

# Design Standard

## General Information

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May 2022

City of Regina



**REGINA**  
Infinite Horizons

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# 1. General

## 1.1. Introduction

- 1.1.1. The objective of this series of Design Standards is to provide a clear framework to support the design and construction of municipal infrastructure in the City of Regina. The targeted audience includes architects, engineers, contractors, planners, and land developers. The standards are intended to ensure that all new municipal infrastructure is acceptable to the City with regards to safety, quality, functionality, operational requirements, environmental requirements, and life cycle costs.
- 1.1.2. All stormwater, water, wastewater, and transportation submittals shall be prepared under the supervision of, and sealed by, a Professional Engineer registered to practice in the Province of Saskatchewan.
- 1.1.3. All open space system submittals shall be prepared under the supervision of, and sealed by, a Professional Landscape Architect registered with the Canadian Institute of Landscape Architects.
- 1.1.4. Notwithstanding section 1.1.2 and 1.1.3 submittals for a development permit do not require preparation under the supervision of the designated professionals if these Design Standards are followed with no exemptions or variances to the standards.
- 1.1.5. The Design Standards do not include the design of street lighting, power, gas, telecommunications, or cable services.
- 1.1.6. The Design Standards should be used in conjunction with the City of Regina Construction Specifications and Standard Drawings.

## 1.2. Definitions

- 1.2.1. The words "shall", "must" and "will" are mandatory.
- 1.2.2. The words "may", "can", "should" and "might" are permissive and considered optional at the discretion of the designer.
- 1.2.3. The definitions provided in Table 1 shall apply to all the applicable design standards as per table 2.

**Table 1:** Definitions

Terminology	Definition	Most Relevant Standard
Access	A point allowing legal ingress and egress from a private property to the public right of way.	Transportation
Advanced Warning Traffic Signs	A non-regulated traffic sign that informs of an upcoming regulatory sign or obstacle such as stop sign ahead or school zone ahead.	Open Space

Terminology	Definition	Most Relevant Standard
Alley (lane)	A public highway intended primarily to give vehicles a secondary access to the rear or side of real property. Alleys are categorized as: Commercial or Industrial Zone Alleys are adjacent to non-residential land use areas and serve a significant portion of commercial vehicles. Residential Zone Alleys primarily serve passenger vehicles and weekly residential garbage pick-up within residential land use areas.	Transportation
Arterial	A road that serves travel in conjunction with other roads. Direct access to and from abutting properties is permitted, under ridged controls. It is used to connect highways and expressways to local road networks.	Transportation
Asset Owner	The City of Regina branch that has capital and/or operational budget control over the particular asset. Where capital budget and operational budget is split between branches then co-ownership of the asset shall be assumed for decision-making purposes however one branch will be identified be responsible for maintaining up to date asset data records.	Open Space
Bike Boulevard	A type of bikeway, particularly a street with low vehicle traffic volumes designated to give bicycle travel priority and identified with the use of signs and pavement markings.	Transportation

<b>Terminology</b>	<b>Definition</b>	<b>Most Relevant Standard</b>
Block Face	Is one side of a street between two consecutive intersecting streets.	Transportation
Boulevard	Means the strip of land between the curb and the sidewalk and between the sidewalk and the property line or, where there is no sidewalk, the strip of land between the curb and the property line.	Transportation Open Space
Buffer	The area is typically measured from the back of the sidewalk or back of the curb to the limit of the road right-way or a dedicated land used to separate incompatible land use.	Transportation
Buffer Strip or Municipal Buffer	As ascribed in The Planning and Development Act, 2007.	Transportation
Centre median	Means the strip of land dividing any street into two or more lanes for traffic going in opposite directions.	Transportation
Clearance Zone	An area free of equipment and/or obstructions around a recreation amenity for the benefit of the recreation amenity users.	Open Space
Collector	A road that provides circulation within neighbourhoods and connectivity between local and arterial roadways. Direct access to abutting properties is generally permitted with some access controls.	Transportation
Concept Plan	A City council approved plan that gives direction for land use as outlined in the secondary plan for the area.	
Conflict Point	This is the intersecting point between traffic movement paths.	Transportation

Terminology	Definition	Most Relevant Standard
Design Flow Sheets	Information on projected population, flows and design, pipe sizing and grades and associated parameters compiled on a standard flow sheet and signed and sealed by a qualified Professional Engineer registered to practice in the Province of Saskatchewan.	Wastewater
Design Rainfall Event	The storm event is used to design the drainage system and its elements.	Storm
Discontinuous Street	A road that terminates by a natural boundary or physical entity.	Transportation
Distribution Watermain	Is a pipe between 150 millimetres and 250 millimetres that delivers potable water within the distribution system network.	Water
Driveway	Means a hard surfaced private right-of-way adjoining and providing access for vehicles from a street, boulevard, curb, or sidewalk to a carport, garage or hard-surface parking pad.	Transportation
D-Shaped Crescent	A street with a curved shape that is intersected at two points by the same intersecting street.	Transportation
ER	Environmental Reserve	Open Space
Expressway	A road that carries relatively high volumes of traffic in conjunction with other types of roads. Direct access to and from abutting properties is prohibited.	Transportation

Terminology	Definition	Most Relevant Standard
Feeder Watermain	A feeder watermain or feedermain is a pipe between 300 millimetres and 450 millimetres that delivers potable water within the distribution system network.	Water
Floodway	The portion of the flood plain adjoining a channel where the waters in the 1:500 year flood are projected to meet or exceed a depth of one metre or a velocity of one metre per second.	Open Space
Forcemain	Force mains are pipelines that convey stormwater or wastewater under pressure from the discharge side in a lift station to a discharge point.	Storm
Fully accessible	Able to access places, information, and services without barriers. The goal of accessibility is for everyone to have the opportunity to participate fully in everyday life.	Open Space
Greenway	A landscaped pathway or sidewalk along roadways, easements, and parks allow for extended, safe, unimpeded walking and cycling and other forms of active transportation. Greenways link community destinations together.	Transportation Open Space
High-Density Polyethylene (HDPE)	Typically represented as the shortened version of HDPE in the pipe industry. It is a thermoplastic polymer made from petroleum products.	Water
Highway	As per the definition in the Highways and Transportation Act, 1997.	Transportation
IES	Illuminating Engineering Society.	Open Space

Terminology	Definition	Most Relevant Standard
Informational Traffic Signs	A non-regulated traffic sign that provides non-safety related information to the public such as street name signs or bus stops.	Open Space
Inverted Siphon (Depressed Sewer)	A siphon is a piping component that allows flows to be conveyed under an obstruction with a downstream outlet to a gravity sewer or trunk.	Wastewater
LED	Light-emitting diode.	Open Space
Linear Open Space	Open space used for linking municipal reserves, environmental reserves, and municipal recreation facilities. May be composed of road rights-of-way, utility easements, public walkways, municipal utility lands, and other types of open space.	Open Space
Linear Stormwater Detention Facility	An open space system that supports stormwater detention, stormwater conveyance, and passive and active recreational infrastructure.	Storm
Local	A road that provides direct access to adjacent lands.	Transportation
Maintenance Hole	This is a shaft with a removable cover that leads down to a sewer or drains.	Wastewater
Major Drainage System	A major drainage system is comprised of overland flow routes, ditches, roadways, watercourses, storage facilities and outfalls into storage or watercourses. These elements are planned, designed, and incorporated as part of the urban infrastructure to convey runoff from major rainfall events.	Storm
MB	Municipal Buffer	Open Space



Terminology	Definition	Most Relevant Standard
Median	An area, including shoulders, between lanes carrying traffic in opposite directions.	Transportation Open Space
Minor Drainage System	A minor drainage system is a network of sewers, inlets, swales, and street gutters designed to convey storm runoff from minor rainfall events. The minor drainage system conveys stormwater flows from the road surface during minor rainfall events. All runoff over the minor system capacity is considered part of the major drainage system.	Storm
MR	Municipal Reserve	Open Space
MU	Municipal Utility parcel	Open Space
Multi-use pathway	An off-street facility that is designed to be shared by many active transportation modes, including but limited to, cycling, walking, and running.	Transportation Open Space
Municipal Reserve Boundary Landscape Buffer	Space within the MR used to provide visual and/or physical separation between Municipal Reserve and abutting properties, often to reduce nuisance potential.	Open Space
Neighbourhood Park	A type of park that is designed to service the entire neighbourhood. Neighbourhood parks include passive and active recreation activities that should accommodate a wide variety of ages and user groups.	Open Space
Neighbourhood (Secondary) Plan	A City council approved plan that provides high-level policy direction for the long-term growth, development, and servicing of a particular area.	Transportation

Terminology	Definition	Most Relevant Standard
Node	A node represents either a maintenance hole or catch basin in stormwater modelling.	Storm
No-encroachment Zone	Additional obstacle-free area adjacent to a clearance zone or recreation amenity to allow pedestrian circulation near a recreational element while minimizing the risk of injury to pedestrians.	Open Space
Offset	Land abutting recreational amenities designed to protect from conflict with surrounding uses.	Open Space
Pathway	An off-street facility that is typically shared by active transportation modes.	Transportation Open Space
Permanent Structure	Anything constructed or erected, the use of which requires location on the ground or attachment to something located on the ground but not including curbs, pavements, walks or open-air surfaced areas or moving vehicles.	Wastewater Water
Playground	A place designed to facilitate an environment of play. Playgrounds may consist of play structures, safety surfaces and other applicable amenities.	Open Space
Pocket Park	A type of park that is designed to service the immediate surrounding neighbourhood. Pocket Parks provide passive recreation opportunities and are often designed to meet the needs of specified groups.	Open Space

Terminology	Definition	Most Relevant Standard
Polyvinyl Chloride	Typically represented as the shortened version of PVC in the pipe industry. It is a high-strength thermoplastic material widely used in the manufacture of piping and its appurtenances.	Water
Program Element	A facility, recreation amenity, or space that forms a part of the overall needs for an open space property.	Open Space
Pump Stations	Are wastewater collection system components constructed to convey flows under pressure to a point in the wastewater collection system where gravity flow can continue.	Wastewater
Pump/Lift Stations	Storm pump or lift stations are hydraulic devices and structures used to convey stormwater mechanically.	Storm
Receiving Body	The receiving bodies for drainage in Regina are Wascana Lake, Wascana Creek, Pilot Butte Creek, Chuka Creek, Cottonwood Creek, human-made channels, detention, and retention facilities.	Storm
Recreation Program	The recreation amenities for a plan area and/or municipal reserve property fulfilling the target service levels as set out by the Recreation Master Plan.	Open Space
Recreation Program Owner	The City of Regina branch responsible for the delivery of the City's recreation programming in fulfillment of the Recreation Master Plan.	Open Space

Terminology	Definition	Most Relevant Standard
Regulatory Traffic Signs	These traffic signs state the law and require adequate setback from obstructions to ensure they are adhered to. Setback may vary based on the speed limit of the road as well as the safety risk.	Open Space
Release Point	A release point (or discharge point) is where overland stormwater flows from private property to the public system.	Storm
Residential alleys	Residential alleys primarily serve passenger vehicles and weekly residential garbage pick-up within residential land use areas.	Transportation
Return Period	The return period of a rainfall event is the inverse of the statistical chance that a given size storm will occur in any given year based on historical data.	Storm
Road	The public right-of-way comprising of a thoroughfare that has been paved or otherwise improved to allow travel by some form of conveyance.	Transportation
Sanitary Service Connection	A pipe that extends from the building and conveys flow to a sanitary sewer main.	Wastewater
Sanitary Sewer Mains	A pipe that receives flows from service connections and convey these flows to a trunk sewer. The minimum size is 200 millimetres in diameter.	Wastewater
Scheduled Recreation Amenity	A program element that requires user-management by the City, typically done through Central Scheduling.	Open Space

Terminology	Definition	Most Relevant Standard
Selected Recreation Amenity	A program element that is available to be selected by the City or developer to form part of the recreation program for Municipal Reserve to achieve a specific Municipal Reserve Classification.	Open Space
Service Connection	A service connection extends from the connection point of the watermain to the property line.	Water
Service Coverage Area	An area measured radially from the boundaries of a municipal reserve meeting the base level of service as stated in the Recreation Master Plan.	Open Space
Shared Spaces	Roadway infrastructure where the priority mode for users is shifted from vehicles to active users. Often, there are no pavement markings, traffic signals, or barriers, the absence of which requires drivers to be attentive.	Transportation
Sidewalk	The actual travelled way constructed on or adjacent to a part of a public highway or that portion of a public highway intended primarily for pedestrians or any structure in a park or other public place designed and intended for use pedestrians.	Transportation Open Space
Siphon (Inverted Siphon or Depressed Sewer)	A siphon is a piping component that allows flows to be conveyed under an obstruction with a downstream outlet to a gravity sewer or trunk.	Storm
Storm Channel	A receiving stream constructed to convey stormwater and a Major Drainage System element.	Storm
Storm Ditch	A ditch is a moderate depression created to channel water. It is a major system element.	Storm

Terminology	Definition	Most Relevant Standard
Storm Outfalls	Storm outfalls are storm sewers that outlet into the receiving bodies such as detention/retention facilities, channels, and creeks.	Storm
Storm Sewer Service Connections	A connection from a proposed or existing lot or parcel to the storm sewer system.	Storm
Storm Swale	A swale is a small to moderate depression created to channel water. This is a minor system element.	Storm
Stormwater Detention Facility	A stormwater detention facility does not permanently retain a portion of its stormwater runoff. Water is contained in the facility for only a short period. The facility's storage attenuates the total calculated runoff and then releases the stored runoff at the rate equal to or less than the predevelopment flow rate. This is a major system element.	Storm
Stormwater Retention Facility	A stormwater retention facility retains a portion of the stormwater runoff permanently in the facility. This is referred to as a wet facility. This is a major system element.	Storm
Street Tree Infrastructure	Space and/or engineered infrastructure underground that supports unimpeded growth of tree roots.	Open Space
Supply Watermain	A supply watermain delivers water from a supply source, such as the Buffalo Pound Water Treatment Plant, to a water storage reservoir or water pumping station.	Water

Terminology	Definition	Most Relevant Standard
Traffic Island	A raised surface or marked area on the roadway which directs or channels the course of traffic or provides a refuge for pedestrians from vehicular traffic.	Transportation
Transit Nodes	A transit node should provide for multi-modal connections and have the potential for transit-oriented development to serve as anchors for transit in local communities. These connection points identified in the transit network should meet one or more of the following: Serves as a major, citywide destination, such as Downtown or the University of Regina. A major transfer location between multiple transit routes; or is adjacent to mixed-use or denser areas.	Transportation
Trunk Sewers	A large pipe generally serving an area of 65 hectares or more and 300 millimetres or larger in diameter.	Wastewater
Trunk Watermain	A trunk watermain or trunkmain is a pipe over 450 millimetres nominal diameter that delivers potable water within the distribution system network. Service connections to trunk watermains are generally not permitted.	Water
Unscheduled Recreation Amenities	A program element that does not require use-management by the City.	Open Space
Walkways	Means a parcel of land described in section 201 of The Planning and Development Act, 2007.	Transportation Open Space

Terminology	Definition	Most Relevant Standard
Wastewater Collection System	A wastewater collection system comprises the following components: Sanitary Sewer Mains, Sanitary Trunks, Sanitary Maintenance holes, and Sanitary Service Connections.	Wastewater
Zone Park	A type of park that is designed to a service recreation zone (approximately 40,000 people) with passive and active recreation and upgraded amenities and services to support higher levels of use.	Open Space

**Table 2:** City of Regina Design Standards

City of Regina Design Standards		
Design Standard Title	Description of Design Information	Date of most recent publication
Transportation	Transportation Infrastructure: Including Roads, Sidewalks, Pathways, Public Transportation, Cycling.	May 2022
Wastewater	Wastewater Infrastructure.	May 2022
Stormwater	Stormwater and Site Drainage Infrastructure	May 2022
Water	Water infrastructure.	May 2022
Open Space	Parks, Outdoor Recreation Facilities, Landscape Design	May 2022
Wastewater Lift Station	Lift Station Building Requirements & Pump Design	January 2021
Lift Station Electrical	Control Functionality of Systems	January 2021

### 1.3. Design References

1.3.1. The design references provided in Table 3 shall apply to all the applicable design standards as per table 2.



**Table 3:** City of Regina Design References

Document Name	Most Relevant Standards
Development Charges Policy (Schedule A to <i>The Development Levy Bylaw</i> )	Water, Storm Water, Wastewater, Transportation, Open Space
Approved Concept Plans	All Standards
Approved Secondary Plan (Neighbourhood Plan)	All Standards
Bylaw No. 2003-7 The Building Bylaw	Water
Bylaw No. 2002-48 City of Regina Forestry	Open Space, Wastewater, Transportation
City of Regina Open Space Lighting Policy and Procedures	Open Space
Bylaw No. 2004-27 City of Regina Parks & Open Space	Open Space
City of Regina Recreation Master Plan	Open Space
City of Regina Standard Construction Specifications and Standard Drawings	All Standards
Bylaw No. 9900 City of Regina Traffic	Open Space, Transportation
City of Regina Wastewater Master Plan	Wastewater
City of Regina Water Conservation Program	Water
City of Regina Water Master Plan	Water
City of Regina Winter Maintenance Policy (2021)	Open Space, Transportation
Bylaw No. 2021-40 Design Regina: The Official Community Plan	Water
Developer's/Consultants Field Services Guidelines	All Standards
Noise Attenuation Policy	Transportation
Open Space Lighting Policy and Procedures	Transportation, Open Space, Wastewater, Water

Document Name	Most Relevant Standards
Open Space Management Strategy	Open Space
Regina Drainage Master Plan Report, 2009	Storm Water
Regina Urban Forest Management Strategy	Open Space
Bylaw No. 2019-19 The Regina Zoning Bylaw, 2019	All Standards
Servicing Agreement Standard Conditions	All Standards
Bylaw No. 7748 Subdivision Bylaw	Storm Water, Transportation, Open Space
Temporary Traffic Control Manual	Transportation, Open Space
The Park Naming Policy and Procedures	Open Space
Bylaw No. 2016-24 The Wastewater and Storm Water Bylaw	Storm Water, Wastewater
Transportation Impact Assessment (TIA) Document Standard	Transportation, Open Space
Transportation Master Plan (TMP)	All Standards
Bylaw No. 9847 Water and Sewer Utility Bylaw	Water
Bylaw No. 8942 The Water Bylaw	Water
American Water Works Association Standards and Design Manuals	Water, Wastewater
B651-12 Accessible Design for the Built Environment, Canadian Standards Association (CSA)	Transportation, Open Space
Canada Post – Vertical Barrier Curb Standard Installation	Transportation, Open Space
Canadian Guide to Traffic Calming, ITE / TAC	Transportation, Open Space
Canadian Roundabout Design Guide, TAC	Transportation
Canadian Traffic Signal Warrant Matrix Procedure, TAC	Transportation

Document Name	Most Relevant Standards
Environment Canada historical climate records	Storm Water
Geometric Design Guide for Canadian Roads, Transportation Association of Canada (TAC)	Transportation
Guide for Design of Pavement Structures, American Association of State Highway and Transportation Officials (AASHTO);	Transportation, Open Space
Guide for the Design of Roadway Lighting, TAC	Transportation
Guidelines for New Development in Proximity to Railway Operations, Federation of Canadian Municipalities, and the Railway Association of Canada	Transportation, Open Space
Highway Capacity Manual (HCM) Transportation Research Board	Transportation
Manual of Uniform Traffic Control Devices for Canada, TAC	Transportation, Open Space
National Fire Code, National Research Council	Transportation, Water
National Fire Protection Association (NFPA) Standards	Water, Transportation
Saskatchewan Onsite Wastewater Disposal Guide	Wastewater
Saskatchewan Plumbing and Drainage Regulations Saskatchewan Plumbing and Drainage Regulations	Wastewater, Storm Water
SaskPower Standards and Specifications	Transportation
Sewage Works Design Standard, EPB 503	Wastewater
Stormwater Guidelines EPB 322 Jan 2014 published by the Water Security Agency (WSA)	Storm Water
The Saskatchewan Environmental Code	All Standards
The Waterworks and Sewage Works Regulations	Wastewater, Water, Stormwater

Document Name	Most Relevant Standards
Transport Canada Railway Grade Crossing Regulations and Standards	Transportation, Open Space
Trip Generation Manual, Institute of Transportation Engineers (ITE)	Transportation
Canadian Landscape Standard	Open Space
Canadian Standards for Nursery Stock, Canadian Nursery Landscape Association	Open Space
Children's Playspaces and Equipment, The Canadian Standards Association (CSA), CAN/CSA-Z614	Open Space
Saskatchewan Human Rights Commission Physical Accessibility Standard Guidelines	Open Space
Time-Saver Standards for Landscape Architects TransCanada Pipelines – Standard Conditions	Open Space
TransCanada Pipelines – Standard Conditions	Open Space
National Building Code of Canada (Current)	Water
National Plumbing Code of Canada (Current)	Water
Saskatchewan Planning and Development Act, 2007	All Standards
The Education Regulations, 2019	Open Space
The Dedicated Land Regulations	Open Space
The Environmental Management and Protection Act, 2010	All Standards
The Power Corporations Act	All Standards
The Public Health Act, 1994	Water, Wastewater
The Public Utilities Easement Act	All Standards

Document Name	Most Relevant Standards
The Public Utilities Easements Regulations	All Standards
The Construction Codes Act	All Standards
The Waterworks and Sewage Works Regulations	Water, Wastewater
Waterworks Design Standard, EPB 501 (Current)	Water

#### 1.4. Use of the Design Standards

- 1.4.1. These Design Standards define the minimum acceptable requirements to be satisfied in the planning, design, and construction of municipal and related infrastructure within the City of Regina.
- 1.4.2. The City's acceptance of any designs is in reference to compliance of the design with respect to these standards and is not a warranty of the design.
- 1.4.3. Changes to the Design Standards will be contemplated by the City according to section 1.5.
- 1.4.4. Where a variance or exception from these Standards might achieve a better design with regards to safety, quality, functionality, operational requirements, environmental requirements and life cycle costs, the designer is encouraged to present this to the City in accordance with section 1.6
- 1.4.5. These Design Standards may require exceptions when used on existing municipal infrastructure improvements or infill development.

#### 1.5. Revisions

- 1.5.1. The City reserves the right to alter, revise, or update the Design Standards from time to time. Any such change proposals shall be in accordance with section 1.5.
- 1.5.2. Comments related to Design Standards may be submitted at any time by contacting Service Regina. Contact information is available on the City of Regina website.
- 1.5.3. Design Standards are published as they become available and are effective immediately. Design and Construction activities must adhere to the current version of the Design Standards.
- 1.5.4. Any proposed changes to the Design Standards shall be accompanied by the *Design Standard Change Request*.

#### 1.6. Design Exceptions

- 1.6.1. Any proposed exceptions to these standards shall be accompanied by the *Exception to Design Standard Request*.
- 1.6.2. If an exception is granted, the exception is only valid for use on the project or within the context and timeframe outlined in the *Exception to Design Standard Request*.
- 1.6.3. All Design Standard exceptions must be prepared, signed, and sealed by a professional engineer, landscape architect, architect, or other industry professional applicable to the design.

#### 1.7. Requirements by Other Authorities

- 1.7.1. It is the responsibility of the Designer to ensure that the design conforms to all other applicable statutes, laws, bylaws, regulations, permits, licenses and requirements of government or other public authorities having jurisdiction.
- 1.7.2. Where regulatory reference is made to City bylaws, policies, or other provincial or federal design references, the most current version is to be used. Where there is a discrepancy between this manual and other regulatory reference material, the other regulatory reference material content will prevail.
- 1.7.3. Where two or more applicable standards govern the design, the more restrictive shall apply.
- 1.7.4. Regulating agencies and other authorities having jurisdiction within Regina include, but are not limited to:
  - 1.7.4.1. Access Communications
  - 1.7.4.2. Alliance Pipeline
  - 1.7.4.3. BT Telecom Group
  - 1.7.4.4. Buffalo Pound Water Treatment Plant
  - 1.7.4.5. Canada Energy Regulator
  - 1.7.4.6. Canadian National Railway
  - 1.7.4.7. Canadian Pacific
  - 1.7.4.8. Canadian Transportation Agency
  - 1.7.4.9. Consumer's Co-Operative Refineries Ltd.
  - 1.7.4.10. Department of National Defence
  - 1.7.4.11. Department of Fisheries and Oceans
  - 1.7.4.12. Environment and Climate Change Canada
  - 1.7.4.13. Enbridge Pipelines Inc.
  - 1.7.4.14. EPCOR
  - 1.7.4.15. First Nations
  - 1.7.4.16. Global Transportation Hub Authority
  - 1.7.4.17. Indigenous and Northern Affairs Canada
  - 1.7.4.18. Last Mountain Railway
  - 1.7.4.19. Natural Resources Canada
  - 1.7.4.20. Plains Midstream Canada
  - 1.7.4.21. Provincial Capital Commission
  - 1.7.4.22. RCMP Depot
  - 1.7.4.23. Regina Airport Authority
  - 1.7.4.24. Regina Bypass Operations and Maintenance
  - 1.7.4.25. Regina Exhibition Association Limited
  - 1.7.4.26. Rogers Communication
  - 1.7.4.27. Rural Municipality of Sherwood #159
  - 1.7.4.28. Rural Municipality of Edenwold #158
  - 1.7.4.29. Rural Municipality of Pense #160
  - 1.7.4.30. Rural Municipality of Moose Jaw #161
  - 1.7.4.31. Rural Municipality of Lumsden #189
  - 1.7.4.32. Saskatchewan Ministry of Environment
  - 1.7.4.33. Saskatchewan Ministry of Highways and Infrastructure
  - 1.7.4.34. SaskEnergy
  - 1.7.4.35. SaskPower
  - 1.7.4.36. SaskTel
  - 1.7.4.37. SaskWater
  - 1.7.4.38. Shaw Communications
  - 1.7.4.39. TransCanada Pipelines
  - 1.7.4.40. Transport Canada
  - 1.7.4.41. University of Regina

1.7.4.42. Water Security Agency

**1.8. Organization**

- 1.8.1. Each City Design Standard (transportation, open space, wastewater, stormwater, and water) is organized into four sections:

**Section 1.0 General** - Contains general information related to the specific Design Standard

**Section 2.0 Preliminary Design** - Contains design information related to the aspects of preliminary design that may include functional studies, option analysis reports, and servicing reports for Area Plans

**Section 3.0 Detailed Design** - Contains design information related to the creation of detailed design drawings and shop drawings for construction.

**Section 4.0 Site Design** – Contains design information related to aspects of a specific parcel of land typically specific to a development permit.

**1.9. Easements**

- 1.9.1. The Designer shall be responsible for securing all necessary easements to protect public municipal infrastructure not located within a right of way or dedicated land.
- 1.9.2. Easements are intended to allow for access/egress to ensure the safe operation and proper maintenance of municipal infrastructure.
- 1.9.3. Easement sizing shall be designed with consultation from the City.

**1.10. Risk Hazard Assessment**

- 1.10.1. Proposed developments involving manufacturing, handling, or storage of significant quantities of hazardous materials/wastes will generally require a quantitative risk/hazard zone assessment prior to final land use approval and/or prior to final development approvals.
- 1.10.2. Proposed developments near fixed facilities or pipeline corridors that involve either hazardous materials or hazardous wastes will generally require a quantitative risk/hazard zone assessment prior to land use approvals.
- 1.10.3. Risk/hazard zone assessments shall be prepared by a qualified Professional Engineer registered to practice in the Province of Saskatchewan. Risk/hazard zone assessments shall meet the guidelines contained within *Risk Assessment – Recommended Practices for Municipalities and Industry* by the Canadian Society of Chemical Engineers (CSChE) which is used to evaluate safe setback distances which will be specific to each site dependant on the hazard or hazards and type of development proposed.

Revisions		
Description	Notes	Date
Draft General Design Standard	For internal COR Review	May 2017
Updated based on comments during internal COR Stormwater Design Standard review		Aug 2017
Updated based on multiple internal and external reviews		April 2022

Updated to include language to support the Design Exceptions and Design Change forms.		May 2022
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