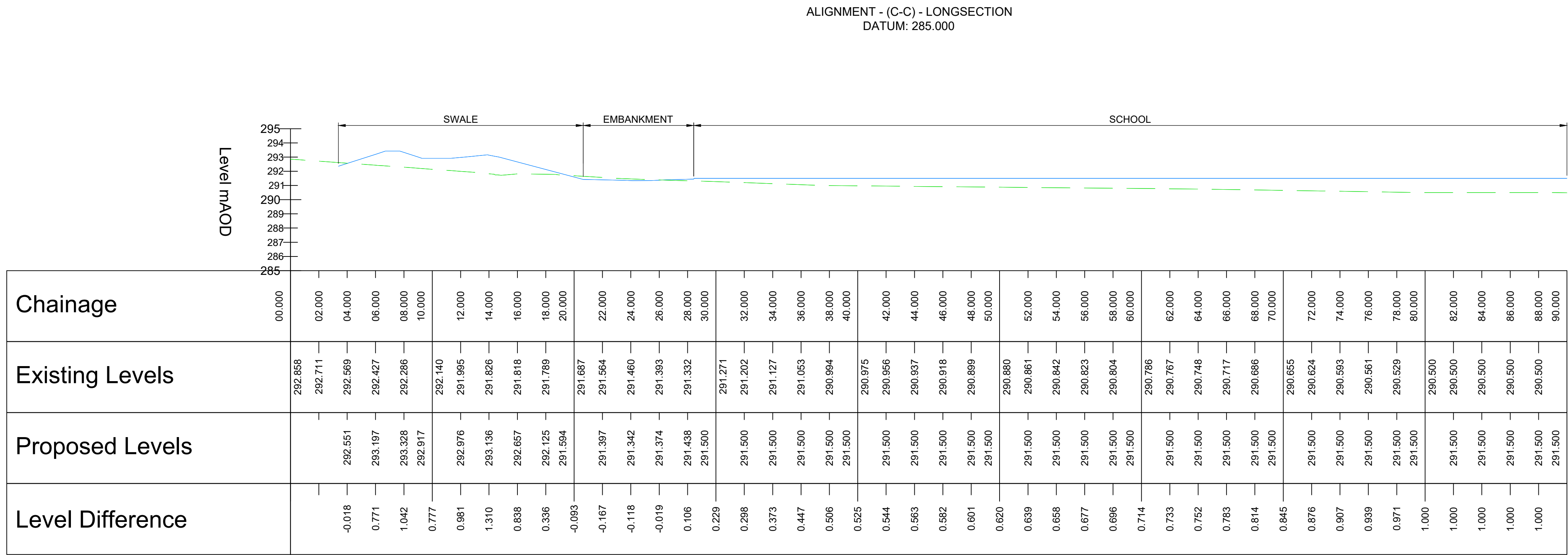
THE CONTRACTOR IS TO REFER TO THE SPECIFICATION, FULL SCHEDULE OF RESIDUAL RISKS IN THE CONTRACT DOCUMENTATION AND ALSO TO INFORMATION FROM OTHER DESIGNERS, IN PARTICULAR THE M&E CONSULTANT REGARDING EXISTING LIVE SERVICES.



KEY:

PROPOSED GROUND LEVEL

--- EXISTING GROUND LEVEL



P01	ISSUED FOR RIBA STAGE 2.	LW	BW	BW
		13/11/23		
Rev.	Description	By	Chk	App

Client:



Project:

GOETRE PRIMARY SCHOOL

Drawing Title:

PROPOSED SITE SECTIONS
SHEET 3 OF 3

Drawing No.

CC2538 CAM XX XX DR C 1202

Project	Originator	Vol.	Level	Type	Role	Number
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Status:	Scale @A1:	Rev:
S1 PRELIMINARY	1:200	P01

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Plans

Plan EDP 1: Designated Historic Assets

(edp7081_d002 18 December 2023 GYo/MBa)

Plan EDP 2: Non-Designated Historic Assets

(edp7081_d003 18 December 2023 GYo/MBa)

Plan EDP 3: Previous Archaeological Events

(edp7081_d004 18 December 2023 GYo/MBa)

Plan EDP 4: LiDAR Sky View Factor Imagery

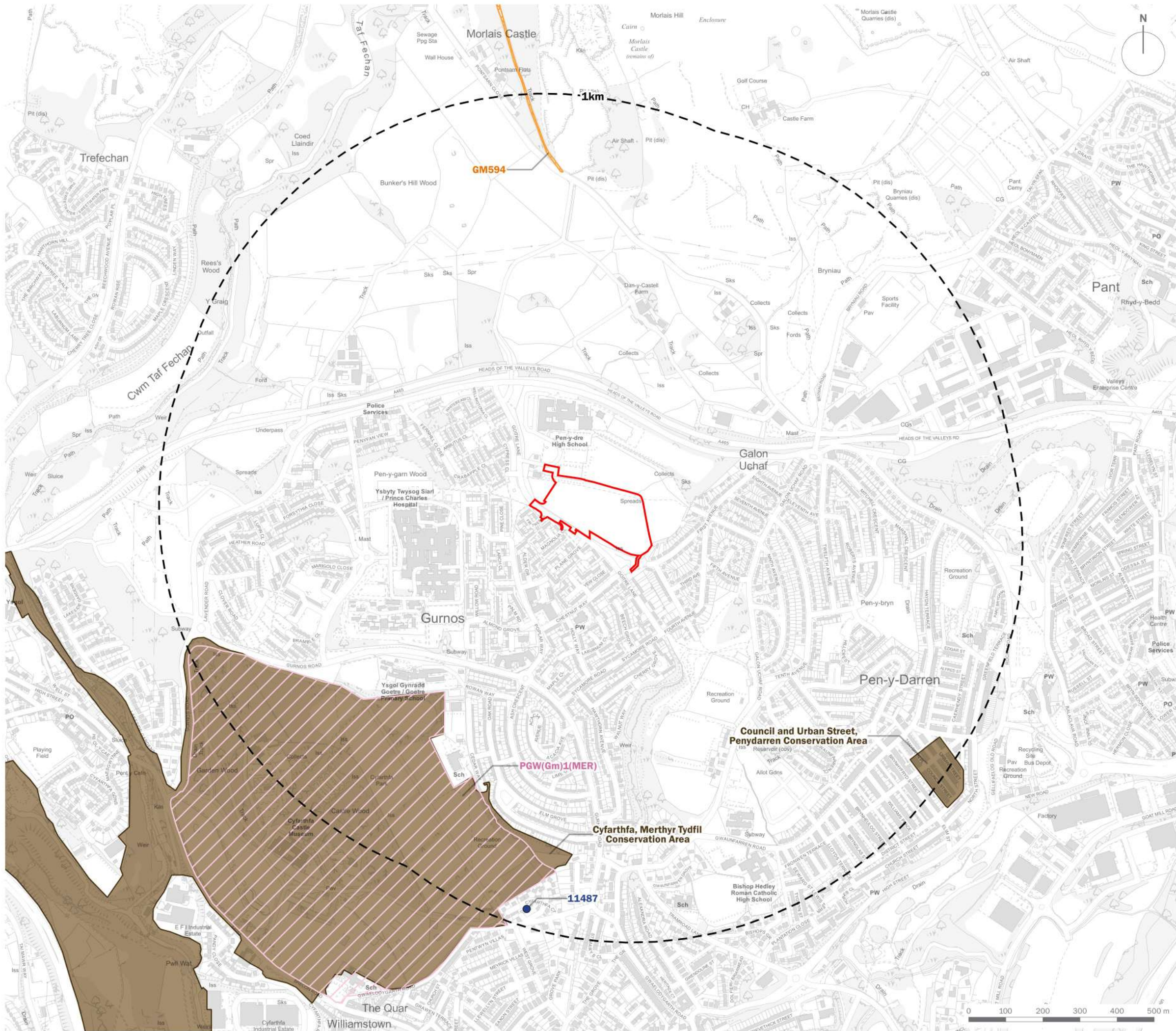
(edp7081_d005 18 December 2023 GYo/MBa)

Plan EDP 5: Historic Maps (1850 to 1968-1986)

(edp7081_d006 18 December 2023 GYo/MBa)

Plan EDP 6: Merthyr Tydfil Landscape of Outstanding Historic Interest – Historic Landscape
Characterisation Areas

(edp7081_d001 18 December 2023 GYo/MBa)



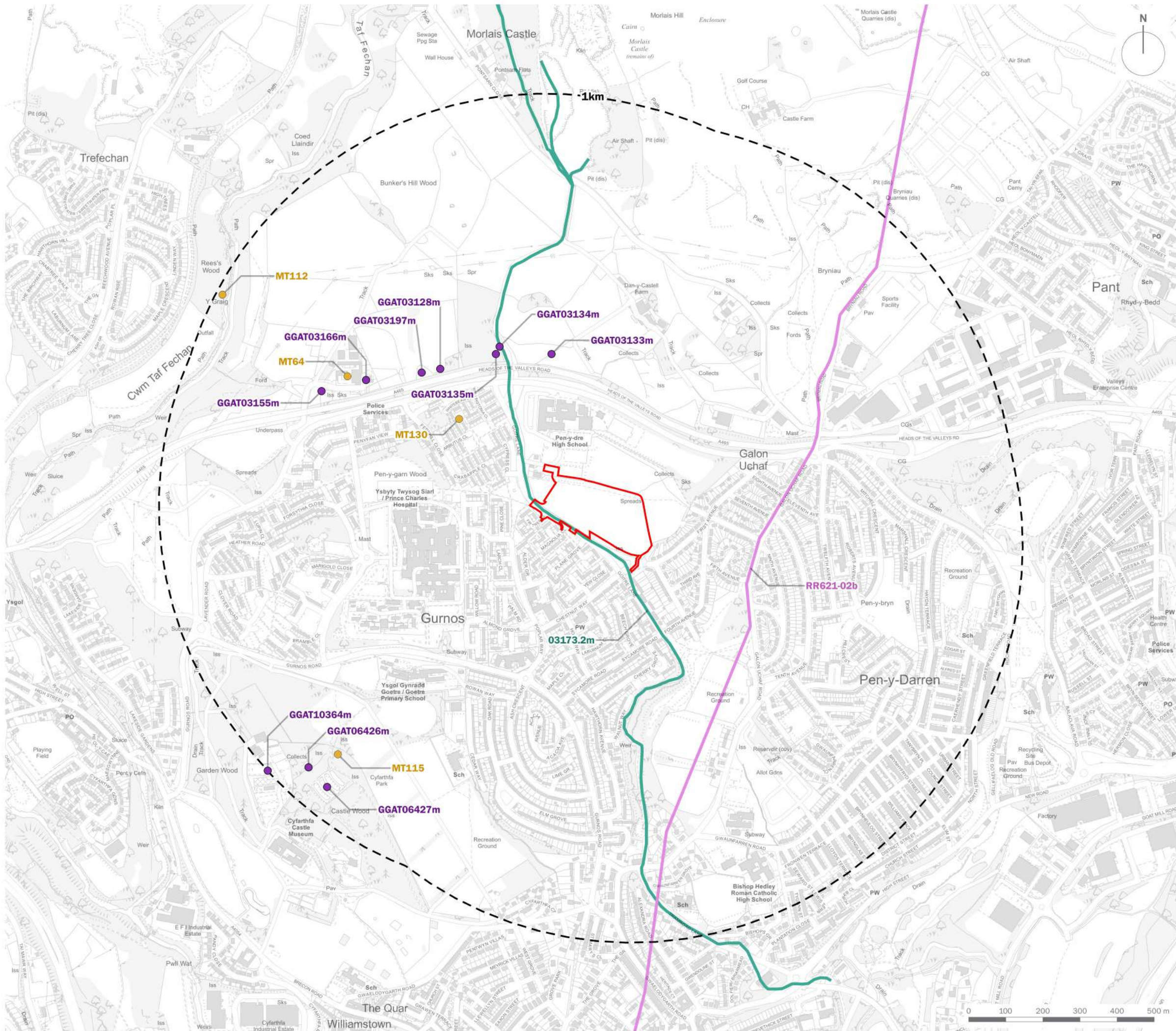
- Site Boundary
- 1km Study Area
- Scheduled Monument
- Registered Park and Garden
- Conservation Area
- Grade II Listed Building

client
Morgan Sindall

project title
Goetre Primary School, Merthyr Tydfil

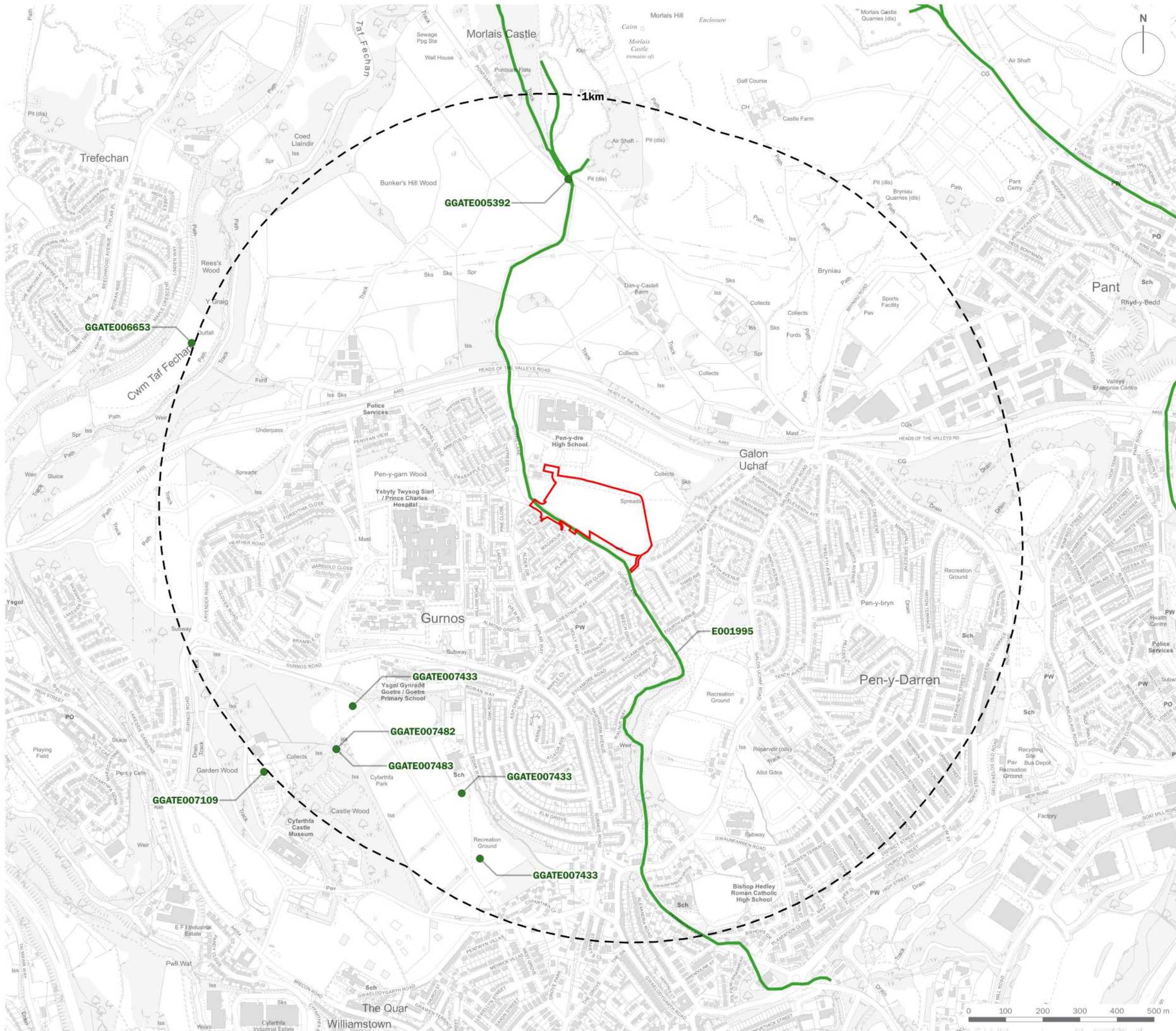
drawing title
Designated Historic Assets

date	18 DECEMBER 2023	drawn by	GYo
drawing number	edp7081_d002	checked	MBa
scale	1:10,000 @ A3	QA	RBa



- Site Boundary
- 1km Study Area
- HER Record
- Roman Road
- Morlais Tramroad
- Locally Listed Building

client	Morgan Sindall		
project title	Goetre Primary School, Merthyr Tydfil		
drawing title	Non-Designated Historic Assets		
date	18 DECEMBER 2023	drawn by	GYo
drawing number	edp7081_d003	checked	MBa
scale	1:10,000 @ A3	QA	RBa



client

Morgan Sindall

project title

Goetre Primary School, Merthyr Tydfil

drawing title

Previous Archaeological Events

date	18 DECEMBER 2023	drawn by	GYo
drawing number	edp7081_d004	checked	MBa
scale	1:10,000 @ A3	QA	RBa

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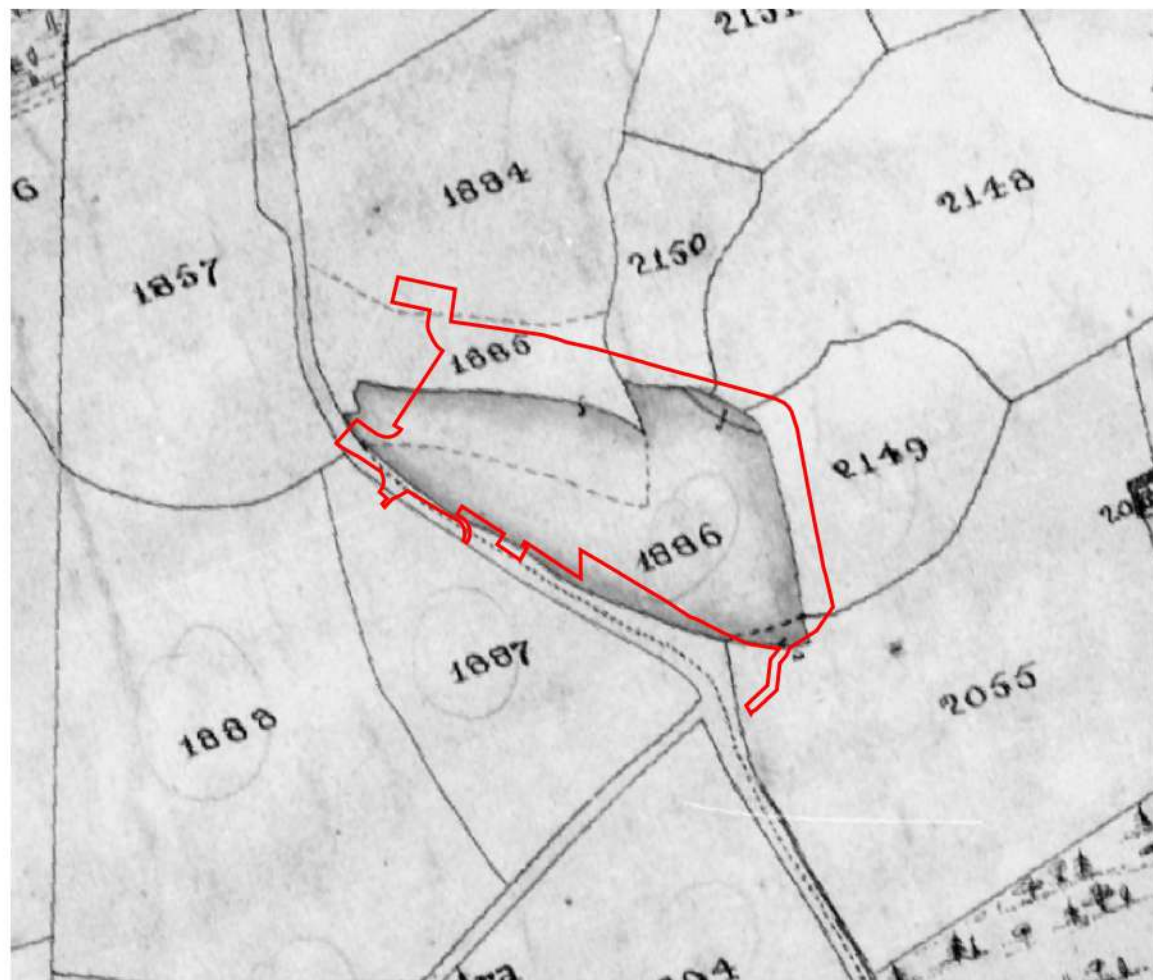
Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk



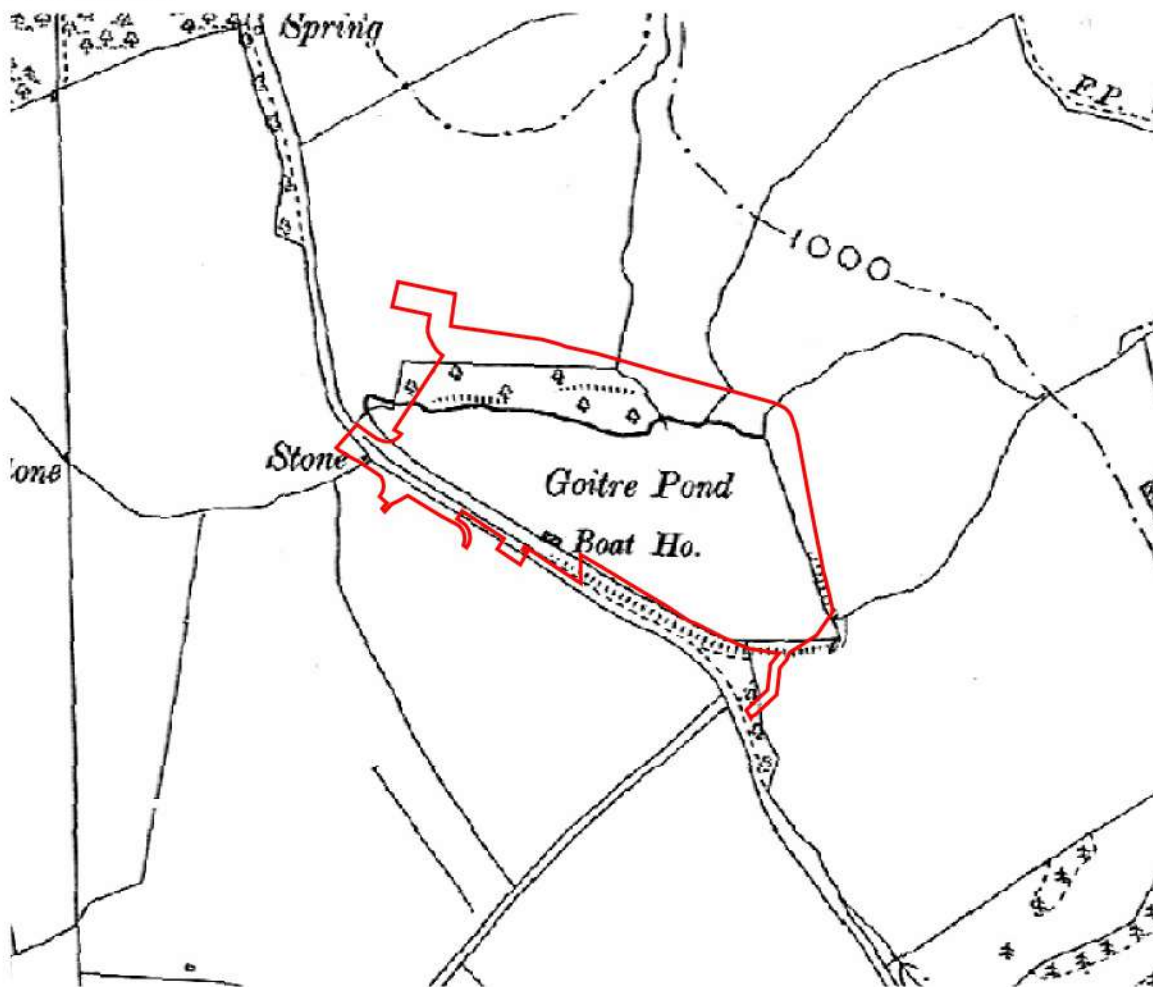
 Site Boundary

 LiDAR Data (2020-2022) Using 1m Digital Terrain Model (DTM) with Sky View Factor Analysis

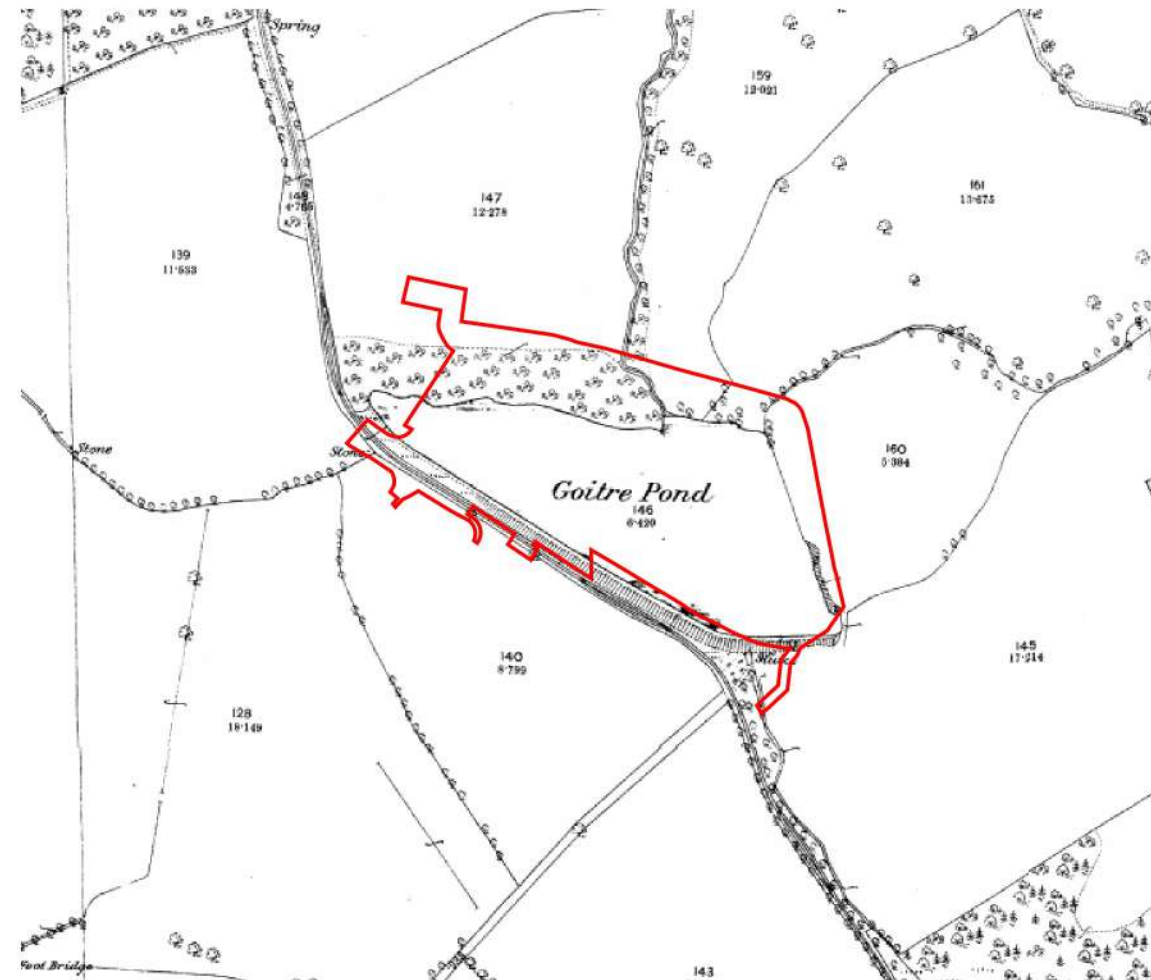
client			
Morgan Sindall			
project title			
Goetre Primary School, Merthyr Tydfil			
drawing title			
LiDAR Sky View Factor Imagery			
date	18 DECEMBER 2023	drawn by	GYo
drawing number	edp7081_d005	checked	MBa
scale	1:2,000 @ A3	QA	RBa



1850 Tithe Map



1901 Ordnance Survey Map

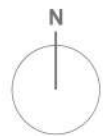


1885-1887 Ordnance Survey Map



1968-1986 Ordnance Survey Map

 Approximate Site Boundary



client

Morgan Sindall

project title

Goetre Primary School, Merthyr Tydfil

drawing title

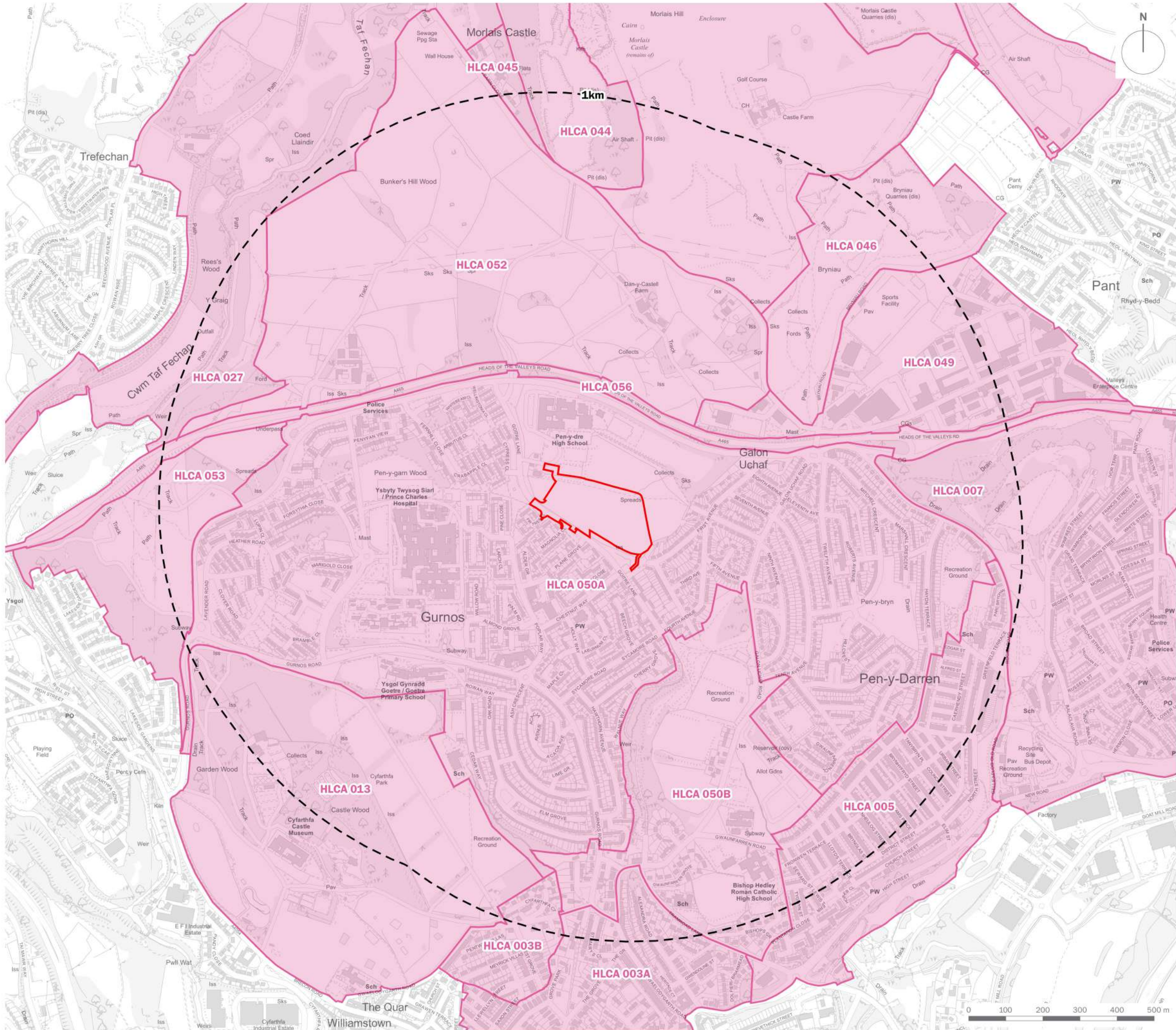
Historic Maps (1850 to 1968-1986)

date	18 DECEMBER 2023	drawn by	GYo
drawing number	edp7081_d006	checked	MBa
scale	1:5,000 @ A3	QA	RBa

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0 50 100 150 200 250 m



client	Morgan Sindall		
project title	Goetre Primary School, Merthyr Tydfil		
drawing title	Merthyr Tydfil Landscape of Outstanding Historic Interest – Historic Landscape Characterisation Areas		
date	18 DECEMBER 2023	drawn by	GYo
drawing number	edp7081_d001	checked	MBa
scale	1:10,000 @ A3	QA	RBa



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