ROSSMANN ARCHITECTURE

Sustainability Statement

RE: 725 Somerset St. West

The proposed development contributes to the achievement of City of Ottawa sustainability objectives through site and building design. With a total of 94 residential units consisting of various types of units ranging from studios to 2 bedrooms, the project can respond to a greater variety of residents and help provide access to housing in a busy well-established area serviced with public and active transportation at the door.

1. *Building Design*
   - The building design including envelope and heating and cooling systems will optimize energy consumption through modelling to meet and potentially exceed all provincial and federal model requirements.
   - The percentage of glass has been minimized by applying smaller punched windows to obtain more energy efficiency;
   - Installing high quality windows that utilize low-e coatings and gas filling, while choosing the glazing and window frame material that will be most sustainable;
   - Air-tight building envelope using increased insulation to be validated using energy modeling software;
   - Most of the building extends along the east-west axis which allows most of the units to take advantage of the South light which creates opportunity for energy efficient design;
   - The proposal has paid attention to the implementation of bird friendly design by incorporating darker exterior finishes on the first 4 levels as well as contrasting materials throughout and punch windows to reduce the amount of reflection on the façade.

2. *Sustainable Site*
   - The Subject property is located within walking distance to an abundance of local services and amenities to meet daily needs reducing reliance on private motor vehicles.
   - The subject property is located in front of existing bus stops with lines running East-West. The closest North-South lines are located 3 blocks East at the intersection of Somerset W. & Bronson.
   - All on-site parking for visitors is provided above ground in a covered part of the building accessible from Empress Ave.
   - Over 99 bicycle parking spaces will be provided to promote active transportation and less dependance on motor vehicles. The project is proposing a 1 bicycle parking per unit ratio as well as 5 bicycle parking for the commercial uses.

3. *Water Efficiency*
   - Stormwater will be controlled on site including rooftop flow attenuation and surface and sub-surface storage.
   - As the building and driving aisle occupies most of the site, there will only be a few trees and shrubs however the landscape design will incorporate indigenous vegetation requiring as little irrigation as possible.

4. *Energy and Atmosphere*

The proposed development also reduces energy consumption through:

- The use of more permeable materials to reduce heat loss.
- Low-flow hot water fixtures.
- Exterior lighting which will be designed to reduce light pollution to a minimum.

5. *Materials and Resources*
   - The building envelope will consist of rain-screen masonry on the lower 4 levels to match the existing context and aluminum panel system on floors 5-9. Punch windows are proposed throughout allowing for higher overall energy efficiency which will ensure comfort and overall energy model performance.
   - Construction will favor locally sourced, durable, sustainable, and recycled materials.
   - Construction and demolition waste will be reduced and recycled during design, construction, operation, and end of life.
   - Roof membranes will have a high solar reflectance index.
   - Greening of the roof with planters will reduce heat island effect.
   - Storage and collection of recyclables will be incorporated in the project.

6. *Indoor Environmental Quality*
   - Operable windows will increase natural ventilation.
   - Interior materials and finishes will be selected to ensure durability and low emissivity.
   - Units are designed to maximize natural light which will reduce reliance on electrical and mechanical systems.