



## Impact of new commuter hub on protected structure

### Project in brief

Kildare Street and University Club was formed upon the amalgamation of the Kildare Street Club, founded 1782, and the Dublin University Club, founded 1850. 17 St. Stephen's Green was built in 1776 and is a fine example of early Georgian Dublin architecture. The building has been continuously used as a club since 1851, when it was purchased by the then fledgling Dublin University Club.

Our brief was to investigate the possible structural impact of the proposed extension of the Luas tramway on St. Stephen's Green through Dawson Street, and the construction of the St. Stephen's Green Metro Station.



### Study included:

#### Visual Inspection

- Inspection of the eighteenth century protected structure and report on its structural condition (listing structural defects and probable causes etc.)

#### Assessment of Hazards

- Review of the likely effects of potential hazards associated with the construction and operation of the Luas and Metro facilities (such as vibration, cracking, settlement, subsidence, flooding, dust and fumes etc.)

#### Mitigation Measures

- Proposal of measures to mitigate the effects of the identified hazards

#### Monitoring Regimes

- Formulation of monitoring regimes to gauge the presence and severity of the effects of the identified hazards. The proposals were tailored to suit the historic nature of the protected structure and its particularly high standard of finishes



**LeeMcCullough**  
Consulting Engineers

*Project 3923: Historic Building Guidance*

## 17 St. Stephen's Green

**Client:** Kildare St. & University Club

**Architects:** Benjamin + Beauchamp

**Value:** €7.5k (2009)

**LeeMcCullough team:**

Lorcan O'Flannery

**Project scope:**

- *Visual Inspection*
- *Structural Assessment*

### Historical Renovation

At LeeMcCullough we have exceptional experience of revitalising existing buildings, which is often more complex than the structural engineering of new buildings.

Over many projects we have addressed and resolved a wide range of issues, including:

- Strengthening historical joists and beams to carry increased loading
- Masonry Decay/Delamination
- Threading modern services into old structures

At LeeMcCullough we always seek to identify and resolve issues early, innovatively address demanding building difficulties and deliver our solutions on time and cost efficiently.

When it comes to renovation and refurbishment, anticipating and resolving engineering issues effectively is the key to a successful outcome.