

## C3: Scope of Work

### C3.1 Works Information

This Works Information sets out the *Employer's* requirements for the execution and Completion of the Works under this Contract. The *Contractor* must Provide the Works strictly in accordance with this Works Information, the Conditions of Contract, the Pricing Data, and the Site Information.

The Works Information defines the scope, standards, constraints, and obligations applicable to the *Contractor*. No requirement shall be implied from information not expressly stated in the Contract, and the *Contractor* shall not rely on assumptions, omissions, or interpretations inconsistent with this Works Information.

#### 1. Description of the works

- a) The *Contractor* must provide all labour, supervision, materials, plant, equipment, temporary works, testing, protection measures, and all other resources necessary to execute and complete the waterproofing works to the Vanderkloof Power Station Surface Building and the repair of resultant internal building damages, in accordance with this Works Information and the Conditions of Contract.
- b) The Works comprise the removal of existing waterproofing systems, preparation of the underlying substrates, installation of a new complete waterproofing system, and the reinstatement of finishes and building elements affected by the Works.
- c) The *Contractor* is responsible for selecting a proprietary waterproofing system suitable for the conditions at the Site, installing the system strictly in accordance with the manufacturer's published installation requirements, and providing the applicable manufacturer's warranties.

#### 1.1 Description of the Existing Building and Work Areas

- a) The Works relate to the Vanderkloof Power Station Surface Building, located within the Vanderkloof Power Station precinct in the Northern Cape Province.
- b) The Surface Building is a face-brick structure comprising suspended reinforced concrete roof slabs with parapets and multiple roof shafts projecting through the roof slabs, including a lift shaft, a generator shaft, and an entrance shaft. The roof slab generally slopes inward toward internal drainage points that discharge into the surface drainage system.
- c) The existing roof construction includes concrete screeds and waterproofing layers applied to the reinforced concrete slab, together with associated copings, roof penetrations, vertical interfaces, and drainage components. Internal building elements include ceilings, plastered walls, painted finishes, and floor coverings.
- d) Previous maintenance interventions to the roof waterproofing system have been undertaken. Notwithstanding these interventions, the existing waterproofing system has deteriorated and no longer performs its intended function.

**WATERPROOFING AND REMEDIAL WORKS TO THE VANDERKLOOF POWER STATION SURFACE BUILDING****1.2 Scope of Waterproofing Works**

- a) The *Contractor* must execute comprehensive waterproofing works to the Surface Building roof areas and roof shafts.
- b) The scope of waterproofing works includes, but is not limited to, the following:
- Removal of the existing waterproofing membranes, screeds, and associated materials as required to allow installation of a new waterproofing system, including lawful disposal at a permitted/licensed landfill facility.
  - Inspection of the exposed reinforced concrete roof slabs, screeds, parapets, and roof shaft structures for defects, cracks, and surface deterioration.
  - Preparation and repair of concrete substrates, including crack sealing and defect remediation, prior to installation of new waterproofing.
  - Application of bonding agents where new screeds are applied to existing hardened concrete.
  - Overlaying or forming new cementitious screeds where required to achieve a minimum fall of 1:50 toward drainage points and a minimum screed thickness of 25 mm, draining to the lowest point.
  - Installation of a new waterproofing membrane system to all relevant horizontal and vertical surfaces, including roof slabs, roof shafts, parapets, and upstands.
  - Installation of waterproofing membranes with a minimum 75 mm side lap and 100 mm end lap, applied to primed substrates using torch-applied or equivalent approved methods.
  - Waterproofing to parapets extending to the underside of copings, including removal and reinstatement of precast concrete copings.
  - Grouting beneath and to reinstated copings using a waterproof grout.
  - Formation of sand-cement coves with a minimum radius of 45 mm at all internal corners between horizontal and vertical surfaces.
  - Application of protective coatings to the waterproofing system, including two coats of an approved protective coating.
  - Execution of flood testing and any remedial works required to achieve a watertight installation in accordance with this Works Information.
- c) The waterproofing system shall comply with SANS 10021 - Waterproofing of buildings, and screed works shall comply with SANS 10109-2 - Concrete floors: Finishes to concrete floors.

**1.3 Repairs to Resultant Damage to the Surface Building**

- a) Following Completion of the waterproofing works, the *Contractor* must carry out repairs and reinstatement of internal building elements affected by the condition of the roof and the execution of the Works.
- b) The scope of repairs includes, but is not limited to, the following:
- Hacking off and removal of damaged plaster, paint finishes, and surface contaminants from walls, beams, soffits, and ceilings.
  - Replastering and repainting of affected areas to match the existing finishes.
  - Replacement of damaged floor coverings, including carpets, to match the existing.
  - Replacement of damaged ceilings and associated components to match the existing.
  - Reinstatement of the inlet receiver box and 200 × 300 mm galvanised steel downpipe where affected by the Works.
  - All waste generated (including building waste ) must be removed from the site and disposed of at a permitted /licensed landfill or hazardous waste site applicable to the waste type
- c) Repairs are limited to areas identified in this Works Information, the drawings listed in Clause 2, and the Price List.

**WATERPROOFING AND REMEDIAL WORKS TO THE VANDERKLOOF POWER STATION SURFACE BUILDING**

- d) Finishes shall comply with the applicable finishing schedules, including Drawing 0.39/1160 Rev 6Z and Drawing 0.39/1159 Rev 4Z, or equivalent schedules listed in this Contract.