

Annex 10: Tewin Community Design Planning Process and Studies

To address the Plan's objectives of creating a new 21st century urban community in the Suburban Transect that reflects Algonquin design and placemaking principles, makes a national statement about the design of new communities and establishes a North American benchmark for community design based on the principles of the Five Big Moves and premised on the aspiration to make this a fundamentally different suburban community than those of the late 20th and early 21st centuries, the planning of the new community will require a suite of integrated studies, culminating in a Community Design Plan, a Secondary Plan, and a Financial Implementation Plan. In order to prepare a community design plan, various constraints and issues need to be addressed. Below is preliminary list of studies and plans that provide the basis for this work. This list is in addition to other requirements of the Official Plan including those of Subsection 5.6.2 Future Neighbourhood and Section 12 Local Plans.

A detailed Terms of Reference for these studies and plans will be produced in collaboration with the proponent.

It is understood that many of the elements identified below will progress in an iterative manner so that the Community Design Plan responds appropriately to the baseline work while also ensuring the community design process provides appropriate inputs to the broader transportation, infrastructure and environmental studies that the City will undertake for lands including and beyond Tewin. The intent where possible is to proceed with the integrated *Planning Act* application and Municipal Class Environment Assessment (EA) process. Proceeding in this manner results in a more streamlined approach allowing for a harmonized review and approvals process. Through this integrated approach the requirements of both the *Planning Act* and *Environmental Assessment Act* still must be met. The integrated approach provides the opportunity to reduce duplication by simultaneously complying with the *Planning Act* and Municipal Class EA processes, including public/stakeholder notification and consultation requirements, technical reports and analyses, and land use planning and environmental protection decisions.

The list below is not intended to provide a strict sequential order of process and studies. Some steps and studies can occur concurrently while others will require the completion of certain studies in order to proceed.

Baseline work

- 1) Establish community design principles in conformity with Algonquin placekeeping, the City's Five Big Moves and the One Planet Living (or similar) framework.
- 2) Natural Heritage Inventory
 - a) Ontario Wetland Evaluation System (OWES)
 - b) Ecological Land Classification (ELC)
 - c) Significant Wildlife Habitat
 - d) Species at risk (SAR)
 - e) Headwater Drainage Feature (HDF)
 - f) Aquatic habitat

- 3) Geotechnical Studies
 - a) Subsurface soil and rock conditions
 - b) Slope stability
 - c) Landslide risk
 - d) Erosion Assessment

- 4) Hydrotechnical
 - a) Water budget
 - b) Ground water studies
 - c) Bear Brook (main channel and its tributaries)
 - i) Hydrology model
 - ii) Hydraulic analysis
 - iii) geomorphology
 - d) Ramsay Creek
 - i) Hydrology model
 - ii) Hydraulic analysis

- 5) Constraints and Considerations Mapping:
 - a) Natural Hazard
 - i) Flood plain
 - ii) Unstable slope setback
 - iii) Geotechnical
 - iv) Bank erosion/geomorphological
 - v) Landslide risk
 - vi) Soils
 - b) Natural Heritage
 - i) Provincially Significant Wetlands
 - ii) Aquatic setbacks
 - iii) Species at Risk Habitat
 - iv) Significant wildlife habitat
 - v) HDF location & categorization
 - vi) Significant woodlands

- 6) Bear Brook Surface Water Drainage
 - a) Evaluate cumulative impacts of future development on Bear Brook;
 - b) Assess and identify capacity of existing downstream infrastructure and determine level of service;
 - c) Identify mitigation requirements to accept controlling events; and
 - d) Establish process by which to secure stormwater outlets for development.

- 7) NCC and MTO consultation (regarding infrastructure and transportation connections)

- 8) South-East Ottawa Transportation Network Study

- 9) Infrastructure Master Plan (City IMP) supporting technical studies

- 10) Bear Brook Watershed Study supporting technical studies

Design Context

- 1) Preliminary community vision and structure.
- 2) Confirm the final Tewin CDP area and identify constraints to potential future growth.
- 3) Bear Brook Watershed Study.
- 4) Identify infrastructure and transportation connections.

Supporting Studies

- 1) South Bear Brook / Ramsay Creek Subwatershed Study and Plan.
- 2) Local *Drainage Act* Studies.
- 3) Bear Brook Municipal Drain improvements (*Drainage Act* and the *Conservation Authorities Act*).
- 4) Off-site water and wastewater projects (Ontario and Canadian impact assessment studies and approvals, as required).
- 5) Off-site roads and transit projects (Ontario and Canadian impact assessment studies and approvals, as required).

Final Plans

- 1) Community Design Plan
 - a) Environmental Management Plan (EMP)
 - b) Community Energy Plan (CEP)
 - c) Master Servicing Plan (MSS)
 - d) Tewin Community Transportation Plan (TCTP)
- 2) Financial Implementation Plan
- 3) Secondary Plan

Financial:

Central to the inclusion of new lands is the provision of infrastructure to service future development and the ability of the proponents to fund this infrastructure to ensure that “Tewin pays for Tewin”. Therefore, the preparation of a funding strategy or methodology is required. The underlying purpose of this strategy is to identify the method to be used to fund the infrastructure costs such as those defined as local or internal services (developer funded costs) versus area-specific and/or city-wide development charges versus tax/user rates. Additional information will be provided to identify the location and timing of various capital projects, together with the purpose and primary beneficiaries, both internal and external to the development. The strategy should outline financing policies and potential agreements for cost sharing

such as front-ending and crediting agreements.

The funding methodology or strategy should address the following financial elements:

- a) provide overall funding strategy recommendations for consideration;
- b) population and employment forecast associated with this development;
- c) external capital infrastructure funding requirements;
- d) capital financing alternatives;
- e) potential impact on existing taxpayers over the planning horizon; and
- f) the proposed timing of infrastructure projects.