3.1.4 Qualifications

- A. Prepare Shop Drawings under direct supervision of a Professional Structural Engineer experienced in design of this work.
- B. Welders Certificates: Submit under provisions of Section 01300, certifying welders employed on the Work, verifying AWS qualification within the previous 12 months.

3.2 Part 2 Products

3.2.1 Materials – Steel

- A. Steel Sections: ASTM A36, BS 4, DIN 1025, DIN 17100, BS 4360 (Gr. 43), BS 4848.
- B. Steel Tubing: ASTM A500, Grade B, ASTM A501, BS 1387
- C. Plates, Sheet: ASTM A283, ASTM A366, BS 1494, DIN 1543, zinc coated, ASTM A526, BS 2989.
- D. Pipe: ASTM A53, Grade B Schedule 40.
- E. Fasteners: BS 4174.
- F. Bolts, Nuts, and Washers: ASTM A325/A307 galvanised to ASTM A153, BS 729 for galvanised components, BS 4183, BS 4186, BS 4190, BS 4320, DIN 267.
- G. Welding Materials: AWS D1.1; type required for materials being welded BS 3019/BS 5135.
- H. Ladders: ANSI A14.3.
- I. Shop and Touch-Up Primer: [SSPC 15, Type 1, red oxide.

3.2.2 Materials - Stainless Steel

All stainless steel elements shall be grade 316L (or equivalent). All stainless steel hardware (such as nuts, bolts, washers, screws, etc.) shall be grade 316 (or equivalent). All galvanization specified in the following sections shall be as per the hot-dip galvanized method

- A. Stainless Steel forgings: ASTM A484, DIN 17440.
- B. Stainless Steel Tubing: ASTM A268.
- C. Plates, Sheets: ASTM A480/480M.
- D. Bolts, Screws, Studs: ASTM F738M, Nuts, and Washers F836M.
- E. Welding Materials: ASTM G 35.