

	<p style="text-align: center;"><b>SoW</b></p>	<p style="text-align: center;"><b>Camden Power Station</b></p>
---	---	--

**Title: Provision of Dredging services on the Camden Power Station Pollution Control Dams for a period of 4 years as an when required.**

**Document Identifier: 229-T2541**

Alternative Reference Number:

Area of Applicability: **Engineering**

Functional Area: **Auxiliary**

Revision: **1.0**

Total Pages: **10**

Next Review Date: **Once off**

Disclosure Classification: **Controlled Disclosure**

<b>Compiled by</b>	<b>Supported by</b>	<b>Functional Responsibility</b>	<b>Authorized by</b>
			
<p><b>N. Shoji</b></p>	<p><b>O. Tilodi</b></p>	<p><b>T. Mpongo</b></p>	<p><b>M. Mathabatha</b></p>
<p><b>Auxiliary Civil Engineer</b></p>	<p><b>Auxiliary Engineering Manager</b></p>	<p><b>Environmental Manager</b></p>	<p><b>Engineering Manager</b></p>
<p>Date: 2024/02/19</p>	<p>Date: 2024/02/19</p>	<p>Date: 2024/02/19</p>	<p>Date: 20/02/2024</p>

## **Content**

1. Introduction .....	3
2. Supporting Clauses.....	3
2.1 Scope .....	3
2.1.1 Purpose .....	3
2.1.2 Applicability.....	3
2.1.3 Effective date .....	3
2.2 Normative/Informative References .....	3
2.2.1 Normative .....	3
2.2.2 Informative .....	3
2.3 Definitions.....	4
2.3.1 Document .....	4
2.4 Abbreviations .....	4
2.5 Roles and Responsibilities .....	4
2.6 Process for Monitoring .....	4
2.7 Related/Supporting Documents .....	4
3. Scope of Work .....	5
3.1.1 Site Access.....	5
3.1.2 Current condition .....	5
4. Acceptance .....	10
5. Revisions .....	10
6. Development Team.....	10
7. Acknowledgements .....	10

### **CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

## **1. Introduction**

This document contains guidelines and technical information for Camden Power Station's Pollution Control Dams.

## **2. Supporting Clauses**

All construction works to be carried out on the Camden Power Station's Pollution Control Dams. should be in accordance with SANS 1200G

### **2.1 Scope**

#### **2.1.1 Purpose**

The purpose of this document is to provide guidance of the desilting process of the Camden Power Station's Pollution Control Dams.

#### **2.1.2 Applicability**

This document shall be applicable at Camden Power station.

#### **2.1.3 Effective date**

This document will be effective after it has been signed for Authorisation.

### **2.2 Normative/Informative References**

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

#### **2.2.1 Normative**

[1] ISO 9001 Quality Management Systems

[2] OHSACT

#### **2.2.2 Informative**

[1] SANS 1200 G - Standardized specification for civil engineering construction

[2] SANS 1200 C - Site clearance

[3] SANS 1200 DE- Small earth dams

[4] SANS 1200 AD - General (Small dams)

### **CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

## **2.3 Definitions**

N/A

### **2.3.1 Document:**

N/A

## **2.4 Abbreviations**

<b>Abbreviation</b>	<b>Explanation</b>
CPS	Camden Power Station
ISO	International Organization for Standardization
OSH Act	Occupational Health and Safety Act
SANS	South African National Standards
AWRD	Ash Water Return Dam

## **2.5 Roles and Responsibilities**

- Common Plant Engineering: Scope of Work development
- Contractor: Scope of Work Execution
- Environmental Department – Environmental compliance advise.

## **2.6 Process for Monitoring**

All construction activities will be monitored by Energy department.

## **2.7 Related/Supporting Documents**

N/A

### **CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

### **3. Scope of Work**

#### **3.1.1 Site Access**

Camden is located approximately 15km from Ermelo, Mpumalanga, along the N2 road. The old ash dam is outside and north-west of the station. The AWRD`s can be accessed via the gravel road leading from Oak Road just before the station`s main entrance.

#### **3.1.2 Current condition**

Currently, there are Five Pollution control dams (**Reclamation Dam, Coal Stockyard Dam, AWRR, AWRD Compartment 1 & AWRD Compartment 2**) at Camden Power Station which are part of the operations. Due to operations, these dams would eventually accumulate silt which can either be ash or coal silts. As part of the Camden maintenance strategy, the dams require dredging of the silts to ensure that the original/design capacity is restored to allow normal operation to take place without any environmental legal contraventions. The technical information applicable to the dredging/desilting of the Camden Power Station PCD`s incorporates the following scope:

- Agitating of the sludge inside the dam floor using the equipment approved by the client to allow easy flow.
- Bathymetric survey should be performed to determine the amount of silt build-up to be removed.
- Agitating of the sludge inside the dam floor and the ramp into the compartment using the skid-steer to allow easy flow.
- High pressure cleaning machine (**maximum pressure of 1.3 bar**) of the silt on the dam walls.
- Desilt silt traps and clean silt trap gabions with a high-pressure cleaning device.
- Dredging/Desilting the dam by vacuuming the sludge using high pressure vacuum truck
- Hauling and disposal of the sludge which is not contaminated with hydrocarbons at the new ash dam which is approved by the client.
- Hauling and disposal of the sludge which is contaminated with hydrocarbons at Holfontein which is approved by the client.

#### **CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

### Ash Water Return Dams (AWRD`s)

The Full Supply Capacity for the Ash Water Return Dams is 389 000 m<sup>3</sup>. This dam is an earthfill dam lined with 1.5mm HDPE liner on the walls and 200mm thick reinforced concrete floor. The HDPE liner is covered with a 150mm protection layer (stabilised with cement 12%).

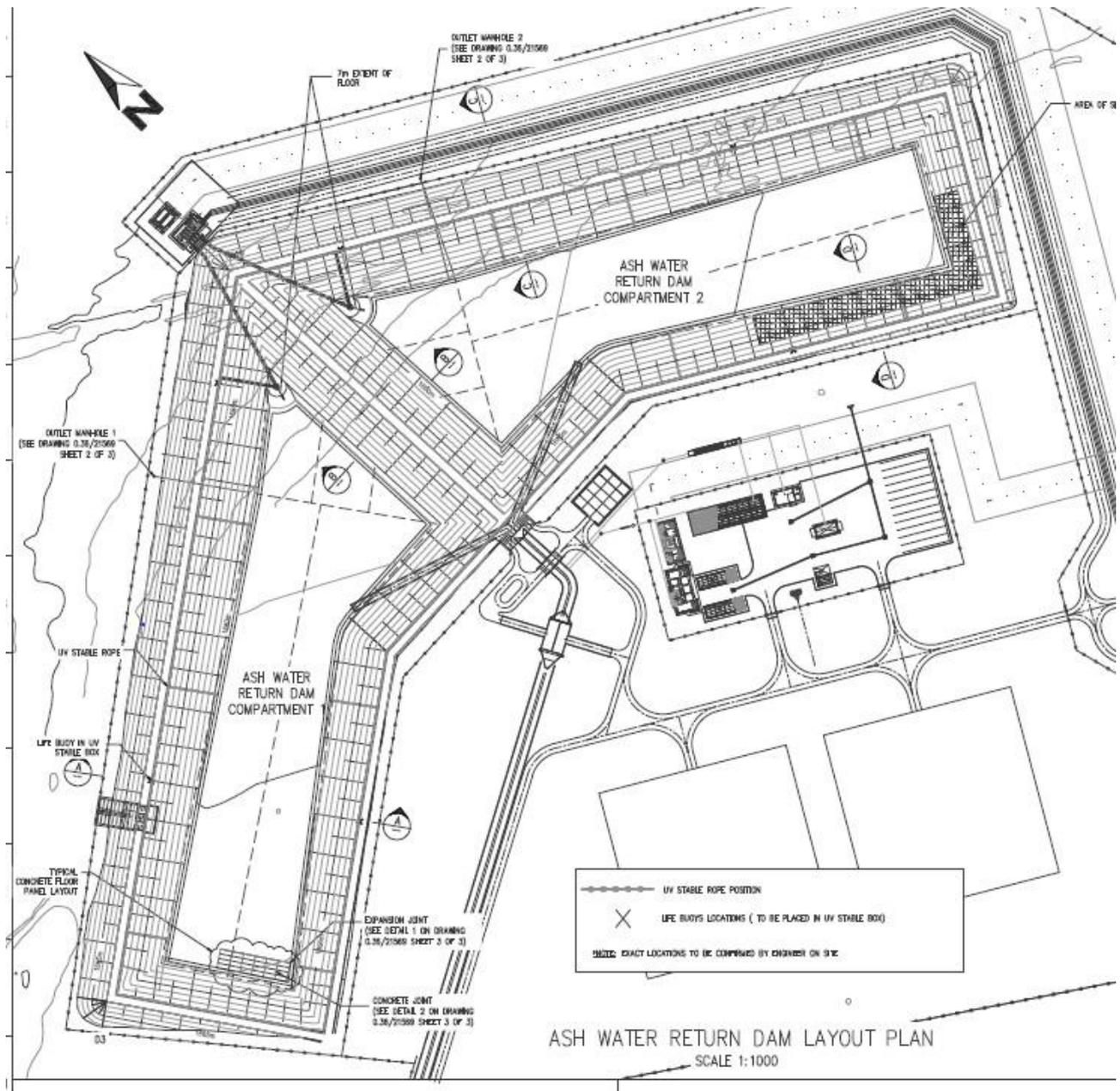


Figure1. Ash Water Return Dam Compartment 1&2 Layout Plan

**CONTROLLED DISCLOSURE**

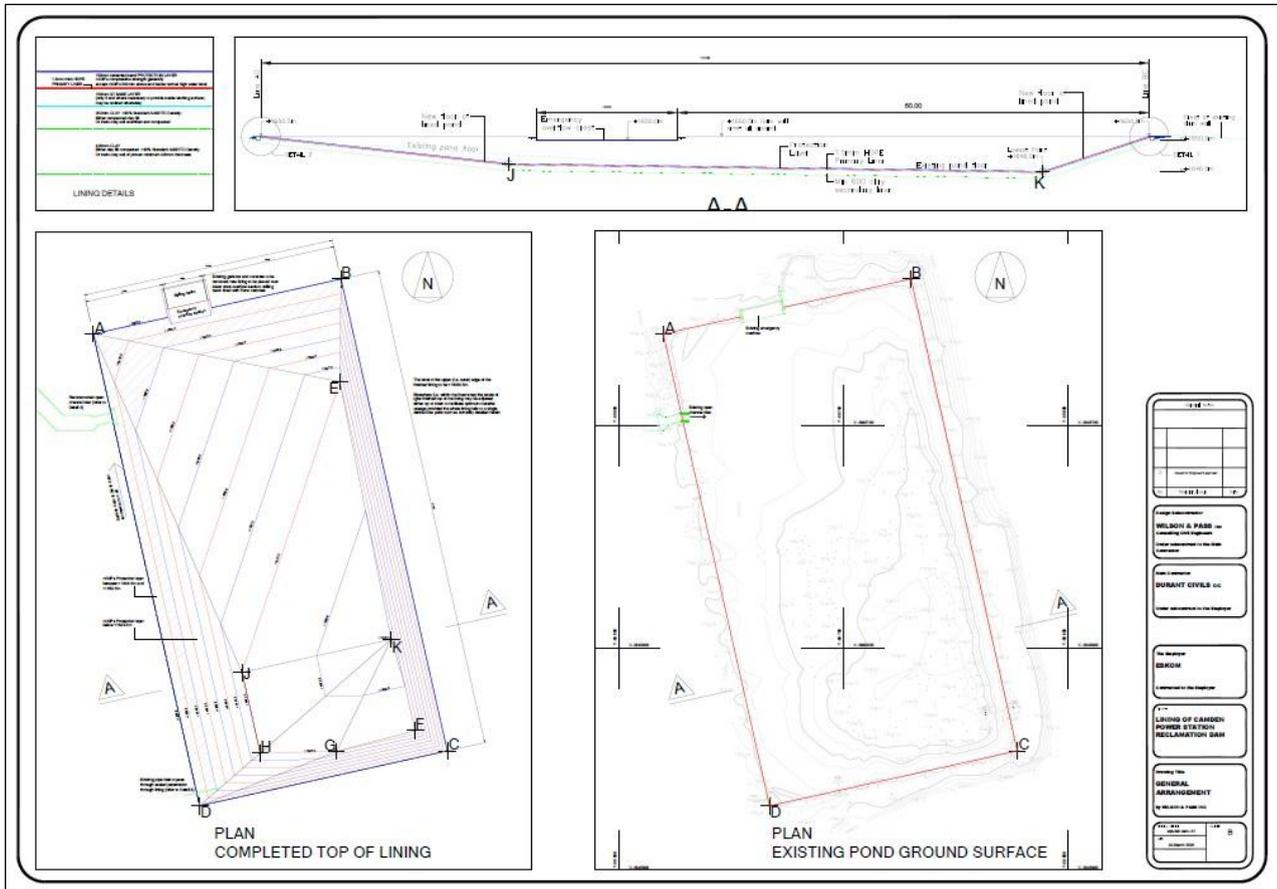
When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.



**Reclamation Dam**

The Full Supply Capacity for the reclamation dam is 46 744 m<sup>3</sup>. This dam is an earthfill dam fully lined with 1.5mm HDPE liner on the dam walls and floor. The HDPE liner is covered with a 150mm protection layer (stabilised with cement 12%).



**Figure 3. Reclamation Dam Layout Plan**

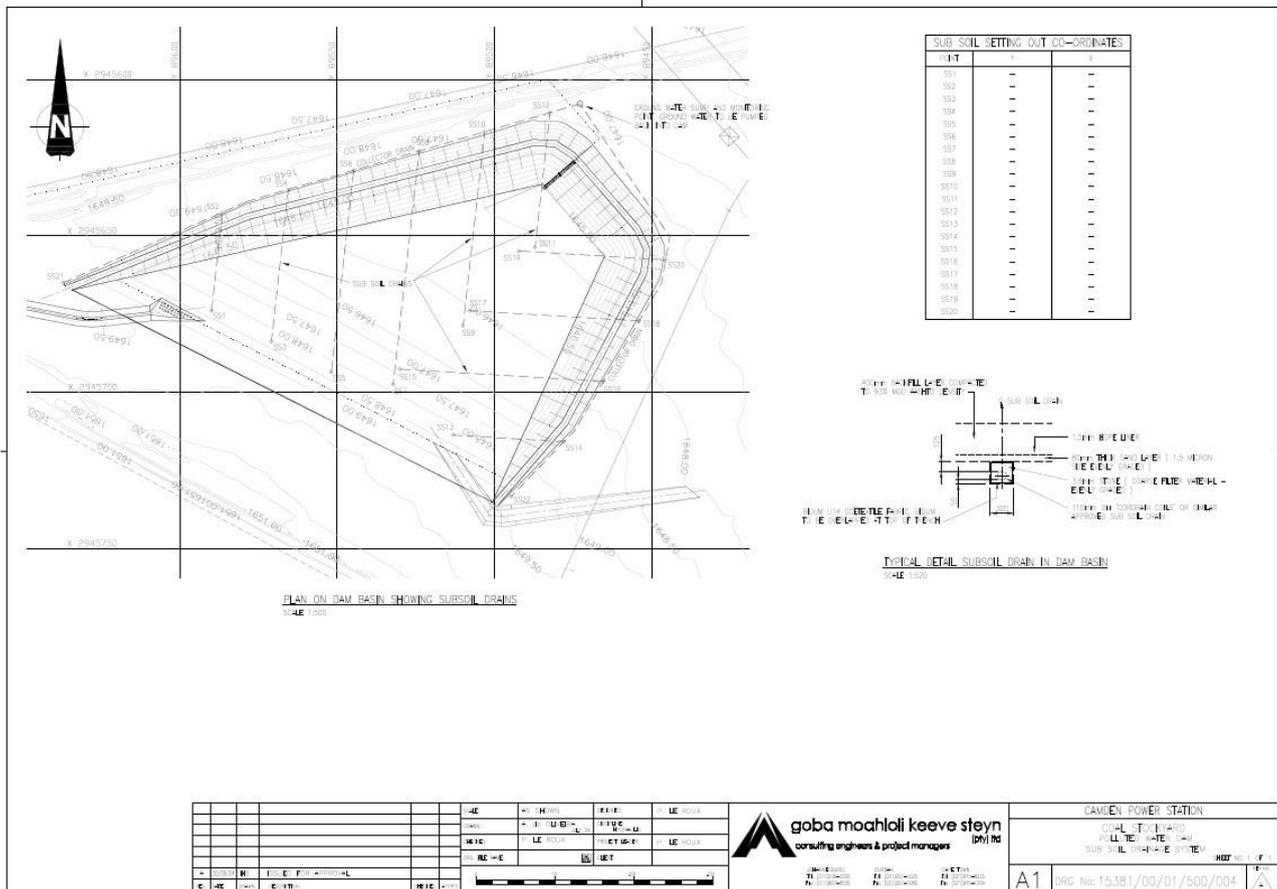
**CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

**Coal StockYard Dam (CSY)**

The Full Supply Capacity for the CSY dam is 14 000 m<sup>3</sup>. This dam is an earthfill dam fully lined with 1.5mm HDPE liner on the dam walls and floor.



**Figure 4. Coal Stock Yard Dam Layout Plan**

**CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

#### **4. Acceptance**

This document has been accepted by

<b>Name and Surname</b>	<b>Designation</b>
Doctor Nkosi	Civil Engineer
Fikile Sithole	Senior Advisor Environmental

#### **5. Revisions**

<b>Date</b>	<b>Rev.</b>	<b>Compiler</b>	<b>Remarks</b>
15/02/2024	01	N. Shozi	The original SoW

#### **6. Development Team**

The following people were involved in the development of this document:

- Doctor Nkosi

#### **7. Acknowledgements**

N/A

#### **CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.