The Fitzrovia, London Technical Note: Section 73 – Roof Plant Extension



The incorporation of the firefighting shaft to the north core at 247 Tottenham Court Road has meant that the roof plant layout has had to be re-coordinated to incorporate the additional plant that serves the firefighting shaft, the associated power supplies and automatic controls that serve the new plant. In addition to this the increased size of the BMU parking garage has also impacted on the space available within the roof plant enclosure.

The additional plant and hence the additional associated plant space requirements are primarily associated with the following firefighting shaft plant items and ancillary considerations.

- The firefighting lobby duty and standby smoke extract fans
- The automatic transfer switch (ATS) that serves the firefighting lobby smoke extract fans
- The increase in size of the life safety motor control centre (MCC) that accommodates the automatic controls to the firefighting lobby smoke extract fans
- The incorporation of the diverse routing of the electrical services that serve the firefighting lobby smoke extract fans has had to be included in the re-coordinated roof plant layout.
- The fire rated enclosure to the ATS

The original roof plant layout incorporated future tenant plant space i.e., empty space where future tenants can locate as an example 24-hour communications/data room cooling units. Therefore, in theory additional plant space was available in the roof plant area to incorporate the additional firefighting shaft plant.

However, using this future tenant plant space for base build Landlord's plant leaves the building deficient in future tenant plant space.

Providing a building a with a lack of future tenant plant space is not a practical option for the operation of the building. Therefore, based on the re-coordinated roof layout that incorporates, the additional plant for the north core firefighting shaft and the increased size BMU parking garage, additional plant space enclosed by the increased run of plant screen to the south of the south core has been incorporated into the scheme. The additional plant space, to the south of the south core is for future tenant plant use.