

CITY OF SASKATOON
DESIGN AND DEVELOPMENT
STANDARDS MANUAL

SECTION ONE
INTRODUCTION

2018



TABLE OF CONTENTS

Section One – Introduction

SECTION	PAGE NUMBER
1. Objective.....	1
1.1 Scope	1
2. Regulatory Authority	1
2.1 <i>The Planning and Development Act</i>	2
2.2 <i>The Cities Act</i>	2
2.3 Transportation & Utilities Department	2
3. Proponent’s Responsibility	3
3.1 Regulatory Requirements.....	3
3.2 Special Provisions.....	3
3.3 Existing Data.....	4
3.4 Engineering.....	4
4. Liability	4
5. Important Notes	4
5.1 General.....	5
5.2 Contact Information	5
5.3 Alternative Standards.....	5
6. Development Overview	5
7. Naming and Civic Addresses.....	6
Appendix A Definitions.....	A-1
Appendix B List of Abbreviations	B-1
Appendix C Development Process Diagram.....	C-1

SECTION ONE – INTRODUCTION

1 Objective

This manual has been prepared to provide process and design information to interested parties who require information about new subdivision developments, infill development and redevelopment of properties in the City of Saskatoon (COS). The manual identifies minimum acceptable standards for typical conditions encountered during design.

1.1 Scope

These standards apply to the design of municipal services for new subdivisions, infill development and redevelopment of properties in the COS. Information is also provided on the land development process, construction practices, and requirements for the submission of plans and specifications.

Standards for the following municipal infrastructure are included:

- Potable Water Distribution System;
- Sanitary Sewage Collection System;
- Stormwater Collection System; and
- Transportation System.

It should be noted that standards for landscaping will also apply to the development of a new subdivision, infill development and redevelopment of properties. Landscaping standards are outside the scope of this manual and should be obtained from the COS Parks Division.

2 Regulatory Authority

The COS has responsibility and authority for the planning, operation, and maintenance of municipal streets and public utilities. At the time of writing, the main Provincial legislation that defines the responsibilities of municipal governments with respect to planning and the provision of services are:

- [*The Planning and Development Act*](#); Province of Saskatchewan and
- [*The Cities Act*](#); Province of Saskatchewan.

2.1 *The Planning and Development Act*

Saskatchewan's [*Planning and Development Act*](#) establishes the legal framework for community planning in the province. The authority to undertake planning and to develop land is delegated to municipal government. The [*Official Community Plan*](#) and the [*Zoning Bylaw*](#) are the main tools that are used to guide planning and development in Saskatoon.

2.2 *The Cities Act*

[*The Cities Act*](#) of Saskatchewan includes legislation to control the operation and maintenance of municipal streets and public utilities. The COS is designated as the regulatory body responsible for water delivery, sanitary sewage and storm water collection, garbage collection and roadway systems. The COS has developed several bylaws, which are referenced throughout this document, to guide the design and construction of utilities for new developments.

2.3 *Transportation & Utilities Department*

The Transportation & Utilities (TU) Department is responsible for the planning, design, operation, and maintenance of the water distribution system, the sanitary sewage system, the stormwater management system, roadways, parks/open spaces, and other COS assets.

The Transportation & Utilities Department's regulatory role ensures that:

- The City of Saskatoon grows in an orderly fashion;
- All developments are close to existing services;
- All developments adhere to standard engineering design and construction practices; and
- All developments do not overload existing services.

2.3.1 *Saskatoon Water Division*

The Saskatoon Water (SW) Division provides planning, and regulatory services for water distribution, waste water collection, and storm water management. The SW Division also coordinates the Design Standards with other branches.

2.3.2 Transportation Division

The Transportation (TS) Division provides planning and regulatory services for vehicular and pedestrian transportation.

2.3.3 Construction and Design Division

The Construction and Design (CD) Division provides design and construction.

- The Land Development Section coordinates service for new land development or redevelopment projects, servicing agreements, subdivision applications, and discretionary use applications.
- The Connections desk coordinates the review of applications and inspection of service connections to the water distribution system, the sanitary sewage system, and the storm water management system,

The Saskatoon Water Division is the deciding authority regarding the intent and interpretation of these standards and the acceptability of proposed alternatives.

3 Proponent's Responsibility

The Proponent and the Engineer are responsible for the design and construction of new neighbourhoods in accordance with good engineering practice considering the site-specific conditions of the development.

3.1 Regulatory Requirements

Regulatory documents are referred to throughout this document. These references should be taken to refer to the most recent edition of each document.

If conflicts or inconsistencies arise between these standards and provincial or federal regulations, the Proponent is responsible for ensuring that the most stringent requirements are met. The issue must be brought to the attention of the TU Department.

3.2 Special Provisions

The Proponent is responsible for satisfying any special provisions, in addition to regulatory requirements, that may be required by the COS.

3.3 Existing Data

When tying into the existing utility or transportation network, the Proponent is responsible for acquiring and analyzing the best available information or estimates for the existing network.

3.4 Engineering

Proponents must ensure that all work is in accordance with good engineering practice and meets the requirements of applicable codes and regulations.

The Proponent shall engage a Professional Engineer, registered or licensed in the appropriate discipline to practice in the Province of Saskatchewan, to be responsible for design and construction of all engineering works other than those carried out directly by the COS or an applicable utility.

Private Proponents shall advise the TU Department regarding which consulting engineers are assigned to projects. Their specific responsibilities shall be outlined.

The Proponent is responsible for coordinating the design and construction of shallow bury utilities such as natural gas, electrical, telecommunications, and street lighting.

4 Liability

The Proponent shall save harmless the COS from any and all claims to those services that are their responsibility arising out of, or related to, their development.

5 Important Notes

The information and specifications in this manual will be updated on an as-needed basis. Designers are responsible for referencing the most recent version of the manual in their design. The manual is available from the COS website:

<https://www.saskatoon.ca/business-development/development-regulation/specifications-standards>.

5.1 General

- Drawing/CAD Standards can be obtained from the TU Department.
- All units in text and drawings are in metric unless otherwise noted.

5.2 Contact Information

Inquiries regarding these standards should be directed to the Transportation & Utilities Department. Contact information is provided below:

Transportation & Utilities Department
222-3rd Avenue South
Saskatoon, SK S7K 0J5
Telephone: (306) 975-2454

Inquiries regarding landscaping standards should be directed to the Parks Division. Contact information is provided below:

Community Services Department
Parks Branch
1101 Avenue P North
Saskatoon, SK S7L 7K6
Telephone: (306) 975-3300

5.3 Alternative Standards

This manual presents standards for routine design procedures, but is not meant to limit creativity and innovation in design. The COS anticipates that departures from these standards may occur for good reason and for the benefit of the development and the COS as a whole. The use of alternative standards must be discussed with, and approved by, the TU Department at the earliest possible stage of planning.

6 Development Overview

The Development Process Diagram in Appendix C illustrates the COS development process from the planning stages to final acceptance of construction.

7 Naming and Civic Addresses

As per the [*Naming of Civic Property and Development Areas Policy*](#), the COS shall be responsible for the naming of suburban development areas, neighbourhoods, streets, parks, and major municipally-owned/controlled facilities.

- Roadway names shall be entered on development plans after a suitable name has been selected.
- Block numbering shall be performed in a logical sequence to assist emergency response personnel with the location of civic addresses.

APPENDIX A – DEFINITIONS

Contractor:	Any appropriately certified person(s) who undertake 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 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.
Transportation & Utilities:	The Department itself, or any person appointed, by the COS, that represents the Department in any engineering or related functions.
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 – LIST OF ABBREVIATIONS

AC	Asbestos Cement
ADWF	Average Dry Weather Flow
AES	Atmospheric Environment Services, Environment Canada
AISI	American Iron and Steel Institute
ASTM	American Society for Testing and Materials
BOD	Biochemical Oxygen Demand
CBR	California Bearing Ratio
CI	Cast Iron
COD	Chemical Oxygen Demand
COS	City of Saskatoon
CSA	Canadian Standards Association
d	Day
DI	Ductile Iron
ESAL	Equivalent Single Axle Load
h	Hour
ha	Hectares
HGL	Hydraulic Grade Line

HMA	Hot Mix Asphalt
HWL	High Water Level
I	Intensity
I&I	Inflow and Infiltration
IDF	Intensity, Duration, Frequency
ITE	Institute of Transportation Engineers
km	Kilometres
kPa	Kilopascal
L	Litres
m	Metres
MH	Manhole
min	Minute
mm	Millimetres
NBC	National Building Code
NFPA	National Fire Protection Agency
NWL	Normal Water Level
PDF	Peak Design Flow
PDWF	Peak Dry Weather Flow
PE	Polyethylene

PVC	Polyvinyl Chloride
s	second
SPS	Sewage pump station
SWSB	Storm Water Storage Basin
T	time
TAC	Transportation Association of Canada
TP	Total Phosphorous
TSS	Total Suspended Solids
WTF	Weeping Tile Flow
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

APPENDIX C – DEVELOPMENT PROCESS DIAGRAM

Notes:

- 1) Review coordinated by COS Planning and Development Branch, will typically include Transportation & Utilities, Utility Services, Community Services, Fire and Protection Services Departments and other relevant reviewers.
- 2) Refer to Development Services website for list of agencies and procedures. (www.saskatoon.ca)
- 3) Refer to Development Appeals website for details. (www.saskatoon.ca).

