# ROYAL ARSENAL AIR SOURCE HEAT PUMPS

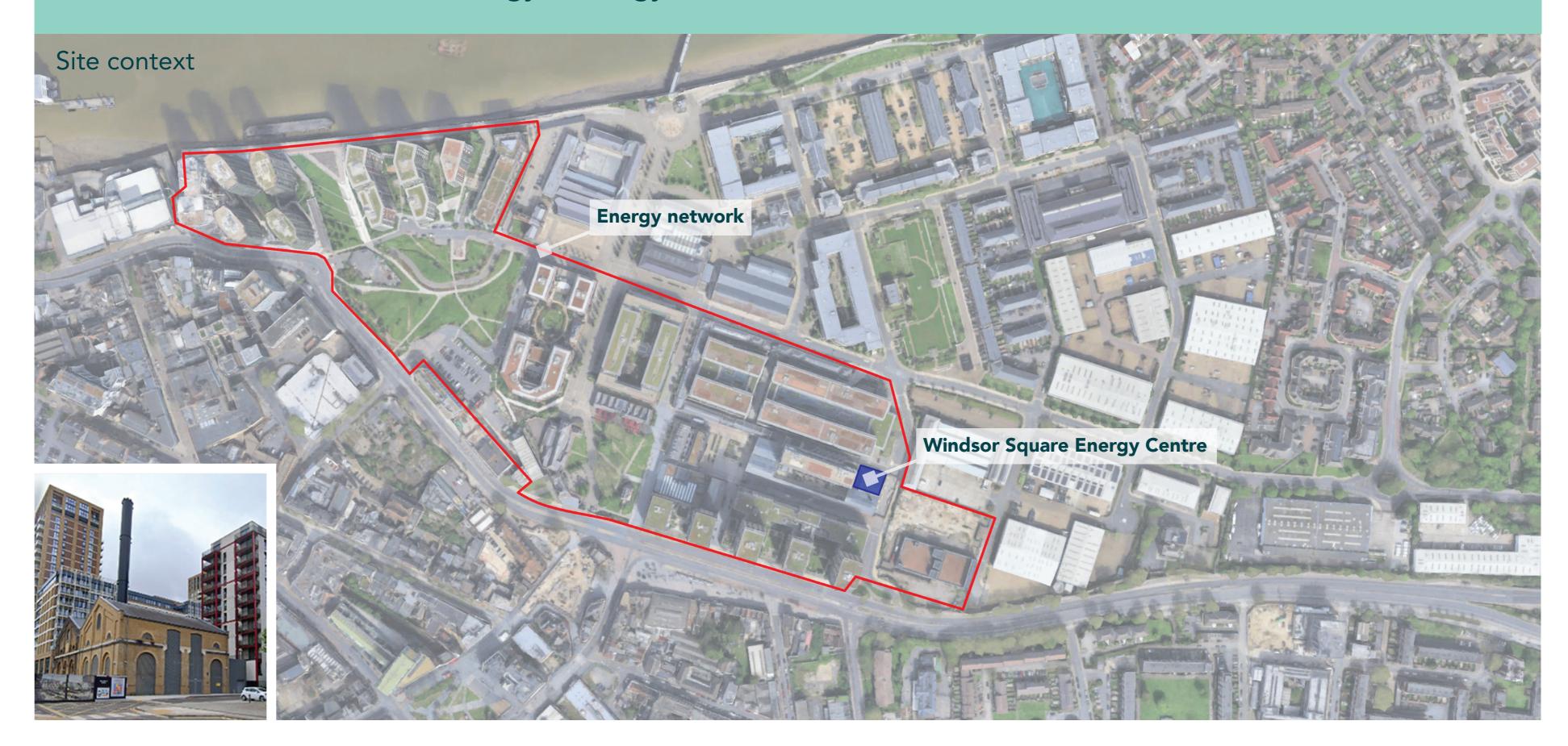
Thank you for taking the time to view our proposals for decarbonising the energy network. We welcome your thoughts and encourage you to review the plans and share your feedback with us.

### **Background**

This consultation outlines the proposed decarbonisation strategy for the district heat networks, shown within the red boundary on the map. This network is currently served by the Energy Centre at Windsor Square and managed by SSE.

The Energy Centre uses a combination of Combined Heat and Power (CHP) units and gas boilers to deliver heat through a network of pipes to local homes.

Following changes in Government legislation we are proposing to install air source heat pumps to work alongside the existing system. This upgrade will help reduce carbon emissions and support a cleaner, more sustainable energy strategy.



# THIS IS BEING PROPOSED TO

- Improve the environmental performance of the network by reducing carbon emissions from the district heat network, in line with planning policies and Part L of the Building Regulations.
- Compliment the existing network to meet the heating needs of the final phases of development at the Royal Arsenal Riverside.

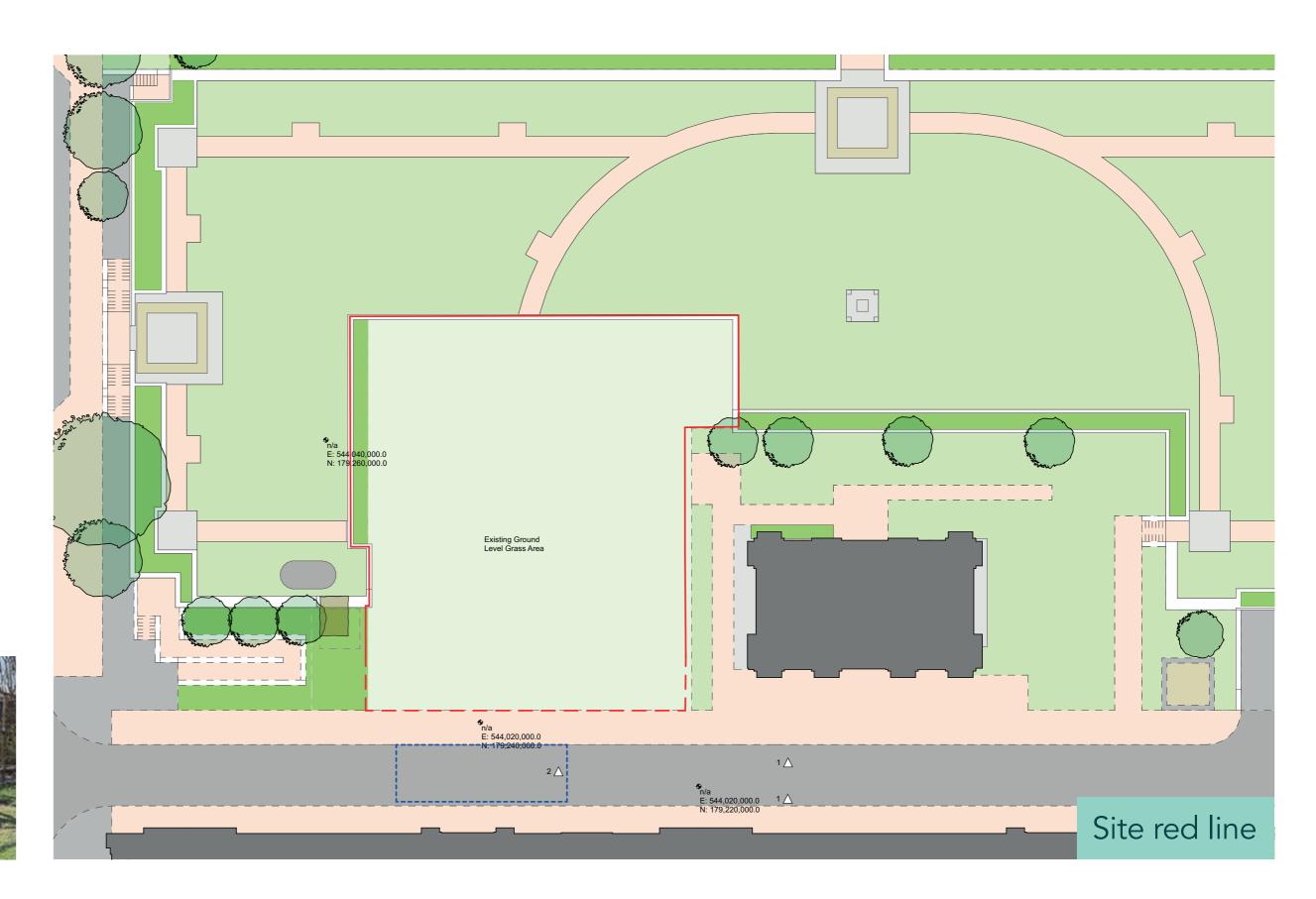


### PROPOSED LOCATION

- It is proposed to locate the ASHP within an extended built structure to the existing undercroft car park.
- This site was selected due to its proximity to the existing Energy Centre located at Windsor Square. This will allow for pipework connections along Arsenal Way.





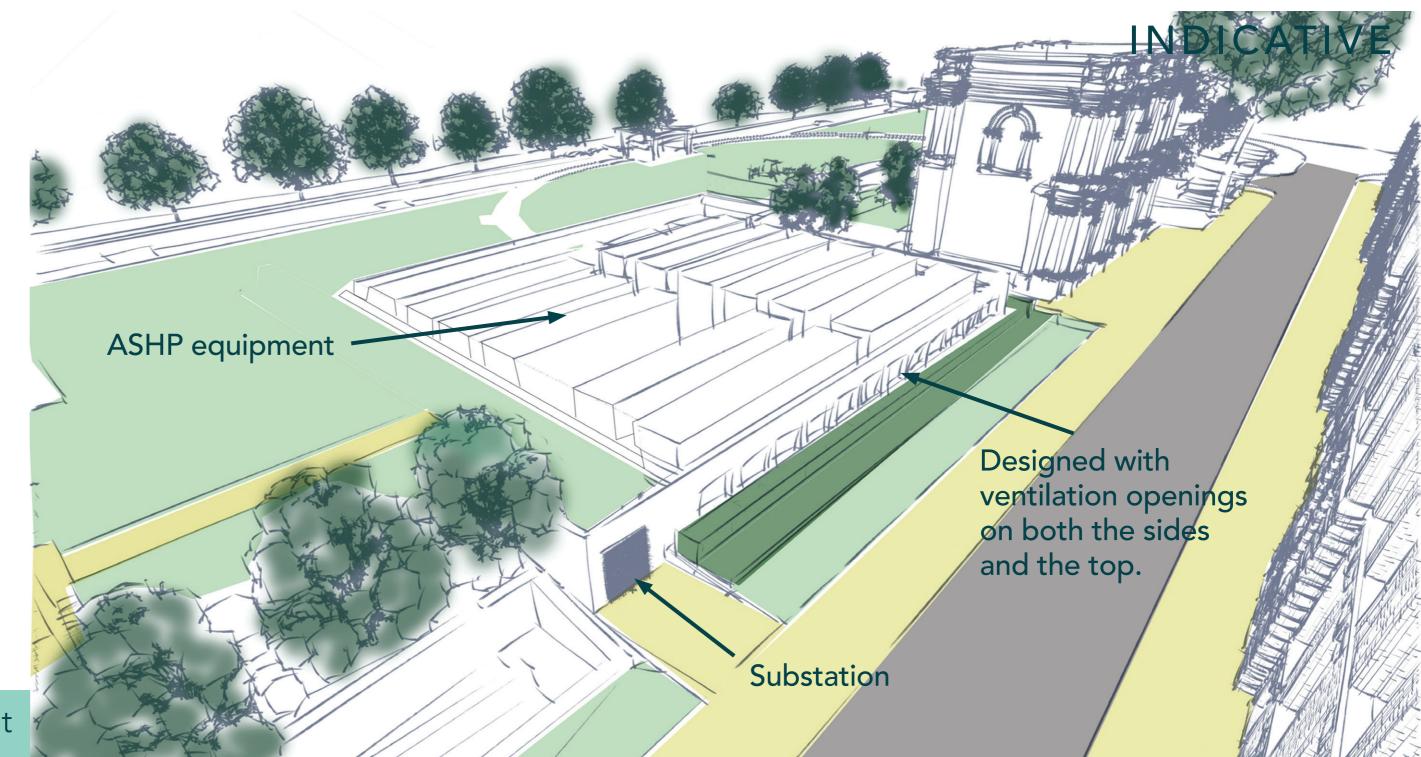


# Outside Air Intake Outside Air Intake Colder Air Return from Heat Network Return from Heat Network

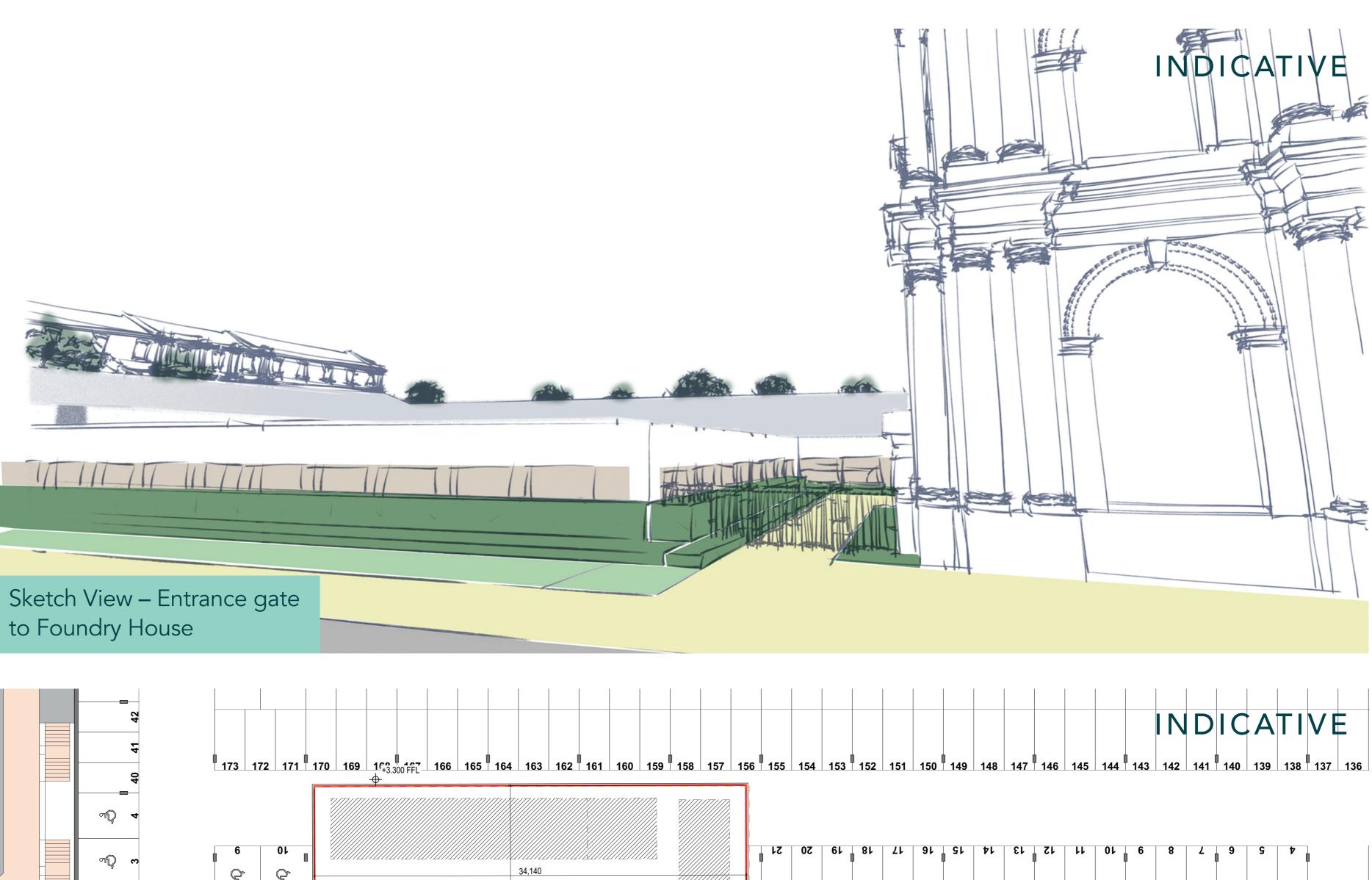
An ASHP is a system that extracts heat from the outside air and transfers it indoors to provide heating and hot water. It works using a refrigerant cycle and is an established low-carbon alternative to traditional gas-based heating systems.

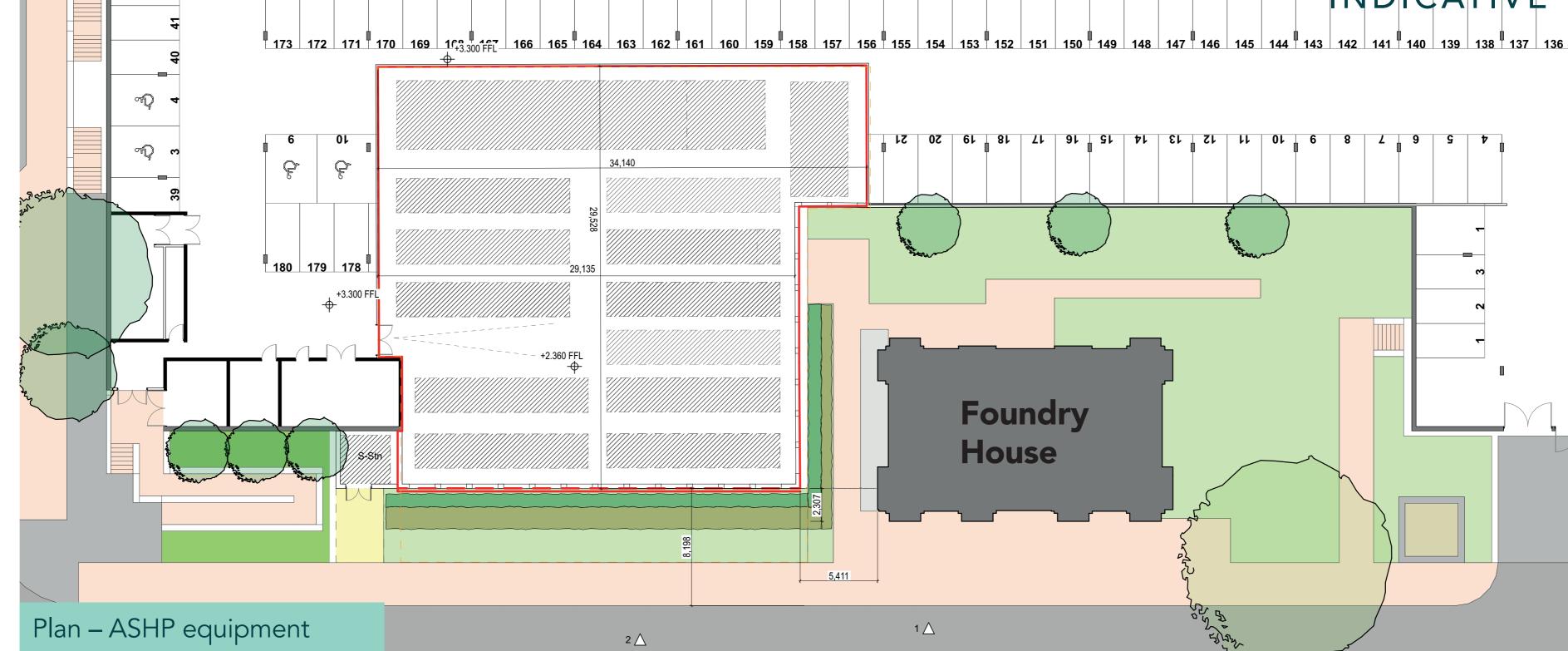
# WHAT WILL THE APPEARANCE BE LIKE

On the following boards, we are presenting indicative images of what the ASHP could look like at ground level, followed by two options on how the site might be enclosed







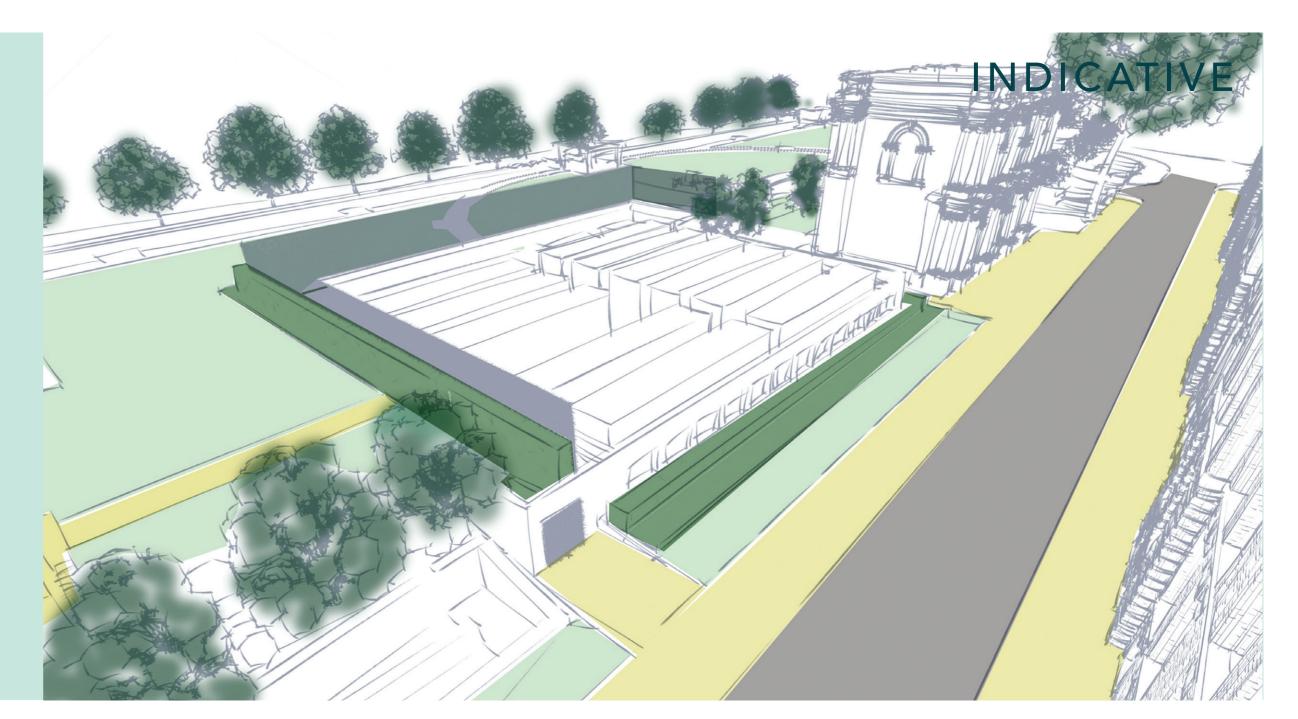


## WHAT ARE THE OPTIONS?

### **Option 1**

The ASHP will be enclosed within a compound designed with ventilation openings on both the sides.

This option proposes to fence off the compound, with no public access, which would have a planting buffer at Wellington Park grade.



### Option 2

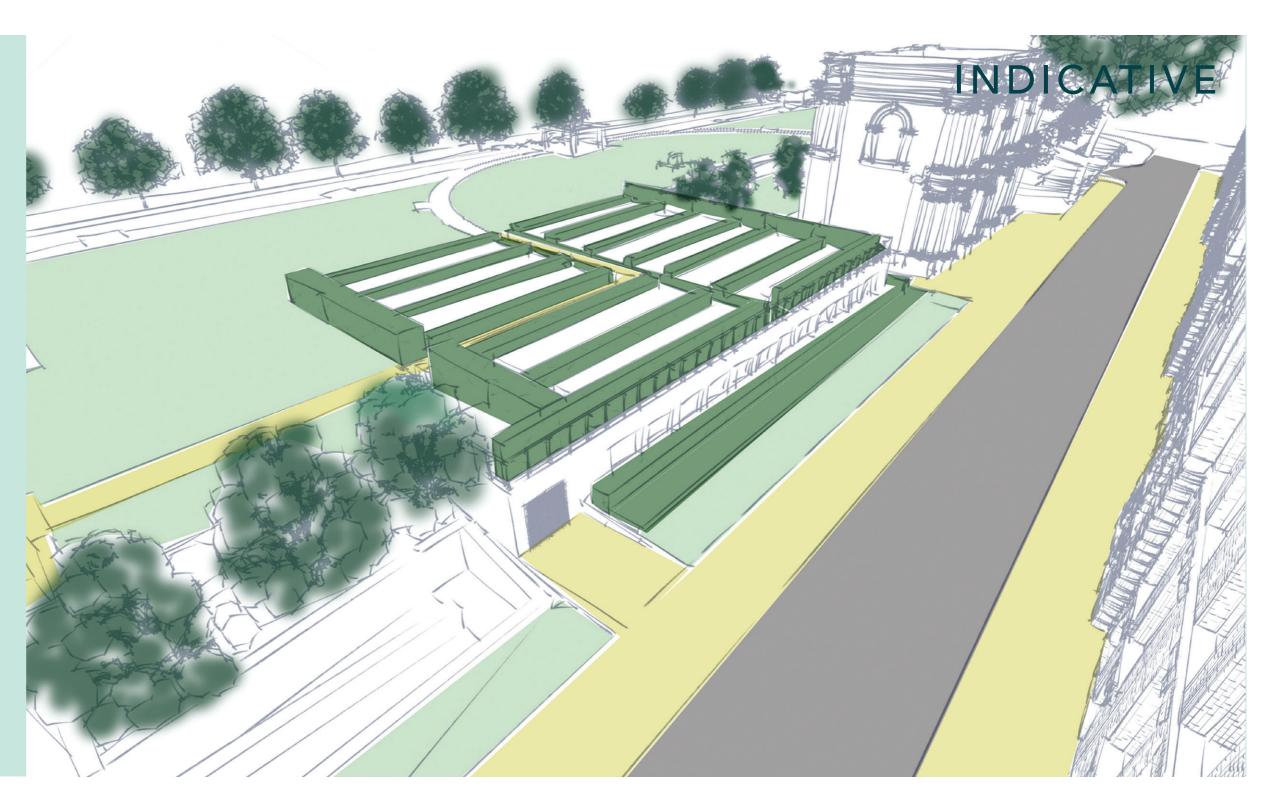
ROAD

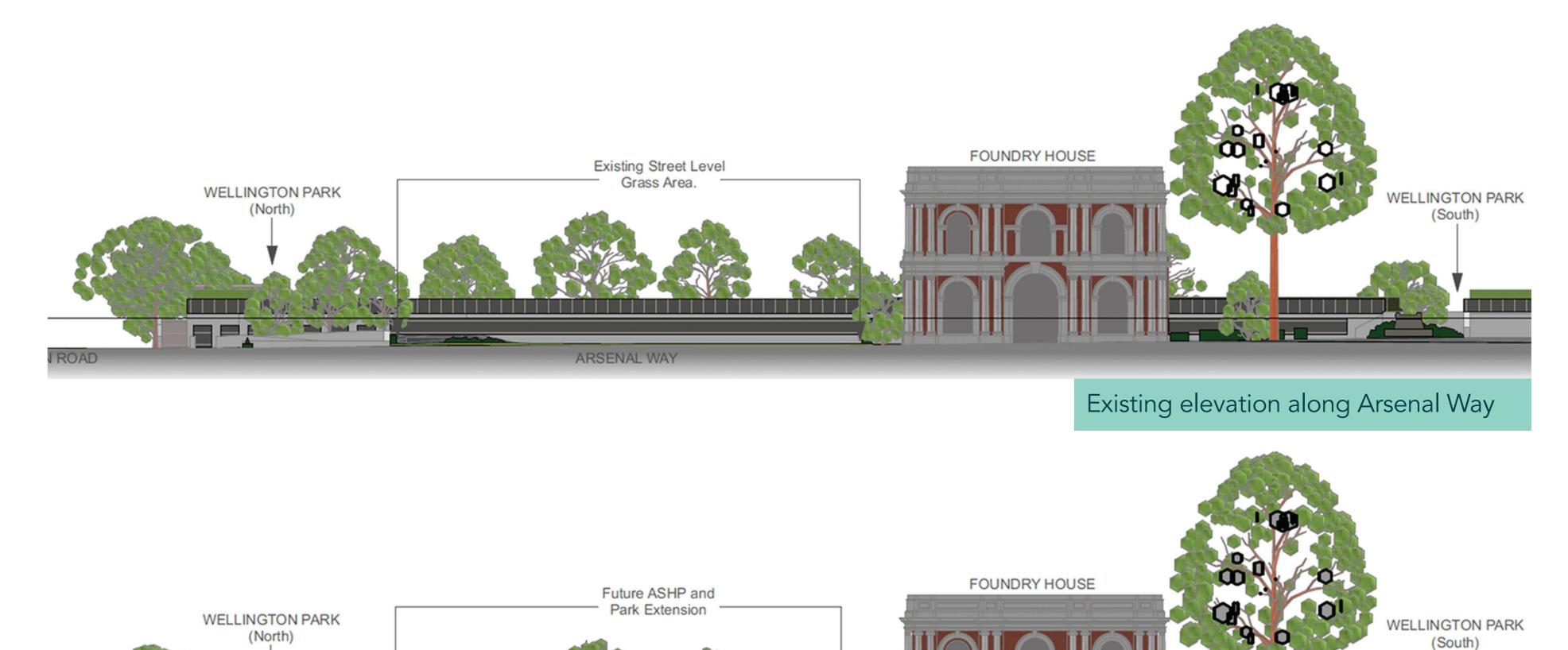
The ASHP will be enclosed within a compound designed with ventilation openings on both the sides and the roof.

To integrate the structure into the park's landscape, the rooftop vents will be screened with evergreen planting, creating a formal garden appearance.

The vents at the top are designed to facilitate air circulation. These will be protected by reinforced grills and surrounded by landscaping. This will allow members of the public to walk through the site.

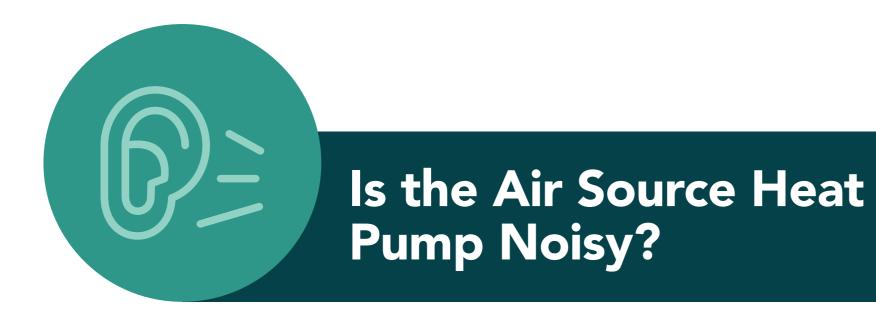
ARSENAL WAY





Proposed elevation along Arsenal Way

## ENVIRONMENTAL IMPACTS



The compound may produce a low hum, which is acoustically treated and comparable to the sound levels of household appliances such as refrigerators or dishwashers.

Measures including sound insulation and antivibration mounts will be in place to minimise any impact.

The installation will fully comply with all relevant British Standards and planning regulations regarding noise.

Noise will not exceed existing external night-time noise levels, remaining quiet during the night outside residential properties.



ASHPs produce zero exhaust emissions, they do not burn fuel, emit carbon monoxide or smoke.

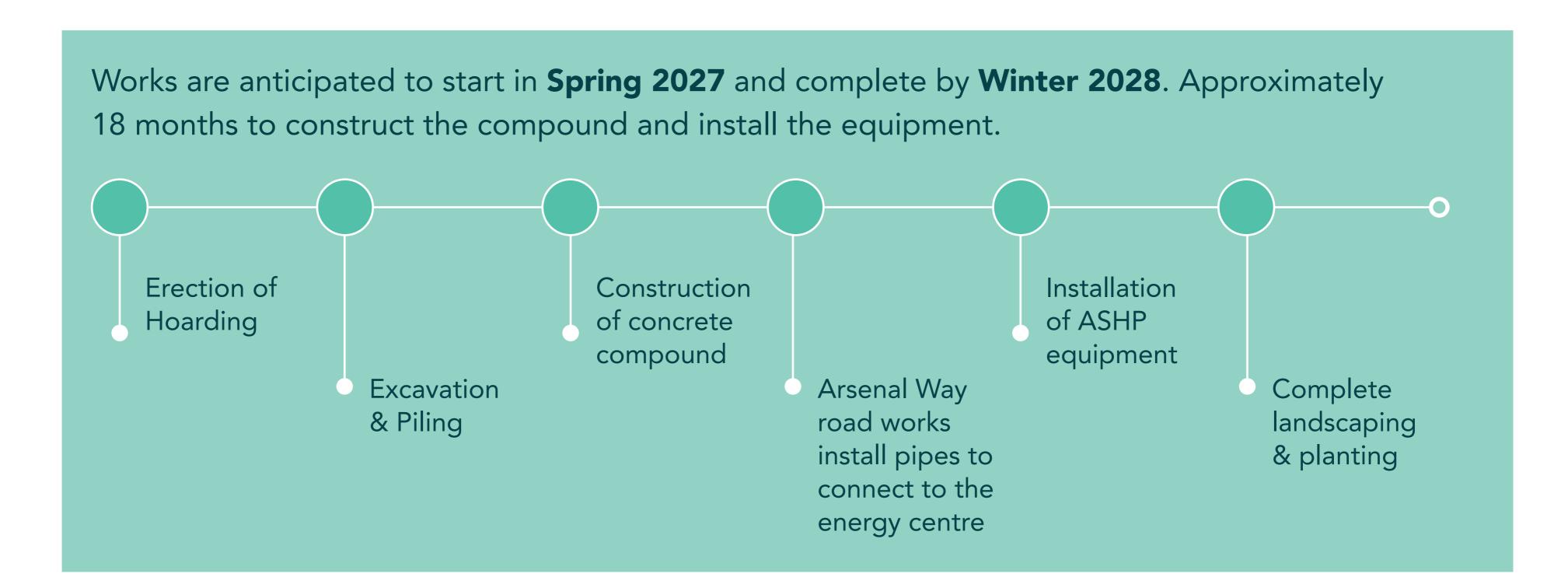


The proposed landscaping in and around the ASHP will improve local biodiversity, making it a better place for nature than it was before.

SHARE YOUR THOUGHTS ON THE PROPOSAL & HOW WE CAN IMPROVE WELLINGTON PARK



### CONSTRUCTION



To ensure public safety during construction, hoarding will be installed around the work area.

This will include a 2-metre zone around the edge of the Wellington Park podium and along the footpath in front of the proposed ASHPs.



# **NEXT STEPS**

Thank you for taking the time to view our proposals for decarbonising the energy network. We welcome your thoughts and encourage you to review the plans and share your feedback with us.



We welcome your feedback. Please share your thoughts with us:





Email us at: info@ASHPRoyalarsenal.co.uk



Have your say at: www.ASHPRoyalarsenal.co.uk