



Watersand Phase 2 South Urban Design Brief

Barrie, Ontario

Plan of Subdivision

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FOR: **WATERSAND CONSTRUCTION LTD.**

DRAFT

Disclaimer

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1.0 INTRODUCTION

1.1 Purpose & Intent

MBTW|WAI has been retained by Watersand Construction Ltd. to prepare this Urban Design Brief to address the various urban design guidelines and policies within the City of Barrie. This Urban Design Brief demonstrates how the proposed development achieves various built form, landscape and streetscape policies and guidelines. This Urban Design Brief is part of the Zoning By-law Amendment and Draft Plan of Subdivision application to facilitate the development of the subject lands, referred to herein as Watersand Phase 2 South.

2.0 CONTENT

This Urban Design Brief will review applicable policies and guidelines within the City of Barrie's Official Plan and Urban Design Manual that pertain to the proposed development on the lands municipally known as 301 McKay Road West (subject lands) and legally described as Part of the North Half of Lot 3, all of the North Half of Lot 4 and Part of Lot 5, Concession 9, Geographic Township of Innisfil.

The proposed development will contribute to creating a unique residential development that is complementary to its natural and built surroundings and is generally consistent with the overall vision, policy framework and community structure identified in the City of Barrie Official Plan and the Salem Secondary Plan.

The proposed development envisions single detached and townhouse dwellings, an elementary school and a recreational facility. In addition, the proposed development will preserve and enhance the valley lands and include a comprehensive trail network. This Urban Design Brief will focus on the residential lands and proposed street network and their interface with the valley lands, recreational centre and elementary school. It is envisioned that the proposed recreational centre and valley blocks will be conveyed to the City and the proposed elementary school block will be developed by the school board.

The Urban Design Brief will:

- Establish site characteristics and surrounding site context.
- Define the design vision and guiding principles
- Present the development concept and describe the proposed site layout and the overall functionality of the development; and
- Review relevant policy and guidelines.

2.1 Contextual Analysis

The subject lands are located at the south-west portion of the City of Barrie and are situated in the Salem Secondary Plan Area. As shown in Figure 1, the subject lands are located south of McKay Road West with County Road 27 to the west and Veterans Drive to the east. The subject lands are generally rectangular in shape and have approximately +/- 475 metres of frontage along McKay Road West.

The subject lands are within the easterly, Phase Two South portion of the overall Watersand Subdivision Lands. The Phase Two South Lands are 30.47 hectares (75.3 acres) in size and are currently vacant, which represents an opportunity to make efficient use of an underutilized site located within the “Settlement Area” of the City of Barrie. The surrounding uses include:

North: McKay Road, an existing arterial road with a 34 metre right-of-way and future residential beyond.

East: Draft approved Watersand Subdivision Phase 1, which consists of a low-density residential community.

South: The Town of Innisfil, with lands that are currently agricultural in use. The proposed stormwater management pond within the southern portion of the subject lands has been approved to continue onto the Innisfil lands to the south.

West: Valley lands that are a continuation from the subject lands with future residential envisioned beyond.

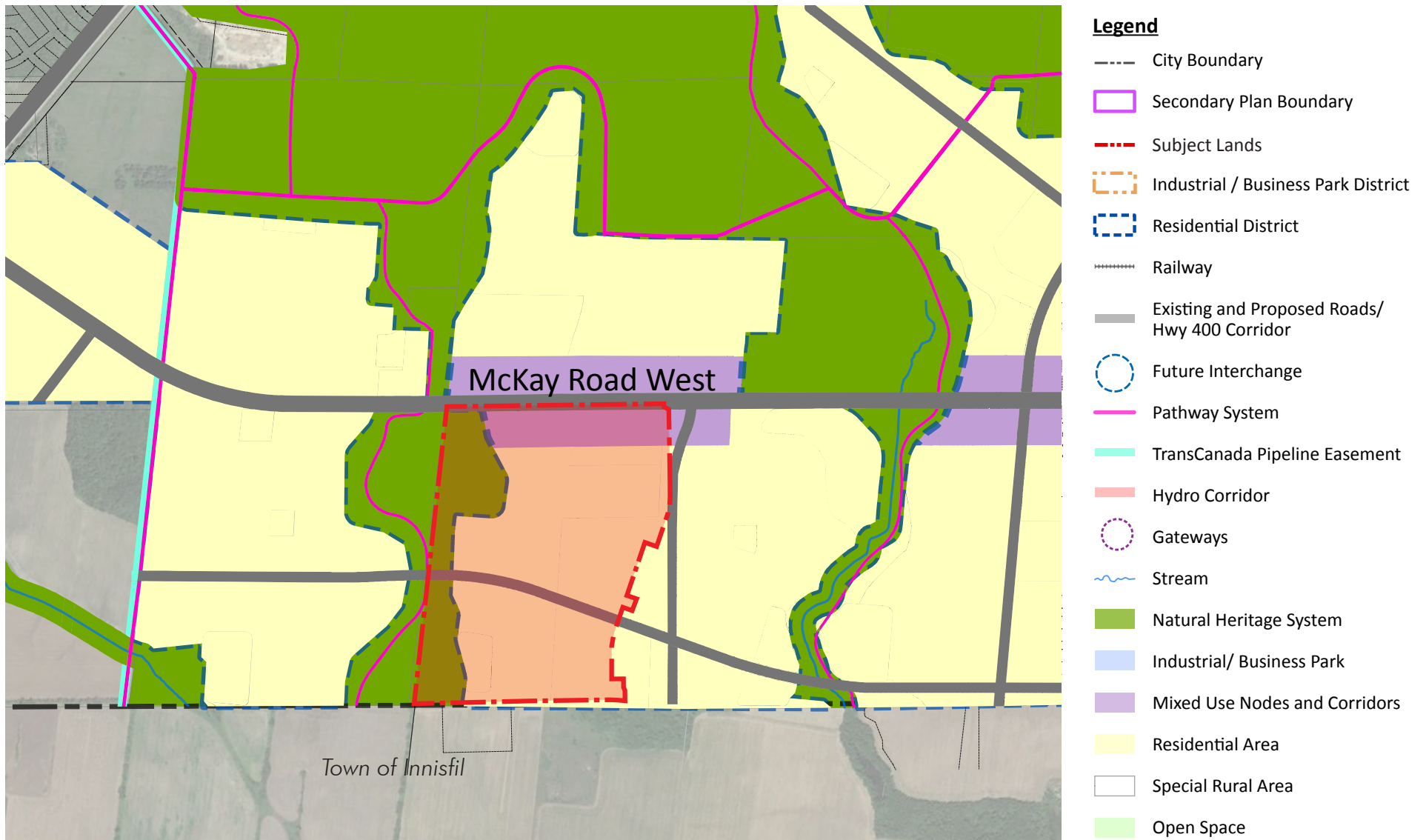


Figure 1 - Site Context - Watersand Phase 2 South



Image 1: View looking east along McKay Road West with subject lands to the south



Image 2: View of subject lands from MaKay Road West



Image 3: Aerial view of subject lands and surrounding area

3.0 SITE DESIGN - DEVELOPMENT CONCEPT

3.1 Site Design and Guiding Principles

The proposed design for the Watersand Phase 2 South development Implements the City of Barrie's vision and strategic direction with the following urban design considerations:

- Introduce low and medium density housing typologies, which contribute to providing a variety of housing choice.
- Protect, preserve and enhance the Natural Heritage System and valley lands by ensuring appropriate buffers and adjacent land uses are proposed.
- Allocate a mixed use node that will provide services and amenities for existing and future residents.
- Provide a well-connected and permeable road network that integrates, where possible, with existing or planned street networks and provides views and potential access to the natural areas.
- Provide amenities such as an elementary school, recreational centre, parks and comprehensive trail network.
- Provide an active transportation network that includes a comprehensive trail network and sidewalks that are well connected, safe and comfortable.
- Introduce built form that is compatible with the existing surrounding character while providing unique high quality design elements and materials that will create a sense of place that will be attractive and memorable for residents and visitors.

3.2 Concept Plan

The subject lands are envisioned as a high quality development that will introduce low and medium density residential dwellings. The residential community will support the development of a future elementary school and recreational centre, which will be developed by the school board and the City of Barrie, respectively. This will create a complete community that will contribute to establishing a memorable and attractive community with a sense of place. The proposed development introduces a total of 253 residential units that comprise of 204 single detached dwellings and 49 townhouse units. The development proposes a stormwater management block and two valley blocks. Additionally, a comprehensive trail network and walkway blocks are proposed, which will provide permeable pedestrian connections and opportunities for active transportation.

As seen in Figure 2, the proposed recreational centre will be strategically situated adjacent to McKay Road West, which will support a gateway feature into the community from Street '2'. The existing valley lands, which are situated along the western extent of the subject lands will be preserved and may comprise of a comprehensive trail network. The proposed townhouse blocks are strategically located in between the recreational centre and the proposed school block. The development proposes a modified grid network with two collector streets and a series of local streets that provide legible and permeable connections both within the site and to the adjacent future neighbourhoods.

3.3 Site Circulation

The Watersand Phase 2 South development proposes a modified grid network with two collector streets and a series of local streets that provide connections throughout the community and create a positive streetscape.

The proposed collector roads, Street '1' and Street '2' have a 24 metre right-of-way and provide a north-south and east-west connection through the community. The proposed elementary school is bound by both Street '1' and Street '2' while the proposed recreational centre is bound by Street '2' and McKay Road West, providing direct and convenient access to the proposed amenities within the community. As shown in Figure 2, Street '1' will provide an east-west connection to the Watersand Phase 1 neighbourhood directly to the east and future residential envisioned to the west. Street '2' provides direct connection to McKay Road West and potential future residential to the south.

The proposed local roads, Street '3' to Street '9' have an 18 metre right-of-way and provide access to the proposed residential dwellings throughout the community.



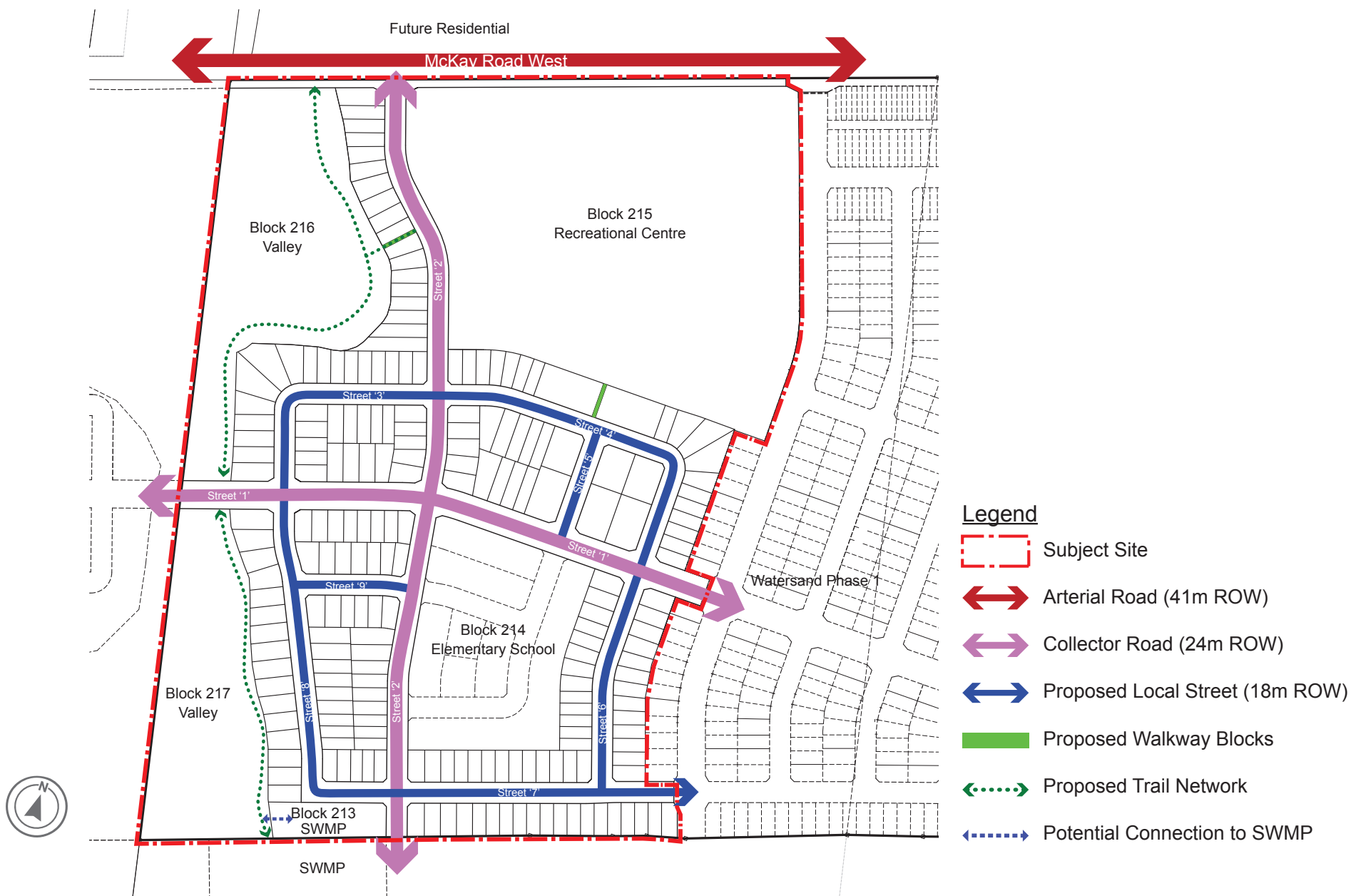


Figure 2 - Circulation Network

3.4 Valley Lands

The Watersand Phase 2 South community comprise of two valley blocks, which are environmentally protected lands along the western extent of the subject lands. The valley lands shape the neighbourhood and will help create a green backdrop for residents. The proposed valley blocks will be preserved and maintained with the only permitted use being a low-intensity recreational trail for pedestrian use. Single detached dwellings are proposed along the eastern boundary of the valley lands, which will have appropriate buffer separation and fenestration to preserve and protect the valley lands. As envisioned in the Salem Secondary Plan, Street '1' will provide east-west connection through the valley block, which will create views into the north and south valley lands.



Figure 3 - Valley Lands and Trail Network

3.5 Built Form

The development proposes a range of built form that will contribute to creating a complete community by providing housing choice, services and amenities. The following built form typologies are proposed:

- single detached dwellings;
- street townhouses;
- elementary school; and
- recreational centre.

The proposed architecture of the Watersand Phase 2 South will be sympathetic to its natural setting. The proposed residential built form will combine a blend of traditional and transitional architectural styles that will be compatible with and complementary to the traditional architectural styles of the surrounding neighbourhoods.

Key design principles include:

- Ensure the proposed built form typologies have compatible and complementary architectural design and building materials.
- Main entry should be highlighted and be the focal point of the façade.
- Architectural elements shall have balanced proportions and be in harmony with the overall design of the community.
- Architectural detailing and exterior cladding materials should be consistently applied on all publicly exposed elevations.
- Special designs are to respond to prominent locations such as gateways, corner lots or fronting onto parks.
- Sustainability measures may include energy efficient design, fixtures or appliances.

3.5.1 Single Detached Dwellings

The Watersand Phase 2 South Draft Plan will introduce 204 single detached dwellings that will have minimum lot frontages ranging from 10 metres to 15.3 metres.

The proposed single detached dwellings will have high quality architectural design, building articulation and detailing and will be sited to address the street. The proposed single detached dwellings will have traditional and transitional architectural style, which will be compatible with the planned and proposed residential development in the area and will be sensitive to the existing character of the area. A range of housing designs should be offered to help create visual diversity in the streetscape. Standard house models and their alternate elevations should differentiate themselves from each other through differences in massing, rooflines, front entry treatments, fenestration, architectural detailing, and building materials. fenestration, architectural detailing, and building materials.



3.5.2 Townhouse Units

The development proposes 8 townhouse blocks, which comprise a total of 49 townhouse units that have a minimum lot frontage of 6.3 metres. The proposed townhouse units are centrally located within the community, adjacent to the recreational centre to the north and the elementary school to the south. A walkway block is proposed between block 184 and 185, which provides direct pedestrian connection to the future recreational centre.

The proposed townhouse units will provide housing choice and will contribute to affordability and aging in place principles. The composition of the overall townhouse blocks shall be designed to be compatible with the surrounding built form and streetscape. The design of townhouse blocks shall provide variations to help articulate long and continuous rooflines and/or wall planes and create a distinctive character for individual blocks. It is encouraged to pair the main entrances and garages of townhouse units to increase the width of landscaped areas and minimize streetscape interruption. Main entrances shall be emphasized through architectural detailing as to create visually interesting streetscapes.





Figure 4 - Proposed Built Form - South Draft Plan Area

3.5.3 Institutional / Recreational Centre Built Form

The development allocates two blocks for an elementary school and recreational centre that are envisioned to be developed by the school board and the City, respectively.

The proposed elementary school (Block 214) is situated at the north east corner of Street '1' and Street '2' intersection. The elementary school block has an area of 2.42 hectares (5.98 acres). The proposed school site will create a central focal point in the community and will attract families to the neighbourhood.

The recreational centre (Block 215) is proposed at the north eastern extent of the subject lands, at the south east corner of McKay Road West and Street '2'. The proposed block has an area of 8.09 hectares (20 acres). The proposed recreational centre will contribute to creating an attractive and active use along McKay Road West, as envisioned in the Salem Secondary Plan. The site will facilitate the creation of a gateway into the community that will establish a sense of place and community identity.

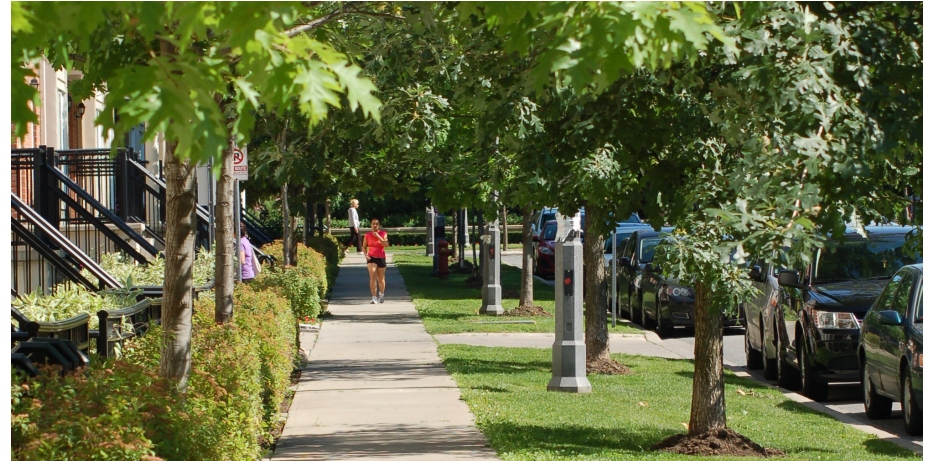
The built form for both the elementary school and recreational centre shall be located close to the street line and oriented to maintain a strong street edge, architecturally addressing any street intersections. The proposed buildings will support the streetscape and neighbourhood image through site planning, architecture and landscaping that are compatible with adjacent residential buildings through complimentary

detailing, materials and colours. The proposed buildings will be designed to facilitate barrier free pedestrian access from the street to the main building entrance. Surface parking shall be adequately screened from public view by using a combination of architectural elements and landscaping.

3.6 Public Realm

3.6.1 Streetscapes and Walkway Blocks

The development proposes a range of public realm opportunities within public right-of-way and walkway blocks. The proposed streetscapes will include sidewalks on both sides of the street, which will provide pedestrians with permeable and direct connections within the neighbourhood and the future surrounding residential communities. Two 3.0 metre walkway blocks are proposed, one of which will provide convenient and direct connection from the recreational centre to the neighbourhood and elementary school. The second walkway block provides a direct connection from Street '2' to the valley block and proposed trail network. Street trees and lighting will be provided within the streetscape allowing for opportunities for street tree canopy to occur and create a safe, comfortable and aesthetically pleasing streetscape. Street furniture may be provided at strategic locations, such as adjacent to the recreational centre, elementary school and potential transit stops within the neighbourhood.



3.6.2 Fencing

Wood privacy and chain link fencing are to be constructed using high quality materials that contribute to the aesthetic quality of the community. Soft and hard landscaping is proposed to accent fencing that flanks public right-of-ways.

A 1.5m high chain link fence will be required to protect the rear yards and side yards of residential lots adjacent to the valley lands, recreational centre, elementary school, walkway block and stormwater management pond. Soft landscaping treatments are recommended to delineate property boundaries. Wood privacy fencing will be required for specific corner lots, as illustrated in Figure 5.





Figure 5 - Proposed Fencing Plan

3.6.3 Trails and Pathways

The Watersand Phase 2 South development proposes a low-intensity recreational trail for pedestrian use within the valley lands along the western extent of the subject lands. As shown in Figure 6, the proposed trail network will provide north-south connection. The final design and construction of the proposed trail will be designed as per the City of Barrie standards.



3.6.4 Stormwater Management Facility

Stormwater management ponds (SWMP) are designed to help maintain the ecological integrity of the natural heritage system. Primarily, SWMP facilities are designed to provide water quality and control systems. SWM facilities are also designed as part of the open space system, linked to other open space features by the pedestrian network in the community.

The SWMP is proposed at the southern extent of the subject lands with an extension planned in the adjacent lands to the south. The SWMP is bound by the valley lands to its east and has the potential to provide pedestrian access to the trail network.

Homes addressing the SWMP promote safety and provide eyes on the potential walkway within the SWMP block. Barrier planting will deter pedestrians from walking in unpaved areas but allowing visual access to the pond. Sediment drying areas and inlet/outlet areas are to be hidden from view with buffer planting.



Figure 6 - Proposed Pedestrian and Trail Network

3.7 Sustainability

The proposed development promotes environmental sustainability and includes preservation and enhancement initiatives for the existing valley lands within the western extent of the subject lands. Sensitive landscaping and transition will be provided within buffers for lots backing onto the valley block. In addition, a low-intensity trail network will provide sensitive access into the valley block. Where possible, mature and healthy trees will be preserved and new trees planted will be in accordance with City's list of acceptable plan species. The proposed community will have on-site stormwater management facilities and will implement low impact development measures, where possible.

Furthermore, the proposed development promotes social sustainability through incorporating a strategic mix and distribution of land uses, including a range of housing types as well as a future elementary school and recreational centre. The proposed built form will also promote aging in place and provide a variety of options and price points for people at various stages in their lives.

A well-connected pedestrian and bicycle network is coordinated and connected to pedestrian trails and potential transit opportunities, encouraging healthy living through the use of safe and connected active modes of transportation. The overall design of the community fosters social interaction and encourages casual surveillance, ensuring the development of a safe and healthy community.

The development constitutes a portion of a larger coordinated community, with established neighbourhood centres that align with the Salem Secondary Plan. This integrated approach will promote a comprehensively planned neighbourhood that is capable of developing into the safe, livable, attractive and healthy community that is envisioned for the Watersand Community. The community will be developed to integrate with the greater Salem Secondary Plan area and the City of Barrie.

4.0 POLICY CONTEXT

4.1 City of Barrie Official Plan

The City of Barrie Official Plan (2010, consolidated 2018) designates the subject lands as Residential, Mixed-Use Nodes and Corridors and Environmental Protection Area, as per Schedule A 'Land Use' (Figure 7). Further, the lands are within the City's Settlement Area Boundary and in the Salem Secondary Plan. As discussed in the Planning Justification Report (PJR) prepared by KLM Planning Partners Inc., the City's Official Plan is under review. As such, the proposed land use designation, for the subject lands, as per the City of Barrie Official Plan 2051 are Neighbourhood Area with a community hub designation. The proposed development aligns with the new designations with regards to the location of the proposed recreational centre, elementary school and valley blocks. Further details with regards to the planning policy framework for the subject lands can be found in the PJR submitted with the application. The following section will provide an analysis on how the proposed development meets the urban design policies within the Official Plan.

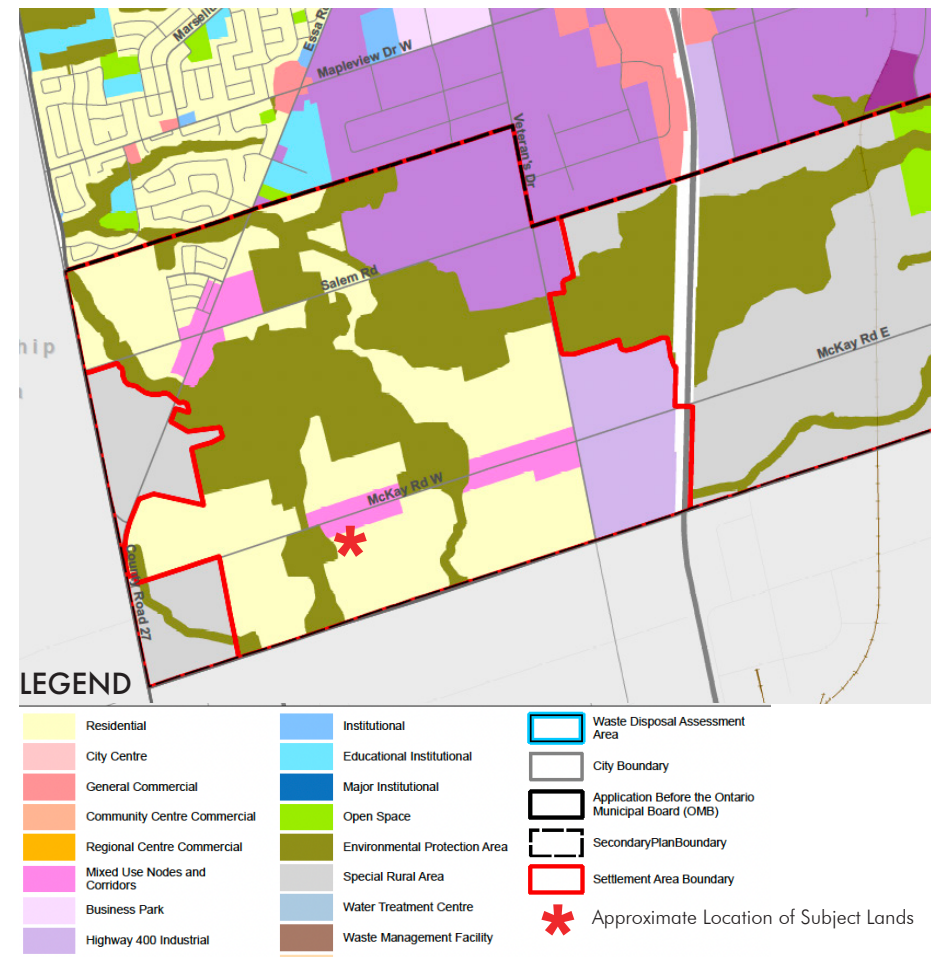


Figure 7 - Schedule A 'Land Use' - Excerpt from City of Barrie Official Plan

Section 3.3 provides policies with regards to Housing, the following are relevant to housing goals with regard to urban design objectives that pertain to the proposed development:

3.3.1 GOALS

(a) To provide for an appropriate range of housing types, unit sizes, affordability and tenure arrangements at various densities and scales that meet the needs and income levels of current and future residents.

(b) To ensure that the quality and variety of the housing stock is maintained and improved.

(c) To promote building designs and densities for new housing which efficiently use land, resources, infrastructure and public service facilities, and support and contribute to safe, vibrant, pedestrian and cyclist-friendly streetscapes.

(d) To ensure the development of complete communities with a diverse mix of land uses, a range and mix of employment and housing types, high quality public open space and easy access to local stores and services.

(e) To encourage all forms of housing required to meet the social, health and well-being requirements of current and future residents including special needs requirements.

(f) To direct the development of new housing towards locations where appropriate levels of infrastructure and public service facilities are or will be available to support current and future population.

The proposed development introduces single detached and townhouse typologies within the City's settlement boundary that meet the needs and income levels for current and future residents. The subject lands are within the Salem Secondary Plan which are envisioned for future residential development. The subject lands are strategically located to the south of McKay Road West, and in close proximity to Veterans Drive, which are existing arterial roads that will provide direct access to the surrounding area. The development proposes a mix of uses, and residential built form that are compact and makes efficient use of land, resources, infrastructure and public service facilities to support and contribute to creating a complete community.

Section 4.2 provides policy directives with regards to Residential development, the following are relevant to the proposed development.

4.2.1 GOALS

(a) To guide the formation of residential planning areas which foster a sense of neighbourhood and belonging for their residents.

(b) To encourage the creation of complete communities through a mix of land uses serving the residential planning areas in order to maximize convenient access to community facilities and services.

(c) To develop residential areas with densities which would support transit use as well as pedestrian and cycling and contribute to the municipality achieving its intensification and density targets.

(d) To develop high quality, well-linked public open spaces in residential areas.

(e) To ensure that new residential development shall not jeopardize the expansion of the City's industrial/commercial/institutional land use sectors.

(f) To plan the location and design of residential development to enhance compatibility between dwelling types at different densities and to minimize potential conflict between incompatible land uses.

The proposed development introduces residential built form in addition to a recreational centre and elementary school, which will provide essential services within walking distance for future residents. The proposed development will provide a well-linked community through a comprehensive pedestrian network of sidewalks, walkway blocks and a trail system. These active transportation networks will provide residents with safe and direct access to the recreational centre, elementary school and valley blocks. The proposed development integrates with the planned future residential developments surrounding the subject lands. In particular, the proposed development will have complementary and compatible built form with the Watersand Phase 1 development directly to its east, which will create a collective sense of

place and community identity. Additionally, the proposed development does not jeopardize the expansion of the City's industrial/commercial/institutional land use sectors.

4.2.2.4 DESIGN POLICIES

(a) Residential development shall provide necessary on-site parking (as prescribed in the implementing zoning by-law) and a functional open space amenity area including landscaping, screening, buffering and accessibility considerations.

(c) Measures shall be taken to mitigate adverse impacts on residential property from non-residential uses, railways, arterial roads and highways. Noise studies may be required at the time of considering proposals for residential development in accordance with Section 5.4.2.1 (e).

(d) The City will continue to encourage the maintenance and improvement of the character, and appearance of existing residential areas.

(e) Special care shall be taken to visually screen development and redevelopment of a non-residential character from existing residential uses.

The proposed development will provide the necessary on-site parking spaces for the single detached and townhouse typologies. The proposed lot design will also provide adequate functional open space amenities for each unit. Appropriate measures, such as fencing, will be taken for lots abutting the recreational centre, elementary school and McKay Road West. The development proposes high quality built form, which will contribute to creating an attractive and unique character within the community. The proposed recreational centre and elementary school will be designed to have complementary and compatible architectural and material features to that of the residential built form within the community.

Section 4.5 provides policy with regards to Institutional uses. The following are relevant for the proposed development.

4.5.2.3 GENERAL POLICIES

(a) Institutional uses will be located to minimize any potential conflict between these uses and adjacent land uses, particularly residential areas. Appropriate visual screening, planting and/or fencing measures shall be provided between the institutional use and the nearby residential area.

4.5.2.5 EDUCATION FACILITIES

(a) Where mutually beneficial, elementary and secondary schools may be located adjacent to public parks but central to the neighbourhood populations they serve. Their location should reinforce their role as a vital part of the community and minimize the hazards associated with children crossing major roads or rail lines, to encourage walking and cycling.

Education facilities are permitted on lands designated 'Educational Institutional' and 'City Centre' on Schedule A – Land Use.

(d) In order to ensure that adequate recreational facilities are maintained, each school site shall maintain a minimum percentage of landscaped open space as required under the Zoning By-law.

The development proposes recreational centre and elementary school blocks, which align with the Community Hub designation as per the City of Barrie Official Plan 2051 (under review). The institutional blocks provide an appropriate land use adjacent to residential uses and are located adjacent to collector streets within the community. The recreational centre is also situated adjacent to McKay Road West, which provide direct and convenient access for future and surrounding residents. The elementary school is centrally situated, creating a central focal point and provides walkable access for surrounding residents. Appropriate screening measures will be provided for lots abutting the institutional blocks, as illustrated in Figure 5 on page 16.

Section 6.5 provides Urban Design Guidelines, the following are relevant to the proposed development.

6.5.2.2 GENERAL DESIGN GUIDELINES

(a) BUILDING AND SITING

i) Buildings should be designed to complement and contribute to a desirable community character in terms of massing and conceptual design.

v) Building entrances should be well-defined and accessible to pedestrians and the handicapped persons with disabilities.

i) Pedestrian links should be designed to promote the safety of the user and be fully accessible between the commercial and residential properties.

vii) Corner locations should emphasize the building, not the car, as the dominant feature of the site. Setbacks at these corner locations should accommodate space for landscaping, pedestrian amenities and interesting architectural features.

The proposed development introduces single detached and townhouse units, which are sited to address the street and have human scale massing and conceptual design that contribute to creating an

desirable community character. Building entrances will be well-defined and have barrier free entrances. Safe and direct pedestrian links are provided between the residential units and the recreational centre and elementary school. Corner lots will have special design considerations and shall require a consistent level of design quality and detailing on all publicly exposed elevations.

(b) PARKING AREAS

i) Linking parking areas, driveways and access points should be encouraged to reduce the number of turns onto and off the major road. These mutual entrances will be encouraged and clearly identified.

ii) Adequate disability parking spaces will be provided where required.

iii) Properties of depths greater than 60 metres (200 feet) should have smaller parking areas, divided by landscaped islands and strips. The visual impact of these parking lots should be softened through berming and planting.

iv) Major parking, loading and delivery areas, as well as garbage enclosures should be confined to the rear of the buildings.

Mutual entrances will be provided for the recreational centre and elementary school block, respectively. The number of entrances from the proposed collector streets and McKay Road West will be reduced

to minimize road interruptions. Access points will provide direct connections to parking areas, which will be adequately screened from public view using a combination of architectural elements and landscaping such as landscape islands and strips. Major loading and delivery areas will be located to the rear of the buildings and will be screened from public view.

(c) LANDSCAPING

i) Minimum planting strips in accordance with the Urban Design Manual shall be provided along the street frontage and should contain planting materials and street furniture (lighting, seating and bus shelters) consistent with any themes established by the municipality.

ii) Where commercial uses abut residential uses, they should be properly screened through a combination of landscaping, berming and fencing measures.

iii) No Environmental Protection Area should be included in the minimum landscaping standard.

iv) Landscaping should seek to utilize native vegetation, and water conservation practices wherever feasible.

The proposed development will provide appropriate landscaping measures between residential uses and the recreational centre and elementary school. Public realm streetscaping will include street trees and furniture, which will be compatible with the general character of the community. Landscaping will utilize native vegetation and water conservation practices, where possible. Appropriate buffering and landscaping will be provided for lots abutting the Valley lands and stormwater management pond.

(f) UTILITIES

i) Consideration shall be given to the location of utilities within the public rights-of-way as well as on private property within appropriate easements. Utilities shall be clustered or grouped where possible to minimize visual impact. The City encourages utility providers to consider innovative methods of containing utility services on or within streetscape features such as gateways, lamp posts, and transit shelters.

The proposed development will group utilities and minimize visual impact through appropriate screening, or within streetscape features, where possible.

(g) ENERGY EFFICIENT URBAN DESIGN

i) Energy efficiency shall be encouraged through community, site, and building design measures that use energy efficient building materials, energy conserving landscaping, building orientation that uses shade and sunlight to advantage, panels for solar energy, appropriate lighting, “green” roofs, and other methods.

iv) Energy efficiency is promoted through the development of a compact urban form that encourages the use of transit, cycling, and walking, a mix of housing and employment uses to shorten commuting trips, and focusing major developments on transit routes.

It is anticipated that the proposed development will implement energy efficient urban design through the introduction of energy efficient design, fixtures or appliances. Additionally, the development proposes a compact urban form with a comprehensive active transportation network that encourages walking and cycling.

4.2 Salem Secondary Plan

The Watersand Phase 2 South lands are within the Salem Secondary Plan area, which is envisioned to be a gateway into the City, which will have a mix of uses that are interconnected with the natural heritage system, open space network and transportation system that will allow residents to live, work, and play in their community. The following are planning principles that are relevant to urban design objectives for the proposed development.

8.2.3 PLANNING PRINCIPLES

(c) That all new neighbourhoods and business areas be designed to support resource conservation and environmental stewardship to the greatest extent feasible and include the best practices in the use of district energy, water conservation/recycling, and sustainable community planning.

(e) That new neighbourhoods draw on the strengths of historic neighbourhoods: grid street patterns, public spaces, and pedestrian friendly street design (buildings close to street, tree-lined streets, onstreet parking, hidden parking lots, garages in rear lane, narrow, and slow speed streets).

(g) That the City of Barrie continues to provide a diversity of housing types in new neighbourhoods.

(h) That the City of Barrie continues to place a high priority on supporting active transportation (walking and cycling) and on accessibility to public transit in all new growth areas.

The proposed development shall protect, preserve and enhance the natural heritage system and will introduce sustainable community planning. The development proposes single detached and townhouse built form that contribute to creating a diversity of housing options. The development introduces a modified grid network that includes collector and local streets. Active transportation and pedestrian friendly design is encouraged and promoted by creating a safe and comfortable public realm through siting built form close to the street, street tree planting, and a comprehensive sidewalk network, walkway blocks and trail system.

As per Schedule 8A 'Community Structure Plan', the subject lands are primarily within the Residential Area, with a portion along McKay Road West being within the Mixed-Use Nodes and Corridors and a portion of Natural Heritage System overlay on the west of the subject lands. Schedule 8C 'Land Use Plan' (Figure 7) further designates the lands as Residential Area and Neighbourhood Mixed Use Node and denotes a conceptual School / Neighbourhood Park Area and Stormwater Management Facility. Additionally, Schedule 8D depicts a conceptual east / west minor collector with a 24 metre right-of-way, which aligns with Street '1' in the proposed plan.

8.4 COMMUNITY AND SUSTAINABLE DESIGN STRATEGY

The objective of the Salem Secondary Plan is to create complete communities by providing a range of employment, housing, and a mix of other uses that allow residents to live, work, and play in their community. High quality and sustainable community design is a key to the achievement of this objective and the policies of this section establish general design policies for the Salem Plan Area.

The Salem Master Plan in Appendix 8B is intended to illustrate graphically the design of the Salem Secondary Plan Area and how the policies and Schedules of the Plan are to be implemented.

8.4.3 URBAN DESIGN AND SUSTAINABLE DEVELOPMENT GUIDELINES

8.4.4.2 Community Design

(a) All development, particularly in the Mixed Use Nodes and Corridors identified on Schedule 8A, shall be designed to be compact and have a pedestrian and transit oriented built form. Building densities and land uses shall be designed at densities which are transit supportive.

(b) Each residential neighbourhood will have distinctive characteristics, but also a number of common features including:

i) a central focal point including a Neighbourhood Park, and where required an elementary school or schools, and related facilities such as day care and central mail pickup facilities, within a five minute walk of most residents;

ii) a character which is primarily residential, but which will also include a range of uses including live-work, institutional and open space uses;

iii) a range of lot sizes, building types, architectural styles and price levels to accommodate a diverse population; and,

iv) a variety of open space including parks, Village Squares, and private open space in accessible locations which can act as “meeting places” for residents.

(c) A hierarchy of institutional, commercial and open space uses shall be established with:

i) major facilities in locations which form part of, or in the case of institutional uses, are adjacent to Mixed Use Nodes and Corridors, to allow them to serve as focal points for the Salem Plan Area and its neighbourhoods and employment areas;

ii) elementary schools and neighbourhood parks, and other uses which are primarily designed to serve neighbourhoods including day care facilities and recreation clubs located to serve as focal points for neighbourhoods within a five minute walk of most dwelling units;

(d) The Salem Secondary Plan Area has a number of barriers to connectivity and accessibility, both internally and externally, including Highway 400, limited street connections to surrounding areas, the Trans Canada Pipeline corridor, the width of arterial streets, and the Natural Heritage System. To address this issue, development shall be based on:

i) a modified grid street system generally as identified on Schedule 8D1, with an interconnected networks of streets which is also designed to disperse and reduce the length of vehicular trips and support the early integration and sustained viability of transit service, as well as supporting walking and cycling. In addition, a pathway system will be provided for walking and cycling;

ii) a local street system which will also be designed as a modified grid system including regular access points to the arterial and collector street system and recognition of topography and the Natural Heritage System. Culs-de-sac will generally only be permitted when warranted by site conditions;

iii) street and pathway crossings of the Natural Heritage System, Highway 400, and the railway and utilities and connections to adjacent areas generally as identified on Schedule 8D1;

iv) street cross sections for all streets, and access and parking provisions which reflect the abutting land uses (e.g. context sensitive design) and will reduce the barrier effects of the street, and encourage a pedestrian, bicycle and transit friendly environment; and,

v) connections will be made to other parts of the City whenever possible through street, pedestrian, and bicycle links to ensure the community functions in an integrated manner.

(e) The Natural Heritage System is a central feature of the Planning Area and the development form should reflect this fact including:

i) a system of trails/pathways which are designed to require very little terrain or vegetation modification and few, if any, buildings or structures, and which are located to maximize protection of features such as wetlands, streams and wooded areas, and are limited to non-motorized use and located generally in accordance with the pathway system on Schedule 8D1; and,

(f) Views and accessibility to other public facilities, particularly recreation centres, schools, and parks which will serve as “meeting places” for residents, are also important with the total linear perimeter distance around recreation centres, schools and parks being in the order of 50 percent of the perimeter bounded by streets and open space as generally identified in the Master Plan.

The proposed Draft Plan of Subdivision for Watersand Phase 2 South has been designed in accordance with the Salem Secondary Plan and reflects the objectives of the Salem Secondary Plan. The development proposes a compact residential community that introduces single detached and townhouse typologies that have a range of lot sizes, building types and architectural styles.

In accordance with the Salem Secondary Plan, the development has allocated a recreational centre on the lands designated Mixed Use Nodes and Corridor. Additionally, an elementary school block is also proposed and centrally located within the community. Both the recreational centre and elementary school will be developed by the City of Barrie and the school board at a later date.

The proposed development is situated to the south of McKay Road West, which provides direct connection to the existing arterial road. The development proposes a modified grid network and provides a well connected circulation with two collector roads and a series of local streets, in accordance with the Salem Secondary Plan. Additionally, Street '1' integrates with the Draft Approved Plan of Subdivision to the east of the subject lands and crosses through the Valley block on the western extent of the subject lands, in accordance with Schedule 8C. A low intensity trail network is proposed within the Valley blocks, which will minimize any impact to the natural area. The development also proposes two walkway blocks, one will provide direct access to the recreational centre and the other will connect to the proposed trail.

8.4.4.4 Streetscape Design

(a) General Street Design Objectives

i) arterial streets are high capacity streets which serve as major gateways to the City. A balance must be achieved between their transportation function, including the accommodation of transit and cycling, and their ability to provide access to flanking land uses and to provide a socially vibrant public space. It will also be important to minimize their barrier effect. To assist in achieving this balance, these streets will have the highest standard of design including features such as wide sidewalks, centre medians, special tree and feature planting, street furniture, paving, lighting and signage particularly in Mixed Use Nodes and Corridors. Consideration may be given to permitting on-street parking in Mixed Use Nodes and Corridors, particularly at off-peak periods and parking bays may also be provided;

ii) major and minor collector streets connect neighbourhoods to each other and to other parts of the community. These streets will have a high standard of design which will be achieved through tree planting, lighting and signage and will permit on-street parking particularly in off-peak periods. The design will complement the planned abutting land uses, including wider sidewalks and street furniture such as benches, in Mixed Use Nodes and Corridors.

iii) local streets support local transportation needs, as well as providing an attractive environment for pedestrians and cyclists through the provision of sidewalks and appropriate tree planting.

The proposed development is situated to the south of McKay Road West, an existing arterial road that is envisioned to have a 34 metre right-of-way to accommodate active transportation measures and public realm enhancements. An acoustic fence is proposed for Lots 1 and 2, which flank McKay Road West, to mitigate rear yard sound. The proposed recreational centre provides an appropriate land use adjacent to the arterial road.

The development proposes two collector roads with a 24 metre right-of-way. The east-west collector, Street '1', is a continuation from the draft approved Plan of Subdivision to the east and in accordance with the Salem Secondary Plan. Street '2' provides a north-south collector road that connects to McKay Road West. The proposed elementary school block is situated at the south-east corner of Street '1' and Street '2' intersection, which provides an appropriate land use at this strategic and central intersection. The collector roads are envisioned to have shared on-street bicycle lanes, sidewalks, tree planting and street furniture at key locations.

The proposed development also includes a series of local streets with 18 metre right-of-way. The proposed local streets will have sidewalks on one or both sides of the street and will have appropriate landscaping.

(b) Pedestrian/Cyclist Comfort

Pedestrian/cyclist comfort and safety will be a priority in streetscape design:

i) In Mixed Use Nodes and Corridors in particular, an enhanced streetscape and sidewalk environment will be provided; in addition more frequent signalization may be considered;

ii) sidewalks shall generally be provided on both sides of all streets with the exception of the following where sidewalks shall only be required on one side of the street:

- Residential streets with less than ten dwelling units or culs-desac;*

iv) The length of a residential or mixed use development block makes a significant difference in creating a pedestrian and transit friendly environment. Blocks should be short and regular, generally a maximum of 250 metres in length, to make walking efficient and allow for variation in routes. Where it is impossible or undesirable to provide short blocks, a wide public mid-block pathway should be provided to shorten walking distances.

v) Provision for cyclists to travel either on the street or on pathways separated from the street system, which may or may not include a designated lane, shall be recognized in the design of all arterial and

collector streets. In addition, bicycle parking standards for other than freehold, ground related housing, shall be prepared and implemented through the zoning by-law.

vi) A system of pathways will be developed primarily in the Natural Heritage System based on the conceptual system on Schedule 8D1. The pathway system shall be subject to further study to the satisfaction of the City, in consultation with the applicable conservation authority and the land owners.

The development encourages active transportation by establishing safe, comfortable and convenient environment for pedestrians and cyclists. The development proposes a series of sidewalks and walkway blocks that create a legible and permeable active transportation network. The proposed blocks are generally less than 250 metres in length with two walkway blocks proposed on streets, which have longer blocks. As previously mentioned, shared on-street bicycle lanes are proposed within the collector roads and appropriate traffic calming measures will be introduced within all streets to create safe and comfortable environment for cyclists. A proposed low-intensity trail system is proposed within the Valley block that will further support pedestrian mobility within the community.

(c) Street Frontage

The following policies relate to the relationship between the street and abutting land uses:

ii) Noise sensitive properties will be buffered through mechanisms such as restrictions on the type of land use, building design, building location on the lot, location of outdoor living space and through the provision of landscaping such as enhanced planting of street trees. Buffering such as noise fences, berms and rear lotting, with the exception related to rear lotting identified in sub section i) above, and where side yards flank arterial streets, which restrict visual and physical access to the street shall generally not be utilized.

iii) Buildings, structures, and landscaping shall be designed to provide visual interest to pedestrians, as well as a “sense of enclosure” to the street. The heights of buildings should be related to street widths to create a more comfortable pedestrian environment, so that generally the wider the street, the higher the building height.

iv) Buildings on corner lots on Arterials and Collectors should be sited and massed toward the intersection.

v) In residential areas, garages shall be designed so they are not the dominant feature in the streetscape in particular, attached garages should not generally project beyond the façade of the building or any porch and the percentage of the dwelling occupied by the garage will be limited in the zoning by-law.

Appropriate noise mitigation measures, such as building siting, design and fencing will be implemented for noise sensitive properties. The proposed built form will be sited to front onto the street, the height, massing and articulation of the building will help contribute to an interesting and comfortable public realm. Garages within the community will be appropriately designed and sited to not project beyond the building facade and to minimize their impact on the streetscape.

8.4.4.6 Landscaping

The City shall establish specific landscaping requirements in the Urban Design and Sustainable Development Guidelines to ensure:

(a) The provision of landscape features which contribute to the definition of the public realm, framing of views and focal points, direction of pedestrian movement and demarcation of areas with different functions;

(b) the enhancement of pedestrian comfort and scale of development; and,

(c) water efficient, drought resistant landscaping; including the use of native plants.

The proposed development will include landscape features that will contribute to creating an enhanced public realm. Where possible, native plants and species will be used in landscaping within the community.

8.4.4.7 Safe Community Design

The City shall work with the Barrie Police Service to promote safety, security, and accessibility to all development and public areas based on the principles of Crime Prevention through Environmental Design (CPTED).

The proposed development will implement CPTED measures such as permeable pedestrian network with appropriate block sizes and lighting. Additionally, the proposed built form will have active uses facing the street to create natural surveillance opportunities within the public realm.

8.4.4.8 Sustainable Development

(b) Development will be encouraged to be designed in a manner which:

i) promotes green building and site design practices;

ii) maximizes the efficient use and management of water resources, including the use of Low Impact Development (LID) stormwater management practices;

iii) minimizes the use of material resources and reduces solid and hazardous waste;

iv) controls and, to the extent practical, eliminates water, soil, noise, and air pollution; and,

v) encourages innovative design; which will achieve enhanced sustainability.

The proposed development will implement sustainable development design practices and LID measures, where possible. The development introduces a stormwater management pond and will utilize water efficient, drought resistant, native landscaping.

8.4.4.10 Public Utilities

Careful consideration will be given to the location of public utilities within the public rights-of-way, as well as on private property in accordance with the policies of Section 8.6.6.

The proposed development has located utilities in appropriate locations and where possible screened from public view.

8.4.4.11 Accessibility and Visitability

The principles of universal design will be generally applied to all public spaces and within new developments to ensure access and visitability for all individuals, while recognizing the need for balance where cultural heritage resources are involved. Regard shall also be given to the Ontarians with Disabilities Act, Ontario Building Code, and any City cultural heritage policies or guidelines.

The proposed development will implement accessibility and visitability principles, where possible, to create a welcoming and safe community.

4.3 City of Barrie Urban Design Manual

The City of Barrie Urban Design Manual, prepared in 2007 and revised in 2014, provides urban design guidance for urban developments. *The Guidelines are intended to be flexible. They are not intended to prescribe specific design solutions but rather to express the preferred design objectives of the City. A successful development will achieve the City's vision while meeting the individual needs of the proponent.* The proposed development generally meets the design directions set out in the urban design manual. The following are relevant to the proposed development.

Section 2.0 provides design guidelines with regards to Physical Environment and Building Siting.

A. Incorporate development measures to appropriately address the physical environment of the site and adjacent lands when siting the building(s).

B. Ensure compatibility of the development with adjacent area development. The visual character and unity of the neighbourhood should be enhanced through the subject development.

C. Design buildings at a scale that is compatible with adjacent structures. New buildings should respect the established heights and setbacks in the neighbourhood.

D. Incorporate natural features, major vegetation and topography into the design wherever it can be integrated with development objectives and the interests of adjoining land uses.

E. Design outdoor spaces with regard to the programmed uses, the quality of views and the influences of sun and wind.

G. Design the building setback at a pedestrian scale where appropriate and to contribute to a desirable streetscape.

L. Energy saving designs and features is encouraged. Orient buildings, outdoor spaces and pedestrian activity areas to maximize sunlight exposure during cooler months and shading during the warmer months.

Q. Locate buildings close to the street with unobstructed views of the street, parks or open spaces and neighbouring buildings.

R. Orient building entrances and windows toward the street to enhance surveillance.

The Watersand Phase 2 South development introduces a compatible residential community that proposes building design, siting and massing that will be consistent and compatible with the draft approved Plan of Subdivision to the east and the surrounding

planned future residential developments. The existing valley lands have been integrated into the design of the development, which will shape the identity of the community. The proposed buildings will be appropriately setback to create a safe and comfortable public realm and streetscape that support active transportation and landscaping. The proposed built form will be oriented towards the street, with special design consideration for priority lots, such as corner lots to provide visibility on the street and create natural surveillance. The proposed buildings will utilize energy efficient design, fixtures and appliances, where possible.

Section 3.0 provides design guidelines for site circulation, the following are relevant to the proposed development.

3.1 Pedestrian Circulation

A. Provide a safe and convenient and accessible pedestrian network from street to building, parking area to building, and building to building, that is visible from the street and buildings, and clear from visual obstructions.

B. Provide pedestrian links between neighbouring properties where appropriate.

C. Provide pedestrian walkways connecting municipal sidewalks to all public institutions, office developments, neighbourhood and larger commercial developments and multi-unit residential developments.

F. Provide weather protected shelters and lighting at transit stops.

G. Install park and street furniture to create monitoring opportunities along pedestrian pathways and open areas.

H. Discourage dead ends, reducing the potential for entrapment and concealment.

I. Provide adequate lighting along pedestrian connections.

The development proposes clear and accessible pedestrian network through a series of sidewalks, walkway blocks and a trail network. The proposed sidewalks are well connected and will have appropriate lighting and safe crossings. Residential buildings are proposed adjacent to the street with adequate setbacks and massing that create a comfortable and active frontage within the public realm. The proposed sidewalks will integrate with the future elementary school and recreational centre blocks. The development proposes a modified grid network, that provides opportunities to integrate with future development to the east, west and south, as such there are no dead ends within the community. Street furniture within the public realm and for transit stops will be determined at a later detailed design stage.

3.2 Vehicle Circulation and Parking

A. Design parking and vehicular movement plans in a safe, convenient, and easily understood manner with appropriate turning radii and visibility.

B. Provide parking areas with appropriate signage and adequate and uniform lighting for visibility and safety surveillance.

Adequate parking is provided for each residential unit. Additionally, on-street parking shall be permitted on local streets, where appropriate, and adequate signage will be provided.

5.0 LIGHTING

A. Select exterior lighting fixtures based on compatibility with the architectural design of the building and the character of the neighbourhood and enhance the ability for surveillance.

F. Use pedestrian scaled lighting (3.5 to 4 metres high) to clearly identify pedestrian routes.

G. Coordinate lighting systems and landscaping to ensure that plant materials or other landscape features do not obscure site and street lighting.

The proposed development will have appropriate and adequate lighting within the community that is compatible with the architectural, streetscape and landscape design as well as the overall character of the community.

6.0 FENCING

A. Design fencing, acoustic barriers and similar site elements that are compatible with the architecture of the main buildings and use complementary materials.

B. Minimize visual monotony through changes in plane, height, material or material texture, or landscape massing for acoustic barriers, masonry walls or fences that are 15 metres in length or longer and 1.3 metres in height or taller.

C. Avoid walling off an entire development as it creates a fortress effect that would reduce monitoring opportunities.

As per Figure 5, fencing is required for specific lots within the community. Fencing will be compatible with the architecture of the main building and will not be visually dominant within the public realm.

7.0 ARCHITECTURAL DESIGN

A. Ensure that the architectural design is compatible with the developing character of the neighbouring area. Design compatibility includes complementary building style, form size, colour and materials. Ensure that building heights and scale relate to the existing developed form of the area and unify or enhance the building character of the neighbourhood.

B. Design multiple buildings on the same site to create a cohesive visual relationship between the buildings.

C. Coordinate exterior building design and detail on all elevations with regard to colour, types of materials, number of materials, architectural form, and detailing to achieve harmony and continuity of design.

D. Locate the main building facade towards a public street or internal courtyard. Principle walls should have windows along the street or interior space to provide casual surveillance and break up the building mass. Where blank walls are unavoidable, use architectural techniques (banding, soldier course, etc.), landscaping, and murals to enhance the elevation.

I. Effective use of building materials, architectural details and lighting is encouraged.

J. Ensure that buildings situated on corner lots have presence on both streets.

The development proposes traditional and transitional architectural style, which is compatible with the developing character in the area. The proposed building style, massing and materials will be complementary to the draft approved Plan of Subdivision directly to the east. The proposed colour palette will also be consistent to further establish an unified community character. The design of the residential buildings within the proposed development will utilize similar materials, colours and architectural features to create a cohesive visual relationship and character between the buildings. The proposed residential buildings will have their main building facade clearly articulated and oriented towards the public street. Corner lots will address both the fronting and flanking streets and will include corner-specific architectural features with a consistent quality of architecture on all publicly exposed elevations.

9.0 LANDSCAPE DESIGN

A. Promote the preservation of existing natural features such as watercourses, specimen, trees, hedgerow and woodlot vegetation wherever reasonably possible in an effort to minimize the environmental impact on the site and surrounding areas.

B. Promote an attractive landscape treatment of the site to soften and improve the visual character of the development by designing a harmonious integration of planting, fencing, retaining walls, hard surfaces, signage, etc.

C. Ensure appropriate plant species are proposed in relation to availability, cold hardiness, mature size and habit, sunlight/soil requirements, moisture/drought tolerance, pollution/salt tolerance, and seasonal effects.

K. Tree preservation is promoted through the City of Barrie Tree Cutting By-law 2002-12 and the issuance of tree cutting permits. In situations where the by-law does not apply, it is the intent of these Guidelines that healthy trees be preserved whenever possible, and that no tree removal occur until the site plan is approved.

L. The following lists are intended to offer a generally acceptable selection of plant species commercially available and suitable for the local climate. It is not intended to limit the design choices of Landscape Consultants.

The proposed development protects and preserves the Valley lands along the western extent of the subject lands. Appropriate buffering and fencing will be provided for lots backing onto the Valley blocks. The proposed landscaping within the community will utilize drought-

resistant and native plant and tree species. Landscaping within the community will further contribute to creating a unique, attractive and welcoming community through harmonious integration of planting and fencing.

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