



BOND BRYAN

FAITH CENTRE, UNIVERSITY OF HUDDERSFIELD

DESIGN & ACCESS STATEMENT

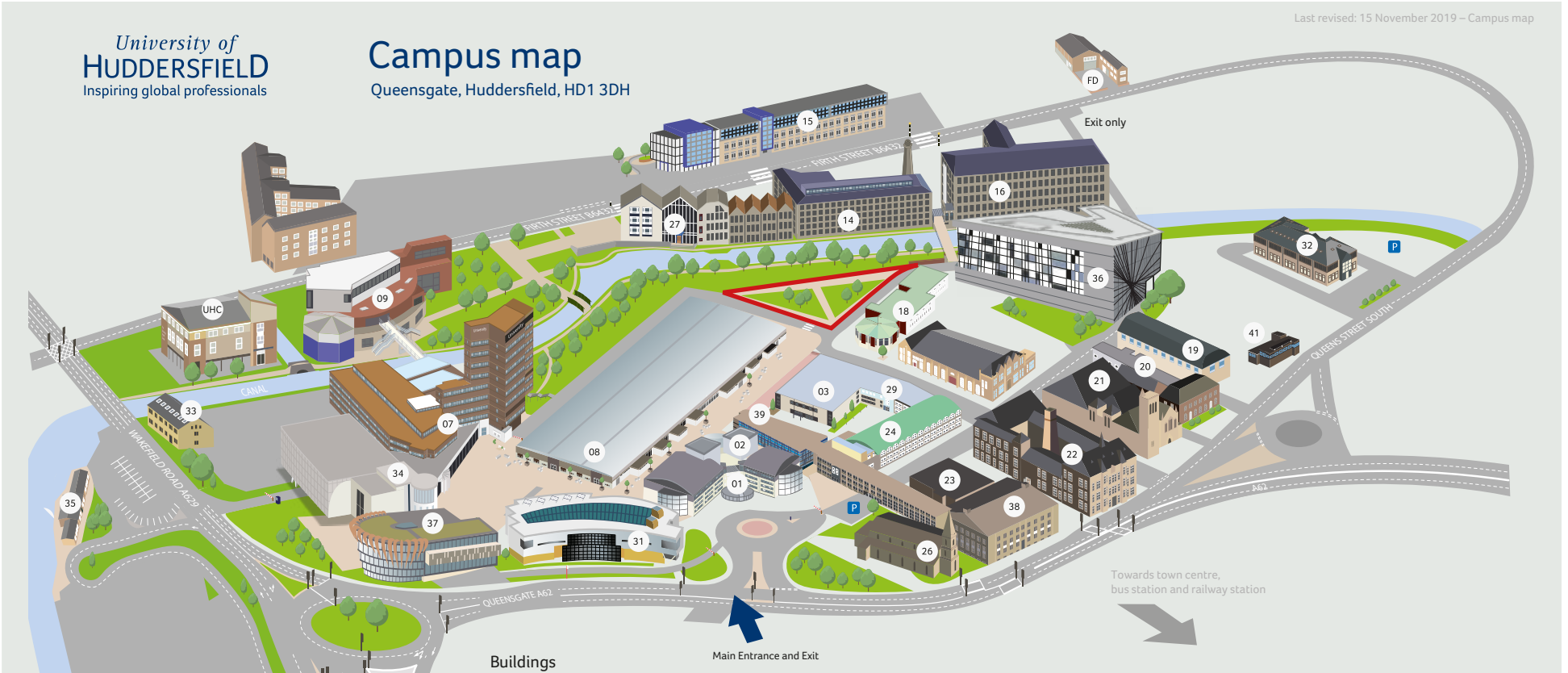
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29th January 2021

University of
HUDDERSFIELD
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Above: 2019 University of Huddersfield Campus map, with the Faith Centre site highlighted in red at the heart of the campus



Left: Aerial view of the site, with the Faith Centre site area highlighted in red [base image from maps.google.com]

1.1 PURPOSE OF THE REPORT

This report has been produced by Bond Bryan Architects on behalf of The University of Huddersfield to support the full planning application for a new 930m² Faith Centre within the University's Queensgate Campus.

It has been provided to help communicate the architectural design intentions that have been created in close collaboration with the University, end-users, and design team as a response to the both the project brief, and its immediate context.

The Client

The University of Huddersfield is recognised within the adopted *Kirklees Local Plan (2019)* as playing an important role in the operation and revitalisation of the town centre, both as a large employer, and for it's role in attracting a significant number of visitors to the area. As such, supporting the development and redevelopment of facilities for the University is seen as key to supporting the success of the University, and the town centre.

The Site

The proposed site for the scheme is located on the North bank of the Huddersfield narrow canal at the heart of the Queensgate Campus, directly opposite the Haslett Building (a converted former mill) and adjacent to the Technology Building and the Edith Key Building. This is the second iteration of the project, with a previous version located adjacent to the grade II listed Sir John Ramsden Court being paused in early 2020 due to issues with the site complexity.

The scheme will provide a much needed permanent replacement for the University's current Multi-faith provision currently situated in temporary accommodation on St Paul's Street, which has now reached a stage of serious disrepair and would require considerable investment to prolong its lifespan.

1.2 PROJECT TEAM

The following multi-disciplinary team has been assembled in order to provide professional support and expertise for this project:

	Bond Bryan Lead Consultant Architect Principal Designer		Hoare Lea Fire Consultant
	Gleeds Project Managers Cost Managers		Stroma Acoustic Consultant
	Gillespies Landscape Architects		Brooks Ecological Ecological Consultant
	Eastwood & Partners Structural Engineers Civil Engineers		Optima Highways Highways Consultant
	Services Design Associates Building Services		IBP Planning Consultant



2.0 PROJECT CONTEXT

BOND BRYAN
FAITH CENTRE, UNIVERSITY OF HUDDERSFIELD
DESIGN & ACCESS STATEMENT

2.1 SITE INTRODUCTION & ANALYSIS

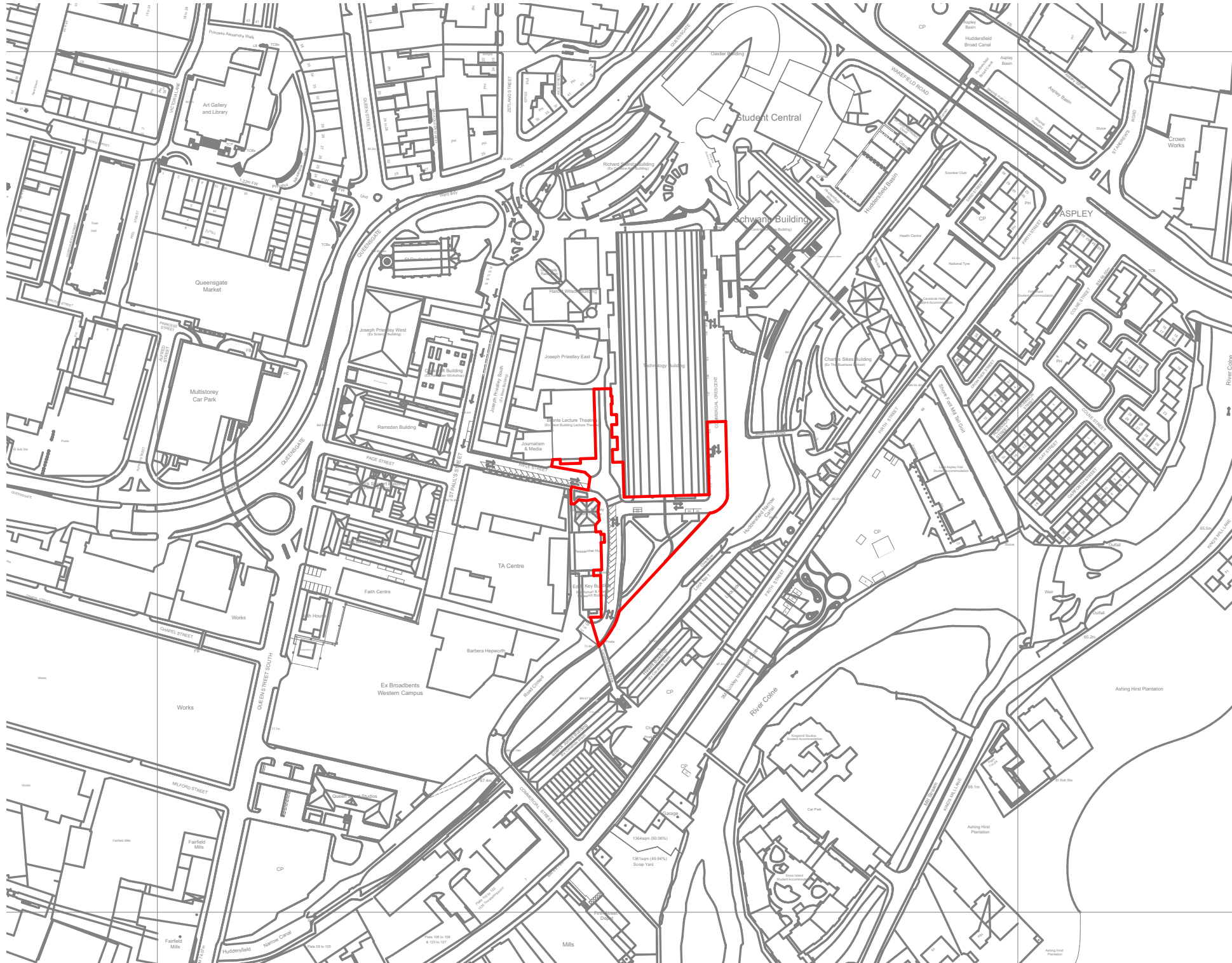
Approximately 1450m², the site sits at the heart of the University of Huddersfield's Queensgate Campus, nestled between the Huddersfield Narrow Canal, the Technology building, and the Edith Key Building. Directly across the canal are the Haslett and the Spärck Jones Buildings, both of which are converted former mills from the city's industrial heritage.

The triangular site is currently under-utilised, having played host to building compounds in recent years for construction projects in surrounding areas. Currently zoned as a informal landscape, it is characterised by the dense tree boundary that occupies the steep bank down to the canal on its southern edge, and by it's position along a major thoroughfare for students moving about the campus. It also features a short section of railway track, currently used by the Institute of Railway Research based in the Technology building on the north edge of the site.

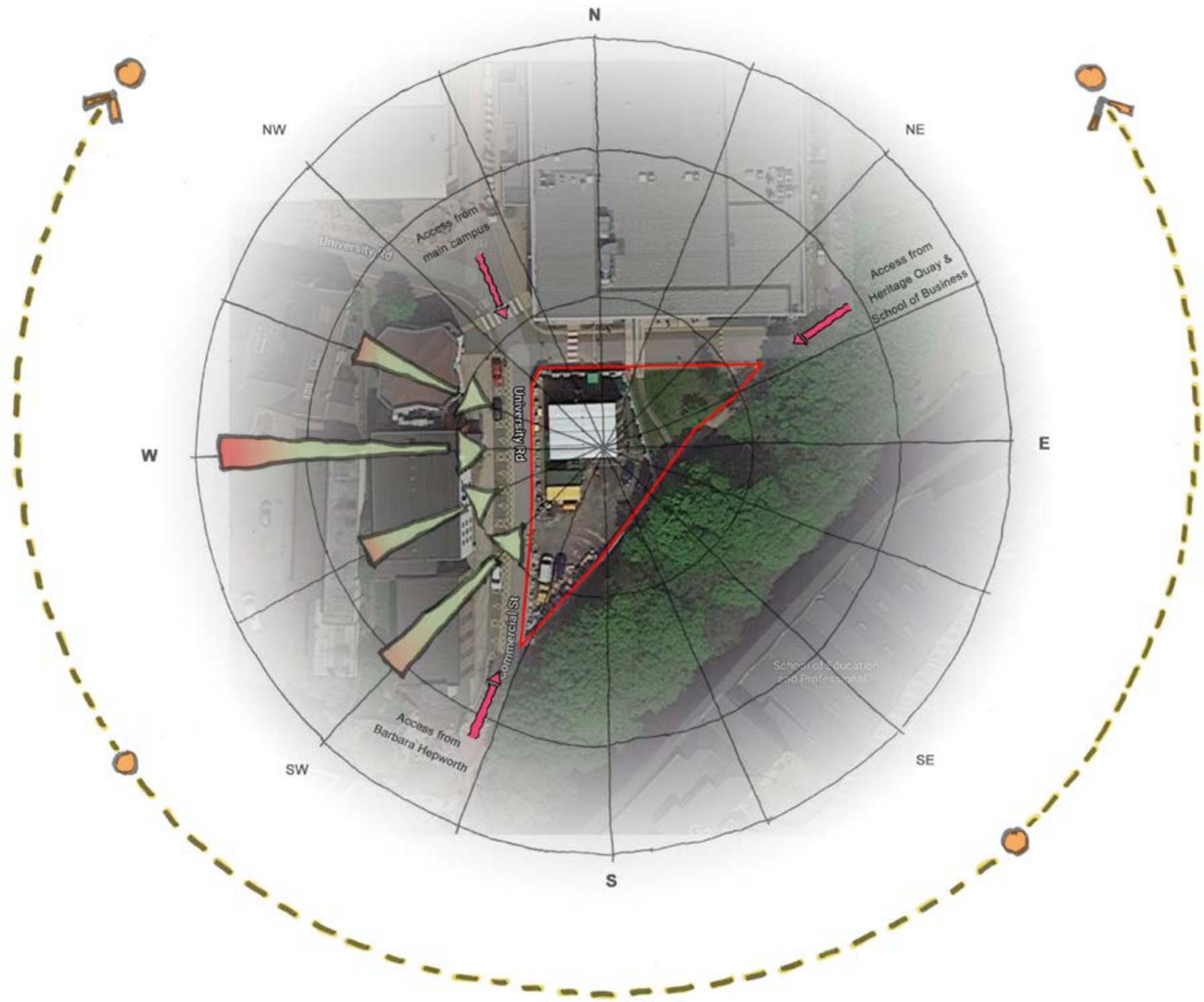
Vehicular access to the site is from University Road, which connects to Firth Street in the South and Queensgate in the North. Pedestrian access to the site is provided both via shared surface areas leading down from the North, and by foot bridges across the canal to the South and East.



View of Site, looking South from the Bronte Lecture Theatres



Site context plan. The wider area addressed in the Landscape plan is highlighted in red, with the Faith Centre site in the South below the Technology Building



Initial Site Analysis
[maps.google.com]



The site is currently open space, and houses a segment of narrow gauge track used by the Institute of Railway research to the North



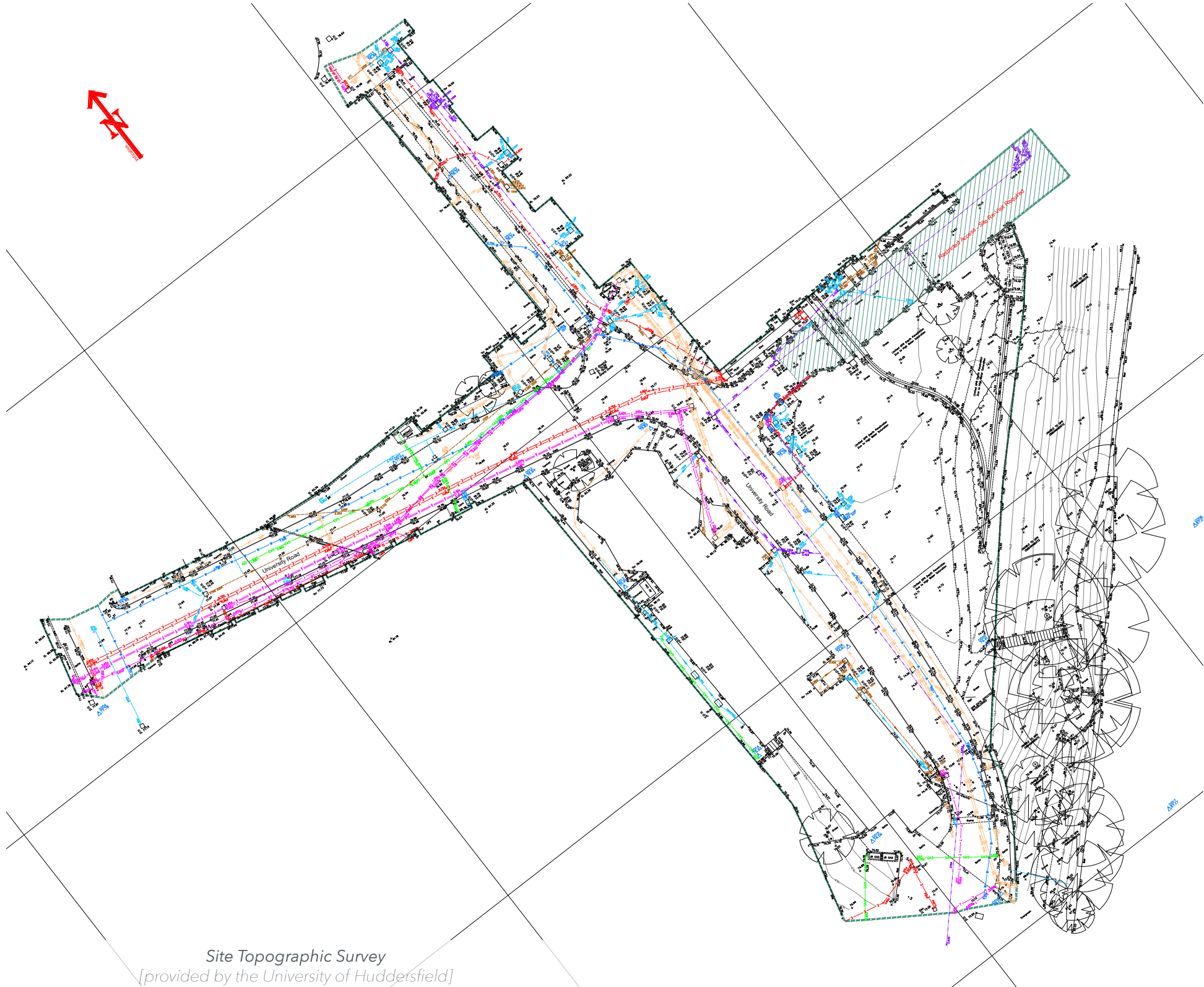
View of the site from the South, on the route into the Campus from the Barbara Hepworth building

2.2 SITE TOPOGRAPHY

The Huddersfield Narrow Canal is located approximately 15m to the South-East of site - the overflow and Lock No 1 are close by, running parallel to this site boundary.

A Topographical survey has been completed that shows that the existing site levels are within the range of 74.50m to 75.50m AOD. There is also a steep embankment dropping down towards the canal on the South-East side of the site, which is densely planted with woodland trees.

Part of the site is currently utilised by a narrow-gauge railway line (accessed from the adjacent Technology Building) - these proposals include the relocation of this track to a new route towards the North-East of the site and around the rear (canal side) of the Technology Building in order to avoid the footprint of the new Faith Centre building.



2.3 LOCAL CONTEXT

There is a wide variety of external fabric materials and building scale, both within the wider Queensgate Campus as well as immediately neighbouring the site, from which it is possible to take reference for the design of the proposed new building.

The Haslett Building and Spårck Jones Building, located on the other side of the canal immediately opposite the site, are former Industrial Mills buildings, constructed of the local hammer dressed York Sandstone typical of the 18th & 19th century industrial building stock found within Huddersfield town. Both were converted for university use in the late 1990's.

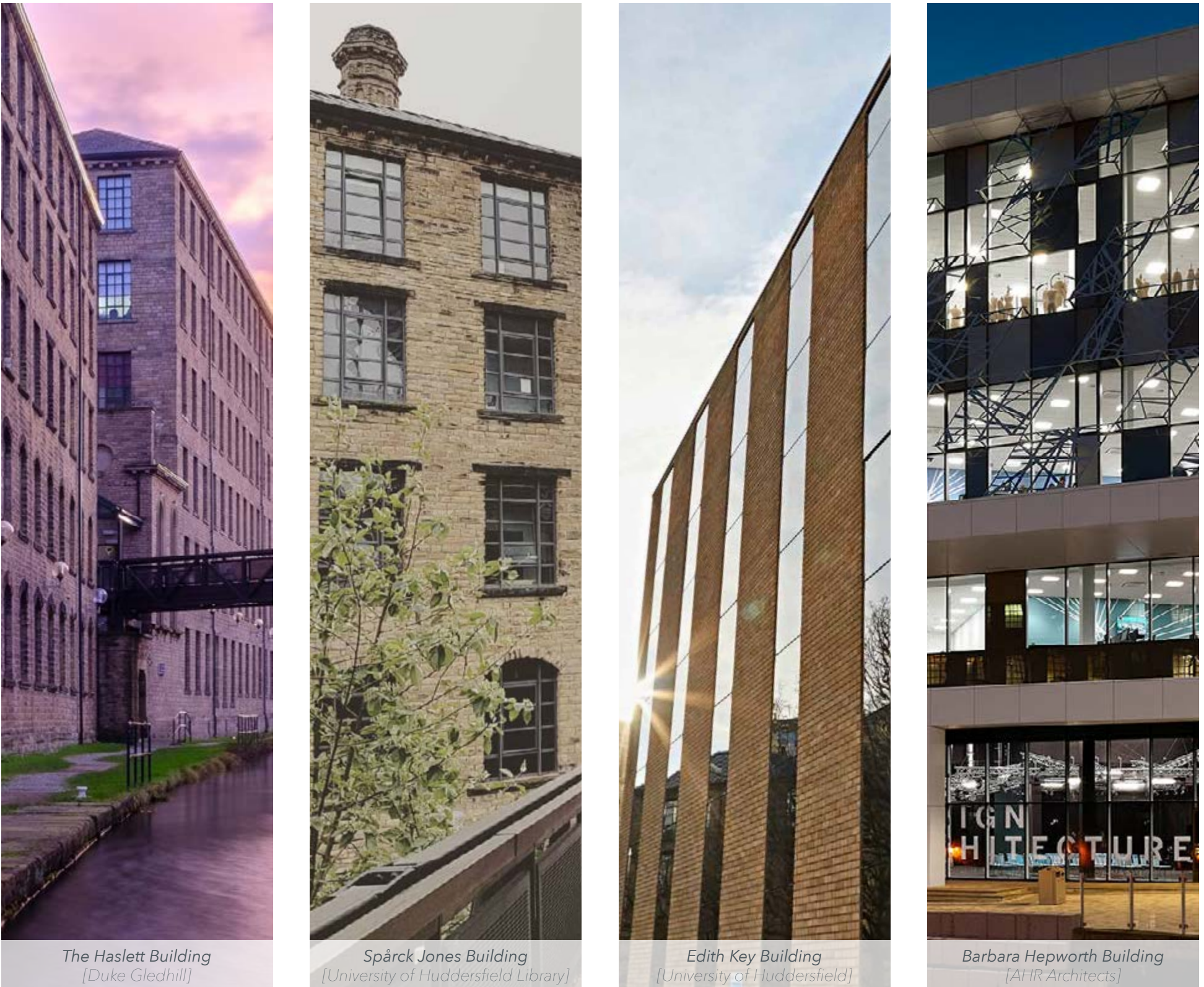
The Edith Key and Barbara Hepworth Buildings located on the Western side of University Road are key design drivers in terms of materiality, offer a contemporary material palette of brickwork, smooth cladding, and large format curtain walling that contrasts with the more historic surrounding buildings from which to take reference and respond to.

There is also a range of building scales around the site, ranging from six stories (the converted mill buildings in the South) to two or three stories (the University buildings to the West). The Technology Building adjacent to the North is a vast two story shed, inhabited the Institute of Railway Research at its southern edge.

2.4 ECOLOGY

Preliminary findings compiled by *Brooks Ecological* suggest that there does not appear to be any significant ecological issues on this site. The recommendations are as follows:

- Produce a site design that improves and enhances local biodiversity where possible, and minimise it's loss where not
- Protect and manage the habits surrounding the site, including the dense woodland edge that leads down to the Huddersfield Narrow Canal
- Remove and monitor the woodland edge for the invasive non-native species identified during the report process

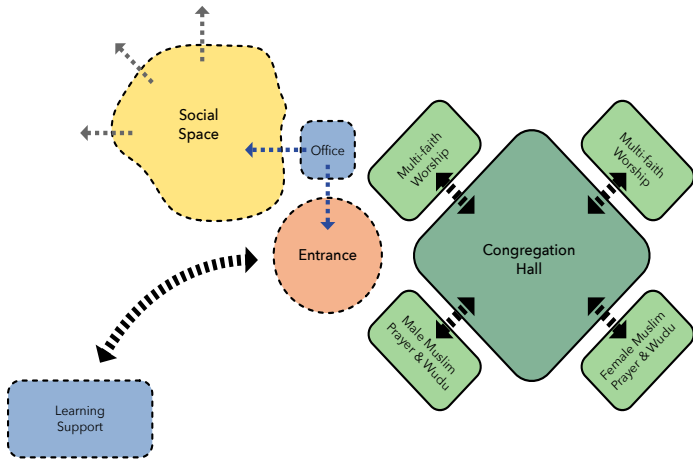


2.5 PROJECT BRIEF

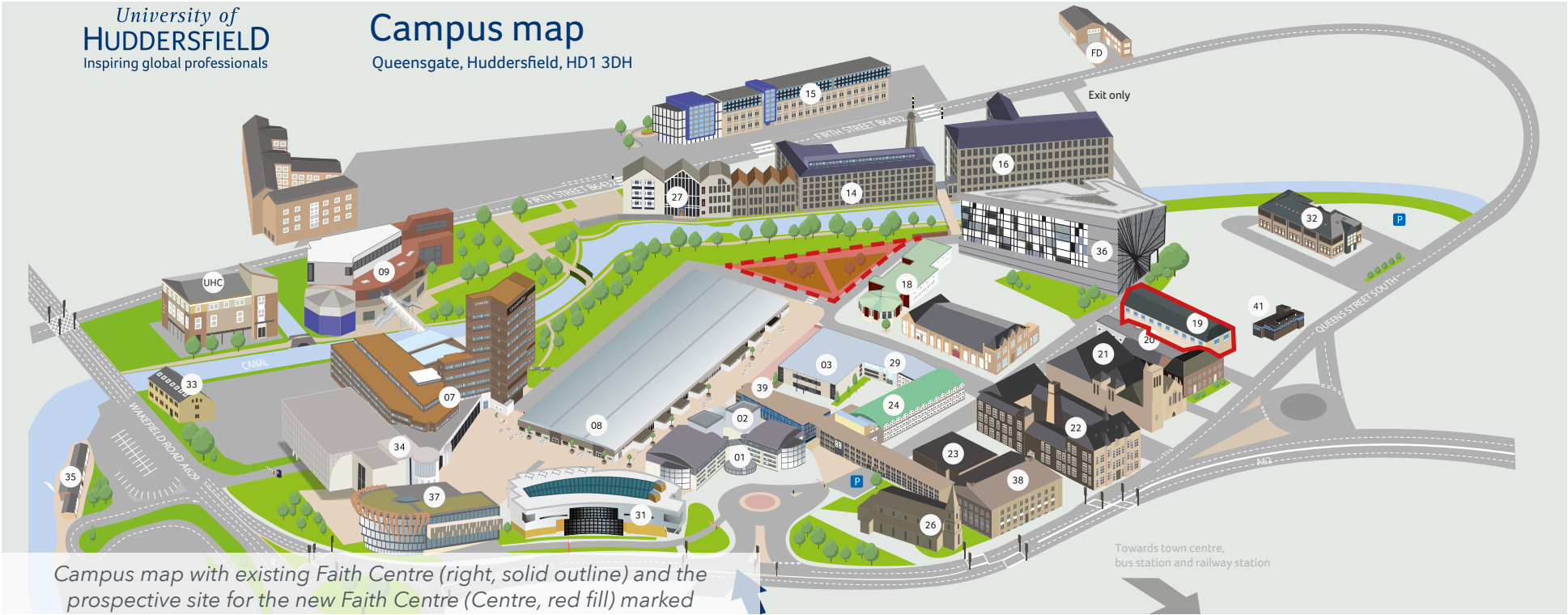
This project aims to provide a much needed permanent solution for the University's multi-faith offering. The floor plans of the existing Faith Centre, currently housed in temporary accommodation on the edge of the Queensgate Campus, and consultation with the building's current users provided the basis for the new facilities brief:

- The Faith Centre should provide a range of faith or spiritual based activities, promoting inclusivity for all religions whilst still catering to the specific practices required by the users
- There should be a provision for learning and pastoral support contained within the scheme that can easily be separated from any faith based activities
- New provisions should be made more visible and accessible by locating them at the heart of the campus in a landmark building, rather than isolating them away from the main student population.

In total the proposed Gross Internal Floor Area for the new 2 storey building is circa 930m² including plant and ancillary spaces.



Sketch adjacencies diagram of brief



2.6 END USER CONSULTATION

In November 2019, the University of Huddersfield carried out a survey of 103 users of the current Faith Centre, covering a sample of students from all faith's represented on Campus. The results can be summarised as follows:

Positive Features of the Existing Provision

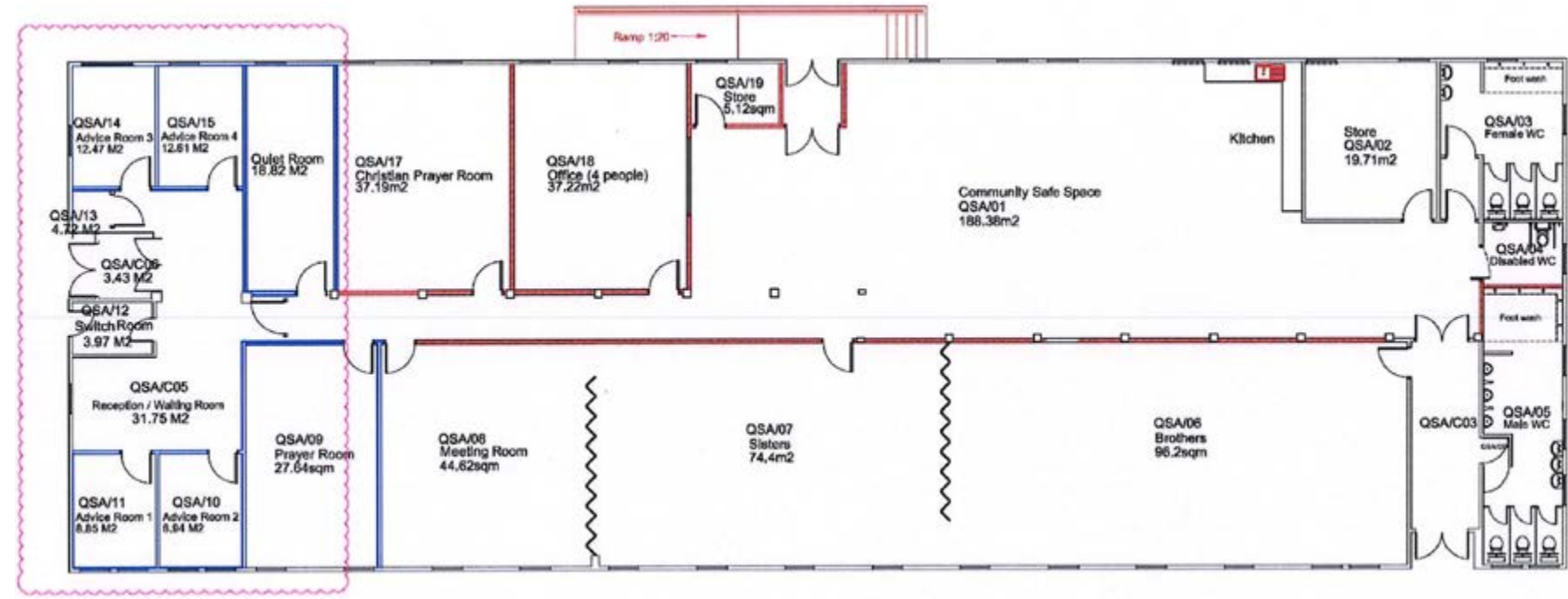
- Quiet, reflective atmosphere
- Separate gendered prayer spaces
- Ablution facilities provided on site
- Provision of Casual spaces for socialising and study

Negative Features of the Existing Provision

- No Hindu worship provision with the centre
- Toilets and communal areas are not cleaned to the desired standard
- The centre is isolated on the edge of campus, away from the main student hubs
- There is a lack of heating, and the physical environment is not up to the required standard
- Many of the rooms are small, with limited storage

User Recommendations and Desires

- A majority of respondents (76%) placed a priority on **group prayer rooms** over individual ones (53%)
- 58% of respondents stated a desire for **single gendered prayer rooms with attached washing facilities** to allow simultaneous use of the facilities by male and female students during peak times such as Friday Prayer
- 63% of respondents thought that including a **kitchen space** in the faith centre was important
- 59% of respondents thought that **storage space** was an important consideration
- Respondents asked for a greater desire to be taken with the design and layout of prayer spaces; with a particular regard to their **orientation towards Mecca** for Muslim prayer, and for the locations for holy books



Floor plan of the Existing Faith Centre in temporary accommodation in the Queen Street Building Annex

QSA Room Number	Actual Use	SQM	Sub Total	% Allocation
Faith Centre				
1	Community Safe Space / Lounge	188.4		
2	Store	19.7		
3	Female WC	17.95		
4	Disabled WC	4.77		
5	Male WC	20.14		
6	Muslim Prayer Room Brothers	97.63		
7	Muslim Prayer Room Flex	75.5		
8	Muslim Prayer Room Sisters	45.28		
17	Christian / Non Denominational Prayer Room	37.19		
18	Office (Chaplains)	37.22		
C01	Main Lobby	3.46		
C03	Rear Lobby (Former Brothers Entrance)	12.22	559.46	81%
Counselling				
10	Advice Room	8.34		
11	Advice Room	8.85		
14	Advice Room	9.37		
9	Meeting Room	28.06		
15	Advice Room	9.64		
C05 + C06	Reception and Lobby	35.18	100.04	14%
Learning Support				
16	Advice Room - Used for Learning Support	28.06		
19	Advice Room - Used for Learning Support	5.12	33.18	5%
Plant and Lobby Spaces				
12	Plant Room	3.97		
TOTAL		696.65	692.68	100%

Area data for the existing Faith Centre provision

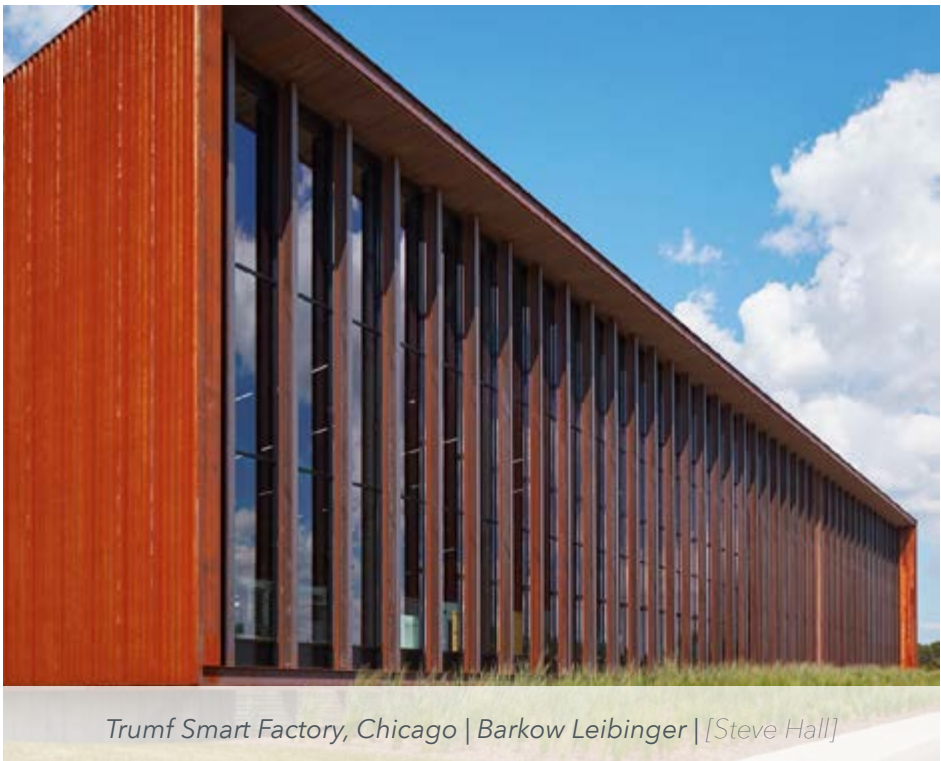
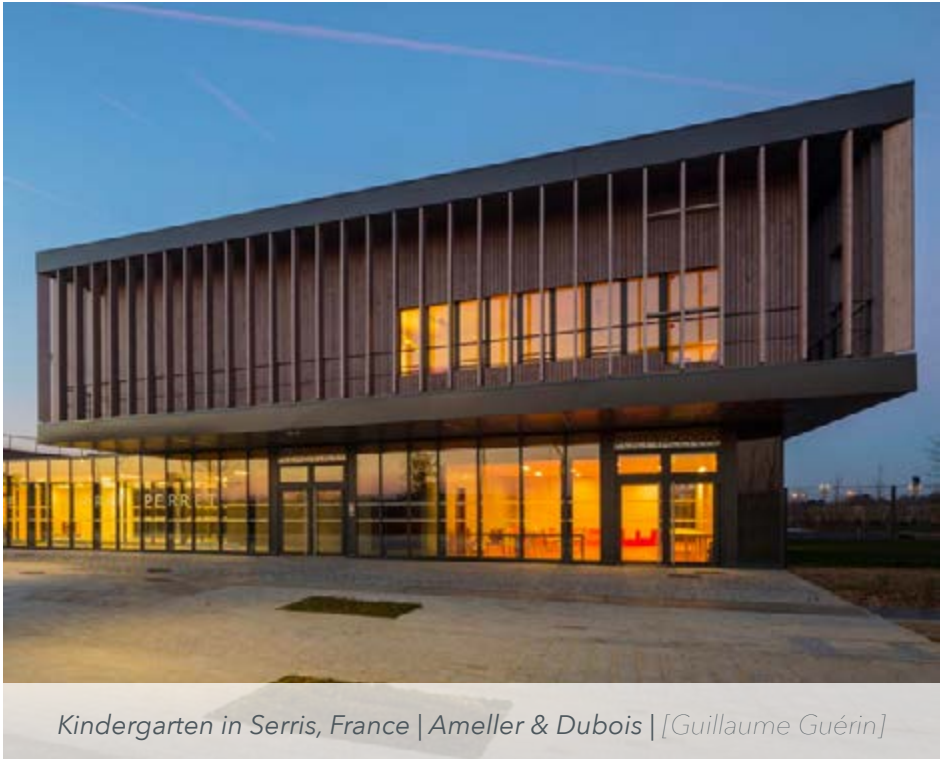
2.7 DESIGN INTENT

The aspiration for the project is to create a visual landmark at the centre of the Queensgate campus to act as a focal point for students of all religious denominations. It is important for the building to reflect aspects of spirituality, worship, and mindfulness, without using symbolism strongly associated with any one particular faith.

The site sits at the junction between a strip of woodland and a major arterial route for students moving through the University. The Landscape design around the faith centre will aim to make use of green areas, providing gathering and breakout spaces, and also creating soft buffers to sensitive spaces such as prayer rooms.

The design should also respond to the industrial heritage of its context, being located adjacent to the Narrow Canal and several historic mills buildings, and to the Sandstone that characterises Huddersfield’s built environment. To reflect this, the building should feel solid and monolithic - it will require a certain gravitas; both to anchor the site, and to convey the restrained, reflective nature of faith. Spaces and openings should feel like they are carved out of the buildings external fabric, expressed through design choices such as deep reveals and external cladding turning into openings.

There is an intention to use strong lines and expressed verticality to help orientate building users and lead people through the procession of spaces. This will be especially important in Muslim prayer areas, as the design can help express the Qibla and align prayer mats with Mecca.



3.0 DESIGN STATEMENT

3.1 SITE STRATEGY

Existing Landscape

University Road forms part of a busy student thoroughfare at the heart of the Queensgate Campus; currently students have no space to congregate or wait for friends after classes, and as such areas of the site can become clogged with pedestrian traffic when classes finish. The existing landscape is predominantly vehicular focused, and the triangle of lawn can become waterlogged after heavy rainfall leaving little usable space for student recreation and relaxation. The northern section of University Road is an area of potential pedestrian and vehicle conflict, with students and cyclists crossing the road and vehicles entering the site.

The site is currently home to a narrow gauge railway track used annually when students test their engines before taking part in a student competition. This railway track is a unique feature for the University of Huddersfield, and should be celebrated as such.

There are five existing trees on site, ranging from moderate to poor quality, which provide little amenity value. Adjacent to the site is a semi self-seeded woodland which slopes down to the Huddersfield narrow canal, creating a soft woodland edge and increasing the biodiversity of this area.



The existing site is mostly low quality amenity grass



Diagram Illustrating Landscape design constraints



Landscape Design Concept

The landscape proposals seek to transform the space by restricting vehicular movement onto University Road, creating more space for a high quality shared street. This will improve cross campus links by allowing pedestrians and cyclists to move freely without conflict.

Planters with seating opportunities will be placed strategically throughout the site, allowing students to filter through from their classes into these seating areas, animating the edges of the new Faith Centre building. New planting seeks to create sheltered areas for quiet contemplation and small gatherings just off the main thoroughfare. New tree planting will also be provided to visually enhance existing façades, provide shelter and break up areas of paving.

The existing narrow gauge railway track will be redirected along the North East side of the Faith Centre, towards the back of the Institute for Railway Research. This design will open up areas of paving for students and spectators to watch, highlighting this unique activity on campus.

A contemporary new and secure cycle shelter will be provided, with space to store up to 26 bikes. The shelter will be in keeping with the materials of the Faith Centre and will have a sedum roof to enhance biodiversity.

3.2 BUILDING ORGANISATION

Design Concept

The new faith centre building aims to provide a welcoming and inclusive approach for all those who wish to use the facilities, regardless of their background or religious beliefs. Reflection upon the university's current faith centre facilities has led to the development of a design brief with inclusivity and tranquillity as key design drivers. Fundamental to the design is the ability for all users to easily navigate themselves through the facilities, without undue confusion or congestion, and respecting each other's differing needs and requirements.

The key adjacencies are summarised as follows:

Entrance – a secure welcoming space, providing a transitional link between the upgraded external environment and interior spaces beyond, with clear views into a shared gathering/meeting space and social space.

Office – a staff work base, providing passive supervision over the entrance and gathering areas, as well as the social space

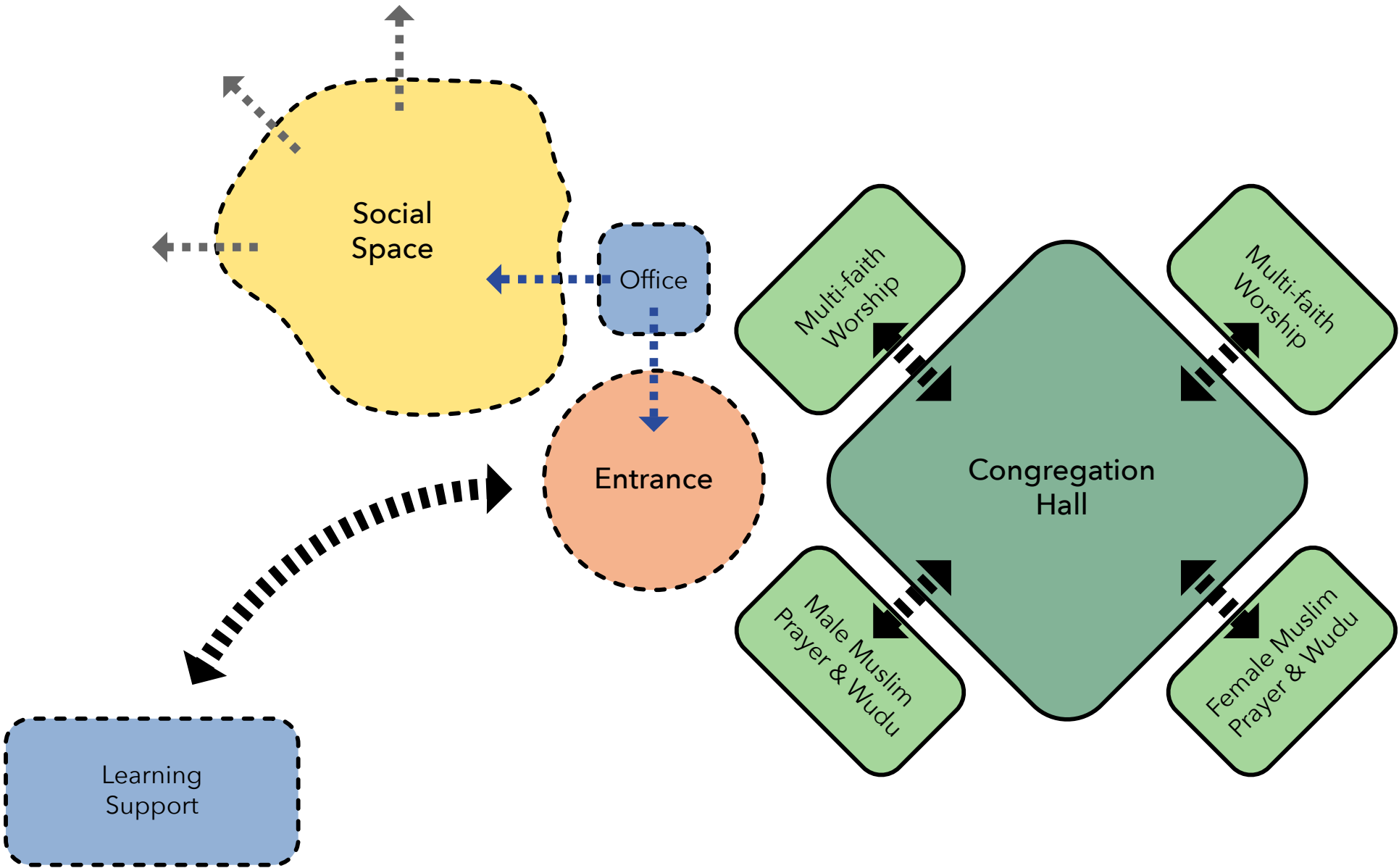
Congregation Hall – A flexible and dividable space suitable for many different uses; ideally located centrally within the facility to allow direct links to the entrance area and social spaces.

Muslim prayer facilities – segregated into self-enclosed male and female facilities; each with their own toilets, shoe storage, wudu, and prayer room. These spaces should ideally connect directly to the congregation hall to facilitate flexible worship.

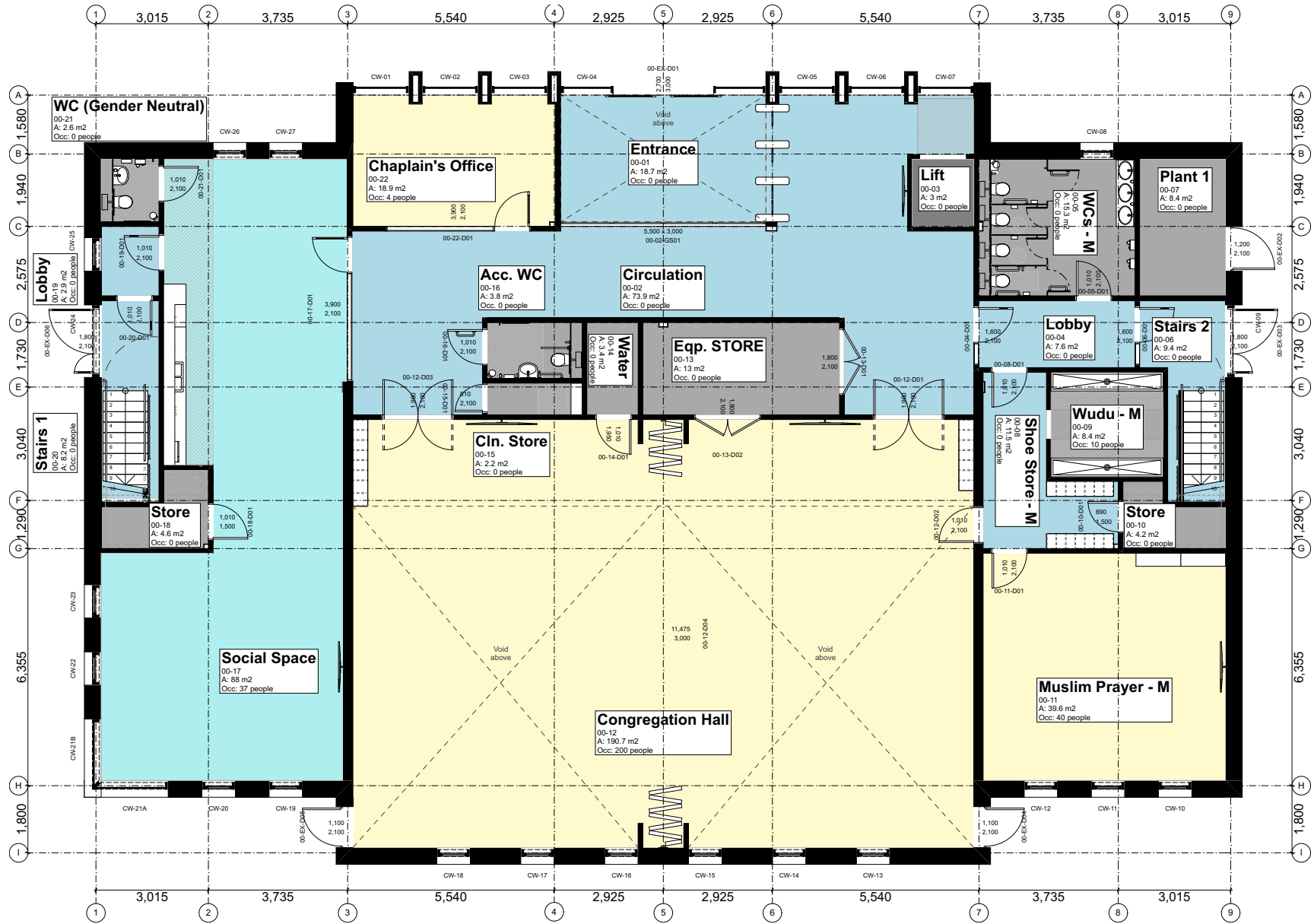
Social Space – a casual space for informal socialising, studying, cooking and dining. The integration of this facility within the overall building is of key importance to encourage relationships to form across the diverse range of users.

Multi-faith rooms – flexible, modest spaces; offering quieter, more private environments for prayer or study away from the social and gathering areas.

Learning Support rooms – contemplative, quiet spaces for addressing students' pastoral needs; such as drop-in sessions or 1-2-1 counselling; accessed from a calming waiting area.



Sketch adjacencies diagram developed from the Universities Brief



Ground Floor Plan, Not to Scale

Ground Floor

Main Entrance

The main entrance space aims to reward the user with a sense of arrival, creating a safe and welcoming environment with multiple opportunities for social gatherings and meeting other building users in an informal setting. The entrance itself is easily recognisable from the wider university campus, located central to the building's symmetrical façade and defined by a series of timber-clad frames that wrap up onto the roof. These frames push through the curtain walling to be expressed both internally and externally, aiding users transition between outside and inside.

A double-height internal entrance offers an inviting transitional gathering space for all visitors arriving at the building via the fully glazed automatic sliding entrance doors, providing clear views of the key internal spaces beyond.

A set of security gates operated via access control systems will ensure that the facility is used exclusively by the university's students and staff and will prevent access by members of the public

Gathering Space

There is a spacious circulation space beyond, offering the opportunity for a number of gathering spaces for individuals or groups awaiting scheduled activities. A feature timber wall links the spaces, bringing natural, tactile materials and patterns from nature into the heart of the building.

The lift is sited in a key visible location to help orientate visitors within the building, as well as offering easy access up to the first floor Learning Support and Faith facilities. In addition to this, two stair cores are located on each side of the building, reinforcing the simplicity and symmetry of the overall building form.

The overall ground floor is split between social and faith facilities, with both facilities being easily recognised from the entrance and circulation areas.

Ground Floor (continued)

Passive supervision

An office is located to the side of the main entrance into the building, which is envisaged to be used as a staff base to provide central support to the complete facility. It occupies a key location for maintaining passive supervision across the complete entrance facade, as well as into the circulation spaces adjoining the Congregation Hall, and into the Social Space to the West.



View of Entrance Area

Social Space

A key design driver has been to provide an extensive social space, that is easily accessible, visible and flexible, to be used by all students, regardless of their faith and beliefs. Located on the western side of the building with direct access off the main circulation area; the space offers flexible and relaxing spaces in addition to a kitchenette storage, and dining facilities, and would be available for students to use as a touch-down base.



View of Social Space from the staff office



View from Social Space towards the Barbara Hepworth Building

Ground Floor (continued)

Faith Provision

The faith offering has been designed in conjunction with the University's faith leaders and end-user groups to ensure the building would work as flexibly as possible for all faiths.

A large congregation space at the heart of the building will not only provide the space needed for the Universities Muslim population, particularly during the Friday prayers, but also provide a flexible general purpose space for use by the University for other events if required. Other faith users will also be able to have access to this space to hold large meetings.

A dividing partition within the Hall itself will enable the space to be segregated for male and female Muslim users if required, or to be re-configured for smaller events when not in use for prayers.

A centrally located Equipment Store is accessible from both within the hall and from the main circulation space, which will allow convenient and flexible use of the space for many different purposes.

Segregated ablution / prayer facilities (WCs, shoe storage, Wudu and Muslim prayer rooms) are provided on both ground and first floors to the east of the Hall - the male facilities are on the ground floor, with the female facilities replicated above on the first floor.



View into Congregation Hall and beyond to the Canal embankment

First Floor

The first floor focusses on some of the smaller, more intimate spaces and facilities, afforded naturally by the increased privacy of the building's arrangement.

Multi-Faith

Smaller Christian and multi-faith spaces are provided adjacent to Stair core 1. These can cater for smaller groups, and offer quieter, more private, facilities that are still flexible in nature.

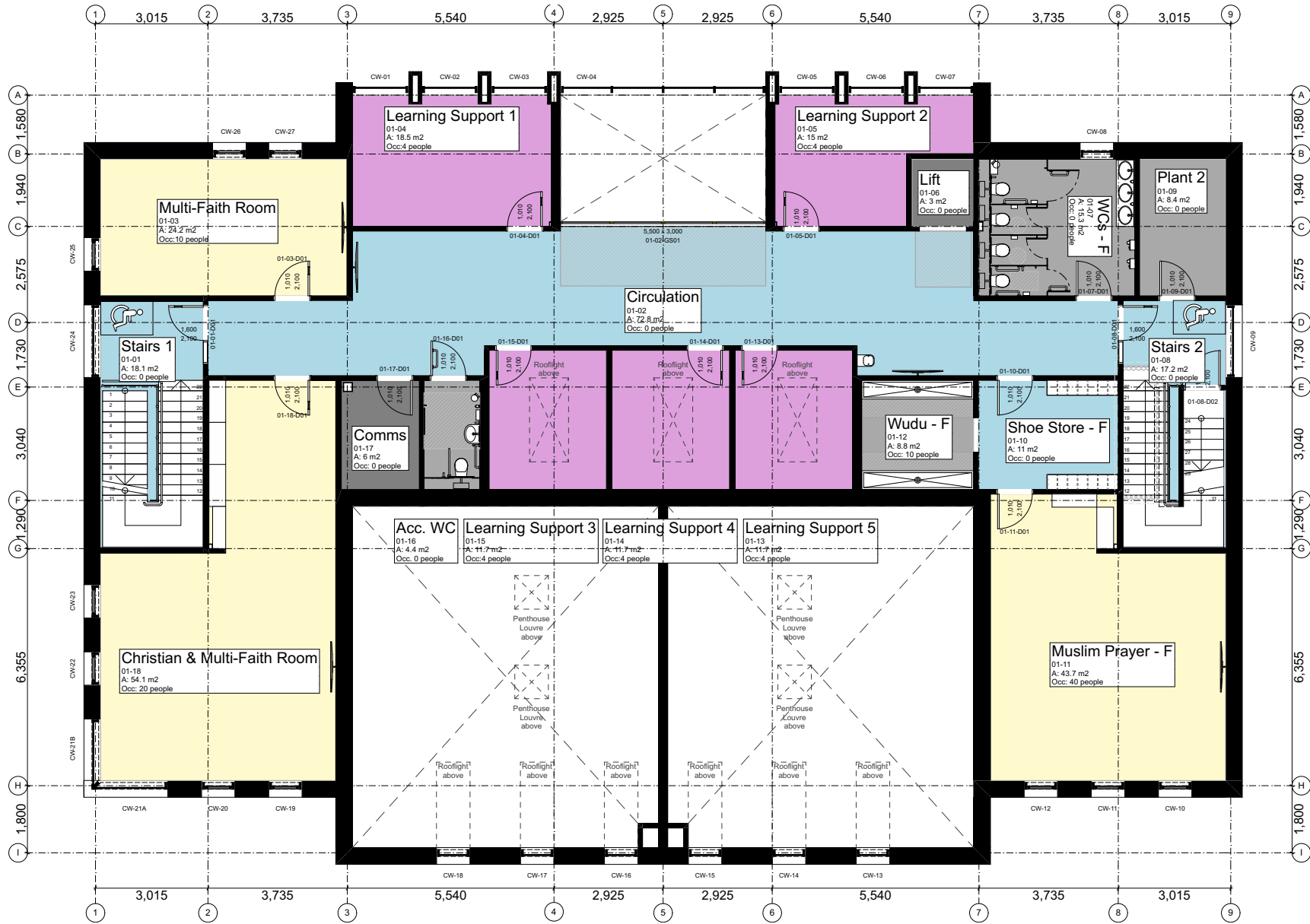
Learning Support

A range of Learning Support Rooms are located centrally, offering good physical links between the smaller multi-faith rooms, as well as providing clear visual connections down to the main entrance area below with it's feature timber-clad structure via internal glazed screens.

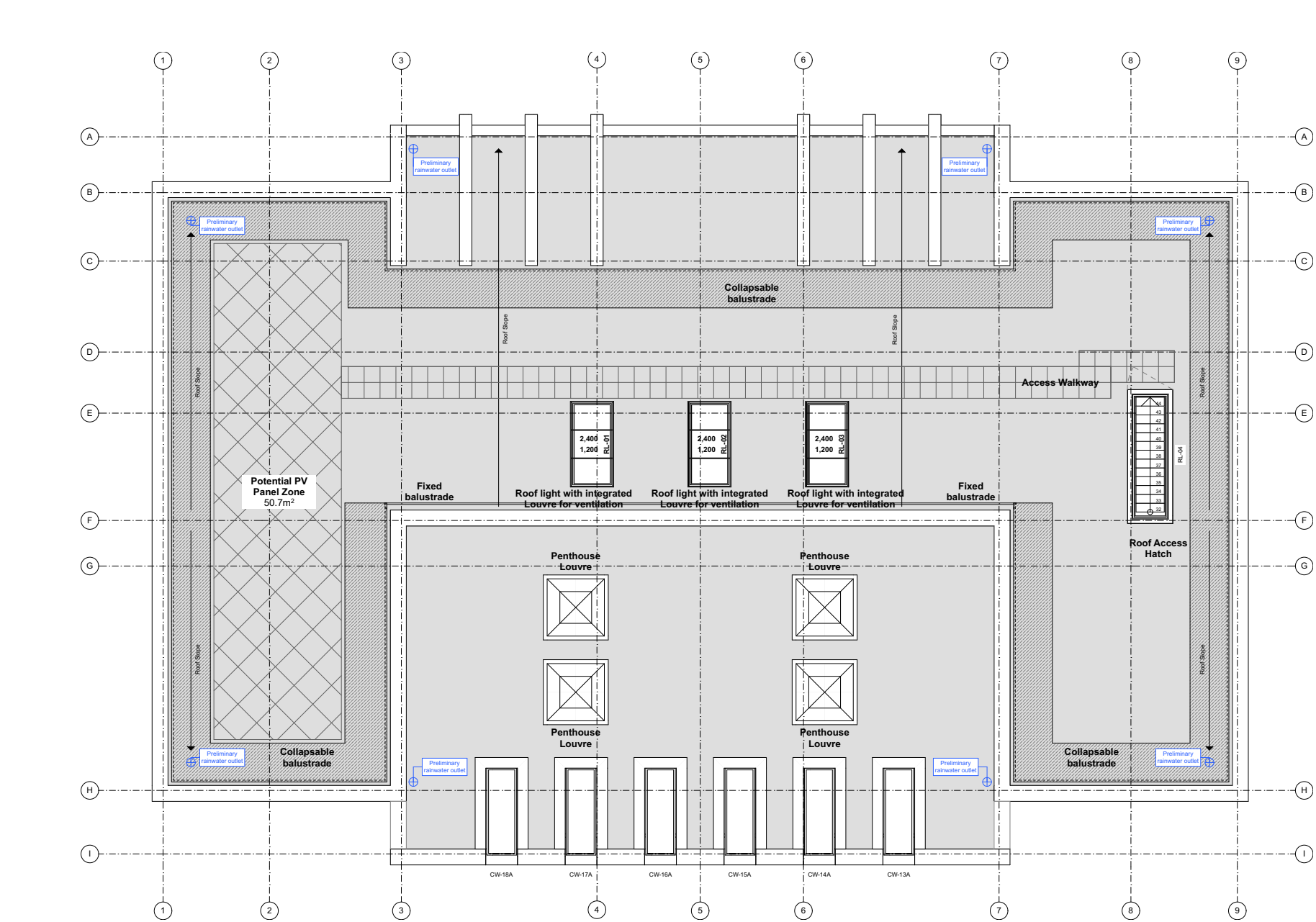
The circulation area serving these rooms provides a reflective, comfortable waiting area, which is vital to the intended operation of these rooms as learning support and student counselling facilities.

Neutrality

Great care has been taken to maintain a 'neutral' outlook to the building to encourage all faith and non-faith followers to use the facilities. In consideration of the internal fabric to Muslim prayer rooms, subtle directional patterns are proposed within the flooring / furnishings to direct users towards Mecca, whilst also allowing all spaces to remain non-denominational in outward appearance.



First Floor Plan, Not to Scale



Roof Level Plan, Not to Scale

Roof Level

The proposed 2-storey building is overlooked on all four sides by surrounding buildings. The high visibility of the building requires the roof design to be sensitively considered. It is proposed that the roof will be kept free from any major services and plant location, with the exception of photovoltaic panels, in order to limit visual impact to the surrounding buildings - particularly those to the South on the other side of the Canal.

The roof is arranged on two levels - a lower area of roof above the Hall, with roof level glazing as a continuation of the vertical curtain walling systems below, and four roof mounted penthouse louvres to provide natural ventilation to the Hall spaces below.

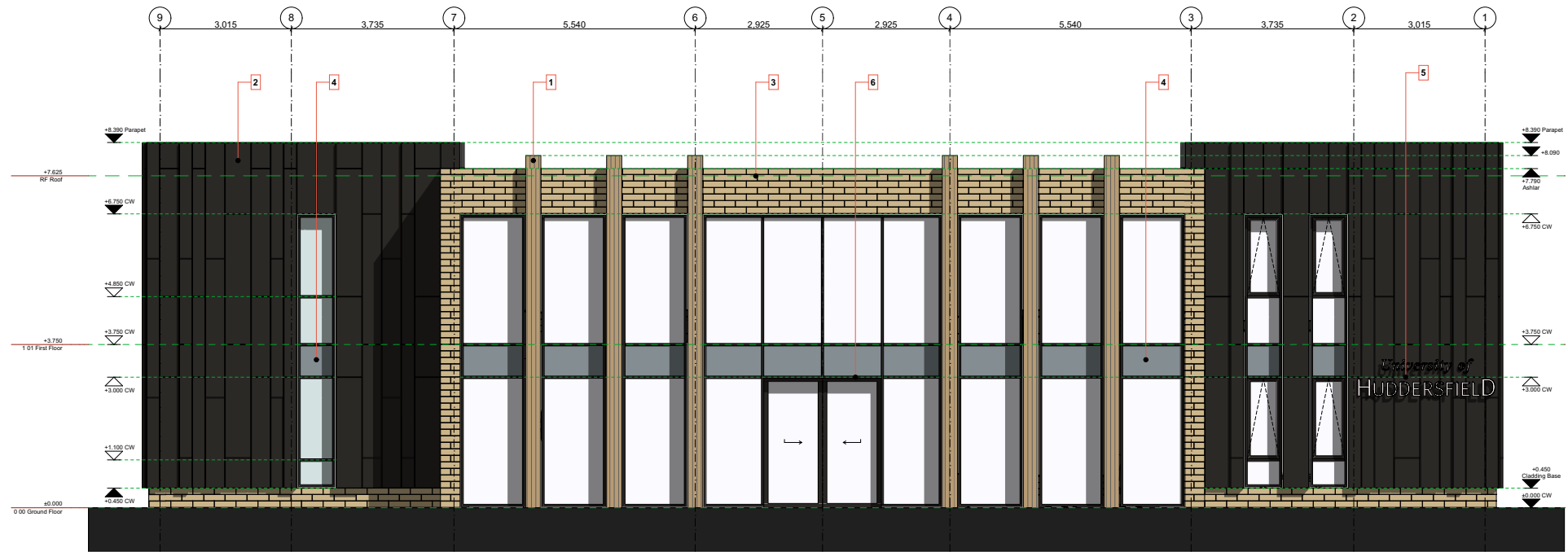
The remaining roof areas are all at a higher level, with a collapsible balustrade system hidden behind the continuous parapet to the external walls and a fixed balustrade along Grid Line F at the centre of the roof to offer protection from falls from the roof edge. Stair core 2 will continue up to roof level via an enclosed maintenance stair (secured from general access via walls and door at first floor), leading to a hydraulically powered roof access hatch. A range of roof lights are located directly above the centrally located Learning Resource Rooms, which will provide natural light and ventilation to the spaces below.

All roof areas will be drained via a syphonic rainwater drainage system, and all rainwater outlets will be suitably positioned to enable good maintenance access from the main roof areas.

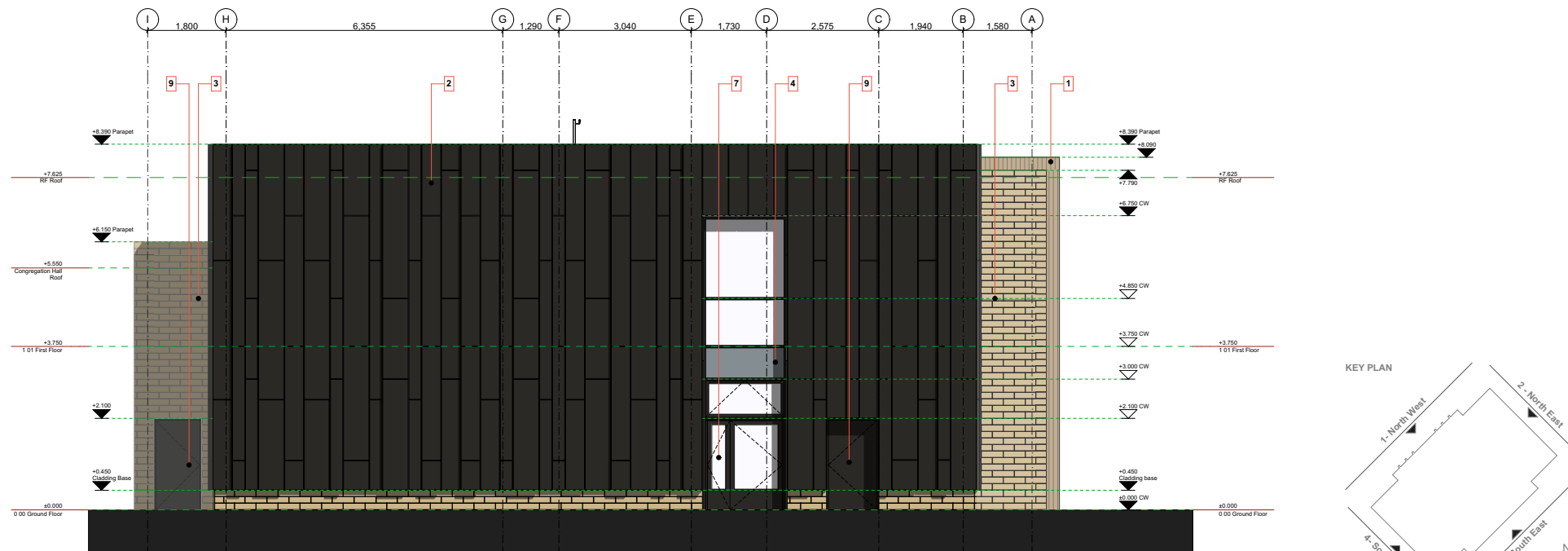
3.3 ELEVATIONAL STRATEGY

Building Form

The faith centre is expressed as a modestly proportioned two-storey building, which externally expresses the forms of its internal spaces, whilst also encompassing a small footprint on the site, in order to maximise the remaining site areas for valuable landscaped social uses. The building's scale and its positioning within the site aims to continue the street scape, building height and massing which is prevalent along University Road, sitting alongside the two-storey Technology Building to its north, and opposite the larger-scale 3-storey Edith Key building.

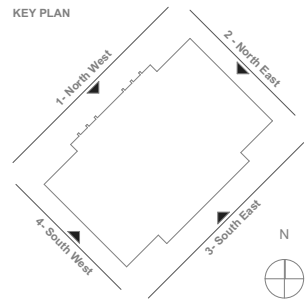


1 - North West Elevation
1:50

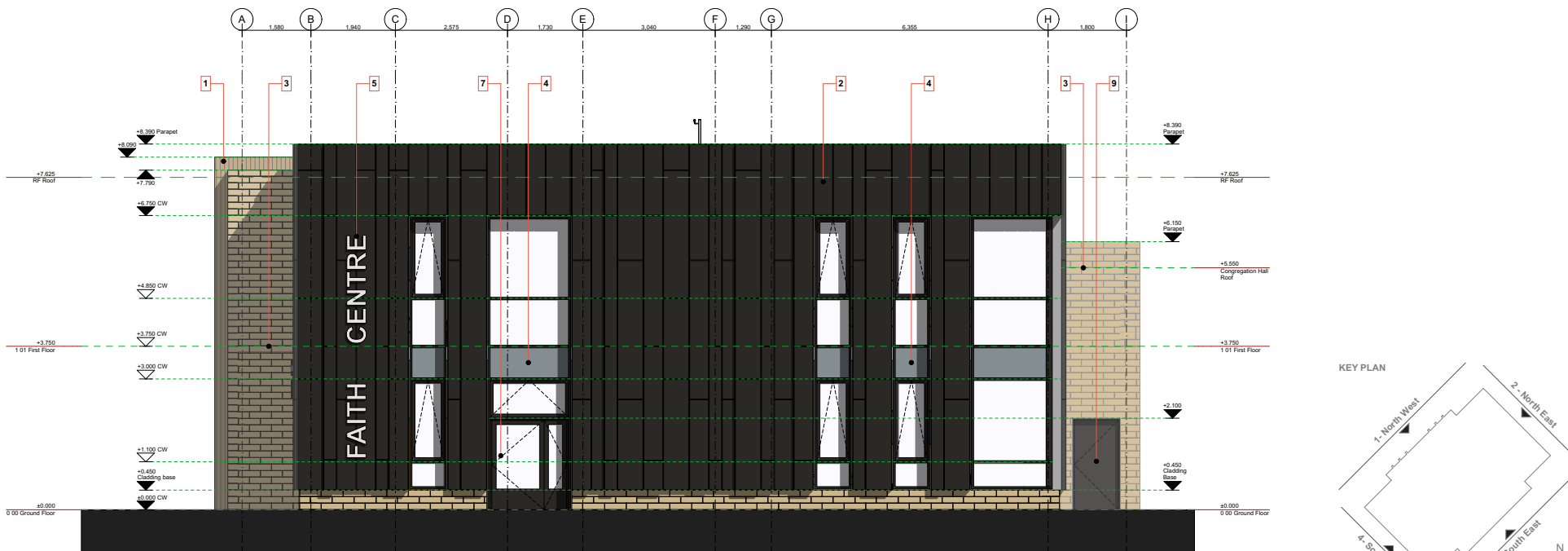


2 - North East Elevation
1:50

North East and North West Elevations, Not to Scale

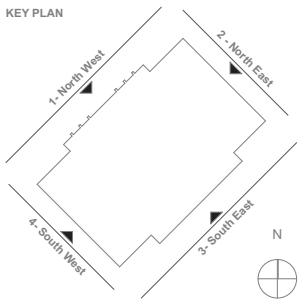


3 - South East Elevation
1:50



4 - South West Elevation
1:50

South East and South West Elevations, Not to Scale



The Congregation Hall drops down and pushes out beyond the Faith Centre

Materiality

Following a study of the materials and massing of the nearby surrounding buildings - which are a vibrant mix of traditional York Sandstone constructed buildings, as well as the larger proportions and cladding materials of the more modern buildings - it was concluded that the most appropriate materials for the proposed Faith Centre in response to its local context would be a combination of contemporary materials; namely Aluminium rainscreen cladding sitting atop a plinth of Ashlar stone, framed by a series timber-clad feature frames.

The choice of a Aluminium rain screen cladding provides a complementary foil to the traditional local stone construction, reflecting it's solid monolithic properties whilst also adding a dramatic dark colour element that will help identify the faith centre as a central focal point for students on campus.

This cladding sits atop a plinth of textured Ashlar stone blocks that provides another direct link back to the York stone used extensively in the surrounding context. Contrasting in both colour and texture to the cladding, the stone blocks lift the darker elements up to reduce the visual weight of the new building, and then wrap up around the entrance and the rear congregation hall to help demarcate the key public spaces within the design

The main entrance is highlighted by a series of protruding timber-clad structural frames, which are expressed both internally and externally. These provide a structured rhythm to the symmetrical façade, and help to break up the double-height curtain walling that offers students and visitors glimpses into the understanding of the building's internal use and typology.

The colouring of the Aluminium cladding is proposed as a dark grey colouring, intended to contrast visually and texturally against the rich natural timber cladding at the entrance, and also with the smaller format Ashlar blocks that form the plinth upon which the cladding sits. The sizes and orientation of the cladding panels also aim to respond to the characteristics of the neighbouring Edith Key and Barbara Hepworth buildings in their modern materials and proportions.



Timber-clad Feature Frame



Vertical Aluminium Rainscreen Cladding



Textured Ashlar Stone Blocks

Fenestration

Large format curtain walling is used to frame key internal spaces, which take their form and proportions from the adjacent modern buildings within the campus. Smaller windows also echo the proportions and rhythms of the fenestration on the more historic nearby buildings (e.g. traditional mill buildings on the other side of the narrow canal).

The windows to the hall are expressed differently, demonstrating its diverse internal use - a rhythmic set of curtain walling strips reach upwards from the ground and wrap around onto the roof to form roof lights, reflecting verticality of the hall's double height space.

Cycle Store and Plant Compound

The single storey cycle store to the East of the Faith Centre is formed from metal mesh over a lightweight frame, with hit-and-miss timber cladding to the plant compound at the rear, and a sedum green roof to encourage biodiversity within the site.



Visitor approach to the main entrance of the Faith Centre



Hit-and-Miss timber cladding to the Cycle Store & Plant Compound

3.4 LANDSCAPE MATERIALITY

Movement and Access

Access and movement around the site has been carefully considered alongside the existing site constraints. A new vehicular barrier and retractable bollards will be implemented at the north of University Road to restrict access into the site. A member of University of Huddersfield staff will accompany any vehicles entering the space in order to protect staff and students within the new public realm.

With vehicular movement restricted, the existing segregated road and footpath will be replaced with a new high quality public realm route. Students will be able to move freely throughout this space which connects student accommodation to the south with the heart of campus to the north.

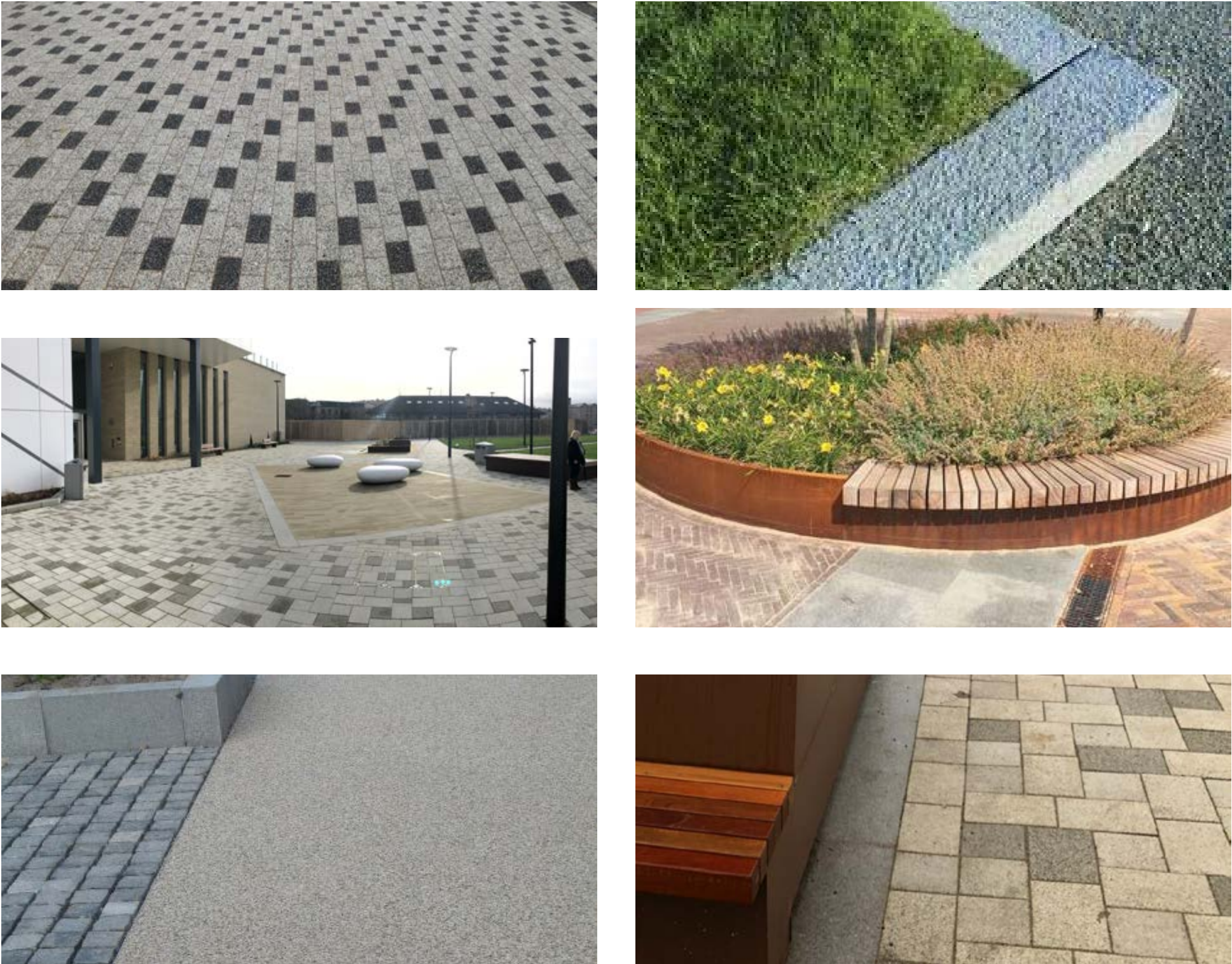
Level access will be provided to the entrance and exits of the new building and access to existing building entrances will be enhanced with the addition of new DDA compliant ramps and steps where necessary.

A secure cycle store and improved cycle links through campus will encourage students to use alternative methods of transportation.

Access to an existing set of stairs abutting the site boundary will be retained in situ to allow continued access to the Broad Canal.



New shared surface Public Realm, with informal gathering areas for Students



Hard Landscape

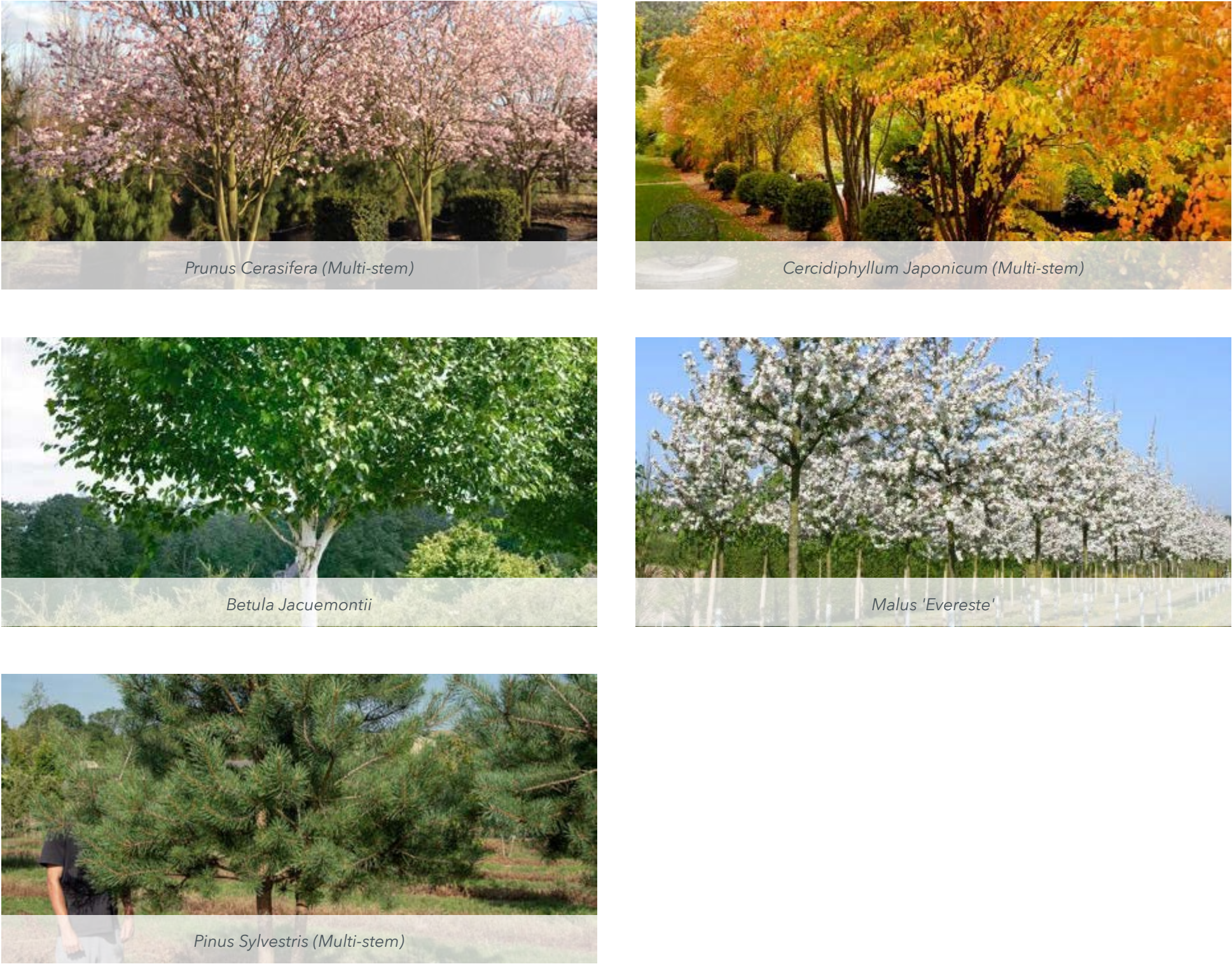
The materials palette is derived from existing campus materials to encourage visual cohesion. A mix of high quality concrete and granite pavers will be employed throughout the site; highlighting certain areas, providing visual interest, and ensuring a seamless transition between the new and existing landscape areas.

Natural coloured resin bound gravel will be used within the more informal contemplative areas linking to the adjacent woodland to the site. High quality metal and timber picnic benches will be used in this area so students can gather in small groups away from the main pedestrian routes.

Seating and Gathering Spaces

As this is the main student thoroughfare to and from campus, opportunities to sit and gather are very important. Raised powder coated metal planting islands in a burnt orange colour will be placed throughout the site reflecting the wider campus materials palette. These will be accompanied by freestanding seat units, placed in a way which allows for maximum filtration of pedestrians.

Feature seating will be added along University Road, providing structure to the space and adding visual interest, in addition to leading students through the contemplation space and along the main pedestrian route



Soft Landscape - Trees

Over half of the existing trees within the site boundary will be retained and two trees will be removed to accommodate the new building and the relocation of the miniature railway track. A variety of trees have been proposed along the façades of the existing buildings to help screen and provide visual interest. Trees will be a mix of multi-stem and single 2m clear stem, tree species may include: Prunus Cerasifera (multi stem), Malus ‘Evereste and Pinus Sylvestris (multi stem).

There are proposals that seek to thin the existing semi self-seeded woodland to the southern boundary of the site to enhance views from the Faith Centre to the canal and to improve the biodiversity of the woodland understorey layer. Proposals for this will be finalised once full arboriculture information is submitted.

Herbaceous and Ornamental Shrub planting Mix

A mix of ornamental planting, lawn and woodland edge planting will be used strategically throughout the site to highlight certain areas. Ornamental planting will be used to help provide privacy and refuge for those who seek quieter recreation and contemplation. Species may include: Lavandula, Phormium tenax, Potentilla fruticosa ‘Primrose Beauty’, Rosmarinus, Sedum matron, Stipa tenuissima, Veronicastrum virginicum, Vinca minor. Species have been selected based on ecological characteristics, seasonal and sensory interest including texture, smell and taste.

Sunny borders of mixed shrubs, perennials, grasses and bulbs. Planting to define key seating/gathering areas and to create interest within raised planters. Plants selected for their varied forms and visual interest during winter, spring and autumn.



Native & Non-Native Woodland Edge Planting

Ornamental woodland edge planting to include a range of native and non-native small multi-stem trees, evergreen, ground cover and floral interest plants to create an attractive planting scheme with extended foliage and flowering season. Planting to create a sensitive transition, acting as a buffer to the existing native habitat and a gradual merging with the designed landscape.



3.5 STRUCTURAL & CIVILS STRATEGY

Drainage Strategy

Given the anticipated ground conditions of deep made ground over relatively impermeable ground, it is not anticipated that soakaway drainage will be viable for this site.

The existing drainage runs within combined sewers along the northern and western edges of the site (running around the perimeter of the Technology Building, then southwards along University Road).

A crate storage system is currently proposed for the scheme, which will be sized accordingly to suit the constraints of the site (as there is limited space available on the compact site). Any additional rainwater drainage volume may need to be diverted to the existing drainage system. A more detailed design of the proposed drainage system(s) is to be undertaken at the next design stage, which will be in full accordance with any planning guidance and planning conditions.

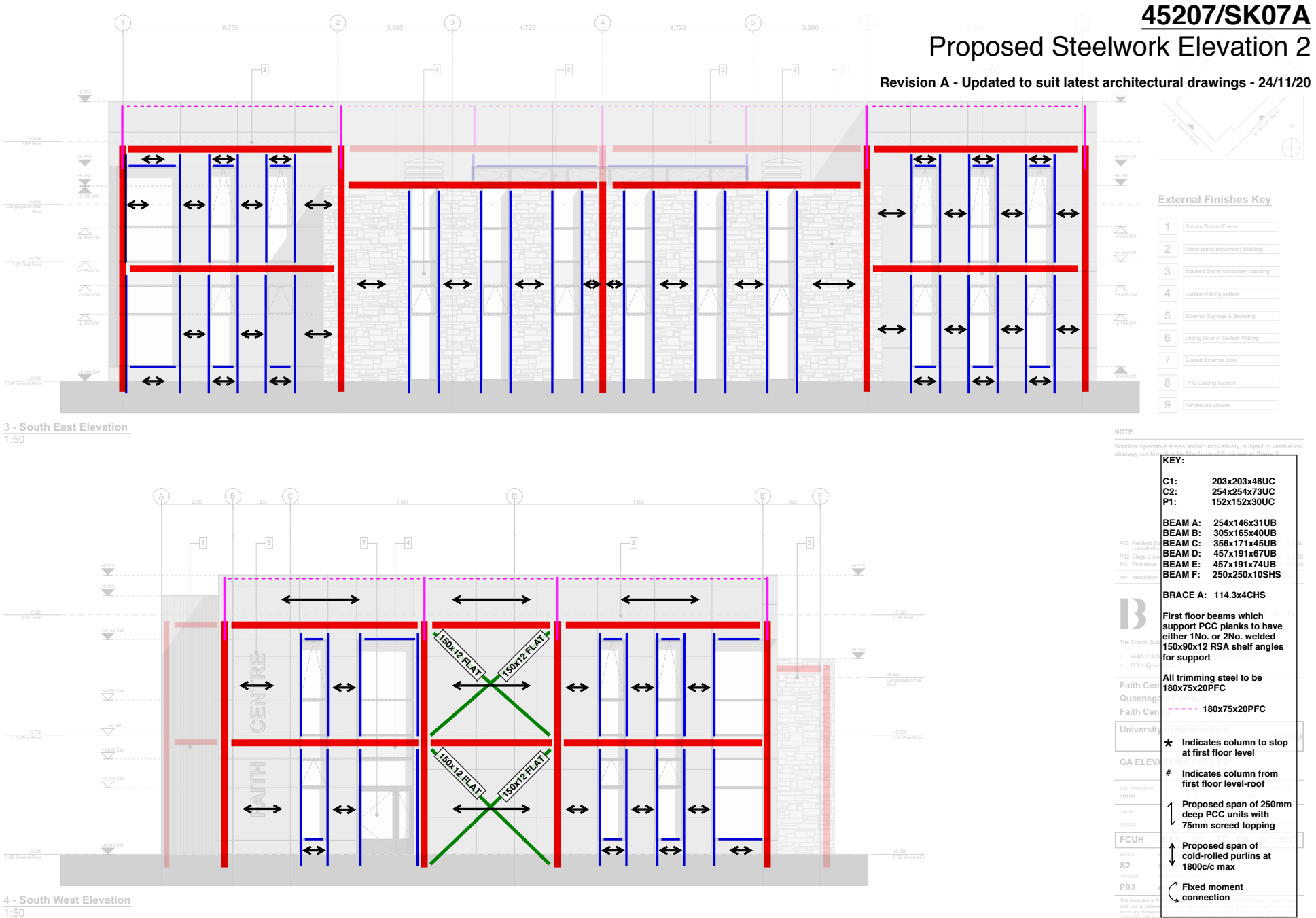


Indicative Drainage Strategy Plan
(Refer to the Drainage Strategy drawing submitted as part of the planning application)

Structural Strategy

It is initially proposed that the most suitable foundations will be mass concrete pads or RC strip footings where required (to be determined following examination of the ground investigations report).

Above ground, it is proposed that the scheme uses a simple steel frame structural system with precast concrete plank units for the upper floor and concrete composite deck to the roof slabs. More detailed design work will be undertaken, in conjunction with the services engineering solution.



Indicative structural frame strategy for the South East and South West elevations



4.0 CONSTRUCTION METHODOLOGY & SUSTAINABILITY

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4.1 MECHANICAL PRINCIPLES

Heating Services

Air source heat pumps shall provide low temperature hot water, linked to a system of underfloor heating. Heating shall be provided for all internal spaces except plant rooms. Design external air temperatures for heating will be -5°C

Cooling Services

Cooling requirements will require detailed thermal modelling to TM52 requirements. The building design will look to eliminate mechanical cooling where possible, through the use of night cooling and reduction in solar gain. Despite this, some cooling may be needed at peak periods. This may be achieved via the use of VRF or direct expansion systems. Design external air temperatures for cooling will be 30°C.

Domestic Cold Water Services

It is understood that the WELL requirements for water filtration may not be achievable by Yorkshire Water. Water filtration and subsequent boosting of the cold water supply is therefore included within the scope of works. Incoming cold water supplies would pass through a water filtration system (assumed duplex tank type) and into a small attenuation tank. Cold water will be boosted from the tank around the building to outlets as required.

Domestic Hot Water Services

A central hot water storage system shall be provided, with re-circulating hot water pipes distributing from the central storage tank. Air source heat pumps are the preferred option for domestic water heating, with immersion heaters for back up.

Above Ground Drainage Services

Above ground drainage systems shall be provided for all toilets, basins, sinks and sanitaryware. Ventilation stacks will be provided for main toilet blocks, as required by Part H of the Building Regulations and the underground drainage design. For smaller isolated drainage systems where ventilation stacks cannot be accommodated automatic air valves (AAV’s) will be used. Gullies will be provided for internal plant spaces to accommodate safety valve and condensate discharge.

Ventilation Services

Natural ventilation shall be the preferred option in most spaces. In the Congregation Hall roof mounted penthouse louvres shall be used to create air flow using the stack effect. Roof mounted penthouse louvres shall contain a split duct arrangement to allow air to flow in and out of each connected space. Mixing boxes with low energy fans may be used to increase airflow and prevent cold draughts in winter.

Low level openings shall be via a combination of wall mounted actuated louvres and openable windows. In smaller rooms where there are opening windows on different façades, these will be used to create natural crossflow ventilation.

All windows will be manually openable. Wall mounted ‘traffic light’ indicators will advise users of CO2 measurements so that windows can be open or closed as appropriate.

Should cooling be required due to overheating, mechanical ventilation will need to be adopted. The natural ventilation strategy is dependent on the local air quality being suitable for WELL Standards and acoustic recommendations.

In toilet spaces and in rooms without windows, local ceiling mounted heat recovery units shall provide mechanical supply and extract ventilation.

Automatic Controls

A mechanical control panel will be provided in the Mechanical Plant Room to house the automatic control equipment. The panel should be provided with a user visual interface on the front of the panel to permit authorised interrogation and adjustment locally. The automatic controls system should be provided with connectivity to the existing site wide BMS system.

The existing site wide BMS Operations Station should be updated to graphically display the new plant status and alarm conditions, logging of mechanical equipment operations, building conditions, and the ability to implement time scheduling of mechanical plant provided as part of the proposals.

Plant Rooms

An external plant space will be required for air source heat pumps and condensers serving the building.

Internal plant rooms will be split into separate mechanical and electrical rooms, with a further additional comms space on the first floor. Mechanical plant rooms containing cold water or hot water storage tanks will be bundled.

Sustainability / Low and Zero Carbon Technologies

Low and zero carbon technologies shall include the use of air source heat pumps for domestic hot water production and space heating. A rooftop photovoltaic (PV) installation will be provided to offset the building usage.

4.2 ELECTRICAL PRINCIPLES

Electrical Distribution

A Main Building Switchboard will be provided fed from the Sub-station F main Switchboard in IIR Technology Building. It is anticipated that this supply will be 250A 3-phase and will make use of a spare way on the Switchboard with a new protective device being provided.

As the building is expected to incorporate a photovoltaic array, connection will be required to the on-site generation monitoring system connected to the MV tripping system to confirm isolation of on-site generation in the event of a mains power outage. This connection will be made via a connection to the existing monitoring equipment in Sub-station G.

The Main Switchboard will in turn serve distribution boards and certain specific large current and life safety services, including the mechanical control panel, lift and fire alarm panel. It is anticipated that the building switchboard will be Square D I-line panelboard. The distribution system will be provided with surge protection.

The building supply will be metered as part of the University energy monitoring system along with sub-main supplies in compliance with Part L of the Building Regulations. The connection to the University system will be made via a Schneider Electric ComX300 meter and University data network connection.

On Site Generation

A rooftop photovoltaic installation will be provided to offset the building usage and this is anticipated to be rated at around 4.5 kW. As mentioned above this on-site generation will need linking to the monitoring system associated with the MV tripping system to ensure this can't back feed into the supply grid under outage conditions due to mains outage or DNO maintenance.

Small Power Distribution

A small power installation will be provided to serve general purpose socket outlets and dedicated fixed equipment supplies as appropriate. The socket circuits will be protected with 30mA RCBO devices installed within the distribution boards.

2No twin 13amp socket outlets will be provided for each workstation in offices, with additional points provided for printers etc. Socket outlets and fixed power supplies shall be provided for AV usage. Cleaner's sockets will be provided throughout all spaces in the building to permit maintenance

Containment

Containment systems will consist of galvanised cable tray and cable basket run within ceiling voids to carry cabling to all areas. Where exposed soffits are being utilised galvanised steel trunking will be used for aesthetic reasons.

Services shall be concealed within the building fabric and galvanised steel conduit shall be used for all drops concealed within walls.

Within the offices dado trunking will be used to carry the small power and data outlets.

Wiring

General small power and lighting will be undertaken in copper/LSZH/LSZH cable run on galvanised steel cable basket, with drops contained within galvanised steel conduit and uPVC dado trunking.

Sub-mains, large loads and externally run cabling will be copper/XLPE/SWA/LSZH cable run on galvanised steel cable tray, clipped direct to the building or run within in ground ducts.

Lighting Installation

New LED luminaires will be provided to all areas. Congregational spaces, prayer rooms, offices and classrooms will be lit to a level of 400lux with a uniformity exceeding 0.6. Toilets, circulation and storage areas will be lit to an average of 150lux with a uniformity exceeding 0.45. Emergency lighting will be provided in line with the appropriate British and European Standards.

Lighting Controls

Due to the potentially intermittent nature of the building, occupancy-based lighting controls will be used throughout the building with daylight linking used in rooms with significant ambient light.

The corridor lighting will be controlled with dimming to 25% output, congregational spaces, meeting rooms and office lighting will be controlled using absence occupancy detection where high levels of daylighting are available and presence detection with override off where not.

External Lighting

External lighting will be provided to the building perimeter and grounds as part of the works. In addition, it is anticipated that additional works will be undertaken in the public realm areas around the proposed building. All lights will be high efficiency LED and achieve the lighting levels required by the University.

Fire Alarm

A category L1 fire alarm system shall be provided to suit the building layout. This system will be linked on to the Campus wide network.

Disabled Alarms

Disabled assistance alarms will be provided to the disabled WCs and assistance intercoms provided to the first floor staircase disabled refuges.

Data Installation

A data installation will be provided to the new building to serve PC and telephone systems. In accordance with the occupancy numbers advised for the rooms, 1No twin data outlet will be provided for each workstation, plus a small number of additional outlets for printer use, etc.

Provision will be made for outlets for Wi-Fi access points throughout the building. Outlets will also be provided for building systems including;

- CCTV
- Door access control
- BMS
- Attendance monitoring

All outlets will be wired to a communications cabinet to be located in a dedicated Communications Room on the first floor. The new communications cabinet will be linked to the University network by fibre optic cable.

Security Systems

It is understood that Faith Buildings may be targets for crime and as such a number of electronic security systems will be provided. Due to the sensitive nature of the building it is anticipated that CCTV will be provided to circulation spaces and it is anticipated that this will require 10No cameras connected to the Campus Control Room monitoring and recording equipment.

As it is anticipated that the building will be locked down overnight a Grade 2 intruder alarm system will be provided. The intruder alarm will be connected to the Campus Control Room. As an integral part of the intruder alarm system, but wired as 24hour circuits, 4No personal attack buttons are proposed to be included in the system to allow Users to summon assistance.

The main entrance doors and security gates are anticipated to be controlled by the University access control system to limit access to authorised staff and students.

AV Systems

It is anticipated that certain rooms will be provided with AV systems and the necessary power and data services to serve these systems will be provided.

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4.3 THE WELL STANDARD

The WELL Building Standard is a performance based vehicle for delivering buildings that are focused on enhancing human health and well-being. Each project wanting to be certified must provide measured evidence that they have met a set number of evidence based targets within 10 core design concepts:



Within each theme, there are a number of mandatory targets that each project must achieve in order to be certified (called Preconditions), as well as a set of optional targets that each project may choose to aim for - these are called Optimisations. There are a total of 200 targets available, ranging from design strategies to operation policies to long-term performance, but a single project cannot aim for more than 100.

There are 4 tiers of certification, depending on how many points a project manages to achieve on top of all the preconditions:

- Bronze: 40 optimisation points
- Silver: 50 optimisation points, minimum 1 point per concept
- Gold: 60 optimisation points, minimum 2 point per concept
- Platinum: 80 points, minimum 3 point per concept

As part of the University of Huddersfield brief, it is anticipated that the Faith Centre project will achieve enough points to gain the Bronze level certification, although may not be formally assessed

Preconditions

WELL Standard preconditions can be either design or management based, but all must be achieved in order for a project to be certified.

Those that might affect the Faith Centre design include:

- Being measured as under the threshold for particulate matter, organic, and inorganic gases
- Ensuring spaces are adequately ventilated by either mechanical or natural means
- Mitigating pollution produced during the project's construction and inhabitation
- Meeting purification standards for washing and drinking water
- Providing sufficient natural or circadian lighting to all working surfaces
- Encourage building users to stay active by creating visual links to circulation spaces and stair cases
- Create a constant and comfortable thermal environment through the use of passive and mechanical ventilation
- Avoid sound pollution between loud and quiet spaces
- Avoid the use of hazardous materials in construction, including Asbestos, Mercury, and Lead
- Provide visual and physical connections to nature and culture to promote mental and physical well-being
- Engage with project stakeholders to ensure their input is included in the process and to agree project goals on health and well-being, environmental and sustainability aspirations.

Optimisations

The nature of the WELL standard certification process means that goals are modular and customisable to each project, and are subject to change and develop over the course of the design process.

Design-focused optimisations that might be considered for pursuit in the Faith Centre project include:

- Allowing users control of their immediate environment by incorporating operable windows into at least 75% of inhabited spaces; and ensure that windows have multiple openable modes
- Designing healthy entranceways, with sufficient barrier matting and measures to limit the movement of air from indoors to outside
- Support effective hand washing, particularly to Wudu areas where the washing has a religious significance
- Conduct and document daylight simulations to ensure target LUX values are met as part of the design process
- Designing flexible artificial lighting strategy that allows users control over their immediate environment
- Provide infrastructure to facilitate cycling and active movement for building users
- Achieve sound isolation within 'Loud' and 'Quiet' zones through use of floor and wall construction
- Specify architectural and interior products that minimise or avoid the use of Halogenated flame retardants (HFR), Polyfluoroalkyl substances (PFAS), and Orthophthalates.
- Conduct a post-occupancy survey of the scheme once constructed and in use
- Integrate universal access principles across the project

5.0 ACCESSIBILITY STATEMENT

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5.1 INCLUSIVE ACCESS

Approach to Inclusive Access

These proposals have been designed to meet the requirements of Approved Document M and those elements of the Equality Act 2010 covered by it.

As designers we will continue to work with the local authority's building control officer to ensure that these regulations are met.

However, continued compliance with the Equality Act 2010 will need to be ensured by the building owner following completion of the works.

Pedestrian & Vehicular Access

The site strategy has been discussed earlier in this report, which includes the rationale behind the approach to pedestrian, vehicle and cycle access. In summary:

The site arrangement has been developed to allow the new faith centre building to respond to the existing buildings adjacent to the site. The pedestrian access is from University Road, which will be kept broadly as existing, with a new vehicular barrier and retractable bollards at the northern end of University Road, to restrict vehicular access into the site, thus protecting staff and students within the new public realm.

Level access will be provided to the main entrance, ensuring free pedestrian movement throughout this space, which connects student accommodation to the south with the heart of the campus to the north.

Additional pedestrian access will be provided to the perimeter of the building to allow access at key points such as fire escapes etc.

A travel plan has been conducted by Optima Highways, and is provided as part of this submission.

Cycle Access and Storage

A secure cycle store, providing space for 26 bicycles, is provided to the north of the faith centre building, which is in close proximity to the main entrance and is clearly visible to encourage its use by all users.

Servicing

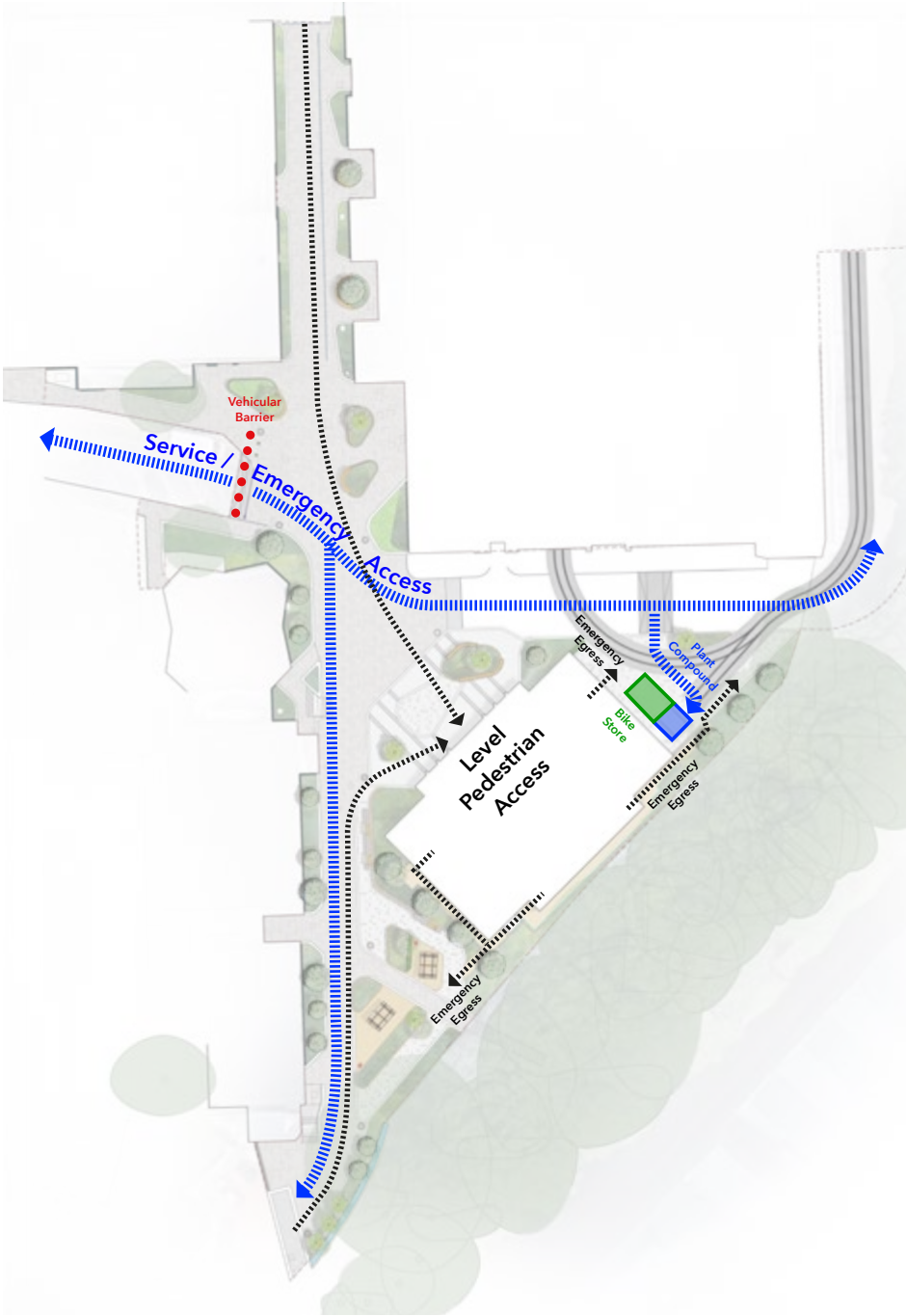
Any service vehicles (e.g. for deliveries, etc) will be able to gain access to the new Faith Centre via University Road from the north. As vehicular movement is restricted beyond the new vehicular barrier, a member of University of Huddersfield staff will accompany any vehicles requiring to enter the areas southward of the new barrier, in order to protect staff and students within the new public realm.

Waste Collection

There are no waste storage facilities within the site, as it is intended that the University's current waste storage facilities within the campus are utilised.

Emergency Vehicle Access

Emergency vehicles will have access to University Road from the north, and will be able to progress beyond the new vehicular barrier to the shared surface areas in front of the new Faith Centre building. This approach ensures that there is sufficient access to the building's external perimeter, as required by the fire service.



Accessibility Diagram

5.2 ACCESSIBILITY

Approach to accessibility

The design proposals for the development have been designed to meet the requirements of Approved Document M. The following provides a brief summary of the design strategy employed in order to satisfy the aforementioned:

General Building Design

The main entrance into the building from the external pedestrian zone, will provide level access, with automatic sliding doors. These fully glazed entrance doors will incorporate manifestations in accordance with Section 2 of Approved Document N. The principal entrance will include walk-off, low friction entrance matting to the entrance lobby.

The range of security gates within the main entrance will meet the requirements of Approved Document M (e.g. in terms of their clear opening widths, ensuring they can be used by wheelchair-bound persons).

There are two staircases within the building, which will provide access to the upper level for able-bodied and ambulant disabled users. They will act as the emergency escape stairs, and are designed to ambulant disabled standard, Approved Document M.

A lift will be provided, situated within the Entrance Foyer, for ease of use.

Internal circulation

The building is constructed with level floor plates, allowing ease of movement throughout the building. All circulation routes will be marked with contrasting colours/ finishes in order to provide a visual contrast for building users with impaired sight. All internal doors are to provide a minimum clear opening width of 900mm, via one door leaf opening. All doors will have either a vision panel or glazed screen, where required, to comply with Approved Document M.

Accessible WC provision – An accessible WC will be provided at both floor levels, and will be located appropriately to ensure that suitable travel distances are maintained.

External Surfaces and approaches generally

All access points into the building, including the fire escapes will be provided with level thresholds and ramped access to Approved Document Part M requirements. Elsewhere around the site, all gradients of the external paved areas will seek to achieve Approved Document M.



6.0 FAITH CENTRE VISUALS

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View of the front facade and the approach from University Road.



Main approach towards the Faith Centre from the Student's Union



View from the Huddersfield Narrow Canal. The Congregation Hall is expressed externally by dropping the roof level and wrapping the Ashlar stone plinth up and around it.



View of the front facade, approaching from the West off University Road, and the new pedestrian shared surface area



Student Entrance facade, with Timber-clad columns wrapping up and over the roof to express the protruding entrance element of the Faith Centre



Approach from Firth Street and the Barbara Hepworth Building, with the new shared surface and informal gathering spaces in the foreground



The Narrow Gauge Railway is redirected into a new plaza to the North East of the building, celebrating what is a unique feature of the University Campus



View of the Entrance Area and Feature Wall, with views into the Social Space and Staff Office



View into the flexible Congregation Hall space, and out towards the woodland edge and Huddersfield narrow Canal beyond



View into the Social Space and Kitchenette from the main circulation space



View out from the Social Space towards the Barbara Hepworth Building and the new shared surface landscape adjacent to the Faith Centre



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