Bullutt Biwott Lawrence bullutt.biwott@gmail.com +254726366668

<u>Professional Competencies</u>

Autodesk (Revit and AutoCAD), Civil 3D, Bentley Watergems, Bentley Sewergems, Microsoft Office Suite, Mathcad, Staad Pro, Prokon Structural Analysis, Robot Structural Analysis, Dynamo BIM and Bluebeam Revu.

Educational background

Kenyatta University

2010 - 2015

Bachelor of Science in Civil Engineering

- **Final year project Forensic Structural Engineering**: The structural analysis of a collapsed building in Kiambu in 2009.
- Applicable modules: Structural Design of Steel, Concrete, Timber & Masonry, Pavement Design, Geotechnical Engineering, Material Engineering, Construction Management, Water treatment, Waste Water Treatment and Use, Environmental Engineering and Soil & Solid Mechanics.

St Joseph's Boys High School Kitale

2005 - 2008

KCSE - Grade A- (minus)

Professional Experience

Engineers Board of Kenya

2016

Registered Graduate Engineer – B11349

Strana Consultants Ltd

Sept 2015 to date

Assistant Engineer

Responsibilities:

- Design and detailing of multistory residential and industrial structures
- Preparation and submission of structural drawings for approval to the client and necessary regulatory bodies for ascent.
- Project supervision and inspection of works to ensure they conform to the design drawings and instructions provided.
- Management of correspondence between the various consultants, contractors and client on issues relating to the structural design details and providing quick and adequate responses on RFI's.
- Creating and implementing design programs to increase productivity and efficiency in the design of elements in the structure.

Projects Undertaken

Some of the projects undertaken

- Expansion of Theatres at Kijabe Mission Hospital (Design Stage)
 - o The project entails the modification of existing theatres and design of new theatres.
 - o Detailing of slabs within Revit as a prototype for all future projects
 - o Developed Keynote files for use in Revit Structure.
 - Used Pyrevit addin in the automation of repetitive tasks within Revit.
- Four Mountains Estate (Design Stage)
 - o Designed all the roads and road furniture within the 17hectrae development.
 - o Detailed all road profiles and sections in Autodesk Civil 3D.
 - o Designed sewer and water reticulation in Bentley Sewergems and Watergems.
 - o Designed storm water drainage and all other civil works specifications.
- Nature Ville Valley Apartments (Ongoing)
 - Consisted of two blocks of apartments; one block required design of earthquake resistance for buildings in Zone VII as defined in the Code of practice for the Design & Construction of Buildings & other Structures in relation to Earthquakes (1973) and the second block, designed with gravity loads only.
 - The project had eccentric pad footings due to proximity to the plot boundary which necessitate the use of strap beams.
 - The roof design required the design of RHS purlins spanning 4.8m with sloping RC beams
- Nature Ville Meadows Apartments (Ongoing)
 - o Design and detailing of the five-storey building as per BS 8110.
 - o Modelling and carried out analysis using STAAD.
 - o Designed the beams, columns, retaining walls and roof details.
 - o Developed a Mathcad template for the design of a free standing staircase.
 - Developed Dynamo script to change projection method of the analytical frame.
- St. Paul Chaplaincy (Completed)
 - Carried out structural design and detailing of the roof structure which applied a vaulted roofing.
- Jamii Bora Plaza Hurlingham (Completed)
 - o Design and detailing of reinforced concrete underground water tanks to BS 8007.
- Mukesh House Kitusuru (Structure Complete)
 - o Carried out structural design and detailing of the residential building from substructure to roof and supervised the project.
 - o Design strip footings for the load bearing one storey structure.
- Chintan Thacker House Runda (Structure Complete)
 - o Carried out structural design and detailing of the residential building from substructure to roof and supervised the project.
 - Developed custom Revit families for the concrete gutters are requested by the architect.

Other Projects include:-

- o AIC Church Iten
- Deliverance Church Kahawa Wendani.
- o Rizwan Fazal House- Runda (Design Stage)
- o 5- Storey Residential development in Mirema for Mr Edward Mungai
- o Maisonette for Mr Joseph Wanjohi in Dam Ridge estate
- o Workshop Drawings for 33m long Steel Trusses for Kangaita Catholic Church
- o Preliminary design for Bomet MCH
- o 8- Store Building design for Susan Gichuhi in Murang'a
- o Maisonette design For Eunice Chege in Thika Greens.
- o Steel frame design and detailing for mezzanine floor at Rainbow towers

Dittman Construction Company Ltd -Kapsoya Roads

2013 May – 2013 August

 During the internship I participated in the design and supervision of Kapsoya roads in Eldoret Town. My responsibilities included collecting samples for materials testing and quality control. During this period I did all the standard materials tests that is CBR, MC, MDD, PI, Proctor compaction tests and LAA.

Referees

1. Mugambi Mitheu

Aprim Consultants

Email: mugambimitheu@gmail.com

Cell No.: 0726179901

2. Kyalo Nzuki

Strana Consultants Ltd

Email: kyalo@stranaconsult.com

Cell No.:0721557313