

BASELINE RISK ASSESSMENT

Project	APPOINTMENT OF A PROFESSIONAL SERVICE PROVIDER TO UNDERTAKE PLANNING, DESIGN AND CONSTRUCTION SUPERVISION OF ROOFS AND ASBESTOS REPLACEMENT AT RK KHAN HOSPITAL	Evaluator Name	
Compiled By	Client Team	Signature	
Date of Assessment	02 March 2026	Responsible Manager	
		Signature	

PROBABILITY INDEX	5	Almost certain to inevitable	SEVERITY INDEX INJURY/DISEASE (I)	5	Fatal	SEVERITY INDEX PRODUCTION (P)	5	No production	SEVERITY INDEX ENVIRONMENT (E)	5	Permanent effects	SEVERITY INDEX COST (C)	5	> R500 000	FREQUENCY INDEX	5	Hazard permanently present
	4	Probable		4	Permanent to Slight Disability		4	Loss of 1 month or more production		4	Long term 2 years		4	R100 000 - R499 999		4	Hazard arises every week
	3	Improbable		3	14 Days with complete recovery		3	Loss of 1 week of production		3	Med - 6 months to 1 year		3	R10 000 - R99 999		3	Hazard arises every month
	2	Less than even chance		2	Medical attention 14 Days with complete recovery		2	Loss of 1 day's production		2	Short term - 1 day to 6 months		2	R1 000 - R9 999		2	Hazard arises every year
	1	High improbable		1	First aid only		1	Loss of 1 man shift		1	Insignificant effect		1	R0 - R999		1	Hazard arises every 5 years

PROBABILITY VALUE X SEVERITY VALUE X FREQUENCY VALUE / 125 = TOTAL SCORE (%)

Risk Value			PPE Requirement & Safety Signs															
A	80 - 100%	Very High Risk	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
B	60 - 79%	High Risk																
C	40 - 59%	Medium Risk																
D	20 - 39%	Lower Risk																
E	0 - 19%	Low Risk																

Item	Task / General Activities	Hazard Identified	Risks i.r.t the hazard	Severity Index										PPE	Signs	Corrective Action	Responsible Person & Time Frame		
				I	P	E	C	Tot	Assess Count	5 Points Each	Formula = points - 5*5	Probability Index	Frequency Index					Risk Score	Risk Value
1	Review of reports, drawings and condition assessments provided.	1. Incomplete or outdated building information 2. Incorrect interpretation of existing structural condition 3. Undocumented services in roof spaces 4. Hidden structural deterioration	1. Health & safety (I) 2. Cost (C) 3. Productivity (P) 4. Environment (E)	2				2	1	5	125	5	5	50	40%	N/A	N/A	1. Review all available reports, drawings, and asset registers. 2. Verify information through site inspections. 3. Identify information gaps and request additional data from the client. 4. Ensure design assumptions are documented.	PSP Design Team - Stage 1
				Total Average Risk Value										50%					
2	Site Inspection and Roof Condition Assessment of Existing Buildings	1. Working at heights during roof inspections 2. Fragile or deteriorated roof sheeting and tiles creating fall-through hazards 3. Structural instability of roof structures due to corrosion, rot or deterioration 4. Exposure to damaged electrical wiring or fittings affected by water leaks 5. Unsafe access to roof spaces or ceiling voids 6. Falling objects or materials during inspection activities 7. Exposure to dust, insulation materials or possible hazardous materials in roof spaces 8. Disturbance to hospital staff, patients or visitors during inspections	1. Health & safety (I) 2. Cost (C) 3. Productivity (P) 4. Environment (E)	4				4	1	5	125	5	5	100	80%	Hard hat, Safety boots, High visibility vest	Warning and restricted access signage to be displayed where inspection or construction activities are conducted.	1. Roof inspections to be conducted by competent persons trained to work at heights. 2. Fragile roof areas to be identified and clearly marked before inspection activities commence. 3. Safe access equipment such as ladders, scaffolding or mobile elevated work platforms to be used where required. 4. Electrical installations to be visually inspected by a competent electrician and isolated where necessary before inspection. 5. Inspectors to avoid stepping on unsupported roof sheets or tiles and to follow safe roof access procedures. 6. Establish exclusion zones below roof work areas to prevent injury from falling objects. 7. Inspectors to wear appropriate PPE including hard hats, safety shoes, gloves, eye protection and dust masks where required. 8. Inspection activities to be coordinated with hospital management to minimise disruption to patients and staff. 9. All identified hazards during inspections to be recorded and incorporated into the project Health and Safety Specification for the construction phase.	PSP Design Team Inspection Team
				Total Average Risk Value										65%					

3	Removal and disposal of asbestos containing materials from existing building components.	<p>1. Disturbance of asbestos containing materials during removal activities</p> <p>2. Exposure of workers or occupants to airborne asbestos fibres</p> <p>3. Contamination of surrounding areas during removal and handling</p> <p>4. Improper transport or disposal of asbestos waste</p>	<p>1. Health & safety (I)</p> <p>2. Cost (C)</p> <p>3. Productivity (P)</p> <p>4. Environment (E)</p>	<table border="1"> <tr><td>5</td><td></td><td>5</td><td>1</td><td>5</td><td>125</td><td>5</td><td>5</td><td>125</td><td>100%</td></tr> <tr><td></td><td>4</td><td>4</td><td>1</td><td>5</td><td>125</td><td>5</td><td>5</td><td>100</td><td>80%</td></tr> <tr><td></td><td></td><td>3</td><td>1</td><td>5</td><td>125</td><td>5</td><td>5</td><td>75</td><td>60%</td></tr> <tr><td></td><td></td><td>4</td><td>1</td><td>5</td><td>125</td><td>5</td><td>5</td><td>100</td><td>80%</td></tr> </table>	5		5	1	5	125	5	5	125	100%		4	4	1	5	125	5	5	100	80%			3	1	5	125	5	5	75	60%			4	1	5	125	5	5	100	80%	Total Average Risk Value	80%	Mandatory or as per requirement	Danger – Asbestos Work Area / Authorised Personnel Only signage to be displayed in accordance with the Asbestos Abatement Regulations, 2020.	<p>1. The presence, type and condition of asbestos containing materials must be identified and confirmed prior to removal activities by an Approved Inspection Authority (AIA) in accordance with the Asbestos Abatement Regulations, 2020 under the Occupational Health and Safety Act (Act 85 of 1993).</p> <p>2. Inspection, sampling, risk assessment and monitoring must be conducted by an Approved Inspection Authority (AIA) in accordance with the Asbestos Abatement Regulations, 2020.</p> <p>3. Asbestos removal must be carried out by approved asbestos abatement contractors using approved removal and containment procedures in accordance with the Asbestos Abatement Regulations, 2020 under the Occupational Health and Safety Act (Act 85 of 1993).</p> <p>4. Work areas must be isolated and access controlled to prevent exposure to workers, hospital staff and the public, and appropriate respiratory protective equipment and protective clothing must be used during removal activities in accordance with the Asbestos Abatement Regulations, 2020.</p> <p>5. All asbestos waste must be packaged, labelled, transported and disposed of at an approved hazardous waste disposal facility in accordance with the National Environmental Management: Waste Act and the Asbestos Abatement Regulations, 2020.</p> <p>6. Air monitoring and clearance certification must be conducted by the Approved Inspection Authority (AIA) prior to reoccupation of affected areas in accordance with the Asbestos Abatement Regulations, 2020.</p>	Principal Consultant / Approved Inspection Authority (AIA) Principal Contractor
5		5	1	5	125	5	5	125	100%																																									
	4	4	1	5	125	5	5	100	80%																																									
		3	1	5	125	5	5	75	60%																																									
		4	1	5	125	5	5	100	80%																																									
4	Replacement of corroded roof sheeting, roof tiles and associated roof components.	<p>1. Working at heights during roof removal and replacement activities</p> <p>2. Fragile or deteriorated roof sheeting and tiles creating fall-through hazards</p> <p>3. Structural instability of roof structures due to corrosion, rot or deterioration</p> <p>4. Exposure to damaged electrical wiring or fittings affected by water leaks</p> <p>5. Unsafe access to roof spaces or ceiling voids</p> <p>6. Falling objects or materials during inspection activities</p> <p>7. Exposure to dust, insulation materials or possible hazardous materials in roof spaces</p> <p>8. Disturbance to hospital staff, patients or visitors during inspections</p>	<p>1. Health & safety (I)</p> <p>2. Cost (C)</p> <p>3. Productivity (P)</p> <p>4. Environment (E)</p>	<table border="1"> <tr><td>5</td><td></td><td>5</td><td>1</td><td>5</td><td>125</td><td>5</td><td>5</td><td>125</td><td>100%</td></tr> <tr><td></td><td>4</td><td>4</td><td>1</td><td>5</td><td>125</td><td>5</td><td>5</td><td>100</td><td>80%</td></tr> <tr><td></td><td></td><td>3</td><td>1</td><td>5</td><td>125</td><td>5</td><td>5</td><td>75</td><td>60%</td></tr> <tr><td></td><td></td><td>2</td><td>1</td><td>5</td><td>125</td><td>5</td><td>5</td><td>50</td><td>40%</td></tr> </table>	5		5	1	5	125	5	5	125	100%		4	4	1	5	125	5	5	100	80%			3	1	5	125	5	5	75	60%			2	1	5	125	5	5	50	40%	Total Average Risk Value	70%	Mandatory or as per requirement	Warning and restricted access signage to be displayed where inspection or construction activities are conducted.	<p>1. Roof inspections to be conducted by competent persons trained to work at heights.</p> <p>2. Fragile roof areas to be identified and clearly marked before inspection activities commence.</p> <p>3. Safe access equipment such as ladders, scaffolding or mobile elevated work platforms to be used where required.</p> <p>4. Electrical installations to be visually inspected by a competent electrician and isolated where necessary before inspection.</p> <p>5. Inspectors to avoid stepping on unsupported roof sheets or tiles and to follow safe roof access procedures.</p> <p>6. Establish exclusion zones below roof work areas to prevent injury from falling objects.</p> <p>7. Inspectors to wear appropriate PPE including hard hats, safety shoes, gloves, eye protection and dust masks where required.</p> <p>8. Inspection activities to be coordinated with hospital management to minimise disruption to patients and staff.</p> <p>9. All identified hazards during inspections to be recorded and incorporated into the project Health and Safety Specification for the construction phase.</p>	Principal Consultant / Discipline Engineer / PSP Design Team (Principal Contractor during construction phase)
5		5	1	5	125	5	5	125	100%																																									
	4	4	1	5	125	5	5	100	80%																																									
		3	1	5	125	5	5	75	60%																																									
		2	1	5	125	5	5	50	40%																																									
5	Design and specification for the replacement of rainwater gutters, downpipes, fascia boards and bargeboards.	<p>1. Working at heights during installation and replacement activities</p> <p>2. Falling from ladders, scaffolding or roof edges</p> <p>3. Falling tools or materials striking persons below</p> <p>4. Manual handling of guttering and fascia materials</p> <p>5. Sharp edges on metal gutters causing cuts or injuries</p> <p>6. Poor installation leading to water drainage failures and structural damage</p> <p>7. Adverse weather conditions affecting work at height</p>	<p>1. Health & safety (I)</p> <p>2. Cost (C)</p> <p>3. Productivity (P)</p> <p>4. Environment (E)</p>	<table border="1"> <tr><td>4</td><td></td><td>4</td><td>1</td><td>5</td><td>125</td><td>5</td><td>5</td><td>100</td><td>80%</td></tr> <tr><td></td><td></td><td>3</td><td>1</td><td>5</td><td>125</td><td>5</td><td>5</td><td>75</td><td>60%</td></tr> <tr><td></td><td></td><td>3</td><td>1</td><td>5</td><td>125</td><td>5</td><td>5</td><td>75</td><td>60%</td></tr> <tr><td></td><td></td><td>2</td><td>1</td><td>5</td><td>125</td><td>5</td><td>5</td><td>50</td><td>40%</td></tr> </table>	4		4	1	5	125	5	5	100	80%			3	1	5	125	5	5	75	60%			3	1	5	125	5	5	75	60%			2	1	5	125	5	5	50	40%	Total Average Risk Value	60%	Mandatory or as per requirement	Warning and restricted access signage to be displayed where inspection or construction activities are conducted.	<p>1. Work at heights to comply with Construction Regulations and fall protection requirements.</p> <p>2. Safe access equipment such as ladders, scaffolding or mobile elevated platforms to be used.</p> <p>3. Exclusion zones to be established below work areas to protect workers and occupants.</p> <p>4. Materials to be handled using safe manual handling techniques or lifting equipment where required.</p> <p>5. Workers to wear appropriate PPE including gloves, hard hats and safety footwear.</p> <p>6. Gutters and drainage systems to be designed and installed to ensure proper stormwater management.</p> <p>7. Work to be suspended during unsafe weather conditions such as strong winds or rain.</p>	Principal Consultant / Discipline Engineer / PSP Design Team (Principal Contractor during construction phase)
4		4	1	5	125	5	5	100	80%																																									
		3	1	5	125	5	5	75	60%																																									
		3	1	5	125	5	5	75	60%																																									
		2	1	5	125	5	5	50	40%																																									

6	<p>Inspection of existing electrical fittings, wiring and DB boards for damage caused by water leaks and specification of repair or replacement where required.</p>	<ol style="list-style-type: none"> 1. Exposure to live electrical wiring during inspection activities 2. Electrical shock or electrocution due to damaged wiring and water exposure 3. Short circuits or electrical fires due to water-damaged installations 4. Accessing ceiling voids and confined areas to inspect electrical services 5. Falling ceiling panels or damaged fixtures during inspection 6. Incorrect identification of electrical damage leading to unsafe installations remaining in service 	<table border="1"> <tr> <td>1. Health & safety (I)</td> <td>5</td> <td></td> <td>5</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>125</td> <td>100%</td> </tr> <tr> <td>2. Cost (C)</td> <td></td> <td>3</td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>3. Productivity (P)</td> <td></td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td></td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>4. Environment (E)</td> <td></td> <td>2</td> <td>2</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>50</td> <td>40%</td> </tr> </table>	1. Health & safety (I)	5		5	1	5	125	5	5	125	100%	2. Cost (C)		3	3	1	5	125	5	5	75	60%	3. Productivity (P)		3	1	5	125		5	5	75	60%	4. Environment (E)		2	2	1	5	125	5	5	50	40%	<p style="text-align: center;">Total Average Risk Value</p> <p style="text-align: right;">65%</p>	<p>Hard hat, Safety boots, High visibility vest</p>	<p>Warning and restricted access signage to be displayed where inspection or construction activities are conducted.</p>	<ol style="list-style-type: none"> 1. Electrical inspections to be conducted by a competent and qualified electrician. 2. Electrical circuits to be isolated and locked out before inspection or repair activities commence. 3. Damaged electrical fittings, wiring and DB boards to be repaired or replaced in accordance with applicable electrical standards. 4. Ceiling areas to be inspected carefully before access to identify unstable ceiling panels or structures. 5. Electrical installations to be tested and certified after repairs are completed. 6. Electrical works to comply with relevant SANS standards and electrical safety regulations. 	<p>Principal Consultant / Discipline Engineer / PSP Design Team (Principal Contractor during construction phase)</p>
1. Health & safety (I)	5		5	1	5	125	5	5	125	100%																																										
2. Cost (C)		3	3	1	5	125	5	5	75	60%																																										
3. Productivity (P)		3	1	5	125		5	5	75	60%																																										
4. Environment (E)		2	2	1	5	125	5	5	50	40%																																										
7	<p>Inspection of existing mechanical fittings, ducting and equipment for damage caused by roof leaks and specification of repair or replacement where required.</p>	<ol style="list-style-type: none"> 1. Accessing ceiling voids or confined spaces to inspect mechanical systems 2. Falling ceiling panels or damaged fixtures during inspection activities 3. Exposure to damaged mechanical equipment or sharp components 4. Manual handling of mechanical equipment during removal or inspection 5. Incorrect identification of damaged mechanical systems leading to operational failures 6. Disturbance to hospital operations during inspection or repair activities 	<table border="1"> <tr> <td>1. Health & safety (I)</td> <td>3</td> <td></td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>2. Cost (C)</td> <td></td> <td>3</td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>3. Productivity (P)</td> <td></td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td></td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>4. Environment (E)</td> <td></td> <td>2</td> <td>2</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>50</td> <td>40%</td> </tr> </table>	1. Health & safety (I)	3		3	1	5	125	5	5	75	60%	2. Cost (C)		3	3	1	5	125	5	5	75	60%	3. Productivity (P)		3	1	5	125		5	5	75	60%	4. Environment (E)		2	2	1	5	125	5	5	50	40%	<p style="text-align: center;">Total Average Risk Value</p> <p style="text-align: right;">55%</p>	<p>Hard hat, Safety boots, High visibility vest</p>	<p>Warning and restricted access signage to be displayed where inspection or construction activities are conducted.</p>	<ol style="list-style-type: none"> 1. Mechanical inspections to be conducted by competent and qualified mechanical personnel. 2. Safe access to ceiling voids and service areas to be established before inspections commence. 3. Damaged mechanical equipment to be isolated and removed safely where required. 4. Proper manual handling procedures to be followed when handling mechanical components. 5. Mechanical systems to be inspected and tested after repairs or replacements are completed. 6. Inspection and repair activities to be coordinated with hospital management to minimise disruption. 	<p>Principal Consultant / Discipline Engineer / PSP Design Team (Principal Contractor during construction phase)</p>
1. Health & safety (I)	3		3	1	5	125	5	5	75	60%																																										
2. Cost (C)		3	3	1	5	125	5	5	75	60%																																										
3. Productivity (P)		3	1	5	125		5	5	75	60%																																										
4. Environment (E)		2	2	1	5	125	5	5	50	40%																																										
8	<p>Investigation of concrete slab spalling and specification of repair works where deterioration due to water penetration has occurred.</p>	<ol style="list-style-type: none"> 1. Falling concrete fragments during inspection of spalled slab areas 2. Structural instability of damaged concrete slabs 3. Exposure to dust during investigation or repair activities 4. Falling objects during removal of loose concrete material 5. Incorrect structural assessment leading to unsafe repair specifications 6. Manual handling of repair materials and equipment 	<table border="1"> <tr> <td>1. Health & safety (I)</td> <td>4</td> <td></td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>2. Cost (C)</td> <td></td> <td>4</td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>3. Productivity (P)</td> <td></td> <td>3</td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>4. Environment (E)</td> <td></td> <td>2</td> <td>2</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>50</td> <td>40%</td> </tr> </table>	1. Health & safety (I)	4		4	1	5	125	5	5	100	80%	2. Cost (C)		4	4	1	5	125	5	5	100	80%	3. Productivity (P)		3	3	1	5	125	5	5	75	60%	4. Environment (E)		2	2	1	5	125	5	5	50	40%	<p style="text-align: center;">Total Average Risk Value</p> <p style="text-align: right;">65%</p>	<p>Mandatory or as per requirement</p>	<p>Warning and restricted access signage to be displayed where inspection or construction activities are conducted.</p>	<ol style="list-style-type: none"> 1. Structural inspections to be conducted by a competent structural engineer. 2. Spalled or loose concrete to be identified and removed safely prior to repair work. 3. Structural integrity of affected slabs to be assessed before repair methods are specified. 4. Appropriate PPE including hard hats, gloves, eye protection and dust masks to be worn. 5. Exclusion zones to be established below work areas during investigation or repair activities. 6. Repair methods to comply with accepted structural repair standards and engineering specifications. 	<p>Principal Consultant / Discipline Engineer / PSP Design Team (Principal Contractor during construction phase)</p>
1. Health & safety (I)	4		4	1	5	125	5	5	100	80%																																										
2. Cost (C)		4	4	1	5	125	5	5	100	80%																																										
3. Productivity (P)		3	3	1	5	125	5	5	75	60%																																										
4. Environment (E)		2	2	1	5	125	5	5	50	40%																																										
9	<p>Removal and replacement of ceilings damaged due to roof leaks.</p>	<ol style="list-style-type: none"> 1. Falling ceiling boards or fixtures during removal 2. Exposure to dust, mould or insulation materials in ceiling voids 3. Manual handling injuries when removing and installing ceiling boards 4. Exposure to hidden electrical wiring or services above ceilings 5. Falling objects from ceiling voids 6. Disturbance to hospital occupants during ceiling replacement activities 	<table border="1"> <tr> <td>1. Health & safety (I)</td> <td>3</td> <td></td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>2. Cost (C)</td> <td></td> <td>3</td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>3. Productivity (P)</td> <td></td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td></td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>4. Environment (E)</td> <td></td> <td>2</td> <td>2</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>50</td> <td>40%</td> </tr> </table>	1. Health & safety (I)	3		3	1	5	125	5	5	75	60%	2. Cost (C)		3	3	1	5	125	5	5	75	60%	3. Productivity (P)		3	1	5	125		5	5	75	60%	4. Environment (E)		2	2	1	5	125	5	5	50	40%	<p style="text-align: center;">Total Average Risk Value</p> <p style="text-align: right;">55%</p>	<p>Mandatory or as per requirement</p>	<p>Warning and restricted access signage to be displayed where inspection or construction activities are conducted.</p>	<ol style="list-style-type: none"> 1. Ceiling removal to be carried out using controlled removal methods. 2. Work areas to be isolated to protect hospital occupants. 3. Workers to wear appropriate PPE including dust masks, gloves and eye protection. 4. Electrical and mechanical services above ceilings to be identified prior to removal. 5. Waste materials to be removed and disposed of safely. 6. Work activities to be scheduled to minimise disruption to hospital operations. 	<p>Principal Consultant / Discipline Engineer / PSP Design Team (Principal Contractor during construction phase)</p>
1. Health & safety (I)	3		3	1	5	125	5	5	75	60%																																										
2. Cost (C)		3	3	1	5	125	5	5	75	60%																																										
3. Productivity (P)		3	1	5	125		5	5	75	60%																																										
4. Environment (E)		2	2	1	5	125	5	5	50	40%																																										

10	Removal and replacement of floor coverings damaged due to water leaks.	<p>1. Slips and trips due to wet or uneven floor surfaces 2. Manual handling injuries during removal and installation of flooring materials 3. Exposure to dust and debris during removal activities 4. Use of cutting tools during installation of new floor coverings 5. Obstruction of hospital access routes during floor replacement works</p>	<table border="1"> <tr> <td>1. Health & safety (I)</td> <td>3</td> <td></td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>2. Cost (C)</td> <td></td> <td>3</td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>3. Productivity (P)</td> <td>3</td> <td></td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>4. Environment (E)</td> <td></td> <td>2</td> <td>2</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>50</td> <td>40%</td> </tr> <tr> <td colspan="11" style="text-align: center;">Total Average Risk Value</td> </tr> <tr> <td colspan="11" style="text-align: right;">55%</td> </tr> </table>	1. Health & safety (I)	3		3	1	5	125	5	5	75	60%	2. Cost (C)		3	3	1	5	125	5	5	75	60%	3. Productivity (P)	3		3	1	5	125	5	5	75	60%	4. Environment (E)		2	2	1	5	125	5	5	50	40%	Total Average Risk Value											55%											Mandatory or as per requirement	Warning and restricted access signage to be displayed where floor repair or replacement activities are conducted.	<p>1. Work areas to be clearly demarcated and access controlled. 2. Good housekeeping practices to prevent slips and trips. 3. Workers to follow safe manual handling procedures. 4. Appropriate PPE including gloves and safety footwear to be worn. 5. Work to be scheduled to minimise disruption to hospital activities.</p>	Principal Consultant / Discipline Engineer / PSP Design Team (Principal Contractor during construction phase)
1. Health & safety (I)	3		3	1	5	125	5	5	75	60%																																																															
2. Cost (C)		3	3	1	5	125	5	5	75	60%																																																															
3. Productivity (P)	3		3	1	5	125	5	5	75	60%																																																															
4. Environment (E)		2	2	1	5	125	5	5	50	40%																																																															
Total Average Risk Value																																																																									
55%																																																																									
11	Temporary relocation of building occupants during construction activities where required.	<p>1. Exposure of patients, staff or visitors to construction hazards 2. Disruption to hospital operations 3. Restricted access routes due to construction activities 4. Conflicts between construction workers and hospital occupants 5. Poor coordination of decanting activities</p>	<table border="1"> <tr> <td>1. Health & safety (I)</td> <td>4</td> <td></td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>2. Cost (C)</td> <td></td> <td>4</td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>3. Productivity (P)</td> <td>4</td> <td></td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>4. Environment (E)</td> <td></td> <td>2</td> <td>2</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>50</td> <td>40%</td> </tr> <tr> <td colspan="11" style="text-align: center;">Total Average Risk Value</td> </tr> <tr> <td colspan="11" style="text-align: right;">70%</td> </tr> </table>	1. Health & safety (I)	4		4	1	5	125	5	5	100	80%	2. Cost (C)		4	4	1	5	125	5	5	100	80%	3. Productivity (P)	4		4	1	5	125	5	5	100	80%	4. Environment (E)		2	2	1	5	125	5	5	50	40%	Total Average Risk Value											70%											Mandatory or as per requirement	Warning and restricted access signage to be displayed where inspection or construction activities are conducted.	<p>1. A decanting plan to be developed in consultation with hospital management in accordance with the Occupational Health and Safety Act (Act 85 of 1993). 2. Construction work areas to be isolated and secured from public access in accordance with the Construction Regulations, 2014 (Protection of the Public). 3. Alternative access routes to be provided where required in accordance with the Occupational Health and Safety Act (Act 85 of 1993). 4. Construction schedules to be coordinated with hospital management in accordance with the Occupational Health and Safety Act (Act 85 of 1993). 5. Warning signage and barriers to be installed around construction zones in accordance with the Construction Regulations, 2014.</p>	Principal Consultant / Discipline Engineer / PSP Design Team (Principal Contractor during construction phase)
1. Health & safety (I)	4		4	1	5	125	5	5	100	80%																																																															
2. Cost (C)		4	4	1	5	125	5	5	100	80%																																																															
3. Productivity (P)	4		4	1	5	125	5	5	100	80%																																																															
4. Environment (E)		2	2	1	5	125	5	5	50	40%																																																															
Total Average Risk Value																																																																									
70%																																																																									
12	Design and specification of roofing materials considering marine environmental exposure and lifecycle durability.	<p>1. Premature corrosion of roof sheeting due to marine environmental conditions 2. Structural deterioration of roof components caused by corrosion 3. Water ingress due to failure of corroded roofing materials 4. Increased maintenance requirements and potential safety risks during future repairs</p>	<table border="1"> <tr> <td>1. Health & safety (I)</td> <td>3</td> <td></td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>2. Cost (C)</td> <td></td> <td>4</td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>3. Productivity (P)</td> <td>3</td> <td></td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>4. Environment (E)</td> <td></td> <td>3</td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td colspan="11" style="text-align: center;">Total Average Risk Value</td> </tr> <tr> <td colspan="11" style="text-align: right;">65%</td> </tr> </table>	1. Health & safety (I)	3		3	1	5	125	5	5	75	60%	2. Cost (C)		4	4	1	5	125	5	5	100	80%	3. Productivity (P)	3		3	1	5	125	5	5	75	60%	4. Environment (E)		3	3	1	5	125	5	5	75	60%	Total Average Risk Value											65%											N/A	N/A	<p>1. Roof sheeting and associated materials must be specified to withstand marine corrosion conditions, including the use of appropriate corrosion-resistant materials and protective coatings, in accordance with applicable SANS building and material standards, the Construction Regulations, 2014 (Designer Duties) and the Occupational Health and Safety Act (Act 85 of 1993).</p>	Principal Consultant / PSP Design Team
1. Health & safety (I)	3		3	1	5	125	5	5	75	60%																																																															
2. Cost (C)		4	4	1	5	125	5	5	100	80%																																																															
3. Productivity (P)	3		3	1	5	125	5	5	75	60%																																																															
4. Environment (E)		3	3	1	5	125	5	5	75	60%																																																															
Total Average Risk Value																																																																									
65%																																																																									
13	Construction supervision to ensure repairs, upgrades and construction activities are implemented in accordance with approved designs and specifications.	<p>1. Construction activities not implemented in accordance with approved designs 2. Unsafe construction practices during roof repair and refurbishment works 3. Non-compliance with health and safety requirements by contractor 4. Poor coordination between contractor, hospital operations and project team</p>	<table border="1"> <tr> <td>1. Health & safety (I)</td> <td>4</td> <td></td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>2. Cost (C)</td> <td></td> <td>4</td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>3. Productivity (P)</td> <td>3</td> <td></td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>4. Environment (E)</td> <td></td> <td>2</td> <td>2</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>50</td> <td>40%</td> </tr> <tr> <td colspan="11" style="text-align: center;">Total Average Risk Value</td> </tr> <tr> <td colspan="11" style="text-align: right;">65%</td> </tr> </table>	1. Health & safety (I)	4		4	1	5	125	5	5	100	80%	2. Cost (C)		4	4	1	5	125	5	5	100	80%	3. Productivity (P)	3		3	1	5	125	5	5	75	60%	4. Environment (E)		2	2	1	5	125	5	5	50	40%	Total Average Risk Value											65%											Mandatory or as per requirement	N/A	<p>1. Construction activities to be supervised and monitored by the PSP team to ensure compliance with approved designs, specifications and method statements. 2. Contractor to implement the Health and Safety Plan in accordance with the Occupational Health and Safety Act (Act 85 of 1993), Construction Regulations, 2014 and Health and Safety Specification. 3. Regular site inspections and progress meetings to be conducted during construction. 4. Any deviations from approved designs to be reported to the client and corrected before continuation of works.</p>	Principal Consultant / PSP Design Team Principal Contractor
1. Health & safety (I)	4		4	1	5	125	5	5	100	80%																																																															
2. Cost (C)		4	4	1	5	125	5	5	100	80%																																																															
3. Productivity (P)	3		3	1	5	125	5	5	75	60%																																																															
4. Environment (E)		2	2	1	5	125	5	5	50	40%																																																															
Total Average Risk Value																																																																									
65%																																																																									

14	Assist the client with the procurement process for the appointment of a suitable contractor.	<p>1. Appointment of contractor without appropriate competency or experience.</p> <p>2. Tender documentation not adequately addressing project risks.</p> <p>3. Health and safety requirements not incorporated into procurement documentation.</p> <p>4. Incorrect interpretation of scope during procurement process.</p>	<table border="1"> <tr> <td>1. Health & safety (I)</td> <td>3</td> <td></td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>2. Cost (C)</td> <td></td> <td>4</td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>3. Productivity (P)</td> <td></td> <td>3</td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>4. Environment (E)</td> <td></td> <td>2</td> <td>2</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>50</td> <td>40%</td> </tr> <tr> <td colspan="10" style="text-align: center;">Total Average Risk Value</td> </tr> <tr> <td colspan="10" style="text-align: right;">60%</td> </tr> </table>	1. Health & safety (I)	3		3	1	5	125	5	5	75	60%	2. Cost (C)		4	4	1	5	125	5	5	100	80%	3. Productivity (P)		3	3	1	5	125	5	5	75	60%	4. Environment (E)		2	2	1	5	125	5	5	50	40%	Total Average Risk Value										60%										Mandatory or as per requirement	N/A	<p>1. Tender documentation to clearly define the scope of work and project risks.</p> <p>2. Contractor competency and experience to be evaluated during procurement.</p> <p>3. Health and safety requirements to be incorporated into tender documentation in accordance with the Occupational Health and Safety Act (Act 85 of 1993) and Construction Regulations, 2014.</p> <p>4. Procurement process to be conducted in consultation with the client and project team.</p>	Principal Consultant / PSP Design Team / Client Representative
1. Health & safety (I)	3		3	1	5	125	5	5	75	60%																																																													
2. Cost (C)		4	4	1	5	125	5	5	100	80%																																																													
3. Productivity (P)		3	3	1	5	125	5	5	75	60%																																																													
4. Environment (E)		2	2	1	5	125	5	5	50	40%																																																													
Total Average Risk Value																																																																							
60%																																																																							
15	Design and specification for roof waterproofing systems, screed to falls, drainage outlets and expansion joints.	<p>1. Water ingress due to inadequate waterproofing design.</p> <p>2. Ponding of water on roof surfaces causing structural deterioration.</p> <p>3. Fire risk associated with torch-on waterproofing membrane application.</p> <p>4. Damage to roof structure or internal building components due to poor drainage design.</p>	<table border="1"> <tr> <td>1. Health & safety (I)</td> <td>4</td> <td></td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>2. Cost (C)</td> <td></td> <td>4</td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>3. Productivity (P)</td> <td></td> <td>3</td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>4. Environment (E)</td> <td></td> <td>2</td> <td>2</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>50</td> <td>40%</td> </tr> <tr> <td colspan="10" style="text-align: center;">Total Average Risk Value</td> </tr> <tr> <td colspan="10" style="text-align: right;">65%</td> </tr> </table>	1. Health & safety (I)	4		4	1	5	125	5	5	100	80%	2. Cost (C)		4	4	1	5	125	5	5	100	80%	3. Productivity (P)		3	3	1	5	125	5	5	75	60%	4. Environment (E)		2	2	1	5	125	5	5	50	40%	Total Average Risk Value										65%										Mandatory or as per requirement	Warning and restricted access signage to be displayed where inspection or construction activities are conducted.	Waterproofing systems, drainage outlets and screed falls must be designed and specified to prevent water ingress and ponding, with torch-on waterproofing activities carried out in accordance with applicable standards and the Occupational Health and Safety Act (Act 85 of 1993) and Construction Regulations, 2014.	Principal Consultant / Discipline Engineer / PSP Design Team (Principal Contractor during construction phase)
1. Health & safety (I)	4		4	1	5	125	5	5	100	80%																																																													
2. Cost (C)		4	4	1	5	125	5	5	100	80%																																																													
3. Productivity (P)		3	3	1	5	125	5	5	75	60%																																																													
4. Environment (E)		2	2	1	5	125	5	5	50	40%																																																													
Total Average Risk Value																																																																							
65%																																																																							
16	Inspection and design interventions for electrical, IT and electronic systems affected by roof repairs and refurbishment works.	<p>1. Electrical shock due to damaged wiring or installations.</p> <p>2. Electrical fires due to water-damaged components.</p> <p>3. Failure of electrical distribution systems including DB boards.</p> <p>4. Damage to IT infrastructure, data networks and electronic systems due to water ingress.</p>	<table border="1"> <tr> <td>1. Health & safety (I)</td> <td>4</td> <td></td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>2. Cost (C)</td> <td></td> <td>4</td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>3. Productivity (P)</td> <td></td> <td>3</td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>4. Environment (E)</td> <td></td> <td>2</td> <td>2</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>50</td> <td>40%</td> </tr> <tr> <td colspan="10" style="text-align: center;">Total Average Risk Value</td> </tr> <tr> <td colspan="10" style="text-align: right;">65%</td> </tr> </table>	1. Health & safety (I)	4		4	1	5	125	5	5	100	80%	2. Cost (C)		4	4	1	5	125	5	5	100	80%	3. Productivity (P)		3	3	1	5	125	5	5	75	60%	4. Environment (E)		2	2	1	5	125	5	5	50	40%	Total Average Risk Value										65%										Mandatory or as per requirement	Warning and restricted access signage to be displayed where inspection or construction activities are conducted.	Electrical installations and electronic systems must be inspected and assessed by a competent electrical engineer, and repairs or upgrades specified in accordance with the Occupational Health and Safety Act (Act 85 of 1993) and the Electrical Installation Regulations.	Principal Consultant / Discipline Engineer / PSP Design Team (Principal Contractor during construction phase)
1. Health & safety (I)	4		4	1	5	125	5	5	100	80%																																																													
2. Cost (C)		4	4	1	5	125	5	5	100	80%																																																													
3. Productivity (P)		3	3	1	5	125	5	5	75	60%																																																													
4. Environment (E)		2	2	1	5	125	5	5	50	40%																																																													
Total Average Risk Value																																																																							
65%																																																																							
17	Inspection and design interventions for mechanical systems including HVAC, ducting, steam, hot water and fire protection systems affected by roof works.	<p>1. Malfunction of HVAC systems affecting indoor air quality.</p> <p>2. Damage to ducting and mechanical equipment due to water leaks.</p> <p>3. Failure of fire protection or detection systems.</p> <p>4. Unsafe mechanical installations affecting building operations.</p>	<table border="1"> <tr> <td>1. Health & safety (I)</td> <td>4</td> <td></td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>2. Cost (C)</td> <td></td> <td>4</td> <td>4</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>100</td> <td>80%</td> </tr> <tr> <td>3. Productivity (P)</td> <td></td> <td>3</td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>4. Environment (E)</td> <td></td> <td>2</td> <td>2</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>50</td> <td>40%</td> </tr> <tr> <td colspan="10" style="text-align: center;">Total Average Risk Value</td> </tr> <tr> <td colspan="10" style="text-align: right;">65%</td> </tr> </table>	1. Health & safety (I)	4		4	1	5	125	5	5	100	80%	2. Cost (C)		4	4	1	5	125	5	5	100	80%	3. Productivity (P)		3	3	1	5	125	5	5	75	60%	4. Environment (E)		2	2	1	5	125	5	5	50	40%	Total Average Risk Value										65%										Mandatory or as per requirement	Warning and restricted access signage to be displayed where inspection or construction activities are conducted.	Mechanical and fire protection systems must be inspected and assessed by a competent mechanical engineer, with repairs or upgrades specified in accordance with applicable engineering standards and the Construction Regulations, 2014.	Principal Consultant / Discipline Engineer / PSP Design Team (Principal Contractor during construction phase)
1. Health & safety (I)	4		4	1	5	125	5	5	100	80%																																																													
2. Cost (C)		4	4	1	5	125	5	5	100	80%																																																													
3. Productivity (P)		3	3	1	5	125	5	5	75	60%																																																													
4. Environment (E)		2	2	1	5	125	5	5	50	40%																																																													
Total Average Risk Value																																																																							
65%																																																																							
18	Design and specification for repair or replacement of external infrastructure including fencing and associated site works.	<p>1. Unsafe perimeter infrastructure posing risks to occupants and visitors.</p> <p>2. Damage to fencing affecting site security.</p> <p>3. Construction activities affecting access routes around the facility.</p>	<table border="1"> <tr> <td>1. Health & safety (I)</td> <td>3</td> <td></td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>2. Cost (C)</td> <td></td> <td>3</td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>3. Productivity (P)</td> <td></td> <td>3</td> <td>3</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>75</td> <td>60%</td> </tr> <tr> <td>4. Environment (E)</td> <td></td> <td>2</td> <td>2</td> <td>1</td> <td>5</td> <td>125</td> <td>5</td> <td>5</td> <td>50</td> <td>40%</td> </tr> <tr> <td colspan="10" style="text-align: center;">Total Average Risk Value</td> </tr> <tr> <td colspan="10" style="text-align: right;">55%</td> </tr> </table>	1. Health & safety (I)	3		3	1	5	125	5	5	75	60%	2. Cost (C)		3	3	1	5	125	5	5	75	60%	3. Productivity (P)		3	3	1	5	125	5	5	75	60%	4. Environment (E)		2	2	1	5	125	5	5	50	40%	Total Average Risk Value										55%										Mandatory or as per requirement	Warning and restricted access signage to be displayed where inspection or construction activities are conducted.	External infrastructure including fencing must be assessed and designed to ensure structural stability, durability and safety, and specified in accordance with applicable SANS standards, project technical specifications and the Occupational Health and Safety Act (Act 85 of 1993).	Principal Consultant / Discipline Engineer / PSP Design Team (Principal Contractor during construction phase)
1. Health & safety (I)	3		3	1	5	125	5	5	75	60%																																																													
2. Cost (C)		3	3	1	5	125	5	5	75	60%																																																													
3. Productivity (P)		3	3	1	5	125	5	5	75	60%																																																													
4. Environment (E)		2	2	1	5	125	5	5	50	40%																																																													
Total Average Risk Value																																																																							
55%																																																																							