



The South African Council for the Project and Construction Management Professions

CONSTRUCTION MANAGER

**IDENTIFICATION OF WORK AND SCOPE OF SERVICES FOR
CONSTRUCTION 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 Management (CM)** services. In essence, this document defines the work set aside for persons registered as Construction Managers (Pr. CM) 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 specialists and other subcontractors executing work or supplying and fixing any goods who may be nominated by the Principal Consultant.

“Selected Subcontractors” are specialists and other subcontractors executing work or supplying and fixing any goods and who are selected by the contractor in consultation with the Principal Consultant.

“Domestic Subcontractors” are specialists and other subcontractors 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 works.

“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 of 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 the Identification of Work document for Construction Project Managers

“Construction Management Work” means the work identified under section 4 of this document.

“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.

“The Council” means the Council for the Built Environment established under section 2 of the Council for the Built Environment Act, 2000 (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 to 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
- .3 Notwithstanding the Project Work Stage definitions, the timing of the Construction Manager’s involvement will depend on the Client’s Procurement Strategy

4.0 CONSTRUCTION MANAGEMENT WORK

IDENTIFICATION OF WORK FOR CONSTRUCTION MANAGERS

STANDARD SERVICES

Construction 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

N/A

2.0 STAGE 2 - CONCEPT AND FEASIBILITY

Definition

Finalization of the project concept and feasibility

Standard Services

N/A

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. Define and agree preliminary scope of construction works.
- 3.2. Prepare Preliminary Construction Programme
- 3.3. Provide the necessary lead times required to prepare a detailed Design and Documentation Programme.
- 3.4. Review and recommend practical and cost effective construction alternatives to consultants' designs.
- 3.5. Attend the appropriate planning, co-ordination and management meetings as required.
- 3.6. Review designs by consultants in relation to constructability requirements.
- 3.7. Review designs by consultants in relation to Health and Safety requirements during construction and provide input if required on related practical and cost issues.
- 3.8. Provide detailed cost information as required by the cost consultant for estimating, budgeting and cost reporting purposes.
- 3.9. Prepare and submit a proposed method statement for the construction of the works.

Deliverables

- Preliminary scope of construction works
- Preliminary Construction Programme
- Schedule of agreed lead times for construction documentation
- Proposed Construction Method Statement
- Approval by Principal Agent of above.

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. Review and confirm the Construction Strategy and method for submission of the Tender
- 4.2. Prepare the Construction Management Organogram and obtain commitment from appropriate staff as required.
- 4.3. Select, recommend and agree the procurement strategy for subcontractors and suppliers with the Principal Agent and consultants
- 4.4. Manage and co-ordinate the preparation and implementation of the Health and Safety requirements for inclusion in the tender
- 4.5. Manage and procure proposals for the appropriate contract insurances and guarantees required for the works.
- 4.6. Review tender documentation to establish any cost effective alternative solutions.
- 4.7. Manage the preparation and submission of the tender
- 4.8. Prepare and agree the Procurement Programme for subcontractors and suppliers
- 4.9. Agree list of subcontractors and suppliers with the Principal Agent
- 4.10. Manage the tender process in accordance with agreed procedures, including calling for tenders, adjudication of tenders, and recommendation of appropriate domestic subcontractors and suppliers.
- 4.11. Manage, co-ordinate and finalize negotiations on all contractual commitments.

Deliverables

- Construction Strategy and Method Statement
- Procurement Strategy for subcontractors and suppliers
- List of proposed subcontractors
- Schedule of Health and Safety requirements
- Contract Insurance and guarantee Proposals
- Construction Management Organogram
- The Tender

5.0 STAGE 5 - CONSTRUCTION DOCUMENTATION AND MANAGEMENT

Definition

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

Standard Services

- 5.1. Manage the preparation and agreement of the Health and Safety Plan with the Client's Health and Safety Consultants and subcontractors
- 5.2. Manage the site establishment including the provision of all necessary temporary services, storage facilities, security requirements and other site requirements
- 5.3. Establish and maintain regular monitoring of all line, level and datum of the works.
- 5.4. Continuously monitor the compliance by the site management of the Health and Safety Plan.
- 5.5. Provide the necessary documentation as required by the Health and Safety Consultant for the Health and Safety File.
- 5.6. Manage the implementation of the requirements of the Environmental Management Plan.
- 5.7. Appoint subcontractors and suppliers including the finalization of all agreements.
- 5.8. Receive, co-ordinate, review and obtain approval of all contract documentation provided by the subcontractors and suppliers for compliance with all of the contract requirements.
- 5.9. Monitor the ongoing projects insurance requirements.
- 5.10. Facilitate and manage the establishment of subcontractors on the site.
- 5.11. Finalize and agree the Quality Assurance Plan with the design consultants and subcontractors
- 5.12. Continuously monitor the compliance of the quality of the works in accordance with the agreed Quality Assurance Plan.
- 5.13. Establish and co-ordinate the formal and informal communication structure and procedures for the construction process
- 5.14. Regularly conduct and record the necessary construction management meetings including subcontractors, suppliers, programme, progress and cost meetings
- 5.15. Finalize and agree the contract programme and revisions thereof as necessary.
- 5.16. Prepare and finalize the detailed Construction Programme including resources planning
- 5.17. Prepare and agree Information Schedule for timeous implementation of construction.
- 5.18. Continuously manage the review of construction documentation and information for clarity of construction requirements.
- 5.19. Manage and administer the distribution of construction information to all relevant parties.
- 5.20. Continuously monitor the construction progress

- 5.21. Manage the review and approval of all necessary shop details and product proprietary information by the design subcontractors.
- 5.22. Review and substantiate circumstances and entitlements that may arise from any changes required to the Contract Programme
- 5.23. Establish procedures for, and monitor all scope and cost variations
- 5.24. Manage the preparation of monthly progress claims for payment
- 5.25. Receive, review and substantiate any contractual claims within the prescribed period
- 5.26. Regularly prepare and submit a Construction Status Report, including construction financial status report
- 5.27. Manage, co-ordinate and supervise all work on and off site.
- 5.28. Manage and co-ordinate the requirements of the direct contractors if required to do so.
- 5.29. Manage, co-ordinate and monitor all necessary testing and commissioning.
- 5.30. Co-ordinate, monitor and expedite the timeous rectification of all defects for the achievement of Practical Completion.

Deliverables

- Health and Safety Plan
- Site establishment Plan
- Signed Subcontract Agreements
- Quality Assurance Plan
- Construction Communication Organogram
- Record of Construction Meetings
- Agreed Contract Programme
- Agreed Construction Documentation Schedule
- Detailed Construction Programme including Resource Plan
- Design drawings, shop details and proprietary product information
- Monthly progress payment claims
- Construction Status Reports

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. Co-ordinate, monitor and expedite the timeous rectification of all defects for the achievement of Works Completion.
- 6.2. Manage, co-ordinate and expedite the preparation by the relevant subcontractors of all as-built drawings and construction documentation
- 6.3. Manage and expedite the procurement of all operating and maintenance manuals as well as all warranties and guarantees
- 6.4. Manage and expedite the procurement of applicable statutory compliance certificates and documentation
- 6.5. Manage the finalization of the Health and Safety File for submission to the Health and Safety Consultant.
- 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 accounts with the cost consultants and all subcontractors
- 6.8. Co-ordinate, monitor and expedite the timeous rectification of all defects for the achievement of Final Completion.
- 6.9. Prepare and present Contract Closeout Report

Deliverables

- Health and Safety File
- Contract Closeout Report

5.0 MINIMUM COMPETENCIES REQUIRED

The minimum competencies required for the effective execution of the Identified Work for the Construction 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 Processes
 - 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
 - i. Sequence of Design Processes
 - ii. Time Required for Design Processes
- .4 Knowledge of Financial and Cost Factors
 - i. Financial Processes
 - ii. Cost of Construction

5.2. **Project Management Competences**

- .1 Knowledge and understanding of the Basic Principles of Law of Contracts
- .2 Knowledge and understanding of Construction Contracts.
- .3 The ability to build good relationships (Partnering) between the consulting team and construction teams.
- .4 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.
- .5 The ability to establish and implement Quality Management Processes on contracts including quality control by the contracting teams.

- .6 The ability to establish and implement Cost Management Processes on contracts including the costing and implementation of site instructions and variations.
- .7 The ability to co-ordinate and monitor interface between all contractors and subcontractors.
- .8 The ability to facilitate and monitor implementation of Health and Safety plan.
- .9 The ability to facilitate and co-ordinate the production of the Health and Safety File.
- .10 The ability to manage the preparation and submission of progress and contractual claims.
- .11 The ability to co-ordinate and monitor completion and handover processes including and not limited to;
 - Monitor implementation of remedial work by contractors and subcontractors
 - Facilitate the agreement of final accounts
 - Expedite and co-ordinate contract 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.
- .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 presupposes 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.