

## **Sustainability Statement for Proposed Dwelling at 1, High Street, Graveley**

### **Energy and Carbon reduction**

The proposed dwelling will be heated by an air source heat pump with wood burner back up  
Solar panels will be provided to the West facing roof pitch  
Air conditioning will be provided  
Insulation in excess of building regulation requirements will be provided to roof, walls and floor  
High insulation windows and doors will be used  
Low water use cisterns, basins, baths and showers will be installed

### **Orientation**

East / West orientation is proposed with retention and encouragement to existing hedge growth to boundaries

### **Energy reduction**

Air source heat pump  
Wood burner  
Solar panels  
Very high levels of insulation

### **Low Carbon**

High levels of insulation  
Minimal thermal bridging  
High levels of air tightness

### **Materials**

The applicant is a builder and will source local materials and labour through his existing contacts

### **Climate change**

High insulation levels  
Air cross flow from East to West

### **Overheating**

Very high levels of insulation  
East to West cross flow of air  
Air conditioning

### **Green infrastructure**

Encouragement to boundary hedge growth

### **Existing landscape**

Existing hedges and boundary trees to be retained and encouraged  
All to be fence protected during construction

### **Green roofs**

No flat roofs proposed  
Rear pitch will have solar panels

### **Surface water run off**

Water butts will be provided to down pipes to store water for garden watering and car washing