BOARD NOTICE 30 OF 2006

ERRATA

Engineering Council of South Africa

Guideline Scope of Services and Tariff of Fees for Persons Registered in terms of the Engineering Profession Act, 2000, (Act No. 46 of 2000)

The Engineering Council of South Africa has, under <u>Section 34(2) of the Engineering Profession Act, 2000 (Act No. 46 of 2000)</u> determined the guideline scope of services and tariff of fees in the Schedule.

Any amount mentioned in or fee calculated in terms of this Schedule is exclusive of Value Added Tax.

The commencement date of these Rules shall be 1 April 2006.

SCHEDULE

Guideline Scope of Services and Tariff of Fees for Registered Professionals

Index

	s and claus	se numbers	
1.		AL PROVISIONS	
1.1	Repeal a	nd Transition	3
1.2	Generalit	y of Terms	3
1.3	Definition	NS	3
1.4		e	
2.	GUIDELI	NE SCOPE OF SERVICES	4
2.1	Normal S	Services	4
	2.1.1	Report stage	4
	2.1.2	Preliminary Design Stage	5
	2.1.3	Design and Tender Stage	
	2.1.4	Working Drawing Stage (Only relevant for Civil and Structural Engineering disciplines)	6
	2.1.5	Construction Stage	6
	2.1.6	Targeted Procurement	7
2.2	Additiona	al Services	
	2.2.1	Additional Services pertaining to all Stages of the Project	7
	2.2.2	Construction Monitoring	
	2.2.3	Occupational Health and Safety Act, 1993 (Act No.85 of 1993)	9
	2.2.4	Quality Assurance System	10
	2.2.5	Lead Consulting Engineer	10
	2.2.6	Principal Agent of the Client	10
	2.2.7	Engineering Management Services	
	2.2.8	Mediation, Arbitration and Litigation proceedings and similar Services	11
3.	GUIDELI	NE TARIFF OF FEES	11
3.1	Application	on of Tariff of Fees	11
3.2	FEES FC	DR NORMAL SERVICES	12
	3.2.1	Civil and Structural Engineering Services pertaining to Engineering Projects	13
	3.2.2	Civil Engineering Services pertaining to Building Projects	15
	3.2.3	Structural Engineering Services pertaining to Building Projects	15
	3.2.4	Mechanical Engineering Services pertaining to Engineering Projects	16
	3.2.5	Electrical Engineering Services pertaining to Engineering Projects	17
	3.2.6	Mechanical Engineering pertaining to Building Projects	18
	3.2.7	Electrical Engineering services pertaining to Building Projects	20
	3.2.8	Electronic Engineering Services	
	3.2.9	Services provided partially or in Stages	22
3.3	Fees for	Additional Services	22
3.4	Time Bas	sed Fees	25
3.5	Expense	s and Costs	26

1. GENERAL PROVISIONS

1.1 Repeal and Transition

- (1) Subject to sub-clause (2), the Guideline Scope of Services and Tariff of Fees for Persons Registered in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000), published under Government Gazette No. 26180, Board Notice 42 of 2 April 2004, is hereby repealed.
- (2) The provisions of Board Notice 42 and 43 of 2 April 2004, 18 and 19 of 28 February 2003 and R.1113 of 11 June 1982 including subsequent amendments still apply in respect of **services** rendered during a **stage**, which has not yet been completed by the date of commencement of this Schedule.

1.2 Generality of Terms

In this document, except where the context otherwise requires or indicates:

- (1) the masculine includes the feminine,
- (2) the singular includes the plural, and
- (3) any reference to a natural person includes a juristic person

1.3 Definitions

In this Schedule, any word or expression defined in **the Act** has that meaning, and, unless the context otherwise indicates:

- (i) "Building Project" means a project comprising building work, together with its associated engineering work, where the engineer is subject to the authority of another professional acting as the Principal Agent while financial and administrative matters are dealt with by another professional.
- (ii) "client", means any juristic person or organ of the State engaging a consulting engineer for services on a project;
- (iii) "construction monitoring" means the process of administering the construction contract and over-seeing and/or inspecting the works, to the extent of the consulting engineer's engagement, for the purpose of verification that the works are being completed in accordance with the requirements of the contract, that the designs are being correctly interpreted and that appropriate construction techniques are being utilized. Construction monitoring, to whatever extent, shall not diminish the contractor's responsibility for executing and completing the works in accordance with his contract.
- (iv) "consulting engineer", for purposes of these rules only, means any professional registered in terms of the Act, or a juristic person who employs such professional, engaged by a client on a project;
- (v) "contractor" means any person or a juristic person under contract to a client to perform the works or part of it on a project, including a subcontractor under contract to such contractor:
- (vi) "cost of the works" means the total amount, exclusive of value added tax, certified or which would, normally, be certifiable for payment to contractors (irrespective of who actually carries out the works) in respect of the works designed, specified or administered by the consulting engineer, before deduction of liquidated damages or penalties, including –
 - (a) a pro-rata portion of all preliminary and general items applicable to the **works**;

(b) the costs of new materials, goods or equipment, or a fair evaluation, of such material, goods or equipment as if new whether supplied new or otherwise by, or

to, the **client** and including the cost or a fair evaluation of the cost of installation (the sourcing, inspection and testing of such will comprise additional services by the **consulting engineer**);

- (vii) "Electronic Engineering Services" means services related to the provision of electronic systems and detailing the terminations, signals and interconnections of electronic components as distinct from conventional electrical HV, MV and LV systems and related reticulation.
- (viii) "Engineering Project" means a project of which the scope comprises mainly engineering work
- (ix) "normal services" means the services set out in clause 2.1;
- (x) "Principal Agent" means the Professional Service Provider appointed as such.
- (xi) "project" means any total scheme envisaged by a client, including all the works and services concerned;
- (xii) "services" means the services contemplated in clause 2 on a project for which a consulting engineer is engaged;
- (xiii) "stage" means a stage of normal services set out in clause 2.1;
- (xiv) "the Act" means the Engineering Profession Act, 2000 (Act No. 46 of 2000);
- "total annual cost of employment" means the total annual cost of employment as defined in clause 3.4(4);
- (xvi) "works" means the activities on a project for which contractors are under contract to the client to perform or is intended to be performed, including the supply of goods and equipment;

1.4 Short Title

This Schedule is called the Guideline Scope of Services and Tariff of Fees for Registered Persons, 2006.

2. GUIDELINE SCOPE OF SERVICES

2.1 Normal Services

2.1.1 Report stage

The preparation and submission of a report embodying preliminary proposals or feasibility studies and estimates of cost and time where appropriate for consideration by the **client**, including all or any of the following:

- (1) Consultation with the **client** or **client's** authorized representative.
- (2) Inspection of the site of the **project**.
- (3) Preliminary investigation, route location, planning and a level of design appropriate to allow project decisions to be made, where any of these are required for the determination of feasibility.
- (4) Consultation with authorities having rights or powers of sanction as well as consultation with the public and stakeholder groups.
- (5) Advice to the **client** as to regulatory and statutory requirements, including environmental management and the need for surveys, analyses, tests and site or other investigations, as well as approvals, where such are required for the completion of the report, and arranging for these to be carried out at the **client's** expense.
- (6) Searching for, obtaining, investigation and collation of available data, drawings and plans relating to the **works**.
- (7) Investigation of financial and economic implications relating to the proposals or feasibility studies.

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(8) Clause 2.1.1(7) does not apply in respect of civil and structural **services** pertaining to **Building Projects**, except as far as the interpretation of cost figures for civil and structural **services** are concerned.

2.1.2 Preliminary Design Stage

Following the **client's** instructions to proceed, the development of preliminary proposals or the basic planning of the **project**, comprising all or any of the following:

- (1) Submission of a basic planning report.
- (2) Establishment of final design criteria.
- (3) Advice to the **client** as to the regulatory and statutory requirements, including environmental management and the need for any further surveys, analyses, tests and site or other investigations, as well as approvals, which may be required and arranging for these to be carried out at the **client's** expense. This advice is to be concluded by the **consulting engineer** with the interpretation of the results of these tests and investigations, including geotechnical and/or foundation investigations, together with a report containing recommendations to be applied to and incorporated in designs. The **consulting engineer** will also take the environmental management plan into account.
- (4) Advice to the **client**, as may be necessary, on the engagement and delineation of the services of other consultants and advisers, arranging such engagements and consultation with them on matters pertaining to the **project**.
- (5) Design of any process or system or refinement of the preliminary process design, where such process design is a prerequisite for the design of the **project**.
- (6) Preparation and submission to the **client** of any preliminary plans, drawings and estimates required for seeking the approval of statutory authorities and the client.
- (7) Consultation on all technical matters with the **client**, authorities and interested parties other than those having rights or powers of sanction, and making modifications to the preliminary design of the **works** arising out of such consultations.
- (8) Submission of estimates of capital and life cycle costs, financial implications and programmes for the implementation of the **works**.
- (9) Clause 2.1.2(5) does not apply in respect of civil and structural **services** pertaining to **Building Projects**.
- (10) Clause 2.1.2(8) does not apply in respect of civil and structural **services** pertaining to **Building Projects**, except as far as inputs to and assessment of programmes for civil and structural **services** are concerned or on projects where all financial, tender and contractual matters are handled by other parties.

2.1.3 Design and Tender Stage

Following the **client's** instructions to proceed with the preparation of all documents necessary to enable tenders for the works to be called for or for the **works** to be otherwise placed by the **client**, including all or any of the following:

- (1) Advice to the client as to the necessity for further surveys, special visits, use of specialist consultants, setting out or staking out the **works**, and arranging for such to be carried out at the **client's** expense.
- (2) Preparation of detail designs and tender and/or working drawings.
- (3) Preparation of specifications and schedules of quantities for engineering works.
- (4) Provision of information necessary for the design of other services.
- (5) Submission of updated and revised estimates, capital and life cycle costs, financial implications and programmes for implementation of the **works** previously submitted.
- (6) Drafting or adapting invitations to tender, tender conditions, forms of tender and conditions of contract, advising the **client** on tender strategies and suitable **contractors** and calling for tenders when instructed to do so by the **client**.
- (7) Advice to the **client** on any alternative designs and tenders, but excluding detailed inspection, reviewing and checking of alternative designs and drawings not prepared by the **consulting engineer** and submitted by any **contractor** or potential **contractor**.

(8) Analyses of tenders and submission of recommendations on the acceptance of tenders and, if necessary, revising the estimates of the cost and the completion date of the works.

- (9) Advice to the **client** as to the provision of a **construction monitoring** service in accordance with clause 2.2.2, over and above that provided for under clause 2.1.5(3).
- (10) Clauses 2.1.3(3), 2.1.3(6) and 2.1.3(8) do not apply in respect of civil and structural **services** pertaining to **Building Projects** or on projects where all financial, tender and contractual matters are handled by other parties.
- (11) Clause 2.1.3(5) does not apply in respect of civil and structural **services** pertaining to **Building Projects** or on projects where all financial, tender and contractual matters are handled by other parties, except as far as inputs to and assessment of programmes for such **services** are concerned.

2.1.4 Working Drawing Stage (Only relevant for Civil and Structural Engineering Disciplines)

- (1) Following the **client's** instructions to proceed, the preparation of any further plans, designs and drawings, excluding shop details, which may be necessary for the execution of the **works**.
- (2) In the case of reinforced concrete works, working drawings must include bending schedules.
- (3) In the case of structural steel **works**, working drawings and details provided by the **consulting** engineer must include full information, dimensions and specifications on all sections, connections, plates, fasteners, bolts and welding, to such an extent that no further designs by **contractors** or other parties are required. The **consulting engineer** need not provide shop drawings for the manufacture of the structural steel **works**.

2.1.5 Construction Stage

The overall contract administration and co-ordination, as well as **construction monitoring** of the execution of the **works** in accordance with the contract, including all or any of the following:

- (1) Placing orders for the works on behalf of the client.
- (2) Advice to the **client** as to the preparation of the contract documents, or preparation of the contract documents in consultation with the **client**.
- (3) Overall contract administration and co-ordination, as well as **construction monitoring** of the execution of the **works** for compliance with the contract and attending site meetings on a combined average frequency of at least one day every two weeks for the duration of the construction of the specific **works** for which the consulting engineer is engaged or at such more frequent intervals as the **consulting engineer** may deem necessary.
- (4) Directing **construction monitoring** operations, but excluding detail day-to-day **construction monitoring** of the **works** and contract administration, as provided for under clause 2.2.2.
- (5) Advice to the **client** as to the provision of a **construction monitoring** service in accordance with clause 2.2.2, over and above that provided for in this clause.
- (6) Checking **contractor's** drawings of structures, plant, equipment and systems for the **works** for conformity with design requirements, but excluding detailed checking of manufacture and installation details for erection or installation fit.
- (7) Advice to the **client** on any further alternative designs, but excluding detailed inspection, reviewing and checking of alternative designs and drawings not prepared by the **consulting engineer** and submitted by any **contractor**.
- (8) Issuing instructions to **contractors** on behalf of the **client**.
- (9) Issuing certificates or recommendations for payment of **contractors** and submitting regular reports regarding **works** finances and anticipated completion dates and final costs.
- (10) Advice to the **client** in regard to or the resolution of disputes or differences that may arise between the **client** and the **contractor**, except mediation, arbitration and/or litigation.
- (11) Preparation of and issuing variation orders on behalf of and after consultation with the **client**.

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(12) General inspection of materials and equipment for compliance with the original design and tender, including checking of marks or documentation for adherence to National and International standards and advice to the **client** regarding further inspection and testing of such materials and equipment as may be necessary and arranging for such inspection and testing to be carried out on behalf of and at the **client's** expense.

- (13) Making arrangements on behalf of the **client** for the provision and reproduction at the **client's** expense of such drawings and documents as may be required by the **contractors** and site staff for the execution of the **works**.
- (14) Agreeing final quantities with **contractors**, compiling final accounts and issuing final payment certificates.
- (15) Prepare and, on completion of the **works**, provide the **client** with record drawings. Making arrangements for the contractor to supply detailed operation, operating and maintenance manuals as part of the contractor's contractual obligations, receiving such and handing it over to the **client**. Both sets of documents shall be in formats as agreed to with the **client**.
- (16) Evaluating results of **contractor's** commissioning procedures and tests and witnessing final performance or acceptance tests on site, only, but excluding day-to-day routine tests
- (17) Clauses 2.1.5(1), 2.1.5(2), 2.1.5(9), 2.1.5(10), 2.1.5(11) and 2.1.5(14) do not apply in respect of civil and structural **services** pertaining to **Building Projects** or on projects where all financial, tender and contractual matters are handled by other parties.

2.1.6 Targeted Procurement

Should the **client** during any stage of the **project**, require the **consulting engineer** to perform work or services pertaining to targeted procurement, such work and or services could entail, but are not limited to, any or all of the following:

- (i) incorporation of any targeted participation goals,
- (ii) the measuring of key participation indicators,
- (iii) the selection, appointment and administration of participation and
- (iv) auditing compliance to the above by any contractors and/or professional consultant.

2.2 Additional Services

The following **services** are additional to the **normal services** provided by the **consulting engineer**, unless specifically agreed otherwise between the **consulting engineer** and the client. The agreement on the scope of **services** and remuneration shall be in writing and should, if at all possible, be concluded before such services are rendered.

2.2.1 Additional Services pertaining to all Stages of the Project

- (1) Enquiries not directly concerned with the **works** and its subsequent utilisation.
- (2) Valuation for purchase, sale or leasing of plant, equipment, material, systems, land or buildings or arranging for such valuation.
- (3) Making arrangements for way leaves, servitudes or expropriations.
- (4) Negotiating and arranging for the provision or diversion of services not forming part of the works.
- (5) Additional work in obtaining the formal approval of the appropriate Government Departments or Public Authorities, including the making of such revisions as may be required as a result of decisions of such Departments or Authorities arising out of changes in policy, undue delay, or other causes beyond the **consulting engineer's** control.
- (6) Surveys, analyses, tests and site or foundation or other investigations, model tests, laboratory tests and analyses carried out on behalf of the **client**.
- (7) Setting out or staking out the **works** and indicating any boundary beacons and other reference marks.
- (8) Preparation of drawings for manufacture and installation or detailed checking of such for erection or installation fit.

(9) Detailed inspection, reviewing and checking of designs and drawings not prepared by the consulting engineer and submitted by any contractor or potential contractor as alternative to those embodied in tender or similar documents prepared by the consulting engineer.

- (10) Inspection and testing, other than on site, of materials and plant, including inspection and testing during manufacture.
- (11) Preparing and setting out particulars and calculations in a form required by any relevant authority.
- (12) Abnormal additional services by or costs to the **consulting engineer** due to the failure of a **contractor** or others to perform their required duties adequately and timely.
- (13) Executing or arranging for the periodic monitoring and adjustment of the **works**, after final handover and completion of construction and commissioning, in order to optimise or maintain proper functioning of any process or system.
- (14) Investigating or reporting on tariffs or charges leviable by or to the client.
- (15) Advance ordering or reservation of materials and obtaining licenses and permits.
- (16) Preparing detailed operating, operation and maintenance manuals.
- (17) Additional **services**, duties and/or work resulting from project scope changes, alterations and/or instructions by the **client**, or his duly authorized agents, requiring the **consulting engineer** to advise upon, review, adapt and/or alter his completed designs and/or any other documentation and/or change the scope of his **services** and/or duties. Such additional **services** are subject to agreement in writing between the **consulting engineer** and the **client** prior to the execution thereof.
- (18) Exceptional arrangements, communication, facilitation and agreements with any stakeholders other than the **client** and **contractors** appointed for the **works** on which the **consulting engineer** provides **services**.
- (19) Any other additional **services**, of whatever nature, specifically agreed to in writing between the **consulting engineer** and the **client**.

2.2.2 Construction Monitoring

- (1) If the construction **monitoring**, as set out in clause 2.1.5(3), is deemed to be insufficient by the **consulting engineer**, the **consulting engineer** may, with prior written approval having been obtained from the client, appoint or make available additional staff for such construction **monitoring** as are necessary to undertake additional construction **monitoring** on site to the extent specifically defined and agreed with the client. The functions in respect of additional construction monitoring are to be limited to detailed inspections and exclude those mentioned under clause 2.1.5.
- (2) Alternatively, the **client** may appoint or make available staff, as intended in clause 2.2.2(1), subject to approval by the **consulting engineer**.
- (3) Staff, as intended in clauses 2.2.2(1) and 2.2.2(2), shall report to and take instructions from the **consulting engineer** or an authorized representative of the **consulting engineer** only and shall be deemed to be in the employ of the **consulting engineer**.
- (4) Should any change regarding the persons utilized for additional on-site **monitoring** or their remuneration be necessary, the utilization of such persons and/or their remuneration must be agreed in writing with the **client** prior to the implementation thereof.
- (5) If, for any reason, no additional staff or inadequate staff for **construction monitoring** is appointed, the **consulting engineer** shall provide additional services, including additional site visits, as required and agreed to in writing with the **client** prior to commencement thereof.
- (6) The duties of the **consulting engineer** for the following four defined levels of **construction monitoring**, respectively, are as follows:

(a) **Level 1**:

The construction monitoring staff shall:-

(i) Monitor the outputs from another party's quality assurance programme against the requirements of the plans and specifications.

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- (ii) Visit the **works** at a frequency agreed with the **client** to review important materials, critical work procedures and/or completed elements or components.
- (iii) Be available to advise the **contractor** on the technical interpretation of the plans and specifications.

(b) Level 2:

The construction monitoring staff shall:-

- (i) Review, preferably at the earliest opportunity, a sample of each important
 - (a) Work procedure
 - (b) Construction material

for compliance with the requirements of the plans and specifications and review representative samples of important completed work prior to enclosure or completion as appropriate.

- (ii) Visit the **works** at a frequency agreed with the **client** to review important materials, critical work procedures and/or completed elements or components.
- (iii) Be available to provide the **contractor** with technical interpretation of the plans and specifications.

(c) **Level 3**:

The construction monitoring staff shall:

- (i) Maintain a part-time presence on site as agreed with the **client** to review random samples and review important completed work prior to enclosure or on completion as appropriate.
- (ii) Where the **consulting engineer** is the sole consultant or principal agent, carry out such administration of the **project** as is necessary on behalf of the **client**.
- (iii) Be available to provide the **contractor** with technical interpretation of the plans and specifications.

(d) **Level 4**:

The construction monitoring staff shall:-

- (i) Maintain a full time presence on site to constantly review
 - (a) Work procedures
 - (b) Construction materials

for compliance with the requirements of the plans and specifications and review completed work prior to enclosure or on completion as appropriate.

- (ii) Where the consulting engineer is the sole consultant or principal agent, carry out such administration of the project as is necessary on behalf of the client.
- (iii) Be available to provide the **contractor** with technical interpretation of the plans and specifications.

2.2.3 Occupational Health and Safety Act, 1993 (Act No.85 of 1993)

Should the **client** require the **consulting engineer** to undertake duties falling under the Occupational Health and Safety Act, 1993 (Act No.85 of 1993) and the Construction Regulations in terms thereof, on behalf of the **client**, the additional **services** may include the following:

(1) The **consulting engineer** must arrange, formally and in writing, for the contractor to provide documentary evidence of compliance with all the requirements of the Occupational Health and Safety Act, 1993 (Act No.85 of 1993).

(2) The **consulting engineer** must execute the duties of the client, as his appointed agent, as contemplated in the Construction Regulations to the Occupational Health and Safety Act, 1993 (Act No.85 of 1993).

2.2.4 Quality Assurance System

Where the **client** requires that a quality management system or quality assurance services, over and above **construction monitoring** services, be applied to the **project**, these are in addition to **normal services** provided by the **consulting engineer** and to be specifically defined and separately agreed in writing prior to commencement thereof.

2.2.5 Lead Consulting Engineer

Should the **client** require the **consulting engineer** to assume the leadership of a joint venture, consortium or team of consulting engineers, of the same discipline, prescribed or requested by the **client**, the additional services may include the following:

- (1) Responsibility for the overall administration of all sections of the **services**, including those portions of the **services**, which fall within the ambit of the other consulting engineers.
- (2) Responsibility for the overall co-ordination, programming of design and financial control of all the **works** included in the **services**.
- (3) Processing certificates or recommendations for payment of **contractors**.

2.2.6 Principal Agent of the Client

When a **consulting engineer** is, in addition to his normal functions as **consulting engineer**, appointed as the **principal agent** of the **client** on a **project**, the **consulting engineer** will also be responsible for the following:

- (1) Leadership of the professional team.
- Submission of preliminary and developed proposals in the form of consolidated reports, drawings and specifications together with estimates of costs for the **project** as a whole.
- (3) The overall administration of all sections of the **project** including those, which fall within the ambit of the other professional members in the team.
- (4) The overall coordination, programming of design and financial control of the **project.**
- (5) Resolving differences that may arise between the **client** and the **contractors**, excluding mediation, arbitration or litigation
- (6) Approval of certificates for payment to **contractors** issued by the other professional members in the team before their presentation to the **client** for settlement
- (7) Making arrangements to provide the **client**, on completion of the **works**, with such record drawings as may be required for a proper record of the **works** as constructed and such manuals as may be required for the operation and maintenance of the relevant parts of the **works**
- (8) Approval of the final contract account for the **project** as a whole.
- (9) Manage targeted procurement **services** as indicated in clause 2.1.6.

2.2.7 Engineering Management Services

Should the **client** require the **consulting engineer** to undertake duties of an engineering management nature on behalf of the **client**, the additional **services** will include the following:

- (1) Leadership of the professional team.
- Be responsible for the overall administration of the **project** including the co-ordination of the work of the team, the programming of the execution of designs and the overall financial control of the **project**.

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(3) Instruct the other members of the team, on behalf of the **client**, in writing as to the client's total requirements in connection with the **project**, including the services required from each of the other members and make available to them all relevant information or data pertaining to the **project** which is required by them. The other members of the team shall be entitled to rely upon the accuracy and completeness of such information and data furnished by the **consulting engineer**.

- (4) Convene and preside over regular meetings of the team and the **client** for purposes of planning the **project** including preparing and distributing agendas and minutes to all concerned.
- (5) Co-ordinate the preparation of a budget for the **client**, together with assistance from other members of the team and update it at regular intervals as agreed with the **client**.
- (6) Prepare a construction and procurement plan and policy according to the **client's** requirements with regard to types of contracts to be adopted, general and commercial conditions and the grouping of items and elements into various contracts.
- (7) With assistance of the other members of the team, determine and recommend to the **client** a policy for calling for tenders and/or negotiating contracts.
- (8) Co-ordinate reports and recommendations on tenders received, either directly or by the other members of the team, and make recommendations to the **client** on the award of contracts.
- (9) Award all contracts on behalf of the **client** and arrange for the preparation and signing of contract documents with the assistance of the other members of the team.
- (10) Issue all instructions to **contractors**, either directly or by delegation to the other members of the team.
- (11) Convene and preside over regular meetings on site with **contractors**, members of the team and the **client** for the purpose of administering the contract including the preparation and distribution of agendas and minutes to all concerned.
- (12) Process and certify all payment and valuation certificates and issue payment certificates for settlement.

2.2.8 Mediation, Arbitration and Litigation proceedings and similar Services

Where the **client** requires the **consulting engineer** to, on his behalf, perform the services listed hereunder or similar work, the extent thereof and remuneration therefore is subject to agreement between the **client** and the **consulting engineer**:

- (1) Dealing with matters of law, obtaining parliamentary or other statutory approval, licenses or permits.
- (2) Assisting with or participating in contemplated or actual mediation, arbitration or litigation proceedings.
- (3) Officiating at or attending courts and commissions of enquiry, select committees and similar bodies convened by statute, regulation or decree.

3. GUIDELINE TARIFF OF FEES

3.1 Application of Tariff of Fees

- (1) The guideline tariff of fees contained in this Schedule applies in respect of the **services** set out in clause 2.
- (2) The **client** should remunerate the **consulting engineer**, for the **services** rendered, on the basis of clauses 3.2 to 3.5. In cases where the **client** and **consulting engineer** have agreed that clauses 3.2 and 3.3 are not applicable, payment should be on the basis of clause 3.4 or as agreed according to clause 3.1(4).
- (3) The **client** shall reimburse the **consulting engineer** for all expenses and costs incurred in terms of clause 3.5 in performing his **services**, irrespective of whether fees are charged in terms of clauses 3.2 and 3.3 or clause 3.4, as well as for all costs incurred on behalf, and with the approval, of the **client**.

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(4) Should the tariff of fees contained in this Schedule be found to be inappropriate to any **project, works, services** or part thereof, the **client** and **consulting engineer** may agree a fee deemed more appropriate. Contributing factors to be taken into account, although not limited to, may include all or any of the following:

- (a) Complexity: Where the **works** call for the application of new, unusual or untried techniques or designs or application of complex control circuits, systems or processes or excessive complexity of the whole or part of the **works**.
- (b) Monetary value of the works: Where the monetary value of the works is abnormally low relative to the services required from the consulting engineer and the tariff of fees for normal projects does not compensate the consulting engineer reasonably for the services to be rendered.
- (c) Time duration: Where the works are executed over appreciably shorter or longer than normal or realistic time periods during any of the stages defined in 2.1
- (d) Level of responsibility, liability and risk: Where unusually high demands in respect of these factors are expected to be carried by the **consulting engineer**.
- (e) Level of expertise, qualifications, skills and experience required of the consulting engineer for the services.
- (5) Agreement on any adjustment of or special fees should be reached at the time of the engagement of the **consulting engineer** or as soon after circumstances warrant such as practically possible, but in all cases prior to the **consulting engineer** rendering services which may be affected.
- (6) Where the **normal services** relate to more than one of the disciplines of consulting engineering contemplated in clauses 3.2.1 to 3.2.8, namely civil, structural, mechanical, electrical or electronic engineering services, a separate fee for **services** in each discipline should be calculated in accordance with the relevant clause.
- (7) Where at the instance and with the consent of the **client** the **works** are undertaken on separate non-contiguous sites, continuity is interrupted or are unusually fragmented or are constructed as separately documented phases or sections, the fee for **normal services** is:
 - (a) the sum of the fees calculated separately for each site, contract, phase or section as if they were separate **works**; or
 - (b) a fee agreed to between the **client** and the **consulting engineer** and which fee lies between the fee calculated on the total **cost of the works** and the sum of the fees contemplated in clause 3.1(7)(a).
- (8) For the calculation of fees, "Duplication of **works**" is defined as the re-use of designs, drawings and details done by a **consultant** to duplicate a complete unit (e.g. a building or bridge).
- (9) The fee for **services** provided in the report stage is calculated on a time basis.
- (10) The following fees may be claimed after each stage of **services** or monthly or as agreed between the **consulting engineer** and the **client**:
 - (a) Percentage fees determined on the basis of the **cost of the works** prevailing at the time of the fee calculation and pro-rata to the completed **services**.
 - (b) Time based fees applicable when the **services** were rendered.
- (11) Disbursements as set out in clause 3.1(3) may be claimed monthly.

3.2 Fees for Normal Services

3.2.1 Civil and Structural Engineering Services pertaining to Engineering Projects

(1) The basic fee for **normal services** in the disciplines of civil and structural engineering, pertaining to **Engineering Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific **cost of the works** in respect of which the **services** were rendered on the project excluding the report stage described in clause 2.1.1 which shall be reimbursed on a time basis in terms of clause 3.4.

Cost of t	he Works	Basis of Fee Calculation		
For projects u	p to R 350 000	A Lump Sum or on a Time Basis		
-	re the he works:	Primary Fee	Coondam for	ioo
Exceeds	But does not exceed	Frimary ree	Secondary fee	
R 350,000	R 950,000	R 43,750	12,5% on the balance over	R 350,000
R 950,000	R 4,750,000	R 118,750	10,0% on the balance over	R 950,000
R 4,750,000	R 17,750,000	R 498,750	8,0% on the balance over	R 4,750,000
R 17,750,000	R 71,000,000	R 1,538,750	6,0% on the balance over	R 17,750,000
R 71,000,000	R 290,000,000	R 4,733,750	5,5% on the balance over	R 71,000,000
R 290,000,000		R 16,778,750	5,0% on the balance over	R 290,000,000

The following additional fee shall be applicable to the value of the reinforced concrete and structural steel portions of the works, inclusive of the costs of concrete, reinforcing, formwork, structural steel work and any pro-rata preliminary and general amounts. Where structures of identical design are repeated on the same project, the combined costs shall be cumulated for the determination of the cost of the reinforced concrete and structural steel works. In cases where structures require individual design, a separate additional fee shall be calculated for each structure based on the cost of the reinforced concrete and/or structural steel work for that particular structure. The additional fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project.

Cost of th	ne Works	Basis of Fee Calculation		
For projects up	to R 350 000	Al	Lump Sum or on a Time Basis	
Where cost of the		Primary Foo	Sacandam, for	
Exceeds	But does not exceed	Primary Fee	Secondary fee	
R 350,000	R 3,250,000	R 17,500	5,0% on the balance over R 350,000	
R 3,250,000	R 9,450,000	R 162,500	4,0% on the balance over R 3,250,000	
R 9,450,000	R 32,000,000	R 410,500	2,65% on the balance over R 9,450,000	
R 32,000,000		R 1,008,075	1,65% on the balance over R 32,000,000	

- (3) To calculate the fee for railway track work in terms of this item, 50 per cent of the cost of the permanent way materials is excluded from the cost of the works, but the full cost of ballast and equipment specially designed by the consultant is included in the cost of the works.
- (4) For **normal services** relating to a description of the **works** mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause 3.2.1(1) and 3.2.1(2) is multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will be the product of the factors involved, except for the fee for targeted procurement.
- (5) These factors do not apply when fees are a lump sum or on a time basis.
- (6) In the case of roadworks, where the road traverses both rural and urban areas, an adjustment pro-rata to the length of road in rural and urban area should be made.
- (7) In the case of road rehabilitation a combination of factors applies depending on the situation of the road (rural or urban) and the category factor for alterations to existing works.

Description of the Works	Factor by which basic fee is multiplied
Rural roads (single carriageways), excluding bridges	0,85
Rural freeways and dual carriageways, excluding bridges	0,95
Freeways and dual carriageways through existing periurban areas, excluding bridges	1,00
Single Carriageways through existing urban areas	1.00
Freeways and dual carriageways through existing urban areas	1,25
Gravel roads: Primary roads Secondary roads Informal roads	1,25 to 1,50 1,00 to 1,25 0,75 to 1,00
Water and waste water treatment works	1,25
Services (Excluding roads) for existing informal settlements including roads and to reduced standards or supplies	1,25 to 1,50
Water and sanitation in rural areas	1,35
Alterations to existing works . (Only applicable to the fees on the portion or section of works affected)	1,25
Mass concrete foundations, brickwork and cladding designed and detailed by the consulting engineer (Only applicable to the design portion of the fees on such works)	0,33
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
Targeted procurement (Additional fee based on the basic fees before the application of any of the other factors)	0, 07

3.2.2 Civil Engineering Services pertaining to Building Projects

(1) The basic fee for **normal services** in the discipline of civil engineering, pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific **cost of the works** in respect of which the **services** were rendered on the project excluding the report stage described in clause 2.1.1 which shall be reimbursed on a time basis in terms of clause 3.4.

Cost of the	e Works	Basis of Fee Calculation		
For projects up	to R 350 000	A Lu	ımp Sum or on a Time Bas	sis
Where cost of the		Duimanu Faa	Sandan fa	
Exceeds But does not exceed		Primary Fee	Secondary fee	
R 350,000	R 950,000	R 43,750	12,5% on the balance over	R 350,000
R 950,000	R 4,150,000	R 118,750	10,0% on the balance over	R 950,000
R 4,150,000	R 9,500,000	R 438,750	9,0% on the balance over	R 4,150,000
R 9,500,000	R 23,000,000	R 920,250	7,5% on the balance over	R 9,500,000
R 23,000,000		R 1,932,750	7,0% on the balance over	R 23,000,000

(2) For **normal services** relating to a description of the **works** mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause 3.2.2(1) is multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will be the product of the factors involved.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Factor by which basic fee is multiplied
Alterations to existing works (Only applicable to the fees on the portion or section of works affected)	1,25
Internal water and drainage for buildings upon specific agreement with the client to render such services	1,25
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25

3.2.3 Structural Engineering Services pertaining to Building Projects

(1) The basic fee for **normal services** in the discipline of structural engineering, pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific **cost of the works** in respect of which the services were rendered on the project excluding the report stage described in clause 2.1.1 which shall be reimbursed on a time basis in terms of clause 3.4.

Cost of t	he Works	Basis of Fee Calculation			
For projects u	o to R 350 000	A Lump Sum or on a Time Basis			
	re the he works:	Drimany Fac			
Exceeds	But does not exceed	Primary Fee	Secondary fee		
R 350,000	R 950,000	R 43,750	12,5% on the balance over	R 350,000	
R 950,000	R 4,750,000	R 118,750	10,0% on the balance over	R 950,000	
R 4,750,000	R 10,000,000	R 498,750	9,0% on the balance over	R 4,750,000	
R 10,000,000	R 23,000,000	R 971,250	8.0% on the balance over	R 10,000,000	
R 23,000,000		R 2,011,250	7,0% on the balance over	R 23,000,000	

(2) For **normal services** relating to a description of the **works** mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause 3.2.3(1) is multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will be the product of the factors involved.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Factor by which basic fee is multiplied
Alterations to existing works (Only applicable to the fees on the portion or section of works affected)	1,25
Mass concrete foundations and brickwork designed and cladding designed and detailed by the consulting engineer (Only applicable to the design portion of the fees on such works)	0,33
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25

3.2.4 Mechanical Engineering Services pertaining to Engineering Projects

(1) The basic fee for **normal services** in the discipline of mechanical engineering, pertaining to **Engineering Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific **cost of the works** in respect of which the **services** were rendered on the project excluding the report stage described in clause 2.1.1 which shall be reimbursed on a time basis in terms of clause 3.4.

Cost of t	he Works	Basis of Fee Calculation			
For projects u	o to R 300 000	A Lump Sum or on a Time Basis			
	e the he works:	Duimanu Faa	Fee Secondary fee		
Exceeds	But does not exceed	— Primary Fee			
R 300,000	R 950,000	R 37,500	12,5% on the balance over	R 300,000	
R 950,000	R 4,150,000	R118,750	10,0% on the balance over	R 950,000	
R 4,150,000	R 11,850,000	R 438,750	8,0% on the balance over	R 4,150,000	
R 11,850,000	R 26,000,000	R 1,054,750	7,0% on the balance over	R 11,850,000	
R 26,000,000	R 47,000,000	R 2,045,250	6,0% on the balance over	R 26,000,000	
R 47,000,000		R 3,305,250	5,5% on the balance over	R 47,000,000	

(2) For **normal services** relating to a description of the **works** mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause 3.2.4(1) is multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will be the product of the factors involved, except for the fee for targeted procurement.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Factor by which basic fee is multiplied
Alterations to existing works (Only applicable to the fees on the portion or section of works affected.)	1,25
Wet services, for domestic hot and cold water and drainage pipe work inside buildings.	1,25
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
Targeted procurement (Additional fee based on the basic fees before the application of any of the other factors)	0, 07

3.2.5 Electrical Engineering Services pertaining to Engineering Projects

(1) The basic fee for **normal services** in the discipline of electrical engineering, pertaining to **Engineering Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific **cost of the works** in respect of which the **services** were rendered on the project excluding the report stage described in clause 2.1.1 which shall be reimbursed on a time basis in terms of clause 3.4.

Cost of 1	the Works	Basis of Fee Calculation			
For projects u	p to R 300 000	A Lump Sum or on a Time Basis			
	re the he works:	Duiman, Eas	ry Fee Secondary fee		
Exceeds	But does not exceed	Primary Fee			
R 300,000	R 950,000	R 37,500	12,5% on the balance over	R 300,000	
R 950,000	R 2,950,000	R 118,750	10,0% on the balance over	R 950,000	
R 2,950,000	R 8,900,000	R 318,750	8,0% on the balance over	R 2,950,000	
R 8,900,000	R 20,500,000	R 794,750	7,0% on the balance over	R 8,900,000	
R 20,500,000	R 38,000,000	R 1,606,750	6,0% on the balance over	R 20,500,000	
R 38,000,000		R 2,656,750	5,5% on the balance over	R 38,000,000	

(2) For **normal services** relating to a description of the **works** mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause 3.2.5(1) is multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will be the product of the factors involved, except for the fee for targeted procurement.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Factor by which basic fee is multiplied
Alterations to existing works (Only applicable to the fees on the portion or section of works affected.)	1,25
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
Targeted procurement (Additional fee based on the basic fees before the application of any of the other factors)	0, 07

3.2.6 Mechanical Engineering pertaining to Building Projects

(1) The basic fee for **normal services** in the discipline of mechanical engineering or wet services, pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific **cost of the works** in respect of which the **services** were rendered on the project excluding the report stage described in clause 2.1.1 which shall be reimbursed on a time basis in terms of clause 3.4.

Cost of the Works		Basis of Fee Calculation		
For projects up to R 300 000		A Lump Sum or on a Time Basis		
Where the cost of the works:		Primary Fee	Secondary fee	
Exceeds	But does not exceed	Frimary ree	Secondary 16	:6
R 300,000	R 850,000	R 45,000	15,0% on the balance over	R 300,000
R 850,000	R 5,900,000	R 127,500	12,5% on the balance over	R 850,000
R 5,900,000	R 11,850,000	R 758,750	10,5% on the balance over	R 5,900,000
R 11,850,000	R 23,700,000	R 1,383,500	9,5% on the balance over	R 11,850,000
R 23,700,000	R 71,000,000	R 2,509,250	9,0% on the balance over	R 23,700,000
R 71,000,000		R 6,766,250	8,5% on the balance over	R 71,000,000

(2) For **normal services** relating to a description of the **works** mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause 3.2.6(1) is multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will be the product of the factors involved, except for the fee for targeted procurement.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Factor by which basic fee is multiplied
Multi-tenant installations	1,25
Alterations to existing works (Only applicable to the fees on the portion or section of works affected)	1,25
Wet services, for domestic hot and cold water and drainage pipe work inside buildings.	1,25
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
For projects where the cost of the works exceeds R 300,000 and where bills of quantities are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the Quantity Surveyor or other parties.	0,75
As above, but bills of quantities for are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the consulting engineer (e.g. lump sum, nominated or selected sub-contracts, etc.)	0,90
Targeted Procurement (Additional fee based on the basic fees before the application of any of the other factors)	0,07

3.2.7 Electrical Engineering services pertaining to Building Projects

(1) The basic fee for **normal services** in the discipline of electrical engineering, pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific **cost of the works** in respect of which the **services** were rendered on the project excluding the report stage described in clause 2.1.1 which shall be reimbursed on a time basis in terms of clause 3.4.

Cost of the Works		Basis of Fee Calculation			
For projects up to R300 000		A Lu	A Lump Sum or on a Time Basis		
Where the cost of the works:					
Exceeds	But does not exceed	- Primary Fee	Secondary fee		
R 300,000	R 600,000	R 45,000	15,0% on the balance over R 300,000		
R 600,000	R 4,750,000	R 90,000	12,5% on the balance over R 590,000		
R 4,750,000	R 10,700,000	R 608,750	10,5% on the balance over R 4,750,000		
R 10,700,000	R 23,700,000	R 1,233,500	9,5% on the balance over R 10,700,000		
R 23,700,000	R 71,000,000	R 2,468,500	9,0% on the balance over R 23,700,000		
R 71,000,000		R 6,725,500	8,5% on the balance over R 71,000,000		

(2) For **normal services** relating to a description of the **works** mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause 3.2.7(1) is multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will be the product of the factors involved, except for the fee for targeted procurement.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Factor by which basic fee is multiplied
Multi-tenant installations	1,25
Alterations to existing works (Only applicable to the fees on the portion or section of works affected)	1,25
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
For projects where the cost of the works exceeds R 300,000 and where bills of quantities are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the Quantity Surveyor or other parties.	0,75
As above, but bills of quantities are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the consulting engineer (e.g. lump sum, nominated or selected sub-contracts, etc.)	0,90
Targeted procurement (Additional fee based on the basic fees before the application of any of the other factors)	0,07

3.2.8 Electronic Engineering Services

(1) The basic fee for **normal services** in the discipline of electronic engineering, including work pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific **cost of the works** in respect of which the **services** were rendered on the project excluding the report stage described in clause 2.1.1 which shall be reimbursed on a time basis in terms of clause 3.4.

Cost of the Works			Basis of Fee Calculation			
For projects u	or projects up to R 300 000 A L		ump Sum or on a Time Basis			
Where the cost of the works:		Duimany Fac	San dan 6a			
Exceeds	But does not exceed	Primary Fee	Secondary fee		ilmary ree Secondary fee	:e
R 300,000	R 1,050,000	R 51,000	17,0% on the balance over	R 300,000		
R 1,050,000	R 4,750,000	R 178,500	13,5% on the balance over	R 1,050,000		
R 4,750,000	R 14,200,000	R 678,000	11,5% on the balance over	R 4,750,000		
R 14,200,000	R 35,000,000	R 1,764,750	9,5% on the balance over	R 14,200,000		
R 35,000,000		R 3,740,750	8,5% on the balance over	R 35,000,000		

(2) For **normal services** relating to a description of the **works** mentioned in the first column of the following table the proportion of the basic fee relating to the specific item calculated in terms of clause 3.2.8(1) is multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will be the product of the factors involved, except for the fee for targeted procurement.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Factor by which basic fee is multiplied
Alterations to existing works (Only applicable to the fees on the portion or section of works affected)	1,25
Where equipment or systems are wholly of proprietary design or approved by a State authority (Only applicable to the design portion of the fees)	0,67
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
For projects where the cost of the works exceeds R 300,000 and where bills of quantities are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the Quantity Surveyor or other parties.	0,75
As above, but bills of quantities for electronic works are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the consulting engineer (e.g. lump sum, nominated or selected sub-contract, etc.)	0,90
Targeted procurement (Additional fee based on the basic fees before the application of any of the other factors)	0,07

3.2.9 Services provided partially or in Stages

(1) The following table shall be used for proportioning the basic fee for **normal services** over the various **stages** of the services:

Stage of Services	Percentage points for each stage
Civil: Engineering Projects: Preliminary design Design and tender Working drawings Construction Completion of all consulting engineering services	30 30 15 20 5
Structural: Engineering Projects: Preliminary design Design and tender Working drawings Construction Completion of all consulting engineering services	30 30 20 15 5
Civil: Building Projects: Preliminary design Design and tender Working drawings Construction Completion of all consulting engineering services	30 30 15 20 5
Structural: Building Projects: Preliminary design Design and tender Working drawings Construction Completion of all consulting engineering services	30 30 20 15 5
Mechanical, electrical and electronic projects: Preliminary design Design and tender, including working drawings Construction Completion of all consulting engineering services	20 40 35 5

(2) Where not all the **stages** of the **normal services** are provided by the **consulting engineer**, the fee is, subject to clause 3.1(7), calculated as a percentage of the total fee calculated in terms of this clause, which percentage is the sum of the percentage points appropriate to each **stage** as set out in the above table against those **stages** of the **services** provided by the **consulting engineer**, plus 10 percentage points.

3.3 Fees for Additional Services

(12) Subject to clauses 3.2.9(2), 3.3(2), 3.3(3), 3.3(4), 3.3(5), 3.3(6), 3.3(7) and 3.3(8), the fees for additional services, contemplated in clause 2.2, are agreed to between the **client** and the **consulting engineer** as set out in clause 3.1.

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(13) (a) Should instructions having been given by the client to the consulting engineer to proceed with any of the stages of services set out in clause 3.2.9(1) and the whole or part of the works is cancelled or abandoned or postponed for a period of more than six months, the consulting engineer shall be remunerated for services performed, plus a surcharge of one tenth of the full fee which would have been payable to the consulting engineer had his services been completed in terms of his engagement.

- (b) For additional services as a result of the resumption of such services or the alteration or modification of designs on the instructions of the client, the consulting engineer is entitled to time based fees and actual costs incurred.
- (14) For the provision of a **construction monitoring** service, as contemplated in clause 2.2.2, the **consulting engineer** is entitled to recover from the **client**
 - (a) for monthly monitoring staff costs, the **total annual cost of employment** of such staff (as defined in clause 3.4(4)), divided by 12 and multiplied by one of the following:
 - (i) Case 1:

Where payment is only made for actual time on site and site allowances are not paid separately:

- 2.1 times total cost of employment.
- (ii) Case 2:

Where payment is only made for actual time on site and site allowances are paid separately:

- 2, 0 times total cost of employment.
- (iii) Case 3:

Where payment is made for leave and non-working days and site allowances are paid separately:

- 1, 8 times total cost of employment.
- (b) for part time monitoring staff costs, the amount payable to such staff at the hourly rates contemplated in clause 3.4(3); and
- (15) For all other costs, as set out in clause 3.5, the actual expenses incurred, multiplied by 1,
- (16) For duties under the Occupational Health and Safety Act, 1993 (Act No.85 of 1993), as contemplated in clause 2.2.3, the **consulting engineer** shall, if so appointed by the **client**, be remunerated on a time and cost basis as agreed with the **client**.
- (17) For **services** as lead **consulting engineer**, as contemplated in clause 2.2.5, the lead **consulting engineer** is entitled to an additional fee of 10 percent (10%) of the total fees payable for the **services**.
- (18) For services as principal agent of the **client**, as contemplated in clause 2.2.6, the **consulting engineer** is entitled to an additional fee calculated at one percentage point (1%) of the total **cost of the works** comprising the **project**. The **consulting engineer** is not entitled to any fees for principal agent if he is not explicitly appointed as such.
- (19) For engineering management services, as contemplated in clause 2.2.7, the **consulting engineer** shall be remunerated as follows:
 - (a) The basic fee for services in the discipline of engineering management services, including work pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project.

Cost of the Works		Basis of Fee Calculation						
For projects up to R 590 000		A Lump Sum or on a Time Basis						
	re the he works:			Drimana Fas	Daimon, Foo	Dimens For	Nimon Fa	
Exceeds	But does not exceed	Primary Fee	Secondary fee					
R 590,000	R 950,000	R 26,550	4,5% on the balance over	R 590,000				
R 950,000	R 5,700,000	R 42,750	3,5% on the balance over	R 950,000				
R 5,700,000	R 21,400,000	R 209,000	2,5% on the balance over	R 5,700,000				
R 21,400,000		R 601,500	1,5% on the balance over	R 21,400,000				

(b) For **normal services** relating to a description of the **works** mentioned in the first column of the following table, the proportion of the basic fee relating to the specific calculated in terms of clause 3.3(8)(a) is multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will be the product of the factors involved, except for the fee for targeted procurement.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Factor by which basic fee is multiplied
Multi-tenant installations	1,25
Alterations to existing works (Only applicable to the fees on the portion or section of works affected)	1,25
Targeted procurement (Additional fee based on the basic fees before the application of any of the other factors)	0,07

(c) The following table shall be used for proportioning the basic fee over the various **stages** of the **services**:

Stage of Services	Percentage points for each stage
Concept and design development	25
Design, documentation and tender	35
Construction	35
Completion of all engineering management services	5

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3.4 Time Based Fees

(1) (a) Time based fees are all-inclusive fees, including allowances for overhead charges incurred by the **consulting engineer** as part of normal business operations, including the cost of management, as well as payments to administrative, clerical and secretarial staff used to support professional and technical staff in general and not on a specific project only.

- (b) Time based fees are calculated by multiplying the hourly rate contemplated in clause 3.4(3), which is applicable to the **consulting engineer** or any other technical staff employed by the **consulting engineer**, with the actual time spent by such technical staff in rendering the **services** required by the **client**.
- (c) Technical staff include all staff performing work directly related to the execution of the **services** the **consulting engineer** is engaged for by the **client** and excludes all administrative, clerical and secretarial staff used to support professional and technical staff in general and not on a specific project only, but includes the typing of letters, minutes, reports and documents for **projects**.
- (2) To determine the time based fee rates the persons concerned are divided into:-
 - (a) <u>Category A</u>, in respect of a private consulting practice in engineering, shall mean a top practitioner whose expertise and relevant experience is nationally or internationally recognized and who provides advice at a level of specialization where such advice is recognized as that of an expert.
 - (b) <u>Category B</u>, in respect of a private consulting practice in engineering, shall mean a partner, a sole proprietor, a director, or a member who, jointly or severally with other partners, co-directors or co-members, bears the risks of the business, takes full responsibility for the liabilities of such practice, where level of expertise and relevant experience is commensurate with the position performs work of a conceptual nature in engineering design and development, provides strategic guidance in planning and executing a project and/or carries responsibility for quality management pertaining to a project.
 - (c) <u>Category C,</u> in respect of a private consulting practice in engineering, shall mean all salaried professional staff with adequate expertise and relevant experience performing work of an engineering nature and who carry the direct technical responsibility for one or more specific activities related to a project. A person referred to in Category B may also fall in this category if such person performs work of an engineering nature at this level.
 - (d) <u>Category D</u>, in respect of a private consulting practice in engineering, shall mean all other salaried technical staff with adequate expertise and relevant experience performing work of an engineering nature with direction and control provided by any person contemplated in categories A, B or C.
- (3) The time based fee rates are:-
 - (a) Calculated for a person in category-
 - (i) A and B at 22, 00 cents per hour;
 - (ii) C at 17, 5 cents per hour; and
 - (iii) D at 16, 5 cents per hour,

for each R100 or part thereof of the **total annual cost of employment** of the person concerned, as contemplated in sub-clause (4); **or**

(b) based on such indicative time based fee rates as are determined from time to time by the Engineering Council of South Africa after consultation with service providers and service users: Provided that in all cases the **client** and **consulting engineer** may agree on a more appropriate fee to take account of the specific **services** to be rendered or expertise to be applied. i ago I c

- (4) For the purposes of clause 3.4(3)(a), the total annual cost of employment of a person contemplated in clause 3.4(2) means the total amount borne by an employer in respect of the employment of such a person per year, calculated at the amounts applicable to such a person at the time when the services are rendered, including
 - (a) Basic salary or a nominal market related salary, excluding profit share and asset growth;
 - (b) Fringe benefits not reflected in the basic salary, including:
 - (i) Normal annual bonus;
 - (ii) Employer's contribution to medical aid;
 - (iii) Group life insurance premiums borne by the employer;
 - (i) Employer's contribution to a pension or provident fund; and
 - (v) All other benefits or allowances payable in terms of a letter of appointment, including any transportation allowance or company vehicle benefit, telephone and/or computer allowances, etc; and
 - (c) Amounts payable in terms of an Act, including:
 - (i) Contributions to the Compensation Fund in terms of the Compensation for Occupational Injuries and Diseases Act;
 - (ii) Contributions to unemployment insurance in terms of the Unemployment Insurance Fund Act;
 - (iii) Levies in terms of the Skills Development Levy Act, and
 - (iv) Recoverable levies to all spheres of government.

3.5 Expenses and Costs

- (1) Subject to clause 3.3(4) a **consulting engineer** shall recover from the **client**:
 - (a) All expenses actually incurred by the **consulting engineer** and members of the **consulting engineer's** staff in rendering their services; and
 - (b) All other costs incurred on behalf of and with approval of the **client**, plus a markup of 10 per cent.
- (2) Recoverable expenses include:
 - (a) Travelling expenses for the conveyance of the **consulting engineer** or a member of the **consulting engineer**'s staff by means of:
 - (i) private motor transport, including any parking charges, toll fees and related expenses;
 - (ii) a scheduled airline or a train, bus, taxi or hired car; or
 - (iii) non-scheduled or privately owned air transport.
 - (b) Travelling time on the basis of the rate set out in clause 3.4, for all time spent in travelling by the **consulting engineer** or members of his staff shall be as follows:
 - (i) when fees are paid on a time basis, all hours spent on travelling are reimbursable.
 - (ii) when fees are paid on a percentage basis, reimbursement for travelling time shall be for all time spent in travelling minus the first hour per return journey.
 - (c) Accommodation and subsistence expenses incurred by the **consulting engineer** or a member of his staff:

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- (d) Agreed costs of typing, production, copying and binding of contract documents, pre-qualification documents, feasibility reports, preliminary design reports, final reports and manuals, excluding general correspondence, minor reports, contractual reports, progress reports, etc.
- (e) Expenses on special reproductions, copying, printing, artwork, binding and photography, etc. requested by the **client**.
- (f) Alternatively, a lump sum or percentage of the **cost of the works** may be determined and agreed between the **consulting engineer** and the **client** to cater for all or any of the above.
- (3) Costs that shall be recovered under clause 3.5(1) (b) include, but are not limited to:
 - (a) Site traffic surveys;
 - (b) Geotechnical investigations;
 - (c) Laboratory testing;
 - (d) Topographical and land surveys;
 - (e) Supply of specific equipment;
 - (f) Specialist sub-consultants;
 - (g) Environmental investigations and studies; and
 - (h) Land acquisitions, expropriation, way leaves, and servitudes.