#### C3.5 PROJECT SPECIFICATIONS

#### **STATUS**

The Project Specifications (PS) forms an integral part of the contract and supplements the Standard Specifications and uMngeni-uThukela Water Particular Specifications. They contain a general description of the works, the site and the requirements to be met.

In the event of any discrepancy between a part or parts of the Standardized or Particular Specifications and the Project Specifications, the Project Specifications shall take precedence. In the event of a discrepancy between the Specifications and the drawings and / or the Bill of Quantities, the drawings take precedence, thereafter the Bill of Quantities. In all events, the discrepancy shall be brought to the attention of the Employer's Agent before the execution of the work under the relevant item.

#### 3.5.1 QUALITY ASSURANCE

The successful Tenderer shall furnish the Employer a detailed Quality Control Plan (QCP) and Procedure for all materials, such as valves, pumps, motors, pipes, specials and fittings for approval prior to any fabrication, coating, lining and delivery.

The Employer shall inspect all of the above at the fabricator or corrosion applicator and release same for delivery with a 48 hour written notice.

#### PS 1 PROJECT DESCRIPTION

Project includes removal and disposal of old external fence in Wiggins WW, replace with
2.3 km new fence anti-climb 3m high double welded galvanized fence.

#### PS 2 OVERVIEW AND DETAILS OF CONTRACT

# PS 2.1 Overview

The main components of the contract comprise:

 Removal and disposal of old external fence and replacement with new 3m high double welded galvanized fence.

#### PS 2.2 Scope of Work

### **Fence Height:**

 The minimum height of the perimeter fence shall be 3.0 meter-high above the finished natural ground level

#### Poles/ Posts

- High tensile square posts to be used (80mm x 80mm x 3600mm high)
- Poles should be 3600mm
- The post to be hot dip galvanized in accordance to ISO 1461
- The distance between the poles must be such a way that the welded mesh panels fit tight against each other and to provide the required structural stability and sturdiness
- Poles must be 60mm in cross section and must not be capable of being bent by human force, or easily bent when accidentally pumped by a car

- Poles must be locking mechanism to enable the mesh panels to be fully secured against each other and lock into place along the entire length
- Poles shall be hot dip galvanized then be polyester electrostatic coated
- Panel poles must have a flash panel post finish with no climbing aid from both the inside and outside of the fence

## **FOUNDATIONS**

- Foundations for the poles shall be 200mm x 200mm in cross section and 600mm deep
- A 25 Mpa/19mm 28 days' strength of concrete to be used.

#### **Anti-Climb finish**

- Mesh panels shall be high tensile steel mesh wrap
- Mesh panels shall be 3.0 m high above the finished ground level where the ground is relevantly flat
- The width of the mesh panels must be according to manufacturer's design specification to enable a structural stable fence but shall not be more than 2.9 m wide
- Where the site or ground level is sloping the mesh panels shall also be stepped to follow the topographical profile, where this occurs the steps shall cover the whole width of the mesh panel
- The diameter of the mesh strands both shall be 4mm horizontal and 4mm vertical
- The panels aperture size (centre to centre) shall be 9mm vertical and 76.2mm horizontal
- All the mesh panels must be secured along the entire length of the poles with a mechanism and using anti vandal bolts that cannot be tempered with or manoeuvred with standard tools
- All mesh panels fixtures shall be on the inside of the fence and not be accessible from the outside.
- The mesh panels, poles and fixtures shall be hot deep galvanised and be polyester electrostatic coated

## Over climb prevention

- 100mm high toughened steel razor ninja spikes to be fixed on top of the fence of the mesh wire panels along the entire length of the fence
- To be secured tight with anti-vandal shear nuts and bolts from the inside of the fence
- Spikes shall also be hot deep galvanised then be polyester coated

### Anti-Burrow/Anti-Dig

- A mesh panel to be the same specification as the mesh panel above the ground shall be secured along the lower edge integrated angle along the full width of the fence between the post
- The anti-dig mesh panels shall be at least 600mm below the finished ground level with anti-vandal bolts on the inside and against the concrete foundations for the pols