Sustainable Building and Development Guidelines Checklist - 517 Plains Rd E					
#	**Required or Voluntary**	**Guideline**	**Rationale, Incentives, and Resources**	**Comments**	**Implementation**
Section 1: Site Design					
1.1	Required	**Augment Topsoil:** Maintain a minimum 15 cm/6" quality topsoil.	**Rationale:** Appropriate topsoil levels absorbs runoff and helps to ensure plants survive and thrive. **Resources:** N/A	Planting beds will have a minimum of 45cm of quality planting soil. Will be shown at Site Plan phase.	Site Plan
1.2	Required	**Snow Management:** For sites with surface parking, identify a designated snow storage area in an area that will reduce salt and contaminant impacts to vegetation, groundwater and surface water. Appropriate on-site snow storage is preferable to off-site snow removal.	**Rationale:** Road salt poses risk to plants, animals, birds, fish, lake and stream ecosystems and groundwater. Appropriate snow storage areas can help manage and mitigate the risks associated with road salt. **Resources:** City of Burlington Site Plan Guidelines [PDF]: https://www.burlington.ca/en/services-foryou/resources/Planning_and_Development/development_Applications/SitePlanGuidelinesason-2014-nc.pdf Guidelines for Snow Disposal and De-icing Operations in Ontario: https://www.ontario.ca/page/guidelines-snow-disposal-and-de-icingoperations-ontario	Snow removal is intended to be addressed through off-site removal. However storage areas will be explored at the time of site plan control.	Site Plan
1.3	Voluntary	**Augment Topsoil, Enhanced:** Maintain a minimum 30 cm/12" quality topsoil, protect areas from disturbance and/or decompact subsoil in landscaped areas/non hardscape areas.	**Rationale:** Enhanced topsoil levels absorbs runoff and helps to ensure plants survive and thrive. Protecting areas from disturbance and decompacting soil in disturbed areas further ensures the health of planted material. **Resource:** Preserving and Restoring Healthy Soil: Best Practices for Urban Construction (TRCA June 2012) https://sustainabletechnologies.ca/app/uploads/2013/02/TRCA_2012_Pr eserving-and-Restoring-Healthy-Soil_Full-Report-REDUCED.pdf **Incentive:** Sustainable Building Award	See comment 1.1; Planting beds will have a minimum of 45cm of quality planting soil. Will be shown at Site Plan phase.	Site Plan
1.4	Voluntary	**Snow Management, Enhanced:** Achieve the Smart About Salt Site Certification.	**Rationale:** The Smart About Salt Site Certification ensures that design and management best practices are in place to mitigate the impacts of road salt. **Resource:** www.smartaboutsalt.com **Incentive:** Sustainable Building Award	Noted. Will be further explored at Site Plan Control	Site Plan
1.5	Voluntary	**Reuse Topsoil:** Retain and reuse uncontaminated on-site topsoil in areas not covered by the building and parking/hard surface areas. Proper storage of topsoil to retain soil health and quality.	**Rationale:** Reusing soil promotes responsible use of a natural resource and minimizes the need to truck soil to and from the site. **Resource:** Preserving and Restoring Healthy Soil: Best Practices for Urban Construction. TRCA June 2012 https://sustainabletechnologies.ca/app/uploads/2013/02/TRCA_2012_Pr eserving-and-Restoring-Healthy-Soil_Full-Report-REDUCED.pdf **Incentive:** Sustainable Building Award	Noted. Will be further explored at Site Plan Control	Site Plan

1.6	Voluntary	**Site Disturbance:** On greenfield sites, limit site disturbance including earthwork and clearing of vegetation to 12 metres beyond the building perimeter, 1.5 m beyond primary roadway curbs, walkways, and main utility branch trenches, and 7.5 m beyond constructed areas with permeable surfaces (such as pervious paving areas) that require additional staging areas in order to limit compaction in the constructed area. Or on previously developed sites, restore a minimum of 50% of the site area (excluding the building footprint) by replacing impervious surfaces with native or adapted vegetation.	**Rationale:** Maintains the local landscape and helps to ensure soils and vegetation remain undisturbed. **Resource:** LEED ND: https://www.usgbc.org/leed/ratingsystems/neighborhood-development **Incentive:** Sustainable Building Award	Noted. Will be further explored at Site Plan Control	OPA/ZBA and Site Plan
1.7	Voluntary	**Adaptive Reuse:** Development includes adaptive reuse or rehabilitation of any non-designated heritage buildings with cultural heritage value or potential.	**Rationale:** The City's Official Plan contains policy to encourage adaptive re-use of built heritage resources where appropriate. Adaptive reuse integrates cultural heritage resources or their key attributes into a new development and makes use of existing building stock. **Resource:** N/A **Incentive:** Sustainable Building Award	Not a Greenfield site. No Heritage Buildings on site.	
1.8	Voluntary (see exception)	**Accessible Units:** In ground oriented residential developments such as townhomes, 15% of units are constructed as visitable housing. Features include: one zero-step entrance, wider doorways and clear passage on the main floor, a main floor bathroom or powder room. **NOTE:** Currently required for multiunit apartment and condo buildings under the Ontario Building Code.	**Rationale:** Visitable housing is the concept of designing and building homes with basic accessibility. Visitable homes provide a welcoming environment for visitors of all ages and mobility. It also helps a person of any age who develops a temporary or permanent mobility disability stay in their home without having to undergo extensive renovations. **Resources:** Visitable Housing Canada: www.visitablehousingcanada.com CMHC Accessible Housing by Design: www.cmhcschl.gc.ca/en/co/acho/acho_002.cfm **Incentives:** Sustainable Building Award; Burlington Accessibility Award; David C. Onley Award for Leadership in Accessibility	Will meet Building Code Requiements	Building Permit
Section 2: Transportation					
2.1	Required	**Site Connections:** Provide pedestrian and cycling connections from on-site buildings to off-site public sidewalks, pedestrian paths, trails, open space, active transportation pathways, transit stops and adjacent buildings and sites in accordance with Official Plan policies	**Rationale**: Encourages active transportation and transit use to reduce the dependence on the automobile. **Resource:** N/A	Provided. Pedestrian connectiveiy has been established throughout the site. See pedestrian circulation plan within Urban Deisgn Brief	OPA/ZBA and Site Plan

2.2	Required	**Accessibility:** Design on-site sidewalks, crosswalks and walkways to be continuous, universally accessible, barrier-free and clearly delineated in accordance with Official Plan Policies, Accessibility for Ontarians with Disabilities Act & City of Burlington Accessibility Design Standards	**Rationale:** Promotes walking by all age groups and abilities and provides access for those with limited mobility. **Resources:** The City of Burlington Accessibility Design Standards [PDF]: www.burlington.ca/accessibilitydesignstandards The Illustrated Technical Guide to the Accessibility Standard for the Design of Public Spaces: https://gaates.org/DOPS/loc.php	Provided.	OPA/ZBA and Site Plan
2.3	Required	**Bicycle Storage:** Provide bicycle parking spaces in accordance with the Zoning Bylaw and Official Plan Policies.	**Rationale:** Cycling reduces greenhouse gas emissions, reduces traffic congestion and improves health. Convenient bicycle parking encourages the use of active transportation. **Resource:** The City's Zoning Bylaw contains minimum bicycle parking space requirements for various zones.	Long and short term parking have been provied.	OPA/ZBA and Site Plan
2.4	Voluntary (see exception)	**Transportation Demand Management:** Provision and implementation of a Transportation Demand Management Plan. Required for parking reductions and required in Primary, Secondary and Employment Growth areas as per Official Plan policy.	**Rationale:** Transportation Demand Management Plans are plans that encourage sustainable modes of transportation. TDM plans evaluate building transportation needs comprehensively and may consider measures such as the provision of transit passes, flexible work hours, unbundled parking, on site transit facilities, priority parking for carpooling and autoshare programs, etc. **Resource:** Smart Commute Halton: https://www.smartcommute.ca/Public/Home.aspx **Incentive:** Sustainable Building Award	TDM measures are outlined in submitted TIS report. To be finalized amd secured through site plan applicant.	OPA/ZBA and Site Plan
2.5	Voluntary	**Bicycle Storage (Occupants):** Locate occupant/employee bicycle parking near the main entrance or easy to identify area, in a weather protected area with controlled access or secure enclosures, at no extra charge to the occupant/employee	**Rationale:** Applicants are encouraged improve upon the required bicycle parking requirements in the Zoning By-law to further encourage cycling as a viable transportation option. **Resource:** Toronto's Guidelines for the Design and Management of Bicycle Parking Facilities: https://www.toronto.ca/wpcontent/uploads/2017/12/8c1a-Cycling-Guidelines-for-the-Design-andManagement-of-Bicycle-Parking-Facilities.pdf **Incentive:** Sustainable Building Award	To be further considered at the time of site plan application.	OPA/ZBA and Site Plan
2.6	Voluntary	**Bicycle Storage (Visitor):** Provision of bicycle parking spaces in a weather protected area at grade near the main entrance or easy to identify area.	**Rationale:** Applicants are encouraged improve upon the required bicycle parking requirements in the Zoning By-law to further encourage cycling as a viable transportation option. **Resource:** Toronto's Guidelines for the Design and Management of Bicycle Parking Facilities: https://www.toronto.ca/wpcontent/uploads/2017/12/8c1a-Cycling-Guidelines-for-the-Design-andManagement-of-Bicycle-Parking-Facilities.pdf **Incentive:** Sustainable Building Award	To be further considered at the time of site plan application.	OPA/ZBA and Site Plan

2.7	Voluntary	**End of Trip Facilities:** In workplaces provide a minimum of 1 shower and change facility with lockers. Provide an additional shower and change facility for every 30 bicycle parking spaces.	**Rationale:** In order to facilitate growth in bicycle commute trips, end of trip infrastructure is essential to ensure that cycling is a viable transportation option. **Resource:** Toronto's Guidelines for the Design and Management of Bicycle Parking Facilities: https://www.toronto.ca/wpcontent/uploads/2017/12/8c1a-Cycling-Guidelines-for-the-Design-andManagement-of-Bicycle-Parking-Facilities.pdf **Incentive:** Sustainable Building Award	Not applicable.	Site Plan
2.8	Voluntary (see exception)	**Electric Vehicles:** A minimum of 3% of parking spaces provide charging stations to accommodate electric vehicles and design additional areas to be EV conversion ready. NOTE: Effective January 2019, the Building Code requires EV charging in 20 per cent of parking spaces and "rough-ins" in the remaining spaces in new multi-unit residential buildings where parking is provided within the building.	**Rationale:** The demand for electric vehicles and related infrastructure is growing in Canada, and encouraging electric vehicles reduces greenhouse gas emissions and air pollution. **Resource:** www.plugndrive.ca - Level 1 charging stations are appropriate for most residential and employment/office buildings. Level 2 charging stations are recommended for commercial/public use. Ministry of Transportation information on electric vehicle charging: http://www.mto.gov.on.ca/english/vehicles/electric/charging-electricvehicle.shtml Guide to Electric Vehicle Charging in Multi-Unit Residential Buildings (Pollution Probe): https://www.pollutionprobe.org/transportation/guide-to-ev-chargingin-murbs/ **Incentives:** Sustainable Building Award	To be further considered at the time of site plan application.	Site Plan
2.9	Voluntary	**Transit Pass:** For residential developments, each unit receives a one-year Burlington Transit pass at no cost to resident.	**Rationale:** Growth in Burlington is directed towards intensification areas, all serviced by local transit. The City encourages transit-supportive development and measures to encourage transit ridership. **Resource:** N/A **Incentive:** Sustainable Building Award	TDM measures are outlined in submitted TIS report. To be finalized amd secured through site plan applicant.	Site Plan
2.10	Voluntary	**Bike Share:** Provision of an on-site bike share available for owners/tenants to use.	**Rationale:** Encourages cycling as a transportation choice. **Resource:** N/A **Incentive:** Sustainable Building Award	TDM measures are outlined in submitted TIS report. To be finalized amd secured through site plan applicant.	Site Plan
2.11	Voluntary	**Car Share:** Provision of an on-site car share service available to owners/tenants and the public.	**Rationale:** Providing space for a car share service reduces the need for private automobile ownership. **Resource:** N/A **Incentive:** Sustainable Building Award	TDM measures are outlined in submitted TIS report. To be finalized amd secured through site plan applicant.	Site Plan
Section 3: Natural Environment					

3.1	Required	**Light Pollution:** Minimization of light pollution in accordance with the city's Guidelines for Outdoor Lighting and Official Plan Policies.	**Rationale:** Reducing light pollution reduces night sky glow which is beneficial for wildlife and improves nighttime visibility. All exterior lights must include cut-off shields in accordance with the City's guidelines. **Resource:** For guidance on outdoor lighting, see resources provided by the International Dark-Sky Association: https://www.darksky.org/ourwork/lighting/ Burlington City Council Approved Guidelines for Outdoor Lighting: https://www.burlington.ca/uploads/92/635575154693976963.pdf	Photometrics plan to be prepared as part of future site plan application. Not reqested for current OPA/ Zoning Amendment application	Site Plan
3.2	Required	**Native Species (NHS):** As per Official Plan policy, use native, non-invasive species within the Natural Heritage System and related buffers, and use non-invasive species in all other areas.	**Rationale:** Planting native and non-invasive species protects and enhances the Natural Heritage System and biodiversity, and are resilient to the local climate. **Resource:** For a list of native species, please refer to Conservation Halton's Landscaping and Tree Preservation Guidelines: www.conservationhalton.ca/planning-permits	To be further considered at the time of site plan application.	Site Plan
3.3	Voluntary	**Native Species (Enhanced, outside NHS and buffers):** Use native, non-invasive species that are suitable to site conditions for a minimum of 75% of all landscaped areas.	**Rationale:** Additional native plantings outside of natural areas are encouraged to promote biodiversity and resiliency. **Resource:** See above **Incentive:** Sustainable Building Award	To be further considered at the time of site plan application.	Site Plan
3.4	Voluntary (see exception)	**Bird Friendly Design:** Incorporate bird friendly design measures. Required for glass buildings and buildings adjacent to the Natural Heritage System and the Lake Ontario shoreline, as per Official Plan Policy.	**Rationale:** Bird Collisions with windows is a leading cause of bird death across North America. **Resource:** For assistance identifying bird friendly design measures please consult with FLAP Canada (www.flap.org) or the following Bird Friendly Design Guidelines: City of Toronto: https://www.toronto.ca/city-government/planningdevelopment/official-plan-guidelines/design-guidelines/bird-friendlyguidelines/ Markham: https://www.markham.ca/wps/portal/home/business/planning/plann ing-documents-and-studies/studies/bird-friendly-guidelines	To be further considered at the time of site plan application.	Site Plan
3.5	Voluntary	**Low Maintenance Landscaping:** All landscaping is low maintenance and drought resistant (i.e. Xeriscaping self-sustaining vegetation) that does not require a permanent potable water-based irrigation system (except for initial watering to establish plants).	**Rationale:** The use of low maintenance and drought-resistant planting reduces the amount of watering needed and produces a resilient landscape. **Resource:** N/A **Incentive:** Sustainable Building Award	To be further considered at the time of site plan application.	Site Plan
3.6	Voluntary	**Tree Planting (quantity):** Submit a Canopy Cover Plan that demonstrates 20% canopy cover of non-building hard surfaces at two thirds mature size.	**Rationale:** Planting trees provides numerous benefits and services, including the reduction of air pollution, water attenuation, moderation of the urban heat island effect, carbon sequestration, shade, habitat for urban adapted wildlife, neighbourhood character and mental health benefits. **Resource:** For assistance preparing a Canopy Cover Plan, please see the Town of Oakville's Guideline and Calculator: https://www.oakville.ca/assets/2011%20planning/CanopyCoverPlan.pdf **Incentive: Sustainable Building Award**	To be further considered at the time of site plan application.	Site Plan

3.7	Voluntary	**Tree Planting (soil):** Provide a soil volume of 30 m3 per tree and a minimum depth of 1 metre of high quality soil OR in hard surface situations install a soil cell product with high quality soil and provide the required soil volume.	**Rationale:** The use of high quality soil at an appropriate quantity helps ensure trees survive and thrive. A soil cell type product helps ensure trees survive in urban hardscape environments. High quality soil is well drained, un-compacted soil comprised of 5 to 15% organic material with a pH level of 6.0 to 8.0. **Resource:** City of Burlington webpages on tree planting and care: https://www.burlington.ca/en/services-for-you/tree-planting-andcare.asp **Incentive:** Sustainable Building Award	To be further considered at the time of site plan application.	Site Plan
3.8	Voluntary (see exception)	**Enhanced Tree Preservation:** Maintain existing on-site trees that are 30 cm or more DBH (diameter at breast height) OR Maintain 75% of healthy mature trees greater than 20 cm DBH. Note: Tree preservation requirements will be determined by Official Plan urban forestry policies	**Rationale:** Preserving trees provides numerous benefits and services, including the reduction of air pollution, water attenuation, moderation of the urban heat island effect, carbon sequestration, shade, habitat for urban adapted wildlife, neighbourhood character and mental health benefits. **Resource:** City of Burlington webpages on tree planting and care: https://www.burlington.ca/en/services-for-you/tree-planting-andcare.asp **Incentive:** Sustainable Building Award	Tree removals required. Should site design change, further tree preservation will be considered at the time of site plan application.	OPA/ZBA and Site Plan
3.9	Voluntary (see exception)	**Restoration and Enhancement:** Complete and implement a restoration and/or enhancement plan that demonstrates net gain for Natural Heritage System areas, including a management and monitoring plan. May be required as a result of Environmental Impact Assessment recommendations	**Rationale:** The restoration and enhancement of Natural Heritage System areas can aid in the improvement of degraded areas, and can enhance ecosystem function. Long term management and monitoring ensures the success of the restoration project over the long term. **Resource:** N/A **Incentive:** Sustainable Building Award	Not applicable.	OPA/ZBA and Site Plan
3.10	Voluntary	**Community Gardens:** For development containing residential units, provide community garden plots for residents in a common amenity area.	**Rationale:** Community gardens encourage sustainable local food production, increase access to healthy food, provide opportunities for community building and create local green space. **Resource:** Burlington Green Community Gardens in Multi Unit Residential Buildings (MURBs) guidance: https://www.burlingtongreen.org/wpcontent/uploads/2021/04/community-gardens-murbs-community-2020- min.pdf **Incentive:** Sustainable Building Award	No being considered at this time.	Site Plan
3.11	Voluntary	**Green Roofs:** For residential and mixed use developments, install green roofs, consisting of a layer of growing medium soil with vegetation material on top of a conventional flat or sloped roof. Definition as set out in the Municipal Act 2001 Section 97.1 (4): “green roof” means a roof surface that supports the growth of vegetation over a substantial portion of its area for the purpose of water conservation or energy conservation.	**Rational:** Green roofs provide multi-functional benefits including improving energy efficiency in buildings, stormwater absorption and quality, reduce urban heat island effects, create green space for passive recreation, and to enhance roof aesthetics. **Resource:** Green Roofs for Healthy Cities works to develop standards in support of green roofs: https://greenroofs.org/design-standards **Incentive:** Sustainable Building Award	No being considered at this time.	Site Plan
Section 4: Water Conservation and Quality					

4.1	Required	**Stormwater Quality:** Achievement of a level one/enhanced stormwater treatment for all stormwater runoff.	**Rationale:** Stormwater quality treatment reduces the total suspended solids in runoff to ensure the protection of receiving watercourses and Lake Ontario. **Resources:** N/A	Achieved. See provided FSR/ SWM report	OPA/ZBA and Site Plan
4.2	Voluntary	**Water Conservation Systems:** implementation of systems to retain and reuse water, such as grey water recycling, rainwater harvesting systems, cisterns and rain barrels.	**Rationale:** Cisterns, rain barrels and rainwater harvesting systems allow rainwater to be captured and reused on site. Grey water systems allow the reuse of water internal to the building, for example allowing the reuse of water from bathing and/or laundry to be used for flushing toilets or irrigation. **Resources:** N/A **Incentives:** Sustainable Building Award	To be further considered at the time of site plan application.	OPA/ZBA and Site Plan
4.3	Voluntary	**Pervious Surfaces:** minimization of impervious surfaces and stormwater runoff through the use of Low Impact Development (LID) measures, such as: permable pavements; bioswales; infiltration trenches/bioretention areas; rain gardens; draining roofs to pervious areas, and; other innovative stormwater management strategies	**Rationale:** Low Impact Development strategies mitigate the impacts of increased urban runoff and stormwater pollution by managing it as close to its source as possible. It comprises a set of site design approaches and small scale stormwater management practices that promote the use of natural systems for infiltration and evapotranspiration, and rainwater harvesting. **Resources:** Guidance, case studies and other tools to help design and construct LID approaches can be found on Credit Valley Conservation's website: www.creditvalleyca.ca/low-impact-development/ **Incentives:** Sustainable Building Award	To be further considered at the time of site plan application.	OPA/ZBA and Site Plan
4.4	Voluntary	**Efficient Fixtures:** All newly installed toilets, urinals, private lavatory faucets, and showerheads that are eligible for labeling must be WaterSense labeled.	**Rationale:** Efficient water fixtures reduce the use of potable water. **Resources:** EPA Watersense - www.epa.gov/watersense/watersenselabel **Incentives:** Sustainable Building Award	To be further considered at the time of site plan application.	Building Permit
Section 5: Energy and Emissions					
5.1	Required	**Urban Heat Island:** Provide vegetated landscape areas in hard surface areas as per the Zoning By-law.	**Rationale:** Vegetation can reduce the urban heat island effect to improve human comfort and energy efficiency in the surrounding areas. **Resource:** City's Zoning By-law	Landscape ares have been maximized and balanced with the development of the site	OPA/ZBA and Site Plan
5.2	Voluntary	**Urban Heat Island (non-roof):** efforts to reduce urban heat island effect using light coloured materials/white paving and/or enhanced landscaped parking for at least 50% of non-roof hardscape.	**Rationale:** Light coloured materials and vegetation can reduce the urban heat island effect to improve human comfort and health and improve energy efficiency in the surrounding area. High albedo materials include white or grey concrete, light coloured asphalt, selected interlocking concrete paver and other light coloured pavers and must have an initial reflectance of at least 0.33. **Resources:** LEED standards provide additional guidance for calculating reflectance: www.cagbc.org **Incentive:** Sustainable Building Award	materials to be refined at the time of site plan applicaion	Site Plan

5.3	Voluntary	**Urban Heat Island (roof)**: Use Cool roofing materials for 75% of the roof area OR Install a Green Roof with 50% minimum coverage OR use a combination of green roof and cool roof material for a minimum of 75% of the roof.	**Rationale:** Light coloured roofing materials reduces the heat island effect and contributes to building energy efficiency. Light coloured roofs should generally have a Solar Reflectance Index of 82 for a low sloped roof, and 39 for a high sloped roof. In addition to reducing the heat island effect, green roofs can be used to manage stormwater, improve local air quality, provide amenity space and grow produce. **Resources:** LEED standards provide additional guidance for calculating reflectance. www.cagbc.org **Incentive:** Sustainable Building Award	materials to be refined at the time of site plan applicaion	Site Plan
5.4	Voluntary	**Energy Efficiency:** Achieve 10% or better energy efficiency improvements over ASHRAE 90.1-2010 as demonstrated by third party certification/energy modelling.	**Rationale:** By some estimates, 40% of energy use in North America can be attributed to the heating, cooling and maintenance of buildings. Building more energy efficient buildings reduces greenhouse gas emissions and air pollution and are more cost effective to operate. Efficiency can be achieved through a combination of measures including HVAC, insulation, building materials, windows, lighting, appliances, automation/controls, building orientation and other passive energy measures to achieve a low carbon building. **Resources:** N/A **Incentives:** Various incentives may be available for eligible projects. Applicants are encouraged to investigate these incentives by contacting Burlington Hydro, Union Gas and the Independent Electricity System Operator. Information is available at www.saveonenergy.ca CMHC Green Home Program: https://www.cmhcschl.gc.ca/en/consumers/home-buying/mortgage-loan-insurance-forconsumers/cmhc-green-home	materials to be refined at the time of site plan applicaion	Building Permit
5.5	Voluntary	**On-site Renewable Energy:** Generate a portion building energy needs using an onsite renewable energy supply (e.g. solar, wind, geothermal).	**Rationale:** Renewable energy can reduce pollution and greenhouse gas emissions and provide energy security. **Resources:** City of Burlington Renewable Energy Protocol: https://www.burlington.ca/en/live-andplay/resources/Environment/Energy/FIT/Burlington_Renewable_Energy_Council_Resolution_Protocol.pdf	No being considered at this time, but can be considered at the time of site plan application	Site Plan and Building Permit
5.6	Voluntary	**Net-Zero:** Demonstration via energy modelling of net-zero energy footprint.	**Rationale:** A combination of energy efficiency and on-site renewable measures can achieve a net-zero energy footprint. **Resources:** LEED Zero Carbon Building Standard: https://www.cagbc.org/CAGBC/Zero_Carbon/The_CaGBC_Zero_Carbon_Building_Program.aspx Toronto Zero Emissions Building Framework: https://www.toronto.ca/wp-content/uploads/2017/11/9875-ZeroEmissions-Buildings-Framework-Report.pdf Incentives: Sustainable Building Award	No being considered at this time, but can be considered at the time of site plan application	Site Plan and Building Permit
5.7	Voluntary	**District Energy:** Incorporate a district heating and/or cooling system, or ensure the building is retrofit ready for a future DE connection.	**Rationale:** District energy is technology for providing heating and/or cooling from a central plant to multiple users in a district. District energy can save money for users, conserve resources, reduce air emissions, and provide energy security. **Resources:** www.districtenergy.org / www.questcanada.org **Incentives:** Sustainable Building Award	No being considered at this time, but can be considered at the time of site plan application	Site Plan and Building Permit

5.8	Voluntary	**Continuous Metering:** Provision of continuous metering of energy usage for each unit.	**Rationale:** Continuous energy metering is critical for accurate energy monitoring and management. **Resources:** N/A **Incentives:** Sustainable Building Award	No being considered at this time, but can be considered at the time of site plan application	Building Permit
5.9	Voluntary	**Commissioning:** Third-party commissioning of building systems to ensure they function properly. Commissioning team should be part of an integrated design and construction team at project start.	**Rationale:** Commissioning of a building a process that documents and verifies that all of the facility's energy related systems perform interactively as per the design specifications and operational requirements for at least one year following construction. **Resources:** LEED-NC Energy & Atmosphere Prerequisite for Fundamental Building Systems Commissioning: www.cagbc.org or The Building Commissioning Guide: https://www.wbdg.org/building-commissioning **Incentives:** Sustainable Building Award	No being considered at this time, but can be considered at the time of site plan application	Building Permit
Section 6: Waste and Building Materials					
6.1	Required	**Waste Management Plan:** Provide and implement a waste management plan in accordance with Regional requirements	**Rationale:** Recycling and composting treats waste as a resource and reduces the need for landfill expansion. **Resource:** Halton Region's Development Design Guidelines for Source Separation of Solid Waste: https://www.halton.ca/Repository/Development-DesignGuidelines-for-Source-Separatio	Regional waste standards regarding waste maangement have been met, however regional collection could not be met	OPA/ZBA and Site Plan
6.2	Voluntary	**Waste Management Facilities:** Provision of recycling, garbage and composting facilities (beyond those required by Halton Region) which are easily accessible for all occupants (in an attached building).	**Rationale:** Recycling and composting treats waste as a resource and reduces the need for landfill expansion. **Resources:** N/A	provided. See provided waste management breif	Site Plan
6.3	Voluntary	**Recycled Materials:** Ensure that at least 15% of a project's construction materials (based on value) are comprised of refurbished/reused or recycled content.	**Rationale:** Reduces the demand for new materials and their associated environmental impacts. **Resources:** N/A **Incentives:** Sustainable Building Award	To be further considered at the time of site plan application.	Building Permit
6.4	Voluntary	**Locally Manufactured:** Ensure that at least 15% of a project's construction materials (based on value) are comprised of materials with locally manufactured content.	**Rationale:** Local materials support the local economy and reduce the environmental impacts associated with transportation. Products should be sourced within 160 km of development site. **Resource:** N/A **Incentives:** Sustainable Building Award	To be further considered at the time of site plan application.	Building Permit
6.5	Voluntary	**Sustainable Wood:** Where wood based materials are used, utilize a minimum of 25% that are certified in accordance with the Forest Stewardship Council's principles and criteria for wood building components.	**Rationale:** The Forest Stewardship Council (FSC) is an international certification and labeling system dedicated to promoting responsible forest management, which includes sustainable harvesting and replanting practices. **Resources:** Forestry Stewardship Council: https://ca.fsc.org/en-ca **Incentive:** Sustainable Building Award	To be further considered at the time of site plan application.	Building Permit
6.6	Voluntary	**Air Pollutants in Materials:** Minimization of air pollutants in interior materials by using low or no VOC paints, carpets, adhesives and other finishes.	**Rationale:** The use of low VOC (volatile organic compounds) paint and finishes improve indoor air quality. **Resource:** N/A **Incentives:** Sustainable Building Award	To be further considered at the time of site plan application.	Building Permit

6.7	Voluntary	**Construction Waste Management:** Develop and implement a waste management plan to recycle and/or salvage construction, demolition and land clearing waste.	**Rationale:** Reduces construction and demolition waste disposed of in landfills, and to treat recycled and salvaged materials as a resource. **Resource:** N/A **Incentive:** Sustainable Building Award	To be further considered at the time of site plan application.	Building Permit
Section 7: Maintenance, Monitoring, and Communication					
7.1	Voluntary	**Maintenance Plan:** provision of a building maintenance plan that provides instructions, training requirements and schedules for maintaining sustainability features of the site/ building/landscaping. Includes requirements for recommissioning plan of	**Rationale:** A maintenance plan will ensure sustainability features remain implemented on the site and continue to function at optimal levels. **Resource:** **N/A Incentives:** Sustainable Building Award	To be further considered at the time of site plan application.	Building Permit
7.2	Voluntary	**Education:** provision of instructions for homeowners and occupants that explain the intent, benefits, use, and maintenance of green building features as part of the lease/sale agreement or condo declaration. Signage and other education materials are posted to educate building visitors of sustainability features.	**Rationale:** Communicating the building's green development features and familiarizing the owner(s) or occupants with these features will help to ensure their proper use and maintenance. **Resource:** N/A **Incentives:** Sustainable Building Award	To be further considered at the time of site plan application.	Building Permit
7.3	Voluntary (see exception)	**Monitoring:** collection and monitoring of project performance data on energy, water and healthy living environments. Note: Ontario's Energy and Water Reporting and Benchmarking (EWRB) program has reporting requirements for commercial, multi unit residential and some industrial buildings over 50,000 square feet	**Rationale:** Monitoring is critical to understand project performance and to undertake adaptive management measures, maintenance and training as required. **Resource:** Energy and Water Reporting and Benchmarking (EWRB) initiative: https://www.ontario.ca/page/report-energy-water-use-largebuildings **Incentives:** Sustainable Building Award	To be further considered at the time of site plan application.	Building Permit
Section 8: Innovation					
8.1	Voluntary	Innovative design or performance features not listed that receive approval from the City	**Rationale:** The intent of this category is to encourage and recognize additional innovative approaches in design or performance that are not specifically addressed above. **Resource:** N/A **Incentive:** Sustainable Building Award	To be further considered at the time of site plan application.	Various