

Summary of design changes: June 2022

Building - What Haringey Planning PPA & QRP Panel said

Look at the specific significance of the parts, including the value of Science building to the campus as a whole – define what is valuable & important. Look at the wider context of the new extension elevation

Science Quad extension - Make the relationships with existing buildings more coherent. The geometry can be less matching in relation to the host. The façade should be more transparent to reveal the host faced within

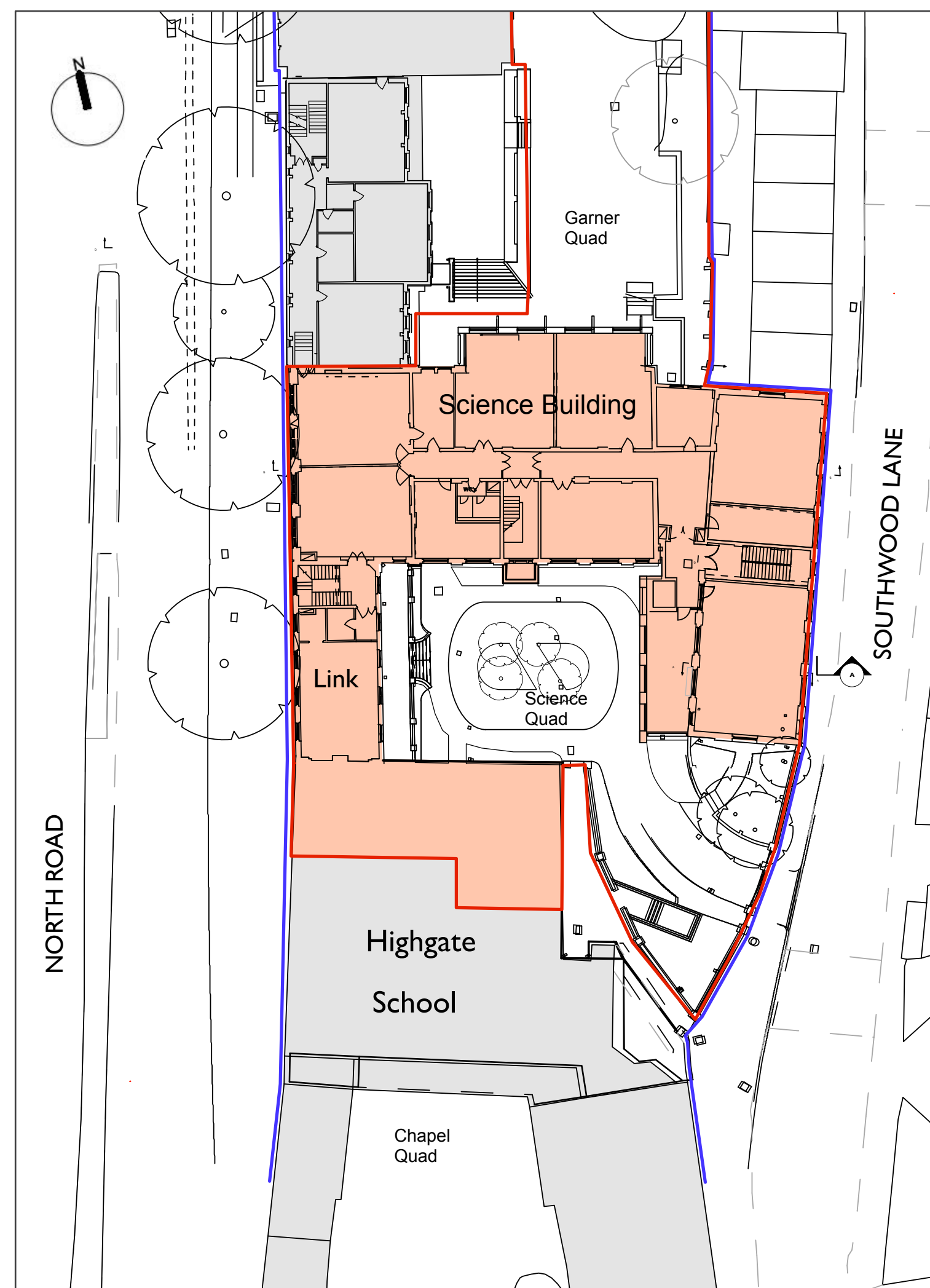
The panel commends the scheme for adopting an all-electric energy strategy, which it feels sets a good precedent for other buildings in a heritage setting. Supportive of refurbishing the existing building and making it more usable

Building - What we did

Significant change to elevation material, weight and character to reflect red brick recessed bay composition - “identity” of the historic buildings on the School site

The west elevation has been re-designed with more glazing, more transparency, while the relationship with the host Science building on the north, and “Link” building on the west side of the Quad, has been clarified by aligning with the latter

To achieve all-electric heating the design required air source heat pumps, which need to be located in an open air environment - the design has been amended to provide a new plant area in a discreet, set back part of the existing flat roof area



Site plan proposed, with Science project shown in red

Key update points:

- After public exhibitions in Autumn 2018, Highgate School finalised the “Supplementary Planning Document” with Haringey, which was adopted in 2021.
- The School then entered into a “Planning Performance Agreement” with Haringey to commit to detailed extensive consultations on design, heritage, planning, sustainability and landscaping, leading to Quality Review Panel meetings
- With regard to proposed Building form and relationship to context, the Quality Review Panel noted:
“... the Science Quad extension is a sensitive modern addition that is wholly appropriate for a Science building. It appreciates the openness of the building, which allows views onto the activity within. The subtle but extensive glazing also has the potential to create a beautiful interior environment..... The restored symmetry of the Science Quad, in particular, enhances the space and clarifies the primacy of the main entrance.”
- Key changes since last exhibition relate to the refinement of main elevations to the two extensions, addition of rooftop observatory and screened ASHP plant area, and roof level atrium glazing over the Science Quad extension and lift.
- Internally the design brings full inclusive accessibility and Part M compliance to all floors of the new and existing development

West elevation Science Quad extension and Perspective Views



West elevation of proposed new Science Quad extension

Key changes to proposed west elevation of Science Quad extension:

- Design amended to reflect more closely the wider historic context of brick buildings
- The elevation is organised in bays with recessed panels, with implied colonnade.
- Bath stone is used to frame the window openings as dressings.
- The Foyer lobby steps forward as a new element, more clearly defining entrance
- New extension façade set back from front face of existing building
- There is a clearer synergy with the “Link Building” on opposite side of Quad
- The glass roof and lift core have been amended to reflect technical requirements

Highgate School Science - Design Development

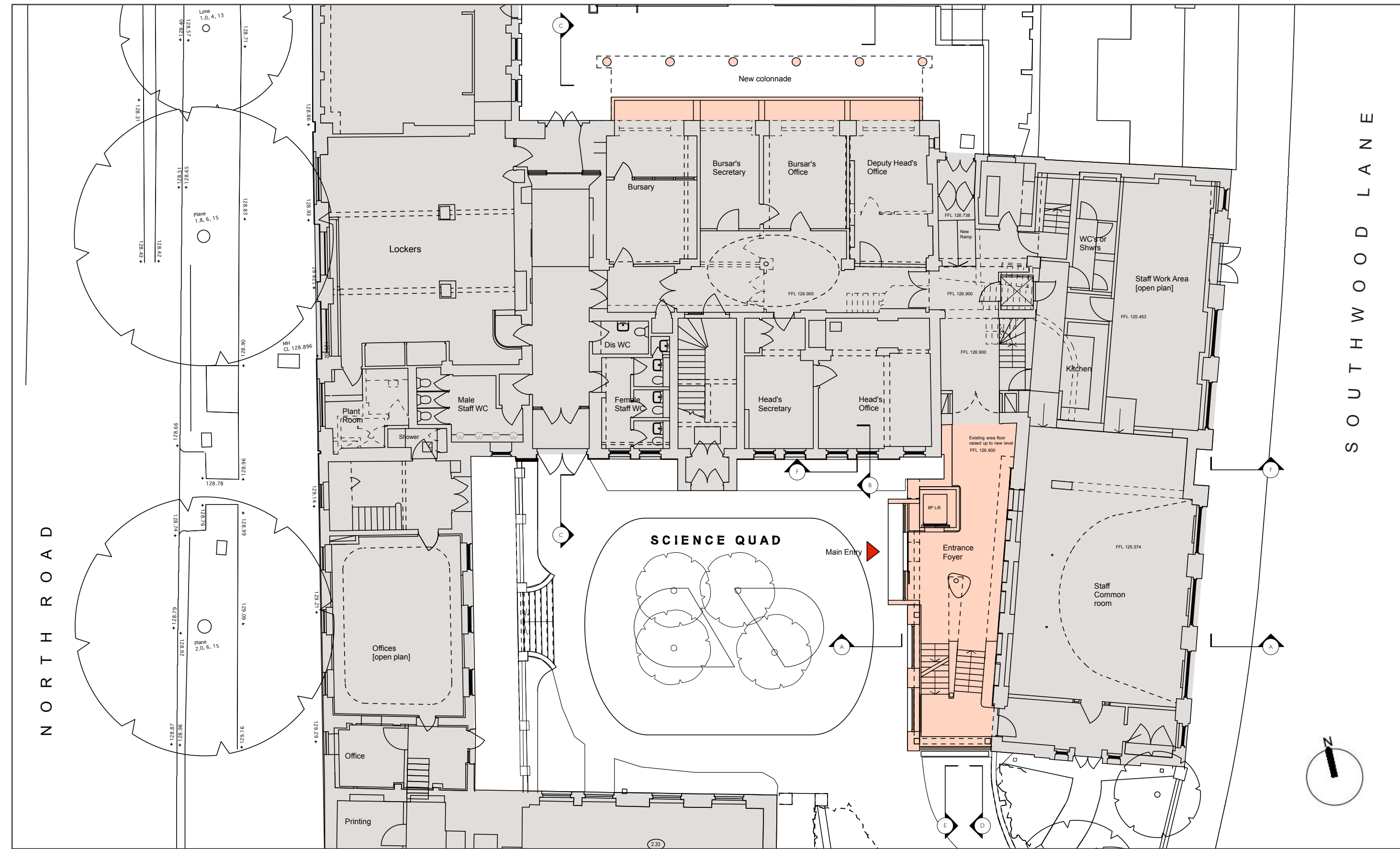


Sketch perspective view of Science Quad extension from within the Quad

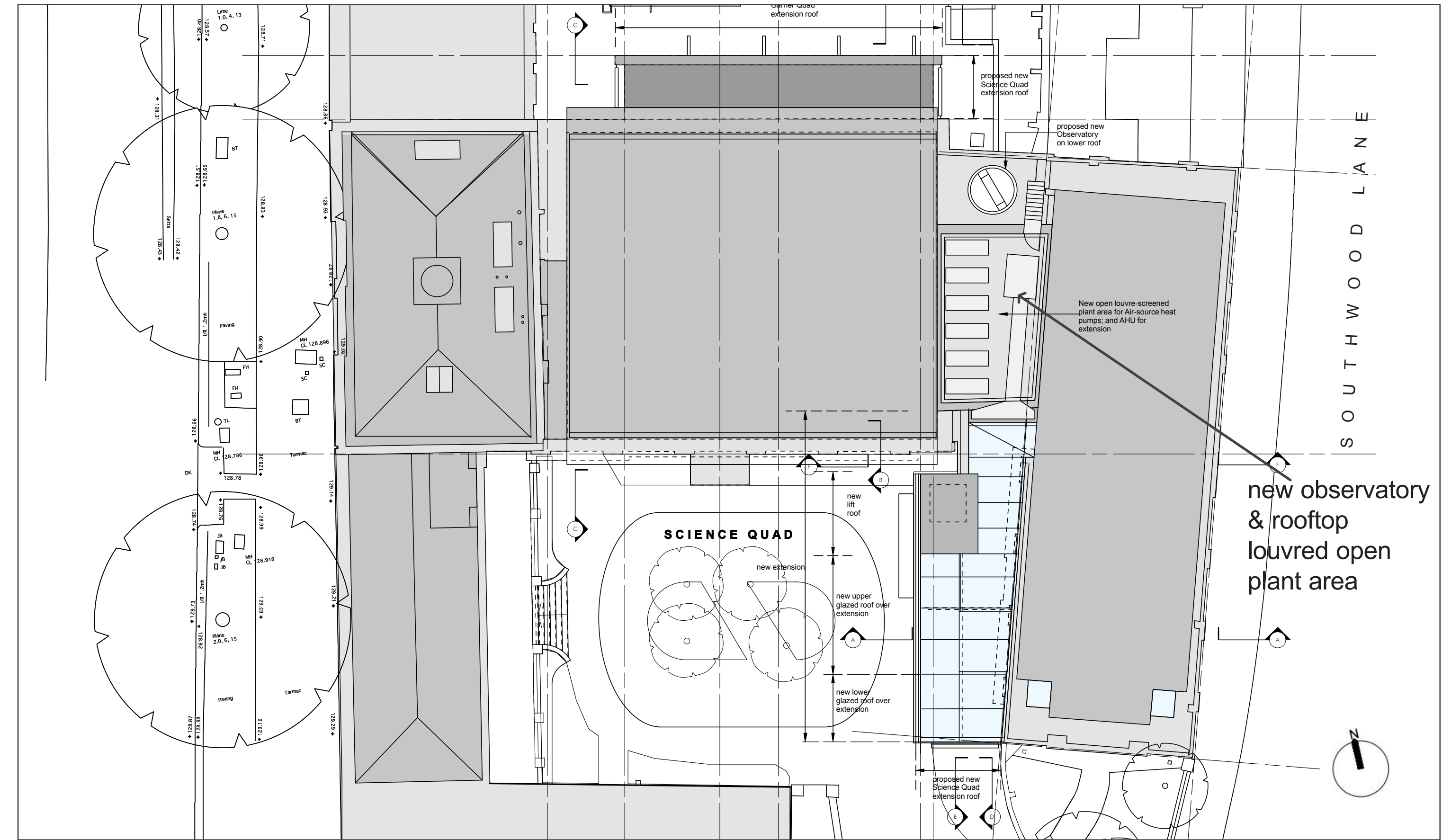


Sketch perspective view of Science Quad extension from south in Southwood Lane

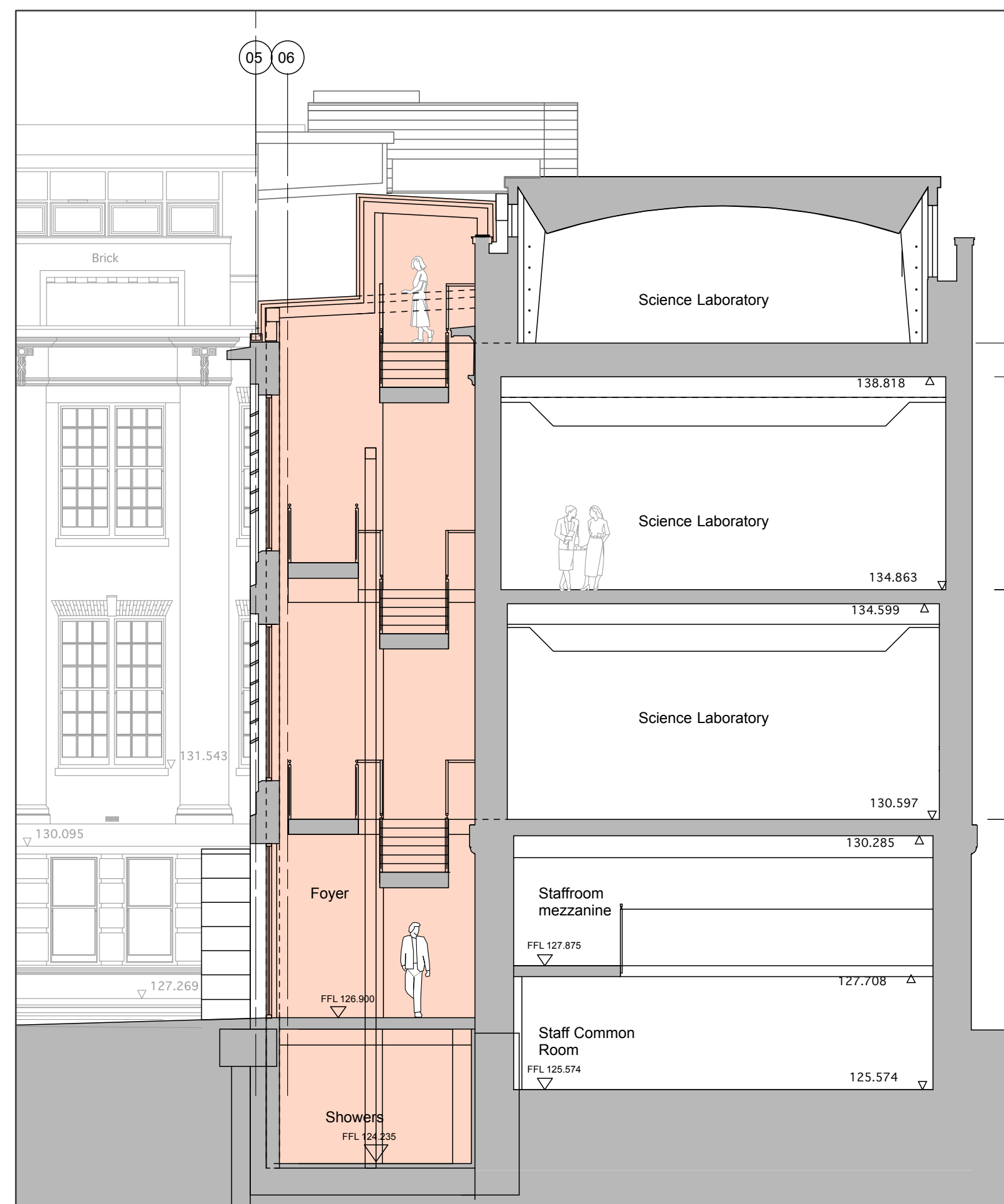
Ground floor plan and rooftop observatory & screened plant area changes



Ground floor plan proposed : new extensions shown in orange tone



Roof level plan proposed : new plant area and observatory



East - west section through the Science Quad extension

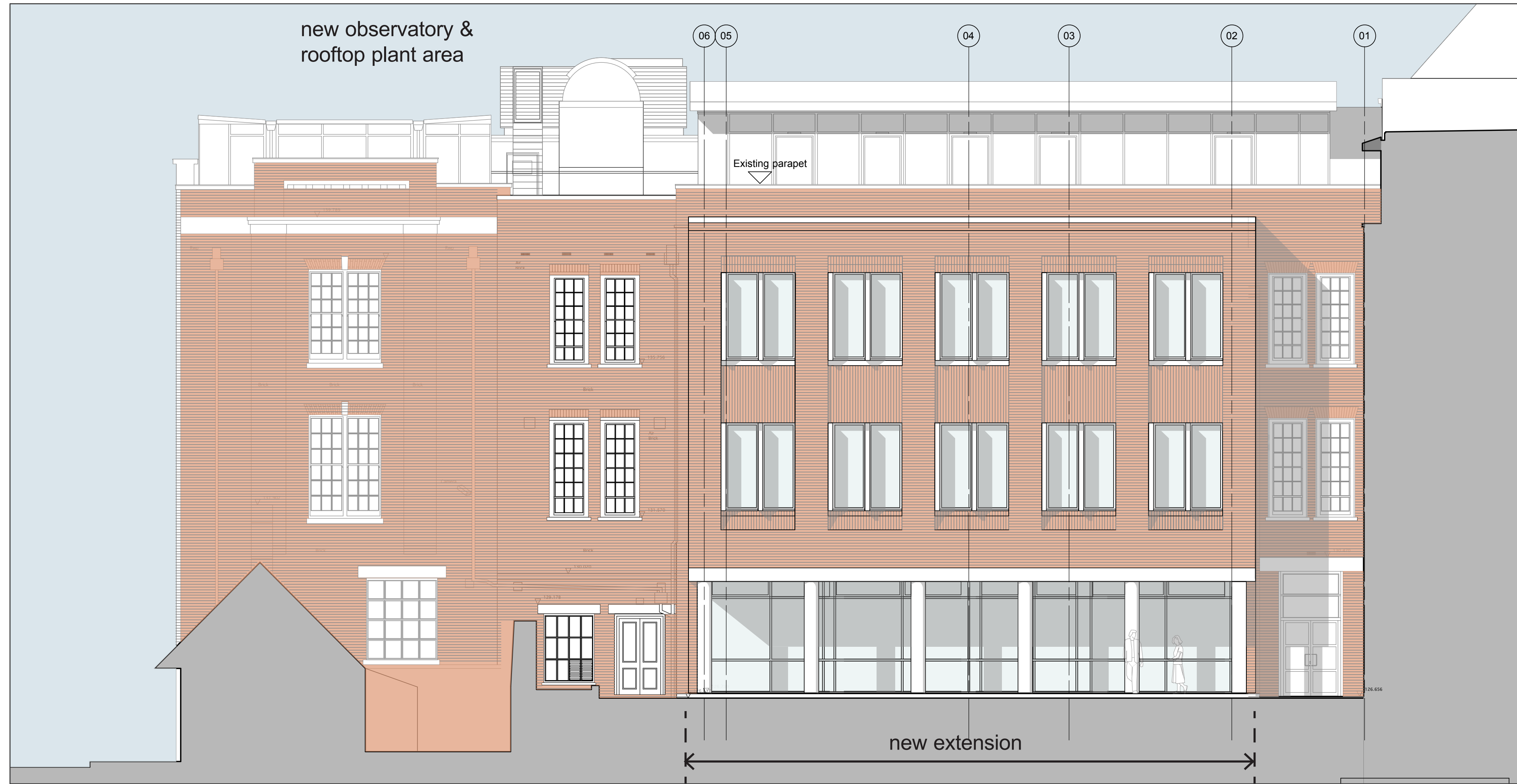


North-south section through the Science Quad extension with roof plant & observatory

Key changes to Roof-top design for plant area and observatory:

- After QRP Sustainability Workshop, meeting Haringey Sustainability target to be “all-electric” resulted in requirement for 6 no. Air Source Heat pumps with an AHU for the south extension atrium, all to be externally located
- After options study, optimum location is at roof level behind east block, set back to south-east
- Area to be screened by ppc aluminium louvres with full noise attenuation
- A small astronomical observatory will provide facility to view the stars & planets for research: finished in ppc aluminium cladding

Garner Quad extension north elevation, rooftop observatory & screened plant area changes



North elevation of Garner Quad extension, with new roof plant and observatory

Key changes to proposed north elevation of Garner Quad extension and rooftop behind elevation:

- At ground floor the brick pier colonnade has been changed to circular columns, responding to QRP Panel comment that the external covered space needed more daylight
- The windows and bay width have been refined: the width matches exactly the south Science Quad extension elevation - the two extensions are “of the same family”
- This has also given the extension a better rhythm and more vertical emphasis
- At rooftop on the east side [top left] note the addition of an observatory for astronomy research & education
- Also, behind the observatory a new louvre-screened plant area for air source heat pumps, a sustainable method of providing electric heating - low energy, low carbon



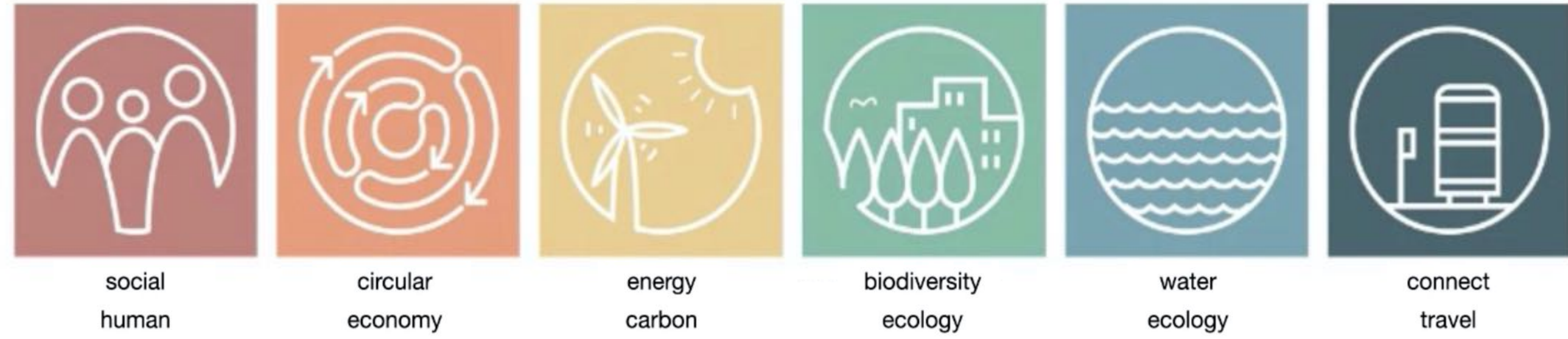
Sketch perspective view of Garner Quad extension, roof plant and observatory from north in Southwood Lane



Sketch perspective view of Garner Quad extension , roof plant and observatory extension from north

Landscaping, Environmental improvements, Sustainability & Energy

* reference Climate Framework



Landscaping, Ecology, Carbon, Sustainability & Energy:

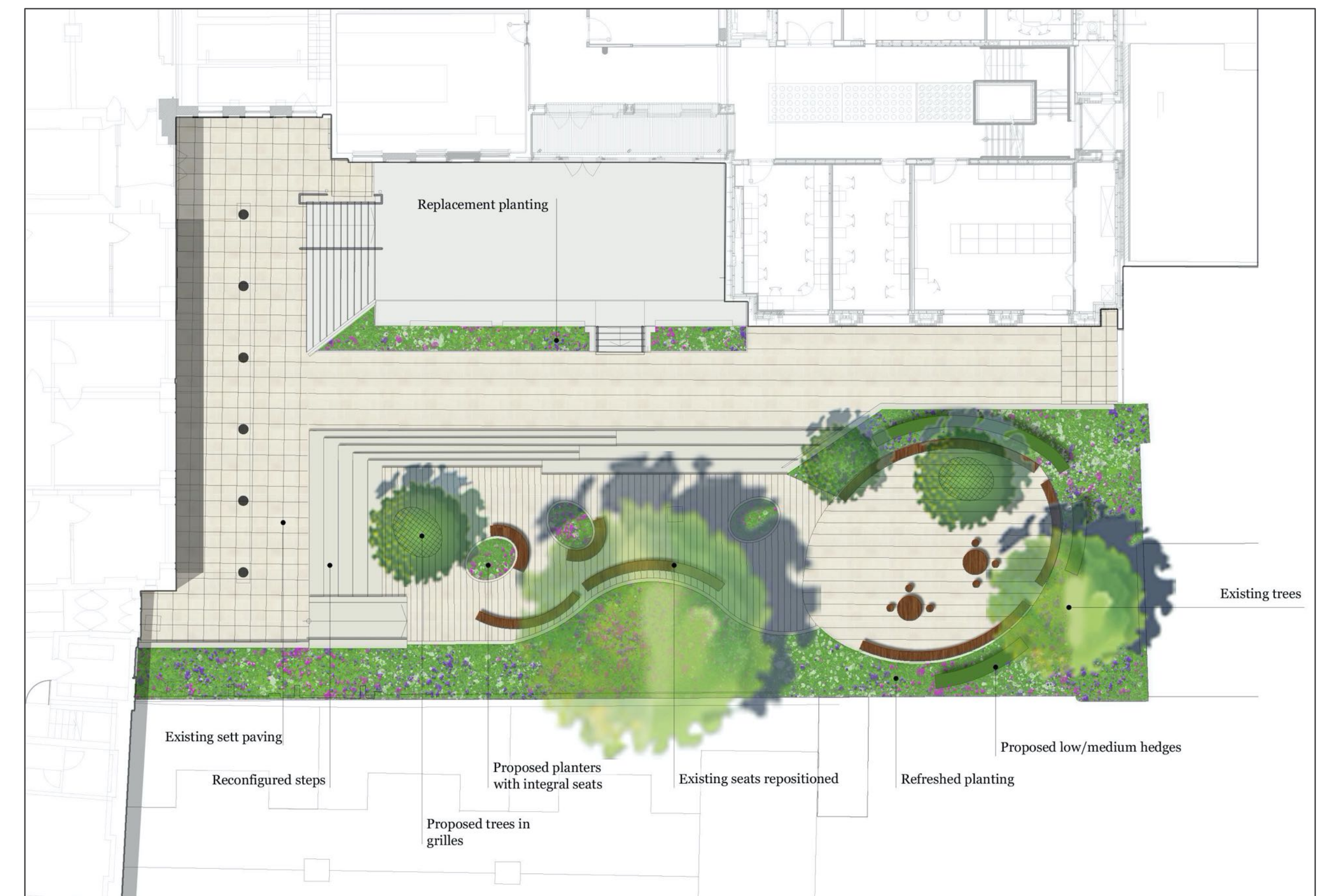
- Landscaping design will reinforce the importance of Quads
- New planting will bring textured layers of evergreen perennials and shrubs for year-round interest with a new native trees as focal points
- Haringey QRP Panel commented: *“The proposed landscape also provides a collegiate environment to the squares, and creates a strong sense of identity”*
- Biodiversity net gain
- Range of Sustainability measures
- Total carbon emissions reduction will increase to 40% by using Air Source Heat Pumps as low carbon energy source
- The refurbished building will aim to achieve target emissions reduction via energy efficiency measures
- Materials for fit-out targeted for natural, non-toxic, high recycle content, low embodied energy
- Louvred bris soleil to south elevation to mitigate over-heating and reduce lighting pollution



Sketch perspective view of Garner Quad, with new landscaping



Plan of Science Quad landscaping



Plan of Garner Quad landscaping