

ENERGY STATEMENT

Erection of 3 new family dwelling house (C3) with
associated parking, landscaping and boundary
treatment & Change of use of land to Residential
Curtilage (Unadopted)

At

Land of The West Side of Muirfield
Close, Manchester, M40 3ND

On behalf of

Barkat Ali



March 2021

Introduction

Description of development:

The proposed development is for 2 three-bedroom detached and 1 4 bedroom detached dwelling houses.

This energy statement analyses the energy and CO savings that can be achieved by installing renewable or low-carbon technologies at the proposed development. It also looks at energy efficiency measures that could be implemented at the development to make energy and CO savings beyond current building regulations.

The energy consumption figures for the development are based on benchmark figures for each building type from CIBSE for non-domestic buildings or based on SAP 2009 for domestic buildings.

Policy Summary

The requirement comes from the Council's Core Strategy that was adopted on 17th March 2011 which includes Policies SD 3 and SD4 which require new domestic or commercial developments to meet reduced carbon emissions targets and to do this by considering low carbon design options such as district heating or microgeneration opportunities.

The following energy efficiency measures will be implemented to reduce the overall energy consumption and CO emissions of the development before renewable or low carbon technologies are installed:

- Lighting
- Windows and doors
- Heating System

Energy Efficiency Measures

Lighting

Lighting will be improved above and beyond current Building Regulations Part L that is likely to result in a total energy saving of 2.50% for the whole development.

Low energy lighting will be fitted throughout the whole of the property all. Motion sensors fitted in all hallway areas.

Windows and doors

Windows and doors will be improved above and beyond current Building Regulations Part L that is likely to result in a total energy saving of 2.00% for the whole development. Triple glazing fitted to be fitted throughout the property.

Adding these measures has reduced the predicted energy consumption over Building Regulations Part L by **4.50%** and the CO emissions by **5.31%**. This brings the predicted energy consumption down to **80802 kWh/annum** and CO emissions down to **25940 kg CO /annum**. These figures have been used to calculate the energy and CO savings from renewable and low carbon technologies in the remainder of the report.

Heating System

An A rated boiler will be installed to the property such as Worcester Bosch Greenstar or similar to beat the minimum standards of the building regulations. The boiler will provide heating to the radiators which will be installed throughout the property. All radiators will be installed with thermostatic valves.

Conclusion

This development will meet all the requirements of the policy statement set out by Manchester City council. Also, in order to pass a full SAP assessment will be carried out prior to commencement of works in order to meet the minimum standards for Part L of the building regulations.