

# Vijaya Dubagunta, M.Tech CEng MICE Key Data

Vijaya Dubagunta is a Senior Structural Engineer at Croft Structural Engineers Ltd and is an integral part of the team. She is highly capable with design, in various materials; Concrete, Steelwork, Timber and Masonry.

Vijaya joined Croft Structural Engineers Ltd in the summer of 2014. Previous to this she worked in various capacities in different infrastructure building projects at Larsen & Toubro Limited in India for six and half years. She was associated with projects involving structural components of hydro power plant structures, intakes, reinforced cement concrete bridges and steel structures. She achieved Chartered Civil Engineer status in May 2011.

She fills a role of Structural Design Engineer responsible for project running, scheme design solutions, structural design and detailing.

While at Croft Structural Engineers Ltd, Vijaya has been involved in various refurbishment and new build projects. She gained experience in the design of structures using various materials such as masonry, timber, steel and concrete with BS and Euro codes. She also acquired considerable experience in Basement design, super structure and sub structure temporary works design.

# Relevant Experience

# Solomon's Passage (2015)

Solomon's Passage in Peckham has 50 balconies which were having signs of decay due to water ingress. Vijaya has carried out the survey of timber balconies and balustrades, performed load tests, numerical Structural design calculations, specified repair works and advised on improving the existing balcony design.

#### 7 Sundridge Avenue (2015)

Structural design of a single storey roof extension with swimming pool and internal alterations to a residential building. Due to the presence of many huge trees and made ground and past subsidence, pile foundations with raft slab was proposed supporting the existing external walls on the new raft edges. 3D modelling, analysis and design of the piled raft has been carried out. Involved in the design of temporary works also.

# 16 Pembridge Place (2014)

Designed temporary works for the two storey basement of a new build domestic dwelling on pile foundations. The external walls are retained and sacrificial props were designed for supporting the existing walls in temporary condition. In permanent condition the walls at base will be supported on a reinforced upstand beam.

Vijaya has also designed the reinforced concrete base required for the temporary frame which is part of the superstructure temporary works.

30-32 Totterdown Street (2014)



Senior Structural Engineer

Year of birth: **1981** 

Nationality: Indian

Languages: English, Telugu and Hindi

Professional Qualifications:

- Chartered Member ICE
- M.Tech Structural Engineering
- B.Tech Civil Engineering



Involved in the design of a new storey above an existing two storey building. The new storey is a timber frame structure supported on steel beams. Design was carried out in such a way that the new structure loads will be transferred to the existing columns through the new steel beams. The existing columns and foundations were checked for the new additional loads. Designed the connection of new stub columns to existing columns and also involved in checking the fabrication drawings.

### 225 St Johns Hill (2014)

Associated with the design of three storey rear extension. Two frames were designed for taking care of the lateral pressures due to wind. Involved in checking and approving the fabrication drawings. Vijaya has also designed the basement structure with a rib deck ground floor slab.

#### 11 Sisters Avenue (2015)

Designed temporary works for the basement excavation and involved in securing party wall award for the permanent structure.

#### 26 Portobello Road (2015)

Designed the two storey residential building where the external walls of the existing building are retained and all floors and internal load bearing walls are removed. Designed the temporary works to support the external walls during construction.

#### Rocks Lane Sports Centre (2014)

Involved in the design of pile raft for a single storey timber framed sports centre. 2D modelling has been carried out and the raft slab is designed. The uplift created due to wind on the structure is also considered in the design.

#### <u>16 Sugden Road (2015)</u>

Involved in the loft conversion and a small basement for storage purposes. The basement was designed using reinforced block work walls.

#### 43 Wessex Gardens (2014)

Designed the loft conversion and a single storey rear extension. A moment frame was designed to carry the lateral forces due to wind.

#### <u>11 Kenmure Road (2015)</u>

Responsible for the design of basement and the single storey rear extension. There is made ground for around 2m in the property. The foundations for the extension were designed as ground beams on mass concrete pads to minimise the excavation.

#### 17 Clareville Grove (2015)

Responsible for the design of basement. Client wants to keep the existing ground floor slab in position. Hence design was carried out supporting the existing ground bearing slab.