

ADRIAN AYORA

Nationality	British
Profession	Chartered Structural Engineer, CEng MIStructE
Specialisation	Structural engineering, project management
Current position	Director

KEY QUALIFICATIONS

20 years' experience of Structural Engineering including design and construction.

Responsible for leading large buildings projects, for public, residential buildings, commercial and retail, industrial buildings including seismic design and lifting structures. Experience of transport infrastructure over ground and underground including major transport interchanges for mass rapid transit and airport Terminals. Experience of the refurbishment, re-use and conservation of heritage structures and foundations. Interest in archaeological aspects of building developments. Interest of sustainability aspects of buildings.

EDUCATION AND PROFESSIONAL STATUS

Chartered Engineer (CEng) registered with the Engineering Council UK, 2009

Chartered Member of the Institution of Structural Engineers (MIStructE), 2006

Engineering Council Graduate Diploma Examinations in Structural Analysis, Structural Design and Geotechnical Engineering, UK, 2004, required to meet academic requirements of the Institution of Structural Engineers for chartered engineers, 2003.

BSc Anthropology, University of Los Andes, Bogotá, Colombia, 2001

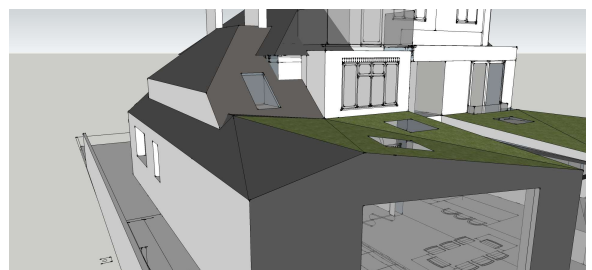
BSc (Eng) Mechanical Engineering, University of Los Andes, Bogotá, Colombia, 1995

EXPERIENCE RECORD

Present

CUPOLA DESIGN LTD – STRUCTURAL ENGINEERS

Argyle Road – Rear extension building comprising large open floor spaces to accommodate the kitchen and living areas. The building extends to the back with an intricate panelised roof vaulted arrangement supporting an extensive green roof and large glazing proportions. The extension extends to the 1st floor and requires the introduction of a two storey high portal frame providing stability to the building following the proposed removal of half of the rear brickwork elevation.

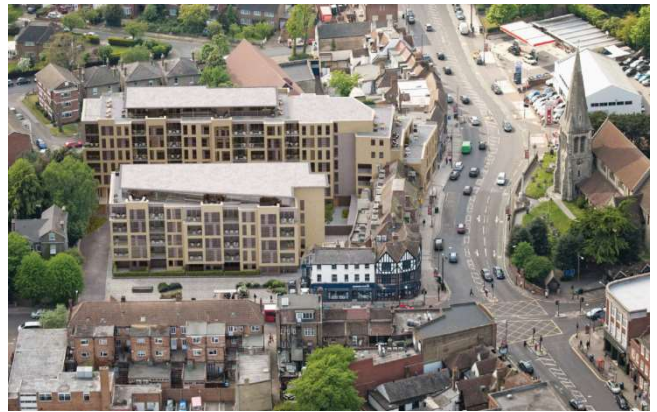


Gloucester Road – Rear extension building comprising large open floor spaces to accommodate the kitchen and living areas. The building extends to the back and to the side which required heavy structural beams and careful planning of the temporary works. This was one of my first projects working as Sole Trader with Fabric Space architects. The structure supports the whole of the side and rear of the building and appears to be floating, this was achieved by close collaboration with the contractor during the planning of the temporary works and I had to visit the site often to ensure all was going according to plan.



2015 – 2016 FORM STRUCTURAL DESIGN

Jan 2015 to April 2016 – The Grove Eltham, £30m –
Lead Engineer – Responsible for leading the redesign of the structure and production of information from Tender to construction, of two new build seven and six story, 75m and 45 respectively, residential buildings for Developer Galliards Homes, comprising 14000m² of accommodation and incorporating a split level basement. The two buildings are to be reinforced concrete construction with RC flat slabs. The larger building is to be constructed on piles due to site conditions and the smaller building and a raft. The structure was modelled in Robot in 3D, coordinated the soil structure interaction analysis for the raft. On site, responding for any RFIs and site queries.



Sep 2014 to Dec 2014 Ladbroke House, £30m – Lead Engineer – Responsible for leading the design up to planning stage for a six story residential building for developer Pagasus Life, comprising 10000m² of accommodation plus a 1,000 m² plant and car parking basement. The project requires demolition of an existing steel framed structure retaining the existing façade, building over and existing 2.3m diameter Victorian brick sewer and the construction of a RC framed flat slab structure and a two storey deep basement.



Weston Street - 3D Modelling in Robot of 8 residential split level units over 6th floors and office space at ground floor and associated facilities in a part basement. Most walls, including facade, are load bearing concrete, the structure at first floor level transfers onto a podium on columns to form open spaces for the office space, the concrete structure is to remain largely exposed. The concrete mix is to contain a large proportion of ggbs cement replacement to reduce the embodied energy of the concrete and achieve a more pleasant and light reflecting exposed concrete.



South Elevation View

March 2015 to June 2015 - Marathon House, £ 5m . A new 16,900 sqft office building for the London Marathon Ltd. The proposals consist of the strip out of part of the five storey section of the existing RC building, back to bare structure and demolition of the two storey rear section of the existing building to incorporate a new five storey office space with integral basement. The existing structure consists of concrete columns around the perimeter of the building spanning onto a central concrete core, the slabs are constructed using clay pots to form a ribbed slab system. It is proposed to refurbish the existing structure to accommodate a new two storey high atrium, and additional floor and connect the new extension to the existing from basement to 5th floor. The new proposed basement and light wells are designed to meet highway standards



2006 – 2014

MOTT MACDONALD GROUP - Senior Structural Engineer –

June 2013 to August 2014 – Lee Tunnel – Abbey Mills Station A Gr. II* circa 1865 - £16m. Civil, Structural and Architectural Design Coordinator (CS&A) and Structural Lead for the refurbishment of the Abbey Mills Pumping Station, circa 1865 to 1868, Grade II* Listed, by the famous engineer Joseph Bazalgette who created the London sewage system. Detail designer for the Joint Venture. Works include the strengthening of the existing mezzanine built in 1929 as office space and upgrading the structure for a 20 kN/m2 live load capacity to house electrical equipment in two fire compartment housing. Responsible for reporting to the client at weekly progress meetings, delivering to strict dates and answering/raising RFIs.






Oct 2012 to Dec 2012 – 9-16 Dingwall Road, Renaissance Project – £18m –Design reviewer, assistant project manager and environmental coordinator for a steel framed 100.000 sq foot, 'A' rated speculative office building in Croydon. The project aimed to achieve BREEAM Excellent 2011 score using air source heat pumps, photovoltaic panels mounted on the roof and a displacement ventilation system.




Nov 2010 to Dec 2011 - Victoria Station Upgrade – £500m– Package Lead Structures for a key London Underground station due to be completed in 2017. Worked in the detailed design under a D&B contract. Responsibility was held for the extension



<p>of the existing 1960's South Ticket Hall basement sitting over two running tunnels and adjacent the one storey deep basement of the Grade Listed II National Rail Building. The extension basement was two storeys deep and accommodated the highway over and heavy duty London Underground escalators to connect to the existing platforms and to the new cut and cover tunnels which linked to the new North Ticket Hall.</p>	
<p>Sep 2006 to Aug 2007 – Unilever Head Office, Leatherhead – £30m –Design of the main steel frame for a high quality three-storey office building providing office accommodation of 15,000 m2 with a striking 1,200 m2 atrium entrance. Responsible for the tender package and masonry support and restraint system. The design for this fast-track Design and Build project was carried out leading a team of four. Exposed and recessed circular columns allowed for a balance between glazing and solid facade on the external elevations. The project was awarded the <i>Certificate of Merit at the Structural Steel Awards 2009</i> and winner of the <i>Think Brick 2009 best commercial building award</i>.</p>	
<p>Aug 2007 to Dec 2010 – New Quito International Airport – US\$460m – Independent Engineer – Responsible for the technical review and site monitoring works for all the new airport buildings including the Terminal building, the air traffic control tower, passenger fixed bridges, hangar, cargo, catering, ground support equipment, water and sewer treatment infrastructure buildings.</p>	
<p>Crossrail – Whitechapel Station & Over Site Developments – £250m – Internal structures Lead. Completed the scheme design submission for the Fulbourne Street Ticket Hall (FSTH), the Durward Street Shaft (DSS) and the Cambridge Heath Shaft. Accomodated in the design proposals for over the station developments (OSD) comprising two six to ten storeys The underground structures included two 30m deep interconnecting basements for three different London Underground lines and a new 150m long curved iconic roof for the new ticket hall.</p>	

1999 – 2006

SINCLAIR JOHNSTON AND PARTNERS - Project Engineer

<p>St Mary's Church, Putney, The Brewer Building (15th 16th and 19th Century Listed Grade II*) – £2.5m–This project comprised the demolition of the 1950s church hall built over an ancient graveyard and its replacement by a two storey steel framed light weight construction building comprising 1,000 m². Extensive site investigation such as radar survey and core drilling were carried out to allow the reuse of the existing foundations in order not to disrupt the archaeology of the site. The timber galleries in the nave were reinstated for concert seating.</p>	
---	--

St James's Church, Paddington (circa 1840 and 1880 Listed Grade II*) – £2.3m – Major structural alterations were designed to refurbish the crypt under the church nave to allow removal of the load bearing brick walls supporting massive brick vaults which were in turn supporting the nave, creating an open space in the crypt. The vaults were suspended from reinforced concrete beams cast within the vaults rubble infill from these beams steel hanging rods supported the springing point of the vault using steel brackets which were installed and dry packed following an underpinning sequence which in turned allowed removal of the load bearing wall.



Clapham Common West Side, Swimming Pool House – £300k
 Careful detailing to achieve curved forms was required within the constraints of the boundary walls, difficult party wall issues were dealt with by careful sequenced works to the foundations to allow construction of the pool in the garden of this wonderful Georgian House. The new roof was to receive copper roofing as per the existing house. In order to achieve the roof build up, steel beams spanned longitudinally and each piece of timber spanned between the steels, the timbers were cut exactly the same size following the curve, allowing savings in curving of steelwork.



1995 – 1999 COFACTED LTD – Project Engineer

Experience developed in the detail designer of steel structures, cranes, formwork, fabrication drawings, production control and erection.

Crane BA2470 (1997) – Project engineer for the design, detailing and fabrication drawings of three-dimensional trusses. The analysis of the structure was carried out for the different stages of erection, undertaking a dynamic analysis of moving parts, fatigue and wind effects and the interface with mechanical components of the lifting mechanisms.

