Part 1 General

1.1 RELATED SECTIONS

.1 Section 040519 - Masonry Anchorage and Reinforcing.

.2 Section 040500 - Common Work Results for Masonry.

.3 Section 06 40 00 – Architectural Woodwork.

1.2 REFERENCES

.1 American Society for Testing and Materials International, (ASTM)

.1 ASTM A307-[02], Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength.

.2 Canadian Standards Association (CSA International)

.1 CAN/CSA-G40.20/G40.21-[98], General Requirements for Rolled or Welded Structural Quality Steel.

.2 CAN/CSA-G164-[M92(R1998)], Hot Dip Galvanizing of Irregularly Shaped Articles.

.3 CAN/CSA-S16.1-[01], Limit States Design of Steel Structures.

.4 CSA W48-[01], Filler Metals and Allied Materials for Metal Arc Welding (Developed in co-operation with the Canadian Welding Bureau).

.5 CSA W59-[1989(R2001)],Welded Steel Construction (Metal Arc Welding) (Imperial Version).

1.3 SUBMITTALS

.1 Product Data:

.1 Submit manufacturer's printed product literature, specifications and data sheet in accordance with Section 01 33 00 - Submittal Procedures.

.2 Shop Drawings

.1 Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures.

.2 Indicate materials, core thicknesses, finishes, connections, joints, method of anchorage, number of anchors, supports, reinforcement, details, and accessories.

1.4 QUALITY ASSURANCE

.1 Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties.

.2 Certificates: Product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

.3 Pre-installation Meetings: Conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements.

1.5 DELIVERY, STORAGE, AND HANDLING

.1 Packing, Shipping, Handling and Unloading:

.1 Deliver, store, handle and protect materials in accordance with Section 01 61 00 - Common Product Requirements.

.2 Storage and Protection:

.1 Cover exposed stainless steel surfaces with pressure sensitive heavy protection paper or apply strippable plastic coating, before shipping to job Site.

.2 Leave protective covering in place until final cleaning of building. Provide instructions for removal of protective covering.

1.6 WASTE MANAGEMENT AND DISPOSAL

.1 Separate and recycle waste materials in accordance with requirements of Contract Administrator.

.2 Remove from Site and dispose of packaging materials at appropriate recycling facilities.

.3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard packaging material in appropriate on-site bins for recycling in accordance with Waste Management Plan.

.4 Divert unused metal materials from landfill to metal recycling facility approved by Contract Administrator.

Part 2 Products

2.1 MATERIALS

.1 Steel sections and plates: to CAN/CSA-G40.20/G40.21, Grade 304, Grade 316.

.2 Stainless steel tubing: to ASTM A269, Type 316L Commercial grade. Seamless welded with brushed finish.

.3 Welding materials: to CSA W59.

.4 Welding electrodes: to CSA W48 Series.

.5 Bolts and anchor bolts: to ASTM A307.

.6 Adhesive anchors to CAN/CSA A23.3-04:

.1 Acceptable product: Hilti Qwik HIS-RN-HY-150, Powers Fasteners AC100+Gold anchors.

.7 Steel angle: 316L Stainless Steel, 2”X 2” X 3/16”.

.8 Stainless sheet: 304 Stainless Steel. #4 Finish, 25 gauge.

.9 Steel plate: 316L Stainless Steel. #4 Finish, 3/16” thick.

.10 Steel plate: 316L Stainless Steel. #4 Finish, 1/4" thick.

.11 Steel plate: 316L Stainless Steel. #4 Finish, 1/2" thick.

.12 Steel pipe: 316L Stainless Steel. #4 Finish, 1/8" gauge.

FABRICATION

.13 Fabricate work square, true, straight and accurate to required size, with joints closely fitted and properly secured.

.14 Use self-tapping shake-proof flat headed screws on items requiring assembly by screws or as indicated.

.15 Where possible, fit and shop assemble Work, ready for erection.

.16 Ensure exposed welds are continuous for length of each joint. File or grind exposed welds smooth and flush.

2.2 FINISHES

.1 Shop coat primer: to CAN/CGSB-1.40.

2.3 SHOP PAINTING

.1 Apply one shop coat of primer to metal items, with exception of galvanized or concrete encased items.

.2 Use primer unadulterated, as prepared by manufacturer. Paint on dry surfaces, free from rust, scale, grease. Do not paint when temperature is lower than 7 degrees C.

.3 Clean surfaces to be field welded; do not paint.

2.4 SCHEDULE

.1 Provide stainless sheet for application to wall behind water fountains. Adhere to wall using appropriate adhesive. Finish 3 edges with hem details.

.2 Provide stainless sheet for use as millwork base on desk and on platforms below lockers.

.3 Provide brackets for wall-mounted benches and vanities as indicated on construction drawings.

.4 Provide pipe legs and brackets for free-standing benches as indicated on construction drawings.

.5 Provide round stainless steel back plate 1/2" thick at top flange of the vertical grab bar in Room 112 and Room 113.

Part 3 Execution

3.1 ERECTION

.1 Do welding work in accordance with CSA W59 unless specified otherwise.

.2 Erect metalwork square, plumb, straight, and true, accurately fitted, with tight joints and intersections.

.3 Provide suitable means of anchorage acceptable to Contract Administrator such as dowels, anchor clips, bar anchors, expansion bolts and shields, and toggles.

.4 Exposed fastening devices to match finish and be compatible with material through which they pass.

.5 Provide components for building by other sections in accordance with shop drawings and schedule.

.6 Make field connections with bolts to CAN/CSA-S16.1, or weld.

.7 Hand items over for casting into concrete or building into masonry to appropriate trades together with setting templates.

.8 Touch-up rivets, field welds, bolts and burnt or scratched surfaces after completion of erection with primer.

3.2 CLEANING

.1 Perform cleaning after installation to remove construction and accumulated environmental dirt.

.2 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

END OF SECTION