Proposed Content of Section E – The Environment

This Section provides direction for how the City of Saskatoon (City) will commit to protecting, enhancing, and managing the impact on the environment. This includes the overall protection of the environment; conservation and management of natural systems; production and conservation of energy; the management of waste; mitigation of and adaptation to climate change and community involvement and programming. The section is proposed to include the following subsections:

- 1. Environmental Protection
- 2. Natural Systems
- 3. Energy
- 4. Waste Management
- 5. Climate
- 6. Community Leadership

Details on each subsection and the source of its content is included below.

E1 – Environmental Protection

This section includes policies relating to the protection of the environment through responsible practice to alleviate impacts on the local and global environment. Sub-headings include:

- 1. Environmental Stewardship
- 2. Water
- 3. Air
- 4. Land

The City engages in environmental protection through responsible practices to alleviate impacts on the local and global environment. Responsible environmental practices include conservation and enhancement of natural assets and preventing wasteful use of resources. Maintaining the integrity of land, air and water resources in the city and the region contributes to a healthy environment, as well as social and economic wellbeing.

This section includes new policies informed by the following documents:

- <u>C02-036 Environmental Policy</u>
- Saskatoon Speaks Community Vision (June 2011)
- <u>City of Saskatoon Strategic Plan 2018 2021</u>
- <u>City of Saskatoon Energy & Greenhouse Gas Management Plan</u>
- Green Infrastructure Strategy Baseline Inventory Report
- Saskatoon North Partnership for Growth Regional Plan

- South Saskatchewan River Watershed Source Water Protection Plan
- City of Saskatoon Storm Water Pond Safety Review

Topics that policies address are listed below under their respective proposed subheading:

Environmental Stewardship

- Environmental stewardship and protection through the use of innovative technologies, green infrastructure, pilot projects, and best practices in civic operations; and
- Supporting a local culture of improved environmental protection.

<u>Water</u>

- A protected and sustainable drinking water supply, and the management of storm water;
- Reducing consumption of water through efficient land use planning and landscaping practices; and
- The policies included from Section 9.4 Source Water Protection of the <u>current</u> <u>OCP</u> are maintained and updated. These policies outline the City's commitment to the protection of groundwater sources and drinking water supply.

<u>Air</u>

• Reducing local air pollution through responsible practices and work with government agencies to monitor regional air shed quality.

Land

- Transforming contaminated lands through the facilitation of brownfield redevelopment; and
- Reducing the use of pesticides and chemicals, as well as facilitating responsible practices to reduce the risk of new, or the spread of existing, soil contamination.

E2 – Natural Systems

This section include policies relating to the natural areas and systems within Saskatoon. Sub-headings include:

- 1. Integration with the Urban Environment
- 2. Natural Asset Management
- 3. Integrated Storm Water Management
- 4. Wetlands and Conservation Management
- 5. Conservation of Natural Areas
- 6. Riverbank Stewardship

7. Urban Forestry

Natural areas within Saskatoon play an important role in overall well-being and environmental health. Natural areas not only support a diversity of plants and wildlife, they also perform ecological services, such as reducing and filtering storm water, sequestering greenhouse gases, reducing urban heat island and wind speed effects and removing harmful pollutants from the air, soil and water. Retention of natural areas is an important asset to the city as it ensures both environmental protection and enjoyment of nature in the urban environment.

This section includes new policies informed by the following documents:

- <u>C02-036 Environmental Policy</u>
- <u>City of Saskatoon Strategic Plan 2018 2021</u>
- Green Infrastructure Strategy Baseline Inventory Report
- <u>City of Saskatoon Storm Water Pond Utility Business Plan</u>
- <u>City of Saskatoon Storm Water Pond Safety Review</u>
- Saskatoon North Partnership for Growth Regional Plan

Topics that policies address are listed below under their respective proposed subheading:

Integration with the Urban Environment

- Integration of ecological systems and natural areas into urban areas and providing access to green spaces and the larger connected green network;
- Limiting impacts of urban development on natural areas and sensitive ecosystems; and
- Opportunities for incorporating green infrastructure into the land development process.

Natural Asset Management

- Managing built and natural assets through an asset management policy, along with a system of natural capital asset valuation; and
- Adaptation to climate change through the use of green infrastructure in the city.

Integrated Storm Water Management

- Safe development of storm water retention ponds; and
- Policies included from Section 10.2 Recreation and Open Space of the <u>current</u> <u>OCP</u>, specifically on storm water management, are maintained and updated. These policies outline best practices for safely managing storm water as a resource.

Wetlands and Conservation Management

 Policies included from Section 9.5 – Wetlands and Conservation Management of the <u>current OCP</u> are maintained and updated. These policies outline the City's commitment to the stewardship, conservation and integration into urban areas, of wetland resources.

Conservation of Natural Areas

- Conserving and protecting natural features;
- Maintaining of an inventory of natural areas and assets; and
- Policies included from 9.2 Conservation of Natural Areas and Archaeological Sites of the <u>current OCP</u> are updated. These policies guide the protection, enhancement and conservation of important natural areas in the city and region.

Riverbank Stewardship

- Policies included from 16.5 Riverbank Areas Susceptible to Slumping and Slope Instability of the <u>current OCP</u> are maintained. These policies:
 - Protect and conserve the South Saskatchewan River Valley, through partnerships with the Provincial Government, Meewasin and University of Saskatchewan for the enjoyment of residents now and into the future;
 - Monitor areas of the riverbank prone to slumping or instability; and
 - Establish a riverbank slope overlay district in the Zoning Bylaw.
- Policies included from 9.1 Riverbank Stewardship of the <u>current OCP</u> are maintained and updated. These policies guide the protection of the South Saskatchewan River Valley.

Urban Forestry

• Policies included from 9.3 – Urban Forestry of the <u>current OCP</u> are maintained and updated. These policies outline the protection and maintenance of existing trees in the city, and expanding the urban forest as Saskatoon grows.

<u>E3 – Energy</u>

This section is a new addition to the OCP and includes policies relating to the production and consumption of energy. Sub-headings include:

- 1. Energy Conservation and Efficiency
- 2. Renewable Energy
- 3. Sustainable Buildings

The City seeks to become a leader in renewable energy, energy and water conservation and management of greenhouse gas emissions. The City is actively trying to meet emission reduction targets, reduce reliance on high carbon energy sources and energy consumption and support energy efficient buildings and transportation modes. The benefits include saving money on utility costs, deferring costs for major capital expenditures, reducing overall operating costs, reducing air pollutants linked to emissions and reducing the severity of projected climate change.

This section includes new policies informed by the following documents:

- Saskatoon Speaks Community Vision (June 2011)
- <u>City of Saskatoon Strategic Plan 2018 2021</u>
- <u>City of Saskatoon Energy & Greenhouse Gas Management Plan</u>
- <u>C02-036 Environmental Policy</u>
- <u>City of Saskatoon Recreation & Parks Master Plan</u>

Topics that new policies address are listed below under their respective proposed subheading:

Energy Conservation and Efficiency

- Reducing energy consumption through public education programs and innovation in energy use; and
- Energy and fuel efficiency improvement for all modes of transportation and transportation technologies.

Renewable Energy

 Increasing the use of innovative and renewable sources in the generation of energy.

Sustainable Buildings

- Reducing the environmental impacts of civic buildings; and
- Encouraging energy efficiency and sustainable building techniques in the construction of new buildings and existing building retrofits.

E4 – Waste Management

This section is a new addition to the OCP and includes policies relating to the management of waste in Saskatoon. Sub-headings include:

- 1. Reduction
- 2. Recycling and Diversion
- 3. Residual Waste

The City has committed to achieving a 70% waste diversion target with a long-term vision of zero waste goals. To realize these initiatives, the City takes an integrated approach to waste management by combining waste handling and waste reduction strategies. An effective integrated system considers how to reduce, reuse, recycle, recover and dispose of waste in ways that protect both human and environmental

health, while remaining affordable and convenient and maximizing resource use efficiency. A variety of programs and initiatives, including recycling, composting, hazardous waste collection and reuse of gently used items help divert waste from the Saskatoon landfill. Outreach, education and services support these programs, while raising awareness about the importance of waste reduction and diversion.

This section includes new policies informed by the following documents:

- Saskatoon Speaks Community Vision (June 2011)
- <u>City of Saskatoon Strategic Plan 2018 2021</u>
- Saskatoon Waste & Recycling Plan
- <u>C02-036 Environmental Policy</u>
- Bylaw No. 8310 The Waste Bylaw, 2004

Topics that new policies address are listed below under their respective proposed subheading:

Reduction

- Reduce waste generated in Saskatoon through implementing and maintaining a waste reduction and diversion plan; and
- Working with government, regional, and community partners to improve waste prevention, reduction, reuse and production to meet zero waste goals.

Recycling and Diversion

- Develop policies and programs on new waste diversion initiatives, like recycling and organics management, for all civic facilities, as well as exploring alternatives and improvements to service levels, collection and processing; and
- City-wide recycling and organics management initiatives through policy, collection and education.

Residual Waste

- Managing the landfill to minimize impacts to the environment and keep hazardous waste from entering the waste stream; and
- Optimized and financially sustainable landfill operations.

E5 – Climate

This section is a new addition to the OCP and includes policies relating to changing climate conditions and becoming a more resilient city. Sub-headings include:

- 1. Mitigation
- 2. Adaptation

Everyone has a role to play in taking action on climate change, as it is a global, national and local challenge. Both climate mitigation and adaptation are needed to effectively address both the causes and effects of climate change. Taking action will support environmental health and integrity, social equity and cultural well-being and economic prosperity and fiscal responsibility. The City has made a commitment to reducing greenhouse gases and adapting to changing climate conditions to become a more resilient city. Part of this commitment includes implementing the solutions and opportunities identified in Saskatoon's climate action planning, which addresses energy efficiency and generation, land use planning, urban design, transportation, waste management, asset management, air quality, water services and other areas.

This section includes new policies informed by the following documents:

- City of Saskatoon Strategic Plan 2018 2021
- Global Covenant of Mayors for Climate and Energy (Item 8.4.2)
- Green Infrastructure Strategy Baseline Inventory Report
- <u>C02-036 Environmental Policy</u>
- Saskatoon Speaks Community Vision (June 2011)
- <u>City of Saskatoon Energy & Greenhouse Gas Management Plan</u>

Topics that new policies address are listed below under their respective proposed subheading:

Mitigation

- Implementing and maintaining a climate action plan to reduce corporate and community emissions; and
- Maintaining and monitoring of corporate and community emission reduction targets and performance.

Adaptation

- Use of the corporate climate adaptation strategy to assess change risk to municipal infrastructure, services, and plans; and
- Assessing and reporting on current and projected future climate conditions in the Saskatoon region to increase community and corporate resilience.

E6 – Community Leadership

This section is a new addition to the OCP and includes policies relating to community involvement and programming. Sub-headings include:

- 1. Shared Stewardship
- 2. Community Programs

The City is committed to sustainable decision making, which means supporting the needs and well-being of both present and future generations by upholding

environmental integrity, equitable social systems, a just economy and good governance. However, the City cannot meet its environmental goals alone. The involvement and effort of the entire community is required, including other orders of government, schools, business, community groups and individuals. Through public engagement, outreach, education initiatives and program development, the City will create partnerships within the community to foster an informed, engaged community and reach our goals. The City strives to build capacity in the community and encourage behaviours that reduce environmental impacts.

This section includes new policies informed by the following documents:

- Saskatoon Speaks Community Vision (June 2011)
- <u>C02-036 Environmental Policy</u>
- <u>City of Saskatoon Energy & Greenhouse Gas Management Plan</u>

Topics that new policies address are listed below under their respective proposed subheading:

Shared Stewardship

- Leading by example through implementing best practices in municipal operations and providing engagement outreach and education on City-led projects; and
- Encouraging community action through building meaningful relationships and raising awareness about sustainability and environmental programs and initiatives.

Community Programs

• Facilitating community involvement through implementing actions and programming to support environment initiatives.