2022

COMPANY PROFILE

RJAN Quantity Surveyors & Construction Cost Consultants

NORTH WEST OFFICE

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INDEX

INTRODUCTION

RJAN Quantity Surveyors and Construction Cost Consultants (Pty) Ltd is a Professional Quantity Surveying firm established by a group of individuals with over 60 years accumulated experience in Quantity Surveying.

RJAN Quantity Surveyors is a Level 2 B-BBEE Contributor (52% Black Woman Owned)

We have unique experience in not only the traditional architectural field but also substantial experience in mining (surface and underground), civil engineering (roads, reservoirs, pollution control dams, etc.), mechanical engineering (Pipe Columns, Conveyors, etc.) and more (refer to field of work)

1. WHAT IS A QUANTITY SURVEYOR?

The economist (auditor) of the Building and/or Engineering Team, often known as a Construction Cost Consultant, internationally recognised as a Cost Management Advisor, Cost Engineer and / or Quantity Surveyor on all types of Construction Projects of any scale.

2. SERVICES

The Scope of Quantity Surveyors' Services to be offered by ourselves are categorised and discussed below. These Services can be made use of by the Employer / Client to avoid some of the areas of difficulty experienced by previous Employer / Clients in the initialising and executing of their projects, therefore assisting in the accelerated implementation. This applies in particular to:

2.1 Preliminary Cost Advice:

2.1.1 From the outset, we will provide practical advice on the likely cost of the project.
2.1.2 It is therefore important to appoint us timorously, not later than the design Team.
2.1.3 Monitoring and evaluating designs as they evolve, to ensure compatibility with the Employer / Clients' budget.
2.1.4 The cost advice enables design decisions to be made with complete knowledge of their financial implications to the Employer / Client, which may in turn, enable the Employer / Client to make other financial decisions which he might otherwise normally have to delay.

2.2 **Preparing Tender Documents:**

2.2.1 Specifications, Conditions of Contract and Bills of Quantities reflecting precise measurement from the drawings to enable each Tenderer to calculate his tender prices on the same basis as his competitors.

2.3 **Tender Procedures and Selection of Tenderers:**

2.3.1 Analyse and estimate financially any tender qualifications.

2.3.2 Technically evaluate the tenders received, prepare a tender evaluation report and recommendation, including assisting the Employer / Client in the adjudication of tenders.

2.3.3 Finalise all Contract Documentation after the awarding of tenders and prepare the documents for signature in close liaison with the Employer / Client and other staff members as required.

2.3.4 Submit the documents to the Employer / Client for signing by the parties involved.

2.4 **Contract Administration:**

2.4.1 Prepare monthly valuations of work completed and materials on site for interim certificates in close liaison with the Employer / Clients' representative and in full accordance with the Employer / Clients' accounting system.

2.4.2 Assist the Employer / Clients' representative in any negotiations with the Contractor for new rates of costing of the additions and / or omissions.

2.4.3 Evaluate timorously all variation orders, day works and scope changes issued by the Employer / Clients' representative.

2.4.4 Evaluate and verify fluctuations in cost under the applicable contract price adjustment provisions.

2.4.5 Evaluate and advise the Employer / Clients' representative on the legitimacy and cost implications of all claims received by the Contractor.

2.4.6 Prepare monthly budget control reports, maintaining a running financial statement, cash flow charts, final cost forecast, etc. all in accordance with the requirements of the Employer / Client.

2.4.7 Measure all work prior to covering-up and measure all revisions of drawings as soon as practically possible after their issue.

2.5 **Final Account Stage:**

2.5.1 During this stage we assist the Employer / Clients' representative in resolving any claims from the Contractor.

2.5.2 Re-measure all the final drawings, variations/work as executed within the shortest reasonable time after issuing the certificate of completion to the Contractor.

2.5.3 Prepare and price in close liaison with the Employer / Clients' representative the final account in terms of the contract and negotiate with the Contractor all as required by the Employer / Client.

2.6 **Audit Services**

2.6.1 Checking rates, invoices, etc. (as claimed) against the contract documents.

2.6.2 Checking quantities (as claimed) against the construction drawings.

3. OUR TEAM

3.1 J.C. NEL (Director, PrQS, BSc QS)

1974 - 1979	:	Enrolled at the U.F.S. reading Quantity Surveying
1980	:	Schoombie, Hartmann and Partners Welkom
1981	:	Transferred to Klerksdorp to Head the Office
1982 – 1988	:	Associate Partner - Schoombie, Hartmann and Partners
1989 – 1991	:	Director - Schoombie, Hartmann Incorporated
1991 – 1992	:	Member of Havinga, Olivier, Brook, Nel & Snyman in Consortium cc.
1992 - to-date	:	J.C. Nel Quantity Surveyors cc. (Klerksdorp)
March 1998 – 28 February 2013	:	J.C. Nel and Putter Quantity Surveyors cc. (Sasolburg)
2019 - to-date	:	RJAN Quantity Surveyors & Construction Cost Consultants (Pty) Ltd
Professional Registration No. and Date	:	1368 - 01/01/1982

3.2 RACHEL MAMAHLOMOLA MOLAMU (Shareholder, Can.QS, BSc QS Hons)

2001 - 2005	:	Enrolled at WITS reading BSc. Honours – Quantity Surveying
2006	:	Group Five Civil
2007	:	JC Nel Quantity Surveyors

2008	:	MP Construction
2009 - 2013	:	Toro Ya Africa Consultants
2014 - to-date	:	Mercycon Construction and Projects
2019 - to-date	:	RJAN Quantity Surveyors & Construction Cost Consultants (Pty) Ltd
Candidate Registration No. and Date	:	IT 5742

3.3 ANDRE TREDOUX
(Director, Pr.QS, BSc QS Hons)

2006 – 2008	:	Enrolled at the U.F.S. reading BSc. Honours – Animal Science
2009 – 2010	:	Enrolled at the U.F.S. reading BSc. Honours – Quantity Surveying
2011	:	JDW Engineering
2011 – to-date	:	JC Nel Quantity Surveyors
2019 - to-date	:	RJAN Quantity Surveyors & Construction Cost Consultants (Pty) Ltd
Professional Registration No. and Date	:	5806 - 20/07/2015

3.4 WILLEM SWART
(QS)

2014 – 2016	:	Enrolled at the CUT reading N. Dip – Building (Quantity Surveying)
2015 – 2016	:	Du Toit and Putter Quantity Surveyors
2016 – Present	:	JC Nel Quantity Surveyors
2019 - to-date	:	RJAN Quantity Surveyors & Construction Cost Consultants (Pty) Ltd

3.5 PERSONNEL

Registered Quantity Surveyors	:	2
Quantity Surveyors-in-Training	:	2
Technicians including Students	:	1
Secretarial, Finance, HR	:	0
Other	:	1

4. PROFILE OF EXPERIENCE AND EXPERTISE

4.1 Architectural

4.1.1 Housing Schemes (including low cost housing)
4.1.2 Offices
4.1.3 Day Clinics
4.1.4 Alterations to Kitchens
4.1.5 Alterations to Ablution Blocks
4.1.6 Hostel Blocks
4.1.7 Shopping Centres
4.1.8 Recreation Clubs
4.1.9 Communication Centre
4.1.10 Security Complex
4.1.11 Schools
4.1.12 Multi Purpose Halls
4.1.13 Hospitals
4.1.14 New Kitchens
4.1.15 New Ablution Blocks
4.1.16 New Change Houses
4.1.17 Indoor Sport Stadium
4.1.18 Sports Stadiums
4.1.19 Boiler Houses
4.1.20 Town Houses
4.1.21 Libraries
4.1.22 Police Stations
4.1.23 Magistrate Offices
4.1.24 Laboratories
4.1.25 Various types of Maintenance Contracts
4.1.26 Major upgrading on various buildings, structures, etc.

4.2 **Civil Engineering**

4.2.1 Roads.
4.2.2 Railway Sidings (i.e. Earthworks and Trackwork)
4.2.3 Various types of Reinforced Concrete Structures (e.g. Pre-cooling Towers, Vent Drifts, Refrigeration Plants, Ice Plants, etc.)
4.2.4 Dams (Earth)
4.2.5 Major Earthworks
4.2.6 Services, i.e. Sewers, Storm Water, Water Reticulation and Roads for Housing Schemes (Township Development)
4.2.7 Silos
4.2.8 Reservoirs (pre-stressed / post tensioned)
4.2.9 Underground (Mining) Civil Engineering Structures
4.2.10 Various types of Maintenance Contracts e.g. Roads, Trackwork, Underground Trackwork, etc.
4.2.11 Major upgrading of various types of concrete structures
4.2.12 Specialised concrete repair work to various reinforced concrete structures

4.3 **Mechanical Engineering**

4.3.1 Pipe Columns (varying from 100 to 750NB)
4.3.2 Steel Structures
4.3.3 Piping Works (Plants)
4.3.4 Underground (Mining) Steel Structures and Pipelines
4.3.5 Conveyor Gantry Steelwork, Trestles, Stringers, etc. and Mechanical Works (i.e. pulleys, idlers, take-up towers, belting, etc.)

NOTE: All the above projects varied in sizes from approximately R 200 000.00 to R 300 000 000.00

4.4 **Environmental**

4.4.1 Rehabilitation Cost Estimates – Closure Liability Estimates – Vaal River, West Wits and Free Gold (Welkom).

4.5 **Project Management**

Associated with all the normal quantity surveying services on construction projects, project management / co-ordinated minor construction projects on behalf of the Engineer / Client

4.6 Note, the above experience and expertise were mainly from previous mining houses i.e.:
* Anglo American (Vaal Reefs, Western Deep Levels and Free Gold)
* Anglovaal (Hartebeestfontein)

* Gencor (Buffelsfontein)
* Currently we are rendering services for AngloGold Ashanti Limited and Harmony Gold Mining Company

4.7 **Internationally**

* Rendered services for **Minorco** (Anglo American) - South America in **Argentina** at Cerro Vanguardia where I spent some time on site. (Three months).
* Closure Liability Estimates for AngloGold Ashanti Limited - **Namibia**
* Closure Liability Estimates for AngloGold Ashanti Limited in **Mali** at Yatela and Alamoutala (Sadiola)
* Closure Liability Estimates for AngloGold Ashanti Limited in **Tanzania** at Geita Gold Mine

5. MEMBERSHIPS

ASAQS	:	The Association of South African Quantity Surveyors
SACQSP	:	The South African Council for the Quantity Surveying Profession

6. CONCLUSION

Our team has a proven record of accomplishment on various Construction Projects to provide the necessary Quantity Surveying and Construction Management expertise to ensure that proposed projects are completed to specification, on time and within the authorised budget.

APPENDIX A

Quality Management System (QMS)

1. INTRODUCTION

RJAN Quantity Surveyors & Construction Cost Consultants is fully committed to the pursuit of total quality in satisfying their clients' requirements and expectations by using a Quality Management System, which meets the standards and regulations of the South African Council of the Quantity Surveying Profession.

Our vision is to ensure that all construction work and services are undertaken in a systematic and controlled manner and at a consistently high level of conformance.

This will be achieved through the disciplined use, continual review and necessary improvement of all processes and procedures.

We are committed, encourage, and empower all employees to implement this policy in all their areas of operation.

2. QUALITY ASSURANCE

Our Quality Assurance System and Practice Manuals are based on our own Practice and covers the following work areas: -

2.1. General Office Administration

- Basic Rules and Procedures
- Filling Requirements
- Archiving
- Drawing Register Form

2.2. Estimating and Feasibility Studies

- Briefing & Site Walkabout with Client or Client Representative
- Briefing & Site Walkabout with Principle Agent
- Preparation documents to obtain Quotations from Sub-Contractors or Suppliers
- Estimating Check-list
- Preparation of Estimate According to Practice Templates

2.3. Conditions of Contract

- Clients Requirements
- Contract Specific Preliminaries
- Contract Specific Building Agreement

2.4. Preparations of Bills of Quantities

- Briefing & Site Walkabout with Client or Client Representative
- Briefing & Site Walkabout with Principle Agent
- Bill Preparation Checklist
- Measuring Check List (Appendix A)
- Detailed Cost Estimate
- Project Queries
- Review/ Scrutinizing Bills of Quantities

2.5. Tenders and Adjudication

- Pre-tender Qualifications Client Specific
- Tender Results and Processing
- Arithmetical Check of Tender Rates
- Tender Adjudication and Recommendation

2.6. Contracts Administration

- Briefing & Site Walkabout with Successful Tender
- Valuation of Work-to-Date
- Payment Certificates
- Site Meeting, Minutes, etc.
- Contractual Matters
- Variations
- Liaison with Client and Consultants

2.7. Final Accounts

- Preparation of Final Account
- Completion Certificates
- Review/ Scrutinizing of Final Account
- Final Account signatures and submission

2.8. Correspondence

- Standard Letter Templates
- Letter Reference Records

APPENDIX A: MEASURING CHECK-LIST

1. FOUNDATIONS

1.1. Demolitions
1.2. Site Clearance
1.3. Excavations
1.4. Sundries
1.5. Working Space
1.6. Disposal of excavated material
1.7. Risk of Collapse
1.8. Keeping excavation Free of Water
1.9. De-watering if so specified/ designed
1.10. Hardcore or filling material
1.11. Grassing
1.12. Pitching
1.13. Soil Poisoning
1.14. Blinding
1.15. Concrete
1.16. Test Cubes
1.17. Formwork
1.18. Reinforcement
1.19. Movement Joints
1.20. Brickwork in foundation
1.21. Ties between concrete columns and brickwork
1.22. Damp proof courses
1.23. Tanking
1.24. Exceptional Items

2. SUPERSTRUCTURE

2.1. Walls – External
2.2. Walls – Internal
2.3. Chimney Breasts, Stacks and Piers
2.4. Load bearing Brickwork Measured Separate if Different Specification
2.5. Ties Between Concrete Columns and Brickwork
2.6. Wall Ties if not Included with Cavity Walls
2.7. Brick Reinforcement
2.8. Partitions
2.9. Extra over for Face Brick
2.10. Beamfilling
2.11. Damp proof courses and Linings
2.12. Closing Cavities at Jambs, Sills, etc.
2.13. Filling to Cavities
2.14. Forming Toothing and Bonding
2.15. Recesses, Projections and Arches
2.16. Movement Joints and Cover Strips
2.17. Air Bricks, other
2.18. Fireplaces

3. STRUCTURAL CONCRETE FRAME

3.1. Pile Caps
3.2. Slabs
3.3. Surface Treatment
3.4. Columns
3.5. Beams
3.6. Walls
3.7. Stairs Inclusive of Beams and Landings
3.8. Test Cubes
3.9. Formwork (Rough, Smooth and Permanent)
3.10. Formwork to Edges and Risers
3.11. Formwork to Projections and Grooves
3.12. Formwork to Openings
3.13. Movement Joints
3.14. Reinforcement
3.15. Special Reinforcement
3.16. Post-tensioned Reinforcement
3.17. Tests

4. ROOF CONSTRUCTION AND COVERING

4.1. Slates, Tiles and Shingles
4.2. Tiling of Slating Battens and Tilting Fillets
4.3. Corrugated or Troughed Sheet Steel
4.4. Ridges, Hips, Finials, Bird proofing, etc.

4.5. Double Course at Eaves
4.6. Valley Flashing, Secret Valleys, etc
4.7. Cover and Stepped Flashing
4.8. Soakers
4.9. Thatch
4.10. Ridge and Apex Caps
4.11. Ornamental Bends and Runners
4.12. Purlins, Bracing and Cleats
4.13. Steel or Timber Trusses, Rafters, Struts, Wrought Ends and Faces, Blots, Blockings and Gussets
4.14. Split Rings and Connectors
4.15. Roofing Felt and Insulation
4.16. Special Sheets and Translucent Sheets
4.17. Wire and Hoop Iron Ties
4.18. Wall Plates and Gang Boarding
4.19. Fascias and Barge Boards
4.20. Waterproofing
4.21. Roof Screeds – Lightweight, Insulating
4.22. Protective Roofing Paint
4.23. Protective Stone Dressing
4.24. Roof Lights and Ventilators
4.25. Rainwater Gutters, Down Pipes, Flat Roof Outlets and Weep Pipes

5. EXTERNAL FINISHES

5.1. Floor Finishes
5.2. Wall Finishes
5.3. Ceiling Finishes
5.4. Sundry Items
5.5. Curtain Walling

6. INTERNAL FINISHES

6.1. Floor Finishes
6.2. Wall Finishes
6.3. Skirtings
6.4. Sundries
6.5. Ceiling Finishes
6.6. Coves and Cornices

7. DOORS AND ADJUSTMENTS

7.1. Flush, Laminated, Panelled, Moulded, Veneered, Hollow Core, Solid Core, etc.
7.2. Weatherboards, Rebates, Glazing Beads (Included in Descriptions of Door), Ironmongery
7.3. Glass
7.4. Frames or Linings, Transoms and Mullions
7.5. Fanlights
7.6. Paint to Doors, Frames, etc.
7.7. Quadrant Beads
7.8. Architraves
7.9. Opening Adjustments
7.10. Strong Room Doors and Ventilators
7.11. Rolling Shutters, Up-and-Over Doors, etc.
7.12. Mats and Mat Sinkings (If not measured with Floor Finishes)
7.13. Copper or Plastic Strips Between Different Floor Finishes (If not measured with Floor Finishes)

8. WINDOWS AND ADJUSTMENTS

8.1. Standard, Purpose Made – Residential, School, Industrial, etc.
8.2. Rebates and Glazing Beads (Included in Description of Window)
8.3. Ironmongery
8.4. Glass
8.5. Frames or Linings, Transoms and Mullions
8.6. Sidelights and Fanlights
8.7. Paint to Windows, Frames, etc.
8.8. Quadrant Beads
8.9. Sills
8.10. Opening Adjustments
8.11. Shopfronts and Curtain Walling
8.12. Pelmets and Curtain Tracks
8.13. Blinds, Curtains, etc.

9. FITTINGS AND SUNDRIES

9.1. Shelving, Cupboards, Counters, Service Hatches in Walls and any Other Similar Fittings are Separately Measure Under Appropriate Headings, Following by Finishes to Same and Necessary Adjustments to Previously Measured Work

9.2. Handrails, Balustrading, Cat Ladders, etc.

10. IRONMONGERY AND RELATED ITEMS

10.1. Signage
10.2. Numerals
10.3. Mirrors
10.4. Bathroom (Furniture – Towel Rails, Toilet Paper Holders, Vanity Shelves, Hand Dryers and Soap Holders)
10.5. Metal Shelving
10.6. Kitchen Cupboards
10.7. Built-in Cupboards
10.8. Lockers
10.9. Writing Boards, Projection Screens, etc.

11. PLUMBING AND DRAINAGE

Cold Water Supply

11.1. Connection to Main Supply
11.2. Stop Valve and Chamber
11.3. Piping (Paint Measured at this Stage, as applicable)
11.4. Fittings
11.5. Builder's Sundries (Cutting and Fitting Wall Tiling around Pipes, etc.)
11.6. Tanks and Connections
11.7. Valves and Stop Cocks

Hot Water Supply

11.8. Tank, Tank Stands, Tray and Overflow Pipe
11.9. Ball Valve
11.10. Geyser or Boiler, Cylinder and Piping
11.11. Valves
11.12. Piping (Paint Measured at this Stage, as applicable)
11.13. Fittings
11.14. Builder's Sundries (Cutting and Fitting Wall Tiling around Pipes, etc.)
11.15. Valves and Stop Cocks
11.16. Lagging to Pipes and Pipe Fittings

Sanitary Fittings

11.17. Sanitary Fittings
11.18. Service Connections
11.19. Traps
11.20. Pan Connectors
11.21. Pillar or bib Taps
11.22. Builder's Work (Bath Walls, Shower Floors, etc.)

Waste, Soil, Vent and Anti-Syphonage Pipes)

11.23. Piping (Paint Measured at this Stage, as applicable)
11.24. Fittings
11.25. Cut Around Facing or other Components
11.26. Balloon Grating

Fire Service

11.27. Connection to Main Supply
11.28. Stop Valve and Chamber (If Applicable)
11.29. Reflux Valve
11.30. Pressure Gauge
11.31. Piping (Paint Measured at this Stage, as applicable)
11.32. Fittings
11.33. Hydrants, Booster Pumps, etc
11.34. Hose Reels and Fire Extinguishers

Stormwater Drainage

11.35. Surface Channels
11.36. Piping
11.37. Fittings
11.38. Junction Boxes and Catch pits
11.39. Allowance for Rock

Soil Drainage

11.40. Piping
11.41. Fittings
11.42. Gulley's and Cleaning Eyes
11.43. Inspection Chambers
11.44. Connection to Main Sewer
11.45. Allowance for Rock

11.46. Conservancy Tanks, Septic Tanks and French Drains

12. ELECTRICAL WORK

12.1. High/ Low Tension Distribution
12.2. General Lighting and Small Power
12.3. Access Control
12.4. Earthing Testing and Commissioning

13. MECHANICAL WORK

13.1. Heating, Ventilation and Air-Conditioning
13.2. Compressed air
13.3. Laboratory Gasses
13.4. Lift Installations
13.5. Testing and Commissioning
13.6. Maintenance guarantee, Replacement Parts, etc.

14. EXTERNAL WORK

14.1. Clear Site
14.2. Bulk Earthworks and Forming Platforms
14.3. Demolitions and Removal of Paving, Trees, Fencing, etc.
14.4. Removal and Setting aside of Topsoil
14.5. Paving, Roads and Kerbing
14.6. Landscaping and Irrigation
14.7. Retaining and Yard Walling
14.8. Fencing and Gates
14.9. Washing Lines
14.10. Flag Poles
14.11. Carports
14.12. Sleeves
14.13. Sign Posts and Boards
14.14. Boom and Gate/ Guard Houses

15. PROVISIONAL SUMS FOR SPECIALISTS' WORK

15.1. Provisional Sums for Specified Specialist Installation/ Work
15.2. Allowances for Main Contractor's Profit and Attendance
15.3. Special Attendance

APPENDIX B

Method Statement

METHOD STATEMENT

1. INCEPTION STAGE

The Quantity Surveyor shall visit the site to acquaint himself with its nature and position, nature of ground sub-strata, access roads or any other limitations which may need to be incorporated in the preliminaries to help in pricing. The nature of the soil will guide the Quantity Surveyor on the likely depths of excavations if this will not have been provided by the Engineers.

2. PRELIMINARY SKETCH DESIGN STAGE

The Quantity Surveyor shall liaise with other consults to prepare programme for the works.

The Quantity Surveyor shall prepare cost estimate from various alternatives prepared by the Architect using cost per square metre methods and advice on the costs of the alternatives and their implications. The Quantity Surveyor will further advice on the design Economies of the various designs.

The Quantity Surveyor will amend his estimate as necessitated by modification on sketches to arrive at an approved estimate for an approved scheme. This estimate, broken down elementary or sectional will constitute the clients budget to be adhered to throughout design and implementation.

3. FINAL DESIGN SKETCH STAGE

The Quantity Surveyor will guide the design team in insuring adherence to client's budget. Where in his opinion final design causes change to the budget, the Quantity Surveyor shall inform the Architect / client accordingly and if approved, amend the budget to reflect the new cost. The Quantity Surveyor shall collaborate with other consultants in preparation of timetable covering the consultancy work for preparation of tender documents and the overall programme of works.

4. DESIGN DETAILS, PRODUCTION DRAWINGS, TENDER DOCUMENTS STAGE

The Quantity Surveyor will guide design team to ensure the client budget is adhered to at this stage. The Quantity Surveyor shall report any variance to the budget and have the same rectified or amended accordingly.

The Quantity Surveyor shall advice on the form of contract to be used and in particular the tendering method to be used taking cognizance of the uniqueness of the project to ensure good practice and responsive tenders for the project.

The Quantity Surveyor shall take out from drawings and prepare bills of quantities using the latest computer software to ensure accurate Quantities. Where drawings are not done by computers, the Quantity Surveyor shall use traditions methods to take off quantities.

The Quantity Surveyor shall prepare bills of quantities incorporating preliminaries, specifications and measured works. The bills of quantities shall tally with other consultants' drawings and specifications. The preliminaries and specifications shall be drafted to reflect the uniqueness of the project/contract and to ensure best practices to obtain the most responsive tenders.

The Quantity Surveyor shall price the finished bills of quantities at current construction rates and compare with the budget. If there is a variance, the Quantity Surveyor shall immediately report and have it amended to conform to the budget or if approved amend the budget.

5. TENDER ACTION STAGE

The Quantity Surveyor in consultation with the client and other consultants shall prepare list of tenderers. The Quantity Surveyor shall invite tenderers who shall be given a copy of bills of quantities to provide a price. The Quantity Surveyor shall advice the tenderers on the date and placed for opening the tenders.

On the tender opening date, the Quantity Surveyor shall provide a tender opening form to be filled. The Quantity Surveyor will then take the priced bills of Quantities, check for arithmetic errors and prepare a comprehensive report on the tenders taking cognizance of any arithmetic errors and the responsiveness of tenderers to the tender.

The Quantity Surveyor's report shall be an appropriate guide to other consultants and the client in the choice of a contractor.

Once a contractor has been appointed, the Quantity Surveyor shall draw a contract document for the signature of the client and contractor.

6. CONSTRUCTION STAGE

The Quantity Surveyor shall: -

- Make periodic visits to site to survey work in progress, take particulars and prepare valuations for interim payments to the contractor in collaboration with other consultants.

- Attend all site meetings.

- The Quantity Surveyor shall measure all variations and provisional sum and give periodic reports on their financial implications to other consultants/client: where the client wants specific variations, the Quantity Surveyor shall cost and advice the client beforehand so that the client makes informed decisions.

- The Quantity Surveyor shall advice on all contractual matters' The Quantity Surveyor shall examine, evaluate and report on contractor's claims.

7. DEFECTS LIABILITY PERIOD STAGE

The Quantity Surveyor shall complete measurement and pricing of all provisional works and variations' The Quantity Surveyor shall advice on any outstanding disputes with the contractor.

Having adjusted for all variations, provisional works and claims, the Quantity Surveyor shall prepare a "final account" which is a statement on the final cost of the project for approval of the Architect and for the signature of the client and contractor.

APPENDIX C

Process and Deliverables Approach

RJAN Quantity Surveyors & Construction Cost Consultants

Process and Deliverables

Quantity Surveyor

SCOPE OF SERVICES

RJAN QS shall provide the undermentioned services and any other services related to the scope of work hereinbefore described which may reasonably be required for the successful completion of the works and the project.

Item	Stage	Services	Approach	Deliverables
Stage 1	**Inception**			
	Establish the client requirements and preferences, assess user needs and options, appointment of necessary consultants, establish the project brief including project objectives, priorities, constraints, assumptions, aspirations and strategies	• Assist in developing a clear project brief • Attend project initiation meetings • Advise on procurement policy for the project • Advise on other consultants and services required • Define the consultant's scope of work and services • Conclude the terms of the agreement with the client • Advise on economic factors affecting the project • Advise on appropriate financial design criteria • Provide necessary information within the agreed scope of the project to the other consultants	The Lead Quantity Surveyor will attend initial planning meetings with Client and Consulting Team to determine the project scope and brief. Discussion and establishment of baseline client budget with relevant project stakeholders Conducting an Inspection of existing site and building, and clearly defining the area of proposed works, limitations, access etc. by the Senior QS and technical resources. Agreement and signing of Professional Services Contract: NEC Term Service Contract and agreeing deliverables and key milestones.	• Agreed scope of work • Agreed services • Signed agreement

Stage 2	**Concept and Viability**			
	Prepare and finalize the project concept in accordance with the brief including the scope, scale, character, form, function and preliminary programme and viability of the project	• Agree the documentation programme with the principal consultant and other consultants • Attend design and consultants' meetings • Review and evaluate design concepts and advise on viability in conjunction with the other consultants • Receive relevant data and cost estimates from the other consultants • Prepare preliminary and elemental or equivalent estimates of construction cost • Assist the client in preparing a financial viability report • Audit space allocation against the initial brief • Liaise, co-operate and provide necessary information to the client, principal consultant and other consultants	Attending planning meetings with consultant team and client, and agreeing the programme based on client's needs. Attend site inspections and conduct site measurements for the existing building. Consult with the design consultants (Architect and Engineers) and offer input regarding financial viability design concepts. Receive and review the investigation reports prepared by Architect and Engineers determining the status of existing building. Prepare a preliminary estimate based on the investigation reports and preliminary designs done by consultants, and prepare financial viability report to be presented to the client for approval. Submit space allocation audit based on site measurements of room areas based on SAPOA Method of Measurement of Floor Areas, to be in line with GBCSA rating requirements. Liaison and presenting documentation and deliverables to client for approval in order to proceed to next stage	• Preliminary estimate(s) of construction cost • Elemental or equivalent estimate(s) of construction cos • Space allocation audit for the project
Stage 3	**Design Development**			
	Develop the approved concept to finalize the design, outline specifications, cost plan, financial viability and programme for the project	• Review the documentation programme with the principal consultant and other consultants • Attend design and consultants' meetings • Review and evaluate design and outline specifications and exercise cost control in conjunction with the other consultants	Review and update programme based on design input submissions and approvals from other stakeholders (GBCSA, SAHRA and Municipal Council etc.) Preparation of detailed cost estimates incorporating detailed designs and scope of works. Detailed Elemental Estimate is prepared through measurement and taking off quantities on drawings	• Detailed estimate(s) of construction cost • Area schedule

		• Receive relevant data and cost estimates from the other consultants • Prepare detailed estimates of construction cost • Assist the client in reviewing the financial viability report • Comment on space and accommodation allowances and prepare an area schedule • Liaise, co-operate and provide necessary information to the client, principal consultant and other consultants	and site measurements, and costing of each construction element as set out in the ASAQS Guide to Elemental Cost Estimating & Analysis for Building Works 2013. The detailed estimate is to be used as baseline cost for the client budget for Construction and will be compared to the tenders that will be adjudicated at Stage 4, for competitiveness. Client to review detailed design and costs and give approval to proceed to documentation and procurement stage.	
Stage 4	**Documentation and Procurement**			
	Prepare the construction and procurement documentation, confirm and implement the procurement strategies and procedures for effective and timeous procurement of necessary resources for the execution of the project	• Attend design and consultants' meetings • Assist the principal consultant in the formulation of the procurement strategy for contractors, subcontractors and suppliers • Review working drawings for compliance with the approved budget of construction cost and/or financial viability • Prepare documentation for both principal and subcontract procurement • Assist the principal consultant with calling of tenders and / or negotiation of prices • Assist with financial evaluation of tenders	Procurement documentation to be prepared by consultant team in consultation with client. Client to confirm the selected procurement strategy and client specific requirements for the procurement process. QS prepares construction cost determination document such as Bills of Quantities based on the approved Scope of Works and Design Specifications. Bills of Quantities are prepared through taking off quantities on drawings and site measurements, using the Standard System of Measuring Building Work, 7th Ed. The Form of Contract (NEC) is a standard form of contract used in South Africa and internationally, detailing the client's conditions of tender, contractual conditions and clauses, project specific contract data and form of offer and acceptance will be included to the tender documentation for the procurement process. QS will adjudicate and evaluate the received tenders for financial responsiveness and assessment of	• Budget of construction cost • Tender documentation • Financial evaluation of tenders • Priced contract documentation

		• Assist with the preparation of contract documentation for signature	contractors' pricing and rates in relation to industry cost norms and prevailing market rates. A recommendation will be sent to the Principal Agent who will prepare a comprehensive report for submission to the client for Approval and award. Contract Documentation shall be prepared including the accepted tender BOQ, and conditions of contract, drawings and specifications and other relevant project specific documentation, to be signed by contracting parties – client and contractor.	
Stage 5	**Construction**			
	Manage, administer and monitor the contracts and processes, including the preparation and co-ordination of the procedures and documentation to facilitate practical completion of the works	• Attend the site handover • Prepare schedules of predicted cash flow • Prepare pro-active estimates for proposed variations for client decision-making • Attend regular site, technical and progress meetings • Adjudicate and resolve financial claims by the contractor(s) • Assist in the resolution of contractual claims by the contractor(s) • Establish and maintain a financial control system • Prepare valuations for payment certificates to be issued by the principal agent • Prepare final account(s) for the works on a progressive basis	QS together with other consultants shall attend Site Handover and regular Technical and Progress meeting as required by client. Monthly Cost Reports and Cashflows to be submitted to the client regularly Valuations on construction progress and Site measurements will be undertaken on a regular basis. QS will monitor the Contract Instruction Site Book for any instruction that have financial implication and will update list of site instructions accordingly. Risk register will also be maintained including any notifications of claims, early warnings and claims submitted by contractor. All claims submitted will be adjudicated and assessed by QS, and recommendation will be sent to PA and client accordingly. All variations shall be financially assessed and submitted to client for approval. The QS shall prepare monthly interim valuations for the Payment certificates. A progressive Final Account will be prepared based on site remeasurements and approved claims and compensation events.	• Schedule(s) of predicted cash flow • Estimates for proposed variations • Financial control reports • Valuations for payment certificates • Progressive and draft final account(s)

Stage 6	**Close-Out**			
	Fulfill and complete the project close-out including the preparation of the necessary documentation to facilitate effective completion, handover and operation of the project	• Prepare valuations for payment certificates to be issued by the principal agent • Conclude final account(s)	Negotiate and agree the final account with the contractor and present to the client for approval. The valuation for the Final Payment Certificate will be based on the agreed and approved Final Account.	• Valuations for payment certificates • Final account (s)