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|  | Scope of Work | NTCSA |
|---|----------------------|--------------|

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1. Introduction

The Fencing Act (Act 63 of 1963) regulates matters regarding fences between properties. Fences are used by the landowner to control the movement of animals, people, as well as to safeguard the property. National Transmission Company South Africa personnel and its contractors use servitude gates to gain access to the powerlines and servitudes for repairs, maintenance and inspection.

At all points where a powerline crosses a fence line and where no suitable gate exists, an applicable gate shall be installed (Refer to TRMSCAAC1). During construction, gates with sufficient width are required to permit access to all terrain vehicles. These gates are galvanised to provide similar life expectancies to the galvanised overhead line towers.

2. Supporting Clauses

2.1 Scope

2.1.1 Purpose

The purpose of this document is to outline the requirements for the servitude gates to be procured.

2.1.2 Applicability

This document shall apply in the National Transmission Company South Africa SOC Ltd, Reg No 2021/539129/30, within Central Grid.

2.1.3 Effective date

Effective from the date it is authorised.

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] 240-80605256 - Access to Private Property (Includes Strategy on Accessing Game Reserves/Farms/Small Holdings)
- [3] Transmission line towers and line construction- TRMSCAAC1

2.2.2 Informative

- [4] Fencing Act (Act 63 of 1963)

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2.3 Definitions

2.3.1 Contractor

Any company or person that performs work for or on behalf of National Transmission Company of South Africa on the powerline and servitudes.

2.3.2 Landowner

A landowner is defined for the purposes of this document as the owner of the land, registered as such in the Deeds Office, his/her assignee, representative or the legal occupier, manager, or lessee of the land.

2.3.3 Visitor

A National Transmission Company of South Africa employee or contractor.

2.4 Abbreviations

| Abbreviation | Explanation |
|---------------------|---|
| NTCSA | National Transmission Company of South Africa |

2.5 Roles and Responsibilities

2.5.1 Lines & Servitudes Manager

The Lines & Servitudes Manager shall ensure that the gates to be procured are budgeted for and to make that budget and resources available.

2.5.2 Senior Advisor

The senior advisor shall provide the specifications and drawings for the servitude gates to be procured.

2.5.3 Technical Support

The technical support shall compile the scope of work document which is to be used to procure the servitude gates.

2.5.4 Senior Supervisor

The Senior Supervisor shall ensure that the Servitudes Gates and Access Maintenance is done to identify damaged/broken gates that need to be replaced.

2.6 Process for Monitoring

N/A

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2.7 Related/Supporting Documents

N/A

3. Access Gates to Powerlines and Servitudes

Access to land on which NTCSA has servitudes and electrical infrastructure is critical to build, inspect, repair and or maintain equipment to ensure continuity of electricity supply. Though NTCSA obtained rights to enter properties through a right of way (Wayleave) or a registered servitude, NTCSA must comply with certain legal obligations whilst exercising these rights. Security on such property is regarded as vital to landowners. Although NTCSA has a right to enter private property to maintain and/or repair equipment, and ensure continuity of electricity supply, NTCSA employees and its contractors are required to respect the landowner and always comply with legislation.

3.1 Scope of Work

For NTCSA to comply with the relevant legislations which govern access to private property in which the powerlines transverse, access gates are required which are in good working condition. Thus, there is a need for Central Grid to procure access gates which will be installed to gain access to the powerlines and servitudes that are in private property. The required scope of work is as follows:

Supply of galvanised servitude gates as indicated on Table 1: Servitudes Gates to be supplied. Servitude gates should be designed according to the specifications and drawings in Appendix A: Servitudes Gates Specification Sheets and Drawings for the **4m** Galvanised steel gate.

Table 1: Servitudes Gates to be supplied

| STG No. | Type of Gate | Quantity | Rate |
|---------|--------------------------------------|----------|------|
| 0226260 | GATE,SERVITUDE 4m GALV. ST. D2504 | 50 | |

4. Acceptance

This document has been seen and accepted by:

| Name | Designation |
|--------------------|--------------------------------|
| Patrick Thwala | Snr Supervisor Tech Lines |
| Edwin Mafolo | Snr Supervisor Tech Lines |
| Abduraghman Hassen | Snr Advisor Lines & Servitudes |
| Rethabile Mzizi | Engineer |
| Koketso Molekwa | Snr Supervisor Tech Lines |
| Collin Sibeko | Snr Supervisor Tech Lines |
| Nathan Molapo | Snr Supervisor |
| Heavyman Kobani | Contracts Manager |
| Biko Dzhalagome | Compliance Manager |

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| Name | Designation |
|---------------|--------------------|
| Ronald Chauke | Quantity Surveyor |

5. Revisions

| Date | Rev. | Compiler | Remarks |
|-------------|-------------|-----------------|----------------------|
| August 2024 | 0 | Z Zwane | Compilation of Scope |

6. Development Team

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

- Zandile Zwane
- Mac Masilana
- Nokuthula Mthiyane

7. Acknowledgements

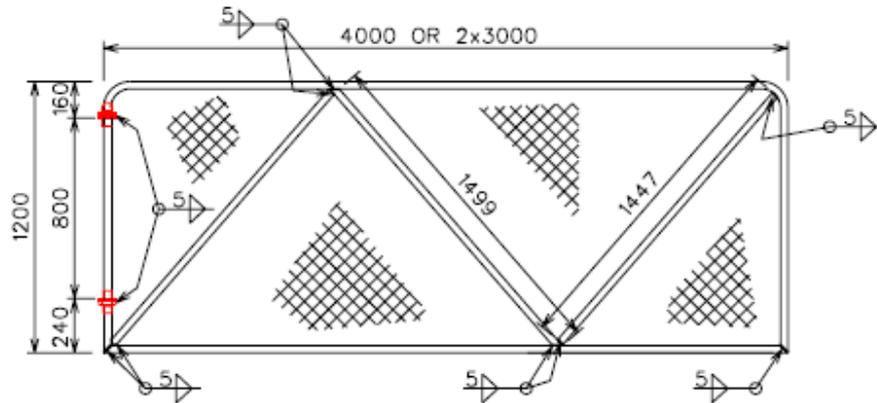
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Appendix A – Servitudes Gates Specification Sheets and Drawings

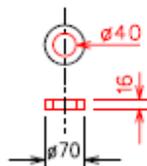
| SPEC SHEET | | | | | | | | | | | |
|---|--|--|------------|--------------------|-----------|--|------------|-----------|----|-----|-------|
| SAP MATERIAL No.: | | 0226260 | | | | | | | | | |
| SHORT DESCRIPTION: | | GATE, SERVITUDE 4m GALV. ST. D2504 | | | | | | | | | |
| TECH. DESCRIPTION: | | | | | | | | | | | |
| <p>** NON-STOCK ITEM ** SERVITUDE GATE FOR POWER LINES * ALL ITEM GRADE S355JR/350WA STEEL * HOT DIPPED GALVANISED* CONSISTING OF : ITEM 1 - 4000 GATE ø 32 x 2.5 WALL THICKNESS HOLLOW TUBING. WITH 50 x 2.6 DIAMOND WIRE MESH TO BE SPIRALLY WIRED TO FRAME AND BRACES WITH 2.6mm GALV. BINDING WIRE. ITEM 2a - COLLAR ø 70 x 16 THICK SOLID ROUND STEEL. (2 OFF) PER GATE WELDED TO GATE. ITEM 2b - WASHER ø 70 x 6 THICK STEEL WASHER. (2 OFF) PER GATE DO NOT WELDED TO GATE. ITEM 3 - GATE POST ø 76 x 3 WALL THICKNESS x 2000 HOLLOW TUBING (2 OFF) PER GATE. ITEM 4 - FOOT PLATE 150 x 6 THICK FLAT STEEL PLATE (1 OFF) PER GATE POST (=2 PER GATE). ITEM 5 - MAKE OFFS 22 x ø 6 SOLID ROUND STEEL (22 OFF PER GATE POST) (=44 PER GATE). (NOTE : FENCE WIRES TO BE WRAPPED AROUND GATE AND STRAIN POSTS TWICE AND SECURELY MADE OFF). ITEM 6 - POST STRUT ø 60 x 3.5 WALL THICKNESS x 2150 LONG HOLLOW TUBING (2 OFF PER GATE). ITEM 7 - FOOT PLATE 200 x 6 THICK FLAT STEEL PLATE (1 OFF) PER GATE POST (=2 PER GATE). ITEM 8 - M16 x 200 THREAD LENGTH (ONLY) EYE BOLT (3 OFF PER GATE). ITEM 9 - M16 x 120 LONG SET SCREW COMPLETE WITH 1 x M16 FLAT WASHER AND 1 x M16 SPRING WASHER (1 OFF PER GATE). ITEM 10 - EARTH STRAP 40 x 3 x 4700 LONG MS GALVANISED, CONNECTED TO GATE POST (ITEM 3) WITH EYE BOLT (ITEM 8) AND SET SCREW (ITEM 9). ITEM 14 - 600 LENGTH OF 8 LONG LINK STEEL CHAIN WITH 50 DIA. x 8 RINGS WELDED ON ENDS & ONE PADLOCK (1 OFF PER GATE). * WELD TO BE 5mm CONTINUOUS SEAL AND TO CONFORM TO SANS 10162-1 AND ITEM 17 – STIFFNER 100 x 39 x 3 THICK STEEL PLATE (2 OFF) WRAPPED AROUND GATE FRAME * TOLERANCES ON DIMENSIONS ± 2mm AND ON DRILLING CENTRES ± 1mm * ESKOM DRAWING No. D-DT-2504 *</p> | | | | | | | | | | | |
| ITEM | | :- GATE, SERVITUDE 4m GALV. ST. | | | | | | | | | |
| MATERIAL SPECIFICATION | | :- EN10025-2 / SANS 1431 | | | | | | | | | |
| CORROSION SPECIFICATION | | :- SANS 121 | | | | | | | | | |
| STANDARD SPECIFICATION | | :- SANS 10162, | | | | | | | | | |
| ESKOM SPECIFICATION | | :- D-DT-2504 | | | | | | | | | |
| TEST & CERTIFICATION REQUIREMENTS | | :- TYPE TEST ACCORDING TO DSP 34-2051 | | | | | | | | | |
| INSPECTION | | Yes | No | ESKOM RELEASE NOTE | | | | Yes | No | | |
| IDENTIFICATION:- INDELIBLE MANUFACTURES TRADEMARK & PART No. ON ALL ITEMS | | | | | | | | | | | |
| 3 | ITEM 2a MODIFIED AND ITEM 2b AND ITEM 17 ADDED | | | P.A.T. | S.MASHABA | B. HILL | 08.05.2011 | | | | |
| 2 | 6m D/LEAF GATE FOUNDATION SHORTENED TO 930mm AND ITEM 12 REMOVED FROM SHEET 6 | | | P.A.T. | B. HILL | B. HILL | 03.06.2009 | | | | |
| 1 | SAP NO.S ALLOCATED I | | | P.A.V. | B. HILL | B. HILL | 06.09.2007 | | | | |
| REV | REVISION DESCRIPTION | | | BY | CHKD | AUTH | DATE | REF. DWGS | | | |
| AUTH: | B. HILL | DATE: | 13.07.2007 | SCALE NTS | |  | | SAP No: | | | |
| CHKD: | B. HILL | DATE: | 13.07.2007 | CAD REF: | | | | 0226260 | | | |
| DRAWN: | P.A. VERMAAK | DATE: | 17.05.2007 | SERIES 2000 | | | | D-DT-2504 | | SET | SHEET |
| | | | | FILE No: | | | | 6 | 1 | 3 | |
| | | | | 2504 | | | | | | | |

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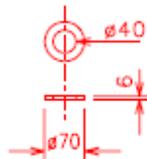
MATERIAL :
 1. FRAME AND BRACINGS $\phi 32$ x 2.5 WALL THICKNESS HOLLOW TUBING.
 2. 50 x 2.6 DIAMOND WIRE MESH, TO BE SPIRALLY WIRED TO FRAME AND BRACES WITH 2.6mm GALV. BINDING WIRE

ITEM 1 OR ITEM 11
 (4000 OR 2 x 3000 GATES)
 $\phi 32$ x 2.5 WALL THICKNESS HOLLOW TUBING



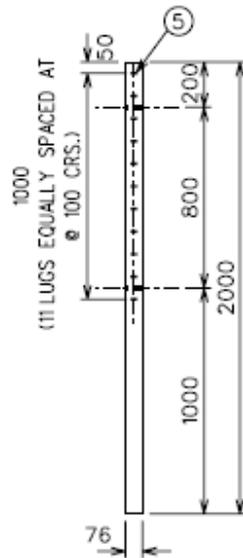
ITEM 2a (COLLARS)
 (2 OFF PER GATE)
 $\phi 70$ x 16 WALL THICK
 SOLID ROUND STEEL

NOTE :
 WELDED TO ITEM 1.



ITEM 2b (WASHERS)
 (2 OFF PER GATE)
 $\phi 70$ x 6 WALL THICK
 SOLID ROUND STEEL

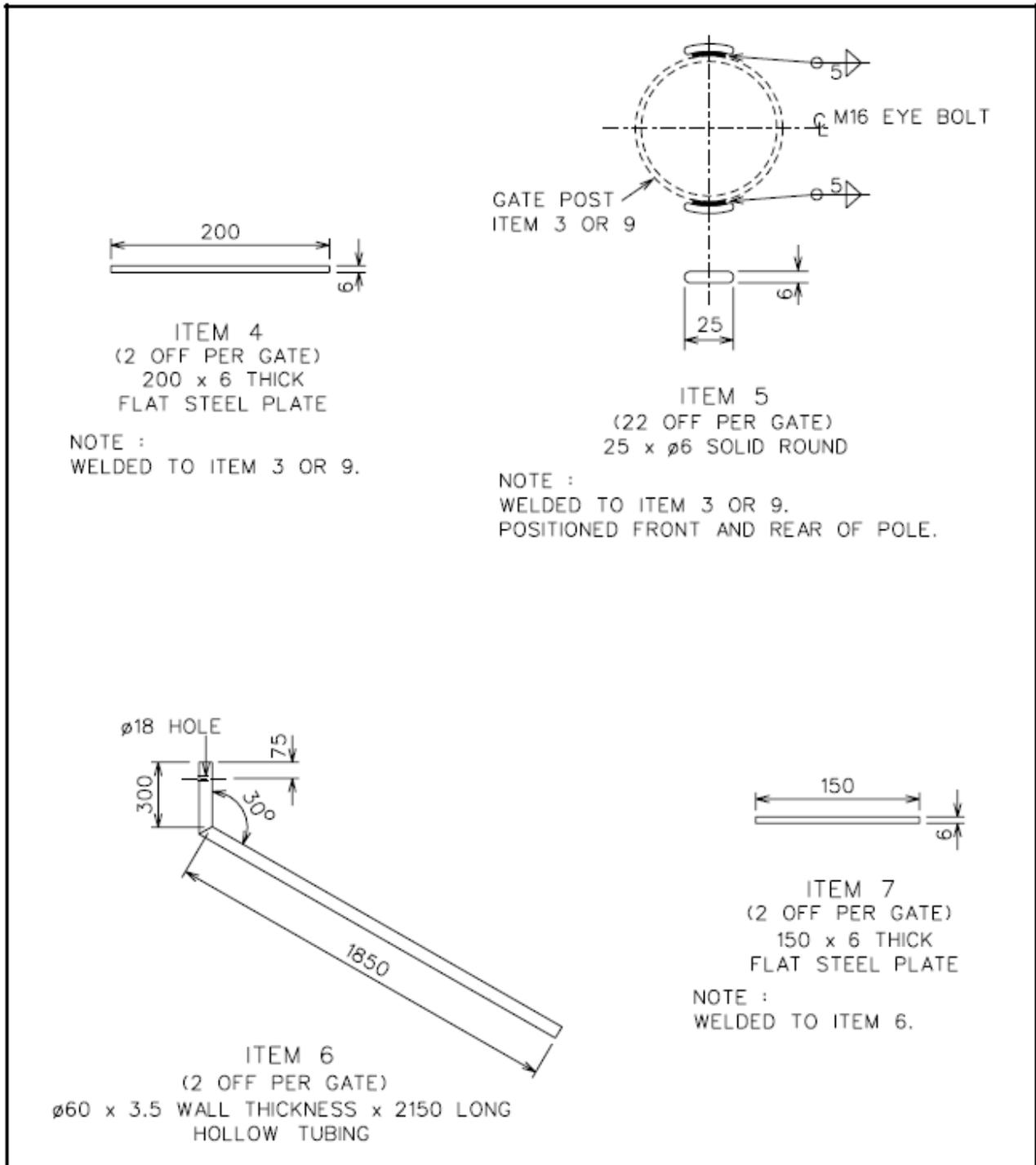
NOTE :
 DO NOT WELD TO ITEM 1.



ITEM 3
 (2 OFF PER GATE)
 $\phi 76$ x 3 WALL THICKNESS x 2000
 HOLLOW TUBING

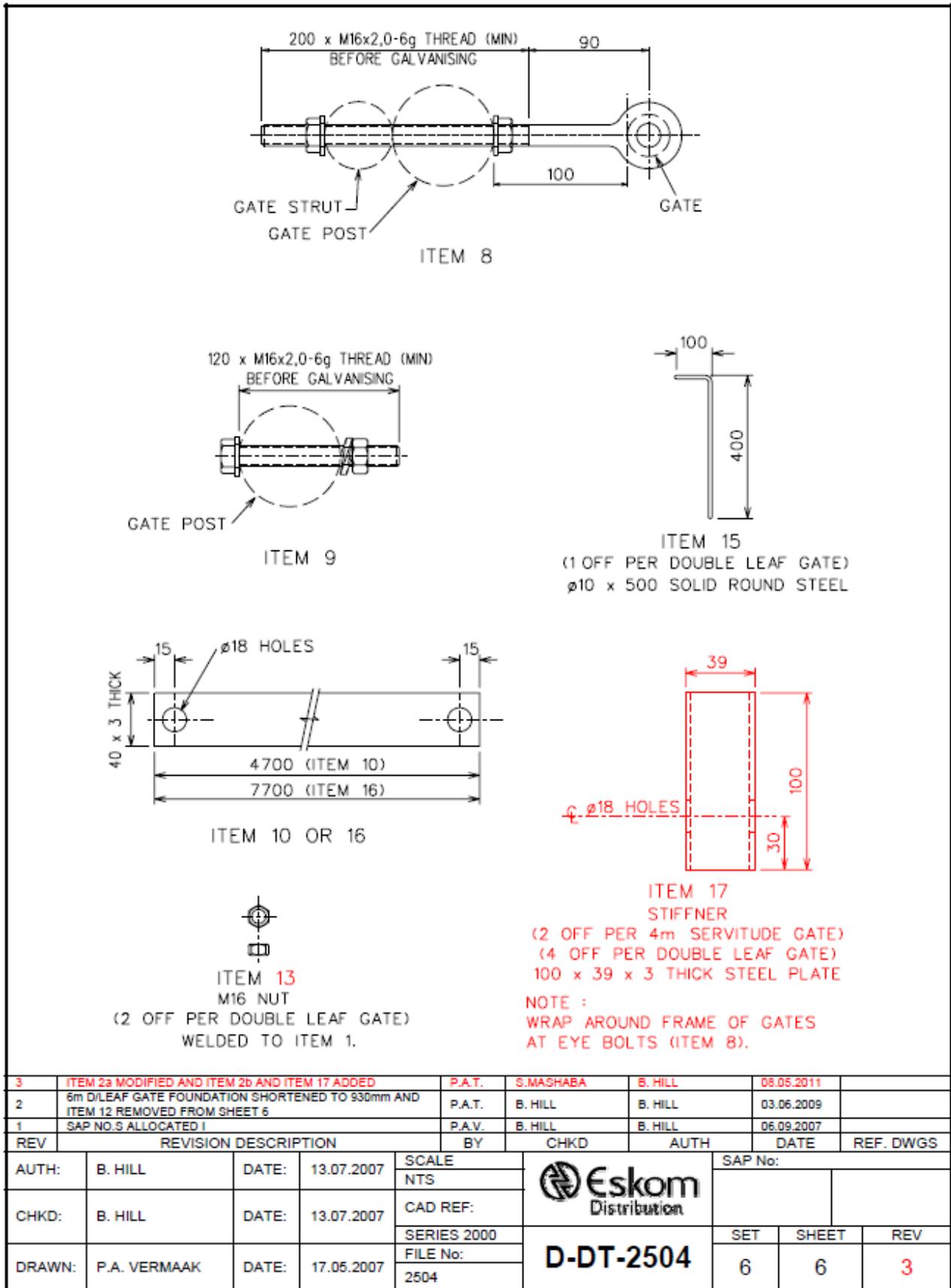
| 3 | ITEM 2a MODIFIED AND ITEM 2b AND ITEM 17 ADDED | P.A.T. | S.MASHABA | B. HILL | 08.05.2011 | |
|--------|---|--------|------------|-------------|------------|-----------|
| 2 | 5m D/LEAF GATE FOUNDATION SHORTENED TO 930mm AND ITEM 12 REMOVED FROM SHEET 6 | P.A.T. | B. HILL | B. HILL | 03.06.2009 | |
| 1 | SAP NO.S ALLOCATED | P.A.V. | B. HILL | B. HILL | 06.09.2007 | |
| REV | REVISION DESCRIPTION | BY | CHKD | AUTH | DATE | REF. DWGS |
| AUTH: | B. HILL | DATE: | 13.07.2007 | SCALE | | SAP No: |
| CHKD: | B. HILL | DATE: | 13.07.2007 | NTS | | |
| DRAWN: | P.A. VERMAAK | DATE: | 17.05.2007 | CAD REF: | | |
| | | | | SERIES 2000 | | |
| | | | | FILE No: | | D-DT-2504 |
| | | | | 2504 | | |
| | | | | 6 | 4 | 3 |

CONTROLLED DISCLOSURE



| 3 | ITEM 2a MODIFIED AND ITEM 2b AND ITEM 17 ADDED | P.A.T. | S.MASHABA | B. HILL | 08.05.2011 | |
|--------|---|--------|------------|--------------------|------------|-----------|
| 2 | 6m D/LEAF GATE FOUNDATION SHORTENED TO 930mm AND ITEM 12 REMOVED FROM SHEET 6 | P.A.T. | B. HILL | B. HILL | 03.06.2009 | |
| 1 | SAP NO.S ALLOCATED | P.A.V. | B. HILL | B. HILL | 06.09.2007 | |
| REV | REVISION DESCRIPTION | BY | CHKD | AUTH | DATE | REF. DWGS |
| AUTH: | B. HILL | DATE: | 13.07.2007 | SCALE | | SAP No: |
| CHKD: | B. HILL | DATE: | 13.07.2007 | NTS | | |
| DRAWN: | P.A. VERMAAK | DATE: | 17.05.2007 | CAD REF: | | |
| | | | | SERIES 2000 | | |
| | | | | Eskom Distribution | | SET |
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