

The South African Council for the Project and Construction Management Professions

CONSTRUCTION PROJECT MANAGER

IDENTIFICATION OF WORK AND SCOPE OF SERVICES FOR CONSTRUCTION PROJECT MANAGERS REGISTERED IN TERMS OF THE PROJECT AND CONSTRUCTION MANAGEMENT PROFESSIONS ACT NO. 48 OF 2000

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1.0 INTRODUCTION

The following are detailed descriptions of standard services (activities and functions) inherent in delivering professional **Construction Project Management (CPM)** services. In essence, this document defines the work set aside for persons registered as Construction Project Managers (Pr. CPM) in terms of section 26 of the Act, 48 of 2000. The standard services described in this document have been drafted to follow the identified generic Project Stages in a typical project.

2.0 **DEFINITIONS**

"Built Environment" refers to the functional area in which registered persons practice. The Built Environment includes all structures that are planned and/or erected above or underground, as well as the land utilized for the purpose and supporting infrastructure.

"Construction Management" is the management of the *physical construction process* within the built environment and includes the co-ordination, administration, and management of resources. The Construction Manager is the one point of responsibility in this regard.

"Construction Project Management" is the management of projects within the built environment from conception to completion, including management of related professional services. The Construction Project Manager is the one point of responsibility in this regard.

"Project" means the total development envisaged by the client, including the professional services.

"Works" means all work executed or intended to be executed in accordance with the construction contracts.

'Principal Agent" means the person or entity appointed by the client and who has full authority and obligation to act in terms of the construction contracts.

"Principal Consultant" means the person or entity appointed by the client to manage and administer the services of all other consultants.

"Cost Consultant" means the person or entity appointed by the client to establish and agree all budgets, and implement and manage the necessary cost control on the project.

"Contractor" means any person or legal entity entering into contract with the client for the execution of the **works** or part thereof.

"Nominated Subcontractors" are specialist and other subcontractor executing work or supplying and fixing any goods who may be nominated by the Principal Consultant.

"Selected Subcontractors" are specialist and other subcontractor executing work or supplying and fixing any goods and who are selected by the contractor in consultation with the Principal Consultant.

"Domestic Subcontractors" are specialist and other subcontractor executing work or supplying and fixing any goods and who are selected by the contractor.

"Direct Contractors" are contractors appointed by the client to execute work other than the works.

"Suppliers" mean a person or entity appointed by the client to supply goods and products for incorporating into the project.

"Construction Programme" is the programme for the works indicating the logic sequence and duration of all activities to be completed by the contractors, subcontractors, and suppliers in appropriate detail for the monitoring of progress on the works.

- **"Contract programme"** is the construction programme for the works agreed between the contractor and the Principal Agent.
- **"Procurement Programme"** is the programme indicating the timeous purchasing requirements for the project, including but not limited to the services of consultants, contractors, subcontractors, and suppliers required for the execution of the project programme.
- **"Project Initiation programme"** is the programme devised by the Principal Consultant in consultation with the client and other consultants for all the work necessary to be completed prior to commencement of work by the contractors.
- **"Documentation programme"** is schedule prepared by the Principal Consultant and agreed to by other consultants indicating the timeous provision of all necessary design documentation required by the contractors and subcontractors for the construction of the works.
- **"The South African Council for the Project and construction Management Professions'** means the South African Council for the Project and Construction Management Professions established by section 2 of the Project and Construction Management Professions Act, 2000 (Act No. 48 of 2000), and **"SACPCMP"** has the same meaning.
- **"Project and Construction Management Professions Act"** means the Project and Construction Management Professions Act, 2000 (Act No. 48 of 2000).
- "Construction Project Management Work" means the work identified under section 4 of this document
- **"Construction Management Work"** means the work identified under section 4 of the Identification of work document for Construction Managers
- **"Improper Conduct"** as contemplated in section 27(3) of the Project and Construction Management Professions Act, means failure to comply with the code of conduct for registered persons.
- **"Public"** means any person or group of persons who is, or whose environment is, either directly or indirectly affected by any project and construction management activity, or by a product, outcome or influence of a project and construction management activity, which may impact on the health, safety and interest of such person or group of persons.
- **"Substantially Practise"** means regularly and consistently carry out project and construction management work identified in section 4 of this document, and charging professional fee for such work and accruing professional responsibility to a client or an employer for the performance of such functions.

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'The Council" means the Council for the Built Environment established under section 2 of the Council for the Built Environment Act, 200 (Act No 43 of 2000)

3.0 GENERAL PREAMBLES

3.1. Nature and Type of Projects

The nature and type of projects to be implemented in terms of the identification of work shall be all construction work within the built environment.

3.2. Application of the Provisions of this Document

The provisions of this document shall be applicable in respect of :-

- .1 Any project and construction management work performed within the borders of the Republic of South Africa (RSA), whether or not the intended outcome of such work is be executed outside the RSA.
- .2 Any person who is not ordinarily resident in the Republic of South Africa, but who performs project and construction management work within the RSA.

3.3. Project Work Stages

The following Project Work Stages have been identified for typical construction projects:

PROJECT STAGES	DESCRIPTION		
1	Project Initiation and Briefing		
2	Concept and Feasibility		
3	Design Development		
4	Tender Documentation and Procurement		
5	Construction Documentation and Management		
6	Project Close Out		

3.4. General Notes

- .1 As these stages might overlap, the Standard Services stated hereunder may be required to be undertaken during any one of the Project Work Stages
- .2 The order of the Standard Services does not necessarily reflect the actual sequence of implementation

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4.0 CONSTRUCTION PROJECT MANAGEMENT WORK

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STANDARD SERVICES

Construction Project Managers shall perform the following standard services under the following stages:

1.0 STAGE 1 - PROJECT INITIATION AND BRIEFING

Definition

Agreeing client requirements and preferences, assessing user needs and options, appointment of necessary consultants in establishing project brief, objectives, priorities, constraints, assumptions and strategies in consultation with the client.

Standard Services

- 1.1. Facilitate the development of a Clear Project Brief
- 1.2. Establish the client's procurement policy for the project
- 1.3. Assist the client in the procurement of the necessary and appropriate consultants including the clear definition of their roles, responsibilities and liabilities.
- 1.4. Establish in conjunction with the client, consultants, and all relevant authorities the site characteristics necessary for the proper design and approval of the intended project
- 1.5. Manage the integration of the preliminary design to form the basis for the initial viability assessment of the project
- 1.6. Prepare, co-ordinate and monitor a Project Initiation Programme

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- 1.7. Facilitate the preparation of the Preliminary Viability Assessment of the project
- 1.8. Facilitate client approval of all Stage 1 documentation

Project Management Deliverables

- Project Brief
- Project Procurement Policy
- Signed Consultant/Client Agreements
- Project Initiation Programme
- Record of all meetings
- Approval by Client to proceed to Stage 2

2.0 STAGE 2 - CONCEPT AND FEASIBILITY

Definition

Finalization of the project concept and feasibility

Standard Services

- 2.1. Assist the client in the procurement of the necessary and appropriate consultants including the clear definition of their roles, responsibilities and liabilities.
- 2.2. Advise the client on the requirement to appoint a Health and Safety Consultant
- 2.3. Communicate the project brief to the consultants and monitor the development of the Concept and Feasibility within the agreed brief
- 2.4. Co-ordinate and integrate the income stream requirements of the client into the concept design and feasibility
- 2.5. Agree the format and procedures for cost control and reporting by the cost consultants on the project.
- 2.6. Manage and monitor the preparation of the project costing by other consultants
- 2.7. Prepare and co-ordinate an Indicative Project Documentation and Construction Programme
- 2.8. Manage and integrate the concept and feasibility documentation for presentation to the client for approval
- 2.9. Facilitate client approval of all Stage 2 documentation

Deliverables

- Signed Consultant/Client Agreements
- Indicative Project Documentation and Construction Programme.
- Approval by Client to proceed to Stage 3

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3.0 STAGE 3 - DESIGN DEVELOPMENT

Definition

Manage, co-ordinate and integrate the detail design development process within the project scope, time, cost and quality parameters.

Standard Services

- 3.1. Assist the client in the procurement of the balance of the consultants including the clear definition of their roles, responsibilities and liabilities.
- 3.2. Establish and co-ordinate the formal and informal communication structure, processes and procedures for the design development of the project.
- 3.3. Prepare, co-ordinate and agree a detailed Design and Documentation Programme, based on an updated Indicative Construction Programme, with all consultants
- 3.4. Manage, co-ordinate and integrate the design by the consultants in a sequence to suit the project design, documentation programme and quality requirements.
- 3.5. Conduct and record the appropriate planning, co-ordination and management meetings
- 3.6. Facilitate any input from the design consultants required by Construction Manager on constructability.
- 3.7. Facilitate any input from the design Consultants required by Health and Safety consultant
- 3.8. Manage and monitor the timeous submission by the design team of all plans and documentation to obtain the necessary statutory approvals
- 3.9. Establish responsibilities and monitor the information flow between the design team, including the cost consultants.
- 3.10. Monitor the preparation by the cost consultants of cost estimates, budgets, and cost reports

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- 3.11. Monitor the cost control by the cost consultants to verify progressive design compliance with approved budget, including necessary design reviews to achieve budget compliance
- 3.12. Facilitate and monitor the timeous technical co-ordination of the design by the design team
- 3.13. Facilitate client approval of all Stage 3 documentation

Deliverables

- Signed Consultant/Client Agreements
- Detailed Design & Documentation Programme
- Updated Indicative Construction Programme
- Record of all meetings
- Approval by Client to proceed to Stage 4

4.0 STAGE 4 - TENDER DOCUMENTATION AND PROCUREMENT

Definition

The process of establishing and implementing procurement strategies and procedures, including the preparation of necessary documentation, for effective and timeous execution of the project.

Standard Services

- 4.1. Select, recommend and agree the procurement strategy for contractors, subcontractors and suppliers with the client and consultants
- 4.2. Prepare and agree the Project Procurement Programme.
- 4.3. Co-ordinate and monitor the preparation of the tender documentation by the consultants in accordance with the Project Procurement Programme.
- 4.4. Facilitate and monitor the preparation by the Health and Safety Consultant of the Health and Safety Specification for the project
- 4.5. Manage the tender process in accordance with agreed procedures, including calling for tenders, adjudication of tenders, and recommendation of appropriate contractors for approval by the client.
- 4.6. Advice the client, in conjunction with other consultants on the appropriate insurances required for the implementation of the project.
- 4.7. Monitor the reconciliation by the cost consultants of the tender prices with the project budget
- 4.8. Agree the format and procedures for monitoring and control by the cost consultants of the cost of the works.
- 4.9. Facilitate client approval of the tender recommendation(s).

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Deliverables

- Contractors, subcontractors, and suppliers Procurement Strategy
- Project Procurement Programme
- Project Tender/Contract Conditions
- Record of all meetings
- Approval by Client of tender recommendation(s).

5.0 STAGE 5 - CONSTRUCTION DOCUMENTION AND MANAGEMENT

Definition

The management and administration of the construction contracts and processes, including the preparation and co-ordination of the necessary documentation to facilitate effective execution of the works.

Standard Services

- 5.1. Appoint contractor(s) on behalf of the client including the finalization of all agreements.
- 5.2. Instruct the contractor on behalf of the client to appoint subcontractors.
- 5.3. Receive, co-ordinate, review and obtain approval of all contract documentation provided by the contractor, subcontractors, and suppliers for compliance with all of the contract requirements.
- 5.4. Monitor the ongoing projects insurance requirements.
- 5.5. Facilitate the handover of the site to the contractor.
- 5.6. Establish and co-ordinate the formal and informal communication structure and procedures for the construction process.
- 5.7. Regularly conduct and record the necessary site meetings
- 5.8. Monitor, review and approve the preparation of the Contract Programme by the contractor.
- 5.9. Regularly monitor the performance of the contractor against the Contract Programme.
- 5.10. Review and adjudicate circumstances and entitlements that may arise from any changes required to the Contract Programme.

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- 5.11. Monitor the preparation of the contractor's Health and Safety Plan and approval thereof by the Health and Safety Consultant.
- 5.12. Monitor the auditing of the Contractors' Health and Safety Plan by the Health and Safety Consultant.
- 5.13. Monitor the compliance by the contractors of the requirements of the Health and Safety Consultant.
- 5.14. Monitor the production of the Health and Safety File by the Health and Safety Consultant and contractors
- 5.15. Monitor the preparation by the Environmental Consultants of the Environmental Management Plan
- 5.16. Establish the construction information distribution procedures.
- 5.17. Agree and monitor the Construction Documentation Schedule for timeous delivery of required information to the contractors.
- 5.18. Expedite, review and monitor the timeous issue of construction information to the contractors.
- 5.19. Manage the review and approval of all necessary shop details and product propriety information by the design consultants.
- 5.20. Establish procedures for monitoring, controlling and agreeing all scope and cost variations.
- 5.21. Agree the quality assurance procedures and monitor the implementation thereof by the consultants and contractors.
- 5.22. Monitor, review, approve and certify monthly progress payments.
- 5.23. Receive, review and adjudicate any contractual claims.
- 5.24. Monitor the preparation the preparation of monthly cost reports by the cost consultants.
- 5.25. Monitor long lead items and off-site production by the contractors and suppliers.
- 5.26. Prepare monthly project reports including submission to the client
- 5.27. Manage, co-ordinate and monitor all necessary testing and commissioning by consultants and contractors.
- 5.28. Co-ordinate, monitor and issue the Practical Completion Lists and the Certificate of Practical Completion.
- 5.29. Co-ordinate and monitor the preparation and issue of the Works Completion List by the consultants to the contractors.
- 5.30. Monitor the execution by the contractors of the defect items to achieve Works Completion.
- 5.31. Facilitate and co-ordinate adequate access with the occupant for the rectification of defects by the contractors

Deliverables

Signed Contractor(s) Agreements

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- Agreed Contract Programme
- Adjudication and award of contractual claims
- Construction Documentation Schedule
- Monthly progress payment certificates
- Monthly project progress reports.
- Record of all meetings
- Certificates of Practical Completion.

6.0 STAGE 6 - PROJECT CLOSE OUT

Definition

The process of managing and administering the project closeout, including preparation and co-ordination of the necessary documentation to facilitate the effective operation of the project

Standard Services

- 6.1. Issue the Works Completion Certificate
- 6.2. Manage, co-ordinate and expedite the preparation by the design consultants of all as-built drawings and design documentation.
- 6.3. Manage and expedite the procurement of all operating and maintenance manuals as well as all warrantees and guarantees.
- 6.4. Manage and expedite the procurement of all statutory compliance certificates and documentation.
- 6.5. Manage the finalization of the Health and Safety File for submission to the Client.
- 6.6. Co-ordinate, monitor and manage the rectification of defects during the Defects Liability Period.
- 6.7. Manage, co-ordinate and expedite the preparation and agreement of the final account by the cost consultants with the relevant contractors.
- 6.8. Co-ordinate, monitor and issue the Final Completion Defects list and Certificate of Final Completion.
- 6.9. Prepare and present Project Closeout Report.

Deliverables

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- Works Completion Certificate
- Certificate of Final Completion
- Record of all meetings
- Project closeout report

SUPPLEMENTARY SERVICES

1.0 **DEVELOPMENT MANAGEMENT SERVICES**

The Project Construction Manager may by prior mutual consent provide the following supplementary services. This will require agreement of both the Client and Project Construction Manager on the adjustment of the fees and disbursements.

Definition: Development management

- 1.1. Facilitate the opportunity realisation process
- 1.2. Procuring of land and finance
- 1.3. Procuring of tenants, tenant co-ordination and tenant installations.
- 1.4. Drafting of appointment contracts for other members of the professional team.
- 1.5. Project management services in relation to direct contractors engaged by the client. Such as those engaged for furniture, fittings and equipment
- 1.6. Mediation, arbitration proceedings and similar services. Such services will commence upon the notification of a dispute or the initiation of such proceedings.
- 1.7. All work arising out of the failure of any consultant contractors, suppliers or other external party to perform its obligations.
- 1.8. Services required in respect of damage to or destruction of the works, insurance matters, postponement or cancellation of agreements.
- 1.9. Additional services resulting form changes by the client to previously issued instructions.
- 1.10. Any other services not specifically incorporated in the identified scope of services mentioned in this document.

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5.0 MINIMUM COMPETENCIES REQUIRED

The minimum competencies required for the effective execution of the identified for the Construction Project Manager are noted below;

5.1. Technical Competencies

- .1 Knowledge of Construction Science
 - i. Understanding Structures
 - ii. Understanding Construction and Building Sciences
 - iii. Understanding Construction and Building Finishes
 - iv. Knowledge of Building Materials
- .2 Knowledge of Construction Science
 - i. Site, Plant and Equipment
 - ii. Formwork Systems
 - iii. Quality Management
 - iv. Health and Safety Management
 - v. Environmental Management
 - vi. Organisational / Management Structures
 - vii. General Building Sequences
 - viii. General Output and Production Factors
 - ix. Basic Knowledge of Building Trades
- .3 Knowledge of the Design Processes

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- i. Sequence of Design Processes
- ii. Time Required for Design Processes
- .4 Knowledge of Financial and Cost Factors
 - Financial Processes
 - ii. Cost of Construction

5.2. Project Management Competences

- .1 As Principal Consultants the CPM should have the Knowledge and Ability to:
 - i. Facilitate the development of a Clear Brief
 - ii. Clearly Define the Roles and Responsibilities of the Consulting Team
 - iii. Prepare Letters of Appointment for Consulting Team for the procurement of Consulting Team.
 - iv. Establish and implement Time Management Processes on Projects with respect to and not limited to the following;
 - Prepare, Co-ordinate and Monitor a Project Initiation Programme
 - Prepare Indicative Construction Programme
 - Prepare Documentation Programme/Schedule
 - Prepare Procurement Programme/Schedule
 - Agreed Contract Programme
 - Co-ordinate Documentation Programme with Contract Programme
 - v. Establish and recommend Professional Indemnity requirements
 - vi. Monitor and co-ordinate quality management of the design processes
 - vii. Establish and implement Communication Management Processes including the preparation of agenda, chairing and preparing minutes of all necessary meetings on the project.
 - viii. Co-ordinate and monitor cost control by the Cost Consultant
 - ix. Co-ordinate and monitor the preparation of Procurement documentation
 - x. Facilitate and Monitor the preparation of the Health and Safety specifications
 - xi. Facilitate the preparation of all conditions of contracts
 - xii. Manage the pre-qualification, tendering, adjudication, recommendation and appointment processes
- .2 As Principal Agent the CPM should have :-

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- i. The ability to take responsibility for and perform the role of Principal Agent on construction contracts.
- ii. Knowledge and understanding of the Basic Principles of Law of Contracts
- iii. Knowledge and understanding of Construction Contracts.
- iv. The ability to build good relationships (Partnering) between client, consulting and construction teams.
- v. The ability to establish and implement Time Management Processes on contracts with respect to and not limited to the following;
 - Agree and monitor contract programme and working programmes.
 - Monitor and review construction progress and programme updates.
- vi. The ability to establish and implement Quality Management Processes on contracts including quality control by the consulting and contracting teams.
- vii. The ability to establish and implement Cost Management Processes on contracts including the issuing, costing and implementation of site instructions and variations.
- viii. The ability to co-ordinate and monitor interface between all contractors.
- ix. The ability to facilitate and monitor implementation of Health and Safety plan.
- x. The ability to facilitate and co-ordinate the production of the Health and Safety File.
- xi. The ability to manage, resolve and certify progress and contractual claims.
- xii. The ability to co-ordinate and monitor completion and handover processes including and not limited to;
 - Oversee and co-ordinate preparation and issue of defects lists.
 - Monitor implementation of remedial work by contractors
 - Oversee and facilitate the agreement of final accounts
 - Expedite and co-ordinate project close out

6.0 PROVISIONS OF THE PROJECT AND CONSTRUCTION MANAGEMENT PROFESSIONS ACT

- 6.1. Compliance with the Project and Construction management Professions Act, 2000
 - .1 Section 18(2) states that a person may not practise in any of the registration categories unless he or she is registered in that category.
 - .2 Section 18(3) states that a person who is registered in the category of candidate must perform work in the project and construction management professions only under the supervision and control of a professional of a category as prescribed.

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.3 Section 26(3)(a) states that a person who is not registered in terms of this Act, may not perform any kind of work identified for any category of registered persons, however section 26(4) states clearly that this may not be construed as prohibiting any person from performing work identified in terms of section 26, if such work is performed in the service of or by order of and under the direction, control, supervision of or in association with a registered person entitled to perform the work identified and who must assume responsibility for any work so performed.

6.2. Improper Conduct

Section 27(3) states that all registered persons must comply with the code of conduct and failure to do so constitutes improper conduct.

7.0 OVERLAPS WITH OTHER COUNCILS

Section 26(1) of the Project and Construction Management Professions Act states that the identification of the type of project and construction management work which may be performed by persons registered in any of the categories referred to in section 18, should include work which may fall within the scope of any other profession regulated by the professions' Act referred to in the Council for the Built Environment Act, 2000. It therefore presuppose that there may be overlaps between the professions registered under the various Built Environment Councils.

The CBE Policy Framework on Identification of Work recognises these potential overlaps and suggests that the issue of overlaps be resolved by the professions. It is the view of the SACPCMP that any person who *substantially practises* project and construction management work should register with the SACPCMP.

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