Part 1 General

1.1 RELATED REQUIREMENTS

.1 Section 01 74 11 - Cleaning

.2 Section 07 62 00 - Sheet Metal Flashing and Trim

1.2 REFERENCES

.1 ASTM International

.1 ASTM A496/A496M-07, Standard Specification for Steel Wire, plain, for thin gauge wire ladder Reinforcement.

.2 CSA International

.1 CAN/CSA-A165 SERIES-04(R2009), CSA Standards on Concrete Masonry Units: A165.1, A165.2, A165.3.

.2 CAN/CSA-A179-04(R2009), Mortar and Grout for Unit Masonry.

.3 CAN/CSA A371-04(R2009), Masonry Construction for Buildings.

.4 CSA G30.18-09, Carbon Steel Bars for Concrete Reinforcement.

.5 CSA S304.1-04(R2009), Design of Masonry Structures.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

.1 Submit in accordance with Section 01 33 00 - Shop Drawings, Product Data and Samples

.2 Product Data:

.1 Submit manufacturer's instructions, printed product literature and data sheets for masonry products and include product characteristics, performance criteria, physical size, finish and limitations.

.3 Shop Drawings:

.1 Shop drawings are not required for masonry.

.4 Samples:

.1 Samples are not required

1.4 DELIVERY, STORAGE, AND HANDLING

.1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements with manufacturer's written instructions.

.2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.

.3 Storage and Handling Requirements:

.1 Store materials in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.

.2 Store and protect masonry products from nicks, scratches, and blemishes.

.3 Replace defective or damaged materials with new.

.4 Develop Construction Waste Management Plan related to Work of this Section..

.5 Packaging Waste Management: remove for reuse or return if required by manufacturer of as specified in Construction Waste Management Plan in accordance with Section 01 74 19 - Waste Management and Disposal.

Part 2 Products

2.1 MASONRY UNITS

.1 Standard concrete block units: to CAN/CSA-A165 Series (CAN/CSA-A165.1).

.1 Classification: H/15/ A/ M.

.2 Size: 240mm x 390mm x 203 mm

.3 Colour: Sandstone – send mock up to architect.

.4 Finish: equivalent to "Basalite" "precision" and 2-Rib Split Face Units for accent bands.

.5 Special shapes: provide square units for exposed corners. Provide purpose-made shapes for bond beams.

2.2 REINFORCEMENT AND CONNECTORS

.1 Bar reinforcement: to CAN/CSA-A371 CSA G30.18, Grade 400.

.2 Wire reinforcement: to CAN/CSA-A371 ASTM A496/A496M, 9ga, truss type.

.3 Connectors shall be corrosion resistant: to CAN/CSA-A370 CSA S304.1.

2.3 MORTAR AND GROUT

.1 Mortar: to CAN/CSA-A179.

.1 Use aggregate passing 1.18 mm sieve where 6 mm thick joints are indicated.

.2 Colour: ground coloured natural aggregates or metallic oxide pigments.

.2 Mortar Type: S based on property specifications,

.3 Mortar for foundation walls, and other exterior masonry at or below grade: type M based on property specifications.

.4 Following applies regardless of mortar types and uses specified above:

.1 Mortar for stonework: type N based on property specifications.

.2 Mortar for grouted reinforced masonry: type S based on property specifications.

.5 Grout: to CAN/CSA-A179, Table 3.

2.4 ACCESSORIES

.1 Weep hole vents: purpose-made PVC colour to match adjacent block finish color.

.2 Nailing Inserts: 0.5 mm minimum thickness, galvanized.

.3 Flashings: as per Section 076200 Sheet Metal Flashing and Trim

Part 3 Execution

3.1 EXAMINATION

.1 Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contracts are acceptable for product installation in accordance with manufacturer's written instructions.

.1 Visually inspect substrate in presence of Departmental Representative.

.2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.

.3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.

3.2 INSTALLATION

.1 Do masonry work in accordance with CAN/CSA-A371 except where specified otherwise.

.1 Bond: running stretcher bond with vertical joints in perpendicular alignment and centred on adjacent stretchers above and below.

.2 Coursing height: 200 mm for one block and one joint.

.3 Jointing: tool with concave surface.

.2 Build masonry plumb, level, and true to line, with vertical joints in alignment.

.3 Layout coursing and bond to achieve correct coursing heights, and continuity of bond above and below openings, with minimum of cutting.

3.3 CONSTRUCTION

.1 Exposed masonry:

.1 Remove chipped, cracked, and otherwise damaged units, in exposed masonry and replace with undamaged units.

.2 Cut out for electrical switches, outlet boxes, and other recessed or built-in objects. Make cuts straight, clean, and free from uneven edges.

.2 Building-in:

.1 Install masonry connectors and reinforcement where indicated on drawings.

.2 Build in items required to be built into masonry.

.3 Prevent displacement of built-in items during construction. Check plumb, location and alignment frequently, as work progresses.

.4 Brace door jambs to maintain plumb. Fill spaces between jambs and masonry with mortar.

.3 Interface with other work:

.1 Cut openings in existing work as indicated.

.2 Openings in walls: as per drawings and other openings only when approved by Departmental Representative

.3 Make good existing work. Use materials to match existing.

.4 Build in flashings in masonry in accordance with CAN/CSA-A371.

.1 Install flashings over the wall as indicated.

.2 Lap joints 150 mm and seal with adhesive.

3.4 REINFORCING AND CONNECTING

.1 Install masonry connectors and reinforcement in accordance with CAN/CSA-A370, CAN/CSA-A371 and CSA S304.1 unless indicated otherwise.

.2 Prior to placing grout, obtain Departmental Representative's approval of placement of reinforcement and connectors.

3.5 REINFORCED LINTELS AND BOND BEAMS

.1 Reinforce masonry lintels and bond beams as indicated.

.2 Place and grout reinforcement in accordance with CAN/CSA-A179, CAN/CSA-A371 and CSA S304.1.

3.6 GROUTING

.1 Grout masonry in accordance with CAN/CSA-A179, CAN/CSA-A371 and CSA S304.1 and as indicated.

3.7 ANCHORS

.1 Supply and install metal anchors as indicated.

3.8 LATERAL SUPPORT AND ANCHORAGE

.1 Supply and install lateral support and anchorage in accordance with CSA S304.1 and as indicated.

3.9 SITE TOLERANCES

.1 Tolerances of CAN/CSA-A371 apply.

3.10 FIELD QUALITY CONTROL

.1 Inspection and testing will be carried out by Testing Laboratory designated by Departmental Representative.

3.11 CLEANING

.1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.

.1 Leave Work area clean at end of each day.

.2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.

.3 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 19 - Waste Management and Disposal.

.1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

3.12 PROTECTION

.1 Protect masonry and other work from marking and other damage. Protect completed work from mortar droppings. Use non-staining coverings.

.2 Repair damage to adjacent materials caused by masonry products installation.

END OF SECTION