

A



**TECHNICAL REPORT**

**ON**

**WORK UNDERTAKEN AND MANDATORY**

**PROFESSIONAL EXPERIENCE ACQUIRED**

**BY**

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**SUBMITTED TO**

**THE NIGERIAN INSTITUTE OF QUANTITY**

**SURVEYORS (NIQS)**

**IN FULFILLMENT FOR THE UPGRADING**

**THROUGH MATURE ROUTE**



## 1.0 **INTRODUCTION:**

This report is prepared to briefly describe my professional experience of works undertaken over the last twenty three (23) years of practice as a Quantity Surveyor. This comes as a requirement in pursuant of Mature Route Application Examination of the Nigerian Institute of Quantity Surveyors (NIQS)

## 2.0 **SUMMARY OF WORKS UNDERTAKEN:**

This section contains the detail of major projects that I have been fully involved since I joined Spark light Engineering Company, Private practice and public service [Apapa Iganmu LCDA, Oriade LCDA]

### **OFFICES:**

- Construction of Bola Ahmed Tinubu Office Complex Ijora Badia, Lagos (2018)
- Construction of Area Office Sari, Apapa, Iganmu LCDA (2025)
- Reconstruction of Apapa Iganmu LCDA Secretariat LCDA (2020)
- Construction of Ultramodern Police station, Ijora Badia Apapa, Lagos (2023)
- Construction of Legislative Building Oriade LCDA (2021)
- Construction of Office complex of Nineteen offices (19) and Three (3) Conference Halls at the Council Secretariat, Kankon Badagry West LCDA (Private Practice) (2008)

### **HOSPITALITY:**

- Construction of 20 rooms Hotel at Igando (Private Practice) (2010)
- Construction of 16 rooms Hotel at Egbe Lagos (Private Practice) (2019)

### **CONSTRUCTION OF SCHOOLS**

- Construction of Block of (14) Fourteen classrooms at L.A primary school, Apa, Badagry.
- Construction of Six (6) classrooms at Ire Akari School Sari, Apapa Iganmu LCDA (2016)
- Senator Oluremi Tinubu Library At Alli Dogo Street Badia Apapa Iganmu LCDA (2017)
- Construction of Twelve (12) Classrooms with Hall at Lightsome Comprehensive Private college, Kayode Awoniyi Street Egan (Private Client) (2014)

### **REHABILITATION OF SCHOOLS**

- Renovation of David Salvage Primary School Sari, Apapa Iganmu LCDA (2024)

### **CONSTRUCTION OF HEALTH CENTRE**

- Construction of Ojora Olugbode Primary Health Center Ijora Badia Apapa Iganmu LCDA (2019)

### **CONSTRUCTION OF ROADS AND DRAINS**

- Fassy Adeshina/Nofisat Adunni/ Olawoyin Ajagbe Street Sari Iganmu (2018)
- Giwa Street, Badia (2018)
- Akinola Street, Sari Iganmu (2025)
- Church Street Badia Ijora (2017)
- Sule Lane Badia Ijora (2018)
- Makanjuola street Oko Oja (2018)
- Sari street Sari Iganmu (2018)
- Sango/Arewa Afolabi Alasia Street Badia Ijora (2019)
- Amusu Street Badia Ijora (2016)
- Osime/Ashimou Street Sari Iganmu (2022)
- Makanjuola Street Sari Iganmu (2025)
- Ekunjimi /Part of Raimi Street Sari Iganmu (2024)

### **ROAD SURFACING**

#### **INTERLOCK STONE PAVING**

- Imam Raji Street Sari Iganmu (2025)

### **REHABILITATION**

#### **ASPHALTIC**

- Alli Dogo Street, Badia, Ijora (2023)
- Olojowon Street, Oke Oja (2022)
- Esugbaya Street, Marine Beach (2022)
- Kayode Street, Marine Beach (2022)

#### **INTERLOCK STONE PAVING**

- Amusu street, Badia Ijora, Lagos (2025)

### **CONSTRUCTION OF CULVERT**

- Construction of Twin Cell Cross Culvert At Firasime, Badagry West LCDA (2014)
- Construction of Box Culvert at Akosile Street Badia, Ijora (2010)
- Construction of Box Culvert at Makanjuola, Sari Iganmu (2024)
- Construction of Box Culvert at Senabu/Olawoyin, Ajagbe Street, Sari (2025)



### **HOUSING DEVELOPMENT PROJECT**

- 5 Nos of 2 bedroom semidetached at Olaiya estate, Ajara Badagry (2024)
- 450 housing unit Spark Light Estate (now Lakeshore Estate)  
Opic, isheri, Lagos-Ibadan expressway (2003)

### **RESIDENTIAL DEVELOPMENT:**

- Construction of 4 Bedroom duplex at Sowhe Street Badagry, Lagos (private client) (2004)
- Construction of 4 bedroom duplex at Abule Egba, Lagos (private client)
- (2005)

### **2.1 OFFICE BUILDING PROJECT: CONSTRUCTION OF BOLA AHMED TINUBU OFFICE COMPLEX GASKIYA COLLEGE ROAD, IJORA BADIA:**

The project involved the construction of the Bola Ahmed Tinubu Office Complex located along Gaskiya College Road, Ijora-Badia, Lagos State. The project was initiated by the then Executive Chairman of Apapa-Iganmu Local Council Development Area to provide additional office accommodation for civil servants and political office holders within the LCDA, as the existing office complex did not have sufficient space to accommodate the growing workforce.

The project was executed in 2018 and the contract was awarded to Messrs.' D.C. Engineering Company Limited.

The building is a four-storey office complex constructed on a pile foundation as recommended by the soil investigation carried out on the site due to the weak soil condition in the area.

I served as the Client's Quantity Surveyor on the project.

As the Client's Quantity Surveyor, my responsibilities included:

- Measurement and verification of works executed on site
- Preparation and certification of interim payment certificate
- Advising the client on cost implications of design changes and construction decisions.
- Attending site meetings and providing cost advice to the client and project team.
- Monitoring contractor performance with respect to cost and contract compliance.

### **2.1.1 CHALLENGES ENCOUNTERED:**



One of the major challenges encountered during the project was related to the foundation system. Due to the weak soil condition at the project location, the building had to be constructed on a pile foundation, which increased the construction cost and required careful monitoring to ensure the contractor executed the piling works strictly in accordance with the structural design and soil investigation recommendations.

#### **2.1.2 SOLUTIONS AND LESSONS LEARNT:**

To address this challenge, I carried out continuous measurement and verification of the piling works to ensure that the number, diameter, and depth of piles executed by the contractor were in accordance with the approved structural drawings and specifications.

Close coordination was maintained with the structural engineer and contractor to ensure proper documentation and valuation of the piling works.

#### **LESSON LEARNT:**

This project reinforced the importance of proper geotechnical investigation at the early stage of a project and the need for strict cost monitoring when dealing with specialized foundation systems such as piling.

#### **2.1.3 PROJECT OUTCOME:**

The project was successfully completed and provided the much-needed office accommodation for civil servants and political office holders. The facility improved administrative operations and service delivery within the local government area.

### **2.2 HOSPITALITY PROJECT: CONSTRUCTION OF A 20-ROOM HOTEL AT IGANDO, LAGOS**

The project involved the construction of a 20-room hotel located in Igando, Alimosho Local Government Area of Lagos State. The development comprised a three-floor, two-storey structure designed to accommodate guest rooms and supporting hospitality facilities. A pad foundation was adopted due to the adequate soil bearing capacity at the site.

The client, a Lagos-based private businesswoman, intended to develop the facility for commercial hospitality purposes. The project commenced in 2010 and was completed and commissioned in 2011.

I was actively involved from the pre-contract stage through to the post-contract stage, serving as both the Project Quantity Surveyor and Project Administrator.

My responsibilities included preparing preliminary cost estimates, developing the Bill of Quantities for tendering, and advising the client on cost management and procurement strategy. I also evaluated contractor tenders, prepared contract documentation, and handled the measurement and valuation of works executed on site. Additionally, I prepared and certified interim payment certificates, monitored project costs to ensure

budget compliance, and managed the valuation and negotiation of variations. I also coordinated project activities between the client and contractor.

#### 2.2.1: **CHALLENGES ENCOUNTERED:**

A major challenge was the fluctuation in the prices of construction materials, particularly cement and reinforcement, which affected contractor pricing and posed a risk to the project budget.

#### 2.2.2 **SOLUTIONS AND LESSONS LEARNT:**

This was addressed through close cost monitoring, careful evaluation of contractor claims, and strict approval of only justified variations. Proper documentation and negotiation ensured cost control. The experience reinforced the importance of proactive cost management and effective project administration.

#### 2.2.3 **PROJECT OUTCOME:**

The project was successfully completed within schedule, delivering a functional hotel that met the client's commercial objectives.

### 2.3 **EDUCATIONAL BUILDING PROJECT (L.A PRIMARY SCHOOL, APA, BADAGRY):**

The project involved the construction of a prototype single storey block of fourteen (14) classrooms located at Apa town along Owode Apa Road, Badagry, Lagos state.

The client was Badagry West Local Council Development Area.

The contract was awarded on 2nd February, 2009 and was later commissioned in 2014, the school was subsequently renamed Asiwaju Bola Ahmed Primary School.

I served as the contractor's quantity surveyor on the project.

- Preparation of tender pricing documentation and unit rate build ups
- Preparation of material and labour schedules for project planning, procurement planning and sourcing of construction materials
- Continuous cost control and budget monitoring
- Measurement of works executed on site
- Preparation and submission of interim payment applications
- Valuation and negotiation of variations
- Monitoring subcontract works and payments
- Financial reporting to management
- Contribution to final account preparation



- Providing technical and cost advisory input planning construction



### **2.3.1 CHALLENGES ENCOUNTERED:**

During execution, the original specification provided for sliding windows system, based on my practical assessment of the project environment and anticipated user behavior in a public primary school, I identified that the sliding window system posed risks in terms of durability, safety and long term maintenance cost.

### **2.3.2 SOLUTIONS AND LESSON LEARNT:**

After technical and cost valuation , I conceptualized and developed an alternative steel Louvre window design that was more durable, tamper resistant, easier to maintain and cost effective for public school use.

I prepared a cost comparison and lifecycle assessment to support the proposal and presented the recommendation to the project team. The alternative was approved and implemented. The adopted steel Louvre window design subsequently became a reference standard for similar public primary school projects within Lagos state and was later adopted in other public school development. The lessons learnt are:

- Contractor's QS can add value beyond cost measurement by contributing to technical improvement
- Lifecycle costing is critical in public sector projects
- Practical site experience enhances design suitability
- Innovation supported by cost analysis strengthens professional credibility

### **2.3.3 PROJECT OUTCOME:**

The project was successfully completed and commissioned. The redesigned window system proved durable, economical, and suitable for the school environment, contributing to reduced maintenance requirements and improved long term performance.

## **2.4 HEALTH FACILITY PROJECT: CONSTRUCTION OF OJORA OLUGBODE PRIMARY HEALTH CENTER IJORA BADIA**

The project involved the construction of the Ojora Olugbode Primary Health Centre located on Amusu Street, Ijora-Badia, the health center was built by Apapa-Iganmu Local Council Development Area (LCDA), Lagos State.

The project was conceived to improve the limited availability of healthcare facilities within the area. The population of the community is relatively high, and the available health facilities were insufficient to meet the healthcare needs of the residents. As a result, the construction of this primary health center became necessary to provide accessible healthcare services to the community.

The health center is a two-floor structure designed to accommodate various healthcare service units. The building was constructed on a raft foundation because the area has previously recorded incidents of building collapse. Therefore, appropriate technical and professional measures were adopted during the design and construction stages to ensure structural stability and safety.

The project was executed in 2019, and the contract was awarded to Messrs.' Road Maker and Builder Nigeria Limited.

I served as the Chief Technical Officer (Quantity Surveyor) on the project.

My responsibilities on the project included:

- Preparation and review of the Bill of Quantities.
- Measurement and valuation of work executed on site.
- Preparation and certification of interim payment certificates.
- Evaluation and negotiation of variation claims submitted by the contractor
- .Participating in site meetings and providing cost advice to the project team.
- Ensuring proper documentation and contract administration throughout the project.

#### 2.4.1 **CHALLENGES ENCOUNTERED:**

One of the major challenges encountered during the project was the poor soil condition within the project area, coupled with the history of previous building collapses in the vicinity. This raised concerns regarding the structural stability of the proposed building.

#### 2.4.2 **SOLUTIONS AND LESSON LEARNT:**

To mitigate this risk, a raft foundation system was adopted for the project based on professional engineering recommendations. Close monitoring of construction activities was also carried out to ensure that all works were executed strictly in accordance with the approved drawings and specifications.

This experience reinforced the importance of adequate structural design, proper supervision, and strict adherence to construction standards, especially in areas with known structural risks.



### **2.4.3 PROJECT OUTCOME:**

The project was successfully completed and now serves as a functional primary healthcare facility for the residents of Ijora-Badia and surrounding communities, improving access to basic healthcare services.

### **2.5 ROAD AND DRAINAGE PROJECT: CONSTRUCTION OF ROAD AND DRAIN AT SULE LANE, IJORA BADIA**

The project involved constructing a road and drainage system at Sule Lane, Ijora-Badia, within the Apapa-Iganmu LCDA of Lagos State. The area serves as a vital link between two major roads in the axis but previously lacked proper infrastructure due to its slum condition. This made vehicular access impossible and negatively impacted transportation and commercial activities.

To improve accessibility and manage storm water effectively, the Local Council executed the construction of a rigid pavement road finished with interlocking concrete paving stones, alongside reinforced concrete drainage channels measuring 750 mm × 750 mm.

Construction began with site clearing and setting out of the road alignment, followed by excavation and subgrade preparation. A filling sand sub-base was laid and compacted to ensure stability. A sharp sand bedding layer was then spread, after which interlocking paving stones were laid and compacted to achieve a durable surface.

The drainage system was constructed alongside the road to collect and discharge surface runoff, preventing water accumulation and potential damage to the pavement.

The project was executed in 2018 and awarded to Messrs. D.C. Engineering Company Limited.

As the Quantity Surveyor, my responsibilities included preparing the Bill of Quantities, taking detailed measurements for cost monitoring, assessing work progress, and recommending contractor payments. I also ensured proper financial administration in line with contract conditions, prepared periodic cost reports, participated in site inspections, and contributed to the preparation of the final account.

#### **2.5.1 CHALLENGES ENCOUNTERED**

A major challenge was the poor site condition caused by dense settlement and inadequate existing drainage, leading to water accumulation that hindered construction activities.

#### **2.5.2 SOLUTIONS AND LESSONS LEARNT**

To address this, construction was executed in phases, with priority given to drainage works to control surface water. This highlighted the importance of incorporating effective drainage systems in road construction, particularly in densely populated areas prone to flooding.

#### **2.5.3 PROJECT OUTCOME**

The project was successfully completed, significantly improving vehicular and pedestrian movement within Sule Lane and surrounding areas, while also reducing flooding through the provision of an efficient drainage system.



## **2.6 CULVERT CONSTRUCTION PROJECT: TWIN CELL CULVERT AT FARASIME, BADAGRY WEST LCDA**

This project involved constructing a twin cell reinforced concrete culvert at Farasime in Badagry West LCDA, Lagos State, to address recurring flooding during the rainy season. Previously, the absence of an effective drainage crossing caused water accumulation along the road, making the area inaccessible and disrupting daily activities.

The culvert was designed to allow free flow of storm water beneath the road. It consists of two reinforced concrete cells, each measuring 2.0 m in height, 2.6 m in width, and 8 m in length, providing sufficient capacity for heavy rainfall.

Construction began with excavation to the required foundation level, followed by preparation of the foundation bed. Reinforcement bars were installed according to structural designs before casting the concrete base slab. After the slab gained adequate strength, side walls were constructed to form the twin cell openings. The structure was completed with the casting of a reinforced concrete deck slab.

Additional works included constructing wing walls at both inlet and outlet sections to guide water flow and stabilize embankments. An apron was also installed at the outlet to prevent erosion. Backfilling and compaction were carried out, and the road surface above the culvert was reinstated to restore vehicular access.

The project was executed in 2018 under the supervision of Badagry West LCDA. I served as the Contractor's Quantity Surveyor, responsible for preparing the Bill of Quantities, monitoring project costs, measuring completed work, and preparing interim payment applications. I also tracked material usage, evaluated variations, and contributed cost advice during site meetings.

### **2.6.1 CHALLENGES ENCOUNTERED:**

A major challenge encountered was flooding of the excavation during foundation works due to high surface water levels. This slowed progress and complicated construction activities.

### **2.6.2 SOLUTIONS AND LESSON LEARNT:**

To address this, continuous water pumping was implemented to maintain dry working conditions. Temporary drainage channels were also created to divert surface water, and work schedules were adjusted to align with periods of reduced rainfall. This highlighted the importance of effective water control in flood-prone areas.

### **2.6.3 PROJECT OUTCOME:**

The project was successfully completed, significantly reducing flooding and improving accessibility and living conditions within the community.

## **2.7 HOUSING DEVELOPMENT PROJECT: SPARKLIGHT (NOW LAKE SHORE) ESTATE, OPIC ISHERI**

This was a large-scale residential estate located along Lagos-Ibadan Expressway, designed for medium- and high-income earners. The project comprised about 450 housing units delivered in phases, including:

- 3-bedroom fully detached bungalows
- 2-bedroom fully detached bungalows
- 3-bedroom semi-detached bungalows
- 2-bedroom semi-detached bungalows

- 3-bedroom terrace bungalows

My responsibilities as the Quantity surveyor includes:

- Preparation of BOQ for various housing types
- Preparation of material and labor schedules
- Monitoring material usage to reduce wastage
- Cost control and financial monitoring
- Preparation of developer budgets
- Contract negotiation with subcontractors, suppliers and Valuation of subcontractors' work



#### **2.7.1 CHALLENGES ENCOUNTERED:**

- High material wastage
- Fluctuating material prices
- Coordination of labour and materials across phases
- Maintaining budget with fixed selling prices

#### **2.7.2 SOLUTIONS AND LESSONS LEARNT:**

- Regular review of material and labour schedules
- Improved site monitoring to minimize wastage
- Frequent market surveys to manage price fluctuations
- Strong coordination between procurement and site teams

#### **2.7.3 PROJECT OUTCOME:**

The project phases were delivered within expected timelines and budget. The experience enhanced my expertise in cost control, procurement, and large-scale housing project management.

### **2.8 RESIDENTIAL DEVELOPMENT AT BADAGRY, LAGOS:**

The project involved the construction of a 4 bedroom duplex located at Sowhe Street, Badagry town, Lagos. The client was a private individual (a political office holder based in Lagos)

The project commenced on 2nd June 2004. With a provisional contract of 24 weeks. I was involved in the project from pre-contract stage through post contract stage and I acted as the project quantity surveyor and contract administrator.

My responsibilities as the project quantity surveyor and contract administrator is outlined below:

- Taking off and preparation of bills of quantities
- Cost advisory services to the client
- Coordination with design team
- Acting as contract administrator for the project

- Supervision and coordination of construction activities
- Advising on cost implications of design alteration



#### 2.8.1 **CHALLENGES ENCOUNTERED:**

A key challenge arose when the client proposed changing the originally designed solid reinforced concrete slab to a rib and block slab system. This required structural review, consultant coordination, and detailed cost reassessment.

#### 2.8.2 **SOLUTIONS AND LESSONS LEARNT:**

I undertook comparative measurement and cost analysis of both slab systems, assessing differences in concrete volume, reinforcements content formwork requirements and infill materials. The analysis established that the rib and block system achieved approximately 20% cost reduction compared to the conventional solid system.

I formally advised the client on the cost, technical and construction implications and the revised system was adopted

#### **LESSONS LEARNT**

- Early cost involvement enhances value optimization
- Strong coordination reduces redesign risks
- Structural decisions significantly influence overall project cost
- Professional advice must balance cost, functionality and structural integrity.

#### 2.8.3 **PROJECT OUTCOME:**

The project was successfully completed within the stipulated time frame. The assignment strengthened my competence in measurement, cost planning, contract administration, interim valuation, and professional coordination

### **3.0 PROFESSIONAL DEVELOPMENT**

To enhance my competence as a Quantity Surveyor, I engaged in continuous professional development through structured training and practical exposure. I attended the Mandatory Refresher Course organized by the NIQS Lagos State Chapter, which updated my knowledge of current professional standards. I also participated in a workshop on Construction, Measurement and Estimation of Mechanical and Electrical Installations with emphasis on Fire Fighting and Extra Low Voltage Installation in a Luxury apartment Building, improving my technical expertise in specialized measurement.

In addition, I worked closely with senior colleagues through mentoring and experience-sharing, which strengthened my practical understanding of the profession. I attended seminars and undertook hands-on exercises to bridge the gap between theory and practice. A seminar on Due Diligence in Local Government Public Procurement further enhanced my knowledge of procurement processes and compliance.



#### **4.0 CONCLUSION**

With over twenty-three years of experience across public and private projects, I have handled BOQ preparation, cost planning, contract administration, and project monitoring. I have successfully managed challenges such as budget constraints, soil issues, and material price fluctuations.

These experiences have improved my ability to deliver cost-effective solutions, manage complex projects, and provide professional advisory services, positioning me for higher responsibilities in the construction industry.