The City of SPRUCE GROVE

TERMS OF REFERENCE FOR CONCEPT PLANS

2026

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INTRODUCTION

Area Structure Plans guide the growth of new areas in Spruce Grove. Area Structure Plans (ASP) provide a high-level framework for developing new areas, including housing, commercial areas, schools, parks, roads, servicing as well as population projections and density. ASPs typically encompass up to four quarter-sections of land and contain three or more neighbourhoods.

With a need to provide more details than the overarching ASP on proposed land uses, housing mix, neighbourhood design, density and population projections, servicing and the local road network, the City of Spruce Grove now requires developers **to provide either a** Neighbourhood Plan or a Concept Plan (not both) to support future development.

Neighbourhood Plans are required to support development in undeveloped neighbourhoods that contain approximately 1 quarter section, while Concept Plans are required in areas that are partially developed and contain less than 1 quarter section of land. Both Neighbourhood and Concept Plans are directly connected to the Land Use Bylaw and play a critical role in guiding future applications for redistricting (change of district), subdivision (lot layout) and development (building sites).

To support further development in the following neighbourhoods, a Concept Plan will be required for:

- *Greenbury Neighbourhood*
- *Copperhaven Neighbourhood*
- *Prescott Neighbourhood*
- *Legacy Ridge (eastern quarter section) Neighbourhood*
- *Easton Neighbourhood*
- *Tonewood Neighbourhood*

Please note small-scale redistricting applications (i.e. a small scale extended care facility, commercial development, apartment or similar development) may have

reduced requirements at the discretion of the General Manager. While Area Structure Plans are a statutory plan that are adopted and amended through Council as a bylaw, Neighbourhood and Concept Plans are non-statutory plans and will be approved by the General Manager.

PLANNING FRAMEWORK

The Municipal Government Act (MGA) provides the legal framework for governance and planning in Alberta municipalities. The MGA regulates the preparation and adoption of land use plans, land use bylaws, and subdivision and development approval.

The City's *Municipal Development Plan: The Shape of Our Community* (MDP) provides high level direction on future growth and development for the next 20 to 30 years. The MDP supports decision-making around urban development and growth. It also supports key aspects of the community such as economic development, housing, transportation, parks and recreation, culture, and the environment. The MDP requires ASPs to support future development and Neighourhood Plans to guide subdivision and development at the neighbourhood scale.

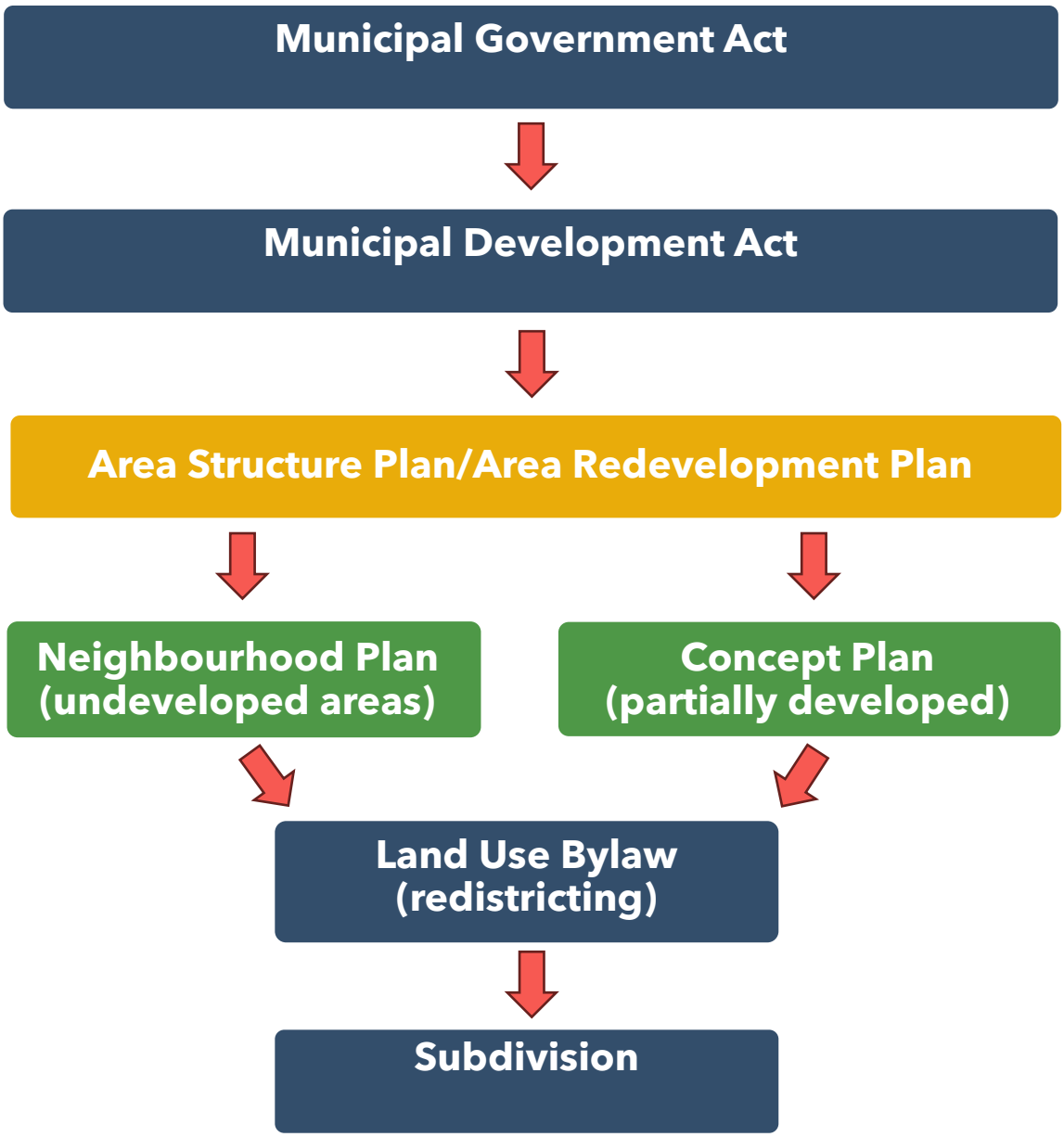
Area Structure Plans and Area Redevelopment Plans provide details on the growth and development of specific areas of the city (1 to 4 quarter sections of land) and must align with the MDP. All ASPs include information on land use, infrastructure, and density. Area Redevelopment Plans guide redevelopment and revitalization within existing developed areas through consideration of land use, mobility, and urban design.

Neighborhood Plans and Concept Plans are non-statutory plans that provide more detail than the overarching Area Structure Plan for approximately one quarter section of land (a neighbourhood), including the proposed land uses and associated policies, housing mix, neighbourhood design, density and population projections, servicing, and the local road network. Neighbourhood Plans are required for undeveloped areas while Concept Plans are required for partially developed areas. Neighbourhood Plans and Concept Plans must align with Area Structure Plan.

The Land Use Bylaw regulates the use and development of all land and buildings in the City.

Subdivision is the dividing of a single parcel of land into two or more parcels, each to be given a separate title.

Figure 1 - Planning Framework



The following table demonstrates the different requirements for Area Structure Plans, Neighbourhood Plans and Concept Plans.

Table 1 - Area Structure Plan, Neighbourhood Plan and Concept Plan Requirements

	Area Structure Plan (Statutory Plan)	Neighbourhood Plan (Non-statutory Plan)	Concept Plan (Non-statutory Plan)
Area	1 to 4 quarter sections and contains multiple neighbourhoods	1 quarter section or one neighbourhood	Less than 1 quarter section or part of a neighbourhood
Regulatory Alignment	√	√	√
Site Context	√	√	√
Vision, Principles and Policies	√	√	
Public Engagement	√	√ May be required	May be required
Development Concept and Associated Policies	√	√	√ Development Concept required but associated policies are not required
Land Use Table and Population Projections	√	√	√
Figures	√	√	√ Fewer required
Engineering Design Brief	√(Tier I)	√ (Tier II)	Tier II may be required if changing servicing, density or shifting location of density from the approved ASP
Technical Studies	√	√	As required

PURPOSE

The purpose of the following document is to establish the process and submission requirements for Concept Plans. Concept Plans are required in partially developed areas and contain less than 1 quarter section of land, while Neighbourhood Plans are required in undeveloped neighbourhoods that contain 1 quarter section. Preparing a new Concept Plan or amendments in conformity with this Terms of Reference does not guarantee it will be supported by Administration.

The Concept Plan application process typically takes 3-4 months to complete. If significant revisions are required, the timeline will be expanded as needed. Concept Plan applications involve the following key steps, which are described further below:

1) *Pre-Application Meeting*
2) *Application Submission and Acceptance*
3) *Application Review*
4) *Public Engagement*
5) *Decision*

PROCESS

Pre-Application Meeting

A pre-application meeting is required for the development of a Concept Plan. Planning and Development will schedule the meeting and invite other departments as required. In advance of the meeting the applicant must provide an agenda and preliminary information about the development concept to Planning and Development staff.

The pre-application meeting will address:

- *Planning process, requirements and timelines;*
- *Identification of any known or potential engineering constraints regarding servicing, transportation, grading etc.*
- *Preliminary discussion of the development concept;*
- *Consultation requirements; and*
- *Technical study requirements and level of detail.*

The applicant is required to distribute the meeting notes to all attendees for review. Planning and Development will provide clarification or revisions to the applicants meeting notes.

Application Submission and Acceptance

Applications are submitted through the Spruce Grove CityView portal. Application requirements include, but are not limited to:

1) *Cover letter*

2) *Certificate of title and all instruments registered on title (within 30 days) including a letter detailing the purpose of all instruments on title.*
3) *Owner (s) Authorization from all landowners.*
4) *Right of Entry form*
5) *Draft Concept Plan document or Amendment Document (PDF and word format that can be edited, and all images must be provided to City standards).*
6) *Redline version of the Concept Plan amendment document*
7) *PDF and AutoCAD version of the development concept and all figures per City standards.*
8) *Required Technical Studies and Reports*
9) *Tier II Engineering Design Brief (if required)*
10) *Public Engagement Plan (if required)*

A complete application includes all required forms, fees, technical studies and supporting documentation. Incomplete applications will not be processed. Planning and Development will send a notice of complete or incomplete application to the applicant.

Application Review

When the application is deemed complete, the Planning and Development Department will circulate the application to internal and external agencies for review. Following the referral period, the City's internal Technical Review Committee will review and confirm the circulation comments. The Technical Review Committee meets every two weeks. After the Technical Review Committee, the Planner will compile all the comments and send them to the applicant. The applicant must address any comments received to the satisfaction of the Planning and Development Department. Sometimes this may require additional meetings with the applicable referral agencies. Please note technical studies may require a longer review timeframe. At the discretion of the Planning and Development Department, a revised application and re-circulation may be required.

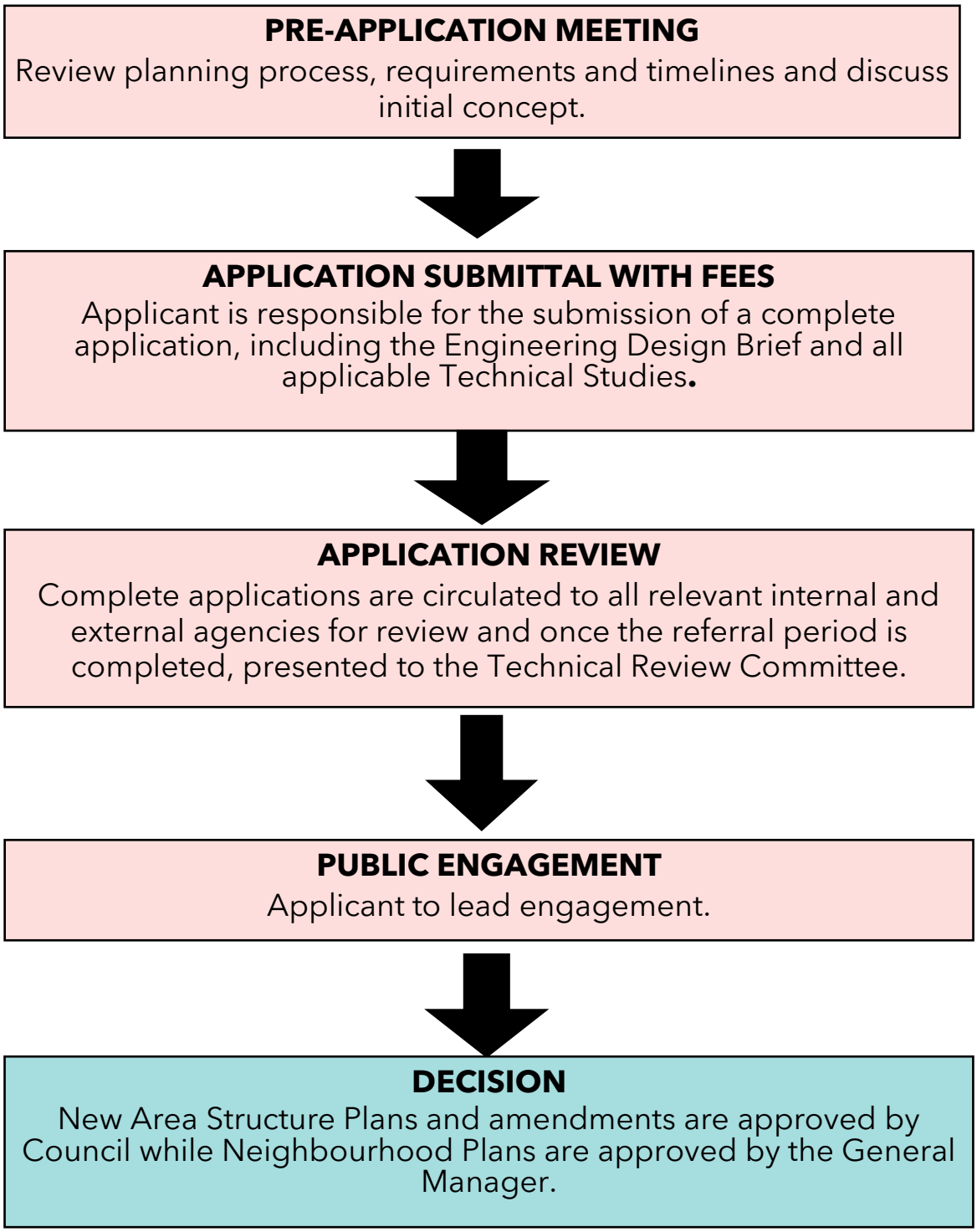
Public Engagement

Generally public engagement will not be required for new Concept Plans and amendments if they align with the overarching Area Structure Plan. However, engagement may be required at the discretion of Administration (i.e. an increase in density is proposed). If engagement is required, the applicant is responsible for conducting all the engagement activities. On-site notification signs are required for new Concept Plans and amendments as per policy CP-1068-26 – Land Use and Development Notification Signs Policy.

Decision

When the Concept plan is prepared to the satisfaction of the Director of the Planning and Development Department and the Director of Engineering and it will be referred to the General Manager. Concept Plans are non-statutory and approved by the General Manager. Once Concept Plans are approved, they are posted on the City's website.

Figure 2 – Process for New Area Structure Plans and Neighbourhood Plans and Amendments



CONCEPT PLAN AMENDMENTS

The City will determine if an amendment to the Concept Plan is required through the pre-application meeting. Generally, an amendment to a Concept Plan is required for the following reasons:

- *Changes to land uses (i.e. residential to commercial)*
- *Significant changes to residential density*
- *Changes to servicing including water, sanitary, and storm*
- *Changes to the road network*
- *Major changes to the size or location of a park or school site.*

The City recognizes that Concept Plans are somewhat conceptual in nature, and minor adjustments (i.e. road or land use shifts a meter or at the discretion of the planning and development authority) may not require an amendment.

The Concept Plan amendment application follows the same process and timelines as new Concept Plan applications. Concept Plan amendment applications are required to provide a plan amendment document that includes:

- *An introduction that describes the proposed amendment, including location within the approved plan.*
- *Brief description of when the Concept Plan was adopted and any subsequent amendments, including dates.*
- *A description and rationale for the plan amendment, including:*
    - *Alignment with the Municipal Development Plan – The Shape of Our Community, Area Structure Plan in effect, Land Use Bylaw C-824-12, and Integrated Transportation, Storm, Water and Sanitary Master Plans.*
    - *Identification of the area (s) and size (s) of the proposed amendment.*
    - *Impacts of the proposed amendment to land areas (residential, commercial, institutional, industrial, parks and Municipal Reserve, Environmental Reserve, open spaces), density, and population statistics.*
    - *Impacts of the proposed amendment to servicing (sanitary, storm, water) and the road network.*
    - *Impacts of the proposed amendment to staging.*
- *Updated land use tables, including land use statistics and projected residential land use, dwelling unit count, and population.*
- *Development concept maps showing the current and proposed land use changes and any changes proposed to the road network.*
- *All figures with proposed changes that show existing and proposed changes (highlighted with a box) and a clean final version.*
- *Updated staging plan if changes are proposed.*
- *A redline version of the Concept Plan showing the specific, proposed amendments.*
- *Updated servicing information may be requested.*
- *New or updated technical studies may be requested.*
- *If public engagement is held, the details and feedback should be summarized.*

CONCEPT PLAN REQUIREMENTS

INTRODUCTION

This section of the Concept Plan should describe the purpose of the plan, and timeframe for implementation. It should describe the plan area in relation to the City, surrounding area and approved Area Structure Plan.

SITE CONTEXT

This section should include a description of all existing land uses for the plan area and adjacent land uses. This section should also describe development opportunities and constraints within and adjacent to the plan area, including but not limited to:

- *Existing vegetation, natural areas, wetlands (including type and classification) and waterbodies*
- *Existing and proposed infrastructure (storm, drainage, water and sanitary)*
- *Potential areas of contamination including pipelines and wells (active and abandoned)*
- *Areas with steep slopes (15% or greater)*
- *General location of top of bank*
- *Rail lines*
- *Major right of ways*
- *Surrounding land uses and boundary conditions (topography and grading)*

A site contours map identifying topography (at a minimum of 2m intervals) and drainage patterns within the plan area should be provided.

REGULATORY ALIGNMENT

This section should briefly review how the Concept Plan complies with the following plans and bylaws. Please note Administration may add additional plans, policies or bylaws to this list:

- *Municipal Development Plan – The Shape of Our Community*
- *Parks and Open Space Master Plan if a park is proposed*
- *Area Structure Plan in effect*
- *Land Use Bylaw C-824-12, as amended*
- *Integrated Transportation, Storm, Water and Sanitary Master Plans*

PROPOSED DEVELOPMENT CONCEPT WITH DESCRIPTION OF EACH LAND USE

The following section should describe future land uses and the development concept proposed for the area as described below.

Table 2 – Land Use Details

Land Use	Type	Details
Residential	Low Density Residential (single detached, zero lot line and semi detached/duplex) is considered 25 to 35 du/nrha	• *Densities and housing mix* • *Lots fronting onto collectors* • *Lots with front and rear drive access* • *Districting (low, medium and high density) along roads.*
	Medium Density Residential (row housing) is considered 35 to 80 du/nrha	
	High Density Residential (apartments) is considered 80 to 150 du/nrha	
Mixed Use and Commercial Areas	Neighbourhood and large-scale commercial, and mixed use	• *Access strategy for mixed use and commercial developments* • *Design considerations (i.e. active street frontage, location of parking)*
Industrial	Medium and Light Industrial/Business Park	• *Mix of industrial uses* • *Design considerations*
Institutional	Hospitals, Emergency services	• *Placement along arterials, collectors and locals*

Municipal Reserve (MR) and Parks	• *Park sizes and road frontage* • *Potential school site area assumptions and type of school (elementary, junior high or high school).*	• *Park sizes and configurations* • *Proposed programming for parks* • *Proposed road frontage*
Open Spaces	Public utility lots and stormwater facilities	• *Sizes, shapes and road frontages*
Environmental Reserve (ER) /Natural Areas	• *Wetlands* • *Tree stands* • *Steep slopes* • *General location of top of bank (Identification of the top of bank location and recommended appropriate development setback will be identified through a slope stability assessment at the time of subdivision or development permit).* • *Interface/buffer with Environmental Reserve, Natural areas (tree lines)*	• *Wetland identification, classification, impacts, and compensation* • *Natural areas to be retained and proposed to be removed.* • *Description of the interface with Environmental Reserve and Natural Areas*
Transportation Network	• *Arterial, collector, local roads and alleys*	• *Block lengths* • *Roundabouts* • *Intersections* • *Access to the area* • *Identification of any variance from the approved road cross sections or standards that are being proposed for the plan area* • *Roads (arterials, collectors, locals and alleys) with adjacent/fronting/flanking land uses*
Active Transportation	• *Multi-use trails and sidewalks*	• *Location and connectivity to amenities.* • *Integration with road network.*
Right-of-Ways	• *Utility corridors, power lines, gas and oil transmission lines*	• *Location* • *Incorporation with walkways and multi-use trails*

LAND USE TABLE AND DEVELOPMENT STATISTICS

Table 3 - Land Use Statistics

	Area (ha)	Area (ac)	% of Gross Developable Area
Gross Plan Area			
Environmental Reserve			
Conservation Reserve			
Gross Developable Area			
Municipal Reserve including park breakdown and schools			
Non-credit Municipal Reserve			
Arterial Roads			
Collectors Roads			
Local Roads			
Public Utility Lots			
Storm Water Management Facilities			
Total Residential Area			
Low Density Residential (single detached and semi detached/duplex)			
Medium Density Residential (row housing)			
High Density Residential (apartments)			
Commercial Area			
Mixed-Use			
Total Industrial Area			
Light Industrial/Business Park			
Medium Industrial			
Institutional Area			

Projected Residential Land Use, Dwelling Unit Count, and Population

The projected residential land use, dwelling unit count, and population statistics should be provided in the format below, using the following density ranges:

- *Low density: 25 to 35 du/nrha*
- *Medium density: 35 to 80 du/nrha*
- *High density: 80 to 150 du/nrha*

Table 4 - Projected Residential Land Use, Dwelling Units, and Population Statistics

Land Use	Area (ha)	Percentage of Net Residential Area	Units/ha	Units	People/Unit	Population
Low Density Residential						
Medium Density Residential						
High Density Residential						
Mixed Use Residential if applicable						
Total Residential						

INFRASTRUCTURE AND SERVICING

This section should identify any proposed changes to the water, storm and sanitary systems. It should also describe any increases in density or changing locations of density from the approved Area Structure Plan and its impact on servicing.

STAGING

A description of the staging and identifications of specific, defined staging areas (i.e. 1-4) and subsequent planning and development approvals should be provided. This section should also identify major infrastructure requirements for triggering stages.

MAPS

The following maps are required to be provided with the Concept Plan:

- *Site Location Map*
- *Development Constraints Map including topography/contour*
- *Development showing arterial, collector and local road network (including lanes)*
- *Parks, Open Spaces and Natural Areas Map (including lands to be dedicated as Municipal Reserve, Environmental Reserve and Public Utility Lots)*
- *Servicing Maps if changes are proposed*
- *Staging Plan*

REQUIRED TECHNICAL STUDIES

At the discretion of the Planning and Development Department, the following technical studies may be required:

- *Biophysical Assessment Report*
- *Environmental Site Assessment*
- *Traffic Impact Assessment (Tier Two)*
- *Updated Engineering Design Brief (storm, sanitary and or water) if changes to the proposed servicing network, increases in density or shifting locations of density.*

APPENDIX 1 – TECHNICAL STUDY DETAILS

The required technical reports should be confirmed with the City of Spruce Grove Administration during the pre-application meeting. Additional technical reports could also be identified through the circulation process.

Depending on the type, age, and scope of the technical studies submitted with the overarching Area Structure Plan, some technical studies may be required with the Concept Plan. Once a technical study has been accepted, the City will initiate a review and circulate it to the appropriate departments. In addition, the City may at their discretion engage a third part to conduct a comprehensive review. Fees are associated with this third part review, in accordance with the Development Fees Bylaw.

Applicants may be required to provide other technical studies not identified below to support their application.

Type of Study	Timing of Study	Details
<u>Land Use Planning & Environment</u>		
Type of Study	**Planning Process**	**Study Description and Details**
Environmental Site Assessment	A Phase I Environmental Site Assessment (ESA) is required to support new Concept Plans. However, where a Phase I ESA has been previously completed for participating lands more than one year but less than five years before the	**<u>Study Description</u>** *A* Phase I Environmental Site Assessment is an investigation to determine if a site is, or may be, contaminated. All Phase I ESA must meet standards set by the Canadian Standards Safety Association *CSA Z768-01 (R2022)-Phase I Environmental Site Assessment* and the Government of Alberta GoA *2016*

	submission date of the Concept Plan, an updated ESA may be required depending on activities during that time at the discretion of the City. Phase 1 ESAs completed more than five years before the date of submission will require updates unless exempted in writing by the City. If an ESA has not been previously provided, it may be required with a CP amendment. All Phase I recommendation for further assessment recommendations must be completed and reported in a Phase 2 ESA prior to any soil disturbance or development within the area of potential concern (APEC). Any contamination identified during a Phase II ESA will be reported immediately to Alberta Environment and Protected Areas (APEA) in accordance with environmental regulations. All contaminated sites must be remediated or obtain approved risk management plans by APEA prior to development.	*Environmental Site Assessment Standard*. A Phase II is an intrusive investigation and confirmation of APECS through characterization and laboratory analysis of soil and groundwater. All Phase II ESAs submitted to the City should be completed in accordance with Z769-00 (R2018)-Phase II Environmental Site Assessment. Following the results of the Phase 2 ESA, remedial or risk management may be requested prior to proceeding with development. **Study Details** The Phase I ESA must provide concise conclusions and recommendations which should indicate whether additional investigation is required and clearly outline any APECs that are associated with the site. The conclusion of a Phase 2 ESA should include sufficient information to support either: that there is no reasonable basis to suspect a substance release OR confirmation that a substance release has occurred and remedial measures and/or risks management should be taken.
Biophysical Assessment Report	At the Concept Plan stage, a field-verified Biophysical	**Study Description** A Biophysical Assessment Report is a field-verified study to confirm and

	Assessment Report (BIA) may be required.
	
	If a Biophysical Inventory or Biophysical Impact Assessment Report was not provided with an ASP, deemed insufficient or not updated appropriately with subsequent amendments, one may be required at the discretion of the City.
	
	Note: Environmental features identified through the BI or BIA may trigger additional studies, approvals, or reporting requirements under provincial or federal legislation (i.e. Water Act Wetland Assessment and Impact Report, Species at Risk considerations, or other regulatory requirements). Where applicable, the municipality may require confirmation of such approvals and submission of supporting documentation prior to further consideration of the application
		delineate feature boundaries as identified in the Biophysical Inventory, assess potential development impacts, and recommend mitigation measures. This assessment informs detailed neighbourhood design, infrastructure layout, and reserve land dedication. This report shall be completed by qualified professionals.
		
		Study Details
		
		Biophysical Assessment Report must include:
		
		Introduction includes a description of the proposed development and its purpose, the study area and surrounding context, and identification of applicable legislation (federal, provincial, and municipal).
		
		Methodology and qualifications describes methods used to collect and analyze data, sources of information, assumptions and study limitations, and recommendations for additional studies where required. Includes qualifications and credentials of the project team.
		
		Inventory and assessment provides a comprehensive, field-verified characterization of the existing biophysical conditions within the study area and adjacent lands potentially impacted by the proposed development. Confirms and delineates features identified in the Biophysical Inventory. Includes, but is not limited to:
		
		• *Physical environment identifies, describes, and maps key physical characteristics, such as:*
		  ○ *Topography (landforms, slopes, elevation patterns)*
		  ○ *Geology (surficial and bedrock geology)*

		○ *Hydrology (surface and groundwater features, flow patterns, connectivity)* ○ *Soils (types, properties, distribution)* • *Biological environment identifies, describes, and maps important biological features, such as:* ○ *Wetlands (location, classification, boundaries)* ○ *Vegetation (composition, extent, condition)* ○ *Wildlife (significant habitat features, movement corridors)* ○ *Aquatic resources (location, fisheries where applicable)* Sensitive and constrained lands identifies lands that may qualify as Environmental Reserve, Environmental Reserve Easement, or Conservation Reserve, as well as lands subject to constraints such as hazard lands or Crown claimable lands. **Impact assessment** includes identification and evaluation of potential positive and negative impacts of the proposed development on the biophysical environment, such as drainage alterations, habitat loss, slope stability impacts. Captures the nature and extent of anticipated impacts, criteria used to predict impacts, as well as direct, indirect, and cumulative effects where applicable. **Consultation** identifies agencies, stakeholders, and other interests consulted during report, with a summary of key input received, where applicable. **Mitigation measures** recommends measures to avoid, minimize, or mitigate identified negative effects, which may include dedication of lands as Environmental Reserve, Environmental

		Reserve Easement, or Conservation Reserve; design considerations and buffers; construction and operational mitigation measures; and interface management (i.e. Natural Area Interface Study). **Reporting framework** present results in a clear framework to support decision makers in determining appropriate land use, reserve dedication, and development conditions. **Viability and sustainability** assesses the long-term viability and ecological sustainability of natural areas within the context of the proposed development or redevelopment and surrounding land use. The applicant is responsible for obtaining and providing all provincial approvals as required as part of the plan development process.
Wetland Assessment	May be required at the Concept Plan stage, or future subdivision of lands, at the discretion of the City. Please note the City requires Water Act approval for wetlands to support redistricting applications.	**Study Description** A Wetland Assessment identifies and classifies wetlands through field surveys. **Study Details** Wetlands are to be assessed under snow free conditions when an appropriate amount of vegetation is present. Field data undertaken for a Wetland Assessment is typically valid for three years, therefore, it should be completed if development is foreseeable within three (3) years from the completion of the Wetland Assessment. The Wetland Assessment must include a report and spatial file that addresses the following: • *Project boundary* • *The ecological boundaries of wetlands delineated according to the*

		Alberta Wetland Identification and Delineation Directive • *Determination of all wetland classes in the wetland as per the Alberta Wetland Classification System.* • *A relative wetland value assessment for each wetland using the actual Alberta Wetland Rapid Evaluation Tool.* • *The area of proposed wetland impacts per wetland (e.g. point or linear disturbances, increase in wetland size or permanence)* • *The area of proposed wetland loss per wetland.* • *Water quality and quantity assessment if a proposed activity could alter the water chemistry discharging into or out of a wetland.* • *Appropriate and sufficient assessments on local hydrology, hydrogeology, geology and/or soils information when a proposed activity is likely to result in changes to the amplitude, timing, frequency, or duration of water discharging into or out of a wetland.*
Engineering		
Engineering Design Brief		Please see the Engineering Design Brief Guidelines.
Traffic Impact Assessment		Follow the City's Municipal Development Standards, which identify requirements for Transportation Impact Assessments. Generally, the TIA will: • *Review existing road network and volumes;* • *Describe additional roadway infrastructure to be built including*

		travel lanes, turning lanes and signals; • *Project traffic generated by development and* • *Assess the anticipated performance of the road network under future conditions.* If the proposed plan area is near a provincial highway, the applicant may be required to consult with Alberta Transportation.
Discretionary Technical Reports		
Noise Impact Assessment		**<u>Study Description</u>** A Noise Impact Assessment identifies and assesses noise sources, and determines appropriate control measures for mitigating noise impacts. A Noise Impact Study is required for all proposed developments with or near a noise sensitive land use.

APPENDIX 2 - ENGINEERING DESIGN BRIEF

OVERVIEW

All planning level estimates (flows, demands, trip generation, servicing assumptions) must be provided in a format compatible with the City's master models. Applicants must:

- *Use the same units, parameters, and contributing basin definitions as outlined in the relevant Master Plans.*
- *Provide tabular data (e.g., ADD, MDD, PHD, fire flows; stormwater peak flows; sanitary flows; trip generation estimates) in a structured format suitable for input into City models.*
- *Clearly state assumptions (population densities, inflow/infiltration ranges, peaking factors, trip rates) so they can be crosschecked against City standards.*
- *The City requires all servicing demand calculations to use the upper limit of the density thresholds defined in the projected residential land use, dwelling unit count and population statistics table.*
- *Identify any deviations from master plan assumptions and justify them at a conceptual level.*
- *Ensure spatial data (conceptual alignments, basins, corridors, PULs) is mapped in a way that can be overlaid with City GIS and model layers.*

TIER I – ENGINEERING DESIGN BRIEF

The Tier I Engineering Design Brief at the Area Structure Plan stage shall provide a conceptual level servicing plan to demonstrate that the proposed ASP area can be supported by municipal infrastructure systems.

The submission should include:

- *Overall servicing feasibility of the ASP area.*
- *Integration with existing and planned municipal infrastructure.*
- *Major infrastructure requirements and system dependencies, both onsite and offsite.*
- *Alignment with Master Plans and Municipal Design Standards.*

The Tier I Engineering Design Brief is a high-level servicing overview only. Detailed engineering design is not required.

Sanitary Sewer System

The Tier I Engineering Design Brief should summarize the sanitary servicing strategy for the ASP area.

The intent of the submission is to confirm:

- *How sanitary flows will be conveyed to the existing municipal system.*
- *Major trunk connections, general alignment, and general capacity considerations required to service the ASP area.*
- *The general servicing concept (gravity preferred).*
- *Integration with planned regional sanitary infrastructure and future trunk extensions.*
- *Capacity of existing downstream systems and high-level confirmation of integration with the proposed ASP servicing plan.*
- *Any necessary lift stations and required upgrades or extensions to municipal infrastructure.*
- *Major constraints affecting sanitary servicing feasibility.*
- *Offsite sanitary servicing dependencies.*
- *General staging considerations for development.*
- *A summary map that reflects the Area Structure Plan phasing and general sanitary servicing direction.*

Stormwater System

The submission should summarize the stormwater management strategy based on watershed concepts.

The submission shall identify:

- *Overall drainage concept for the ASP area.*
- *Major trunks, drainage pathways, and watershed context.*
- *Conceptual stormwater management facility requirements.*
- *General location of stormwater outfalls.*
- *Integration with existing stormwater systems.*
- *Downstream capacity considerations.*
- *Requirement for system upgrades or extensions, for both onsite and offsite infrastructure.*
- *Interim drainage considerations for undeveloped upstream lands.*
- *Major constraints affecting stormwater servicing feasibility.*
- *Integration with natural drainage features and environmental systems.*
- *A summary map that reflects the watershed context and general drainage direction.*

Water System

The submission should summarize the water servicing strategy for the ASP area.

The submission shall identify:

- *Overall system integration strategy.*
- *Connection points to the existing water infrastructure system.*
- *Pressure zone considerations.*
- *Major water servicing requirements, including system capacity considerations.*
- *Need for upgrades or extensions to municipal infrastructure.*
- *General servicing constraints affecting feasibility.*
- *General looping considerations to support long term system connectivity.*
- *A summary map that reflects the Area Structure Plan phasing and general servicing direction.*

Transportation Network

The submission should summarize the transportation network required to support the ASP area.

The submission shall identify:

- *Integration with adjacent and future transportation networks.*
- *General alignment throughout the ASP area.*
- *Multimodal connectivity considerations at a conceptual level.*
- *Major constraints affecting transportation feasibility.*
- *A summary map that reflects the Area Structure Plan phasing and network structure.*

TIER II – ENGINEERING DESIGN BRIEF

The Tier II Engineering Design Brief at the Neighbourhood Plan stage shall provide the preliminary engineering servicing details required to demonstrate how the proposed neighbourhood can be serviced and integrated within the existing infrastructure network.

The intent of the submission is to confirm:

- *The proposed neighbourhood servicing concept and infrastructure layout.*
- *Integration with the applicable Area Structure Plan, existing infrastructure, and planned infrastructure projects, both onsite and offsite.*
- *The feasibility of sanitary, stormwater, water, and transportation systems to support the proposed land use concept and staging strategy.*
- *Major infrastructure requirements, servicing constraints, and offsite dependencies affecting neighbourhood development.*
- *Alignment with applicable Master Plans, Municipal Development Standards, and the approved Area Structure Plan.*
- *Identification of potential oversizing or boundary conditions from adjacent land.*

The Tier II Engineering Design Brief is intended to support coordinated infrastructure planning, development staging, and system integration. Detailed construction design is not required.

Sanitary Sewer System

Adhering to the current City of Spruce Grove Sanitary Sewer Master Plan and Municipal Development Standards (MDS), sanitary planning is required to identify the practical conditions for sanitary serviceability, limiting factors in terms of capacities and elevations and the strategy for implementation of the necessary additions or extensions to the sewer network including staging, oversizing, off-site development, etc. Capacity requirements must be defined that address inflow/infiltration contributions. Sanitary planning is formulated on the contributing basin concept. The system shall be designed to provide gravity flow throughout the network. If required, permanent or temporary lift stations are to be identified and explained.

Sanitary Requirements:

- *Describe the overall servicing concept – gravity preferred*
- *Confirm consistency with the City's Sanitary Sewer Master Plan and MDS*
- *Define the contributing basins within the study area.*
- *Illustrate how flows from each basin will be conveyed to the downstream system*
- *Show approximate alignments of major sanitary trunks and service areas.*
- *Identify practical conditions for serviceability, including elevations and slope feasibility*
- *Demonstrate integration with existing and planned City-wide infrastructure.*

- *Provide planning level estimates of sanitary demand based on land use and density assumptions*
- *Address inflow/infiltrations (I/I) contributions*
- *Highlight potential capacity constraints and areas where oversizing may be required to accommodate ultimate development or offsite flows*
- *Outline how sanitary servicing will be staged to support development build-out*
- *Identify any interim connections and ultimate solutions*
- *Highlight offsite infrastructure dependencies (i.e., regional connections)*
- *Note potential constraints (topography, geotechnical conditions, downstream capacity) that may impact feasibility*
- *Identify potential PULs required for sanitary infrastructure. Where utilities are proposed to run through Municipal Reserve (MR) Lands, these locations must be identified. MR function cannot be compromised by utility placement.*
- *Summary Map(s) that reflects the Area Structure Plan or Neighbourhood Plan and Phasing Plan*.

Stormwater System

Adhering to the current City of Spruce Grove Stormwater Master Plan and Municipal Development Standards, stormwater drainage planning at this level is based on the watershed concept and will be and will identify the pre-development conditions of drainage. These planning efforts should include proposals for handling offsite storm drainage from undeveloped areas in the interim period until developments gradually substitute storm sewer networks in these areas, and the strategy for implementation of the necessary additions or extensions to the sewer network including staging, oversizing, off-site development, etc. The system shall be designed to provide gravity flow throughout the system. If required, permanent or temporary lift stations are to be identified and explained.

Locations of Stormwater Management Facilities (SWMF) will be identified at this level.

Stormwater Requirements:

- *Describe the Watershed context and pre-development drainage patterns*
- *Confirm consistency with the Stormwater Master Plan and MDS*
- *Show conceptual level locations and sizes of SWMFs and outfall points*
- *Illustrate conceptual level overland flow routes and integration with the open space network*
- *Provide planning level estimates of peak flows (5yr and 100yr events)*
- *Identify interim servicing strategies for undeveloped upstream lands*
- *Highlight potential constraints or oversizing needs for ultimate development*
- *Outline a phasing strategy for stormwater servicing*
- *Identify potential PULs required for storm infrastructure. Where utilities are proposed to run through Municipal Reserve Lands, these locations must be identified. MR function cannot be compromised by utility placement.*

- *Summary Map(s) that reflects the Area Structure Plan or Neighbourhood Plan and Phasing Plan.*

Water System

Adhering to the current City of Spruce Grove Water Master Plan and Municipal Development Standards, hydraulic network planning at this level is required to identify the practical conditions for water serviceability and the strategy for implementation of the necessary additions or extensions to the water network including staging, oversizing, off- site development, etc.

Water System Requirements:

- *Describe the overall servicing concept in alignment with the City's Water Master Plan*
- *Show approximate alignments of major watermains and pressure zones*
- *Provide planning level estimates of demand (ADD, MDD, PHD, fire flow)*
- *Identify boundary conditions and integrations with existing/planned city-wide infrastructure*
- *Outline a phasing strategy for water servicing, including interim and ultimate solutions. All interim phases shall meet the minimum design requirements described in the City's Municipal Development Standards*
- *Highlight potential constraints, oversizing, or looping needs*
- *Identify potential PULs required for water infrastructure. Where utilities are proposed to run through Municipal Reserve Lands, these locations must be identified. MR function cannot be compromised by utility placement*
- *Summary Map(s) that reflects the Area Structure Plan or Neighbourhood Plan and Phasing Plan.*

Transportation Network

Adhering to the current City of Spruce Grove integrated Transportation Master Plan and Municipal Development Standards, transportation network planning at this level is required to identify the practical transportation opportunities to accommodate the movement of vehicles, pedestrians, and public transit.

Transportation Requirements:

- *Describe the overall road hierarchy*
- *Show conceptual alignments of arterial, collector, local roads, and laneways*
- *Show the location of major intersections and indicate anticipated type of control (signal/roundabout/stop) at a conceptual level*
- *Show detailed access point tie-ins and ensure minimum number of neighborhood accesses are provided*
- *Analysis should accommodate a safe and efficient transportation system within the Engineering Design Brief study area to accommodate pedestrian, bicycle,*

and vehicular transportation demands within the Engineering Design Brief study area.

- *Integrate transportation and utility corridors into the neighborhood, making use of their walkway and linkage potential.*
- *Demonstrate coordination with any adjacent areas including but not limited to provincial lands, municipal jurisdictions, or rail corridors.*
- *Encourage neighborhood walkability by identifying pedestrian destinations, minimizing walking distances, providing enroute and destination amenities, and connection of users with local services through interconnected street and multi-use trail corridor networks.*
- *Identify traffic calming methods at intersections, pedestrian crossings, or any other location as required*
- *Roundabouts are the preferred option of traffic control on arterials and collectors in all new development areas where an intersection is planned that warrants or may warrant a future traffic signal or all way stops.*
- *Summary Map(s) that reflects the Area Structure Plan or Neighbourhood Plan and Phasing Plan.*

APPENDIX 3 - DOCUMENTS AND MAPPING STANDARDS

Digital plans in Microsoft Word and PDF format are required as part of any new Area Structure Plan (ASP) and Neighbourhood Plan (NP) applications and amendments. Text must be provided in black.

DIGITAL PLAN STANDARDS

- *All digital drawings must be in AutoCAD dwg format, in their true scale. In addition to the AutoCAD dwg file, an accompanying pdf or tiff, of the plan is required.*
- *All plans submitted must be spatially referenced in 3TM NAD83 degrees West longitude, Meridian 114, bearings grid.*
- *AutoCAD layers must be logically named.*
- *Linework must be clean (GIS ready) using Drawing Clean Up tools or equivalent within AutoCAD (no duplicates, gaps, overshoots or undershoots).*
- *All required maps formally submitted with appropriate title, plan boundaries, north arrow, scale, legend, known street names and qualifications as required.*

- *All Autocad linework must be delineated by layers to clearly define the following:*
    - *Boundary (Area Structure Plan or Neighbourhood Plan)*
    - *Parks*
    - *Environmental Reserve*
    - *Municipal Reserve*
    - *Public Utility Lots (Neighbourhood Plan)*
    - *School Sites*
    - *Servicing*
    - *Stormwater Management Facilities*
    - *Trails*
    - *Roads (including local in Neighbourhood Plans)*
    - *Existing base/parcel linework*
    - *Future land use categories*

Land Use Colour Table

Land Use	Colour
Low Density Residential	Yellow
Medium Density Residential	Orange
High Density Residential	Brown
Mixed-Use/Mixed-Use Node	Pink
Commercial	Red
Park	Green
Institutional	Dark Blue
Stormwater Management Facility	Light Blue
Light Industrial and Medium Industrial	Dark Purple for medium industrial and light purple for light industrial