ANNEXURE A TECHNICAL SPECIFICATIONS FOR PERIMETER FENCING SERVICES

Tender No: 49Q/2025/26

VOLUME 3: TECHNICAL SPECIFICATION

SPECIFICATIONS FOR SUPPLY AND INSTALLATION OF THE PERIMETER FENCING AT VARIOUS PUBLIC TRANSPORT INTERCHANGE (PTI) FACILITIES

TENDER No: 49Q/2025/26

CONTENTS

1.	SYSTEM DESCRIPTION	1
1.1	BACKGROUND	1
2.	STANDARDS	1
3.	TECHNICAL REQUIREMENTS	1
3.1	HIGH SECURITY FENCE 2400MM	1
3.2	SINGLE LEAF SLIDING GATE	2
3.3	SINGLE LEAF PEDESTRIAN GATE (1200MM WIDE GATE)	2
3.4	DOUBLE LEAF SWING GATE	2
3.5	SINGLE LEAF SWING GATE	2
3.6	HORISONTAL PROTECTION	2
3.7	SITE CLEARANCE AND RUBBLE REMOVAL	2
3.8	TRANSPORT	2
3.9	SUNDRIES	3

Tender No: 49Q/2025/26

1. STANDARDS

All products and workmanship shall comply with:

- SANS 10244-2:2003
- Occupational Health and Safety Act
- The National Building Regulations
- Local Municipal By-Laws regulations
- All building materials and work to comply with NBR/SANS10400 and SABS standards

2. TECHNICAL REQUIREMENTS

2.1 HIGH SECURITY FENCE 2400MM

Supply and install Betaforce 358 Dublo with standard Zincalu: Super finish coated in accordance to SANS 10244-2:2003

· Supply and install Betaforce heavy high security welded panel fence, with rectangular

mesh and vertical double wires welded on either side of the horisontal wires with panel width 3050mm with wire horisontal diameter of 4mm and wire vertical diameter of 4mm thick and tensile strength of $600\text{-}900\text{N/mm}^2$ and weld strength of 60-80% and weight should +/- 10kg/mm^2 . Maximum width of panel from centre post to post as per manufacture's specifications and maximum steps from panel to panel to be 150mm. Apertures to be 76.2×12.7 and inner apertures 72.2×8.7 . Panels have to be fixed to top and bottom angle rails with cover plate bolted. Zincalu super wire coating has to be 95% Zinc and 5% Aluminium (SANS 10244-2. Min 275g/m^2)

IPE 100x55mmx3m(h) with 300mmfooting- Galvinised & anthracite coated Fence posts that has to be 95% Zinc and 5% Aluminium (SANS 10244-2. Min 275kg/m³. Foundations for the fence posts has to be 450 x 450 x 800mm (15Mpa/19mm stone) 10mm below ground level at fence and gate guide post. Ground conditions may require additional concrete. Fence post installation has to conform manufacture's specifications. All post to have 16mm hole on the inside of the fence 50mm below ground level for an earth lug to be fitted. Splay corner post – IPE 100x55mmx3m (h) witrh300mm footing – Galvinised & anthracite coated with 50x5mm flat on sides. Corner posts – IPE with flat x 3m (h) with 300mm footing – galvinised & anthracite with 50x5mm flat on sides

2.2 SINGLE LEAF SLIDING GATE

Supply and install Dublo Mesh Panel Single Leaf Swing Gate. Gate to be provided with lockbox and barrel bolt. Gate posts to be 100mm x 100mm x 3mm square mild steel posts, guides and rails in 15mpa/19mm stone concrete footings and including PVC coating (RAL 7021 Anthracite PVC). The PVC that is used is the Zincalu coated wire. Zincalu panels are sealed with adhesion epoxy prior to the PVC coating to ensure a perfect bond. The PVC is plasticised and thoroughly compounded to have a full dispersement of pigments, stabiliser and other components. The PVC is to be free from lead and cadmium.

All vehicular swing gates are to have guide wheels and a track for additional support.

2.3 SINGLE LEAF PEDESTRIAN GATE (1200MM WIDE GATE)

Supply and install Single Leaf Pedestrian gate to be provided with heavy duty hinges, lockbox and barrel bolt and including Zincalu Coating. Super wire coating is 95% Zinc and 5% aluminium. (SANS 10244-2. Min 275g/m³).

2.4 DOUBLE LEAF SWING GATE

Supply and install Dublo Mesh Panel Double Leaf Swing Gate. Gate to be provided with heavy duty hinges, lockbox and barrel bolt gate posts to be 100mm x 100mm x 3mm square mild steel posts in 15mpa/19mm stone concrete footings and including PVC coating (RAL 7021 Anthracite PVC). The PVC that is used is the Zincalu coated wire. Zincalu panels are sealed with adhesion epoxy prior to the PVC coating, to ensure a perfect bond. The PVC is plasticised and thoroughly compounded to have a full dispersement of pigments, stabiliser and other components. The PVC is to be free from lead and cadmium.

2.5 SINGLE LEAF SWING GATE

Supply and install Dublo Mesh Panel Double Leaf Swing Gate. Gate to be provided with heavy duty hinges, lockbox and barrel bolts. Gate posts to be 100mm x 100mm x 3mm square mild steel posts in 15mpa/19mm stone concrete footings and including PVC coating (RAL 7021 Anthracite PVC). The PVC that is used is the Zincalu coated wire. Zincalu panels are sealed with adhesion epoxy prior to the PVC coating, to ensure a perfect bond. The PVC is plasticised and thoroughly compounded to have a full dispersement of pigments, stabiliser and other components. The PVC is to be free from lead and cadmium.

2.6 HORISONTAL PROTECTION

Supply and install Toping-castle spike fixed on top of fencing and all gates. Serrated spike strip 3046x96x20 – 45 deg bend. Bottom Rails – Angle iron – 40x40x3mm

2.7 SITE CLEARANCE AND RUBBLE REMOVAL

- Removal of vegetation and topsoil shall be done by hand or mechanical means and surplus material either shall be stockpiled at site for reuse purpose, or shall be disposed of off-site in designated dumping area in strict accordance with the City's bylaws
- Daily housekeeping will be carried out after the work
- Upon completion of the works the site is to be free of all builders' rubble and debris which may have resulted from the construction process

2.8 TRANSPORT

The contractor shall be liable for the transport of all materials and personnel to and from site with all applicable insurances in place.

Tender No: 49Q/2025/26

3. GENERAL REQUIREMENTS

- All services to be identified and checked on site and any discrepancies to be verified with the Project Manager
- All trade names to be specified or equally approved
- All specialist finishes and materials to be applied/fitted in strict accordance with the manufacturer's specifications and by approved contractors