QUALITY ASSURANCE LABORATORY LTD.

Professional House, Kufuga. Road of Langata road Karen.

P. O. Box 1285-00502,

Nairobi – Kenya.

Tel: +254 202013921 / 0722885687

Email: qualitylabke@gmail.com

1. EXECUTIVE SUMMARY.

Quality Assurance Laboratory have invested heavily on technology and has acquired the state-of-the-art Non-destructive testing and geotechnical soils investigation. Our clients include civil/structural consultants, multi-national companies other corporate organizations and private individuals amongst others.

Quality Assurance Laboratory Ltd specializes in providing Geotechnical Investigations/ Materials Engineering, Non-Destructive Testing of Structural elements, Material testing and quality control services and site surveys. The company provides backup support to Government Bodies, NGO's, Engineering Consultancies and Contractors civil and mechanical engineering fields such as site investigations for Civil Engineering works and tests on metallurgical fabrications for consultants.

Our Non-destructive testing division also undertakes tests covering the following scope:

- Tank condition inspections
- Process and pressure vessels.
- Hydro dam gate panels and turbine blades.
- Structural integrity assessment of buildings, bridges and other civil structures
- Structural steel tests for communication towers
- Corrosion check and general metallurgy
- Industrial products, components, and assemblies.

Quality Assurance Laboratory Ltd is geared to providing High Quality Professional Services to its clients and is confident that the qualifications and experience of its personnel, the investment in modern machinery and equipment can provide efficiency and ultimately add value to our clients' businesses.

2. RESOURCES AND EQUIPMENT

RIGS:

GY-150

This is multi usage engineering drill rig for geophysical prospecting and small diameter piling work for civil engineering projects like industrial and civil construction, railway, bridged construction, water well drilling, soil investigation and core drilling. The rig can drill up to 230 meters and any angle and is complete with a BWQ- 160 MUD PUMP which is a horizontal, single- cylinder double acting pump with a displacement of 20L/sec and a rated speed of 2500r/min. Digilab Engineering Laboratory owns 4 rigs of this model.

XY-1B

XY-1B drill rig is high-speed vertical-shaft light drill for engineering and it has been widely applied to the geo-exploration of industry, civil / building, railway, bridge, hydropower engineering.
It is characterized by high rotation speed for drilling with small-caliber diamond drill bit.

LS 200

This is a lightweight, easy to transport, set up and operate rig that is mainly used in difficult to access areas like mountains, valleys, islands.
The rig can drill up to 200 feet in both hard and soft formation. The rig is also complete with all accessories, including a 5.5 HP mud pump.Other Equipment includes:

- SPT hammer and cone
- Augers
- Mud pumps
- Schmidt hammers
- U100 samplers
- Packer/Lugion Test Equipment
- D.C.P testing Equipments
- SAS 400 Terrameter among others
- Grouting equipment
- Electromagnetic ferroscan
- Trucks and support vehicles
- 6 No. Laptops
- 4 No. Desk top Computers
- 1 No. HP Laser Printer
- 1 No. HP A1 Plotter
- 3 No. Desk Jet printers

- 1 No. Fax Machine
- 1 No. Still Photo Cameras
- 2 No. Digital Camera
- 2 No. Four-Wheel Vehicle
- 2 No. Saloon Cars

3. SERVICES RENDERED

A. The Main services that Quality Assurance Laboratory Limited is able to undertake include:

- Site investigation
- Progress and Quality control
- Material testing
- Concrete design
- Site Supervision
- Geotechnical survey
- Concrete durability and strength investigation
- Premix Design and Testing
- In-situ structural tests
- Non-destructive testing
- General metallurgy
- Failure Investigations
- Drilling and coring services

TESTS DONE

Typical major tests carried out on various Engineering materials include the following:

a) Soils

- Grading
- Compaction
- Atterberg Limits
- Triaxial Test
- Shear Test
- Settlement Test

b) Concrete

- Concrete Mix Design
- Concrete Cube tests
- Slump Tests
- Testing all constituent Material to be used in concrete work as required by Standard Specifications.

c) Aggregates

- A.C.V
- S.S.S

- P.S.D
- E.L.D
- Silt Content
- L.A.A
- F.I

d) Bitumen / Asphalted Concrete

- Premix Design
- Bitumen Grade
- Stability
- Flow Test
- Viscosity test

P Flash Point
Q Bitumen content
R Density of mix

e) Non-destructive Tests

- Radiographic tests (X –Ray and Gamma-Ray Radiography -Iridium192)
- Ultrasonic tests (Both High frequency –flaw detectors and thickness gauges) and
- Low frequency ultrasonic tests for structural assessment)
- Magnetic particle Inspection (Yoke and prod)
- Visual tests
- Penetrant tests (Red Dye, Fluorescent, Emulsifying and dual techniques)
- Weld and corrosion profile measurements
- Schmidt hammer testing

f) Steel

- Tensile strength
- Elongation
- Dimensional check
- Bending properties and rebending
- Metallurgical properties
- And any other requested by our clients.

g) Structural Timber

- Moisture content
- Bending strength

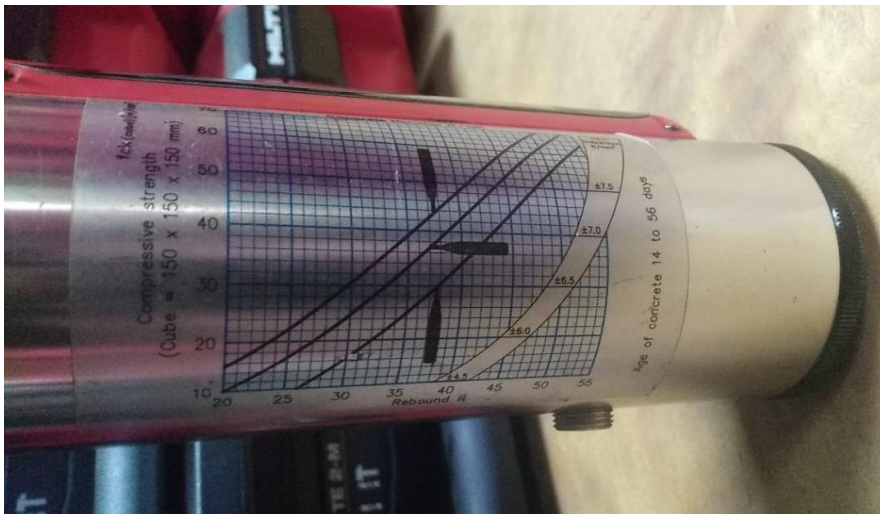
- Treatment
- Tear
- Compression
- Grading etc
- And any other test required by our client

B. Field Tests

The commonly adopted field tests are outlined below:

❖ **Schmidt Hammer Tests**

This device is used to measure the elastic properties or strength of concrete, mainly surface hardness and penetration resistance. The rebound value achieved can be used to determine the compressive strength of the concrete tested.



Concrete strength calculation under standard measuring mode – Conversion Curve.

❖ **Concrete Slump Testing**

This is quality control measure whereby workability of fresh concrete is measured. The test measures consistency of concrete in that specific batch. It is performed to check consistency of freshly made concrete.

❖ **Concrete Cube Testing**

This is quality control measure whereby fresh concrete is sampled in cube moulds of 150mm x 150mm x 150mm dimensions and casted accordingly. The cubes are then crashed for compressive strength at 7, 14 and 28 days for acceptance if the desired mix design is achieved.

❖ **Ultrasonic Pulse Velocity Tests**

This is a non-destructive testing technique that is based on the propagation of ultrasonic waves in the object or material tested.

These measurements may be used to establish:

- The homogeneity of the concrete
- The presence of cracks, voids and other imperfections
- Changes in the structure of the concrete which may occur with time
- The quality of the concrete in relation to standard requirements
- The quality of one element of concrete in relation to another
- The values of elastic modulus of the concrete

❖ **Electromagnetic Ferroscan Tests**

This is a non-destructive measuring method based on the generation and detection of electromagnetic fields in conductive materials. In concrete structures, the strength of this induced field depends on the diameter and the cover of the reinforcement. The technique is used to find location and orientation of reinforcement bars, stirrup, or other metal pipe, in the concrete, measure thickness of concrete cover over reinforcement bar, and to determine the bar diameter.

❖ **Ferro scan testing on Column**

Pull Out Test

This test method covers determination of the pullout strength of hardened concrete by measuring the force required to pull an embedded metal insert and the attached concrete fragment from a concrete test specimen or structure.

The insert is either cast into fresh concrete or installed in hardened concrete. A Pull out tests is used to estimate the in-place strength of concrete to establish whether it has reached a specified level.

Concrete Core Cutting

A concrete core is a cylindrical sample used for concrete testing purposes. Concrete cores are cut so that the concrete core sample can be tested for deterioration or suitability for additional works.It also enables space for plumbing or electrical installation.

Proof Load Test

This test is performed on various components to ensure that these components can withstand the design load without failure or with yielding (unacceptable deformation).The test is performed by applying force in the range of 1.1 to 1.5 times of the design load or maximum allowable working load for a specified duration.

Profile Tests; Carbonation and Chloride Tests

These tests are used to determine the residual life for old buildings.

Laboratory Tests

A set of laboratory tests are required to be done to obtain the concrete parameters for design purposes. These tests are:

1. **Compressive Strength of Concrete Samples.**

This test is used to determine the compressive strength of the cube samples made and also the cylindrical concrete samples obtained by core cutting.

2. **Aggregate Grading and Analysis**

Several tests are carried out for aggregates which include; sieve analysis, water absorption, Aggregate Impact Value, Aggregate Crushing Value, Aggregate Abrasion value.

Assignment Name:- Proposed Rehabilitation of Upgrading Of Moi International Sports Complex, Kasarani	**Country:-** Kenya
Location within Country:- Nairobi-Kenya	**Professional Staff provided by your firm:-** Geotechnical Engineer Structural Engineer
Name of client:-	**No. of staff:** 3

SPORTS KENYA		**No. of staff Months:** 12
Address:- P.O.BOX Private Bag Nairobi		**Stadium & Racing Truck** 
Start Date (Month/Year) 08/2023	**Completion Dated: (Month/Year)** On going	
Approx. value of Services: 20,000,000	**Approx. Current value of Project:** 10,000,000,000.00	
Name of Associated Firm (s) if any: N/A		**No. of Months of Professional Staff Provided by Associated Firm (s):** N/A
Name of senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:- Alexander Mbugua co-ordinated analyzing soil, rock, and subsurface conditions to support the design and construction of various structures.		
Narrative Description of Project: • Planning and execution of subsoil site investigation. • Carry out geotechnical studies and prepare a report. • Estimate the quantity of rock to be excavated. • Carry out laboratory test for evaluation. • Provide periodic progress reports to the client during the implementation of the project.		
Description of Actual Services Provided by your staff: Conducting subsurface investigations using drilling, sampling, and testing techniques,Analyzing soil and rock properties, including strength, permeability, and composition and Preparing geotechnical reports detailing findings and recommendations.		

Assignment Name:- Non-Destructive tests for Nairobi Serena Hotel	**Country:-** Kenya
Location within Country:- Nairobi-Kenya	**Professional Staff provided by your firm:-** Geotechnical Engineer Structural Engineer
Name of client:-	**No. of staff:** 3

<table>
<tr><td colspan="2">Nairobi Serena Hotel</td><td>No. of staff Months: 6</td></tr>
<tr><td colspan="2">Address:-
P.O.BOX 48990 - 00100
Nairobi</td><td rowspan="3">  </td></tr>
<tr><td>Start Date (Month/Year)

10/2024</td><td>Completion Dated: (Month/Year)
12/2024</td></tr>
<tr><td>Approx. value of Services: 20,000,000</td><td>Approx. Current value of Project:
20,000,000.00</td></tr>
<tr><td colspan="2">Name of Associated Firm (s) if any:
N/A</td><td>No. of Months of Professional Staff Provided by Associated Firm (s):
N/A</td></tr>
<tr><td colspan="3">Name of senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:-
Alexander Mbugua co-ordinated analyzing soil, rock, and subsurface conditions to support the design and construction of various structures.</td></tr>
<tr><td colspan="3">Narrative Description of Project:
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• Carry out geotechnical studies and prepare a report.
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Assignment name: Proposed Water treatment in Rongo, Migori County	**Approx. value of the contract (in current Kenya Shillings):** 200 Million
Country: Kenya **Location within country:** Migori County	**Duration of assignment (months):** 2

Name of Client: Benchmark Engineering & Architectural Consultants Ltd,	**Total No of staff-months of the assignment:** 5
Address: P.O. BOX 58438-00200, Nairobi-Kenya	**Approx. value of the services provided by your firm under the contract (in current Kenya Shillings):** 6 Million
Start date (month/year): March 2021 **Completion date (month/year):** May 2021	**No of professional staff-months provided by associated Consultants:** N/A
Name of associated Consultants, if any: N/A	**Name of senior professional staff of your firm involved and functions performed:** Eng Alexander Mbugua
Narrative description of Project: Migori county have an existing water treatment plant that was constructed then abandoned. They contracted Benchmark Engineering to revive and expand the project to increase the capacity. The county did not have the construction drawings and the cube tests results of the existing structures. Benchmark contracted Quality Assurance Laboratory Limited to undertake Factual Structural Integrity report.	
Description of actual services provided by your staff within the assignment: This involved undertaking NDTs tests (Schmidt hammer, Ferroscan and ultra-pulse velocity) to determine the strength of concrete, reinforcement used and the homogeneity of the concrete. Structural analysis was undertaken with the report for the structural integrity and recommendations given to the client.	

Firm's Name: **Quality Laboratory Assurance Limited**

Assignment name: Proposed Mawimbi Restaurant Renovations At Norfolk Towers	**Approx. value of the contract (in current Kenya Shillings):** **200 Million**
Country: Kenya **Location within country:** Nairobi	**Duration of assignment (months):** 0.5
Name of Client: Mawimbi Restaurant & Cafe	**Total No of staff-months of the assignment:** 6

Address: https://www.mawimbirestaurant.com	**Approx. value of the services provided by your firm under the contract (in current Kenya Shillings):**3 Million
Start date (month/year): March 2019 **Completion date (month/year):** April 2019	**No of professional staff-months provided by associated Consultants:** N/A
Name of associated Consultants, if any: N/A	**Name of senior professional staff of your firm involved and functions performed:** Eng Alexander Mbugua
Narrative description of Project: Quality Laboratory Assurance Limited was commissioned by the client to carry out a detailed structural integrity audit on an existing structure for Norfolk Tower to advice on part-demolition of external walls and create an openings and link s to outdoor pool. There was a need by the client to have a structural integrity audit carried out on the structure to affirm if the walls to be demolished are load bearing or in-fill walls.	
Description of actual services provided by your staff within the assignment: The scope involved checking the columns on either sides of the walls and the beams above the walls at ground, first and second floor level. NDTs tests (Schmidt hammer, Ferroscan) we undertaken to determine the strength of concrete and reinforcement used. Structural analysis was undertaken with the report for the structural integrity and recommendations given to the client.	

Firm's Name: **Quality Laboratory Assurance Limited**

Assignment name: Structural Audit Of The Existing National Bank Eldoret Building - On Eldoret/ Municipality Block 4/88	**Approx. value of the contract (in current Kenya Shillings):** 250 Million
Country: Kenya **Location within country:** Eldoret	**Duration of assignment** (months): 1.5
Name of Client: National Bank Ltd	**Total Nº of staff-months of the assignment:** 10

Address: P.O Box 72866-00200 Nairobi- Kenya	**Approx. value of the services provided by your firm under the contract (in current Kenya Shillings):**6 Million
Start date (month/year): September 2020 **Completion date (month/year):** October 2020	**Nº of professional staff-months provided by associated Consultants:** N/A
Name of associated Consultants, if **any:** N/A	**Name of senior professional staff of your firm involved and functions performed** Eng Alexander Mbugua
Narrative description of Project: Quality Laboratory Assurance Limited was commissioned by the client to carry out a detailed structural integrity audit on an existing structure on Plot LR No. 26508 in Eldoret town, Uasin Gishu County. There was a need by the client to have a structural integrity audit carried out on the structure due to the fact they did not have structural drawings for the development and were desirous of regularizing the approval process of the building as well as ensure that the structure does not pose a safety risk to the occupants.	
Description of actual services provided by your staff within the assignment: This involved undertaking NDTs tests (Schmidt hammer, Ferroscan and ultra pulse velocity) to determine the strength of concrete, reinforcement used and the homogeneity of the concrete. Structural analysis was undertaken with the report for the structural integrity and recommendations given to the client.	

Firm's Name: **Quality Laboratory Assurance Limited**

Assignment name: Determining the ground /soil bearing capacity using plate bearing tests- EABL Kisumu	**Approx. value of the contract (in current Kenya Shillings):**4.5 Million
Country: Kenya **Location within country:** Kisumu	**Duration of assignment (months):** 0.5
Name of Client: DIA-GEO - East African Breweries Limited	**Total Nº of staff-months of the assignment:** 6
Address: P.O BOX 30161 00100 Kisumu Kenya	**Approx. value of the services provided by your firm under the contract (in current Kenya Shillings):** 4.5 Million

Start date (month/year): September 2020 **Completion date (month/year):** October 2020	**Nº of professional staff-months provided by associated Consultants:** N/A
Name of associated Consultants, if any: N/A	**Name of senior professional staff of your firm involved and functions performed:** Eng Alexander Mbugua
Narrative description of Project: Quality Laboratory Assurance Limited was commissioned by the client to carry out a plate load test at their premises in Kisumu. The object was to determine the ground bearing pressure at their factory to determine if they would position their crane on the natural ground when they are erecting their premises.	
Description of actual services provided by your staff within the assignment: This involved undertaking plate load tests on several locations pointed out by the client. The data obtained was analysed with the recommendations given to the client.	

Firm's Name: **Quality Laboratory Assurance Limited**

Assignment name: Roll out Renovations for Family bank Branches; Structural Audit, Investigations (concrete strength testing and reinforcement scanning) and report compilation	**Approx. value of the contract (in current Kenya Shillings):** 350 Million
Country: Kenya Location within country: Nairobi, Nyamira, Kisumu, Mombasa, Kajiado, Naivasha, Meru.	**Duration of assignment (months):** 12
Name of Client: Family Bank Limited	**Total Nº of staff-months of the assignment**: 10
Address: P. O. Box 74145-00200 Nairobi	**Approx. value of the services provided by your firm under the contract (in current Kenya Shillings):**10 Million

Start date (month/year): April 2020 **Completion date (month/year):** March 2021	**Nº of professional staff-months provided by associated Consultants:** N/A
Name of associated Consultants,if any: N/A	**Name of senior professional staff of your firm involved and functions performed** Eng Alexander Mbugua
Narrative description of Project: Quality Laboratory Assurance Limited was commissioned by the Grid Consult Ltd (Civil structural Engineering Consultants for the Family Bank Limited) in their roll out renovation of various branches in Kenya. Most branches did not have drawings and building details. Before the various renovations the structural Engineer needed the concrete strength and reinforcement for various structural members.	
Description of actual services provided by your staff within the assignment: This involved undertaking NDTs tests (Schmidt hammer, Ferroscan and ultra pulse velocity) to determine the strength of concrete, reinforcement used and the homogeneity of the concrete. Structural analysis was undertaken with the report for the structural integrity and recommendations given to the client	

Firm's Name: **Quality Laboratory Assurance Limited**

Assignment name: Geotechnical surveys for UNON annex block	**Approx. value of the contract (in current Kenya Shillings):** 350 Million
Country: Kenya **Location within country:** Nairobi	**Duration of assignment** (months): 2
Name of Client: Triad / UNON	**Total Nº of staff-months of the assignment:** 8
Address: P.O. **Box 30725** -00100 Nairobi, Kenya	**Approx. value of the services provided by your firm under the contract (in current Kenya Shillings):** 6.0 Million
Start date (month/year): July 2020 **Completion date (month/year):** August 2020	**Nº of professional staff-months provided by associated Consultants:** 2

Name of associated Consultants, **if any:** Digilab Engineering Ltd	**Name of senior professional staff of your firm involved and functions performed** Eng Alexander Mbugua

Narrative description of Project:

Quality Laboratory Assurance Limited was commissioned by Triad to undertake Geotechnical investigations foe extension of UNON Complex. 3 No. bore holes to a depth of 15m max

- Auguring up to rock level followed by coring in rock to ascertain properties,
- Sampled soil materials tests from the augur holes;

Soil structure classification, Natural Moisture content Specific gravity tests Consolidation tests, Triaxial / Shear box tests, Chloride content, sulphate and Ph Bulk dry density, Particle size analysis, Atterberg limit tests, Standard Penetration Tests (SPT) on the augur holes at 1.5m depth interval, Rock samples tests as follows; Water absorption, Bulk density of rock, Dry density of rock UCS/ Point load

- 3 No. trial pits will be required to a depth of 2.0m max.
- 3 No. Dynamic cone penetrometer tests will be required to a max. depth of 1.5m. Location to be directed on site.
- 3 No. Atterberg limit tests on the trial pit samples.
- 3 No. Particle size distribution tests on the trial pit samples.
- 3 No. Linear shrinkage tests on the trial pit samples.

Description of actual services provided by your staff within the assignment:

This involved drilling of 3 No. bore holes to a depth of 15m max, collecting samples to undertake all above tests, analysing and reporting to produce a geotechnical report.

Firm's Name: **Quality Laboratory Assurance Limited**

Assignment name: Geotechnical Surveys For Proposed Residential Apartments At Othaya Rd For Shelter Afrique	**Approx. value of the contract (in current Kenya Shillings):** 850 Million
Country: Kenya **Location within country**: Nairobi	**Duration of assignment (months):**1.5
Name of Client: Tectura International	**Total Nº of staff-months of the assignment**: 8
Address: P.O. Box 54634 -00100 Nairobi, Kenya	**Approx. value of the services provided by your firm under the contract (in current Kenya Shillings):**8 Million
Start date (month/year): Feb 2021 **Completion date (month/year):** March 2021	**Nº of professional staff-months provided by associated Consultants:** 2
Name of associated Consultants, **if any:** Digilab Engineering Ltd	**Name of senior professional staff of your firm involved and functions performed** Eng Alexander Mbugua

Narrative description of Project:

Quality Laboratory Assurance Limited was commissioned by Tectura International Ltd to undertake Geotechnical investigations for Proposed Residential Apartments At Othaya Rd For Shelter Afrique. 3 No. bore holes to a depth of 20m max

- Auguring up to rock level followed by coring in rock to ascertain properties,
- Sampled soil materials tests from the augur holes;

Soil structure classification, Natural Moisture content Specific gravity tests

Consolidation tests, Triaxial / Shear box tests, Chloride content, sulphate and pH

Bulk dry density, Particle size analysis, Atterberg limit tests, Standard Penetration Tests (SPT) on the augur holes at 1.5m depth interval, Rock samples tests as follows; Water absorption, Bulk density of rock, Dry density of rock UCS/ Point load

- ✓ 3 No. trial pits will be required to a depth of 2.0m max.
- ✓ 3 No. Dynamic cone penetrometer tests will be required to a max. depth of 1.5m. Location to be directed on site.
- ✓ 3 No. Atterberg limit tests on the trial pit samples.
- ✓ 3 No. Particle size distribution tests on the trial pit samples.
- ✓ 3 No. Linear shrinkage tests on the trial pit samples.

Description of actual services provided by your staff within the assignment:

This involved drilling of 3 No. bore holes to a depth of 20m max, collecting samples to undertake all above tests, analysing and reporting to produce a geotechnical report.

Firm's Name: **Quality Laboratory Assurance Limited**

Assignment name: Proposed Affordable House Development In Kisumu For For Lapfund On Plot Lr. Nos. Kisumu Municipality Blocks 5/ 360, 5/361 ,5/362 ,5/363 , Kisumu County	**Approx. value of the contract (in current Kenya Shillings):** 1.5 Billion
Country: Kenya **Location within country**: Nairobi	**Duration of assignment (months):** 2
Name of Client: Professional Consultants	**Total Nº of staff-months of the assignment**: 8
Address: P.O. Box 79592-00200 Nairobi, Kenya	**Approx. value of the services provided by your firm under the contract (in current Kenya Shillings):** 16 Million
Start date (month/year): April 2021 **Completion date (month/year):** May 2021	**Nº of professional staff-months provided by associated Consultants:** 2
Name of associated Consultants, if any: Digilab Engineering Ltd	**Name of senior professional staff of your firm involved and functions performed** Eng Alexander Mbugua

Narrative description of Project: Quality Laboratory Assurance Limited was commissioned by Professional Consultants Ltd to undertake Geotechnical investigations for Proposed Affordable House Development In Kisumu For Lapfund On Plot Lr. Nos. Kisumu Municipality Blocks 5/ 360, 5/361 ,5/362 ,5/363 , Kisumu County.

6 No. bore holes to a depth of 20m max

- Auguring up to rock level followed by coring in rock to ascertain properties,
- Sampled soil materials tests from the augur holes;

Soil structure classification, Natural Moisture content Specific gravity tests Consolidation tests, Triaxial / Shear box tests, Chloride content, sulphate and pH Bulk dry density, Particle size analysis, Atterberg limit tests, Standard Penetration Tests (SPT) on the augur holes at 1.5m depth interval, Rock samples tests as follows; Water absorption, Bulk density of rock, Dry density of rock UCS/ Point load

- ✓ 10 No. trial pits will be required to a depth of 2.0m max.
- ✓ 10 No. Dynamic cone penetrometer tests will be required to a max. depth of 1.5m. Location to be directed on site.
- ✓ 10 No. Atterberg limit tests on the trial pit samples.
- ✓ 10 No. Particle size distribution tests on the trial pit samples.
- ✓ 10 No. Linear shrinkage tests on the trial pit samples.

Description of actual services provided by your staff within the assignment:
This involved drilling of 6 No. bore holes to a depth of 20m max, collecting samples to undertake all above tests, analysing and reporting to produce a geotechnical report.

Firm's Name: **Quality Laboratory Assurance Limited**

Assignment name: Geotechnical investigations at plot LR No. 3734-17 (3734-3- 12) at Gitanga road - Kilimani, Nairobi..	**Approx. value of the contract (in current Kenya Shillings):** 3 Million
Country: Kenya **Location within country:** Nairobi	**Duration of assignment (months):** 1.5
Name of Client: AECOM	**Total Nº of staff-months of the assignment:** 4
Address: P.O BOX 13796, 00800 Nairobi Kenya	**Approx. value of the services provided by your firm under the contract (in current Kenya Shillings):** 2.0 Million
Start date (month/year): September 2019 **Completion date (month/year):** October 2019	**Nº of professional staff-months provided by associated Consultants:** 1
Name of associated Consultants, if any: Grid Consult Ltd	**Name of senior professional staff of your firm involved and functions performed** Eng Alexander Mbugua

Narrative description of Project: Quality Laboratory Assurance Limited was commissioned by the Grid Consult Ltd to carry out a soil investigation and existing foundation strength. The objective was to determine the ground bearing pressure at the site which was ongoing and undertake core drilling in some existing bases and the underlying rock. This was to affirm the presumed bearing pressure by the design engineer.
Description of actual services provided by your staff within the assignment: This involved undertaking trial pitting and 1.5 meters core drilling for laboratory tests on several existing foundation bases pointed out by the client. The data obtained was analysed with the recommendations given to the client.

Firm's Name: **Quality Laboratory Assurance Limited**

Assignment name: Proposed apartments development for stima investment	**Approx. value of the contract (in current Kenya Shillings):** 2 Million
Country: Kenya **Location within country:** Nairobi	**Duration of assignment (months):** 1.5
Name of Client: Stima Investment	**Total Nº of staff-months of the assignment:** 4
Address: P.O BOX 13796, 00800 Nairobi Kenya	**Approx. value of the services provided by your firm under the contract (in current Kenya Shillings):** 2.0 Million
Start date (month/year): April 2022 **Completion date (month/year):** June 2022	**Nº of professional staff-months provided by associated Consultants:** 2
Name of associated Consultants, **if any**: Grid Consult Ltd	**Name of senior professional staff of your firm involved and functions performed** Eng Alexander Mbugua

Narrative description of Project:

Quality Laboratory Assurance Limited was commissioned by the Grid Consult Ltd to carry out a soil investigation and existing foundation strength. The objective was to determine the ground bearing pressure at the site which was ongoing and undertake core drilling in some existing bases and the underlying rock. This was to affirm the presumed bearing pressure by the design engineer.

Description of actual services provided by your staff within the assignment:

This involved undertaking trial pitting and 1.5 meters core drilling for laboratory tests on several existing foundation bases pointed out by the client. The data obtained was analysed with the recommendations given to the client.

Firm's Name: **Quality Laboratory Assurance Limited**