Terms of Reference:

Functional Servicing Report

Description:

A Functional Servicing Report (FSR) provides a review of functional serviceability for a proposed development and determines the overall impact of a land development proposal (i.e, Plan of Subdivision), proposed conversion or changes of land uses and intensification, water and wastewater service capacities, and the storm drainage system. It also determines the required improvements to the municipal servicing infrastructure, stormwater management systems, water balance as well as any mitigation measures to minimize negative impacts.

Development Application Stream(s):

An FSR may be required as part of the following applications:

- Official Plan Amendment;
- Zoning By-law Amendment;
- Plan of Subdivision;
- Site Plan Control**

** For Site Plan Control applications, an FSR would require a capacity analysis if there is a change to the existing sanitary drainage pattern, changes to the combined sewer system, or in limited cases groundwater foundation drainage discharge proposed to the sanitary system or both.

Prepared By:

The FSR must be prepared by a registered professional engineer qualified in municipal engineering. All drawings must be stamped, signed, and dated by a professional engineer, licensed in the Province of Ontario.

Rationale:

The FSR is required to assist staff in determining if the existing water and wastewater services and stormwater management systems are adequate for the proposed development, or if services need to be upgraded.

Content:

The FSR should include sufficient details for the local municipal and Regional staff to determine the financial and infrastructure implications of servicing (water, wastewater, stormwater, site grading and utilities) the proposed development. The submission should include reports, plans, computer modeling results and/or design calculations relating to the designs, upgrades of municipal services and related reports.

The FSR should at a minimum contain:

1. Introduction

- 1.1. Purpose of Study
- 1.2. Background Information
- 1.3. Site Description
- 1.4. Environmental Constraints and Development Limit
- 1.5. Proposed Development Plan, Phasing and Tenureship

2. Grading Plan
   - 2.1. Existing Grading Plan
   - 2.2. Proposed Grading Plan

3. Water Servicing Plan
   - 3.1. Existing Water Servicing and Connections
   - 3.2. Proposed Watermain System Analysis and Design

4. Sanitary Servicing Plan
   - 4.1. Existing Sanitary Servicing, Connections and Flows
   - 4.2. Design Criteria and Demand
   - 4.3. Projected Sanitary Flows
   - 4.4. Proposed Sanitary Servicing Plan

5. Storm Sewer Servicing Plan
   - 5.1. Existing Storm Sewer Servicing and Connections
   - 5.2. Proposed Minor Storm Sewer System
   - 5.3. Proposed Major Storm Drainage System
   - 5.4. Proposed Easement(s) as applicable

6. Stormwater Management Plan
   - 6.1. Existing Drainage Pattern and Peak Flows
   - 6.2. Existing Soil and Groundwater Information
   - 6.3. Stormwater Management Criteria

- 6.4. Proposed Stormwater Management Plan
  - 6.4.1. Quantity Controls
  - 6.4.2. Quality Treatment
  - 6.4.3. Erosion Controls as applicable
  - 6.4.4. Stormwater Management Pond Design as applicable
  - 6.4.5. Water Balance 6.4.6. CLI ECA Compliance

7. Sustainability Assessment and Summary - Stormwater Management

8. Utilities
   - 8.1. Existing Conditions
   - 8.2. Servicing Considerations
   - 8.3. Hydro
   - 8.4. Telephone
   - 8.5. Natural Gas
   - 8.6. Cable Television and Internet
   - 8.7. Street Lighting

9. Geotechnical and Hydrogeological Findings and Recommendations

10. Erosion and Sedimentation Control Plan

11. Conclusion
    - 11.1. Grading Plan
    - 11.2. Water Servicing Plan
    - 11.3. Sanitary Servicing Plan
    - 11.4. Storm Sewer Servicing Plan
    - 11.5. Stormwater Management Plan
    - 11.6. Sustainability Assessment and Summary
    - 11.7. Utilities

List of Figures

List of Appendices

Additional Resources:

- Professional Engineers of Ontario – Why employ a professional engineer?
- Stormwater Management Planning and Design Manual
- Stormwater Management, City of Brampton