

CONSULTATION UPDATE

Web: <http://www.morgannwg.ac.uk/developments/consultation.aspx>

BUILDING RESEARCH ESTABLISHMENT, ENVIRONMENTAL ASSESSMENT METHOD (BREEAM)

The new Taf Ely Learning Campus (TELC) building aims to achieve a BREEAM 'Excellent Rating'. A description of BREEAM is provided as follows.

What is BREEAM?

BREEAM is the world's foremost environmental assessment method and rating system for buildings, with 200,000 buildings with certified BREEAM assessment ratings and over a million registered for assessment since it was first launched in 1990.

BREEAM sets the standard for best practice in sustainable building design, construction and operation and has become one of the most comprehensive and widely recognised measures of a building's environmental performance.

A BREEAM assessment uses recognised measures of performance, which are set against established benchmarks, to evaluate a building's specification, design, construction and use. The measures used represent a broad range of categories and criteria from energy to ecology. They include aspects related to energy and water use, the internal environment (health and well-being), pollution, transport, materials, waste, ecology and management processes.

A Certificated BREEAM assessment is delivered by a licensed organisation, using assessors trained under a UKAS accredited competent person scheme, at various stages in a buildings life cycle. This provides clients, developers, designers and others with:

- market recognition for low environmental impact buildings,
- confidence that tried and tested environmental practice is incorporated in the building,
- inspiration to find innovative solutions that minimise the environmental impact,
- a benchmark that is higher than regulation,
- a system to help reduce running costs, improve working and living environments,
- a standard that demonstrates progress towards corporate and organisational environmental objectives.

For further details concerning BREEAM please visit: <http://www.breeam.org/page.jsp?id=66>

TELC SHARED FACILITIES (Man 7):

Community forum events have regularly taken place as part of the consultation process. Meetings with shared facility representatives have also taken place and feedback recorded as part of the consultation review and feedback process.

There will be a wide range of new facilities to be open at the TELC building during 2012 which will be available either by private booking or for general public use during normal College opening hours. Shared facilities will also be available with designated access arrangements to allow independent use of shared facilities as appropriate. Shared facilities are provided in a separate and secured zone that can be accessed by members of the public/community without gaining uncontrolled access to other parts of the building.

The new range of facilities will be accessible from the ground floor within the atrium / central street area in the main building, and crèche building as follows.

RCT Library / Learning Centre – Shared use facility operated by the local authority, and independent access arrangements out of normal College hours. Access also provided to College Learning Centre on upper floors during normal College hours for library members.

Gym – Shared use facility between College and external operators, independent access arrangements out of normal College hours.

Crèche – Externally operated facility up to 60 spaces with independent access arrangements.

Coffee Shop - Externally operated facility open during normal College hours.

Shop / Local Store - Externally operated facility open during normal College hours.

Multi Use 'Big Room' Events/ Music & Performance – College operated facility which is available for external bookings, events, community/business meetings, etc (out of hours as required).

Dance Studio / Classes – College operated facility which is available for external bookings, classes, etc (out of hours as required).

Restaurant – College operated facility / training restaurant which is available for external bookings, events, etc (out of hours as required).

Hair & Beauty Salons – College operated facility open during normal College hours.

Business events and classes will also be available for external bookings within designated areas of the building as required. The 'Advanced Learning Centre' will also provide higher education facilities in designated areas of the building as required.

Other shared use facilities under consultation involve external areas to develop a potential new heritage / lottery funded scheme to develop a green park & play area.

Operators of shared facilities involving new Small, Medium Enterprise (SME) businesses have also been consulted as part of the consultation process including arrangements for access.

Consultation has taken place for the public library with local community and RCT Local Authority Library Representatives. Local community and business groups have made suggestions regarding what facilities they would like to see and how they would like them to be used, and these have also been documented as part of the consultation process.

Architectural drawings have been provided showing secure zones, and details have been provided by the College confirming instructions & guidance for building users.

TELC Building Information

MAIN BUILDING

Description of the project and building

The new £40m development, the Taf Ely Learning Campus, is part of the college's Estates Strategy and will be developed on the 7.74 acre site opposite its existing facility at Heol Yr Odyn, Nantgarw.

Designed over four floors the campus will incorporate facilities for Computing, Information Technology, Science, Care & Childhood Studies, Business & Professional Studies, Sport, Catering, Hair & Beauty, Music and Performing Arts along with a purpose built state of the art Learning Centre.

The new campus will enable the College to expand the model developed at the Rhondda campus, where facilities are available and used by the community, other public sector and private sector organisations seven days per week throughout the year.

BREEAM rating and score

Target rating 74.44% Excellent

The key innovative and low-impact design features include:

- Biomass boiler
- Green roof
- Photovoltaic panels
- Rainwater recycling
- Natural ventilation
- BMS

Basic Building Cost

£1,242/m² GIFA

Services Cost

£428/m² GIFA

External Works

£61/m² GIFA

Gross Floor Area

13,910 m²

Total area of the site

2.85 hectares

Area of circulation

3,095m²

Area of storage

443m²

Function areas and their size

Area	m ²
Gym / Sports Area	333
Vocational Access	376
Hair & Beauty	935
Music & Live Performance	484
Refectory & Coffee shop	405
Training Restaurant	207
Public Library	232
Offices, admin & student support	914
Social Care & Key Skills	807
Learning Centre	951
Catering Training	390
Science	693
General teaching	1,887
IT classrooms	719
Ancillary spaces	768
Energy centre & Plant	274

Percentage of grounds available for use by the community

90%

Percentage of building available for use by the community

17%

Predicted electricity consumption

47.1 kWh/m²

Predicted fossil fuel consumption

12.8 kWh/m² Gas

Predicted renewable energy generation

53.1 kWh/m² Biomass 0.34 kWh/m² Photovoltaic

Predicted water use

6.68 m³/person/year

% predicted water use to be provided by rainwater or greywater

22% of water provided by rainwater

The steps taken during the construction process to reduce environmental impacts

Laing O'Rourke operates an Environmental Management System (EMS) which is accredited to ISO 14001. The EMS has been used from the start of the Taf Ely Learning Campus project.

The EMS aims to help reduce the environmental impacts of our construction activity; this includes closely monitoring the amount of diesel, electricity and water used on site and setting tight targets for our site team to achieve on a monthly basis.

The EMS also aims to ensure we plan early to use innovative construction techniques to reduce our environmental impact. On the Taf Ely Learning Campus project a large proportion of the structural

concrete frame was constructed off site in a factory meaning energy consumption was reduced, and all waste concrete was re-used for other components.

Any waste leaving the project is closely monitored and analysed so we can target high-volume waste streams. To date over 90% of the waste from our site has been diverted from landfill and has been processed for re-use elsewhere.

Social or economically sustainable measure achieved/piloted

The project has incorporated a number of economically sustainable measures: these include Photovoltaic panels on the roof; biomass boiler which will provide revenue via renewable heat incentive tariffs; rainwater harvesting tanks to reduce water consumption; and a Building Management System to monitor energy usage throughout the building so that improvements in efficiency can be made throughout the life of the building.

The social measures include public access to a number of areas on the ground floor, including the public library, restaurant, coffee shop, multi-use space (which can be hired for performances, public meetings etc), dance studio (anticipated uses include evening fitness classes), gym and hair and beauty salon. The college also continue to allow public access to the land to the West of the bund which the local community make frequent use of.

CRÈCHE

Description of the project and building

The new Coleg Morgannwg Crèche is to be constructed on the same site as the new Taf Ely Learning Campus and will provide crèche facilities for students, staff and the wider community. The crèche is in a separate building to the main campus to provide the space and security required while allowing shared services and facilities to benefit the building users and operators.

BREEAM rating and score

Target rating 77.84% Excellent

The key innovative and low-impact design features include:

Biomass boiler
Natural ventilation
BMS

Basic Building Cost

£1,242/m² GIFA

Services Cost

£428/m² GIFA

External Works

£61/m² GIFA

Gross Floor Area

535 m²

Total area of the site

0.25 hectares

Function areas and their size

Creche, Cot Area & Creche Cloakroom Area – 146 m²
Nursery & Nursery Cloakroom Area - 97 m²
Child WCs & Hygiene Facilities – 56.4 m²
Kitchen – 19.6 m²
Staff Facilities – 41.2 m²
Office & Meeting space – 27 m²
Plant etc – 9.4 m²

Area of circulation

44.9m²

Area of storage

25.5m²

Predicted electricity consumption

47.1 kWh/m²

Predicted fossil fuel consumption

12.8 kWh/m² Gas

Predicted renewable energy generation

53.1 kWh/m² Biomass 0.34 kWh/ m² Photovoltaic

Predicted water use

6.68 m³/person/year

% predicted water use to be provided by rainwater or greywater

0%

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Social or economically sustainable measure achieved/piloted

During the planning stage for the project it was recognised that the area needed a crèche, this will provide care for the children of the local residents as well as students and staff thereby creating a much needed service within the community.

The economically sustainable measures include the biomass boiler, which provides heat to the crèche as well as the main building and the BMS which will also be used to monitor energy usage in the crèche.