



SCOPE OF WORKS FOR BAY 60 FOUNDATION REPAIRS

DURBAN 311 SOLOMON MAHLANGU DRIVE

Date of release: August 2024

Rev 00

The information contained herein is the sole property of Transnet Engineering. It may not be used, disclosed, or reproduced in part or in whole in any manner, except with the written permission of and in a manner permitted by the proprietors.

Table of contents

Table of contents.....	2
1. DOCUMENT AUTHORITIES.....	3
5. TECHNICAL REQUIREMENTS	4
6. HEALTH AND SAFETY REQUIREMENTS	5
7. SHE SPECIFICATION.....	5
8. AS PART OF THE LEGISLATIVE AND TE SHE REQUIREMENTS.	5

1. DOCUMENT AUTHORITIES

Department	RSE
Department Affected	RSE, FIM
Effective date	August 2024
Compiled by	Thamsanqa Mtolo
Designation	Civil Engineering Technician
Signature & Date	
Reviewed by	Stanley Mchunu
Designation	Project Manager
Signature & Date	
Approved by	Mhlonipheni Nxumalo
Designation	Executive Manager: FIM
Signature & Date	 12/08/2024

2. TECHNICAL REQUIREMENTS

The main deliverables would be as per the scope of works, in summary, to be carried out is as follows and to be read in conjunction with part C3 of the scope of works:

Item	description
2.1	Site preparation
	The total square meters of the site is 238m², which has 62 stelkon concrete blocks in total. Clear site by moving all heavy steel equipment. Once that is done, use a forklift to disconnect and remove all stelkon blocks on site. Move them to a reserved safe place within the plant.
2.2	Earth excavation and backfilling
	Use a bobcat or shovels to excavate soil or other materials to the required depth of 700mm. All access materials must be disposed of site and will not be reused as G5 material will be used for back filling.
2.3	G5 backfill material
	Use G5 material with stabilised cement and crusher to backfill 500mm and compacted to 98% AASHTO leaving 200mm for the slab. Note that compaction must be tested (testing requires a SANS approved certificate) as the site will be used for heavy machines operation.
2.4	Levelling and grading
	The ground needs to be surveyed, levelled and evenly compacted. Use a dumpy level, total station, or GPS (surveying equipment) to do levels of the ground.
2.5	Footing and foundation
	Dig trenches for footing foundation (Strip foundation). Foundation must be 450×300 strips Casting concrete in to footing foundation Reinforce concrete of 30Mpa is required for the foundation. Reinforcement must be designed and approved. A cube test must be done to test if concrete meets required strength
2.6	Slab preparation
	Cast 200mm 30MPa concrete slab (238m²) Use Heavy-duty mesh wire (50x50x3.15 mm, SPECIMESH 2400x1200 REF 244) serves as reinforcement for the slab. Required concrete of 30Mpa must be brought to site using a ready mixer and must be poured into the foundation and base slab Concrete must be evenly poured and levelled. Use a concrete vibrator to compact and ensure no voids and prevent honeycombing
2.7	Curing
	Concrete must be cured for a minimum of 28 days. Spread a layer of river sand onto the concrete and mist it with water for the first 14 days to allow it to cure.
2.8	Finishing
	Allow the concrete to set and cure.

3. HEALTH AND SAFETY REQUIREMENTS

- 3.1 All equipment and installation whether detailed in this specification or not shall comply with the requirements of the Occupational Health and Safety Act 85 of 1993 as amended and all other applicable legislation including specific set of regulations and local authority bylaws where applicable.
- 3.2 The contractor shall hold monthly safety meetings with staff and records of minutes. shall be kept on file on site.
- 3.3 The contractor shall be available for monthly meetings with Transnet Management. A schedule for these meetings may be agreed upon.

4. SHE SPECIFICATION

- Prior to commencement of contract, the contractor shall be issued with a SHE specification to compile a SHE files in line with TE requirements.
- Prior to establishing on site, it is an explicit requirement of this contract that all the Contractor's personnel directly involved with this contract, including those of sub-contractors, attend a **Safety induction course**. Transnet will provide the course free of charge and attendance is compulsory for all personnel under the control of the Contractor who, during the duration of the contract, will be present on site whether on a full time or adhoc basis.
- The contractor must allow for all additional charges because of these requirements as no claims for extras will be accepted in connection with the foregoing.

5. AS PART OF THE LEGISLATIVE AND TE SHE REQUIREMENTS.

- The successful contractor is required to conduct a Risk assessment to ascertain all potential risks associated with this project. The completed risk assessment is to potential risks associated with this project. The completed risk assessment is to be formally submitted to the Risk department via the project manager at least two weeks prior to the commencement of the actual project.
- A safety file and associated documents will be required from a successful tenderer, and such will be communicated by the Risk department.