#### WELWYN HATFEILD SUSTAINABILITY CHECKLIST

## University of Hertfordshire Block M façade refurbishment.

Policy SD1 of the District Plan expects all applicants to demonstrate that their development will be consistent with the principles of sustainable development. Supplementary Design Guidance for Welwyn Hatfield includes a sustainability checklist which is to be submitted with an application, and which identifies the factors to be addressed in making development sustainable.

The refurbishment of the Block M façade at the de Havilland Campus, Hatfield falls into the category of 'small scale development' (B) - 235 sq. metres of floorspace or less.

## A) SITING AND LAND USE

1. Use previously developed land as opposed to a green field site.

The project is a refurbishment of part of an existing building.

2. Avoid the loss of urban open spaces and, designated sites for nature conservation, and damage to the Historic Environment.

Refer to A1.

3. Make use of any derelict, under-used, or vacant land or buildings.

Refer to A1.

4. Encourage a maximum lifespan for the development with the use of durable construction unless there are extenuating circumstances requiring more flexibility.

The façade will be re-clad using solar-controlled glazing, polyester powder coated (PPC) perforated metal panels, 'Reglit' glazing, and glazed doors. This constitutes a durable form of construction that will be appropriate for the life span of the building.

5. Avoid areas of high quality agricultural land and floodplains.

Refer to A1.

5a. Avoid the possible sterilisation of mineral resources identified in the Adopted Minerals Local Plan.

Refer to A1.

## B) IMPACT AND FUTURE USE OF THE DEVELOPMENT

### **Minimisation of Pollution**

1. Minimise noise, e.g. building design, use of quieter technology, operating hours and traffic reduction.

The site is enclosed on all sides by existing university land and buildings. The scheme will only be in use during the operational hours of the existing campus buildings. The project will decrease occupancy of the refurbished area, and will not cause an increase in noise levels. No extra parking is provided as part of the project.

2. Minimise light pollution, e.g. design of buildings, and lighting schemes, avoiding use of floodlighting.

The scheme does not include any external lighting.

3. Minimise odours from buildings and plant.

The scheme will use existing plant.

# **Management of Water Resources**

4. Use local sources for the water supply and disposal of waste if possible.

No water supply or disposals required by development.

5. Prevent pollution of ground and surface water and enhance water quality where possible e.g. renew sewers, waterway maintenance, reed beds for waste water treatment.

The scheme does not include any alterations to the external landscape.

6. Protect the hydrology of the site and the surrounding areas e.g. use permeable surfaces for car parks, provide swells, and open water areas, minimise road length, avoid water run-off into water courses.

Refer to B5.

7. Minimise water consumption through the use of water efficient fixtures and fittings, reed bed systems, ponds, rainwater storage and recovery and grey water re-use.

Development does not include installation of water consumption fixtures and fittings.

## **Energy Efficiency**

- 8. Maximise passive solar gain by considering the siting and microclimate of the individual buildings e.g. making best use of the sun, avoiding overshadowing, size and orientation of windows, use of earth sheltering.

  Not applicable.
- 9. Minimise heat loss and maximise energy efficiency through building design e.g. using sources of renewable energy, solar panels, insulation, using lobbies and conservatories as buffer zones, draught proofing, localised temperature controls, weather-breaking planting.

  Not applicable.
- **10.** Reduce green house gas emissions through building design, e.g. use of condensing boilers. No new plant is required as part of the project. The area, as currently configured, is ventilated naturally.
- 11. Generate power efficiently from a local source e.g. combined heat and power plant, heat/methane recovery from waste and other forms of renewable energy.

  Not applicable.
- **12.** Encourage energy efficient modes of transport e.g. cycling walking and buses. Refer to A1 and B5.

#### **Waste Management**

12a. Follow the Waste Strategy Hierarchy of Minimisation, Re-use, recovery, and disposal as a last resort.

The project has sought to follow the waste strategy hierarchy. The scheme's nature (refer to A1) means that a minimum of building work is required.

- **13.** Maximise facilities on site to help with recycling, including home composting. Not applicable.
- **14.** Include facilities for separation and storage of different types of waste for collection. The university's waste and resource management strategy will apply to the new development.
- 15. Include public facilities for recycling of waste and consider the need for access by various disposal contractors.

Not applicable.

### **Habitats and Species**

16. Ensure that there will be no overall net loss of biodiversity i.e. the quantity and variety of species.

Refer to A1.

- 16a. Contribute to the priorities and targets set out in the Local BAP (Biodiversity Action Plan). Refer to A1.
- 17. Protect designated sites and other sites/features of nature conservation importance, including SSSIs, and County Wildlife Sites.

The proposed development will have no impact upon sites of features of natural importance requiring conservation. Refer to A1 and B5.

18. Conserve protected species where found.

Not applicable – refer to A1 and B5.

19. Make positive provision to nature conservation e.g. nature reserves, naturally shaped watercourses, native planting to encourage wildlife, or other wildlife- friendly landscape features.

The project presents no opportunities for such provision – refer to A1 and B5.

20. Provide for the ongoing management of habitats where applicable.

Not applicable.

21. Ensure that waste products do not harm wildlife.

The operation of the proposed development will be carried out in accordance with the University of Hertfordshire's waste strategy. As such, waste products from the development will not harm wildlife.

22. Encourage use of timber from sustainably managed sources.

Timber used in the works is to be certified by FSC.

## **Community Provision and Equity**

23. Involve the local community in the development of proposals.

Not applicable.

23a. Contribute to the provision of education facilities where appropriate.

Not applicable.

24. Provide affordable housing, or commuted payment for affordable/ social housing where appropriate.

Not applicable.

**25.** Provide appropriate health and childcare facilities where appropriate to satisfy local demand. Not applicable.

26. Improve leisure and recreational facilities e.g. recreation grounds, playing fields, children's play areas.

Not applicable.

27. Make positive provision for open spaces e.g. provide parks, village greens, and commuted sums for future maintenance.

Not applicable.

28. Improve and maintain access to existing open space.

Not applicable.

29. Improve community, cultural and social facilities e.g. community centres, public art.

Not applicable.

# **Accessibility**

30. Improve or enable convenient access to employment centres, shops, recreation and community facilities

Not applicable.

31. Maximise access for the pedestrian/cyclist to & within the development & give priority to footpaths and cycle ways over private transport methods

There is no scope for such provision – refer to A1 and B5.

32. Improve access to buildings for everyone (wheelchair users, people with young children and disabled people).

The scheme will comply fully with statutory requirements set out in the Disability Discrimination Act 1995.

33. Give public transport priority over private transport modes

Not applicable.

34. Improve facilities and conditions for cycling especially safety aspects e.g. secure covered cycle storage, cycle paths, signals and lanes.

Not applicable.

35. Meet the requirements for the preparation and implementation of a Green Transport Plan.

Not applicable

36. Minimize car parking e.g. appropriate levels/standards of parking, car free neighbourhoods, park and ride.

Not applicable – refer to A1 and B5.

## **Contribution to the Economy**

37. Increase job opportunities for local people e.g. training courses, inward investment, and small business units.

There is no change in staff or job opportunities through the development.

**38.** Demonstrate how the proposal will add to the generation of income in the local area. Not applicable.

39. Promote socially and environmentally responsible business practice e.g. waste minimization, office recycling, energy saving schemes and noise reduction.

The development will be subject to the University of Hertfordshire's policies and initiatives.

## 40. Add to diversity of the local economy

The development should benefit the local economy. Improved facilities will enhance the quality of the teaching and learning experience at the university, attracting more staff and students.

# **Health and Safety**

41. Minimise opportunities for crime through the layout of buildings and spaces e.g. natural surveillance of paths overlooking of paths, appropriate landscaping and mixed uses. New fenestration will increase opportunities for surveillance f areas adjacent to the scheme.

42. Segregate vehicles from all other modes of transport wherever possible.

Not applicable.

43. Store potentially hazardous materials safely.

Provision will be made for the secure storage of potentially hazardous materials.

### **C) CONSTRUCTION PERIOD**

# **Energy Efficiency**

1. Demonstrate how the energy costs of developing the site will be minimised in terms of extraction, manufacture, transport, use and disposal in construction e.g. minimise changes in site levels during construction, avoid use of aluminium.

Not applicable.

#### **Minimisation of Pollution**

2. Include a site investigation to identify areas of soil contamination and take correct measures for decontamination.

Not applicable – refer to A1.

3. Minimise noise levels and light pollution during the building processes e.g. use of quieter technology, restriction of operating hours and traffic reduction.

Detailed construction plans have been finalised. A 'considered constructor' scheme is presently proposed for the development.

4. Minimise air and dust pollution during construction.

Refer to C3.

5. Prevent pollution of ground and surface water.

Refer to C3.

6. Minimise odours from buildings and plant.

Refer to C3.

## **Waste Management**

- 7. Identify the volumes and type of waste generated during development through construction and occupation and take measures to minimise, reuse and recycle waste.

  Not applicable.
- 8. Encourage the use of renewable, recycled, recyclable and durable products e.g. building materials, salvage material for re-use/ recycling, use demolition materials for hardcore and aggregate.

Recyclable materials will be used wherever possible.

8a. Promote the use of local materials first, followed by low embodied energy materials, and finally high embodied energy imported materials.

Building materials will be specified to be fit for purpose, and be durable in order to provide a good lifespan and to minimise replacements. Although BREEAM rating is not required on the project, every effort will be made to specify and use products and materials that have a good BRE Green Book Classification.

## **Habitats and Species**

- **9.** Ensure the protection of trees, hedgerows and other plants during construction. Not applicable.
- **10.** Preserve wildlife habitats on site during construction either in situ or by translocation. Refer to B5 and C9.

## **Health and Safety**

- **11.** Use clean hazard-free technologies for plant and building operation and maintenance. Plant, building operation and maintenance issues are to be finalised. The use of clean hazard-free technologies will be encouraged.
- 12. Store potentially hazardous materials safely.

Operations on site will comply fully with health and safety regulations.

- **13.** Avoid unsafe building materials e.g. asbestos, lead paints, organochlorides. Refer to C12.
- 14. Encourage liaison with the local community as part of a 'Considerate Contractor' approach to the construction phase.

The University has ongoing discussion with the local community.