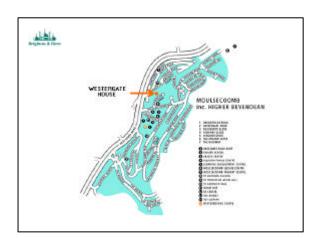




- Located in Moulsecoomb, Brighton
- Fairway Business Park, Moulsecoomb Way off Lewes Road
- Area of high deprivation particularly with regard to employment





- Original building constructed in 1963
- Became redundant over a period of time
- **●50%** Office 50% Factory
- Poor mix



## **Westergate Business Centre**

- On market for some time
- Long leaseholder attempted to sell
- Funding available through SRB for improvement of industrial estates
- Many sites investigated
- Westergate chosen by Brighton & Hove Regeneration
   Partnership



# Westergate Business Centre Partnership with eb4U formulated eb4U to be head lessees Joint objectives

- Joint objectives ■Employment of local people
- **■**Regeneration of area
- ■Remediation of brownfieldland
- $\blacksquare$ Sustainable development
- **Funding from SEEDA and GOSE**





- Consultants CDA appointed to obtain planning permission
- Option appraisals carried out
- Retaining existing building investigated but too costly and lacked flexibility
- Scheme with two single storey blocks and some office accommodation preferred
- Applications to SEEDA and GOSE made

#### **Westergate Business Centre**

- Long leasehold redeemed for £650,000
- Project aims formulated
  - **■22,500** of light industrial
  - **■**Highly sustainable
  - ■BREEAM excellent rating

  - ■SEEDA sustainability checklist
  - **■**High quality aesthetic appearance
- Consultation with businesses and residents



#### **Westergate Business Centre**

- Project approved
- New team of consultants appointed
  - ■Hazle McCormack Young Architects and Lead Consultants
  - ■Dixon Hurst Kemp Structural
  - **Engineers and Party wall surveyors** ■Blyth and Blyth – Services Consultants
  - ■MacConvilles Quantity Surveyors and **Planning Supervisors**
- Design Developed



MacConvilles

#### **Westergate Business Centre**

- Demolition tendered
- Selection based on cost and sustainability
- Re-use of as much material as possible
- Brick and concrete crushed on site
- Timber, steel, copper, etc. segregated
- Davis and Samson appointed
- On budget and time
- Won Considerate Constructor Award
- BRE using document as exemplar





# **Westergate Business Centre**

- Sustainability options considered
  - Green roof
  - Growing walls
  - Geothermal energy
  - Solar water heating
  - Wind turbine
  - Sun pipes
  - Natural ventilation
  - Photo voltaic cells ■ Grey water recycling
  - **■** Carbon balancing
  - Nesting boxes
  - Use of local and sustainable materials



#### **Westergate Business Centre**

- All adopted except
  - ■Green roof as heavy load and therefore too expensive
  - ■Grey water recycling as not enough total flow ■Photo voltaic cells as too expensive
- Description of each sustainable measure



- Growing walls
- More economic alternative to green roof
- Planters at base of walls
- Plants trained up wall on stainless steel wires
- Careful choice of noncombustible plants
- Natural rainwater irrigation



#### **Westergate Business Centre**

- Geothermal energy
- Greater heat below the surface of the ground
- 3 number 80m boreholes
- Heat pump system
- Should provide 60% ambient heat for Unit 5
- Minimal running costs





#### **Westergate Business Centre**

- Solar water heating
- **Evacuated tube technique**
- **●**Most efficient
- Positioned South facing
- Should provide 50 percent of hot water for unit 5







#### **Westergate Business Centre**

- Wind turbine 5 kW
- First major one in Brighton & Hove
- Extensive Planning process
- Photos from all aspects
- Liaison with many bodies
- 60% of power for Unit 5

mass keeps temperature stable

Silent as possible





#### Westergate Business Centre

- Sun pipes
- Introduce more natural light
- Minimise use of artificial light
- Mirrored tubes also acting for ventilation











- Carbon balancing
- By C Level
- Innovative assessment of construction impact (CO2) from fuel use, cement and transport
- 332 tonnes CO2, 258,967 miles
- Planting trees as a compensating factor
- 2 acres Mount Elgon Uganda
- Pilot for Carbon Balanced Construction method for new developments



# ALM A

#### **Westergate Business Centre**

- Use of sustainable and local materials
  - ■Warmcell recycled newspaper insulation
  - ■Bricks with lime mortar for demountability
  - ■Locally sourced sweet chestnut cladding
  - ■Glulam laminated timber beams







### 4144

#### **Westergate Business Centre**

- Use of sustainable and local materials
  - ■Masonite
  - ■Plastic bottles recycled as worktops
  - **■Low flush toilets**
  - ■50% roof cladding aluminium recycled









#### **Westergate Business Centre**

- Nesting boxes considered
- ■Bat boxes
- Small bird boxes
- Swift boxes





#### **Westergate Business Centre**

- Revised planning application made
- eb4Us agents suggested additional parking
- Scheme amended
- Planning granted
- Section 106 money for real time bus indicator
- Scheme tendered





#### **Westergate Business Centre**

- **●** Two blocks Total 21,308 sq.ft.
- Ten major units■Largest 2,458 sq.ft.■Smallest 1,576 sq.ft.
- Unit 5 sub divided into ten office units
  - ■Largest 1,048 sq.ft. ■Smallest 189 sq.ft.
- Unit 10 sub-basement recording studio/photography?















