

640 LIVERPOOL ROAD, PICKERING

SUSTAINABILITY REPORT

In September 2022, the City of Pickering's Council adopted new Integrated Sustainable Design Standards (ISDS) for all new development in the City to replace the 2007 Sustainable Development Guidelines. The ISDS defines a set of performance criteria for all new development in the City.

This report describes the development under the new ISDS.

The proposed development of 91 townhomes at 640 Liverpool Road will meet all mandatory Tier 1 criteria in the Integrated Sustainable Design Standards for low-rise residential development. There may be occasional opportunities to exceed mandatory requirements, to be more defined at the site plan application or prior to building permit. There is also a mixed use building that has commercial space on the ground floor and townhomes on the 2nd and 3rd floors.

This report is provided as part of the rezoning stage. (The lands are already designed for medium density land uses)

APPLICANT INFORMATION

Applicant/Agent: Brian Moss and Associates Ltd.

Name: Brian Moss

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Address of Subject Land (Street Number and Name): 640 Liverpool Road

Registered Owner (First, Last Name): Liverpool Road Limited Partnership

PROJECT INFORMATION

Project Name: 640 Liverpool Road

Date Checklist Completed: April 8, 2026

Is this checklist revised from an earlier submission (Yes/No): No

Proposal Description: The development is 91 townhomes and commercial space on the main floor of a mixed use building at the corner of Liverpool Road and Wharf Street. The townhomes are a combination of conventional, back to back and stacked townhomes.

The balance of this report summarizes the checklist and the proponent's commitment to meeting tier one requirements with some description of same. This follows the comment section of the checklist.

During the site plan circulation the report will be supplemented on aspects such as energy efficiency, resilient building and solar gain potential.

EDUCATION

Educating homeowners about the use and maintenance of sustainable building features and sustainable lifestyle practices.

(E1) Resident Education. The proponent will meet Tier 1 requirements by providing a resident education information package to all residents that explains the use and maintenance of sustainable building features as well as sustainable lifestyle practices. They will do this through printed materials or on a website. Signage will not be posted on site.

ENERGY & RESILIENCE

Designing and constructing resilient, energy efficient buildings and encouraging on-site renewable energy systems.

(ER1 – Roof) Urban Heat Island Reduction. Tier 1 requirements state that cool roofs should be installed with high albedo/light coloured materials with a Solar Reflective Index (SRI) of 78 or over (for low- sloped roofs <2:12) or 29 (for steep-sloped roofs >2:12) for 100% of the available roof area OR that solar PV should be installed for 50% of the available roof area. The proponent will comply with Tier 1 requirements. Details to come at site plan or prior to building permit. Note all roofs will be flat roofs with private amenity terraces for each unit.

(ER1 – Non-roof) Urban Heat Island Reduction. Tier 1 offers several strategies for non-roof areas for urban heat island reduction. These include, using one or a combination of the following strategies to treat at least 50% of the site's hardscape:

- High-albedo paving materials with an initial solar reflectance of at least 0.33 or SRI of 29;
- Open grid pavement with at least 50% perviousness;
- Shade from existing tree canopy or new tree canopy within 10 years of landscape installation;
- Shade from architectural structures that are vegetated or have an initial solar reflectance of at least 0.33 at installation or an SRI of 29;
- Shade from structures with energy generation.

The proponent will meet the Tier 1 requirement, with decisions to come at the site plan stage or prior to building permit. We expect tree shade will be a key strategy, shade structures on the terraces and perhaps paving materials that achieve the requirements.

(ER2) Building Energy Performance and Emissions. The proponent will design and construct all buildings to achieve the Energy Star[®] rating for new homes, which complies with Tier 1.

(ER3) Renewable Energy. Tier 1 strategies for renewable energy include designing or constructing all buildings to be solar ready or incorporating web-based Home Energy Management Systems. The proponent will employ one of these strategies to meet the Tier 1 requirements. To be decided at a later stage.

(ER4) Building Resilience. The Tier 1 requirement for this is to implement at least two of the primary measures from the Durham Region Climate Resilience Standard for New Houses additional to those required by this Standard. The proponent will meet this Tier 1 standard with details to be determined at a later date.

NEIGHBOURHOOD

Creating accessible and safe places to live for all.

(N1) Private Pedestrian Walkways. Tier 1 requires developments to provide on-site private pedestrian walkways from buildings to features outside of the development site, such as public sidewalks, multi-use trails, transit stops and adjacent buildings. All connections must be Accessibility for Ontarians with Disabilities Act (AODA) compliant.

The concept plan for this proposal shows private sidewalks within the development that link to public sidewalks on Annland Street, Liverpool Road and Wharf Street. These sidewalks connect to transit stops (Krosno Blvd), parks and the balance of the nautical village area.

(N2) Private Play Areas and Structures. Tier 1 requires that all private play areas and play structures must be AODA compliant.

For this project, the gathering areas on site will not have active playground equipment, but rather passive areas, one near the waterfront and one at the corner of Wharf Street and Liverpool. Progress Frenchman's Bay East Park is an existing public park with playground equipment northwest of the development site. It is within easy walking distance from the site and accessible by sidewalk. If a playground is incorporated at the site plan stage, it will be compliant with AODA requirements.

(N3) Community Safety. Tier 1 requires that the project be designed using Crime Prevention Through Environmental Design (CPTED) principles to create a safe space.

The design for this project follows CPTED principals of windows 'on the street' on each of 3 public streets and internal roads, no blind spots, good lighting, appropriate landscape and so on. The open space block at Liverpool and Wharf Street is in an active pedestrian area. The small open space near Frenchman's Bay is for residents, not the general public.

LAND & NATURE

Protecting, conserving and enhancing the natural environment.

(LN1) Topsoil. Tier 1 states the topsoil layer should have a minimum depth of 30 cm for all turf areas, and a minimum depth of 45 cm of high-quality topsoil for all planting beds and scarify hard packed subsoil in all soft landscape areas prior to placement of topsoil.

The proponent will comply with this Tier 1 requirement.

(LN2) Light Pollution Reduction. Tier 1 requires that all exterior lighting to be Dark Sky Compliant with the exemption of street lighting, which is governed by the City's Street Lighting Requirements. If a Dark Sky Fixture Seal of Approval is not available, fixtures must be full cut-off and with a colour temperature rating of 3000K or less.

The proponent will comply with this Tier 1 requirement.

(LN3) Native and Non-Invasive Species. Tier 1 requires the development to plant 50% native plant species, including trees, shrubs and herbaceous plants preferably drought-tolerant and pollinator-friendly outside of the buffer area and within the development limit. Remaining non-native species must be non-invasive.

The proponent will comply with this Tier 1 requirement.

(LN4) Vegetated Buffers. The disturbed buffer area between the development limit and a key natural heritage feature shall be restored with 100% native plant species, including trees, shrubs and herbaceous plants, preferably drought- tolerant.

The proponent will comply with these Tier 1 requirements if such buffers are determined to exist.

(LN5) Tree Preservation and Removal Compensation. Tier 1 requires the development to plant 60 mm caliper deciduous trees and 1.8 m high coniferous trees in accordance with the tree compensation requirements. This applies to the removal of any existing trees that are 15 cm or more in diameter at breast height.

The proponent will comply with this Tier 1 requirement and has submitted the tree preservation plan with this zoning submission.

(LN6) Healthy Street Trees. Tier 1 requires the development to plant 60 mm caliper deciduous trees on both sides of private streets and in public boulevards at an interval rate of 1 tree per 8 m of street frontage or spaced appropriately having regard to site conditions.

The proponent will comply with Tier 1 requirements, assuming the medium density housing form can accommodate 1 tree per 8m or fine-tuned to the concept plan at the site plan stage. The stacked townhome product cannot accommodate that level of tree planting on the garage side of the units, but can on the main elevation of the units.

(LN7) Natural Heritage Features and Open Space Enhancement. Tier 1 requires the development to protect key natural heritage features and key hydrologic features on site, including

associated setbacks/buffers; OR where all alternatives to protect and enhance key natural heritage features and open spaces on site have been evaluated and determined to not be feasible, provide compensation for the loss of ecosystem functions due to development impacts.

There are no natural heritage features on site, but the tree canopy will be enhanced upon redevelopment.

TRANSPORTATION

Providing opportunities for sustainable modes of transportation.

(T1) Electric Vehicles Including Plug-In Hybrid Vehicles. Tier 1 has two strategies for this development feature: Require 40% EV Rough-in & 10% EV Ready charging infrastructure or equivalent electric vehicle energy management systems (load sharing/circuit sharing) capable of providing Level 2 or higher charging for the resident parking spaces; OR require EV Ready charging infrastructure capable of providing Level 2 charging or higher for 50% of the resident parking spaces.

The proponent will discuss electric charging at the site plan stage and will meet one of the Tier 1 requirements.

WASTE MANAGEMENT

Providing opportunities to recycle and divert materials in order to reduce waste.

(WM1) Construction Waste Reduction. The proponent will meet the Tier 1 requirement to divert 50% or more of all non-hazardous construction, demolition, and land clearing waste from landfill.

(WM2) On-Site Storage. For low rise multi-storey residential buildings, design the site so that all individual units can be served by curbside collection; and allocate space for separate recyclables, organics and garbage containers inside each dwelling unit.

The proponent has fulfilled this Tier 1 requirement and submitted plans to the planning department. See typical figure 1 below.

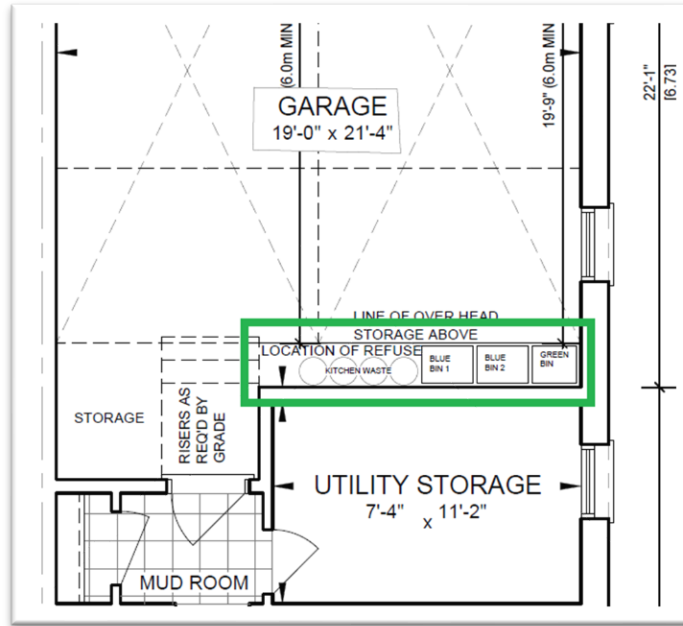


Figure 1 - Shows location for garbage bins, blue bins and green bins within the garage space.

WATER

Using water efficiently and supporting sustainable stormwater management practices.

(W1) Stormwater Management. The ISDS lists three Tier 1 requirements for stormwater management. They are:

- Achieve a level one/enhanced stormwater treatment for all stormwater, and achieve runoff reduction of a minimum 5 mm of rainfall depth; and
- Demonstrate that the applicable groundwater recharge targets are met based on site-specific water balance/budget studies, in accordance with the CTC Source Protection Plan; and
- Provide an enhanced level of protection for water quality through the long-term average removal of 80% of Total Suspended Solids (TSS) on an annual loading basis from all runoff leaving the site, in accordance with the City of Pickering Stormwater Management Design Guidelines.

The proponent is meeting this Tier 1 requirement. The required reports have been submitted and TRCA and City Engineering are providing comment.

(W2) Water Efficiency. Two of the following requirements for water efficiency must be implemented to meet Tier 1 requirements:

- Use WaterSense® labeled water fixtures.
- Use a non-potable watering system for irrigation purposes.
- Install a drain water heater recovery unit.

- Install a hot water recirculation pump with an integrated adjustable timer or auto-adaptive controls to shut off during periods of low/no hot water use.
- Use Energy Recovery Ventilation in lieu of conventional humidifier.

The proponent will meet Tier 1 requirements and will determine which strategies will be appropriate at site plan or prior to building permit.

Matters related to the mixed use building

ISDS N4 – Wayfinding signage: Install AODA-compliant wayfinding signage, including braille and/or tactile signage in all buildings and public space.

The mixed use building provides about 2,300 sf (214m²) of commercial space on the ground floor, and is adjacent a public open space, complete with historic plaque and public art. The building faces Liverpool Road with commercial frontage, similar to the live/work units further south on Liverpool Road (south of Wharf Street). While this can be discussed during the site plan, we would suggest this requirement is for larger mixed use buildings.

ISDS N5 – Discussed above for the overall development.

ISDS LN9 – Bird Friendly design; requirement for bird/friendly design treatments for 90% of all exterior glazing. To be discussed at the site plan stage.

ISDS T2 – Electric vehicles: To provide a minimum of one dedicated parking space for electric vehicle (EV) parking and/or EV charging infrastructure. This can be accommodated and confirmed at site plan.

ISDS T3 – A bike rack will be provided for short term parking.

ISDS WM2 – On Site Storage: a loading area has been provided within the concept plan.

CONCLUSIONS

This proposed development of 91 townhomes will meet all mandatory Tier 1 requirements spelled out in the Pickering Integrated Sustainable Design Standards for low-rise residential development. Some of these requirements have already been integrated into the concept plans. Some of the other requirements will be considered more closely during site plan and prior to building permit.