

## INTRODUCTION

The following model *'The Deacon Procurement, Design and H&S Model'* is from my PhD in Construction Management entitled: The Effect of the Integration of Design, Procurement, and Construction Relative to Health and Safety (H&S), submitted in 2016 to the Nelson Mandela Metropolitan University (NMMU). The full thesis can be found on [www.achasm.co.za](http://www.achasm.co.za) under 'Publications'.

The guidelines are a broad guideline for Built Environment Professionals (BEPs) and clients, and cross reference the health and safety (H&S) roles among stakeholders as currently published in each Councils Identity of Work (IDoW), the roles as identified in the Construction Regulations (CRs), 2014, across the 6 stages of work. The table outlines the role of each of the H&S categories, as defined by the South African Council for the Construction and Project Management Professionals (SACPCMP) Act 48 of 2000 Section 18 (1)(c).

The model does not replace the detailed duties as outlined in the CRs or Act 48 of 2000 guidelines gazetted for each of the registered categories.

I hope the information is of interest and will serve to guide the practice of H&S on projects.

**Claire Deacon PhD Construction Management**

**Pr. CHSA 010/2013**

### The 'Deacon Procurement, Design and H&S Model'.

Construction Health and Safety Interventions / Construction Stages					
1	2	3	4	5	6
Project Initiation and Briefing	Concept and Feasibility	Design Development	Tender Documentation and Procurement	Construction Documentation and Management	Project Close Out
Each item should be considered as a trigger or 'gateway' in terms of the IDMS, in that the following stage does not proceed without the appropriate items relative to legal compliance and H&S being met. Stakeholders (all) includes the client, and designers (BEPs'); CWP					
Key Activities per Stage and Stakeholder					
<b>Client:</b> <ul style="list-style-type: none"> <li>• Appoint the CHSA, and</li> <li>• Provide financial resources for the project.</li> </ul>	<b>All Stakeholders:</b> <ul style="list-style-type: none"> <li>• Feasibility or value management;</li> <li>• Workshop the design aspects, and</li> <li>• Discuss O&amp;M from the design perspective e.g. how washing or replacing of windows will be done through the life cycle.</li> </ul>	<b>All Stakeholders:</b> <ul style="list-style-type: none"> <li>• Provide detailed designs for the project and ensure legal compliance to continue with construction, and</li> <li>• Selection of the procurement strategy and, including partner or contractor selection.</li> </ul>	<b>All Stakeholders:</b> <ul style="list-style-type: none"> <li>• Ensure inclusion of the CHSA as part of the technical SCM committees, and</li> <li>• Ensure contractors are adequately resourced and competent, and</li> <li>• Ensure that all contract documentation is complete and provides adequate information to the contractor.</li> </ul>	<b>All Stakeholders:</b> <ul style="list-style-type: none"> <li>• Ensure appropriate legal compliance through the project;</li> <li>• Stop any work placing workers at risk;</li> <li>• Ensure means of change management is included, and</li> <li>• Monitor and maintain records relating to contractors and communication to ensure compliance.</li> </ul>	<b>All Stakeholders:</b> <ul style="list-style-type: none"> <li>• Ensure legal compliance through the project;</li> <li>• Ensure monitoring and close out records are submitted, relating to contractors and communication to ensure compliance, and</li> <li>• Maintain performance reports.</li> </ul>

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Key Activities per Stage and Stakeholder					
<b>Designers:</b> <ul style="list-style-type: none"> <li>• Ensure financial resources for the project;</li> <li>• Identify communication channels, and</li> <li>• Use parameters set by the CHSA.</li> </ul>					

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Key Activities per Stage and Stakeholder					
<b>CHSA:</b> <ul style="list-style-type: none"> <li>Develop and maintain H&amp;S policies and project strategic objectives, and</li> <li>Develop a risk register: <ul style="list-style-type: none"> <li>Visit site to assess potential issues and risks;</li> <li>Develop Baseline Risk Assessment (BRA), and</li> <li>Develop project H&amp;S parameters for designers.</li> </ul> </li> </ul>	<b>CHSA:</b> <ul style="list-style-type: none"> <li>Include requirement for H&amp;S pre-qualification in the SCM process of tendering;</li> <li>Further development of the BRA;</li> <li>Advising on the investigations to be done (from a H&amp;S perspective), and</li> <li>Link BRA into designer project specific H&amp;S specification (DSSHSS).</li> </ul>	<b>CHSA:</b> <ul style="list-style-type: none"> <li>Include H&amp;S information in the project specifications and controls;</li> <li>H&amp;S pre-qualification in the SCM process of tendering (to reduce procurement time and potential contractor claims);</li> <li>Reduce the time for developing the SSHS plan in contractual documentation to 7 days (unless extenuating circumstances);</li> <li>Prepare BoQ against SSHSS for inclusion into the project specific H&amp;S plan;</li> <li>Finalise the SSHSS and BRA;</li> <li>Assess the requirements and include criteria for the pre-qualification and</li> </ul>	<b>CHSA:</b> <ul style="list-style-type: none"> <li>Support the client to limit liability with SCM;</li> <li>Assist with assessing competence and resources during tender adjudication and award, and</li> <li>Ensure adequate information for CWP application.</li> </ul>	<b>CHSA:</b> <ul style="list-style-type: none"> <li>Ensure aspects of change management is included;</li> <li>Stop any work placing workers at risk, and</li> <li>Ensure monitoring of all contractors and communication to ensure compliance.</li> </ul>	<b>CHSA:</b> <ul style="list-style-type: none"> <li>Ensure monitoring and close out records are submitted. relating to contractors and communication to ensure compliance.</li> <li>Reconcile hazards encountered with the BRA, SSHSS, and PSHSP; submit operational and maintenance (O&amp;M) information, consolidated H&amp;S information for maintenance.</li> </ul>

		pre-tender H&S plan.			
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Key Activities per Stage and Stakeholder					
		<ul style="list-style-type: none"> <li>• Ensure all the H&amp;S documentation is included in the tender documentation.</li> </ul>			
			<b>CHSO:</b> <ul style="list-style-type: none"> <li>• Prepare BoQ against SSHSS for inclusion into the SSHSP, and</li> <li>• Submit 'generic' H&amp;S plan with the tender (pre-tender).</li> </ul>	<b>CHSO:</b> <ul style="list-style-type: none"> <li>• Ensure monitoring of all contractors and communication to ensure compliance, and</li> <li>• Stop any work placing workers at risk.</li> </ul>	<b>CHSO:</b> <ul style="list-style-type: none"> <li>• Ensure monitoring and close out records are submitted relating to contractors, and</li> <li>• Communication to ensure compliance.</li> </ul>