

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 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>
A-1	Outdoor Pool Plan Layout and Section Details

E2. SCOPE OF WORK

E2.1 Description of Work

Work of this Section consists of, but is not limited to the following:

- .1 Drain or pump out all water from pool.
- .2 Remove and dispose of all existing face plates and vinyl pool liner from site.
- .3 Upon removal of existing pool liner, patch, repair and smooth sand and cement pool base surfaces. Allow for four (4) hours labour to prepare pool floor surfaces to accommodate new pool liner.
- .4 Sand, clean and rust proof existing steel wall surfaces where required with Tremclad.
- .5 Caulk and retape all steel panel joints.
- .6 Pressure test underground suction and return plumbing lines.
- .7 Supply and installation of new 30 mil. plain blue vinyl liner and all related pool components (ie. face plates, gaskets, T-type PVC beauty stripping).

E2.2 Quality Assurance

- .1 The manufacturer shall be a firm experienced in the manufacturing of 30 mil. Vinyl pool liner.
- .2 Installer must have successfully completed installations of the same scale in the last three years.
- .3 Installer shall be recognized and approved by the pool liner manufacturer or its approved distributor.

E2.3 Submittals

- .1 Submit three (3) samples of the actual 30 mil. vinyl pool liner in the blue colour selected within two (2) Business Days of a request of the Contract Administrator.
- .2 Submit three (3) copies of the technical data sheets of the product within two (2) Business Days of a request of the Contract Administrator.
- .3 Submit three (3) maintenance instruction manuals within two (2) Business Days of a request of the Contract Administrator.
- .4 After installation of the pool liner, provide the Contract Administrator with maintenance material in the amount of 30 mil. vinyl liner material representing 2% of the total surface area of the pool. Maintenance material shall be from the same dye lot.

E2.4 Warranty

- .1 Contractor hereby warrants vinyl pool liner materials against defects in materials and workmanship for a period of three (3) years from the date of Total Performance.
- .2 Submit written warranty on Manufacturer's letterhead stating that vinyl pool liner shall be free of manufacturing defects, and the seams will not split, open or separate.

E3. PRODUCTS

E3.1 Materials

- .1 Physical Properties of the vinyl pool liner material to conform to the following requirements:

Test	Test Method	CGT Specs.	Tolerance
Thickness	mil.	30	±5.0%
Width	Measured on roll	As ordered	±1/4
Tensile strength, psi	ASTM D882	2500 x 2200	minimum
Modulus @ 100%	ASTM D882	1100 x 1100	±150 psi
Elongation, psi			
Tear strength, lbs/in.	ASTM D1004	325 x 325	minimum

Test	Test Method	CGT Specs.	Tolerance
Elongation @ break, %	ASTM D882	300 x 300	minimum
Low Temperature Properties	SPI Impact	Pass -35°F	±2°F
Water Extraction, % weight loss	ASTM D1790		
Dim, Stability, %	ASTM D1239	0.35	maximum
Hardness	30 min. @ 158°F	-4.0 x 1.0	maximum
Specific Gravity	Shore A Durometer	75	±5
Volatility, %	ASTM D792	1.230-1.240	±0.01
	ASTM D1203	-0.8	maximum
	24 hrs. @ 158°F		
Contamination Fungal & Bacterial Resistance	Visual	none	none
Weatherometer Resist. to Chemicals Colour	ASTM G-21-75	no growth & no stain	-
	ASTM D1499		
	ASTM D543	Excellent resistance	
	Plain Blue		

E4. EXECUTIONS

E4.1 Base

- .1 Provide if necessary, an additional 1" of finished base material consisting of dry mixed sand and cement mix for underside of new pool liner to be placed over existing base material and sub-base and formed to provide uniform slopes as per attached drawing.
- .2 Finish base shall be hand tamped to be free of all unnecessary depression or rises.
- .3 Base material: shall consist of 7 parts playbox sand to one part normal Portland cement mechanically dry mixed for an adequate length of time to ensure sand and cement are thoroughly combined.

E4.2 Pool Walls

- .1 Sand and clean all existing steel panel walls and joints for a clean and dirt free surfaces.
- .2 Retape all steel panel joints and rust proof where necessary with Tremclad.
- .3 Install new pool liner in accordance with manufacturer's printed instructions.