

**PART E**  
**SPECIFICATIONS**

## PART E - SPECIFICATIONS

### GENERAL

#### E1. APPLICABLE SPECIFICATIONS, STANDARD DETAILS AND DRAWINGS

E1.1 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.

E1.1.1 *The City of Winnipeg Standard Construction Specifications* is available in Adobe Acrobat (.pdf) format on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at <http://www.winnipeg.ca/matmgt>.

E1.1.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.

E1.1.3 Further to GC:2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.

E1.2 The following Drawings are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing</u>
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A-1	Floor Finish Plan
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## **E2. GENERAL PROVISIONS SECTION 01000**

### **E2.1 SCOPE**

#### **E2.1.1 ARCHITECT OR ENGINEER**

- a) Wherever the word Architect or Engineer or Consultant is used in the construction specifications, it shall be replaced with Contract Administrator as defined in GC:1.1(l) of the General Conditions..

### **E2.2 COORDINATION AND COOPERATION:**

#### **E2.2.1 OTHER TRADES**

- a) Further to GC:6.1, Specifications shall be read by all trades to acquaint them with the nature of the work required. Failure to do so will not relieve them of any responsibilities for cooperation in coordinating the work and preventing delay and for the supply and installation of materials required for this work.

#### **E2.2.2 CUTTING AND PATCHING**

- a) Each trade shall do all necessary cutting and patching required for their work. Existing adjacent surfaces shall be accurately matched. Cutting through any structural member shall only be done with the prior approval of the Contract Administrator.
- b) Perform all cutting and patching required to make the several parts of the work come together properly.

### **E2.3 MATERIALS**

#### **E2.3.1 C.S.A.**

- a) All materials, where applicable, shall be CSA approved.

### **E2.4 SUBMITTALS**

#### **E2.4.1 SHOP DRAWINGS**

- a) Further to GC:6.9, the Contractor shall submit for approval, at least five (5) sets of detailed shop drawings for all work as requested by the Contract Administrator at the initial site meeting and as required thereafter.

### **E2.5 QUALITY CONTROL**

#### **E2.5.1 INSPECTING AND TESTING MATERIAL**

- a) The City reserves the right to inspect and test all materials at its own expense and to reject any materials which are not in accordance with the requirements of the specifications. The Contractor shall furnish, at the contractor's expense, such specimens and samples of materials as may be required for testing.
- b) The Contractor shall allow the City to test any equipment, and shall provide power, fuel or material required for these standard performance tests on the equipment.

### **E2.6 CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS:**

## E2.6.1 SITE PROTECTION

- a) The Contractor shall provide adequate protection to prevent any damage to existing structures, furnishings, finishes, etc. during construction. Temporary ramps, barricades, hoardings as required shall be provided to the approval of the Contract Administrator.
- b) The Contractor shall exercise care in the operations relative to the site. Any unnecessary destruction of the site will not be permitted. The Contractor shall exercise care in the movement of equipment and materials especially during wet weather. The Contractor shall be held responsible for the repair of damages to the site, boulevards, roads, other pavements, etc. in the surrounding area of the immediate site.

## E2.6.2 LAYOUT OF WORK

- a) The Contractor shall verify all dimensions on the drawings and report any discrepancies to the Contract Administrator before starting the work.

## E2.6.3 EXISTING SERVICES AND UTILITIES

- a) Further to GC.3. (3.1) of the General Conditions, it shall be the responsibility of the Contractor to verify the location of all existing utilities, pipes and other objects and, if encountered, to adequately protect them during the construction period, and if disturbed or damaged by the Contractor, to have them replaced or reset in their original position after construction has been completed at the Contractor's cost.

## E2.7 CONTRACTOR TO NOTIFY UTILITIES AND OTHER AUTHORITIES

### E2.7.1 UTILITIES

- a) Whenever the Work requires that a public street or lane be cut for underground works, the Contractor shall before entering on the Work Site, make application to each utility, or other authorities, and shall give to the Superintendent of Traffic Services, Traffic Operations Section of the Streets and Traffic Branch in the Streets and Transportation Department of the City of Winnipeg, not less than 48 hours written notice of the date on which work is to commence. A copy of the application and of all notices are to be given to the Contract Administrator.
- b) The Contractor shall be responsible for all costs of the work to be done in the cut, the work to restore all underground structures to their "as found condition", and to restore the surface area to its original condition, or better.
- c) The Contractor shall supply, erect and maintain all applicable traffic control devices in accordance with the provisions of the latest edition of the "Manual of Temporary Traffic Control in Work Areas on City Streets" issued by the City of Winnipeg. The manual is available from the Public Works Department, Customer Services Division, 1155 Pacific Avenue, of the City of Winnipeg.

## E2.8 PROJECT INFORMATION SIGNS

### E2.8.1 SIGNS

- a) No project information signs shall be allowed without the written approval of the Contract Administrator. Any project information signs approved during construction are to be removed by the Contractor upon completion of the project.

## E2.9 REQUIREMENTS FOR SUBSTANTIAL PERFORMANCE:

E2.9.1 INSTRUCTION MANUALS

- a) The Contractor shall provide the Contract Administrator with four copies of all manuals showing:
  - i. Maintenance Instructions.

E2.9.2 APPLICATION FOR SUBSTANTIAL PERFORMANCE

- a) Upon completion of the work or upon reaching substantial performance the Contractor shall complete form (to be supplied) C.P.10 Contractors Application for Substantial Performance.

**E3. FIELD MEASUREMENT SECTION 01055**

E3.1 General

E3.1.1 REQUIREMENTS INCLUDED

- a) Verification of building dimensions.

E3.1.2 RELATED REQUIREMENTS

- a) Section 01000 – General Provisions
- b) Individual Sections – site measurements prior to fabrication.

E3.1.3 PROJECT CONDITIONS

- a) The drawings in these bid documents are based on drawings of existing facility, actual site dimensions may vary.

E3.2 Products

E3.2.1 Not Used

E3.3 Execution

E3.3.1 SITE MEASUREMENT

- a) Verify all fixed dimensions prior to commencing with work.
- b) Site check all dimensions prior to fabrication.
- c) Notify Contract Administrator of any discrepancies between site checked dimensions and drawing dimensions.

## **E4. CUTTING & PATCHING SECTION 01045**

### **E4.1 General**

#### **E4.1.1 REQUIREMENTS INCLUDED**

- a) Requirements and limitations for cutting and patching the Work.

#### **E4.1.2 RELATED REQUIREMENTS**

- a) Individual Sections: cutting and patching incidental to work of the section.

#### **E4.1.3 SUBMITTALS**

- a) Submit written request in advance of cutting or alteration which affects:
  - ii. Structural integrity of any element of Projects.
  - iii. Integrity of weather-exposed or moisture resistant elements.
  - iv. Efficiency, maintenance, or safety of any operational element.
  - v. Visual qualities of sight-exposed elements.
- b) Include in request:
  - i. Identification of project.
  - ii. Location and description of affected work.
  - iii. Statement on necessity for cutting or alteration.
  - iv. Description of proposed work and products to be used.
  - v. Alternatives to cutting and patching.
  - vi. Effect of work on owner.
  - vii. Date and time work will be executed.

### **E4.2 Products**

#### **E4.2.1 MATERIALS**

- a) Required for original installation.

### **E4.3 Execution**

#### **E4.3.1 GENERAL**

- a) Execute cutting, fitting and patching to complete the work.
- b) Fit the several parts together, to integrate with other work.
- c) Uncover work to install ill-timed work.
- d) Remove and replace defective and non-conforming work.

- e) Provide openings for penetrations of mechanical and electrical work.

#### E4.3.2 INSPECTION

- a) Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
- b) After uncovering, inspect conditions affecting performance of work.
- c) Beginning of cutting or patching means acceptance of existing conditions.

#### E4.3.3 PREPARATION

- a) Provide supports to assure structural integrity of surroundings; devices and methods to protect other portions of project from damage.
- b) Provide protection from elements for areas which may be exposed by uncovering work.
- c) Conduct work to minimize interference with operation of existing facility.

#### E4.3.4 PERFORMANCE

- a) Execute work by methods to avoid damage to other work and which will provide proper surfaces to receive patching and finishing.
- b) Employ original installer to perform cutting and patching for weather-exposed and moisture-resistant elements and sight-exposed surfaces.
- c) Cut rigid materials using masonry saw or core drill. Pneumatic or impact tools not allowed without prior written approval.
- d) Restore work with new products in accordance with requirements of Contract Documents.
- e) Fit work airtight to pipes, sleeves, ducts, conduit and other penetrations through surfaces.
- f) At penetration of fire-rated wall, ceiling or floor construction, completely seal voids with fire-rated material, full thickness of the construction element. Refer to Section 07270.
- g) Refinish surfaces to match adjacent finishes: for continuous surfaces refinish to nearest intersection or as indicated on schedule and drawings; for equipment refinish entire unit.
- h) Provide and install steel lintels for new openings in existing masonry construction.
- i) Restore surfaces and finishes in areas of electrical and mechanical work to match surrounding substrate as per above notes.
- j) Revise existing elevator openings to accommodate new floor heights match to adjacent materials. Patch elevator sill to match existing.



## **E5. RESILIENT FLOORING SECTION 09650**

### **E5.1 General**

#### **E5.1.1 SECTION INCLUDES**

- a) Preparation of substrate surfaces.
- b) Inlaid sheet.
- c) Base materials.
- d) Clean up all surfaces and areas of work.

#### **E5.1.2 RELATED SECTIONS**

- a) Section 09680 – Carpeting

#### **E5.1.3 REFERENCES**

- a) ASTM E84 – Surface Burning Characteristics of Building Materials.
- b) CSA A126 – Sheet Flooring Products

#### **E5.1.4 SAMPLES**

- a) Submit samples in accordance with Section 01000.
- b) Include duplicate 12"x 12" sized samples of each flooring material, color and pattern selected.

#### **E5.1.5 MAINTENANCE DATA**

- a) Provide manufacturers instructions covering care and maintenance of materials of this section as per Section 01000.

#### **E5.1.6 EXTRA MATERIALS**

- a) Provide 5% or 50 sf, whichever is greater, of carpet, sheet goods and 10 sq. ft. of tiles. 10 linear ft. of each base materials for project maintenance use. Store where directed. Identify each roll or container.

### **E5.2 Products**

#### **E5.2.1 FLOORING MATERIALS**

- a) Inlaid sheet flooring – Mannington commercial magna multiflec.

#### **E5.2.2 N/A**

#### **E5.2.3 BASE MATERIALS**

- a) Rubber Base: Roll stock 4" high, 1/8" thick, top set coved; premoulded external corners. Provide flat, non-coved base in carpet areas.

#### **E5.2.4 EDGE GUARD MATERIALS**

- a) Johnsonite wheeled traffic transition CTA-XX-K – sheet goods to carpet CTA-XX-L – Quarry tiles to carpet.

#### **E5.2.5 ACCESSORIES/ADHESIVES/SEALERS**

- a) Sub-Floor Filler: trowelable cement based floor filler; Ardex K-55 or type recommended by flooring material manufacturer.
- b) Primer and adhesives: waterproof, of types recommended by flooring manufacturer for specific material.
- c) Sealer and Polish: type recommended by flooring material manufacturer for material type and location.

### **E5.3 Execution**

#### **E5.3.1 SITE AND SUBSTRATE CONDITIONS**

- a) Ensure floor surfaces are smooth and flat with maximum variation of ¼" in 10 ft.
- b) Maintain minimum 70 degrees F. air temperature at flooring installation area for 72 hours prior to, during and for 48 hours after installation.
- c) Beginning of installation means acceptance of existing substrate and site conditions.

#### E5.3.2 PREPARATION

- a) Remove sub-floor ridges and bumps. Fill low spots, cracks, joints, holes, and other defects with sub-floor filler.
- b) Clean floor and apply, trowel and float filler to leave smooth, flat hard surface. Prohibit traffic until filler is cured.
- c) Apply primer to concrete surfaces, to flooring manufacturers recommendations.

#### E5.3.3 INSTALLATION – SHEET MATERIAL

- a) Install in accordance with manufacturer's instructions.
- b) Mix tile from container to ensure shade variations are consistent.
- c) Spread only enough adhesive to permit installation of materials before initial set.
- d) Set flooring in place, press with heavy roller to attain full adhesion.
- e) Terminate flooring at centerline of door openings where adjacent floor finish is dissimilar.
- f) Install edge strips at unprotected or exposed edges, and where flooring terminates.
- g) Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.

#### E5.3.4 INSTALLATION – BASE MATERIALS

- a) Fit joints tight and vertical. Maintain minimum measurement of 2' – 0" between joints.
- b) Mitre internal corners. Use premoulded units at exterior corners and at exposed ends.
- c) Run sheet flooring up wall in rooms indicated on room finish schedule using cover former strips. Taper cove former strips 4" from door frames to prevent cove from projecting past door frame.
- d) Install base on solid blocking. Bond tight to wall.
- e) Scribe and fit to door frames and other interruptions.

#### E5.3.5 PROTECTON

- a) Prohibit traffic from floor finish for 48 hours after installation.

#### E5.3.6 CLEAN-UP

- a) Remove excess adhesive from floor, base and wall surfaces and leave free of damage.
- b) Clean, seal and polish floor and base surfaces in accordance with manufacturers recommendations.

**E6. CARPET SECTION 09680**

**E6.1 GENERAL**

**E6.1.1 WORK INCLUDED**

- a) Supply and install carpeting.

**E6.1.2 RELATED WORK (specified elsewhere)**

- a) Resilient Flooring - Section 09650

**E6.1.3 CERTIFICATION**

- a) Bidder shall submit within two (2) business days of a request by the Contract Administrator manufacturer's product data verifying compliance with specification requirements.

**E6.1.4 MAINTENANCE DATA**

- a) Provide maintenance data for carpet maintenance for incorporation into Maintenance Manual.

**E6.1.5 WARRANTY**

- a) Provide a written warranty stating that carpeting work of this Section is warranted against deterioration of backing, delamination, failure of seams, stretching or wrinkling, fading or other defect of materials or workmanship detrimental to appearance or performance for a period of five years from the date of Certificate of Total Performance.

**E6.2 PRODUCTS:**

**E6.2.1 MATERIALS**

- a) Carpets: Krans contract.
- b) Carpet Colour: Terminal 4 – 183601 Bluestone.
- c) Carpet grippers: Types recommended by carpet manufacturer.
- d) Binder bars: Aluminum finish of type recommended by carpet manufacturer.
- e) Adhesive: type of brand recommended by carpet manufacturer.
- f) Polyethylene film: to CGSB 70-GP-1a CAN2-51.33-M77, Type 2, 0.15mm thick.
- g) Carpet base with cloth binding on edges.
- h) Anti-fatigue mat – tred-mor 2568 SCI & Spangle – double glue.
- i) Johnsonite wheeled traffic transition CTA-XX-K – sheet goods to carpet CTA-XX-L – Quarry tiles to carpet.

**E6.3 EXECUTION:**

**E6.3.1 WORKMANSHIP**

- a) Install glue-down carpet in accordance with CGSB 4-GP-156.
- b) Install carpeting after finishing work is complete but before telephone and electrical pedestal outlets are installed.
- c) Finish installation to present smooth wearing surface free from conspicuous seams, burring and other faults.
- d) Ensure perfect colour, pattern and texture match within any one area.

**E6.3.2 PREPARATION**

- a) Prepare floor surfaces in accordance with CGSB 4-GP-156.
- b) Ensure toeless type resilient base is installed before proceeding with carpeting.

**E6.3.3 CARPET GRIPPERS AND BINDER BARS**

- a) Install carpet grippers to conform to high and low spots in floor, using carpet gripper cement, concrete nails or approved stud driver.
- b) Use carpet grippers at walls and vertical surfaces; metal binder bars at exposed carpet edges.

#### E6.3.4 CARPET INSTALLATION

- a) Install carpet in accordance with seaming plan. Hand sew seams and cross-joints. Maintain run of pile directionally constant.
- b) Install carpet tightly and fit neatly around architectural, mechanical, electrical and furniture fitments. around perimeter of rooms into recesses and around fixtures, and around projections through the floor.
- c) Seal edges of cut-outs with latex, or use positive binding method.

#### E6.3.5 PROTECTION OF FINISHED WORK

- a) Vacuum carpets clean. Protect traffic areas of carpeted floors with polyethylene drop sheets. Tape joints to prevent shifting.