
RFP:	COM-PE-3-24- City of Morden Infrastructure Master plan
Addendum #:	01
Issue Date of this Addendum:	Dec 06, 2024

1. **Closing date and time** is changed to 2:00pm Tuesday January 14, 2025.

2. **Replace Part- A - 2. Purpose and Scope** with the following:

Purpose and Scope:

The Infrastructure Master Plan will provide a holistic approach to managing Morden's critical infrastructure systems. It will incorporate current best practices, innovative technologies, and sustainable approaches to infrastructure management. The plan will cover the entire City of Morden and the collaborative area (see Appendix A) including the urban neighborhood and urban downtown areas identified in the current Development Plan with a focus of providing efficient infrastructure services to a projected population of 19,040 by 2045.

Transportation System Analysis:

City owns and operates about 80 kilometers of road network. With continued population growth over the years the network is experiencing a drop in service levels. Also with the expansion in the urban sprawl there is a need to plan how the collector and arterial road system will be extended into the new growth areas. The scope of the transportation system plan is but not limited to:

- Evaluate the existing road network, including Provincial Trunk Highways and Provincial Roads running through the municipality.
- Assess current traffic patterns and identify congestion points.
- Analyze active transportation infrastructure and connectivity, including recreational paths and hiking trails.
- Recommend geometrical or capacity improvements required in the transportation network.
- Develop future collector and arterial road network extending into the undeveloped areas within the city limits and into the collaborative planning area.
- Develop strategies for improving overall mobility and safety, considering the policies outlined in the current Development Plan for Urban Areas and Urban Neighborhoods.

Water System Evaluation:

City owns and operates a water system consisting on intake water well, water treatment plant, standpipe, booster stations and distribution network. City Primary raw water source is Lake Minnewasta. City water demand is close to the limit of raw water license and lake Minnewasta is fully allocated. City also obtains about 10% of its water demand from PVWC. Recently, City has completed a water system assessment, WTP upgrade functional design and a preliminary study for Pembina River Water Supply is in progress. This data can be utilized to inform and incorporate into the water treatment portion of the infrastructure master plan. The scope for the water portion is but not limited to:

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- Incorporate data from past and recent studies to prepare a plan for the water treatment.
 - Assess water quality and quantity issues.
 - Project future water demands based on population growth scenarios. (projections available from recent studies)
 - Identify necessary upgrades and expansions to meet future needs, in line with the current Development Plan's policies on water resource protection. (water plant upgrades identified in the recent reports)
 - Assess the water distribution system in terms of peak hourly and fire flow demands and provide upgrade recommendations to meet future demands.

Wastewater Infrastructure Evaluation:

City currently owns and operates a wastewater lagoon, 7 lift stations, forcemains and a gravity collection system. The wastewater lagoon is at its hydraulic and treatment capacity. City has completed number of preliminary studies and have evaluated different options for the wastewater treatment upgrades. The outcome of the studies will be utilized by the successful proponent to inform and incorporate into wastewater treatment system of the master plan.

- Project future wastewater flows based on population growth scenarios based on the development plan and recent wastewater studies.
- Incorporate the wastewater upgrade studies outcomes to inform and build into the wastewater treatment portion of the master plan.
- Analyze the existing wastewater collection systems.
- Assess the trunk sewer mains, lift stations and forcemain system capacity to handle current and projected wastewater volumes.
- Identify necessary upgrades or expansions to the collection system to meet future needs.

Storm Drainage System Evaluation:

- Analyze the existing stormwater management infrastructure, including natural drainage systems and Dead Horse Creek.
- Assess the system's capacity to handle current and projected rainfall events.
- Identify areas prone to flooding or inadequate drainage.
- Propose green infrastructure and low-impact development solutions, considering the natural topography and the Manitoba Escarpment.

Climate Change Resilience:

- Evaluate the potential impacts of climate change on all infrastructure systems, considering the climate trends and projections mentioned in the background study.
- Develop adaptation strategies to enhance infrastructure resilience.
- Incorporate sustainable and environmentally friendly practices in infrastructure planning.

Growth Management:

- Align infrastructure planning with Morden's projected population growth.

- Consider the anticipated need for approximately 2,700 new dwelling units by 2045, as mentioned in the background study.
- Integrate infrastructure planning with land use strategies to support sustainable urban development, considering the various land use designations outlined in the current Development Plan.

Economic Development Support:

- Ensure infrastructure planning supports Morden's diverse economy, including manufacturing, agriculture, and service sectors.
- Identify infrastructure improvements to attract and retain businesses, considering the Urban Employment Areas identified in the current Development Plan.

Financial Analysis:

- Develop cost estimates for proposed infrastructure improvements.
- Create a sustainable long-term financial plan for infrastructure development and maintenance.

Implementation Strategy:

- Prioritize infrastructure projects based on urgency, impact, and available resources.
- Develop a phased implementation plan with clear timelines and milestones.
- Identify potential challenges and mitigation strategies for project execution.

Public Engagement:

- Design and implement a robust public consultation process, building on the engagement efforts mentioned in the background study.
- Engage diverse stakeholders, including residents, businesses, and community organizations.
- Incorporate public input into the final Infrastructure Master Plan.

Environmental Considerations:

- Integrate protection measures for natural areas, including wildlife habitats, waterways, wetlands, and treed areas, as the current Development Plan emphasizes.
- Given the significant agricultural land cover in the planning district, consider the impact of infrastructure development on agricultural lands.

Intergovernmental Coordination:

- Ensure alignment with the policies and objectives of the Morden-Stanley-Thompson-Winkler (MSTW) Planning District Development Plan.
- Coordinate with Pembina Valley Watershed District, MTI and other Provincial Departments and stakeholders.

3. Replace Part-B 1. Consulting Services with the following:

1. Consulting Services

This section outlines the key objectives and scope of work for the consultants who will develop the Morden Infrastructure Master Plan. The plan focuses on three central infrastructure systems: transportation, water, and storm drainage. Here's a breakdown of each objective.

a. Objectives:

i. **Comprehensive Infrastructure Assessment:**

- This involves a thorough evaluation of Morden's existing infrastructure.
- Consultants will assess the capacity, and performance of transportation networks (roads, bridges, public transit ‘Taxicab’), water systems (supply, treatment, distribution), Wastewater system, and storm drainage systems.
- The goal is to identify strengths, weaknesses, and areas needing improvement in the current infrastructure.

ii. **Future Needs Analysis:**

- Based on projected population growth and planned developments in Morden, consultants will estimate future infrastructure demands.
- This includes forecasting increased traffic, water usage, wastewater, and stormwater runoff.
- The analysis will help identify where and when infrastructure upgrades or expansions will be needed to meet future needs.

iii. **Sustainable Development:**

- This objective focuses on incorporating environmentally friendly practices and technologies into infrastructure planning.
- Examples include green stormwater management techniques, energy-efficient water treatment, or sustainable transportation options.
- The goal is to ensure that infrastructure development minimizes environmental impact and supports long-term sustainability.

iv. **Financial Viability:**

- Consultants will develop strategies to make infrastructure development and maintenance cost-effective.
- The aim is to ensure that infrastructure plans are financially sustainable for the city in the long term.

v. **Resilience Planning:**

- This objective focuses on making infrastructure robust enough to withstand and adapt to the impacts of climate change.
- Consultants will consider potential climate risks (e.g., increased flooding and extreme weather events) and incorporate appropriate adaptation measures into infrastructure plans.
- The goal is to ensure that Morden's infrastructure remains functional and reliable despite changing environmental conditions.

b. Background Data and Studies Available

- City will make the following studies available to the successful proponent
 - AutoCAD base map and GIS shape files for city assets
 - Water system assessment report
 - MSTW development plan
 - Water Model and Sewer Model
 - Morden East and Morden West traffic impact studies
 - Water Treatment Plant Upgrade study (AE 2022) (draft)
 - Wastewater System Upgrade studies
 - Water System Capital Improvement Plan (JDB 2020)

c. Deliverables

Deliverables and the content each will include:

i. Comprehensive Infrastructure Master Plan Document

- Executive Summary (maximum 10 pages)
- Detailed analysis of current infrastructure systems (transportation, water, sewer, storm drainage)
- Future demand projections for each system (20-year horizon)
- Recommended improvements and upgrades for each system
- Prioritized list of capital projects with budgetary cost estimates
- Implementation strategy with short-term (0-5 years), medium-term (5-10 years), and long-term (10-20 years) actions
- Sustainable development strategies and green infrastructure recommendations
- Climate change adaptation and mitigation measures
- Financial projections
- Policy recommendations for infrastructure development and management

ii. Maps and Visual Representations

- Current infrastructure network maps (minimum 1:10,000 scale)
- Future infrastructure network maps showing proposed improvements (minimum 1:10,000 scale)
- Thematic maps highlighting areas of concern or priority (minimum 1:20,000 scale)
- Infrastructure capacity and demand heat maps
- Phasing maps for implementation strategy

End of Addendum#01