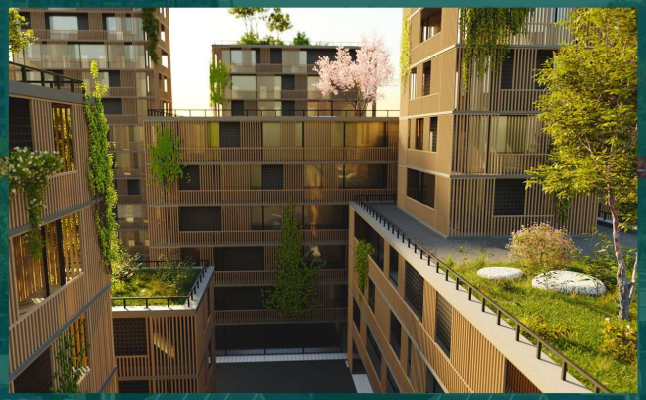
Pickering Integrated Sustainable Design Standards

Mid to High-Rise

Residential & Non-Residential Checklist



City of PICKERING

September 2022

Instructions

The Pickering Integrated Sustainable Design Standards (ISDS) for Mid to High-Rise Residential & Non-Residential development, applies to residential buildings 4 storeys and higher, and all Industrial, Commercial and Institutional (ICI) buildings.

Tier 1 performance measures are required by the City of Pickering and must be included as part of your complete development application.

Tier 2 performance is encouraged, but optional.

Words and terms identified in **bold** in the Performance Criteria and Documentation cells are defined further in the Glossary of the User Guide. Performance criteria apply to all building types except where specified.

Applicant Information:

Applicant/Agent:

Name (First, Last Name): Mallory Nievas c/o The Biglieri Group Ltd.

Telephone Number: 416-693-9155 x 231

Email: mnievas@thebiglierigroup.com

Address of Subject Land (Street Number and Name): 1095 Kingston Road, Pickering, Ontario

Registered Owner (First, Last Name): 1095 Kingston Road Ltd.

Project Information:

Project Name: 1095 Kingston Road

Date Checklist Completed (yyyy-mm-dd): March 21, 2025

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

Gross Floor Area (square metres): 98,184 (net floor area)

Number of Storeys: 35

Non Residential Gross Floor Area (square metres): N/A

Proposal Description (narrative of your project):

Residential development comprised of 2 Buildings. Building 1 has an 8 storey podium and two 27 storey towers, totalling 35 storeys. Building 2 has a 6 storey podium and two 29 storey towers, totalling 35 storeys. 98,184 squre metres of residential net floor area are proposed. 1,492 residential units in various sizes are proposed (1-bedroom to 3-bedroom). Residential parking is provided at 0.62 spaces/unit, and visitor parking is provided at 0.15 spaces/unit. A cumulative parking rate of 0.77 spaces/unit. The proposal has an FSI of 4.71. The project proposed a Multi-use Path running along the site's southern edge. Additionally a Gateway Plaza is proposed at the intersection of Kingston Road and Dixie Road. A POPS is proposed at the site's southeastern edge.

Education

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
E1	**Resident Education**	For residential buildings, provide a **Resident Education Information Package** (hardcopy or digital through website link) to residents that explains the use and maintenance of sustainable building features as well as sustainable lifestyle practices.	☒	Meet Tier 1 and post signage and other education materials onsite to educate residents and visitors of sustainability features.	☐	☐ Educational package or other educational materials demonstrating compliance.	A Resident Education Information Package will be produced and distributed to all future residents during occupancy. The package will speak on the items detailed within this checklist, plus any additional sustainability measures determined through future steps in the planning process.

Energy & Resilience

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
ER1	**Urban Heat Island Reduction**	Roof: For flat roofs (low slope ≤2:12) over 500 m^2, buildings must provide. 1. Green roof for at least 50% of available roof space; • Where possible, green roof area should be incorporated into visible or accessible locations such as podiums. • Where the green roof is accessible, the common outdoor amenity space may be reduced by no more than 25%. • Where green roof is edible landscaping, the whole garden area including pathways and adjacent terraces, may be counted as common outdoor amenity space. **or** 2. Cool roof installed for 90% of available roof space and if the roof is over 2,500 m^2 a minimum of 1,000 m^2 will be designated **solar ready**.	☒		☐	☒ Roof plan indicating heat island reduction measures, including the SRI values(s) of roof materials.	BDPQ: 50% of available roof has been designed as Green Roof. Refer to sheets A101.S, A201-212.S. A roof plan indication SRI values of roof materials to be provided in future submissions. MHBC: Green roof has been incorporated on Landscape Plans per architecture plans/ stats. Please see L2.2 and L2.3

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
		or 3. A combination of a green roof, cool roof and solar PV installed for at least 75% of available roof space.					
		Non-Roof: Treat 50% of the hardscapes (i.e., roads, sidewalks, and driveways) with heat island reduction measures such as: • High-albedo paving materials with an initial solar reflectance of at least 0.33 or **Solar Reflectance Index (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; and • Shade from structures with energy generation.	☒	Non-Roof: Treat 75% of the hardscapes (i.e., roads, sidewalks, and driveways) with heat island reduction measures.	☐	Plan(s), drawing(s), or other documentation indicating heat island reduction measures measure(s).	MHBC: Confirming High-albedo paving is provided on all landscape proposals with a SRI of 29. Further detail/information to be provided in subsequent applications.

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
ER2	**Building Energy Performance and Emissions**	Design and construct all buildings to meet or exceed the **Energy Performance Emissions' Total Energy Use Intensity (TEUI)**, **Thermal Energy Demand Intensity (TEDI)** and **GHG Emission Intensity (GHGI)** targets.	☒	Design and construct all buildings to meet or exceed the **Energy Performance Emissions' Total Energy Use Intensity (TEUI)**, **Thermal Energy Demand Intensity (TEDI)** and **GHG Emission Intensity (GHGI)** targets.	☐	☐ Energy Modelling Report or other documentation demonstrating compliance with the target standard and a Commissioning Closeout Report.	The project team commits to meeting emission targets as required by Tier 1. Future submissions will provide details how the proposal will meet all relevant standards.
ER3	**Energy**			Incorporate on-site **renewable energy** of power generation to meet 5% or more of the building energy needs. **or** Incorporate **peak shaving devices** like battery storage.	☐	☐ Drawings, plans, or other documentation demonstrating compliance.	

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
ER4	**Building Resilience**			For high-rise residential buildings greater than 12 storeys, provide: • A 72 hour minimum back-up power system, preferably using a non-fossil fuel source, to ensure power is provided to the refuge area, and to the ground floor or the first two floors as applicable to the building use, to supply power to: building security systems, domestic water pumps, sump pumps, at least one elevator, boilers and hot water pumps to enable access and egress and essential building functions during a prolonged power outage.	☐	☐ Drawings, plans, or other documentation demonstrating that the project incorporates resilient measures.	

Neighbourhood

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
N1	**Private Pedestrian Walkways**	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 AODA compliant.	☒			☒ Site plan(s) highlighting on-site walkways.	BDPQ: Refer to sheets A101.S, A201.S, in coordination with Landscape plans. MHBC: All proposed pedestrian circulation on Site is AODA compliant in terms of path widths, slopes and circulation in coordination with engineering and architecture. Please see L1.
N2	**Private Play Area & Structures**	All private play areas and play structures must be **AODA** compliant.	☒			☐ Site plan(s) highlighting play areas with accessibility features.	MHBC: All play areas will be AODA compliant. Further information to be provided in subsequent applications.
N3	**Building Access**	Provide the same means of entrance for all users to public entrances of buildings on site, or provide equivalent access when access by the same means is not possible.	☒			☒ Plan(s), drawing(s), or other documentation indicating building entrance(s).	BDPQ: Refer to sheets A101.S, A201.S, in coordination with Landscape plans.

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
N4	**Wayfinding Signage**	Install **AODA** compliant wayfinding signage (e.g., braille and/or tactile signage) in all buildings and public spaces.	☒			☐ Plan(s), drawing(s), or other documentation indicating implemented measure(s).	MHBC: All wayfinding signage to be AODA compliant. Further information to be provided in subsequent applications.
N5	**Community Safety**	Design the project using **CPTED** principles to create a safe space.	☒			☒ Report demonstrating community safety techniques.	See Planning Rationale. Safety is being designed through the proposal by means of visibility from lobbies and amenity spaces through to the public realm. Lighting will also be designed to support community safety on-site. Site design integrates view corridor through the centre of the site towards the POPS, promoting safety in publicly accessible spaces.

Land & Nature

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
LN1	**Topsoil**	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.	☒	Meet Tier 1 and a minimum depth of 60 cm of high-quality topsoil for all planting beds.	☐	☐ Landscape Plan(s) and/or other documentation indicating applicable soil characteristics (depth, pH, organic matter content) and planting depth.	MHBC: All proposed trees to comply with the listed criteria. Further detail including planting plans, soil volume plans to be provided in subsequent applications.
LN2	**Light Pollution Reduction**	Require 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-cutoff and with a colour temperature rating of 3000K or less.	☒	Meet Tier 1 and use motion sensors or timers for outdoor lights to maintain security without excessively lighting the building's exterior.	☐	☐ Exterior Lighting Plan, Schedule(s), or other documentation indicating lighting type, orientation and location.	MHBC: All lighting to be dark sky compliant. Further detail to be provided in subsequent applications.
LN3	**Native and Non-Invasive Species**	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.	☒	Plant 75% or greater with **native plant species**.	☐	☐ Landscape Plan(s), drawings or other documentation demonstrating the percentage of native plant species, preferably are drought-tolerant and pollinator-friendly.	MHBC: 75-100% native species will be provided. Further detail including planting plans, soil volume plans to be provided in subsequent applications.

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
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.	☒			☐ Landscape Plan(s), drawings or other documentation demonstrating that plant species are 100% native, drought-tolerant.	MHBC: Landscape buffers have been provided. Please see L-1. Further detail including planting plans will be provided in subsequent applications.
LN5	**Tree Preservation and Removal Compensation**	Plant 60 mm **caliper** deciduous trees and 1.8 m high coniferous trees in accordance with the **tree compensation requirements** to ensure no net loss. This applies to the removal of any existing trees that are 15 cm or more in diameter at breast height.	☒	Provide a site design solution that includes the preservation and protection of existing mature trees and a net gain of tree canopy through additional tree plantings in accordance with the **tree compensation requirements**.	☐	☐ A **Tree Inventory Report and Preservation Plan** that includes all trees on the development site and those on adjoining lands that may be affected by the proposed construction activities.	MHBC: Provided. Please see arborist materials.

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
LN6	**Healthy Street Trees**	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; **and** Design, implement, and pay for a watering and fertilizing program for at least the first 2 years of planting.	☒	Meet Tier 1 and provide 30 m^3 high quality soil for street trees with a minimum top soil depth of 75 cm.	☐	☐ Tree Planting Plan(s), drawings or other documentation demonstrating species, and quantity for each planting area. ☐ Watering program methods and watering schedule.	MHBC: All proposed trees to meet listed Tier 2 criteria. Futher information including planting plans and soil volume plans to be provided in subsequent applications.

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
LN7	**Common Outdoor Amenity Space**	For residential buildings with 20 or more dwelling units, provide 4.0 square metres of common outdoor amenity space per dwelling unit (a minimum contiguous area of 40.0 square metres must be provided in a common location). Where lot areas are constrained in some cases, flexibility on providing the common outdoor amenity space requirement may be provided at the discretion of the Director, City Development. **and** Where a green roof functions as an amenity space, no more than 25% of the outdoor component may be on the green roof.	☒	For residential buildings with 20 or more dwelling units, provide 6.0 square metres of common outdoor amenity space per dwelling unit (a minimum contiguous area of 40.0 square metres must be provided in a common location).	☐	☒ Site Plan(s), drawing(s), or other documentation indicating size and location of outdoor amenity area.	BDPQ: 2 sm of common Outdoor Amenity area per dwelling unit has been provided which is excluding balconies and private terraces. 25% of required Outdoor Amenity area is provided as Green Roof. Refer to sheets A001.S, A101.S, A202-212.S.

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
LN8	**Natural Heritage Features and Open Space Enhancement**	Protect **key natural heritage features** and **key hydrologic features** on site. **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.	☐	Maintain and enhance **key natural heritage features** and **key natural hydrologic features** on site and • Create new natural heritage features on or off-site. **or** • Restore and enhance connectivity among natural heritage features on or off-site.	☐	☐ Landscape Plan(s), drawing(s), or other documentation highlighting implemented feature(s) and/or an Ecosystem Compensation Report where required.	N/A - no on-site features
LN9	**Bird-Friendly Design**	For residential and non residential buildings, use a combination of **bird-friendly** design treatments for a minimum of 90% of all exterior glazing within the first 16 m of the building above grade or the height of the mature tree canopy (including all balcony railings, clear glass corners, parallel glass and glazing surrounding interior courtyards and other glass surfaces).	☒		☐	☒ Elevations indicating bird-friendly glazing measures implemented, including treated area, type of treatment, density of visual markers, etc. Summary table of treated glazing areas for each elevation.	BDPQ: Bird Friendly design treatments to be applied to windows, affected areas highlighted in elevations. Refer to sheets A401-408.S.

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
		Where green roof is constructed with adjacent glass surfaces, glass is to be treated within 12 metres above green roof surface.	☒			☒ Elevations indicating bird-friendly glazing measures implemented, including treated area, type of treatment, density of visual markers, etc.	BDPQ: Bird Friendly design treatments to be applied to windows, affected areas highlighted in elevations. Refer to sheets A401-408.S.

Transportation

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
T1	**Electric Vehicles including plug in hybrid vehicles**	For multi residential buildings, 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.	☒	For multi-residential buildings, require **EV Ready** charging infrastructure capable of providing Level 2 charging or higher for 100% of the parking spaces excluding visitor parking.	☐	☒ Parking plan(s) indicating the location of EV Rough-in or EV Ready parking spaces. ☒ Electric Vehicle (EV) Charging Infrastructure Plan, drawings or other documentation.	BDPQ: EV rough-in and EV Ready parking spaces have been shown in all Parking plans and tables. Refer to sheets A103.S, A201-206.S.
T2		For non-residential buildings, require **EV Rough-in** charging infrastructure for 20% of the parking spaces.		For non-residential buildings, require **EV Ready** charging infrastructure for 20% of the parking spaces.	☐	☐ Parking plan(s) indicating the location of **EV Rough-in** or **EV Ready** parking spaces.	N/A

Performance Measures		Performance Criteria			For Submission		
Number	**Development Feature**	**Tier 1 Mandatory**	**Met**	**Tier 2 Optional**	**Met**	**Documentation**	**Comments**
T3	**Bicycle Parking and Storage Facilities**	For residential buildings, provide 0.5 long-term bicycle parking spaces (includes adaptive bikes, trikes, and scooters for people with disabilities) in weather protected areas located within a secure area of the building or common garage for each dwelling unit. **and** At least 15% of the required long-term bicycle parking spaces, or one parking space, whichever is greater, shall include an Energized Outlet (120 V) adjacent to the bicycle rack or parking space.	☒	For residential buildings, provide 0.75 long-term bicycle parking spaces (includes adaptive bikes, trikes, and scooters for people with disabilities) in weather protected areas located within a secure area of the building or common garage for each dwelling unit. **and** At least 15% of the required long-term bicycle parking spaces, or one parking space, whichever is greater, shall include an Energized Outlet (120 V) adjacent to the bicycle rack or parking space.	☐	☒ Plan(s) indicating location, number and type (long-term) of bicycle parking spaces.	BDPQ: Required long-term bicycle parking spaces have been provided on Ground and Mezzanine floor. Refer to sheets A201.S and A202.S.
		For residential buildings, provide 0.1 short-term bicycle parking spaces per dwelling unit in locations that are highly visible and in close proximity to primary entrances.	☒			☒ Plan(s) indicating location, number and type (short-term) of bicycle parking spaces.	BDPQ: Required short-term bicycle parking spaces have been provided on Ground floor plan. Refer to sheet A201.S.

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
		For non-residential buildings and mixed use buildings, provide long-term bicycle parking spaces at a rate of 1.0 bicycle parking space for each 1,000 square metres of gross leasable floor area and at least one bicycle rack shall be installed for short-term bicycle parking.	☐			☐ Plan(s) indicating location, number and type (long-term) of bicycle parking spaces.	N/A
		For non-residential buildings and mixed use buildings, provide two trip-end facilities (i.e., showers and a change room) for every 60 long term bicycle parking spaces (minimum of 1 facility when more than 5 bicycle parking spaces are provided).	☐			☐ Plan(s) indicating trip-end facilities.	N/A

Waste Management

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory	Met	Tier 2 Optional	Met	Documentation	Comments
WM1	Construction Waste Reduction	Divert 50% or more of all non-hazardous construction, demolition, and land clearing waste from landfill.	☒	Divert 75% or more of all non-hazardous construction, demolition, and land clearing waste from landfill.	☐	☐ Commitment letter to divert waste through a third-party hauler.	The details on construction related waste will be provided at a later date. The team is committed to meeting tier 1 performance criteria.
WM2	On-Site Storage	For multi-storey residential buildings, provide a tri-sorter or separate chutes to direct and separate materials into either recyclables, organics or waste. Ensure there is adequate storage space for accumulated recyclables, waste and organics generated between collection days and be designed to minimize litter and pests.	☒	Meet Tier 1 and include a dedicated space for materials such as textiles, batteries and electronics is provided.	☐	☒ Drawing(s) demonstrating compliance.	BDPQ: All waste recepticles and tri-sorters provided for each building on Ground floor plan. Refer to sheet A201.S.
		For non-residential development, provide a dedicated area or area attached to the building for the separate collection and storage for accumulated recyclables, waste and organics.	☐			☐ Site plan(s) or Drawing(s) indicating location of waste storage area.	N/A

Water

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory Requirement	Met	Tier 2 Optional Requirement	Met	Documentation	Comments
W1	**Stormwater Management**	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.**	☒	In a manner best replicating natural site hydrology processes, manage on-site runoff using at least two of the following low-impact development (LID) and green infrastructure: • permeable pavement • bioswales • soakaways • rain gardens • filtered strips • infiltration trenches **or** Achieve post-development runoff reductions to no more than 50% of annual precipitation (approx. 10 mm of rainfall event retention from all site surfaces) through infiltration, evapotranspiration, water harvesting and reuse.	☐	☐ Stormwater Management Report, Plan(s), and drawing(s) to verify compliance.	Refer to the Functional Servicing and Stormwater Management Report (FSSR) prepared by Counterpoint Engineering Inc., dated March 2025.

Performance Measures		Performance Criteria			For Submission		
Number	Development Feature	Tier 1 Mandatory Requirement	Met	Tier 2 Optional Requirement	Met	Documentation	Comments
W2	**Building Water Efficiency**	Install **WaterSense®** labeled water fixtures.	☒	All buildings reduce indoor aggregate potable water consumption (not including irrigation) by 30% better than the **Ontario Building Code** baseline.	☐	☐ Plumbing fixture specifications or other documentation demonstrating WaterSense® labelling and flush/flow rates. ☐ Calculations demonstrating water use reduction. **or** Third party verification of water reductions with systems like **Home Energy Rating System H2O** or **WaterSense®** labeling. Hand calculations could be done according to LEED version 4.1 approach.	To be addressed at the Site Plan stage. The project team is committed to meeting the Tier 1 performance criteria.
W3	**Rainwater Harvesting**			For mid to high-rise residential development, each building includes a separate, non-potable subsurface watering system for irrigation and outdoor–reuse purposes.	☐	Plan(s), drawing(s), or other documentation indicating non-potable water system.	