

Capital Projects & Planning Division

Mechanical and Electrical Services Site Survey Schedule

This document refers to the installation of M&E services into existing buildings and the minimum requirements for pre-tender surveys

Note: Designers are also required to undertake a review of available As-Installed information contained within the College archives

1. General
2. Services Risers
3. Rooms/Spaces
4. Ceiling Voids
5. Fire protection and alarm systems
6. Available capacity/M&E Services Validation
7. Isolations
8. Plant Rooms/Spaces
9. Structural
10. Miscellaneous
11. Fume Cupboard Validation

1. General

- Assess the suitability and condition of existing services equipment and plant, clearly identifying that which is to be retained and that which is required to be removed under the project. Separately record those services and items of plant and equipment that are recommended for replacement due principally to their poor condition.

2. Services Risers

- Identify locations of services risers
- Confirm dimensions of risers including apertures between floors
- Identify existing services, plant and equipment to be retained
- Identify existing services, plant and equipment to be removed under the project
- Confirm that space is available for the installation of new services, and to locate equipment. Make recommendations for additional services risers where it has been confirmed that insufficient space is available to accommodate new services and/or equipment required under the project works

3. Rooms/Spaces

- Identify locations and dimensions of structural beams and downstands

4. Ceiling Voids

- Identify existing services, plant and equipment to be retained
- Identify existing services, plant and equipment to be removed under the project
- Confirm space available for the installation of new, additional services, plant and equipment including taking into account obstructions such as beams and other support members, and taking into account existing services to be retained

5. Fire protection and alarm systems

- Identify links between fire alarm and protection systems and other systems. i.e. security, ventilation etc

6. Available capacity/M&E Services Validation

- Determine the spare capacity available to support any increased demands on the system likely to be imposed as a result of the proposed project works. Make recommendations to undertake a validation exercise on the existing services where it is considered necessary to do so in order to accurately determine the condition and capacity of those services. Assist the Project Manager with the appointment of a specialist commissioning/validation company and manage the validation exercise where requested to do so by the Project Manager. Make recommendations for the re-enforcement or replacement where it is considered that existing services are inadequate as a result of insufficient capacity and/or due to their condition.

7. Isolations

- Identify all services isolations required for the safe removal of existing services proposed under the project and/or for the protection of operatives working on or adjacent to services intended to be retained for re-use. The points of isolation are to be determined by survey, and agreement with the appropriate maintenance team. The points of isolation to be presented in the form of a schedule and identified on the tender drawings.

8. Plant Rooms/Spaces

- Identify and record full details, locations and technical details of existing services, plant and equipment to be retained
- Identify existing services, plant and equipment to be removed under the project
- Confirm space available for the installation of proposed additional services, plant and equipment.

9. Structural

- Advise the structural engineer of any proposed plant or equipment that may require additional structural support to be provided to existing, (or new), structural elements of the building, and/or which may transmit vibration to the building structure. Seek the advice of the structural engineer where there is any uncertainty regarding the implications on the structure, of any proposed plant or equipment.

10. Fume Cupboard Validation

- Prior to undertaking works to any mechanical environmental systems in rooms containing fume cupboards, each cupboard shall be subjected to a face velocity and containment test. The tests shall be undertaken with a 'standard test rig' (as agreed with the College Safety Unit) positioned within the cupboard enclosure. The tests shall be undertaken in accordance with the relevant requirements of the College Draft Code of Practice, 'Selection, installation, use, maintenance and decommissioning of fume Cupboards', by a contractor approved by the College to undertake such tests. All tests to be recorded and presented to the Project Manager, together with a photograph of each fume cupboard interior, with the test rig in position. Note: Agree with the Project Manager whether these tests are to be carried out pre-tender or post tender.

11. Miscellaneous

- Confirm details of existing a lighting protection system and assess suitability to extend to protect proposed new plant and/or structure
- Identify locations and details of all M&E services meters.