

 RAND WATER	STRATEGIC ASSET MANAGEMENT TECHNICAL SPECIFICATION	
SECTION: Design Office Civil		

Project No.

P000

Contract Number

RW00

BARRAGE ZEOLITE TREATMENT PLANT

ANNEXURE A - CIVIL SPECIFICATION

Validation Status (Draft, Review, Approval, Construction)

Rev	Rev. Date	Compiled by Name & ECSA No.	Signature	Checked by Name & ECSA No.	Sign.	Approved Name and ECSA No.	Sign.
0	15/04/25	M. MAQINA PR. ENG. 20170167					

1.1 CIVIL/STRUCTURAL SPECIFICATIONS

1.1.1 TERMINOLOGY, ABBREVIATIONS AND APPLICABLE DRAWINGS

The following terminology shall apply:

Term	Definition
Engineer	As defined in the commercial document.
Employer	Shall mean the same as the “client”, with the client being the owner of the project
Contractor	Shall mean the legal entity under the employ of the Client who enters into a binding Contract to undertake part of or the entirety of the Works described in this and other Contract documents.

The following abbreviations shall apply:

Abbreviation	Definition
GA	General Arrangement
SANS	South African National Standards
SABS	South African Bureau of Standards

This document shall be read in conjunction with the following drawings:

Drawing Number	Drawing Title
RA 72229-001	Barrage Zeolite Station – Concrete and Steel Details – Sheet 1
RA 72229-002	Barrage Zeolite Station – Concrete and Steel Details – Sheet 2
RA 72229-003	Barrage Zeolite Station – Concrete and Steel Details – Sheet 3
RA 72229-004	Barrage Zeolite Station – Schedules

1.1.2 General Requirements

Civil and Structural works are to be carried out as per the requirements of the SANS 2001 “Construction Works Standards”; applicable SANS 1200 “The Standardized Specification for Civil Engineering Construction” (where not superseded by SANS 2001); the Occupational Health and Safety Act; as well as the Construction Regulations (Latest Amendment at the time of construction).

The Standard Specification referenced herein are not included along with this document but are available at the Contractor's expense from the South African Bureau of Standards (SABS). The costs associated with purchasing the standards shall be included in the rates tendered by the Contractor.

Should any requirements of specifications contained herein conflict with any requirements of the standardised specifications, the requirements of the specifications contained in this document shall take precedence.

1.1.3 The detailed scope of works for the project, to be affected by the contractor, are as follows:

The Contractor's obligations under this project shall include, but not be limited to the following principal items (the exact extent for the scope of works shall be verified by the Contractor with the Engineer prior to tendering):

- A. Fencing off around designated site areas
- B. Surveying and setting out of works
- C. Accommodation of traffic along existing road, maintaining entry for staff to access the plant, as required
- D. Site Clearance

All permanent structure obtained from site clearance shall remain the property of the client, unless directed to dispose of by the client. If items are sold or salvaged, the monies recovered from salvaging or selling shall be transferred to the client or taken off the Contract value.

- E. Exposure of services by hand (Site to indicate location of existing services)
- F. Relocation and/or protection of existing services
- G. Relocate the existing fence and compressor.
- H. Excavation and Earthworks
- I. Laying of services (electrical, telecommunication).

Temporary works design and erection, as part of the formwork. Design of the temporary works shall comply with all requirements of the Occupational Health and Safety Act (latest amendment relevant at the time of appointment), and the Construction regulations (latest amendment relevant at the time of appointment).

- J. Construction of structures/buildings:
 - Reinforced concrete platforms and plinths,
 - Canopy Structure (including sheeting) – Canopy structure is to be made of pickled-and-passivated galvanised structural steel. Workshop drawings are to be prepared and presented to the client/engineer for approval

-
- K. Landscaping in line with existing run-off requirements (including the addition of a half-round drain on the north side of the structure – per construction drawings).
 - L. Mark up construction drawings.
 - M. Reinstatement of structures damaged or relocated during construction to their preconstruction condition/location.

1.1.4 General Requirements:

- 1.1.4.1** The Contractor is required to comply with the requirements of the Occupational Health and Safety Act (latest amendment) and its accompanying Construction Regulations (latest amendment) – and is also required to prepare and submit all documents pertaining with the requirement of the said Act and regulations.

The Contractor's attention is drawn to the following risks which may arise on site:

- Working in the vicinity of the existing live GAC plant.
- Working at heights (when erecting the canopy structure).
- Integration with existing infrastructure

1.1.7 STANDARDIZED SPECIFICATIONS, VARIATIONS AND ADDITIONS TO STANDARDIZED SPECIFICATIONS

The variations and additions to the applicable standardized specifications have been compiled to provide supplemental site and project specific information, and in that regard are intended to supplement and not replace the other related specification, most notably: SANS 1200; SANS 10120; SANS 2001 and the Technical Specifications contained in this document.

1.1.7.1 STANDARDIZED SPECIFICATIONS

The variations and additions below are provided, to varying extents, refer to some of the following specifications applicable to this project:

Specification No.	Description
SANS 1200 - A	Standardized Specification for Civil Engineering Construction – General
SANS 2001 – BE1	Construction Works – Earthworks (General)
SANS 2001 – BS1	Construction Works – Site Clearance
SANS 2001 – CC1	Construction Works – Concrete Works (Structural)
SANS 2001 – CS1	Construction Works – Structural Steelwork
SANS 1200 – HC	Standardized Specification for Civil Engineering Construction – Corrosion Protection for Structural Steelwork