**Requested Registration: Consulting Engineer**

Name: **Eng. Cleophas N. Makau**

Date of Birth: 23rd October, 1971

Marital Status: Married

Nationality: Kenyan

Profession: Civil Engineer

**PROFESSIONAL QUALIFICATION**

● Registered Professional Engineer with Engineers Board of Kenya

● Registered Lead Expert on Environmental assessment and Audit

● Member of Institute of Engineers of Kenya.

**MANAGEMENT TRAINING**

● Result based performance management in Setym international, Montreal, Canada

● Operational management and control in Setym International, Kualar Lumbur, Malaysia

● Public private partnership in Setym International, montreal, Canada

* Strategic leadership development programme- KSG
* Public private partnership- project Management and implementation- IP3 Arlington VA, USA

**TECHNICAL COURSES ATTENDED**

● Road Asset management

● Comprehensive Bridge planning and Design, Japan

● Bridge and culvert inspection and maintenance, Johannesburg, South Africa.

* Training of trainers on Eurocode Design of Steel structures

**EDUCATION BACKGROUND**

2011: JKUAT, Executive Masters in Business administration

1997: JKUAT, BSC Civil Engineering, 2nd Class Hons. Upper division

1990: Kathonzweni Sec. School: KCSE B (plain)

1986: Kiteei Pry. School: KCPE A-(minus)

**WORK EXPERIENCE**:

2017 to to date: deputy Director Head of Structures, KeNHA

2009 to 2017. Manager (Structures), Kenya National Highways Authority

1998- 2009: Rose through the ranks from Assistant Engineer (Roads) to Senior Supt. Engineer Roads, Ministry of Roads and public works:

**CAPABILITIES TO MEET THE DESIRED QUALIFICATION:**

* I have Executive Master in Business Administration in addition to various short term courses attended. These have equipped me with knowledge on strategic management skills, Human resource management, project management, financial management and result based performance management to supplement the Engineering experience which have enhanced delivery of my responsibilities.
* I have held the position of Deputy Director -Head of Structures for three years and Manager (Structures) for the last seven years overseeing designs, construction, maintenance and management of bridges with strong performance Appraisal every year in the areas of supervision of design, construction and maintenance of roads and bridges.
* I have been project Engineer for various projects in diverse project management models. They include Design and construction (Employers design), Design/build, harmonized conditions and EPC/turkey projects. Having encountered various unique challenges in those projects I am equipped to participate in the policy formulation to increase the efficiency and effectiveness in project delivery.
* As Manager (Structures) and project coordinator for Arab funded projects I have participated in funds mobilization, loan negotiations, coordinating appraisal missions, coordinated grant of no objections on procurement matters, progress reporting and payments with various development partners in bridges and roads.
* I have resident Engineer for various civil works contracts in which I have mobilized a project team of experts on site and coordinated survey works, continuous design reviews on all the elements of the scope, management of stakeholders, monitoring of environmental mitigation management plan, evaluation of claims and preparation of interim payment certificates among other site activities within the RE delegated powers.

**Detailed Work Experience:**

2009 to date: Manager/ **Deputy Director- Head of Structures,** Kenya National Highways Authority,Kenha.

This is a position that I have held since establishment of KeNHA to date. The department of structures is domiciled in the directorate of Highway Planning and Design however, it serves the four technical directorates following:

1. Preparation and monitoring of budget implementation within a financial year including optimized rationalization during the mid-year reviews for projects under structures section and the department as whole.
2. Formulation and negotiation of performance contract and performance appraisal evalution for the structures section and monitoring to ensure full achievements of the targets for the financial year.
3. Capacity building in structures section by coordinating technical training for Engineers both within the country and foreign training. I have been able to send Engineers to Japan for comprehensive bridge engineering course. Four Engineers have undergone the three month course sponsored by JICA in the last six years. I have also been able to send Engineers for foundation design course in Ghana, Embankment and slope stability course in Zambia.
4. Conceptualize projects, mobilization of funds, and preparation of tender documents, procurement of consultants and contractors and provision of oversight in design, construction and maintenance of projects.

**2009 to 2017: Roads and Bridge projects implemented during the period**

1. Contract management in Design, construction of Mbita causeway replacement bridge substructure, Kanuk bridge, Wakor bridge and Thua Bridge, Daraja mbili bridge and Uludhi bridge. The bridges are financed under the Development Budget, government of Kenya, utilizing various technologies. The implementation is a differential construction of either reinforced concrete or composite steel on reinforced concrete substructure. All the projects were managed under FIDIC 1987 edition and supervised either in house or by consultants.

2. Contract management in Design review, approval and monitoring of construction contracts for nginyang , weiwei, lomut, Endao and Mbita causeway bridges. This involved resource mobilization from the Government of spain to finance the designs for the substructures and superstructures, supply and delivery of the steel superstructures and training. The project started in 2009 and its still ongoing. The Government of Kenya component in the project is the financing of the substructure works. Two bridge substructure contracts, Nginyang and Mbita causeway are ongoing while its expected the substructure works for the remaining four will be procured under the financial year 2017/2018. The implementation is a blend of FIDIC 1987 for the substructure contract and Design/Build superstructure. The various contracts will be managed to ensure harmonized completion.

3. Design Review, approval and construction monitoring of drainage structures and interchanges in the design and construction of the following projects: Mombasa bypass, nyamasaria to Kisumu bypass, Sultan Hamud to Machakos Turn off, Machakos turn off to JKIA, Nairobi southern bypass. Others include Kisumu – kakamega – Wembuye- Kitale, James Gichuru - Rironi and Mombasa Gate Bridge projects among others in liason with Special projects Department. Some of the projects are at various stages of completion while others have been completed. The involvement of structures section is continuous through design review during the design stage and construction stage.

4. Design review , approval and monitoring construction of drainage structures and interchanges in the following road projects; Eldoret –webuye- malaba, Athi River - Namanga, Emali – Loitoktok, merille – marsabit –Turbi – Moyale, Dualling of Mombasa- mariakani projects among others in liaison with Design and construction department.

5. Contract management in Design and construction of pedestrian crossing facilities in Nairobi between Nyayo stadium and City Cabanas, Nairobi to Thika superhighway. Two pedestrian bridges are completed with approximately 100% acceptability. The procurement of four footbridges on Thika superhighway is ongoing with construction expected to commence soon.

6. Resource mobilization including loan negotiations, procurement of consultant and contractor, project coordination in procurement, contract management of design review, tender administration and construction of Nuno modagashe. The financiers are Saudi fund, Kuwait fund, BADEA, Abudhabi Fund and OPEC. The project is at construction stage.

7. Project Engineer for Construction of Garsen- Witu- Lamu Road (C112) EPC/Turnkey contract based. The procurement of works were based on the Employers requirements, and the contractor is responsible for the design, construction and maintenance on lumpsum contract. I am involved in coordination of the employers representative, Contractor/Designer JV and the project stakeholders. The project is at design/ construction stage.

8. Other projects in include:

(i) Supply of steel pedestrian bridges on twenty one (21NO.) most vulnerable areas along the northern corridor and Thika super highway to be financed by the Government of Belgium

(ii) Spanish steel bridge project (phaseII): improvement of T-Mall junction and five pedestrian bridges in Nairobi city, to be financed by the Government of Spain.

**2008 to 2009: Senior Supt. Engineer.**

a) 2008 to 2009: Resident Engineer kainuk bridge on A1 Marich pass – Lowdwar. The project consisted of reconstruction of the collapsed bridge Abutment and its span and repairs to piers. The construction period was twelve month. The works were completed in time and at cost. The details of scope include Abutment founded on 15 piles 20 metres long. And normal reinforced concrete beams and deck.

b) 2008: Project Engineer; Construction of drainage structures on B8 Malindi - Garsen- A3 Junction. The project consisted of ten (10 no.) contracts each consisting of a box culvert of sizes 2 X 3X5X2.5 and approach road along between Garsen and Bura. The contract period for construction was four months. The section of the road has the characteristic flat terrain with gentle slope towards River Tana. The project was awarded to four contractors . to reduce the cost of administration of the project one resident Engineer was appointed. This reduced the total cost of the ten contracts from Ksh. 568million to ksh 410million.

c) 2003-2005: Resident Engineer Masalani bridge. I was responsible for the Project team

management. It also involved Liaison with other government departments in land compensation

issues. Briefing the local and national leaders on the status of the project on site. Ensuring the

works are executed to specifications, scope , contract sum and within the contract period.

(d) 2005 to 2008: District Works officer/ District Roads Engineer Nandi South District.

* Participated as a member of the District development committee, Environment committees, District tender committee and Presidential functions among others. We assisted in designs, procurement and construction supervision of offices for various government ministries and the District Hospital.
* Provided financial management for ministry allocation in the district. I also provided information on Human resource management in the District.
* Public relations role in the District by preparing responses to adverse publicity on matters related to the district and share with the permanent secretary.
* Conceptualization of projects, inventory and condition survey, preparation of tenders, evaluation, supervision , preparation of payment certificates and progress reporting of roads and bridge maintenance program.
* Management of Roads 2000 programme in the district financed by KFW of Germany. Formulation of a 3 year stakeholders priority list of roads in the district. This list was approved by the district development committee and was used for maintenance program for three rolling years.
* Supervision of the road project Kipsigak –serem – Shamakhokho upgrading to bitumen standards. Financed by China Government as grant I was involved as coordinator in ensuring the obligation of the Government of Kenya was met without delay. These included, land acquisition and compensation for road alignment and for borrow areas.

2001 to 2003: Engineer

Worked in bridge maintenance program and bridge design and construction. I was Involved in bridges and culvert inspection in western region of Kenya. Preparation of bridge maintenance program for western region (budgeting process). Preparation of work plans for the execution of maintenance program. Supervision of maintenance works. Preparation of progress reports for maintenance projects. Design of kamole bridge, design of rehabilitation works in Kamandura among others.

1998 to 2001: Assistant Engineer:

Worked in planning department on traffic counting, evaluation of tenders and use of HDM IV system in cost benefit analysis. Participated in feasibility study for improvement of Mariakani –Bachuma gate road section of A104.

**Social Involvements:**

1. Chairman Board of Management, Kiteei ACK Secondary school

P.O BoX 44, Kitise

1. Chairman, Finance and development Committee, Kiteei ACK
2. Treasurer, Committee on Rights of Passage, ACK Holy Trinity, Kitengela.

Hobies: Playing Golf

Referees:

1. Eng. Francis A. Karimi

P.O Box 1279-00521

Nairobi

1. Eng. Cyrus Kamau

Cmkamau and Assoc. ltd

P.O Box74694-00200

1. Eng. Samuel Ogege

General Manager ( Design & Construction)

Kenya National Highways Authority

P.O Box 49712- 00100

Nairobi

I hereby confirm the contents of the curriculum vitae are a true reflection of my academic qualification, testimonials and experience.

Eng. Cleophas Ndolo Makau

Manager, Structures

Kenya national Highways