



Staff Report

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Report To:	Planning and Development Committee	
Date of Meeting:	September 28, 2020	Report Number: PSD-032-20
Submitted By:	Faye Langmaid, Acting Director of Planning and Development Services Andrew	
Reviewed By:	C. Allison, CAO	Resolution#: PD-118-20
File Number:	COPA 2020-0004 (PLN 41.12)	By-law Number:
Report Subject:	Public Meeting – Brookhill Neighbourhood Secondary Plan	

Recommendations:

1. That Report PSD-032-20 be received;
1. That the proposed Draft Brookhill Neighbourhood Secondary Plan Amendment (COPA 2020-0004) and Sustainable Urban Design Guidelines be received, continued to be reviewed and processed, and staff report back to Committee with a Recommendation Report; and
2. That all interested parties listed in Report PSD-032-20 and any delegations be advised of Council's decision.

Report Overview

The Municipality of Clarington is updating the Brookhill Neighbourhood Secondary Plan in order to prepare for future growth in this area. This project will implement the policies of the Clarington Official Plan and guide the future development of the neighbourhood.

The update of the Brookhill Neighbourhood Secondary Plan will guide the creation of a walkable neighbourhood in the north and east portion of the Secondary Plan area, and will include new homes, a school and parkland. The updated Secondary Plan will create greater connectivity throughout northwest Bowmanville with the addition of new roads, such as the extension of Clarington Boulevard north to Nash Road. The update will also provide increased connectivity to surrounding natural areas with new trails and paths. The neighbourhood design places a strong emphasis on walkability and access to amenities to encourage social interaction and outdoor activity.

The purpose of the statutory public meeting is to obtain comments from the public, stakeholders and commenting agencies on the proposed Secondary Plan.

1. Background – Secondary Plans

About Secondary Plans

- 1.1 A Secondary Plan provides more detail than an Official Plan about how a neighborhood is to develop. This neighbourhood-scale planning allows for a more detailed analysis of land use and transportation issues and specific ways to achieve the objectives of the Clarington Official Plan, including meeting density and infill targets.
- 1.2 A Secondary Plan provides the structure for the various components of a neighbourhood, such as how to best provide locations for housing, commercial uses, and parks and amenities, as well as planning the mobility between them and the rest of the community at large. Ultimately, a Secondary Plan establishes the character and identity of the neighbourhood while promoting efficient land use and development.
- 1.3 The preparation or amendment to a Secondary Plan follows the same procedures as an Official Plan Amendment under the Planning Act. This includes the preparation of supporting technical studies, public engagement, notice and holding of public meetings and adoption procedures. The Region of Durham is the final approval authority for Secondary Plans.

2. Brookhill Neighbourhood Secondary Plan Update

- 2.1 The Brookhill Neighbourhood Secondary Plan area covers 300 hectares generally bound by Nash Road in the north, Bowmanville Creek in the east, the Bowmanville West Urban Centre Secondary Plan area in the south and the Bowmanville Urban Boundary in the west (Figure 1).

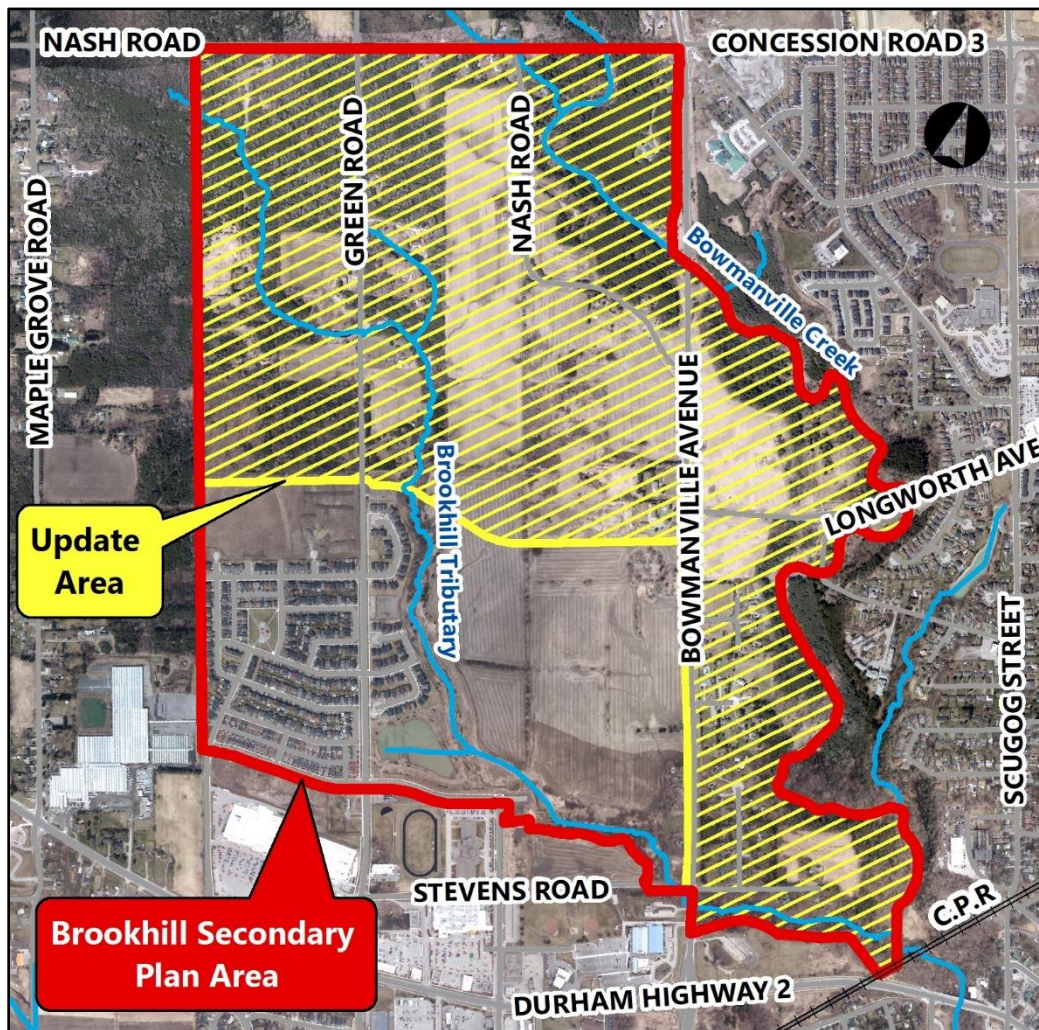


Figure 1: Brookhill Neighbourhood Secondary Plan Area and the Update Area

- 2.2 Approximately one-third of the Secondary Plan area is occupied by natural features. The main natural features are the Bowmanville Creek Valley, the Brookhill Tributary and the West Clarington Iroquois Beach Area of Natural and Scientific Interest (ANSI) and the Maple Grove Provincially Significant Wetland (PSW) Complex in the northwest quadrant of the Secondary Plan area.

- 2.3 The Brookhill Neighbourhood Secondary Plan and accompanying Urban Design Guidelines were originally adopted in 2008. These documents reflect New Urbanist principles that focus on creating complete, walkable communities. To this day, the Brookhill Neighbourhood Secondary Plan and Urban Design and Sustainability Guidelines present progressive approaches to community planning and have since become hallmarks for other secondary plans to follow in Clarington.
- 2.4 The Brookhill Neighbourhood Secondary Plan and its accompanying Urban Design Guidelines require an update now that the lands in the north portion of the neighbourhood are ready to be developed. Following the “Future Development Area” policy of the existing Secondary Plan, the land uses shown in “Map A” do not come into effect until this Secondary Plan is updated and reflects the current Clarington Official Plan approved by the Region of Durham in June 2017. Conformity with the Durham Region Official Plan and Provincial plans and policies is also required at this time. These updates are essential for development to proceed in the north part of the neighbourhood and for the Municipality to meet its population and employment targets.
- 2.5 The Brookhill Neighbourhood Secondary Plan Update will maintain the original plan’s progressive vision and many of its policies. For the sake of clarity, the draft Official Plan Amendment proposes to entirely replace the existing plan and urban design guidelines with those proposed here.
- 2.6 The Brookhill Neighbourhood Secondary Plan Update is focused on the undeveloped area of the plan north of the Longworth Avenue extension west of Bowmanville Avenue, and along the east side of Bowmanville Avenue, as shown in Figure 1.
- 2.7 The southwestern quadrant of the Secondary Plan is now building out; however, the balance of the Secondary Plan area remains largely as it was in 2008. Draft plans of subdivision cover much of the Secondary Plan area south of the future Longworth Avenue extension. The current designations and densities planned for the area south of the Longworth Avenue extension remain as is.

3. Initiation of the Secondary Plan Update

- 3.1 Planning Services received a request from the Brookhill North Landowners Group requesting initiation of a conformity update of the Brookhill Neighbourhood Secondary Plan with their commitment to cover 100% of the cost as required by Clarington Official Plan policies. On June 4, 2018 ([PSD-052-18](#)). Staff made the recommendation to proceed with project, which was ratified by Council on June 11, 2018 (Resolution #C-207-18).
- 3.2 A Terms of Reference was created and agreed upon. The terms of reference outlines the update process to the Brookhill Neighbourhood Secondary Plan and Urban Design

Guidelines. The Terms of Reference include descriptions of all the studies, reports, and outreach required as a part of this project.

- 3.3 Although the Municipality ultimately manages and directs the Secondary Plan process, the Terms of Reference included the requirement of a Technical Steering Committee to provide overall guidance and feedback on the deliverables. The role of the Committee is an advisory one to Planning Services staff. The Steering Committee includes various Clarington, Region and CLOCA staff, the Landowner Group project manager, two landowner representatives and the lead consultant for the Municipality.
- 3.4 A number of Council's priorities including sustainability and urban design were included in the Terms of Reference and are already addressed in the existing Brookhill Neighbourhood Secondary Plan and Urban Design Guidelines. The update to these documents provides the opportunity to refine and add to them.

Sustainability and Climate Change

- 3.4.1. The Brookhill Neighbourhood Secondary Plan Update will address the criteria developed for Secondary Plans in Clarington's Green Development program and will be guided by the Priority Green Development Framework. Council added emphasis to this priority through the declaration of a Climate Emergency on March 23, 2020.
- 3.4.2. Sustainable development principles and practices will be incorporated into every part of the Secondary Plan, including the design of neighbourhoods and the allocation of land uses.

Urban Design

- 3.4.3. New and expanding neighborhoods should be designed to enhance the history and character of Clarington. Neighbourhoods are to be created with a sense of place and all development should result in a high-quality aesthetic and design. Excellence in urban design will consider elements like building design, complete streets, views, park connectivity, sun and shadow impacts, active transportation and the integration of green infrastructure into neighborhood design.

Affordable Housing

- 3.4.4. Council, through Official Plan policy, supports the provision of a variety of housing types, tenure and costs for people of all ages, abilities and income groups. Recommendations for policies are found in Clarington's Affordable Housing Toolkit.
- 3.4.5. Additional work needs to be undertaken to ensure affordable housing is developed through the right combination of policies and incentives. The proposed policies of the

current draft Secondary Plan may be further refined by the time staff presents a recommendation report.

Community Engagement

- 3.4.6. Clarington Council is committed to community consultation and engagement beyond the statutory requirements. The preparation of this Secondary Plan was and continues to be supported by a thorough public engagement strategy which includes a range of public consultation initiatives in order to share, consult, deliberate and collaborate with all stakeholders. These efforts are in addition to any statutory meeting requirements.

Coordination of Initiatives

- 3.4.7. The following processes have been undertaken at the same time as the Brookhill Neighbourhood Secondary Plan Update and have been incorporated into the study process:

Environmental Assessment Process

- 3.4.7.1. An Environmental Assessment (EA) is required for all new major (collector and arterial) roads needed for the Brookhill Neighbourhood Secondary Plan. All public notices, communications and review periods have been designed to ensure that they conform to the requirements of both the Planning Act and EA. To avoid confusion and focus resources more effectively, this project is being undertaken using the 'Integrated Approach' which jointly satisfies the requirements of both the Planning Act and the Environmental Assessment Act.

Key public consultation elements of the EA process include:

- Notifications: All project notices demonstrate clear indication of the Integrated EA and Planning Act approach;
- Mandatory Consultation: Engagement with review agencies and the public regarding the problem/opportunity and alternative solutions is a key component for the EA process; and
- Completion: At study completion, a Notice is to be prepared advising agencies and the public of the study completion and the opportunity to review the project reporting.

Indigenous Communities Consultation

- 3.4.7.2. Both the Planning Act the Environmental Assessment Act require consultation with Indigenous communities. Staff have provided background materials and

copies of all notice material to each Indigenous community with rights and interests in the area. Prior to reporting back with a recommendation, staff will ensure that consultation with the each of the required Indigenous communities meets the requirements of the Acts.

4. The Secondary Plan Update Process – Four Phases

4.1 There are four phases to the Secondary Plan Update process (Figure 2):

- Phase 1 focuses on initial input from the public and technical background studies;
- Phase 2 develops design principles and alternative land use plans based on Phase 1;
- Phase 3 selects a preferred land use plan based on additional public input and technical studies; and,
- Phase 4 formalizes the Secondary Plan and its implementing documents – Sustainable Urban Design Guidelines, and Zoning By-laws. Below is a description of key tasks associated with each phase.

The following sections will generally describe the process for updating the Brookhill Neighbourhood Secondary Plan. A sequence of events summary table is provided in Attachment 1 – Sequence of Events, for reference.

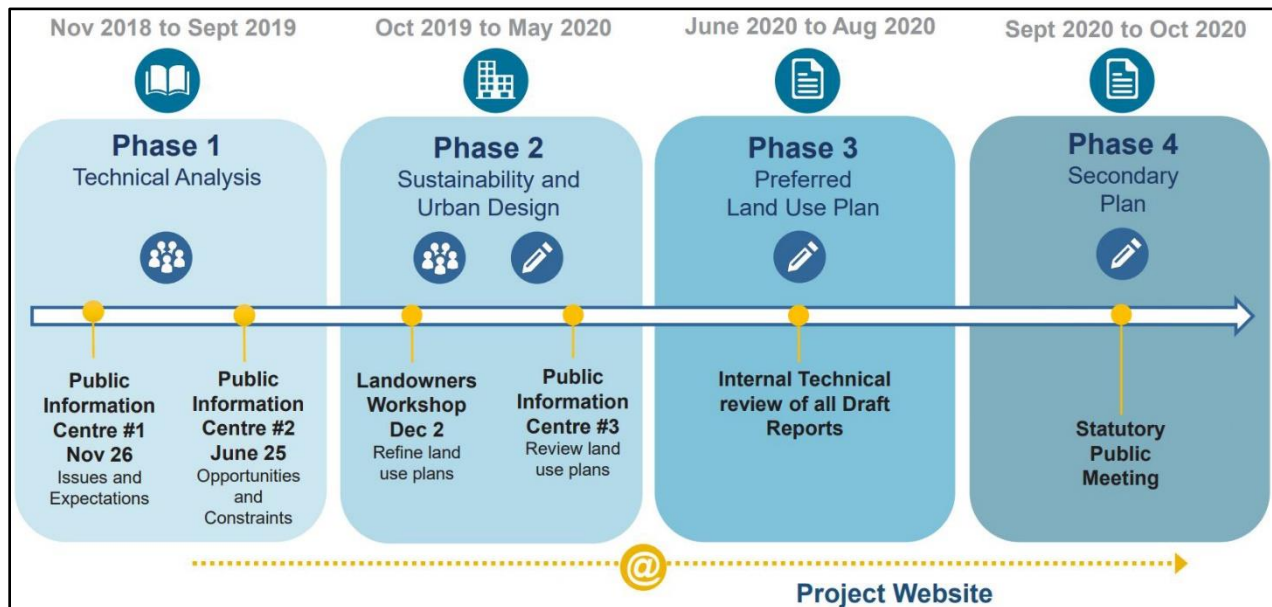


Figure 2: Four Phases of the Secondary Plan Update

Phase 1 – Initial Public Input and Technical Analysis

- 4.2 The initial phase involved a detailed technical analysis of the area including servicing, infrastructure and initial public participation.

Public Information Centre (PIC) #1

- 4.2.1. The first PIC on November 26, 2018, was held at the Garnet B. Rickard Recreation Complex. Group activities by table were used to review the principles of the original Brookhill Neighbourhood Secondary Plan and to consider the importance of elements within the priorities for this update, which include sustainability and climate change, urban design, affordable housing and community engagement.

Public Information Centre (PIC) #2

- 4.2.2. A second PIC was held on June 25, 2019. At this event, the opportunities and constraints when planning this part of Bowmanville were shared with the public based on the background studies. A summary of the feedback messages received from the 29 people in attendance at this event include:

- Concerns with the current and future level of traffic in the Project Area.
- Need for expanded infrastructure for pedestrians and cyclists.
- Include Climate Change implications in the updated Secondary Plan.
- Concerns with the delivery of schools and services.
- Expressed support and need for a variety of housing.

Phase 2 – Urban Design and Sustainability Principles and Alternative Land Use Plans

- 4.3 Based on the information gathered in the background reports and the feedback from the public and other stakeholders, the Municipality and its consultants developed three preliminary alternative land use concepts for the area. These early plans are variations on road layout, land uses (mostly residential with a school and some commercial), parkland distribution, and stormwater management facilities.

Alternative Land Use Plans

- 4.3.1. All alternative plans were designed to achieve a population density of 50 people/ha and parkland at a rate of 1ha/300 dwelling units. Emphasis on different structuring elements distinguished each alternative land use plan as follows:
- 1) Alternative 1 used a street grid with limited rear lanes with an elementary school located next to a park and the Natural Heritage System. Parkland and density are distributed evenly throughout the area. Small-scale retail is located along Longworth.

- 2) Alternative 2 used a modified street grid making more connections via rear lanes. The elementary school is centrally located, and parkland is consolidated into three Neighbourhood Parks. Housing density and small-scale retail and a larger Neighbourhood Centre create nodes along major streets.
- 3) Alternative 3 used a modified street grid as well with a large Neighbourhood Park adjacent to the elementary school and Natural Heritage System. Smaller parkettes are distributed throughout the area. Housing density is focussed along arterial roads and Bowmanville Creek valley, with retail and a Neighbourhood Centre located at the intersection of Bowmanville Avenue and Longworth Avenue.

Landowner Workshops and the Emerging Plan

- 4.3.2. Workshops were organized for the afternoon and evening of December 2, 2019, for all landowners within the project area. 65 landowners and representatives attended the two workshops. The workshops included a presentation about the background and criteria informing the three alternative plans and open discussion about each plan afterward.
- 4.3.3. Input from the workshops as well as the steering committee and agencies continued to guide their development and the direction toward an Emerging Plan. A best practice review of urban design and sustainability guidelines and guiding principles were used to inform the three options and provided a basis to develop the Emerging Plan. A brief description of the best practice's review and three land use options and evaluation are included in Attachment 2 – Summary of Technical Reports.
- 4.4 The Emerging Plan combined the modified street grid with an even distribution of parks and a centrally located school for improved accessibility and active transportation options throughout the neighbourhood. Medium density was spread throughout the area with high density along Bowmanville Avenue. Mixed-use commercial is accessible along Longworth Avenue, with a Neighbourhood Centre at Bowmanville Avenue and Longworth Avenue. A Block Master Plan area has been proposed in the emerging plan to best coordinate the development of this unique large-lot residential area.

Public Information Centre (PIC) #3

- 4.4.1. A third PIC was scheduled to occur on March 24, 2020; however, it was cancelled due to the COVID-19 pandemic. This PIC was rescheduled and held online on May 21, 2020. Three sessions were made available in the afternoon and evening, each of which followed the same format of a presentation about the different land use plans with pauses for discussion throughout.
- 4.4.2. An online survey was released on the project webpage for two weeks immediately after PIC #3, from May 22 to June 5, 2020. The survey summarized the alternative land use plans and the emerging plan presented at PIC #3 and prompted members of the public

for preferences between the different community elements being proposed. The survey was promoted by the Municipality on its social media platforms and garnered opinions from 240 members of the public on the preferred way forward with the Secondary Plan.

- 4.4.3. The options were evaluated based on criteria informed by stakeholder and public comments as described in the draft Alternative Land Use Plans Report.
- 4.5 COVID-19 was declared a pandemic in March 2020 as the project was nearing the end of Phase 2. Although staff and the consultants were no longer working from their respective offices, the Secondary Plan project proceeded. Virtual steering committee meetings, agency communication and replying to landowner and public questions and comments have continued.

Phase 3 – Preferred Land Use Plan

- 4.6 Based on the preceding analysis and public engagement regarding the emerging plan, a Preferred Land Use Plan was developed and released for review as a part of the Statutory Public Meeting process.
- 4.7 The Preferred Land Use Plan refined the distribution of parkland, as well as medium density and high density residential, increasing the amount of medium density adjacent to the elementary school, and adding high density land designation along the west side of Bowmanville Avenue in keeping with its Local Corridor designation in Clarington's Official Plan.

Phase 4 – Final Secondary Plan and Zoning By-law

- 4.8 Phase 4 focusses on the finalization of the Secondary Plan. This includes the Statutory Public Meeting and Recommendation Report to Council for adoption together with the preparation of the final documents. In this phase, an implementing zoning by-law and the Notice of Completion and the Documentation package for the Integrated Environmental Assessment process would also be finalized.
- 4.9 The Statutory Public Meeting provides the opportunity for the public to formally comment on the draft Official Plan Amendment, the draft Secondary Plan (including Land Use Plan) and the Sustainable Urban Design Guidelines. It is important to note that any comments received, either verbally during the Public Meeting, or submitted in writing to staff, since the release of the draft Official Plan Amendment and Secondary Plan, will be outlined in the Recommendation Report.

Notice – Statutory Public Meeting

- 4.8.1 Notice for the Statutory Public Meeting for the Brookhill Neighbourhood Secondary Plan was provided in accordance with the Planning Act. A Notice of Statutory Public Meeting

was mailed to approximately 600 landowners located in and within 120 metres of the Secondary Plan area. The Notice of Public Meeting was also sent by mail to the Region of Durham, the Ministry of Municipal Affairs and Housing, and all other commenting agencies. All draft and supporting documents were posted to the project webpage by September 8, 2020.

- 4.8.2 Communications has promoted the Statutory Public Meeting and posted the Notice on the Municipal website, Facebook, and Twitter. Three notices advertising the Public Meeting were placed in both Clarington This Week and the Orono Times during the weeks of September 6, 13 and 20. The Notice of Statutory Public Meeting stated that the materials (draft Official Plan Amendment and draft Secondary Plan) would be available for review on September 8, 2020.
- 4.8.3 All registered interested parties were mailed the Notice of Public Meeting on September 4, 2020, and/or (depending on the contact information provided) emailed the Notice on September 8, 2020.
- 4.8.4 In addition to receiving a Notice of Public Meeting, external agencies and internal departments have been requested to provide their comments regarding the Draft Secondary Plan and the draft Sustainable Urban Design Guidelines. These comments, as well as the public's, assist staff in preparing a Recommendation Report.

5. Draft Brookhill Neighbourhood Secondary Plan

- 5.1 The Clarington Official Plan Amendment (Attachment 3) provides for the update of the Brookhill Neighbourhood Secondary Plan and its Urban Design Guidelines.
- 5.2 The Brookhill Neighbourhood Secondary Plan and Sustainable Urban Design Guidelines promote a vibrant, pedestrian-oriented community reflected in its high quality and sustainable design. It is meant to be a progressive, predominantly low-rise neighbourhood community with central elementary schools and retail opportunities. The proposed Land Use Plan (Figure 3) aligns higher density housing along Bowmanville Avenue, a Local Corridor, and places medium density closer to the elementary schools, more central to the Secondary Plan area. Housing types and tenures will be diverse and include detached and semi-detached homes, townhomes, stacked townhomes, and apartment buildings. Parkland and commercial opportunities are placed throughout to promote walking and cycling, and to forge a sense of community and belonging. The total number of dwellings expected in this community is 2,300 units.

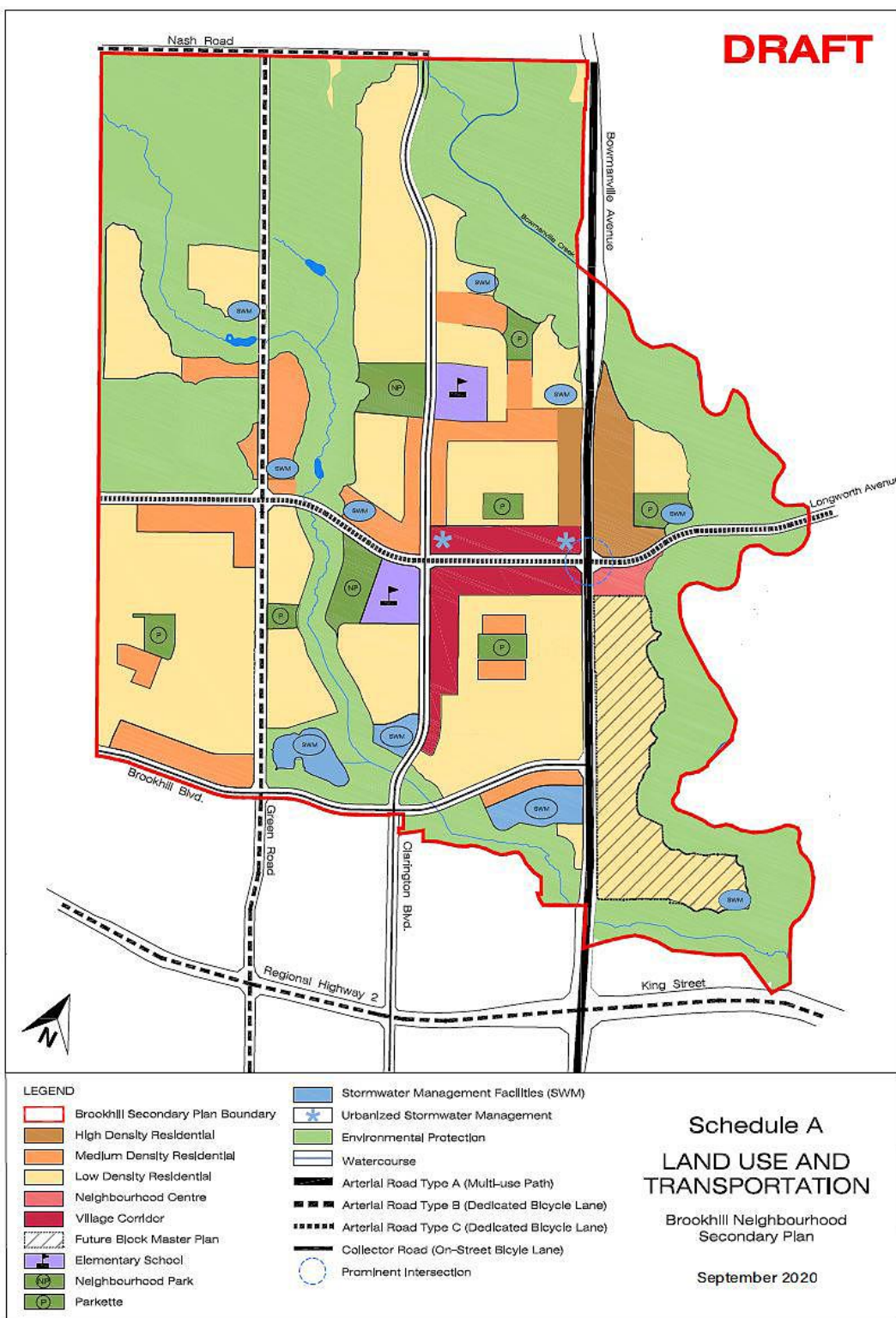


Figure 3: Draft Brookhill Neighbourhood Secondary Plan Land Use Schedule

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- 5.3 The policy framework of the draft Brookhill Neighbourhood Secondary Plan establishes the structure of the community, which is supported by the Neighbourhood Centre, Village Corridor, the Prominent Intersection designations along Bowmanville Avenue and Longworth Avenue, which are the main roads through this area.
- 5.4 Bowmanville Avenue is the primary north-south route through the Secondary Plan area and is designated a Local Corridor in the Clarington Official Plan. As such, the highest densities in the Secondary Plan area are located along it to provide ready access to public transit and active transportation opportunities. Mixed use buildings, townhouses, and apartment buildings up to 8 storeys are proposed for this designation. Despite the potential height and density of these lands, they are to be designed with a pedestrian-oriented frontage close to the street to foster a comfortable and engaging pedestrian experience. Policy for appropriate transitions to lower density housing are also included in the Secondary Plan.
- 5.5 Longworth Avenue currently ends at Bowmanville Avenue and based on previous work and already-approved draft plans of subdivisions, it is planned to extend west into the Brookhill area and beyond. Longworth Avenue will serve as the main east-west arterial through the neighbourhood and will be flanked by the Village Corridor land use. This designation includes a mix of retail, service, residential, cultural and institutional uses in buildings up to 6 storeys. The Bowmanville Avenue frontage has similar policies related to the Village Corridor as those along Longworth Avenue. The policies of the Village Corridor emphasize the pedestrian experience, generally prohibiting garage doors/service facilities facing the street and promoting porches instead.
- 5.6 The Neighbourhood Centre designation at the southeast corner of Longworth Avenue and Bowmanville Avenue serves as the main retail and service location in the Brookhill Neighbourhood. Retail and commercial uses that benefit from exposure along arterial roads are envisioned here, mixed with residential to provide an appropriate transition to the residential area adjacent to it. As a higher density node in the Plan, the maximum building height proposed here is 6 storeys. This intersection is proposed to be designated a Prominent Intersection, which will require special architectural and landscaping and street furniture treatment as it will be developed as a community focal point.
- 5.7 In the area of the Secondary Plan south of Longworth Avenue, land use designations have been adjusted to match the existing build-out or already approved plans. On lands that currently have proposals but no approval, land use designations reflect the existing Secondary Plan's designations.
- 5.8 A Block Master Plan area is located south of the Neighbourhood Centre and east of Bowmanville Avenue as shown in Figure 3. This area was identified in the emerging plan presented at PIC #3 that requires development to be coordinated among the existing large-lot residential properties in this area. Throughout the consultation process

there have been two requests for higher density to be provided on Linden Lane properties, as well as at 46 Stevens Road. Residents in the area have concerns with increasing density and the change in character that would result.

In addition, this area also has particular constraints related to infrastructure servicing and vehicular and emergency access. Slope stability must also be assessed given the area's location adjacent to Bowmanville Creek Valley. Given the unique concerns to this area, it is recommended that it be developed through a Block Master Plan process.

A Block Master Plan evaluates the urban form, coordinates access, roads and servicing, refines environmental constraints, and allocates development options based on studies that will look specifically at the unique conditions of this area. Approval of the Block Master Plan would proceed as an amendment to this Secondary Plan. A development application will be considered after the Block Master Plan is approved by Council.

Draft Sustainable Urban Design Guidelines

- 5.9 The Brookhill Neighbourhood Sustainable Urban Design Guidelines provide direction on how to implement the Secondary Plan policies to achieve high-quality urban design and sustainability. The Guidelines encourage pedestrian-oriented and sustainable development, guiding the way toward a balance of a healthy environment, economy, and society. Three chapters cover design in the public realm (e.g., roads, supporting transit and active transportation, parks and the Natural Heritage System), private realm (e.g., buildings for residential, commercial, and institutional), and infrastructure (e.g., energy and water conservation, stewardship and education). The Guidelines support Priority Green Clarington by providing standards for development that helps to create sustainable communities.

6. Conformity with Provincial Plans

Provincial Policy Statement

- 6.1 The Provincial Policy Statement 2020 (PPS) provides policy direction on land use planning and development for matters of provincial interest. This includes the protection of Provincial resources, public health and safety, and the quality of the natural and built environment. These objectives are to be achieved through efficient land use planning. Through land use designations and policies, municipal official plans and secondary plans are the most important vehicle for implementing the PPS.
- 6.2 The Provincial Policy Statement focuses growth and development within urban and rural settlement areas. Development within these areas must meet the full range of current and future needs of its population by employing efficient development patterns and avoiding significant or sensitive resources and areas which may pose a risk to public health and safety. Land use patterns should promote a mix of housing, including

affordable housing, employment, recreation, parks and open spaces, and transportation choices that increase the use of active transportation and transit before other modes of travel.

- 6.3 The new Brookhill Neighbourhood Secondary Plan will continue to grow the Brookhill neighbourhood and include a mix of housing and other uses. In keeping with PPS, this Plan has directed the highest densities to our Local Corridor and is designed around the existing natural heritage resources in the area. As a result, the updated Brookhill Neighbourhood Secondary Plan will conform with the PPS.

A Place to Grow: Growth Plan for the Greater Golden Horseshoe

- 6.4 The Growth Plan for the Greater Golden Horseshoe 2019 (Growth Plan) provides guidance on where and how to grow within the Greater Golden Horseshoe (GGH). This includes requiring Municipalities to maintain a three-year supply of serviced land for residential development.
- 6.5 Building on the direction of the PPS, the Growth Plan supports the achievement of complete communities, a thriving economy, a clean and healthy environment, and social equity. These goals will be achieved by promoting access to transit and active transportation and increasing the amount and variety of housing that is provided.
- 6.6 Complete communities provide for the needs of all parts of society. This includes providing retail and office uses to locations that support active transportation and have existing or planned transit. To address the issue of housing affordability the Growth Plan provides direction for a range and mix of housing to be offered with a priority on access to transit and amenities.
- 6.7 In order to promote intensification, the Growth Plan has mapped a Built Boundary that identifies the limits of existing development. Lands outside of the Built Boundary are designated as Greenfield Areas. The Growth Plan calls for new developments in Greenfield Areas to achieve a minimum density target of 50 residents and jobs combined per gross hectare. The updated Brookhill Neighbourhood Secondary Plan includes lands within the Built Boundary as well as lands that are designated Greenfield Areas. The lands designated Greenfield in the Brookhill Neighbourhood Secondary Plan meet the 50 residents and jobs per gross hectare requirement, and the area designated Future Block Master Plan, which is within the Built Boundary, will develop in accordance with the Local Corridor designation from the Clarington Official Plan. This will eventually contribute to Clarington's intensification targets.

7. Conformity with Official Plans

Durham Region Official Plan

- 7.1 The Brookhill Neighbourhood Secondary Plan area is designated Living Areas and Major Open Space Areas in Schedule 'A' Regional Structure. The Region will work with area municipalities to develop area-specific targets for Living Areas and Employment Areas. These targets will achieve the minimum overall gross density of 50 residents and jobs combined per hectare (as mandated by the Growth Plan).
- 7.2 The Region's Official Plan states that Living Areas should accommodate the widest possible variety of housing types, sizes, and tenure to provide living accommodations that address various socio-economic factors. Living Areas should be developed with compact built forms through higher density development and consider support and access for public transit, but be predominantly used for housing purposes, with limited office and retail in appropriate locations. Policies in the proposed Secondary Plan promote various forms of medium and high density with mixed-use opportunities along the area's arterial roads to provide ready access to transit and other modes of transportation. In addition, policies have also been included to support the Region and Clarington Council's desire to provide affordable housing units within this Secondary Plan area and throughout Clarington.
- 7.3 The implementation of the Brookhill Neighbourhood Secondary Plan shall ensure sequential and orderly development, that the servicing of the area is on full municipal water and sanitary sewer systems; that there is transportation for all modes available; that a range of housing is provided; and that there is a diverse mix of land uses, amongst others. It is acknowledged that the provision of servicing may occur earlier than currently anticipated should the Region enter into a cost-sharing agreement with landowners and government authorities.

Clarington Official Plan

- 7.4 The Clarington Official Plan (OP) provides a vision for the future growth and development of the Municipality to the year 2031, in conformity with the Regional Official Plan and the Growth Plan, and consistent with the PPS. It also provides direction on fostering the economic, environmental, cultural, physical and social wellbeing of the residents of Clarington. The most recent Clarington OP was adopted in November 2016 and approved by the Region of Durham in June 2017.
- 7.5 The OP designates the lands in this area as Urban Residential and Environmental Protection.
- 7.6 The Urban Residential designation shall predominantly be used for housing purposes, providing for a variety of densities, tenure and types. Neighbourhoods are to be

walkable, compact, connected and create a high-quality public realm. The Brookhill Neighbourhood Secondary Plan will ensure a broad range of housing types in the community with its varied housing densities and flexible built forms. Urban design policies and guidelines ensure that the mix of heights encouraged throughout the community is compatible with adjacent homes. Accessory apartments, including in the form of units above garages on laneways, are also permitted. The Secondary Plan includes policies calling for the study of incentives for affordable housing and will aid in achieving a meaningful percentage of affordable housing that supports the Municipality's broad target.

- 7.7 Regarding Environmental Protection Areas, the lands associated with Bowmanville Creek and the Brookhill Tributary are recognized as the most significant components of the Municipality's natural environment and their ecological functions are to be conserved and protected. The plan envisions development that maintains, restores and creates continuous green corridors along the Bowmanville Creek and associated Brookhill tributary and valley lands. The policy framework in the Secondary Plan is aligned with OP policies and will be updated in accordance with the recommendations to come from the updated Natural Heritage Evaluation Report currently being prepared.

Priority Green

- 7.8 The Brookhill Neighbourhood Secondary Plan policies were developed with regard for sustainability, taking into consideration the goals of Priority Green Clarington, discussed below.

Built Environment

- 7.9 Development in the Brookhill neighbourhood will require a mix of housing types and densities and support the municipal-wide density targets for development. The design approach of a complete community creates a walkable built environment with destinations that encourage community interaction.

Mobility

- 7.10 Policies encourage shorter block lengths and additional pedestrian linkages where needed to create direct and continuous pedestrian routes throughout the neighbourhood. The interconnected network and the design of streetscapes, reflecting complete street principles, will support walking, cycling, transit and driving. Park locations are central and easily accessible, and policies and urban design guidelines support street frontages along no less than 60 metres of the Neighbourhood Park. Trails, bike paths, walkways, and sidewalks will form an interconnected network for active transportation.

Natural and Open Space

- 7.11 Parks, stormwater management facilities, and development adjacent to natural heritage features will use low impact development strategies, naturalized landscaping and vegetation as are deemed necessary to maintain or enhance the nearby natural features. New parks have been distributed so that most residents are within 400 metres of one.

Infrastructure and Buildings

- 7.12 All development in Brookhill shall meet high standards for energy efficiency and sustainability in building design and construction. It shall incorporate energy and water conservation measures, including consideration for renewable/alternative energy systems, such as solar panels. Landscape features throughout the neighbourhood should maximize infiltration, maintain topography, use hardy, non-invasive plantings and provide trees for shade.

8. Public Comments

- 8.1 As mentioned, public comments were collected throughout the Secondary Plan process. Since releasing the draft Secondary Plan documents, additional comments have been received from the public and other stakeholders. To date, comments have been received from landowners outside of the Study Area about whether they are located in the Secondary Plan area and there has been a request to consider increasing density permitted on a single property in the southern portion of the plan area. A summary of all public comments will be provided in the subsequent recommendation report.

9. Indigenous Communities Comments

- 9.1 At the time of writing, one comment has been received from Alderville First Nation about the status of archaeological studies for this project. A summary of all agency and rights- and stakeholder comments will be provided in the subsequent recommendation report.

10. Agency and Departmental Comments

- 10.1 To date, agencies have reviewed background reports, draft land use options and various iterations of the preferred land use plan. We anticipate receiving formal comments from the agencies as we move closer to the Recommendation Report. The Municipality will not proceed with a Recommendation Report to Council without first ensuring that all commenting agencies have provided their input into the documents released September 8, 2020.

- 10.2 Agencies and Departments have been requested to comment on the draft Secondary Plan documents outlined above and attached to this report. The status of comments received by these agencies and departments is outlined below.

Durham Region

- 10.3 No comments have been provided at the time of writing this report.

Central Lake Ontario Conservation (CLOCA)

- 10.4 No comments have been provided at the time of writing this report.

Metrolinx

- 10.5 No comments have been provided at the time of writing this report.

School Boards

- 10.6 The Conseil Scolaire Viamonde has responded that they have no comments at this time but would like to be kept updated about the project. No other school boards have responded with comments at the time of writing.

Municipality of Clarington – Engineering/Public Works

- 10.7 Preliminary comments from Engineering/Public Works have been received on the draft Sustainable Urban Design Guidelines. The comments pertain to confirming pedestrian facilities and dimensions for each road type, specifying rear lane characteristics, and referencing standards for stormwater management facilities. Comments were also provided about using appropriate plants and lighting in parks and ensuring that park requirements outlined in the document are consistent with park policy in the Official Plan.
- 10.8 Preliminary comments have also been provided on the draft Transportation Memo that reviews the transportation impacts of the proposed land use plan. Comments are mostly related to the likelihood of needing signalized intersections along Bowmanville Avenue from a safety perspective.

Utilities

- 10.9 Hydro One has responded that they have no comments or concerns regarding their High Voltage Facilities and Corridor Lands at this time. They have also confirmed that there are no existing transmission assets in the Secondary Plan area.

11. Concurrence

Not Applicable.

12. Conclusion

- 12.1 The purpose of this Public Meeting is to obtain comments from the public, stakeholders and commenting agencies on the proposed Secondary Plan.
- 12.2 Staff will continue to process and prepare a subsequent Recommendation Report.
- 12.3 After extensive consultation with agencies, stakeholders and the public, the draft Brookhill Neighbourhood Secondary Plan has been prepared and released for agency and public review. Following this Public Meeting, the draft documents will be further revised based on the comments received.
- 12.4 When adopted, the Official Plan Amendment will be forwarded to the Region of Durham for approval. Part of the Region of Durham review includes circulation of the Amendment to agencies and the Province for their comments. The Region will issue a Notice of Decision regarding the Amendment and the 20-day appeal period will commence. If there are no appeals to the Region about the approved OPA it will come into full force and effect.
- 12.5 A subsequent phase of this process will involve the preparation of the implementing zoning regulations. A final version of the Secondary Plan, Schedules, and Sustainable Urban Design Guidelines along with zoning regulations will be presented to Council in the future.

Staff Contact: Greg Bunker, Planner, 905-623-3379 ext. 2420 or gbunker@clarington.net.
Carlos Salazar, Manager, Community Planning and Design, 905-623-3379 ext. 2409 or csalazar@clarington.net

Attachments:

- Attachment 1 – Sequence of Events
Attachment 2 – Summary of Technical Reports

Attachment 3 – Draft Official Plan Amendment Secondary Plan with Schedules A and B; and Appendices A (Road Standards and Profiles), B (Sustainable Urban Design Guidelines), and C (Potential Environmental Features)

Interested Parties:

List of Interested Parties available from the Planning and Development Services Department.

Brookhill Secondary Plan Update – Sequence of Events

2018	Event
January 25, 2018	Landowners Initial Meeting
June 4, 2018	Staff Report (PSD-052-18) – Seek Council authorization to initiate the project
	Award the contract to The Planning Partnership
November 16, 2018	Steering Committee Meeting #1
November 26, 2018	Public Information Centre #1
November 26, 2018	Municipal Class Environmental Assessment – Notice of Study Commencement

2019	Event
April 24, 2019	Steering Committee Meeting #2
June 19, 2019	Steering Committee Meeting #3
June 25, 2019	Public Information Centre #2
November 5, 2019	Steering Committee Meeting #4
December 2, 2019	Landowner Workshop (afternoon session – LOG only)
December 2, 2019	Landowner Workshop (evening session – all landowners)

2020	Event
March, 2020	COVID-19 Pandemic Declared
March, 2020	Cancelled – Public Information Centre #3
March 24, 2020	Steering Committee Meeting #5 (virtual)
May 21, 2020	Online Public Information Centre #3 (virtual)
May 21, 2020	Municipal Class Environmental Assessment – Mandatory Point of Public Contact
May 22, 2020	Alternative Land Use Plan Options and Emerging Plan Online Public Survey open
June 5, 2020	Alternative Land Use Plan Options and Emerging Plan Online Public Survey closed
September 8, 2020	Notice of Public Meeting posted
September 8, 2020	Material available for review

Attachment 1 to Report PSD-032-20

September 8, 2020	Request for Comments sent to Commenting Agencies
September 28, 2020	Statutory Public Meeting
Early Winter 2020/2021	Recommendation Report; Municipal Class Environmental Assessment – Notice of Completion
Early Winter 2020/2021	Zoning By-law - draft

Summary of Background Reports

Report	Key Findings
Planning Rationale	<p>This report identifies that the Brookhill Secondary Plan Update is an opportunity to further advance the forward-thinking policy framework established in the original policies and that the update will bring the Secondary Plan into conformity with the Municipality's new Official Plan and initiatives, the Durham Region Official Plan and Provincial Policy. The update will also revise the urban design guidelines to support and reflect the Priority Green Framework and address the key focus area of sustainable design.</p> <p>The current Secondary Plan is based on the following principles of New Urbanism:</p> <ul style="list-style-type: none"> • Focus – multi-centered, village corridor, neighbourhoods with central focus within a 5 minute walk • Connections/Linkages – connected network of roads, system of trails, linked to existing neighbourhoods • Uses – diversity of housing types and mix of uses to support transit and commercial activity • Greenlands – connected system of parks, natural heritage system, and stormwater ponds • Infrastructure – municipal services provided in a cost effective manner • Environmental Sustainability and Energy Conservation – environmental, energy, and water conservation • Design Excellence – buildings, streetscapes, parks, and infrastructure distinctive and aesthetically pleasing <p>This report commits the update of the Secondary Plan to bolster these New Urbanism principles and inextricably couples Brookhill to the Municipality's new high standards for sustainable design.</p> <ul style="list-style-type: none"> •
Peer Review of Market Demand Study	<p>urbanMetrics inc. (urbanMetrics) was retained by the Municipality to conduct a peer review of the July 11, 2019 report prepared by Tate Economic Research (TER) entitled Retail Market Demand Study. This retail market study was submitted for consideration to the Secondary Plan process by a landowner as alternative land use plans were being developed. The draft Secondary Plan identifies the southeast corner of Longworth Avenue and Bowmanville Avenue as a Neighbourhood Centre. After conducting a peer review, urbanMetrics concludes that the TER retail</p>

	<p>market demand and impact study meets the tests of the Municipality of Clarington Official Plan and the existing Brookhill Secondary Plan, and that from a Retail Market Demand Study perspective, a Neighbourhood Centre with up to 54,000 square feet of retail/service space anchored by a supermarket of 30,000 square feet can be supported.</p>
Transportation Study	<p>R.J. Burnside & Associates Limited (Burnside) was retained to provide a review of the existing and future transportation infrastructure and advice on improvements to accommodate future growth. Their report provides a summary of existing transportation conditions for all modes of travel including the following comments:</p> <ul style="list-style-type: none"> • Good sidewalk network in developed areas • Sidewalks are needed on Bowmanville Avenue, but this is a challenge due to the rural road cross section • Opportunities exist for new sidewalks and trail connections as development occurs in the study area • Cycling infrastructure is sparse and correcting this on existing road right-of-ways is a challenge. • Opportunities exist in and around the study area to expand the cycling network and make connections • Transit service is adequate to the south of the study area • Transit can be extended into the study area and development occurs • Extension of GO Lakeshore East line is anticipated • Existing road network has capacity for future growth • Bowmanville Avenue currently presents some challenges, but planned improvements will help • It will become increasingly challenging to maintain a good vehicle network while providing an enhanced and safe network for pedestrians, cyclists and transit users <p>The report indicates that details pertaining to future planned transportation improvements will be further explored in a forthcoming Phase 2 study.</p>
Preferred Land Use Plan Transportation Review	<p>This review examines the preferred land use plan from a transportation perspective.</p> <p>Clarington's Transportation Master Plan should continue to be implemented as per various recommendations. While the area awaits GO rail service, bridge measures may be warranted should the service be delayed beyond development of some or all of the Brookhill</p>

	<p>Neighbourhood. There is excess capacity in all movements at study intersections and along all study corridors. Some movements are projected to have higher delay but do not warrant any further road improvements than are already planned or underway. Potential road network concerns can be mitigated with a commitment to increasing active transportation and transit infrastructure. In addition, vehicle demand can also be reduced by implementing mandatory Transportation Demand Management (TDM) requirements and reducing parking supply requirements for developments. Adequate and attractive active transportation and transit infrastructure needs to be available as an alternative to the motor vehicle for the success of many TDM measures.</p> <p>It is recommended that sidewalks be implemented on at least one side of all streets, with sidewalks on both sides of all collector and arterial streets. In addition, opportunities should be explored for pedestrian interconnections between streets and school, park and open space blocks to facilitate easy pedestrian movement throughout the neighbourhoods.</p> <p>It is recommended that cycle lanes be implemented as planned and consideration should be given to adding cycling lanes on Clarington Boulevard, between Highway 2 and Nash Road. Cross-rides should also be considered for safer and more convenient crossings of Highway 2 to facilitate access overall and to the future GO station.</p> <p>It is also recommended that further review be conducted for how Micromobility (i.e. bicycles, ebikes, electric scooters, electric skateboards, shared bicycles, and electric pedal assisted bicycles) will be incorporated into the active transportation network and accommodated within the road right of way.</p>
<p>Master Servicing and Stormwater Management Report</p>	<p>The purpose of the MSSR is to confirm the technical requirements associated with providing the following services to support urban development within the study area: sanitary sewers, water supply, stormwater management, site grading and external servicing, all in accordance with the current policies and criteria of the Municipality of Clarington, the Ministry of the Environment, Conservation and Parks (MECP), the Central Lake Ontario Conservation Authority (CLOCA), and the Region of Durham.</p>

	<p>The Phase 1 work included an examination of existing conditions and has pulled together various background studies completed in the past, including:</p> <ul style="list-style-type: none"> • Brookhill Neighbourhood Subwatershed Study, prepared by Aquafor Beech Limited November 2005; • Brookhill West Stormwater Management Report, prepared by Sernas Associates October 2010; and • Hydraulic Analysis for Brookhill Tributary, Brookhill Neighbourhood, prepared by Sernas Associates September 2010. <p>The Phase 2 work includes the proposed drainage and stormwater management plan. Stormwater Management (SWM) facilities are proposed throughout the study area to provide runoff control for the proposed development. The proposed SWM facilities are a mixture of facilities located within dedicated SWM blocks and facilities integrated into urbanized blocks. Some examples of SWM facilities within dedicated SWM blocks are wet ponds, wetlands and dry ponds. Examples of SWM facilities integrated into urbanized blocks include oversized pipes and underground storage chambers. In addition to end of pipe SWM facilities, Low Impact Development Measures (LIDs) are to be considered throughout the Secondary Plan as a means of facilitating a treatment train for water quality control. The Phase 2 work also includes noting the various sanitary sewer and watermain stubs that will be connected to as Brookhill develops further. Existing sanitary sewers and watermains in the vicinity were sized appropriately to accommodate the development coming to the study area. This report concludes that more thorough work on topics such as lot grading, erosion and sediment control and detailed servicing plans will need to be completed at the subdivision stage of the development process.</p>
<p>Natural Heritage Evaluation</p>	<p>The draft Natural Heritage Evaluation (NHE) report was prepared as part of Phase 1 (Opportunities and Constraints) of the Brookhill Secondary Plan study process. The report was prepared largely on the basis of existing background information augmented by field reconnaissance data.</p> <p>In-season field survey data, species at risk assessments, analysis of land use alternatives, impact assessment, and recommended mitigation measures are forthcoming and will be provided at the conclusion of Phase 2 of the Secondary Plan process. As a result, certain sections of the draft NHE report are incomplete. These sections will be</p>

	<p>completed as part of a final NHE report submission. The results of other technical submissions will be incorporated into the final NHE report. Agency comments on the Phase 1 NHE submission will also be addressed in the final NHE report.</p>
<p>Landscape Analysis</p>	<p>The scope of the investigation addresses the existing vegetation, hydrological features, topography, and habitat value, with the intent of informing future preservation and development decisions. The study area includes naturalized areas, manicured lots, agricultural fields, and numerous private residential properties. The site is bounded to the east by Bowmanville Creek, otherwise the perimeter conditions and surrounding land uses vary to include transportation corridors, naturalized areas, agricultural lands, and suburban residential developments. The site is also bisected by Green Road and Nash Road. As a result of the landscape analysis, recommendations for the Secondary Plan are as follows:</p> <p>Existing Site Features</p> <ul style="list-style-type: none"> • Ensure a 15m offset out from the edge of existing watercourses and waterbodies is observed by any future development. Limited recreational trails can be considered in this area if disturbance is minimized. • Where possible, preserve existing natural areas. A 15m buffer zone should be provided between new development and existing wooded areas. • Remove invasive species from woodlands. • Remove any ash trees affected by Emerald Ash Borer located within 15m of existing or future trails. • Preserve existing row of mature Eastern White Pine along Nash Road (north-south portion). These trees are in excellent condition and demonstrate high aesthetic quality. <p>Potential Future Site Features</p> <ul style="list-style-type: none"> • Consider introducing a trail and lookout system along existing watercourses. • Introduce walking trails throughout the existing woodland. Ensure trails do not interfere with sensitive habitat areas. • Introduce walking trails along the top of ridges. Provide lookouts and frame aesthetic vistas and views where possible. • Preserve and enhance views into high-quality natural areas.

	<ul style="list-style-type: none"> • Introduce areas for recreational activity, including park amenities, throughout the site, including locations identified as part of this study (refer to Map B, Key Landscape Features, and Map C, Recommendations). • Establish major destination nodes (i.e. – ridge, pond walk, woodland walk, etc.) and provide wayfinding, parking areas, and connection/circulation routes between them.
<p>Phase 1 Sustainability Plan and Urban Design Report</p>	<p>The purpose of this report is to identify and assess sustainable development principles and practices, and describe the vision, principles, and urban design intent for the Brookhill Neighbourhood Secondary Plan Area. This report forms the basis for the development of the Sustainability and Urban Design principles for Brookhill, as well as the Sustainable Urban Design Guidelines that will form an appendix to the updated Secondary Plan. The update builds on the current Brookhill Urban Design Guidelines and ensures that the Secondary Plan addresses the criteria developed for Secondary Plans under Clarington’s Priority Green Development Framework. This Phase 1 report includes various case studies from other communities, which demonstrate approaches to sustainability and urban design that have worked as well as lessons learned. Some recommended changes from the current Secondary Plan and Guidelines include the following:</p> <ul style="list-style-type: none"> • Consider extending the corridor designation further north to create a continuous built form corridor. • The edges of parks should be delineated by roads or front building facades. • Where the park is edged with buildings, the façade design should include a unit entrance linked to a sidewalk on the park side or a private walkway parallel to its edge. These buildings/units are encouraged to be rear lane accessed. Include windows and secondary entrances on side elevations where fronting onto a park. More precedent images related to these guidelines should be included. • Consider replacing ‘Urban Square’ terminology with open space or green space to allow for more flexibility in the type of amenity provided. • Include diagrams on Views and Focal Points in the community • Incorporate guidelines for schools including the

	<p>location of school related parking away from primary roads and the use of entrance and drop-off areas to reinforce the street edge.</p> <ul style="list-style-type: none"> • Complement the guidelines related to the built form at corner lots to state that “both elevations facing the road should be designed to reinforce the pedestrian character of the street, and designed to address the specific nature of the location with consistent design treatment on both faces”. • Incorporate text stating that “visual and physical access to environmental areas should be ensured and unobstructed and that it rear lotting them should be avoided”. • Set a maximum block length to avoid lengthy blocks that discourage walking and limit the community permeability and add specifications for mid-block connections. • Add content related to the screening of both structured or at-grade parking. • In general, the urban design guidelines require more graphics (diagrams and pictures) to reflect the envisioned characteristics described. • Set a maximum length for lanes. • For each streetscape, consider incorporating guidelines on maximum setbacks related to the ROW and nature of the roadway, to maintain the pedestrian scale of the street. • Include guidelines on preference for native and low maintenance species. Establish minimum percentage of native species. • Incorporate guidelines on trail heads. • Garages should not exceed 60% of the front façade of any type of residential unit. • Complement guidelines on shared or group driveways as a mechanism to maximized green areas on the streetscape and enhance the pedestrian experience. • For apartments, visitor drop-off areas should be optional and related to the building’s context for appropriateness. Parking and service areas on side yards should be discourage and only permitted where their location at the rear is not possible. • The current Guidelines group all townhouses as ‘Stacked Townhouses’. Reconfigure this section to include other typologies. All references to ‘Stacked townhouses’ as a general description for townhouses should be revised to reflect a broader selection.
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	<ul style="list-style-type: none"> • Incorporate guidelines on transitions from low-rise to mid-rise buildings e.g. angular planes and appropriate setbacks) • Include guidelines on privately owned – publicly accessible spaces, patios and other common areas related to private development.
<p>What We Heard Report #3 (Landowners Workshops)</p>	<p>Two Landowners Workshops were held on December 2, 2019. An Afternoon Session and an Evening Session took place at the Garnet B. Rickard Recreation Complex in Bowmanville. Approximately 30 landowners and their representatives attended the Afternoon Session and approximately 35 attended the Evening Session. The Landowners Workshops included a presentation discussing the planning context, key directions established from the findings and information gained from the technical review and background work from Phase 1, and a review and discussion of the three preliminary alternative land use plans. Workshop participants shared their thoughts on the three land use plans.</p> <p>Summary of Key Messages:</p> <p>Land Use Distribution</p> <ul style="list-style-type: none"> • Concern about the location and integration of higher density built forms with low to medium density • Agreement with locating higher density along Bowmanville Avenue • Residential and commercial uses should be separated by roads and not property lines • Natural heritage issues with 2490 Green Road • More medium density should be placed in the north portion of the study area <p>Housing Distribution</p> <ul style="list-style-type: none"> • Opportunities for seniors housing • Medium and higher density residential should be located along Bowmanville Avenue • Consider opportunity for properties south of Longworth Avenue and east of Bowmanville Ave to be designated High Density • Locate high density in the north portion, adjacent to Bowmanville Creek Valley, in the property located north of Longworth Avenue and east of Bowmanville Avenue <p>Open Space System</p> <ul style="list-style-type: none"> • Parks should be varied and evenly distributed • Parks and schools should be adjacent to one another

	<ul style="list-style-type: none"> • Expand the Bowmanville Creek/Valley Trail and identify the existing biking and walking trail from Nash Rd south to Longworth Avenue <p>Natural Heritage</p> <ul style="list-style-type: none"> • Nature Park and trail connection to 2490 Green Road (Wallace Farm) • Confirmation and further study required to determine the buffer depths to the Natural Heritage System <p>Road Pattern</p> <ul style="list-style-type: none"> • Participants questioned the Longworth Avenue realignment, needs to be verified • Bike lanes and multi-use paths should be located on Bowmanville Avenue • Limit the use of rear lanes • Access to Bowmanville Avenue is restricted due to topography • Concerned about the traffic impacts of high density on Bowmanville Avenue • Concerns related to the closure of Linden Lane and realignment to connect to Longworth Avenue (a consideration for the Municipality from the Bowmanville Avenue Environmental Assessment) <p>Stormwater Management Strategy</p> <ul style="list-style-type: none"> • Participants would like to see the integration of parks and stormwater management techniques, as well as the consolidation of stormwater management ponds • Register on title lands used for Low Impact Development on private property • Opportunity to propose Low Impact Development measures in parks, need to utilize Low Impact Development as much as possible <p>Schools</p> <ul style="list-style-type: none"> • Participants expressed support for the clustering of schools <p>Retail/Commercial Distribution</p> <ul style="list-style-type: none"> • Concern about commercial sites immediately next to single family homes • Agree with the location at Longworth and Bowmanville Avenues
<p>What We Heard Report #4 (PIC #3 and Online Survey)</p>	<p>The online Public Information Centre #3 (PIC) was held through the GoTo Meeting platform on May 21, 2020 and was facilitated by The Planning Partnership. The Public Information Centre included a presentation of three land use alternatives and an Emerging Plan. Questions were taken during the presentation and answered by the</p>

	<p>consultant team. At the three PIC#3 sessions, 35 people participated in the 1pm session, 26 in the 3pm session and 19 in the 6:30pm session. A summary of comments from the PIC sessions is as follows:</p> <p>Transportation</p> <ul style="list-style-type: none"> • Higher density should be located closer to future GO Train so that as many people as possible will be within walking distance. • Majority of traffic should be directed to the higher order roads through and around the neighbourhood. • What if the GO Train does not come? <p>Natural Heritage</p> <ul style="list-style-type: none"> • How come some trees are allowed to disappear but others are not? • Can development take place on green zone? • Need for additional east-west linkages for movement of wildlife • Neighbourhood planning to reduce possible spread of diseases (eg. COVID-19) <p>Residential</p> <ul style="list-style-type: none"> • How did high density housing at the top right corner of the plan get introduced? It was not in the previous 3 alternatives. <p>Commercial/Retail</p> <ul style="list-style-type: none"> • Expand on the Neighbourhood Centre at Bowmanville Ave and Longworth as well as the Village Corridor along Longworth. • Clarify the location of the neighbourhood centre and the medium density residential designation at the northeast corner of Longworth and Bowmanville Avenue. • Clarify commercial entrance locations (Alternative 3). <p>Implementation</p> <ul style="list-style-type: none"> • Can the lands north of Longworth be built if the new Longworth is not constructed? • Who proposed that the lands east of Bowmanville Avenue and south of Longworth be part of a new study? • Will study of the area north of Stevens Rd. delay the rest of the Secondary Plan Update Study completion? <p>Directly following the online Public Information Centre, the online survey was launched through the Metroquest platform on May 22, 2020. It was intended to gather public</p>
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	<p>feedback on the Emerging Plan. The online survey ran from May 22, 2020 to June 6, 2020. In total, 240 people answered the survey, producing 2151 total data points. The survey consisted of three parts:</p> <ul style="list-style-type: none"> • The introduction explaining the Emerging Plan, • An overview of each of the 3 Alternative Plans and the Emerging Plan where participants could zoom in/out of the plans to look at them in more detail, and • Elements of the Emerging Plan with questions where participants were asked to respond to various statements regarding land use and design elements of the Emerging Plan by choosing whether they “agree” (thumbs up) or “disagree” (thumbs down) with the specific direction. Participants were also given the opportunity to provide additional comments on the plans. The four most preferred elements of the Emerging Plan were as follows: <ul style="list-style-type: none"> • Provide more protection for the natural heritage system by recognizing the existing natural features and adding a 30 metre buffer. • Provide trails throughout the neighbourhood in the natural features, wherever possible. • Provide a variety of neighbourhood parks and parkettes for a range of recreation activities for all age groups. • Provide one Elementary School central to the neighbourhood, located next to a park.
<p>Draft Alternative Land Use Plans Report</p>	<p>The intent of the Alternative Land Use Plans Report is to utilize the findings, strategies, and information gained from the technical studies prepared in Phase 1 of the Study Process to provide direction for the refinement of the Brookhill Neighbourhood development plan.</p> <p>The report includes the following components:</p> <p>Existing Secondary Plan and Study Area - overview of the principles and land use designations of the existing Secondary Plan and the area of study for the update.</p> <p>Key Directions - based on the findings from the technical reports, key directions were established and used to prepare three development programs to guide the design for three alternative land use plans.</p> <p>Development Programs - three development programs that set forth a series of elements to structure the layout of the alternative land use plans.</p> <p>Alternative Land Use Plans - three land use plans that were reviewed by the Municipality, Steering Committee, stakeholders such as landowners and agencies, the public, and the consulting team.</p>

	<p>Evaluation of the Alternatives - evaluation of the Alternative Land Use Plans was undertaken using evaluation criteria to determine the best elements of the three plans to move forward with the development of a Preferred Plan which was used to prepare the Secondary Plan Update. The analysis of the alternatives was a comparative evaluation where the alternative plans are assessed in relation to one another.</p> <p>An Emerging Plan was prepared to coalesce the findings of the evaluation and develop a preliminary community structure ideas plan for comments and feedback before determining the final community elements and structure of the Brookhill Neighbourhood Preferred Plan.</p> <p>The Emerging Plan includes the following elements:</p> <ul style="list-style-type: none">• The Natural Heritage system remains as defined with enhancements through parks, views, and trail connections• The street network will support a modified grid of streets that are permeable and connected supporting transit and active transportation with trails and cycling routes• The park system is a multi-park hierarchy with a centralized system of neighbourhood parks and parkettes all located within a 5 minutes walk (400 metres) of residents.• The Plan provides a mix of low and medium density residential in the neighbourhoods, with higher density residential focused along Bowmanville Ave.• Retail and commercial uses located at Bowmanville Ave. and Longworth Ave., with opportunity for smaller mixed use along Longworth Ave.• An Elementary school is located central to the neighbourhood and adjacent to a neighbourhood park.
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Draft AMENDMENT NO.126 TO THE CLARINGTON OFFICIAL PLAN

PURPOSE: The purpose of this Amendment is to create a planning framework that will facilitate the development of a complete community in the Brookhill Secondary Plan area, both in the neighbourhood to the south, and in the agricultural area to the north.

This initiative complements the Official Plan principle of promoting higher densities, and mix of uses, and the principles of promoting a diversity of housing types and tenures, as well as sustainable design throughout the Secondary Plan area.

LOCATION: This Amendment applies to a 300-ha area bounded by Nash Road in the north, Bowmanville Creek in the east, the Brookhill Tributary and Brookhill Boulevard in the south, and the Bowmanville Urban Boundary in the west. The subject lands are located at the northwest corner of the Bowmanville urban area boundary. Approximately one-third of the area contains natural features. Bowmanville Avenue is the main north-south arterial through the area, and the extension of Longworth Avenue west from Bowmanville Avenue will become the main east-west arterial of the community.

BASIS: In 2008, the Brookhill Secondary Plan was originally adopted by Council. Policies and guidelines related to land uses, built form and densities for the entire secondary plan area were developed and described. The goals of the secondary plan were to design a community based on: (1) New Urbanism design principles; (2) a total of 2,800 units at full build out; (3) a net density of 50 residents and jobs per ha; (4) high quality design and energy conservation and sustainability; and (5) natural features as a key contributor to the quality of life of residents. The update of this secondary plan maintains these goals, however, the total number of units has been reduced to 2,300 to reflect the existing and planned build-out in the southern area of the Secondary Plan. There have been changes to Municipal, Regional, and Provincial policies since its original adoption which requires the update of this Secondary Plan.

In 2018, the Brookhill North Landowners Group (which represents most of the currently undeveloped lands in the northern half of the secondary plan area), committed to covering 100% of the costs of the update. In June 2018, staff recommended that the Municipality proceed with updating the Brookhill Secondary Plan. The recommendation was approved by Council, and the Brookhill Secondary Plan Update was initiated with the engagement of The Planning Partnership in November 2018. The original Brookhill Secondary Plan was developed by The Planning Partnership.

This Amendment is based upon the study team's analysis and an extensive public consultation process which included open-house-style Public Information Centres in November 2018 and June 2019, two stakeholder

workshops that included all landowners and agencies in December 2019, and a third Public Information Centre held online later in May 2020, which was followed up by an online survey from the end of May and into June 2020.

The background reports below highlighted key challenges and opportunities for the north and east portions of the Brookhill Secondary Plan area, and provided some direction to the policies. The list of reports is as follows:

- Peer Review of Market Demand Study for Neighbourhood Centre
- Draft Natural Heritage Report;
- Landscape Analysis;
- Planning Rationale Report;
- Servicing and Stormwater Management Report;
- Sustainability and Urban Design Report;
- Transportation – Existing Conditions Report;
- Landowner Workshops Summary Report (WWHR#3);
- Draft Alternative Land Use Plans Report;
- Draft Transportation Review Memo; and the
- Draft Servicing and Stormwater Management Report.

**ACTUAL
AMENDMENT:**

1. Existing Part VI Secondary Plans is amended by deleting the 'Brookhill Neighbourhood Secondary Plan' in its entirety and replacing it with the new Secondary Plan as follows:

DRAFT 1

FOR DISCUSSION PURPOSES ONLY

Brookhill Neighbourhood Secondary Plan

Municipality of Clarington

September 2020

Brookhill Neighbourhood Secondary Plan

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1.0 INTRODUCTION

1.1 Purpose

- a) The purpose of the Brookhill Neighbourhood Secondary Plan (this Secondary Plan) is to provide a detailed land use plan and policies to establish a vision, principles, and objectives for the regulation of development within the Secondary Plan Area. The planning horizon is to the year 2031 to match the time horizons in the current Municipality of Clarington Official Plan (the “Official Plan”) and the current Region of Durham Official Plan.
- b) This Secondary Plan replaces the previous Brookhill Neighbourhood Secondary Plan that was originally approved in 2007.
- c) The following text and Schedules, identified as Schedule 'A' - Land Use and Transportation and Schedule B – Open Space and Parks, attached hereto, constitute the Brookhill Neighbourhood Secondary Plan as established and adopted by Amendment No. 126 to the Official Plan.
- d) All development in the Brookhill Neighbourhood shall conform to the vision, guiding principles, and policies of this Secondary Plan, along with:
 - i. Schedule A - Land Use and Transportation;
 - ii. Schedule B –Open Space and Parks; and,
 - iii. Sustainable Urban Design Guidelines attached as Appendix B. While the Sustainable Urban Design Guidelines do not form a statutory part of this Secondary Plan, they are meant to guide the preparation of detailed development plans in accordance with the Municipality’s vision and principles for Brookhill. It is the intent of this Secondary Plan that all new development be consistent with the Sustainable Urban Design Guidelines.
- e) This Secondary Plan is to be read in its entirety, and all relevant policies are to be applied to all applications for development. This Secondary Plan is also to be read in conjunction with the Official Plan, and all relevant policies of the Official Plan are to be applied and conform to when making any land use planning decision. Where there is a conflict between the

policies of the Official Plan and this Secondary Plan, the policies of the policies of this Secondary Plan shall apply.

- f) In addition, all development shall conform with the relevant policies of the Region of Durham Official Plan and the relevant policies of the Growth Plan for the Greater Golden Horseshoe. All development shall be consistent with the Provincial Policy Statement.

1.2 Location

- a) This Secondary Plan applies to the lands within the Brookhill Neighbourhood Secondary Plan Area as identified on Schedule 'A' - Land Use and Transportation to this Secondary Plan.
- b) 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 (741 acres) in size. Approximately one third of the area contains natural features.

1.3 Population and Employment Growth

- a) The Brookhill Neighbourhood is identified as an “Urban Area” in the Regional Official Plan. The Municipality of Clarington Official Plan identifies the area as “Urban Residential” and “Environmental Protection Area”.
- b) The Municipality of Clarington has an approximate population of 92,013 residents. It is expected that the Municipality of Clarington will grow to a resident population of 140,340 and provide 38,420 jobs by 2031.

The 2051 population and employment forecasts for Clarington are not yet known and will be subject first to the Region of Durham's Municipal Comprehensive Review and subsequent Official Plan Amendment, followed by the Municipality of Clarington's Official Plan Update.

- c) This Secondary Plan is expected to achieve the goals and objectives of the Official Plan. Fundamental to the development of this Secondary Plan is the achievement of a transit supportive community structure and the

achievement of a minimum net density of 50 residents and/or jobs per hectare across the Brookhill Secondary Plan Area.

- d) Employment opportunities within the Brookhill Neighbourhood Secondary Plan Area will be population-related employment that will include a range of retail and service commercial uses, institutional uses, and modestly scaled business and professional offices. Employment opportunities will be located in the Village Corridor through permission for commercial activities and in the Neighbourhood Centre. Live/work and home occupations will also contribute to the supply of employment opportunities.
- e) The Municipality and Region shall carefully monitor residential growth within the Brookhill Neighbourhood Secondary Plan Area. Development Phasing will be established based on population growth over time, in accordance with, and in conjunction with the ability of the developers, Municipality, and Region to pay for their respective responsibilities of infrastructure development costs, as required.
- i. This Secondary Plan shall be planned to achieve a population range of approximately 6,400 to 6,600 people and to provide approximately 280 jobs with a gross density of 41 residents and jobs per hectare.
 - ii. This Secondary Plan will provide up to 2,300 dwelling units upon full build-out.
 - iii. It is the intent of this Secondary Plan that growth shall occur in a logical, efficient, and fiscally responsible manner. The phasing for the Secondary Plan Area and the primary factors to consider in this regard include:
 - The integration of new development within the planned community structure of this Secondary Plan, resulting in a contiguous, connected, and compact urban form;
 - The provision of efficient and cost-effective municipal services (water, sanitary, stormwater) to accommodate the proposed growth in a cost-efficient manner; and the ability of new growth to facilitate the provision of municipal services to existing serviced areas;

- The provision of appropriate transportation facilities, and the availability of adequate capacity on the existing road network; and,
 - The provision and adequacy of educational and social services, recreational facilities, and other community services.
- f) It is important to be innovative and to respond to all forms of the new economy within the evolving economic context of Clarington, which includes leveraging quality of life/place attributes. This Secondary Plan facilitates growth in the ‘new economy’ and supports creative partnerships towards the creation of innovative work spaces, including incubators and flexible/shared work space, as well as appropriate support for live/work options and home occupations.

2.0 VISION, PRINCIPLES AND OBJECTIVES

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 develop as a healthy and complete community with distinctive, liveable neighbourhoods, integrated and connected green spaces, and efficient transportation, transit, and trails systems.

2.2 Principles and Objectives

To achieve the principles of this Secondary Plan the policies contained herein, new development shall create livable communities that focus on public health, climate change, and the quality of the built environment. The policies further encourage the development of ‘complete’ communities which are characterized by compact form, greater densities placed at neighbourhood centres; mixed land uses; employment opportunities; mix and diversity of housing types; connected and walkable road patterns and trails; and pedestrian-oriented and transit supportive design. The following guiding principles and objectives further articulate the vision and are the foundation upon which the policies of this Secondary Plan are based:

Principle 1: Promote the responsible use of resources

An adaptive and resilient community is advanced through the responsible use of resources to ensure long-term sustainability, reduce greenhouse gas emissions and demands for energy, water, and waste systems, and to ensure new development contributes to adapting to, and mitigating, the impacts of climate change.

Objectives

- To demonstrate leadership in sustainable forms of green building design and technology, including the incorporation of renewable and alternative energy sources.
- To encourage commercial, institutional, and government buildings to be LEED certified or to demonstrate environmental and energy conservation measures from preconstruction to operation.
- Energy conservation will be encouraged through appropriate site planning, urban design, and the use of energy efficient materials.
- To utilize, wherever possible through street alignments and building placement, opportunities to capture solar energy.
- To incorporate Low Impact Development (LIDs) best practices and green infrastructure, wherever feasible to minimize runoff, reduce water pollution, and protect groundwater resources.
- To ensure streetscape design incorporates appropriate resilient tree species and spacing to maximize heat island reduction.

Principle 2: Create a complete, healthy, and vibrant community.

To develop as 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.

Objectives

- To support the mix and diversity of land uses in a compact, active transportation supportive development form to ensure a proper balance of residential, employment, and services to shorten distances between homes, workplaces, schools, and amenities to meet people’s needs for daily living, throughout the year, and throughout an entire lifetime.
- To provide for a diverse range of parks, open spaces, and community facilities to encourage residents to be physically active and socially engaged.
- To plan for a density of development that will support transit.
- To ensure that development is cost-effective and appropriate for the marketplace, including the flexibility to respond to, and encourage positive changes in the marketplace over time.

Principle 3: Provide a Range of Housing Types and Opportunities for Affordable Housing.

To provide a mix of housing opportunities and building types throughout the community to meet the needs of people at different stages of their life-cycle and with varying socio-economic factors.

Objectives

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

Principle 4: Protect and Restore Natural Heritage and Cultural Heritage Features

To grow and develop in an environmentally appropriate manner that conserves biodiversity and protects and enhances the existing natural and cultural heritage features while broadening opportunities for public access, enjoyment, education, and stewardship.

Objectives

- To protect and enhance local and regional ecosystems and biological diversity.
- To ensure that development does not negatively impact natural heritage features or their ecological functions by providing appropriate separation distances and buffers.
- To preserve and enhance existing natural and cultural heritage features including significant vegetation, topographic features and scenic views, heritage buildings and archaeological resources, and to promote the ecological restoration of linkages between these features.
- To integrate the existing natural and cultural heritage features into the design of the community and the public realm as aesthetic amenities.
- To provide a functional and highly interconnected system of natural heritage resources, parks, trails, and stormwater management facilities that are accessible and visible to residents.

Principle 5: Ensure Mobility Choices

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 members of society have transportation options.

Objectives

- To 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.
- To provide a variety of economical, 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 members of society have transportation options while reducing automobile dependence.
- Ensure all roads are designed to consider context and to utilize complete streets design principles to support a variety of users of all ages and abilities.
- Provide a permeable and connected street system that enables multiple direct routes to enhance pedestrian and cycling activity.
- To create walkable and connected neighbourhoods with sufficient destinations within a walking distance of approximately 400 to 800 metres (5-10 minute walk) of most residents.
- To ensure all roads will be designed as important components of the public realm to provide a network that is appealing for pedestrians, cyclists, transit facilities, and motor vehicles.

Principle 6: Create a Linked Greenspace System

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, addressing an ageing population, and supporting needs of residents of all ages and abilities.

Objectives

- To ensure that parks and open spaces, including the Natural Heritage System are beautiful, accessible, and linked. Parks and open spaces must be visible and accessible from, and integrated with, the street system, and include a full array of

opportunities for outdoor festivals, recreation, and play, as well as quiet contemplation.

- To incorporate stormwater management facilities as part of a linked open space system.
- To provide a continuous trails network within the community that incorporates links of varying character and function, among the natural heritage features, public parks, stormwater management facilities, and a full array of community amenities.
- To provide access to parks by placing parkettes within 200 metres (2-3 minute walk) and neighbourhood parks within 400 metres (5 minute walk) of residents.
- To provide a variety of trails and pathways such as on-road bike lanes, boulevard multi-use pathways, and off-road multi-use pathways.
- To ensure that pedestrian connections adjacent to the Natural Heritage System are planned to anticipate use and to avoid impact on the natural features and their ecological functions.

Principle 7: Promote Design Excellence

Develop a well-designed and contextually appropriate community that celebrates the scale and form of the existing natural and built character.

Objectives

- To develop a welcoming community that encourages and supports active living, social engagement, civic pride, and the creation of a sense of place and well-being.
- To 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 the Sustainable Urban Design Guidelines.
- Promote high quality urban design, including place-making and community focal points.

- Ensure buildings, streetscapes, parks and open spaces, and infrastructure are distinctive and aesthetically pleasing.
- Ensure that traffic calming measures are an integral part of the community design through streetscape design measures, boulevard tree planting, street curvature, axial view, and appropriate on-street parking provisions that do not impede the pedestrian and cycling networks and the provision of safe infrastructure.
- Provide for the orientation of building front facades, both public and private, to frame streetscapes and to enhance the public realm and encourage pedestrian activity.
- 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 as it may be defined through building materials, colour, and architectural details.

Principle 8: Promote Efficient Development Patterns and Standards

To achieve logical and 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.

Objectives

- To ensure that appropriate densities within the Secondary Plan area are strategically located to promote cost efficient construction of new infrastructure.
- To design the road network in a manner that enables transit routes within the Secondary Plan area to be located, intersect, or form a central corridor with key destinations such as schools, Village Corridor, and the Neighbourhood Centre.
- To optimize the use of existing infrastructure investments and to promote the coordinated, efficient, and cost-effective delivery of service infrastructure and community infrastructure that is appropriate for the planned urban development forms

- To ensure the phasing of future development is planned as a logical and sequential extension of infrastructure that is both cost effective and minimizes disruption of existing transportation routes, residential, and employment uses.
- To include higher density built forms and intensity of land uses as a way of reducing land consumption and maximizing the efficiency and cost effectiveness of municipal service infrastructure.

3.0 COMMUNITY STRUCTURE

The Community Structure of the Secondary Plan is based on achieving the principles and objectives identified in Section 2.2. The components of the community structure are a collection of high level structuring elements that shape the Brookhill Neighbourhood. The Community Structure elements include the following:

- i. Open Space System
- ii. Major Road Network
- iii. Park
- iv. Residential Neighbourhoods
- v. Retail/Service Commercial
- vi. Institutional

1. Open Space System

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.

2. Major Road Network

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. 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. 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. Parks System

The parks system includes Neighbourhood Parks, parkettes, urban squares, and a trail network. 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. Parkettes and urban squares are smaller components of the parks system and offer passive recreation opportunities. Parks are located throughout the community and are centrally located such that most residents are within a 5 minute walk (400m) of an open space. This encourages daily physical activity and creates a central focus and gathering space for the neighbourhoods.

4. Residential Neighbourhoods

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 local transit, schools, and parks, and within a 10 minute walk (800 metres) of higher order transit and services. 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 dwelling types, and limited townhouse dwellings; medium density housing, such as townhouses, stacked townhouses, and live/work units; and high density housing with stacked townhouses and low-rise and mid-rise apartment buildings. Apartment units may be permitted in either stand-alone residential buildings or above the ground floor in a mixed-use building. Medium and high density housing will be distributed along collectors and arterials. Transit oriented development will occur along Bowmanville Avenue, a Local Corridor, providing the highest densities in the Neighbourhood.

5. Retail/Service Commercial

Retail/service 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 community elements include a Neighbourhood Centre and a Village Corridor.

A Neighbourhood Centre is located at Bowmanville Avenue and Longworth Avenue, which will be an area with the highest concentration of uses, supporting Bowmanville Avenue's role as a Local Corridor. The uses include mixed use buildings, with ground floor retail and residential above, and stand-alone commercial/retail uses up to 5,000 square metres. The residential built form includes townhouses, stacked townhouses, and apartments and provides for a concentration of users within easy access of transit.

The Village Corridor is a primary focus along Longworth Avenue and will incorporate retail and service commercial, recreational, and cultural uses, as well as ground related housing and residential apartment buildings within a mixed-use context, which are also a built form that removes driveways from the road frontage.

6. Institutional

Elementary schools have been located central to the Brookhill Neighbourhood at a walking distance of approximately 5 minutes (400 metres) of residents to support children walking to school. Elementary schools also act as a neighbourhood focal point and when located adjacent to a neighbourhood park further create opportunities for the sharing of facilities.

4.0 THE ENVIRONMENT AND SUSTAINABILITY

Built form plays a major role in creating a healthy, vibrant, and sustainable community. Communities, neighbourhoods, and new buildings should be designed with a focus on reducing water use, waste generation, and energy use. Since human activity is the principle 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 mitigating 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 Sustainable Design and Climate Change

- a) The Municipality will use its array of planning tools, including this Secondary Plan and associated Sustainable Urban Design Guidelines, as well as the Green Development Program, to help guide development to be more sustainable.
- b) The promotion of green building technologies, renewable and alternative energy sources, and other sustainable design options for development shall be developed in accordance with the policies of Section 5.5 of the Official Plan and all relevant Provincial legislation and policy directives.
- c) Development applications shall be consistent with Section 5.6.5 of the Official Plan and shall include 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.

Climate Change Adaptation and Mitigation

- d) The Municipality will work to integrate climate change adaption and mitigation strategies through land use and development patterns that are sustainable, including:
 - i. Maximizing the use of vegetation to support improved air quality;
 - ii. Reduced greenhouse gas emissions;
 - iii. Water conservation and management;
 - iv. Maximizing opportunities for the use of renewable energy systems; and,
 - v. Promoting the use of active transportation and reduced vehicle trips.
- e) 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.

Air Quality

- f) In order to minimize the air quality and climate change impacts associated with new growth, the following is achieved by this Plan:
 - i. The reduction of air pollution through the development of ‘complete’ communities that are characterized by greater densities placed at mixed use centres, or near transit facilities; mix and diversity of housing types; and connected and walkable road patterns to encourage healthier lifestyles by making it easier to walk, bike, or take transit;
 - ii. The reduction of vehicle kilometres travelled across the Secondary Plan Area through increased mobility choices and the promotion of active transportation, including accessible transit within a 400 metre (5 minute) walking distance of residential development, walking, and cycling, to reduce automobile dependence and single-occupancy vehicle trips; and,
 - iii. The separation of sensitive land uses from air pollutant sources through appropriate separation distances, mitigation measures, land use planning, and zoning.
- g) The Municipality will support the use of electric vehicles through the provision of charging infrastructure in the Neighbourhood Centre and/or Village Corridor.
- h) The Municipality will require the minimum number of parking spaces to minimize the impact of car parking through the following.
 - i. Require that mixed use developments include shared use of parking among uses that have different peaking characteristics;
 - ii. Design parking areas so they are not the primary visual component of a neighbourhood;
 - iii. Reduce the parking ratio required in areas that are served by transit; and,
 - iv. Dedicate priority parking spaces for carpool, ride sharing, and ultra-low emission vehicles - 5% of total parking spaces.

Water Conservation

- i) To support water conservation, the Municipality will:
 - i. Encourage green infrastructure to utilize the absorbing and filtering abilities of plants, trees, and soil to protect water quality, reduce runoff volumes, and recharge groundwater supplies. Provide an interconnected network of open spaces, natural areas, greenways, wetlands, parks, and forest areas;
 - ii. Encourage the use of drought tolerant and native tree and shrub species in parks, along streetscapes, and in public and private landscaping to reduce water use;
 - iii. 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; and,
 - iv. Where feasible, implement Low Impact Design Standards that emphasize the use of bio-swales, innovative stormwater practices, constructed wetlands, at-source infiltration, greywater re-use system, and alternative filtration systems such as treatment trains and water conservation measures.

Energy Conservation

- j) In order to reduce energy consumption, development proposals that include energy efficient building design and practices in building renovations and re-developments such as passive solar energy gain, increased building insulation, green roofs, Energy Star® rated appliances and mechanicals, alternative energy systems, and conformity with LEED (Leadership in Energy and Environmental Design – Canada) standards® (or equivalent alternative), in all new buildings, shall be encouraged and supported.
- k) Development within the Secondary Plan Area shall be developed with regard to the principles of of Canadian LEED-ND (Leadership in Energy and Environmental Design for Neighbourhood Development) as they evolve.

- l) The Municipality will promote the mitigation of heat island effect by:
 - i. Incorporating green roofs planted with vegetation to contribute to cooling while also assisting with stormwater management, improved air quality, and energy efficiency of buildings;
 - ii. Implementing cool roofs strategies into building design that use high albedo materials to reduce heat gain;
 - iii. Strategic use of deciduous trees or preserve existing trees as part of a free cooling strategy to help with evapotranspiration and shading of sidewalks and hard surface areas in summer and solar access in winter; and,
 - iv. Installing light-coloured paving materials including white concrete, grey concrete, open pavers and any material with a solar reflectance index of at least 29.

Energy Generation

- m) The Municipality shall:
 - i. Encourage development plans and building designs to maximize solar gains and that buildings be constructed in a manner that facilitates future solar installations (i.e. solar ready- *built with all the necessary piping and equipment that would be needed to install a rooftop solar power system*);
 - ii. Where feasible, 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; and,
 - iii. Where feasible, provide alternative community energy systems such as geo-exchange, sewer heat recovery, and/or inter-seasonal thermal energy.

Urban Forest Resource Enhancement

- n) The Municipality will increase the urban canopy by reforesting parkland, residential, and commercial areas, open spaces, marginal land, and streetscapes. Trees sequester CO₂ and will contribute to the Region's greenhouse gas emissions target of 80% reduction by 2050.
- o) New development applications shall include a planting plan that provides for a variety of trees that are hardy, resilient, non-invasive, salt tolerant, drought resistant and low maintenance. All trees shall be non-invasive species and provide a large canopy and shade over sidewalks, parks, and open spaces.
- p) Any development proposal on a site which includes a woodlot, hedgerow, or trees shall be accompanied by, or may be required to prepare a Tree Preservation Plan. Tree Preservation Plans shall be submitted at the draft plan of subdivision application stage, or at the site plan application stage, or as otherwise required by the Municipality.
- q) A Tree Preservation Plan shall be prepared by a qualified professional in the field of ecology, arboriculture, or forestry to the satisfaction of the Municipality. A Tree Preservation Plan shall identify the present conditions of the site and shall make recommendations on tree preservation in conjunction with the development proposed.
- r) In the consideration of development applications in which there is a net loss of trees, the Municipality will require this loss to be compensated by the developer with the replacement of trees in a location to be determined by the Municipality. In determining appropriate compensation, consideration shall be given to the significance and value of the ecological function that the existing tree inventory provides.

Local Food Production

- s) The creation of opportunities for local food production in the Secondary Plan Area is supported by the Municipality. Development plans and building designs shall provide opportunities for local food growing and production through:
 - i. Community gardens;

- ii. Edible landscapes;
- iii. Small scale food processing (i.e. community kitchens, food co-ops, community food centres);
- iv. Food-related home occupations/industries;
- v. Small and medium scaled food retailers; and,
- vi. Local market space (i.e. a farmer's market).

4.2 Environmental Protection

- a) The Natural Heritage System is largely composed of lands that contain key natural heritage features and key hydrologic features. The system also includes other lands that serve as linkages, corridors, and adjacent buffer lands.
- b) 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 B – Open Space and Parks and comprise approximately 40% of the Brookhill Neighbourhood Secondary Plan. Lands designated Environmental Protection Area shall be subject to the policies of the Official Plan.
- c) 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.
- d) 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 and among natural heritage features and areas, surface water features, and ground water features.
- e) Lands within the Environmental Protection Area are to be protected, conserved, restored, and where possible, enhanced as the community evolves. 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.

- f) Natural heritage features should be physically and visually accessible from the abutting roads.
- g) Preservation of existing vegetation is encouraged. Where necessary, indigenous and ecologically complementary plantings should be encouraged.
- h) A linked open space system is also seen as a fundamental element of the urban structure of the Brookhill Neighbourhood. Public recreation has evolved from taking place primarily in formal active recreation areas, to include activities undertaken in informal public spaces such as wooded areas, valley lands, and other open space areas.
- i) The community will be designed to avoid natural hazards.

5.0 CREATING VIBRANT URBAN PLACES

- a) 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.

5.1 Urban Design Intent

- a) The Secondary Plan is designed based on achieving 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 and high-quality public realm. The Secondary Plan is premised on high quality urban design, including measures to ensure:
 - i. The provision of a clearly defined public realm;
 - ii. A standardized and highly interconnected pattern of lotting for development blocks;
 - iii. Consistent built form;
 - iv. Safety, accessibility, and comfort in the pedestrian environment;

- v. Support for cycling lanes, routes and stands throughout the community;
 - vi. Achievement of an overall density within the community of at least 50 residents and employees per net hectare; and,
 - vii. Support for transit services throughout the community.
- b) The design policies of this Plan provide development proponents with an understanding of the design intent of the Municipality. New development shall conform with the urban design policies contained in the Official Plan.
 - c) This Secondary Plan includes Sustainable Urban Design Guidelines, which are attached as Appendix B. The intent of the Sustainable Urban Design Guidelines is to promote an appropriate built form and public realm within the Secondary Plan Area. The Sustainable Urban Design Guidelines function as an implementation tool for successive development and approval processes that are required to implement this Secondary Plan, particularly the Zoning By-law, and Draft Plans of Subdivision/Condominium.
 - d) All development within the Secondary Plan Area shall be consistent with the Sustainable Urban Design Guidelines attached as Appendix B. 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.

5.2 Placemaking

- a) Place-making is the recognition and enhancement of a local community's unique aspects/assets. Recognizing the unique aspects of a neighbourhood requires an understanding of its existing attributes and how they contribute to creating a recognizable and defined character. They assist in understanding the physical make-up of an area and help to identify what sets an area apart from its surrounding context.

- b) To achieve excellent community design, the Municipality shall require the creation of landmarks and other distinctive elements or focal points for activities and events to help foster community identity and sense of place. In addition, the Municipality shall support development that:
 - i. Offers pedestrians and other users a high level of comfort, enjoyment, and personal protection;
 - ii. Provides an integrated mix of uses, activities and experiences, including the provision of social and health facilities, arts, culture, and recreation facilities;
 - iii. Is designed to fit its context by considering the mix of uses, building massing, height, scale, architectural style, and details of existing and/or historical, adjacent buildings and structures; and,
 - iv. Establishes appropriate relationships between built and natural environments, which ensure that natural systems are protected and celebrate significant aspects of the natural and cultural landscape.
- c) The principle of compatible development will be applied to all applications for development to ensure the sensitive integration of new development with existing built forms and landscapes in a way that enhances the image and character of the Secondary Plan Area.
- d) Within the framework of compatible development, the Municipality shall support and encourage contemporary architecture and design approaches that interpret and enrich living culture, and thereby creates a 21st century cultural heritage for future generations.
- e) To ensure development is compatible, when considering any application for development within the Brookhill Neighbourhood, attention shall be paid to the following:
 - i. The landscape, built form, and functional character of the surrounding community is enhanced;
 - ii. No undue, adverse impacts are created on adjacent properties in the vicinity;

- iii. Significant natural heritage features and their associated ecological functions are appropriately protected;
- iv. Identified on-site or adjacent cultural heritage resources are appropriately conserved;
- v. The height and massing of nearby buildings is appropriately considered, and buffers and/or transitions in height and density to adjacent properties are implemented, where necessary;
- vi. On-site amenity space is provided, and it is reflective of the existing patterns of private and public amenity space in the vicinity;
- vii. Streetscape patterns, including block lengths, setbacks and building separations are maintained; and,
- viii. Utility, infrastructure, and transportation system capacity exists to serve the proposed development and there are no undue adverse impacts on the Municipality's sewer, water, storm water management and transportation systems.

5.3 The Public Realm

- a) The public realm comprises 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.
- b) The design and development of the public realm shall be consistent with the policies of Section 5.3 of the Official Plan. In addition to the policies of the Official Plan, and the policies of this Secondary Plan, the Sustainable Urban Design Guidelines, attached to this Secondary Plan as Appendix B, provide detailed guidelines for the public realm.

5.3.1 Roads and Streetscapes

- a) The design of Public Roads and lanes will:
 - i. Provide access for vehicles, pedestrians and bicycles, opportunities for vistas and view corridors and pedestrian amenity areas and space for utilities and services;

- ii. Be subject to comprehensive streetscape requirements including landscaping, that will ensure that the public realm is consistent in quality and design;
 - iii. 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;
 - iv. Be designed to ensure efficient walking routes to schools, centres, transit, and other key destinations with continuous sidewalks, or equivalent provisions for walking, on both sides of the road;
 - v. Implement traffic calming measures such as on-street parking, reduced lane widths, laneways, raised intersections, curb bulb-outs, and/or roundabouts to reduce vehicular traffic speeds and to ensure safe walking and cycling environments;
 - vi. Provide neighbourhood permeability by designing blocks to be between 150 to 180 metres in length (no more than 250 metres) to promote active transportation, discourage excessive driver speed, and disperse traffic movements; and,
 - vii. Provide street trees and landscaping on both sides of the road to create and enhance the urban tree canopy while providing shade over sidewalks.
- b) Streetscaping elements shall be provided throughout the community. They shall be designed to be consistent and complementary to the character of the community. The coordinated installation of roadways, utilities, sidewalks, bicycle lanes, streetscaping elements, lighting and tree planting will be part of the planning, design, and development of all streets. Regard will be given to adequate space and safety provisions for the movement of pedestrians and cyclists, with a clear system of through routes and for safe transfers, on and off, of transit vehicles.
- c) 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 AODA.

- d) Locate all utilities underground where feasible, including the consideration of cost. Where components of utilities must be located above ground, they should be located within the public right-of-way or on private property, such as a rear lane or in locations where there is no conflict with the street tree planting line.
- e) Utility providers will be encouraged to consider innovative methods of containing 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.

5.3.2 Views and Focal Points

- a) The preservation, enhancement, and creation of significant views and focal points shall be encouraged by:
 - i. Preserving and enhancing views to natural features including woodlots, topographic features, water bodies, and across open spaces;
 - ii. Providing opportunities for views of important public buildings, heritage buildings, open spaces and parks, natural heritage features, and other landmarks; and,
 - iii. Providing for sites that terminate road and view corridors.

5.3.3 Public Buildings

- a) 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 and institutional buildings in the community and to enhance their status, public buildings will:
 - i. 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;
 - ii. Be designed as special landmark buildings with high quality design, materials, and finishes. The site should be well landscaped in recognition of the prominent locations and status as landmark buildings; and,

- iii. Be located close to the road right-of-way to reinforce the road edge to create a visually dominant feature in the community.

5.3.4 Building Orientation

- a) To reinforce the road, lane, and block pattern established by this Secondary Plan, the following measures will be employed:
 - i. Buildings will be aligned parallel to a public road;
 - ii. Buildings will be located in proximity to the property line adjoining the public road;
 - iii. Buildings on corner sites will be sited and massed toward the intersection of the adjoining public roads;
 - iv. Siting and massing of buildings will provide a consistent relationship, continuity, and enclosure to the public roads;
 - v. Siting and massing of buildings will contribute to and reinforce the comfort, safety, and amenity of the public roads;
 - vi. Buildings located adjacent to, or at the edge of parks and open spaces, will provide opportunities for overlook onto the parks and open spaces;
 - vii. 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,
 - viii. 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.

5.3.5 Prominent Intersection

- a) A Prominent Intersection is located at Bowmanville Avenue and Longworth Avenue.
- b) The intensity of development and variety of uses will establish this area as a community focal point. The significance of Prominent Intersections as

community focal points will be emphasized through building massing and height, materiality, street furniture, landscaping, and public art.

5.3.6 Public Art

- a) The Municipality will support the installation of new pieces of public art in the Secondary Plan Area in public locations, such as gateways, public squares, and parks.

5.4 The Private Realm

- a) The private realm within the Secondary Plan Area is comprised of a variety of built forms and private spaces, and their relationship to natural features, open spaces, and street network. The variety of residential types, and commercial/retail uses envisioned for the Brookhill Neighbourhood will contribute to its character and support the public realm through form and architectural details/features. The following private realm guidelines are intended to:
 - i. Encourage harmonious, attractive streetscapes through attention to the architectural quality of the building facade and the at-grade relationship of buildings to streets, to parks, and to natural features;
 - ii. Create a high standard of architectural detail and design excellence that enhances the overall character and uniqueness of the community;
 - iii. Encourage a range and mix of housing forms, a diversity of height, and lot type variety to create a diverse built environment; and,
 - iv. Reduce and mitigate the visual prominence of garages and utilities within the residential landscape.

5.4.1 Development Blocks and Lots

- a) 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.

- b) Where possible, development blocks should maximize solar gains through building orientation and layout to maximize potential for passive and active solar energy.
- c) The size and configuration of each development block will:
 - i. Be appropriate for its intended use;
 - ii. Facilitate and promote pedestrian movement; and,
 - iii. Provide a sufficient number and, where appropriate, a range of building lots to achieve cost effective and efficient development.
- d) Each development lot in a block will:
 - i. Have frontage on a public road or lane;
 - ii. Ensure buildings are designed to front, face, and feature abutting public streets. Reverse frontage shall generally not be permitted for development within this Secondary Plan Area. Where conditions exist that require reverse frontage, it shall be done to the satisfaction of the Municipality; and,
 - iii. Be of sufficient size and appropriate configuration to accommodate development that reflects the planning and urban design policies set out in this Secondary Plan and attached Sustainable Urban Design Guidelines.
- e) Notwithstanding the provisions of this Secondary Plan, development lots within the Village Corridor or Neighbourhood Centre designations, having substantial frontage on a Type A or C Arterial Road, may be permitted to have a second access to parking provided:
 - i. The lot contains a comprehensively designed mixed use development;
 - ii. The principal access to the required services areas on the lot is from a rear lane;

- iii. The need for a second access to parking can be demonstrated to be necessary to facilitate the development pattern, but will not interfere with, or promote unsafe traffic and pedestrian movement; and,
- iv. The development pattern is otherwise in conformity with the provisions of this Secondary Plan and Sustainable Urban Design Guidelines.

5.4.2 Built Form

- a) Buildings shall be designed for an urban context by directing their primary building facades to the abutting public street. Buildings must be designed for close siting which facilitates street activity and active transportation, with views directed to the street and public spaces rather than towards parking areas and neighbouring sites.
- b) New development will be compatible with adjacent and neighbouring development as per Section 5.2 e) of this Secondary Plan.
- c) To support public transit and for reasons of public safety and convenience, primary entrances shall be clearly visible and located on a public road frontage or onto public open spaces.
- d) Access from sidewalks and public open space areas to primary building entrances shall be convenient and direct, with minimum changes in grade, and shall be generally accessible to people who are mobility challenged.
- e) 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 architectural style complement the design of the public realm.
- f) To minimize disruptions to the safety and attractiveness of the Type B and C Arterials and Collector Roads, a system of rear lanes may provide the primary access for on-site parking and servicing functions.
- g) To enhance the quality and safety of the public roadscapes 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.

- h) To reduce the impact of surface parking and to provide 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 principle buildings and/or within the exterior side yard. Appropriate landscaping and screening measures shall be provided to mitigate their visual impact on public views.

5.4.3 Pedestrian Environment

- a) To promote safety and security in public places, including roads, *parks* and open space, schools, public transit routes, and the public use activity areas of buildings, the following measures are necessary:
 - i. The design and siting of new buildings shall provide opportunities for visual overlook and ease of physical access to adjacent roads, parks and open spaces:
 - ii. Clear, unobstructed views to parks and open spaces shall be provided from the adjoining roads; and,
 - iii. Appropriate lighting, visibility and opportunities for informal surveillance shall be provided for all walkways, parking lots, garages and outdoor amenity areas.
- b) To ensure ease of access for the pedestrian and the enjoyment of public roads and other outdoor spaces, the following measures are necessary:
 - i. Public-oriented spaces and activity areas, including entrances, terraces and porches, will be oriented toward public roads; and,
 - ii. Provision of a consistent level of landscape design, incorporating such elements as appropriate paving, planting, fencing, street furniture, lighting, and signage.

5.5 Accessibility for Ontarians With Disabilities (AODA)

- a) The Municipality will consider accessibility for persons with disabilities in all land-use planning and development decisions. As such:
 - i. All new and/or renovated Municipally-owned, leased, or operated facilities, parks and open spaces, municipal infrastructure systems, and any other space that is accessible to the public, shall comply with the accessibility requirements as set out by the Ontario Building Code and the Accessibility for Ontarians with Disabilities Act; and,
 - ii. All new private sector development shall incorporate universal physical access features and follow the accessibility requirements as set out by the Ontario Building Code and the Accessibility for Ontarians with Disabilities Act. Accessible private sector development shall be achieved through Site Plan Approval, enforcement of the Building Code, and the implementation of all applicable Provincial legislation and standards.

5.6 Crime Prevention Through Environmental Design (CPTED)

- a) 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:
 - i. Adequate lighting;
 - ii. Clear sight lines, allowing views from one end of a walkway to the other;
 - iii. Appropriate landscaping, but avoiding landscaping that might create blind spots or hiding places;
 - iv. Adequate fencing and fenestration;
 - v. Clear signage that delineates permitted use and speed; and,
 - vi. Streetscape and building design that promotes 'eyes on the street'.

6.0 ENCOURAGING HOUSING DIVERSITY

6.1 Housing

- a) Housing is vital to the creation of healthy, sustainable, and complete communities. Residents of all ages, income levels and abilities rely on a range and mix of housing types to offer a meaningful place to grow and a safe and secure place to live. An appropriate range of housing choices contributes to the overall health and well-being of communities. By providing a range and mix of housing types, the diverse range of housing needs can be met, and it enables people to live in the community as they progress through the stages of life. The policies of this section are intended to facilitate the provision of a broad range and mix of housing opportunities in appropriate locations in the Secondary Plan Area.
- b) The Secondary Plan shall encourage and support a variety of housing forms, and where appropriate, private, public, and non-profit housing developments designed to provide housing options for seniors including small ownership dwellings, higher density condominium dwellings, building with rental units, as well as developments such as retirement and assisted living facilities that facilitate “aging-in-place”.
- c) Each application submitted for proposed draft plan of subdivision shall include the distribution of housing by house form and will identify, in detail, the composition and distribution of the anticipated housing stock and its relationship to the achievement of the housing mix objectives of this Secondary Plan, and the Provincial requirement to achieve a minimum *net density* of 50 residents and/or jobs per hectare within the Secondary Plan Area.
- d) New residential buildings should incorporate universal physical access features and follow the accessibility requirements as set out by the Ontario Building Code (OBC) and the *Accessibility for Ontarians with Disabilities Act*.
- e) All of the relevant policies of Section 6 of the Official Plan apply to all new residential development within the Brookhill Neighbourhood. The Official Plan states that a broad range of housing types, tenure, and cost is encouraged to meet the evolving housing needs of people of all ages, abilities, and income groups in the Municipality. Providing a range of

housing types includes not only various forms, sizes, and tenures, but also includes affordable and special needs housing.

- f) Residential development abutting the Natural Heritage System 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.
- g) All residential development shall be consistent with the Sustainable Urban Design Guidelines attached to this Secondary Plan as Appendix B and submit an Urban Design Brief as a component of a development application.
- h) Individual site access for any permitted residential use adjacent to any Arterial Road shall be discouraged. Residential uses fronting on an Arterial Road or Collector Road may be developed on the basis of rear lanes. Further, a variety of interface techniques may be permitted, including window roads and/or flankage lots, however a landscaped berm must be provided, creating a 'Green Corridor' concept for the Bowmanville Avenue right-of-way. Noise attenuation fencing will be discouraged.
- i) Home occupations may be permitted in residences if they are compatible with the surrounding uses and subject to the inclusion of appropriate provisions in the Zoning By-law.

Live/Work Units

- j) The Municipality will encourage live-work opportunities through a combination of flexible zoning permissions and accommodations for combined residential and business or personal services, office uses, where appropriate, to facilitate home-based employment, which ensures proximity between housing and jobs and provides a mix of uses.
- k) Live-work units should be located along Collector Roads, transit routes, or at the gateway to a neighbourhood. These units provide not only higher densities to help support transit systems but a diverse range of shops and services that are within a convenient walking distance of the majority of adjacent residential neighbourhoods.
- l) Live-work development is subject to the following:

- i. Permitted within street and block townhouses;
- ii. The first floor within any live-work unit may be used for commercial, retail, and office uses, and be oriented towards a public road; and,
- iii. 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.

Additional Dwelling Units

- m) Additional dwelling units shall be permitted within residential areas in a new single detached dwelling, semi-detached, dwelling, and townhouse dwelling, including in an ancillary structure to one of these dwellings. Only one additional unit is permitted per property.
- n) Additional dwelling units can be created without triggering a development charge.

Garden Suites

- o) Garden Suites are permitted in conjunction with all permitted single detached dwellings, subject to the provisions of a Temporary Use By-law and the policies of Section 6.3 of the Official Plan.

Assisted and Special Needs Housing

- p) Assisted and special needs housing shall be integrated into residential areas and in close proximity to community facilities to support access to everyday needs.
- q) Assisted and special needs housing shall be subject to the provisions of Section 6.3 of the Official Plan.

6.2 Affordable Housing

- a) The Secondary Plan supports the provision of affordable housing for low- and moderate-income households in accordance with the definitions and policies of the Province.
- b) The Secondary Plan supports the Municipality's affordable housing objectives by requiring a variety of housing sizes and types and permitting accessory apartments, as per Policy 6.3.5 of the Official Plan. Affordable

housing will be achieved through Municipal Regulatory and Process Tools, Land Based Incentives, and Financial Incentives.

- c) As an incentive for the provision of affordable housing, as defined in Section 24.2 of the Clarington Official Plan, reductions in the minimum parking requirements 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.
- d) In addition, the Municipality will explore other potential incentives under a Community Improvement Plan or other legislated tool, such as reduced or deferred development charges, reduced application fees, grants and loans, to encourage the development of affordable housing units and purpose-built rental housing. The Municipality will also encourage Durham Region to consider financial incentives for these types of development.
- e) The Municipality shall explore options such as the dedication of land, or payment-in-lieu, to support the construction of affordable housing units in Clarington.
- f) The Municipality will work with other government agencies and the private sector, to promote innovative housing forms, development techniques, and incentives that will facilitate the provision of affordable housing.
- g) The Municipality shall encourage, as a component of the affordable housing target, the provision of housing that is cost-subsidized (i.e. assisted housing) and is necessary to meet the needs of households unable to find affordable housing through the private market. Such assisted housing may be provided by the public or private sector and may be in conjunction with government programs for seniors.
- h) Affordable housing will be encouraged to locate in proximity to local community facilities and existing or potential public transit routes and active transportation facilities.

6.3 Accessible Housing

- a) The Municipality shall work with appropriate agencies to ensure an adequate supply of appropriately scaled accessible housing forms including assisted living; special needs housing; nursing homes and other

forms of housing for seniors; and innovative housing models such as co-housing.

- b) Appropriately scaled accessible housing forms shall be integrated into the Neighbourhood Centre and Village Corridor where community services and amenities are easily accessible to ensure people with special needs have the best opportunity to care for themselves as much as possible in a non-institutional setting.

7.0 CELEBRATING OUR CULTURAL HERITAGE

- a) Cultural Heritage resources include archaeological and historic resources, built heritage resources, and cultural heritage landscapes. The combination of human-made buildings and structures, as well as the natural landscape create an area that is valued by the community.
- b) The conservation 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 policy directives.
- c) Prior to on-site grading, construction of infrastructure or development approval, an Archaeological Assessment shall be completed to the satisfaction of the Municipality and the Archaeology and Heritage Planning Unit of the Ministry of Citizenship, Culture and Recreation.
- d) 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.
- e) In addition to the policies of the Official Plan, when reviewing applications for zoning amendments, site plan approval, demolition, minor variance, or the provision of utilities affecting lands/properties adjacent to a designated cultural heritage resource, the Municipality will ensure that the proposal is compatible by:
 - i. Respecting the massing, cladding materials, profile and character of adjacent heritage buildings;
 - ii. Having regard and approximating the width of nearby heritage buildings when constructing new buildings facing the street;

- iii. Approximating the established setback pattern on the street;
- iv. Orienting the building to the street in a similar fashion to existing heritage buildings;
- v. Ensuring that parking facilities are compatibly integrated into heritage areas by locating them to the rear of the property; and,
- vi. Requiring local utility companies to place metering equipment, transformer boxes, power lines, conduit equipment boxes, and other utility equipment and devices in discrete locations that do not detract from the visual character or architectural integrity of the heritage resource.

8.0 MOBILITY AND STREETS

- a) The Secondary Plan shall provide for a balanced transportation system that promotes active transportation facilities to encourage walking and cycling. This Plan requires that a highly walkable community is developed based on an interconnected network of streets with pedestrian supportive streetscapes that provide for ease of access, orientation, and safety for pedestrian, cyclists, and motor vehicles to ensure that all members of society have a range of transportation options.

8.1 General Mobility Policies

- a) The road network serving the Secondary Plan Area will be designed with complete streets principles to accommodate all modes of travel while prioritizing transit, cycling, and walking to balance the needs of all users.
- b) The policies applicable to the provision of transportation services within this Secondary Plan are within Section 19 of the Official Plan. Notwithstanding the provisions of Section 19, roads shall be provided in accordance with the provisions and standards established through this Secondary Plan.
- c) All road designs shall be consistent with Appendix A - Road Standards and Profiles, the Sustainable Urban Design Guidelines included as Appendix B to this Secondary Plan and confirmed through a Traffic Impact Study submitted as part of a development application.

- d) The intent of the Secondary Plan is to develop connected and continuous, 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.
- e) Final route alignments, designs and requirements for roads, trails and other components of the active transportation system shall be established based on the detailed traffic impact studies required at future planning applications (site plans/draft plan of subdivisions). This study shall be completed and the requirements for all active transportation system components confirmed to the satisfaction of the Municipality in consultation with other agencies having jurisdiction, prior to approval of development within the Secondary Plan Area.
- f) All streets will be designed as important components of the public realm, providing a network that is appealing for pedestrians, cyclists, motorists and in the longer term, transit users. The road network shall be designed to provide vistas and view sheds to public parks and open spaces and to the Natural Heritage System to assist in the creation of a sense of place.
- g) Cul-de-sacs, crescent streets, and loop streets will not be utilized unless they are located and provide pedestrian connections to adjacent or nearby significant infrastructure or are abutting the Natural Heritage System.
- h) Minor revisions to transportation routes to incorporate design features such as streetscaping and bikeways may be made without further amendment to this Secondary Plan, provided that the principles of permeability and inter-connectivity are maintained to the satisfaction of the Municipality.

8.1.1 Arterial Roads

- a) Bowmanville Avenue bisects the Secondary Plan Area and will be a key component of the transit system for the area and is identified in the Official Plan as a Type A Arterial Road. Green Road and Nash Road are identified as Type B Arterial Roads and Longworth Avenue is a Type C Arterial Road.
- b) 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.

- c) Bowmanville Avenue is intended to be a Green Corridor with no direct access provided for any individual *development* proposal or residential land use. 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. Reverse frontage development will not be permitted adjacent to Bowmanville Avenue. It shall have sidewalks on both sides and bicycle lanes. Additional tree plantings and vegetated berms shall be incorporated into the road allowance or in adjacent areas to promote attractive and safe pedestrian movements.
- d) Driveway access on Green Road, Nash Road, and Longworth Avenue Arterial Roads shall be limited.
- e) Back-lotting or reverse lot frontages shall be avoided where feasible and not considered unless demonstrated to be the only alternative.
- f) All development within the Secondary Plan Area that directly abuts an Arterial Road shall provide appropriate buffering, landscaped open space, and shall consider the aesthetic function of the corridor.
- g) The alignment of the Longworth Avenue extension as shown on Schedule A is approximated and will be determined through detailed planning to determine the appropriate intersection point at Bowmanville Avenue, the appropriate crossing of the Brookhill Tributary and the appropriate setback from the environmentally sensitive lands to the north, west of Green Road. Any resulting modification to the alignment of Longworth Avenue extension shall not require an amendment to the Official Plan or Secondary Plan.

8.1.2 Collector Roads

- a) 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, the north boundary of the Secondary Plan Area, to provide for a continuous north-south Collector Road.

- b) Collector Road right-of-way widths shall be designed up to a maximum of 26.0 metres, and in accordance with Section 19 of the Official Plan.
- c) The location and design requirements for Collector Roads will be confirmed and implemented through subsequent development approvals.
- d) Back-lotting or reverse lot frontages shall be avoided where feasible and not considered unless demonstrated to be the only alternative.
- e) Bicycle lanes should be provided in the boulevard on both sides of a 26.0 metre Collector Road.
- f) Roundabouts will be encouraged to be used at the intersection of any two Collector Roads.

8.1.3 Local Roads

- a) The complete Local Road pattern is not identified on any of the statutory schedules to this Secondary Plan. A conceptual Local Road pattern is identified as part of the Sustainable Urban Design Guidelines included as Appendix B to this Secondary Plan. Changes to the identified Local Road Pattern shall not require any further Amendment to this Secondary Plan, provided that the principles of permeability and inter-connectivity are achieved to the satisfaction of the Municipality.
- b) Local roads will have an interconnected street layout with multiple route choices to arterial and collector roads where transit routes and supporting retail facilities are most commonly located.
- c) Local Roads are expected to have a right-of-way width of up to a maximum of 20.0 metres. Lesser right-of-way widths for Local Roads are encouraged.
- d) Local Roads will generally be designed to accommodate on-street parking, sidewalks on both sides, and landscaping in the boulevards.
- e) The location and design requirements for Local Roads will be confirmed and implemented through subsequent development approvals.
- f) Back-lotting or reverse lot frontages shall be avoided, where feasible, and not considered unless demonstrated to be the only alternative.

8.1.4 Lanes

- a) Lanes shall be used on a limited basis to access a private garage or parking space, or access to the rear yard of a commercial building, and to promote through traffic movements on Arterial and Collector Roads, where individual direct access is limited.
- b) Residential lanes may be provided for dwelling units that front onto Arterial Roads, Collector Roads, or neighbourhood parks. The inclusion of rear lanes provides significant benefits, such as creating safer pedestrian environments through the removal of driveways.
- c) Lanes shall have a maximum right-of-way of 8.5 metres with a pavement width of 6.0 metres.
- d) The use of permeable materials shall be encouraged in areas where insufficient drainage exists.
- e) Public utilities may be located within rear lanes subject to functional and design standards established by the Municipality.
- f) The location and design requirements for residential lanes will be confirmed and implemented through subsequent development approvals.

8.1.5 Roundabouts

- a) The Municipality shall consider the following as general design policies for Roundabouts:
 - i. Roundabouts are intended to calm traffic and direct traffic flows without necessarily requiring stop signs at intersections. The open spaces created in the traffic circles add to the character of neighbourhoods;
 - ii. Whenever Roundabouts are used, they should incorporate significant landscape features, as well as traffic calming devices; and,
 - iii. The design of a Roundabout should ensure safe pedestrian and bicycle movement, as well as ease of snow removal and maintenance.

8.1.6 Public Transit

- a) The Municipality and Region will develop an appropriate system of transit service for the Secondary Plan Area.
- b) Transit services will be implemented on a phased basis and based on acceptable operational and financial criteria.
- c) To facilitate the development of a transit supportive urban structure, the following measures shall be reflected in development proposals, including the subdivision of land:
 - i. Provision of a local road pattern and related pedestrian routes that provide for direct pedestrian access to transit routes and stops;
 - ii. Provision for transit stops and incorporation of bus-bays where appropriate into road design requirements; and
 - iii. Transit waiting areas incorporated into buildings located adjacent to transit stops.

8.1.7 Traffic Calming

- a) Traffic calming will be achieved on neighbourhood streets by using:
 - i. Pedestrian-priority streets, woonerfs or home-zones (i.e., the speed limit is under 15km/hr. and vehicles must yield to pedestrians and cyclists);
 - ii. Street design that discourages vehicle speeding through right-of-way curvature, complimentary streetscape design, building proximity to the street, and boulevard street tree planting.
 - iii. Minimum traffic lane widths; and/or,
 - iv. Minimum number of traffic lanes in the roadway.
- b) 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:

- i. Parking should be provided on at least one side of the street for all Local and Collector Roads; and,
- ii. 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.

8.1.8 Pedestrian and Bicycle Path System

- a) The Secondary Plan Area shall have pedestrian and bicycle path systems which serve the entire community, and which are linked with other pathway systems in the Municipality. Pedestrians and cyclists will be appropriately accommodated within the entire road network, and within the trails network.
- b) Trails for pedestrians and cyclists within the Secondary Plan Area shall be consistent with the Sustainable Urban Design Guidelines attached to this Secondary Plan as Appendix B.
- c) The Municipality shall require that the recreational trail system along the Brookhill Tributary and accessing the Bowmanville Creek Valley Trail to be constructed as a condition of draft approval for any plan of subdivision, or site plan approval which includes, or is adjacent to, the Brookhill Tributary lands, or through appropriate cost-sharing arrangements between landowners.
- d) Trail design and type will be based on each site's sensitivity in order to minimize environmental impacts.
- e) The trails system may include trails within natural features, stormwater management facilities, open spaces, parks, and the road system.
- f) The trail system is to provide both a recreational and utilitarian function. Accordingly, connections will be made to the road network, the Neighbourhood Centre, and the existing trail system.
- g) Multi-use trails, where adjacent to the street system, will generally be separated from the road right-of-way by a landscaped berm.
- h) Trails will be designed to accommodate a range of users and abilities. Slopes, where possible, should be under 5 percent. Curb-cuts 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.

- i) 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*.
- j) The Municipality may require trail corridors to be dedicated for public purposes as a condition of draft approval for a plan of subdivision.
- k) The Secondary Plan encourages increased bicycle and pedestrian traffic subject to the following policies:
 - i. Dedicated bicycle/pedestrian paths will be provided in new developments to create linkages to centres of activity and the sidewalk/trail system;
 - ii. Rights-of-way for bicycle/pedestrian paths will be dedicated as part of the land requirements for transportation and will be dedicated as public rights-of-way as part of new development or redevelopments;
 - iii. Adequate provision will be made in the planning, design, and development of the Secondary Plan Area to ensure safety and efficient bicycle/pedestrian movement;
 - iv. Pedestrian circulation will generally be on sidewalks or multi-use trails adjacent to roads and shall be separated from the road by a landscaped boulevard. Exceptions may be considered where insufficient right-of-way widths exist, or other terrain constraints exist;
 - v. The active transportation network will connect to major destinations, such as neighbourhood parks and community gardens, in order to provide convenient and safe access to facilitate travel by alternate modes of transportation;

- vi. Trails and bicycle routes shall be clearly signed regarding permitted use and speed. Wayfinding signage shall be provided throughout the trail network;
- vii. Vehicular crossings of off-street trails shall be minimized; and,
- viii. Trail crossings of roads shall ideally be located at an intersection where trail users can be afforded the right-of-way. At trail crossings at a midblock location along a road, provisions should be made for a signed trail crossing to alert drivers of the likely presence of trail users.

8.1.9 Parking

- a) 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.
- b) Off-street parking for all uses shall be required and shall be provided on-site in accordance with the provisions of the implementing zoning by-law.
- c) Subject to the findings and recommendations of an Internal Traffic Study, on-street 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 development.

9.0 PARKS AND COMMUNITY FACILITIES

- a) An important aspect of building a healthy and vibrant community is the provision of a range of passive and active public parks and open space areas. The policies of this Section are intended to provide an integrated system of municipally owned Neighbourhood Parks and Parkettes, and other publicly accessible open space areas and pathways within the community.

9.1 General Policies for Parks

- a) Wherever feasible, lands designated Environmental Protection Area shall be incorporated into the parks and open space system for leisure uses and compatible, passive recreational functions. Such lands shall not be

included as part of the parkland dedication requirements identified in this Secondary Plan.

- b) Parks that are in proximity to residential uses shall be designed so as to minimize any potential negative impacts on the residential uses.
- c) Park and open space design shall reflect the requirements of the Sustainable Urban Design Guidelines and shall consider the following:
 - i. Have regard for Crime Prevention Through Environmental Design (CPTED) principles and the Accessibility for Ontarians with Disabilities Act (AODA).
 - ii. New trees and landscaping within parks should be of a diverse, non-invasive, robust species selection, drought tolerant, and contribute to the tree canopy objectives of the Municipality and Region, and where possible, salvaged from the site or the local area.
 - iii. Bicycle and pedestrian routes to, and within, parks should be accessible, safe, and visible.
 - iv. Bicycle parking should be provided within all parks, regardless of park size.
 - v. 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.
 - vi. The illumination of recreational facilities, 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.
 - vii. The inclusion of public art in parks, facilities, and pedestrian spaces is encouraged.
- d) Dedication of lands for Neighbourhood Parks and Parkettes shall be in accordance with the Official Plan.

9.1.1 Neighbourhood Parks

- a) Neighbourhood Parks shall form the central focus of the overall Brookhill Neighbourhood and shall:
 - i. Be centrally located and approximately within 400 to 800 metre radius (5 to 10 minute walking distance) of all residential uses within the neighbourhood it is serving;
 - ii. Shall have a minimum size of 2.0 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(s) as determined through more detailed planning;
 - iii. Where deemed appropriate by the Municipality, be integrated with other community facilities such as schools;
 - iv. Have frontage on a Local and/or Collector Road, with a minimum 60 metres of continuous frontage; and,
 - v. Where appropriate and feasible, be connected and/or integrated with the broader Natural Heritage System and active transportation routes shown on Schedule B to this Secondary Plan.
- b) Neighbourhood Parks are to be accepted as part of the parkland dedication required under the Planning Act.

9.1.2 Parkettes

- a) Parkettes are shown on Schedule A – Land Use and Transportation and may be implemented as part of a development application. They are required wherever the Municipality deems it necessary to augment or adjust the park requirements of any neighbourhood
- b) Parkettes are smaller scale parks, between 0.5 to 1 hectare in size, and are intended to provide passive open space areas, serve as focal points within sub-areas of each neighbourhood, and shall:
 - i. Be easily accessible for residents approximately within a 200 to 400 metre radius (3 to 5 minute walking distance);

- ii. 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;
- iii. 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,
- iv. Be designed with 100 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.

9.1.3 Public Squares

- a) Public Squares are intended to enhance the public realm by providing defined spaces for social interaction and shall be incorporated within the Neighbourhood Centre, Village Corridor, or other high traffic areas.
- b) Public Squares shall be up to 1 hectare in size and can be used for cultural events, public art, farmer’s markets, and small-scale outdoor activities/games.
- c) Public squares shall be highly visible from the dominant street frontage and shall be designed to support activity year-round. Amenities such as appropriate paving, landscaped areas, benches, refuse containers, bicycle stands, lighting, public art and other elements that enhance the social and physical *environment* are required.

9.1.4 Green Roads/Gateways/Greenways

- a) Green Roads/Gateways/Greenways are small scale open space features provided as linkages within the open space system or as entrance features to the community to provide for connecting pedestrian and bicycle routes and special identity features within the Secondary Plan Area.
- b) Dedication of lands for Green Streets/Gateways/Greenways shall be considered on a case-by-case basis subject to a review of their individual function and contribution to the neighbourhood as fulfilling parkland dedication requirements.

9.2 Community Facilities

9.2.1 Schools

- a) 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, integrated with 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.
- b) Each school site should be centrally located such that the majority of students are within an 800 metre radius or 10 minute walk.
- c) 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.
- d) 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.
- e) In the event that all or part of a school site should not be required by a School Board, the following alternate uses shall be permitted in order of priority:
 - i. 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:
 - ii. Institutional uses such as private schools, Places of Worship, government buildings, community and recreational facilities, housing for seniors and/or cultural buildings (e.g. museum, art gallery) shall be investigated; or

- iii. Residential uses shall be developed in accordance with the policies of this Secondary Plan.
- f) School sites and buildings will be developed in accordance with the following policies and the Sustainable Urban Design Guidelines:
- i. 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;
 - ii. Elementary schools shall be located on a Type B or C Arterial or Collector Road to be accessible by residents in more than one neighbourhood; and
 - iii. Parking and loading areas will be provided and access points designed in a manner that will minimize conflicts between pedestrian and vehicular traffic and will enhance the aesthetic character of the Neighbourhood.

9.2.2 Places of Worship

- a) Places of Worship shall be permitted within all designations except for the Environmental Protection Area designation.
- b) Sites for a Place of Worship may be pre-zoned, with a 'Hold' prefix to permit a place of worship, accessory uses, and appropriate alternative uses.
- c) Places of Worship should be located on Arterial or Collector Roads and along public transit routes in order to maximize transit ridership, ensure accessibility, and to provide terminus views of an important architectural feature.
- d) Site for a Place of Worship will have a minimum site size of 0.5 hectare and a maximum site size of 2.0 hectares.
- e) 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 so as to provide appropriate levels of screening.

- f) The massing and scale of the building should be compatible with the character of adjacent development, especially within Low and Medium Residential areas through the use of similar setbacks, material selection, and the use of architectural elements.

9.2.3 Day Care Centres

- a) Day Care Centres shall be permitted in Low, Medium, and High Density Residential, Village Corridor, and Neighbourhood Centre designations.
- b) Day Care Centres shall be permitted within a place of worship or other place of public assembly, a community centre, an apartment building or a multiple unit housing project, and are subject to Provincial licensing policies.
- c) Day Care Centres are encouraged within elementary schools, subject to the consent of the School Boards, to encourage shared facilities and concentration of related land uses.

10.0 LAND USE DESIGNATIONS

10.1 General Land Use Policies

- a) The land use designations on Schedule 'A' – Land Use and Transportation of this Secondary Plan and the policies of this section are designed to establish a community structure which implements the Vision and Principles established for the lands subject to the Brookhill Neighbourhood Secondary Plan.

The land use designations 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* that is compatible with the surrounding existing and planned *development*, while ensuring the appropriate protection and conservation of cultural and natural heritage resources.

- b) The land use pattern provided on Schedule A - Land Use and Transportation is schematic and may be adjusted through the subdivision or site plan approval processes without amendment to this Plan provided it meets the general intent of the Plan, taking into account the conservation of natural and cultural heritage features, stormwater management requirements, detailed land use relationships, and road patterns to the satisfaction of the Municipality and any other approval authority.

10.2 Low Density Residential Designation

- a) Unless otherwise specified in the Secondary Plan, land uses permitted in the Low Density Residential designation shall be in accordance with Section 9 of the Official Plan.
- b) Low Density Residential shall accommodate a range of housing types. Permitted residential building types shall predominantly include detached and semi-detached dwellings. Limited street townhouse dwellings shall also be permitted.
- c) Building heights shall not exceed 3.0 *storeys*, or 10metres.
- d) Minimum net densities shall be provided in accordance with internal and edge neighbourhood criteria as set out in Table 4-3 of the Clarington Official Plan.
- e) 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.
- f) Reverse frontage development shall not be permitted within the Low Density Residential designation.
- g) Coach houses are permitted in limited areas within the Low Density Residential designation. Coach houses shall generally be in the form of residential uses on the second storey of a detached garage where individual lots have access to a rear lane, and where the side yard abuts a public road.

10.3 Medium Density Residential Designation

- a) Unless otherwise specified in the Secondary Plan, land uses permitted in the Medium Density Residential designation shall be in accordance with Section 9 of the Official Plan.
- b) Permitted dwelling types shall include townhouses, stacked townhouses, and low rise apartment buildings, and dwelling units as part of a mixed-use building.
- c) The minimum height of any building shall be 2 storeys or 7.0 metres, and the maximum height of any building shall be 4 storeys or 13.5 metres.

- d) Retail uses shall be provided at strategic locations to reinforce the community structure and provide access to local amenities within walking distances for residents of the surrounding areas.
- e) Retail uses shall only be permitted on the ground floor of a mixed use building with an entrance and frontage onto an arterial street.
- f) Stand-alone retail is not permitted within this designation.
- g) Retail uses will generally not exceed 20% of the total ground floor area of a building, except in live/work dwelling types.
- h) Street and block townhouses should be generally located in proximity to open spaces and neighbourhood commercial uses to allow for easy access to amenity spaces and services.
- i) In addition to the policies of this Plan, multi-unit residential development in the Medium Density Residential designation shall be in accordance with Section 9.4.5 of the Official Plan.

10.4 High Density Residential Designation

- a) Unless otherwise specified in the Secondary Plan, High Density Residential development shall be in accordance with Section 9.4.5 and Local Corridor criteria as set out in Table 4-3 of the Official Plan.
- b) Permitted dwelling types shall include apartment buildings, townhouses, and mixed use buildings.
- c) The height of any building shall be a minimum of 4 storeys and a maximum of 8 storeys or 13.5 metres to 27.0 metres.
- d) Minimum net densities shall be provided in accordance with the Local Corridor typology in Table 4-3 of the Clarington Official Plan.
- e) Apartments and other multi-unit buildings are encouraged to be designed with a street frontage that is pedestrian-oriented with buildings located close to the street. Exterior pedestrian access to individual dwelling units is encouraged. Parking areas should be located within rear yards or interior side yards.
- f) Apartment dwellings should be located such that front and exterior side yards are generously landscaped to complement the streetscape. Lower

density housing forms may be utilized with apartment buildings to transition to lower density areas.

10.5 Village Corridor Designation

- a) The Village Corridor will incorporate institutional, retail and service commercial, recreational and cultural uses, as well as ground related housing and residential apartment buildings within a mixed-use context.
- b) Development in the Village Corridor designation may be in either single use or mixed-use buildings.
- c) Permitted residential building types include street, block, or stacked townhouses, small plex-type (e.g. quattroplex) multiple unit buildings and low-rise apartment buildings. Apartment units may be permitted in either stand-alone residential buildings or above the ground floor in a mixed-use building. Live/work units shall also be permitted.
- d) Retail and service commercial development shall only be permitted on the ground floor of a mixed-use building. Individual retail and service commercial uses shall generally be limited in size to a maximum of approximately 500 square metres each; and,
- e) The following retail and service commercial land uses are specifically prohibited:
 - i. Drive-throughs;
 - ii. Any use that requires the outdoor display or storage of goods, with the exception of a seasonal garden centre, associated with another permitted use;
 - iii. Night clubs or banquet halls;
 - iv. All automobile related uses (sales, service, gas bars, car washes);
 - v. Amusement arcades;
 - vi. Places of entertainment;
 - vii. Adult live entertainment parlour;

- viii. Body rub parlour; and,
- ix. Taxi establishments.
- f) Buildings heights shall be within a range of 3 to 6 storeys, or between 10.0 to 20.0 metres.
- g) 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 encouraged on all ground-related residential units.
- h) Development abutting Arterial or Collector Roads shall be on the basis of rear lane access. Other development within the Village Corridor designation may include rear lane access. Parking lots shall not be located between the building and the street within the Village Corridor designation.
- i) To facilitate appropriate development within the Village Corridor designation, the Municipality may consider a ‘development incentives’ package. Development incentives may include reduced parking and/or parkland standards, or other incentives to encourage *mixed use development*.

10.6 Neighbourhood Centre Designation

- a) The Neighbourhood Centre area is the primary focus for retail and service use development and the focal point of gathering in the Brookhill Neighbourhood and will benefit from high visibility from Bowmanville Avenue. The Neighbourhood Centre is located at a Prominent Intersection.
- b) The intent of the Neighbourhood Centre Designation is to provide opportunities for retail and commercial uses that benefit from Arterial Road frontage and to provide a transition to the residential lands by permitting both commercial, as well as residential uses.
- c) The Neighbourhood Centre shall be developed in accordance with the policies of Section 10.5 of the Official Plan.
- d) Buildings within the Neighbourhood Centre Designation are encouraged to accommodate an array of uses. This mixture of uses is encouraged not

just within the designation in general, but also on individual development sites, and within individual buildings.

- e) The mix of uses in a Neighbourhood Centre shall be compatible and sensitively integrated with the surrounding residential uses in terms of building mass, height, setbacks, orientation, privacy, landscaping, shadow casting, accessibility and visual impact.
- f) Building heights shall not exceed 6 storeys, or 20.0 metres, whichever is less. Minimum building heights shall be 2 storeys, or 7.5 metres whichever is greater.
- g) Retail and service uses may be developed as follows
 - i. Retail and service uses shall only be permitted in a mixed use building;
 - ii. Ground floor retail and service use that would benefit from exposure along an Arterial Road frontage are encouraged along Bowmanville Avenue;
 - iii. Parking areas shall be located at the rear of the building, away from the public street frontage. Parking areas shall be designed to incorporate vegetative islands.
- h) Residential uses may be developed as follows
 - i. Residential uses shall be permitted in a stand-alone building provided there is a mixed use building elsewhere on site;
 - ii. Parking areas shall be located in the rear or interior side yards. Where a rear or exterior lot line, or rear or side building façade abuts a public road, enhanced landscaping and building treatments should be employed to ensure that building facades are attractive and parking areas are appropriately screened from view.
 - iii. Where residential uses are proposed in mixed use buildings, they must be located above the ground floor.
 - iv. Shared parking arrangements within mixed use buildings may be permitted on a site-specific basis, subject to a Parking Demand

Analysis being submitted, as part of an application to amend the Zoning By-law, to the satisfaction of Transportation Services.

10.7 Environmental Protection Area Designation

- a) Lands designated Environmental Protection Area shall be subject to the provisions of Section 14.4 of the Official Plan.
- b) The natural heritage features within the Secondary Plan Area are identified as Environmental Protection Area on Schedule B to this Secondary Plan.
- c) No development shall be permitted in Environment Protection Areas, except passive recreation, environmental restoration, and uses related to erosion control and stormwater management.
- d) The naturalization of the Brookhill Tributary is required in accordance with a naturalization plan to be prepared by the proponent and approved by the Municipality of Clarington.
- e) An Environmental Impact Study shall be undertaken for development proposals, including any necessary infrastructure and roads proposed within the Lake Iroquois Beach, or within 120 metres of the boundary of a wetland or wetland complex or 30 metres of the Environmental Protection Area designation. 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 the Official Plan or Secondary Plan.

10.8 Environmental Constraints Overlay

- a) The areas with an Environmental Constraints Overlay as shown on Appendix C have been identified as having the potential for environmental significance and the underlying designation can not be achieved until an Environmental Impact Study has been prepared and the limits of the natural heritage system confirmed to the satisfaction of the Municipality and the Central Lake Ontario Conservation Authority (CLOCA).
- b) The presence and precise delineation of these features and the level of development acceptable shall be determined through an Environmental Impact Study prepared as part of the review of development applications

in accordance with the policies of the Clarington Official Plan. The study will determine whether proposed development will have a significant negative impact on the identified features/functions. Mitigation and/or compensation measures may be recommended to offset impacts.

- c) If the study establishes that development can proceed, then the underlying designation shall apply over those lands.

10.9 Future Block Master Plan

- a) An area of existing large lot residential development located east of Bowmanville Avenue and south of Longworth Avenue as identified on Schedule A is designated as a Future Block Plan Area. 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.
- b) In accordance with Appendix A – General Description of Reports, Studies and Plans of the Official Plan, a Block Master Plan will be required to:
 - i. Evaluate the character, size, and urban form of residential;
 - ii. Determine the siting of a particular proposal within the broader surrounding context;
 - iii. Co-ordinate the delivery of services and roads; and,
 - iv. Determine the location of parks and where to allocate development priority.

11.0 SERVICING

11.1. Municipal Services

- a) 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.
- b) 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 Secondary Plan Area. A phasing plan shall be prepared as part of the Functional Servicing Plan

by development proponents at the time an application for draft plan of subdivision is submitted.

11.2. Stormwater Management

- a) Stormwater Management facilities are conceptually shown on Schedule A and Schedule B and may be permitted in all land use designations within the Brookhill Neighbourhood Secondary Plan Area, except for the Environmental Protection Area designation. Symbols denoting urbanized stormwater management facilities are not traditional ponds but an integrated stormwater management approach which may include “Low Impact Development” best practices and green infrastructure.
- b) The location of the stormwater management facility symbols may be relocated without an amendment to this Plan. The exact location and size will be determined through the Functional Servicing Study 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 B to this Secondary Plan.
- c) Storm drainage for the secondary plan lands will be conveyed to the Bowmanville Creek and the Brookhill Tributary in accordance with the provisions of the Brookhill Neighbourhood Stormwater Management Report.
- d) 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.
- e) Stormwater management facilities will be key features within the community contributing to the appearance and ambience of the

neighbourhood, while achieving functional objectives related to flow moderation and water quality.

- f) 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.
- g) Stormwater management facilities are treated as public assets. The ponds will be designed and planted with native upland, flood tolerant shoreline and aquatic species to provide enhanced *wildlife habitat*.
- h) Stormwater management facilities will not be fenced, but rather will be designed with trails, overlooks and interpretive signage so that they are an integral part of the parks and open space system.
- i) 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 in the Environmental Protection Area Designation. A detailed water balance will be required as part of a stormwater management plan submitted at the time of future development applications.

11.3 Utilities

- a) 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.
- b) The Municipality shall promote utilities to be planned for and installed in initial common trenches, where feasible, in a coordinated and integrated basis in order to be more efficient, cost effective, and minimize disruption.
- c) Utility services shall be developed to be compatible with the general character of the surrounding uses and minimize visual impact, where feasible. 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.

12.0 IMPLEMENTATION

12.1 General

- a) 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.
- b) 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.
- c) 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.
- d) 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.

12.2 Capital Works

- a) The capital works program for Brookhill is generally outlined through the Development Charges Background Study as amended from time to time. Specific timing of works may vary depending on the rate of growth and the Municipality's ability to incorporate required works in its capital budget and forecast.

- b) Prior to the approval of any development, the Municipality of Clarington shall be satisfied as to the availability of water supply and sewer capacity to accommodate the said development.
- c) Prior to the registration of any phase of a draft plan of subdivision:
 - i. The Municipality shall have approved any necessary capital works for that phase of development in its capital budget;
 - ii. The owner shall have entered into a Subdivision Agreement with the Municipality of Clarington that will identify among other things; the capital expenditures associated with servicing the lands.
- d) Prior to any development approvals, an assessment of infrastructure cost requirements to accommodate the Secondary Plan development including development phasing, and timing shall be undertaken to the satisfaction of the Municipality of Clarington.

12.3 Required Studies

12.3.1 General

- a) This Secondary Plan identifies the following studies, plans, and assessments that may need to be completed to the satisfaction of the Municipality of Clarington and any agency have jurisdiction, prior to the approval of development applications within parts of, or the entire, Secondary Plan Area. The Municipality shall determine the need for the following studies, plans and assessments, and when in the approvals process, they may be required on an application-by-application basis:
 - i. Stormwater Management Implementation Plan;
 - ii. Functional Servicing Plans;
 - iii. Environmental Impact Studies;
 - iv. Environmental Site Assessment (ESA) and Record of Site Condition;
 - v. Archaeological Surveys/Assessments;
 - vi. Tree Inventory and Tree Preservation Plan;
 - vii. Noise Assessment(s);
 - viii. Internal Traffic Impact Study;

- ix. Traffic Impact Study;
- x. Energy Conservation and Sustainability Plan;
- xi. Landscaping Plan;
- xii. Brookhill Tributary Naturalization/Remediation Plan;
- xiii. Community Theme and Urban Design Implementation Plan; and
- xiv. Architectural Guidelines.

Additional study requirements may be identified by the Municipality as development within the Secondary Plan Area proceeds.

12.3.2 Community Theme and Urban Design Implementation Plan

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.

12.3.3 Architectural Guidelines

It is the intent of the Plan to create an identifiable character for the Brookhill Neighbourhood. Architectural Guidelines shall be prepared for the Brookhill Neighbourhood Secondary Plan Area.

- a) All development within each Neighbourhood shall be subject to urban design and architectural guidelines;
- b) Provision for compliance with the guidelines shall be incorporated into all subdivision, site plan or similar development agreements;
- c) A program to ensure compliance with the guidelines shall be established among the landowners 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;

- d) 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 B) and shall be prepared to the satisfaction of the Municipality of Clarington; and
- e) It is the intent of this Secondary Plan to achieve the agreement of all public agencies involved in any aspect of development in the Secondary Plan Area, to comply with the policies of this Secondary Plan, the regulations in the Zoning By-law, and the Sustainable Urban Design Guidelines (Appendix B) in order to achieve the goal, objectives, principles and policies of this Secondary Plan.

12.4 Pre-Submission Consultation

Pre-submission consultation provides the opportunity to ensure that all necessary information is available at the time of the application submission as necessary to properly assess the application and determine that it is complete for the purposes of the Planning Act. The following outlines the pre-submission consultation and complete application policies:

- a) Prior to the submission of a complete application for an Official Plan Amendment, Zoning By-Law Amendment, Draft Plan of Subdivision, Draft Plan of Condominium, or Site Plan, the applicant shall consult with the Municipality in accordance with this Plan and the Municipality's Pre-consultation By-law.
- b) Pre-consultation meetings shall be held with the Municipality and any other government, public authority and/or external agency as deemed appropriate by the Municipality.
- c) Any application for an Official Plan Amendment, Zoning By- Law Amendment, Draft Plan of Subdivision, Draft Plan of Condominium, or Site Plan will require the applicant to:
 - i. comply with the statutory complete application submission requirements of the Planning Act;

- ii. include a fully completed application form with all submission requirements and supporting documentation; and,
 - iii. include the prescribed application fees.
- d) Any application for an Official Plan Amendment, Zoning By- Law Amendment, Draft Plan of Subdivision, Draft Plan of Condominium, or Site Plan by the applicant shall be deemed to be a complete application once all required studies, reports and information outlined in Section 12.3.1 are prepared and provided by the proponent. Studies, reports and information outlined in Section 12.3.1 as necessary for the proper evaluation of a complete application will be determined by the Municipality in consultation with the applicant, any other government, public authority and/or external agency as deemed necessary by the Municipality. Any studies not required or required as a condition of approval will be indicated in writing after pre-submission consultation.
- e) In addition to the studies, reports and information specified during the pre-consultation process, the proponent shall be required to submit any other studies and reports relevant and necessary to the evaluation of the particular applications as deemed appropriate by the Municipality in consultation with the applicant, and any other government, public authority and/or external agency.
- f) Any studies or reports and information shall be prepared in accordance with any standards or specifications applicable within the Municipality or the Regional Municipality of Durham, and may at the Municipality's discretion, require a peer review by a qualified consultant retained by the Municipality at the applicant's expense.
- g) In all instances the scope, timing and number of studies, reports and information required for the submission of a complete application should be appropriate and in keeping with the scope and complexity of the application. For applications that may be considered simple or minor in nature, little, if any, additional information may be required.
- h) Council or its designate may refuse to accept or further consider an application until a complete application has been prepared.

12.5 Site Plan Control

Site Plan Control is a key mechanism to implement the urban design policies of this Plan. In addition to the matters identified in Section 23.8 of the Official Plan, the following policies apply to the Secondary Planning Area:

- a) Coloured elevation drawings showing plan, elevation and cross section views may be required for all proposed non-residential development and adjacent buildings and all residential development containing greater than 25 residential units.
- b) In addition, the other matters referred to in subsection 41 (4) of the Planning Act, plans submitted for approval shall include:
 - i. Exterior designs, including but not limited to, character, scale, appearance and design features of the building and their sustainable designs including energy efficiency; and,
 - ii. Sustainable design elements on any adjoining public street, including without limitation trees, shrubs, hedges, plantings or other ground cover, street furniture, curb ramps, waste and recycling receptacles and bicycle parking.

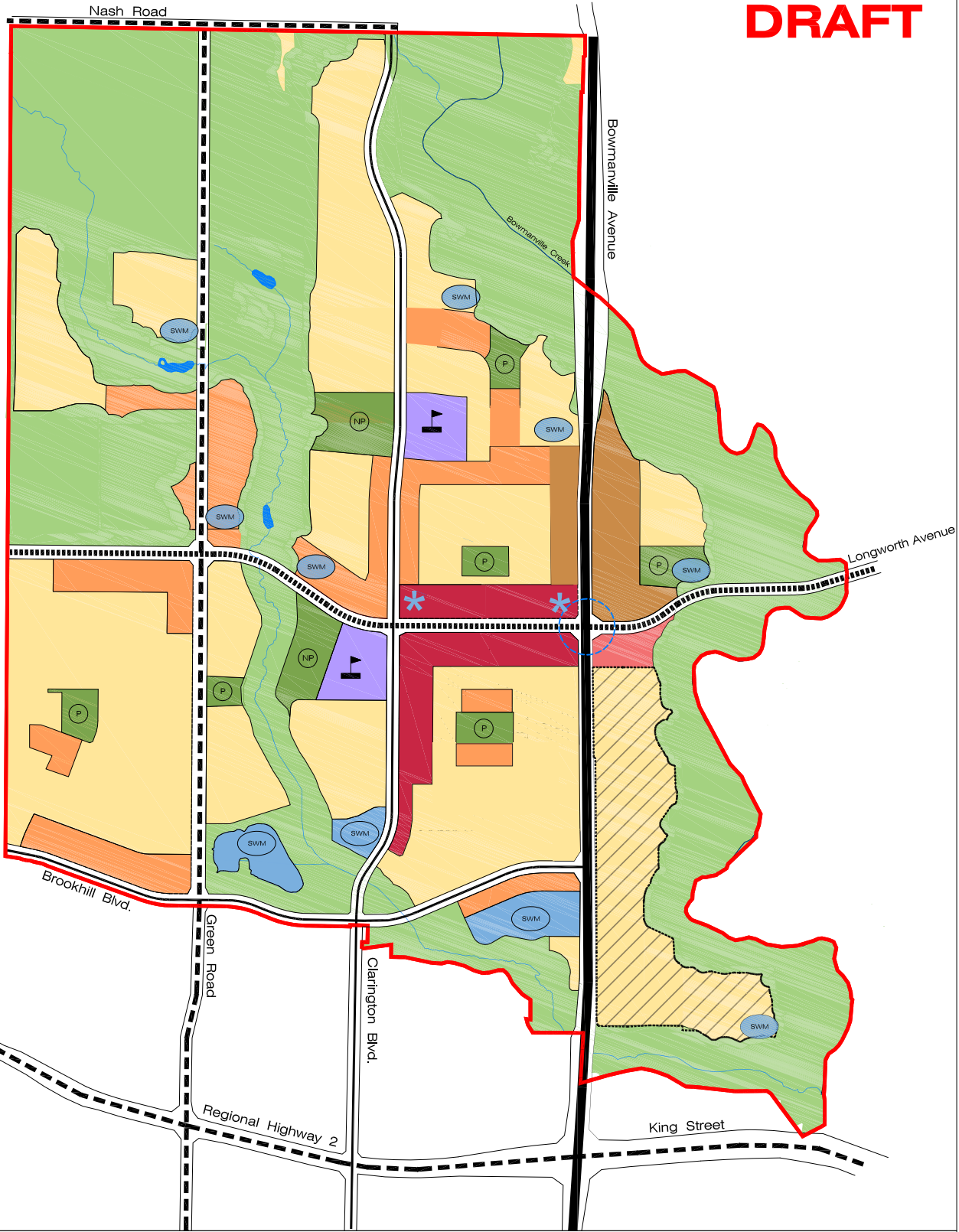
13.0 INTERPRETATION

- a) 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.
- b) 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.

- c) 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.
- d) 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 B) provide the foundation for the development of the Brookhill Neighbourhood Secondary Plan Area and the basis for the policy framework of this Secondary Plan.

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LEGEND

- Brookhill Secondary Plan Boundary
- High Density Residential
- Medium Density Residential
- Low Density Residential
- Neighbourhood Centre
- Village Corridor
- Future Block Master Plan
- Elementary School
- Neighbourhood Park
- Parkette

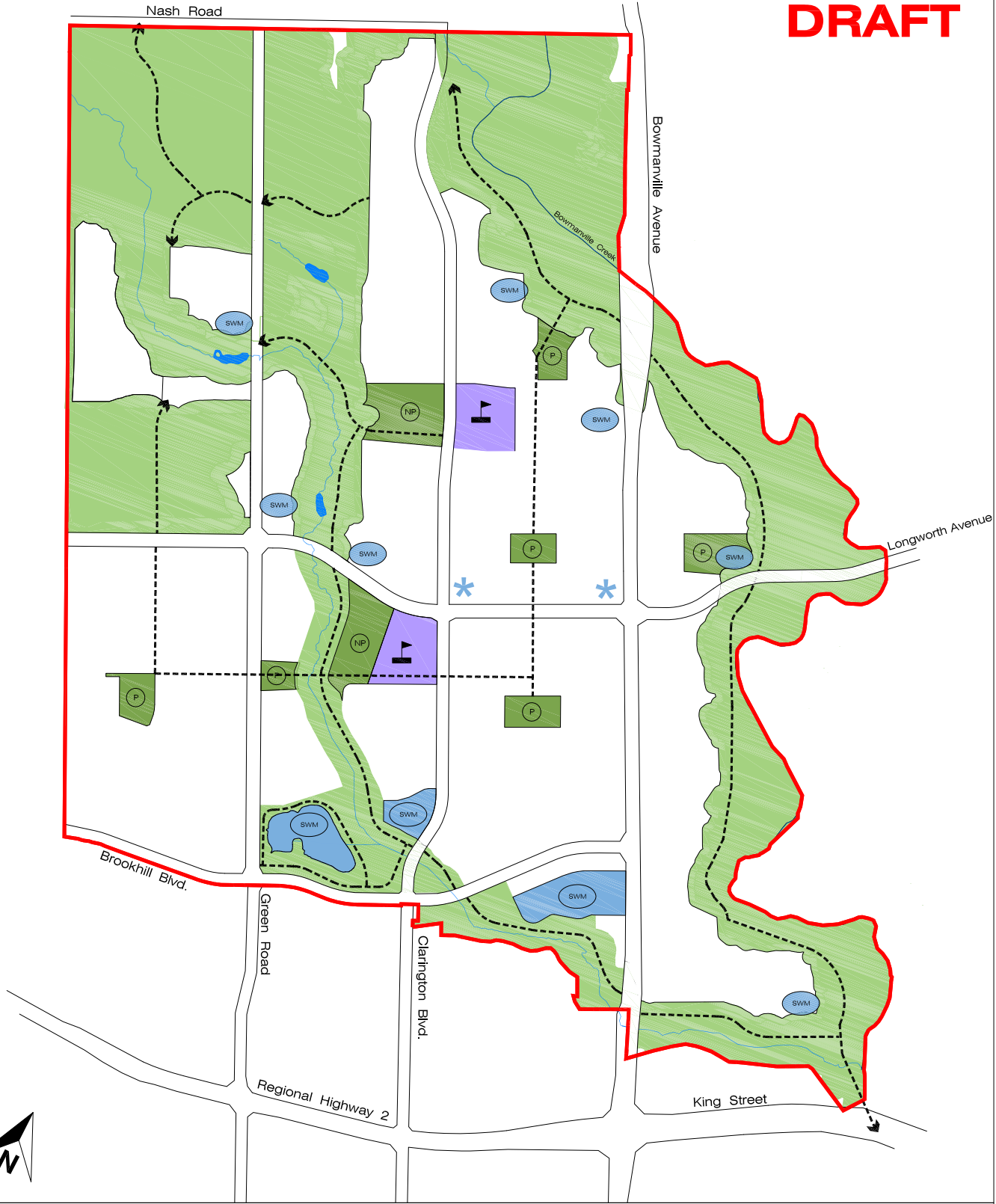
- Stormwater Management Facilities (SWM)
- Urbanized Stormwater Management
- Environmental Protection
- Watercourse
- Arterial Road Type A (Multi-use Path)
- Arterial Road Type B (Dedicated Bicycle Lane)
- Arterial Road Type C (Dedicated Bicycle Lane)
- Collector Road (On-Street Bicycle Lane)
- Prominent Intersection

Schedule A
LAND USE AND
TRANSPORTATION










Brookhill Neighbourhood
 Secondary Plan

September 2020

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LEGEND

-  Brookhill Secondary Plan Boundary
-  Environmental Protection
-  Stormwater Management Facilities (SWM)
-  Urbanized Stormwater Management
-  Watercourse
-  Elementary School
-  Neighbourhood Park
-  Parkette
-  Trails

**Schedule B
OPEN SPACE
AND PARKS**

Brookhill Neighbourhood
Secondary Plan

September 2020

Appendix 1 - Road Standards and Profiles, Brookhill Secondary Plan

Table 1

Classification	Pavement Width	R-O-W Width	Boulevard Width	On-street Parking	Bicycle Lanes	Transit Facilities	Sidewalk	Individual Direct Access
Type A Arterial (Regional Road 57)	19.5 m (2@3.5 m, 2@3.75 m, median/left turn lane @5.0 m)	36.0 – 50.0 m	2@ 8.25 m	No	3.0 m path in boulevard (1 Side)	Yes	2 Sides	No
Type B Arterial	19.5 m (2@3.5 m, 2@3.75 m)	30.0 – 36.0 m	2@8.25 m	No	3.0 m path in boulevard (1 Side)	Yes	2 Sides	No
Type C Arterial with Medians	17.0 m (2@ 3.5 m, 2 parking @ 2.5 m, median@ 4.0 m)	30.0 m	2@6.5 m	2 Sides	1.5 m in boulevard (2 Sides)	Yes	2 Sides	No Rear lane/ access

Table 1									
Classification	Pavement Width	R-O-W Width	Boulevard Width	On-street Parking	Bicycle Lanes	Transit Facilities	Sidewalk	Individual Direct Access	
Collector	13.0 m (2@3.5 m, 2 parking @ 3.0 m)	26.0 m	2@6.5 m	2 Sides (optional)	1.5 m in boulevard (2 Sides)	Yes	2 Sides	Optional	
Collector	12.0 m (2@3.5 m, 2 parking @2.5 m)	23.0 m	2@5.5 m	2 Sides	No	No	2 Sides	Yes	
Local Road	8.5 m	20.0 m	2@5.75 m	1 Side	No	No	1 Side	Yes	
Local Road	8.5 m	18.0 m	1@4.0 m, 1@ 5.5 m	1 Side	No	No	1 Side	Yes	
Public Laneway	6.0 m	8.5 m	2@1.25 m	No	No	No	No	No	

APPENDIX B
DRAFT FOR DISCUSSION

BROOKHILL NEIGHBOURHOOD
SECONDARY PLAN

**SUSTAINABLE
URBAN DESIGN
GUIDELINES**

SEPTEMBER 2020 • DRAFT

Clarington

The Planning Partnership
PLAN B Natural Heritage
R.J. Burnside & Associates
SCS Consulting Group

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1. INTRODUCTION



The Brookhill Neighbourhood Sustainable Urban Design Guidelines work together with the policies of Brookhill Neighbourhood Secondary Plan to provide the Municipality with a sound and rational framework for the assessment of development applications.

The Sustainable Urban Design Guidelines is a comprehensive document that encourages and guides development at a level of planning and design that focuses on the community as a whole. The guidelines may be general in nature but will direct the ongoing development of the Brookhill Neighbourhood in a balanced manner and according to the principles of good urbanism and high-quality urban design. In particular, the Sustainable Urban Design Guidelines seek to protect and reinforce the community's built characteristics and shape the public and private realms, including streets, public spaces and buildings, from a sustainability perspective to achieve the vision of the Brookhill Neighbourhood Secondary Plan.

Sustainable development requires a balance of a healthy environment, economy, and society. Mindful of that, the purpose of the guidelines is to provide a design vision and guidance for the Brookhill Neighbourhood by addressing the nature, intensity, quality and level of sustainability in both the public and private realms – while still ensuring that all other goals and objectives of the Secondary Plan are achieved.

1.1 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 develop as a healthy and complete community with distinctive, liveable neighbourhoods, integrated and connected green spaces, and efficient transportation, transit, and trails systems.

1.2 Urban Design Objectives

The vision for Brookhill is further articulated through a set of urban design objectives which will guide how the community will be physically arranged, and its component elements shaped, to achieve the stated vision; these include:

- Ensure an attractive and distinctive Neighbourhood that has outstanding architecture that both respects the existing character and context through visual diversity, interest, and beauty;
- Promote sensitive integration of new development with existing development through the requirement for compatible development;
- Establish a variety of beautiful public gathering spaces to support community life throughout the year including interconnected park spaces, trails, and sidewalk networks;
- Create vibrant, safe, and comfortable pedestrian-oriented streets that enhance mobility for pedestrians, cyclists, and drivers and will support existing and future transit;
- Promote a mix of uses in a variety of building forms, including a range of housing types and opportunities for retail, commercial and community uses;
- Protect and enhance natural features while broadening opportunities for public access, enjoyment, education and stewardship;
- Demonstrate high-quality design in new development and incorporate best practices that respect and complement the character of its adjacent neighbourhoods; and,
- Incorporate sustainable development and construction practices to ensure that energy conservation is maximized and the strain on non-renewable resources is minimized.



1.3 Community Structure

The Brookhill Neighbourhood's Community Structure is a collection of high level structuring elements that shape the components of the Brookhill Neighbourhood. The Community Structure elements include the following:

- Open Space System
- Road Network
- Parks System
- Residential Neighbourhoods
- Retail/Service Commercial (Village Corridor and Neighbourhood Centre)
- Institutional (Elementary Schools, Place of Worship)

Open Space System

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.

Road Network

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. 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.

Parks System

The parks system should be designed to provide a fair distribution of amenity spaces for a range of users in a linked network. The system includes parks, stormwater management facilities, and a trail system.

Residential Areas

The Residential Areas shall be planned and designed as accessible, pedestrian-oriented areas that are distinct in character and connected within the larger Brookhill

Neighbourhood. The Residential areas will include a mix and diversity of housing types to ensure variety and choice. Each area will have a central focus that is within a 5 minute walk (400 metres) of local transit, schools, and parks, and within a 10 minute walk (800 metres) of higher order transit and services.

Retail/Service Commercial

Retail/service 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 community elements include a Neighbourhood Centre and a Village Corridor.

Institutional

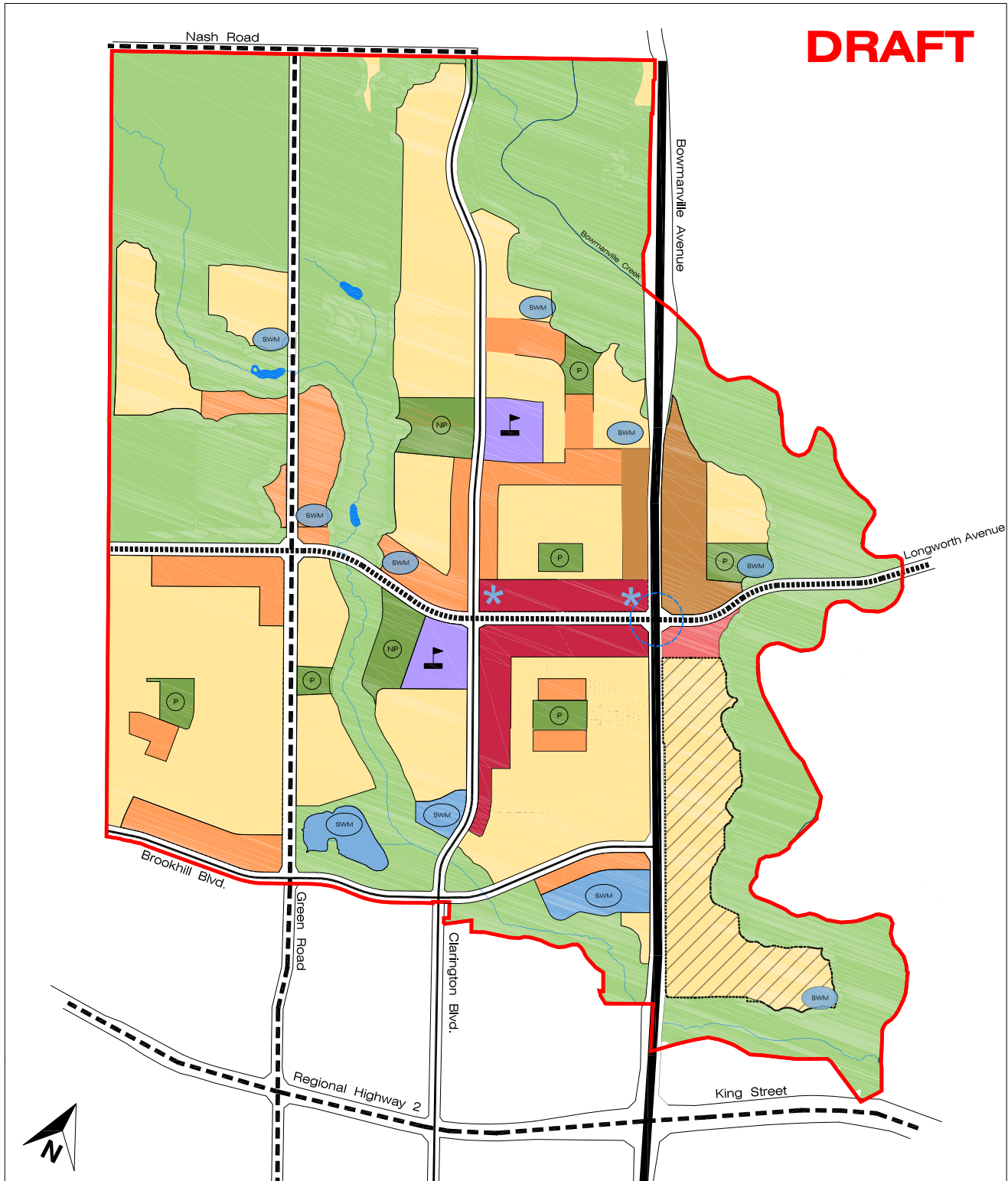
Elementary schools have been located central to the neighbourhood at a walking distance of 5 minutes or 400 metres to support children walking to school. Elementary schools also act as a neighbourhood focal point and in some locations have been located adjacent to a neighbourhood park creating opportunities for the sharing of facilities.

1.4 Interpretation & Implementation of the Guidelines

The Brookhill Neighbourhood Sustainable Design Guidelines are intended to implement the Secondary Plan direction for the Brookhill Neighbourhood and provide greater clarity on urban design, streetscapes, built form, and sustainability initiatives.

The Guidelines are to be read in conjunction with, and complement the policies of the Brookhill Neighbourhood Secondary Plan, objectives of the Municipality of Clarington Official Plan, and the provisions of the Municipality of Clarington Zoning By-law. The Guidelines, in concert with the Secondary Plan policies, will be used to evaluate draft plans of subdivision applications in order to ensure that a high level of urban design and the intended level of sustainability is achieved.

Notwithstanding the foregoing, the provisions of the Secondary Plan shall prevail over the provisions of these Guidelines in the event of any conflict.



Brookhill Neighbourhood - plan to be updated/refined

2. THE PUBLIC REALM



As the population of the Brookhill Neighbourhood continues to grow, it will require a public realm that continues to support and enhance the needs of its existing residents, new residents, and visitors. This includes a variety and hierarchy of spaces for community gathering and every day activities such as walking, sitting, socializing, and engaging in street life, actively and passively.

A comprehensive understanding of how the components of the Public Realm Network work together and complement each other and their adjacent uses, will lead to a more connected, accessible, and logical network of pedestrian friendly spaces throughout the Brookhill Neighbourhood. Moving people into, out of, and through the community easily and safely, and providing a variety of public spaces for socializing and recreation, is a priority.

2.1 General

1. Encourage opportunities for vibrant, diverse and pedestrian-oriented urban environments that provide for public safety, changing experiences, social engagement, and meaningful destinations.
2. Provide for mixed-use neighbourhoods that are walkable with connected public gathering places, where opportunities for social interaction are increased and services can be provided within easy walking or cycling distance or by use of public transit.
3. Promote internal connectivity and multiple connections to the community at large, taking into account the existing and proposed urban structure of adjacent and adjoining areas.
4. Ensure a typical walking distance of 400 metres (5 minute walk) to daily activities, such as transit (local bus routes), elementary schools, active parks, and modest services, or 800 metres (10 minute walk) to higher order transit or community centre.
5. Locate residential buildings within a 200 metre walking distance (3 minute walk) from each sub-neighbourhood focal point.



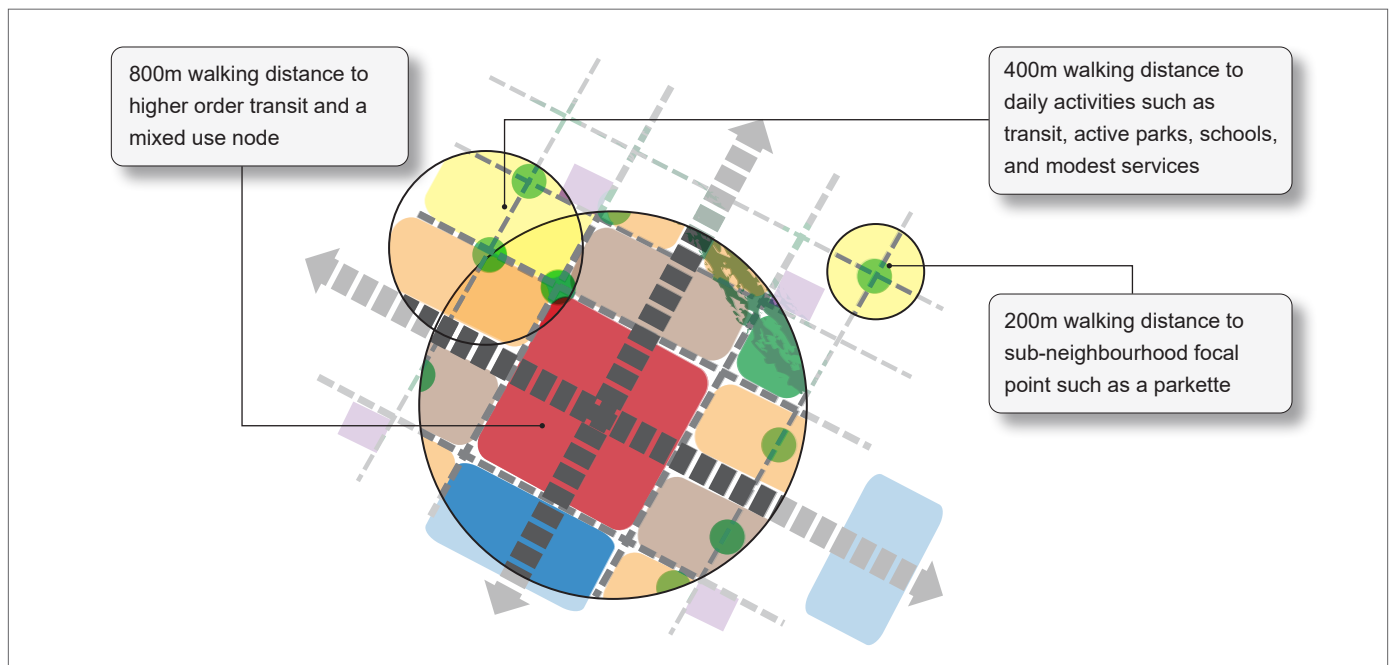
6. Provide for an interconnected network of sidewalks, bicycle routes, transit, and multi-use trails ensuring proper integration with surrounding neighbourhoods and a variety of destinations, allowing for continuous movement throughout the community.
7. Design the street layout to ensure efficient walking routes to schools, centres, transit, and other key destinations. Provide continuous sidewalks, or equivalent provisions for walking, on both sides of the road.
8. Implement traffic calming measures 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.
9. Provide neighbourhood permeability by designing blocks to be between 150 to 180 metres in length (no more than 250 metres) to promote active transportation, discourage excessive driver speed, and disperse traffic movements.

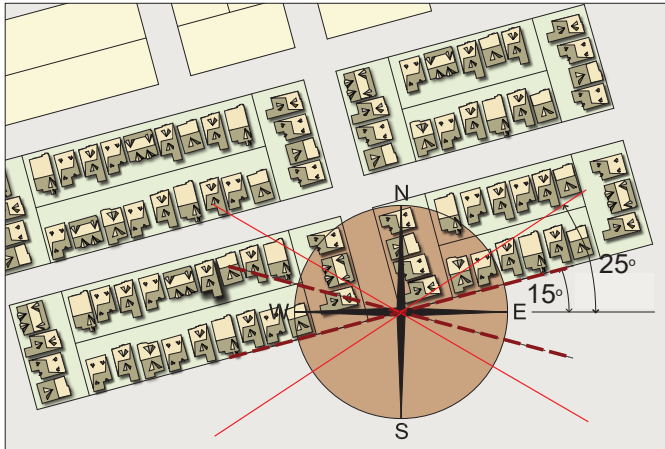
2.2 Roads

2.2.1 General

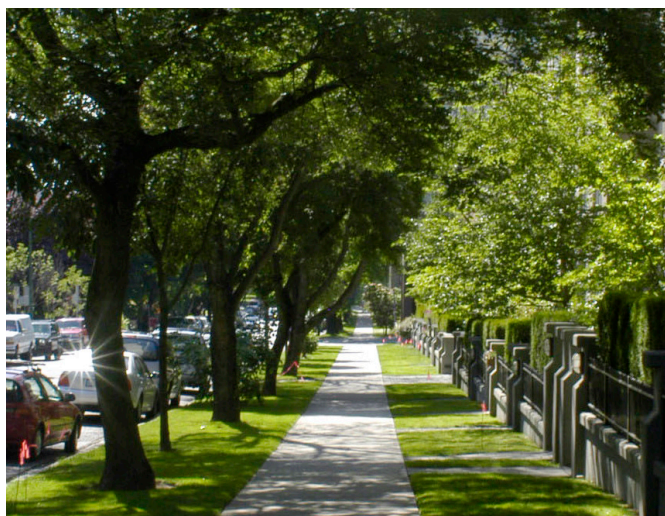
1. All Roads will be safe, accessible, secure and shall implement the relevant policies of the Accessibility for Ontarians with Disabilities Act.
2. Design the road and block pattern to emphasize connections and walkability both internally and with surrounding neighbourhoods, through a grid or modified grid pattern discouraging cul-de-sacs, p-loops and crescents, except where necessary due to grading and topography.
3. For blocks with grade-related residential units, encourage street and block alignments within 25-degrees of geographic east-west to maximize passive solar orientation of buildings.
4. The design of all roads shall include defined and, wherever possible, continuous zones for plantings, street furnishings, utilities, pedestrian sidewalks, bicycle paths, and vehicular pavements.

COVID-19: wider sidewalks to support social distancing, ensure access to green space through variety of park spaces above and beyond requirements





To maximize passive solar orientation the street and block alignment should be designed within 25-degrees of geographic east-west .



5. Sidewalks shall be constructed to municipal standards to facilitate pedestrian and bicycle circulation.
6. Incorporate enhanced landscape strips into the streetscape to provide a buffer between pedestrians and moving vehicles.
7. Plant street trees to create and enhance the urban tree canopy while providing shade over sidewalks.
8. Introduce green infrastructure, such as bioswales, within the public right-of-way to enhance ground water infiltration and improve water quality as part of a comprehensive water management plan.
9. Where feasible, implement curb cuts along sidewalks and driveways to allow water to flow onto planted zones or infiltration basins.
10. Where possible, roads should terminate at public facilities or landmark buildings.
11. Provide a comprehensive and consistent approach to the design of the elements that make up the street environment to enhance the character of Brookhill and contribute to creating a sense of place. These elements include street furnishings and plantings.
12. Provide for a coordinated family of street furnishings that include street lights, seating, waste and recycling receptacles, community information boards, bollards, bicycle lock-ups, paving, and planters;

;

2.2.2 Arterial Roads

Refer to Table C-2 in Appendix C of the Official Plan for criteria for road classification types in the Municipality.

Type A Arterial – Bowmanville Avenue

Bowmanville Avenue bisects the Brookhill Neighbourhood, its surrounding neighbourhoods and the broader Municipality of Clarington. Bowmanville Avenue will accommodate a range of travel modes, including passenger vehicles, transit, cyclists, and pedestrians.

1. Bowmanville Avenue shall have a maximum right-of-way of 36.0 to 45.0 metres.
2. Bowmanville Avenue will include boulevards on both sides of the pavement area, 2.0 metre sidewalks on both sides, and a 3.0 metre separated multi-use path on one side.
3. A raised centre median shall be a minimum of 5.0 metres and will include trees, shrubs, and ground covers.
4. Transit facilities will be provided on Bowmanville Avenue.
5. Individual, direct access from any development site to Bowmanville Avenue shall not be permitted.
6. Buildings that abut Bowmanville Avenue shall present a facade with architectural detailing and landscape features that address the Bowmanville Avenue frontage. Reverse frontage development shall not be permitted adjacent to Bowmanville Avenue.
7. Consider high efficiency LED street lighting to maximize energy.

Type B Arterial – Green Road and Nash Road

Type B Arterial Roads provide important connections between residential neighbourhoods and other community functions. They accommodate a range of travel modes, including passenger vehicles, transit, cyclists, and pedestrians.

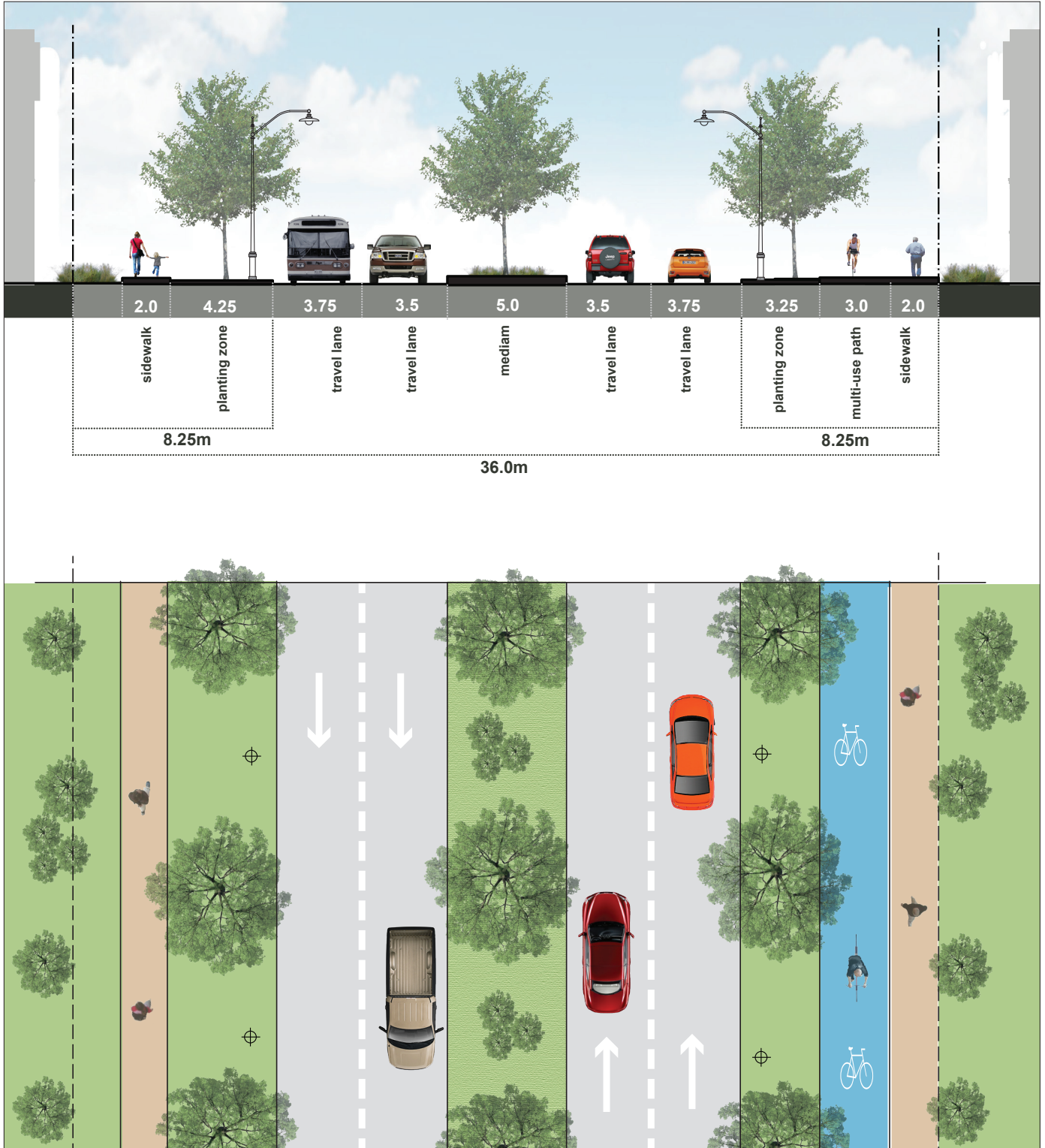
1. Type B Arterial Roads will have a maximum right-of-way of 30.0 to 36.0 metres.
2. Type B Arterials will include boulevards on both sides of the pavement area, 2.0 metre sidewalks on both sides, and a 3.0 metre bicycle lane on one side.
3. Transit facilities may be accommodated on any Type B Arterial Roads.
4. Individual direct access to any development site abutting a Type B Arterial Roads shall be limited to minimize disruptions to traffic flow and to maximize safety and the attractiveness of the road.
5. Buildings that abut Type B Arterial Roads shall present a facade with architectural detailing and landscape features that address the road frontage. Reverse frontage development shall not be permitted adjacent to any Type B Arterial Roads.

Local Corridor: building setback, type of uses, higher density development

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To be confirmed

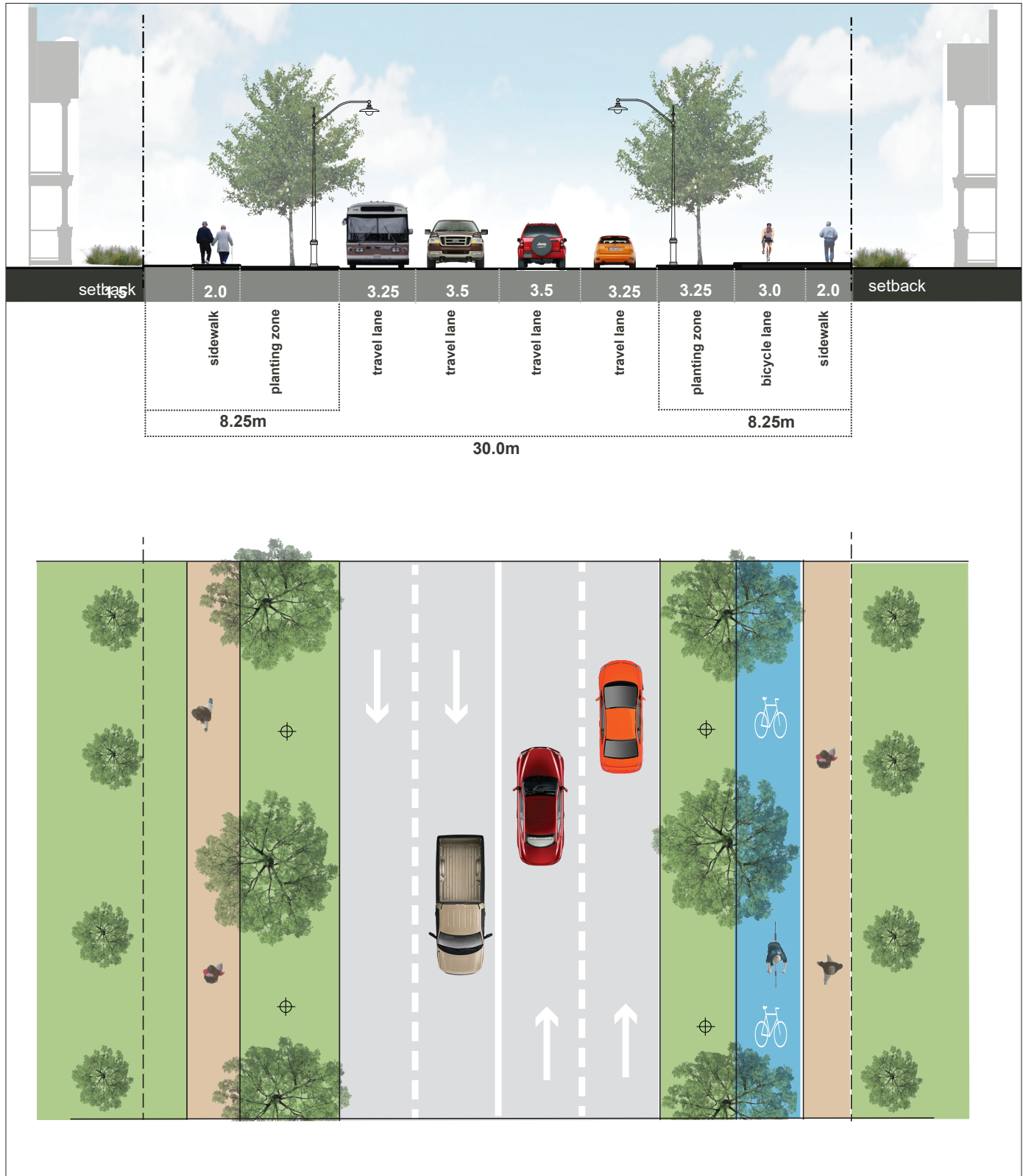
Arterial Type A - Bowmanville Avenue (36.0 metre ROW)



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To be confirmed

Arterial Type B - Green Road/Nash Road (30.0 metre ROW)





Type C Arterial – Longworth Avenue

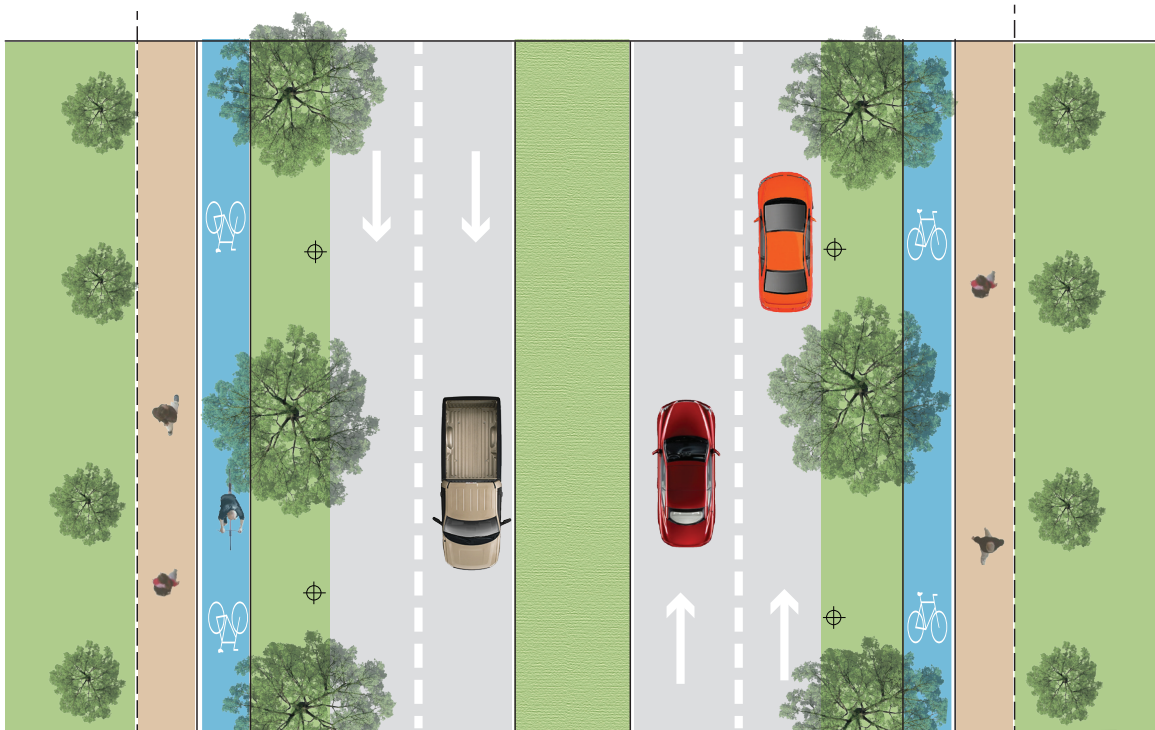
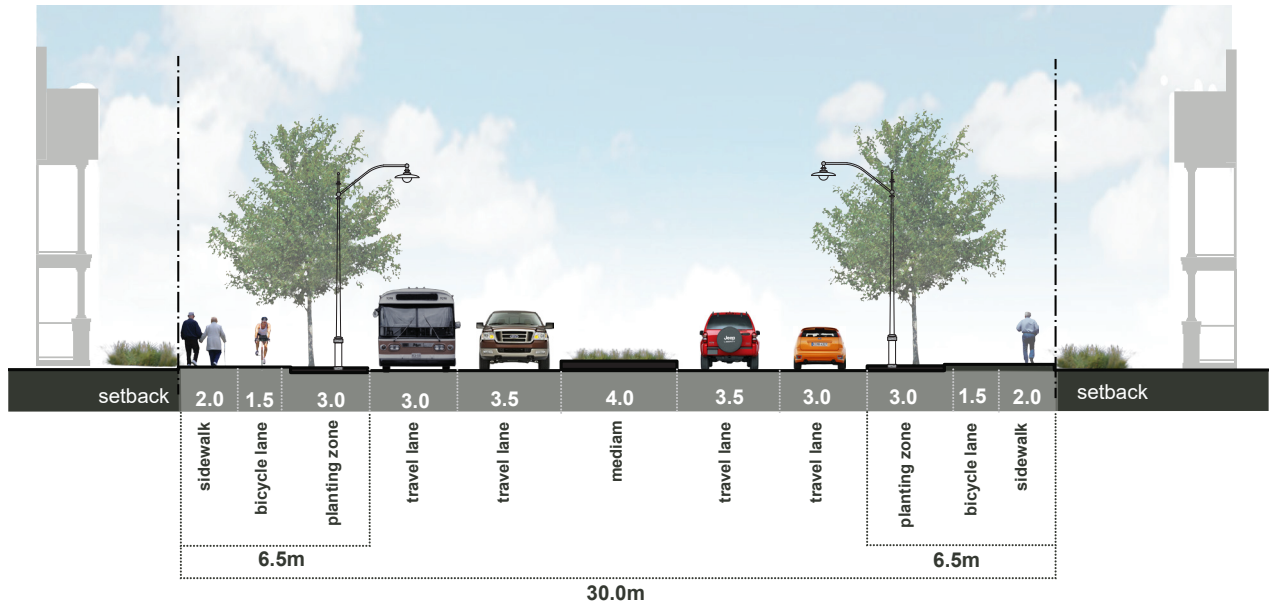
Type C Arterial Roads provide important connections between residential neighbourhoods and other community functions. Longworth Avenue will provide an east-west connection for the Brookhill Neighbourhood.

1. Type C Arterial Roads will have a maximum right-of-way of 26.0 to 30.0 metres.
2. Type C Arterials will include boulevards on both sides of the pavement area, 2.0 metre sidewalks on both sides, and a 1.5 metre bicycle lanes on both sides.
3. Transit facilities may be accommodated on any Type C Arterial Roads.
4. A raised centre median shall be a minimum of 4.0 metres and will include trees, shrubs, and ground covers.
5. Optional parking lanes or lay-by parking may be permitted within the Village Corridor designation to support the permitted ground floor retail of mixed-use buildings.
6. Individual direct access to any development site abutting a Type C Arterial Road shall be limited to minimize disruptions to traffic flow and to maximize safety and the attractiveness of the road. Within any area designated as a Village Corridor within the Brookhill Secondary Plan, individual direct access from a Type C Arterial Road to any development site shall be limited and subject to approval.
7. Buildings that abut Type C Arterial Roads with medians shall present a facade with architectural detailing and landscape features that address the road frontage. Reverse frontage development shall not be permitted adjacent to any Type C Arterial Road.

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To be confirmed

Arterial Type C - Longworth Avenue (30.0 metre ROW)



2.2.3 Collector Roads

1. Collector Roads with no medians shall have a maximum right-of-way of 23 to 26.0 metres.
2. Collector Roads may include optional 3.0 metre on-street parking on both sides of the road.
3. Collector Roads will have boulevards on both sides of the pavement and will accommodate a grass verge with street trees and 1.5 metre sidewalks on both sides. Separated or shared space for cyclists should be provided with or without separation from traffic lanes.
4. Transit facilities may be located on any Collector Road.
5. Individual direct access to any development site shall be limited to minimize disruptions to traffic flow and to maximize safety and the attractiveness of the road.
6. Buildings that abut Collector Roads shall present a facade with architectural detailing and landscape features that address the road frontage. Reverse frontage development shall not be permitted adjacent to any Collector Road.

2.2.4 Local Roads

Local Roads connect to Collector Roads and link with public spaces.

1. Local Roads should be designed with a maximum right-of-way width of 17.0 to 20.0 metres.
2. The road surface, including a parking lane on one side of the road (that could alternate to both sides of the road) shall be a maximum of 8.5 metres.
3. Boulevards on both sides of the pavement shall be a maximum of 5.75 metres and will accommodate a grass verge with street trees and 1.5 metre sidewalks on both sides.
4. Individual direct access onto Local Roads is permitted.

5. Buildings that abut Local Roads shall present a facade with architectural detailing and landscape features that address the road frontage.
6. Local Roads that are intended for use over shorter distances may be designed with a reduced maximum right-of-way width of 17.0 metres, with reduced boulevard widths of 4.75 metres on each side to accommodate utilities.

Green Streets - Single-Loaded Local Roads

Green Streets can be Collector or Local Roads that are typically single-loaded and run adjacent to natural features or significant natural areas. As such, they provide the opportunity to enhance the character of the community.

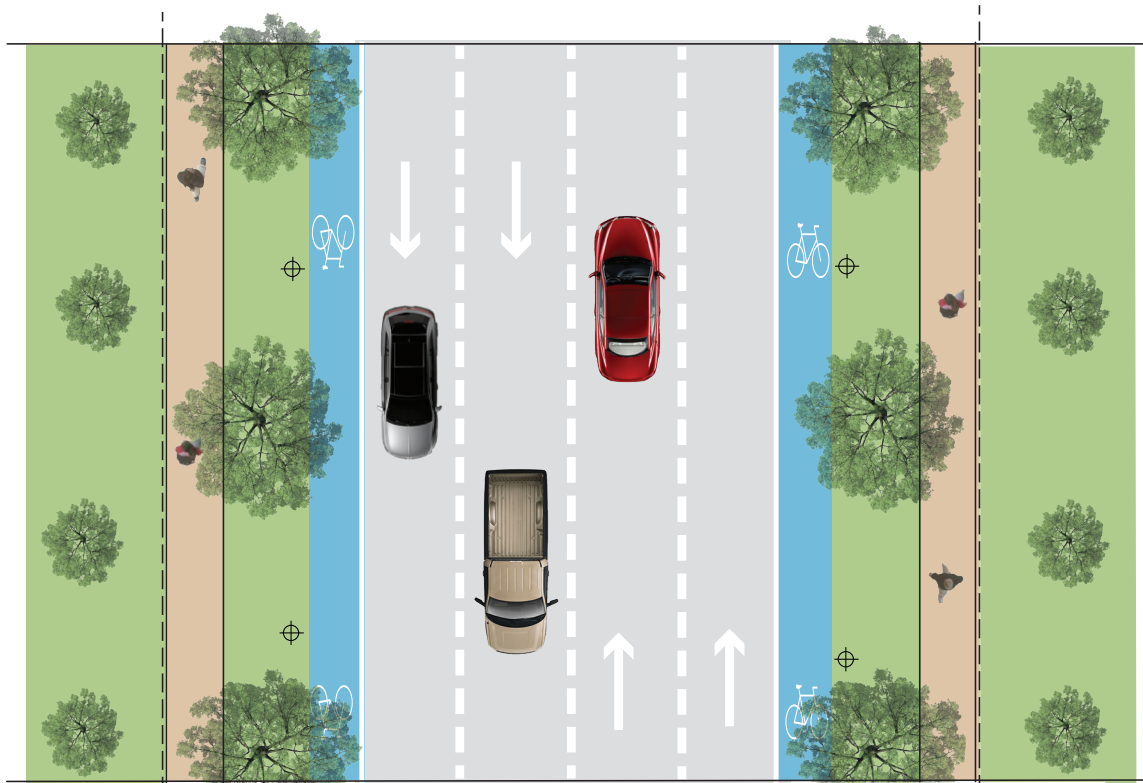
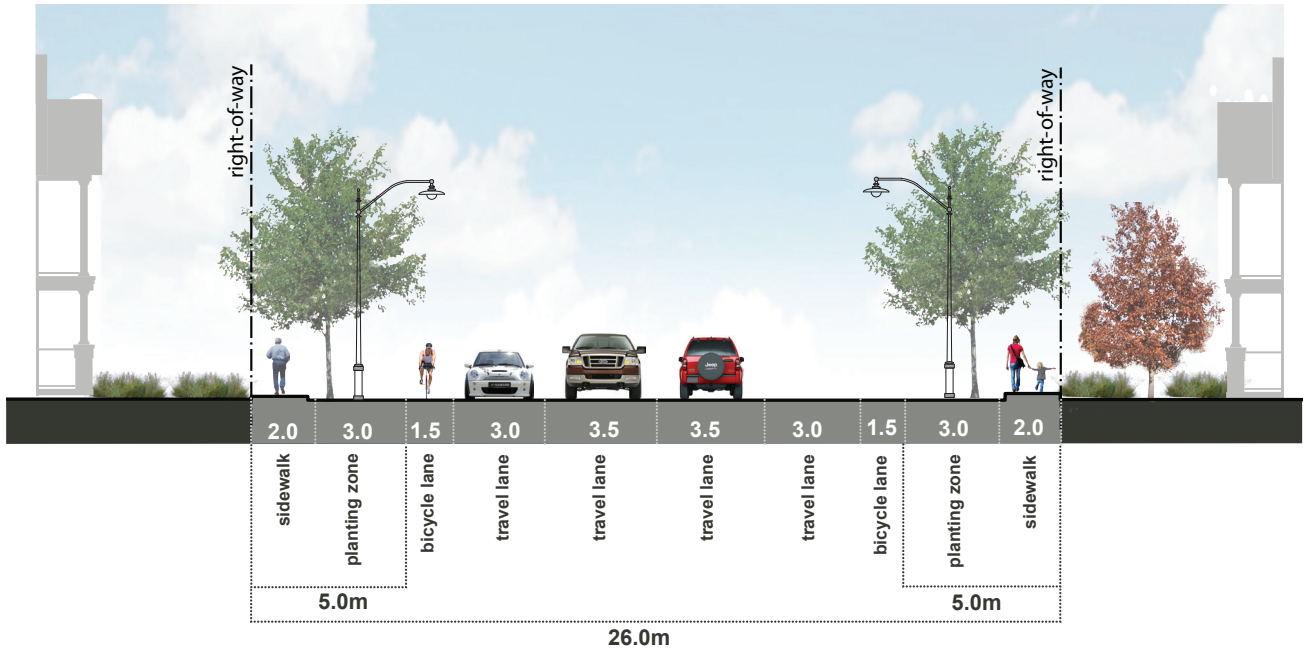
1. Single-loaded Collector or Local Roads, adjacent to natural features will provide unobstructed views to the natural areas and, where appropriate, accommodate a trail along the edge of the street for active uses, such as walking and cycling.
2. Include opportunities for pedestrian amenities such as and interpretive signage.
3. Single-loaded Local Roads along Bowmanville Avenue will have a reduced right-of-way of 15.0 to 17.0 metres and sidewalks on both sides. Bowmanville Avenue will accommodate a multi-use path along the west side of the road for active uses, such as walking and cycling
4. Include robust landscaping in the public right-of-way, including distinct deciduous canopy trees and shrubs.

A cross section for Green Streets can be included if required to illustrate layout.

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To be confirmed

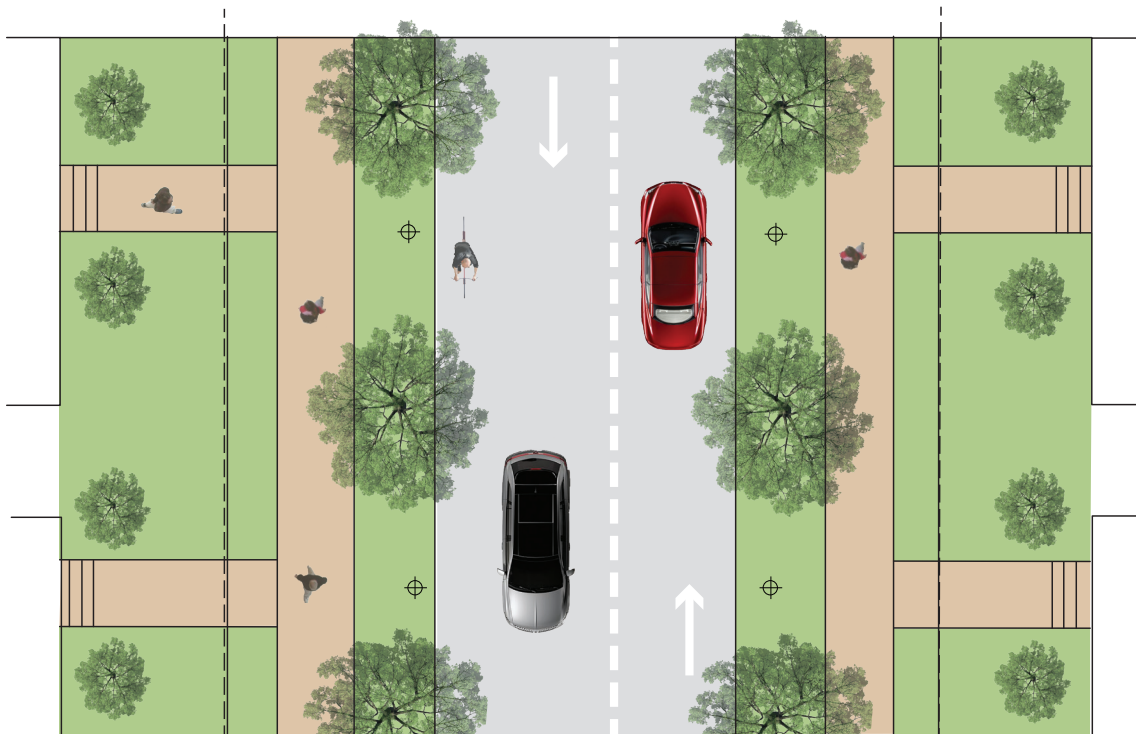
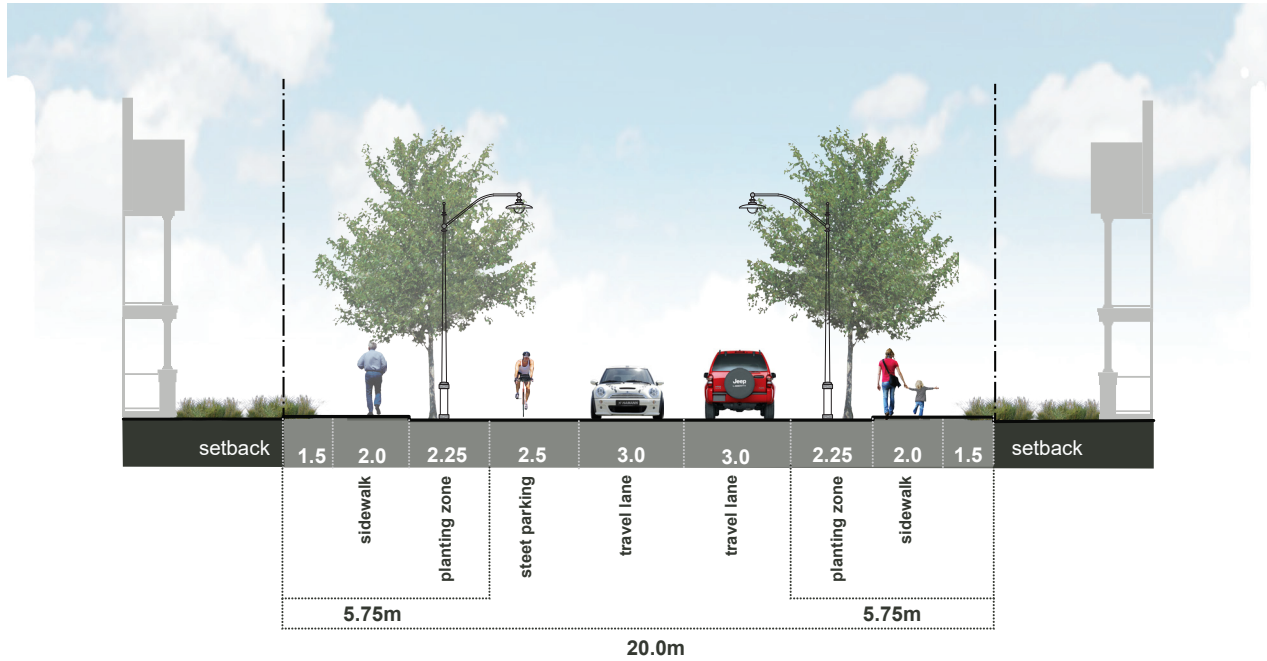
Collector Road - 26.0 metre ROW



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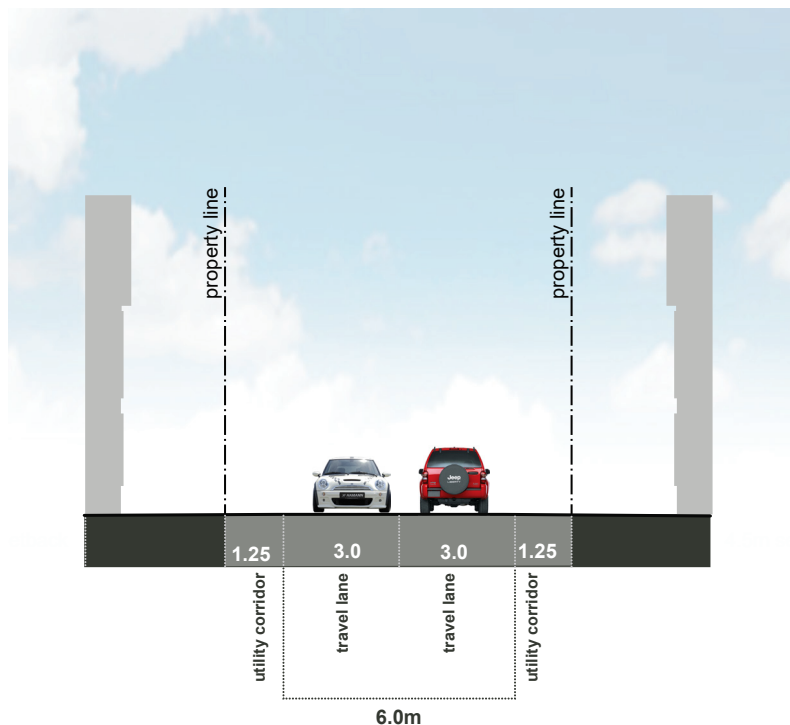
Local Road - 20.0 metre ROW

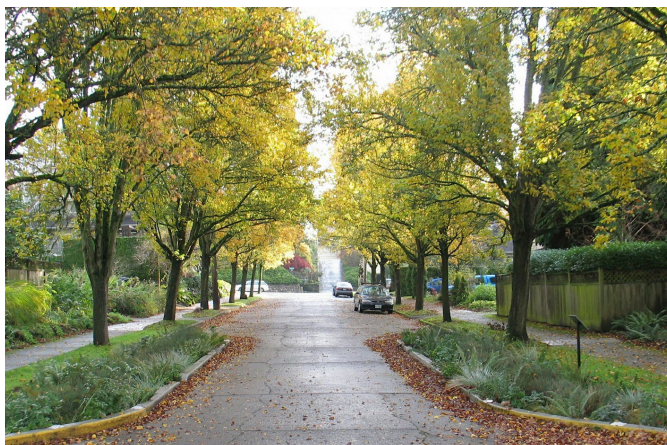


2.2.5 Lanes

The use of rear lanes provides significant benefits such as enabling continuous street tree planting and creating safer pedestrian environments through the removal of driveways from the street edge. Lanes may be used in key locations where private access along prominent streets should be minimized.

1. Lanes should be provided along Arterial Roads where garages and front driveways are not permitted, and in areas where driveways will detract from the character of a special location, such as within the Village Corridor.
2. Lane right-of-ways shall be a maximum of 8.5 metres with a paved surface of 6.0 metres and a 1.25 metre utility corridor on either side of the lane.
3. The use of permeable materials shall be encouraged in lane construction in areas where sufficient drainage exists.
4. The garage shall be set back a minimum of 0.6 metres from the lane right-of-way.
5. Ensure rear lanes are between 130 to 160 metres in length, and follow emergency services standards.
6. Lanes may also be considered in the rear of residential units facing Collector Streets or Neighbourhood Parks.
7. Provide landscape areas where possible to enhance lane appeal and promote their use as gathering/playing areas.





2.2.6 Streetscape Elements

Sidewalks

1. Sidewalks should be continuous throughout the community and constitute an integral part of the pedestrian system to promote active transportation and should be designed as follows:

- 1.5 metres on local roads
- 1.8 to 2.0 metres on collector and arterial roads
- 1.8 to 3.0 metres in high pedestrian areas in the Village Corridor and Neighbourhood Centre particularly where retail is provided along the street.

In all cases, sufficient space shall be provided for street furnishings, public utilities, tree plantings, and transit shelters.

2. In order to accommodate the needs of persons with disabilities, and the elderly, sidewalks should be designed to applicable municipal standards.

Street Trees and Planting

1. Plant street trees to contribute to the urban tree canopy, to incorporate a buffer to separate the pedestrian from moving vehicles, and to create a canopy and shade over sidewalks in order to reduce heat island effect and enhance pedestrian comfort and safety.

2. Where appropriate, plant drought resistant and salt tolerant landscaping within medians to visually soften the pedestrian environment.

3. Ensure a comprehensive planting and soils strategy based upon species diversity, resiliency, and urban tolerance.

4. A diversity of native tree species should be considered and delivered along each street.

Add Prominent Intersection guidelines.

Street Furniture

1. Concentrate street furniture in areas with the highest pedestrian traffic, such as Village Corridor Neighbourhood Centres, key intersections, and parks.
2. Streetscape furniture should include elements such as pedestrian scaled lighting, benches, bicycle racks, newspaper boxes and trash bins and where possible should be manufactured from recycled material.

Signage

1. Develop a comprehensive wayfinding strategy, including directional signage and mapping at key locations, such as mixed use nodes, neighbourhood centres, and key intersections.

Pedestrian Crossings

1. In order to promote walkability and a pedestrian-focused environment, provide a formal pedestrian crossing at every four-way intersection in high pedestrian areas.
2. Provide signalized pedestrian crosswalks at locations where important destinations and/or significant walking traffic is anticipated, such as near retail shops, schools, and places of worship, provided traffic warrants and minimum spacing requirements are met.
3. Pedestrian crossings will have a minimum width of 3.0 metres, be continuous, and connected to adjacent sidewalks.
4. To enhance pedestrian crossings visibility and quality, utilize distinctive feature paving through the use of alternative pavement markings or materials to minimize the conflict between vehicles and pedestrians. At minimum, crossings are identified with distinctive painted lines.
5. Minimize the height of curb cuts to facilitate wheel-chair and stroller usage in high pedestrian areas.





On-Street Parking

On-street parking functions as a traffic calming device to slow traffic and acts as a safety buffer separating the pedestrian realm from vehicles.

1. Parking should be provided on at least one side of the street for local and collector roads.
2. Provide lay-by parking or on-street parking bays on both sides of the road in the Village Corridor.

2.3 Transit Supportive Guidelines

A complete community must ensure that a compact, mixed use development with a variety of residential forms, makes transit feasible, efficient, and accessible to all sectors of the public. Transit supportive systems require densities and development patterns that connect people of all ages to homes, jobs, and other places linked to their lifestyles. Transit supportive developments support the efficient use of transit facilities, help to reduce greenhouse gases, and improve public health.

1. Promote transit-oriented development as a priority tool to achieve sustainable and complete communities.
2. Provide local transit within a 400 metre (5 minute) walking distance of residential development to support active transportation such as walking and cycling, and to reduce automobile dependence.
3. Transit stops should be located as close to intersections as possible, and their location coordinated with neighbourhood trail connections and building entrances.
4. Ensure the coordination of the transit network with the multi-use trails and paths system to enhance accessibility to transit.
5. Provide a range of transit facility amenities including but not limited to: weather protection, seating, garbage and recycling receptacles, lighting, route information, and automated fare machines at all major transit stations.



6. Surface texture changes should be provided at transit stops to assist the visually challenged in locating the stop and/or shelter location.
7. Support bike use through the provision of bike racks, bike storage, and lockers at transit stops and stations.
8. Where four-sided transit shelters are not possible, provide overhead open-air canopies to protect transit users from sun, rain, and snow.

2.4 The Greenlands System

The Greenlands System is a major functional, structural, and aesthetic component of the Brookhill Neighbourhood and should be designed to provide a fair distribution of amenity spaces for a range of users.

The natural environment, urban forest, parks, open space, and trail systems are essential components of a healthy, sustainable community ensuring residents have convenient access to a connected and diverse range of recreational opportunities.

2.4.1 Natural Heritage Features

The Natural Heritage System (NHS) contributes to the community's character and is a key structural element of the Brookhill Neighbourhood.

The following guidelines aim to protect, restore and enhance the natural heritage system, while mitigating any existing or potential negative impacts due to urbanization and development. They ensure existing natural and environmental lands are woven into the fabric of the community as key features providing richness in the parks and open space system.

1. Significant natural heritage features and functions, linkages between NHS features, and tableland vegetation shall be protected, restored, and enhanced, where appropriate.
2. Integrate the NHS as a key structural element by providing appropriate views, vistas, and connections to the NHS by utilizing terminal views at the ends



COVID-19: ensure access to green space through variety of park spaces above and beyond requirements



of prominent streets and by providing for a range of development interfaces to ensure opportunities for public visual and physical access, while also limiting access where necessary.

3. Ensure connectivity between natural heritage features, maintaining, and where possible improving or restoring corridor function.
4. Consider local east-west connections, provided through such elements as parks and/or trails, to provide linkages between the primarily north-south NHS.
5. Connect and integrate the NHS with the open space network and the local and regional trail systems to buffer and expand ecological features and functions, as opportunities arise.
6. Natural heritage features should be physically and visually accessible from the abutting roads.
7. Preservation of existing vegetation should be encouraged. Where necessary, indigenous and ecologically complementary planting should be encouraged.

Valleylands

1. Where appropriate, provide opportunities for passive recreation along the Bowmanville Creek valleylands, connecting to the Bowmanville Valley Conservation Area.
2. Provide naturalization planting and restoration to enhance urban ecology and function of valleyland features.

Woodlands

1. Preserve and expand existing tree cover to connect and buffer protected woodlands and other natural areas and to mitigate heat island impacts.
2. Provide opportunities for naturalized plantings and landscape restoration to enhance and help to establish local ecological features.

3. Protect the water table and drainage patterns to ensure the long term sustainability of existing woodlots within development areas.
4. Discourage direct access from private properties backing onto woodlands.
5. Limit pedestrian access through trails and provide only where there is no long term impact to the existing vegetation and wildlife communities.
6. Discourage lighting to protect ecological features and functions of the woodland natural setting.



Urban Forest

Trees provide ecological services that benefit human and environmental health, such as reducing the heat island effect, sequestering greenhouse gases, providing shade in the summer, separating pedestrians from vehicular traffic, and contributing to more appealing sidewalks and streets.

1. Provide robust species selection to anticipate climate change conditions and operational constraints.
2. Provide street trees on both sides of the road in the public right-of-way.
3. Encourage a diversity of tree species along each road, native to the Municipality and Region, non-invasive, drought and salt tolerant, and low maintenance.
4. A double rows of trees may be used in key areas, such as adjacent to parks and where a wider boulevard exists.
5. Encourage the delivery of alternative planting strategies along high-pedestrian areas such as **Silva-cells**, sufficient soil medium, continuous planting trenches, etc. to sustain long-term growth and healthier tree life.





2.4.2 Parks and Open Spaces

An open space network that is connected to the natural environment, and throughout the community, and provides for a variety of open spaces, parks, and recreation facilities creates opportunities for improved public health. Convenient access to these amenities encourages residents to walk and cycle, in addition to providing places for gathering, socializing, and active and passive recreation.

a) General

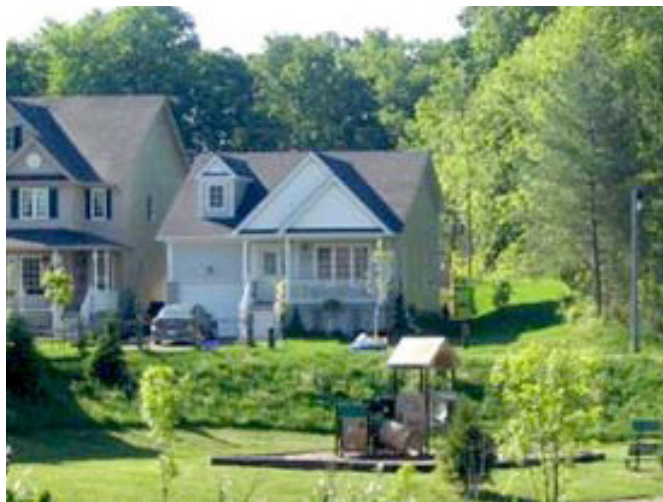
1. Incorporate Crime Prevention through Environmental Design (CPTED) principles into the design of parks to ensure clear views into and out of surrounding areas, including:
 - adequate lighting;
 - front buildings overlooking public spaces, especially playgrounds which should be highly visible to public streets and/or houses to enhance safety;
 - proper signs and design for ease of access and egress; and,
 - mix of activity for constant use of the space.
2. New trees and landscaping within parks should be of non-invasive plant materials, and where possible, should be salvaged from the site or the local area.
3. Provide lighting to be Dark Sky/Nighttime Friendly compliant.
4. Incorporate LED lighting or solar powered lighting for park pathways and other public spaces to reduce electric energy supply in the public realm.
5. Consider public art as focal points in open spaces to reflect the cultural heritage of the location. Public art can include memorials, sculpture, water features, or individual installations at visually prominent sites.



b) Neighbourhood Parks

The Neighbourhood Parks are located on the major road network and adjacent to the Natural Heritage System to support active transportation and connections to a community trail system.

1. Neighbourhood parks shall be centrally located to ensure that residents are within a 5 minute walk (400m distance) of an open space. This encourages daily physical activity and creates a central focus and gathering space for the neighbourhoods.
2. Neighbourhood Parks should be sufficient in size (a minimum of 2.0 hectares) and configuration to accommodate a variety of active and passive recreational activities.
3. Neighbourhood Parks should have significant road frontage on all four sides. Street frontage shall not be less than 30% of the park perimeter.
4. Pedestrian access to parks should be clearly defined with landscape or architectural elements to ensure an appealing park presence.
5. Locate neighbourhood parks adjacent to school sites, where appropriate, to allow for shared amenities, such as parking lots and recreational play fields. Construct playfields using innovative and appropriate durable turf treatments to minimize maintenance and extend the life of the playfield.
6. Provide on-street parking adjacent to the park as it creates a barrier edge. Parking can be either lay-by parking or on-street, depending on the scale of the park and the nature of the streetscape, local versus collector road.
7. Bicycle parking should be provided.



c) Parkettes

A Parkette is a smaller component of the public open space system, that is typically soft surfaced and serves the immediate adjacent population.

1. Parkettes are smaller parks that vary in size from 0.5 to 1.0 ha and are accessible within a 5-minute walk (400m distance). These parks occupy smaller park blocks in residential areas and provide space for gathering and passive recreation.
2. Locate parkettes to achieve significant public exposure and access. Urban design options include





surrounding the park with streets or fronting dwellings directly onto the parkette to create visually attractive 'edges' to these spaces and eyes-on the park.

3. Parkettes should strive for 100% of public frontage, including public streets, schools or the natural heritage system.
4. Pathways should be provided which encourage safe and efficient pedestrian circulation.
5. Parkettes should provide areas of seating and shade.

d) Public Squares

1. Public squares shall be incorporated within the Neighbourhood Centre and the Village Corridor.
2. Public Squares shall be located at the prominent intersection of Bowmanville Avenue and Longworth Avenue to create small, publicly accessible, focal areas for pedestrians in a high traffic area.
3. Public Squares will be designed as high quality and interactive areas and will include amenities such as appropriate paving, landscaped areas, signage, benches, refuse containers, bicycle stands, lighting, public art and other elements that enhance the social and physical environment.
4. View corridors terminating at a public square should be highlighted through landscape treatment and/or built form elements.



e) Urban Agriculture

Urban agriculture provides the opportunity for an alternative use of green space, as a transition in land uses such as community gardens, and traditional farm areas at community peripheries.

1. Promote initiatives such as sustainable food production practices as a component of a new development.
2. Support urban agriculture as part of the neighbourhood's character and open space system, while also providing a transitional use between the natural and built environments.



f) Gateways

1. Streetscaping features at identified gateway corners shall include enhanced landscaping and coordinated fencing to frame the entry into the community.
2. Gateway features, such as community signage, low walls, fencing or enhanced landscape treatment, shall be incorporated in the design of entry road intersection and shall be coordinated in design and materials with adjacent structures and consistent along main road right-of-way.
3. Primary roads into the community should include a planted centre median and other design features to signify their importance.
4. Intersections should have distinctive surface treatment for pedestrian crossings, including wider sidewalks and connections to bus shelters
5. Noise attenuation fences should only be used after all other mitigating options have been explored. Where fences are located adjacent to gateways, their material and design should be coordinated with streetscape features.



g) Views and Vistas

Enhancing the views of important community elements for residents can assist in the creation of a sense of place. The best way to achieve those views is through the orientation of streets and buildings. Streets shall be oriented to maximize views to the Natural Heritage System and the Bowmanville Creek valley. These views are an opportunity to reinforce these elements as landmark features.

1. Existing natural features should form the basis for directing views.
2. Streets should be oriented to reinforce vistas and views to natural features and open spaces.
3. Significant views are to be protected through the location and configuration of open space opportunities and made available to the public.
4. Where possible, community buildings such as schools, churches, and community facilities should be sited as view terminations.
5. Buildings that terminate views should be designed as special landmark buildings.





h) Stormwater Management Facilities

Stormwater management facilities should be developed in a manner that will yield the greatest environmental and amenity benefit to the neighbourhood, which can be achieved through first reducing stormwater run-off and flow to the ponds, and secondly, through the design and landscaping of the pond.

Stormwater management facilities will be provided in accordance with [Chapter 20 of the Official Plan and Municipality's 'Stormwater Management Planting Guidelines'](#)

1. Encourage Innovative Stormwater Management Design by incorporating stormwater management ponds as part of the open space system, integrated as a community amenity.
2. Consider on-site treatment of stormwater through the use of green infrastructure such as bioswales, at source infiltration, and permeable pavement.
3. Enhance views and access to ponds by designing a portion of the pond to be bounded by either streets and/or open space.
4. Design ponds to blend with the natural landscape. Where feasible, conceal inlet and outlet structures using a combination of planting, grading, and natural stone.
5. Fencing of ponds is discouraged, except where necessary along rear or flankage residential property lines.
6. Pond Design and Landscaping:
 - a. Ponds are located offline and may contribute to buffering environmental features;
 - b. Ponds are landscaped to contribute to the urban tree canopy, add to the natural features of the community, and support wildlife habitat.
 - c. Ponds are designed as key focal/visual features within the community in addition to functional objectives related to flow moderation and water quality; and,

- d. Ponds are designed as part of the overall pedestrian and trail system with view points and interpretive signage. Public walking/ cycling trails encircle ponds and extend along stormwater channels.

2.5 Active Transportation

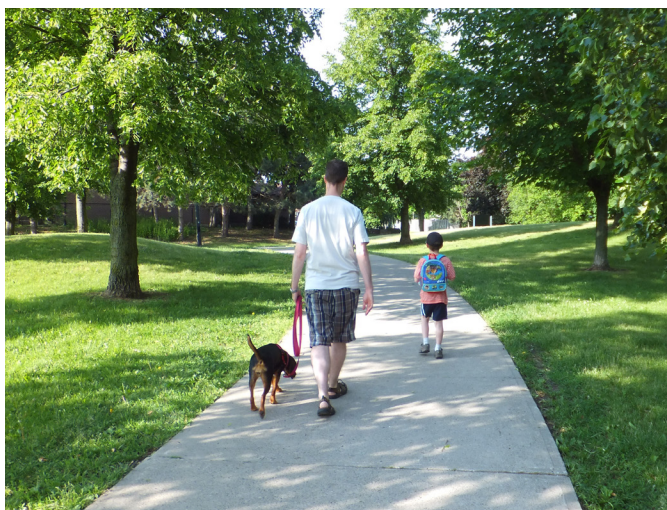
2.5.1 Pedestrian and Cycling System

Encourage active transportation as alternative modes of transportation, while supporting physical activity through the provision of a linked system of walking and cycling trails that ensure residents have increased access and mobility options to local destinations for work and play.

1. Implement a network of continuous and varied active transportation facilities - inter-connected pedestrian and cycling routes and trails, walkways, sidewalks, bicycle lanes - that link the community with surrounding neighbourhoods, are integrated with existing and future public transit infrastructure and connected to regional/local sidewalk and open space systems.
2. Encourage safe routes to schools by providing a network of connected local streets with inherent traffic calming measures (such as reduced lane widths, raised intersections, slower vehicle speeds, on-street parking, crosswalks) to ensure safe use by young pedestrians and cyclists.
3. Accommodate a cycling network that includes bike lanes and off-road cycling or multi-use trails. Connect the cycling network to existing bike lanes and trails and follow the standards of the Transportation Master Plan.
4. Design shared off-street pedestrian and bicycle paths for the requirements of the route. Provide for a continuous, linked, legible, and clearly marked system of trails throughout the community, as part of the open space network with the separation of cyclists and pedestrians.

Multi-use Trail along Bowmanville Avenue - add specific guidelines - refer to Regional Road TMP





5. Provide, where feasible, clearly marked bike lanes on collectors, and consider further separation by including a painted buffer.
6. Wherever possible, pedestrian and cycling routes should travel to or from transit stops and GO Transit.
7. Design trails to accommodate a range of users and abilities and be barrier-free, where appropriate. Curb-cuts must be provided to improve access at road crossings.
8. Trails must be clearly signed regarding permitted uses and speed. Provide wayfinding signage and/or trail markers throughout the trail network.
9. Design trails to minimize and mitigate impacts on natural heritage features where they are permitted. Consider the use of permeable materials for trail construction in areas where sufficient drainage exists.
10. Specifically focus lighting on primary trails at neighbourhood connections. Lighting is not acceptable in natural heritage features.
11. Avoid locating trails in low-lying areas. Where they do occur implement boardwalks, bridges, culverts and swales as support systems.
12. Use native, non-invasive species that can contribute to the urban tree canopy along trails abutting natural features and coordinate planting design to shade trails.

Pedestrian linkages

1. Design public pedestrian walkways to include Crime Prevention Through Environmental Design (CPTED) principles in order to provide a safe and comfortable environment for pedestrians.
2. Provide pedestrian connections through and to residential areas to facilitate accessibility and promote visibility and safety.

3. THE PRIVATE REALM



The private realm within the Brookhill Neighbourhood is comprised of the built form development blocks and their relationship to open spaces and roads with respect to their location. The residential, institutional, and commercial/mixed use buildings within a community contribute to its character and can assist in further defining and complementing the public realm. Development of the private realm and built form shall be based upon principles of transit-supportive development, place-making, and design excellence.

Place-making

Place-making involves a multi-faceted approach to the planning, design, and management of private development including streetscapes. Place-making is the recognition and enhancement of a community's unique aspects/assets. Recognizing the unique aspects of a neighbourhood requires an understanding of its existing attributes and how they contribute to creating a recognizable and defined character. They assist in understanding the physical make-up of an area and help to identify what sets an area apart from its surrounding context. These attributes are collectively experienced from the viewpoint of the public street.



Design Excellence

Good urban design practices and sustainability guidelines will promote excellence in the design of the private realm. While the specifics of each development proposal may vary, the overall objectives will remain the same throughout the Brookhill Neighbourhood. The objectives will include:

- creating distinctive and appealing streetscapes through attention to building design and detailing;
- ensuring appropriate massing, materials, and building siting;
- design compatibility;
- identifying design requirements for specific priority lots having highly visible elevations; and,
- supporting a pedestrian friendly streetscape.



This section of the document provides general guidance for the design of built form and how it should address the streetscape and open space in the private realm. These Guidelines are to be read in conjunction with the policies of the Brookhill Secondary Plan.

3.1 Guidelines for all Buildings

All development shall ensure excellence in design, be designed to achieve a high degree of environmental sustainability and demonstrate high quality architectural detailing, in accordance with the following guidelines

1. In the Brookhill Neighbourhood new building design shall:
 - a. Be barrier free and universally accessible to enable the widest spectrum of people, regardless of age or ability, to live within the community;
 - b. Have a textured architectural quality that can be achieved by introducing variation in certain elements of the façade treatment such as balconies, bay windows and porches, cornices, window trim, entrances, canopies, and the articulation of the building mass;
 - c. Promote street space that is scaled to the pedestrian and organized to present an appropriate façade to all adjacent public streets. Primary pedestrian entrances shall provide direct and universal access to the public sidewalk;
 - d. Include pedestrian weather and sun protection systems including awnings, canopies, or front porches along the sidewalk edge of pedestrian streets, adjacent to parks, and at entrances to buildings;
 - e. Ensure access from sidewalks and public open space areas to primary building entrances shall be convenient and direct, with minimum changes in grade, and shall be accessible to people who are mobility challenged; and,
 - f. Where feasible, have all transformers and other above ground utilities located within the building, or on private property located away, and/or screened, from public view.
2. All development shall demonstrate design excellence and compatibility with its surrounding context. Architectural detailing, landscape treatments, colour and building materials shall be representative of the highest quality possible.
3. Massing and siting of important buildings will acknowledge their location in the plan through the use of architectural treatments, such as tower elements and/or upgraded elevations.
4. New development will be compatible with adjacent and neighbouring development by ensuring that the siting and massing of new buildings does not result in undue adverse impacts on adjacent properties particularly in regard to adequate privacy conditions for residential buildings and their outdoor amenity areas.
5. Back-lotting or reverse lot frontages shall be avoided.
6. Each residential block shall contain a mix of unit types with a variety of elevations.
7. Where side and rear elevations of units are exposed and visible from a public space or visible from an Arterial Street, they shall have upgraded elevations that are consistent and continuous in design quality and main massing material as the front elevation. Continuous architectural detailing and material organization is required.
8. When siting different unit types on a street, appropriate transition should be considered to avoid drastic change in height.



3.2 Residential Development

3.2.1 Housing Typologies

a) Single Detached and Semi Detached Dwellings

1. Houses should be designed to frame the street edge with a consistent setback, and have front doors, windows, and entry features facing the road to create a consistent street wall.
2. Single Detached and Semi Detached Dwellings shall be 1 to 3 storeys in height.
3. The front elevation of the house should be designed so that its front entrance design and architectural elements reduce the visual dominance of the garage and the front drive.
4. Garages shall not protrude beyond the main front wall of the dwelling unit. Garages shall be set behind or flush with the main building face or accessed from a rear lane.
5. The setback to the main building face should be from **3.0 to 6.0 metres** from the edge of the right-of-way. The setback to a main building face, which could be the main front wall, second floor room over or beside the garage, or significant element such as a roofed porch or verandah.
6. Porches, stairs, canopies and other entrance features can encroach into the required setbacks.
7. Driveways should be designed to reduce the amount of asphalt on front yards and enhance the visibility of the street.
8. Semi-detached dwellings with a front facing garage and driveway should have the garages paired to maximize the extent of continuous green planting area.

b) Townhouses and Other Multiple Unit Dwellings

1. The siting, massing, and facade design of townhouse units shall be coordinated on a block-by-block basis.
2. The elevation of the townhouse block shall be articulated in a manner that provides variation between units, and reinforces common characteristics that visually unites the block.
3. Variety in the design of roofs through the use of traditional gables and dormers, or more contemporary designs that include cantilevers and parapet details, is required to break up the massing of units within a block. However, the main roof should appear as one roof where possible and reflect the architectural style of the unit block.
4. Blocks of attached townhouse units shall be oriented to the street with integrated front garages accessed from the street. For rear lane townhouses an attached or detached garage will be located at the rear of the block and accessed from a lane.
5. The main front entry should be oriented to the front lot line or higher order street, for interior units, while the entry of the corner unit is encouraged to be oriented to the exterior lot line. Where a dwelling unit flanks a private street or laneway, the main entrance shall face the front lot line or an interior courtyard.
6. The massing and built form of townhouse units adjacent to single/semi-detached dwellings shall be broken down with architectural elements to promote visual integration.
7. Front garages shall not exceed 50% of the width of the unit, and should be paired to allow for more substantial front yard green space. Garages shall not protrude beyond the main front wall of the dwelling unit.
8. Rows of street townhouses should be limited to a maximum of 8 units, with 6 units preferred. Stacked townhouses should be limited to 16 units. The length of the townhouse blocks should not exceed 50.0 metres, unless it is essential to the architectural style of the townhouse block.





9. Rear lane townhouses are ideally suited to reinforce important locations such as parks, public spaces, community nodes and primary streets, where continuous enhanced streetscapes are a priority.
10. Rear lane accessed garages shall be complementary in design and building material with the principal dwelling.
11. For townhouses with an attached garage in the rear, a minimum amenity area requirement may be considered rather than a rear yard setback. Such amenity area may include outdoor space on a second floor deck.
12. Utility meters shall be screened from public view and integrated into the design of the units through the use of wall recesses, enclosures, or inseting within the building walls. Rear lane units shall locate utility meters at the rear lot line.

c) Live-Work Units

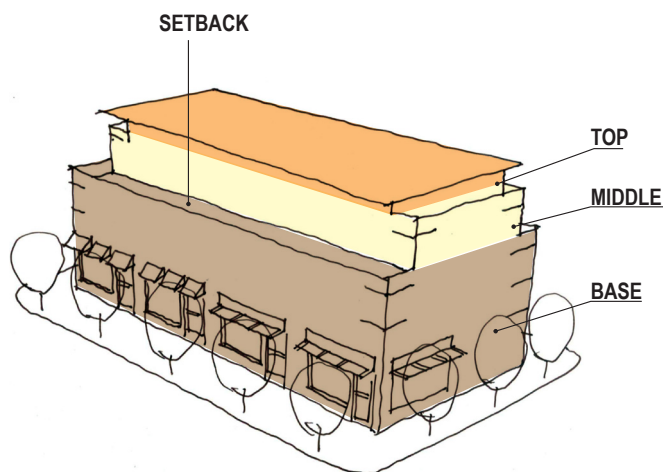
1. Live-Work units introduce a flexible built form use that allows for the unit to be used fully as a residence or a residence above with retail, commercial or office uses at grade.
2. Live-work units are ideally suited for the mixed-use context in the Village Corridor and along primary streets.
3. Live-Work building designs should support pedestrian activity through minimal front yard setbacks, pedestrian weather protection such as canopies and enlarged clear glazed windows and pedestrian-scaled detailing for commercial space.
4. On-street parking shall be provided as lay-by parking with resident parking provided at the rear of the building and accessed from a lane or a private road.
5. Live-work Units are 3 to 3.5 storeys in height.
6. Live-work units shall have continuous and consistent architectural details and materials for the entirety of the block.

7. Mechanical equipment including air conditioning units and utility meters shall be screened and/or located away from public view.

d) Low-Rise Apartment Buildings (Height 4)

1. The design of the building and the site layout shall consider overall form, massing and proportions, and rhythm of major repetitive building elements, to create a streetscape that supports the pedestrian scale.
2. The majority of the main building facade shall front the abutting street. The implementing Zoning By-law shall establish an appropriate build-within zone to ensure pedestrian comfort and streetscape activation.
2. Primary building entrances should be located and oriented to public roads, and designed to be visible and accessible to the public.
3. Parking shall be located below grade, where possible. Visitor parking, loading, and service areas shall be located in areas of low public visibility in side or rear yards and set back from the front facade of the building.
4. A visitor drop off area should be located at the side or rear of the building with lane access or private drive.
5. Where it is only possible to provide parking at grade, it shall be screened from street view through the use of landscaping, including features such as wrought-iron/metal fencing with masonry pillars and landscaping or a similar combination that is consistent with the building's architectural style.
6. Rooftop mechanical equipment shall be screened from public view and integrated into the design of the building with materials and/or colours that are consistent or complementary to the building.
7. Taller buildings should have a clearly articulated base, middle, and top, through the use of horizontal or vertical extrusions or projections, or changes in material.





8. In order to encourage continuity on the streetscape buildings should be designed to reinforce the base, middle, and top elements through the use of setbacks, extrusions, textures and materials.
9. Where buildings are taller than 4 storeys, or 14.0 metres, the upper floors shall be setback a minimum of 1.0 metre from the front wall of the base building. Taller buildings, such as 6 storeys, may have more than 1.0 metre setback to maintain a consistent street wall height.

e) Mid-Rise Apartment Buildings (Height 6)



1. Buildings and their primary entrance shall be oriented towards and face the abutting street. The implementing Zoning By-law shall establish an appropriate build-within zone to enhance pedestrian comfort and streetscape activation.
2. Mid-Rise buildings may be slab form, or include a podium and tower configuration. For a slab configuration, there should be a 2.0 metre stepback above the 3rd storey facing a street. If a podium and tower configuration is preferred, the podium should be a maximum of 3 storeys.
3. Balconies on all storeys above grade are encouraged. Where townhouse units are proposed at the base of the building they should incorporate a defined front yard that can accommodate tree planting and landscaping.
4. Servicing, loading, and parking access shall be from a rear lane or private road. These functions shall not occur along the Waterfront Promenade frontage.
5. Parking shall be located in structure, where feasible.
6. Where it is only possible to provide parking at grade, it shall be screened from street view through the use of landscaping, including features such as wrought-iron/metal fencing with masonry pillars and landscaping or a similar combination that is consistent with the building's architectural style.
7. Bicycle parking and storage should be provided for apartment buildings.

8. Rooftop mechanical equipment shall be screened from public view and integrated into the design of the building, with materials and/or colours that are complementary to the building.

3.2.2 Garages and Driveways

The design of garages can have a major impact on the visual character of the individual dwelling and the collective streetscape. A cohesive streetscape where attached garages compliment instead of dominate the streetscape is intended.

a) Front Garages

In order to minimize the presence of the garage, the following guidelines shall be applied for attached and detached garage buildings accessed from the front:

1. Garages must be a natural extension of the design, massing, and materials of the main dwelling.
2. Garages should be set behind or flush with the main building face. Garage doors facing a public road, should be setback a distance of 6.0 metres from the road right-of-way.
3. Attached garage setback from the rear lot line when accessed from the front and located at the back of the lot should be a minimum of 6.0 metres.
4. Detached garages are permitted in the rear yard and interior side yard only.
5. Detached garages setback from rear and exterior corner lot line should be 1.2 minimum if garage has doors and/or windows other than the main vehicular entrance.
6. Detached garages setback from rear and exterior corner lot line should be 0.3 minimum if garage has no doors and/or windows other than the main vehicular entrance.
7. Setback of 0.0 metres if walls are common with garages on abutting lot (up to 2 garages are allowed to share common wall in a front drive condition).

8. Detached garages setback from main buildings should be a minimum of 6.0 metres.
9. A variety of garage door configurations and styles should be provided. The door should have a maximum width of 2.4 metres for single doors, and 4.6 metres for one-and-a-half garage doors.
10. Tandem garage designs are encouraged to help minimize the impact of garage width on the elevation and in turn on the streetscape.





b) Lane-Accessed Garages

Garages that are accessed from a laneway can either be detached or attached to the main dwelling at the rear. Attached garages can either be set into the house with access at the rear, or they can be attached the main dwelling through a breezeway which forms a side courtyard for amenity space.

1. The minimum setback for garages accessed by a lane should be 0.60 metres from the lane right-of-way.
2. Side yard setbacks should be 1.2 minimum if the garage building has doors and/or windows other than the main vehicular entrance facing the side yard.
3. Side yard setbacks should be 0.3 minimum if the garage building has no doors and/or windows other than the main vehicular entrance facing the side yard but may be 0 m where the garages on abutting lots are attached.
4. Where possible, garages should be paired to allow for increased rear yard, or an outdoor parking pad to accommodate resident parking.
5. The maximum number of attached garages on adjacent lots should be 4.
6. Secondary suites located above detached garages are encouraged for lot sizes greater than 6.0 metres, and should be located on end units.

c) Driveways

1. Driveway widths should generally be no larger than the interior width of the garage.
2. Driveways are encouraged to be paved with light-coloured or permeable material to reduce stormwater run off and reduce heat island effect.
3. Driveways should be located as far as possible from parks, open space features, public walkways, schools and intersections.

3.2.3 Priority Lots

Priority Lots are those that have high public exposure, such as corner lots or lots located adjacent to public open space. Priority Lots occur where two streets intersect or where lots are sited next to community amenity spaces and are open to views.

a) Buildings facing and flanking arterial or collector roads

1. Units facing or flanking onto arterial or collector roads should be given special consideration in architectural design, massing, orientation, siting and materials and should be of high architectural quality.
2. For units flanking an arterial or collector road, the main front door should be visible from, and oriented to, the exterior side elevation of the house with access to the sidewalk. The entries should be articulated through the use of entry features such as projecting porches facing the street.
3. Garages and driveways should be located on the local road, off arterial or collector roads.
4. Side elevations flanking arterial or collector roads should be consistent with the front elevation in terms of materials, fenestration style and detailing.
5. Facades should be highly articulated through coordinated fenestration, masonry detailing, accent gables, dormers, and/or other special treatment.

b) Buildings Adjacent to Parks and Open Spaces

1. Front, side and rear elevations exposed to public spaces such as neighbourhood parks and parkettes, should be highly articulated. A combination of fenestration, bay windows, material changes, and dormers may be used.
2. Side and rear elevations should adopt a similar design and use materials that are consistent with those used on front elevations. Architectural detailing such as corbelling should continue from front to side elevations, where visible to the public.



3. For units flanking onto parks and open spaces, a highly articulated side façade is encouraged. Side main entrances are an alternate means to achieve this.
4. The location of porches, windows and entry doors for units surrounding parks and parkettes should maximize opportunities for overview and safety.

c) Corner Units

1. Side and rear elevations visible from the street should have windows, materials, and other architectural treatments equal in quality to the front elevation of the house.



2. Corner windows and wrap-around porches should be included to emphasize a corner location. Where possible, the entry door should be located on the exterior side elevation of the house with direct access to the sidewalk.

d) T Intersections/Key View Terminus

T intersections occur when one road terminates at right angles to another. Consideration should be given to homes at the top of the T intersection and the last two lots on either side of the road that terminates at the intersection.

1. Architecture on lots at the end of T intersections should have facade designs that utilize elements such as coordinated fenestration, masonry detailing, and entry elements.
2. Pairing of side yards is encouraged to form a landscaped area at the terminus of the T Intersection.
3. Buildings sited at the end of the view corridor should be designed with architectural elements that address these views.

e) Gateway Corner Units

Gateway corner units are typically houses located at the entry to the community from adjacent areas. These units should be designed with the following principles in mind:

1. Gateway dwellings should be given special consideration in architectural design, massing, orientation, siting and materials, and shall be of high architectural quality.
2. Entry elements and porches are encouraged to produce interest in the facade as well as to help define the entrance to the neighbourhood.
3. Pairing of similar model units on lots directly opposite each other to establish and enhance a gateway condition is encouraged.
4. Provide landscape and landscape features are to accentuate gateways and coordinated throughout the community.

3.3 Commercial and Mixed-Use Development

In the Brookhill Neighbourhood Commercial and Mixed-Use buildings are directed to the Neighbourhood Centre and Village Corridor designations. The Neighbourhood Centre is located at the intersection of Bowmanville Avenue and Longworth Avenue and the Village Corridor is located along both sides of Longworth Avenue.

Section 10.5 of the Official Plan sets out the criteria for development within the Neighbourhood Centre. In addition to those design criteria, development should follow the design guidelines of this section.

3.3.1 General

Building placement refers to the location of the building in relation to the street. The orientation and placement of buildings along the street can help to reinforce the public realm by enhancing the pedestrian environment through creating a sense of enclosure.

1. The siting and massing of buildings should provide a consistent relationship, continuity and enclosure to adjacent public roads.
2. Buildings located adjacent to, or at the edge of, parks or urban squares should provide opportunities for overlook into the public space with windows and doors. The massing, siting and scale of these buildings should create a degree of enclosure or definition appropriate to the type of open space they enclose.
3. Where located at a corner, buildings shall be designed to address both street frontages and be massed towards the corner locations for visual interest and to “anchor” the building.
4. Primary entrances to buildings should be clearly visible and located on a public road or onto public open spaces in order to support public transit and for reasons of public safety and convenience. Secondary doors, such as those that face the parking area, emergency exits or service doors should be designed to blend in with the building façade.



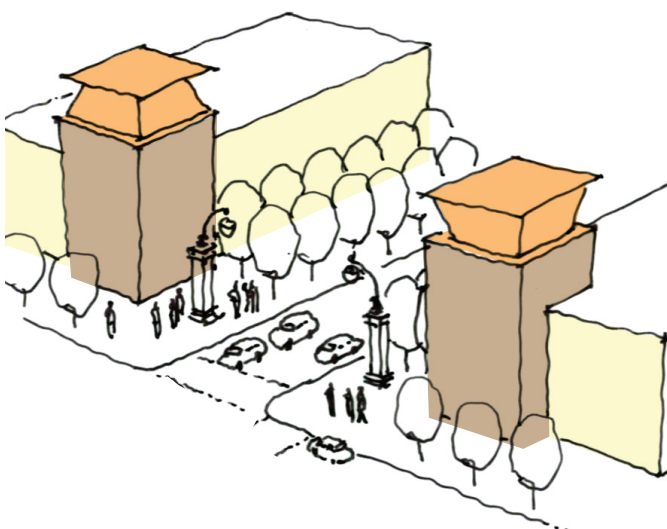


5. Access from sidewalks and public open space areas to primary building entrances should be convenient and direct, with minimum changes in grade.
6. Signage should provide a high level of clarity, visibility, and visual interest and shall complement the architecture of the building(s) in its scale, materials, consistency, and design.

ADD: Building Design at the Street Level

3.3.2 Mixed-Use Buildings (Height ?)

1. Mixed-Use buildings may include commercial and office uses at grade and multi-unit residential above or behind. Ground floors shall be designed to be appealing to pedestrians and include uses that are more active in terms of pedestrian traffic, such as commercial/retail, personal service, and restaurant type uses on the ground floor.
2. Mixed-Use buildings are envisioned for the higher order street network within the Secondary Plan Area including, Bowmanville Avenue and Longworth Avenue.
3. Buildings abutting low to medium density residential properties shall be designed to include appropriate approaches for transition including enhanced landscaping, setbacks, stepbacks, and/or angular planes.
4. Larger buildings should be articulated to avoid large expanses of uninterrupted blank wall. Grade level retail frontages shall be broken down in scale to provide a finer grained frontage onto Longworth Avenue. Reflective mirror glass shall not be used for windows at grade.
5. Residential entrances shall be clearly distinguished from the commercial entrances through building design and can be located at the front or side of the building.
6. Rooftop mechanical equipment shall be screened from public view and integrated into the design of the building with materials and/or colours that are complementary to the building.



3.3.3 Commercial Buildings

1. Commercial buildings located in the Neighbourhood Centre will serve an important role of defining the entry to and initial impression of the community. Buildings at these locations will:
 - i. Include distinctive building designs which include articulated built form, massing features and added building height at corners that address the gateway;
 - ii. Incorporate decorative planting and/or hardscape features that complement the building design and materials; and,
 - iii. Include decorative paving at the corners and to define direct connections to building main entrances.

2. Entrances to buildings should be emphasized through any combination of material changes, maximized height, canopies, or wall articulation.

3. Clear glazing should be maximized on all building elevations, where possible. Street frontages and elevations facing parking areas shall include clear glazing and/or landscaped walls to provide a comfortable and safe pedestrian experience.

4. Non-street facing building facades exposed to public view or facing parking areas shall provide visual interest through the provision of windows, wall articulation, architectural detailing and/or landscaped walls similar to the main building facade.

5. Large expanses of blank wall shall be avoided and addressed through landscaping, wall articulation, and material changes to create visual interest.

6. Rooftop mechanical equipment shall be integrated into the roof design and screened from public view.

7. Servicing and loading areas shall be discreetly located and be screened from public view through architectural design, low walls, and landscaping features.





3.3.4 Surface Parking Lots

1. Entrances to parking areas shall be from internal Collector Roads and not from Bowmanville Avenue, unless approved by the Region, Ministry of Transportation of Ontario, and the Municipality.
2. Parking in structures is preferred, where possible. Where at-grade parking is provided it shall be to the side or rear of the building and should not occupy more than 50% of any street frontage.
3. 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.
4. Where parking lots abut a road right of way, a landscaped area of at least 2.5 metres wide should be provided and include trees planted at intervals of 6.0 to 12.0 metres depending on the canopy size of the trees.
5. Large parking areas should be broken down into smaller courts of parking that include pedestrian routes defined through planted raised islands, decorative unit paving, and traffic bollards.
6. Raised medians that are generally 4.5 metres wide, consisting of a 1.5 metre wide paved walkway with a 3.0 metre tree planted landscaped area on one side, shall define the walkway to a building's entrance from the parking areas.
7. Light standards in parking lots should relate to the pedestrian and be limited to a height of 6.0 metres which meets minimum safety standards.
8. Permeable paving material should be used to reduce run-off volume and minimize on-site infiltration pollutants.
9. Landscaped islands should be designed with bioswales and/or trees. The islands should be designed to provide for tree growth and retention.



3.3.5 Landscaping

1. Drought tolerant vegetation which may include seeding or an agricultural crop should be provided on unbuilt areas of a site that are not required to meet parking requirements. This includes any areas reserved for future phases of development, and all areas not required for building, storage and/or servicing.
2. Native trees, shrubs and other vegetation should be selected except where other species are required due to a higher level of tolerance to urban conditions.
3. Along the arterial/collector road frontages, significant landscape features and decorative fencing should be required to provide a street edge at the initial stages of development where there is no building and/or to help soften views to parking areas.

3.4 Public / Institutional Buildings

Public/Institutional uses form an important aspect of community identity. Buildings serving these uses act as important built landmarks in the community, including schools, recreation centres, places of worship, and fire stations. Careful attention must be paid to the design of these structures to ensure that they reflect the built quality and integrate with the scale of the surrounding neighbourhood.

3.4.1 General Guidelines

1. Public/Institutional buildings should be sited prominently and where possible, should terminate views. Buildings should be sited to specifically differ from the surrounding urban fabric in order to emphasize their importance as landmarks.
2. Public/Institutional buildings should be located close to the road to reinforce the street wall and define intersections.
3. Public/Institutional buildings should be designed as special landmark buildings with high quality architectural design, materials and finishes.

4. The site should be well landscaped and visible at the pedestrian level, in recognition of their prominent locations and status as landmark buildings.
5. The front door of all Public/Institutional buildings should be connected with a walkway to the sidewalk on the road, and should have direct access to transit stops.
6. Vehicular parking should be located at the side or rear of the building. Parking for cyclists should be located near building entrances and where visual surveillance can be maximized.
7. Drop-off areas should be provided for buses and cars in the public right-of-way where possible, but where located on site they should be at the side of the building, and not in front of the building.
8. Rooftop mechanical equipment should be screened with materials that are complementary to the building or through parapet height where applicable.
9. All Public/Institutional buildings should contribute to the creation of compact neighbourhoods through multi-storey buildings in order to maximize the site and services, minimize floor area, as well as contribute to an urban street condition through a building façade proportion that contributes to a sense of enclosure at the street. Multi-level buildings can accommodate accessory and, if applicable, complementary uses.

3.4.2 School Sites

In addition to the General Guidelines, the following guidelines for elementary schools apply:

1. The land area required for school sites should be minimized in order to promote compact development and conserve land. School Boards are encouraged to build more compact facilities including three storey elementary schools and buildings located close to the street.
2. Where possible, Elementary School sites should be located adjacent to a neighbourhood park so that playfields can be shared to promote compact



development and minimize land area requirements. Appropriate and innovative engineered turf material should be explored to increase the durability of the playfields and minimize maintenance requirements. See also guideline 2.4.2 b) for guidelines under Neighbourhood Park.

3. Shared parking lots for Elementary School sites with neighbourhood parks, and Secondary School sites with community parks, should be considered in order to reduce the number of parking requirements. The shared parking lot should be located and sited to facilitate easy and safe access, and to minimize the need for crossing required by students.
4. Schools sites that are located adjacent to the Natural Heritage System should maximize the opportunity for using the Natural Heritage System for passive open space uses such as trails and trail heads.
5. Schools should be designed to ensure safe pedestrian crossing and cycling practices. Whenever possible, students should be able to easily reach building entrances without crossing bus zones, parking entrances, and student drop-off areas.
6. School sites should be designed to provide for visitor parking and bus pickup and drop off in bays in the adjacent collector road right of way.



3.4.3 Places of Worship

To complement the General Guidelines the following additional guidelines apply to the development of places of worship:

1. Sites should be located on arterial or collector roads along public transit routes in order to maximize transit ridership.
2. Especially in mixed use areas, the joint use of parking areas with adjacent uses is encouraged in order to reduce land requirements and promote compact development.
3. The massing and scale of the building should be compatible with the character of adjacent development, especially within Low and Medium Density Areas through the use of similar setbacks, material selection, and the use of architectural elements.



4. GREEN INFRASTRUCTURE AND BUILDING



While sustainability is an overarching objective throughout the Guideline, this section provides guidance on green infrastructure and building practices and helps achieve the broad sustainability principles of the Official Plan and the specific policies as set out in Secondary Plan.

As part of the strategy to achieve a high level of sustainability in regards to the reduction of energy, water and waste within the Brookhill Neighbourhood, the Green Infrastructure and Building Guidelines apply to both the private and public realm.

4.1 Energy Conservation

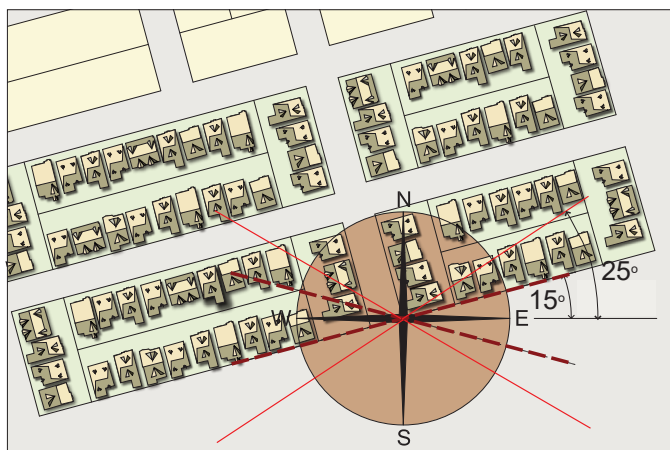
Provide for the reduction of energy use and consider the inclusion of alternative energy sources.



1. Where feasible, provide alternative community energy systems such as **district energy**, geo-exchange, sewer heat recovery, and/or inter-seasonal thermal energy.

2. **Encourage new commercial and institutional development to connect to district energy facilities.**

3. Consider reducing demand for energy from the grid and encourage renewable energy production. Renewable energy sources that could be employed may include the use of solar thermal and photo voltaic equipment, and/or wind power. Proposed alternative energy source(s) could be used in combination with energy from the grid.



To maximize passive solar orientation the street and block alignment should be designed within 25-degrees of geographic east-west .

4. Encourage passive solar orientation to permit enhanced energy efficiencies by creating optimum conditions for the use of passive and active solar strategies. The integration of passive building systems is enhanced with buildings oriented to maximize the potential for sunlight and natural ventilation.

5. Where feasible, implement street and block alignment within 25 degrees of geographic east-west to maximize passive solar orientation of buildings front and rear windows.

6. Consider constructing all low and medium density residential buildings to be Solar Ready. *(built with all the necessary piping and equipment that would be needed to install a rooftop solar power system)*
7. Consider the purchase of energy from renewable resources available from local utility/energy providers.
8. Reflective or light-colored roofs are encouraged for multi-unit residential units above 5-storeys and public or institutional buildings, in order to reduce solar heat absorption and energy demand.
9. Mitigate heat island impacts through the use of paving material with high solar reflectance, strategic use of deciduous trees or preserve existing trees as part of a free cooling strategy to help with evapotranspiration and shading of sidewalks and hard surface areas in summer and solar access in winter.
10. Charging stations that would supply electricity for electric vehicles are encouraged in Draft Plans/Site Plans. Charging stations could be provided in parking areas of mixed-uses, office, employment, institutional or employment uses, or within underground garages for multi-storey residential buildings or other residential buildings.
11. Grade related residential unit driveways are encouraged to be paved with light-coloured material to reduce the heat island effect.



4.2 Water Use and Management

The benefits of high performance, compact, mixed use projects include reduction in household water consumption and water utility costs, as well as the protection of the natural water supply. Compact development reduces impervious surfaces and makes it easier to protect natural areas which are the most important steps a community can take to maintain water quality.

1. Encourage the implementation of Low Impact Design Standards 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.

2. Implement a comprehensive rainwater and water recharge strategy in conjunction with required stormwater management facilities.
3. Implement policies for stormwater retention and run-off such as:
 - a. Retain stormwater on-site through rainwater harvesting, on-site infiltration, and evapotranspiration;
 - b. Consider the inclusion of third pipe greywater systems and rain water harvesting for watering lawns, gardening, to reduce demand on potable water use;
 - c. Direct flow to landscaped areas and minimize the use of hard surfaces in order to reduce the volume of run-off into the storm drainage system;
 - d. Store snow piles away from drainage courses, storm drain inlets, and planted areas; and,
 - e. Use infiltration trenches, dry swales and naturalized bioswales adjacent to parking areas to improve on-site infiltration.
4. Introduce green infrastructure, such as bioswales, within the public right-of-way to enhance ground water infiltration and improve water quality as part of a comprehensive water management plan.
5. 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.
6. Implement a rainwater harvesting program to provide the passive irrigation of public and/or private greenspace, including absorbent landscaping, cisterns, rain barrels, underground storage tanks, infiltration trenches, etc.
7. Implement xeriscaping using native, drought-tolerant plants, a cost-effective landscape method to conserve water and other resources on a residential and community-wide level.

8. Where feasible, implement curb cuts along sidewalks and driveways to allow water to flow onto planted zones or infiltration basins.
9. Consider the installation of subsurface basins below parking lots to enable stormwater to be stored and absorbed slowly into surrounding soils.

4.3 Material Resources and Solid Waste

Assist in the reduction and diversion of waste from landfills and increase measures for recycling and reuse.

1. Consider the use of recycled/reclaimed materials or new infrastructure including roadways, parking lots, sidewalks, unit pavings, curbs, water retention tanks and vaults, stormwater management facilities, sanitary sewers, and/or water pipes.
2. Incorporate strategies that emphasize targets for a higher diversion rate in recycling for the plan area.
3. Reduce waste volumes through the provision of recycling/reuse stations, drop-off points for potentially hazardous waste, and centralized composting stations.
4. Consider incorporating existing heritage buildings in situ through retention, restoration, and adaptive reuse to avoid further construction waste.
5. In large buildings, such as multi-unit residential buildings and institutional or public buildings, provide on-site recycling facilities for handling, storing, and separation of recyclables.
6. Recycle and/or salvage at least 50% of nonhazardous construction and demolition debris and locate a designated area on site during construction for recyclable materials.

4.4 Air Quality

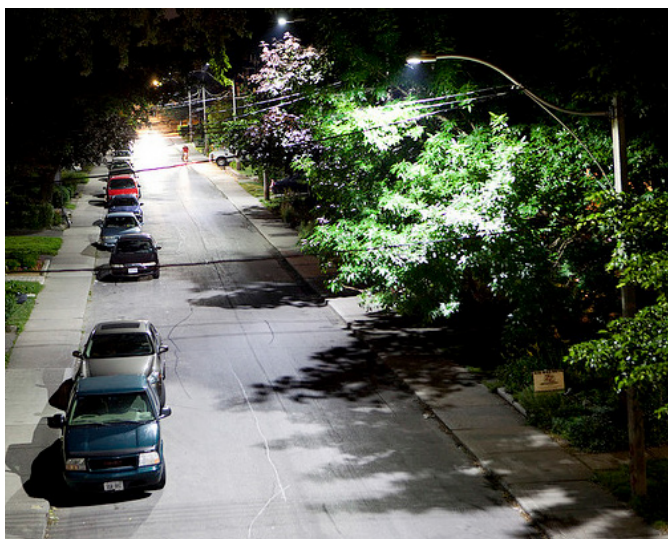
In order to minimize the air quality and climate change impacts associated with new growth, the following measures are encouraged:

1. Reduce the impact of air pollution by encouraging the development of 'complete' communities that are characterized by greater densities placed at neighbourhood centres, mixed use nodes, or near transit facilities; mixed land uses; mix and diversity of housing types; connected and walkable road patterns, and are designed to encourage active transportation.
2. Encourage and promote alternative modes of transportation such as public transit, walking, and cycling. Provide transit within a 200 to 400 metre (3 to 5 minute) walking distance of residential development.
3. Ensure the separation of sensitive land uses from air pollutant sources through land use planning and zoning. Refer to the Ministry of the Environment guidelines.
4. To promote transit ridership, programs such as developer-sponsored transit passes at reduced-costs for each residential unit or employee are encouraged.
5. Provide the minimum number of parking spaces to minimize the impact of car parking.
 - a. Mixed use developments should include shared use of parking among uses that have different peaking characteristics;
 - b. Design parking areas so they are not the primary visual component of a neighbourhood;
 - c. Reduce the parking ratio required in areas that are served by transit; and,
 - d. Dedicate priority parking spaces for carpool, ride sharing, and ultra low emission vehicles - 5% of total parking spaces.



4.5 Lighting

1. Promote Dark Sky/Nighttime Friendly compliant practices to minimize light pollution and the intrusion of unwanted lighting on natural areas.
2. Consider high efficiency street lighting to reduce energy use.
3. Consider opportunities for renewable energy use to reduce electric energy supply in the public realm, such as solar powered lighting for natural trails and park pathways.



4.6 Green Buildings/Green Sites

Promote innovative programs to encourage the design and construction of energy efficient green buildings and sites.

1. Consider third-party certification and rating programs, such as LEED® for New Development (ND).
2. Consider innovative residential development designs which contribute to affordability and energy and natural resource conservation.
3. Consider building(s) that are LEED® Certified or recognized or accredited by a third-party certification program i.e. Energy Star, LEED H, LEED NC, LEED for Schools, BREAM, etc.,.
4. Green roofs are encouraged for high-density residential, office buildings, as well as, public, institutional buildings to minimize surface runoff, reduce urban heat island effect, provide noise insulation, and improve local air quality.
5. Encourage synergies between buildings and site management practices that conserve water, reduce waste, and are energy efficient.
6. Provide green roofs for 80% of all high density development. In high-density residential buildings, design roofs as amenity areas.



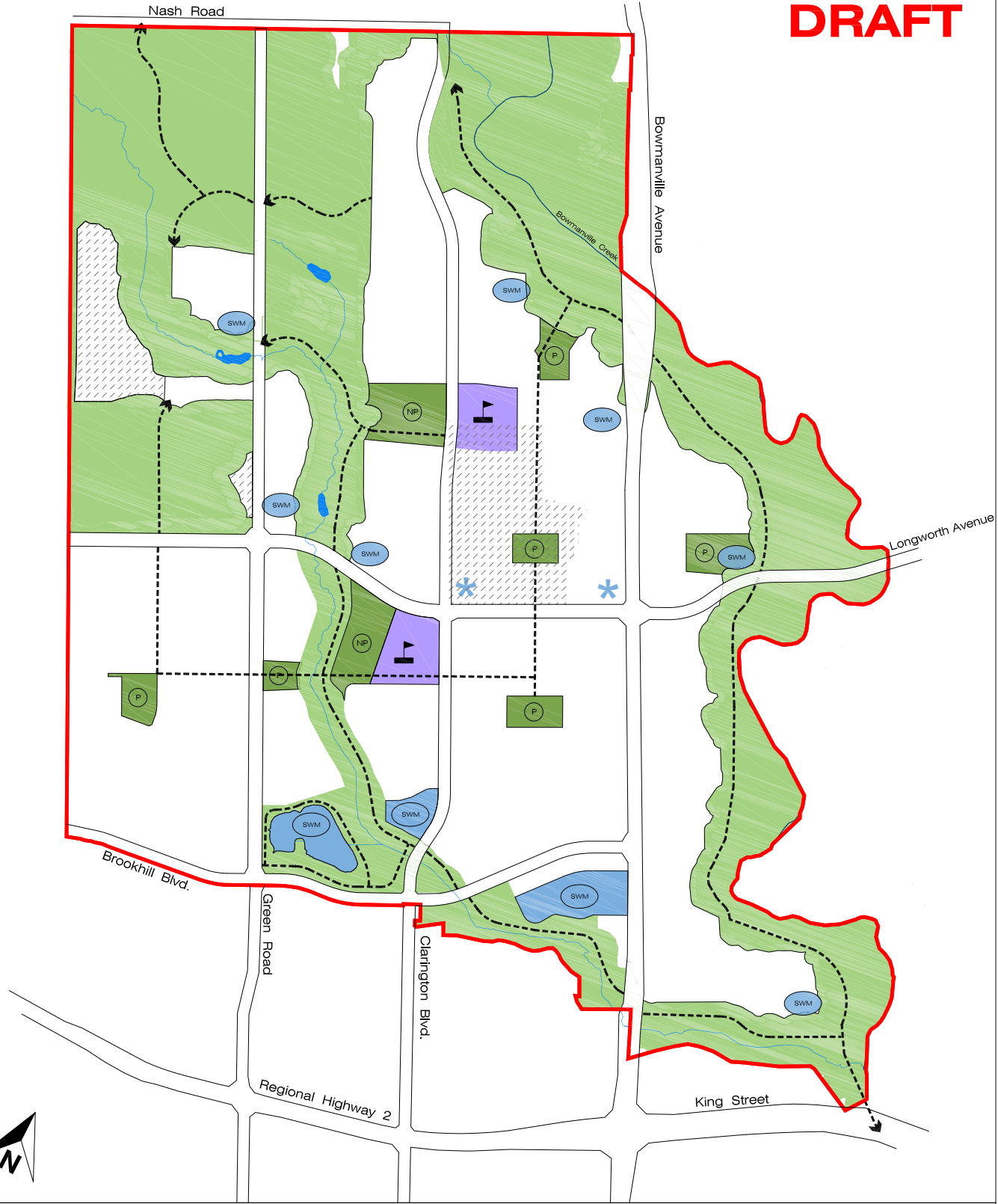
7. Develop a heat island reduction strategy for community and public buildings to install green roofs with 50% coverage, remainder covered with light coloured material. Light coloured roofs have a high solar reflectance, which reduces energy costs and reduces urban heat island effect,
8. Promote Energy Efficiency:
 - a. Where feasible, provide alternative community energy systems such as geexchange, sewer heat recovery, or inter-seasonal thermal energy; and,
 - b. Development plans and building design shall provide opportunities for south facing windows and building orientation to maximize potential for passive and active solar energy.
9. Promote Water Efficiency:
 - a. All buildings comply with Ontario's Building Code required water fixtures efficiency;
 - b. Building uses Low Impact Development strategies to deal with on-site run-off and heat island effects;
 - c. Building's landscaping is water efficient and drought resistant by using native planting materials; and,
 - d. Pre-design for grey-water pipe infrastructure.
- 10 Promote Green Materials:
 - a. Incorporate waste reduction work plans and construction best practices that reduce construction waste;
 - b. Incorporate green building material standards to reduce impact on the environment and ensure materials are purchased/obtained from a responsible ethical sources; and,
 - c. Materials sourced from certified local businesses.



4.7 Stewardship and Education

1. Create a well-documented master plan including illustrations that promote sustainable aspects of the development.
2. Include environmental builder specifications in all subcontracts.
3. Produce detailed sales and promotion materials that feature conservation aspects of the development.
4. Develop subdivision covenants that establish ground rules for the maintenance of shared open lands and individual lots.
5. Create a Homebuyer's Environmental Instruction Guide that explains the unique environmental aspects of the subdivision/site and special maintenance considerations.
6. Include an owner/tenant education package at the time of purchase or rental regarding household activities to improve energy and water efficiency, access to transit, location of recycling station, etc. Coordinate with existing municipal and regional information.

DRAFT



LEGEND

- Brookhill Secondary Plan Boundary
- Environmental Protection
- Environmental Constraints Overlay *
- Stormwater Management Facilities (SWM)
- * Urbanized Stormwater Management
- Watercourse
- Elementary School
- Neighbourhood Park
- Parkette
- Trails

Appendix C
Potential
Environmental
Features

Brookhill Neighbourhood
 Secondary Plan

September 2020

Note: *Area subject to further environmental study