Atelier MB
Urban Architects

# Location of Plant Deck at 14-16 Newton Street. Justification Statement in Support of a Planning Application for Works to 8-16 Newton Street

Client: Eastern Green
May 2018
Job: 1665
Revision -



The changing needs and changing uses necessitate the reconsideration of the heating/cooling requirements for these historic assets. It is recognised that the existing and historic methods for heating (solid fuel) are both inefficient and incompatible with modern office uses and that the deep floor plates, relatively high user ratios and limited natural light require additional systems for heating, cooling and ventilation to be considered. These systems should be installed in such a way as to balance the need to continue with a viable use for the building with minimal impact on the historic asset. Various locations have been considered as to where to site the plant equipment for building numbers 14-16 Newton Street and they include the following:

## Option 1: Loading bay.

Impact on historic asset - potentially low.

Practicality - There is already a plant located in this area which relates to the existing use of the ground floor of number 16 (Cottonopolis). The space will also contain electrical plant in the form of the proposed substation, as well as bin stores. Both of these elements require level access to the street. It is considered that they are ideally located for this purpose. Also, the loading bay contains essential escape routes for the building as well as access to the cycling facilities. With all this usage, there is no further space for any additional plant and it is for this reason that the loading bay has been discounted.

## Option 2: Incorporate above 3rd floor to no.8 in the sloping eaves.

Impact on historic asset – low.

This is the location where the plant is proposed to be situated serving numbers 8, 10 and 12. Whilst the impact is considered low in terms of the asset, there are two problems with this approach. Firstly, due to the proposed plant that serves the other side of the building, there is no space for additional plant. Also, the location is less than ideal in that it is some 20 meters from numbers 14 and 16, which will result in long service runs, probably too long, through other demises. A less than ideal scenario.

## Option 3: Internally in the centre of the building mid floor.

Impact on historic asset - high.

Locating the plant internally is not practical due to the need for ventilation of the external units. These units are designed to be mounted externally and cannot be ducted in the conventional sense so there needs to be a good deal of ventilation around the units, which can only be properly accommodated by the lightwell. It is considered that mounting the units in the lightwell will have a high negative impact on the building as this is a restricted space which will be dominated by such an installation. The legibility of the lightwell element will be difficult to appreciate and the purpose of the lightwell will become compromised. For these reasons, this option was discounted.

## Option 4: Internally, but adjacent to an external wall.

Impact on historic asset – high.

Various locations were considered for the plant being located internally. However, on the external facade there would be a need to replace glazing in window frames with a large number of louvres. This would have a negative impact on the external facade, but furthermore, the impact of the plant room internally would affect prime space adjacent to windows. Natural light to the interior of the area effected would be reduced substantially and the layout of the spaces would be affected negatively by the room. In number 8, the sloping soffit of the roof space lends itself to the plant room, but there is no natural equivalent in this side of the building.

## Option 5: Externally, on the roof in the natural dip in the roof.

Impact on historic asset - low to medium.

The height of this proposed acoustic enclosure, in relation to the eaves and the setback from the facade, has the effect that this additional intervention cannot be seen from anywhere on the street. It is recognised that the deck will be seen from taller buildings. In order to address

the impact from tall buildings we have hidden the plant behind a sympathetic covering which is described fully on the accompanying drawings. All things considered we feel that the location of the units, above the spaces that they are serving minimises service runs and simplifies layouts. Access for servicing is safe, and plant can be serviced and replaced by way of a crane. From the inside of the building, the impact will be zero, and the impact of the plant deck externally is more than compensated by the fact that the units will serve the spaces in a way that addresses the need for modern office requirements maintaining the viability of the building and securing its long term funded future. This approach has been successfully implemented at the neighbouring 35 Dale Street and the adjacent Easy Hotel and there is no reason why a similar approach could not be acceptable in this case.

## Conclusion.

We have concluded that the external rooftop plantroom extension (Option 5) has the least impact on the historic nature of the assert and this is the reason why this proposal is contained within our application.