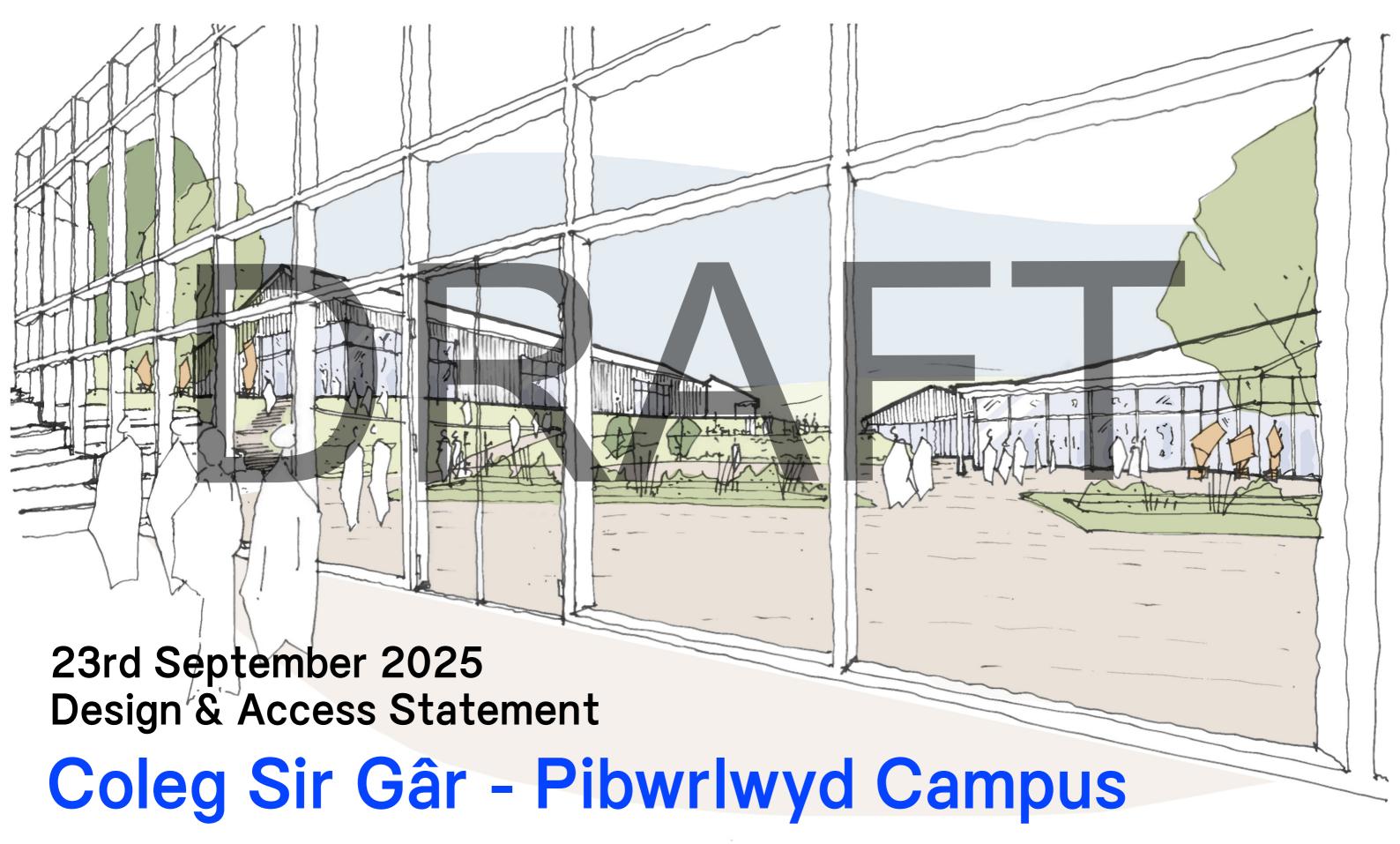
# SHEPPARD ROBSON





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Project Number: 7164

Project Title: Coleg Sir Gar - Pibwrlwyd Campus

Purpose for Issue: For Information

Rev	Date	Status	Issue Purpose	Originator	Authorised
PO1	17/09/25	S2	For PAC	SH	FH



#### 1.0 INTRODUCTION

This Design and Access Statement (DAS) has been prepared by Sheppard Robson (SR) on behalf of the Welsh Education Partnership Company (WEPCo) and Coleg Sir Gâr. Additional input has been provided by Ares Landscape Architects. It accompanies and supports the pre application consultation (PAC) and planning application for the Coleg Sir Gâr, Pibwrlwyd Campus. The statement explains how the proposed development is a suitable response to the site and its setting, and demonstrates that it can be adequately accessed by prospective users.

This document is intended to supplement the information required by Carmarthenshire County Council by summarising the functional requirements of the brief, together with the architects interpretation of the site context and the response to it.

Section 42 of 2004 Town and Country Planning Act substituted the Section 62 of the 1990 Act so as to provide a statement covering design concepts, principle and access issues submitted with an application for planning permission. It states that one statement should cover both design and access, allowing applicants to demonstrate an integrated design approach that would deliver inclusive design and address a full range of access requirements throughout the design process.

A key purpose of the Design and Access Statement is to achieve good design, supporting the role in the delivery of sustainable development through the planning system. This is a fundamental objective of the Planning Policy and as such is reflected in the National Planning Policy Framework.

This DAS has been written with reference to the guidance document 'Design and Access Statements in Wales' (April 2017, prepared for the Welsh Government by the Design Commission for Wales). It is intended that this DAS will cover all of the required aspects set out in the guidance document.

This document has been developed in conjunction with feedback received from various preapplication meetings held with the Local Authority and the Design Commission for Wales.



#### 2.0 DEVELOPMENT BRIEF

The Coleg Sir Gâr Pibwrlwyd Campus project is a redevelopment of the existing Coleg Sir Gâr campus outside Carmarthen to provide a new 'state of the art' vocational training centre. The new development will sit alongside existing animal science and automotive facilities already at Pibwrlwyd, bringing curriculum areas from other campuses across Carmarthen into a single flagship Skills Centre. The new development will offer specialist facilities for teaching construction, hair & beauty, art & design, ILS, catering and hospitality, alongside facilities to support classroom-based subjects including welsh language, teacher training and business.

Whilst there will be some 14-16 learners through the schools outreach programme, most students will be post 16, including higher education, adult learners, apprentices and businesses. There will be a strong emphasis on creating links with local businesses, employers and the community.

The new campus will create an inspiring learning environment for staff and students, but also present professional and business-like surroundings to attract businesses to the college as a centre of excellence for skills.

The College has defined a number of key objectives through the original brief:

- The project should have the look and feel of an inspirational educational building and should reflect the college status as a World Skills Centre of Excellence.
- The new development should enhance the connection between the new campus and the
  existing retained facilities south of Pibwrlwyd Lane, making the most of the external
  environment.
- The new development should facilitate a varied pedagogical approach with a mix of face-toface interactive sessions, practical sessions, self-directed study and blended delivery.

The new centre will be highly sustainable, meeting Net Zero Carbon in Operation (as defined by the UKGBC) and will meet strict targets for embodied carbon. The development will provide a vibrant and inspiring learning environment with a professional and friendly atmosphere where students and the community feel welcomed and supported. Teaching spaces will be high quality and flexible and support high-level vocational training. Central facilities will also support the existing campus facilities south of Pibwrlwyd Lane, creating a connected campus with vibrant internal and external social spaces which respond to the semi-rural setting.

The facilities will be flexible to accommodate growth and changes in provision – particularly in the context of the likely pace of change of vocational subjects to respond to market changes- and designed in a manner where the nature of individual spaces can be adapted without compromising on the building performance or the high-quality learning environment.



Site Location



#### 2.1 Location

The site sits north of Pibwrlwyd Lane, south of Carmarthen. The site itself incorporates the existing buildings and car parking for the Coleg Sir Gâr Campus and an area of open land to the east. These parcels of land were identified as the college and area of future expansion in a wider masterplan (see following pages).

The site is bounded by Pibwrlwyd Lane to the south and the existing Coleg Sir Gâr Pibwrlwyd South Campus. To the West the site is bounded by the A434 and a residential property. The land to the north and east is farmland which has been earmarked for development in the Local Plan.

#### 2.2 Project Origin

The background to this development lies in the continued improvement of the Coleg Sir Gar estate to meet various long term strategic objectives. These relate to broader goals including: Welsh Government education and training policy, responding to demographic and economic trends, moving towards net zero carbon and increasing community benefits. The development is part of the Mutual Investment Model (MIM), a Welsh variation of Private Finance Initiative, an innovative Welsh Government model created to deliver investment in public infrastructure and to finance major capital projects. The model allows local authorities and Further Education institutions to develop and deliver projects through MIM. The campus redevelopment will be the fifth project being developed under the MIM model.

#### 2.3 Stakeholders

The design team have engaged extensively with the client team and the college to meet the brief which has been the basis of the development proposals described in this DAS.

The principal stakeholder is WEPCo, which is a joint venture between the Development Bank of Wales (on behalf of Welsh Ministers) and Meridiam, a long-term investor in sustainable infrastructure benefiting communities around the world and leading advocate of the United Nations Sustainable Development Goals. The purpose of WEPCo is to create and drive forward innovative value for money development solutions under the 21st Century Schools and Colleges (Band B) Programme that improve the education estate of today for the generations of tomorrow. Coleg Sir Gar are the end user.

Key representatives from WEPCo and the College have been consulted with extensively throughout the early stages of design, by means of Client Engagement Meetings (CEMS) and more detailed Departmental Briefings with department heads and other relevant staff. To support this process, Technical Advisor (TA) reviews were also undertaken at key project stages.

Consultations have been conducted with Carmarthenshire Council and the Design Commission for Wales and the Welsh Government. The key principles of the projects were presented, including the building setting, massing, façade finishes, entrances, landscape, and SuDs. The overall feedback on the projects has been positive, and all comments have been considered.



Coleg Sir Gâr



### 2.4 Client/Project Aspirations

The College has defined a number of educational objectives which the new development must meet:

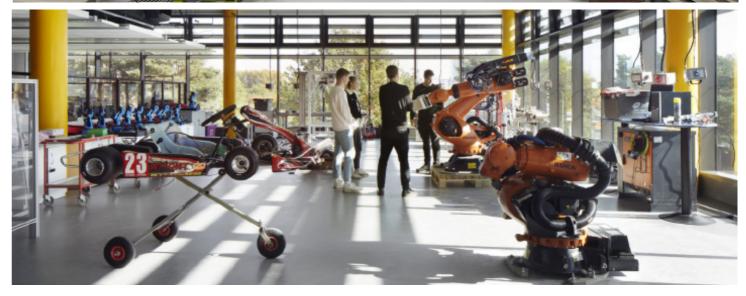
- The new development should be designed with consideration of the wider Coleg Sir Gâr campus, including the existing facilities south of the roar to bring the two areas of the campus together in a more cohesive way.
- Construction is the largest vocational offer on the site and has the largest number of students. The department should be celebrated and should be easily visible from the central facilities.
- The construction buildings should facilitate a 'showcase' space which has the flexibility to be
  used as a teaching area, but can also act as an industry showcase and/or incubator space.
   This should be situated close to the central facilities and easily visible.
- The Creative Arts facility should have a distinct identity and reflect the Higher Education purpose of the facility. It should have the look and feel of an inspirational building that encourages creativity.
- Catering and hospitality facilities are to be placed centre-stage with an elevated position and views of the surrounding landscape.
- The Salon will be open to the public, and should have a dedicated reception and waiting area.
- Distinct provision should be provided for wellbeing, student support and learning support.

#### Sustainability

The brief also sets out key targets for sustainability, which is an important consideration for both the college and the Welsh Government. The buildings are designed to enable efficient use of energy and water, minimise heating requirements, preserve and enhance existing natural resources whilst addressing their own environmental impact appropriately. The sustainability statement later in this DAS provides further information on how the specific targets have been addressed.







Photographs of the School of Science Engineering & Environment Building, University of Salford, representing the aspirations of the college for a high-impact, aspirational environment.



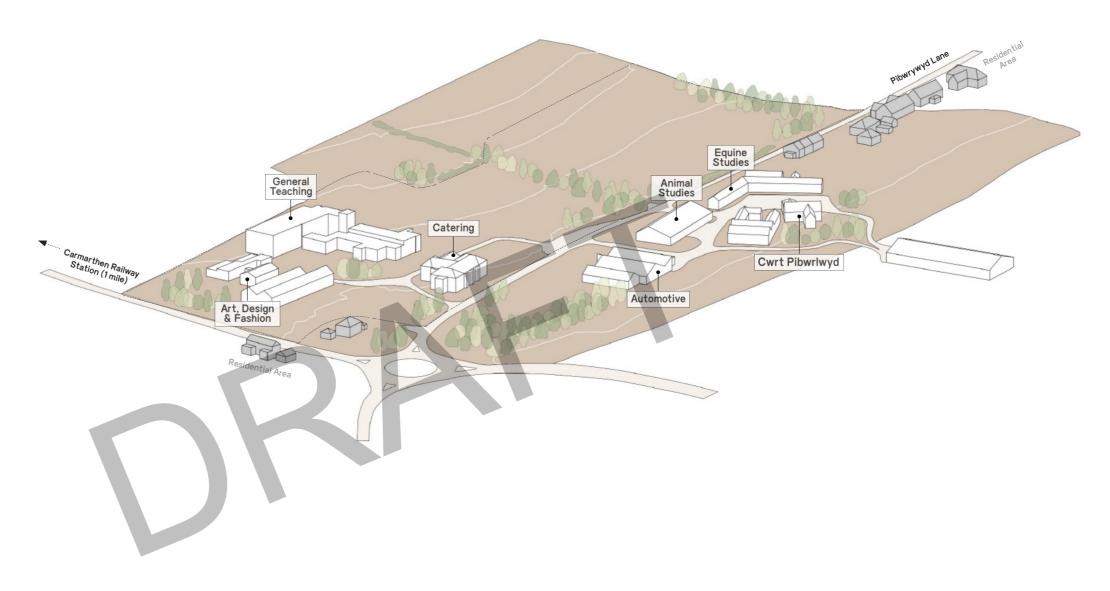
#### 3.0 SITE ANALYSIS & CONTEXT APPRAISAL

#### 3.1 Site and Immediate

# **Surroundings**

The site sits north of Pibwrlwyd Lane, approximately one mile south of Carmarthen. The site incorporates existing buildings and car parking for the Coleg Sir Gâr Campus, and an area of open land to the east. These parcels of land were identified as the college site and future college expansion in a wider masterplan. There are a number of material constraints across the site including existing buildings, level changes, water mains, existing utilities and a blue-green corridor. The redevelopment site has no mapped flood risk according to the Development Advice Map and the Flood Maps for Planning.

Constraints and opportunities are set out in more detail in section 3.7 below. The site itself has been a major driver in the development of the design which looks to provide a coherent campus of buildings which are sympathetic to the site, benefit from the spectacular views across the valley and the greenery of the site, and provide an inspirational learning environment.







### 3.2 Wider Context and Surroundings

The college campus itself is only part of a wider area of land owned by Coleg Sir Gâr, including a large area of land north of the site. There are proposals for this area to be developed in the future to provide commercial and residential development. These proposals are recognised within the Local Plan, and are illustrated in the adjacent diagram.

Connections between the college campus and adjacent areas would be strengthened through the new development, both within the college estate itself and to adjacent public areas.

Links between the development site and the South Campus are to be strengthened through the new masterplan. A coherent campus is a critical part of the college brief and it is important that students who study in the exiting automotive and animal science departments south of the road feel welcomed into the new areas of the campus through the design of a secure but welcoming entrance sequence and provision of amenity space both inside and outside of the buildings.

It is also important to acknowledge key North-South pedestrian links from the residential plots to Pibwrlwyd Lane and beyond. These will be incorporated towards the western side of the site to respond to the likely desire lines and to incorporate with the site without compromising the security of the campus heart. Green infrastructure and walking/cycling routes are important throughout the whole masterplan.

New college development site in the context of the wider masterplan



## 3.3 Site History and Listed Structures

The mansion of Pibwrlwyd or Cwrt Pibwrlwyd is a Grade II\* listed building on the southern side of the campus and incorporates part of a late medieval-sixteenth century house. The interior contains one of the most comprehensive stencil-painted fictive-wallpaper schemes in Britain. The house was sold to Carmarthenshire County Council in 1919 and was used as a teaching farm for the post-war generation. The Pibwrlwyd Farm Institute was established on the site in 1926.

Although the listed building is outside of the sit boundary, it is important that the proximity is recognised and considered. A separate Heritage Impact Assessment has been prepared as part of the submission.

# 3.4 Existing Buildings

The adjacent photographs show some of the existing buildings on site. The college campus has grown organically over time, responding to growth and changes in curriculum, and the architectural styles reflect that with no single dominant architectural style. Material and colour palettes vary, with older stone buildings sitting alongside more recent metal-clad structures.







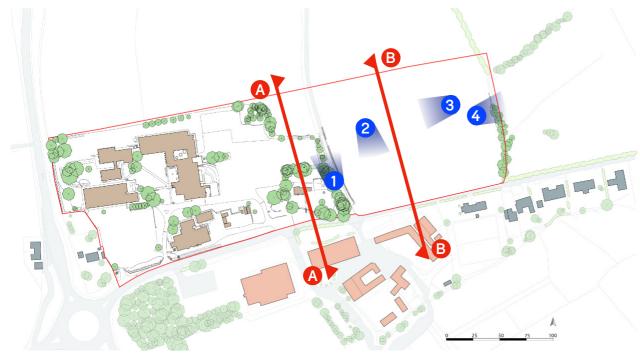




Photographs of the existing campus on Pibwrlwyd Road



# 3.5 Context Photographs







# 3.6 Topography



+28m at top, +14m at road – 14m difference (3/4 storeys)



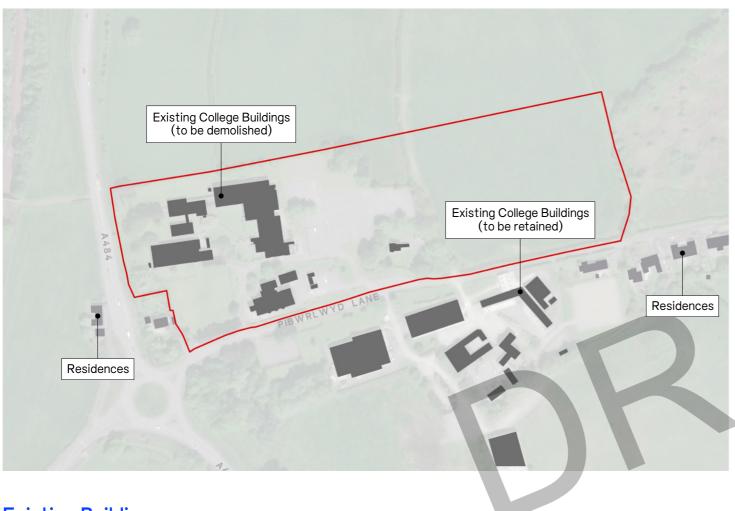
+32m at top, +15m at road – 17m difference (4/5 storeys)





## 3.7 Site Constraints and Opportunities

A detailed study has been carried out by Sheppard Robson alongside Ares Landscape Architects to understand the site constraints. This has been assisted by the rest of the design team and incorporates survey information for the site. There are a number of material constraints across the site, as well as opportunities for benefits to the project. These are summarised on the following pages.





# **Existing Buildings**

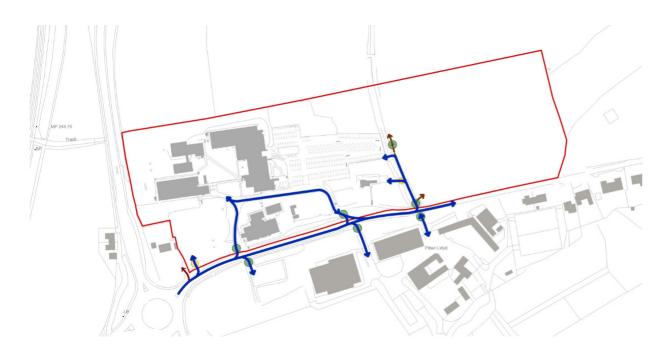
- · Within the red line all the existing buildings are within the western parcel of land
- · Existing and previously existing buildings have created plateaus on the sloping site
- Small no of adjacent residential properties to south east and immediately to south west boundary

# **Existing Vegetation**

- Large number of existing trees of good to high value
- Established hedgerows
- Ecological value and screening, amenity advantages
- Importance of retaining existing vegetation where possible
- Opportunity to remove lower quality specimens and replace with high quality new trees







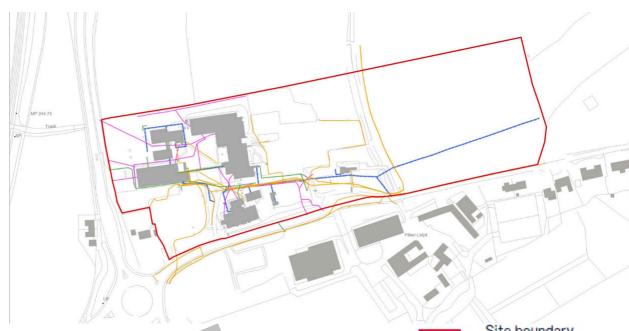
#### Access

- Existing ingress and egress points to be retained and improved
- Current service and agricultural access via existing farm track route. Two crossings / culverts over stream



## **Topography**

- Fall of approximately 12 to 15m from north to south, with a bias towards south west at the lowest point
- The gradients vary across the site and there are some very steep gradients on the western parcel of land where level plateaus have been cut for buildings



# **Existing Services**

- · Western parcel of land more constrained than the eastern Parcel of land
- Minimising conflict with existing utilities preferred
- Likely to need diversion of water main on eastern parcel

# Site boundary

Existing buildings

UG - Electric

UG - Water/Foul Drain

UG - Gas

UG - BT/Comms



## Watercourses

- · Naturally drain toward existing water courses to south east of site
- Storm water drains
- · High volume of vegetation for intercepting water

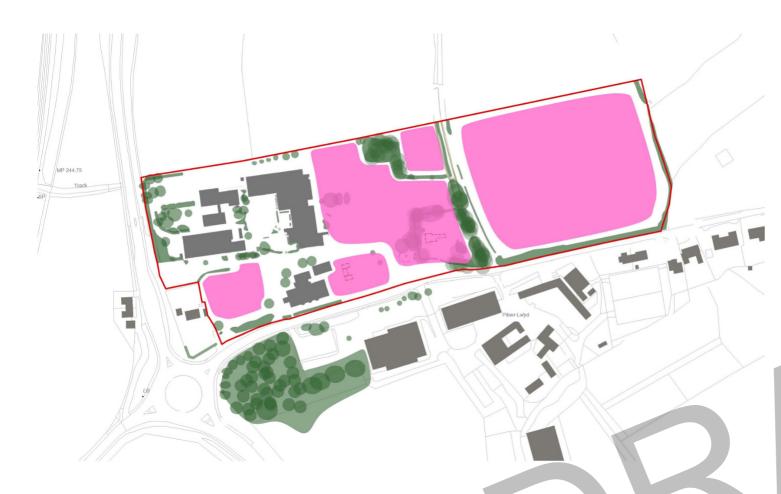
Site boundary

Existing buildings

UG - Storm Water Drain

Existing watercourse

Flood zone



#### **Buildable Area**

The site analysis has strongly informed the overall masterplan. The diagram to the right shows the main areas identified as buildable areas for the new development. These have been identified in line with the following key considerations:

- Working with levels by making use of existing plateaus, 'stepping' landscape areas on steeper gradients
- Avoid existing buildings to allow college to function during the build
- Aim to retain as many trees and good quality hedgerow as far as practicable
- Minimise utility diversions



## **Movement Patterns**

Site boundary

Buildable area

Existing buildings

Pibwrlwyd Lane splits the campus into two halves and provides access to residential properties to the East of the campus.

There are bus stops on the A484 directly west of the site and Carmarthen train station is approximately 1 mile North.

#### **DESIGN STATEMENT**

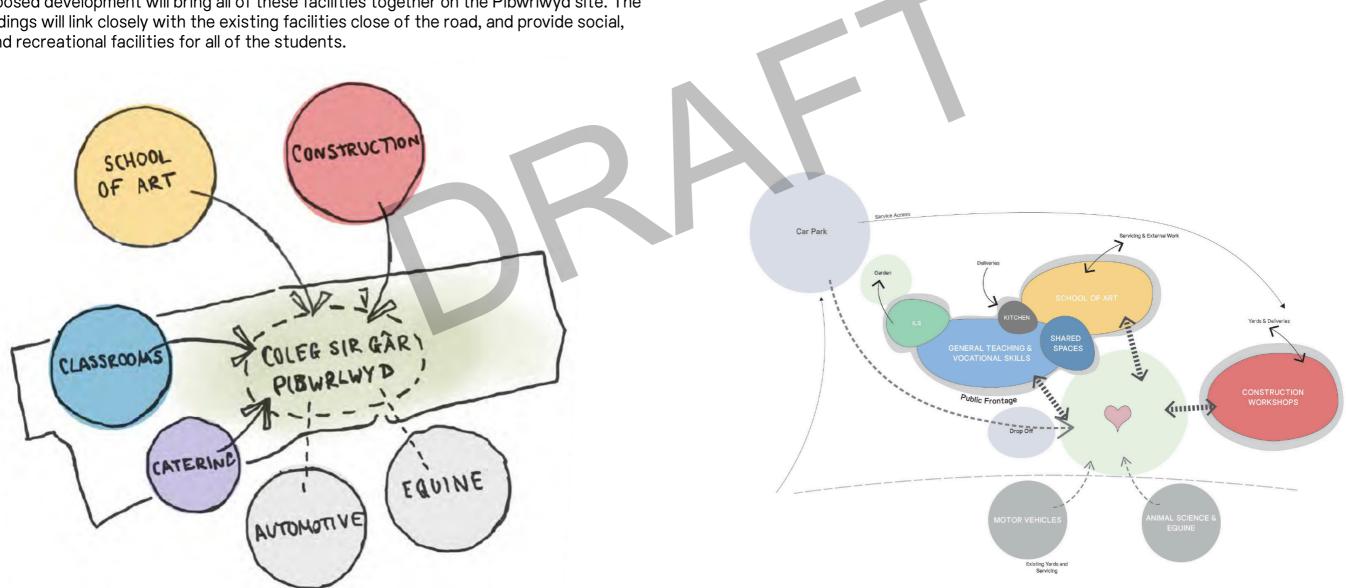
## **Design Principles and Concept**

#### 'A Vision For One Campus'

The Coleg Sir Gâr Pibwrlwyd Campus encompasses the land north of the road which will be home to the new development, as well as existing departments south of the road which will be retained. Facilities from other sites will be relocated to Pibwrlwyd within the new development and it is critical to the college to create a cohesive campus, bringing the different facilities together on one site.

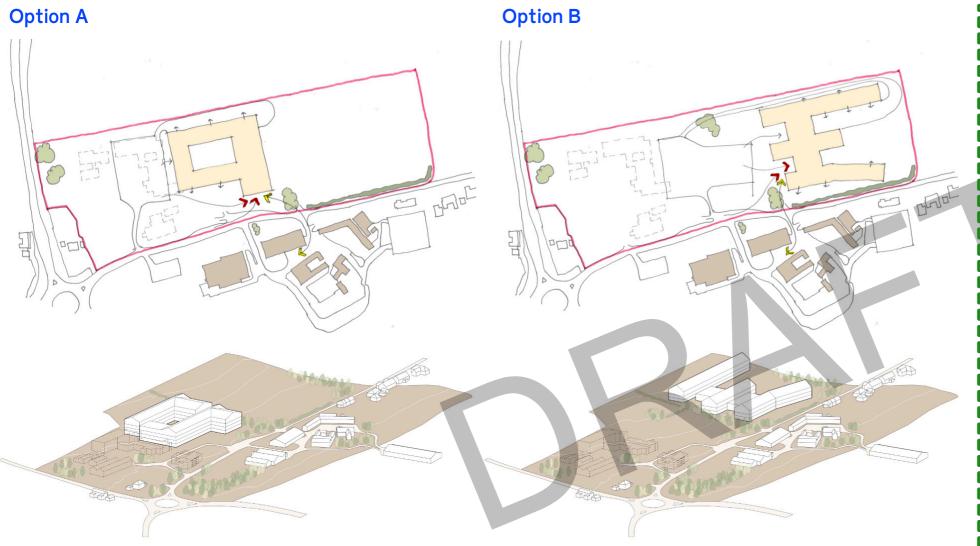
Construction is to be relocated from Ammanford and the School of Art from Job's Well. Hair & Beauty is to be expanded to add to the existing facilities at the Graig campus. Catering, Welsh Language, Business and Teacher Training are already at the Pibwrlwyd site but will be rehoused into the new building. The new building will also provide central facilities for the existing buildings south of Pibwrlwyd Lane including Animal Science and Automotive.

The proposed development will bring all of these facilities together on the Pibwrlwyd site. The new buildings will link closely with the existing facilities close of the road, and provide social, dining and recreational facilities for all of the students.



## 4.2 Site Plan & Layout

The site plan was developed over a series of in-depth workshops considering the aspirations of the college, the design of a cohesive college and the constraints of the site as set out in the previous section. Context of the site, adjacencies, key routes and connections were all considered to develop a site plan which responds to the site, and provides appropriate high-quality facilities for teaching. The diagrams below show some of the options that were considered. Reviews of these showed Option C to be the preferred option in terms of response to the site constraints and the architectural merit of the scheme. Multiple buildings across the site terrace up the hill in response to the contours and the buildings can be positioned to avoid key constraints and make the most of key views across the valley and connections to the south campus. This creates a cluster of buildings around a central landscaped heart, which provided internal and external amenity for the students from the whole campus.



- Good visibility from site entrance
- Costly site works
- Difficult departmental access
- Proximity of different functions noise etc.
- Lack of ground floor access
- Difficult future expansion
- Scale on the site

- Difficult departmental access
- Very difficult to service workshops
- Difficult future expansion
- Proximity of different functions noise etc.
- Far from site entrance impact
- Scale next to local residents



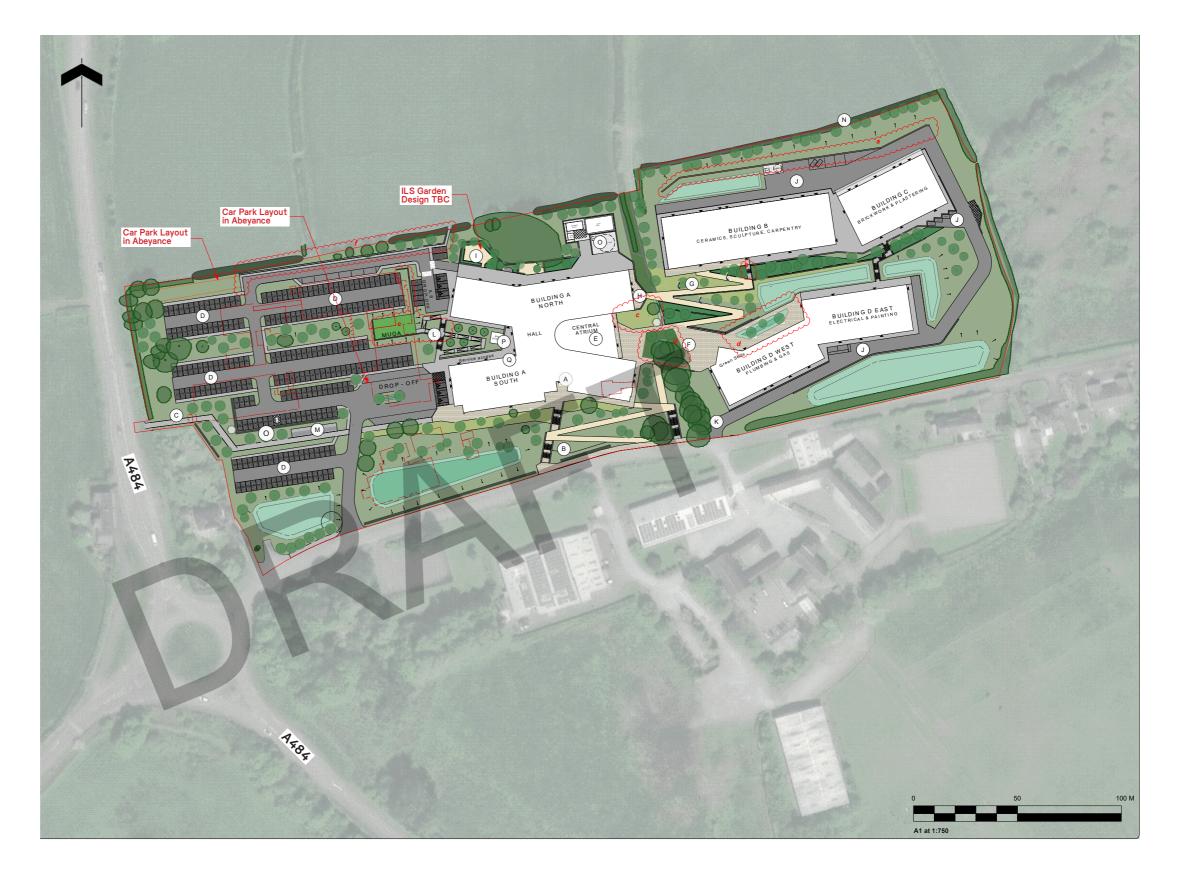
- Good visibility from site entrance
- Space for access and servicing
- Maximum ground floor department access
- Separation of different functions noise etc.
- Separation of routes
- Campus approach with good external spaces



- (A) Main Entrance
- B Southern Pedestrian Approach From Pibwrlwyd Approach
- D Vehicle Parking
  TBC nr. standard spaces
  TBC nr. accessible spaces
- **E** Social/Dining Atrium Space
- F Central Plaza
  External plaza space with planting and amphitheatre seating
- G Sculpture Garden

  Terraced landscape with incidental art and sculpture features
- (H) Art Terrace
- ILS Garden
  With raingardens, feature trees and seating
- J Construction Yard
  To front rear of workshops
- Access Road
  Access for services and vehicular users requiring access to workshops
- (L) ILS Pedestrian Access
- (M) Covered Cycle Shelter
- (N) Boundary Hedge Planting
- (O) Plant Compound/Substation
- (P) Bin Store
- **Q** Plant Room
- (R) Existing Bus Stop

\*Please note design proposals outside the red line boundary are for illustrative purposes only at this stage and sit outside of the MIM scope



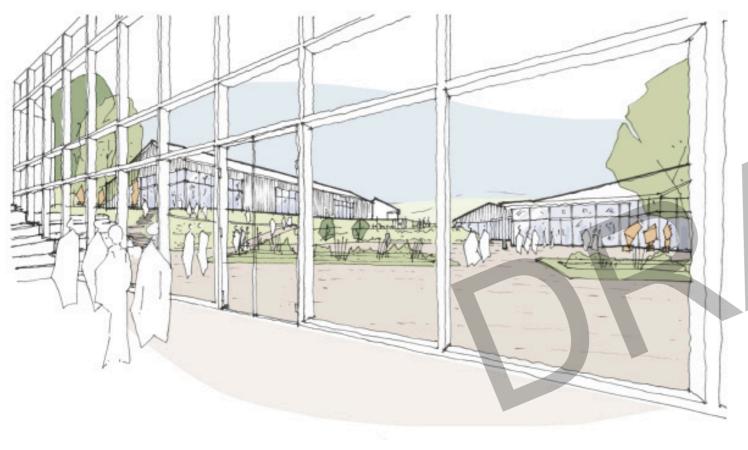
Detailed landscape design has been undertaken by Ares Landscape Architects. The masterplan creates an attractive, public-facing frontage to Pibwrlwyd Lane and a series of diverse and rich spaces for the staff and students of the college. The site maximises opportunities for social interaction whilst also addressing complex functional requirements including level changes, access, car parking and SUDs provision.



## 4.3 Outline Design Strategy

The previous pages showed a summary of the strategic site considerations and initial massing. This exercise established the need to split the accommodation across the site to provide appropriate facilities for both construction and teaching including access, deliveries and the appropriate acoustic environments.

The variety of subjects offered by the college across all of the buildings on site require a mix of different spaces, however maintaining connectivity between the different departments was central to the requirements of the college to ensure links between different departments. These connections are both physical and visual, to ensure that learners and visitors to the college are aware of the different vocational offers on site.



## Development sketch showing the view from the atrium, Building A, out across the landscape to Building B, C and D

#### **Spatial Organisation**

The buildings housing the various departments are clustered around a central landscaped heart, with physical and visual connections between the different departments and an enhanced connection to the existing campus buildings south of Pibwrlwyd Lane. This central landscaped heart links to an internal atrium space housing the central facilities of the college- social spaces, dining, wellbeing and student services.

Some of the more practical subjects, such as construction, are located in 3 buildings to the east of the site, each with service yards and delivery access and each responding to the contours and constraints of the site. Ceramics and sculpture are located adjacent to carpentry, with shared woodworking and metal workshops used by both departments. The remainder of the departments are located in a single three-storey building to the west of the site, surrounding the atrium space.



Development sketch showing the view of the buildings from Pibwrlwyd Lane

#### 4.4 Scale & Massing

The scale of the building is influenced by the requirements of the brief, alongside consideration of the local context. Curriculum requirements for lots of spaces with external access drive a low-rise development of multiple buildings. From assessment of the local context, the low rise 1-3 storey buildings are in keeping with the general scale of local development.

The form of the buildings responds to the contours of the site, leading to linear buildings following the contours of the site. Each building has a pitched roof to deal with rainfall and to provide south-facing roof space for photovoltaics.

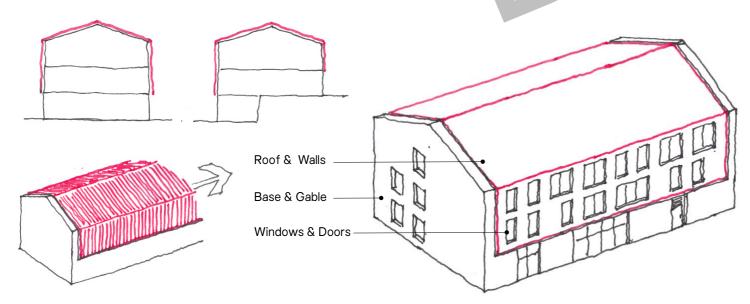
The form of the buildings are influenced by the Welsh Longhouse. These traditional Welsh dwelling allowed people and livestock to live under the same long roof, and could be built along the side of the hills of South Wales. The earliest examples date back to the 13<sup>th</sup> century are are considered an important part of the architectural heritage.

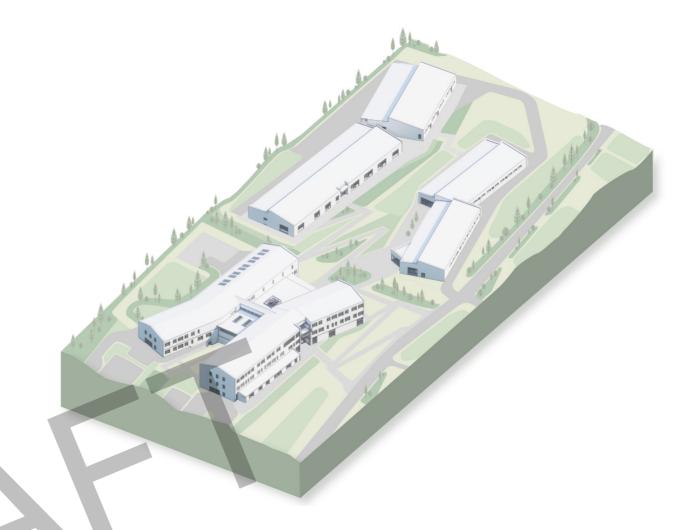
#### 4.5 Heritage Considerations

Heritage is an important consideration across the development and it is important that the building makes recognition of the heritage of South Wales. In addition to influence from the Welsh Longhouse dwellings, consideration has been made to the local vernacular. The roof form recognises the dominance of the pitched roof in this area of Wales, responding to the local climate. Materials and colours will also be influenced by the environmental colour assessment which has looked at local material palettes. A colour palette is developing from this study which will influence the building to ensure it is sensitive to the setting.

More locally to site, the Pibwr Lwyd farm house is a Grade 2\* listed building situated south of Pibwrlwyd Lane, as shown in earlier sections. This building houses some of the best-preserved examples of stencilled Regency wall decorations. Opportunities are being explored to incorporate influences from the decoration into the new building, including interior design and manifestation.

# **Massing Development**





#### 4.6 Main Entrances & Access to Site

The main entrance to the new development is situated on the south side of Building A, clearly visible from Pibwrlwyd Lane and the approach from the roundabout. The entrance will be enhanced by a double-height opening, curtain walling, a canopy and clear signage. Steps and a ramp lead directly to the main entrance from Pibwrlwyd Lane or, alternatively, students and visitors will walk from the car park along the south of Building A, getting glimpses into the Hair & Beauty curriculum spaces as they pass.

## 4.7 Community Use

The new college building aims to be a centre of excellence for skills which not only supports students but also provides support and facilities for the community and local businesses. Both the new restaurant and the salon will be open to the general public and are public-facing on the south side of building A. The restaurant on the top floor is designed to make the most of the farreaching views across the valley to the south. The café, gallery and gym are also situated in a way that they can be opened up to the public and easily accessible from the main entrance as required.

The college will also benefit the local community through the state-of-the-art teaching facilities. Green Skills will provide teaching to businesses and individuals, and a number of the curriculum areas support adult learners as well as apprentices.



## 4.8 Key Spaces

#### **Atrium**

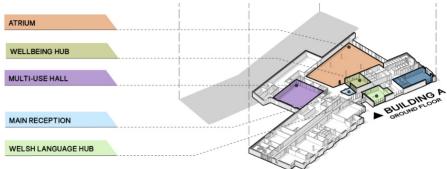
The central atrium is directly adjacent to the main learner and visitor entrance and also has direct access out to the external social areas. The external and internal social spaces create the 'heart' of the campus and will allow for learners and staff from all departments to come together in between classes. The atrium is vibrant and lively and includes dining and social spaces, with student support and wellbeing facilities directly adjacent. The main hall is off the atrium, with lobbied access to ensure the acoustic performance of the hall is maintained.

The atrium is overlooked by the gallery and library and has views across the site to 3D Art, Carpentry and Green Skills, creating visual connection between departments and the feel of a well-connected site.



Views across the Atrium towards the hall and wellbeing. Gallery is visible above

Note: Finishes shown are indicative



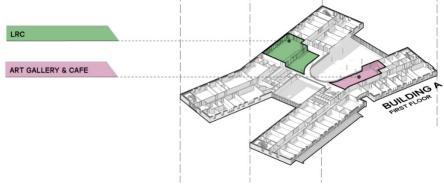
Key Spaces - Ground Floor, Building A





Views across the study space and library, overlooking the Atrium

Note: Finishes shown are indicative



Key Spaces - First Floor, Building A

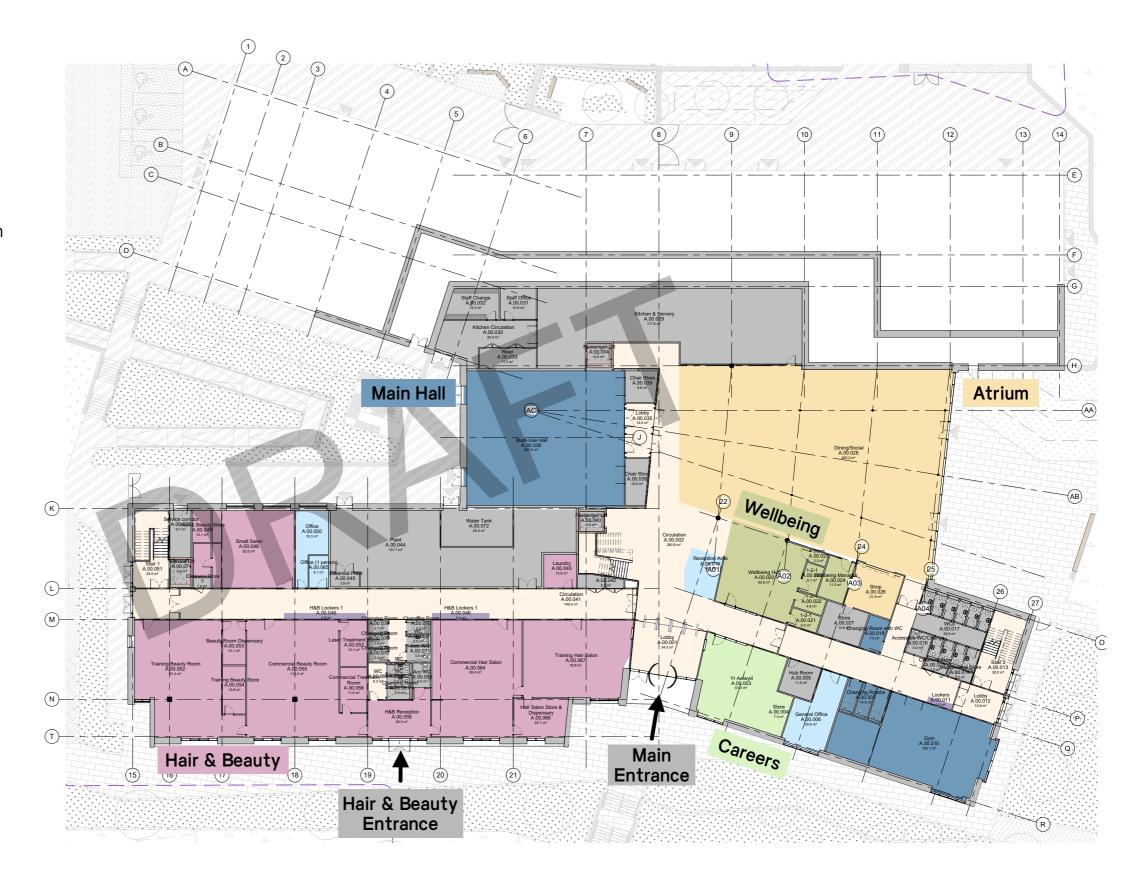
# 4.9 Plans - Internal Layout

#### **Block A**

Building A is a split-level building in response to the steep gradient of the site. Both ground and first floor have external access, providing opportunities for entrances, servicing & external learning and social spaces.

#### **Ground Floor**

Ground floor includes Hair & Beauty, Employer Engagement, Student Support the Main Hall and the central atrium. The main entrance to the south of the building provides access to reception and admin facilities and then through to the central atrium. Kitchens and plant rooms are also on the ground floor and are serviced from the courtyard at the rear, adjacent to the car park.





#### First Floor

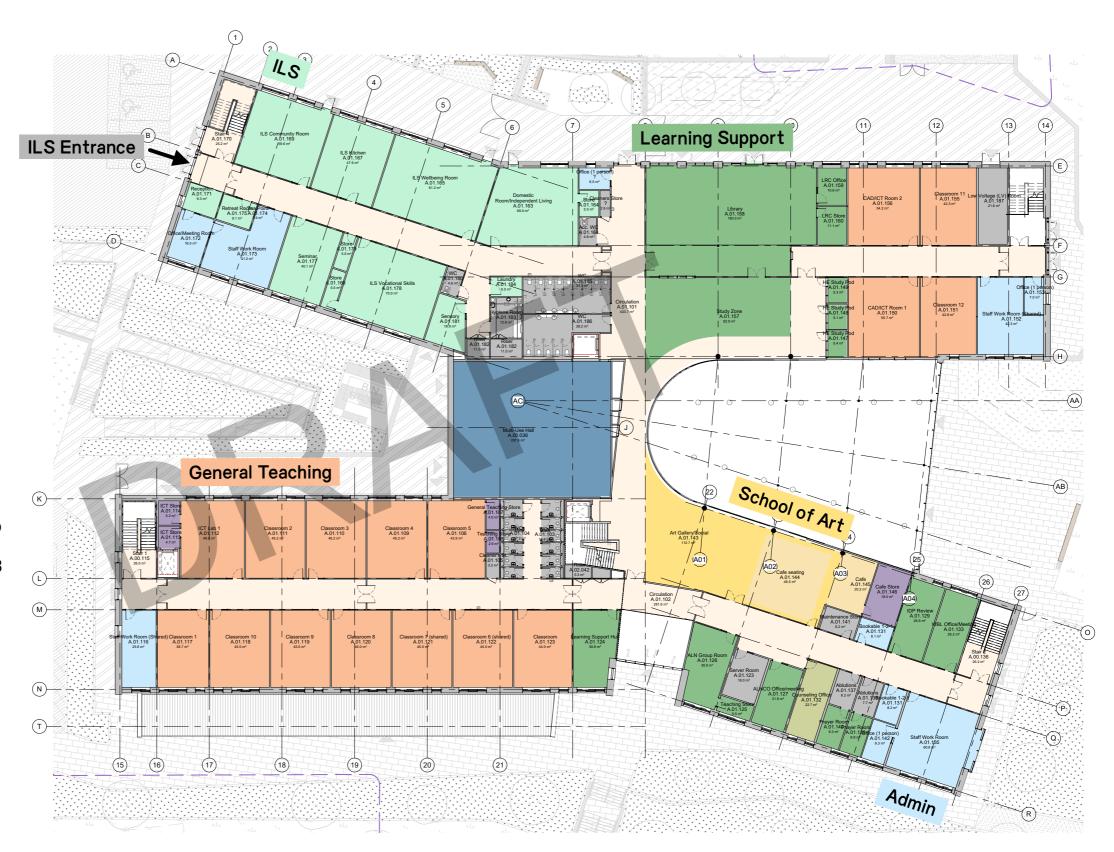
The first floor has four wings, with the northern parts of the building benefiting from direct access from outside due to the change in levels.

The atrium is central to the plan at first floor, connecting all of the departments and creating a generous circulation route between the different wings of the building, with opportunities to create break-out spaces and seating areas.

To the south of the building, adjacent to the accommodation stair is a cafe and gallery, overlooking the atrium. These spaces are potentially accessible by the general public and are clustered together in easy ready of the main entrance via the accommodation stair. The gallery is mirrored by the library which overlooks the atrium from the north .The library is split between open and enclosed study spaces to provide a variety of learning and study environments. The library has direct external access on the north side, creating opportunities for external study spaces.

Independent Life Skills (ILS) is located adjacent to the library which reflects the close connection between these spaces, with ILS students requiring regular use of the library. The ILS suite of spaces comprises of varied facilities for group work, teaching, domestic skills and support spaces. This will be developed further at Stage 3 in consultation with the relevant staff to suit the needs of the learner. ILS has a direct entrance from adjacent drop off and parking and benefits from a garden to the south of the department.

The south-western wing of the building and the north-eastern corner accommodate general teaching spaces to be shared between departments, including business, ICT, teacher training and construction. Staff work rooms are located alongside the teaching spaces and staff offices are dotted across the plan to create passive supervision.



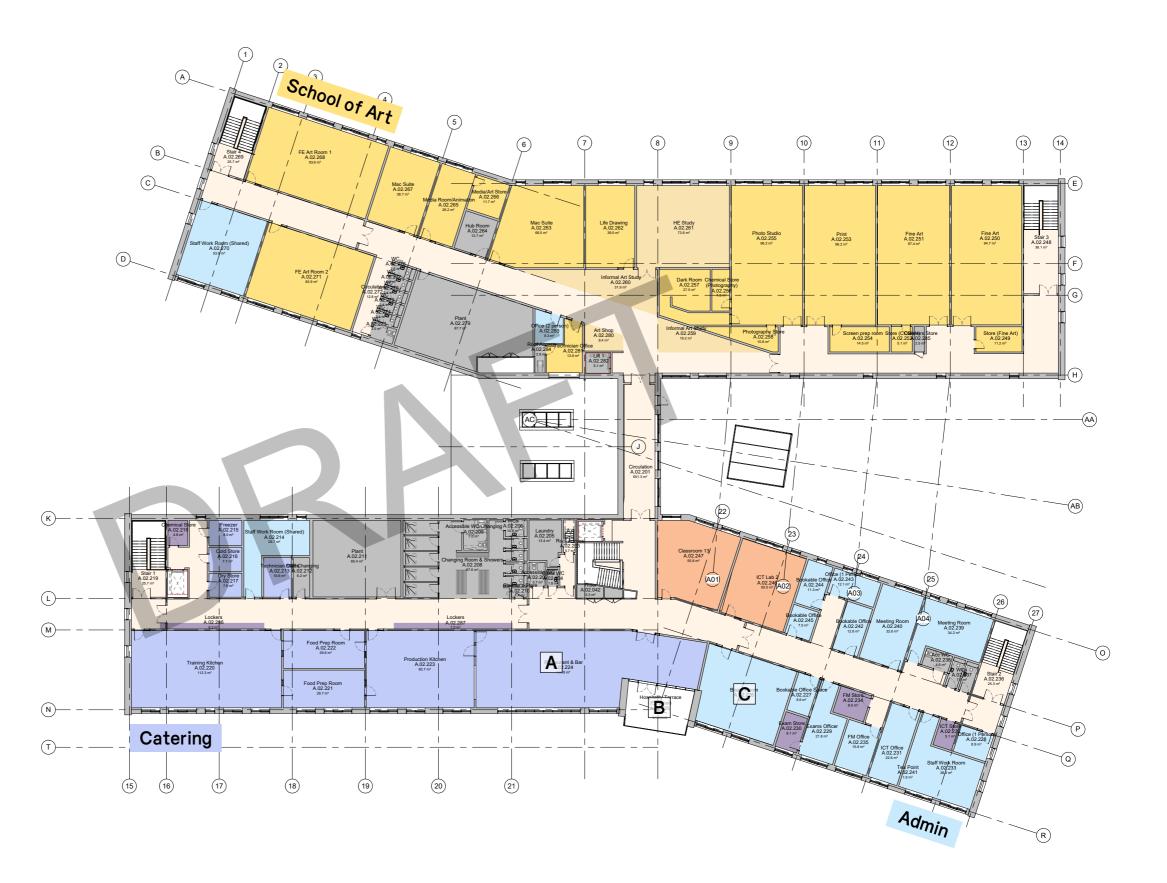
#### **Second Floor**

Second floor comprises of a distinct north and south building, connected by a generous circulation route with glazing allowing views across the campus towards the construction buildings and 3D art.

The northern wings of the building house the School of Art. The elevated position of this allows it to have a distinct identity to reflect the Higher Education nature of the courses. Large roof lights are provided along with windows to allow plenty of north light into the spaces. The art department shares access to the general classrooms directly below and has ease of access to the first floor exits connecting to 3D art and Carpentry.

The south west wing houses the Catering department, with a public restaurant (A) and associated external terrace (B) providing views across the valley for diners. The accommodation stair rises up in the centre, affording ease of access for the public to visit the restaurant. Out of hours access arrangements will be agreed with the college during the next stage.

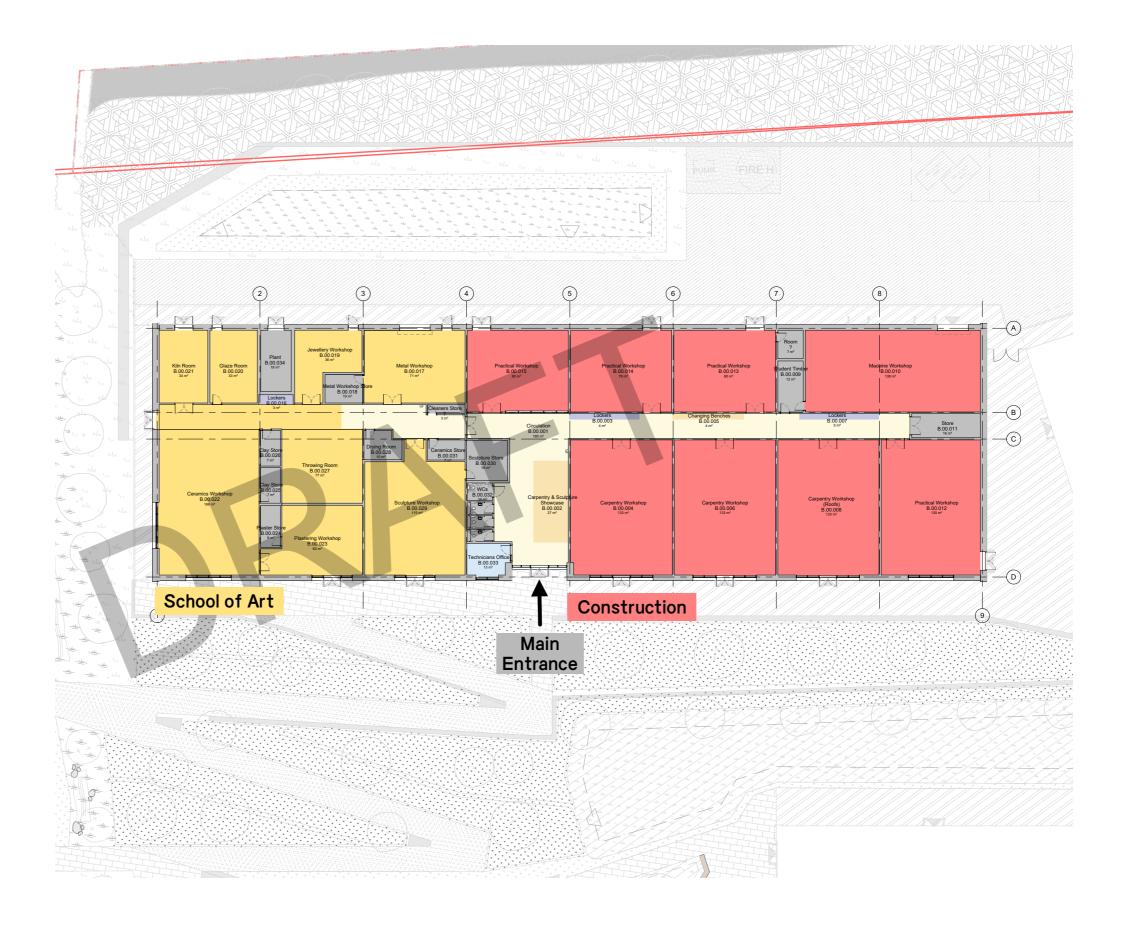
The board room (C) and admin spaces are located to the south east, allowing them to also benefit from the terrace and the catering, whilst affording them an element of privacy.



Blocks B, C and D follow a different grid and structure to Block A, to suit the different sort of teaching space they accommodate. The large grid allows for very large, flexible teaching spaces. These have been allocated to support the different construction disciplines in line with the schedule of accommodation, however as all spaces follow the same grid and have provision for storage and external access, it is anticipated that these can be flexible in the future as required to suit changes to the curriculum.

# **Building B**

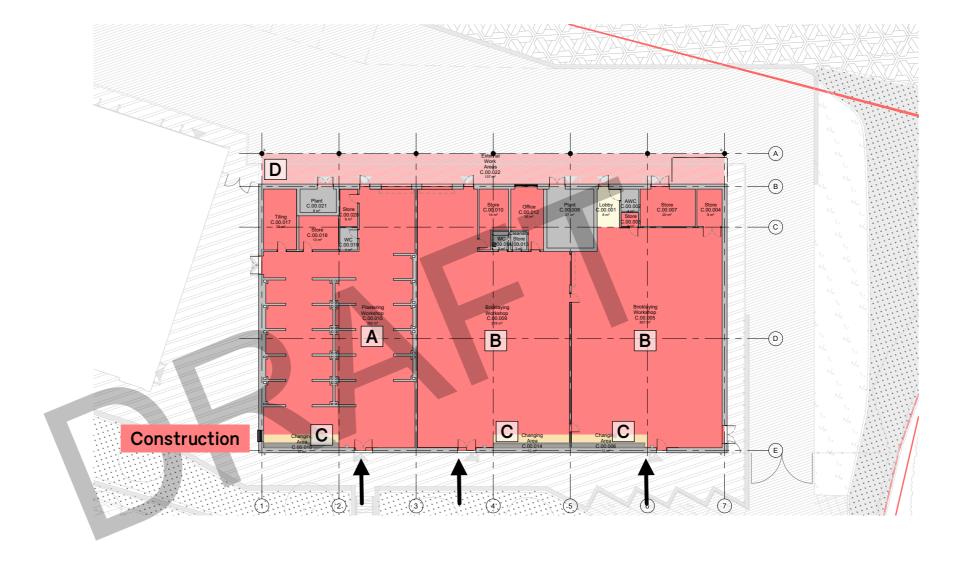
Block B accommodates 3D Art and Carpentry. Site visits to exiting facilities at both Ammanford and Job's Well highlighted a crossover in the functional requirements between these two subject areas, including deliveries, ceiling heights and a crossover of skills, equipment and creative thinking. Many of the 3D Art & Sculpture projects use similar skills to carpentry. As Building B sits at approximately the same level as the first floor of Building A and in close proximity, there can be close connection with the general classrooms and art rooms in Block A.





# **Building C**

Block C is a smaller construction building intended to accommodate plastering (A) and brickwork (B) teaching. Three large, flexible workshops are provided with associated stores and support spaces, including changing areas (C) for students and staff. Externally, there is dedicated space for a mortar mill, as well as covered bays for storage and/or external working. A large yard (D) provides space for students to work and large roller shutter doors allow for deliveries. The yards are located at the furthest point from the student social areas to ensure that dust, dirt and noise do not adversely impact on the social facilities or any of the other teaching spaces.



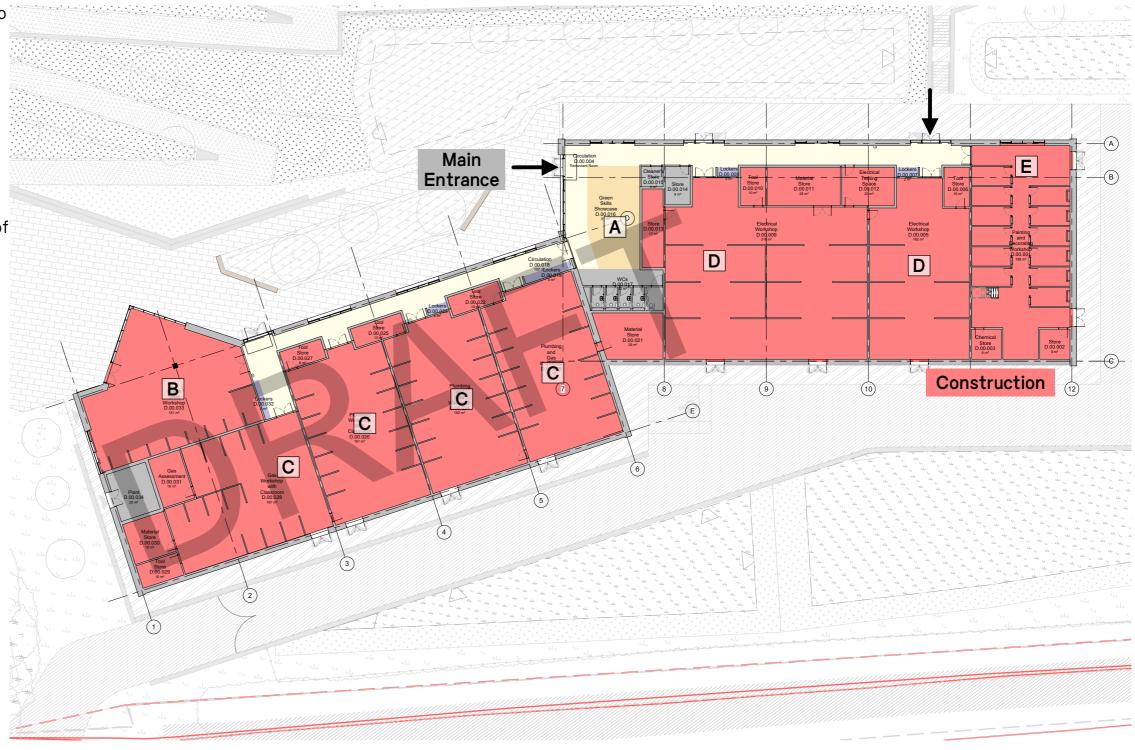
# **Building D**

Block D is the closest workshop building to the central heart of the site and frames the southern side of the external social space. It is intended that the building will have glazed, open elements to allow learners and visitors to see what goes on inside.

The main entrance into the building is in the centre of the north elevation, adjacent to landscaped social areas. A showcase space (A) is provided right at the entrance.

The western end of the building houses green skills (B), plumbing and gas (C) and electrical (D) workshops. The green skills workshop (B) is located at the west of the building in view of the central atrium in Block A to showcase the excellent work that the college is doing in this area. This space is designed as a teaching space, but can be flexibly used for employer engagement and events as the college desire.

The eastern wing of the building houses the painting and decorating workshop (E) which benefits from a yard to the rear for external working.

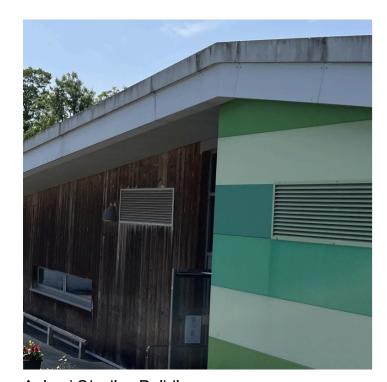


# 4.10 External Appearance

# **Existing Buildings on Campus**



Equine Studies Building



Animal Studies Building



Cwrt Pibwrlwyd



Automotive Building

# **Facade Precedents**



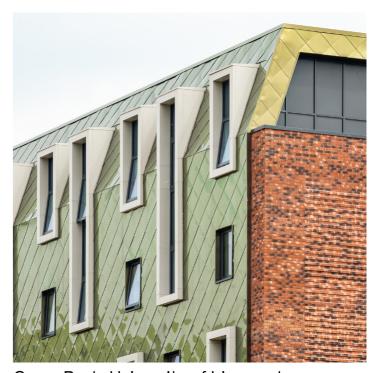
Notre Dame Catholic College



SEE Building, University of Salford



Notre Dame Catholic College



Green Bank, University of Liverpool

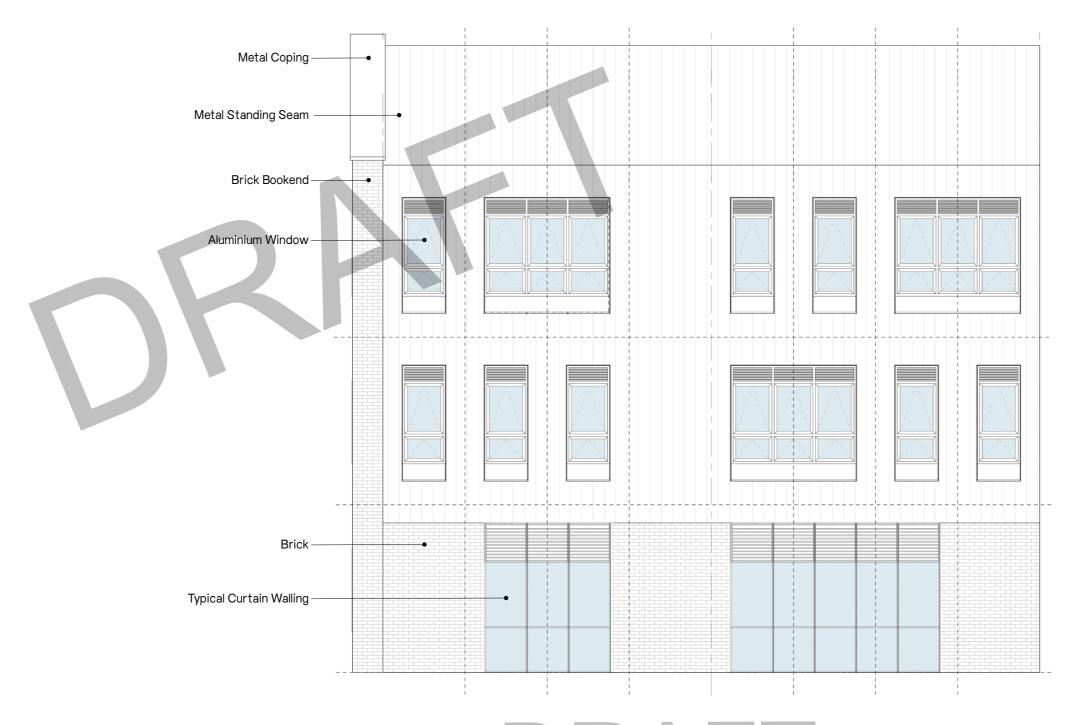


#### **Proposed Facade Approach**

The façade is designed as a metal cladding draped over the length of the building and bookended by brick gables at the end of each block. The materials are robust, attractive and contemporary and have been carefully considered for the setting. It is important that the building is in keeping with the context whilst also reflecting the aspirations of the college and the importance of this development for Carmarthenshire and the wider area.

The base of each building is brickwork, to ground the building, as well as to provide additional robustness in busy areas. The brickwork is broken up with panels of curtain walling, whilst punched windows above punctuate the metal cladding and ensure plenty of natural light in each of the classrooms.

The same material is applied to each building, with subtle adjustments to reflect the activities within. Block C houses the brickwork and plastering teaching spaces and, as such, the walls of the single-storey building are all clad in brick. This gives a nod to the teaching spaces in the building, whilst also proving additional robustness. Block B and D house the rest of the construction-related curriculum and feature greater areas of cladding with less brick, to differentiate these buildings.



# **Bay Studies**

Metal cladding is available in a wide range of colours and a lengthy process has been undertaken to review these and identify the most appropriate colours for the new development. This has taken into account the setting, the Environmental Colour Assessment, the visual impact and the preferences of the college.

A number of options have been tested in both 2D and 3D, some of the results of which are shown adjacent. The college preference is for a building which is sophisticated and elegant, but also unique and inspirational. Final colour choices have not been decided, although the bronze colour has received positive responses and is the colour shown on the imagery over the following pages.

As part of the materials exercise, a number of brick options have also been tested ranging from buff to grey tones. The brick will be carefully selected to complement the cladding and the setting.

All materials specified will be suitable for use in an exposed environment and in the particular setting of Carmarthenshire.



Metallic Grey Cladding and Buff Brick

Metallic Black Cladding and Buff Brick



Metallic Bronze Cladding and Buff Brick

# **Elevations**





West Site Elevation



View of the new buildings from South Campus

Note: Materials shown are indicative





View across the North Campus

Note: Materials shown are indicative

#### 5.0 SUSTAINABILITY STATEMENT

#### 5.1 Sustainable Design Strategy

Sustainability is at the heart of the design of the project, from early considerations of the site design to allow for sustainable drainage and biodiversity to detailed considerations of daylighting and internal environment.

The project is designed as Net Zero Carbon in operation and follows stringent requirements for embodied carbon. The brief stipulates that a Net Zero Carbon Option should be understood to be based around:

- Operational Energy: the amount of carbon emissions associated with the building's operational energy on an annual basis being zero or negative.
- Embodied Carbon: a maximum embodied energy target of 600kgCO2/m2

Stantec are working as the sustainability consultant and have undertaken initial assessment of the environmental impact of building forms, servicing and construction approach and material choices, in collaboration with Sheppard Robson and the wider design team. The results of this study have directly influenced the design of the site, the building fabric and the building services. In addition to the net zero carbon requirements, the project is targeting BREEAM Excellent.

#### 5.2 Building Services & Ventilation

As part of the Net-Zero Carbon in Operation strategy, the building is naturally ventilated via louvres above the windows attached to MVHR units, bringing fresh air into the building. Windows have been carefully designed to ensure sufficient daylighting and ventilation whilst managing overheating, and portions of each window can be opened for additional purge ventilation. Air Source Heat pumps will provide heating for the building during the cooler months, which will be linked to radiators in each classroom. MVHR heat recovery systems will also be used to improve efficiency.

Digital modelling of the building has ensured that a comfortable learning environment can be provided year round, even allowing for the effects of climate change over the lifespan of the building.

## 5.3 Energy Usage

The building is designed following a fabric-first approach which aims to minimise energy usage within the building. To achieve this, the building has been designed with enhanced levels of insulation and increased air tightness. As heating is a high demand on energy and most heat is lost through the external envelope, maximising the efficiency of the building form is an important consideration to minimise energy demand. Design of an efficient building and the passive ventilation explained above reduce energy use. All appliances and lighting specified will be lowenergy to further reduce demand.

Energy will be generated on site to meet the demands of energy usage. Renewable energy will be generated via photovoltaic panels on the roofs of the buildings. Calculations show that energy generated on site can meet the demands of the buildings.

#### 6.0 ACCESS STRATEGY

#### 6.1 Access & Inclusion

Attention has been paid to access issues throughout the design of the building with cognisance to use of the building as a college and reference to Part M of the Building Regulations, the Equality Act and other relevant regulations and standards including BS8300 and the Authority Construction Requirements. Additional attention is required for the Independent Life Skills department where many students have additional needs, however ease of access through the whole building has been central to the design and no student should be prevented from accessing education facilities due to access difficulties.

#### 6.2 Access to Site

The main pedestrian approach is to the south from Pibwrlwyd Lane and forms a new, accessible segregated pedestrian route from the west and a clear pedestrian connection to existing College buildings / facilities to the south. A second new pedestrian route is proposed to provide a dedicated pedestrian connection from the existing bus stop on the main road to the college. This supports the College's aspirations to encourage the use of public transport to the site and again allows for separation between the pedestrian and vehicular entrances. Footways to each car parking area provide pedestrian access from parking areas to the college buildings.

The primary access point into the site is via the main entrance and reception of building A. This provides managed access for students, staff and visitors. From here, they can disperse across the campus to each department. The design of a single primary point of access into the buildings is important to the college, ensuring that all students and staff feel part of the college community and have an awareness of the other activities that are happening within the college.

The main entrance is reached on foot, either via the steps/ramp from Pibwrlwyd Lane, or via the pathway along the southern side of the building from the car park. The entrance is double-height, with tall curtain walling and flanked by tall brick piers. The entrance is further enhanced by a canopy which doubles as a terrace for the restaurant and gives the entrance a clear identity. The entrance will be visible when approaching the building along Pibwrlwyd Lane, to give a clear sense of arrival.

Secondary entrance are provided around the site. Students can access into the central heart of the new campus via a gated access on the south side, allowing direct access to the atrium and to buildings B, C and D. This gated access will be managed by the college to ensure that the campus remains open and welcoming but is also safe and secure.

Elsewhere, some dedicated access points are provided, particularly for the ILS learners to allow a direct, controlled access into their department from a dedicated drop-off and parking area.



#### 6.2.1 Visitor Access

Visitors are welcomed to the site for a number of reasons, and will generally access via the main entrance, from where they will be met by reception staff. A dedicated visitor access is also provided for the Hair & Beauty salons, which are open to the public as paying customers. This access point is on the south side of Block A, on the route from the car park to the main entrance, and will be manned by staff and students during salon opening hours.

## 6.3 Parking Provision

Parking is provided to the western side of the site as shown in more detail in the landscape architect's drawings. Given the rural nature of the site, car usage is unavoidable and therefore adequate space has been provided, alongside encouraging more sustainable methods of transport.

#### 6.4 Cycling Provision & Amenities

Cycle parking is provided to the western pedestrian route for cyclists accessing the site from the west.

#### 6.5 Movement Around Site

As the development is formed of multiple buildings, movement between these buildings has been carefully considered. Pedestrian circulation throughout the campus is via a series of walkways and level access (step and ramp) arrangements to provide legible connections between buildings and key external spaces. Level access is provided to all of the buildings, and some additional disabled parking is also provided to the rear of the workshop buildings for students and staff who may require more direct access.

# 6.6 Internal Accessibility

Legibility of the building is important, to ensure that both students and visitors can find their way around the campus. The strong visual connections that have been built into the design aide with legibility, with many areas of the campus visible from the central external space and atrium. When entering the building via the main entrance, the clear views through into the main atrium and beyond are designed to both draw people in and to provide a clear centre to the campus with all of the central facilities located here.

Away from the atrium, the building has a very legible, linear circulation pattern with all classrooms accessed of simple spine corridors in each wing of the buildings. Stair cases at the end of each wing of Block A provide access between floors and an accommodation stair and two large lifts adjacent to the atrium provided additional vertical movement.

The interior design of the buildings will aide with wayfinding more generally, with opportunities for feature colours/graphics to highlight key areas. Finishes and colours will be carefully considered to ensure contrast and east of navigation for visually impaired building users.

#### 6.7 Emergency Escape

In the event of an emergency, all of the ground floor doors can be used to escape from the buildings. In buildings B, C and D, all workshops have direct external access. Occupants of the remaining rooms would escape via the corridors. In building A, four protected staircases provide safe egress from the upper floors, with direct escape outside from the staircases.

#### 6.8 Roof Access & Maintenance

Most roofs are pitched roofs and are not designed to be accessible. Maintenance to these roofs will be carried out via a Mobile Elevated Working Platform (MEWP). The project has been designed to minimise requirements to access roofs where possible, however, the roof to the main hall and atrium are flat roofs and periodic maintenance will be required to the roof covering and to M&E elements on the roofs. Safe access will be provided onto these roofs via direct access points from adjacent circulation areas. Railings at a minimum of 1.1m will be provided at a set-back from the open edge of each roof to ensure the areas of the roof requiring maintenance can be accessed safely.



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