

## BARRAS BUILDING NEWCASTLE UNIVERSITY

Client – Newcastle University – xxxxxxxxxxxxxxxx

📍 Estates Office, 1st Floor, Newcastle University, Agricultural Building, Newcastle upon Tyne, NE1 7RU

☎ xxxxxxxxxxxxxxxx ✉ xxxxxxxxxxxxxxxx

Architect – Newcastle University – xxxxxxxxxxxxxxxx

Completion – August 2015 (12 Months)

Value - £840,000 (*JCT Measured Term Contract 2011*)

Site Man. - Trevor Minns

As the University's No1 Framework Contractor we were initially appointed to carry out the external refurbishment of the Barras Building. The works were instructed after one of the façade masonry blocks became dislodged and fell to the street below. After exploration works it was discovered that several areas of the façade were in danger of falling. The initial works involved the full removal, repair/renewal of and reinstatement of the glazed feature blocks together with the support

brackets to all elevations. It also involved the replacement of windows and some repairs to the roof coverings. During the works the 1<sup>st</sup> floor of the building remained occupied throughout the project.



Upon opening up the building we found that there was significant corrosion to not only the supporting brackets, but also to the structural steel frame. We also discovered that the cast in situ roof slab was very thin and its reinforcement heavily corroded thus resulting in spalling concrete and a deck which was no longer structurally stable.



We worked with the University and developed details/systems that would enable us to remove the existing concrete roof slab and replace it with a new roof deck & coverings, whilst the building remained



occupied. We also worked with the client/structural engineer to devise methods of splicing and replacing various corroded beams and columns, again whilst parts of the building remained occupied.



The building was enveloped with an over roof and sheeting to the facades to ensure that it remained watertight throughout the works. The parapets were then carefully dismantled and set aside for reuse, a scaffold crash deck installed inside the upper floor and the existing slab broken out in small sections and the steel frame repaired, before works could commence to reinstate/reconstruct the outer envelope.

During the work we were also appointed to refurbish the ground/basement and arranged for the relocation of the security office to this area, including all of the CCTV etc. The scopes were also extended to incorporate the refurbishment of the 2<sup>nd</sup> floor once the building was watertight.



The original proposed work escalated, however by working with the client we were able to ensure that the department housed in the 1<sup>st</sup> floor could remain during the works and we were able to keep the costs of the works to a minimum.

The works were completed in the summer of 2015, well in advance of the new academic year. The feedback from the client and occupants, during and post completion has been excellent and the building should now be structurally stable for many years.



The project was successfully completed with minimal disruption to the department, staff & students. Our philosophy of understanding and working around the client's needs certainly helped on this live site and enabled ourselves and the University to function alongside each other.