

MTV

North façade planning application

Design statement

MTV needs to refurbish the internal space along the north façade facing on to the Regents Canal because the space has a low level specification that does not conform to modern office standards.

The overall objective is to improve the quality of the internal space and the external environment along the canal by removing the old equipment and making minor modifications.

Removal of split units

Over time, the building was transformed several times internally and as different requirements developed, temporary measures were put into place to resolve different cooling requirements for the office space and technical rooms. This organic growth meant that air conditioning split units were placed on the external façade temporarily.

MTV is now upgrading its mechanical central system and is in the process of replacing these external units with a central roof top plant. All the existing split units on the north façade will be removed over the next few months.



Floor grilles

jacobs webber

The existing space has no raised floor making it difficult to use for modern IT and telecom requirements. Given the low ceiling construction and existing first floor slab level the only alternative available was to lower the height of the existing floor. Some of the floors on to the canal had ventilated cavities through grilles in the masonry below the windows, with the modification of the internal floor levels some of these grilles need to be removed since they would be above the finished floor level.

Although the use of the low level existing grilles was considered for ventilation of the office space, their uneven locations and low level position was not conducive to the distribution of high level air. The possibility of a low level displacement air distribution was considered but that would have meant modifying all the existing windows and the ultimate result would have made the head of the windows quite low as well as significantly reducing the amount of daylight into the new office space, not a very environmentally friendly solution.

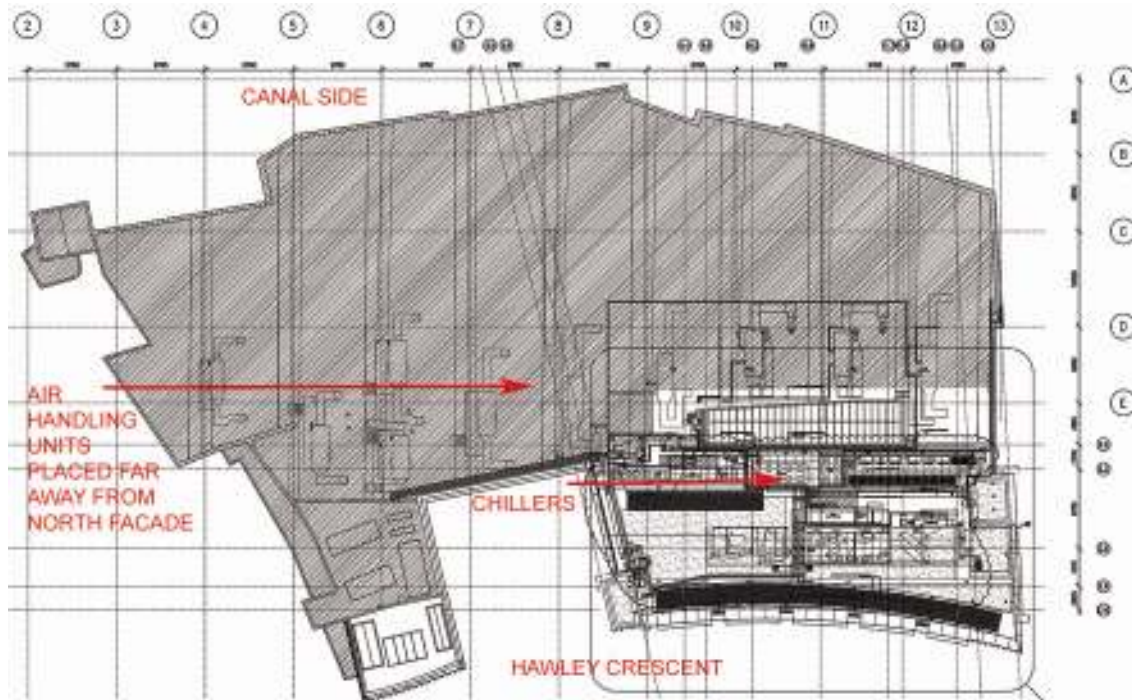
The proposed objective is to remove the lower level grilles and fill in the masonry to match the adjacent masonry and to decorate to match the existing adjacent wall surfaces.



Ventilation

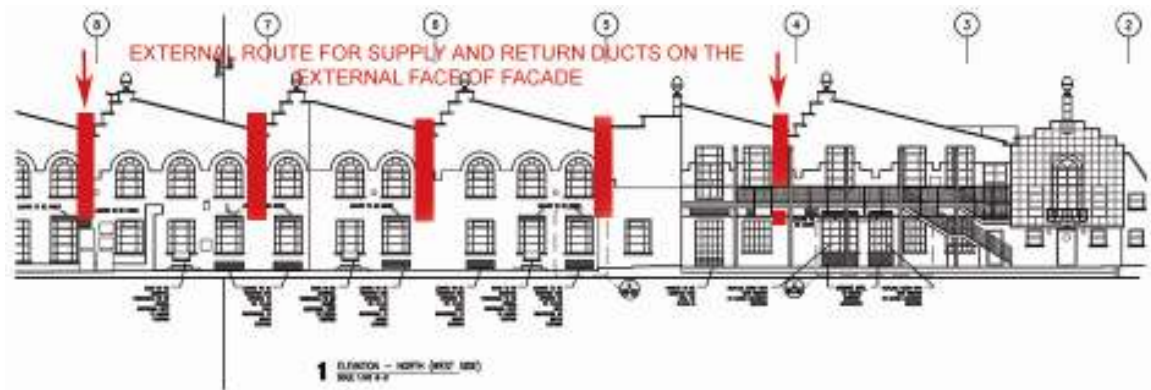
Over the years a number of air conditioning split units have been placed on the north façade in different areas to suit the internal cooling requirements. Given the needs of modern office space these outdated equipments will be replaced by a centralized air conditioning and ventilation plant that would be placed on the roof.

In order to protect the façade facing on to the conservation area from the unsightly mechanical equipment, the plant has been placed closer to the southern side of the building far away from the north façade; so as to be invisible from the Regents Canal.



Roof plan showing location of plant far removed from north elevation

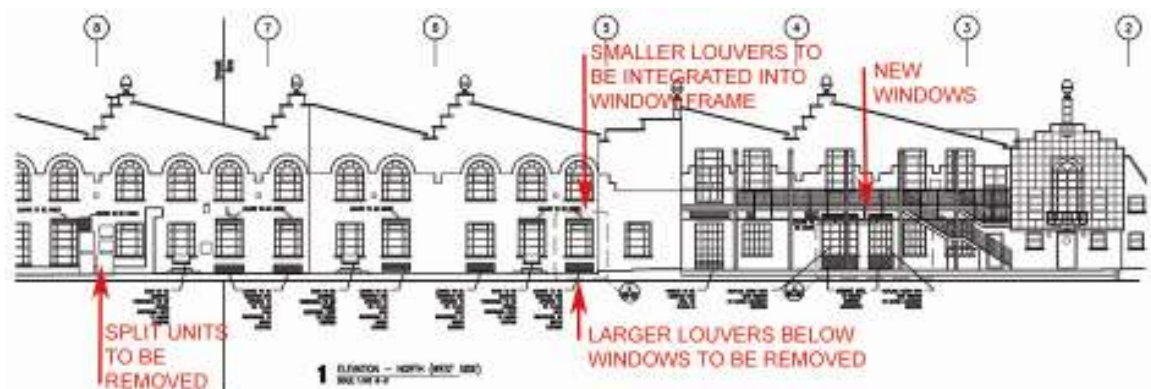
Although the mechanical equipment, air handling units and chillers, are placed far away from the north face the refrigerant pipes have to feed the new office space on the ground floor. Different alternative routes for the air supply and return ducts were analyzed, the most straight forward alternative was running the ducts across the roof and down the façade and into the ground floor space; the main concern was the unsightly nature of the exposed ducts and the lack of respect for the existing façade. The alternative of running large ducts across the whole building was considered unpractical due to the large size and the inefficiencies of energy loss; this alternative was considered very costly and not very environmentally friendly given the large energy losses.



Alternative duct route considered and discarded

The preferred solution was the one that allowed the fresh air and return air to be sourced directly at the point of use hence minimizing the energy loss, a better environmental solution. In order to be able to introduce air through the façade it was felt that the most sympathetic way was by using the same type of air grilles that existed currently and have historically existed on the façade. The proposal is to remove the air grilles at low level and replace them with new air louvers immediately above the head of the windows. The notion is to express the metal work in the same way as the existing grilles and matching the existing Crittall metal windows.

This solution would minimize the impact on the north façade, maximize the use of daylight, improves the efficiency of the mechanical system and is the most environmentally friendly.



Elevation showing preferred location of louvers and new windows

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New windows

On the west side of the façade there is an existing plant room that is obsolete and is intended to be used for office space.

The original Crittall metal window-doors frames over time have had the glazing replaced by a metal grille to allow for air intake and exhaust.

The objective is to replace the existing frame and grilles with a new double glazed window that matches the original Crittall metal frames and will be decorated to match the adjacent windows.



The overall objective is to improve the external environment along the canal facing on to the conservation area by removing the old equipment, replacing grilles with new windows and making minor modifications in keeping with the character of the existing facade.