

Title: **SCOPE OF WORKS FOR
REPAIR OF DAMAGED
+38.340M LEVEL PLATFORM
AT SURGE BIN 2**

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DISCLOSURE**

	Name	Signature	Date
Compiled By	Redz Pillay Civil Engineer		06.04.2022
Reviewed By	Maxwell Makhanya Senior Civil Technologist		06/04/2022
Authorised By	Thando Gxota Acting Auxiliary Engineering Manager		06/04/2022

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	Scope of Works	Technology
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Table of Contents

1.1 INTRODUCTION	3
1.1.1 Description of the <i>works</i>	3
1.1.2 Work to be performed by the <i>Contractor</i>	3
1.1.3 List of specifications and standards:	4
1.1.4 Documentation required	5
1.1.5 SHEQ Requirements.....	5

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a) C3: Scope of Work

1.1 INTRODUCTION

A collapse of a portion of the +38.340m level platform occurred on 05.04.22 due to excessive overloading of coal deposits. The damaged beams and checker-plate has been removed, except 1 x 6.3m beam which is still in place (in a deformed and twisted state) and the area barricaded. This SoW details the safe repair of the platform.

1.1.1 Description of the *works*

The *Contractor* is responsible to firstly do a thorough inspection and assessment of the platform, which includes beams, checker plate, support structure/frame and its associated bracing members and connections. The *Contractor* immediately informs the *Project Manager* of the additional structural members and/or connections that require replacement.

From a visual inspection on site, structural members that were affected by the incident was identified. The *Contractor* is responsible to replace the damaged structural members, and associated connections. The required structural members identified from the visual inspection to be replaced, but not limited to this list, are as follows:

- 1 x 6.3m Beam – 406x140x30 UB (still in place, however twisted and deformed state) – Beam no. 2
- 1 x 6.3m Beam – 406x140x30 UB (removed) – Beam no. 2
- 5 x 1.27m Beams – 200 x100 x 22 IPE – Beam no. 4
- 2 x 1.210 m Beams – 152 x 76 channel section – Beam no. 8
- 3 X 1.15m Beams – 203 x133x25 UB – Beam no. 6
- 1 x 1.97M Beam – Beam no. 5
- Checker plate for the affected area
- All affected connections (plates, bolts and welding)

1.1.2 Work to be performed by the *Contractor*

The following scope is for the replacement and repair of the damaged Platform at +38.340m level platform. This includes beams, checker plate, and associated connections.

- a) All studies, reports, drawings and method statements prepared by the *Contractor* are signed off by an ECSA Professionally registered Engineer who takes full professional accountability for the work and reinstatement of the platform

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	Scope of Works	Technology
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- b) The *Contractor* takes note of the damaged platform and connections as detailed above and in appendix A
- c) The *Contractor* is responsible for planning and installing necessary access and safe access platforms for inspections, assessment and execution of the works
- d) The *Contractor* performs a thorough inspection and assessment of the damaged platform, beams and connections. The *Contractor* immediately informs the *Project Manager* of the additional structural members and/or connections that require replacement.
- e) The *Contractor* is responsible to safely temporarily support the platform, whilst removing the damaged beam still in place and reinstating the platforms to original condition. This is compliant with Construction regulations, and the design responsibility thereof.
- f) The *Contractor* then replaces the damaged beams, associated connections and checker plate. The *Contractor* refers to Appendix B, for the structural drawings and details
- g) The *Contractor* is required to submit a detailed method statement with the tools and equipment for execution of the entire scope of work. Inclusive of rigging studies. No works commence until the M.S is accepted
- h) All steel to be grade S355JR. All bolts GR 8.8 unless otherwise noted
- i) No damage must be done to the adjacent infrastructure. The *Contractor* is liable for any damage of infrastructure not related to this scope
- j) The *Contractor* verifies all dimensions on site, prior to commencement of fabrication and procurement
- k) The *Contractor* shall notify the *Employer* to arrange for inspections of the +38.340m level and support structure at Surge Bin 2.
- l) Once the replacement of the platform beams, associated connections and checker plate is complete, the drawings are redlined and submitted for acceptance for as built purposes. Once accepted, these must be redrawn and submitted to Eskom.
- m) The *Contractor* is mandated in terms of Construction Regulations 2014: Duties of Designer, 6(1) g to fulfil the duties described therein for the recommendations done by the *Contractor*
- n) Any risk discovered by the *Contractor* is highlighted to the Employer together with mitigation measures

1.1.3 List of specifications and standards:

During execution of the *works*, the *Contractor* must adhere to, as a minimum, the following specifications during the implementation of the *works*:

- a) OHS Act
- b) Construction Regulations
- c) SANS 10400: National Building Regulations
- d) SANS 10100: The structural use of concrete
- e) SANS 10162: The structural use of steel

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	Scope of Works	Technology
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- f) SANS 2001 CS1-2012: Concrete Works
- g) SANS 2001 CC1-2012: Structural Steelwork
- h) SANS 1200 HC: Corrosion protection of structural steelwork

1.1.4 Documentation required

- a) The *Contractor* provides the *Employer* with a detailed method statement for proposed works, for review and acceptance prior to commencement
- b) Any specific data sheets of products required to execute the SoW
- c) Completed data books for review and close out

1.1.5 SHEQ Requirements

1.1.5.1 Requirement for the Detailed Risk Assessment

The *Contractor* shall compile a detailed Risk Assessment and submit to the *Project Manager* for the approval. The Risk Assessment should cover all the activities that shall be conducted by the *Contractor* during the *Works* execution stage. The *Contractor* shall prove the risk identified with its aggravating factors and mitigating factors and this to be presented to the *Employer*.

1.1.5.2 Quality Requirements

The *Contractor* shall comply with the ISO 9001:2008 Quality Management System and Employer's Quality Requirements as specified in Eskom QM58 document

- a) Quality documents for inspections and tests plans shall be required to be submitted to the Project Manager for approval before the works begin on site

1.1.5.3 Health, Safety and Environment (SHE)

The *Contractor* must comply with the following standards and SHE:

- a) Eskom SHEQ policy 32727
- b) SHE requirements for Eskom commercial process
- c) Adhere to the OHS Act 85 of 1993.
- d) Adhere to Eskom lifesaving rules
- e) All staff will undergo Safety Induction, presented by *Employer's* Risk Management Department.
- f) *Contractor* must obtain a permit and adhere to the permit to work system used at Kendal Power Station before carrying out any work.

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	Scope of Works	Technology
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Kendal Power Station is ISO 14001: 2004 certified therefore the *Contractor* must comply with the requirements of the following procedures:

- a) Waste Management Procedure: *1024102
- b) Environmental non-conformities, corrective and preventive actions: *1015684
- c) Emergency preparedness plan *1015702
- d) Environmental competency, Training and awareness*1015689
- e) Eskom SHEQ Policy (32-727)

The above mentioned procedures will be given to the appointed *contractor* before the commencement of the project. The procedures must always be available in the file and must be communicated with the *Contractor's* employees. Proof of communication must be kept in the file.

Kendal procedures are applicable to the *Contractor's* area of responsibility to assist the *Contractor* and his or her employees to prevent pollution and comply with legislative requirements and to familiarize themselves on such procedures within 30 days from the date of commencement of work at Kendal. Copies of the above-mentioned documents shall be obtained from the Eskom Agent and / or Environmental Officer on the first day prior to commencement of work at Kendal.

The *Contractor* must identify all Environmental aspects and impacts related to his or her activities. The *Contractor* must have copy of the legal register related to the scope. The non-adherence to the rules will result in a non-conformance, hence immediate termination of the contract. Rules are as following:

- a) Arrange for sufficient storage containers, labelled depicting general or hazardous waste and store in a designated storage area as per the Kendal waste management procedure *1024102.
- b) Ensure that all waste (Hazardous and General) is stored as per the Kendal waste management procedure *1024102.
- c) Ensure compliance with the general good housekeeping practices.
- d) Report all Environmental Incidents before the end of the shift or within 24hrs as per the Environmental non-conformities, corrective and preventive actions: *1015684

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Appendix A: Pictures of extent of damage**Figure 1: Outline Damaged Platform****CONTROLLED DISCLOSURE**

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Figure 2: Damaged Platform hanging into Surge Bin hopper

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Figure 3: Deformed beam in place and section of platform removed

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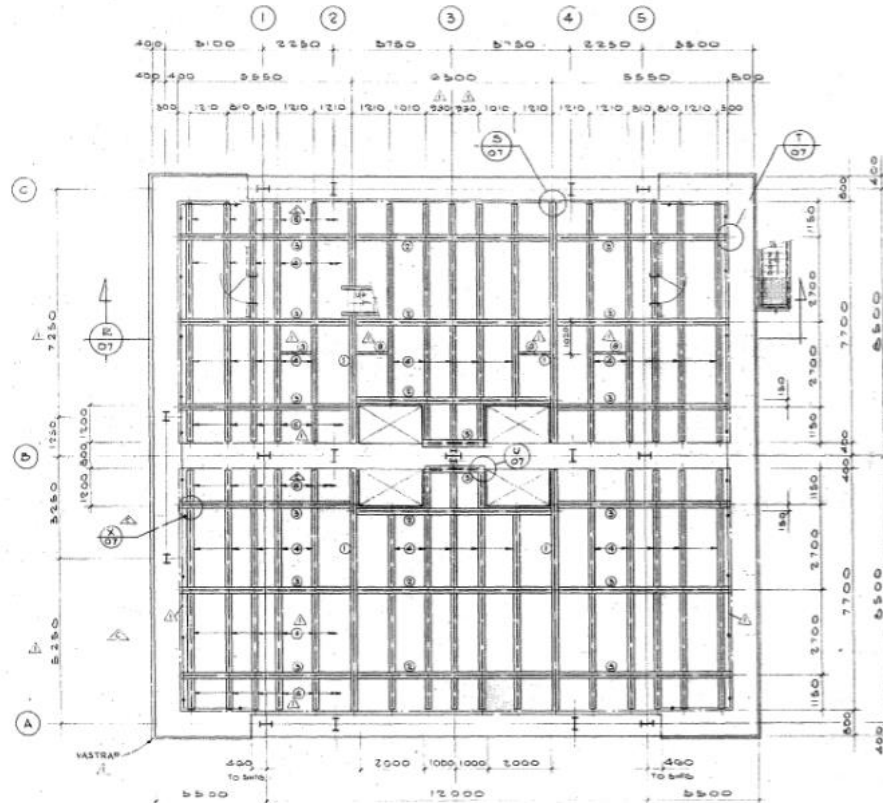
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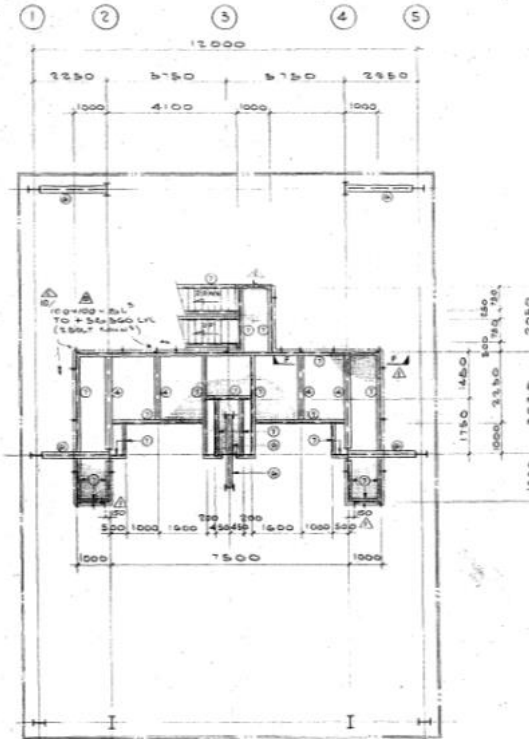
Appendix B: DRAWINGS

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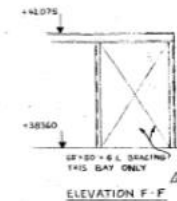
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VASTRAP FLOORING



PLAN @ +42 075 T.O.S.
OPEN GRID FLOORING



MEMBER SIZE	SAB CONN DETAIL
1 60x100x10	SAB CONN DETAIL
2 60x100x10	SAB CONN DETAIL
3 60x100x10	SAB CONN DETAIL
4 60x100x10	SAB CONN DETAIL
5 60x100x10	SAB CONN DETAIL
6 60x100x10	SAB CONN DETAIL
7 60x100x10	SAB CONN DETAIL
8 60x100x10	SAB CONN DETAIL

NO.	REVISION	DATE	BY	CHKD	APP'D
1	AS BUILT	11/05/04			
2	CONSTRUCTION	11/05/04			
3	REVISION	11/05/04			
4	REVISION	11/05/04			
5	REVISION	11/05/04			
6	REVISION	11/05/04			
7	REVISION	11/05/04			
8	REVISION	11/05/04			
9	REVISION	11/05/04			
10	REVISION	11/05/04			

KENDAL POWER STATION		PETER STEIGER	
PROJECT NO.	OPJ 11902	ENGINEER	PETER STEIGER
DESIGN NO.	OPJ 11902	CHECKED	PETER STEIGER
DATE	11/05/04	APPROVED	PETER STEIGER
THE COAL STOCKPILE & OVERLAND CONVEYOR SYSTEM		KENDAL POWER STATION	
11/05/04		11/05/04	