
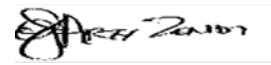


ETHEKWINI MUNICIPALITY - **Occupational Health & Safety Unit**

SITE BASELINE RISK ASSESSMENT - Construction Regulations 5.1.(a)



Document Title	Baseline S.H.E. Risk Assessment
Client	EThekwin Municipality- COASTAL STORMWATER & CATCHMENT MANAGEMENT
Project Name	38 Lady Ellen Crescent, Umhlanga, Ward 36: Coastline Rehabilitation
Contract Number	<b>1D-33987</b>
Date	<b>08.10.2025</b>
Compiled by (Safety Officer)	<p>Name and Surname: <u>Ntombifuthi Mazibuko</u></p> <p>Signature: </p> <p>Date: <u>10.08.2025</u></p>
Approved by (Safety and Risk Manager)	<p>Name and Surname: <u>Arty Zondi</u></p> <p>Signature: </p> <p>Date: <u>08.10.2025</u></p>
Revision Number	<b>BRA:444/10/2025</b>

## **BASELINE RISK ASSESSMENT**

**1. INTRODUCTION:** In accordance with the Occupational Health and Safety Act, (Act 85 of 1993) the Legislator places specific requirements on an Employer. One of these is prescribed in Section 8(i) of the Act where it requires the Employer to ascertain the risks and dangers which may occur within the workplace or section of the workplace and then goes on to establish working procedures or practices.

**2. PURPOSE:** This is conducted to create a benchmark of the potential risks that apply to the whole project or business operation.

**3. SCOPE:** This assessment could be approached on a site, regional or national level concerning any facet of the business operation or process or activity.

### **4. REVIEW AND MONITORING PLAN**

The risk assessment form part of the health and safety plan to be applied on the site and must include the following:

- (a) The identification of the risk and hazards to which persons may be exposed.
- (b) An analysis and evaluation of the risk and hazards identified based on a documented method,
- (c) A documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- (d) A monitoring plan; and
- (e) A review plan

### **5. REFERENCES**

- (a) Tender document number **1D-33987**
- (b) Occupational Health & Safety Act and its Regulation



## 6. LOCALITY PLAN

**From the Durban CBD, take the M4 North towards uMhlanga and use the La Lucia Mall off-ramp. At the traffic light, turn right, then take the second exit at the first traffic circle, followed by the second exit again at the next circle. Continue straight, turning left just after the bridge, and at the following traffic circle take the second exit. Saratoga Beach Park will then be on your right.**



## **7. SCOPE OF WORKS**

### **Description of Works**

- From the Durban CBD, take the M4 North towards uMhlanga and use the La Lucia Mall off-ramp. At the traffic light, turn right, then take the second exit at the first traffic circle, followed by the second exit again at the next circle. Continue straight, turning left just after the bridge, and at the following traffic circle take the second exit. Saratoga Beach Park will then be on your right

### **Scope of works:**

- Site clearance
- Stream diversion
- Suitable fill material (beach sand) from the swash zone.
- Excavate unsuitable material and spoil at an approved tip.
- Supply and place grade A5 geofabric blanket
- Supply, deliver and install Geotextile sandbags on the coastline
- Dune rehabilitation and grass planting.
- Removal of stream diversion
- Redirect stream to original stream channel
- Reinstate ground surface onsite, clean and tidy site after completion



## RISK RATING CRITERIA

A		INJURY SEVERITY		B		FREQUENCY of OCCURENCE		RATING							
0	No injury			0	Has not occurred in last two years			RISK CLASSIFICATION		RISK VALUE					
2	Minor laceration, wound (first aid case)			2	Occurs very seldom			LOW		0---6					
4	More severe injury medical attention			4	Occurs <b>occasionally</b>			MEDIUM		6---16					
8	Serious injuries, broken bones, amputation etc			8	Occurs often			HIGH		16---32					
10	Loss of life / fatality			10	Could / has happened			CRITICAL		32---40					
C				POTENTIAL DAMAGE / LOSS				D		ENVIRONMENT			ACTION REQUIRED		
0	No damage, minimal costs R10 – 100			0	No effect			Spillage, noise, water, dust / vapours/ fauna and flora	LOW	Supervision, training, certification, method/risk assessments, safe work procedures training, toolbox talks.			Good instruction.		
2	Minor damage, small costs R100 – 1000			2	Minor effect				MEDIUM	Competent supervision, training certification, method/risk assessments, safe work procedures training, toolbox talks.			Change method, mitigate		
4	Med damage, stoppage (On site repair) medium cost R1000 – 5000			4	Serious effect (Short term)										
8	More serious damage // loss / delay < R5000 - +			8	Very serious effect (Long Term)										
10	Severe damage, long term stoppage, high costs			10	Catastrophic effect				HIGH	Competent supervision, training certification, method/risk assessments, safe work procedures training, toolbox talks.			Change method, mitigate.		
									CRITICAL	Close competent supervision, training certification, method/risk assessments, safe work procedures, PJO's, work permits, training and toolbox talks.			Intolerable, change method, transfer risk.		

# **Potential Risk Identified as per Scope of Work**

1. Vehicles travelling to the construction site.
2. Site establishment.
3. Security operations.
4. Robbery on site.
5. Speed restriction on site.
6. Transport of workers on site.
7. Working on site exposed to weather conditions.
8. Carrying out work on site where there are long grass, bushes etc. which can burn.
9. Survey or set out area to be cleared and grub with wooden survey pegs.
10. Carrying out tasks on site requiring specific Personal Protective Equipment to be worn.
11. Use of Hand Tools, Mechanical and Hydraulic operated tools.
12. Pneumatic Tools.
13. Use of Portable Electrical Tools.
14. Using Ladders.
15. Manual Handling.
16. Hazardous Chemical & Flammable Liquids used on site.
17. Bulk Diesel Storage.
18. Housekeeping.
19. Stacking and Storage.
20. Loading and Offloading of equipment.
21. Use of lifting machines, Hand powered lifting devices and lifting tackle for the purpose of loading and offloading equipment on vehicles or lowering of equipment, materials ect
22. Excavation
23. Pipe Laying
24. Public and site visitor safety.

ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION					PREVENTATIVE MEASURES	CONTROLS
			A R	B	C	D			
Vehicles travelling to the construction site.	Poor road conditions i.e. no established road; Rocks, holes, ditches etc. hidden by long grass; Roads slippery in wet conditions; Unstable road edges on high ground; Driving vehicles too fast for the road conditions.	Damage to vehicles or equipment; Injuries to persons should a vehicle accident occur;	4	2	8	0	14	Only experienced licensed vehicle drivers to drive on site; Vehicles to be in a roadworthy condition; Vehicles to have inspection Checklists; No persons to travel on the back of trucks or LDV's unless seated inside a canopy constructed for that purpose; Equipment to be properly secured on the back of vehicles; The condition of the road to be assessed in advance if there is any doubt regarding the safety of driving on the road; Speed limit appropriate to the condition of the road to be maintained.	Detailed risk assessment and training on RA; Only experienced licensed vehicle drivers drive on site; Vehicles in a roadworthy condition; Vehicles have inspection Checklists; No persons to travel on the back of trucks or LDV's unless seated inside a canopy constructed for that purpose; Equipment properly secured on the back of vehicles; The condition of the road assessed in advance if there is any doubt regarding the safety of driving on the road; Speed limit appropriate to the condition of the road maintained.
Site establishment	Poor positioning of offices, stores and parking areas.	Restricted access to parking and delivery to storage areas can cause damage to transport, equipment and buildings.	2	2	4	0	8	Access to be a main consideration when positioning offices and stores on site during planning stage; possible one way traffic movement to be introduced.	Detailed risk assessment and training on RA; toolbox talks; directional signs and supervision.
	Incorrect Installation of electrical cables and distribution boards.	Damage to exposed cables and loose wires; Electrical shock / Electrocution of employees or non employees.	10	2	8	0	20	All cables from distribution board to offices, stores and security to be underground; the distribution board is to stand on a firm level base and should be locked at all times; Electrical installations must be in compliance with the Electrical Installations Regulations 2009.	Detailed risk assessment and training on RA; toolbox talks; supervision; constant reinforcement and inspections by an appointed competent person and findings recorded in a register kept on site.

	Installation of security fencing.	Installation of fencing can result in lacerations and other minor injuries to the hands of the workers; Objects falling on feet of workers.	2	2	2	0	6	Security fencing must be minimum height of 1.8m around site area together with two double gates; Employees must wear hand gloves and safety boots at all times.	Detailed risk assessment and training on RA; toolbox talks; supervision; constant reinforcement and inspections by an appointed competent person.
	Fire Fighting Equipment not provided.	Not having Fire Fighting Equipment available in case of a fire can result in loss of property.	0	2	8	2	12	Firefighting services to be available during the site establishment.	Principal contractor to ensure that sufficient fully serviced firefighting equipment to meet the fire risk is on site from the start-up of the site establishment; training on use of firefighting equipment; fire risk surveys; fire drills and scheduled inspections on firefighting equipment.

ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION					PREVENTATIVE MEASURES	CONTROLS
			A R	B	C	D			
	Not providing required hygiene facilities.	Not having proper hygiene facilities available like clean drinking water, toilets, showers, changing facilities and sheltered eating areas will result in unhygienic conditions which can lead to Health issues and water pollution.	4	2	4	2	12	Hygiene facilities to be available in compliance with the Facilities Regulation 2004 and must be within reasonable access of the site; clean hygienic and maintained facilities consisting of at least 1 shower for every 15 persons, 1 sanitary facility for each sex for every 30 workers, changing facilities for each sex; Sheltered eating areas.	Principal contractor to ensure that sufficient fully maintained hygiene facilities are on site from the start of the site establishment; talks on hygiene; regular inspections carried out on the facilities.
Security operations.	Uncontrolled entry /exit to the site.	Can result in tampering with equipment; stealing; persons under the influence of alcohol entering on site; unauthorised entry to the site etc.	2	4	8	0	14	Security Company with competent trained guards to be engaged to control access to the site; All entry and exit to the site to be recorded; Employees of all Contractors to be issued with ID cards.	Security Company with competent trained guards engaged to control access to the site; Guards instructed in the correct procedures to be followed.

ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION				PREVENTATIVE MEASURES	CONTROLS
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			A R	B	C	D			
								available for use at all times; Depending on the location/circumstances pertaining to the site, it is advisable to obtain the services of a reputable security company for the duration of the contract.	
Speed restriction on site.	Speeding vehicles / mobile plant.	Causing accidents involving people, other mobile plant and existing structures, Spillages resulting in ground contamination.	10	2	8	2	22	Safe speed limit to be set for the site and enforced.	Detailed risk assessment and training on RA; toolbox talks; supervision; Constant reinforcement & specific instructions to operators of vehicles / mobile plant; Speed limit set for site.
Transport of workers on site.	Workers not properly seated; tools and equipment not secured sliding around.	Workers being struck by moving equipment or falling off vehicles resulting in injury.	10	4	2	0	16	No transport of persons together with goods or tools unless there is an appropriate area or section to store the goods or tools; Transport persons in a non-enclosed vehicle e.g. truck, there must be a proper canopy (properly covering the back and top) with suitable sitting area; Workers shall not be permitted to stand or to sit on the edge of the bin of the vehicle.	Risk assessment training; Toolbox talks; Supervision; Constant reinforcement & specific instructions to workers.

ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION					PREVENTATIVE MEASURES	CONTROLS
			A R	B	C	D			
Working on site exposed to weather conditions or in areas with poor air circulation.	Ultra violet sun rays	Excessive sun burn.	4	2	2	0	8	Personnel to wear long sleeve tops and long pants; Sun screen lotion to be available for use by Personnel; Safety talks to be carried out.	Detailed risk assessment and training on RA; toolbox talks; supervision; Sun screen lotion available for use by Personnel.



	Excessive hot conditions.	Dehydration / heat exhaustion / heatstroke which can result in death.	10	2	2	0	14	Training of personnel on the precautions to be taken to avoid heatstroke and to recognise the symptoms of heatstroke; Inform personnel of the need to partake of at least 600 millilitres of water every hour; Any person showing symptoms of heatstroke must receive medical attention as soon as possible; Safety talks to be carried out.	Detailed risk assessment and training on RA; toolbox talks; supervision; Personnel trained on the precautions to be taken to avoid heatstroke and to recognise the symptoms of heatstroke; Personnel informed of the need to partake of at least 600 millilitres of water every hour; Carry out Heat stress monitoring if deemed necessary.
	Severe weather conditions i.e. thunderstorms with lightning.	Lightning striking a person can result in severe burns or death.	10	2	4	0	16	When a thunderstorm approaches the site area, all personnel must be withdrawn from the open areas and take shelter inside their vehicles or inside an office; Safety talks to be carried out.	Detailed risk assessment and training on RA; toolbox talks; supervision; Personnel withdrawn from open areas during a thunderstorm and lightning.
Carrying out work on site where there are long grass, bushes etc. which can burn.	Veldt Fires.	Persons trapped in a fire can sustain serious burns, lung damage or be burnt to death.	10	2	4	0	16	When a veldt fire is noticed no matter how small, all personnel must be withdrawn from the area to gather in a safe open area away from the fire where there is no grass i.e. open road, cleared work area etc.; A roll call must be held to ensure all personnel are accounted for; Under no circumstances must any personnel attempt to put out the fire unless their safety is in danger or damage to the equipment can occur since it is not part of the work for which they are contracted for; No person may go back to carry out his or her task until such time that the fire is put out or has passed the area and it is safe to do so and then only if instructed to do so by the person in charge; Safety talks to be carried out.	Detailed risk assessment and training on RA; toolbox talks; supervision; Personnel withdrawn during a veldt fire to a safe open area away from the fire where there is no grass and all personnel accounted for; Firefighting carried out only when the safety of personnel and equipment is threatened.

ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION					PREVENTATIVE MEASURES	CONTROLS
			A R	B	C	D			
	Open Fires made by personnel on site.	It can result in setting the surrounding grass, bushes etc. on fire and If the fire cannot be put out quickly, it can result in the grazing areas and other property burning down and also possible fire damage to own equipment; Animals can also suffer burns or death from the fire; Persons trapped in a fire can sustain serious burns, lung damage or be burnt to death.	10	2	8	2	22	No open fires to be made by personnel on site.	Detailed risk assessment and training on RA; toolbox talks; supervision; No open fires made on site.
Carrying out work on site where there are poisonous reptiles, arthropods and arachnids present.	Poisonous Snakes, Spiders, Scorpions and Ticks.	Snake bites, scorpion stings, spider and tick bites can result in blood poisoning and tick fever which can be very serious and even lead to death if not treated correctly and timeously.	10	2	4	0	16	Ensure the wearing of safety boots is enforced; The wearing of snake gaiters is recommended when walking in long grass, bushy or rocky areas; Don't attempt to approach or try to catch any of the creatures mentioned; The First Aider is to attend to the affected Person; Any person bit by a snake, stung by a scorpion or bit by a spider must receive medical attention as soon as possible; Persons bit by ticks must report to their supervisor if they starting to feel unwell and develop a fever; If snakes are spotted in working area's then work must be stopped and a professional snake catcher should be called out to remove the snake. Employees are not allowed to take action by them self's. Safety talks to be carried out.	Detailed risk assessment and training on RA; toolbox talks; supervision; Personal Protective Equipment (P.P.E) Requirements Matrix; Record of P.P.E issued to Personnel; Record of training on the correct use of the P.P.E.

ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION					PREVENTATIVE MEASURES	CONTROLS
			A R	B	C	D			
Surveyor set out area to be cleared and grub with wooden survey pegs.	Heat Exposure.	Sun stroke / heat Exhaustion.	4	4	2	0	10	Risk assessment training; Daily safe task instructions; Potable water available on site; Wearing of appropriate PPE.	Detailed risk assessment and training on RA; DSTI's; Supervision; Registers
	Environmental hazards.	Snake bites / tick bites / spider bites.	4	4	2	0	10	Wearing of appropriate PPE; Daily safe task instructions; Trained First Aider on site; When possible snake / spider to be identified to assist medical personnel with treatment.	Detailed risk assessment and training on RA; PPE Matrix and issue Registers.
Carrying out tasks on site requiring specific Personal Protective Equipment to be worn.	Incorrect or no Personal Protective Equipment worn.	Persons not wearing the correct Personal protective Equipment Can result in serious injuries or death.	10	4	4	0	18	The following Personal Protective Equipment must be issued to all personnel and worn when on site: <u>Hard hats</u> to prevent head injuries from falling objects; <u>Safety boots</u> to protect against Snake bites, Scorpion stings and spider / tick bites / falling Objects, ground conditions, slippery surfaces etc.; <u>Snake gaiters</u> to protect against snake bites, Scorpion stings and spider / tick bites; <u>Eye Protection</u> appropriate for the task; <u>Gloves</u> appropriate for the task; <u>Reflective vests</u> for visibility; <u>Safety Harnesses</u> for fall protection; Any other P.P.E which may be required.	Detailed risk assessment and training on RA; toolbox talks; supervision; Personal Protective Equipment (P.P.E) Requirements Matrix; Record of P.P.E issued to Personnel; Record of training on the correct use of the P.P.E.
Use of Hand Tools, Mechanical and Hydraulic operated tools.	Using tools which have the potential to cause injury.	Possible serious injury if used incorrectly.	4	2	4	0	10	Only trained competent persons with the knowledge in the use, limits and hazards pertaining to a specific tool may work with the tools; Workers trained on the correct use of personal protective equipment issued for use with the tools; Regular inspections carried out to ensure the tools are in a good condition, safe to work with and used properly	Detailed risk assessment and training on RA; toolbox talks; supervision; Only trained competent persons to have access to the tools; Tools on register & checked on a regular basis; visually inspect tools for damage before use; PPE Register.

ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION					PREVENTATIVE MEASURES	CONTROLS
			A R	B	C	D			
Manual Handling.	Lifting heavy loads i.e. bags of cement, heavy tools or equipment.	Employees could injure their backs when picking up heavy loads on their own.	4	4	2	0	10	Employees must never pick up anything that is too heavy for one person; If they battle to lift an item, they must get assistance; Where possible mechanical lifting equipment i.e. forklifts, cranes etc. must be used to pick up heavy equipment.	Detailed risk assessment and training on RA; toolbox talks; supervision; Constant reinforcement & specific instructions to employees.
	Wrong posture when lifting/placing down items.	Employees that pick items up with their legs straight and back bent can sustain serious back & muscle injuries.	4	4	2	0	10	Employees must ensure that they keep their back straight and bend their knees when they lift any load, this prevents strain on the lower back; Physical demonstrations should be given to all employees.	Detailed risk assessment and training on RA; toolbox talks; supervision; Constant reinforcement & specific instructions to employees.
	Loads with sharp edges/corners.	Sharp edges and corners could cause lacerations to hands and other body parts.	2	2	4	0	8	Load to be inspected before lifting to check for sharp edges & corners; To wear leather gloves when picking up equipment and materials to protect against hand injuries.	Detailed risk assessment and training on RA; toolbox talks; supervision; Constant reinforcement & specific instructions to employees.

Hazardous Chemicals & Flammable Liquids used on site.	Exposure to source of ignition; inhaling vapours / fumes; contact with the skin; accidental ingestion; Chemicals splashing into eyes; Spillage of chemicals on ground and in water.	Fire or explosion when ignited; respiratory irritation from fumes and vapours which can cause injuries to the respiratory system, dizziness, nausea & loss of consciousness if inhaled constantly; Irritation & possible skin disorders like Dermatitis, infection, allergy and poisoning when skin is exposed constantly to chemicals; low viscosity material if swallowed may enter the lungs and cause lung damage; eye injuries from chemicals splashing into the eyes; Ground and water pollution.	4	2	8	2	16	Keep flammable liquids away from high energy ignition sources, heat, sparks, pilot lights, static electricity & open flames; Avoid skin contact with chemicals by wearing PVC gloves; Wear respirators if exposed to the inhalation of vapours or mists; Use chemicals in a well ventilated area away from all ignition sources; no smoking or open flames in close proximity of flammable liquids; firefighting equipment must be available at the point of storage & use of flammable chemicals; flammable substances must be stored separately from other materials in a well ventilated area with a bund wall to contain leaks or inside a flammable liquid cabinet specific for that purpose with suitable warning signs displayed; Do not ingest any chemicals; wear splash goggles when handling chemicals; Eye wash to be available; Workers trained on the correct use of personal protective equipment issued; Material Safety Data Sheets available for all Hazardous chemical substances;	Detailed Risk Assessment; Training on MSDS sheets; Toolbox talks; MSDS Sheets available for all chemicals; Constant Supervision & Reinforcement of Preventative Action; Proper storage facility for chemicals and the necessary warning signs displayed; Hazardous Chemical substances Coordinator appointed in writing; PPE register.
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ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION				PREVENTATIVE MEASURES	CONTROLS
			A R	B	C	D		
							Spill kit to be available; Hazardous Chemical Substances Co-ordinator to be appointed in writing.	



Bulk Diesel Storage.	Sub-standard storage; Unsafe handling.	Ground and water pollution; ignition of fuel causing fire damage and possible burn injuries; fines from local authorities for noncompliance.	8	2	8	2	20	Obtain written approval from land owner where the tank will be positioned; Site plan and positioning of the Diesel tank along with the local fire department's approval after inspection need to be supplied to the supplier before the installation can commence; Firefighting equipment requirements information can be obtained from the fire department on their visit to site; The fuel supplier will then visit the site for approval before installation can commence.	Detailed risk assessment; storage and handling to be in compliance with local authority and supplier requirements; Approval documentation and permits to be available on site.
Housekeeping.	Poor housekeeping and storage practises can result in various items lying around.	Materials and paper lying around creates an un neat appearance; Items lying around are tripping hazards and can cause employees to trip and fall resulting in injuries; Plastic bags when eaten by cattle can result in the animal dying; Pollution of the Environment.	8	4	2	2	16	Housekeeping must be based on a place for everything and everything in place; Refuse bins must be available to place all waste in; Redundant material or equipment must be sorted and stored in designated areas; All workstations must be kept tidy; Employees should be trained through risk assessments and toolbox talks to practise housekeeping on a daily basis; Regular inspections by Supervisors; All waste must be removed from site.	Detailed risk assessment and training on RA; toolbox talks; supervision; Refuse bins in place; Designated storage areas; All waste removed from site.
Stacking and Storage.	Unstable stacking and storage	Collapsing stack and material falling off the stack can fall on employees resulting in multiple injuries; Damaging of stored items.	8	2	8	0	18	Competent person appointed in writing with the duty to supervise all stacking on site; Demarcated storage area; Stacking area must be stable and levelled to avoid material falling; Storage area must be kept neat and under control.	Supervision by a competent person appointed in writing; Constant reinforcement; Toolbox talks.

	Stacking material of different sizes, shape and mass together.	Collapsing stack and material falling off the stack can fall on employees resulting in multiple injuries; Damaging of stored equipment.	8	2	8	0	18	Competent person appointed in writing with the duty to supervise all stacking on site; Demarcated storage area; Stacking area must be stable and levelled to avoid material falling; Storage area must be kept neat and under control; Material of the same size, shape / mass must be stacked and stored together to avoid the material	Supervision by a competent person appointed in writing; Constant reinforcement; Toolbox talks.
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ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION					PREVENTATIVE MEASURES	CONTROLS
			A R	B	C	D			
								falling.	
	Stacking exceeding 3m in height.	It can cause material to fall and serious injuries and damage to equipment can occur.	8	2	8	0	18	Competent person appointed in writing with the duty to supervise all stacking on site; Demarcated storage area; Stacking area must be stable and levelled to avoid material falling; Storage area must be kept neat and under control; Total height of stack must not exceed 3m to avoid material from falling onto the ground.	Supervision by a competent person appointed in writing; Constant reinforcement; Toolbox talks.
Loading and Offloading of equipment.	Untrained / incompetent persons using the equipment; loads being dropped.	Damage to material, equipment & plant; Injury to workers and/or plant.	4	2	4	0	10	Only competent trained persons are permitted to operate lifting machinery; Banksman / Rigger to be available at all times to co-ordinate & control the material being loaded or unloaded.	Ensure that the lifting machine operator & banks man are trained & are appointed as competent persons; Training certificates should be available.

Use of Lifting machines, Hand powered lifting devices and Lifting tackle for the purpose of Loading and Offloading equipment on or from vehicles and the raising or lowering of equipment, materials etc.	Untrained / incompetent persons using Lifting machines, Hand powered lifting devices and Lifting tackle; Unsafe Lifting machines, Hand powered lifting devices and Lifting Tackle.	Damage to Lifting machines, Hand powered lifting devices and Lifting tackle; Load dropping can result in damage to materials, equipment and plant; Possible injuries to Workers; Contravention or failure to comply with the Driven Machinery Regulations, 2015 can lead to Prosecution.	4	4	8	0	16	Only competent trained persons are permitted to operate lifting machines, hand powered lifting devices and lifting tackle used on site; All lifting machines, hand powered lifting devices and lifting tackle to be on register; Tested & checked by a competent appointed person; Load test certificates must be available for all lifting machines and hand powered lifting devices; All training of lifting machine operators, Load testing and inspection of lifting machines and lifting tackle to be in compliance with Driven Machinery Regulations, 2015; Lifting machines, hand powered lifting devices and lifting tackle to be visually inspected for damage before use; A competent Banksman / Rigger to be available at all times to co-ordinate & control the lifting operations; The banks man must use his whistle at all times when a suspended load is moving above workers to warn them.	Detailed risk assessment and training on RA; toolbox talks; supervision; Training certificates of lifting machine operators on file; All records of tests and inspections of lifting machines, hand powered lifting devices and lifting tackle to be on file and available on site; All training of lifting machine operators, Load testing and inspection of lifting machines, hand powered lifting devices and lifting tackle in compliance with Driven Machinery Regulations, 2015; Visual inspection of lifting before use; A competent Banksman / Rigger to be available at all times to co-ordinate & control the lifting operations.
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ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION					PREVENTATIVE MEASURES	CONTROLS
			A	B	C	D	R		
	Spoil is stacked too close to the edge of the excavation & causing it to collapse / fall back into the excavation.	Lost time, damage and/or possible injury depending on the depth of the excavation.	4	2	2	0	8	Ensure that the spoil removed is placed at least one meter from the edge of the excavation; Ensure that there are no cracks in the side walls.	As spoil is removed, it must be ensured that it is placed at least 1 meter from the edge of the excavation.

ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION				PREVENTATIVE MEASURES	CONTROLS
			A R	B	C	D		

ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION					PREVENTATIVE MEASURES	CONTROLS
			A R	B	C	D			
Excavation work for the proposed sack wall position	Manual and mechanical excavation	<ul style="list-style-type: none"><li>• Unforeseen underground services</li><li>• Unsafe hand tools</li><li>• Unsafe construction mobile plants</li><li>• Uneven surface/ ground condition</li><li>• Incompetent construction mobile plant operator</li></ul> Oil leak	10	2	8	0	20	<ul style="list-style-type: none"><li>• Appointment of Excavation Supervisor with relevant Competency</li><li>• Dairy Excavation Work Inspection.</li><li>• Risk Assessment to be done</li><li>• DSTI to be done dairly</li></ul>	

Laying of Sandsack	<p>Operating of TLB or Excavator in close proximity to workers and public vehicles</p> <ul style="list-style-type: none"> <li>Using TLB or mobile crane for lifting pipes or other material</li> </ul>	<ul style="list-style-type: none"> <li>Critical injuries caused by TLB/ Excavator striking workers or TLB rolling over</li> <li>Critical injuries caused by the TLB, crane or Excavator striking workers or rolling over</li> </ul> <p>The incorrect and or defective hand tools could result in non-disabling/ first aid case i.e. the hand or eyes</p>	10	2	2	6	18		
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	No annual leak tests performed.	Can result in persons being exposed to radiation due to radiation leaks and prosecution by law.	4	2	8	0	14	Annual leak tests to be carried out on sources and the results thereof to be kept on file.	Annual leak tests carried out on sources and the results thereof kept on file.
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	Exposure to radiation due to unsafe storage.	Sealed sources with very low level of radiation but can have health effects if not handled properly and damage occur resulting in exposure to radiation.	4	2	4	0	10	Source assembly must be in the "off" or fully shielded position; Warning signs will be displayed at entrance to store room indicating presence of radioactive material; Storage facility will be lockable and unauthorised entry will be prevented; Unit control register will be provided in which instruments can be signed in and out of the	Risk Assessment and training on the RA; Safe work Procedure and training on the SWP. Toolbox talks; Record of training on file; Supervision; Radioactive warning and unauthorised entry signs displayed at store room;
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	Accident/ Incident during transportation.	Sealed sources with very low level of radiation but can have health effects if not handled properly and damage occur resulting in radiation exposure.	4	2	4	0	10	If mechanical damage has occurred the area is to be isolated and the appointed Radiation Protection Officer notified immediately; No person is to go near the gauge unless instructed to do so by the appointed Radiation Protection Officer.	Risk Assessment and training on the RA; Safe work Procedure and training on the SWP. Toolbox talks; Record of training on file; Supervision; In case of an accident and mechanical damage has occurred, the area is isolated and the appointed Radiation Protection Officer notified immediately;
ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION					PREVENTATIVE MEASURES	CONTROLS
			A	B	C	D	R		
									No person goes near the gauge unless instructed to do so by the appointed Radiation Protection Officer.
Public and site visitor safety.	Unauthorised entry to the construction site.	Can result in serious injuries or death to members of the public.	10	4	8	0	22	Unauthorised entry prohibited in English and in the language of the surrounding community to be displayed at conspicuous locations on the fence surrounding the site area; The site to be fenced off and any other hazardous locations on site i.e. excavations, water ponds etc. to be fenced off and warning signs displayed; Controlled access points to the site to be in place; Visitors to the site to undergo safety induction training before allowed to go on site;	Site to be fenced off; Warning signs displayed; All hazardous locations on site fenced off; Controlled access to the site; Visitors undergoing Safety induction training; Visitors accompanied by employees whilst on site.



								Visitors to be accompanied by employees at all time when on site.	
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**NOTE:**

This information describes the type of work required in terms of this contract that will be accompanied by dangers, hazards and risks which the Contractor shall be required to identify, analyse, manage, monitor and review in terms of the Health and Safety Plan and Risk Assessments.

This information is neither prescriptive nor exhaustive, and is provided as a guideline to tenders in preparing their tender submissions and to the successful Contractor as a basis for the preparation of the Site Specific Risk Assessments, to be performed by the Contractor in terms of Construction Regulation 9.

Tenders shall make their own assessment of the dangers, hazards and risks that can be expected during the course of this contract, which may include dangers, hazards and risks not identified in the Baseline Risk Assessment, including those that may arise from specific methods of construction employed by the Contractor, and shall make due allowance in their tendered rates and prices for all costs related to complying with the provisions of the Act and Construction Regulations.

This information is given in good faith for the guidance of Tenderers, and no additional payment shall be made as a result of any inaccuracies, discrepancies or omissions contained therein.

This is a Baseline Risk Assessment and the responsibility remains with the Contractor to prepare project specific Risk Assessment as per Regulation 9.

