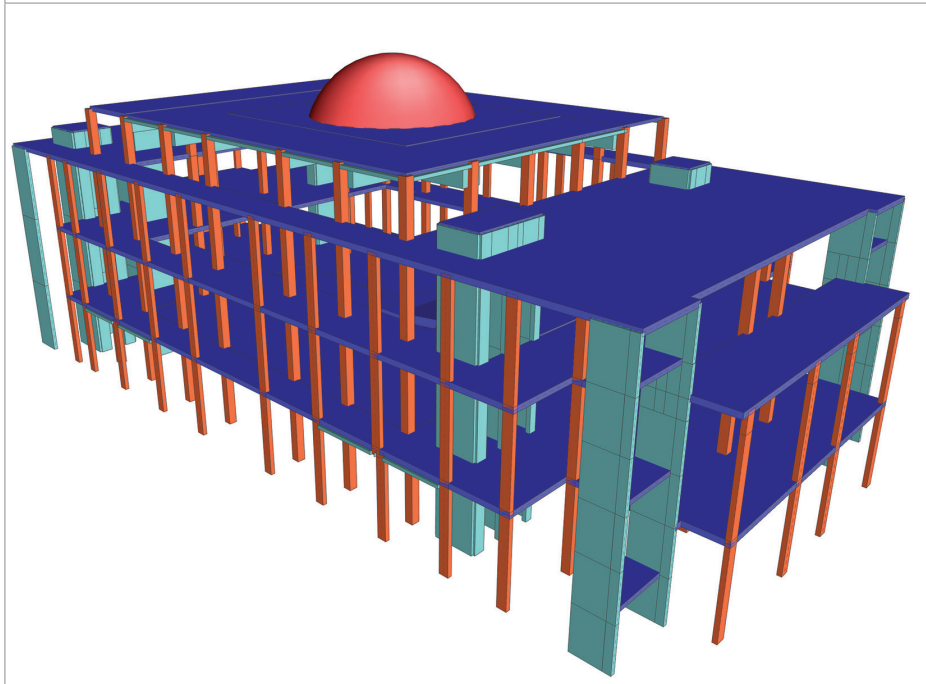
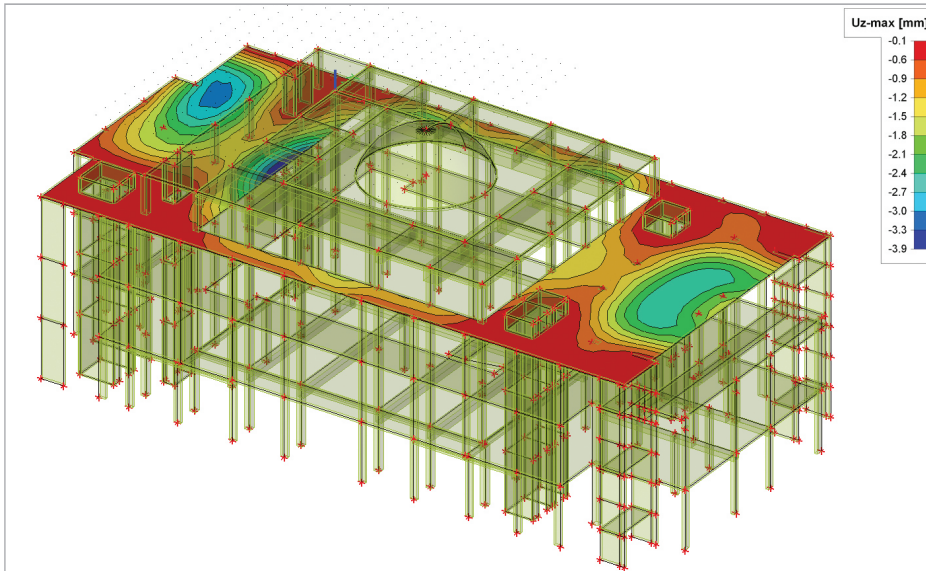


Shree Swaminarayan Temple - Kingsbury, London



This project comprises the construction of a new Temple complex in Kingsbury, London, for the Shree Swaminarayan Gadi Community.

The purpose of the project is to locate the Temple in the centre of the community as the community's existing Temple is located on the periphery in Golders Green.

The site for this project was already developed as a building and civil engineering contractor's yard and office complex. The site comprised a substantial three storey office building to the north of the site, a single storey warehouse building to the south of the site and extensive concrete hard standing throughout. The warehouse building was demolished whilst the existing office building was partially demolished, for refurbishment later, under an enabling works contract.

The Temple complex comprises the Temple building, the Multi-Function Hall building and the refurbishment of the Office building.

The Temple building is a three storey building with an internal 18 x 20 x 7.5 m high clear clerestory space over the worship area. The structure of the building is in situ reinforced concrete framed comprising a 500 mm thick raft foundation slab bearing onto Firm to Stiff London Clay; 250 mm thick flat slabs at 1st, 2nd and Roof level augmented by downstand beams at transfer locations; and a 100 mm thick dome supported by a 250 mm slab and 1.2 m deep grillage of beams over the clerestory space. The floor and roof structures are supported by in situ RC columns and walls. The walls act as shear walls to provide stability to the structure. The structure of the building was analysed and designed using the analysis and concrete design modules of Scia Engineer. Of particular importance was the checking of the potential long term deflections of the clear span structure over the open area.

The Multi-Function Hall building comprises an 18.5 x 33.5 x 9.5 m high clear span sports hall, with viewing galleries to the rear; a three storey administration block to the western end; and a basement plant room under the eastern end. The sports hall portion is steel framed with long span glulam timber rafters over the space.

The administration block and basement plant room are in situ RC framed. This building was founded on CFA piled foundations due to Made Ground exceeding 3 m depth under the footprint of the building. The ground floor slab is a suspended 250 mm thick in situ RC flat slab. The stability of the sports hall frame is provided by horizontal diagonal bracing girders in the plane of the roof spanning between the concrete framed block to the west and vertical diagonal braced bays in the east gable wall. Shear walls provide stability to the concrete framed portion. The in situ RC structures were analysed and designed using the analysis and concrete design modules of Scia Engineer.

The refurbishment of the Office building comprises a steel framed reworking of the eastern end of the retained building to better blend in with the architectural theme for the site.

Contact Keith Wilson
Address Unit 2 Blue Lion Place
237 Long Lane
SE1 4PU London, United Kingdom
Phone +44 2 074079575
Email keithw@engineers-hrw.co.uk
Website www.ehrw.co.uk

engineersHRW

Engineers HRW was established in 2001. Since formation the company has contributed to a wide portfolio of completed work in both the public and private sectors. We have collaborated with clients, architects and fellow engineers in the design of many refurbishment and new build projects by providing well researched sound advice supported by comprehensive and detailed information delivered to programme.

We are committed to working with architects and other members of the design team to produce high quality well considered buildings. We enjoy the challenge of developing appropriate economic solutions to the client's brief, ensuring simple construction and long term durability.

A fresh approach is taken on every project. Drawing on our knowledge of current and historic building practice, the design process is supplemented by research into new and emerging technologies.

Project information

Owner	Shree Hari Community
Architect	LTS Architects
General Contractor	Foundation Developments Limited
Engineering Office	Engineers HRW
Location	Kingsbury, London
Construction Period	10/2012 to 08/2013

Short description | Shree Swaminarayan Temple

The project comprises the construction of a new Temple complex for the Shree Swaminarayan Gadi Community in North London. The project is located in Kingsbury, London. The complex comprises the Temple building, the Multi-Function Hall building and the Office building. The Temple building is a three storey building with an internal 18 x 20 x 7.5 m high clear clerestory space over the worship area. The structure of the building is in situ reinforced concrete framed comprising a 500 mm thick raft foundation slab; 250 mm thick flat slabs at 1st, 2nd and Roof level augmented by downstand beams at transfer locations; and a 100 mm thick dome supported by a 250 mm slab and 1.2 m deep grillage of beams over the clerestory space. The Multi-Function Hall building comprises an 18.5 x 33.5 x 9.5 m high clear span steel and glulam timber framed sports hall with an in situ RC framed three storey administration block to the western end and an in situ RC basement plantroom under the eastern end. The Office refurbishment is steel framed.

