

Pilot Project

Dream Development has proposed using non-potable water for irrigation of the Core Park and district parks. The proposal requires further development prior to implementation but presents an opportunity to pilot using raw water for park irrigation.

Dream Development's Proposal:

Dream Development has presented a proposal to Administration outlining the use of raw water for park irrigation. The proposal is to use a storm water pond as the water source and supplement it with either the Patience Lake Potash Mine raw water line or ground water. Dream Development estimated 3,785m³/week would be required to meet 100% of the irrigation service level (which would be the case for weeks where there is no rain). Dream Development has estimated over a 30 year lifetime of the project, raw water irrigation could save significant amount of money compared to the standard potable water irrigation systems that are currently being installed in new parks.

Dream Development has requested to advance the design and construction timeframe the Core Park.

Pilot Project Development:

Dream Development's proposal to use raw water for park irrigation presents an opportunity for a pilot project. In addition to delivering a raw water irrigation demonstration, a pilot project would allow for a process to be developed for the design, approval and operation of raw water irrigation projects and to evaluate actual environmental and financial outcomes.

Administration recommends further review and refinement of Dream Development's proposal prior to implementation. This process could coincide with the park design process for efficiency and to leverage opportunities such as public consultation. Administration will seek Council approval prior to implementing raw water park irrigation and prepare an assessment that will include:

Water quality: Dream Development has proposed using a storm water pond as the irrigation source. This water source was not included on the list provided by the Saskatchewan Health Authority of safe water sources. Other jurisdictions have used storm water ponds as a source of irrigation water, therefore additional work with the Health Authority is required to determine the measures required to protect human health.

Water source: The sources of water will need to be confirmed, including the permissions to access the raw water line owned by the Patience Lake Potash Mine and anticipated seasonal variability of the storm pond supply. The use of a storm water pond source

may also require review from other levels of government to ensure environmental compliance.

Irrigation requirements: Dream Development has outlined the irrigation requirements for the parks based on the City's Service Level for Park Maintenance and Design. These need to be confirmed.

Irrigation system: A complete irrigation system to meet irrigation requirements will need to be drafted based on the water source(s), water quality, and any treatment that may be required.

Operational requirements: A complete understanding of how the irrigation system is operated and maintained, including any necessary training and safety.

Public engagement and education: A plan to understand and address resident concerns about the use of raw water and a plan to educate residents on the use of raw water for park irrigation with an emphasis on the measures being taken to protect public health.

Financial assessment: With the more robust information as outlined above, the financial estimates provided by Dream Development can be updated.

Roles and responsibilities: The resources from the City and Dream Development that would be required to proceed with the pilot would be clearly outlined to clarify the implications of proceeding with the pilot project.