# **Specifications**

#### **DIVISION 01 - GENERAL REQUIREMENTS**

#### SPECIFICATIONS

Any and all representations in these documents are furnished merely for general information and are not in any way warranted or quaranteed by or on behalf of the Contract Administrator. If a specific material or brand name product has been referenced, it is only to show the quality of material being used in the

final specification and during construction of this project. All work to meet or exceed City of Winnipeg Construction Specifications Standards, unless noted otherwise.

Refer to City of Winnipeg Design Guides for Community Centres as standards of performance, unless noted otherwise.

#### CONTRACTORS REPRESENTATION The Contractor represents that, in commencing with the Work, he has had the opportunity to visit the site, examine all site

# conditions, has familiarized himself with all required documents, is satisfied he can complete the Work, and will place his

All Work shall comply with all current applicable code, regulations, by-laws and ordinances for the City of Winnipeg, and the Province of Manitoba.

#### 01001 GENERAL All facilities, labour, material, and equipment, that are typically required for the completion of the Work shall be the

responsibility of the Contractor and are to be included in any bid proposal. All sections in these Specifications carry a one (1) year Standard Construction Warranty and Guarantee against labour and material defects including Work performed by subcontractors. All equipment warranties greater than one (1) year will be passed to the Contract Administrator at project completion.

#### 01003 ALLOWANCES Not applicable to this contract.

01050 FIELD ENGINEERING The Contractor shall provide for Field engineering services required for proper completion of the Work.

Provide 6 copies of shop drawings and duplicate samples of products noted to be submitted. Submit to Contract Administrator office or as directed. Provide as-built and/or record drawings at the end of the project.

#### 01500 TEMPORARY FACILITIES AND CONTROLS

The Contractor shall provide for all temporary facilities unless as permitted by the Contract Administrator and as negotiated in the Contract. The builder shall be responsible for provision of all temporary barricades, hoarding, dust screens, weather enclosures as may be required of the Work and for the safety of the Contract Administrator, tenants and public and to the satisfaction of the City and Local Authorities.

#### 01700 CONTRACT CLOSEOUT

Upon substantial completion of all work, the project will be inspected with representatives of the Contract Administrator and for the purpose of itemizing a final punch list.

#### The project will be turned over broom clean and ready for use. Closeout submittal to include but not be limited to: Project record documents i.e. "as built" drawings, specifications, shop

drawings, etc.: Operation and maintenance manuals as available: Warranties and bonds; Keying and keying schedule: Spare parts and material extra stock; Release of liens; List of subcontractors, service organizations and principal vendors.

### The Contractor is responsible for maintaining a clean site in a standard of cleanliness consistent with safe and efficient

### Final cleaning of the structure: Broom clean all decks; Clean and wash all glass inside and out; Clean all flooring materials. **DIVISION 02 - SITE WORK**

### 02110 SITE PREPARATION

Provide for barricades, hoarding, dust screens for the safe and secure completion of the work. Locate area and extent of work and coordinate with the Contract Administrator.

### 02130 CUTTING AND PATCHING

Beginning of cutting or patching means acceptance of existing conditions.

Submit written request in advance of cutting or alteration which affects: Structural integrity of any element of Project; Integrity of weather-exposed or moisture-resistant elements; Efficiency, maintenance, or safety of any operational element, Visual qualities of sight-exposed elements; Work of Contract Administrator or separate contractor.

Perform cutting, fitting, and patching including excavation and fill, to complete the Work. Remove and replace defective and non-conforming work. Provide openings in non-structural elements of Work for penetrations of mechanical and electrical work. Perform work to avoid damage to other work. Prepare proper surfaces to receive patching and finishing. Restore work with new products in accordance with Contract Documents. Fit work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces. Refinish surfaces to match adjacent finishes; for continuous surfaces refinish to nearest intersection; for an assembly, refinish entire unit

# 02130 SELECTIVE DEMOLITION FOR RENOVATION WORK

Work of this section includes selective demolition consisting of removal of constructed elements and existing materials and finishes and cutting openings, recesses, to accommodate new work and finishes. Coordinate work with all trades. Comply with Manitoba and National Building Code, Construction Safety Measures at Construction and Demolition Sites and Provincial and Municipal requirements.

Work to include but not be limited to removal and cutting of existing chainlink fencing and line posts, metal stair railings, wood panelling, grilles and vent covers, openings for mechanical and electrical devices.

Workers must be knowledgeable or have the ability to identify asbestos or other hazardous materials. Immediately stop Work in the area and notify the Contract Administrator should unexpected materials suspected of containing Asbestos be encountered. Do not resume Work in area until it has been determined if the material encountered contains Asbestos, and authorization to resume Work is given.

# **DIVISION 03 - CONCRETE**

03302 CAST IN PLACE CONCRETE

### Refer to Structural Drawings and specifications **DIVISION 04 - MASONRY**

# 04060 MORTAR AND MASONRY GROUT

Provide 2' x 2' samples and submit in accordance to 01300 Submittals for colour approval prior to installation Do masonry mortar and grout work in accordance with CSA A179. Colour to be selected by the Contract Administrator prior to construction from manufacturer's full colour range. Apply parging in uniform coating not less than 3/4" thick where indicated. Install parging to wire mesh mechanically fastened

to grade beam as detailed, to top of grade. Provide a knife cut clean edge that follows grade and cement grout the gap.

# 04412 BRICK TILE UNIT MASONRY

literature and shop drawings in accordance to 01300 Submittals.

Acceptable Product: Thin Brick Tile Veneer as manufactured by Endicott Clay Products and supplied by Allsips Winnipeg or approved substitute. Colour: Manganese Ironspot. Size: ½" x 35/8" x 75/8". Submit one 2' x 2' product mock-up sample installed on plywood backup set up in the specified mortar, together with product

Install to manufacturer's specifications and recommendations. Running bond; Concave Joints. Lay up tiles in specified mortar. Provide mortar coats, wire mesh, fasteners, corner beads, adhesives, flashings, materials

and accessories in accordance with manufacturer's specifications. Clean faces using soft cloths before mortar hardens. After completion of tile work, fill joints with pointing mortar then point to provide concave joints. Repeat cleaning faces.

# **DIVISION 05 - METALS**

# 05500 MISCELLANEOUS METALS

Work includes but is not limited to plates, angles, bolt plates, brackets, channel, frames, supports required for safe and secure installation of products or materials or for construction of assemblies. Submit shop drawings in accordance with submittals.

Fabricate work square, true, straight and accurate to required size, with joints closely fitted and properly secured. Ensure exposed edges and surfaces are smooth.

Finish: Typically Hot dipped galvanizing with zinc coating 600 g/m² to CAN/CSA-G164. Apply galvanizing paint to edges and corners. Install and apply galvanizing on site in accordance with product recommendations.

Provide 3" diameter pipe bollards buried and concrete filled with tapered top and painted, to Gas Utility Company standards

# and City of Winnipeg Standard Specifications.

#### **DIVISION 06 - WOOD AND PLASTICS** 06100 ROUGH CARPENTRY

Wood, nails, bolts, screws, framing anchors and other rough hardware and other items needed to complete the Work requirements for formwork, wood blocking, framing, cants, etc., required to properly install all frames, finish hardware, wall cladding, glass and glazing. Bolts, screws, nuts, washers, fasteners to be hot dipped galvanzied unless noted otherwise.

# **DIVISION 07 - THERMAL AND MOISTURE CONTROL**

# 07212 BOARD INSULATION

Extruded Polystyrene: to CAN/CGSB-51.20, Type II, thickness 3", R15.

Install insulation to maintain continuity of thermal protection to building elements and spaces Fit insulation tight around electrical boxes, plumbing and heating pipes and ducts, around exterior doors and windows and other protrusions. In addition to adhesive, install insulation boards with insulation clips and disc, 2 per 4' x 8' board minimum, fit boards tight, cut off fastener spindle 3mm beyond disc. Offset both vertical and horizantal joints in multiple layer applications. Leave insulation board joints unbonded over line of expansion and control joints.

#### 07271 AIR / VAPOUR BARRIER

Submit shop drawings in accordance with 01300 Submittals. Section includes materials and installation of the primary air/vapour barrier membrane system, damproof coursing and

through-wall flashing membranes, methods for adhesion of rigid insulating materials.

Provide a continuous air and vapour barrier membrane system to existing exterior concrete block wall. Perform Work in accordance with the manufacturer's written instructions of the air/vapour barrier membrane and this

specification. Apply primer to all areas to receive air/vapour barrier membrane sheet and/or through-wall flashing membrane. Air/Vapour Barrier: Blueskin SA as manufactured by Henry Company, a SBS modified bitumen, self-adhering type,

integrally laminated to a cross laminated polyethylene film. Sheet Membrane Primer: Aquatic Primer as manufactured by Henry Company, a polymer emulsion type, quick setting,

non-flammable during application, low VOC. Colour Aqua. Water based with a drying time of 30 minutes at 50% RH and 70°F (21°C). Apply only when conditions are above 45°F (7°C)

Through-wall flashing membrane: Blueskin TWF as manufactured by Henry Company, a SBS modified bitumen, self-adhering sheet membrane complete with cross-laminated polyethylene film. Liquid air seal mastic and insulation adhesive: Air-Bloc 21 insulation adhesive as manufactured by Henry Company, a

### 07450 FIBRE REINFORCED CEMENTITIOUS PANELS

synthetic, trowel applied, rubber based adhesive type.

This section includes the provision of all labour, materials, equipment and services required to provide and install cement fibre panels, as indicated on the drawings, as specified herein, and required to complete the project. Submit one sample panel for each paint colour specified (see Painting Section below) to the Contract Administrator for approval prior to proceeding with work. Sample panels to be 2' x 2' (600 mm x 600 mm).

Product: Autoclaved manufactured non-asbestos fibre-cement panel as manufactured by James Hardi Building Product or approved substitute. Hardi-Panel Vertical Siding composed of Portland cement, ground sand, cellulose fibre, select additivies and water.

Finish: Smooth, factory primed. Thickness: 5/16". Accessories: Wood furring and blocking - refer to Section 06100 Rough Carpentry Fastenings: Hot dipped galvanized corrosion resistent full round head siding nails (6mm diameter) to penetrate fully through strapping to CSA-B35.4

Trim, closures, cap pieces, etc.: refer to Section 07620 - Metal Flashing and Trim Patching Compound: Cementitious patching compound acceptable to the siding material manufacturer. Sealants: Refer to Section 07900 Joint Sealants Finish Painting: Refer to Section 09912 Exterior Painting

Install in strict accordance with the manufacturer's printed instructions. Provide wood strapping behind entire area to be covered by panels. Install sill flashings, wood starter strips, edgings and flashings over openings and exposed edges. All work to be nail fastened. Space fasteners according to manufacturer's recommendations. Locate fasteners ½" back from panel edge and 2" from panel corners. Take special care to neatly align and equally space fastenings. Finish joints as indicated on the drawings and manufacturer's instructions. Prefinished aluminum flashing to be applied at horizantal joints. Caulk at vertical joints.

#### 07620 METAL FLASHING AND TRIM Submit samples in accordance to 01300 Submittals

Patch surface defects, nail heads, and leave ready for paint finish.

Accessories: Isolation coating: alkali resistent bituminous paint.

Sheet metal materials: Zinc coated steel sheet: minimum 22 ga thickness, commercial quality to ASTM A526M with Z275

designation zinc coating. Aluminum Finishes: Finish exposed surfaces of aluminum components in accordance with Aluminum Association Designation for Aluminum Finishes - Clear anodized finish. Extruded aluminum pieces and flashings as per aluminum window manufacturer requirement for matching finish and required thickness properties. Prefinished Aluminum Sheet: Finish: Factory applied coating to CAN/CGSB-93.1 Colour selected by Contract Administrator from manufacturer's standard range.

Sealants: Refer to Section 07900 Joint Sealants Cleats: Of same material, and temper as sheet metal, minimum 2" wide. Thickness same as sheet metal being secured. Fasteners: Of same material as sheet metal, to CSA B111, flat head roofing nails of length, and thickness suitable for metal flashing application.

Fabricate metal flashings and other sheet metal work in accordance with applicable CRCA 'FL' series details. Fabricate aluminum flashings and other sheet aluminum work in accordance with Aluminum Association Aluminum Sheet Metal Work in Building Construction.

Form pieces in 8' maximum lengths. Make allowance for expansion at joints. Hem exposed edges to underside  $\frac{1}{2}$ ". Miter and seal corners with sealant. Apply isolation coating to metal surfaces to be embedded in concrete or mortar.

Metal Flashings: Form flashings, trims, copings, and fascias to profiles indicated and gauge specified. of 22ga, galvanized

### 07900 JOINT SEALERS

Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials and regarding labelling and provision of material safety data sheets acceptable Conform to manufacturer's written instructions for temperature, relative humidity and substrate moisture content for application and curing of sealants including special conditions. Use moisture resistent sealants only.

Sealants must be listed on CGSB Qualified Products List issued by CGSB Qualifications Board for Joint Sealants. Where sealants are qualified with primers use only these primers. Submit cut sheets detailing types of sealants and locations for approval by Contract Administrator prior to commencing work.

# DIVISION 08 - DOORS, WINDOWS AND GLASS

**08500 ALUMINUM WINDOWS** 

Window manufacturer to appraise proposed types and installation of windows in areas and locations identified and provide written recommendations and installation instructions to Contractor with copies issued to the Contract Administrator for the proper connections to the new air/vapour barrier membrane and adjacent wall construction in order to maintain the integrity of the air/vapour barrier and performance expectations for the windows.

Submit shop drawings in accordance with Section 01300 Submittals.

Materials: Aluminum Windows - main frame aluminum, thermally broken. Finish: clear anodic finish. Glass: Insulated double glazed sealed units, hermetically sealed, thermal spacer, argon gas filled, two coatings of Low 'E', Exterior metal sills aluminum facings: extruded aluminum of type and size as detailed and to suit job conditions; minimum 1/2" thick, complete with joint covers, jamb drip deflectors, chairs, and anchors. Isolation coating: alkali resistent bituminous paint.

Operable Window Type: Alumicor Series Acoustic Slider or approved substitute in accordance with B6. Classification rating to CAN/CSA-A440 M90 A3,B7,C5

Fabricate and install in accordance with CAN/CSA-A440

# 08800 GLAZING

Insulating glass units: to CAN/CGSB-12.8, double unit. 1/4" thickness per light, Tempered Safety Glass. Hermetically sealed. Two coatings of Low 'E". Argon gas filled with thermal 'super' spacer. Clear unless noted otherwise. All labels removed and class cleaned before Total Performance.

Acceptable Product: PPG Canada Inc. or approved substitute in accordance with B6.

# **DIVISION 09 - FINISHES**

Provide materials and perform painting in accordance with CAN/CGSB and National Fire Code of Canada. All non-finished miscellaneous metal specified in Section 05500 to be primed and painted with a standard colour finish coat to be picked by the Contract Administrator from the manufactuer's full line. Metal doors and door frames: Filled holes, one coat primer, two coats semi-gloss finish. Colour to be picked by Contract

Administrator from manufacturer's full line. Allow for 2 paint colours.

Hardi-Panel wall cladding: Patch holes and nail heads with approved patching compound. Apply three coats latex semigloss acrylic as panels supplied are factory primed. Allow for 4 paint colours

Wood Soffits & Fascia: filled holes, one coat wood filler, spot prime knots and resinous areas, one coat alkyd primer and two coats latex semi-gloss finish. Colour to be picked by the Contract Adminisrator from the manufacturer's full line. Allow for 1 paint colour.

Paint Finish Schedule: P1: Sienna 2092-20, Benjamin Moore

P2: North Sea CC-932, Benjamin Moore P3: Yellow Marigold 2155-30, Benjamin Moore P4: Saybrook Sage HC-114, Benjamin Moore

P5: Doors and Frames. TBA

P6: Doors and Frames, TBA P6: Soffits and Fascia, TBA

Existing Conditions: Investigate existing substrates for problems related to proper and complete preparation of surfaces to be painted. Report to Contract Administrator all damage, defects, unsatisfactory or unfavourable conditions before proceeding with work. Investigate moisture content of surface to be painted and report findings to Contract Administrator. Do not proceed with work

until conditions fall within acceptable range as recommended by manufacturer. Acceptable Product: Benjamin Moore 'Low Lustre' Collection Series, Para Paint or approved substitute in accordance with

### **DIVISION 10 - SPECIALTIES**

#### 10441 BUILDING SIGNS

Submit shop drawings and one sample for each letter in accordance to 01300 Submittals

Provided Black Aluminum lettering mechanically fastened with vandal resistant fasterneres to wire mesh grating as indicated on drawings. 6" high x  $\frac{1}{6}$ " thick with Helvetica font. Provide Brushed aluminum numbering mechanically fastened with vandal resistanct fasterners to brick tile veneer as indicated on drawings. 10" high x  $\frac{1}{8}$ " thick with Helvetica font.

Ensure separation of dissimilar materials. Fasteners should not be exposed or visible.

#### 10605 WELDED WIRE MESH

Submit shop drawings and two product samples in accordance with 01300 Submittals This section covers materials for a complete galvanized coated welded wire mesh grating system, including accessories,

Welded wire fabric shall be fabricated from low carbon steel wire and electronically control welded, forming a specified mesh

Acceptable Product: WireWall as manufactured by Riverdale Mills Corp., Northbridge, MA, Tel: 1-800-762-6374 or approved substitute in accordance with B6. The wire shall conform to ASTM A 853 Grade AISI 1006, having a minimum tensile strength of 70,000PSI (485 MPa). After welding the fabric is hot-dipped, galvanized with a minimum 1.2 oz zinc/ft² Fabric Size: Single panel construction ½" x 3" x 8 ga typical panel size of 7'-3" wide x 4' high.

Framework: The wire mesh is to be welded into a 1" deep galvanized metal frame on 4 sides as indicated on drawings. Outer edges to be grinded down and smoothed out. Cut wire mesh section in such manner so edges end on a vertical bar. Ensure that the outside face of the frame is smooth, free of defects, and of a continuous finish. Accessories: Piano Hinges of length and gauge necessary to support the individual frame. Mechanically fastened to frame and support bracket. Finish: to match frame.

### **DIVISION 15 - MECHANICAL**

Provide new exterior grade grilles and vent covers as indicated. Sizes to fit existing openings. Submit cut sheets to Contract Administrator for approval prior to installation.

### **DIVISION 16 - ELECTRICAL**

Lighting indicated on drawings is for reference purposes only.

Exterior Lighting: Provide Lithonia lighting building mounted exterior lights as indicated. Model no.: TWAC 100M Contour Series, Colour to be DDBT (Dark Bronze Standard).

Note: All electrical work including disconnecting and reconnecting existing fittings and fixtures and/or installation of new luminaires by qualified trade / certified electrician. Coordinate with Contract Administrator prior to proceeding with Work.

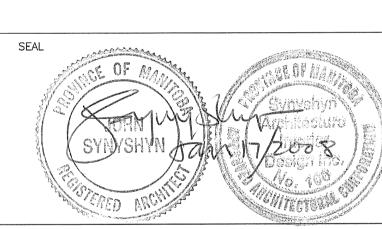
Ownership of Documents: Drawings and specifications as instruments of service are and shall remain the property of the Architect whether the project for which they are made is executed or not. They are not to be used by the owner on other projects or extensions to this project except by agreement in writing and with appropriate compensation to the Architect.

This drawing shall not be scaled. Follow given dimensions only.

1. TENDER

ISSUED FOR

JANUARY 18, 2008



ARCHITECT / PRIME CONSULTANT SYNYSHYN ARCHITECTURE ARCHITECTURE PLANNING INTERIOR DESIGN

PRESENTATIONS 603-63 ALBERT STREET WINNIPEG MANITOBA CANADA R3B 1G4 TELEPHONE 947-1100 FACSIMILE 956-5742

INTERIOR DESIGN

FACILITY MANAGEMENT

ENGINEERING CONSULTANT

ENGINEERING CONSULTANT

**BID OPPORTUNITY NO. 11-2008** 

# **SOUTH TRANSCONA** COMMUNITY CLUB **EXTERIOR WALL UPGRADES**

124 BORDEN AVENUE

DRAWING TITLE

PROJECT TITLE

**SPECIFICATIONS** 

DESIGNED BY

PROJECT No. 681

ISSUE DATE 01/18/2008 REVISION No.

DRAWING No. 4-5

DRAWN BY AD, JK