

DESIGN AND ACCESS STATEMENT

1.0 Introduction and Context

- 1.1 Worthington House is located on the Towers Business Park which is in Didsbury Manchester and within the St James Conservation Area. Worthington House is at the entrance to the Business Park fronting Wilmslow Road and was constructed approximately 25 years ago.
- 1.2 The current owners acquired the Business Park in 2016 and are committed to maintaining the quality of the office accommodation and ensuring it provides a sustainable and energy efficient work place for a mixture of business users. As the central plant within the buildings reaches the end of its life the owner is committed to replacing this with new energy efficient and sustainable equipment which requires modification and alteration works.
- 1.3 The gas fired boiler at Worthington House is now 25 years old and requires replacement. Rather than do this with another gas boiler which is reliant on fossil fuels the intention is to use an Air Source Heat Pump (ASHP) to generate the heating and cooling required for the building. The ASHP runs on electricity which can be sourced from renewable energy and is much more efficient and environmentally friendly than a gas fired boiler. However, the ASHP is 5 times the size of the gas boiler and needs a large volume of air flow to allow its operation which means that it is not possible to locate this within the plant room where the boiler is currently positioned. Therefore, an alternative location for the ASHP must be found.

2.0 Evaluation

- 2.1 A detailed analysis of the area surrounding Worthington House, consideration of how the external Air Conditioning plant has been located at Kingston House and the need to position the ASHP close to the building was undertaken to identify the best location for the ASHP. This selected the smokers shelter to the south east corner of Worthington House as the perfect site. This was for the following reasons.
- 2.2
- The size of the hardstanding on which the smokers shelter is set fits the size of the ASHP without the need to extend this into the surrounding landscaping.
 - The refrigerant pipework and power supply which will need to run between the ASHP and the building can be laid beneath the paved path to the south elevation and will not affect any landscaping or tree roots.
 - The visual impact to the ground floor office occupier is limited with the ASHP replacing an existing structure.
 - The smokers shelter is rarely used and the policy of providing a facility for each building is being reviewed across the business park resulting in no immediate requirement for the existing smokers shelter to be reinstated adjacent to Worthington House.
 - The visitor cycle hoops which share the smokers compound can be repositioned to the main entrance of Worthington House where they will be more prominent. Occupiers of Worthington House who cycle to work use the secure bike parking, showers and changing facilities across the Business Park which is available for all employees and has received the Cycling Score Gold Award.
 - The carbon foot print for the works is reduced by reusing an existing area which is no longer required rather than siting it within a green landscaped area.

3.0 Development Principles

3.1 Amount of Development

- 3.1.1 The decision to use the existing compound in which the smokers shelter is sited significantly reduces the amount of development works required to improve the energy efficiency of the heating to Worthington House increasing the sustainability of the works and reducing the environmental impact and carbon footprint of the development.

3.2 Use

- 3.2.1 The use of the office building will remain unchanged by the works albeit that the energy efficiency of the heating system will be greatly enhanced improving the EPC rating to a B for the building ensuring that it can continue to provide office accommodation fit for occupation and use for another 20 years.

3.3 Scale

- 3.3.1 Careful consideration of the size and nature of the ASHP to ensure that it can provide efficient heating for the building but be contained within the existing compound without this being enlarged causing damage to the existing vegetation and trees. The ASHP selected operates quietly compared to other units and ensures a sound rating level of 5dB (LAeq) below the typical background level at the nearest noise location.

3.4 Landscaping

- 3.4.1 The existing vegetation and trees will not be impacted by locating the ASHP in the former smokers shelter compound. Even the route for the power supply and refrigerant pipework connecting the ASHP to the building will be laid beneath the footpath preventing any green areas from being disturbed by the works.

3.5 Appearance

- 3.5.1 The ASHP will be screened by a hit and miss vertical timber boarded fence 2.4 m high. This will hide the mechanical plant behind a natural material obscuring the visual impact of the ASHP from the building and users of the Business Park but maintain the need for air flow to the unit to allow its operation and provide a barrier to prevent unauthorised access to the equipment.

3.6 Inclusive Access

- 3.6.1 The proposal does not affect the access or use of the building or wider business park.

Sustainability

- 3.6.3 The need for a compound to house the ASHP is driven by a desire to improve the carbon foot print of the development and allow the heating and cooling of the office building to be achieved through renewable energy rather than the use of fossil fuels.

The decision to locate the ASHP on an existing area of hardstanding used for a smoking shelter protects against damage to the existing vegetation, landscaping and mature trees in the business park.