

BREEAM Man 9 Publication of Building Information

A basic description of the building project.

The library is fitted to the sloping site with two 800mm steps in the floorplate. Internal ramps allow the barrier free access throughout the building. The building is three storey high at the west end and two storey at the east. The offices are on the partial top floor, the library on the ground and mezzanine and the Daycare centre on the lowest level facing west. There are library entrances on each of the north and south elevations, and the daycare entrance is on the West Elevation. The building has a flat roof with large scale glazed wall elements forming good visual links to the landscape. The opposing south and north Glazed elements form a clear visual link through the building between Drumbrae Drive and the civic space to the south. The south elevation has a large glazed element with static steel solar shade element. The entrance through the north and south glazed screens is framed by timber enclosures.

The public library is the main element of the building and acts as a community hub for the area. Visitors to the council offices will arrive at the public library and staff will meet the public on the ground floor.

It is proposed that the building will be finished predominantly in acrylic render, with grey aluminium framed windows. External steelwork on the south elevation will support a projecting canopy with an exposed timber soffit. The detail at the roof edge will be a dark grey aluminium trim. The main entrances to the library are proposed as being a treated natural timber product which will retain the natural colour of the timber throughout its lifetime.

BREEAM Rating and Score

Very good Target 55%

The key innovative and low-impact design features of the building

Various innovative strategies are being utilised in the development.

These include maximising natural ventilation to reduce the need for mechanical extract and consequent power usage.

Heat generation is by a ground source heat pump system to supply the main areas of the building via an underfloor heating system removing the need for radiators and boiler plant.

Basic building cost

Total Prime Cost £/m² = £1,816/m² (including prelims, risk, fees and OH&P) £1,471/m² (prime cost only)

Services costs

Services £/m² = £430/m²

External works

External works £/m² = £206/m²

Gross floor area

2283.97m²

Total area of site

0.616 hectares

Function areas and there size(m2)

| Area | Ground | Mezzanine | First | Total | | circ | public | |
|--------------------------------------|---------|-----------|--------|-------------|--|--------|---------|-------|
| Entrance Foyer | 24.53 | | | 24.53 | | 24.53 | 24.53 | |
| Stairs | 31.64 | 31.09 | 39.56 | 102.29 | | 102.29 | 102.29 | |
| Staff Office | 25.19 | 25.12 | | 50.31 | | | | |
| Lifts | 7.2 | 7.2 | 7.2 | 21.6 | | 21.6 | 21.6 | |
| Risers | 0.25 | 0.82 | 0.58 | 1.65 | | | | |
| Laundry | 5.52 | | | 5.52 | | | | |
| Shower/WC | 15.6 | | 5.39 | 20.99 | | | 15.6 | |
| GP/Quiet room | 16.16 | | | 16.16 | | | 16.16 | |
| Corridors / Lobby | 51.33 | 24.13 | 23.88 | 99.34 | | 99.34 | 75.13 | |
| WCs | 18.14 | 13.46 | 29.1 | 60.7 | | | 31.57 | |
| Elec. | 1.43 | | | 1.43 | | | | |
| Store Rooms | 10.23 | | | 10.23 | | | | 10.23 |
| Dining room | 83.67 | | | 83.67 | | | 83.67 | |
| Lounge | 40.74 | | | 40.74 | | | 40.74 | |
| Kitchen | 23.79 | 7.91 | | 31.7 | | | | |
| Lower/Upper Library | 447.92 | 225.19 | | 673.11 | | | 673.11 | |
| Future Servery | 16.96 | | | 16.96 | | | | |
| Work Room | 26.4 | | | 26.4 | | | | 13 |
| Loading Room | 25.17 | | | 25.17 | | | | 5 |
| Meeting Room | 15.21 | 49.17 | | 64.38 | | | 64.38 | |
| Secure Store | | | 12.57 | 12.57 | | | | 12.57 |
| Common Room | 18.8 | | | 18.8 | | | 18.8 | |
| Quiet Room | 9.04 | | | 9.04 | | | 9.04 | |
| Switch Room | 9.5 | | | 9.5 | | | | |
| Tea Prep | 2.11 | | | 2.11 | | | | |
| Community Room A1 | 25.6 | | | 25.6 | | | 25.6 | |
| Community Room A2 | 24.12 | | | 24.12 | | | 24.12 | |
| Café Area | 85.48 | | | 85.48 | | | 85.48 | |
| Entrance Blocks | 22.79 | | | 22.79 | | 22.79 | 22.79 | |
| IT Learning Suite | | 26.81 | | 26.81 | | | 26.81 | |
| Offices | | | 389.73 | 389.73 | | | | |
| Offices - Break Out | | | 50.1 | 50.1 | | | | |
| ICT Room | | 11.5 | | 11.5 | | | | |
| Plant Room | | | 105.39 | 105.39 | | | | |
| Lockers | | | 11.04 | 11.04 | | | | |
| Cleaners | 4.12 | 3.24 | 4.87 | 12.23 | | | | 12.23 |
| | | | | | | | | |
| Total useable Internal Area (sqm) | 1088.64 | 425.64 | 679.41 | 2193.69 | | | | |
| | | | | | | | | |
| Total Gross Internal Area (sqm) | 1130.48 | 445.99 | 707.5 | 2283.97 | | | | |
| | | | | | | | | |
| Total Gross External Area (sqm) | 1192.56 | 482.68 | 769.89 | 2445.13 | | | | |
| | | | | | | | | |
| | | | | circulation | | 270.55 | | |
| | | | | public | | | 1361.42 | |
| | | | | storage | | | | 53.03 |

Area of Circulation(m2)

270.55m²

Area of storage (m2)

53.03m²

% area of grounds to be used by community

63.5%

% area of buildings to be used by community

62%

Predicted electricity consumption-kWh/m²

104 kWh/m²

Predicted fossil fuel consumption kWh/m²

110,000kW/m²

Predicted Renewable Energy generation – kWh/m²

29.2kWh/m² (heating load generation)

Predicted water use-m³/person/year

5.2m³/annum/person

Steps taken during the construction process to reduce environmental impacts

- Site clearance and tree felling was under taken out with the nesting season
- Tree pruning was under taken out with the nesting season
- Existing trees were protected during the construction works
- Site waste material was segregated and skips were covered where appropriate
- A clean tidy site was maintained
- A series of settlement tanks were set up so that water and solids could be separated during the bore hole drilling for the ground source heat pump system