

## REFERENCE STANDARDS

### PART 1 GENERAL

1.01 OTHER CONTRACT DOCUMENTS      The General Conditions of the Contract, General Requirements and Supplemental Conditions attached hereto shall apply to and be a part of this Section.

1.02 DESCRIPTION OF WORK              The Work described herein describes the references made in the Contract Documents.

**PART 2 PRODUCTS**                      None required.

### PART 3 EXECUTION

3.01 DOCUMENTS                      Words and abbreviations which have well known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings. Where building codes, Product or material specifications, Provincial or Federal laws, local ordinances, industry standards and utility company regulations are quoted or implied, the latest issue as amended and revised to the date of the signing of the Agreement shall apply, except where a specific date of issue is noted.

3.02 STANDARDS                      Materials and workmanship shall conform to or exceed, in whole or part, applicable standards and other governmental or trade specifications or standards referred to within the Contract Documents. The Work shall conform to such standard, in whole or in part, as specified.  
 Within the text of the specifications reference may be made to the following standards.

|        |  |
|--------|--|
| AASHTO | American Association of State Highway Transportation Officials |
| ACI    | American Concrete Institute                                    |
| AISC   | American Institute of Steel Construction                       |
| AISI   | American Iron and steel Institute                              |
| ANSI   | American National standards Institute                          |
| ASA    | American Standards Association                                 |
| ASME   | American Society of Mechnaical Engineers                       |
| ASTM   | American Society for Testing and Materials                     |
| AWWA   | American Water Works Association                               |
| AWS    | American Welding Society                                       |

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| CEC  | Canadian Electrical Code(published by CSA)       |
| CEMA | Canadian Electrical Manufacturers Association    |
| CGSB | Canadian Government Specifications Board         |
| CISC | Canadian Institute of Steel Construction         |
| CSPI | Corrugated Steel Pipe Institute                  |
| CSA  | Canadian Standards Association                   |
| CWB  | Canadian Welding Bureau                          |
| FCC  | Fire Commissioner for Canada                     |
| IEEE | Institute of Electrical and Electronic Engineers |
| MBMA | Metal Building Manufacturers Association         |
| ULC  | Underwriters Laboratoies of Canada               |

If there is a question as to whether any product or system is in conformance with applicable standards, the Engineer reserves the right to have such products or systems tested to prove or disprove conformance. The cost for such testing will be borne by the City in the event of conformance with the Contract Documents or by the Contractor in the event of non-conformance.

### 3.03 ABBREVIATIONS

The following abbreviations shall apply to and be part of the Specifications;

|                      |                   |
|----------------------|-------------------|
| ga                   | gauge (thickness) |
| °C                   | degree centigrade |
| %                    | percent           |
| o.d.                 | outside diameter  |
| i.d.                 | inside diameter   |
| m                    | metre             |
| sq                   | square            |
| lm lin m             | lineal metre      |
| sq.m. m <sup>2</sup> | square metre      |
| cu.m. m <sup>3</sup> | cubic metre       |
| mm                   | millimetre        |
| um                   | micrometer        |
| cm                   | centimetre        |
| km                   | kilometre         |
| l                    | litre             |
| l/s                  | litres per second |
| l/m                  | litres per minute |
| l/hr                 | litres per hour   |

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|         |                        |
|---------|------------------------|
| mg      | milligram              |
| mg/l    | milligram per litre    |
| kg      | kilogram               |
| hr      | hour                   |
| no or # | number                 |
| Pa      | pascal                 |
| kPa     | kilopascal             |
| Mpa     | megapascal             |
| ppm     | parts per million      |
| psi     | pounds per square inch |
| j       | joule                  |
| Kj      | Kilojoule              |
| rpm     | revolutions per minute |
| hz      | hertz                  |
| w       | watt                   |
| kw      | kilowatt               |
| hp      | horsepower             |
| P.E.    | polyethylene           |
| D.I.    | ductile iron           |
| P.V.C.  | polyvinyl chloride     |
| C.I.    | cast iron              |
| S.S.    | stainless steel        |
| N.P.T.  | national pipe thread   |

END OF SECTION