Project	PROVISION OF ABLUTION FACILITIES AT L JENTILE SSS FOR THE SAFE PROGRAMME IN THE EASTERN CAPE (CLUSTER A1)	Evaluator Name	Thulani Bukhosini	**BASELINE RISK ASSESSMENT- ANNEXURE B**	5008-S030W-34-BRA-0001 Rev 00
Compiled By	Client Team	Signature			
Date of Assessment	28 April 2021	Responsible Manager			
		Signature			

PROBABILITY INDEX		SEVERITY INDEX INJURY/DISEASE (I)		SEVERITY INDEX PRODUCTION (P)		SEVERITY INDEX ENVIRONMENT (E)		SEVERITY INDEX COST (C)		FREQUENCY INDEX	
5	Almost certain to inevitable	5	Fatal	5	No production	5	Permanent effects	5	> R500 000	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 days'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		
A	80 - 100%	Very High Risk
B	60 - 79 %	High Risk
C	40 - 59%	Medium Risk
D	20 - 39%	Lower Risk
E	0 - 19%	Low Risk

PPE Requirement & Safety Signs

Item	Task / General Activities	Hazard Identified	Risks i.r.t the hazard	Severity Index I	P	E	C	Tot	Assess. Count	5 Points Each	Formula = points *5*5	Probability Index	Frequency Index	Risk Score	Risk Value	PPE	Signs	Corrective Action	Responsible Person & Time Frame
1	Site establishment	1. Improper loading and unloading practices 2. Traffic congestion 3. Improper electric installation 4. Use of damaged portable electrical tools and hand tools 5. Risk and Security 6. Enviironmental damage	**1. Health & safety (I)**	2				2	1	5	125	5	5	50	40%	Mandatory or as per requirement		• Appointed spotter to be in position wearing day glow vest and blowing whistle. • Clear all bystanders away from operations •Banksman to oversee all lifting operations • Pre-lift checks to be done on lifting material. • Slings and chain blocks to be checked prior lifting operations and to have valid load certificate. Lifting truck to also be in possession of a load test certificate and driver to be appointed in writing. 2. All electrical installations to be conducted by a competent person and COC's to be obtained when necessary. 3. Power tools to be inspected by a competent person, pre-check inspections to be conducted, power tools to be recorded on inspection register 4. Ensure that there is a site specific security risk assesment, control measures and competent security company with compitent security officers. 5. Ensure that envirnment is protected.	Principal Contractor
			2. Cost (C)				3	3	1	5	125	5	5	75	60%				
			3. Productivity (P)		2			2	1	5	125	5	5	50	40%				
			4. Environment (E)			2		5	1	5	125	5	5	125	100%				
															60%				
2	Exposure of services	1.Manual excavation 2. Digging using excavators	**1. Health & safety (I)**	3				3	1	5	125	5	5	75	60%	Mandatory or as per requirement		1. Scanning devices to be used prior any excavation issues in order to determine live services and avoid electrocution.	Principal Contractor
			2. Cost (C)				3	3	1	5	125	5	5	75	60%				
			3. Productivity (P)		4			4	1	5	125	5	5	100	80%				
			4. Environment (E)			2		2	1	5	125	5	5	50	40%				
															60%				
3	Excavations/Backfilling	1. Unsuitable ground conditions for excavation work that may lead to excavation collapse 2. Man machine interaction, 3.Dust generation 4. Noise generation (especially during rock breaking) 5. Unbarricaded excavations/trenches 6. Damage to existing services during excavations 7. Oil spillages causing ground contamination 8. Air pollution	**1. Health & safety (I)**	5				5	1	5	125	5	5	125	100%	Mandatory or as per requirement		1. Shore/brace excavations to prevent caving/falling in and provide access ladder. Soil dumped at least 1m away from edge of excavation and no material to be kept closer to the edge of excavation. 2. Traffic control to be managed to prevent collision of mobile plant as well as collision with personnel. 3. Dust suppression methods to be used when required and employees to be provided with dust masks when required. 4. In residential areas noisy activities to be conducted at timings specified by laws. 5. Excavations guarded/barricaded/lighted after dark in public areas and when there is no work conducted. All excavations are subject to daily inspections by a competent person. 6. Scanning devices to be used to identify underground services prior excavation works, in order to prevent cable damage and possible electrocution. 7. Principal Contractor must comply to Construction Regulation 13	Principal Contractor
			2. Cost (C)				5	5	1	5	125	5	5	125	100%				
			3. Productivity (P)		4			4	1	5	125	5	5	100	80%				
			4. Environment (E)			3		3	1	5	125	5	5	75	60%				
															85%				
4	Vehicles not roadworthy	1. Construction vehicles unroadworthy 2. Employees transport facilities unroadwothy 3. Mobile plant used in the project unsafe	**1. Health & safety (I)**	4				4	1	5	125	5	5	100	80%	Mandatory or as per requirement		1. All construction vehicles have to comply with Construction regulations 2. Employees to be transported to and from work in a safe manner, never to be ferried at the back of bakkies and trucks. 3. Mobile plant operating on site to fully comply with CR 23.	Principal Contractor
			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)			1		1	1	5	125	5	5	25	20%				
															60%				
5	Working next to the road	1. . Working on the road without Traffic plan , Traffic controllers and road signs	**1. Health & safety (I)**	2				2	1	5	125	5	5	50	40%	Mandatory or as per requirement		1. Traffic plan must be submitted to RE for approval prior to commencement of work.	Principal Contractor
			2. Cost (C)				3	3	1	5	125	5	5	75	60%				
			3. Productivity (P)		2			2	1	5	125	5	5	50	40%				
			4. Environment (E)			1		1	1	5	125	5	5	25	20%				
															40%				
6	Demolishing of existing dilapidated ablution buildings	1. Falling objects 2. Schedule and cost over run on	**1. Health & safety (I)**	1				1	1	5	125	5	5	25	20%	Mandatory or as	CR10	1. Principal Contractor must comply to Construcrion Regulation 14 Demolishing work. 2. Principal Contractor condcut specific risk assesment, Methos statement and safe work procedure for demolishing work. 3. Principal Contractor must remove waste on site and dispose off to registered land fill site. 4. Contractor	Principal Contractor
			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)			1		1	1	5	125	5	5	25	20%				

		project		**Total Average Risk Value**	**50%**	per requirement		must dispose off sludge, rubble and hazardous waste to registered waste management facility and keep records.	
	Scaffolding	Unsafe scaffolding, offloading of scaffold material, incompetent scaffold erectors,		**Total Average Risk Value**	**55%**	Mandatory or as per requirement		1. Competent person/s appointed in writing to supervise and inspect excavation work Written Proof of Competence of above appointee/s available on Site Risk Assessment carried out Inspected: - before every shift - after any blasting - after an unexpected fall of ground - after any substantial damage to the shoring - after rain. Inspections register kept Method statement developed where explosives will be/ are used	Principal Contractor

8	Eletrical Instalation	1. Incompitent Eletrical Contractor	**1. Health & safety (I)**	**2**			**2**	1	5	125	5	5	50	40%	Mandatory or as per requirement		1. Only compitent contractor is allowed to do Eletrical instalation. 2. Principal contractor must appoint comitent person for eletrical work	Principal Contractor
			2. Cost (C)			**2**	**2**	1	5	125	5	5	50	40%				
			3. Productivity (P)		**2**		**2**	1	5	125	5	5	50	40%				
			4. Environment (E)			**3**	**3**	1	5	125	5	5	75	60%				
				Total Average Risk Value										**45%**				

9	Water retuculation	1. Incompitent supervisor 2. Trench can collapse 3. Man machine interaction, 4. Water with pressure, 5. Damage to existing services during excavations.	1. Health & safety (I)	4			4	1	5	125	5	5	100	80%	Mandatory or as per requirement		1. Principal contractor must appoint compitent supervisor for supervisn of construction work and plumbing operations. 2. Appointed Excavationo supervisor must monitor the excavation and keep records of excavation register. 3. Employees must keep safe distance from moving mechinery and wear aprorpaite PPE, Safety vest. 4. Supervisors must develop Safe work procedure for valve instalation and mantainance. 5. Principal contractor must refer to construction drawing and wayleave prior to commencement of excavation.	Principal Contractor
			2. Cost (C)			2	2	1	5	125	5	5	50	40%				
			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	Stormwater channels	1. Incompitent supervisor 2. Trench can collapse 3. Man machine interaction, 4. Damage to existing services during excavations	1. Health & safety (I)	5			5	1	5	125	5	5	125	100%	Mandatory or as per requirement		1. Principal contractor must appoint compitent supervisor for supervisn of construction work. 2. Appointed Excavationo supervisor must monitor the excavation and keep records of excavation register. 3. Employees must keep safe distance from moving mechinery and wear aprorpaite PPE, Safety vest. 5. Principal contractor must refer to construction drawing and wayleave prior to commencement of excavation.	Principal Contractor
			2. Cost (C)			5	5	1	5	125	5	5	125	100%				
			3. Productivity (P)		5		5	1	5	125	5	5	125	100%				
			4. Environment (E)			1	1	1	5	125	5	5	25	20%				
			Total Average Risk Value											80%				
10	Use of portable electrical tools and hand tools	1. Unsafe, sub-standard and/or defective equipment used Untrained employees using portable electrical tools	1. Health & safety (I)	3			3	1	5	125	5	5	75	60%	Mandatory or as per requirement		1. All portable electrical equipment to be logged on a register and monthly inspections to be conducted. 2. Pre use checklists to be implemented, conducted and maintained 3. Employees to be trained on use of portable electrical tools	Principal Contractor
			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)			3	3	1	5	125	5	5	75	60%				
			Total Average Risk Value											60%				
11	Eletrical work	1. Incompitent person doing eletrical work. 3. Incompitent Contractor 2. Eletricution and fire	1. Health & safety (I)	3			3	1	5	125	5	5	75	60%	Mandatory or as per requirement		1. Only compitent person is allowed to do eletricla work on site. 2. Inly compitent Contractor is allowed to do eletrical work 3. Legaly appointed Fire fighter, fire extinguisher anfd first Aider must be in place for in case of emergency.	Principal Contractor
			2. Cost (C)			2	2	1	5	125	5	5	50	40%				
			3. Productivity (P)		2		2	1	5	125	5	5	50	40%				
			4. Environment (E)			1	1	1	5	125	5	5	25	20%				
			Total Average Risk Value											40%				
12	Loading and Offloading	1.Improper loading and unloading 2. Incompetent operators deployed	1. Health & safety (I)	3			3	1	5	125	5	5	75	60%	Mandatory or as per requirement		1. Pre-use inspections to be conducted on truck mounted crane 2. Truck mounted crane operator to be licensed and appointed in writing 3. Truck mounted crane to be accommodated with a valid load test certificate, crane hook certificate 4. Full maintenance record of crane to be available 6. Ensure 3 point contact when climbing on and off the truck. 7. Ensure loads are stable when loading and offloading. 8.All material/equipment that is sling to be lifted must be checked before lifting takes place and locked down in register.	Principal Contractor
			2. Cost (C)			3	3	1	5	125	5	5	75	60%				
			3. Productivity (P)		2		2	1	5	125	5	5	50	40%				
			4. Environment (E)			2	2	1	5	125	5	5	50	40%				
			Total Average Risk Value											50%				
13	Use of chemicals	1.Improper storage of chemicals, transportation and handling	1. Health & safety (I)	2			2	1	5	125	5	5	50	40%	Mandatory or as per requirement		1. HCS to be properly stored in a cool locked store room 2. HCS to be safely transported to the work place and no HCS to be stored in a work place, only quantity used. 3. Employees handling hazardous chemical substance to be trained. Possible preventive measures to be put in place in order to prevent harm to employees. PPE to be used when necessary.	Principal Contractor
			2. Cost (C)			2	2	1	5	125	5	5	50	40%				
			3. Productivity (P)		2		2	1	5	125	5	5	50	40%				
			4. Environment (E)			3	3	1	5	125	5	5	75	60%				
			Total Average Risk Value											45%				
14	Laying stormw water pipes and Construction of	1. Incompitent person supervising excavation work 2. Trench can collapse 3. Storm water pipes can fall into employees 4. Insects and snakes	1. Health & safety (I)	2			2	1	5	125	5	5	50	40%	Mandatory or as per requirement		1.Excavation work must be supervised by legaly appointed excavation supervisor. 2. Excavation supervisor must inspect excavation and keep records 3. Supervisor must develop safe method of laying storm water pipes. 4. Employees must report to supervirs if they see insects or animals. Compitent personnel must be called to site so that they can handle the situation.	Principal Contractor
			2. Cost (C)			2	2	1	5	125	5	5	50	40%				
			3. Productivity (P)		2		2	1	5	125	5	5	50	40%				
			4. Environment (E)			1	1	1	5	125	5	5	25	20%				
			Total Average Risk Value											35%				
15	Roofing	1. Overhead cables 2. Incompitent Supervisor 3. Poor planing of works 4. Falling from heights 5. Cut injuries	1. Health & safety (I)	4			4	1	5	125	5	5	100	80%	Mandatory or as per requirement		1. Principal contractor must conduct Risk assesment and safe work procedure prior to commencment of work. 2. Principal Contractor must apoint compitent Supervisor for contruction work. 3. Compitent supervisor must demarcate/barricaded. 4. All employees working on site must be familiar with fall protection plan. 5. Principal contractor must issue appropriate PPE, Safety Harnes, Safety Shoes, Work suit, Safety Glasses and gloves. 6. Princip	Contractor must provide life line and it must be instaled by comoitent person, equipemnt used must be calebrated. 7. Life line must be inpected by compitent person and must be declaired safe prior to use.	Principal Contractor
			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)			4	4	1	5	125	5	5	100	80%				
			Total Average Risk Value											80%				
16	Working on Heights	1. Personal Injury 2. Fatality	1. Health & safety (I)	5			5	4	20	500	5	5	125	25%	Mandatory or as per requirement		1. Designate a competent person to be responsible for the preparation of a fall protection plan. 2. Ensure that the Fall protection plan and Risk assesment is implemented, amended and maintained. 3. Take steps to ensure continued adherence to the fall protection plan. 4. The fall protection plan must include but not limited: A Risk assessment of all woerk carried out from a fall risk position, procedures and methods used to address all the risks identified. 5. Appointed 16 (2) to ensure that employees comply with Construction regulations 10 Fall protection.	Principal Contractor
			2. Cost (C)			5	5	1	5	125	5	5	125	100%				
			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											61%				
18	Retaining walls	1. Falling objects 2. Lifting heavy material	1. Health & safety (I)	3			3	1	5	125	5	5	75	60%	Mandatory or as per requirement		1. Ensure vehicles are isolated when not in operation 2. Employer must provide awareness on ergonomics. 3. Principal Contractor must conduct method stament, Risk Assesment and Safe work procedure for building retaining wall. 4. Principal Contractor must comply to Engineers design.	Principal Contractor
			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)			3	3	1	5	125	5	5	75	60%				
			Total Average Risk Value											60%				
19	Moving vehicles on public road during construction	1. Injury to people 2. Damage to equipment	1. Health & safety (I)	3			3	1	5	125	5	5	75	60%	Mandatory or as per requirement		1. Keep safe distance from moving machinery. 2. Wear reflective vests 3. Don't cross or leave work area without permission 4. Draft, implement and maintain a proper traffic management plan.	Principal Contractor
			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%				

20	Rehabilitation of affected area	1. Damage to envirnment 2. Personal injury.	1. Health & safety (I)	4			4	1	5	125	5	5	100	80%	Mandatory or as per requirement		1. Principal Contractor must conduct method statement, HIRA and Safe work procedure for rehabiltation of affected area. 2. Work area to be barricaded and demarcated. 3. Principa Contractor must take care of the envirnment and conduct awarenes to all employees, comply to envirnmental Act.4. Principal Contractor must manage machinery/Mobile plant and make sure that employees are safe.	Principal Contractor
			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)			1	1	1	5	125	5	5	25	20%				
			Total Average Risk Value											65%				
22	Emergency Preparedness (Fire Fighting equipment insufficient)	1. Injury to people 2. Property and equipment damage	1. Health & safety (I)	2			2	1	5	125	5	5	50	40%	Mandatory or as per requirement		1. Fire fighting equipment must be in place accordance to survey conducted during site establishment. 2. Identification and signage must be clear and visible. 3. All relevant equipment to be inspected and on register.	Principal Contractor
			2. Cost (C)			2	2	1	5	125	5	4	40	32%				
			3. Productivity (P)		2		2	1	5	125	2	3	12	10%				
			4. Environment (E)			2	2	1	5	125	1	1	2	2%				
			Total Average Risk Value											21%				
23	Site security and public protection	1. Public gaining access to the construction site.	1. Health & safety (I)	4			4	1	5	125	5	5	100	80%	Mandatory or as per requirement		1. Principal contractor to ensure the project is secure at all times. Access control to be maintained and no unathaurised entry to be permitted to the project. 2. When there are no activities on site and no personnel conducting works. The Project has to be left in a safe manner that the public cant gain access and that all hazards are attended to prior vacating the site.	Principal Contractor
			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%				
24	Ablution facilities	1. 1. Use of untidy facilities putting employees at risk of contracting various infections and sicknesses	1. Health & safety (I)	2			2	1	5	125	4	5	40	32%	Mandatory or as per requirement		1. Adequate, clean and ablution facilities to be provided by employer.	Principal Contractor
			2. Cost (C)			1	1	1	5	125	4	3	12	10%				
			3. Productivity (P)		1		1	1	5	125	4	3	12	10%				
			4. Environment (E)			2	2	1	5	125	4	3	24	19%				
			Total Average Risk Value											18%				
25	Safe guarding / Dealing with existing Structures	1. Damage to existing services and structures.	1. Health & safety (I)	5			5	1	5	125	3	5	75	60%	Mandatory or as per requirement		1. Ensure identification off all existing services and structures before commencing with site establishment.	Principal Contractor
			2. Cost (C)			5	5	1	5	125	3	5	75	60%				
			3. Productivity (P)		5		5	1	5	125	3	5	75	60%				
			4. Environment (E)			5	5	1	5	125	3	5	75	60%				
			Total Average Risk Value											60%				
26	Emergency Preparedness (Fire Fighting equipment insufficient)	1. Injury to people 2. Property and equipment damage	1. Health & safety (I)	2			2	1	5	125	5	5	50	40%	Mandatory or as per requirement		1. Fire fighting equipment must be in place accordance to survey conducted during site establishment. 2. Identification and signage must be clear and visible. 3. All relevant equipment to be inspected and on register.	Principal Contractor
			2. Cost (C)			2	2	1	5	125	5	4	40	32%				
			3. Productivity (P)		2		2	1	5	125	2	3	12	10%				
			4. Environment (E)			2	2	1	5	125	1	1	2	2%				
			Total Average Risk Value											21%				
27	Installation of fence	1.Transportation and handling of fence. 2. Use of ladders 3. Use of scaffolding	1. Health & safety (I)	3			3	1	5	125	5	5	75	60%	Mandatory or as per requirement		1. Rolls of fence to be transported mechanically. 2. Proper PPE and suitable hand gloves to be provided to employees involved. 3. Ladders to be inspected by a competent person appointed in writing and to be well positioned and secure when in use. No wooden ladders to be used.	Principal Contractor
			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)			3	3	1	5	125	5	5	75	60%				
			Total Average Risk Value											60%				
28	Concrete Mixing and Pouring (Manually and Mixer)	1. Concrete spillages 2. Use of hand tools 3. Oil spillages 4. Dust generation 5. incompetent operators 6. Miscommunication between operator and flagman 7. Mixer operating near excavation	1. Health & safety (I)	3			3	1	5	125	5	5	75	60%	Mandatory or as per requirement		1. concrete mixers to be regularly serviced in order to prevent breakdown leading to oil spillages. Spot checks to be done prior each shift. 2. All hand tools to be inspected by a competent person. 3. When concrete is being poured, concrete spillages to be prevented and plastic sheet to be placed on the ground when spillages cannot be prevented. 4. Concrete washout area to be created where concrete run off will be discharged. 5. A flagman must be well trained in order for him to be able to provide proper signals thus preventing employees being hit by a mixer. 6. Operators to be well trained and no unauthorized employees must operate the mixer. 7. Dust mask must be provided to employees handling cement as a last resource when dust cannot be controlled. 8. Concrete mixer must keep a distance from excavations, when pouring into excavation flagman have to be more vigilant and a regular toolbox talks must be held. 9. Task specify risk assessment for all activities must be developed and communicated.	Principal Contractor
			2. Cost (C)			3	3	1	5	125	5	5	75	60%				
			3. Productivity (P)		2		2	1	5	125	5	5	50	40%				
			4. Environment (E)			2	5	1	5	125	5	5	125	100%				
			Total Average Risk Value											65%				