

SECTION 1: DESIGN BASIS

The mission of the City of Prince Albert is to anticipate, encourage and prepare for growth and be responsive to the needs of our community. As well, the City will create infrastructure that supports growth while planning for continuous improvement.

1.0 PURPOSE

Design standards are an important part of accomplishing the mission of the City of Prince Albert. Standards are meant to provide a service for designers, giving clear direction and allow them to streamline the design, review and approval process. Design standards also demonstrate leadership by providing specifics with regard to the vision of building and maintaining a healthy, attractive and economically viable city. Finally, design standards assist the community by providing a common set of requirements based on the unique conditions encountered in Prince Albert.

The design standards are being issued to provide additional guidance to developers and their consultants. These standards will provide a consistent approach to development by clearly defining the expectations of the City of Prince Albert. The intent of the design standards is not to simply dictate what would be an acceptable design but to provide the design basis, which can be used to evaluate novel or innovative designs. Options and design guidelines will also be proposed in areas where strict standards are not required.

One goal of development is to provide a safe and enjoyable place for people to live and work. This must be done in a cost effective manner while considering environmental impacts as well as future maintenance and replacement costs. This is in fact the vision statement of the design standards that guides the development of the rest of this document.

The objectives of the design standards are:

- i. To provide clear standards to designers regarding the design of infrastructure in the City of Prince Albert.
- ii. To ensure that infrastructure built for the City of Prince Albert meets community quality of life expectations by being safe, functional, and aesthetically pleasing, while protecting the environment, and having reasonable life cycle costs.

1.1 DESIGN PRINCIPLES

The intent of providing overall design principles is to describe the desired outcomes. With a clear idea of the intent behind a standard, it becomes easier to interpret and apply in atypical situations. This also gives freedom to designers with regard to an innovative design, which is true to the overall intent of the standards but may not fit within all the specific requirements.

These basic design principles are a reflection of the community's quality of life expectations. Infrastructure is built to serve the community and it is the community that determines the service levels. The citizens should not be expected to adapt their lifestyle to fit within the municipal infrastructure but rather municipal infrastructure should be adapted to meet community expectations.

1.1.1 Safety

Public safety is the highest priority. Designers must consider safety as a high priority. This includes physical safety of the City's citizens as well as the safety of the City staff required to operate and maintain the facilities. Safety in this context also means the protection of health and property.

1.1.2 Functionality

The design elements must function reliably for their expected design life, providing a level of service on par with prevalent community expectations. The citizens of our community have come to expect a certain level of service and quality of life. New additions to the system must not negatively impact existing levels of service. The City of Prince Albert defines community expectation through the use of public forums, project committees and day-to-day interactions with the public.

1.1.3 Aesthetics

Extensive consultation with the public resulted in community values such as "small town atmosphere", cleanliness, parks, playgrounds and wide tree lined streets being articulated in the Official Community Plan. Aesthetics applies at the contact points between the physical infrastructure and the community, specifically to those areas and structures which will be seen and used by the public.

1.1.4 Environmental Protection

As stewards of the environment charged with creating a healthy city and protecting the natural endowments within our jurisdiction, the City of Prince Albert promotes any design measures which reduce or mitigate the impacts of development.

Some basic environmental principles can be defined to assist in decisions about infrastructure design and subdivision planning. Best practices in municipal servicing incorporate such principles. The City of Prince Albert promotes design choices and processes based on these principles. Design options should:

- i. Enhance energy conservation and the efficient use of energy while decreasing emission that contributes to air pollution.
- ii. Acknowledge the regional environmental conditions, park land ecosystem and prevailing west winds.
- iii. Create and enhance opportunities for bio-diversity and maintenance of natural ecological function.
- iv. Consider the effects of environmental hazards on development.

Stricter Environmental Protection standards are on the horizon for many aspects of development. These include such items as stormwater management and wind erosion protection. The citizens of our community have also identified environmental protection as an important priority. The City of Prince Albert wants to take a proactive approach to protecting the environment from adverse impacts of development and living.

1.1.5 Life Cycle Costs

The cost of maintaining and eventually replacing infrastructure ultimately becomes the responsibility of the City. Design of new infrastructure must take this factor into account in order to obtain the best possible balance between initial capital costs, future maintenance costs, ongoing replacement costs and the other design principles. Providing a well-thought-out design that considers the cost, ease and frequency of maintenance and then following up with quality construction are the main factors needed to achieve reasonable life cycle costs.

1.2 RELATED RESOURCES – PROVINCIAL AND FEDERAL REQUIREMENTS

The City of Prince Albert Design Standards supplements the existing standards, codes, guidelines and regulations regarding municipal infrastructure. These design standards provide additional detail for conditions unique to Prince Albert. Even though the requirements of the City of Prince Albert Design Standards have been met the developer is still responsible to comply with other appropriate regulations and obtain the required provincial and federal approvals.

1.2.1 Planning and Development

The City of Prince Albert follows the following Provincial Legislation for planning and development purposes:

- i. *The Planning and Development Act.*
- ii. *The Cities Act.*

1.2.2 Design Standards

These design standards refer in large extent to the most recent provincial and federal standards and guidelines referred throughout the document. All Water Distribution, Sanitary Sewer and Stormwater Management Systems must be designed so that they meet, as a minimum, the standards and design requirements set out in the latest editions of the Federal, Provincial and Municipal Bylaws.

This document takes its direction from the City of Prince Albert's Official Community Plan and the standards presented here naturally flow out of the community values and planning goals stated there. Developers are also referred to the following City of Prince Albert documents which provide additional information governing the subdivision development approval, construction and handover process:

- i. 2014 City of Prince Albert Master Specifications, updated 2017.
- ii. 2014 City of Prince Albert Standard Detail Drawings, updated 2018.
- iii. 2015 City of Prince Albert Water Hydraulic System Analysis.
- iv. 2016 City of Prince Albert Storm Hydraulic System Analysis.
- v. 2017 City of Prince Albert Sewer Hydraulic System Analysis.
- vi. 2017 City of Prince Albert Transportation Study.