1 GENERAL

1.1 INTRODUCTION

1.1.1 Scope

1 This Section specifies the requirements associated with all aspects of structural steelwork including materials, drawings, workmanship and protective treatment.

2 The purpose of QCS is to provide as a general technical guide for acceptable construction work practices in the State of Qatar, considering this; any addition for technology, material, specification, standard that are not mentioned in this section or their modification, shall be subject to approval as stated in the introduction of QCS (00-02)

3 Related Sections and parts are as follows:

This Section All Parts

1.1.2 References

1 The following standards are referred to in this Part:

BS 5950.....Structural use of steelwork in building

Eurocode 3: Part 1.1 (DD ENV1993-l.l), General rules and rules for buildings

1.1.3 System Description

1 This Section deals with structural steelwork designed in accordance with the following:

(a) BS 5950: Part 1,Code of practice for design in simple and continuous construction: hot rolled sections

(b) Eurocode 3: Part 1.1 (DD ENV1993-l.l), General rules and rules for buildings, where the references to BS 5950 in the National Application Document are taken into account.

1.2 DEFINITIONS

1.2.1 General

1 Terms which are defined in this section are treated as Proper Nouns throughout the text of the Specification. The following definitions apply for the purposes of this Specification:

1.2.2 Connection Design

1 The design of bolts, welds, cleats, plates and fittings required to provide an adequate load path between the end of a member and the component it connects to.

1.2.3 Design Calculations

1 Calculations, prepared by the Engineer, showing the design and analysis of the structure, including computer data sheets.

1.2.4 Design Drawings

1 Fully dimensioned drawings prepared by the Engineer showing all members with their size and material grades, the forces to be developed in their connections, any cambers and eccentricities and other information necessary for the design of the connections and completion of Fabrication and Erection Drawings.

1.2.5 Erection Drawings

1 Drawings, prepared when necessary by the Contractor, showing details to amplify the information given in the Contractor's erection method statement and showing details of any temporary steelwork (see Part 8 of this Section).

1.2.6 Fabrication Data

1 Numerical control tapes, computer discs, data bases or other electronic means of communication for automatic methods of fabrication.

1.2.7 Fabrication Drawings

1 Drawings, prepared by the Contractor, showing all necessary information required to fabricate the structural steelwork.

1.2.8 Fittings

1 Plates, flats or rolled sections which are welded or bolted to structural steel components.

1.2.9 Foundation Plan Drawings

1 Drawings, prepared by the Contractor or the Engineer, indicating location of column bases and details of foundation connections to the steelwork.

1.2.10 Shop Drawings

1 Drawings, prepared by the Contractor, showing plans, cross sections and elevations, main dimensions and the erection marks of components.

1.2.11 Inspection Authority

1 A qualified independent body or association which verifies compliance with the Project Documentation.

1.2.12 Ordinary Bolts

1 A bolt used in a non-preloaded bolt assembly which is designed to carry forces in shear, bearing or tension.

1.2.13 Production Test Plate

1 A plate used for testing purposes, which is made of the same material and using the same procedures as the joint in a component.

1.2.14 Quality Assurance

1 Activities concerned with the provision of systems, equipment and personnel necessary to achieve the required level of quality.

1.2.15 Fillet Weld

1 A weld, other than a butt or edge weld, which is approximately triangular in transverse cross section and which is generally made without preparation of the parent material.

1.2.16 Full Penetration Weld

1 A weld between elements which may be in-line, in the form of a tee, or a corner in which the weld metal achieves full penetration throughout the joint thickness.

1.2.17 Partial Penetration Weld

1 A weld formed using a technique which ensures a specified penetration which is less than the depth of the joint.

1.2.18 Full Strength Weld

1 Any of the above welds designed to develop the full strength of the element which it connects.

END OF PART