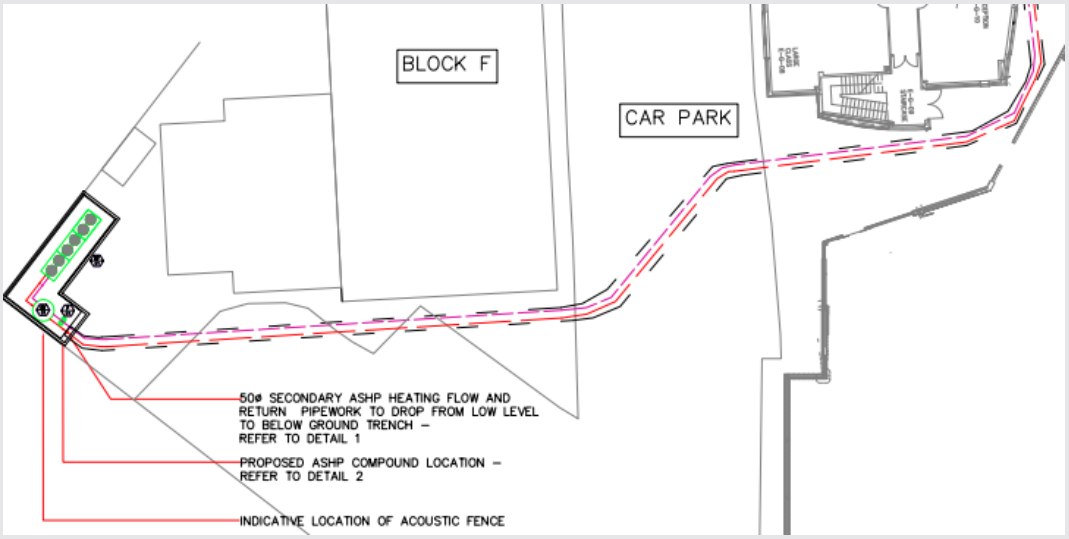
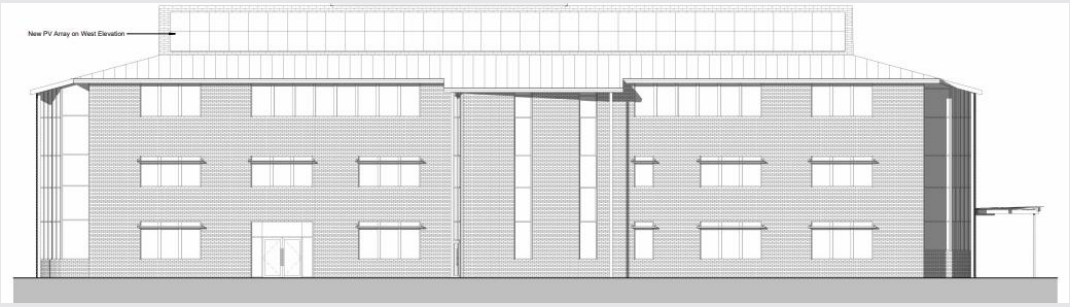

BLOCK F
CAR PARK
50ø SECONDARY ASHP HEATING FLOW AND RETURN PIPEWORK TO DROP FROM LOW LEVEL TO BELOW GROUND TRENCH – REFER TO DETAIL 1
PROPOSED ASHP COMPOUND LOCATION – REFER TO DETAIL 2
INDICATIVE LOCATION OF ACOUSTIC FENCE


New PV Array on West Elevation

Control Sheet

Please ensure when referencing this document that you are using the most recent Issue in accordance with the table below and ensure previous issues of this document are destroyed or marked as superseded.

Author	Checked	Approved By
GCM	AJC	AJC

Document Issue Register

Issue	Date	Description of Amendment	By	Checked
1	16/06/25	Document issued for Planning	GCM	AJC
2				
3				
4				

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1. Introduction
2. Project Brief
3. Design Principles
4. Project Programme
5. Site – Research & Analysis
6. Design Proposal – PV Roof Panels
7. Design Proposal – ASHP Compound
8. Consultation & Public Engagement

1. Introduction

1.1 This statement has been prepared by TACP Architects Ltd on behalf of Coleg Cambria support the planning application for the proposed development to enhance existing mechanical and electrical systems for the Block E teaching block at Coleg Cambria Yale Campus, Wrexham. Comprising of a new air-source and hot-water heat pump system in addition to a new PV roof panel system.



The image above shows the area of Wrexham. The arrow in **RED** indicates the location of the proposed development at Block E on the Coleg Cambria Yale Campus.

1.2 Scope of Report

The purpose of this Design and Access Statement is to is to consolidate the design development of this project to explain the context of the site, the intent behind the development and the design requirements with regards to its site constraints, regulatory framework and client brief.

It accompanies a drawing package which supports the full planning application.

1.3 Project Team

The roles within the project team

Client	Coleg Cambria
Architect	TACP Architects
Specialist Consultant	Sureserve Group - Mechanical & Electrical

2. Project Brief

2.1 Scope of Services

TACP have been appointed by Coleg Cambria to deliver design services for this development up to and including the submission of a full planning application.

It is understood that the Client will instruct specialist consultants as required to carry out design services for the development of the proposed enhanced mechanical and electrical systems.

2.2 Project Objectives

The client has specified that the scheme should deliver on the following objectives:

- To enhance and update the electrical and heating/cooling systems for the Block E teaching block.

The above objective(s) will be achieved by the implementation of the following proposed works:

- A new PV roof panel system to be installed on the roof of the existing Block E teaching block.
- A new Air Source Heat Pump system including the erection of a new Compound enclosure for the ASHPs and associated trenching/ ductwork from the ASHP compound to the Block E building.
- New Hot Water Heat Pump system.

3. Design Principles

3.1 Planning Policies

- There is a statutory requirement for building developments to comply with Local and National Planning Policies. The following policies have been identified as being relevant to the proposed development:
    - National Policies:
        - Planning Policy Wales, Edition 12, 2024
        - Future Wales: The National Plan 2040
    - Local Policies:
        - Wrexham County Borough Local Development Plan 2013-2028

3.2 Building Regulations

- There is a statutory requirement for building developments to comply with the National Building Regulations. A non-exhaustive list of aspects of building work covered by the Building Regulations for Wales includes:
    - Structure
    - Fire Safety
    - Acoustic performance
    - Protection from Falling
    - Conservation of Fuel and Power
    - Access to and Use of buildings

- Meeting the requirements set out in the relevant Building Regulations will be achieved firstly through detailed design development, during which stage the proposed drawings will be assessed for approval by an approved Building Control Officer. During construction, building work will be carried out by Competent Persons whose work will be assessed by an approved Building Control Officer at key intervals to ensure compliance.

3.3 Design Guidelines

- The client has specified that the proposed development should be designed in accordance with the following non-statutory design guidelines:
    - None

3.4 Energy Targets

- The Client wishes to make sustainable improvements to the existing mechanical and electrical systems for the Block E teaching block, since the current systems have become outdated and inefficient with respect to current building standards and technologies.

4. Project Programme

The timeline for the design and construction of this development has been scheduled as per the Construction Programme included below.

None has been provided.

5. Site – Research & Analysis

5.1 Surrounding Area

The application site is located just inside the Northern edge of Wrexham's inner ring road. The site is surrounded by a mix of land uses, primarily education, commercial and public amenities. Immediately to the south is Wrexham Library, with religious facilities and Waterworld leisure centre car parking directly to the east beyond Chester Road.





Coleg Cambria Yale Campus, Wrexham.

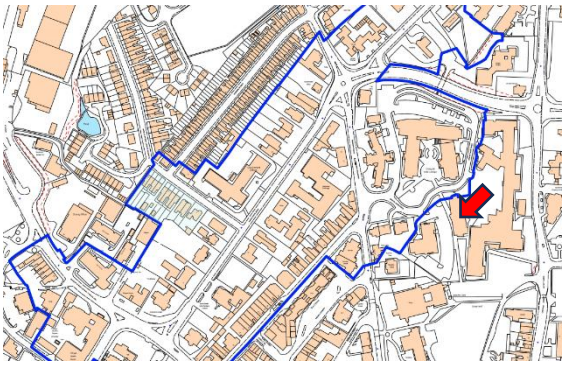


Image showing the boundary of Grosvenor Road Conservation Area. The application site identified by the red arrow lies just outside the boundary.

The north-west of the campus falls within the Grosvenor Road Conservation Area. The Conservation Area was first designated in September 1990 and its boundary amended in July 2007. The Grosvenor Road Conservation Area Character Assessment and Management Plan was adopted in April 2009. The application site falls just outside the Conservation Area.

5.2 Nearby Attractions & Amenities

The proposed development site is well-connected to nearby attractions and amenities in Wrexham City Centre, which can be easily accessed by foot, car or public transport.

5.3 Public Transport

- The site is served by the abundance of bus and train services operating throughout Wrexham city centre, including the College's own private bus services for students.

5.4 Topography

- Locally, the topography at the application site is level since it has been previously developed to form the College campus as it stands today.

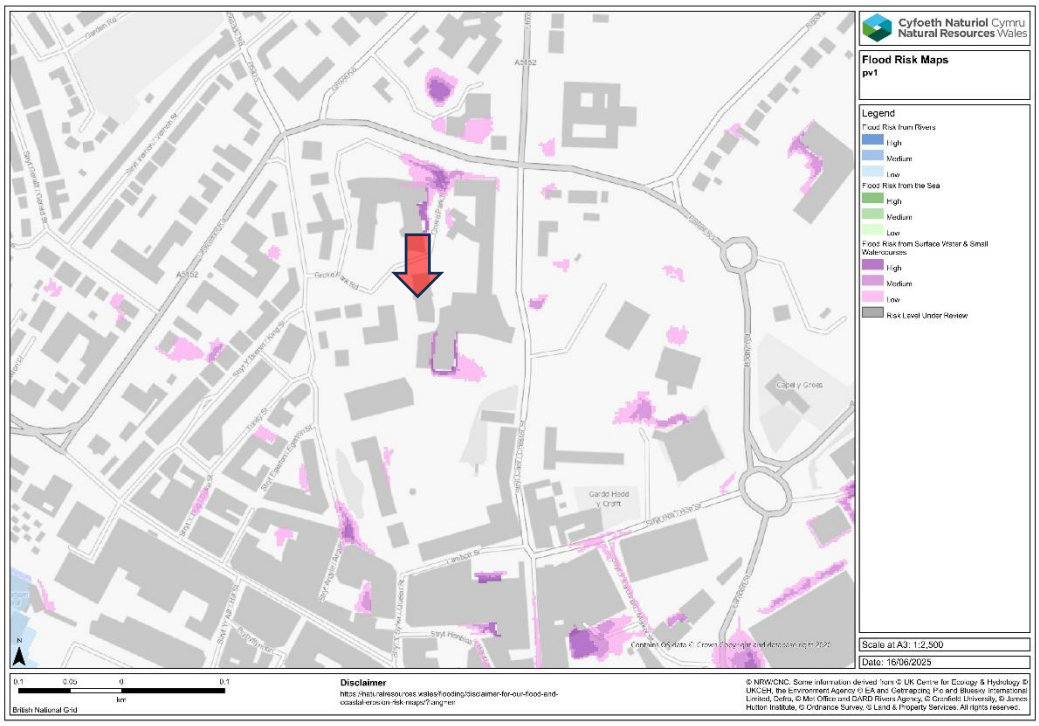
5.5 Flood Risk

- The maps included below have been provided by National Resources Wales.

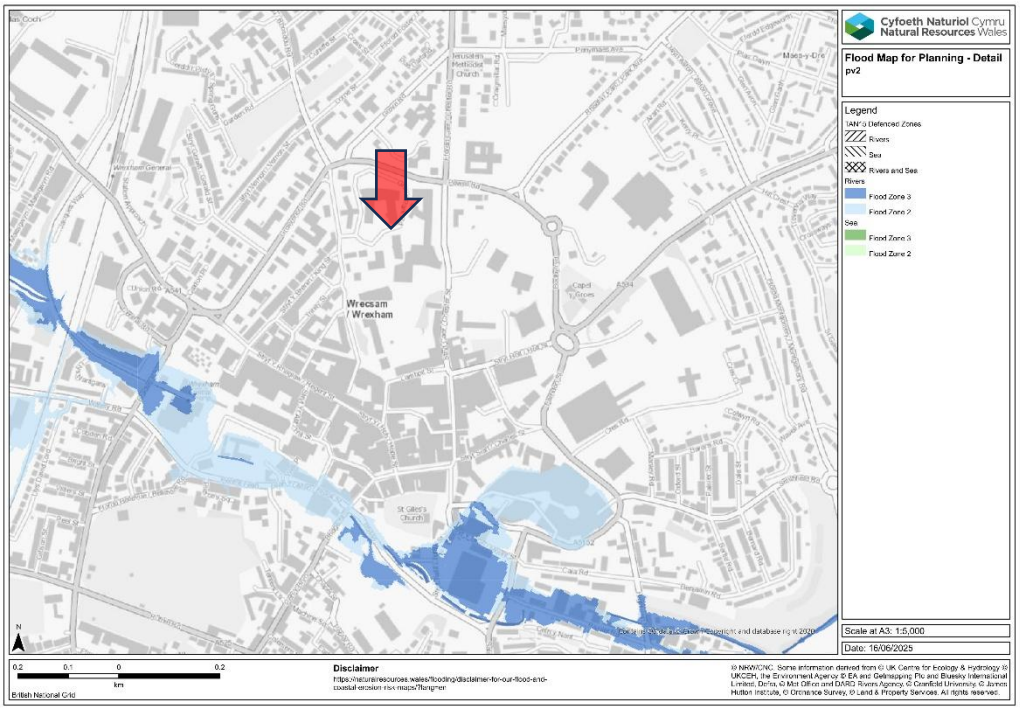
- The Flood Risk Map suggests that there are small areas adjacent to the application site with a low risk of flooding from Surface Water and Small watercourses.

- The Development Advice Map shows the application site to be in Zone A.

    - *Technical Advice Note (TAN) 15 includes Development Advice Maps that define three development advice zones as follows:*
        - *Zone A: Considered to be at little or no risk of fluvial or tidal/coastal flooding.*
        - *Zone B: Areas known to have been flooded in the past evidenced by sedimentary deposits.*
        - *Zone C: Based on Environment Agency extreme flood outline, equal to or greater than 0.1% (river, tidal or coastal) (ie: greater than 1 in 1,000 chance of flooding in any one year). Zone C is divided into C1 and C2.*
        - *C1 is areas of the floodplain which are developed and served by significant infrastructure, including flood defences.*
        - *C2 is Areas of the floodplain without significant flood defence infrastructure.*



Above: Flood Risk Map (NRW)
Below: Development Advice Map (NRW)

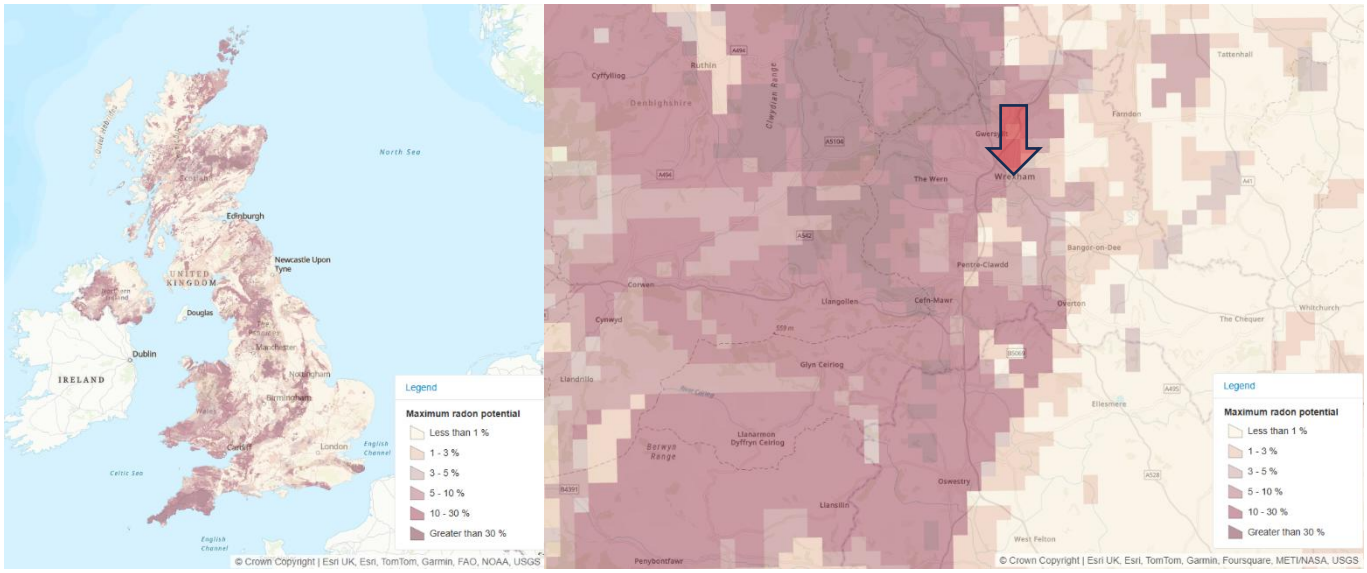


5.6 Drainage

Not applicable to the proposed development – no modifications to drainage systems are proposed.

5.7 Radon Affected Area

The maps below have been sourced from ukradon.org and show the areas of the UK affected by the presence of high levels of radon gas. The data shows that the application site is within a catchment area with potential for high levels of radon gas.



Developments subjected to these levels of Radon gas need to be constructed with appropriate protective measures so as to mitigate against any potential exposure to high levels of Radon. Full guidance on the protective measures required have been set out by the Building Research Establishment (BRE).

5.8 Public Rights of Way (PROW)

The map below can be accessed at https://www.wrexham.gov.uk/service/public-rights-way/public-rights-way-definitive-map

The map shows that there are no Public Rights of Way which pass through or adjacent to the application site.

However, the application site is an active College campus and the proposed development will have an impact on the use of external areas such as car parks and pedestrian routes.



5.9 Other Site Searches

None

5.11 Trees and Ecology

Because the development will be on brownfield land, it will not impact on any existing ecological features.

The associated Green Infrastructure Statement submitted with this planning application provides further details on any nearby ecological features, including plans to provide a net ecological benefit to the surrounding area.

SUDs

Given that the application site has been previously developed and the proposed development will not increase areas of hardstanding, the development is unlikely to have any negative impact on the surface water drainage strategy.

5.12 Asbestos

It is understood that the Client will procure an asbestos survey for the application site as required. This information has not been made available to us yet.

5.13 Existing Building Character

Across the campus, the existing buildings range from two to five storeys high and include a mix of both turn of the 20th century red-brick buildings and contemporary purpose-built blocks.







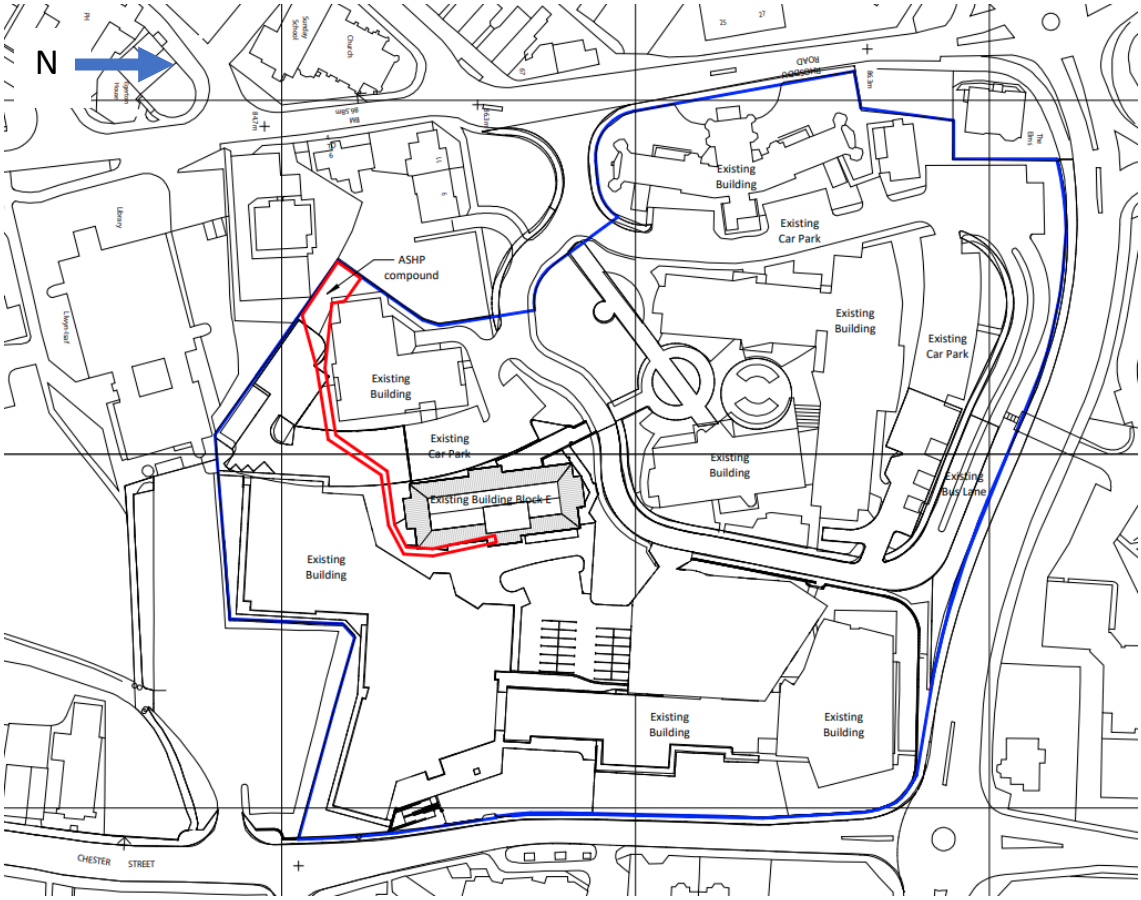






The Block E teaching block is a relatively contemporary building on the campus, completed in 1998 with refurbishment works completed in 2015. The three storey facades are red brick with art stone window surrounds, glazed curtain walling with white PPC transoms and white PPC window and door frames. The building has a pitched combination roof form to house the plant room with profiled stainless-steel of the lower gradient sections and natural slate to the central steeper pitch.

5.14 Existing Site Description



As indicated on the site plan above, the proposed development will involve the construction of a new ASHP compound behind the existing Block F teaching block. A new trench will be dug out to connect up the new ASHPs to the Block E teaching block.



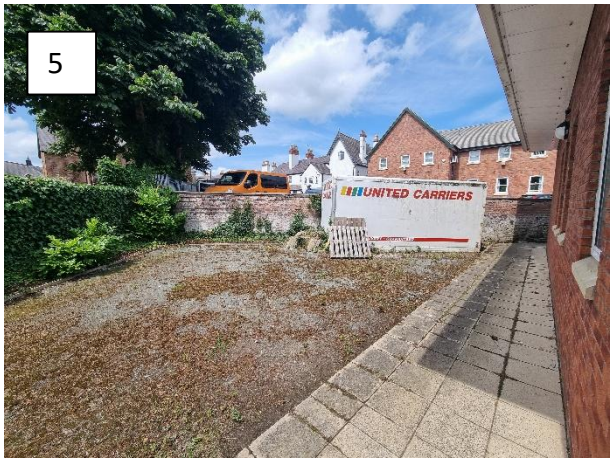


Image 1 was taken from an area of car parking and shows the Block E teaching block. The recently completed Hafod building is also visible. Image 2 looks in the other direction towards the area for the proposed ASHP compound.





Image 3 shows the Block E building in the distance and the area of car parking from where photos 1 and 2 were taken. Image 4 looks closer towards the area proposed for the ASHP compound behind the Block F teaching block.





Images 5 and 6 are around the corner to the right from image 4, showing the layout of the area behind the existing Block F teaching block where the ASHP compound is to be positioned.

6. Design Proposal – PV Roof Panels

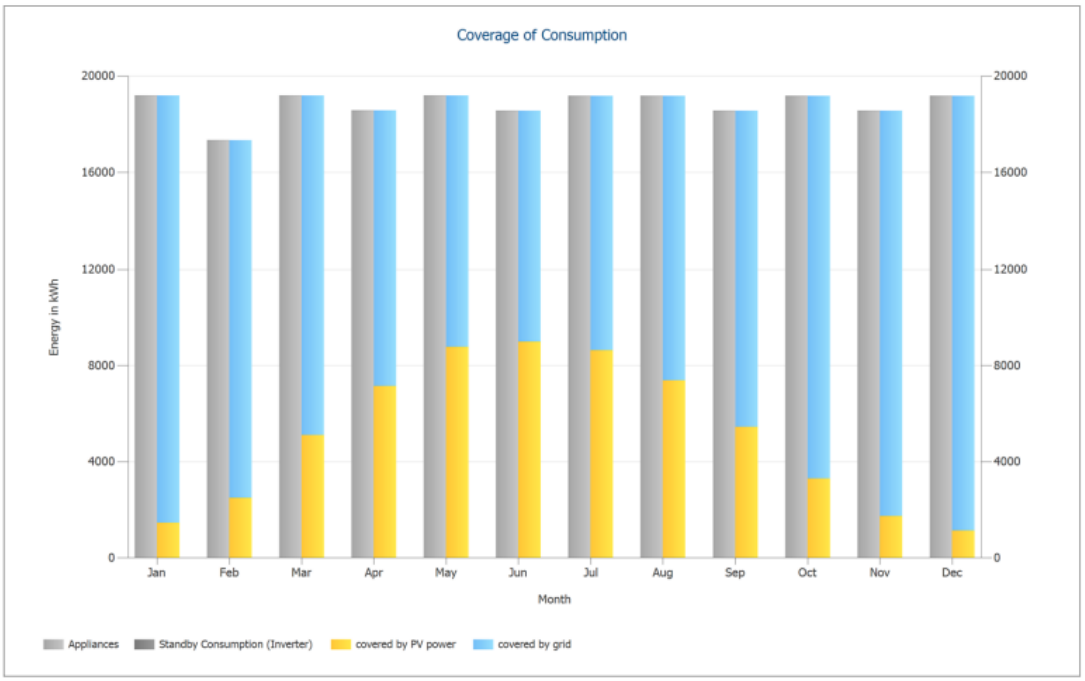
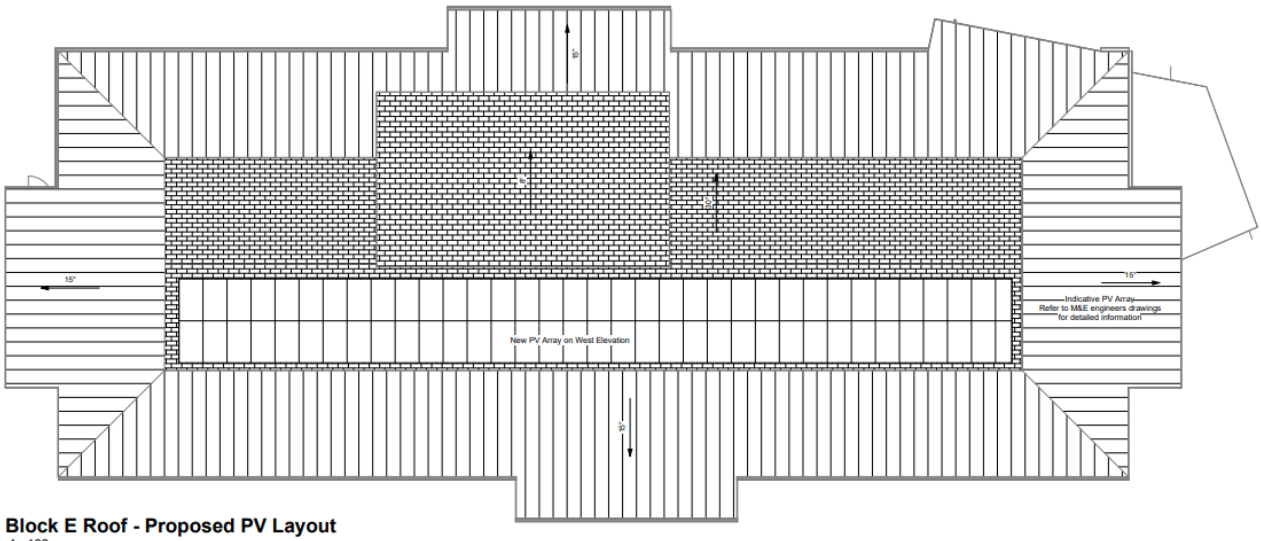


Figure: Coverage of Consumption

The graph shown above was extracted from the PV report produced by Sureserve and shows an estimation of the proposed electricity consumption for the Block E teaching block following the installation of new PV roof panels. The full report has been submitted with this planning application.

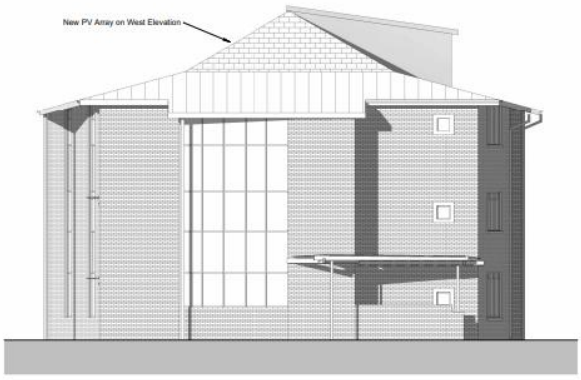
New PV panels are to be installed on the roof of the Block E teaching block.



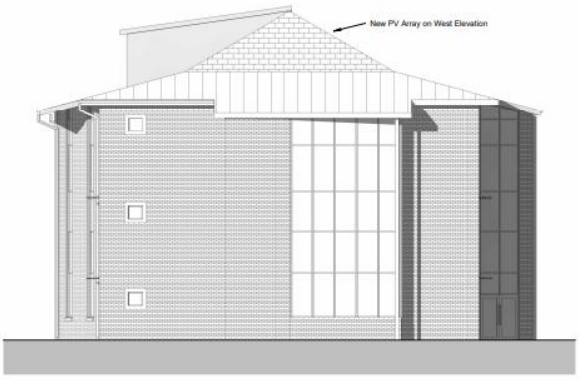
Block E Roof - Proposed PV Layout
1 : 100



Proposed West Elevation- PV Layout
1 : 100



Proposed South Elevation - PV Layout
1 : 100

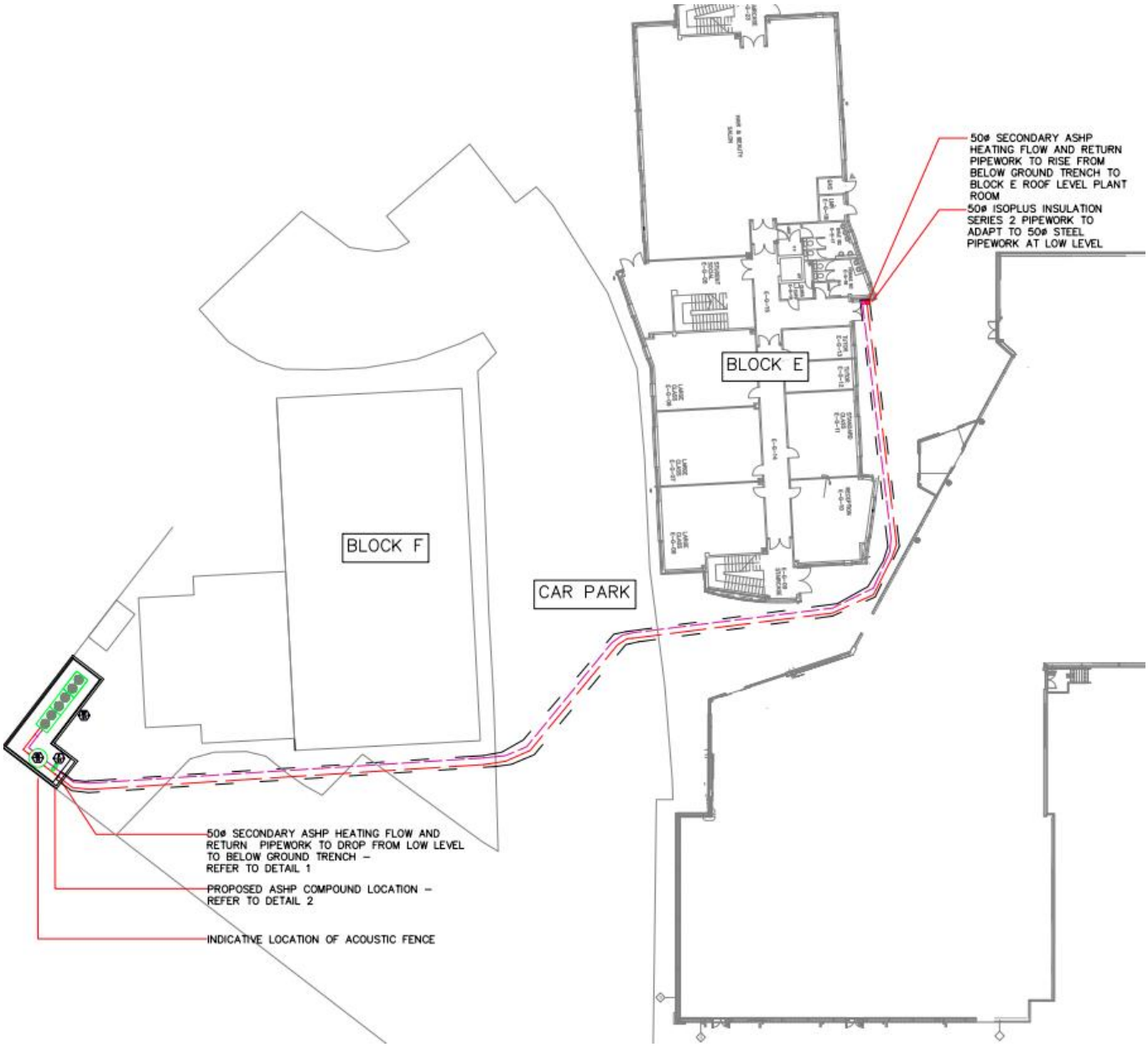


Proposed North Elevation - PV Layout
1 : 100

7. Design Proposal – ASHP Compound

7.1 Proposed location on site

The image below shows the proposed location of the new ASHP compound behind the existing Block F building and the route of the new trenching leading to the existing Block E building.



7.1 Identified Constraints & Opportunities

Further details of the proposed works for the ASHP have been included as separate documents as part of this application.

The following constraints / opportunities with respect to the construction of the proposed ASHP compound have been identified:

1. Noise pollution

The ASHPs will generate additional noise. In order to help mitigate against this, the compound has been positioned in an area not subjected to significant footfall. This small corner plot is surrounded by masonry brick walls which will act as a barrier to the transmission of noise across any open areas.

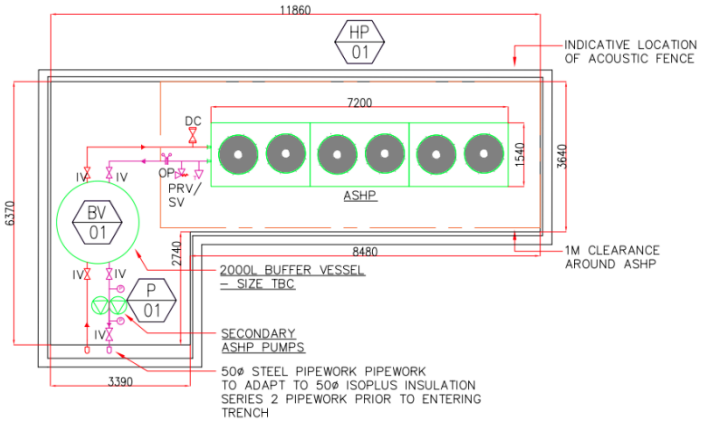
The new compound will be clad with specialist acoustic timber fencing which will also help to minimise the transmission of any noise generated by the ASHPs.

2. Visual appearance

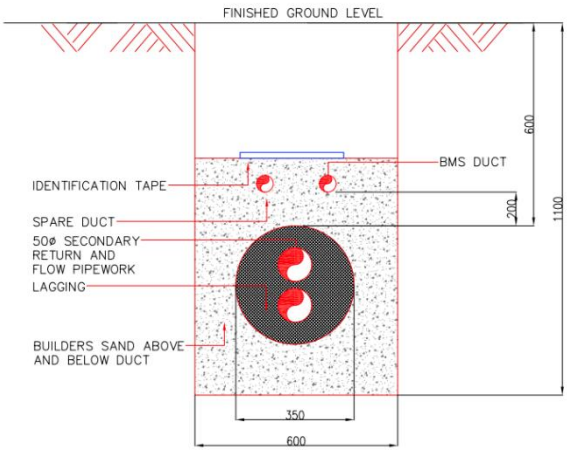
The compound will be positioned in an area which is not easily overlooked, and the proposed acoustic timber fencing will act as a visual screen.

3. Temporary disruption to existing operations for the duration of construction.

Some disruption may be caused by the opening up of the ground to install the trenching to the Block E building. Any areas deemed unsafe for public access are to be blocked off with appropriate safety barriers.



GA Plan for the proposed ASHP Compound.



Section detail of the proposed Trenching from the ASHP compound to the Block E teaching block.

8. Consultation & Public Engagement

As this project is at the stage of concept development and coordination, we have not yet undertaken any public consultation on this scheme.

However, given the scale of the proposed development, it will not fall under the requirements set out for Major applications, and public consultation is not a requirement.

When an application is made to the local planning authority, the application will be published online where the public will have the opportunity to share comments which will be taken into consideration before a decision can be determined.