

ARC Institute for Agricultural Engineering

Specifications for the repairs of the Landscape Irrigation-Dam

## 1. Background

This specification is for refurbishment of the existing Landscape Irrigation Dam at the Agricultural Research Council (141 Cresswell Street, Weavind Park, Pretoria). The dam has been existing for more than 30 years and has never been repaired before. The leakages on the dam are compromising the integrity of the dam and the pump house. The refurbishment is meant to protect the dam from leakages, which are caused by cracks on the dam wall.

- 2. Specifications and Scope of work
  - 2.1 Cleaning and preparation of the dam

Thorough preparation before installation of PVC-1000micron liner, painting of the dam with elastomeric coating to close the cracks.

#### 2.2. Supply and installation of PVC-1000micron liner (or equivalent)

PVC-1000micron Potable materials are produced in a rolled format with custom thickness and widths. It has abrasion resistance and is hard to puncture, due to the fabric reinforcements. The liners are as flexible as possible, so they can take up any form of a structure that is being lined.

The PVC formulation is designed for continuous contact with water, and radically reduces the level of toxins that leech from the PVC liner into the stored water.

# 2.3. Supply and installtion of PVC-320micron mesh for UV Shield (or equivalent)

A 320micron PVC mesh (net) is a specialized reinforced PVC mesh that is welded into place on the dams walls to protect the liner from extended UV damage, it covers the section of the liner that folds over the outside of the wall, the section on top of the wall and approximately the first 70cm inside the dam.

#### 2.4. Provision for the two outlets of the dam

During the installation allow for the following:

- 200mm diameter outlet which is 100mm from the bottom of the dam.
- · An outlet for the drainging of the water from the dam.

#### 3. Dimensions of the existing Dam

The dimensions of the Irrigation Dam is approximately 20.0 metres in diameter by 2.0 metres deep with a wall thickness is of 300mm

#### 4. Condition

All materials and workmanship must be in terms of the National Building Regulations and South African National Standards (SANS) approval. After completion of the work, the site must be cleared and all builder's rubbish removed from the site.

The Filtration system is built inside the dam and have to be taken out in order to complete the lining and then it must be installed back on its place after completion of the work.

The rails at the side of the dam and step ladder inside the dam must be taken out before the refurbishment process commences and be re-installed after the process.

#### 5. Compulsory Requirements

# 5.1. References

 Three traceable references of similar work must be provided. (Name and contact information of clients.)

#### 5.2. Guarantee

 There must be at least a 10-year guarantee on the material used and the workmanship done (Must be indicated on the quotation).

#### 5.3. Construction Industry Development Body

 Special preference will be given to contractors that a certified as CIBD 2SH/ 2SN however, 2GB will be also considered.

#### 5.4. Site briefing

 All the Service Providers that will receive a request for quotation will be required to attend Compulsory site briefing.

#### 5.5. Contingency

- Amount of 10% of the quotation will be set aside for any unforeseen.
- NOTE: contingency amount belong to ARC therefore it's within our right to use it.

#### 6. Annexure 1



Image: Landscape irrigation dam

# 7. Additional Information

• The above specified services should be rendered to:

Name of Institute :

: ARC-IAE

Address

: 141 Creswell Road

: Weavind Park

: Pretoria

- The particulars of the guarantee that will apply to the goods quoted for, with particular regard to the period and extent of the warranty must be clearly stated. Where services are required, service providers must submit documentation about the relevant experience.
- · Your written quotation should be sent to:

Lungile Kubheka : 012 842 4078 E Mail: KubhekaL@arc.agric.za

All price quotations that have a rand value of R30,000-00 to R50 000 000.00 including VAT, will be evaluated by applying the 80/20 principle as prescribed by the Preferential Procurement Policy Framework Act 5 of 2000 and its Regulations. The lowest acceptable price will score 80 points, the 20 BBBEE points will be allocated as follows:

B-BBEE Status Level of Contributor	80/20
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant Contributor	D

#### 7.1 Standard conditions

- The validity of the quotations must be indicated.
- Prices quoted should be in South African Rand and inclusive of VAT costs such as delivery, insurance, taxes, etc.
- No price adjustments or amendment of the delivery particulars contained in paragraph 2 will be considered by the ARC.
- The supplier accepts full responsibility for the proper execution and fulfilment of the goods/services quoted for.
- ARC reserves the right to accept or reject any special terms and conditions that may qualify the goods/services to be provided.
- Quotes should be submitted on official letterhead and duly signed
- Goods and services should be supplied/rendered upon receipt of a
- purchase order from the ARC
- The General Conditions of Contract issued by the National Treasury are applicable.

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- The ARC supply chain management code of conduct is applicable.
- SBD Forms must be signed and returned together with the quotation if your price is above R10 000.00, failure to comply will result to disqualification of your quotation.
- Only quotations from suppliers who are requested to quote shall be evaluated and considered.
- The ARC reserve the right to do due diligence on the quotations.
- . The ARC reserve the right to benchmark prices quoted.

# 7.2 Compulsory ARC Requirements

- · A valid Tax Pin number from SARS.
- · Current Central Supplier Database (CSD Report)
- · Standard Bidding Documents (SBD forms)

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Mr .Ayanda Krwece

Date

End -User

Dr. Idan Chiyanzu

Date

13/12/2024

Chairperson of the specification committee

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