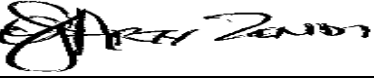




ETHEKWINI MUNICIPALITY Occupational Health & Safety Unit

BASELINE RISK ASSESSMENT

Document Title	Baseline Risk Assessment
Client	eThekwini municipality – Human settlements Unit
Project	Construction of 438 top-structure units at Vumengazi Rural Housing Project (ward 84, 100 & 111)
Contract Number	1H-28810
Internal reference	BRA25/03/2024
Compiled by (Safety officer)	Name and surname: Siya Nkosi Signature:  Date: 03/04/2024
Reviewed by (Manager: Safety & Risk)	Name and surname: Arty Zondi Signature:  Date: 03/04/2024
Contractor acceptance	Name and surname: _____ Designation: _____ Signature: _____

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

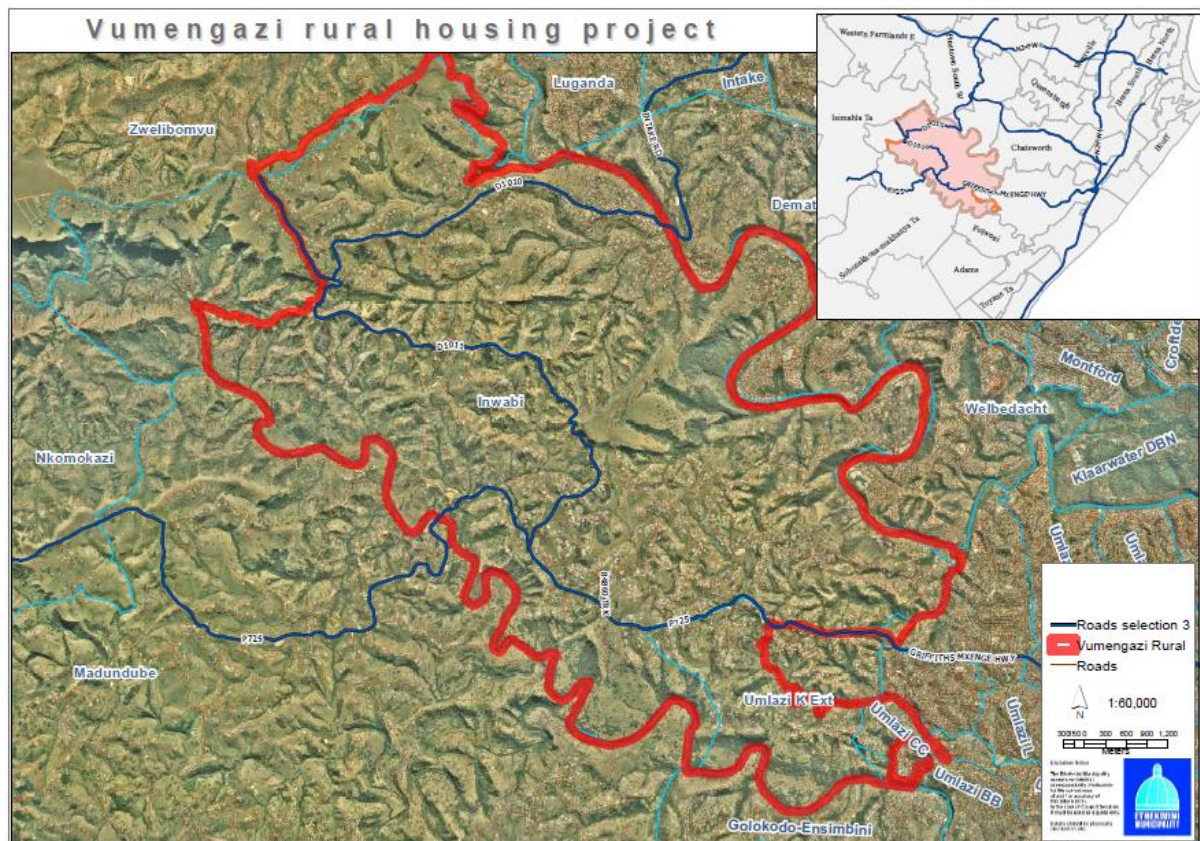
The risk assessment form part of the health and safety plan to be applied on the site and must include the following:

- (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 1H-28810
- (b) Occupational Health & Safety Act and its Regulations
- (c) COVID19 Codes of Practice

6. LOCALITY PLAN



SCOPE OF WORK

Clear and grab

Cutting platforms and slab

Plumbing

Public safety

Blockwork

Site establishment

Roof work

Electrical work

Excavation work

Use of hand-tools and electrical tools

Corona virus

Construction vehicle and mobile plants

Site security

Working in a fall risk position

1. RISK ESTIMATION AND EVALUATION

RISK CLASSIFICATION USING A RISK SCORE TECHNIQUE

Exposure (E) How frequently does the hazardous event occur		Risk level
Continuously		10
Frequently (daily)		6
Occasionally (weekly)		3
Unusually (monthly)		2
Rarely (few a year)		1
Probability (P) The probability of a loss when the hazardous event does occur		Risk level
Frequent (happens often)		10
Probable (quite possible)		6
Occasional (unusual, but possible)		3
Remotely possible (has happened somewhere)		1
Improbable (practically impossible)		0.5
Severity (S) Consequences of the hazardous event		Risk level
Catastrophic many fatalities; or interruption of longer than 2 weeks; or asset or environmental damage (or both) exceeding R100m		100
Disaster (few fatalities; or interruption between one and 2 weeks; or asset or environmental damage (or both) exceeding R10m)		40
Very serious (one fatality; or interruption of 6 days; or asset or environmental damage (or both) exceeding R100,000		7
Important (temporary disability; or interruption between 6 and 24 hours; or damage exceeding R10,000		3
Noticeable (first aid needed; or interruption of less than 6 hours; damage exceeding R1000)		1
Risk classification (Risk score = E x P x S)		
Risk score	Risk level	
Over 400-----5	Very high risk – discontinue operation or activity	
200 to 400 ----- 4	High risk – immediate correction needed	
70 to 200----- 3	Substantial risk – correction needed	
20 to 70----- 2	Possible risk – attention needed	
Under 20 ----- 1	Risk accepted	

BASELINE RISK ASSESSMENT WORKSHEET: IDENTIFYING EXISTING & POTENTIAL RISKS

	Activity	Hazard	Risk	Risk Evaluation			Risk Score	Risk level
				E	P	S		
1	Clear and grab							
	Clearing of the site using construction mobile plant and hand tools	- Incompetent driver/ operator - Unsafe construction mobile plant/ hand tools - Petrol and oil spillages - Existing services - Noise	- Accident/ property damage/ machinery running out of control - Injury to body - Environmental contamination - Noise induced hearing loss	3	6	7	126	3
2	Cutting platforms and slab							
	- Cutting platforms using construction mobile plants - Construction of slabs	Unsafe construction mobile plants; Incompetent operators; Unsafe access to site	Damage to nearby structures; Injury to body; Damage to construction mobile plants	6	3	7	126	3
3	Plumbing							
		Manual handling of	Injury to hands	6	3	1	18	1

		tools; Unsafe tools						
4	Public safety							
		Public exposure to construction activities; community unrest; fighting over resources	Injury to body; work stoppage; Legal claims	6	6	3	108	3
5	Blockwork							
		Unsafe working at height platforms; Unsafe hand tools; Contact with mortar	Fall risk; broken bone; dislocation; Injury to hands; Skin dermatitis	6	6	3	108	3
6	Site establishment							
	Manual and mechanical clearing of the land. Off-loading and positioning of containers by mobile crane. Fencing. Installation of temporary water	Incompetent construction mobile plant operator. Manual Handling of equipment and materials. Uneven surfaces.	Body injuries/ Accidents. Destruction of services. Burns/ death	2	6	3	36	2

	supply, electricity, ablution facilities	Driving on dangerous and undulating terrain. Reckless driving. Electrocution. Incorrect/ poor connection of temporary services						
7	Roof work							
	Construction of roof	Working on fall risk position; Unsafe roof access; Untrained roof erectors; No/ poor roof work planning; Collapsing of the roof; Falling objects	Falling from; Falling into; broken borne; death; disablement; Head injuries	6	6	7	252	4
8	Electrical work							

	Electrical installation	Incompetent personnel. Unsafe hand-tools/ electrical tools. Unsafe ladder. Electrocution	Improper installation of electricity/ non-compliance with safety standards. Injury to hands. Burns; electric shock	3	3	7	63	2
9	Excavation work							
	Manual and mechanical excavation	Unsafe hand tools; Unsafe construction mobile plants; Uneven surface/ ground condition; Incompetent construction mobile plant operator; Oil leak; Unforeseen underground services	Broken borne; dislocation; Accidents; injuries to hands; Falling into excavation; Ground contamination	3	3	3	27	2
10	Use of hand-tools and electrical tools							
	Conducting activities using hand-tools and electrical tools	Unsafe hand-tools/ electrical tools. Possible of pinch	Injury to hands	6	3	1	18	1

11	Corona virus							
	• Transportation of employees • Use of site facilities and hand-tools • Performing construction work • Meeting/ toolbox talks	• Non-compliance with COVID19 Codes of practice • Sharing of facilities and hand tools • Failure to use disinfectants • Virus contaminated vehicle, facilities and tool • Being in an enclosed place • Not using protective gear	• Employees could be infected with COVID19 virus, severe illness or death • Could be prosecuted or fined	6	3	7	126	3
12	Construction mobile plants and vehicles							
	• Use of construction vehicles and mobile plants and equipment	• Unsafe construction plants and equipment. Incompetent drivers or	• Accidents; injury to employees and public; death; disablement; damage to	6	6	7	252	4

		operators. Oil leaks	property. Environmental contamination					
13	Site security							
		Unguarded site camp; Inadequate security provision; No safe access control	Loss of material and equipment/ financial risks/ theft/ unlawful invasion or damage new of houses	6	6	3	108	3
14	Working in a fall risk positions							
		Falling into; Falling from; Medical unfit; Untrained person	Broken borne/ disablement/ death	6	6	7	252	4

RISK PROFILE:

Construction of 438 top-structure units at Vumengazi Rural Housing Project 1H-28810

