

DESIGN / ACCESS STATEMENT

Overview:

The services design for the university provides for all the main air handling, cooling plant and water services at main roof level. This requires the primary distribution for services in vertical risers within three cores 06, 07 and 08 adjacent to the heritage wall on Grid line D (the inner heritage wall to the Eastern Transit Shed). Please see A3 drawing 3753 / ARCH / 1002 highlighting these cores in red. These services will then be distributed at high level ground floor through into the plenum walls from cores 06 and 07 shown highlighted in green. The services at core 08 will appear through the heritage wall and distribute into either workshops or cellular rooms within the loading bay / back of house area.

There are a total of 14 No. holes we are requesting listed building consent that relate to services. Please see A3 drawing number 3753/ARCH/E1113 B which has been marked up identifying the required use of each hole for your information. Listed below is a more detailed explanation of each new hole:-

- (i) The two holes on grid line E10 both 1620 x 1650mm appear from the services riser within core 06 providing supply and extract ductwork to plenum walls on grid line E10 ground and first floor levels. The plenum walls have been approved under the planning consent and are key in the creation of the large studio spaces. These holes will be hidden by the new plenum wall.
- (ii) The hole between grid line E10/E11 first floor level requires the top of the heritage wall to be recessed by 330mm to accommodate this ventilation duct for the first floor workshop areas. As there are services zones within the core areas with critical height requirements this duct configuration needs to be short and wide. To confine services to within core 06 this duct needs to be located between grids E10/E11. We have located this duct to limit the affect on the heritage wall however this will still affect one pier.
- (iii) The two ducts adjacent to grid E14 1500 x 1000 and 1400 x 900mm are for the new kitchen and provide supply and extract ventilation. We have repositioned these holes to avoid the brick piers on the ETS side of the wall which will have greater visibility. On the core 07 side of the heritage wall within the toilet accommodation these holes will occur within the ceiling zone where the hole on the right will bisect the recess arch, see drawing E1114B. We have endeavoured to reduce the impact of the ducts by designing as small as possible for the air volumes required however they either affect the piers on one side of the wall or the recessed arch on the other. The new kitchen will incorporate a ceiling therefore these holes / ducts will not be visible.

- (iv) The two ducts on grid E15 follows the same description as item (i) above.
- (v) The two 500x500mm ducts close to grid E21 are separate from the large duct adjacent over the core 08 access door as there is a fire wall between and the ducts provide supply and extract ventilation to the space opposite for offices. The holes need to be in this location within the pier as moving to the left will encroach on the staircase area within the core.
- (vi) The large hole over the access door to core 08, 2070 x 1300mm between grids E21/E22 is for local extract ventilation to the main workshops on the ground floor for metalwork/woodwork. The hole is positioned to avoid existing piers one side of the heritage wall.
- (vii) The three ducts between grids E22/E23 are all 1000 x 980mm provide the theatre back of house accommodation with supply to extract ventilation from core 08 to different spaces including changing rooms, showers, toilets, green room, stage set workshop etc. We have endeavoured to keep sizes to a minimum however we do affect one pier on one side of the heritage wall. There is insufficient room to accommodate these ducts between the existing piers.

The holes required through the heritage wall are at high level avoiding access issues and are designed to suit the university requirements at this moment in time without any over sizing for future use. We have endeavoured to limit the size / number of holes through the heritage wall and avoid wherever possible positioning of holes to avoid existing brick features such as piers / arches. Drawing 3753 / ARCH / E1463G shows a typical duct detail that penetrates the heritage wall which will either be exposed or concealed within walls or ceilings.