Municipality of Clarington

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SCHEDULE A – Land Use, Transportation, Parks and Open Space

APPENDIX A – Sustainable Urban Design Guidelines

1.0 INTRODUCTION

The Brookhill Neighbourhood is located north of the Bowmanville West Town Centre, and south of Nash Road. Its easterly boundary is the Bowmanville Creek valley and the historic community of Bowmanville. Its westerly boundary is the limit of the Urban Area for Bowmanville. The area for the Brookhill Neighbourhood is approximately 300 hectares (740 acres) in size. Of that total, one third of the area contains natural features and approximately 100 hectares south of the Longworth Avenue Extension, has been either built or approved for development.

An update of the Brookhill Neighbourhood Secondary Plan is required to advance the forward-thinking policy framework approved over 10 years ago for a dynamic *mixed use* community. The update is focused on the approximate 200 hectares of land located north of the Longworth Avenue extension to ensure that future development in the Brookhill Neighbourhood is based on the latest Provincial and local policies and updates to the *natural heritage system* and the engineering elements of the plan including transportation, stormwater drainage, and servicing. This update replaces the previous Brookhill Neighbourhood Secondary Plan and Urban Design Guidelines that were originally approved in 2008. The Secondary Plan reflects the goals of the Clarington Official Plan ("Official Plan") and has been prepared with the intent that growth shall occur in a logical, efficient, and fiscally responsible manner.

The Secondary Plan Area is anticipated to achieve a minimum total planned population of approximately 7,400 residents and 2,700 units. The purpose of the Secondary Plan is to establish goals and policies to guide development within the Brookhill Neighbourhood, as it is implemented through subdivision, zoning, and site plan control. The secondary plan policies reflect key themes for the Brookhill Neighbourhood to support an efficient, low-energy neighbourhood that preserves the natural environment, provides a diversity of housing options, and offers a central focus with a mix of uses

Sustainability – The Brookhill Neighbourhood will be developed to minimize the community's impact on the environment. The Secondary Plan supports sustainability by:

- Supporting an adaptive and resilient community through the responsible use of resources;
- Reducing demands for energy, water, and waste systems;
- Ensuring new *development* contributes to adapting to, and mitigating, the impacts of climate change; and
- Reducing greenhouse gas emissions through the design of *complete streets*, *active transportation* opportunities, and *transit supportive* densities.

Environmental Preservation – The Brookhill Neighbourhood is characterized by environmental features that will be preserved and enhanced by:

- Recognizing the importance of the natural features as contributing to the quality of life for local residents;
- Preserving the *natural heritage system* as the initial structuring feature around which all other community elements are built;
- Observing defined protection areas and exploring land use design options that restore or enhance the *natural heritage* system; and
- Providing a continuous open space system linking, natural features, public *parks*, stormwater management facilities and a full array of community amenities.

Healthy, Complete Community - The Brookhill Neighbourhood will be a healthy, connected, and complete community which supports the quality of human well-being and active lifestyles by.

- Designing for a complete community that meets people's needs for daily living
 throughout an entire lifetime. Complete communities are characterized by greater
 densities placed at *mixed use* centres, or near transit facilities; a mix and diversity of
 housing types and uses, including *affordable* housing; convenient access to public
 services, community infrastructure, and mobility options; a robust open space
 system; and job opportunities;
- Integrating new *development* within the planned community structure of this Secondary Plan, resulting in a contiguous, connected, and compact urban form; and
- Encouraging healthier lifestyles by creating connected and walkable road patterns with amenities and services within a 5 minute walk (400 m).

The Sustainable Urban Design Guidelines attached as Appendix A provide further guidance on the implementation of the policies of this Secondary Plan.

2.0 VISION AND PRINCIPLES

2.1 Vision

The Brookhill Neighbourhood is envisioned as a vibrant, pedestrian oriented community that promotes high quality design practices centered on energy conservation, efficiency, and environmental sustainability. It is intended that the Secondary Plan Area will achieve the goals of a healthy and complete community with distinctive, livable

neighbourhoods, a commercial area, integrated and connected green spaces and trails system, and efficient transportation and public transit to ensure a balance and mix of uses. Although predominantly residential, the community will feature a central commercial area that includes a Neighbourhood Centre and a Village Corridor to provide commercial and service amenities within walking distance of residents.

2.2 Principles

The goals and principles of this Secondary Plan work together to create a complete community that addresses public health, climate change, environmental preservation, and the quality of the built environment to meet the needs of residents. The following guiding principles further articulate the vision and are the foundation upon which the policies of this Secondary Plan are based:

- 2.2.1 Foster an adaptive and resilient community through the responsible use of resources to ensure long-term sustainability, reduce greenhouse gas emissions, demands for energy, water, and waste systems, and the impacts of climate change.
- 2.2.2 Create a complete, healthy, attractive, safe, inclusive, pedestrian-oriented, and accessible community for the present and future residents of the Brookhill Neighbourhood throughout all stages of their lives.
- 2.2.3 Provide a mix of housing opportunities and building types throughout the community to meet the needs of people at different stages of their life and with varying socio-economic circumstances.
- 2.2.4 Protect, restore, and enhance local and regional ecosystems to conserve biodiversity, ecological integrity, and function.
- 2.2.5 Support a connected and accessible multi-modal transportation network that gives priority to the creation of *complete streets* and the provision of *active transportation* and transit *infrastructure* to ensure all persons have transportation options.
- 2.2.6 Provide for an accessible, connected, and integrated system of *parks*, open spaces, and multi-use trails that are linked to natural features creating opportunities for daily physical activity and supporting needs of residents of all ages and abilities.

- 2.2.7 Promote design excellence through a well-designed and contextually appropriate community that celebrates the scale and form of the existing natural and built character.
- 2.2.8 Preserve and enhance existing *cultural heritage landscape*s and incorporate these features into the evolving future landscape.
- 2.2.9 Promote efficient development and land use patterns and coordinated planning for transportation and municipal services to sustain the financial well-being of the municipality over the long term.

3.0 COMMUNITY STRUCTURE

- 3.1 The Community Structure of the Brookhill Neighbourhood is based on achieving the goals and principles in Section 2. The components of the community structure that shape the distribution of land uses and include the following:
 - i. Open Space System
 - ii. Major Road Network
 - iii. Parks System
 - iv. Residential Neighbourhoods
 - v. Commercial Areas
 - vi. Schools

3.1 Open Space System

- 3.1.1 The Open Space System includes the *natural heritage system* which is the initial structuring element around which all other elements are built. The *natural heritage system* includes all core *natural heritage features*, such as *wetlands*, *woodlands*, and tributaries and shall be protected, restored, and enhanced to create continuous green corridors.
- 3.1.2 The natural heritage features of the Bowmanville Creek and Brookhill Tributary are the defining features of the Open Space System in the Secondary Plan Area. The Bowmanville Creek defines the eastern boundary of the Secondary Plan Area and the Brookhill Tributary forms the basis for naturalized channels that run through much of the Secondary Plan Area.

3.2 Major Road Network

- 3.2.1 The Road Network includes the major connector roads within the Brookhill Neighbourhood. The road network will follow a modified grid pattern to ensure a permeable and connected system of roads that allow for direct routes into, through, and out of the community.
- 3.2.2 The road network will be developed under the principle of "complete streets" and will accommodate appropriate facilities for the movement of pedestrians, cyclists, transit, and vehicles.
- 3.2.3 Bowmanville Avenue is identified as a Local *Corridor* in the Official Plan and will support transit and opportunities for *active transportation* facilities including a multi-use trail.

3.3 Parks System

- 3.3.1 The *parks* system includes Neighbourhood Parks, parkettes, urban squares, and a trail network. *Parks* are located throughout the community and are centrally located to ensure that residents are within an approximate 5 minute walk (400m) of an open space. This encourages daily physical activity and creates a central focus and gathering space for the neighbourhoods.
- 3.3.2 Neighbourhood Parks are located adjacent to planned community facilities and the *natural heritage system* to support *active transportation* and connections to a community trail system.
- 3.3.3 Parkettes and urban squares are smaller components of the *parks* system and offer passive *recreation* opportunities.
- 3.3.4 Where appropriate, *stormwater management ponds* will include areas for passive *recreation*, through paths and trails, and as visual extensions of the *parks* system.

3.4 Residential Neighbourhoods

- 3.4.1 The Residential Neighbourhoods shall be planned and designed as accessible, pedestrian-oriented areas that are distinct in character and connected within the larger Brookhill Neighbourhood within an approximate 5 minute walk (400 metres) of existing and future local transit services, schools, and *parks*, and within a 10 to 20 minute walk (800 to 1,600 metres) of future higher order transit and services.
- 3.4.2 The Residential Neighbourhoods will include a mix and diversity of housing types to ensure variety and choice. The Residential Neighbourhoods include low

density housing such as single detached, semi-detached, and townhouse dwelling types; medium density housing, such as townhouses, and low-rise apartment buildings; and high density housing with mid-rise apartment buildings. Small scale service and neighbourhood retail commercial uses are also permitted in predominantly residential areas.

3.4.3 Medium density housing is distributed throughout the Secondary Plan Area, with higher density housing focused along the Local *Corridor*.

3.5 Commercial Areas

- 3.5.1 Commercial areas have been included in the Brookhill Neighbourhood to provide opportunities for amenities and services within an approximate 10 minute walk of residents (800 metres). Two commercial elements include a Neighbourhood Centre and a Village Corridor.
- 3.5.2 A Neighbourhood Centre is located at Bowmanville Avenue and Longworth Avenue. The uses include residential, *mixed use building*s with ground floor retail and residential above, and a stand-alone grocery store/supermarket with ancillary uses. The residential built form includes townhouses, stacked townhouses, and apartments.
- 3.5.3 The Village Corridor is a primary focus of the Brookhill Neighbourhood. The Village Corridor along Longworth Avenue, from Bowmanville Avenue to Clarington Boulevard, will have the greatest mix of uses including retail and service commercial, recreational uses, cultural uses, apartments in *mixed-use buildings*, and limited ground related housing. This area will be pedestrian focused with a vibrant, walkable streetscape that will bring the community together and provide an identity for the Brookhill Neighbourhood.

3.6 Schools

3.6.1 Elementary schools have been located central to the Brookhill Neighbourhood to support walkability. Elementary schools also act as a neighbourhood focal point and when located adjacent to a neighbourhood park further creates opportunities for the sharing of facilities.

4.0 SUSTAINABILITY AND CLIMATE CHANGE

Built form plays a major role in creating a healthy, vibrant, and sustainable community. Communities, neighbourhoods, and new buildings shall be designed with a focus on

reducing water use, waste generation, and energy use. Since human activity is the principal cause of elevated levels of air pollutants and greenhouse gases, and of demands on energy, water, and waste systems, the policies of this Plan will focus on means of reducing this impact on both the built and natural environments. The policies will also address public health issues through a variety of measures that encourage urban design strategies to promote daily physical activity.

4.1 Objectives

- 4.1.1 Demonstrate leadership in sustainable forms of green building design and technology, including the incorporation of renewable and alternative energy sources, and district energy systems.
- 4.1.2 Encourage energy conservation through appropriate site planning, urban design, and the use of energy efficient materials.
- 4.1.3 Utilize, wherever possible, street alignments and building placement to maximize potential for passive and active solar energy capture.
- 4.1.4 Incorporate Low Impact Development (LID) best practices and *green infrastructure*, wherever feasible to minimize runoff, reduce water pollution, and protect groundwater resources.
- 4.1.5 Ensure streetscape design incorporates appropriate resilient tree species and spacing to minimize heat island effect.

4.2 Sustainable Design and Climate Change

- 4.2.1 The Municipality will use its array of planning tools, including this Secondary Plan, and associated Sustainable Urban Design Guidelines, as well as the Priority Green Development Program in accordance with Section 5.5.3 of the Official Plan to help guide development to be more sustainable. The Municipality may consider the use of a Community Benefits By-law and other financial incentive programs to assist with the implementation of sustainable development design standards.
- 4.2.2 Green building technologies, renewable and alternative energy sources, and other sustainable design options for development shall be in accordance with the policies of Section 5.5 of the Official Plan and all relevant Provincial legislation and policy directives.

4.2.3 *Development* applications shall be consistent with Section 5.6.5 of the Official Plan by providing a Sustainability Report indicating how the development meets the sustainable development principles and policies of this Plan, including addressing sustainable community, site, and building design.

4.3 Climate Change Adaptation and Mitigation

- 4.3.1 *Development* applications shall integrate *climate change adaptation* and mitigation strategies through land use and development patterns that are sustainable by:
 - a. Maximizing vegetation and natural areas to support improved air quality and carbon sequestration;
 - b. Reducing emissions of greenhouse gases and other pollutants;
 - c. Maximizing opportunities for the use of renewable energy systems; and
 - d. Promoting active transportation.
- 4.3.2 The Municipality shall work with Durham Region, GO Transit, Metrolinx, and adjacent municipalities to improve transit services, carpooling, and other traffic demand management measures to reduce greenhouse gas emissions from transportation.

4.4 Air Quality

- 4.4.1 In order to minimize the air quality and climate change impacts associated with new growth, the following shall be included in this Plan:
 - a. The reduction of air pollution through the development of complete communities;
 - b. The reduction of vehicle kilometres travelled across the Secondary Plan Area through increased mobility choices and the promotion of walking, cycling, and transit; and
 - c. The separation of sensitive land uses from air pollutant sources through appropriate separation distances, land use planning, and zoning.
- 4.4.2 Where feasible, support the use of electric vehicles through the provision of charging *infrastructure* in the Neighbourhood Centre and/or Village Corridor.

4.5 Water Conservation

- 4.5.1 To support water conservation, the Municipality will:
 - Require green infrastructure by utilizing the absorbing and filtering abilities of plants, trees, and soil to protect water quality, reduce runoff volumes, and recharge groundwater supplies;
 - b. Require the use of drought tolerant and diverse tree and shrub species in *parks*, along streetscapes, and in public and private landscaping to reduce water use;
 - c. Encourage the use of porous or permeable pavement instead of standard asphalt and concrete for surfacing sidewalks, driveways, parking areas, and many types of road surfaces as a stormwater run-off management strategy for promoting groundwater infiltration and water quality treatment; and
 - d. Where feasible, implement LID measures that emphasize the use of bioswales, innovative stormwater practices, constructed wetlands, at-source infiltration, greywater re-use system, and alternative filtration systems such as treatment trains and water conservation measures.

4.6 Energy Conservation

- 4.6.1 In order to reduce energy consumption, development proposals that include energy efficient building design and practices in all new buildings, shall be encouraged and given priority.
- 4.6.2 The following may be used to mitigate heat island effects:
 - a. Green roofs and cool roofs strategies that use high albedo materials to reduce heat gain;
 - b. The strategic use of deciduous trees to help with evapotranspiration and shading of sidewalks and hard surface areas in summer;
 - c. Solar access in winter; and
 - d. Light-coloured paving materials with a solar reflectance index of at least 29, where feasible.

4.7 Energy Generation

4.7.1 Alternative energy systems and renewable energy systems shall be permitted and encouraged throughout the Secondary Plan Area in accordance with Provincial and Federal requirements.

4.7.2 *Development* plans and building designs shall provide opportunities for south facing windows and building orientation to maximize potential for passive and active solar energy. Where feasible, implement street and block alignment within 25 degrees of geographic east-west to maximize solar gain.

4.8 Local Food Production

- 4.8.1 The creation of opportunities for local food production and distribution in the Secondary Plan Area is supported by the Municipality. *Development* plans and building designs shall incorporate opportunities for local food production through:
 - a. Community gardens;
 - b. Edible landscapes;
 - c. Food co-ops and community food centres;
 - d. Food-related home businesses;
 - e. Food retailers; and
 - f. Local market space (i.e., a farmer's market).

5.0 NATURAL HERITAGE

5.1 Objectives

- 5.1.1 Protect and enhance local and regional ecosystems and biological diversity.
- 5.1.2 Ensure *development* does not negatively impact *natural heritage features* or their *ecological* functions by providing appropriate separation distances and buffers.
- 5.1.3 Provide a functional and highly interconnected system of *natural heritage features*, *parks*, trails, and stormwater management facilities that are accessible and visible to residents.

5.2 General Policies

5.2.1 All development shall adhere to the policies of the Official Plan, as it pertains to the policy areas of the *Natural Heritage System* in Section 3.4 and Hazards policies in Section 3.7.

- 5.2.2 The *Natural Heritage System* ("NHS") is largely composed of lands that contain *natural heritage features* and hydrologic features. The system also includes other lands that serve as *linkages*, corridors, and adjacent buffer lands.
- 5.2.3 The Municipality recognizes the important contribution that *natural heritage* features make to the creation of a vibrant, livable community. The *natural heritage features* within the Secondary Plan Area are identified as Environmental Protection Area on Schedule A.
- 5.2.4 Lands within the Environmental Protection Area are to be protected, conserved, and restored. Moreover, the Environmental Protection Area together with a network of *parks* and trails can be leveraged to provide unique views and connections through the community that contribute to creating a sense of place.
- 5.2.5 *Natural heritage features* should be physically and visually accessible from the abutting roads.
- 5.2.6 Preservation of existing vegetation is encouraged.
- 5.2.7 Revegetation of the riparian corridors that are less than 60 metres wide is encouraged.

5.3 Urban Forest and Native Plantings

- 5.3.1 Together, new *development* and public realm improvements shall establish an urban tree canopy throughout the Secondary Plan Area to minimize the heat island effect, provide for shade and wind cover, and contribute to a green and attractive environment.
- 5.3.2 New *development* and public realm improvements are required to use native plant species wherever possible, particularly along rights-of-way and pedestrian trails.
- 5.3.3 New *development* and public realm improvements shall only use native plantings within 30 metres of Environmental Protection Areas.
- 5.3.4 All private *development* shall be supported by landscape plans which demonstrate how the development will contribute to the urban forest, improve the health and diversity of the natural environment, support other local plant and animal species, and further enhance the connectivity of the built environment to *natural heritage features* and *hydrologically sensitive features*.

- 5.3.5 A diversity of tree species shall be planted in *parks* and along rights-of-way to provide a healthy and more robust tree inventory that is less prone to insects and diseases. The selection of tree species within the Secondary Plan Area will contribute the Municipality's species diversity objectives.
- 5.3.6 Where trees and shrubs are destroyed or harvested pre-maturely prior to proper study and approval, compensation will be calculated at a 3:1 ratio.

6.0 CREATING VIBRANT URBAN PLACES

The Municipality's objectives for urban design in the Brookhill Neighbourhood are based on the belief that the livability and physical appeal of a community can be enhanced by the quality, layout, and attractiveness of its public and private realms.

6.1 Objectives

- 6.1.1 Develop a welcoming community that encourages and supports active living, social engagement, civic pride, and the creation of a sense of place and wellbeing.
- 6.1.2 Encourage a high quality and consistent level of urban design for the public and private realms through adherence to the principles, policies, and requirements of this Secondary Plan and in accordance with the Sustainable Urban Design Guidelines.
- 6.1.3 Buildings, streetscapes, *parks* and open spaces, and *infrastructure* shall be distinctive and aesthetically pleasing.
- 6.1.4 Traffic calming measures are an integral part of the community design.

 Streetscape design measures, boulevard tree planting, street curvature, axial view, and appropriate on-street parking provisions shall not impede the pedestrian and cycling networks and the provision of safe *infrastructure*.
- 6.1.5 Provide for the orientation of building front façades, both public and private, to frame streetscapes and to enhance the public realm and encourage pedestrian activity.
- 6.1.6 Require high quality architecture that transcends a theme or a specific period in time is fundamental to a beautiful community. Buildings should be compatible with one another, but there must be a diversity of scale and a diversity of style defined through building materials, colour, and architectural details.

6.1.7 Provide a transition between areas of different *development* intensity and uses.

6.2 Urban Design Intent

- 6.2.1 The Secondary Plan is designed to achieve a community that is diverse in use and population, is scaled to the pedestrian, can accommodate private automobiles and transit, and has a well defined high-quality public realm.
- 6.2.2 New *development* shall be consistent with the urban design policies contained in Section 5 of the Official Plan, the policies of this Secondary Plan, and shall be in accordance with the Sustainable Urban Design Guidelines.
- 6.2.3 The Sustainable Urban Design Guidelines in Appendix A to this Plan shall be used as guidance in the interpretation and implementation of the Secondary Plan's policies.

6.3 The Public Realm

- 6.3.1 The public realm compromises public roads, lanes, *parks* and open spaces, *natural heritage features* and their associated buffers, stormwater management facilities, and the public use activity areas of other public lands and private *development* sites and buildings.
- 6.3.2 The design and development of the public realm shall be consistent with the policies of Section 5.3 of the Official Plan, the policies of this Secondary Plan, and shall be in accordance with the Sustainable Urban Design Guidelines.

Roads and Streetscapes

- 6.3.3 The design of Public Roads and lanes will:
 - Provide access for vehicles, pedestrians, and bicycles, opportunities for vistas, view corridors, pedestrian amenity areas, and space for utilities and services;
 - b. Be subject to comprehensive streetscape requirements in the Sustainable Urban Design Guidelines to ensure the public realm is consistent in quality and design;
 - c. Be aligned to create a modified rectilinear grid pattern that defines development blocks and establishes a highly inter-connected and permeable network that maximizes accessibility and support for transit;

- d. Be designed to ensure efficient walking routes to schools, centres, transit, and other key destinations with continuous multi-use paths, sidewalks, or equivalent provisions for walking, on both sides of the road;
- e. Implement traffic calming measures on Collector and Local Roads such as on-street parking, reduced lane widths, public laneways, raised intersections, curb bulb-outs, and/or traffic circles to reduce vehicular traffic speeds and to ensure safe walking and cycling environments; and
- f. Provide street trees and landscaping on both sides of the road to create and enhance the urban tree canopy while providing shade over sidewalks, where appropriate.
- 6.3.4 Adequate space and safety provisions will be provided for the movement of pedestrians and cyclists with a clear system of through routes and for safe transfers, on and off, of transit vehicles.
- 6.3.5 Sidewalks shall form a continuous network throughout the community and constitute an integral part of the pedestrian system to promote *active transportation*. All sidewalks shall be designed to enhance accessibility for all residents and will comply with the Accessibility for Ontarians with Disabilities Act (AODA).
- 6.3.6 The streetscape along Longworth Avenue within the Village Corridor shall include wider sidewalks to facilitate public spaces, café patios, street trees/planters, street furniture, and future transit shelters.
- 6.3.7 Utility providers will be encouraged to consider innovative methods of containing equipment associated with utility services on or within streetscape features including, but not limited to, gateways, lamp posts, and transit shelters when determining appropriate locations for larger equipment and cluster sites.

Views and Focal Points

- 6.3.8 The preservation, enhancement, and creation of significant views and focal points shall be encouraged by:
 - a. Preserving and enhancing scenic views to natural features including woodlots and the Bowmanville Creek valley;
 - b. Creating and maintaining opportunities for views of important public buildings, open spaces and *parks*, and other landmarks through the layout of the street, *parks*, and open space networks; and
 - c. Providing for sites that terminate road and view corridors.

Public Buildings

- 6.3.9 Public buildings, facilities, and spaces enhance the quality of the urban setting and are an important component of a community. To recognize the importance of public buildings in the community and to enhance their status, public buildings will be consistent with Section 5.3.4 of the Official Plan and:
 - a. Be sited at the termination of a road or view corridor, or at road intersections, or on sites that enjoy prominence due to topographic and natural features;
 - b. Be designed as special landmark buildings with high quality design, materials, and finishes. The site should be landscaped in recognition of the prominent location and to reflect the status of the landmark building; and
 - c. Be located close to the road right-of-way to reinforce the road edge to create a visually dominant feature in the community.

Building Orientation

- 6.3.10 To reinforce the road, lane, and block pattern established by this Secondary Plan, the following measures will be employed:
 - a. Buildings will be aligned parallel to a public road;
 - b. Buildings will be in proximity to the property line adjoining the public road;
 - c. Buildings will be designed with a street frontage that is pedestrian-oriented with direct public access from the street;
 - d. Buildings on corner sites will be sited and massed toward the intersection of the adjoining public roads;
 - e. Siting and massing of buildings will provide a consistent relationship, continuity, and enclosure to the public roads;
 - f. Siting and massing of buildings will contribute to and reinforce the comfort, safety, and amenity of the public roads;
 - g. Buildings located adjacent to, or at the edge of *parks* and open spaces, will provide opportunities for overlook onto the *parks* and open spaces;
 - h. The massing, siting, and scale of buildings located adjacent to, or along the edge of a *park* or open space, will create a degree of enclosure or definition appropriate to the type of *park* or open space they enclose; and

i. Buildings of significant public use or architectural merit may be sited to specifically differ from the surrounding urban fabric to emphasize their importance as landmarks.

Public Art

- 6.3.11 The installation of public art is encouraged in public locations, such as the Prominent Intersection at Bowmanville Avenue and Longworth Avenue, privately owned publicly accessible spaces, and *parks* to contribute to the Brookhill Neighbourhood's identity and sense of place.
- 6.3.12 In accordance with a Community Benefits By-law, and the applicable policies of this Plan, the Municipality may require public art as a community benefit.

6.4 Development within a Local Corridor

- 6.4.1 Bowmanville Avenue and the lands adjacent to it are a Local *Corridor* in accordance with Section 10.6 of the Official Plan. Local *Corridors* are routes for future transit and align with the Medium Density Local Corridor designation shown on Schedule A.
- 6.4.2 Within the Local *Corridor* the greatest heights and highest density buildings shall be located on the Local *Corridor* frontage, with height and density decreasing as a transition to lower density designations.

6.5 Transition

- 6.5.1 Where *development* of a higher density built form abuts lands designated Low Density Residential mitigation measures including transition setbacks or buffers shall be provided from the adjacent use in accordance with the appropriate studies and in keeping with the Sustainable Urban Design Guidelines.
- 6.5.2 The Municipality may require that applications for *development* undertake technical studies including a wind study and/or sun/shadow study which demonstrate mitigation of potential shadow or wind impacts on existing or proposed pedestrian routes, public spaces, and adjacent development to the satisfaction of the Municipality. Analysis may also be required to address applicable angular plane guidance.
- 6.5.3 *Development* shall be compatible and sensitively integrated with surrounding residential uses in terms of building mass, height, setbacks, orientation, privacy, landscaping, shadow casting, accessibility, and visual impact.

- 6.5.4 *Development* transition requirements may be met using a combination of the following:
 - a. Separate *development* of higher density built forms from Low Density Residential buildings with a Local Road;
 - b. Require a minimum 7.5 metre rear yard setback for *development* of higher density built forms that abut Low Density Residential buildings;
 - c. Mitigate the actual and perceived massing impacts of a higher density built form by breaking up the mass horizontally and vertically, through the creative incorporation of changes in materials, balcony and floor plate design, architectural features, and unit/amenity locations;
 - d. Provide rear and side stepbacks for upper *storeys* to provide contextually appropriate transitions from higher density built forms to the surrounding Low Density Residential neighbourhoods;
 - e. Provide high quality landscape treatment such as decorative fencing, trees, shrubs, grassed areas, and berming;
 - f. Control the location of loading areas;
 - g. Control the location of garbage collection/storage facilities;
 - h. Regulate lighting and signs so that they are averted or shielded from adjacent uses;
 - i. Rooftop equipment shall be unobtrusive and screened from view; and
 - j. Provided adequate screening such as solid or perforated fencing, trellises, or other appropriate structures.

6.6 Prominent Intersection

- 6.6.1 A Prominent Intersection is located at Bowmanville Avenue and Longworth Avenue and will be the primary gateway into the Brookhill Neighbourhood. The design and development of the Prominent Intersection shall be consistent with the policies of this Plan and Section 5.4.10 of the Official Plan.
- 6.6.2 This Prominent Intersection shall serve as a community focal point, both visually in terms of building height, massing and orientation, architectural treatment, materials and landscaping, and functionally in terms of destination uses and public spaces, and amenities such as street furniture and public art.

- 6.6.3 The commercial use buildings in the Neighbourhood Centre designation at this Prominent Intersection shall provide special architectural elements such as corner design, massing and height, awnings, and entrance door features.
- 6.6.4 The Neighbourhood Centre designation at this Prominent Intersection shall provide a privately owned publicly-accessible plaza to contribute to its visual prominence, reinforce its role as a gateway, improve the relationship of built form to the public right-of-way, and contribute to the area's identity.

6.7 The Private Realm

6.7.1 The private realm consisting of a variety of residential types, and commercial uses envisioned for the Brookhill Neighbourhood will contribute to its overall character and support the public realm through form, architectural details, and features.

Development Blocks and Lots

- 6.7.2 *Development* will be accommodated on a modified street grid including Arterial Roads, Collector Roads, Local Roads, and Lanes to establish *development* blocks that achieve an efficient pattern and provide visual interest and diversity.
- 6.7.3 Provide neighbourhood permeability by designing blocks to be generally no more than 200 metres in length to promote *active transportation*, discourage excessive driver speed, and disperse traffic movements.
- 6.7.4 The size and configuration of each *development* block will be appropriate for its intended use, facilitate convenient pedestrian movement; and provide a sufficient range of building lots to achieve efficient development. Each *development* lot in a block will:
 - a. Have frontage on a public road or lane; and
 - b. Be of a size and configuration to accommodate *development* that reflects the planning and urban design policies set out in the Official Plan, this Plan, and the Sustainable Urban Design Guidelines.
- 6.7.5 Lots within the Village Corridor or Neighbourhood Centre designations that have substantial frontage on a Type A or Type C Arterial Road, may be permitted to have a second access to parking provided:
 - a. The lot contains a comprehensively designed *mixed use development*:

- b. The principal access to the required service areas on the lot are from a rear lane; and
- c. The need for a second access to parking is demonstrated to facilitate the development pattern but will not interfere with safe traffic and pedestrian movement.
- 6.7.6 The boundary between areas designated Low Density Residential and Medium Density Local Corridor shall generally be a public street with buildings of each designation fronting onto the street.
- 6.7.7 The maximum number of contiguously attached townhouses shall be six.
- 6.7.8 Multi-unit residential *development* shall be consistent with the policies of Section 9.4.5 of the Official Plan.
- 6.7.9 Townhouses shall be distributed throughout the Secondary Pan Area to ensure a mix and diversity of dwelling types within all neighbourhoods.
- 6.7.10 Mid-block pedestrian connections and trails shall be provided to further enhance the pedestrian permeability of the area, the efficiency and variety of pedestrian routes, and access to transit.

Built Form

- 6.7.11 Buildings shall be designed for an urban context with primary building façades abutting public streets. Buildings must be designed for close siting to facilitate street activity and encourage *active transportation*, with views from buildings directed to the street and public spaces rather than towards parking areas and neighbouring sites.
- 6.7.12 New *development* will be compatible with adjacent development.
- 6.7.13 Reverse frontage is generally not permitted. Where conditions exist that require reverse frontage, it shall be done to the satisfaction of the Municipality.
- 6.7.14 To support public transit and for reasons of public safety and convenience, primary building entrances shall be clearly visible and located on a public road frontage or onto public open spaces.
- 6.7.15 Access from sidewalks and public open space areas to primary building entrances shall be convenient and direct, with minimum changes in grade to increase accessibility for people who are mobility challenged.

- 6.7.16 Architectural styles of individual *dwelling units* shall complement each other. The various architectural forms within the community shall provide for a harmonious mix of distinctive architecture, which may incorporate both traditional/heritage and modern influences. It is important that the architectural form and style complement the design of the public realm.
- 6.7.17 All major rooftop mechanical structures or fixtures including satellite dishes and communications antenna shall be suitably screened and integrated with the building, where feasible. Parapets may be utilized to accommodate such screening.
- 6.7.18 Air conditioning units, utility metres, and similar features should not be visible from the public realm and/or well integrated, recessed, and screened.
- 6.7.19 To enhance the quality and safety of the streetscapes throughout the Secondary Plan Area, the construction of parking lots/structures which occupy significant proportions of the at-grade frontage of public roads shall not be permitted.
- 6.7.20 The Municipality will require the impact of car parking to be minimized by:
 - a. Requiring that *mixed use developments* include shared use of parking among uses that have different peaking characteristics;
 - b. Designing parking areas so they are not the primary visual component of a neighbourhood;
 - c. Reducing the parking ratio required in areas that are served by transit; and
 - d. Dedicating priority parking spaces for carpool, ride sharing, and ultra-low emission vehicles.
- 6.7.21 To reduce the visual impact of surface parking and to increase opportunities for at grade amenity areas the provision of structured parking shall be encouraged for higher density forms of development in the Village Corridor and Neighbourhood Centre designations. Where it is not feasible to locate parking in structures either below or above grade, parking should be located to the rear of the principal buildings. Appropriate landscaping and screening measures shall be provided.

Accessibility for Ontarians With Disabilities

6.7.23 The Municipality considers accessibility for persons with disabilities in all landuse planning and development decisions. All development shall comply with the accessibility requirements as set out by the Ontario Building Code and the Accessibility for Ontarians with Disabilities Act (AODA).

Crime Prevention Through Environmental Design

- 6.7.24 All development, with a focus on streetscapes, *parks* and open spaces, parking lots and other publicly accessible areas, shall include Crime Prevention Through Environmental Design (CPTED) principles, including:
 - a. Adequate lighting, visibility, and opportunities for informal surveillance shall be provided for all walkways, parking lots, garages, and outdoor amenity areas;
 - b. Clear sight lines, allowing views from one end of a walkway to the other;
 - c. Appropriate landscaping, but avoiding landscaping that might create blind spots or hiding places;
 - d. Adequate fencing and fenestration;
 - e. Clear signage that delineates permitted use and speed of travel; and
 - f. Streetscape and building design that promotes visual overlook through the strategic placement of entrances and windows.

7.0 ENCOURAGING HOUSING DIVERSITY

7.1 Objectives

- 7.1.1 Provide for a range and mix of housing opportunities, choices, and accessibility for all income levels and needs.
- 7.1.2 Provide for a range of affordability, consistent with targets established by the Municipality.
- 7.1.3 Plan for age-in-place facilities within the community that anticipate changing housing needs for an aging population.
- 7.1.4 Ensure the distribution of housing types provides equal opportunity to access goods and services located in the community and beyond.
- 7.1.5 Provide appropriate transitions in housing forms of various heights and densities.

7.2 General Policies

- 7.2.1 The policies of this Plan and Section 6 of the Official Plan are intended to facilitate the provision of a broad range and mix of housing opportunities in appropriate locations in the Secondary Plan Area.
- 7.2.2 Where appropriate, private, public, and non-profit housing *developments* designed to provide housing options for seniors are encouraged, including small ownership dwellings, higher density condominium dwellings, buildings with rental units, as well as retirement and assisted living facilities that facilitate "aging-in-place".
- 7.2.3 Provide a broad range of housing forms, sizes, and tenure to meet the needs of a diverse population and households of various sizes, incomes, and age compositions.
- 7.2.4 Residential development abutting the NHS shall be oriented and developed in a manner that is compatible, complimentary, and supportive of the *natural heritage* features and ecological functions of the system.
- 7.2.5 Views to key landmarks and natural features shall be maintained and created through the layout of the street network, the creation and reinforcement of the *parks* and open space network, the establishment and landscaping of gateways, the siting of buildings and the design of sites.
- 7.2.6 Individual site access for residential uses adjacent to any Arterial Road shall be discouraged. Residential uses fronting on an Arterial Road or Collector Road may be developed on rear lanes. Window streets and/or flankage lots are permitted. Noise attenuation fencing will be discouraged along Arterial Roads.
- 7.2.7 Development within the Secondary Plan Area shall be developed in accordance with the urban design policies of this Secondary Plan. The Sustainable Urban Design Guidelines shall accompany this Plan and be used as guidance in the interpretation and implementation of the Secondary Plan's policies.

Affordable Housing

- 7.2.8 Affordable housing should be located where there is access to public transit.
- 7.2.9 Affordable housing, including subsidized non-market housing units, is encouraged to be integrated within neighbourhoods and combined in developments that also provide market housing to deliver opportunities for a range of housing tenures and prices that support diversity.

- 7.2.10 New *affordable* housing and purpose-built rental housing should incorporate barrier-free, universal or flex design features in both common and living areas.
- 7.2.11 The Municipality should collaborate with public and non-profit housing providers to encourage a supply of subsidized non-market housing units to be included within the housing mix in the Secondary Plan Area.
- 7.2.12 To support the provision of *affordable* housing units, the Municipality will explore other potential incentives such as reduced or deferred development charges, reduced application fees, grants, and loans, to encourage the development of *affordable* housing units. The reduction or deferral of Development Charges shall be done in consultation with the Region of Durham. The Municipality will also encourage Durham Region to consider financial incentives for *affordable* housing.
- 7.2.13 As an incentive for the provision of *affordable* housing, as defined in Section 24.2 of the Official Plan, reductions in the minimum parking requirement under the Zoning By-law may be considered by the Municipality on a site-by-site basis where housing that is *affordable* is provided as part of a development proposal.
- 7.2.14 To facilitate the development of *affordable* housing units within the Secondary Plan Area and in the Municipality, the Landowners Group in the Secondary Plan Area shall provide at their choice either land or a contribution of funds to the Municipality for the development of *affordable*, public, or non-profit housing in the community.
- 7.2.15 The land to be conveyed as provided in Section 7.2.13 shall have an approximate size of 1.5 hectares, be fully serviced, and be gratuitously conveyed free and clear of encumbrances. Conveyance shall occur at the time of approval of the first plan of subdivision within the Secondary Plan Area.
- 7.2.16 The contribution of funds as provided in Section 7.2.13 will be through a contribution agreement to be negotiated between the Municipality and the Landowners Group. The contribution of funds shall be paid by the Landowners Group upon the approval of the Secondary Plan and upon the first approval of a development application in the Secondary Plan Area at a rate of \$400.00 per unit.
- 7.2.17 The Municipality will give priority to *development* applications that include *affordable* housing units that are being funded by federal and provincial government programs or non-profit groups.

Live/Work Units

- 7.2.18 The Municipality encourages live-work opportunities for combined residential and personal services, or office uses, where appropriate, to facilitate home-based employment, which ensures proximity between housing and jobs and provides a mix of uses.
- 7.2.19 Live/work units provide higher densities to help support transit systems, and a diverse range of services within a convenient walking distance of residents.
- 7.2.20 Live-work *development* is subject to the following:
 - a. Permitted within street and block townhouses;
 - b. The first floor within any live-work unit may be used for commercial, personal services, and office uses, and be oriented towards a public road; and
 - c. Off-street parking in front of buildings is prohibited. Parking should be accommodated through on-street parking or in driveways located off a rear lane.

Accessory Apartments

- 7.2.21 Within the Secondary Plan Area, one accessory apartment is permitted within a detached, semi-detached, or townhouse dwelling, and one accessory apartment is permitted within a detached accessory structure subject to the provisions of the Zoning By-law and other relevant regulations.
- 7.2.22 Accessory apartments must be registered with the Municipality.

8.0 CELEBRATING OUR CULTURAL HERITAGE

8.1 Objectives

- 8.1.1 Preserve and enhance existing cultural heritage features including significant vegetation, topographic features, scenic views, and archaeological resources to promote the ecological restoration of these features.
- 8.1.2 Integrate the existing cultural heritage features into the design of the community and the public realm as aesthetic amenities.

8.2 Cultural Heritage

- 8.2.1 The conservation, protection, and enhancement of significant *cultural heritage resources* shall be consistent with the provisions of Chapter 8 in the Official Plan and all relevant Provincial legislation and Regional policy directives.
- 8.2.2 Prior to on-site grading, construction of *infrastructure*, or *development* approval, an Archaeological Assessment may be required and completed to the satisfaction of the Region, Municipality, and the Archaeology and Heritage Planning Unit of the Ministry of Citizenship, Culture and Recreation.
- 8.2.3 No grading or other disturbance shall take place on any site within the Brookhill Neighbourhood Secondary Plan Area prior to the issuance of a letter of clearance from the Ministry of Citizenship, Culture and Recreation.
- 8.2.4 Create opportunities for *cultural heritage landscapes* to be incorporated into the design of open spaces and *parks*. High quality landscape architecture will ensure that these spaces include public art where possible and appropriate grading, paving, and planting materials that celebrate the landscape context.

9.0 MOBILITY AND STREETS

9.1 Objectives

- 9.1.1 Plan for an *active transportation* system that is highly integrated and connected within the community, the adjacent communities, the Municipality, and to transportation systems that serve the broader Region.
- 9.1.2 Provide a variety of safe and accessible mobility options through the provision of a highly interconnected network of streets, sidewalks, bicycle lanes, trails, and a public transit system to ensure all persons have transportation options while reducing automobile dependence.
- 9.1.3 Ensure all roads are designed to consider context and to utilize *complete streets* design principles to support users of all ages and abilities.
- 9.1.4 Establish a connected street system that creates multiple direct routes throughout the community.
- 9.1.5 Create walkable and connected neighbourhoods with destinations within a walking distance of approximately 400 to 800 metres (5-10 minute walk) of most residents.

9.1.6 Ensure all roads are designed as important components of the public realm to provide a network that is appealing for pedestrians, cyclists, transit users, and motorists.

9.2 General Mobility Policies

- 9.2.1 The road network serving the Secondary Plan Area will be designed with *complete streets* principles to accommodate multiple modes of travel such as motorists, transit users, cyclists, and pedestrians. The road network will prioritize active modes of transportation and the needs of the most vulnerable users.
- 9.2.2 The provision of transportation infrastructure shall be consistent with Section 19 of the Official Plan and shall have regard for the standards established through the Sustainable Urban Design Guidelines.
- 9.2.3 All road designs shall be consistent with Appendix C, Table C-2 of the Official Plan and confirmed through a Traffic Impact Study submitted as part of a *development* application.
- 9.2.4 The intent of the Secondary Plan is to develop a connected grid-like multi-modal street network while recognizing constraints such as natural areas that create barriers which limit the achievement of a completely connected street network.
- 9.2.5 Final route alignments and requirements for roads, trails, and other components of the *active transportation* system shall be designed according to detailed planning and engineering studies at the time of applications for site plan approval or/draft plan of subdivision. This work shall be to the satisfaction of the Municipality in consultation with other agencies having jurisdiction.
- 9.2.6 All roads will be designed as important components of the public realm, providing a network that is appealing for pedestrians, cyclists, motorists, and transit users. The road network shall be designed to provide vistas and view sheds to public parks and open spaces and to the NHS to assist in the creation of a sense of place.
- 9.2.7 Minor revisions to transportation routes to incorporate design features such as streetscaping and bikeways may be made without amendment to this Secondary Plan, provided that the principles of permeability and inter-connectivity are maintained to the satisfaction of the Municipality.

9.3 Arterial Roads

- 9.3.1 Bowmanville Avenue bisects the Secondary Plan Area and is a Type A Arterial Road. Green Road, Nash Road, and Longworth Avenue, west of Green Road, are Type B Arterial Roads. Longworth Avenue, east of Green Road is a Type C Arterial Road.
- 9.3.2 Bowmanville Avenue is a major regional transportation corridor and is identified as a Local *Corridor* in the Official Plan. Development along Bowmanville Avenue shall be consistent with the policies of Chapter 10.6 of the Official Plan.
- 9.3.3 Generally no direct access to Bowmanville Avenue will be provided for any individual development proposal or residential land use. However, where feasible, right-in/right-out access may be permitted. Signalized intersections will be installed, where approved by the Regional Municipality of Durham, to provide access to existing development and the primary road network within the Brookhill Neighbourhood.
- 9.3.4 Bowmanville Avenue shall have a boulevard Multi-Use Path (MUP) on the west side (for use by pedestrians and cyclists) and a sidewalk on the east side. Additional tree plantings and vegetated berms shall be incorporated into the road allowance or in adjacent areas.
- 9.3.5 Driveway access on Green Road, Nash Road, and Longworth Avenue Arterial Roads shall be limited.
- 9.3.6 Within the Village Corridor on-street parking shall be provided on both sides of Longworth Avenue with parking lots located in the rear.
- 9.3.7 *Development* in the Village Corridor designation along Longworth Avenue shall include rear lane access. No driveway access is permitted along Longworth Avenue with limited driveway access along Clarington Boulevard.
- 9.3.8 The alignment of Longworth Avenue as shown on Schedule A is approximate. Adjacent development may not proceed until the alignment is finalized and any required lands are conveyed to the Municipality. The section from the existing Bowmanville Creek bridge westerly to Green Road (including the shift in alignment to the south from the existing bridge to Bowmanville Avenue), will be determined through detailed design. The section from Green Road westerly to Holt Road is currently being determined through the Longworth Avenue Extension Class Environmental Assessment (EA) Study. Any resulting modification to the alignment of Longworth Avenue extension shall not require an amendment to the Official Plan or Secondary Plan.

9.4 Collector Roads

- 9.4.1 Clarington Boulevard is identified as a Collector Road in the Official Plan and will be extended north from the Longworth Avenue extension to Nash Road to provide for a continuous north-south Collector Road.
- 9.4.2 Bicycle lanes shall be provided on both sides of Collector Roads.

9.5 Local Roads

- 9.5.1 The complete Local Road pattern is not identified on Schedule A of this Secondary Plan. A conceptual Local Road pattern is identified on the Demonstration Plan as part of the Sustainable Urban Design Guidelines. Changes to the identified Local Road pattern shall not require an amendment to this Secondary Plan, provided that the principles of permeability and interconnectivity are achieved to the satisfaction of the Municipality.
- 9.5.2 Local Roads will have an interconnected street layout with multiple route choices to arterial and collector roads where transit routes and commercial areas are most commonly located.
- 9.5.4 Local Roads will be designed to accommodate on-street parking and landscaping in the boulevards. Sidewalks are encouraged on both sides of a Local Road.
- 9.5.5 The location and design requirements for Local Roads will be confirmed and implemented through *development* applications.

9.6 Rear Lanes

- 9.6.1 Public Rear Lanes are permitted and encouraged to support safe and attractive streets by eliminating the need for driveways and street-facing garages.
- 9.6.2 To minimize disruptions to the safety and attractiveness of the Arterial and Collector Roads, a system of rear lanes may provide the primary access for onsite parking and servicing functions.
- 9.6.3 Public Rear Lanes can provide alternative pedestrian routes through a community and shall provide a safe environment for pedestrian and vehicle travel.
- 9.6.4 Public utilities may be located within Rear Lanes subject to functional and design standards established by the Municipality.

- 9.6.5 Rear lanes shall be designed in accordance with the road classification criteria in Appendix C, Table C-2 of the Clarington Official Plan and include the following design standards:
 - Lanes shall allow two-way travel and incorporate a setback on either side of the right-of-way to the adjacent garage wall;
 - b. Lanes shall provide a minimum pavement width of 6.5 metres;
 - c. Lanes shall provide access for service and maintenance vehicles for required uses as deemed necessary by the Municipality and may include enhanced laneway widths and turning radii to accommodate municipal vehicles including access for snowplows, garbage trucks and emergency vehicles where required;
 - d. Lanes shall be clear of overhead obstruction and shall be free from overhanging balconies, trees, and other encroachments;
 - e. Lanes shall intersect with public roads;
 - f. No Region of Durham infrastructure shall be permitted;
 - g. Lanes should be graded to channelize snow-melt and runoff;
 - h. The design of lanes shall incorporate appropriate elements of low impact design including permeable paving where sufficient drainage exists;
 - i. Lanes should be prioritized where *development* fronts onto an arterial or collector road network;
 - j. Access to loading areas should be provided from rear lanes;
 - k. Appropriate lighting shall be provided to contribute to the safe function of the roadway as well as the safe and appropriate lighting of the pedestrian realm; and
 - I. Lighting should be downcast to reduce light pollution.

9.7 Roundabouts

- 9.7.1 The Municipality shall consider the following as general design policies for Roundabouts:
 - a. Roundabouts are intended to calm traffic and direct traffic flows without requiring stop signs at intersections;
 - b. The design of a Roundabout should prioritize the safe movement of pedestrians and bicycles; and

c. Whenever Roundabouts are used, they should incorporate appropriate landscape features and public art while ensuring that clear sightlines are maintained for drivers to promote safety.

9.8 Public Transit

- 9.8.1 Transit facilities should be integrated early and appropriately throughout the Brookhill Neighbourhood. Durham Region Transit shall be invited to all development pre-consultation meetings to advise on transit requirements.
- 9.8.2 To facilitate the creation of a transit supportive urban structure, the following measures shall be reflected in *development* proposals, including the subdivision of land:
 - a. *Transit-supportive* densities provided on lands within the Local *Corridor* in keeping with municipal density targets;
 - b. Provision of a local road pattern and *active transportation* network that provides for direct pedestrian access to future transit routes and stops;
 - c. Transit stops located in close proximity to activity nodes and building entrances; and
 - d. Provision for transit stops and incorporation of bus-bays where appropriate into road design requirements.

9.9 Traffic Calming

- 9.9.1 Traffic calming will be achieved on neighbourhood streets by:
 - Encouraging pedestrian-priority streets, woonerfs, or home-zones (i.e., the speed limit is under 15km/hr. and vehicles must yield to pedestrians and cyclists);
 - b. Designing streets that discourages vehicle speeding through right-of-way curvature, complimentary streetscape design, building proximity to the street, and boulevard street tree planting.
 - c. Minimizing traffic lane widths; and/or
 - d. Minimizing the number of traffic lanes in the roadway.
- 9.9.2 On-street parking is an excellent traffic calming device to slow traffic and acts as a safety buffer separating the pedestrian realm from vehicles. On-street parking should be designed as follows:

- a. Parking should be provided on at least one side of the street for all Local and Collector Roads; and
- b. On-street parking areas may be demarcated with a special pavement treatment in limited special areas in order to distinguish the parking lane from the roadway.

9.10 Active Transportation

- 9.10.1 The *active transportation* network provides opportunities for *active transportation* and enhances mobility by providing for an alternative to local automotive transportation. The *active transportation* network includes both on-and off-street facilities including multi-use paths, trails, sidewalks, separated cycle tracks, and on-street bicycle lanes.
- 9.10.2 *Active transportation* within the Brookhill Neighbourhood shall be consistent with the policies of Section 18.4 of the Official Plan, this Plan, and be in accordance with the Sustainable Urban Design Guidelines.
- 9.10.3 Adequate provision will be made in the planning, design, and development of the Secondary Plan Area to ensure safe and efficient bicycle and pedestrian movement.
- 9.10.4 The *active transportation* network will connect to the street network and all major destinations, such as the Village Corridor, the Neighbourhood Centre, schools, and *parks* to provide convenient and safe access to facilitate travel by alternate modes of transportation.
- 9.10.5 Active transportation routes will include streetscaping elements such as trees, landscaping, and benches to support pedestrian and cyclist comfort and safety and enhanced accessibility for all residents.

Trails

- 9.10.6 The trail system is to provide both a recreational and utilitarian function.

 Accordingly, connections will be made to the road network, the Village Corridor, the Neighbourhood Centre, *parks*, schools, and the existing trail system.
- 9.10.7 Trail crossings of roads shall generally be located at an intersection where trail users can be afforded a safe, protected crossing. Trail crossings at a mid-block location along a road shall be provided a signed trail crossing to alert drivers of the likely presence of trail users.

- 9.10.8 Trails will be designed to accommodate a range of users and abilities. Curbcuts and other safety measures and design elements must be provided to improve access at road crossings. The use of permeable materials may be considered for trail development in areas where sufficient drainage exists. Trails with asphalt surfaces may be incorporated into the trails system to address accessibility and active transportation needs.
- 9.10.9 Trail location will be based on each site's sensitivity in order to minimize environmental impacts. The trails system may include trails along stormwater management facilities, open spaces, the road system, the outer edge of the *vegetation protection zone*, and within *parks*.
- 9.10.10 Trails identified on Schedule A shall be assessed as part of an Environmental Impact Study being undertaken on adjacent lands
- 9.10.11 The Municipality shall require that the trail system along the Environmental Protection Area and accessing the Bowmanville Creek Valley Trail be constructed as a condition of subdivision draft approval or site plan approval where the subject lands include, or are adjacent to, the Environmental Protection Area.
- 9.10.12 Trails located in proximity to sensitive natural features, or adjacent to stormwater management facilities should incorporate interpretive signage at various locations to promote stewardship initiatives that will protect and enhance the features and functions of the natural environment.
- 9.10.13 The Municipality may require trail corridors to be dedicated for public purposes as a condition of development approval.
- 9.10.14 Trail connections and crossings shall be subject to the following policies:
 - a. Trail connections bisecting the NHS should be limited in order to promote the preservation and protection to the ecological integrity and function of the features comprising the NHS;
 - b. New pedestrian crossings of tributaries should be limited to ensure protection of the ecological integrity of the tributary and riparian corridor;
 - Where feasible, road crossings over creeks should be utilized for trail crossings;
 - d. Where creek crossings are unavoidable, existing crossing locations can be considered however, the new crossing should not use existing non-permitted culverts. Creek crossings will need to be designed to promote

- fish passage, passage of flows as well as minimize impacts to the riparian area: and
- e. The location of pedestrian trails should be designed to avoid interfering with the meander belt of the creeks.

9.11 Parking

- 9.11.1 On-street parking will be encouraged at appropriate locations on all roads, with the exception of Type A and Type B Arterials in order to provide for anticipated parking needs and to assist in calming traffic movement and thereby enhancing pedestrian safety. On-street parking will be provided on Longworth Avenue in the Village Corridor designation, with parking lots located in the rear.
- 9.11.2 Off-street parking for all uses shall be adequate to serve the use.
- 9.11.3 Subject to the findings and recommendations of a Transportation Study, onstreet parking may be approved at certain locations for specified times of the day to satisfy a portion of the parking requirements of adjacent non-residential uses.

10.0 PARKS AND COMMUNITY FACILITIES

10.1 Objectives

- 10.1.1 Provide for a diverse range of *parks*, open spaces, and community facilities to encourage residents to be physically active and socially engaged.
- 10.1.2 Ensure parks and open spaces are visible, accessible, and linked.
- 10.1.3 Ensure *parks* include a full array of opportunities for outdoor festivals, *recreation*, and play, as well as quiet contemplation.
- 10.1.4 Locate schools, *parks*, and other community amenities to promote safe and convenient access by walking and cycling.

10.2 General Policies for Parks

10.2.1 *Parks* shall be designed to minimize any potential negative impacts on the residential uses.

- 10.2.2 *Park* and open space design shall be in accordance with the requirements of the Sustainable Urban Design Guidelines and shall consider the following:
 - Have regard for Crime Prevention Through Environmental Design (CPTED) principles and the Accessibility for Ontarians with Disabilities Act (AODA);
 - b. New trees and landscaping within *parks* should be of a diverse, robust species selection, drought tolerant, contribute to the tree canopy objectives of the Municipality and Region, and where possible, salvaged from the site or the local area;
 - c. Bicycle and pedestrian routes to, and within, *parks* should be accessible, safe, and visible;
 - d. Bicycle parking should be provided within all *parks*, regardless of park size;
 - e. *Parks*, in general, should be accessible and accommodate a range of age groups. Co-locating physical activity spaces for children and adults promotes physical activity in different age groups;
 - f. The illumination of *parks*, including parking areas and playing fields, shall be directed away from the Environmental Protection Area to minimize disturbance to wildlife, to the greatest extent feasible; and
 - g. The inclusion of public art in *parks*, facilities, and pedestrian spaces is encouraged.
- 10.2.3 Dedication of lands for Neighbourhood Parks and Parkettes shall be in accordance with the Official Plan. Privately owned publicly-accessible spaces are not accepted as part of the parkland dedication.

10.3 Neighbourhood Parks

- 10.3.1 Neighbourhood Parks are shown on Schedule A. The precise size and location of Neighbourhood Parks shall be determined at the time of *development* review and approval, based on the parkland provision requirements of Section 18 of the Clarington Official Plan.
- 10.3.2 Neighbourhood Parks shall form the central focus of the overall Brookhill Neighbourhood and shall:
 - a. Be centrally located and within 400 to 800 metres (5 to 10 minute walking distance) of all residential uses within the neighbourhood it is serving;

- b. Have a size of 1.5 to 3.0 hectares and be designed for passive and active recreational facilities such as playground equipment and active sports fields to meet the recreational needs of the neighbourhood residential area through detailed *parks* planning;
- c. Be integrated with other community facilities such as schools, where deemed appropriate by the Municipality;
- d. Have frontage on a Local and/or Collector Road, with a minimum 60 metres of continuous frontage; and
- e. Be connected and/or integrated with the broader NHS and active transportation routes shown on Schedule A to this Secondary Plan. The Neighbourhood Park shall be located beyond the feature and the associated vegetation protection zone.

10.4 Parkettes

- 10.4.1 Parkettes are shown on Schedule A. The precise number, size and location of Parkettes shall be determined at the time of *development* review and approval, based on the parkland provision requirements of Section 18 of the Clarington Official Plan.
- 10.4.2 Parkettes are smaller scale *parks*, between 0.5 to 1.0 hectare in size, and are intended to provide passive open space areas, serve as focal points within subareas of each neighbourhood, and shall:
 - a. Be easily accessible for residents within a 400 metre radius (5 minute walking distance);
 - b. Be designed to have significant public exposure and access. Urban design options include surrounding the park with streets or fronting dwellings directly on to the parkette/village square;
 - Reflect the needs of surrounding residents including places to sit and socialize, junior play area for children, and a significant tree canopy for shade; and
 - d. Be designed with 50 percent public frontage but may be less where other design alternatives achieve public view and access. Public frontage can be a public road, a school, or *natural heritage features*.

10.5 Privately Owned Publicly-Accessible Spaces

- 10.5.1 In addition to the publicly owned lands which form the Parks designation, *development* is encouraged to include privately owned publicly-accessible spaces that contribute to the sense of place in the community and the quality of the urban environment.
- 10.5.2 Privately owned publicly-accessible spaces can include public squares, plazas, courtyards, walkways and passages, atriums, arcades, and parklike spaces. They contribute to the urban environment by creating spaces for social interaction, adding to visual interest, improving mid-block permeability. and complementing adjacent land uses.
- 10.5.3 Public access to privately owned publicly-accessible spaces will be secured through the *development* approval process.
- 10.5.4 A privately owned publicly-accessible space shall be provided in the Neighbourhood Centre designation.

10.6 Schools

- 10.6.1 Elementary school sites are shown symbolically on Schedule A of this Secondary Plan. Schools support the community structure and patterns of land use and should be located adjacent to public *parks*, where possible, connected to the trail system, and central to the community to promote walking or cycling, enabling most students to walk to school. The configuration and size of school sites will be defined in consultation with the School Boards through an application for approval of a proposed plan of subdivision.
- 10.6.2 Each school site should be centrally located such that the majority of students are within an 800 metres (10 minute walking distance).
- 10.6.3 Where a school site adjoins a Neighbourhood Park, the school site shall be sized and designed to provide on-site recreational and athletic uses for the school and to facilitate potential joint use between the Municipality and the respective School Board.
- 10.6.4 The Municipality will cooperate with the School Boards efforts to maximize the area available for on-site recreational and athletic use through the construction of multiple *storey* buildings that permit smaller building floor plates.
- 10.6.5 In the event that all or part of a school site should not be required by a School Board, the Municipality of Clarington shall be given the first opportunity to

- purchase all or part of the school site. Government agencies and community groups with identified needs shall have the second right of refusal.
- 10.6.6 Schools shall be sited and designed to be consistent with the relevant policies of Section 18.5 of the Official Plan and developed in accordance with the Sustainable Urban Design Guidelines:
 - Joint use sites and multiple use buildings will be encouraged wherever possible. The Municipality will work with the School Boards to achieve appropriate and efficient site designs, and to maximize public service and safety;
 - b. Elementary schools shall be located on a Type B or C Arterial or Collector Road: and
 - c. Adequate drop off and pick up zones shall be provided within the site and located to the side of the building to minimize conflicts between pedestrian and vehicular traffic. Where drop off zones are located within the public right-of-way utilize layby lanes to remove vehicles from active traffic lanes.

10.7 Community Facilities

- 10.7.1 Community Facilities will be developed in accordance with the relevant policies of Section 18.6 of the Official Plan.
- 10.7.2 Parking areas should be located within the rear yards or interior side yards. Landscape buffers along any property line shall be of sufficient depth and intensity to provide appropriate screening of the parking lot.
- 10.7.3 Community Facilities should be compatible with the character of adjacent development if located within the Low and Medium Density Residential areas.

11.0 LAND USE DESIGNATIONS

11.1 Objectives

11.1.1 Support the mix and diversity of land uses in a compact, *active transportation* supportive development form to provide a proper balance of residential, employment, and services to shorten distances between homes, workplaces, schools, and amenities to meet resident's needs for daily living, throughout the year, and throughout an entire lifetime.

- 11.1.2 Realize an efficient and *transit-supportive* community structure by achieving targets of 50 people and jobs per gross hectare.
- 11.2.3 Locate the highest intensity of *development* and greatest mix of uses along the Local *Corridor* and the Village Corridor to foster access to commercial amenities and transit.

11.2 General Land Use Policies

- 11.2.1 The land use designations on Schedule A of this Secondary Plan and the policies of this section are designed to establish a distribution of land uses to ensure an appropriate mix of land uses, heights, and densities in a manner which supports the creation of a sustainable and complete community.
- 11.2.2 The following land use designations apply within the Secondary Plan Area:
 - a. Low Density Residential;
 - b. Medium Density Residential;
 - c. Medium Density Local Corridor;
 - d. Village Corridor;
 - e. Neighbourhood Centre; and
 - f. Environmental Protection.
- 11.2.3 Schedule A also includes an Environmental Constraint overlay that establishes an area where further study is required before development as per the underlying designation is permitted.
- 11.2.4 Drive-through facilities are not a permitted use in any land use designation.
- 11.2.5 Service stations are not a permitted use in any land use designation.
- 11.2.6 The land use designations are identified in Schedule A of the Secondary Plan. Minor alterations which maintain the general intent of the policies of this Secondary Plan may occur without amendment through the development approval process in accordance with policies 24.1.2 and 24.1.3 of the Official Plan.

11.3 Low Density Residential Designation

Permitted Uses and Built Forms

- 11.3.1 The predominant use of lands within the Low Density Residential designation shall be a mix of housing types and tenures in low-rise building forms.
- 11.3.2 Other uses, including small scale service and neighbourhood retail commercial uses, which are supportive of and compatible with residential uses, are also permitted in accordance with the Official Plan.
- 11.3.3 The following building types are permitted:
 - a. Detached dwellings;
 - b. Semi-detached dwellings;
 - c. Street townhouses; and
 - d. Accessory apartments, as per Policies 7.2.21 and 7.2.22 of this Plan.

Height and Density

- 11.3.4 Buildings within the Low Density Residential designation shall not exceed 3 *storeys* in height.
- 11.3.5 *Development* on lands designated Low Density Residential shall have a minimum *net density* of 13 units per net hectare.

Development Policies

- 11.3.6 Detached and semi-detached dwelling units shall account for a minimum 80 percent of the total number of units in the Low Density Residential designation, with units in other building types accounting for the remaining 20 percent. Generally, this ratio should be applied for each plan of subdivision to encourage an even distribution of townhouse units.
- 11.3.7 Townhouses should generally be located in proximity to open spaces and neighbourhood commercial uses to allow for easy access to amenity spaces and services.
- 11.3.8 Private streets and private lanes are not permitted within the Low Density Residential Designation.
- 11.3.9 Residential *development* shall contribute to the overall appearance of the streetscape. Garage doors shall not dominate the view of the streetscape. Front and exterior side yard porches shall be encouraged.

11.4 Medium Density Residential Designation

Permitted Uses and Built Forms

- 11.4.1 The predominant use of lands within the Medium Density Residential designation are a mix of housing types and tenures in mid- and low-rise building forms.
- 11.4.2 Other uses, including small scale service and neighbourhood retail commercial uses, which are supportive of and compatible with residential uses, are also permitted in accordance with the Official Plan.
- 11.4.3 The following building types are permitted:
 - a. Street townhouses;
 - b. Block townhouses;
 - c. Stacked townhouses;
 - d. Back-to-back townhouses;
 - e. Apartment buildings; and
 - f. Accessory apartments, as per Policies 7.2.21 and 7.2.22 of this Plan.

Height and Density

- 11.4.4 Building heights shall be a minimum of 2 storeys and a maximum of 4 storeys.
- 11.4.5 *Development* on lands designated Medium Density Residential shall have a minimum *net density* of 40 units per net hectare.

Development Policies

11.4.6 Residential *development* shall contribute to the overall appearance of the streetscape. Garage doors shall not dominate the view of the streetscape. Front and exterior side yard porches shall be encouraged.

11.5 Medium Density Local Corridor Designation

Permitted Uses and Built Forms

- 11.5.1 The Medium Density Local Corridor designation allows for a concentration of density and mix of uses. The predominant use of lands with the Medium Density Local Corridor designation is housing in mid-rise building forms combined with cultural, entertainment, recreational, offices, restaurants, retail, and/or service commercial uses within *mixed-use buildings*.
- 11.5.2 The following building types are permitted:

- a. Street townhouses;
- b. Block townhouses;
- c. Stacked townhouses:
- d. Back-to-back townhouses;
- e. Apartment buildings;
- f. Mixed-use buildings; and
- g. Accessory apartments, as per Policies 7.2.21 and 7.2.22 of this Plan.

Height and Density

- 11.5.3 The height of any building shall be a minimum of 3 *storeys* and a maximum of 6 *storeys*.
- 11.5.4 *Development* on lands designated Medium Density Local Corridor shall have a minimum *net density* of 40 units per net hectare.

Development Policies

- 11.5.5 The highest and most dense forms of *development* shall be located fronting the Local *Corridor*. Development shall provide a transition, locating less dense and lower scale buildings in locations adjacent to lower density designations.
- 11.5.6 The scale of buildings in a Medium Density Local Corridor designation shall be compatible and sensitively integrated with surrounding residential. *Development* transition requirements shall be met following the policies in Section 6.5 of this Plan.
- 11.5.7 Cultural, entertainment, recreational, offices, restaurants, retail, and service commercial uses shall only be permitted on the ground floor of a *mixed use building*.

11.6 Village Corridor Designation

Permitted Uses and Built Forms

11.6.1 The Village Corridor is the primary focus for mix of uses and the focal point of gathering in the Brookhill Neighbourhood. The Village Corridor will incorporate a combination of residential, cultural, entertainment, recreational, offices, restaurants, retail, and service commercial uses. A mixture of uses is required within the designation.

- 11.6.2 The following building types are permitted:
 - a. Street townhouses;
 - b. Block townhouses;
 - c. Stacked townhouses;
 - d. Back-to-back townhouses;
 - e. Live/work units;
 - f. Apartment buildings;
 - g. Mixed-use buildings; and
 - h. Accessory apartments, as per Policies 7.2.21 and 7.2.22 of this Plan.

Height and Density

- 11.6.3 Building heights shall be a minimum of 3 *storeys* to a maximum of 4 *storeys*.
- 11.6.4 *Development* on lands designated Village Corridor shall have a minimum *net density* of 40 units per net hectare.

Development Policies

- 11.6.5 *Mixed-use buildings* and live/work units shall be the predominant use along Longworth Avenue. Townhouse dwellings shall account for a maximum 20 percent of the buildings fronting Longworth Avenue.
- 11.6.6 The mix of uses in the Village Corridor shall be compatible and sensitively integrated with the surrounding residential uses. *Development* transition requirements shall be met following the policies in Section 6.5 of this Plan.
- 11.6.7 All *development* within the Village Corridor designation shall be oriented towards the street. Garage doors/service facilities shall generally be prohibited from facing the public street. Front and exterior side yard porches shall be required on all ground-related residential units.
- 11.6.8 The streetscape along Longworth Avenue shall facilitate public spaces, café patios, street trees/planters, street furniture, and future transit shelters.
- 11.6.9 Cultural, entertainment, recreational, offices, restaurants, retail, and service commercial uses shall only be permitted on the ground floor of a mixed-use building and shall generally be limited in size to a maximum of approximately 500 square metres per unit.

11.6.10 To facilitate appropriate *development* along Longworth Avenue within the Village Corridor designation, the Municipality may consider development incentives. Development incentives may include reduced parking and/or parkland standards, or other incentives to encourage *mixed use development*.

11.7 Neighbourhood Centre Designation

Permitted Uses and Built Forms

- 11.7.1 The Neighbourhood Centre Designation provides opportunities for residential and commercial uses that benefit from Arterial Road frontage along Bowmanville Avenue. The Neighbourhood Centre will incorporate a combination of residential, cultural, entertainment, recreational, offices, restaurants, retail, service commercial uses, and a grocery store/supermarket.
- 11.7.2 The following building types are permitted:
 - a. Street townhouses;
 - b. Block townhouses;
 - b. Stacked townhouses;
 - c. Back-to-back townhouses;
 - d. Apartment buildings;
 - e. Mixed-use buildings;
 - f. Grocery stores/supermarkets; and.
 - g. Accessory apartments, as per Policies 7.2.21 and 7.2.22 of this Plan.

Height and Density

- 11.7.3 Residential and mixed-use built forms shall have a minimum height of 4 *storeys* and a maximum of 6 *storeys*. The commercial use built form shall have a minimum height of 2 *storeys* and a maximum of 6 *storeys*.
- 11.7.4 *Development* on lands designated Neighbourhood Centre shall have a minimum *net density* of 40 units per net hectare.

Development Policies

11.7.5 The Neighbourhood Centre is located at a Prominent Intersection and shall be developed in accordance with the policies of this Plan and Section 10.5 of the Official Plan.

- 11.7.6 The mix of uses in a Neighbourhood Centre shall be compatible and sensitively integrated with the surrounding residential uses. *Development* transition requirements shall be met following the policies in Section 6.5 of this Plan.
- 11.7.7 Cultural, entertainment, recreational, offices, restaurants, retail, and service commercial uses shall only be permitted on the ground floor of a mixed-use building or within a building containing a grocery store/supermarket.
- 11.7.8 A stand-alone, multi-storey commercial building is permitted only if a mixed-use or residential building is also within the Neighbourhood Centre designation.
- 11.7.9 *Dwelling units* may be permitted in either stand-alone residential buildings or above the ground floor in a *mixed use building*.
- 11.7.10 Surface parking lots should be screened from view from roads, open spaces, and adjacent residential areas with low fencing, architectural features, landscaping and/or other mitigating design measures, such as lowered parking surfaces with landscaped buffers.

11.8 Environmental Protection Area Designation

- 11.8.1 Lands designated Environmental Protection Area shall be subject to the provisions of Section 14.4 of the Official Plan.
- 11.8.2 No *development* shall be permitted in Environment Protection Areas, except low intensity *recreation*, and uses related to conservation, flood, or erosion control projects.
- 11.8.3 The *natural heritage features* and their associated *vegetation protection zones* within the Secondary Plan Area are identified as Environmental Protection Area on Schedule A to this Secondary Plan.
- 11.8.4 The Environmental Protection Area recognizes the interdependence of *natural heritage features* and their associated functions, and thus seeks to maintain connections among natural features, so that their existing *ecological* and *hydrological functions* are maintained or enhanced.
- 11.8.5 The biodiversity, *ecological function*, and connectivity of the Environmental Protection Area shall be protected, maintained, restored or, where possible, improved for the long-term, recognizing *linkages* between *natural heritage features* and areas, surface water features, and ground water features.

- 11.8.6 Potential erosion concerns along a section of the lower end of the Brookhill Tributary, in proximity to the confluence with the Bowmanville Creek, may require investigation for erosion control works prior to the submission of a development application.
- 11.8.7 The delineation of the boundary of lands designated as Environmental Protection Area are approximate and shall be detailed through appropriate studies prepared as part of the review of development applications in accordance with the policies of this Secondary Plan and the Clarington Official Plan. Any resulting changes to the boundaries of the Environmental Protection Area designation resulting from the recommendations of an Environmental Impact Study shall not require an amendment to this Secondary Plan.
- 11.8.8 Access to Environmental Protection Areas and associated areas through the development of public trails will be undertaken in a manner which conserves their ecological integrity.

11.9 Environmental Constraints Overlay

- 11.9.1 The areas with an Environmental Constraints Overlay as shown on Schedule A have been identified as having the potential for environmental significance and the underlying designation can not be achieved until an EIS has been prepared and the limits of the NHS confirmed to the satisfaction of the Municipality and the Central Lake Ontario Conservation Authority (CLOCA).
- 11.9.2 The presence and precise delineation of these features and areas and the level of development acceptable shall be determined through an EIS prepared as part of the review of *development* applications in accordance with the policies of the Clarington Official Plan.
- 11.9.3 If the study establishes that *development* can proceed, then the underlying designation shall apply over those lands. Further, it may be determined that only a portion of the lands within the Environmental overlay may be available for development.

11.10 Future Block Master Plan

11.10.1 The entire area of land, including the existing large lot residential *development*, located east of Bowmanville Avenue and south of Longworth Avenue is designated as a Future Block Master Plan on Schedule A. The area is subject to comprehensive planning studies to determine future land uses which will be

incorporated into the Official Plan by amendments to the Brookhill Neighbourhood Secondary Plan. A Block Master Plan will be required to ensure that community design elements in the Secondary Plan are further enhanced and detailed for this area.

- 11.10.2 A Block Master Plan will, at a minimum, be required to:
 - a. Evaluate the compatibility of new *development* with the area's existing character, size, and urban form;
 - b. Determine the siting of a particular proposal within the broader surrounding context;
 - c. Co-ordinate the delivery of services and roads;
 - d. Address environmental constraints; and
 - e. Determine the location of *parks* and where to allocate *development* priority.
- 11.10.3 A Terms of Reference for the Block Master Plan must be approved by the Municipality.
- 11.10.4 Within the area identified as Future Block Master Plan, the land use designations of Low Density Residential, Large Lot Residential, and Environmental Protection Area from the original Brookhill Neighbourhood Secondary Plan (adopted 2008) remain until a Block Master Plan is approved and new designations are determined.

12.0 SERVICING

12.1. Municipal Services

- 12.1.1 All new *development* within the Secondary Planning area shall proceed based on the sequential extension of full municipal services in accordance with the municipal capital works program.
- 12.1.2 Any Regional *infrastructure* required to support the development of the Brookhill Neighbourhood is subject to the annual budget and Business Planning Process.
- 12.1.3 The Municipality will work with the landowners and the Regional Municipality of Durham to develop a plan for the phasing of extensions to the existing services within the Brookhill Neighbourhood Secondary Plan Area. A phasing plan shall

be prepared as part of a Functional Servicing Report by development proponents at the time an application for draft plan of subdivision is submitted.

12.2. Stormwater Management

- 12.2.1 Stormwater Management facilities are conceptually shown on Schedule A and may be permitted in all land use designations, except for the Environmental Protection Area designation. Symbols denoting urbanized stormwater management facilities are not traditional ponds but an on-site control stormwater management approach which may include Low Impact Development best practices and *green infrastructure*.
- 12.2.2 The number and location of the stormwater management facility symbols may be changed without an amendment to this Plan. The exact location, number, and size of the facilities will be determined through a Functional Servicing Report and in accordance with Section 20 of the Official Plan. Stormwater management facilities shall be constructed in accordance with the provisions of the Sustainable Urban Design Guidelines attached as Appendix A to this Secondary Plan.
- 12.2.3 Storm drainage for the Secondary Plan Area will be conveyed to the Bowmanville Creek and the Brookhill Tributary in accordance with the provisions of a Functional Servicing Report.
- 12.2.4 Development in the Secondary Plan Area is encouraged to incorporate "Low Impact Development" best practices and green infrastructure, wherever feasible and practical to minimize runoff, reduce water pollution, and protect groundwater resources quality and maintain pre-development groundwater levels as measures in addition to more traditional stormwater management systems and facilities. These measures may include but are not limited to, porous pavements, bioretention basins, enhanced swales, at-source infiltration, greywater re-use, green roofs, rain gardens, and alternative filtration systems such as treatment trains and water conservation measures, subject to the satisfaction of the Municipality.
- 12.2.5 Stormwater management facilities will be designed and located to be key features within the community contributing to the appearance and ambience of the neighbourhood, while achieving functional objectives related to flow moderation, erosion control, and water quality.
- 12.2.6 Stormwater management facilities will blend with the natural landscape.

 Geometric forms and standard slope gradients will be avoided in favour of

organic shapes and landform grading designed to replicate natural landforms in the area. Inlet and outlet structures will be concealed using a combination of planting, grading, and natural stone. The ponds will be designed and planted with native upland, flood tolerant shoreline and aquatic species to provide enhanced wildlife habitat. Facilities will be designed to include trails, overlooks, and interpretive signage so that they are an integral part of the *parks* and open space system.

12.2.7 Stormwater management for the Secondary Plan Area will be designed in such a manner that pre-development water balance conditions are maintained for all wetlands, tributaries and other natural heritage features requiring the maintenance of water balance conditions. A detailed water balance will be required as part of a stormwater management plan submitted at the time of a development application.

12.3 Utilities

- 12.3.1 The Municipality shall participate in discussions with utility providers such as hydroelectric power, communications/telecommunications facilities and utilities, broadband fibre optics, and natural gas to ensure that sufficient *infrastructure* is or will be in place to serve the Secondary Plan Area.
- 12.3.2 The Municipality shall promote utilities to be planned for and installed in common trenches, where feasible, in a coordinated and integrated manner in order to be more efficient, cost effective, and minimize disruption.
- 12.3.3 Utility services shall be developed to be compatible with the general character of the surrounding uses and minimize visual impact. The Municipality will encourage utility providers to consider innovative methods of containing utility services on or within streetscape features such as gateways, lamp posts, transit shelters, etc., when determining appropriate locations for large utility equipment and utility cluster sites.

13.0 IMPLEMENTATION

13.1 General

13.1.1 This Secondary Plan shall be implemented in accordance with the provisions of the Planning Act, other applicable Provincial legislation, and the provisions of the Official Plan.

- 13.1.2 Approval of *development* applications shall be conditional upon commitments from the appropriate authorities and the proponents of development to the timing and funding of the required road and transportation facilities, *parks*, and *recreation* facilities. These works shall be provided for in the subdivision and site plan agreements. Phasing of the development, based on the completion of the external road works, may be required by the Municipality of Clarington.
- 13.1.3 Approval of *development* applications shall also be conditional upon commitments from the appropriate authorities and the proponents of development to the timing and funding of required stormwater management, sanitary sewer, and water supply facilities. These works shall be provided for in subdivision and site plan agreements. Phasing of *development*, based on the completion of external sewer and water services, may be implemented if required by the Municipality of Clarington.
- 13.1.4 *Development* within the Secondary Plan Area shall be consistent with programs intended to reduce the consumption of energy and water and to promote waste reduction. An Energy Conservation and Sustainability Plan will be prepared by development proponents to outline the specific commitments for sustainability.
- 13.1.5 The Sustainable Urban Design Guidelines contained as an appendix to this Secondary Plan provide specific guidelines for both the public and private sectors. They indicate the Municipality of Clarington's expectations with respect to the character, quality, and form of development in the Brookhill Neighbourhood. The Demonstration Plan illustrates the planning principles that are inherent to the Secondary Plan. It is one example of how the Secondary Plan might be implemented within the Secondary Plan Area. The Sustainable Urban Design Guidelines and Demonstration Plan have been approved by Council and do not require an amendment to implement an alternative design solution at anytime in the future.
- 13.1.6 All *development* within the Secondary Plan Area shall be in accordance with the Sustainable Urban Design Guidelines. Adjustments and further refinements to the Sustainable Urban Design Guidelines are anticipated and may be considered at the development stage through submission of an Urban Design Brief which demonstrates how the general design approach in the Sustainable Urban Design Guidelines is being achieved, or the rationale for the deviation, to the satisfaction of the Municipality and Region.
- 13.1.7 The Secondary Plan recognizes that comprehensive planning requires the equitable sharing amongst landowners of costs associated with the *development* of land. It is a policy of this Secondary Plan that prior to the

approval of any draft plan of subdivision, applicants/landowners shall have entered into appropriate cost sharing agreements which establish the means by which the costs (including Region of Durham costs) of developing the property are to be shared. The Municipality may also require, as a condition of draft approval, that proof be provided to the Municipality that landowners have met their obligations under the relevant cost sharing agreements prior to registration of a plan of subdivision.

13.2 Required Studies and Reports

General

- 13.2.1 Prior to the approval of *development* applications within parts of, or the entire, Secondary Plan Area, studies, plans, and assessments shall be completed in accordance with Clarington Official Plan and Durham Region Official Plan policies and requirements
- 13.2.2 Additional study requirements may be identified by the Municipality as development within the Secondary Plan Area proceeds.
- 13.2.3 Every development application, as part of complete application and updated at the time of final approval, shall be accompanied by a policy implementation monitoring report that shall include details regarding the following, if applicable:
 - a. For the development application area:
 - i. Net density by land use designation;
 - ii. Number and type of units in conformity to policy 11.3.6;
 - iii. Total development application unit count;
 - iv. Estimated population;
 - b. For the entire Secondary Plan Area:
 - i. Overall density per hectare and by land use designation;
 - ii. Number of dwelling units by type;
 - iii. Number of units within the built-up area;
 - iv. Amount/type of non-residential space and number of jobs;
 - c. How the application is implementing the housing policies in Section 7 of the Secondary Plan; and
 - d. Number of purpose-built accessory apartments.

- 13.2.4 The Municipality shall make available the most up-to-date data based on proposed and approved development in the Secondary Plan area referenced in section 13.2.3
- 13.2.5 To help ensure a diversity of housing is provided and that housing and population targets are achieved, all *development* applications shall provide a land budget to demonstrate how the application will support the achievement of the applicable housing targets. If the approved application differs from the original application, a revised land budget shall be provided.
- 13.2.6 The Municipality shall make available data on the housing mix, based on existing and approved development, to assist applicants in the preparation of land budgets for new applications.

Community Theme and Urban Design Implementation Plan

13.2.7 Prior to the approval of a *development* in the Brookhill Neighbourhood a Community Theme and Urban Design Implementation Plan shall be prepared to confirm and control the intended pattern of *development* within the Neighbourhood. In addition to other matters, the Community Theme and Urban Design Implementation Plan shall include design concepts for community theming including gateway treatment, landscape treatment including the green corridor treatment for Bowmanville Avenue, light fixture standards, fencing details, sidewalk details, and related design issues that provide for overall community theme including the proposed network of roads, transit, pedestrian, and bicycle routes.

Architectural Guidelines

- 13.2.8 All development shall be subject to urban design and architectural guidelines.
- 13.2.9 Provision for compliance with the guidelines shall be incorporated into all subdivision, site plan, or similar development agreements.
- 13.2.10 A program to ensure compliance with the guidelines shall be established among the landowner's group and the Municipality and shall ensure integration with other required planning approvals. Confirmation of compliance with the guidelines shall be required prior to the issuance of building permits.
- 13.2.11 Such guidelines may be reviewed and amended from time to time provided that any amendments shall conform to the principles and policies of this Secondary Plan and the Sustainable Urban Design Guidelines (Appendix A) and shall be prepared to the satisfaction of the Municipality of Clarington.

14.0 INTERPRETATION

- 14.1 It is intended that this Secondary Plan Area be developed in accordance with the policies of this Secondary Plan in conjunction with the applicable policies of the Municipality of Official Plan. Notwithstanding that intention, where there is a conflict between the principles, objectives, and/or policies of this Secondary Plan and the Official Plan, the principles, objectives, and/or policies of this Secondary Plan shall prevail.
- Inherent to this Secondary Plan is the principle of flexibility. Policies shall be subject to interpretation without Amendment to this Secondary Plan, provided that the general intent and structure of the Secondary Plan are maintained to the satisfaction of the Municipality. As such, it is the intent of the Municipality to permit some flexibility in the interpretation of the policies, regulations, and numerical requirements of this Secondary Plan except where this Secondary Plan is explicitly intended to be prescriptive. The Sustainable Urban Design Guidelines provide design principles and specific guidelines for both the public and private sectors. They indicate the Municipality of Clarington's expectations with respect to the character, quality, and form of development in the Brookhill Neighbourhood. The Sustainable Urban Design Guidelines have no formal status and do not require any formal amendment process to implement an alternative design solution, or solutions at any time in the future.
- 14.3 The boundaries between land use designations are to be considered approximate except where they coincide with existing roads, rail lines, utilities, or other clearly defined physical features. Where the general intent of this Secondary Plan is maintained, to the satisfaction of the Municipality, minor boundary adjustments will not require an Amendment to this Secondary Plan.
- 14.4 Development within the Secondary Plan Area will be guided by a detailed series of policies, regulations, and guidelines that will create a livable and diverse community that is sympathetic to the environmental context. The Sustainable Urban Design Guidelines (Appendix A) provide the foundation for the development of the Brookhill Neighbourhood Secondary Plan Area and the basis for the policy framework of this Secondary Plan.