### <u>Twelve Main Points For</u> City-Responsible Protection of the Swale: Specific Responses

#### (NOTE: Original points are in bold text. Responses to each point are in italics.)

An integrated City-administered Swale Buffer Plan, parallel to the MVA NE Swale Master Plan, should be implemented since the surrounding City development creates disruptions and pollutants that will potentially affect and degrade the Swale. This Plan should include, as a minimum, all points below:

<u>Response</u>: The Northeast Swale Development Guidelines (2012) identify the boundary of the Swale and provide direction for how urban development should interface with, and provide a buffer for, the Swale. These Guidelines were adopted in conjunction with the University Heights Sector Plan Amendment (adopted 2013). The Guidelines prescribe a linear "Greenway" that is a minimum of 24 metres in width, beyond the Swale boundary, as a means to buffer the Swale from urban development. Where urban development already abuts the Swale (i.e. along Fedoruk Drive), the roadway corridor provides an acceptable buffer.

## 1. Include Petursson's Ravine and Central Avenue Crossing within the Swale as indicated in the MVA Northeast Swale Master Plan.

<u>Response</u>: Petursson's Ravine is considered to be part of the Swale, according to the Northeast Swale Development Guidelines (2012) and the University Heights Sector Plan. The Guidelines provide guidance for the Central Avenue Crossing. This guidance has been built into the requirements for the North Commuter Parkway Project.

## 2. Insist that the Province relocate the Perimeter Highway to Clark's Crossing, to go around the Swale within the Greater Saskatoon area region.

<u>Response</u>: Planning for the Saskatoon Freeway (formerly "Perimeter Highway") is a responsibility of the Provincial Ministry of Highways and Infrastructure. In 2014, the Ministry undertook a validation study to determine whether the general location of the proposed freeway was still valid. The City and the Meewasin Valley Authority (Meewasin) were involved in this process, which involved specific discussion of the crossing of the Northeast Swale. The Ministry's study determined, in part, that the general location of the Saskatoon Freeway in the northeast area of Saskatoon, including the area of the Swale, is "valid." While minor adjustments in the alignment of the freeway may be necessary during the detailed design, the Administration does not support re-opening discussions on its general location; nor has the Ministry provided indication that this is an option. 3. Impose Dark Sky policy lighting standards in neighbourhoods adjacent to the Swale through zoning bylaw changes that include neighbourhood roadways, residential and commercial properties, lit signage, and minimally-lit roadways through the Swale.

<u>Response</u>: Saskatoon Light & Power is working with Graham Commuter Partners, in consultation with Meewasin, on the lighting design for the North Commuter Parkway Project to ensure Dark Sky considerations are addressed appropriately.

Within residential neighbourhoods, Saskatoon Light & Power's standard fixture meets all Dark Sky-compliance requirements except the colour temperature requirement, which was updated in November 2015. The standard fixture used by Saskatoon Light & Power met the colour temperature requirement at the time it was selected in 2014.

Planning and Development will be exploring the potential for Zoning Bylaw No. 8770 (Zoning Bylaw) amendments that would provide incentives for environmentally-sustainable development. The incentives to be investigated may include measures to encourage, though not require, the use of appropriate lighting on residential properties. Zoning Bylaw amendments mandating Dark Sky-compliant lighting are not being considered at this time.

4. Eliminate bottlenecks for safe wildlife passage, modelling from Edmonton's Wildlife Passage Guidelines, and ensure that there is an ecological network in place to enable the wildlife to move unimpeded from the river through the Swale and back.

<u>Response</u>: The Northeast Swale Development Guidelines (2012) provide guidelines for design of neighbourhood interface and for roadway and infrastructure crossings to minimize the impacts to the Swale, while ensuring a connected urban environment. Meewasin's Northeast Swale Resource Management Plan 2013 is meant to guide ongoing management practices in the Swale to "ensure connectivity between the South Saskatchewan River, the existing natural areas, and the greater swale."

# 5. Ensure that wildlife crossings over roads and small animal crossings under roads are designed and installed for all roadways. The success of these crossings should be monitored.

<u>Response</u>: The Northeast Swale Development Guidelines (2012) provide guidance for the design of roadways that cross the Swale. Design and management requirements include:

- a) maximum 50 kph speed limit;
- b) wildlife crossing and no stopping signs;

- c) undivided roadway (McOrmond Drive and Lowe Road collector) to calm traffic, to reduce the crossing distance for animals, and to eliminate the potential for animals to be "stranded" in the roadway median;
- d) level crossings, where possible (roadway should be elevated as little as possible from surrounding terrain to improve sightlines for animals);
- e) culverts designed to permit small wildlife crossings, while minimizing roadway elevation; and
- f) special road design mitigation to ensure adequate amphibian and reptile crossings, where warranted.
- 6. Ensure that traffic-calming measures, including an enforced 50 kph speed limit, are implemented on all roads through the Swale.

<u>Response</u>: See response to point 5.

7. Ensure that there is minimum damage to the Northeast Swale and Small Swale during road and neighbourhood construction. Follow the City's Predevelopment Protocol and the MVA's Construction Protocols (articulated under the revised Development Review process) in a proactive way that includes environmental monitors with stop work authority.

<u>Response</u>: The City's Predevelopment Protocol will be followed for all neighbourhood development. Similarly, the North Commuter Parkway included all of the same activities identified under the protocol, and environmental management plans are being observed, with ongoing monitoring and auditing, for all construction activities.

#### 8. Ensure that the MVA has sufficient funding to finance the MVA Northeast Swale Master Plan and expand the Master Plan to include the Small Swale.

<u>Response</u>: Along with its endorsement of the Meewasin Northeast Swale Master Plan, City Council directed the Administration to "work with the Meewasin Valley Authority to develop a funding strategy and communication plan, consider potential regulations, and assist with additional implementation planning, reporting back at the appropriate time." A November 30, 2016 report to City Council for the 2017 Corporate Business Plan and Budget Review addressed a capital and operating funding strategy for the implementation of Phases 1 and 2 of the Meewasin Northeast Swale Master Plan.

The Small Swale is not part of the above master plan, which is led by Meewasin. The Small Swale is currently outside of Meewasin's Conservation Zone, though Meewasin has identified an interest in including it in its jurisdiction in the future. At an appropriate time during the development of the University Heights Sector Plan, an applicable plan and funding strategy for the Small Swale will likely be necessary. However, it is not necessary to include this level of detailed planning for the Small Swale at the same time as the Northeast Swale. 9. Enact long-term legal protection of the Northeast Swale and the Small Swale though a change to Zoning Bylaw No. 8770 through a special designation mandated by City Council.

<u>Response</u>: The Swale is currently under a number of "layers" of protection (all apply only within City limits):

- a) with the exception of Petursson's Ravine, the Swale is entirely under public ownership, meaning community interests govern decisions;
- b) the majority of the Swale is within Meewasin's Conservation Zone and is under Meewasin's Northeast Swale Resource Management Plan and Northeast Swale Master Plan. Additionally, both the City and Meewasin have endorsed Meewasin's Northeast Policy, which includes a proposed extension of its jurisdiction to include the entire Swale;
- c) the University Heights Sector Plan identifies the Swale as an area to be preserved from urban development. As Sector Plans are considered "Concept Plans" under The Planning and Development Act, 2007, this designation is statutory; and
- d) City Council adopted the Northeast Swale Development Guidelines (2012), along with the adoption of the University Heights Sector Plan. All development within, and adjacent to, the Swale should be in conformance with these guidelines.

Along with its endorsement of the Meewasin Northeast Swale Master Plan, City Council directed the Administration to report on the "process and implications for designating the Northeast Swale as a special conservation area." The Administration prepared a response to this request that recommends the dedication of Swale lands as Environmental Reserve through the subdivision process. This will add another "layer" of protection to the Swale.

The Small Swale is earlier in the planning stages, but similarly has a number of layers of protection. All but a small portion of the Small Swale within the City limits is in public ownership. The University Heights Sector Plan and a subsequent natural area screening have identified the Small Swale as an area to be protected from development. While Meewasin does not have jurisdiction over most of the Small Swale, both the City and Meewasin have supported potentially adding it to the Conservation Zone in the future.

The Administration is also exploring the potential of pursuing some type of heritage designation for the Swale. This is addressed in another report.

10. Ensure that the University Heights Neighbourhood 3 (UH3) area is either not developed, or that the current design is scrapped and redeveloped as a model-sustainable community as suggested in Moriyama's 100-Year Plan. The current plan does not support designated environmental reserve lands that should be in excess of the minimal 10% for parks, playing fields, etc., and does not allow for an efficient public transportation plan. <u>Response</u>: University Heights Neighbourhood 3 (UH3) is an integral part of the University Heights Sector Plan and the City's plans for growth. Foregoing development of this neighbourhood would mean that urban growth would need to be accommodated further out from the current extents of urban development; in effect: imposed urban sprawl. The City's Official Community Plan Bylaw No. 8769 explicitly prohibits such "leapfrog" development as it is not a sustainable practice.

UH3 has not yet been designed, so comments addressing how its design is not a "model-sustainable community" are premature. The City will work to ensure that when the design and development of UH3 occurs, it will reflect the City's Strategic Goals of Sustainable Growth and Environmental Leadership.

The Swale is excluded from Municipal Reserve calculations, meaning that each neighbourhood must contribute 10% of its own net developable area (in land or money in lieu) for Municipal Reserve. The requirement to preserve the 290-hectare (718-acre) Swale lands from development is in addition to the Municipal Reserve requirements from the development of urban neighbourhoods within the Sector. The University Heights Sector Plan open space (environmental) and Municipal Reserve dedication requirements far exceeds 10% of the total area of the Sector Plan.

11. Ensure that the stormwater handling systems do not allow contaminants to enter the adjacent wetlands. They are experimental, so careful monitoring will be needed, especially since regulations for the Pesticide Use policy and the Wetlands policy are not in place.

<u>Response</u>: The Aspen Ridge constructed forebay has been designed to remove more than 80% of suspended sediments. This level of removal is within the enhanced protection category as per the Stormwater Management Planning and Design Manual, MOE, Ontario, 2003 (and City of Saskatoon wetland design guidelines), and is consistent with best practice in the industry.

Water quality and quantity within the Northeast Swale has been monitored since the fall of 2013. Certain water quality parameters were selected for analysis based on potential impacts of urban development. These parameters fall under the following categories: Metals, Major Ions, Nutrients, Microbiological Substances, and Petroleum Hydrocarbons. Additionally, a permanent monitor was installed to measure basic field parameters, such as Temperature, pH, Turbidity, Conductivity, and Dissolved Oxygen, at a 10-minute sampling interval from April to October each year.

Any additional stormwater forebays/outfalls into the Swale that may be required as a result of urban development (e.g. UH3) will include similar measures and standards.

# 12. Ensure that environmental protection policies are coordinated and adopted with the P4G group through the Saskatoon North Regional Study for the entire Swale region.

<u>Response</u>: In February and March of 2016, the Saskatoon North Partnership for Growth (P4G) held an open house and online engagement for the P4G Regional Plan. A draft land use plan and draft land use categories were introduced, which included a Conservation and Drainage category (now called the Green Network Study Area). This category includes wetlands, natural areas, and other vital ecological infrastructure, and provides direction for their protection. The P4G considered the comments received through the engagement and refined the draft land use map and draft land use categories. A subsequent round of public consultation for P4G began on January 24, 2017, and continued for a month.