Intensification and Climate Change

Overview:

Good design of urban, suburban and rural built forms is integral to community health and wellness as well to enhanced resilience in the face of environmental disaster and personal stress.

However, increased density through intensification on its own is not enough to produce outcomes that generate healthy, livable, resilient, environmentally sustainable communities, both within the urban area and well beyond the City's boundaries.

If the City is to "change the conversation about intensification" to make it more acceptable to residents, then the benefits of intensification need to be more evident. Among other things, that means expanding school capacity in line with increasing intensification, more libraries, community centers and fieldhouses, nearby health care facilities and services, better transit, better enforcement of traffic and noise bylaws, safer active modes of transportation, better snow clearance of sidewalks including near transit stops/stations, more urban green spaces and parks, all of which are essential contributors to a better, healthier, sustainable, more economically vibrant Ottawa.

Good design means ensuring that all decisions/programs /expenditures undertaken pursuant to the Planning, Transportation and Infrastructure Master Plans are filtered through the lens of a comprehensive Climate Change Master Plan.

Good design means taking an integrated approach to intensification that dovetails with the Greenspace Master Plan, the associated Urban Forest Management Plan, the Significant Woodlands Guidelines, the Urban Tree Conservation by-laws and the intent of the Mature Neighbourhoods Overlay and Alternative Provisions. Good design

recognizes that urban green spaces and trees are crucial to mitigating the effects of climate change and its associated costs, including declining health, loss of biodiversity and failing grey infrastructure.

It means prioritizing infill within existing communities and developing brownfield and green-field sites within the urban boundary so as to minimize to the fullest extent practicable the expansion of the urban boundary.

It also means seeking out opportunities to transform deteriorating publicly–owned surplus properties into green non-market social housing and livable mixed-income green neighbourhoods.

Denser multi-dwelling unit homes, particularly if built with a "design with nature" approach result in a lower climate and ecological footprint and better sustainability. Features of positive, human-scaled intensification include:

- Roadways designed or re-designed with pedestrian and cyclist safety in mind.
- High walkability and cycle-ability with segregated pathways on tree-lined streets.
- Access to good public transit
- Nearby access to grocery stores and other retail shops, restaurants, social services, schools, jobs, places of worship, libraries, parks and playgrounds.
- Nearby access to heath services and facilities.

Typically, that means such design features as common walkways, green inner courtyards, local parks and playgrounds, community centres and field-houses, ample green spaces, community gardens, public plazas, mixed use buildings with ground-level retail and ample front, rear and side-yard setbacks to sustain the growth of mature trees.

Some proposed measures:

- Embed environmental and public health resiliency and adaptation into the framework of all planning policies.

- Commit as a matter of policy and practice to the creation of complete, self-sustaining, neighbourhoods/communities as the optimal design strategy for delivering sustainable, environment and climate sensitive intensification.

- Prioritize climate change considerations not just in the next Official Plan, but also in any future new/revised Secondary Plans, CDPs, zoning by-laws, Site Plan Control provisions, setback requirements, storm water management, and plans of subdivision.

- Do the same with respect to the city's investment in transit/transportation, water infrastructure, green spaces, parks and trees.

- Create a separate branch within the City 's organizational structure with overall responsibility for climate change issues; one that has a clear cross-divisional mandate, clear authority and clear deliverables.

- Seek provincial approval to use gas tax rebates for infrastructure projects that promote the social, environmental and cultural sustainability of the city by reducing greenhouse gas emissions and that contribute to climate change adaptation/mitigation.

- Seek Provincial approval to use gas tax rebates to pay for the resources/expertise needed to build up the city's climate change capabilities.

- Identify new measures the City could adopt to reduce energy consumption and greenhouse gas emissions in new infill/intensification development projects as well as elsewhere. Adopt those determined to be cost-effective, even if only in the long run.

- Develop and implement citywide and ward-level Emergency Preparedness Plans aimed at adapting to the effects of climate change and improving resilience. Both are needed because the quality and state of repair of existing critical infrastructure varies considerably across the urban, suburban and rural parts of the city. Different neighbourhoods experience different levels of vulnerability, as do different age groups and different societal groups.

- Adopt future city budgets that recognize the reality of climate change, including, for example, more rain-on-snow events with their implications for future flooding, the overflow of sewer systems, the contamination of flood waters by industrial, commercial and residential waste, the flooding and erosion of riverbanks, culverts and roadways with all their attendant health, mobility and economic implications.

- Commit to realistic life-cycle investment in the maintenance/renewal of critical infrastructure (water and wastewater treatment plants, pipes, sewers, roads and bridges).

- Update land use planning rules/regulations to be more responsive to climate change considerations. Incorporate adaptive climate change planning into land use decisions.

- To encourage developers/contractors to factor in environmental sustainability early in the design stage, add a mandatory evaluation of the impact of intensification on environmental sustainability and climate change into the building permitting system, including implications for municipal service delivery and infrastructure.

- Recognizing that climate change has no regard for municipal boundaries, work collaboratively on a regional basis with other municipalities to address regional scale climate objectives.

- Gather and collect data/research on climate change as it applies to municipalities, including Ottawa and the local region. Use the

City's Open Data portal as a clearinghouse for municipal and regional climate change data and information.

- Require the integration of green practices in TOD developments including a ban on the connection of new commercial and residential buildings to natural gas pipelines.

- Initiate a comprehensive review of the City's green infrastructure and adopt best practices to successfully regrow the urban tree canopy, giving priority to where trees currently are scarce or missing entirely.

  With Ontario, Ottawa Hydro and the telecom service providers, develop and implement a coordinated tree protection and re-greening process.

- Encourage urban agriculture, including community gardens and green roofs.

- As an element of an Ottawa Climate Change Action plan, initiate a building energy and water consumption reporting and benchmarking system and adopt a build better buildings partnership program as Toronto has done.

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