# **City of Saskatoon**

## **Design and Development Standards Manual**

**Section Eleven** 

**Drawing Requirements and Standards** 

Version 17





## **Table of Contents**

1	Objective1				
2	Submissions and Approvals1				
3	Propo	oponent/Contractor Responsibilities1			
4	Import	portant Notes			
5	Requi	Requirements			
	5.1	General	2		
	5.2	Design/Construction Drawings	4		
	5.3	As-Built/Record Drawings	4		
6	Stand	andards			
Appendix A		Definitions	5		
Appendix B		Abbreviations	6		



## 1 Objective

The objective of the Drawing Requirements and Standards section of the Design & Development Standards Manual is to provide guidance for delivering appropriate drawings detailing proposed construction and the final field conditions (as-built) to the City of Saskatoon (CoS). The intent is to use this document in conjunction with the Support Materials for Drawings package containing drawing standards documentation and support files.

The key goals are to achieve the following:

- Ensure all drawings will be accepted by the CoS drawing system, with the understanding that these are vital records for the future.
- Ensure all drawings have a consistent appearance for the benefit of users.
- Ensure all electronic drawing files have a standard format for information extraction and integration into internal CoS systems.
- Provide Proponents/Contractors with clarity regarding the requirements and standards for submitted drawings.
- Simplify and clarify contractual obligations regarding drawings for all parties.

## 2 Submissions and Approvals

The CoS requires the submission of drawings that detail any alterations or additions to the water distribution, sanitary sewer collection, storm water drainage, and transportation systems owned by the City of Saskatoon. The CoS reserves the right to require the resubmission of any drawing(s) not complying with the requirements and standards outlined in this document and/or the Support Materials for Drawings package.

## **3** Proponent/Contractor Responsibilities

The Proponent/Contractor is responsible for the following:

- Referencing the most recent version of the Drawing Requirements and Standards section of the Design & Development Standards Manual, including the Support Materials for Drawings package.
- Submitting drawings in compliance with the drawing requirements and standards and the Support Materials for Drawings package as described.
- Submitting drawings to the appropriate CoS department or division for their project.



• Completing drawing changes as requested by CoS representatives.

### 4 Important Notes

- The Design & Development Manual and supporting information are available on the CoS website by searching or at the following URL: <u>https://www.saskatoon.ca/business-development/development-regulation/specifications-standards</u>.
- The information in the Drawing Requirements and Standards section and/or the Support Materials for Drawings package will be updated on an asneeded basis.
- Inquiries regarding drawing standards and requests to assign CoS drawing numbers should be directed to the City of Saskatoon. Contact information is provided below:

City of Saskatoon – Transportation & Construction – Construction & Design – Design & Drafting Team 222-3rd Avenue South Saskatoon, SK S7K 0J5 Telephone: (306) 975-2476 Email: <u>TCCDDesignDrafting@Saskatoon.ca</u>

### 5 Requirements

#### 5.1 General

The following are the general requirements for all drawings submitted to the COS.

- 1. Acceptable drawing sizes include 11" x 17" (preferred) or 24" x 36".
- 2. Drawings shall use the CoS title block (TB\_11x17-Title\_Block.dwg).
- 3. All text and objects must be clear and legible when printed to fit on 11" x 17" paper regardless of the drawing size.
- 4. A representative of the proponent/contractor shall apply and sign the Certificate of Authorization on each drawing sheet.
- 5. The responsible engineer shall seal/stamp and sign each drawing sheet.
- 6. The CoS drawing plan number (including the revision number) must be shown in the title block.
- 7. A CoS representative assigns the CoS drawing plan numbers during the review process prior to issuing drawings for construction. Typical drawing numbers have a three-digit category, a dash, a four-digit option, a dash, a



three-digit series, and an "r" followed by a three-digit revision number (e.g. 107-0081-104r002).

- 8. The proponent/contractor drawing number is shown in title block above the CoS drawing number.
- 9. References to other sheets in the drawing set or project shall use CoS drawing numbers.
- 10. References to CoS standard specification drawings shall include the revision number.
- 11. Do not provide drawings with copies of the CoS standard specification drawings in project drawing sets.
- 12. Submitted drawings shall be in one or more of the following formats as specified by the drawing type.
  - a. Paper
    - i. Minimum paper quality to be 28lb weight and 98 brightness.
  - b. PDF
    - i. Multiple sheets within one PDF file is preferred.
    - ii. Where PDF files for individual sheets are provided, the PDF files shall be named with the CoS drawing number.
    - iii. Quality to be 300 dpi or higher.
  - c. AutoCAD Drawing
    - i. A stand-alone AutoCAD drawing file is required for each drawing sheet.
    - ii. NO external references of any kind (including attachments, overlays, images, PDFs, data links, etc.) are allowed within the AutoCAD drawing files. Bind external references, embed images including logos, and replace any other attachments with drawing objects. The final drawing file must be able to produce a print that is identical to the PDF file or paper copy provided (excluding signatures) without any adjustment to the file.
    - iii. The file name for each drawing file is to match City of Saskatoon drawing plan number without dashes (e.g. 1070081104r001.dwg or 1070081104r001.pdf).
- 13. Provide the linework for proposed construction when requested by a CoS representative.

Additional requirements that are specific to the drawing type are detailed in the following sections.



#### 5.2 Design/Construction Drawings

For design/construction drawings, the following are addition requirements for submitted drawings.

- 1. Drawings issued for construction, that include any design revisions or addenda completed before construction starts, shall be CoS revision number 001 (r001).
- 2. As Construction occurs and design changes are made, for any reason, the revision number shall change incrementally upward with each change through to completion.
- 3. The construction stamp (Stamp-Const.dwg) shall be shown on each sheet.
- 4. Submission format shall be either paper or PDF.

#### 5.3 As-Built/Record Drawings

For as-built/record drawings, the following are additional requirements for submitted drawings.

- 1. The as-built/record drawings shall be the next incremental revision (one more than the last revision of design) with all as-built information added (for example, r011 if last construction/design revision was r010).
- 2. The as-built stamp (Stamp-Asbuilt.dwg) shall be shown on each sheet.
- 3. Submission format shall be AutoCAD Drawing files and either paper or PDF.

#### 6 Standards

Drawing standards documentation and support files are provided in the Support Materials for Drawings downloadable package (link provided below). This package may change separately from the Drawing Requirements and Standards section of the Design and Development Standards Manual.

The download of the 56 MB zip file will begin automatically with this link:

Support Materials for Drawings Download



Appendix A	Definitions
Term	Definition
Contractor:	Any appropriately certified person(s) who undertakes the installation of municipal services on behalf of either the Proponent or the CoS.
CoS:	The City of Saskatoon
Engineer:	The professional engineer retained by the Proponent/Contractor to be responsible for the design, layout, supervision of installation, recording of as-built information, and for certifying that the design and installation is performed in accordance with these standards.
Proponent:	A person, persons, or corporation who has applied to subdivide, develop, or service an existing parcel of land, whether as the owner or as an agent for the owner of the land.



Appendix B	Abbreviations
Abbreviation	Definition
AutoCAD	AutoCad drawing software by Autodesk
CoS	City of Saskatoon
DWG or .dwg	Autocad drawing file format
PDF or .pdf	Portable Document Format / Adobe PDF