

BROOKHILL NEIGHBOURHOOD

Secondary Plan Update

What We Heard Report #2
Public Information Centre #2 • June 25, 2019

Clarington

 **The Planning
Partnership**

in association with
SCS Consulting Group
R.J. Burnside & Associates Inc.
PLAN B Natural Heritage

ACKNOWLEDGMENTS

Municipality of Clarington

Carlos Salazar, Manager, Community Planning and Design
Karen Richardson, Manager, Development Engineering
Greg Bunker, Planner, Planning Services Department
Amanda Welsh, Development Coordinator
Shahzad Mir, Planner, Development Review

Consulting Team

Project Management, Municipal Planning, and Public Consultation

[The Planning Partnership](#)

Dan Leeming, Senior Advisor
Donna Hinde, Principal
Stacey McCulloch, Associate

Municipal Services

[SCS Consulting Group \(SCS\)](#)

Sarah Kurtz, Senior Engineer
Marc Tremblay, Engineering Intern

Transportation

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David Angelakis, Senior Project Manager
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Natural Environment

[PLAN B Natural Heritage](#)

Brad Bricker, Certified Senior Ecologist

TABLE OF CONTENTS

1.0 Introduction 1

2.0 Engagement Process 2

3.0 Meeting Overview - Pubic Information Centre #2 3

4.0 Summary of Key Messages 5

5.0 Study Area Feedback 6

 Transportation 6

 Servicing 8

 Natural Heritage 9

 Urban Design, Sustainability & Landscape 10

 Land Use 11

Appendix A - Table Group Discussion Worksheets

Appendix B - PIC #2 Display Panels



1.0 INTRODUCTION

Project Purpose

The Brookhill Secondary Plan, completed in 2007, is being updated to reflect current planning policies, including the updated Clarington Official Plan, approved by the Region of Durham in June 2017 and updated Provincial policies. The Update will guide land use, environment, transportation, servicing, and public realm planning for the neighbourhood.

The Secondary Plan Update is being prepared as an Integrated Approach in accordance with the Planning Act and the requirements of the Municipal Class Environmental Assessment Process (MCEA) under the Environmental Assessment Act. The “Integrated Approach” recognizes the desirability of integrating and coordinating the planning and approval processes to satisfy the requirements of the Planning Act and Environmental Assessment Act.

The Secondary Plan Update is currently in Phase 1 – Technical Analysis – of a four phase project. This Phase includes the inventory and analysis of land use, built form, natural features, transportation, and servicing in the Brookhill Secondary Plan area to be used as the basis for understanding opportunities and constraints for development.

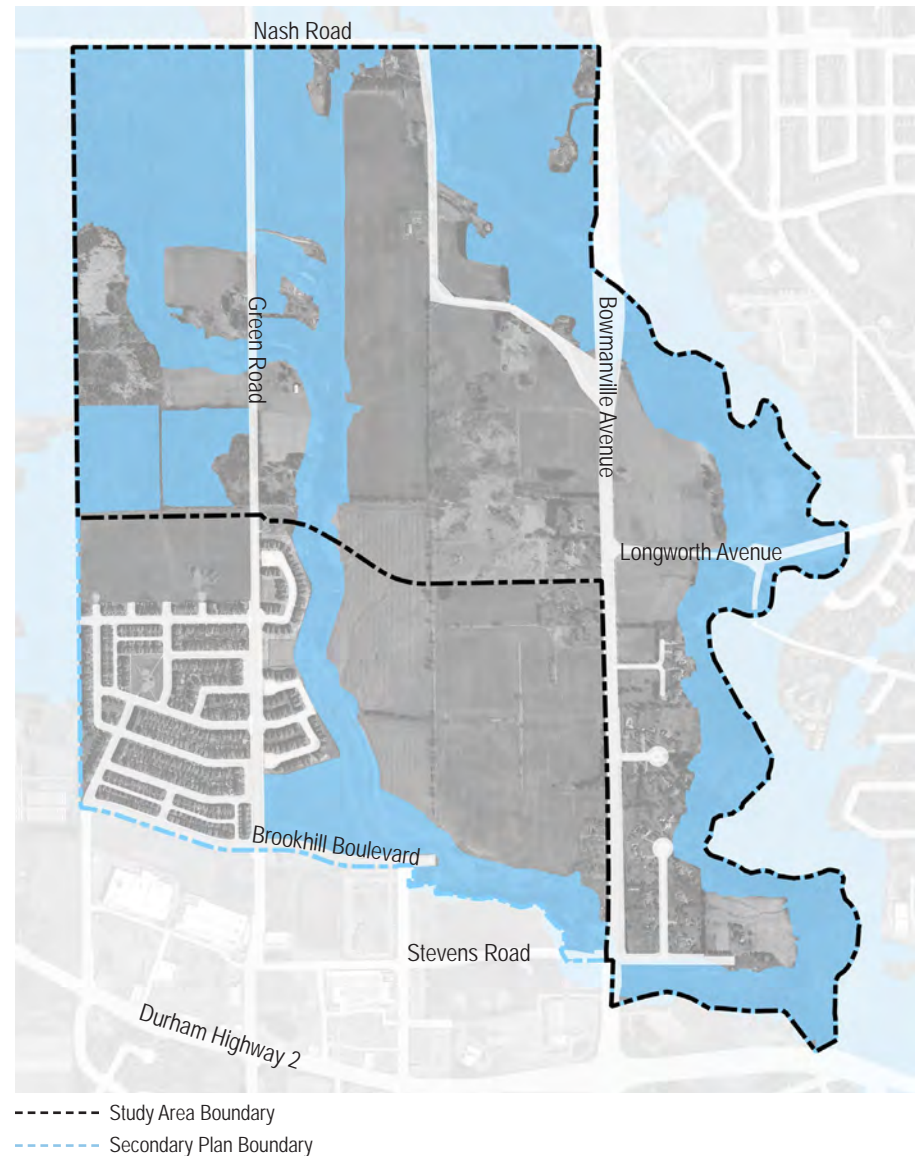


Figure 1: Brookhill Neighbourhood Secondary Plan Update Study Area

2.0 ENGAGEMENT PROCESS

The Brookhill Secondary Plan Update process consists of four phases, each of which has unique goals, objectives, and deliverables. Public engagement will occur through Public Information Centres and on-going online engagement to ensure ample opportunities to receive and integrate feedback on the Secondary Plan update.

Engagement and Consultation Goals

- To build awareness and understanding of the purpose of the Brookhill Secondary Plan Update;
- To effectively engage all stakeholders in the process of reviewing and updating the Brookhill Secondary Plan;
- To generate broad-based support for the Brookhill Secondary Plan;
- To have meaningful conversations focused on providing the planning, design, and development framework for successful, implementable, and complete Secondary Plan; and,
- To encourage participation and ensure stakeholders can contribute their ideas through a variety of forums.

An overview of each phase is provided below.

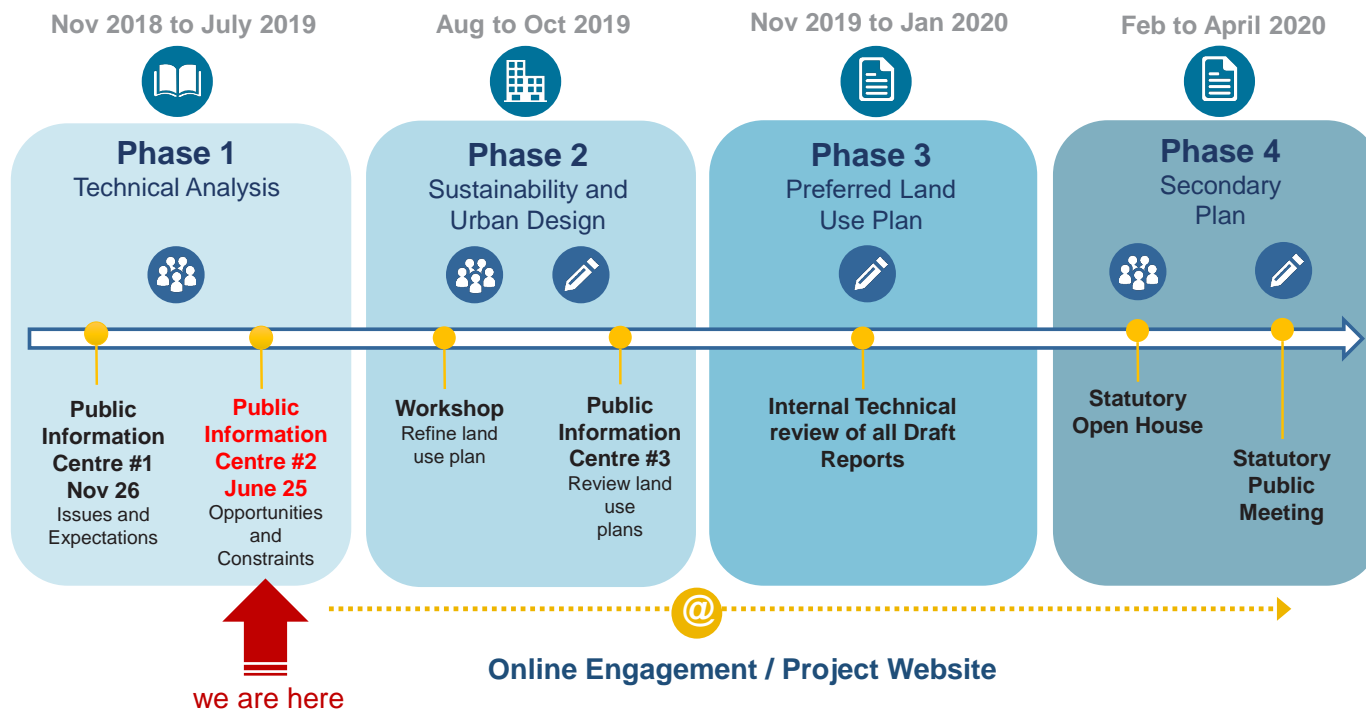


Figure 2: Project Timeline

3.0 MEETING OVERVIEW - PUBLIC INFORMATION CENTRE #2

The second Public Information Centre was held on Tuesday, June 25, 2019 from 6:30 pm to 8:30 pm at the Garnet B. Rickard Recreation Complex at 2440 Highway 2 in Bowmanville. The Information Centre included an open house with large format displays that introduced attendees to the project and the initial findings of the Consulting Team. Participants reviewed the displays and had the opportunity to speak to a member of the project team or Municipal staff one-on-one. Following the open house, a presentation highlighting the findings of the technical background work in the form of opportunities and challenges of the Study Area was given by the Consulting Team.

Following the presentation, workshop participants were invited to share their thoughts on the priorities for the Brookhill Neighbourhood with respect to five (5) topic areas:

- Transportation;
- Servicing;
- Natural Heritage;
- Urban Design, Sustainability & Landscape; and,
- Land Use.

Approximately 29 members of the public attended the second Public Information Centre. Key members of the project team in attendance included:

Municipality of Clarington

Carlos Salazar, Manager, Community Planning and Design
Karen Richardson, Manager, Development Engineering
Greg Bunker, Planner, Planning Services Department
Amanda Welsh, Development Coordinator
Shahzad Mir, Planner, Development Review



Figure 3: Participants involved in table discussions

Consulting Team

Project Management, Planning, and Public Consultation

The Planning Partnership (TPP)

Dan Leeming

Donna Hinde

Stacey McCulloch

Municipal Services - SCS Consulting Group (SCS)

Sarah Kurtz

Marc Tremblay

Transportation - R.J. Burnside & Associates Inc.

David Angelakis

Cindy Chung

Natural Environment - PLAN B Natural Heritage

Brad Bricker



Figure 4: Participants involved in table discussions

During the Table Group activity, participants were encouraged to provide feedback, ask questions, and review the findings from the background reports as outlined in the presentation and on table worksheets under the headings “Opportunities and Challenges”. The tables were organized by the five (5) topic areas :

- Transportation;
- Servicing;
- Natural Heritage;
- Urban Design, Sustainability & Landscape; and,
- Land Use.

Each table was facilitated by a member from the consulting team and municipal staff who guided discussion, recorded feedback, and answered questions related to the topic and the focused topic specific

question “What are your priorities for the Brookhill Neighbourhood related to ...? In addition to feedback received at the table discussions, participants were also encouraged to provide feedback on comment sheets.

A summary of the responses and feedback are provided in the following sections: Section 4.0 Summary of Key Messages, and a record of the notes that were taken during the Table Group activity under Section 5.0 Study Area Feedback. If there are any questions about this report, please contact Greg Bunker, Planner, Municipality of Clarington, by email (GBunker@clarington.net) or by phone (905-623-3379 ext. 2420).

4.0 SUMMARY OF KEY MESSAGES

Participants expressed concerns with the current and future level of traffic in the Project Area. Participants are concerned with traffic congestion, speed limits, and access to Bowmanville Avenue from existing residential development. Participants expressed that traffic congestion will worsen when the Durham Road 57/Highway 407 Interchange is opened, that the speed limit on Bowmanville Avenue is too high, and with the extension of Longworth Avenue into the Study Area, that Green Road will become congested.

Participants would like expanded infrastructure for pedestrians and cyclists. Participants expressed concern with the lack of pedestrian infrastructure and crossings along Bowmanville Avenue, and that additional stop lights are needed. Participants suggested redirecting pedestrians and cyclists way from Bowmanville Avenue; creating linkages between schools, parks, and residents; separating pedestrian and cycling lanes for trails, and connecting to the Bowmanville Valley trail and the Downtown.

Participants would like to have Climate Change included in the updated Secondary Plan. Participants suggested that the Secondary Plan should include policies on climate change and updated design criteria for storm sewers and stormwater management to assist with adapting to changing conditions, such as extreme weather, resulting from climate change.

Participants noted concerns with the delivery of schools and services. Participants inquired about the timing of elementary schools as children currently living in the Bowmanville Neighbourhood are bused outside of Bowmanville to the Village of Hampton. A suggestion was put forth for a place of worship. Participants also inquired about the delivery of sanitary sewers for existing residential lots currently on septic systems.

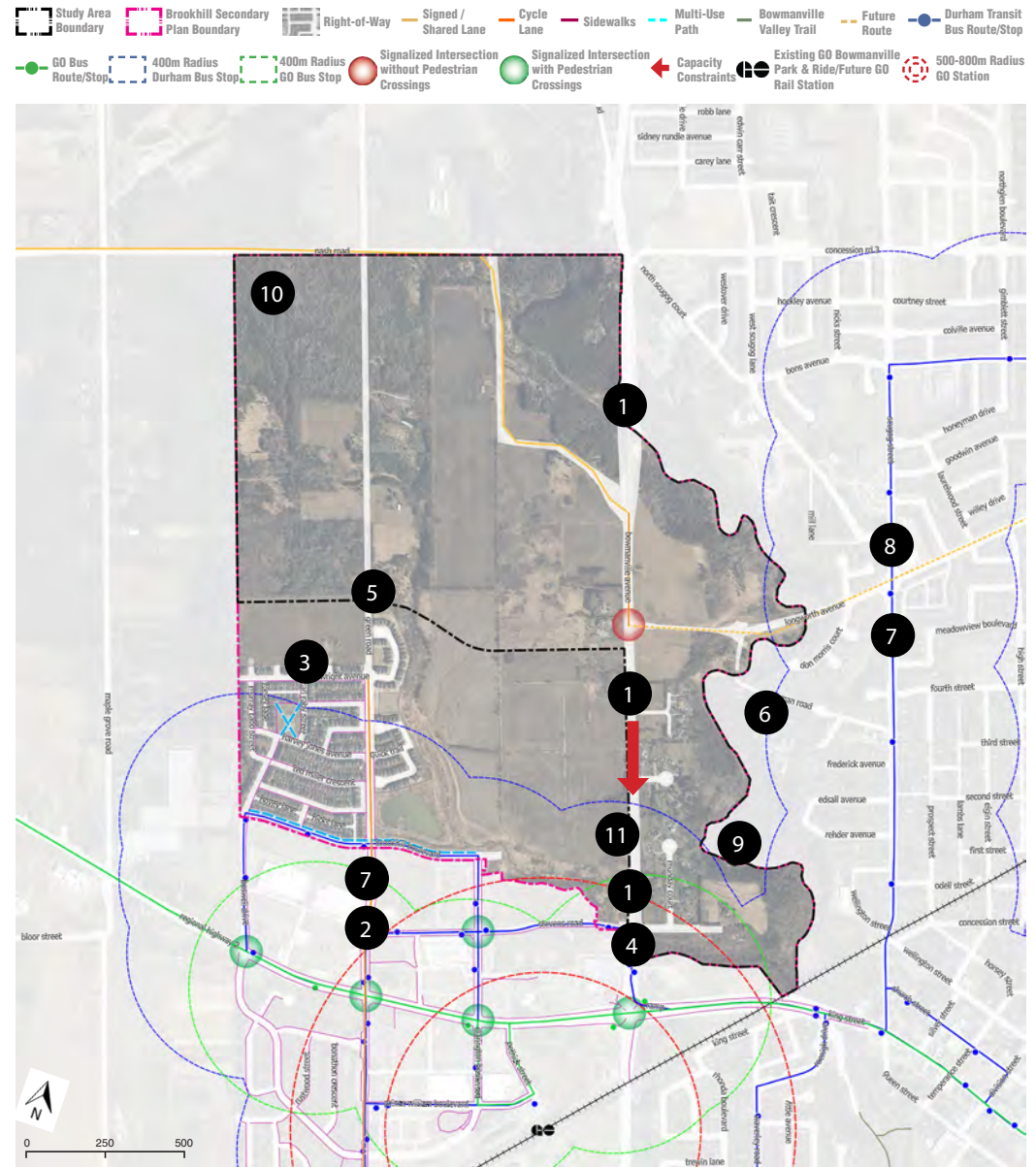
Participants expressed support and need for a variety of housing. Participants suggested locating higher density along Bowmanville Avenue and south of Longworth Avenue for condominiums and a seniors residence. Support was also provided for large lot housing in the south-east of the Study Area to replicate existing conditions in this area.

5.0 STUDY AREA FEEDBACK

Transportation

Location-Specific Comments

1. Residents on Linden Lane and Munday Court have a difficult time to access Bowmanville Ave due to traffic volume and speed limit. They had expressed that traffic congestion will worsen with 407 interchange opens. Also, they believe that the speed limit on Bowmanville is too high and should be 60 km/h max.
2. Access to plaza on Green Road - only one access to the plaza that allows drivers to make a left in and left out. Individual felt it was inconvenient and felt that the north driveway is congested /queued up because of this.
3. A resident living on Ross Wright Ave had a concern with the extension of Longworth, will traffic increase along Green? With Bowmanville congested, he was concerned that traffic will diver to use Green via Longworth. As a result, it will be difficult for residents along Ross Wright to get out onto Green.
4. Lack of pedestrian crossings
5. Will Longworth Ave extension to Green Rd warrant a signal?
6. Self-made (informal) trail by cyclist
7. Bike lanes concern with parked cars
8. Existing cyclist using Scugog Street rather than Bowmanville
9. Missing connection from homes along Bowmanville and within the area to the Bowmanville Valley Trail and Downtown area



relates to location-specific comments recorded on the map

10. Potential of trails and bike paths at either end of the property, that would facilitate very nice paths and biking off main vehicular roads like Green Rd
11. More stoplights needed along Bowmanville Ave North of Stevens South of Longworth Ave

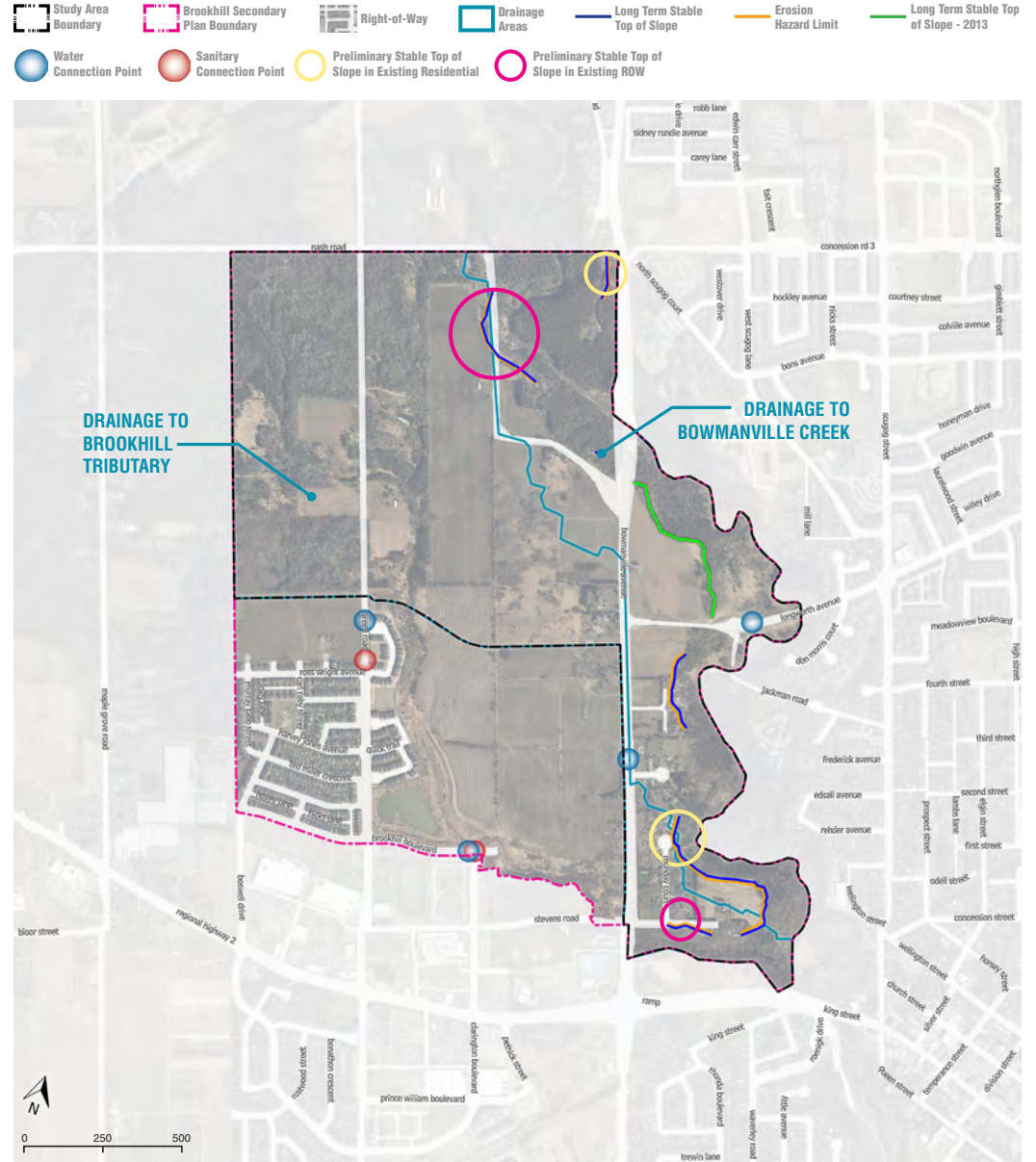
General Comments

1. Consider use of roundabouts with the right design
2. Infrastructure for e-scooters, shared bike spaces, e-bikes station
3. Pedestrian linkages with parks, schools, and residential areas
4. Use Bowmanville as a major vehicle road and redirect pedestrian and cyclists away from this road to use other north-south roads with better facilities
5. Proposed trails should include benchmarks, signs
6. Case study to consider for design: Kansas (Overland Park), Shanghai, Sedona (Arizona)
7. Width of trail should be wide enough to separate cyclists from pedestrians and there should be a clear indication separating the two

Servicing

General Comments

1. How will existing developed lots east of Bowmanville Ave. will be serviced with sanitary sewers (currently on septic)? Will the proposed trunk sanitary sewer on Bowmanville Ave. be deep enough to service this area by gravity, or will a pumping station be required?
2. Can the trunk sanitary sewer on Bowmanville Ave. proposed to be constructed in 2027 be constructed sooner?
3. Trunk sanitary sewers on Bowmanville Avenue from the intersection of Stevens Road to Highway 2 are proposed as part of the 2020 works.



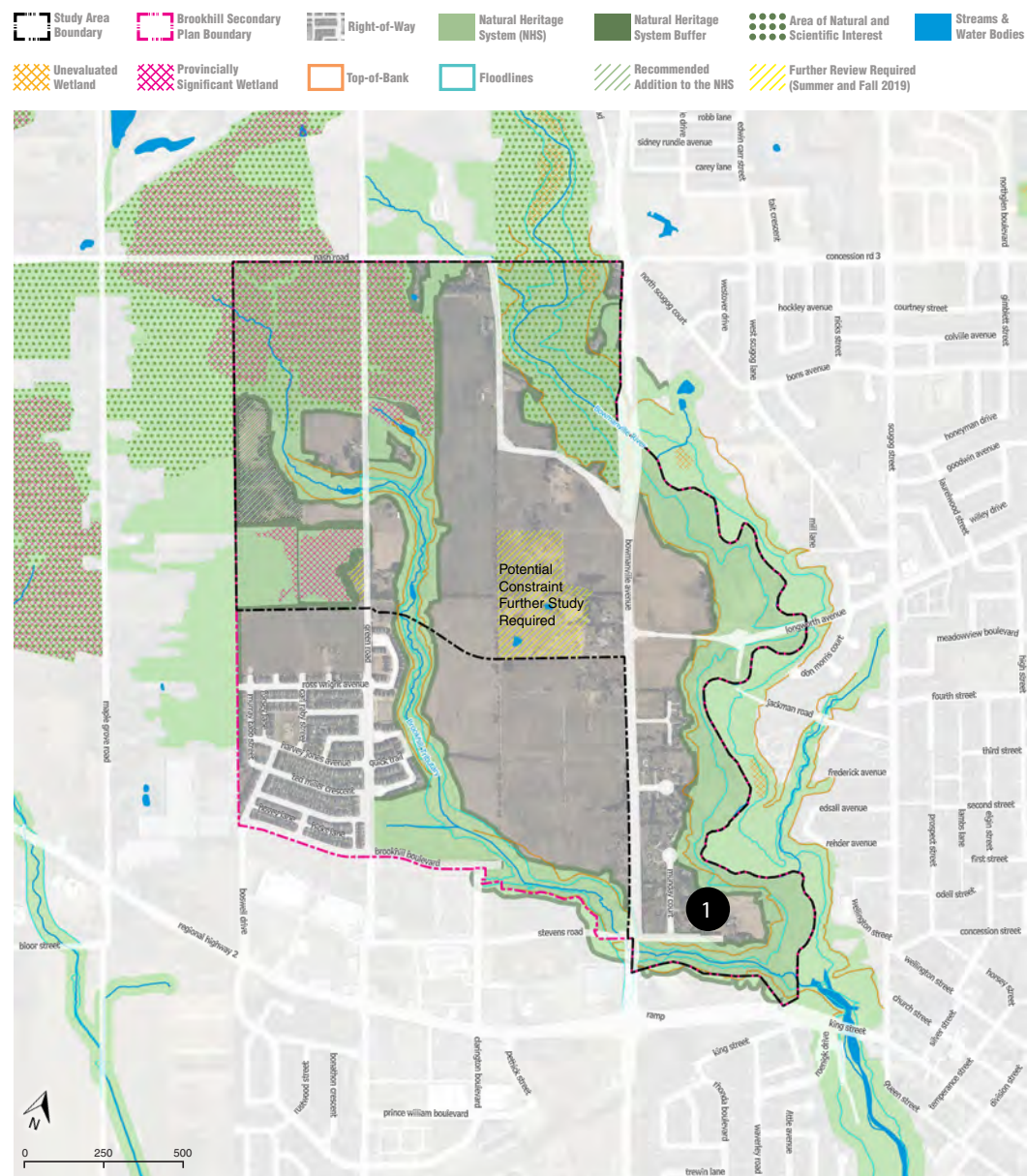
Natural Heritage

Location-Specific Comments

1. Integration of mature trees and hedgerows in southeast corner of the study area

General Comments

1. Potential impacts of future trails and lookouts on private property (i.e.. privacy, unauthorized access)
2. Can development occur within environmental protection areas?
3. Brookhill Tributary erosion, need money to fix the problem. The erosion problem was identified previously, mitigation measures were provided, and the money is in Clarington's bank account for future implementation. Plan B role is to determine if additional measures and money is required to mitigate the impacts of future growth or whether the original assessment and funding is sufficient.



relates to location-specific comments recorded on the map

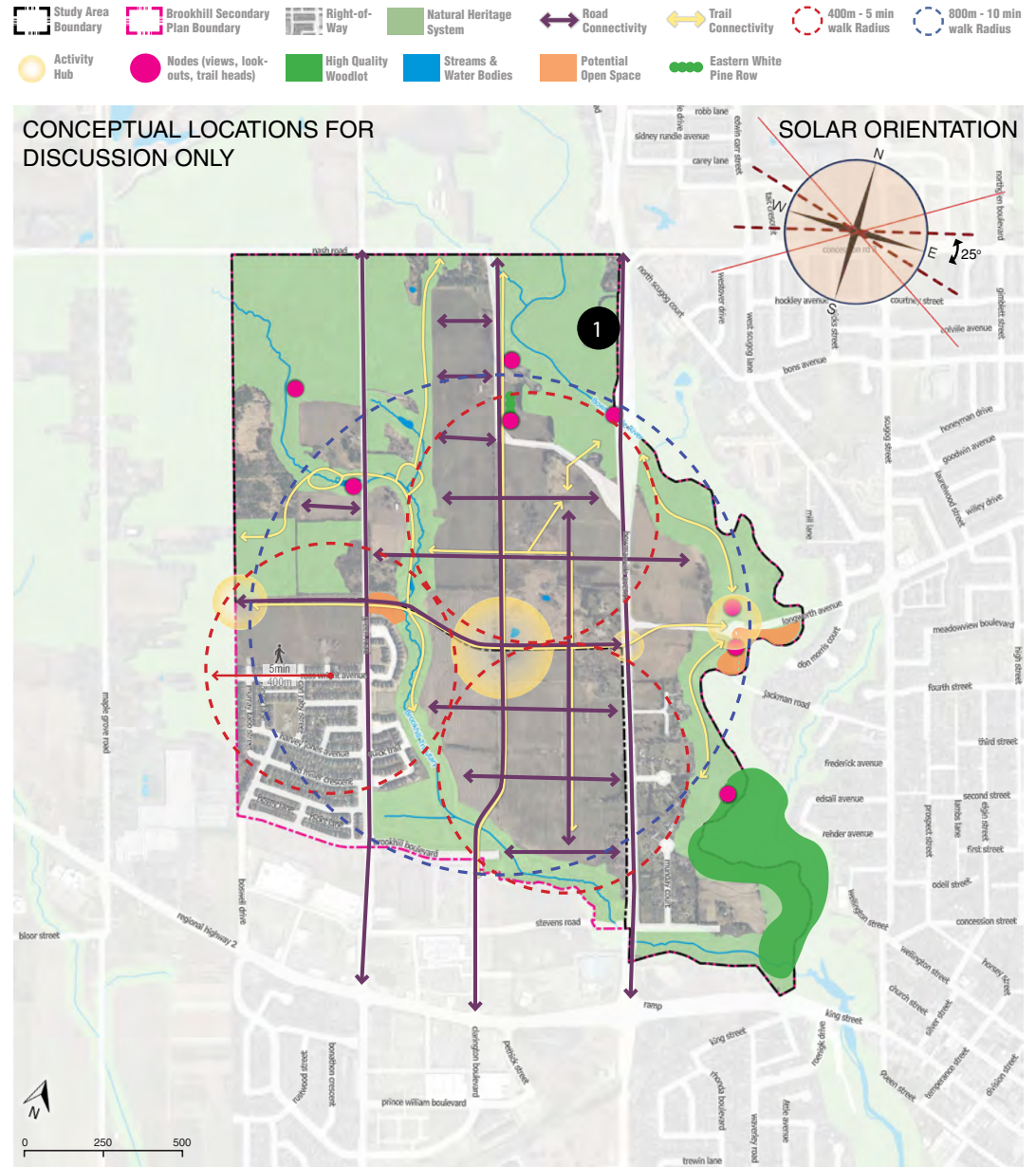
Urban Design, Sustainability & Landscape

Location-Specific Comments

1. Concern about trail system location on private property located in the north-east. More information as trail plan develops.

General Comments

1. A specific section in the Secondary Plan should be included to deal with Sustainability & Climate Change. Recent severe weather events require much better resiliency planning.
2. The text of the Secondary Plan should include a Statement about Climate Change and how new policies and Design Criteria can help development within the Plan to adjust to changing conditions resulting from Climate Change. As an example, the 100 year storm of the future may not be the same as the 100 year storm of today.
3. Secondary Plan should include updated design criteria related to storm sewer sizes and stormwater management.



relates to location-specific comments recorded on the map

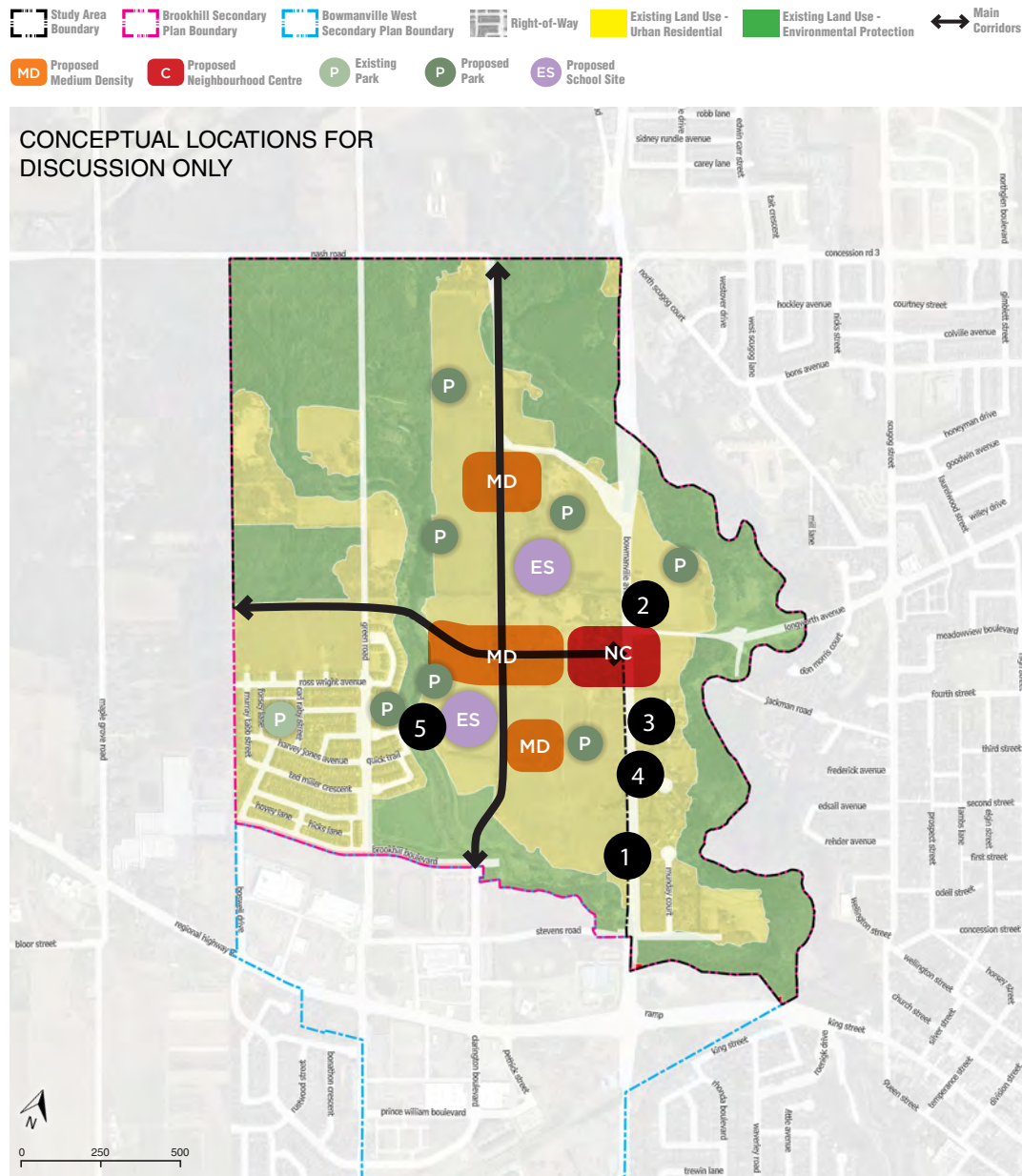
Land Use

Location-Specific Comments

1. Sidewalks are needed on both sides of Bowmanville Ave. Concerns with existing conditions along Bowmanville Ave (no bus, no sidewalks, difficult to access road from existing streets).
2. Existing grocery store on Longworth Ave. to the east, not needed in Brookhill.
3. Opportunity for place of worship.
4. Need high density on east side of Bowmanville Ave, south of Longworth Ave, for condos or seniors home.
5. Timing of school site for existing residents of Brookhill, children are currently being bused outside of Bowmanville to Hampton.

General Comments

1. Good opportunity for a win/win. With new growth, what are the opportunities to help to promote the historic core area / access / parking, etc?
2. Integrated bicycle paths - safety.
3. Charging stations - electrification.
4. Plan for executives moving to the area because of the new OPG HQ. High-density housing is not attractive to the overall character of our town. There is a piece of land (10 acres) at the eastern end of Stevens that could meet the needs while being consistent with the current neighbourhood (1 acre lot homes) + wouldn't create more traffic on already strained Bowmanville Ave.
5. Bowmanville Ave is already so busy during peak traffic times, it would be best to add the 4 lanes first before building all these new neighbourhoods.



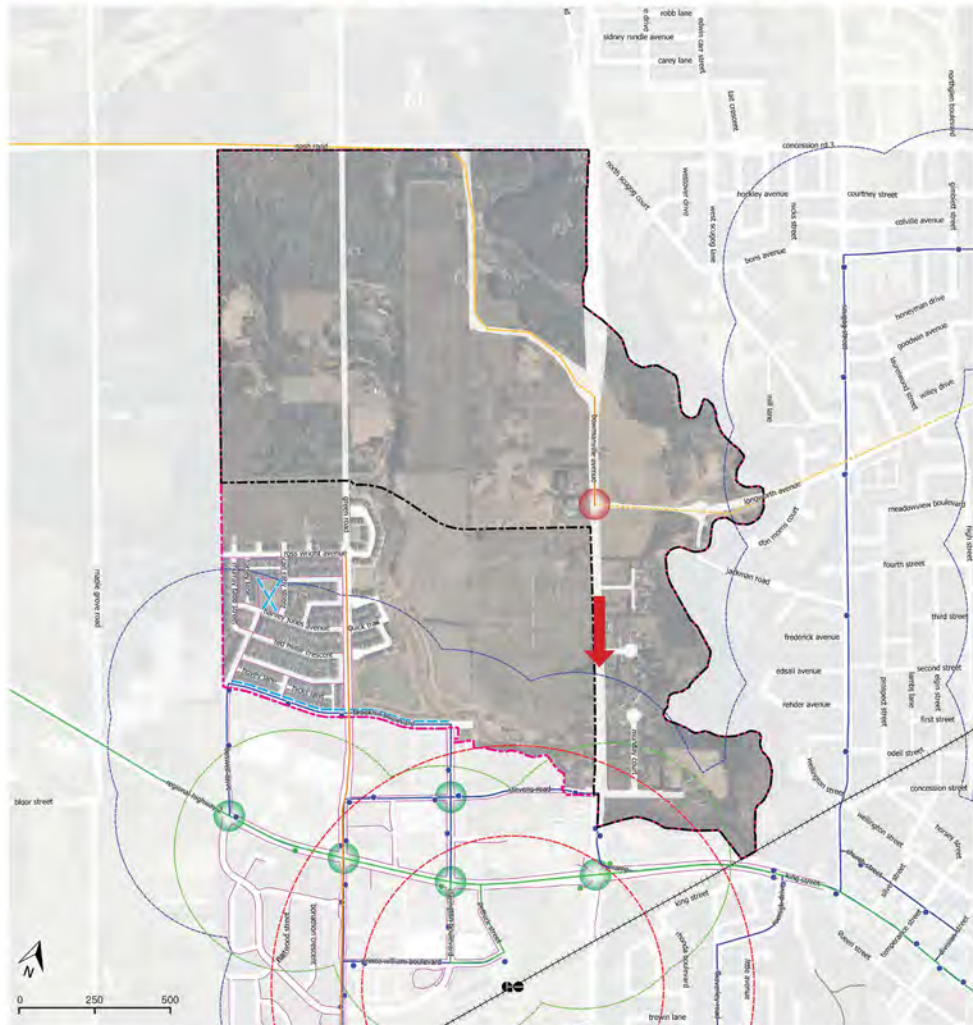
relates to location-specific comments recorded on the map

APPENDIX A

TABLE GROUP DISCUSSION WORKSHEETS

BROOKHILL SECONDARY PLAN UPDATE

PUBLIC INFORMATION CENTRE #2



TRANSPORTATION OPPORTUNITIES & CHALLENGES

ACTIVE TRANSPORTATION

OPPORTUNITIES

- Continue the sidewalk network to the north and east
- Extend the Bowmanville Valley Trail along the Bowmanville Creek into the study area
- Install wider sidewalks and improve crossing infrastructure
- Extend existing bike lanes and routes within and beyond study area and improve crossing infrastructure

CHALLENGES

- Bridges may be required to make connections to the Bowmanville Valley Trail
- Require adequate crossing infrastructure to cross Durham Highway 2 and Bowmanville Avenue due to growing vehicular traffic in certain areas and respective operating speeds
- Cycling infrastructure is sparse in the area and might be challenging to fit within existing road rights-of-way

TRANSIT

OPPORTUNITIES

- Extend bus routes into the study area to cover the majority of future development and increase bus frequency
- Increase connections to the Bowmanville GO Park and Ride, especially with the upcoming Bowmanville GO Station

CHALLENGES

- The Bowmanville GO Station is approved but not currently funded and there is no fixed timeline for its construction
- Extending transit into the area
- Increasing frequency of bus service
- The above is dependent on Durham Region Transit

VEHICLE ROAD NETWORK

OPPORTUNITIES

- Existing vehicle road network has excess capacity for future growth
- Improve the pedestrian and cyclist experience by reviewing road network design, such as right turn channelizations and reduced speed limits
- Reconsider the alignment and function of Nash Road

CHALLENGES

- Maintaining good vehicle traffic, while providing an enhanced and safe network for pedestrians, cyclists and transit users
- Peak morning hour traffic movement southbound exceeds capacity at Highway 2 and Bowmanville Avenue
- Peak morning hour traffic movement southbound exceeds single lane capacity for an arterial on Bowmanville Avenue (between Longworth and Stevens)

What are your priorities for the Brookhill Neighbourhood related to Transportation?

BROOKHILL SECONDARY PLAN UPDATE

PUBLIC INFORMATION CENTRE #2



SERVICING OPPORTUNITIES & CHALLENGES

OPPORTUNITIES

- Existing sanitary and water infrastructure has been sized to accommodate development in the Brookhill Secondary Plan Area (discussions with the Region of Durham on April 12th, 2019)
- Trunk sanitary sewers are proposed on Bowmanville Avenue from Nash Road to Highway 2 and on Highway 2 from Bowmanville Avenue to the existing CPR line. The section of trunk sanitary sewer on Highway 2 is proposed for completion in 2020 and section on Bowmanville Avenue is proposed for completion 2027
- Connect to existing sanitary sewers on Green Road and Clarington Boulevard
- Connect to existing water mains on Longworth Avenue, Bowmanville Avenue, Clarington Boulevard & Green Road

- Runoff from the western portion of the study area is conveyed to the Brookhill Tributary
- Runoff from the eastern portion of the study area is conveyed to Bowmanville Creek
- Stormwater Runoff Control
 - Quantity Control: Brookhill Tributary: Control to existing peak flows for the 2 through 100 year storm events. Quantity control not required for flows conveyed directly to Bowmanville Creek
 - Quantity Control: MECP Enhanced Level Protection (80% TSS Removal)
 - Erosion Control: Detention of the 25 mm rainfall runoff for 24 to 48 hours
 - Water Budget: Remedial measures are required to match groundwater recharge in proposed conditions to groundwater recharge in existing conditions

CHALLENGES

- Slope Stability - the stable top of slope is within the existing Nash Road right-of-way (ROW), the existing Stevens Road ROW, and portions of the stable top of slope adjacent to Bowmanville Creek are within existing residential lots
- The preliminary stable top of slope is beyond the physical top of slope in several areas within the study area

What are your priorities for the Brookhill Neighbourhood related to Servicing?

BROOKHILL SECONDARY PLAN UPDATE

PUBLIC INFORMATION CENTRE #2



NATURAL HERITAGE OPPORTUNITIES & CHALLENGES

OPPORTUNITIES

- Balancing urban growth with environmental protection, restoration and enhancement
- Increasing woodland and riparian cover through the application of buffers from NHS features
- Improving the quality/quantity of urban runoff to watercourses and wetlands
- Providing for passive and sustainable recreational opportunities within natural areas
- Promoting environmental stewardship and public awareness

CHALLENGES

- Protecting watercourses from urban pollution, sedimentation, channel/bank erosion, and thermal impacts
- Maintaining the overall pre-development pattern and volume of groundwater recharge, and discharge to wetlands and watercourses
- Minimizing crossings of natural heritage features
- Minimizing erosion in the Brookhill tributary
- Minimizing the negative impacts of human activities on natural heritage features and functions
- Maintaining/enhancing bio-diversity in natural areas
- Controlling establishment of invasive plant species in natural areas and buffers
- Integrating other environmental features such as mature trees and hedgerows
- Additional environmental features identified may have an impact on development potential

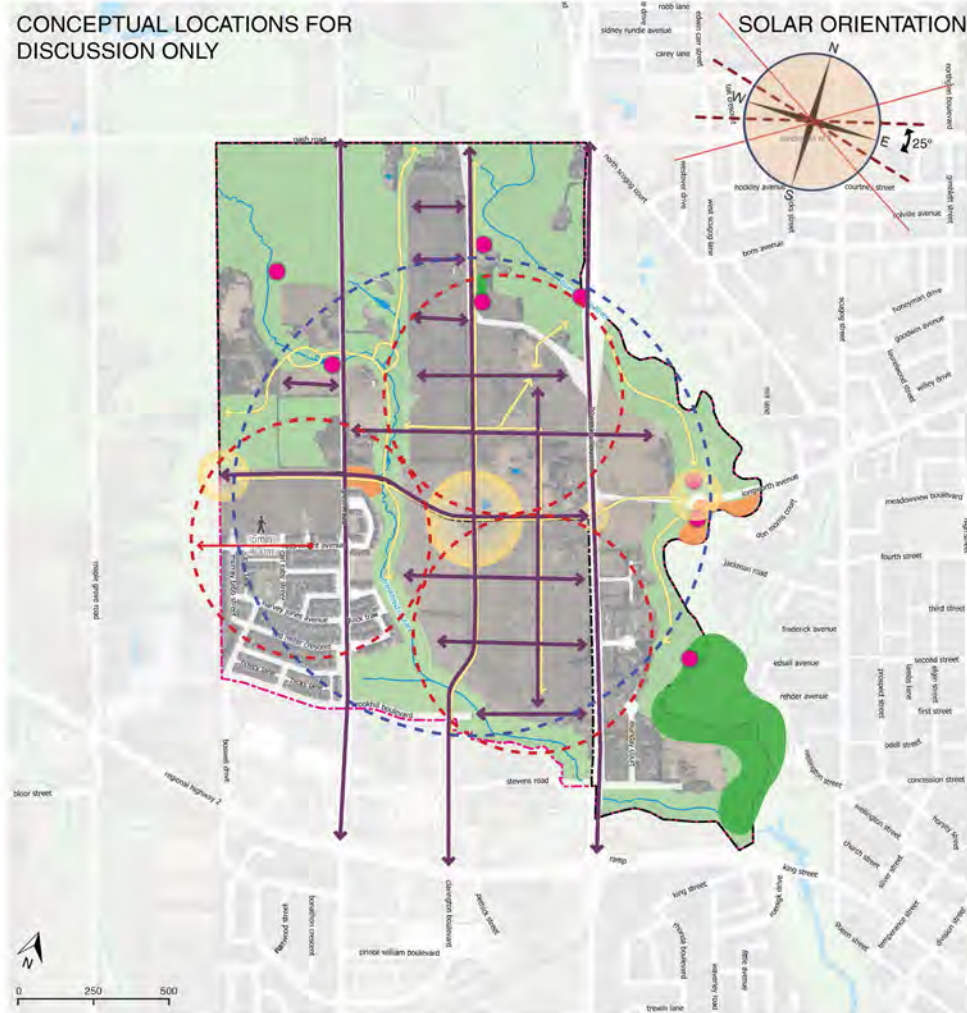
What are your priorities for the Brookhill Neighbourhood related to Natural Heritage?

BROOKHILL SECONDARY PLAN UPDATE

PUBLIC INFORMATION CENTRE #2



CONCEPTUAL LOCATIONS FOR DISCUSSION ONLY



URBAN DESIGN, SUSTAINABILITY & LANDSCAPE OPPORTUNITIES & CHALLENGES

URBAN DESIGN

OPPORTUNITIES

- Promote a healthy, connected, and complete community with:
 - An intensified form of development with appropriate synergies with public realm
 - A permeable street and block pattern to create a pedestrian-scaled environment
 - A Neighbourhood Commons with a strong and consistent building edge and coordinated streetscape treatments
 - A Village Corridor that incorporates special built form and public space designs
 - A high-quality public realm that promotes a healthy lifestyle and contributes to Brookhill's character
 - An accessible & connected active transportation network

SUSTAINABILITY

OPPORTUNITIES

- Support public health by creating walkable neighbourhoods with amenities and services within a 5 minute walk (400 m)
- Reduce greenhouse gas emissions through complete streets, active transportation, and reduced parking strategy
- Opportunities for best management practices for stormwater: rain gardens, planted swales, permeable pavements, rain barrels, and green roofs
- Benefits of the urban forest: reduction in air pollution, urban heat island effect, energy savings, habitat for urban wildlife, biodiversity, and opportunities for recreation

- Promote innovative residential building designs that contribute to energy reduction and conservation: green roofs, synergies between buildings, site management practices
- Utilize passive solar orientation in the layout of the community to maximize solar energy gain opportunities (25° of geographic east-west)

CHALLENGES

- Delivering District Energy in a greenfield location will be difficult without a large user, such as a hospital
- Identify different shocks and stresses to better understand vulnerabilities either natural or manmade

LANDSCAPE

OPPORTUNITIES

- Introduce a trail and lookout system along watercourses with minimal creek crossings, through existing woodland, and along the top of ridges
- Preserve and enhance views into high-quality natural areas
- Introduce open space amenities throughout the site
- Establish major nodes and provide wayfinding and connection/circulation routes between them

CHALLENGES

- Encroachment into existing watercourses will negatively affect the health of the riparian zone
- Remove invasive species from woodlots
- Remove any ash trees affected by Emerald Ash Borer located within 15m of new or existing trails
- Preserve existing row of mature Eastern White Pine trees that are in excellent condition and have high aesthetic quality

What are your priorities for the Brookhill Neighbourhood related to Urban Design, Sustainability & Landscape?

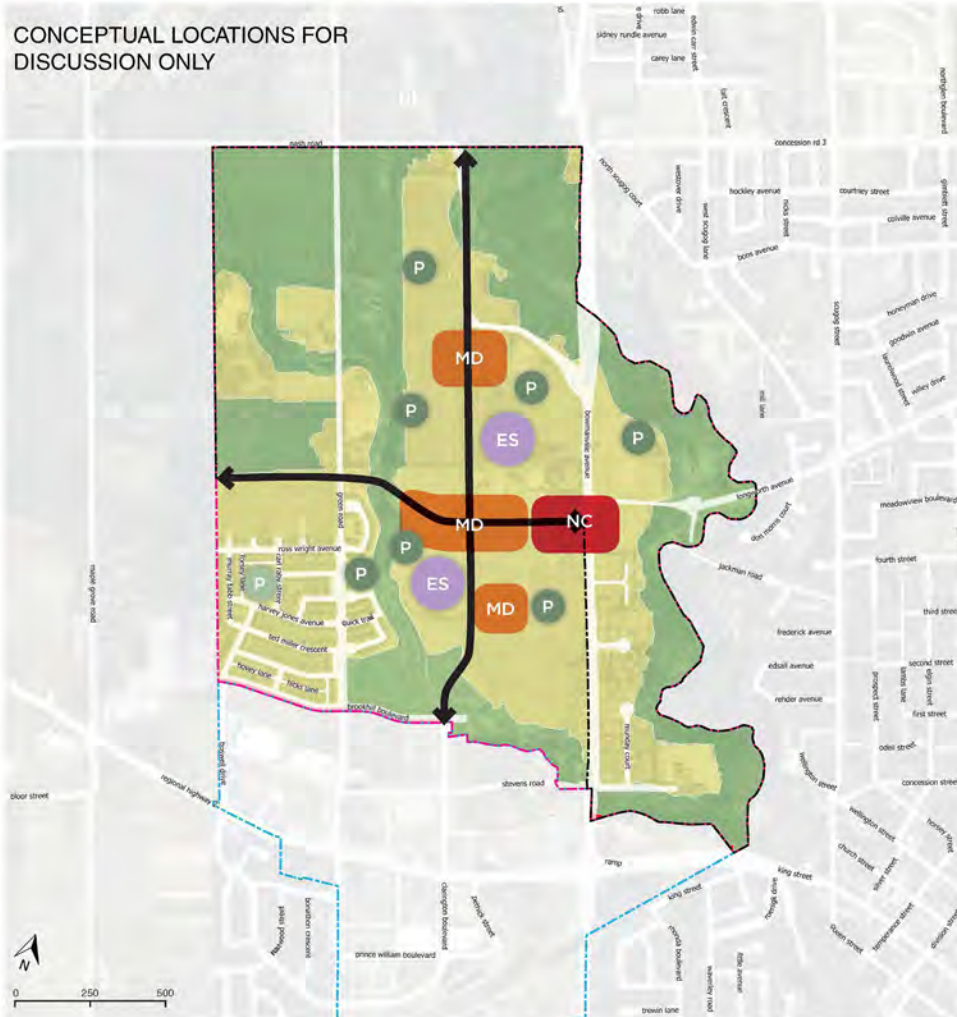
BROOKHILL SECONDARY PLAN UPDATE

PUBLIC INFORMATION CENTRE #2



LAND USE OPPORTUNITIES & CHALLENGES

CONCEPTUAL LOCATIONS FOR DISCUSSION ONLY



OPPORTUNITIES

- Explore feasibility for increased density
- Key strategies to facilitate growth:
 - Support environment for change
 - Promote compact form
 - Develop as mixed use area
- Provide a range of housing types, densities, and tenures to use land more efficiently, reduce the cost of municipal services, and meet 30% affordable housing target
- Promote development that builds on and supports existing community character, provides public benefits, and contributes to a high quality public realm
- Achieve mixed-use development where residents are closer to services and alternative modes of transportation to meet long-term needs
- Promote development and land use patterns that conserve biodiversity and consider the impacts of a changing climate

- Plan public streets, spaces, and facilities to be safe, meet pedestrian needs, foster social interaction, and facilitate active transportation and community connectivity
- Include a neighbourhood centre for convenience of local residents, may include a grocery store
- Provide a full range and equitable distribution of publicly accessible parks and open spaces
- Promote conservation in energy, water, and wastewater management
- Create a:
 - Complete community
 - High-quality community
 - Healthy community
 - Sustainable community
 - Resilient community
 - Viable community

CHALLENGES

- Impacts of Provincial Bill 108
- New Growth Plan proposed / future changes

What are your priorities for the Brookhill Neighbourhood related to Land Use?

APPENDIX B

PIC #2 DISPLAY PANELS

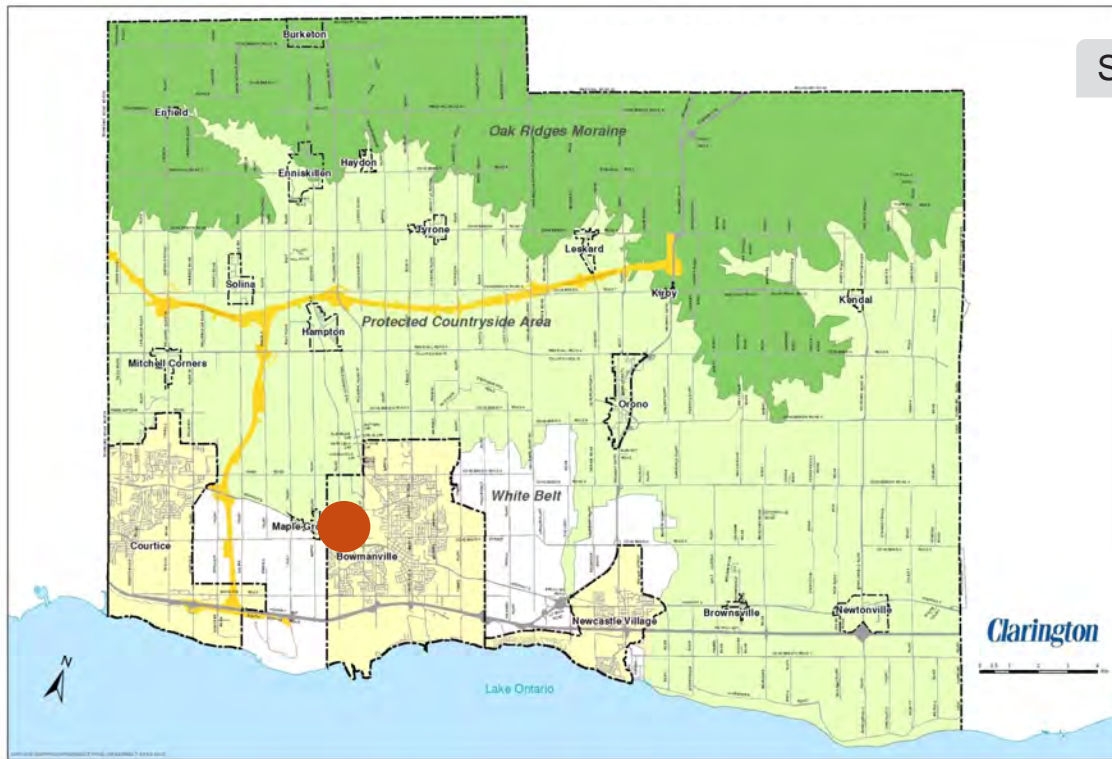


BROOKHILL
secondary plan update
PUBLIC INFORMATION CENTRE
PIC #2

Tuesday, June 25 | 6:30 to 8:30 p.m.

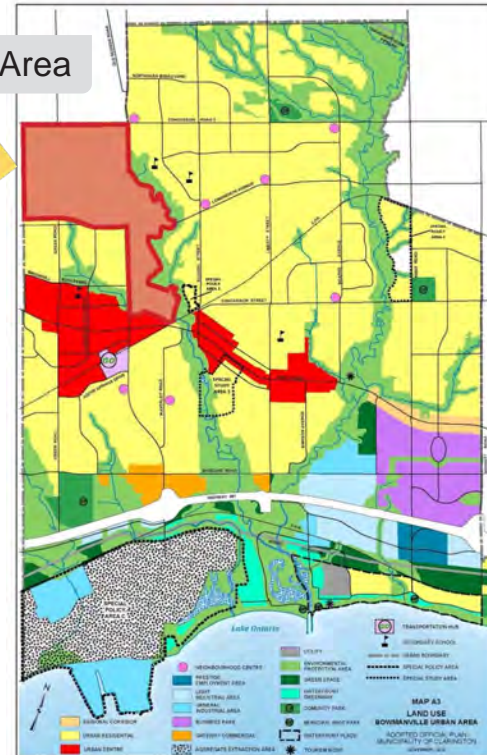
Garnet B. Rickard Recreation Complex

SECONDARY PLAN STUDY AREA CONTEXT



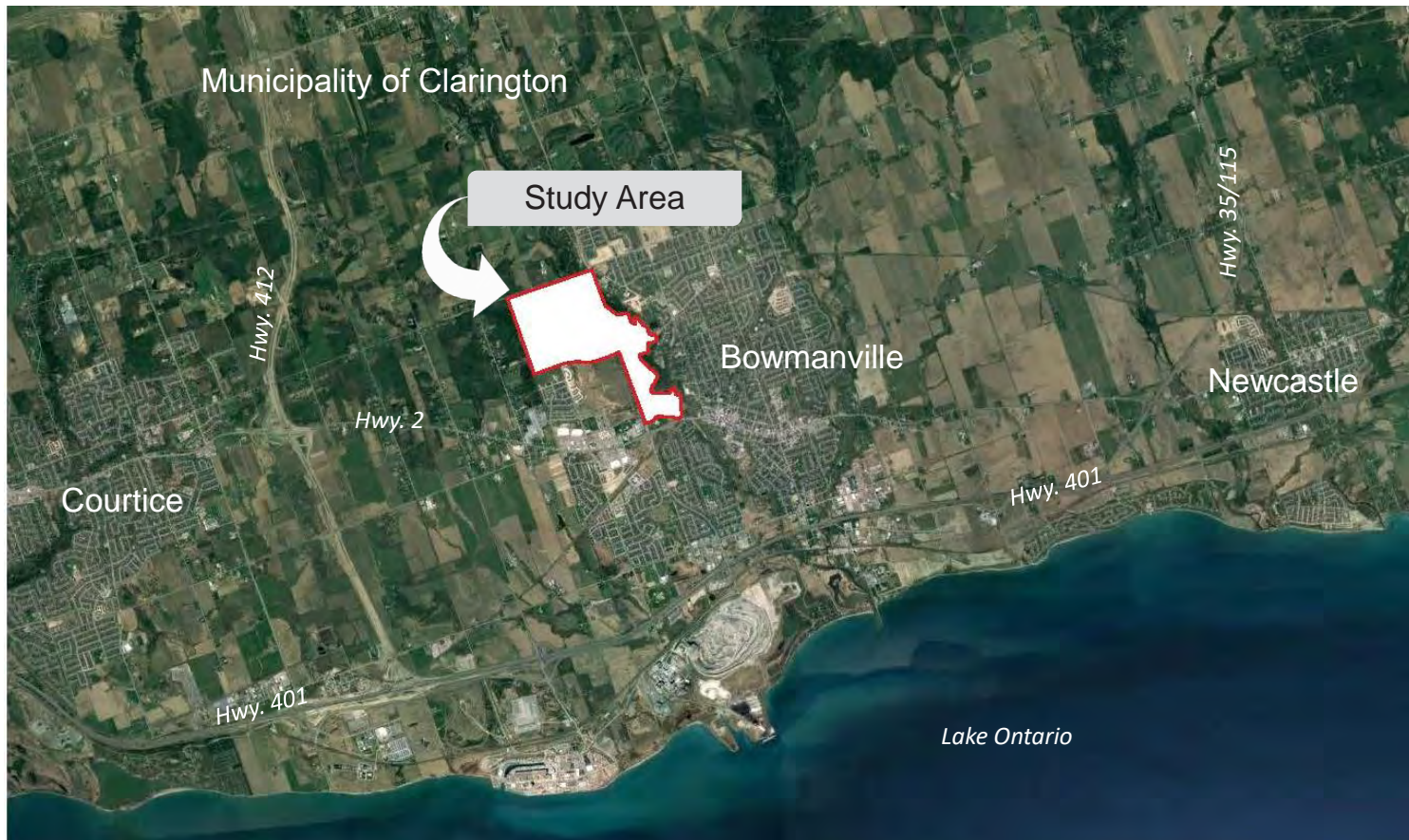
Official Plan – Bowmanville Area

Study Area



Land Use Map A

SECONDARY PLAN STUDY AREA CONTEXT



WHAT IS A SECONDARY PLAN?

A **policy document** prepared under the Planning Act to provide detailed local development policies to **guide growth in a defined area**.

It establishes:

- an appropriate mix of land uses;
- the height and density of buildings;
- the road network, trails and transit routes;
- the parkland system; and,
- protection for the natural heritage system.



WHY A NEW SECODNARY PLAN?

This update shall **implement** the policies of the Clarington Official Plan, the Durham Region Official Plan, and the Provincial Policy Statement and the Growth Plan.



The work will address:

- New targets for growth in terms of intensification and the density of development;
- Clarington's Priority Green Development Framework;
- Updating the natural heritage system;
- Updating the engineering elements of the plan:
 - Stormwater drainage
 - Transportation
 - Servicing

INTEGRATED PROCESS



- The “**Integrated Approach**” recognizes the desirability of integrating and coordinating the planning and approval processes to satisfy the requirements of the Planning Act and Environmental Assessment Act.
- The Secondary Plan Update is a Master Planning Process that will follow Phases 1 and 2 of Schedule ‘C’ of the Municipal Class Environmental Assessment (MCEA) process.

SECONDARY PLAN AREA



2007 SECONDARY PLAN (white)

Size: 300 hectares (740 acres)

Approved for:

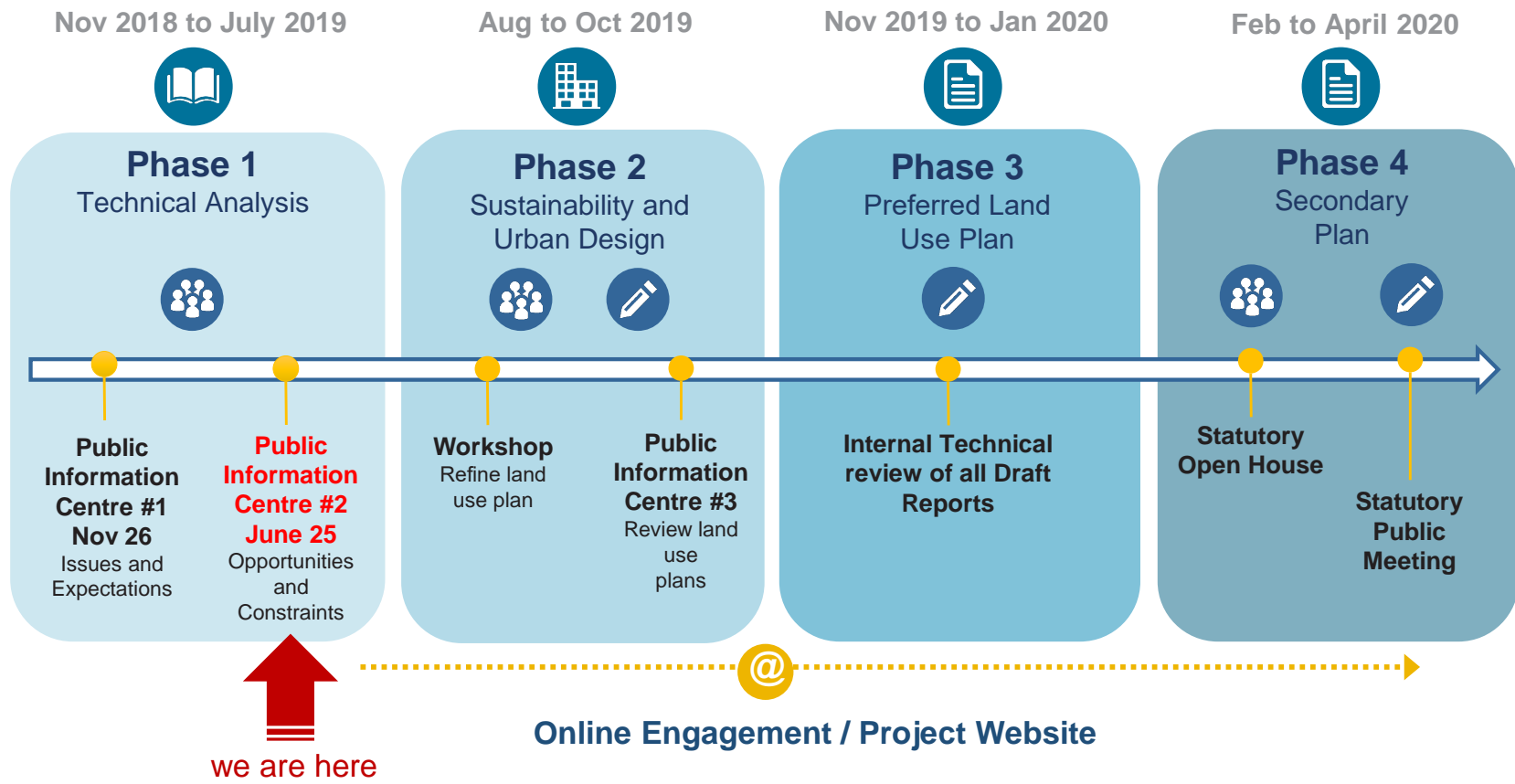
- 2,800 Residential units: singles, semi's, townhouses, low-rise apartments
- Retail and Service Commercial
- Schools and Places of Worship
- Parks and Open Spaces

2019 UPDATE (red)

Size: +200 hectares (495 acres)

**Brookhill Update Study Area
Secondary Plan Boundary**

STUDY PROCESS



TEAM

Municipality of Clarington
Municipal Staff

Clarington

Project Management and Municipal Planning
The Planning Partnership (TPP)

TPP

Municipal Services
SCS Consulting Group (SCS)

The logo for SCS Consulting Group Ltd features three colored circles (light blue, medium blue, dark blue) above the letters 'SCS' in a bold, dark blue font. To the right of 'SCS' is the text 'consulting group ltd' in a smaller, dark blue font, with a horizontal arrow pointing to the right above the text.

Transportation
R.J. Burnside & Associates Inc.

The logo for R.J. Burnside & Associates Inc. consists of a stylized orange 'A' inside a circle, followed by the word 'BURNSIDE' in a green, serif font.

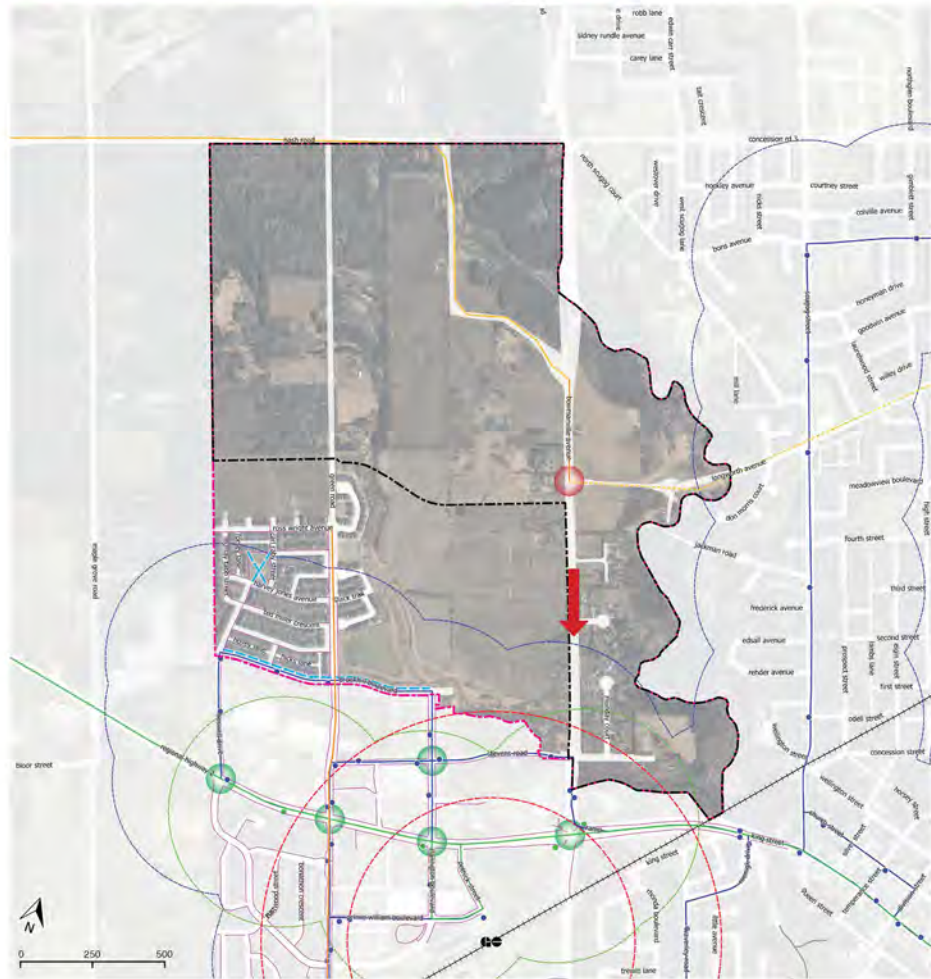
Natural Environment
PLAN B Natural Heritage

PLAN Natural Heritage



BROOKHILL SECONDARY PLAN UPDATE

PUBLIC INFORMATION CENTRE #2



TRANSPORTATION OPPORTUNITIES & CHALLENGES

ACTIVE TRANSPORTATION

OPPORTUNITIES

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CHALLENGES

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OPPORTUNITIES

- Extend bus routes into the study area to cover the majority of future development and increase bus frequency
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CHALLENGES

- The Bowmanville GO Station is approved but not currently funded and there is no fixed timeline for its construction
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VEHICLE ROAD NETWORK

OPPORTUNITIES

- Existing vehicle road network has excess capacity for future growth
- Improve the pedestrian and cyclist experience by reviewing road network design, such as right turn channelizations and reduced speed limits
- Reconsider the alignment and function of Nash Road

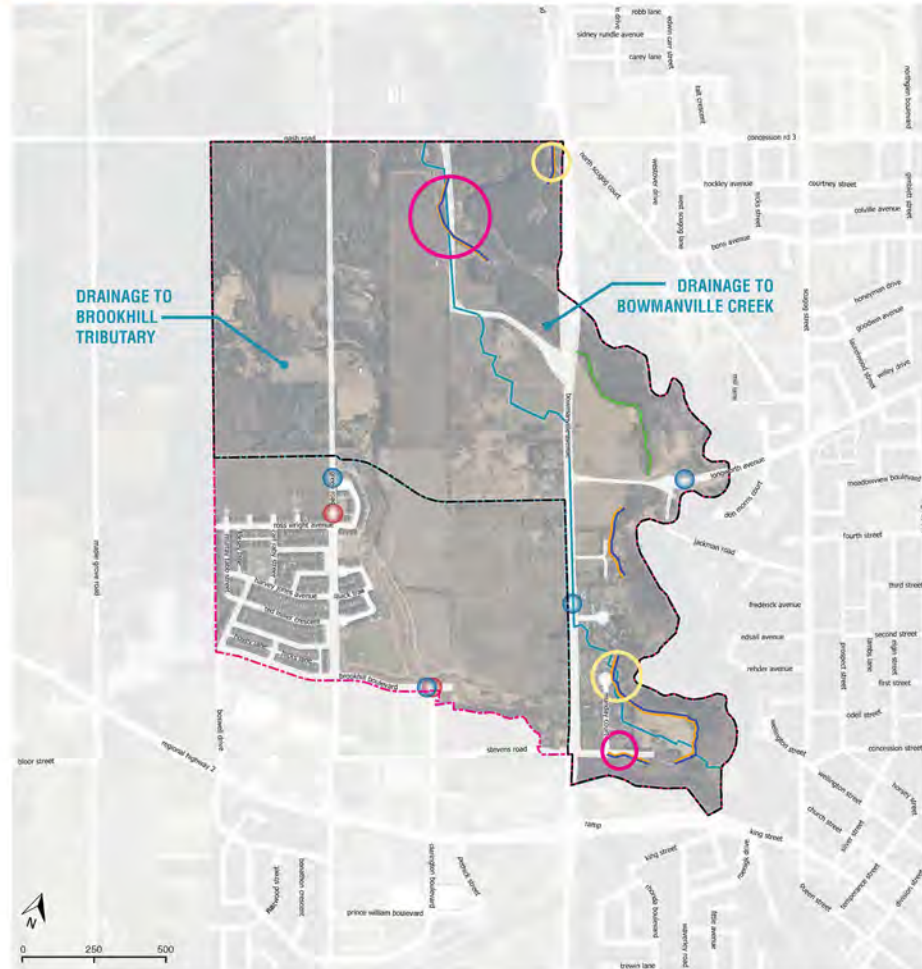
CHALLENGES

- Maintaining good vehicle traffic, while providing an enhanced and safe network for pedestrians, cyclists and transit users
- Peak morning hour traffic movement southbound exceeds capacity at Highway 2 and Bowmanville Avenue
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What are your priorities for the Brookhill Neighbourhood related to Transportation?

BROOKHILL SECONDARY PLAN UPDATE

PUBLIC INFORMATION CENTRE #2



SERVICING OPPORTUNITIES & CHALLENGES

OPPORTUNITIES

- Existing sanitary and water infrastructure has been sized to accommodate development in the Brookhill Secondary Plan Area (discussions with the Region of Durham on April 12th, 2019)
- Trunk sanitary sewers are proposed on Bowmanville Avenue from Nash Road to Highway 2 and on Highway 2 from Bowmanville Avenue to the existing CPR line. The section of trunk sanitary sewer on Highway 2 is proposed for completion in 2020 and section on Bowmanville Avenue is proposed for completion 2027
- Connect to existing sanitary sewers on Green Road and Clarington Boulevard
- Connect to existing water mains on Longworth Avenue, Bowmanville Avenue, Clarington Boulevard & Green Road
- Runoff from the western portion of the study area is conveyed to the Brookhill Tributary
- Runoff from the eastern portion of the study area is conveyed to Bowmanville Creek
- Stormwater Runoff Control
 - Quantity Control: Brookhill Tributary: Control to existing peak flows for the 2 through 100 year storm events. Quantity control not required for flows conveyed directly to Bowmanville Creek
 - Quantity Control: MECP Enhanced Level Protection (80% TSS Removal)
 - Erosion Control: Detention of the 25 mm rainfall runoff for 24 to 48 hours
 - Water Budget: Remedial measures are required to match groundwater recharge in proposed conditions to groundwater recharge in existing conditions

CHALLENGES

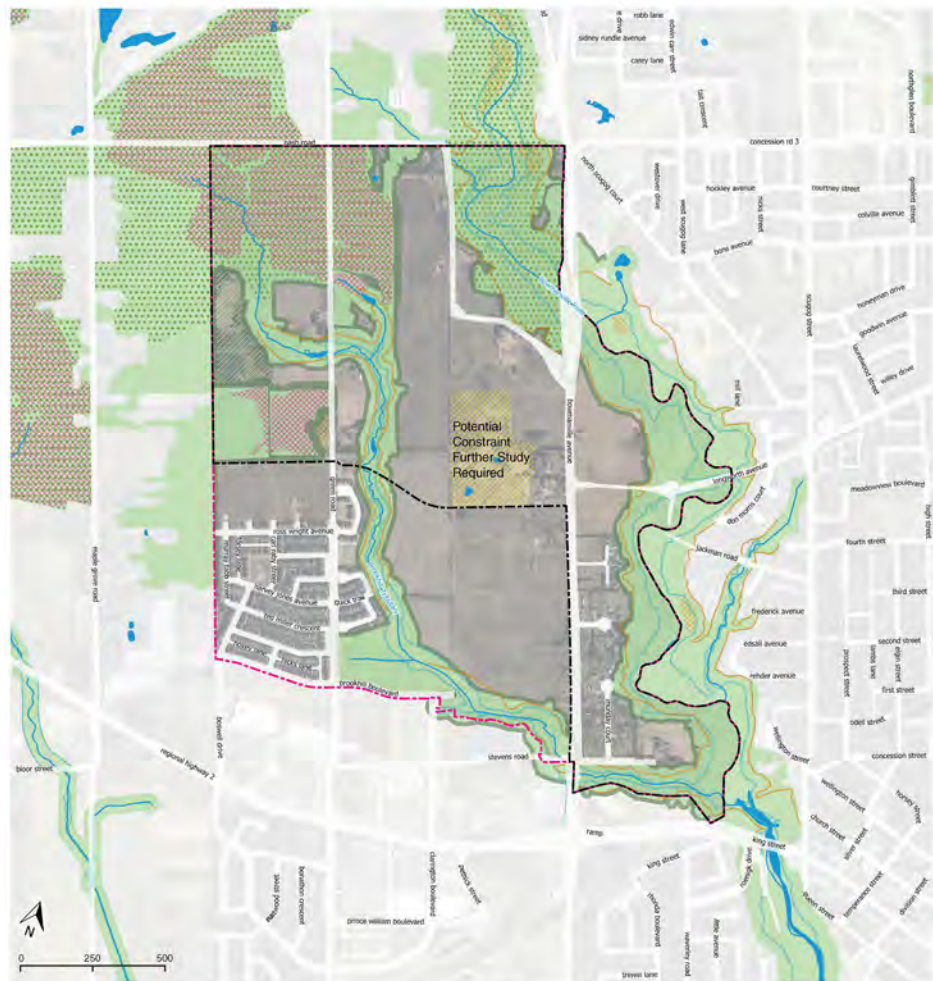
- Slope Stability - the stable top of slope is within the existing Nash Road right-of-way (ROW), the existing Stevens Road ROW, and portions of the stable top of slope adjacent to Bowmanville Creek are within existing residential lots
- The preliminary stable top of slope is beyond the physical top of slope in several areas within the study area

What are your priorities for the Brookhill Neighbourhood related to Servicing?



BROOKHILL SECONDARY PLAN UPDATE

PUBLIC INFORMATION CENTRE #2



NATURAL HERITAGE OPPORTUNITIES & CHALLENGES

OPPORTUNITIES

- Balancing urban growth with environmental protection, restoration and enhancement
- Increasing woodland and riparian cover through the application of buffers from NHS features
- Improving the quality/quantity of urban runoff to watercourses and wetlands
- Providing for passive and sustainable recreational opportunities within natural areas
- Promoting environmental stewardship and public awareness

CHALLENGES

- Protecting watercourses from urban pollution, sedimentation, channel/bank erosion, and thermal impacts
- Maintaining the overall pre-development pattern and volume of groundwater recharge, and discharge to wetlands and watercourses
- Minimizing crossings of natural heritage features
- Minimizing erosion in the Brookhill tributary
- Minimizing the negative impacts of human activities on natural heritage features and functions
- Maintaining/enhancing bio-diversity in natural areas
- Controlling establishment of invasive plant species in natural areas and buffers
- Integrating other environmental features such as mature trees and hedgerows
- Additional environmental features identified may have an impact on development potential

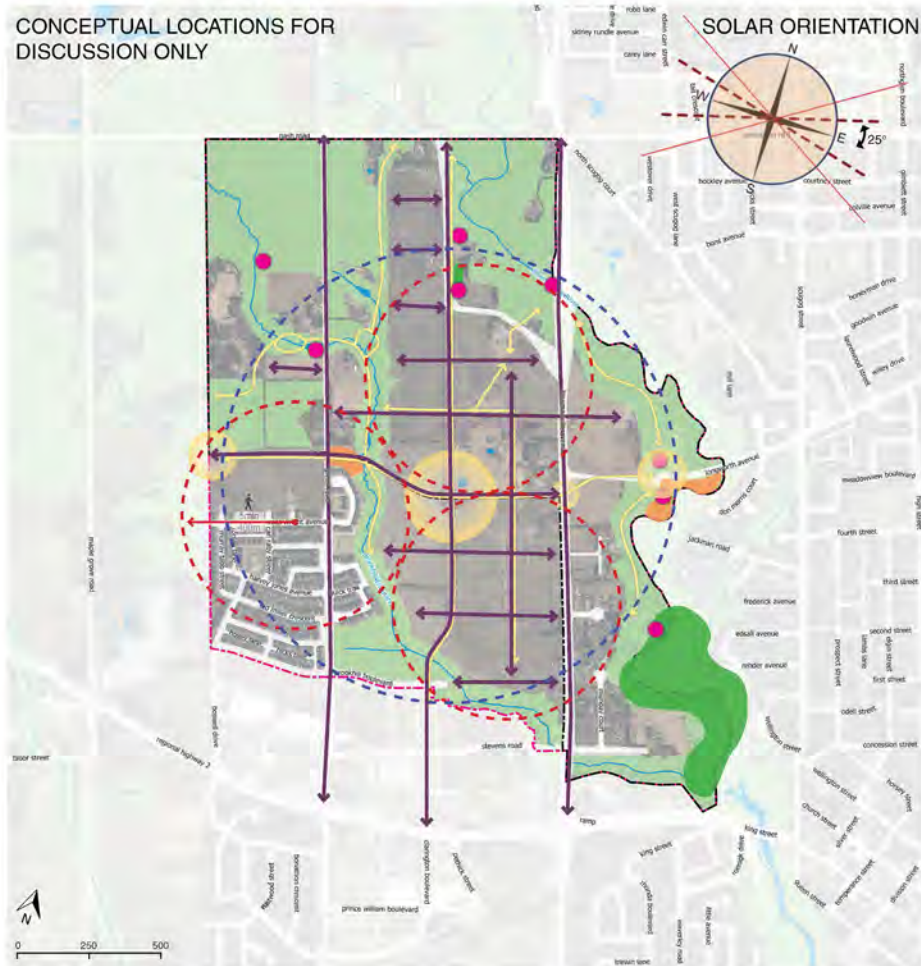
What are your priorities for the Brookhill Neighbourhood related to Natural Heritage?

BROOKHILL SECONDARY PLAN UPDATE

PUBLIC INFORMATION CENTRE #2



CONCEPTUAL LOCATIONS FOR DISCUSSION ONLY



URBAN DESIGN, SUSTAINABILITY & LANDSCAPE OPPORTUNITIES & CHALLENGES

URBAN DESIGN

OPPORTUNITIES

- Promote a healthy, connected, and complete community with:
 - An intensified form of development with appropriate synergies with public realm
 - A permeable street and block pattern to create a pedestrian-scaled environment
 - A Neighbourhood Commons with a strong and consistent building edge and coordinated streetscape treatments
 - A Village Corridor that incorporates special built form and public space designs
 - A high-quality public realm that promotes a healthy lifestyle and contributes to Brookhill's character
 - An accessible & connected active transportation network

SUSTAINABILITY

OPPORTUNITIES

- Support public health by creating walkable neighbourhoods with amenities and services within a 5 minute walk (400 m)
- Reduce greenhouse gas emissions through complete streets, active transportation, and reduced parking strategy
- Opportunities for best management practices for stormwater: rain gardens, planted swales, permeable pavements, rain barrels, and green roofs
- Benefits of the urban forest: reduction in air pollution, urban heat island effect, energy savings, habitat for urban wildlife, biodiversity, and opportunities for recreation

- Promote innovative residential building designs that contribute to energy reduction and conservation: green roofs, synergies between buildings, site management practices
- Utilize passive solar orientation in the layout of the community to maximize solar energy gain opportunities (25° of geographic east-west)

CHALLENGES

- Delivering District Energy in a greenfield location will be difficult without a large user, such as a hospital
- Identify different shocks and stresses to better understand vulnerabilities either natural or manmade

LANDSCAPE

OPPORTUNITIES

- Introduce a trail and lookout system along watercourses with minimal creek crossings, through existing woodland, and along the top of ridges
- Preserve and enhance views into high-quality natural areas
- Introduce open space amenities throughout the site
- Establish major nodes and provide wayfinding and connection/circulation routes between them

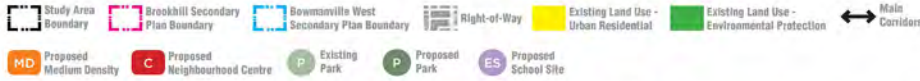
CHALLENGES

- Encroachment into existing watercourses will negatively affect the health of the riparian zone
- Remove invasive species from woodlots
- Remove any ash trees affected by Emerald Ash Borer located within 15m of new or existing trails
- Preserve existing row of mature Eastern White Pine trees that are in excellent condition and have high aesthetic quality

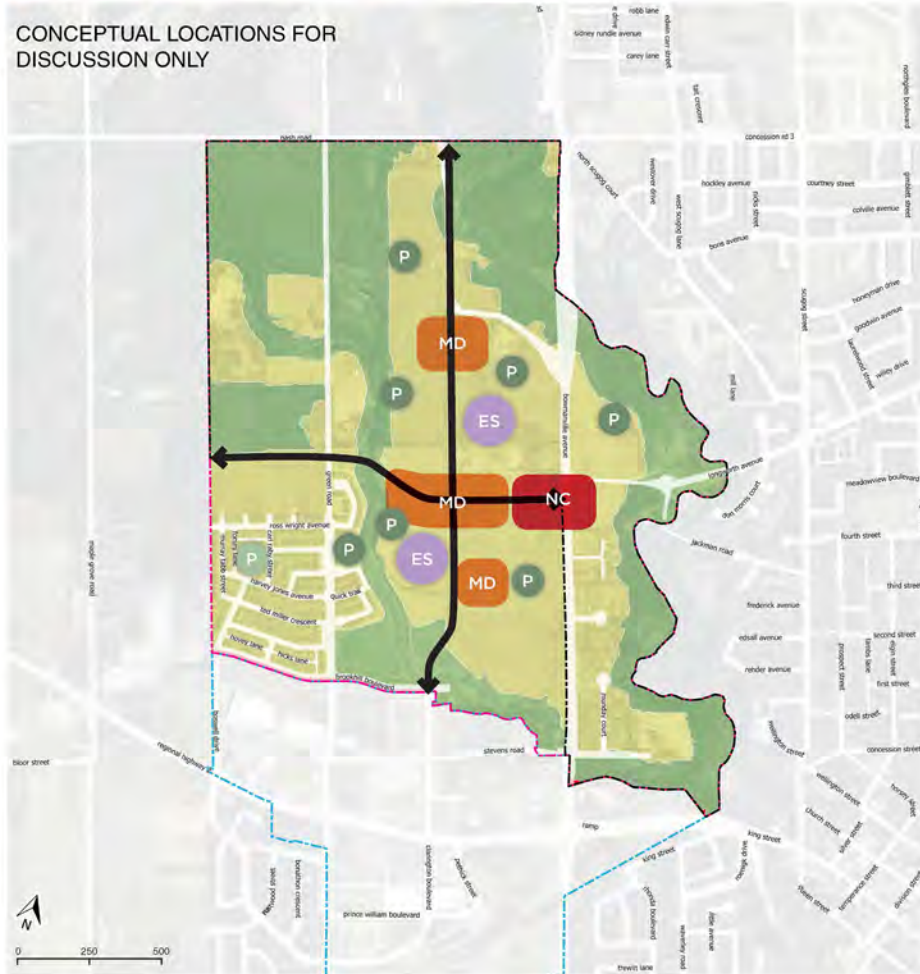
What are your priorities for the Brookhill Neighbourhood related to Urban Design, Sustainability & Landscape?

BROOKHILL SECONDARY PLAN UPDATE

PUBLIC INFORMATION CENTRE #2



CONCEPTUAL LOCATIONS FOR DISCUSSION ONLY



LAND USE OPPORTUNITIES & CHALLENGES

OPPORTUNITIES

- Explore feasibility for increased density
- Key strategies to facilitate growth:
 - Support environment for change
 - Promote compact form
 - Develop as mixed use area
- Provide a range of housing types, densities, and tenures to use land more efficiently, reduce the cost of municipal services, and meet 30% affordable housing target
- Promote development that builds on and supports existing community character, provides public benefits, and contributes to a high quality public realm
- Achieve mixed-use development where residents are closer to services and alternative modes of transportation to meet long-term needs
- Promote development and land use patterns that conserve biodiversity and consider the impacts of a changing climate

- Plan public streets, spaces, and facilities to be safe, meet pedestrian needs, foster social interaction, and facilitate active transportation and community connectivity
- Include a neighbourhood centre for convenience of local residents, may include a grocery store
- Provide a full range and equitable distribution of publicly accessible parks and open spaces
- Promote conservation in energy, water, and wastewater management
- Create a:
 - Complete community
 - High-quality community
 - Healthy community
 - Sustainable community
 - Resilient community
 - Viable community

CHALLENGES

- Impacts of Provincial Bill 108
- New Growth Plan proposed / future changes

What are your priorities for the Brookhill Neighbourhood related to Land Use?


Built Environment



The built environment is the constructed physical environment in which we live, work and play each day. It considers the design and layout of a neighbourhood, including land use mix (i.e. residential and commercial) and diversity of building forms (i.e. single detached dwellings, townhomes and low-rise buildings), together with the interaction of the buildings, road systems and other infrastructure that we encounter.



Mobility



Mobility is about reducing vehicle dependency and offering alternative travel choices for residents as they move in and through neighbourhoods each day. It speaks to facilitating active transportation in order to reduce pressure on Clarington's transportation network and reducing vehicle emissions from entering the environment, thereby contributing to human health and well-being.




Natural Environment & Open Space



This theme seeks to protect and enhance ecologically significant components of Clarington's natural heritage system, encourage design that works with natural conditions and gains benefit from the environmental, economic and social benefits of the natural landscape, and promote linkages to a diverse range of open spaces, parks and recreation facilities.



Infrastructure & Buildings



Green neighbourhoods strive to use resources more efficiently, leading to potential cost savings. This theme identifies the means to maximize energy and water conservation, minimize the consumption of renewable resources, and contribute to climate change mitigation and adaptation.



The Clarington Official Plan directs the Municipality to address climate change and become a more sustainable community. The Priority Green initiative provides a framework to guide development in minimizing the consumption of energy, water, and other resources and reducing impacts on the natural environment.

- Promote renewable energy
- Reduce the heat island effect
- Increase building efficiency
- Divert construction waste
- Recover rainwater and greywater
- Provide bicycle parking
- Create electric vehicle parking
- Design mixed-use, walkable communities



Clarington

Visit our website for updates

www.clarington.net/Brookhill

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