4.0 The Site, Surrounds & UCLH

4.01 University College Hospital (UCH) is a teaching hospital. It is part of the University College London Hospitals NHS Foundation Trust and is closely associated with University College London (UCL).

4.02 UCH has 665 in-patient beds, 12 operating theatres and houses the largest single critical care unit in the NHS. The existing Accident & Emergency department sees approximately 110,000 patients a year.

4.03 It is a major teaching hospital and a key location for the UCL Medical School. It is also a major centre for medical research and part of both the UCLH/UCL Biomedical Research Centre and the UCL Partners Academic Health Science Centre.

4.04 The following pages outline and illustrates the design for the installation of a multiple flat roof mounted solar PV system. The initial site for the PV system has assessed 3 separate locations on the UCLH buildings. These are:

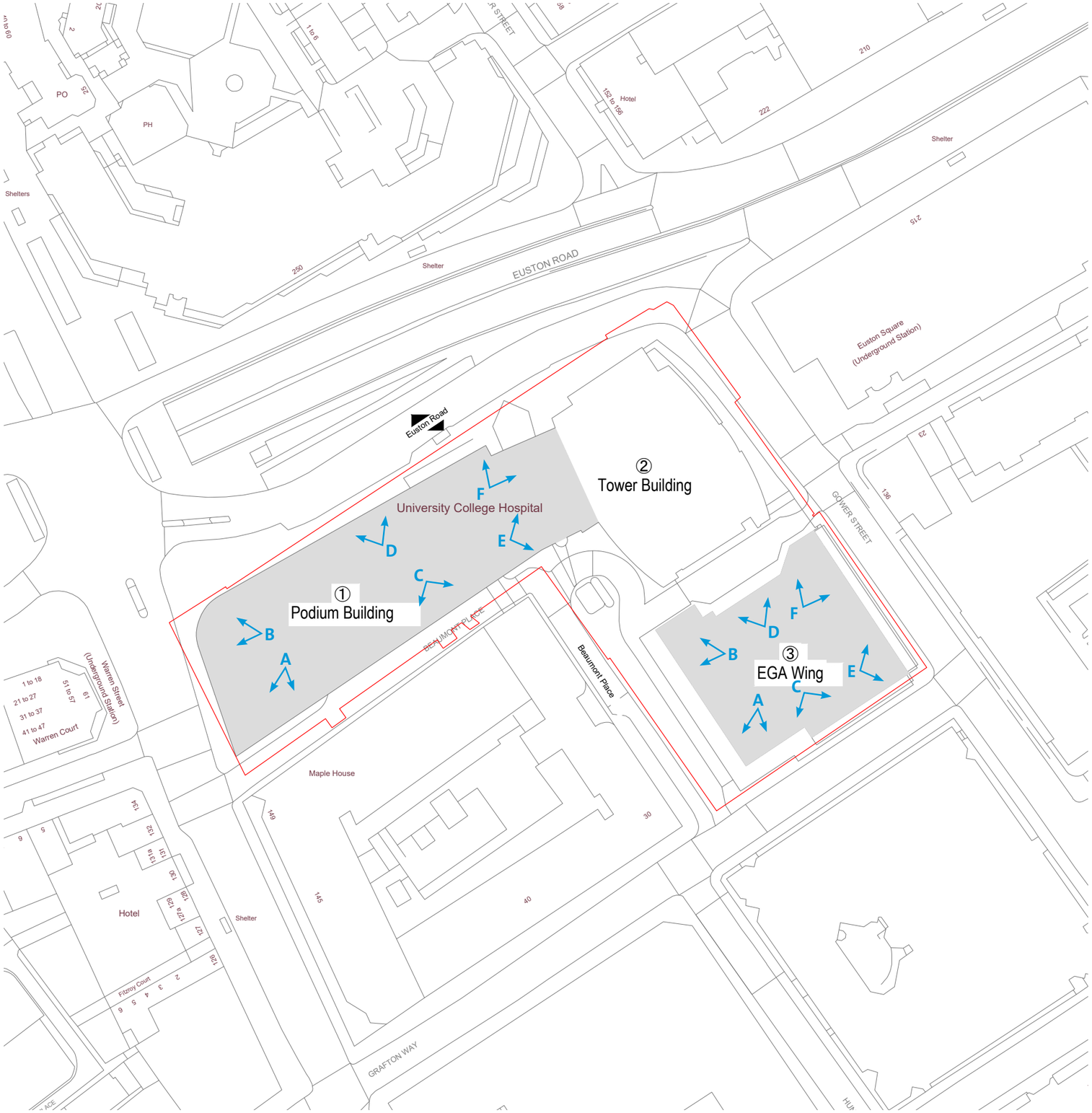
Location 1. *The Tower Roof Level*

Location 2. *The Podium Roof Level*

Location 3. *The EGA Wing Roof Level (Elizabeth Garrett Building)*

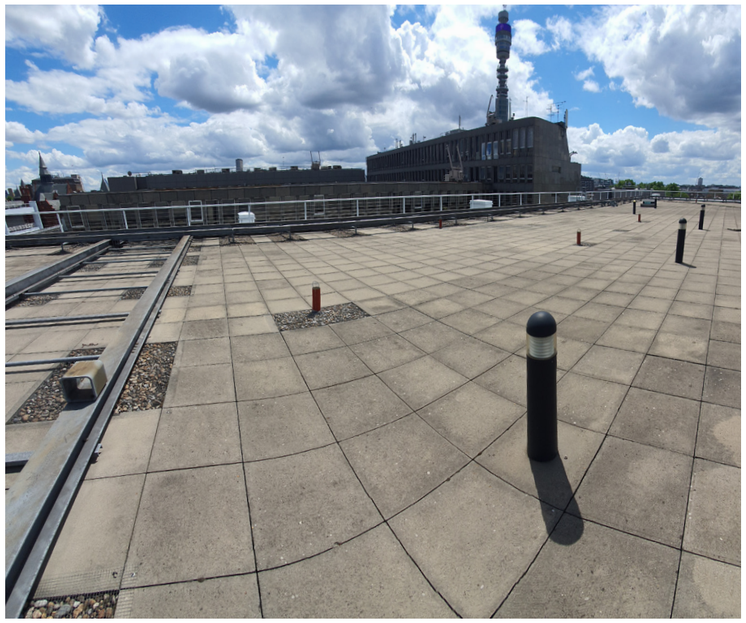
After undertaking the solar report & review, it has been decided to ***only install the PV system on location 2 & 3***, due to the possible high winds at location 1 the tower roof level.

4.05 The following page illustrates the proposed site for the PV installation on the remaining 2 sites.



4.1 The Site - Podium Roof Level - Photographs

View A - South West corner looking towards Tottenham Court Road



View C - Southern boundary looking towards Maple House

View E - North East corner looking towards UCLH tower, Euston Road & Gower Street

View B - North West corner looking towards Euston road

View D - Northern boundary looking towards Euston Road

View F- South East corner looking towards UCLH tower & Gower Street

4.1 The Site - Podium Roof Level - Existing Plan

4.1 Location 2. The Podium Roof Level

4.1.1 The existing roof provides approximately 1910 sqm of roofspace to use for a PV installation.

4.1.2 The main roof at present is clear with very little area used for plant space which is located on the floor below.

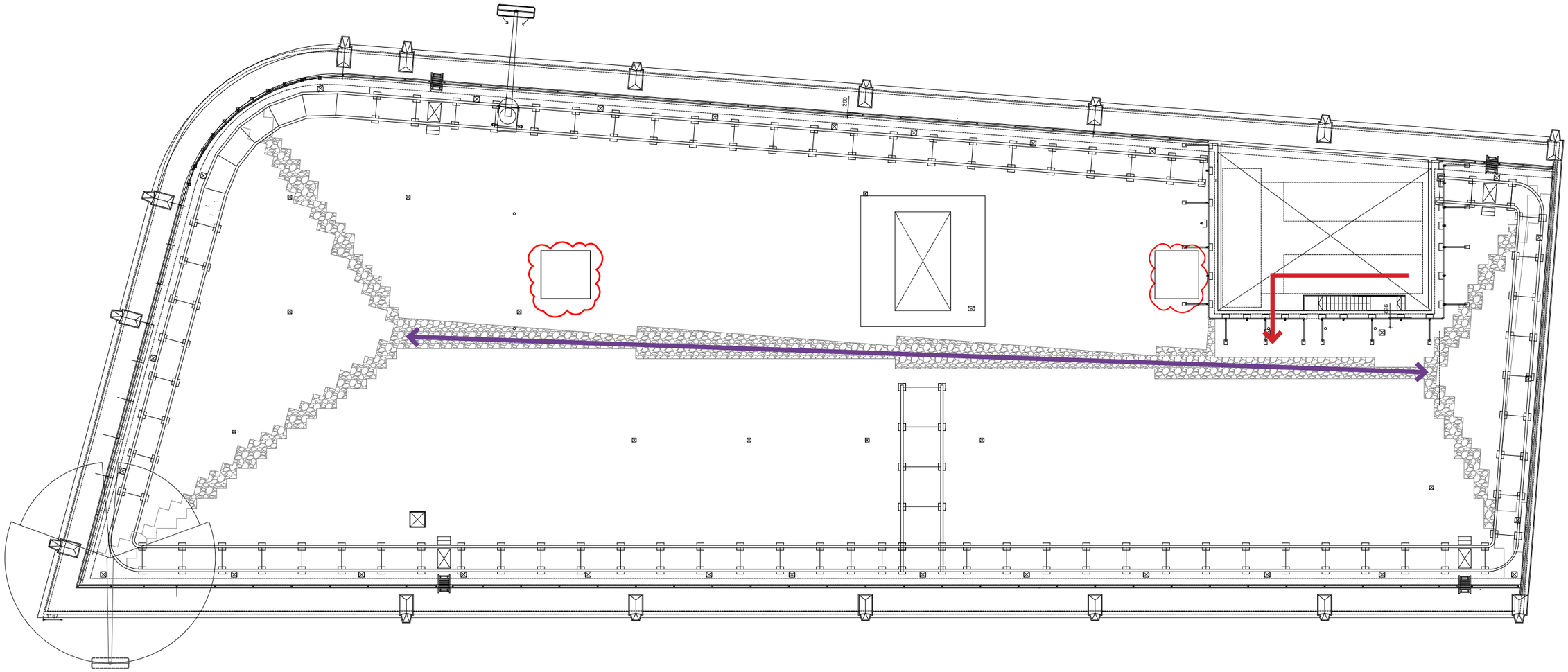
4.1.3 The roof consists of concrete pavers and a central drainage channel with gravel.

4.1.4 Existing low level bollard ligting is provided to the central route area.

4.1.5 Access is provided from the plant floor from below via an external staircase.

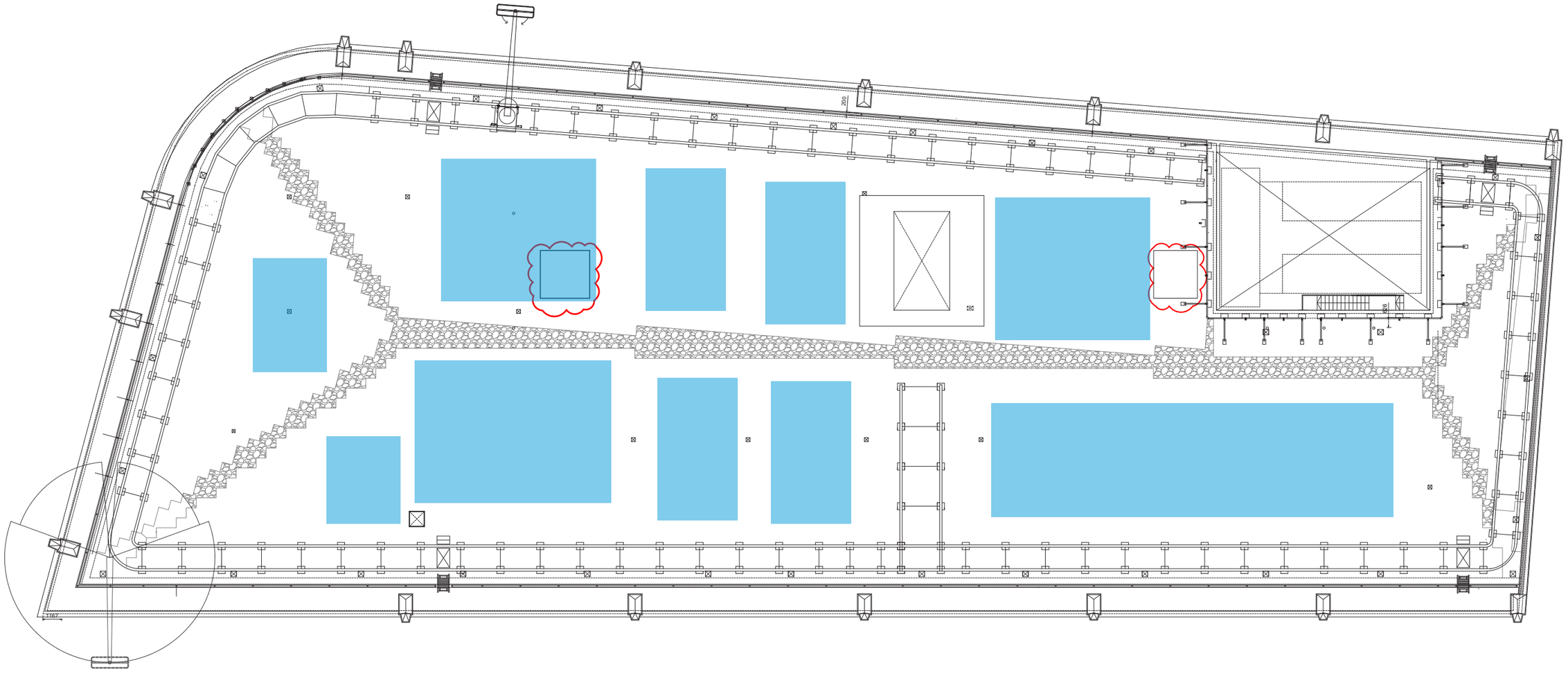
Staircase Access from plant floor below

Central Access Route



4.1 The Site - Podium Roof Level - Areas for PV Panels

4.1.6 The plan below illustrates possible areas to install solar PV panels.



4.2 The Site - EGA Building Roof Level - Photographs

View A - South West corner looking towards University Street & Tottenham Court Road

View C - Southern boundary looking towards the Cruciform building

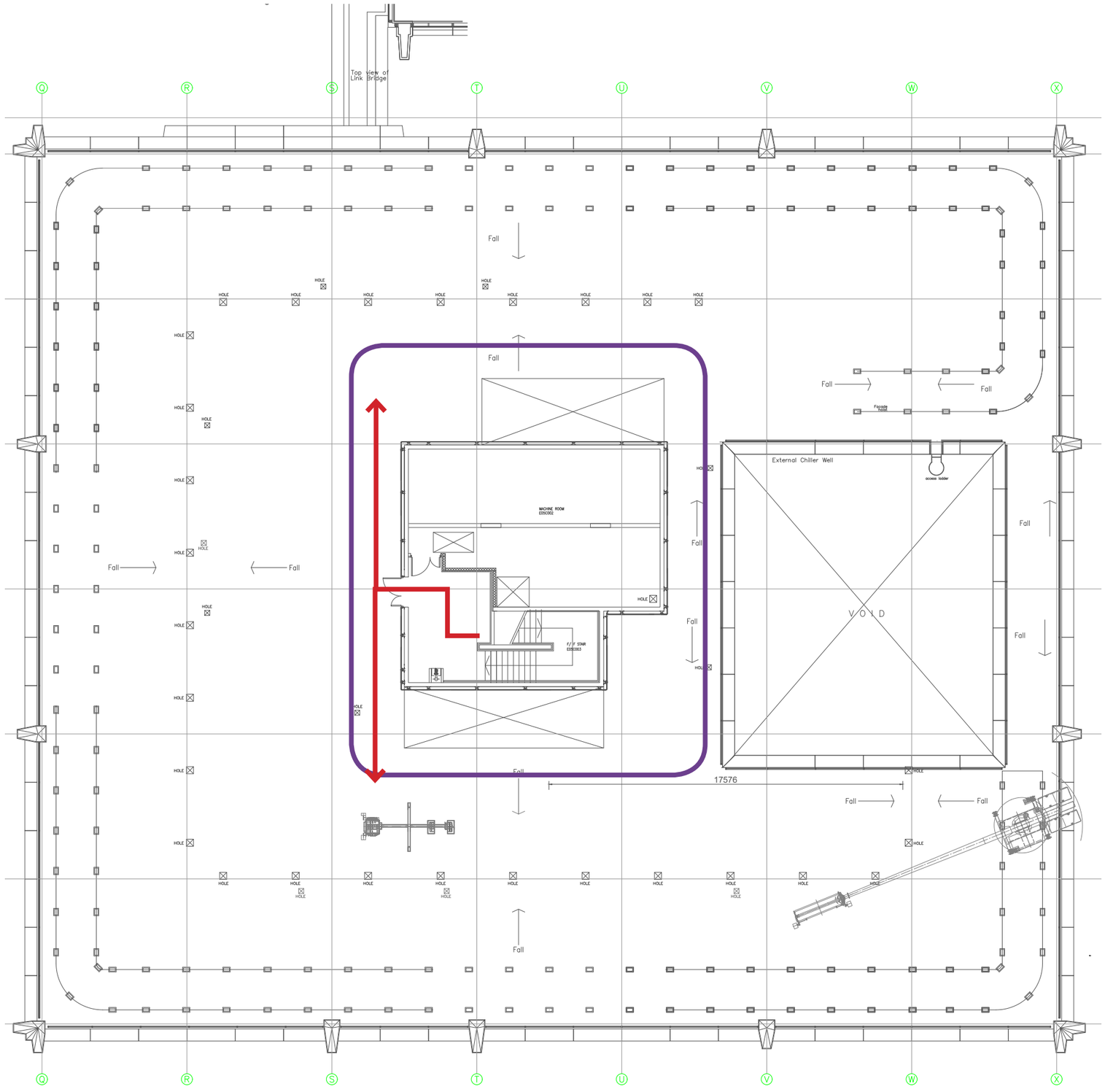
View E - South East corner looking towards University Street & UCLH Cruciform building

View B - North West corner looking towards Euston road

View D - North East boundary looking towards Gower Street

View F- North East corner looking towards UCLH tower & Gower Street

4.2 The Site - EGA Building Roof Level - Existing Plan



4.2 Location 3. The EGA Roof Level

4.2.1 The existing roof provides approximately 780 sqm of roofspace to use for a PV installation.

4.2.2 The main roof at present is clear with very little area used for plant space which is located on the floor below.

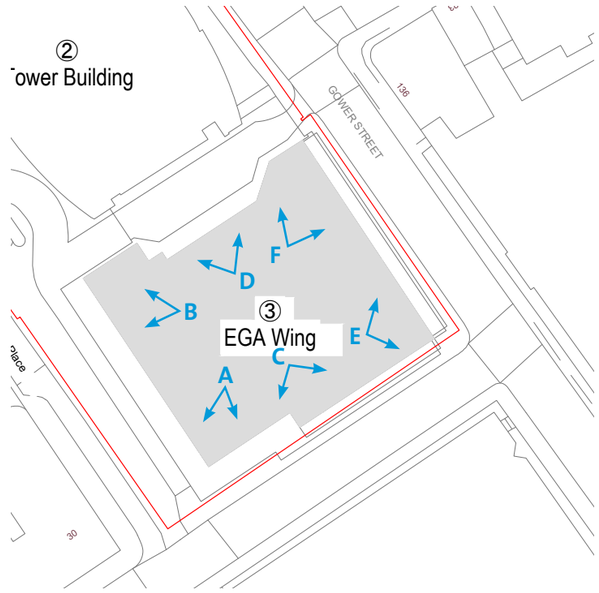
4.2.3 The roof consists of concrete pavers, gravel drains laid to fall with small raised vent pipes. These will be retained.

4.2.4 Existing lighting is provided from the central core walls.

4.2.5 Access is provided from the plant floor from below via an internal staircase core.

Staircase Access from plant floor below

Central Access Route



4.2 The Site - EGA Building Roof Level - Areas for PV Panels

4.2.6 The plan below illustrates possible areas to install solar PV panels.

4.2.7 The area for PV panels has been located to the South and South-West corner. Locating the panels to the northern end of the site would be overshadowed by the central core during early morning sunshine and then later during late afternoon by the tower.