

CONSULTING ENGINEERS

8 Friday Street

Henley on Thames

RG9 1AH

Email: mail@simpsoneng.com

www.simpsoneng.com

Holiday Inn Express Wimbledon – Structural Statement

Project Number: P23-001

Introduction:

The proposed works at Holiday Inn Express Wimbledon involves a 5-storey extension to the North-East of the building; an extension of the ground floor bedrooms and hotel entrance on the south-Eastern elevation; a new rooftop bar; extension of stairs and lifts and the addition of new plant equipment to the existing roof constructions.

This statement provides an outline of structural elements within this scheme to accompany the design & access statement for the submission of the planning application.

Proposed Works:

North-Eastern Extension

A 5-storey extension to the North-Eastern corner of the existing structure. The extension will include a relocated substation at ground floor, installed inside 215mm solid brick walls and below a reinforced concrete slab.

The extension will be supported by sectional/contiguous flight auger piles supporting concrete ground beams and pile caps. The ground floor will be formed partly with beam and block and partly with a suspended concrete slab, below the substation.

The ground to first floor construction will be a steel framed transfer structure with a composite metal deck. Above, the superstructure will be formed of lightweight metal framing.

Ground Floor Extension

It is proposed to extend the ground floor bedrooms and hotel entrance on the Eastern end of the hotel towards the road using a ground bearing raft construction. The finished floor level of the bedrooms will be raised with the use of filcor insulation topped with a concrete screed.

HENLEY-ON-THAMES

8 Friday Street
Henley on Thames
Oxfordshire
RG9 1AH
Tel: +44 (0) 1491 576 221

GLOUCESTER

Unit B10
Elmbridge Court Business Park
Gloucester
GL3 1JZ
Tel: +44 (0) 1452 309 727

LONDON

4th Floor, Devonshire House
60 Goswell Road
London
EC1M 7AD
Tel: +44 (0) 207 253 2626



Roof top bar

Alongside the meeting rooms on the 5th floor of the vertical extension, a glass box extension is proposed on the roof of the existing structure towards the Eastern end of the hotel. This will be serviced by vertical extensions of the lift shafts and stairwells of the hotel.

An initial load analysis has been undertaken on the existing structural frame and reinforcement will be required for floor joists to accommodate the load and fixing details of the glass box frame. Additionally, a covered walkway will require reinforcement of internal load bearing elements above the existing first floor steel transfer frame.

Additional plant equipment

Additional plant equipment will be installed on the first floor level flat roof to the rear of the Eastern wing and the existing fourth floor flat roof to the Northern end of the hotel.

An initial load analysis has been undertaken on the existing structural frame. For the Northern end of the hotel, the additional plant equipment will be spread over a large area using a steel beam platform to ensure loads are kept within reasonable limits. To the rear of the Eastern wing, the single storey steel framed structure will require reinforcement in the form of additional steelwork.