



Regional Oversight Committee Report

REPORT Regional Oversight Committee

REPORT TITLE: Loraas Nutrient Recycling Facility Proposal – SW 16-38-5-W3
Request for Amendment to the Regional Land Use Map – Interim
Regional Plan Change

MEETING DATE: April 20th, 2018

RECOMMENDATIONS

1. That the Regional Oversight Committee endorse in principle the Regional Land Use Map amendment appended to the Saskatoon North Partnership for Growth Regional Plan as Exhibit 2, by amending the land use designation of the E½ SW 16-38-5-W3 from Urban Commercial/Industrial to Regional Infrastructure.
2. That a copy of this report be forwarded to the Rural Municipality of Corman Park, Cities of Martensville, Warman and Saskatoon and the Town of Osler for endorsement in principle by each partner Council.

REPORT HIGHLIGHTS

- The purpose of this report is to recommend endorsement, in principle, of an amendment to the Regional Land Use Map that forms part of the Saskatoon North Partnership for Growth (P4G) Regional Plan;
- The P4G Regional Plan has received endorsement by the Regional Oversight Committee (ROC) and by its partner Councils but has not received final approval by the Ministry of Government Relations. As such, this request falls under the Interim Regional Plan Changes process, as outlined in the P4G Governance and Implementation Strategy; and
- The applicant will be required to apply for a rezoning and satisfy all conditions under the R.M. of Corman Park Official Community Plan and Zoning Bylaw including, but not limited to the submission of a Comprehensive Development Review and undertaking public consultation.

DISCUSSION

1. Background

In May 2017, the ROC endorsed in principle the Draft Regional Plan, Regional Servicing Strategy and Regional Governance and Implementation Strategy. Following this achievement, each partner Council endorsed the documents in principle in the fall of 2017. The documents were then filed with the Ministry of Government Relations (Ministry). The Regional Land Use Map is included as Exhibit 2 in the endorsed Regional Plan (see attachment 1). Each partner municipality has begun to use the endorsed Regional Plan policies and Regional Land Use Map when reviewing development proposals in the P4G study area.

The R.M. of Corman Park has received a request from Loraas to amend the Regional Land Use Map. The request is in relation to a rezoning proposal for a Nutrient Recycling Facility that would compost organic waste generated from residential, commercial, industrial and institutional clients in the Saskatoon region. This proposed facility would be located adjacent to the Northern Landfill south of Martensville.

The subject quarter section is currently subject to the R.M. of Corman Park's Official Community Plan (OCP) and Zoning Bylaw. This proposal requires a rezoning under the R.M. of Corman Park's bylaws from Agricultural District to Regional Waste Management District. As such, all requirements under the R.M.'s bylaws will need to be met (i.e. submission of a Comprehensive Development Review (CDR) and public consultation).

P4G Regional Plan has received endorsement by the ROC and by its member Councils but has not received final approval by the Ministry, this request would fall under the Interim Regional Plan Changes process, as outlined in the P4G Governance and Implementation Strategy.

To accommodate their rezoning proposal, Loraas is requesting a Regional Land Use Map amendment on the E ½ SW 16-38-5-W3 to "Regional Infrastructure", leaving the western half of the quarter section, the area fronting Highway No. 12, under the current land use designation of "Future Urban Commercial/Industrial" (see attachment 2). This quarter section is located outside the Future Urban Growth Areas to 700,000. 'Splitting' the land use designation on this quarter section into two land use designations is consistent with other quarter sections in the P4G plan area.

2. Evaluation Criteria

As outlined in the P4G Governance and Implementation Strategy, interim amendments to the P4G Regional Land Use Map are subject to the following conditions:

- Changes to the Regional Land Use Map must be supported and submitted to P4G for consideration by an affiliated municipality;
 - *The R.M. of Corman Park is supportive of the proposed amendment and has submitted this request for consideration by P4G.*
- Changes to the Regional Land Use Map should be supported either by new information not considered during the development of the P4G Regional Plan, or a change in the planning context that requires consideration in the Regional Land Use Map;
 - *New information has been submitted that requires consideration in the Regional Land Use Map. The applicant has indicated that the proposed facility will offer waste diversion services to benefit the region and could contribute to the extended operational life span of the Northern Landfill. The facility could also support the City of Saskatoon with increased capacity for organics processing as part of their development of a city-wide organics program. The*

proposal can be considered under current R.M. bylaws. Therefore, a Regional Land Use Map amendment request has been submitted for consistency with land use in the region.

- Changes to the Regional Land Use Map must be supported with a rationale that is reviewed and confirmed by PAC;
 - *The rationale provided by the applicant was reviewed by PAC at their February 21, 2018 meeting, including servicing considerations, impacts on adjacent properties and environmental considerations. PAC has recommended endorsement in principle of this Regional Land Use Map amendment by ROC.*
- Changes to the Regional Land Use Map should be supported by a Concept Plan or other study;
 - *Associated Engineering (Sask) Ltd. submitted a request dated December 14, 2017 (see attachment 3) on behalf of the applicant which outlines the rationale for the amendment including technical information on the proposal. This request was reviewed by PAC. A CDR is under development by the applicant as it will be required as part of a rezoning application to the R.M. The CDR is more detailed than what is required for the Regional Land Use Map amendment.*
- Changes to the Regional Land Use Map should not adjust the total amount of land in each land use category or provide a rationale acceptable to PAC and ROC to justify the change;
 - *The Regional Land Use Map amendment requested by the applicant is consistent with the existing land uses in the vicinity. Under the P4G Regional Plan, designation to “Regional Infrastructure” on the Regional Land Use Map is required for regional waste management proposals such as this. Therefore, the intent of this amendment is to align the Regional Land Use Map with a proposal that can be considered under current R.M. policies. The applicant is requesting that a Regional Land Use Map amendment occur on the E ½ of SW 16-38-5-W3. The remainder of the quarter section, the area fronting Highway No. 12, will remain under the current land use designation of “Future Urban Commercial/Industrial”. The removal of approx. 80 acres of “Future Urban Commercial/Industrial” designated lands will not have a negative impact as there was an over dedication of “Future Urban Commercial/Industrial” lands when the Regional Land Use Map was developed.*
- The proposed change otherwise complies with the principles and strategic directions of the Regional Plan.
 - *The proposed change complies with the principles and strategic directions of the Regional Plan under section 20.*

3. Next Steps

Following endorsement by ROC, the Councils of the R.M. of Corman Park, Cities of Warman, Martensville and Saskatoon, and Town of Osler will be requested to endorse the Regional Land Use Map amendment. Following municipal endorsement, the Regional Land Use Map will be updated on the project website and an updated copy will be filed with the Ministry. Following endorsement the applicant will be allowed to proceed with the rezoning application.

In order to proceed under R.M. bylaws, the proposal requires a rezoning and submission of a CDR. As part of the development of a CDR, the applicant is required to undertake significant and effective public consultation with all landowners within 1.6 km (1 mile) of the subject property. The information required in a CDR to demonstrate evidence of public consultation includes:

- a. Submission of a consultation plan, identifying the program and timing of consultation;
- b. Submission of a summary of findings, clearly identifying ideas and areas of support and challenges presented through the consultation process; and
- c. Identification of strategies to respond to the challenges presented within the consultation, and how potential solutions may be incorporated within the proposal.

Where R.M. Council deems public consultation to have been less than thorough or effective, additional consultation by the proponent may be required.

Notice of the proposed property rezoning is also advertised pursuant to the provisions of *The Planning and Development Act, 2007* if First Reading to the proposed bylaw is given by R.M. Council.

Report Author: Vicky Reaney, Senior Planner, R.M. of Corman Park

- **Attachment 1: Regional Land Use Map**
- **Attachment 2: Subject Property Showing Proposed Amendment from Future Urban Commercial/Industrial to Regional Waste Management**
- **Attachment 3: Associated Engineering (Sask) Ltd. Amendment Request dated December 14, 2017**



- Existing Urban Municipality
- Corman Park - Saskatoon Planning District
- First Nations TLE Land Holdings
- First Nations Reserves
- Areas subject to ongoing study
- Potential Expansions (Airport, Wanuskewin, etc.)
- Wanuskewin viewshed
- Major Roadways
- Potential Interchanges
- Saskatoon Freeway**
- Potential Alignments
- Approved Alignments
- Water
- Key Location

Land Use

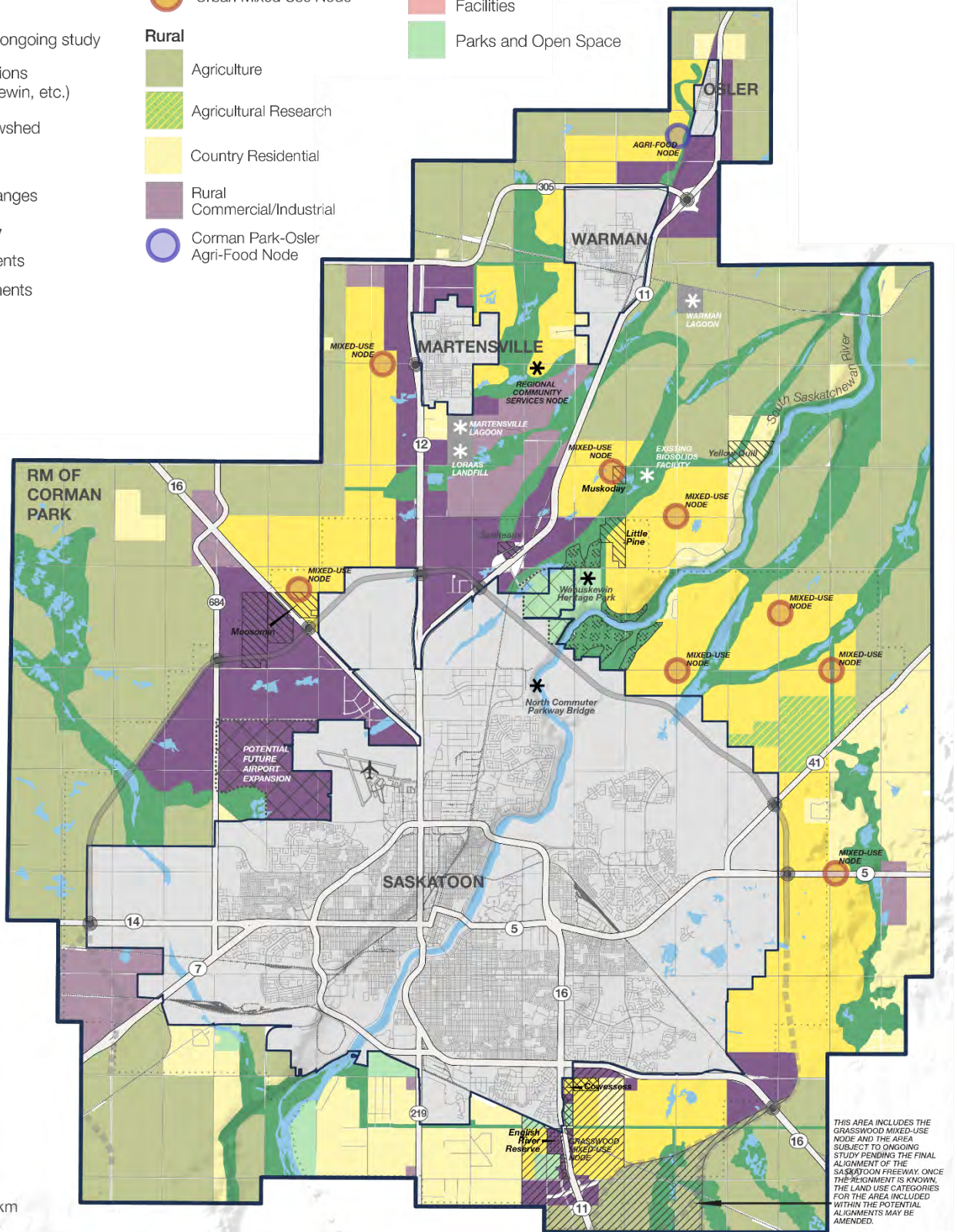
Future Urban Growth

- Urban Residential Neighbourhood
- Urban Commercial/Industrial
- Urban Mixed Use Node

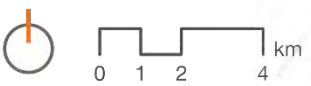
Rural

- Agriculture
- Agricultural Research
- Country Residential
- Rural Commercial/Industrial
- Corman Park-Osler Agri-Food Node

- Green Network Study Area (additional review required)
- Regional Infrastructure
- Regional Institutional Facilities
- Parks and Open Space



THIS AREA INCLUDES THE GRASSWOOD MIXED-USE NODE AND THE AREA SUBJECT TO ONGOING STUDY PENDING THE FINAL ALIGNMENT OF THE SASKATOON FREEWAY. ONCE THE ALIGNMENT IS KNOWN, THE LAND USE CATEGORIES FOR THE AREA INCLUDED WITHIN THE POTENTIAL ALIGNMENTS MAY BE AMENDED.



Current:

Land Use

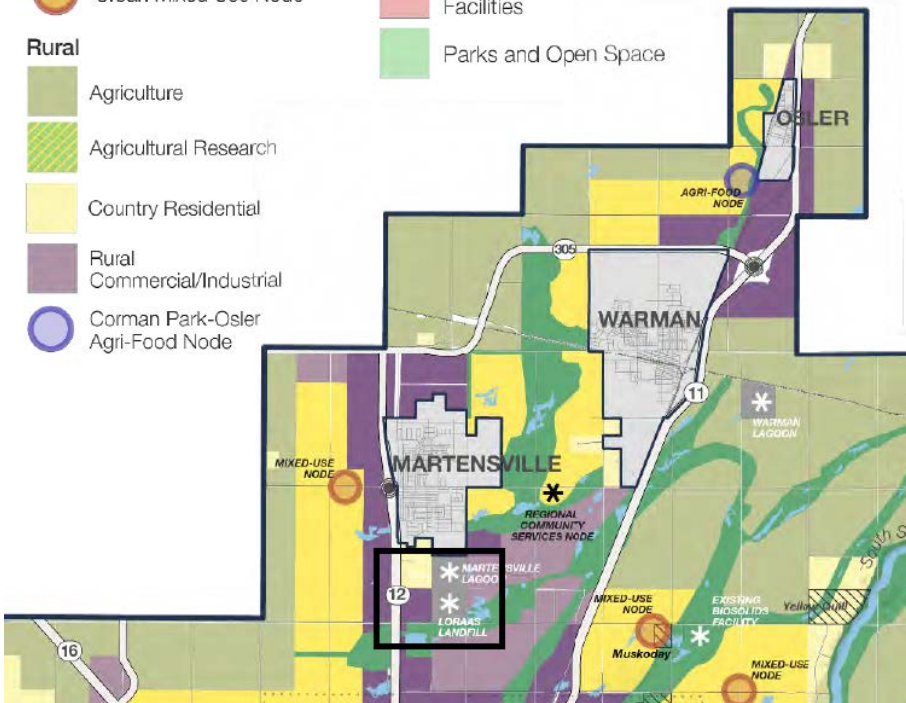
Future Urban Growth

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Proposed:

Land Use

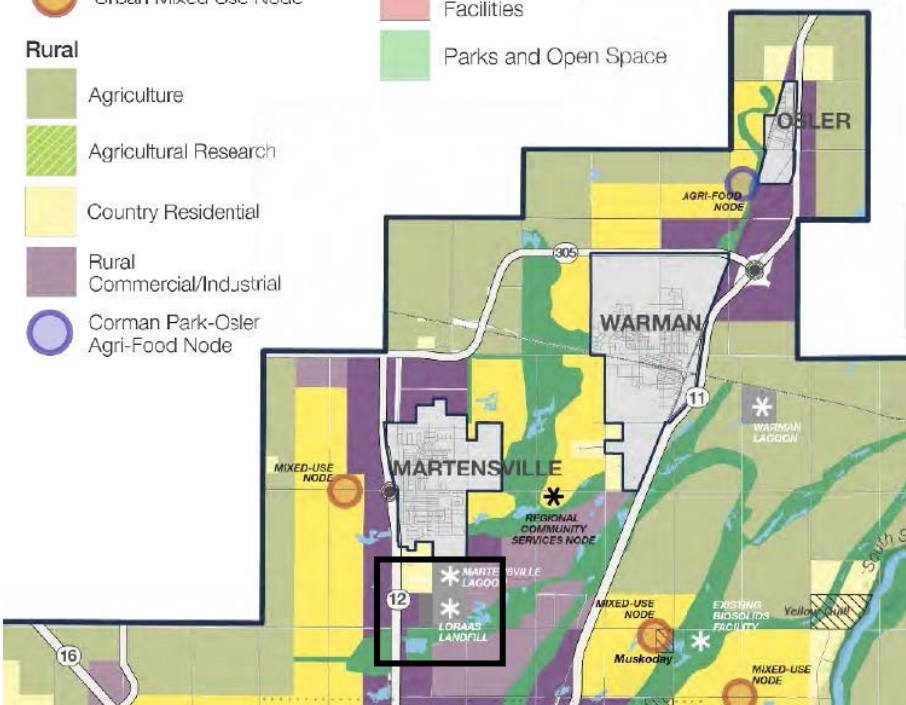
Future Urban Growth

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- Green Network Study Area (additional review required)
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December 14, 2017

File: 2012-4208.020

Rebecca Row, RPP
Director of Planning
RM of Corman Park No. 344
111 Pinehouse Drive
Saskatoon, SK S7K 5W1

Re: REQUEST FOR AMENDMENT TO THE REGIONAL LAND USE MAP

Dear Ms. Row:

It is our understanding that the Regional Plan has yet to be formally adopted, but the member communities have mutually agreed to make decisions concerning land use changes with consideration of the direction portrayed in this document. Recognizing the critical importance of waste diversion and the role that the proposed Loraas Nutrient Recycling Facility represents towards meeting regional goals of environmental sustainability; please accept this as a formal request for consideration of an amendment to the Regional Future Land Use Map to re-designate a portion of the SW 16-38-5-W3 from Urban Commercial/Industrial to Regional Infrastructure.

Associated Engineering has been contracted to support Loraas Environmental in an application to rezone the above noted quarter section from an Agricultural District to a Regional Waste Management District. The proposed zoning will enable our clients to establish a Nutrient Recycling Facility (NRF) on approximately 12 hectares. It is not our objective to pursue the subdivision of the site at this time and it is anticipated that the balance of the quarter section would remain undeveloped with the intention of potentially pursuing an industrial subdivision along Highway No. 12 at a later date. The location for this facility was chosen on account of the need for proximity to the Northern Landfill, but also to minimize the spatial impact of the operation in relation to existing and planned development in the area. The development of the site does not present any hindrance to the future development of industrial or commercial development within the western half of the quarter section along Highway 12.

The proposed NRF is intended to collect and recycle yard and food waste from communities within the Saskatoon Region. This organic waste will be processed on-site to generate an organic rich soil product for use as a marketable amendment supporting various sectors of our economy including the food production and construction industries.

It is estimated that organics represent nearly a quarter of the current waste stream being deposited in our landfills today. Our society has begun to transition away from a 'throw it away' attitude. In the past, society was not overly concerned with where that material went or how it was handled as long as we did not have to see it, or especially smell it again. As organic waste from landfills begins to decompose, it creates and



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releases methane into the atmosphere. Methane is a greenhouse gas estimated to be 72 times more powerful than carbon dioxide in promoting climate change. By diverting this waste stream to a dedicated facility that converts it into a useful soil product, we are turning it into something that is good for the environment rather than something that is harmful.

The strain on natural resources, changing economics, as well as negative environmental effects of traditional landfills has forced change in this industry. The emergence of new branches of the waste management industry, (i.e. recycling) has proven that we have many alternatives to the 'throw it away' attitude.

The proposed facility provides an opportunity to divert this component of the current waste stream and recapture it as a marketable product. Waste diversion and specifically organic recycling provides both environmental and economic benefits and is already an established priority in the Saskatoon Region as evidenced by Saskatoon's *Integrated Waste Management Plan*. The waste management plan outlines the city's goal of diverting 70% of the waste entering the landfill by 2023.

The City of Saskatoon recently published its *Waste Diversion Opportunities Report (May 2017)*. The report assesses Saskatoon's relative success in meeting the above noted goal. Based upon this report, it is estimated that Saskatoon's diversion rates have "remained relatively constant", averaging 20% over the last eight years. The report indicates that "significant changes need to be made to Saskatoon's waste management programs to reach the target diversion goal of 70% by 2023". The report goes further to identify that "... there are approximately 58,000 tonnes of food waste, (primarily from the Industrial, Commercial, Institutional sector); 20,000 tonnes of yard waste; and 38,000 tonnes of Construction and Demolition waste that could be reduced and/or diverted." The report indicates that this would go along way in reaching the established target. A subsequent report to be presented at a meeting of the Environment, Utilities, and Corporate Services committee indicates that 77% of material from single-family homes, and 40% of multi-unit dwellings could be diverted with expanded composting programs.

Saskatoon is developing their Recovery Park facility as a means of diverting household hazardous waste, construction and demolition waste and organic waste. This facility is intended to include the construction of an organic waste processing facility as a means of moving towards the City's target diversion rates. We note that there have recently been several facilities established in the RM intended to provide for recycling of construction and demolition materials. The NRF provides a complementary facility intended to provide regional populations with a similar suite of opportunities as is provided to Saskatoon residents to support a more sustainable and environmentally friendly economy.

One obvious economic benefit of this project for the Saskatoon Region is that through waste diversion, the operational life span of the Northern Landfill is extended. The Northern Landfill offers an invaluable service



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to the surrounding rural and urban communities within the region. The Northern Landfill allows these communities to provide solid waste disposal services to their residents without taking on the long-term financial liabilities that accompany such operations. In the absence of this facility, these member communities would be responsible for locating, constructing, operating and ultimately decommissioning their own landfills which represents a significant burden to each community. To put this into context, annual expenditures on solid waste management in Saskatoon for 2017 were forecasted to exceed \$8 million. It is assumed that any actions that can be taken to extend the operational lifespan of this privately operated and funded facility provides immense economic benefits to all the communities in the region.

We note that the cities of Martensville and Warman have been in discussions with Loraas Environmental regarding the possible expansion of existing recycling activities and the response to this idea has been positively received.

The draft Regional Plan establishes a vision and principles which includes promoting sustainable growth and development in an integrated manner. As previously mentioned, our society has become increasingly conscious of our impact on the environment. Saskatoon has specifically recognized the physical and economic limitations of its own landfill as evidenced by establishing a diversion target of 70% by 2030. The waste management industry has had to change its focus from efficient removal of waste from within human settlements to waste avoidance, minimization and recycling options. The diversification represented by the introduction of this proposed facility in the Saskatoon Region runs in parallel with this objective by providing a basis for supporting waste reduction to the member communities with minimal need for public investment.

The Northern Landfill currently operates as a shared regional facility providing "...world class infrastructure, facilities, and services with the aim to realize cost-effectiveness and improvements in quality through shared systems". We note that the Regional Plan establishes the coordination of infrastructure and services as a strategic priority, but fails to recognize solid waste management and recycling within the list of prioritized services that should be integrated. Failure to recognize the importance of these activities as a vital component in supporting a long-term sustainable future for development in the region is somewhat short sighted. Solid waste management is a land intensive activity which is difficult to introduce as a new use given its propensity for off-site impacts. Maintaining a sufficient land base to support the continued expansion and diversification of waste management activities within the existing facility makes a lot of sense and contributes to the successful realization of the region's vision for a more sustainable community.

We would like to emphasize that the introduction of the NRF at this location is both logical and cost effective for the communities in the region. As an integrated component of the Northern Landfill and a waste diversion activity, the NRF will have little impact on provincial and municipal roadways. It is anticipated that any increase in traffic generation because of the project will be limited to the start-up phase. As the recycling service continues to expand in the surrounding communities, the increase in traffic associated



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with the collection and disposition of organic waste will result in a corresponding reduction in the volume of traffic accessing the landfill. Primary access to the site is provided from Lutheran Road and Highway No. 12. We note that this intersection has undergone significant improvements including the construction of dedicated turning bays and acceleration lanes in every direction to facilitate safe and efficient access and egress from this area. The collection process is intended to utilize the same fleet of trucks that are employed for the landfill, so there should not be any issues with the physical capacity of Lutheran Road to accommodate the additional use.

The NRF will require a valid source of process and domestic water. Potable water for the site is anticipated to be provided via an existing low pressure Inter Valley water line currently serving the Northern Landfill. Potable water usage on the site will be limited to domestic activities only such as toilets, sinks, and washing equipment as necessary.

Process water demands are minimal. Water is introduced into the process to stimulate the decomposition process by making the nutrients in the organic material available to the microorganisms living in the heap. The decomposition process naturally produces wastewater which is captured in a dedicated leachate containment facility for continual reintroduction into the system. Site development is intended to include the construction of a storm retention pond. This facility will be used as a supplemental process water source. These two sources are more than adequate to meet the overall process water requirements for the facility.

Sources of wastewater generated from the proposed development include domestic sewage and process wastewater. Domestic sewage is intended to be captured and contained within a septic holding tank to be evacuated by a licensed hauler and deposited in a registered disposal facility. The frequency of evacuation will be determined by the size of holding tank installed on site which will be determined at the building design phase of the project. The applicant will be responsible for obtaining all necessary approvals for the installation of the holding tank from the Saskatoon Health Region.

Process wastewater or leachate is naturally generated through the decomposition process as water percolates through the composting materials. As this leachate may contain any combination of nutrients, soluble chemicals and organic matter, it is necessary to segregate this water from ground and surface water sources. Each bunker is designed to allow liquids to percolate through the heap to an in-floor leachate collection system situated along the base of the bunker. The bunkers are constructed on a grade to promote the transfer of this collected liquid to a water trap where any suspended or dissolved solids can be captured.

It is estimated that the facility will generate approximately 800 gallons of leachate per day which will be collected in a central holding tank to be installed within the operational boundaries of the site. This water is



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intended to be reintroduced into the composting process. Any excess water collected beyond the process requirements will be evacuated and disposed of in the same manner described above for domestic sewage.

We have endeavoured to prepare a Comprehensive Development Review report to provide a detailed summary of the recycling processes, the operation of the facility, servicing requirements and an assessment of the facilities' compliance with both the RM of Corman Park Official Community Plan/Zoning Bylaw as well as the pertinent Regional Plan policies. The Regional Plan establishes a 60-year planning horizon with an inherent amount of uncertainty on when urban infrastructure will be provided to this site. This uncertainty is a result of the proposed site area being outside of the 25-year planning horizon of both the City of Saskatoon and the City of Martensville.

A policy which is common to both plans is the need to identify and seek to minimize the external disturbance created by the proposed use on surrounding lands. The GORE® Cover Technology is designed specifically to control particulate and odour emissions from the bunkers throughout the composting process. The feedstock material has the greatest potential to generate odour during the initial stages of the composting process. Materials sorting and initial processing of the feedstock is intended to occur within the tipping building which will be equipped with a biofilter designed to filter particulate and gaseous matter that would-be odour causing. Odour generation dissipates as the heaps progress through the composting process.

We believe there is an opportunity to achieve our client's objectives without sacrificing the long-term goals of the region by considering changing the designation of the eastern half of the quarter section to Regional Infrastructure and leaving the area fronting Highway No. 12 under the current Urban Commercial/Industrial designation. The Regional Plan acknowledges that the decisions concerning the final composition of land uses in the Urban Commercial/Industrial areas will be established through a second-tier plan to be prepared in the future. In our opinion consideration of this request for a partial re-designation is an appropriate compromise, representing a commitment to environmental sustainability while not prejudicing the future planning processes envisioned by the Regional Plan.

Thank you for consideration of this request. Please feel free to contact me if you have any questions concerning our intentions or about the information represented in this letter.

Yours truly,



Associated
Engineering

GLOBAL PERSPECTIVE.
LOCAL FOCUS.

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Rebecca Row, RPP
RM of Corman Park No. 344
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Bill Delaine, RPP
Project Manager

BD/bd