

NO: R207

COUNCIL DATE: September 13, 2010

REGULAR COUNCIL

TO: **Mayor & Council** DATE: **September 13, 2010**

FROM: **General Manager, Planning and Development** FILE: **6520-20 (NCP 5A - Orchard Grove)**
General Manager, Engineering

SUBJECT: **Grandview Heights Neighbourhood Concept Plan Area 5A - Orchard Grove - Approval of Stage 1 Land Use Concept**

RECOMMENDATION

The Planning and Development Department and Engineering Department recommend that Council:

1. Receive this report as information;
2. Approve the Stage 1 Land Use Concept for the Grandview Heights Neighbourhood Concept Plan ("NCP") Area 5A - Orchard Grove as described in this report and as illustrated on the map attached as Appendix I;
3. Authorize staff to undertake the Stage 2 component of the NCP planning process on the basis of the Stage 1 Land Use Concept, including:
 - (a) the preparation of design and development guidelines; and
 - (b) the completion of an engineering servicing plan and a comprehensive financial plan that will provide adequate funding for servicing infrastructure, phasing of development and the provision of community amenities; and
4. Authorize staff to receive and process development applications for sites within the NCP area, based on the Stage 1 Land Use Concept Plan, provided that final approval of any such application is held pending the completion and approval of the Stage 2 component of the NCP.

INTENT

The purpose of this report is to:

- Provide a synopsis of the public and stakeholder consultation process completed, to date, including the public information meetings held on November 24, 2009 and July 20, 2010, regarding the Draft Land Use Concept Plan for the Grandview Heights Area 5A (Orchard Grove) NCP;

- Provide an overview and seek Council's approval of the Stage 1 Land Use Concept component of the NCP, as the basis for more detailed planning that will occur through the Stage 2 component of the NCP, including addressing a list of outstanding issues as part of Stage 2; and
- Confirm the preliminary servicing strategy to support the Stage 1 Land Use Plan as a basis to move forward with the completion of the final Stage 2 servicing plan.

BACKGROUND and PREVIOUS COUNCIL CONSIDERATION

In June 2005, Council adopted the Grandview Heights General Land Use Plan ("GLUP") as a document to "provide an overall planning framework that will guide the servicing, development and build-out of Grandview Heights as a comprehensively planned community" (Appendix II). The GLUP originally identified five neighbourhoods for the development of more detailed NCPs. The completion and Council approval of more detailed NCPs for each of these areas is required before development can proceed in such an area.

In May 2006, the City received a petition from Aplin and Martin Consultants Ltd., representing 73% of the owners and 91% of the land in Area 5A, requesting that the City proceed with an NCP planning process for this sub-area of Area 5.

On July 24, 2006, Council received Corporate Report No. L008, outlining the recommended next steps for the Grandview Heights planning process, specifically the new NCP areas within the Grandview Heights community. Council authorized staff to bring forward a Terms of Reference for the preparation of an NCP for sub-area 5A following the approval by Council of the completed Stage 1 component of the Grandview Heights Area 2 NCP.

On July 25, 2007, Council received Corporate Report No. R194 and approved the Stage 1 Land Use Concept for Grandview Heights Area 2 NCP.

On July 28, 2008, Council received Corporate Report No. R155 and directed staff to proceed with the preparation of an NCP for Grandview Heights Area 5A. The Stage 1 component of the NCP process for Area 5A is intended to establish and identify the location of land uses, the alignment of roads and lanes, development densities, the location of neighbourhood parks, walkways and open spaces.

DISCUSSION and PLANNING CONTEXT

The Plan Area

The Area 5A-Orchard Grove NCP is bounded by 164 Street to the West, 24 Avenue to the South, 168 Street to the East and 26 Avenue to the North (Appendix III). It contains approximately 53 individual properties and is comprised of approximately 30 hectares (76 acres) of land. The entire NCP area is currently designated Suburban in Surrey's Official Community Plan ("OCP"), and the majority of properties are zoned One-Acre Residential (RA).

Foundation: Grandview Heights General Land Use Plan (GLUP)

The Grandview Heights GLUP, approved by Council in 2005 provides the overall framework to guide the development, servicing and build-out of Area 5A - Orchard Grove as a comprehensively

planned community. The GLUP provides principles for consideration during the preparation of individual NCPs. In particular, the Vision and Guiding Principles developed for the Area 5A - Orchard Grove NCP build upon Section 4.4 Sustainable Development Practices in the GLUP that states:

- *As Grandview Heights presents an ideal opportunity to implement principles of sustainability by introducing standards and development practices consistent with global and regional sustainability objectives, detailed planning for the Grandview Heights area will incorporate principles of sustainable development, which are to be given attention in the development of the NCPs.*
- *The detailed NCP process for the five NCP areas in Grandview Heights will be expanded to explore innovative servicing, storm water management, road standard and neighbourhood planning ideas.*

The Vision and Guiding Principles

NCP 5A - Orchard Grove will contribute to creating a complete and sustainable City made up of quality, vibrant and inclusive neighbourhoods with a high degree of amenity and sensitivity to the natural environment by:

- Fostering the creation of a high quality and walkable public realm that contributes to a unique neighbourhood character and identity;
- Fostering the creation of a neighbourhood that is inclusive, safe, healthy and diverse;
- Providing opportunities for public recreation and social interaction;
- Preserving valued habitat and natural open space;
- Ensuring sensitive integration and connection with adjacent existing and planned neighbourhoods;
- Exploring opportunities for providing local every day services and local employment for residents; and
- Ensuring the greatest protection of ecological resources.

Key Land Use Features Identified in the Grandview Heights GLUP

In addition, the Grandview Heights GLUP identifies the following key land use features in Area 5A - Orchard Grove to guide future development of this area (Appendix IV):

- A substantial landscape buffer along 26 Avenue between 164 Street and 166 Street;
- A central North-South Street with a substantial Greenway and Habitat Corridor running from 26 Avenue to 24 Avenue connecting North to an existing greenway in NCP Area 5 and connecting South to NCP Area 2 - Sunnyside;
- A multi-use pathway running along 24 Avenue and connecting West to NCP 1 – Morgan Heights and East to NCP 5;
- A sensitive interface and density transition along 26 Avenue and 168 Street with the Suburban designated lands to the North and East; and

- A mixed use- residential and commercial area identified at the intersection of 24 Avenue and 168 Street in NCP 2- Sunnyside.

PLANNING and PUBLIC CONSULTATION

A start-up public open house was held on October 15, 2008, and a Citizens' Advisory Committee ("CAC") was formed. The CAC consists of 16 members of the community including four members from outside NCP Area 5A, representing NCP Area 5, NCP Area 2 - Sunnyside, the Country Woods Residents Association and the West Grandview Residents Association. The CAC has met with City staff and project consultants regularly to guide the development of the NCP.

On November 24, 2009, staff held a public open house to present two working draft land use options, including a preferred draft land use option proposed for the Area 5A - Orchard Grove NCP. As a result of the feedback from the open house, staff worked with stakeholders and area residents to make refinements to the plan to resolve outstanding issues concerning the plan.

On July 20, 2010, staff held a third public open house to present a Draft Preferred Land Use Plan for Area 5A -Orchard Grove. Feedback from the most recent public open house has now been reviewed and a Stage 1 Land Use Concept is being forwarded to Council for consideration.

The planning process for Stage 1 of the Area 5A - Orchard Grove NCP has included:

- Four meetings with the CAC, including two design workshops early in the planning process;
- Three public open houses held on October 18, 2008, November 24, 2009 and July 20, 2010;
- Inter-agency referrals to Fisheries and Oceans Canada ("DFO"), Ministry of Transportation and Infrastructure ("MOTI"), TransLink, Fraser Health Authority, Metro Vancouver, School District No. 36, Semiahmoo First Nation, Katzie First Nation, RCMP Surrey Detachment, Terasen Gas, BC Hydro, Surrey Board of Trade and the Surrey Fire Department; and
- Numerous discussions with internal and external stakeholders and area residents.

November 24, 2009- Public Open House

Approximately 82 people attended the public open house held on November 24, 2009, where two working draft land use options, including a preferred draft land use option, were presented. A series of display boards, comment sheets, a staff presentation, and an opportunity to ask questions were provided for community feedback. Notice of the public open house was mailed to all properties within the NCP area and within 100 metres (300 feet) of the boundary of the NCP. As well, the open house was advertised in The NOW and Peach Arch newspapers and on the City's website.

A total of 39 comment sheets were received during or after the open house with the majority of respondents, 74% of all comments received, generally supporting the Land Use Concept. Of those respondents that generally supported the plan, 59% stated some concerns regarding the plan. Twenty six per cent (26%) of the total respondents stated that they did not support the Land Use Concept.

When asked what features they liked about the Land Use Concept, many respondents commented favourably on the following:

- Tree preservation, parks and green space;
- Mix of housing types and;
- Street network and layout of the neighbourhood.

The most frequently cited concerns recorded on the comment sheets were:

- Too many roads and lanes with particular concern that 166 Street is connected to 24 Avenue;
- Individual property owners expressing concerns about the development potential of their properties; and
- Density is too high, especially in transition areas.

Response to Public Consultation

City staff has worked with area residents to respond to the concerns that were raised at the open house as follows:

Too Many Roads and Lanes

The NCP study area currently contains approximately 53 properties and with the NCP allowing for up to 1,200 dwelling units the neighbourhood needs an accompanying increase in road density to accommodate the projected traffic. In addition, the road network within NCP 5A provides connectivity, routing options, access to alternative modes of transportation for the future residents of this neighbourhood as well as the wider community and is pivotal to the neighbourhood's urban design objectives. Adjustments have been made to the road network by, for example, developing a special reduced local road cross-section for the street within the mixed use, commercial and residential area to make the development of this area more feasible. In addition, flexibility in the alignment of lanes has also been incorporated into the Land Use Plan where larger land assemblies are achieved (Appendix V). The proposed road network density is broadly comparable with East Clayton and Clover Valley Station.

Recently, members of the development community have approached staff to remove some of the proposed roads to achieve larger development blocks of approximately 10 acres in area for multi-family townhouse developments. More detailed review of this issue will be undertaken through Stage 2 to establish reasonable development block areas for this neighbourhood.

Fair Development Potential

Individual property owners expressed concerns about the development potential of their properties within the NCP. Staff has made adjustments to the alignment of roads and lanes to better match property lines so as to balance road allowance requirements more equitably. Additionally, an implementation plan has been introduced to address concerns about development potential. Due to the fragmented land ownership within this NCP, land assembly areas for the townhouse, multi-family and mixed use areas have been identified. The intent of these adjustments to the land use plan is to ensure that development potential is as fair as possible and that individual existing lots are not unduly burdened in relation to the provision of infrastructure or road allowances in comparison to other lots in the neighbourhood.

Density along Transition Areas

Concerns were raised that the density within the NCP is too high, especially along the transition area along 26 Avenue. As a result of this concern, the densities along 26 Avenue have been reduced and all the townhouse designation on lands in proximity to 166 Street has been replaced with a single family residential designation.

July 20, 2010- Public Open House

A revised preferred land use plan (incorporating the above described adjustments) was presented at a public open house held on July 20, 2010. Approximately 65 people attended the open house where a series of display boards, comment sheets and an opportunity to ask questions were provided to encourage community feedback. Notice of the public open house was undertaken in a manner consistent with the previous public open house.

A total of 22 comment sheets were received as of August 3rd, 2010 with the majority of respondents, representing 73% of the comment sheets received, generally supporting the Land Use Concept Plan. Of those respondents that generally supported the plan, 63% stated some concerns regarding the plan. Of the total respondents 27% stated that they did not support the Land Use Concept.

When asked what features people liked about the Land Use Concept, many respondents commented favourably on the following:

- Tree preservation, parks and green space and the protection of the natural environment;
- Sustainability features; and
- Distribution of land uses and the proposed densities including the mix of residential, commercial, parks and roads.

The most frequently cited concerns on the comment sheets were:

- Increased traffic to the area and lack of sufficient transportation infrastructure to accommodate the new growth;
- Lack of safe cycling infrastructure in the community; and
- Density is generally too high.

In addition, there are a few individual property owners within the plan area who are concerned about the development potential of their properties. One property owner requested a higher density on their property and two other property owners requested the elimination of walkways on their properties.

Response to Public Consultation

The following sections describe the elements that have been incorporated into the Land Use Concept Plan to address the concerns that were raised at the open house.

Increased Traffic

The proposed land uses and densification allowed for the NCP will result in additional traffic. In recognition of this, the following elements have been incorporated into the NCP:

- A modified grid, local road network, of sufficient density to accommodate the projected traffic and provide routing options and dispersion of traffic within the neighbourhood;
- Traffic calming measures such as the installation of a traffic circle at the centre of the plan to prevent shortcutting and speeding within the neighbourhood;
- Providing safe transportation choices by promoting walking, biking and transit as alternate modes of transportation to the private automobile by such measures as the multi-use trail along 24 Avenue and the provision of connectors throughout the neighbourhood. The local roads within NCP Area 5A have been designed to be used as part of future transit routes; and
- This NCP is part of a broader land development strategy within South Surrey that will result in the development of a strategic road network to manage traffic demand. As background traffic volumes increase, road improvements will be undertaken incrementally. The City's traffic modelling of growth has identified broader strategic network improvements. The City will improve the perimeter roads surrounding NCP Area 5A, including 164 Street, 24 Avenue and 168 Street to collector and arterial standards.

Bike Connectivity

Transportation choice, including the possibility to walk, bike and use transit as alternative modes to car use are important components of creating complete and sustainable communities. A robust local road network designed to be safe for cycling and a multi-use trail along 24 Avenue will provide good cycling connections within NCP Area 5A and to other neighbourhoods in Grandview Heights and beyond.

Density

Most members of the CAC and most respondents at the July 2010 public open house indicated that they were satisfied with the distribution of land uses and the proposed densities in the land use concept. Some residents continue to be concerned about the potential change to the suburban character of the area.

OVERVIEW of the STAGE 1 LAND USE CONCEPT PLAN

The NCP proposes a complete community that includes a range of residential housing forms, employment opportunities and preservation of natural heritage on a modified grid street network. The following sections provide an overview of Plan. The Stage 1 Plan is consistent with the Vision and Guiding Principles as noted above, and is also consistent with the Grandview Heights GLUP.

The key features and land use components are:

- A range of street-oriented and human-scale residential land uses including large lot single family, large lot duplex, small lot single family, townhouses and higher density multi-family units;
- A mixed use, commercial and residential area providing opportunities for public gathering and a community meeting place;
- Three parks including the protection of a 2.3 acre (1 ha) forested area and the incorporation of the existing apple-pear orchard farm in the future development of this area;
- A multi-use trail along 24 Avenue and amenity connectors providing transportation choice in the neighbourhood;
- Multi-functioning stormwater utility corridors that also act as habitat corridors and buffers to adjacent land uses;
- A robust road network providing increased connectivity within the neighbourhood and with adjacent neighbourhoods; and
- A Green Street and a Special Commercial Street promoting sustainability and placemaking within the public realm of the neighbourhood.

Interface with Existing and Planned Neighbourhoods

The proposed land use plan for Area 5A -Orchard Grove has been developed to be compatible with the existing and planned surrounding land uses (Appendix VI).

164 Street-West Interface with NCP 1 - Morgan Heights

The land uses proposed on 164 Street in Area 5A - Orchard Grove are planned to mirror the existing land uses across 164 Street such that small lot single family lots are planned between 26 Avenue and 25 Avenue, and townhouses are planned between 25 Avenue and 24 Avenue.

26 Avenue and 168 Street - North and East interface with future NCP 5

The lands North of 26 Avenue and East of 168 Street are rural residential in character consisting of larger homes on large lots. To respond to this existing sensitive interface, the form and character of this interface is proposed to be maintained by requiring a substantial landscape buffer along 26 Avenue and a lower density built form. In addition, tree preservation along 168 Street is proposed to maintain the existing character of this interface.

24 Avenue - South interface with NCP 2- Sunnyside

Higher residential densities and a mixed use (commercial and residential) area are proposed along 24 Avenue within NCP Area 2- Sunnyside. To complement the proposed uses in NCP Area 2, the highest residential densities and a small mixed use (commercial and residential) area are proposed on 24 Avenue within Area 5A - Orchard Grove.

Employment Lands - Mixed Use, Commercial/Residential Area

Due to the proximity of the subject site to the Grandview Corners shopping centre, consisting of approximately 1 million square feet (93,000 square metres) of commercial space, as well as proximity to the industrial development along the Highway 99 Corridor, the opportunity to provide for employment areas is limited within Area 5A - Orchard Grove. However, based on the market analysis completed by Coriolis Consulting for Grandview Heights in August 2008, it was determined that a small employment area could be accommodated in this NCP with a possible location near the intersection of 24 Avenue and 168 Street. As such, the proposed Land Use Concept includes a small 2.1 acres (0.85 hectare) mixed use, residential and commercial area at the corner of 24 Avenue and 168 Street.

The proposed location of the mixed use area at the corner of 24 Avenue and 168 Street allows for good visual exposure to regional transportation routes while allowing for sufficient access points to support the scale of commercial development that is envisioned. The proposed development will allow for neighbourhood shops within walking distance of the residential areas and will include public gathering spaces and seating. The specific features will be identified in the Design Guidelines that will be developed as part of the Stage 2 component of the NCP planning process.

Residential Uses

Overall, the highest residential densities are located adjacent to 24 Avenue and densities decrease towards 26 Avenue and 168 Street. At full build out, it is projected that the Plan area will have between 700 and 1,200 dwelling units.

Multi-Family

The highest residential densities (30 - 45 units per acre) are proposed along 24 Avenue and next to the mixed use commercial-residential area. These densities generally allow for four storey apartments with underground parking and stacked townhouses.

Townhouse

Residential densities of 15 - 30 units per acre in the form of townhouses and row-houses are proposed to be located in the interior of the plan area and between higher density multi-family housing and single family housing. The housing form typically built under the townhouse designation provides a suitable transition between apartment forms of residential development and single family houses.

Small Lot Single Family

Residential densities of 10 - 15 units per acre will allow for small lot single family development with or without coach houses. Design Guidelines will be developed for the coach house component as part of the Stage 2 NCP planning process to ensure compatibility with the adjacent lower density housing forms on 26 Avenue.

Large Lot Duplex or Single Family

The lowest residential densities (2 - 10 units per acre) are proposed along 26 Avenue to match the form and character of the development across the street. Flexibility is provided to allow for large single family lots or duplex units, provided that the form and character already established on 26 Avenue is maintained. Additional guidelines, outlining the form and character of 26 Avenue will be identified in the Design Guidelines that will be developed as part of Stage 2 of the NCP process.

Natural Heritage and Environmental Preservation

Grandview Heights Heritage Study

As part of the planning process for the Grandview Heights GLUP, a Heritage Study was prepared in 2005 by Donald Luxton and Associates to identify the historic sites in Grandview Heights and opportunities for heritage preservation. There are no heritage buildings in Area 5A - Orchard Grove; however, the study recommended that there were opportunities to celebrate the natural heritage of this area by using historical road and pioneer family names as well as preserving historical landscapes such as windbreaks, remnant orchards and specimen trees.

Environmental Assessment and Tree Survey Study

In developing the land uses for the NCP area, in 2008 an Environmental Assessment and Tree Survey Study were carried out by Madrone Consulting. The study provided an up-to-date inventory of all the vegetated areas, sensitive ecosystems, potential wildlife linkages, and other ecologically important features. There are no fish bearing watercourses in Area 5A - Orchard Grove NCP; however, several high value tree stands and associated wild-life values were identified.

Building on the findings of the Environmental Assessment Report and the Heritage Study, the following natural heritage protection areas have been incorporated in the Stage 1 Land Use Concept (Appendix VII):

- Tree preservation on public property by the acquisition of a 2.3 acre (1 hectare) forested area consisting of high value Douglas Fir trees exceeding 30 metres (100 feet) in height;
- Promoting tree preservation on private property by offering density incentives when tree clusters are protected; and
- Commemoration and protection of a portion of a 5 acre (2 hectare) apple/pear orchard farm.

As the Design Guidelines are developed as part of the Stage 2 NCP process, opportunities to retain and commemorate the apple/pear orchard farm will be explored in detail.

Parks and Open Space

A network of parks and open space throughout the NCP area is proposed to provide active and passive recreational opportunities for residents and to facilitate habitat connectivity and tree preservation (Appendix VIII). The new parks build on the existing foundation of regional and community level open space provided or planned in the Grandview Heights area. These parks are linked through amenity connectors.

A total of 7 acres (2.8 hectares) of parkland is provided in the following three parks:

- A 3.7 acre (1.5 hectare) active neighbourhood park within approximately 400 metre (1,300 feet) walking distance of all residents in this neighbourhood;
- A 1 acre (0.4 hectare) active park is planned in the northwest quadrant of the Plan area; and
- A 2.3 acre (1 hectare) passive park protecting stands of high value Douglas Fir trees.

The active parks may contain playing fields, playgrounds, walking trails and other active amenities as well as enhanced natural areas to promote habitat connectivity and to allow for tree preservation. The final programming for these parks will be confirmed in the future and will include further consultation with local residents.

Placemaking Opportunities

Several elements have been proposed to reinforce identity and to create a sense of place for the Area 5A - Orchard Grove NCP based on the Placemaking and Public Space Guidelines that were completed by the consultant known as the Project for Public Places in 2009. There are opportunities for placemaking within the parks and open spaces, gateway features, the square in the mixed use site as well as the roads and designated walking and cycling routes (Appendix IX). The proposed street network is a fundamental element where the majority of daily public interactions occur. An important component of the placemaking for this neighbourhood will be the protection of natural heritage by preserving forested areas and the remnant orchard farm.

Parks, Open Space and Natural Heritage

The parks, open space and the preservation of natural heritage will form a very important aspect of creating a "good place". In particular, as part of the Stage 2 NCP process, the design and development guidelines will build upon the following principles:

- Safety and inclusion by requiring that all developments face a public park or open space. For example, the single family homes surrounding the proposed 1 acre (0.4 acre) park have been designed so that the front doors face the park and have direct front door access to the park. This concept of "eyes on the park" will allow for natural surveillance of this space and will ensure that the park spaces are safe for users throughout the day;
- Multi-tasked open space and access for all modes of transportation. The design of the parks will consider multi-uses including community gardening and other forms of food production that will have the ability to build food security and create a sense of community for the area

residents. Bicycle parking, benches and trails will ensure that non-motorized travel is promoted in this area; and

- Preservation of natural features by incorporating historical references to formal agricultural uses such as the remnant orchards into the proposed development.

Square in the Mixed Use, Commercial and Residential Area

The mixed use, commercial and residential area will include a space for a neighbourhood square and a public gathering space. This space is envisioned as a destination where the community gathers to socialize and take part in various activities. Amenities in this area may include seating, public art, outdoor cafes and activity spaces for community and cultural programming. In addition, the street network surrounding the mixed use area will be modified to a "Special Commercial Street" to improve the public realm by featuring on-street parking pockets, traffic calming, special pavement treatment and enhanced sidewalks.

Four Corners- the Gateways to the Community

Each corner of the NCP will be designed to clearly define the entrance to the neighbourhood as follows:

- Northwest corner (26 Avenue and 164 Street): A formal landscaped gateway feature is envisioned and may include seating and signage to welcome visitors to this neighbourhood. The details of this gateway feature will be developed as part of the Stage 2 NCP process;
- Northeast (26 Avenue and 168 Street) and the southwest (24 Avenue and 164 Street) corners: Retention of mature treed areas to mark the entrance to the neighbourhood; and
- Southeast corner (24 Avenue and 168 Street): Public square providing a community gathering place as part of the mixed use, commercial and residential development.

Movement Networks

The streets and walkways are important elements that create a sense of place and identity for Area 5A - Orchard Grove. The routes connecting amenities in the neighbourhood such as parks, open spaces and gathering places will be designed as amenity connectors with 2.5 metre (8.2 foot) sidewalks. In addition, it is anticipated that the traffic circle at the centre of the Plan area will become a neighbourhood focal point with public art and sustainable drainage features.

Sustainability Features

The key features of a sustainable community include the promotion of a range of densities to reduce the footprint of development and to provide for a transit-friendly and walkable neighbourhood. The network of pedestrian-oriented and human scale streets will create a safe and walkable community. The featured "Green Street" design will provide sustainable drainage features, and will ensure that the existing Douglas Fir trees on this street are retained.

The following is an example of the sustainability principles that will be incorporated into the design and development guidelines for the development of this area as part of the Stage 2 NCP process:

- Green building and infrastructure by promoting LEED (Leadership in Energy and Environmental Design) certification to ensure ecological development in this area. The LEED Certification process uses a points-based rating system to assess building and site design against recognized sustainable measures and standards in the areas of sustainable sites, water efficiency, materials and resources, and indoor environmental quality;
- Promoting sustainable drainage and implementing Drainage Best Management Practices such as the concept of rain-gardens and bio-swales and promoting permeable paving and permeable surfaces to ensure that downstream erosion and water quality issues are addressed; and
- Promoting and enhancing wildlife corridors and maximizing the quantity of native species and including planting material that is drought resistant and trees that provide shade.

School and Community Amenities

Based on the projected housing unit numbers and population projections for the NCP area, the Surrey School Board has indicated that the existing and planned elementary schools in the Grandview Heights area are sufficient to accommodate the ultimate build out of this neighbourhood. An elementary school is planned on 166 Street, just south of 24 Avenue in NCP 2- Sunnyside. The central North - South Stormwater Utility Corridor along the east side of 166 Street will provide a safe and pleasant walking route for children to the new elementary school.

With the general growth in the Grandview area, the School Board intends to build a new secondary school to accommodate approximately 1,500 students in the Grandview area when funds become available.

Overview of Engineering Servicing

The Plan requires the expansion of municipal engineering infrastructure to accommodate anticipated growth in the area. Transportation and infrastructure servicing requirements to accommodate development of the proposed Area 5A - Orchard Grove NCP have been reviewed. The Engineering Department is satisfied that transportation, water, sanitary sewer, and storm drainage can be provided in a cost efficient manner to support the proposed land use concept. Specific strategies for each component will be developed as part of the Stage 2 NCP planning process.

Water

This NCP is located completely within the servicing area of the Grandview Pump Station and the topography in this area is suitable for the Grandview Pumped Pressure Zone. The existing Grandview Pump Station is located immediately south of the Area 5A - Orchard Grove and has sufficient capacity to service this NCP. A 600 millimetre feeder main on 24 Avenue has been completed between 164 Street and the pump station. To provide water to this NCP area, a 600 millimetre feeder main will need to be completed on 24 Avenue between the existing pump station and 168 Street.

In addition to the feeder main, on-site distribution mains will be required to service this NCP area, as are required in all other NCP areas. The layout and sizing of the distribution mains will need to consider the needs of servicing areas both North and East of this NCP area.

Sanitary Sewer

Currently, there is no sewer system in Area 5A - Orchard Grove. All of the existing homes are serviced by on-site private septic systems. Area 5A abuts and flows into NCP Area 1 - Morgan Heights where the sanitary sewer system has been installed and sized to accommodate flows from Area 5A.

The proposed development within Area 5A will need to be serviced by local sewers, as required in other NCP areas, and will need to follow the local roads and connect to the existing sanitary sewer system within NCP Area 1 -Morgan Heights.

Stormwater

Area 5A - Orchard Grove is located within the Old Logging Ditch watershed which contains fish-bearing watercourses draining into agricultural lowlands, and the Nicomekl River. Downstream flooding, channel erosion, and diminishing summer base flows in watercourses are common stormwater concerns resulting from increased urban development. To mitigate these potential problems, stormwater Best Management Practices (BMP) are proposed in Area 5A.

The primary drainage management feature proposed for this NCP is the use of enhanced infiltration systems through a network of stormwater corridors, similar to the systems proposed for Grandview Heights Area 2 NCP. The proposed stormwater corridors include a combination of open space landscaped corridors, underground drainage storage facilities, on-lot water detention, and other features to enhance infiltration into the ground.

The proposed system of stormwater corridors for infiltration has many advantages as compared to traditional detention ponds as summarized below:

Stormwater Management Approach	Peak Flow Control	Runoff Volume Control	Water Quality Treatment	Base Flow Augmentation
Detention Pond	yes	no	yes	no
Stormwater Corridors	yes	yes	yes	yes

Specific alignments, design details, and funding of the stormwater utility corridors will be determined as part of the Stage 2 NCP planning process.

Based on preliminary financial analysis, it is anticipated that there will be a significant funding shortfall for drainage servicing in this area. This funding shortfall is currently estimated at \$115,000 per acre of developable land, and is greater than the funding shortfall recently identified as part of the Stage 2 Grandview Heights Area 2 NCP.

The funding shortfall in Area 5A exists regardless of whether the traditional detention ponds or the proposed drainage corridor systems are proposed, as the costs for each of these systems is similar to the other.

As part of the Stage 2 NCP process, a financing concept for the drainage infrastructure will be developed ensuring equitable cost sharing among the future developed lots throughout the NCP area, similar to the City's current approach to funding detention ponds in other NCP areas.

Transportation

The transportation plan for Area 5A - has been developed following the guiding principles contained in the Placemaking and Public Specs Guidelines in the Surrey Transportation Strategic Plan. A modified grid road system is provided that takes into account property lines, tree protection, environmental protection and topography. When combined with a network of greenways and public lanes, the road system supports good internal circulation providing residents with continuous and safe routes to walk or cycle to schools, parks and other services and facilities in the area. The network has been designed to provide good connectivity and integration with the surrounding transportation network and supports the dispersion of traffic throughout the neighbourhood while still providing developable and desirable block spaces. On street parking is accommodated on most of the roads within the NCP Area 5A and routing options for future transit service are protected.

An analysis of the additional traffic that will be generated by the proposed land uses for Area 5A based on the proposed modified grid road network, has indicated that there are no anticipated operational issues. The analysis examined the impact of the proposed uses on the existing and planned major road network and also on intersections in the area.

The Plan area is bounded by two arterial roads (24 Avenue and 168 Street), a collector road (164 Street), and a local road (26 Avenue). The City's South Surrey Traffic Model which takes into account predicted development and growth identified the need for future road widening of 24 Avenue to a six-lane cross-section and 168 Street to a four-lane cross-section. The required road allowances for both roads will be dedicated with the development of this area.

Population Projections

The expected population of the Area 5A, based on the Stage 1 Land Use Concept at full build-out, will be approximately 1,700 to 2,900 people in 700 to 1,200 dwelling units. These numbers will be updated in conjunction with any revisions to the Land Use Concept that occurs as result of the Stage 2 NCP planning process.

Breakdown of Dwelling Units and Population Projections:

Proposed Land Use	Area (Acres)	Total Number of Dwelling Units		Population Projections	
		Minimum	Maximum	Minimum	Maximum
Large Lot Duplex or Large Lot Single Family (2-10 upa)	4.3	9	43	26	128
Small Lot Single Family w/wo Coach House (10-15 upa)	11.6	116	174	347	521
Single Family (10 upa) or Townhouse with Tree Preservation (15 upa)	2.6	26	39	78	117
Townhouse (15-30 upa)	12.8	193	385	482	964
Townhouse (15 upa) or Multi-Family with Tree Preservation (30 upa)	3.6	55	109	136	273
Multi-Family (30-45 upa)	7.9	237	356	475	712
Mixed Use-Commercial/Residential (30-45 upa)	2.1	64	96	128	192
Total	44.9	700	1202	1672	2907

Next Steps - Stage 2 Planning Component

During Stage 2 of the NCP planning process, staff will work to resolve outstanding concerns identified as part of the Stage 1 process, identify all detailed engineering requirements, prepare a comprehensive servicing plan, and prepare a financial strategy to fund the infrastructure needed to support development in the area.

Items that will be further considered during Stage 2 of the NCP planning process include the following:

- Development of design and development guidelines, including:
 - Guidelines for residential and mixed use, commercial/residential land uses;
 - Guidelines for the development of parks, open spaces and movement networks;
 - Gateway features and community gathering places;
 - Detailed design of the Green Street and the Special Commercial Street;
 - Microclimate, energy conservation and weather protection considerations;
 - Detailed design of the stormwater utility corridors with consideration of their habitat value; and

- Consideration of the protection of natural heritage including tree preservation and the apple/pear orchard farm.
- Determine amenities to serve the area, including park development costs, fire and police protection, library needs and the establishment of appropriate amenity contributions for the NCP area;
- Complete transportation, stormwater, sanitary sewer and water servicing plans for each of the utilities on the basis of the strategies included in this report; and
- Develop a financing, phasing and implementation strategy. While the details associated with servicing the NCP area will be determined through the Stage 2 process, a preliminary analysis has been undertaken to confirm the feasibility of the proposed land uses and densities. As part of Stage 2 of the NCP planning process, staff will explore options for dealing with the DCC revenue shortfall for the proposed stormwater servicing after more detailed servicing plans and costs are prepared.

The complete servicing, phasing and financial plan will be presented to the public for review and comment. It is anticipated that the Stage 2 component of the NCP will be completed by the spring of 2011.

CONCLUSION

Based on the above discussion, it is recommended that Council:

- Receive this report as information;
- Approve the Stage 1 Land Use Concept for the Grandview Heights NCP Area 5A - Orchard Grove as described in this report and as illustrated on the map attached as Appendix I;
- Authorize staff to undertake the Stage 2 component of the NCP planning process on the basis of the Stage 1 Land Use Concept, including:
 - the preparation of design and development guidelines; and
 - the completion of an engineering servicing plan and a comprehensive financial plan that will provide adequate funding for servicing infrastructure, phasing of development and the provision of community amenities; and

- Authorize staff to receive and process development applications for sites within the NCP area, based on the Stage 1 Land Use Concept Plan, provided that final approval of any such application is held pending the completion and approval of the Stage 2 component of the NCP.

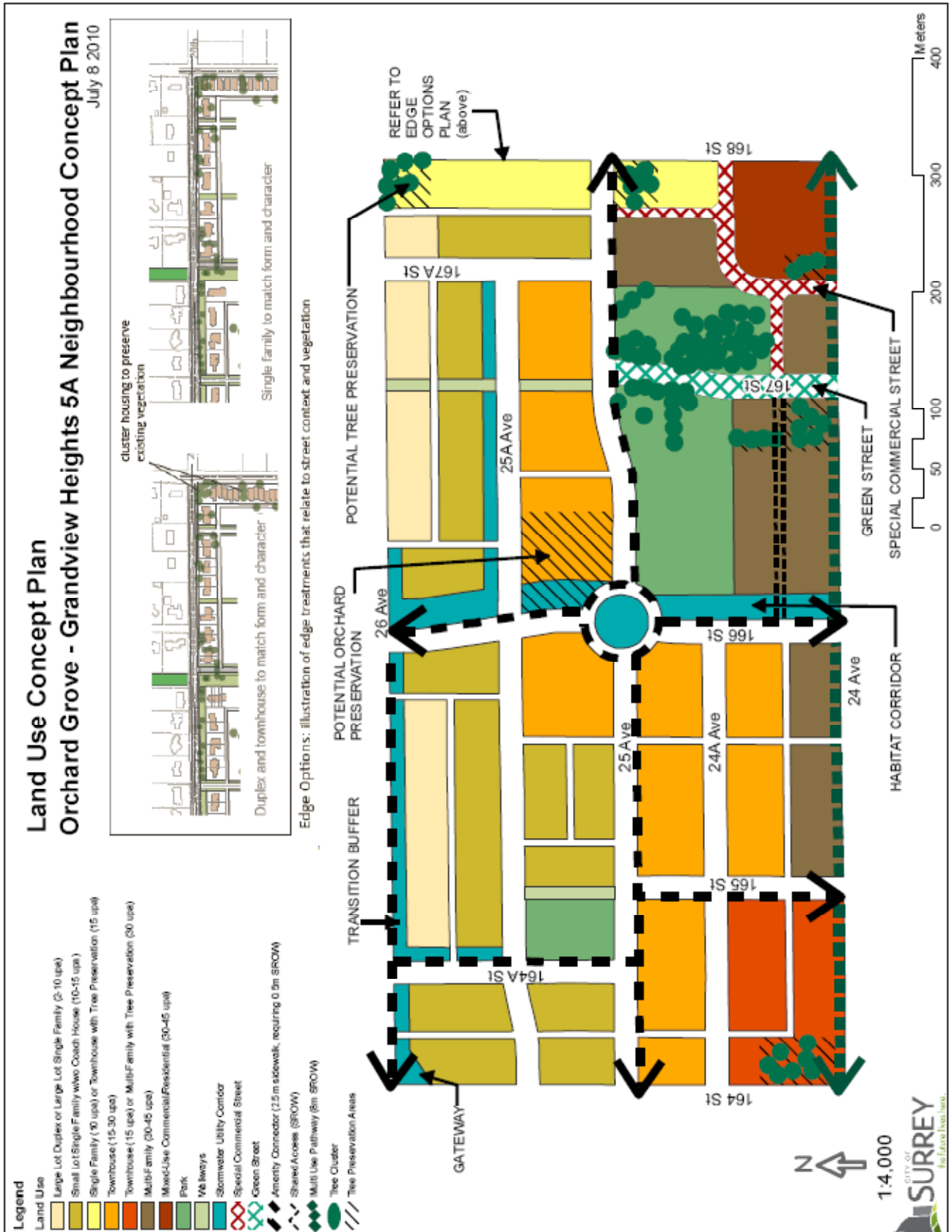
Original signed by
Jean Lamontagne
General Manager
Planning and Development

Original signed by
Vincent Lalonde, P.Eng.
General Manager
Engineering

CL/JA/brb/saw

Attachments:

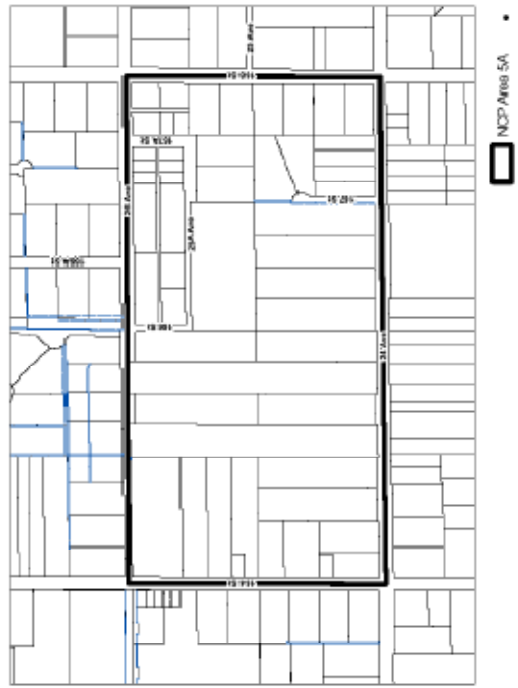
- Appendix I Stage 1 Land Use Concept for Area 5A - Orchard Grove NCP
- Appendix II Grandview Heights General Land Use Plan
- Appendix III Existing Neighbourhood
- Appendix IV Grandview Heights General Land Use Plan – Area 5A
- Appendix V Land Assembly Area Map for Area 5A – Orchard Grove NCP
- Appendix VI Context Map
- Appendix VII Open Space Network Map for Area 5A – Orchard Grove NCP
- Appendix VIII Stormwater, Parks and Green Space
- Appendix IX Edges and Placemaking
- Appendix X Sustainability Guidelines



Foundation: General Land Use Plan



Existing Neighbourhood

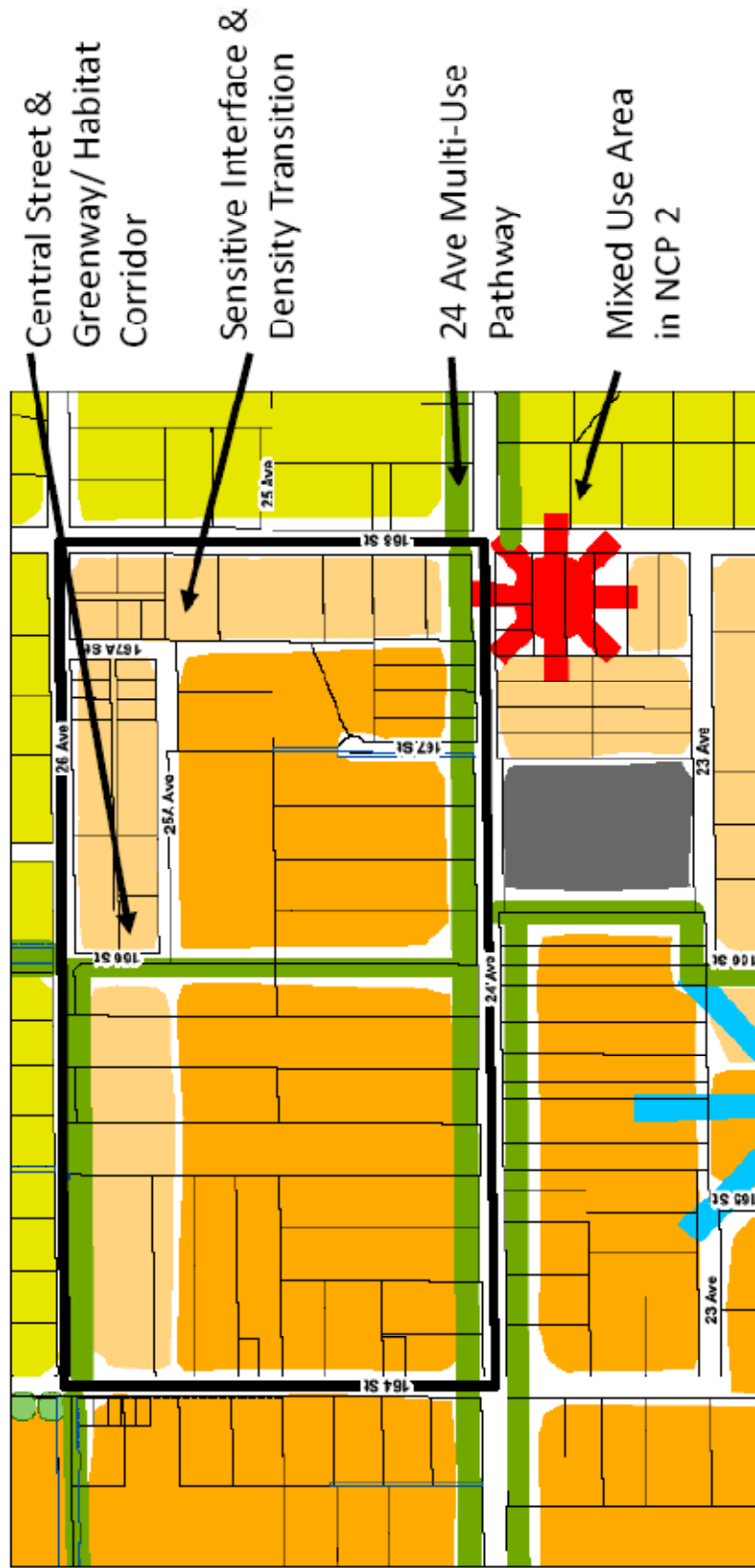


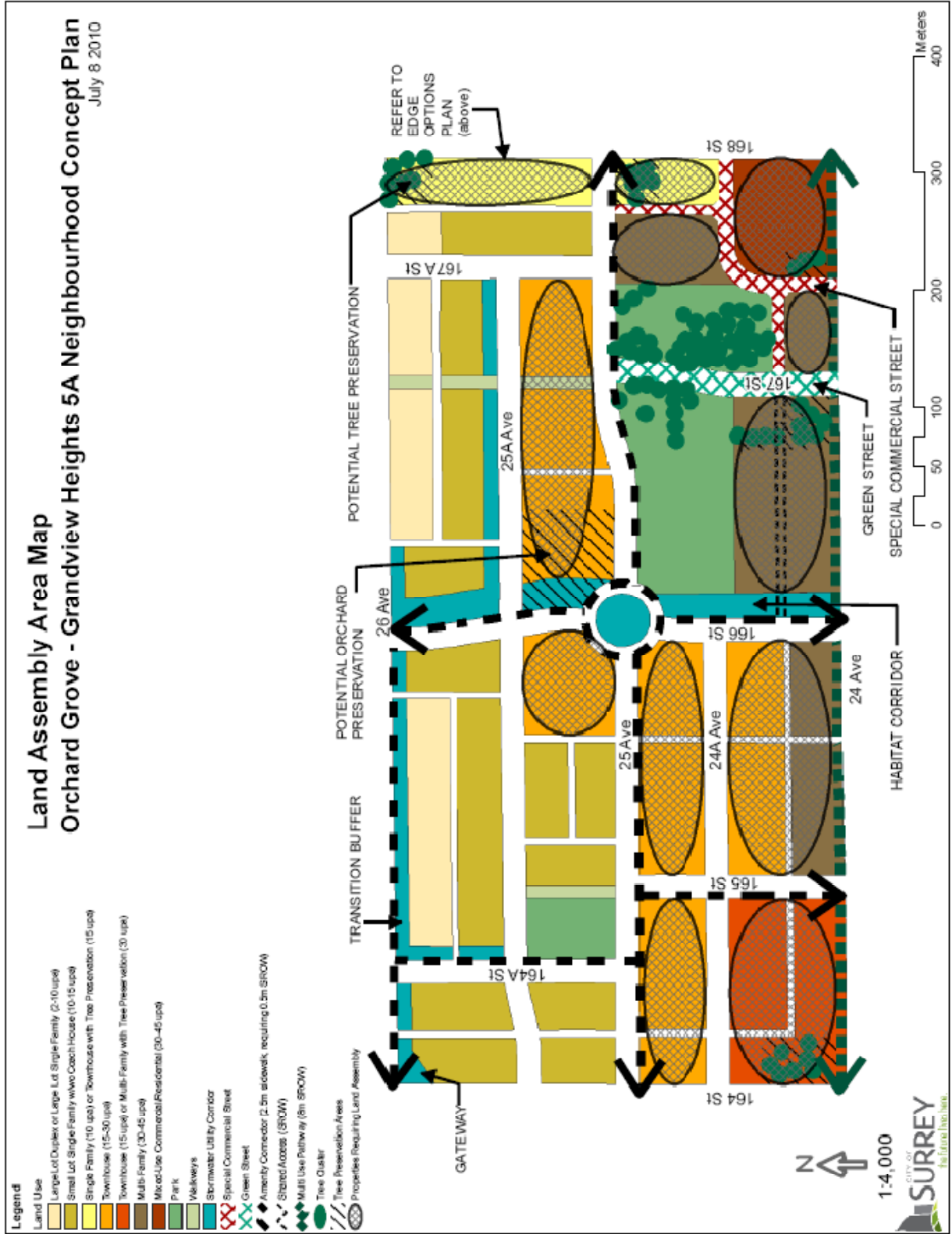
Existing Property Boundaries

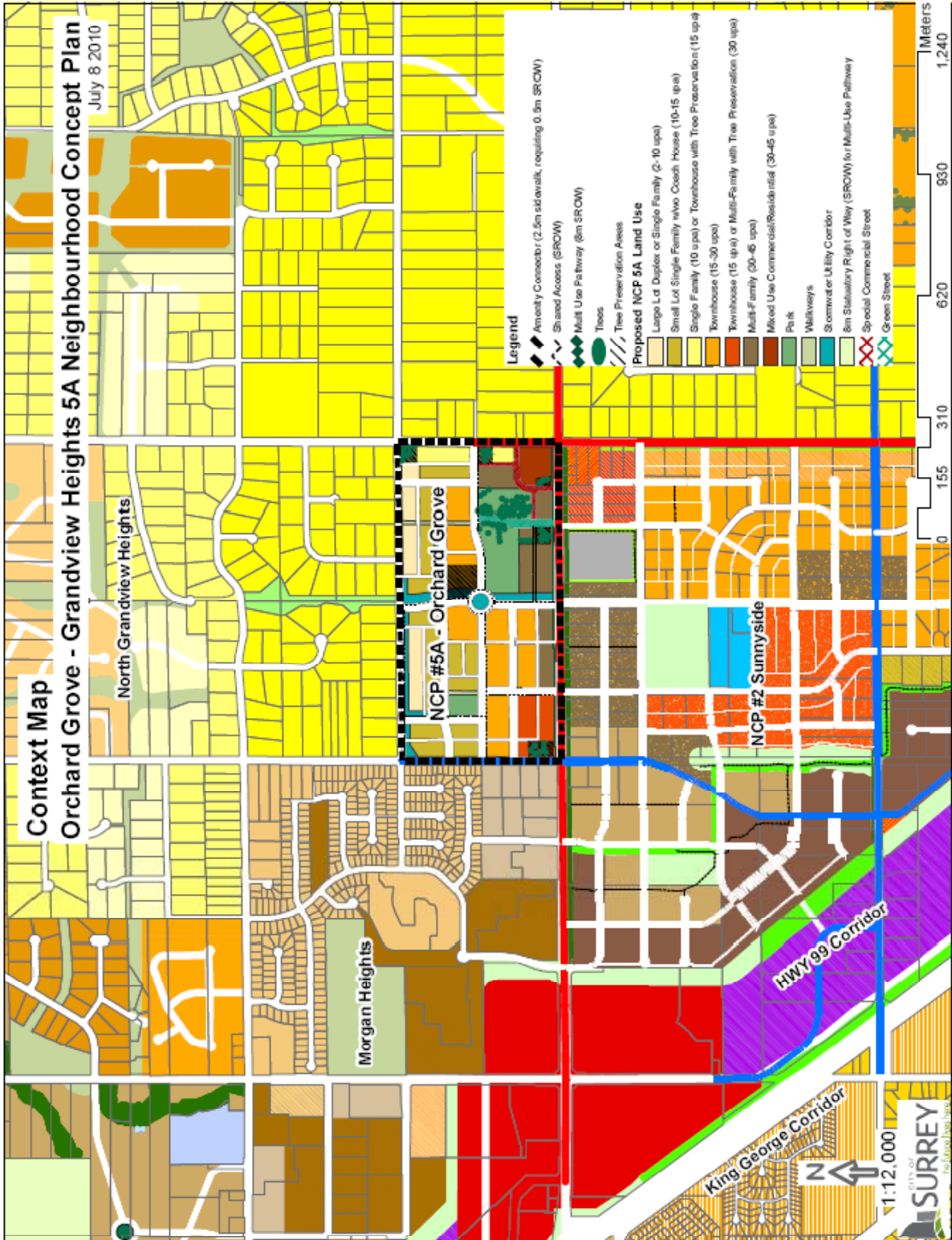


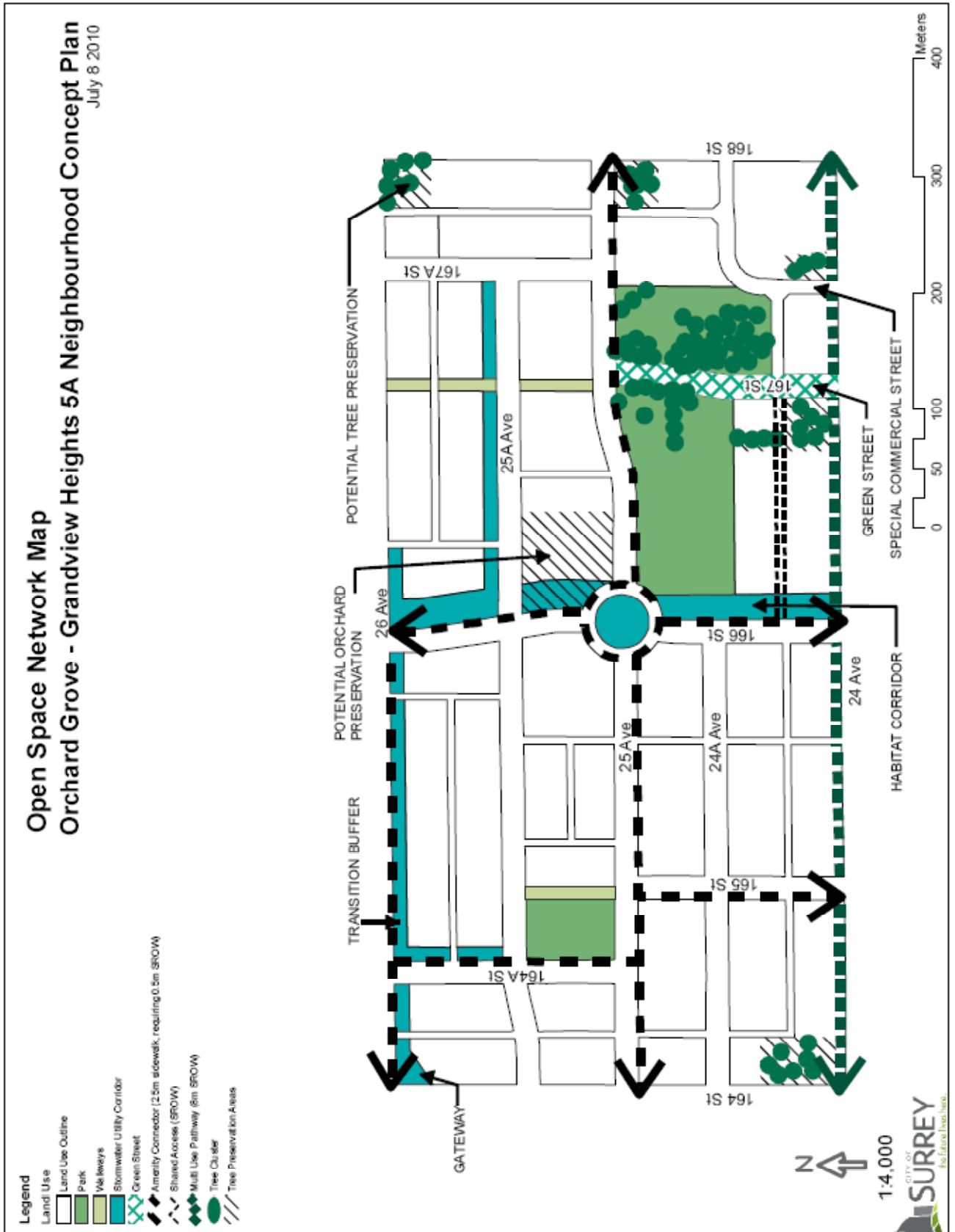
2008 Air Photo

Foundation: General Land Use Plan









Stormwater, Parks & Green Space



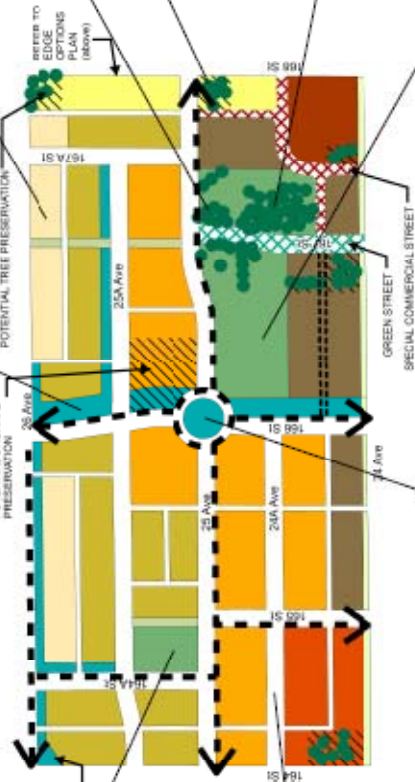
One acre neighbourhood park



Permeable paving and a catch basin control the flow of water feeding local streams.



Structures that collect and filter road runoff



Rainforest or similar subsurface structures



Infiltration Bio Swales



On-Lot Source Controls



Identify and protect key vegetation



Existing trees



Park programming for a variety of park users, active and passive

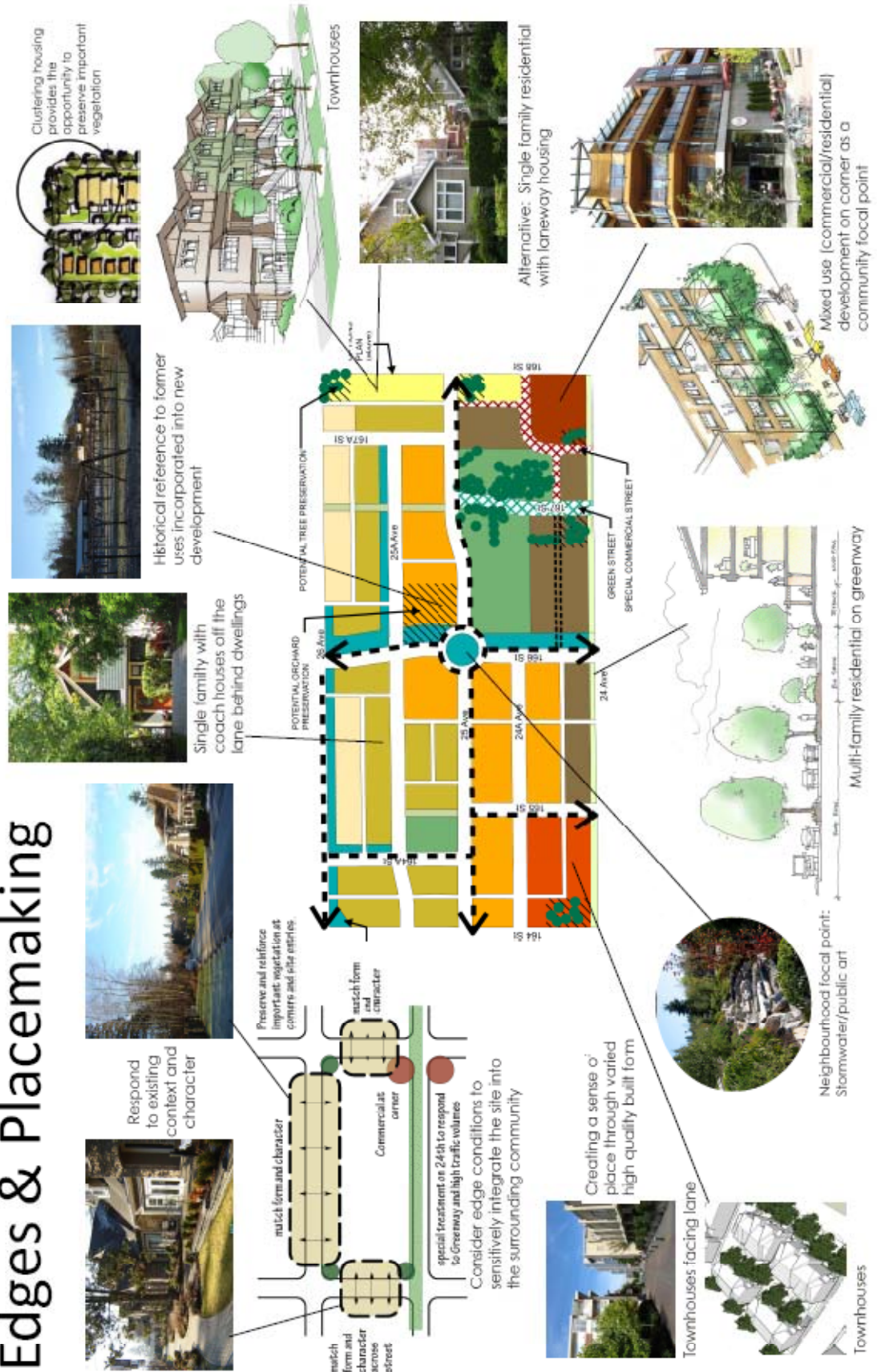


Park programming for a variety of park users, active and passive



Stormwater detention integrated with habitat and park amenities

Edges & Placemaking



Respond to existing context and character



Single family with coach houses off the lane behind dwellings



Historical reference to former uses incorporated into new development



Clustering housing provides the opportunity to preserve important vegetation



Townhouses



Alternative: Single family residential with laneway housing



Mixed use (commercial/residential) development on corner as a community focal point



Neighbourhood focal point: Stormwater/public art



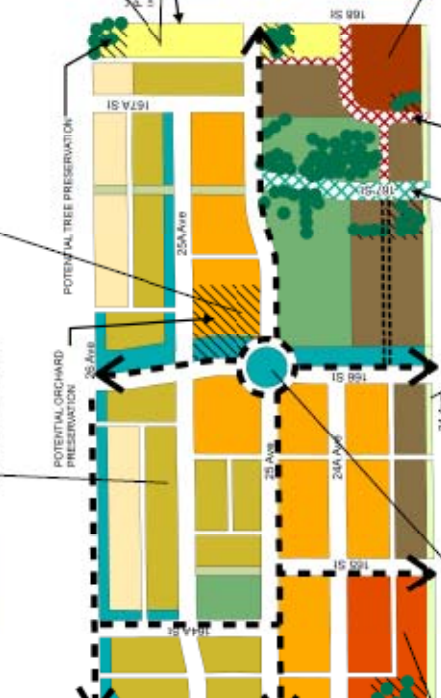
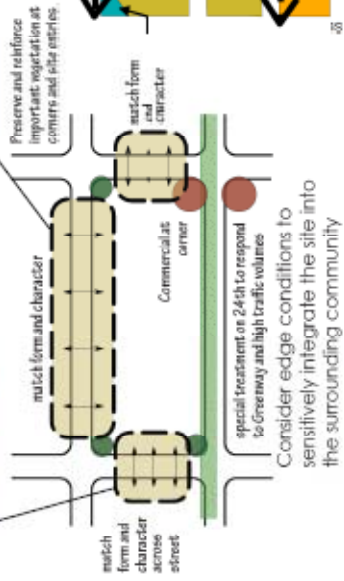
Townhouses facing lane



Townhouses

Creating a sense of place through varied high quality built form

Multi-family residential on greenway



Grandview 5A Design Guidelines + Sustainability Concepts

Compact and Complete Neighbourhood



Live-Work Flex Units - These allow people to work from home, reducing travel and supporting local jobs. At the street level, these units should be designed to be flexible so that they can be assigned from residential to commercial uses (and vice versa).



Coach Housing - These units, which are auxiliary to a main residence, may be used to house the following: increase density (locally) by using smaller lots; increase affordability by providing a mortgage helper to the principal dwellings; increase rental options; and activate neighbourhood lanes.

Multi-Tasked Open Space



Transportation Links - Pedestrian and cyclist connections can be integrated into open space management to increase active recreation opportunities and strengthen the local transportation network.



Green Features - Open spaces can manage stormwater (e.g., rain gardens above), and integrate natural landscaping such as native and drought-tolerant species to reduce the need for water irrigation and pesticide use. Greater irrigation should also be utilized.



Preservation of Natural Features - Development can be designed to conserve natural features such as mature trees, which recognize their intrinsic value in providing opportunities for passive recreation.

Sustainable Food System



Organic Waste Management - An important way to reduce commercial and residential waste is to use organic waste for composting or indoor composting facilities. In multi-family and non-residential developments an easy way to recover and recycle nutrients consumed locally.



Production: Food Gardens - Gardens can be either public (community gardens) or private (backyard gardens). They build food security, reduce food costs, and reduce the transportation footprint of residents' groceries.



Production: Green Roofs - Civic food projects, community gardens, and school gardens can be used to address food security. Green roofs conserve building energy, help manage stormwater, create habitat, and create a place for passive recreation.

Supportive Community & Local Economy



Small-Scale Retailers - Designing for small-scale commercial space (e.g., with short mobile widths) can be ideal for local business owners, and contributes to a pedestrian-oriented streetscape experience.



Crime Prevention through Environmental Design (CPTED) is a holistic neighbourhood design to increase safety. For example, orienting and designing buildings to increase natural surveillance or "eyes on the street" (as above) increases safety and sense of community.

Low-Impact Transportation



Safe & Attractive Public Realm - Transportation planning should prioritize pedestrians. Generous sidewalks, public realm, and a well-connected grid-like network are critically important to walkability.



Traffic Calming - Measures such as curb extensions (shown above), traffic roundabouts, narrow streets (i.e., alternative right-of-way standards), street trees and on-street parking were to slow traffic and increase pedestrian safety.

Green Buildings & Infrastructure



Permeable Pavement - Driveways, parking areas and curbside drop-off zones can utilize permeable pavement to decrease water run-off and create a greener "look and feel".



Lawn Drains & Back Flts - Main hole covers in lawns and backyards combine rock pits, which allow water to seep through and into the ground below, reducing water run-off.



Integrated Stormwater Management - Using natural systems to help manage stormwater is green, less expensive than a full cost accounting perspective, and more aesthetically pleasing (i.e., swale shown).



Renewable & Shared Energy Systems - Buildings can be linked to district energy systems, which can use renewable energy (generated on-site), waste energy or conventional energy. In all scenarios, energy consumption is reduced as the need for individual boilers, furnaces, and air conditioners is eliminated.