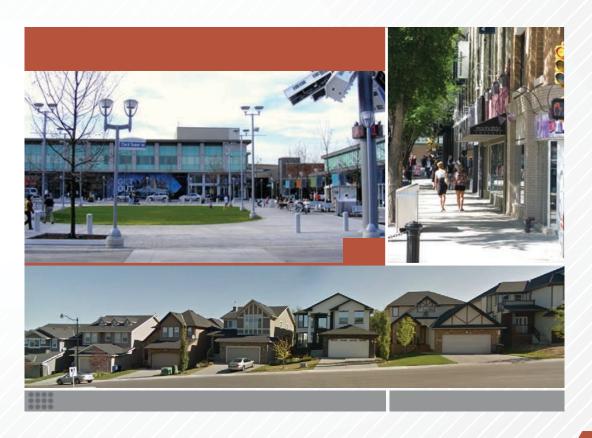
REVISED

PROPOSED

CALGARY WEST

AREA STRUCTURE PLAN



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Preface

The original Calgary West Area Structure Plan (ASP) was adopted by City Council in 1997. Since that time, only the western quarter section of the ASP has been developed into the existing Crestmont Community. In response to several development applications in the area, a comprehensive review of the original ASP was undertaken in recognition that the original document has become outdated in content and format.

The review process commenced at the end of 2011 and involved the area community associations; meetings with landowners and the public; and transportation, geotechnical, environmental, market and land use studies.

As an alternative to creating a long list of amendments to the original ASP in its existing format, this Revised Calgary West Area Structure Plan (the "Plan") will provide the conceptual framework to guide more detailed planning for future development.



INTRODUCTION

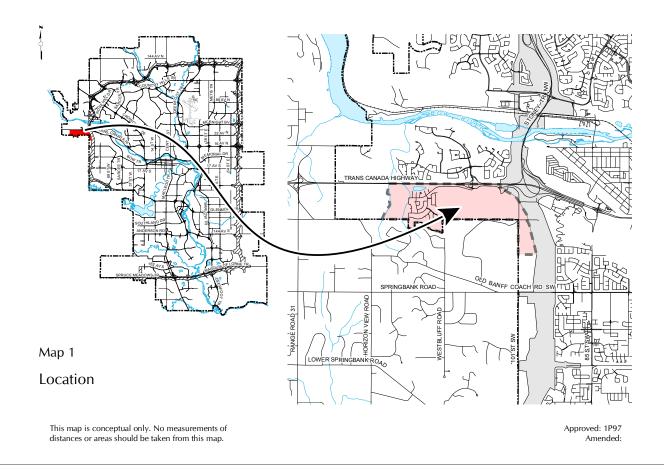
1.0 Introduction

1.1 Location

The area of land that comprises the Plan is located in the northwest sector of the city to the west of the future extension of Stoney Trail, and to the south of the Trans Canada Highway. North of the Plan area is the community of Valley Ridge, to the south are

lands within Rocky View County and to the west are future developable lands within The City. The total Plan area is approximately 278 hectares (687 acres).

See Map 1: Location.



1.2 The Plan Area

The Plan area is situated on the northwest portion of the prominent geographic feature known as the Paskapoo Slopes. The upland plateau rises to a considerable height of 155 metres above the Trans Canada Highway within a distance of 800 metres. Aspen forests cover much of the west- and north-facing escarpments, and add to their visual prominence. During the summer months the green forested escarpments are particularly impressive forming a significant landmark at The City's western entranceway.

The Plan area, however, is largely limited to the lower elevations of the Paskapoo Slopes. **See Map 2: Aerial Photo**

Developable lands in the Plan area do not rise above one third of the height of the upland plateau, with the exception of the lands adjacent to the 117 Street SW undeveloped road right-of-way. To the east, the north-facing slope extends to Canada Olympic Park and the northwest portion of the community of Patterson Heights. This area has an abundance of natural features including heavily treed ravines and gullies, streams and springs, aspen and balsam poplar stands, dense dogwood shrubs, etc. The area is also known to be habitat for deer, small mammals and a variety of migratory and breeding birds. Because of its high visibility and ecological quality, the Paskapoo Slopes is an important area to a broad range of Calgarians as well as to the rural residents of Rocky View County.

Most of the ravines/gullies which dissect the north- and west-facing slopes of the Plan Area have been identified as being environmentally significant. Native grass species are evident on the Benchlands and, to a lesser extent, on the lowlands.

The southeast portion of the Plan Area contributes to a wildlife corridor stretching from the Elbow River to Edworthy Park. This corridor is not clearly defined, but wildlife movement has been observed west of The City between the Elbow River to the south and the Bow River bank at Edworthy Park. Canada Olympic Park and surrounding area form parts of this corridor.

Portions of the natural features within the Plan Area have been impacted through placement of power lines, farming, grazing and improper drainage. Gravel mining has also taken place sometime ago on a small site in the south-central portion of the Plan Area. Where these past uses have damaged environmentally significant lands, rehabilitation of some of the damage may be possible as development takes place.

1.3 Vision

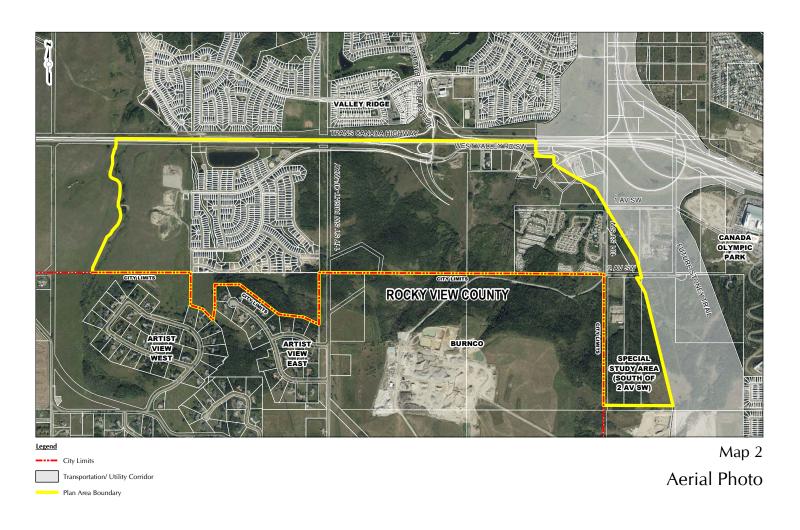
By 2025, the Plan Area has become a vibrant and diverse community of over 7,000 people. The Community Core Area is the focus of social and commercial activity where residents can meet their daily needs in an attractive and convenient setting. There will be a seamless integration of development intensities, uses, and built form between residential and commercial areas within the Community Core Area.

The Plan Area will have street trees, wide pedestrian friendly sidewalks, street furniture and appropriate lighting to enhance the pedestrian experience. There will be a comprehensive and consistent pedestrian /cyclist link between Sites 1 and 2 in the Community Core that extends into the surrounding communities. Sites 1 and 2 will each provide a high quality of urban design, creating vibrant public spaces and streets for pedestrian activity. Connectivity to Canada Olympic Park, existing regional pathways, and to transit will be achieved. Public amenities and services are within comfortable walking distance through excellent pedestrian connections, while public transit and cycling facilities provide access to wider employment, retail, leisure and cultural destinations.

The Plan is an area for people of all ages and lifestyles. It is a complete community. There are two distinct areas within the Plan, the Neighbourhood Area and the Community Core Area, that provide for a mix of housing types, tenures, architectural styles and active street fronts.

The Community Core Area provides residents the opportunity to live, shop, socialize, gather and recreate locally. The Plan is designed to integrate with and respect the

INTRODUCTION





INTRODUCTION Revised Calgary West Area Structure Plan

unique natural features such as the ravines, the steep north- and west-facing slopes, and the wildlife corridors. Development is integrated with the natural environment providing access and opportunities for residents, employees and visitors to enjoy the natural surroundings.

As one of the important transportation connections and entranceways into the City, the Plan has many distinctive urban design features, lighting, enhanced vegetation and landscaping, public and private art, and view corridors which make the experience from the Trans Canada Highway a positive one.

The Plan Area seamlessly integrates into the long-term City vision, taking advantage of opportunities to optimize City infrastructure and advance the objectives of The City's *Municipal Development Plan (MDP)* and *Calgary Transportation Plan (CTP)*.

1.4 Plan Objectives

1.4.1 Fnvironment

- a. Protect Environmentally Significant Areas (ESAs) in their native condition.
- b. Maintain key sites essential to wildlife movement in a natural state and rehabilitate, where applicable, any environmental damage to these sites in accordance with The City's *Natural Area Management Plan*.
- Ensure continuity of the open space system so that a diverse natural environment can be sustained.

1.4.2 Land Use/Development

- a. Provide for a sensitive form of development that respects the ecological quality of the area.
- Minimize the visual impact of development on the natural landscape, as viewed from Rocky View County, from communities within The City of Calgary and by motorists on the Trans Canada Highway.

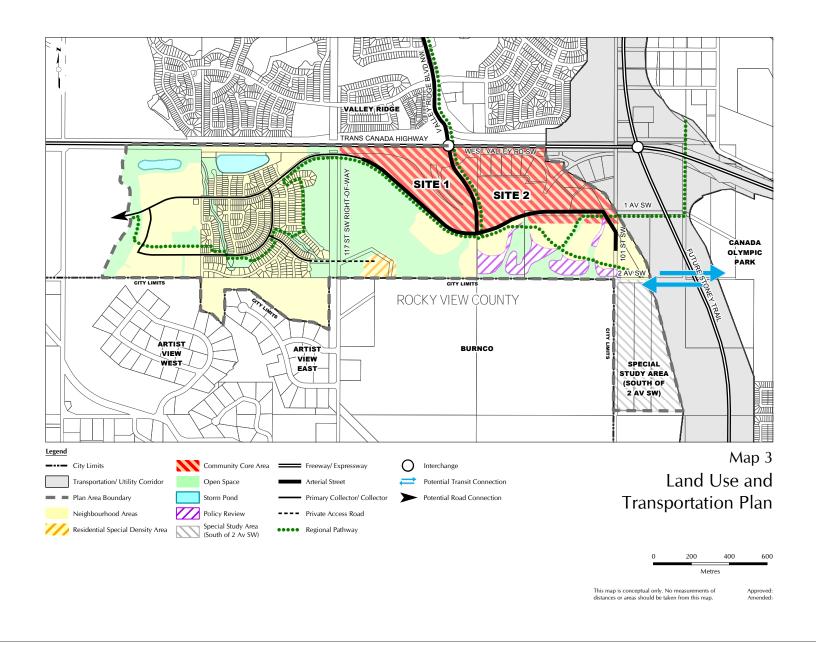
c. Promote a vibrant, pedestrian-friendly community with a visual focus, and residential neighbourhoods capable of accommodating a variety of housing as well as innovative forms of housing.

1.4.3 Transportation

- a. Phase the development of the Plan Area together with required improvements to the roadway network in the northwest and west sectors of The City.
- b. Ensure that the development of the Plan Area will minimize through traffic in the adjacent communities.
- c. Provide for road access and an internal roadway network that will adequately meet the needs of residential and commercial development in the Plan Area with minimal disturbance to key ESAs.

1.4.4 Interpretation

- a. All references within this Plan to legislation, regulations, and/or The City's planning and policy documents shall include all amendments thereto.
- b. Within this Plan, "The City" is used to describe The City of Calgary as a municipal government, or corporation, and "the city" and "Calgary" are used to describe the geographical area of the municipality.
- c. Policies that use the active tense or "should" are to be applied in all situations, unless it can be clearly demonstrated to the satisfaction of The City that the policy is not reasonable, practical or feasible in a given situation. Proposed alternatives must be to the satisfaction of The City with regards to design and performance standards. Policies that use the words "require", "must", "will" or "shall" are written to apply to all situations, without exception.
- d. Unless otherwise specified in this ASP, the boundaries or locations of any symbols or areas shown on a map are approximate only, not absolute, and will be interpreted as such. They are not intended to define exact locations except where they coincide with clearly recognizable physical features or fixed boundaries such as property lines or road or utility rights-of-way.



2.0 Community Framework

2.1 Plan Summary

Protecting the ESAs and integration of development with natural features is the primary consideration in allocating land uses and determining the road alignments in the Plan Area. Most of the ESAs will be protected as open space and retained in their natural state. The major open space system, as shown in Map 3, protects the ravines, the steep north- and west-facing slopes, and some of the Benchlands required for continuity of the wildlife corridor.

Developable lands in the Plan Area consist mainly of two inter-connected areas east and west of the 117 Street SW undeveloped road right-of-way located in the middle of the Plan Area. To the east, Sites 1 and 2 are suitable for a mix of Retail, office, Recreational and Residential Uses that are in accordance with the policies of The City's *Improving Calgary's Entranceways: A Guide for Development Adjacent to Entranceways* document. The balance of the land east of the 117 Street SW undeveloped road right-of-way is sloping Benchlands and is suitable for residential development that is slope adaptive and integrates well with the natural landscape.

The area west of the 117 Street SW undeveloped road right-of-way varies from lowlands to rising Benchlands bordering the forested, west-facing slope. This area, if appropriately buffered from the highway, is suitable for Residential Uses. The roadway network servicing this portion can also be extended further west, where appropriate, to service any future development in the surrounding lands.

Access to the Plan Area will be from the Valley Ridge Boulevard interchange. An arterial street leads from this access point to the Community Core Area and transitions to a primary collector/collector street further to the western portion of the Plan Area. The alignment is located so as to minimize the visual and environmental impact of crossing the ESA.

Given the high visibility and prominent location of the Plan Area, a set of development guidelines is included in this Plan to ensure that development will be sensitive to the natural setting of the Paskapoo Slopes.

Development in the Plan Area is expected to accommodate approximately 7,000 residents, and provide employment for approximately 1,600 people. In the Commercial Core Area it is expected that many residents will be able to walk or cycle to commercial and retail stores and professional offices via pedestrian and cycling routes, and that there will be excellent transit and road connections for those destinations not within walking distance.

2.2 General

- a. This Plan contains many proposals related to the extension of utility systems, open space provision, roadway interchanges, pathways/bikeways and other municipal services. It is important to note that this Plan does not commit The City to provide these services and facilities at any particular point in time. These decisions will be made through the normal development process and the annual capital budget process.
- b. Development phasing will follow the extension of utilities and necessary infrastructure improvements.
- c. The land use pattern and road network is generally as shown in Map 3, and shall serve as the basis for further detailed planning.
- d. The exact location, size and configuration of specific uses (eg, multi-family residential development, joint use sites, multi-use pathways) shall be established at the Outline Plan stage.
- e. Because of multiple land ownership in the Plan Area, individual Outline Plans must demonstrate how the proposed development can be integrated, well connected and complementary to adjacent existing development and future Outline Plan areas in a manner that maintains the integrity of the overall planning concept as set out in this Plan.

- f. The Plan Area is located within the *Rocky View County/City of Calgary Intermunicipal Development Plan* (IDP). The IDP identifies areas of mutual interest, establishes policies that influence and guide planning decisions and institutes process for dealing with issues that may arise within the IDP Policy Area. Proposed planning and development applications shall be circulated in accordance with the IDP.
- g. The Plan Area is considered to be an area of high archeological sensitivity. Therefore, developers are required at the Outline Plan stage to submit an Historical Resource Impact Assessment (HRIA) report of the subject land to Alberta Culture and, where required, shall, to the satisfaction of Alberta Culture, undertake those protective or mitigative measures identified in the HRIA report.
- The name "Calgary West" is intended to apply only to this document.
 Different community name(s) for this area may be proposed and will be subject to City Council approval.

2.3 Neighbourhood Area

- a. A broad range of housing choices should be provided that include:
 - i. a mix of built forms and housing types at densities that support viable transit service; and
 - ii. a mix of built forms and housing types that support different income levels and age groups.
- b. The Neighbourhood Area should include opportunities for residential-based commercial uses such as Live-Work Units, Home-Based Businesses, and Child Care Facilities. Neighbourhood Areas should also provide opportunities for a variety of compatible uses that are well connected by pedestrian routes and transit stops. These include:
 - i. Cultural, Recreational, and Institutional Uses;
 - ii. Local Commercial and Retail Uses; and
 - iii. Other compatible uses as deemed appropriate by the Approving Authority.



Low rise multi-residential apartments



Low rise multi-residential apartments



Single-detached and townhouses fronting a park



Mixed use multi-residential development



Live-work development

- c. A minimum residential density of 20 units per gross developable hectare (GDHa) (8 units per gross developable acre) (GDac) is required in the Neighbourhood Areas. The density of specific developments can vary, but Outline Plan / Land Use Amendment applications should be monitored to ensure that minimum density requirements are met.
 - It is noted that the existing Crestmont development was built at a density closer to 5 units per acre and development adjacent to the existing Crestmont development will be required to meet a minimum of 7 units per acre with the opportunity to intensify over time.
- d. In approving Outline Plans within 300 metres from the Burnco gravel pit, an adequate separation between Residential Uses and the gravel mining operation to mitigate the impacts of the gravel mining operation shall be maintained.



Neighbourhood Place of Worship

2.3.1 Residential Special Density Area

The Residential Special Density Area, as shown on Map 3, is a low density area, with a specific density limit to mitigate the development impacts on the existing residents. The maximum residential density is 2.47 units per gross developable hectare (one unit per gross developable acre) and should include built forms that protect as much of the natural area as possible.

2.3.2 Areas Under Policy Review

This Plan provides for the protection of most of the ESAs as open space, however, the areas identified on Map 3 as "Policy Review" may be considered to be potentially developable in the future. Identifying these areas as developable raises two concerns:

- extending roads and utilities to these areas may disturb the surrounding natural area and undermine its quality; and
- these areas, by themselves, may not be able to be economically supplied with water and sanitary services.
- a. As part of its application to redesignate any of the Areas Under Policy Review, an applicant shall:
 - Determine that roads and utilities can be extended to these areas in a manner that does not significantly impact the quality of the surrounding natural area; and
 - 2. Determine the financing method of the infrastructure cost of extending utilities to these areas.
- b. Once the above conditions are met, and the subject site has otherwise been found suitable for redesignation, this Plan should be amended to include these areas as developable land. The most likely land use for these areas will be residential.

2.4 Community Core Area

The Community Core Area will provide a destination for local area residents and others. It will contain a mix of Residential, Retail and other Employment Uses that are designed at intensities that support well- integrated transit service. The Community Core Area will be one node in a string of nodes along the Trans-Canada Highway corridor between Sarcee Trail SW and the western City of Calgary limit. Nodes along the Trans-Canada Highway corridor will consist of Mixed Use centres to provide amenities and services to the neighbouring communities and travellers. The Community Core Area will consist of Sites 1 and 2, identified on Map 3, that are well integrated with and provide good connectivity to one another, and that provide a range of uses that collectively support the Community Core Area as a whole.

Development within the Community Core Area shall achieve high-quality architectural design, contribute to a high quality urban environment through vertical and horizontal mixes of uses, and orient and place the buildings to integrate with the surrounding natural environment. Design of the Community Core Area shall emphasize the pedestrian realm. The site plan and architecture of this site should respond in quality, appearance and character to the importance of its location along the western entranceway into The City of Calgary and adjacent to significant natural open space.

Location

 a. The Community Core Area consists of land immediately south of the Trans Canada Highway and east and west of the Valley Ridge Boulevard/ Trans Canada Highway interchange identified on Map 3: Land Use and Transportation Plan.

2. Size and Intensity

- a. The Community Core Area should achieve a minimum Intensity of 125 people and jobs per GDHa.
- b. Where it can be demonstrated to the satisfaction of the Approving Authority, that the minimum Intensity cannot be met due to infrastructure capacity, the minimum Intensity may be reduced to the level where it can be supported by infrastructure.

3. Composition

- a. Commercial uses shall be integrated vertically and/or horizontally with other uses.
- b. No more than 60% of the land use Intensity should be achieved with any one general land use type (e.g., residential, office, commercial retail, Institutional, etc.) to ensure an appropriate mix of uses.
- c. Residential Uses should accommodate a broad range of ground-oriented and Medium to High-Density Multi-Residential Development.

- d. The Commercial Core Area should provide opportunities for a variety of compatible uses that are well connected by pedestrian routes and transit stops. These uses may include:
 - i. Cultural, Recreational, and Institutional Uses;
 - ii. Medium to High-Density Residential Uses;
 - iii. Local Commercial and Retail Uses; and
 - Other compatible uses as deemed appropriate by the Approving Authority.
- e. Retail development should consist of Small- to Medium-Format stores. Large Format Retail may also be provided in a form that limits the overall building footprint, or the visual perception of a large footprint and provides active street frontages to support a high quality pedestrian environment.
- f. Amenity space within each site of the Community Core Area shall be provided to create a focal point and destination for passive recreation and local gatherings.



Vertical Mixed Use

Horizontal Mixed Use

Commercial Component



Horizontal Mixed Use

Residential

Pedestrian Spine



Amenity space in a lifestyle centre



Winter amenity space



Small passive amenity space



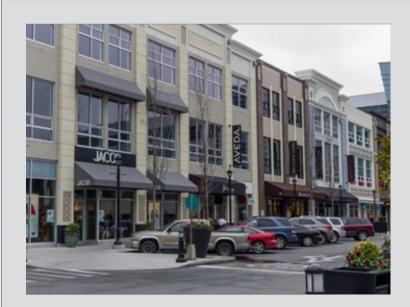
Pedestrian corridor

4. Mobility

- a. Sites 1 and 2 of the Community Core Area shall each provide a linear, pedestrian corridor that serves as the primary pedestrian connection between the two sites. The pedestrian corridor should be designed to encourage activity such as walking, cycling, sitting and window shopping.
- The pedestrian corridor may consist of either a public or private street that allows for either an exclusive pedestrian only thoroughfare or a combination of pedestrian and vehicular facilities.
- c. The pedestrian corridors in the Commercial Core Area should provide direct, accessible and visible pedestrian connections between Sites 1 and 2, and to the adjacent open space area.
- d. Good walkable access by numerous, pronounced, visible, and short route connections from the site to its surrounding existing or planned communities and their street networks should be provided.

5. Parking Design

- 40% of the parking required for developments in Sites 1 and 2 of the Community Core Area should be accommodated in a structured and/or underground parking facility.
- b. Only angled or parallel parking spots should be allowed in the pedestrian corridors in the Community Core Area.



Angled parking along pedestrian corridor

6. Design

- a. Sites 1 and 2 within the Community Core Area shall be comprehensively designed. Comprehensive plans for each development site must be submitted to the Development Authority as part of every development permit application within each site.
- b. The layout of the Community Core Area shall be organized around amenity spaces that are highly accessible to pedestrians and cyclists and create focal points in the development.
- c. The scale of streets and buildings within each site shall support active street frontages that includes direct connections from building entrances to the public street.

- d. An aesthetically appealing visual transition shall be provided between development and the surrounding open space.
- e. A comprehensive and seamless integration of development Intensity, uses, and built form between residential areas and commercial areas that supports a vibrant pedestrian realm is encouraged.
- f. All signage along the Trans Canada Highway should comply with the guidelines set out in the *Improving Calgary's Entranceways: A Guide for Development Adjacent to Entranceways.* Signage should be incorporated into building frontages and structures and be compatible with the architectural treatment of buildings. Stand-alone advertising signs should not be allowed.



Example of a focal point within a development



Pedestrian friendly retail street



Stand alone commercial signs should not be used

2.5 Special Study Area

The Special Study Area west of the Transportation and Utility Corridor (TUC) lands and south of 2 Avenue SW, as indicated on Map 3, requires further study to determine its development potential. To determine the appropriate use(s) and the development density for this area, the applicant shall submit information regarding:

- soil stability;
- environmental quality; and
- access options.

As a first step, the applicant shall submit a concept plan, supported by technical studies such as a geotechnical analysis. This information will help determine whether the Special Study Area is developable.

2.6 Urban Design

The purpose of this Plan's urban design guidelines (the Guidelines) is to provide direction for development to ensure the vision and objectives of the Plan are met, particularly in the public realm. In meeting the Guidelines, a certain degree of flexibility will be applied to ensure the intent of this Plan is achieved in a manner that responds to the context. In an effort to achieve the optimal design solution, it is anticipated that innovative solutions will be utilized.

Site design should create a comprehensive and consistent, high quality, comfortable and attractive pedestrian and cyclist movement system which links Sites 1 and 2. Connectivity to Canada Olympic Park, to transit, to existing regional pathways, and to the surrounding neighbourhoods must also be achieved.

2.6.1 Streetscape and Site Design

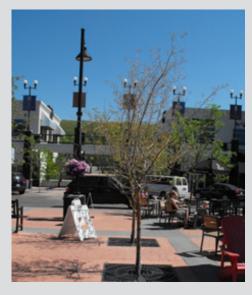
- a. Development adjacent to storm ponds, natural ravine areas, and natural topographic features shall maintain the environmental integrity and amenity value of these areas. Sightlines and / or access to the open space should be provided where possible.
- b. The design of the streetscape shall accommodate elements such as street trees, sidewalks, street furniture, bicycle parking and appropriate lighting to enhance the experience of cyclists and pedestrians.
- c. Public or private art should be incorporated at prominent locations along streets to provide points of interest and to serve as landmarks for local residents, business patrons and visitors.
- d. The height of an exposed retaining wall should not exceed one (1.0) metre unless it can be demonstrated to the satisfaction of the Approving Authority that the design enhances the surrounding environment.
- e. To limit visual impact or Crime Prevention Through Environmental Design (CPTED) issues, retaining walls should be designed using methods such as smaller scale, stepped-up structures, attractive naturalized slope retention methods, (such as earth walls), and intensive planting of trees and shrubs.
- f. The finished grade of developed land should follow as closely as possible to the natural contours of the site.
- g. Applicants should retain as many existing trees as possible. If tree retention is not possible, relocating existing trees should be undertaken. Total site clearing is discouraged where there are significant tree stands which can be retained.
- h. All fencing in highly visible locations should be coordinated in both design and detail as it relates to the overall development.
- i. A low-profile chainlink fence, a low-profile ornamental iron fence or other low-profile decorative fencing should be used, if required, to separate private properties from adjacent ravines, escarpments or other natural elements of the open space system.



High-quality naturalized retaining wall system that enhances the public realm



Poor design and location of a retaining wall that does not enhance the public realm



View into the surrounding open space

- j. High quality and well connected pedestrian routes should be provided within all sites, between development sites and to adjacent open space areas, ensuring clear, safe, comfortable, well landscaped pedestrian connections from parking areas to buildings and between the individual buildings within the sites.
- k. Development along the Trans Canada Highway should comply with the policies of The City's *Improving Calgary's Entranceways: A Guide for Development Adjacent to Entranceways* document.
- The use of open space and increased landscaping through the planting and/ or retention of trees at appropriate locations is encouraged.

- m. Contextually sensitive landscaping should be provided on all surface areas not occupied by structures, or required for vehicle access, parking, loading or garbage enclosures.
- n. Landscaping should provide shelter from the elements in the form of shade and wind breaks.
- Entrances to multi-dwelling developments should be oriented to the
 public street and public open space in order to enhance the pedestrian
 environment, the safety of the community and to facilitate opportunities for
 social exchange.
- p. Publicly accessible amenity spaces should be incorporated into large scale developments to enhance the vibrancy within the development.

- q. Disruption and fragmentation of natural habitats should be minimized by clustering development to retain greater amounts of open space and natural areas where possible and appropriate.
- r. The use of slope adaptive design and conservation planning in accordance with the City of Calgary Slope Adaptive Development Policy and Guidelines and Conservation Planning and Design Guidelines should be incorporated into the development.

2.6.2 Building Design

- a. Buildings adjacent to amenity spaces should be designed to provide an appropriate sense of enclosure for the space and activate the amenity space.
- b. Buildings should be designed to provide a consistent setback from the public sidewalk and have active frontages with primary public entryways facing the public sidewalk.
- c. Multi-residential developments should be designed to provide ground floor units with individual entryways to the public sidewalk.
- d. Building façades visible from the Trans Canada Highway should be fully articulated and of a high architectural quality.
- e. Large expanses of uniform, building structures shall be avoided unless the visual quality, exterior or design provides a positive pedestrian environment.
- f. Building designs should respond to the gateway location, high visibility, and topography of the area through the variation of building massing and roof heights, and through the use of signature, landmark elements, to accentuate entries and corners.

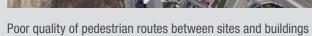


Good façade treatment of structured parking



Poor example of façade treatment on a large building







Front doors facing directly onto street





Ample fenestration to provide views into the building

2.6.3 Parking and Loading Design

- a. Surface parking shall be located away from transit and pedestrian areas and active frontages to enhance the pedestrian function of the streetscape and reduce conflict between active modes of travel and automobile traffic.
- b. Parking and loading areas should be designed to provide safe, convenient sidewalk and pathway connections for pedestrians and cyclists to access building entrances and reduce pedestrian and automobile conflicts.
- c. To help reduce parking requirements as much as possible, developments and buildings should include:
 - i. bicycle parking stalls; and
 - ii. locker and shower facilities.

- d. Applicants should provide only the minimum number of parking spaces required by the Land Use Bylaw. If parking stalls exceed the minimum requirements established by the Land Use Bylaw and the policies contained in this Plan, they shall be accommodated in a structured and/or underground parking facility, unless otherwise determined by the Approving Authority.
- e. Relaxations of the minimum parking requirements of the Land Use Bylaw are encouraged and shall be reviewed at the time of the development permit application.
- f. All loading and service areas should be located so as to minimize visibility from pedestrian areas and streets, and to avoid interference with pedestrian movement or the exterior design character of buildings.



Poor pedestrian connectivity and routing through parking lot



Well defined pedestrian route through parking lot



Well defined pedestrian connection

3.0 Community Services and Amenities

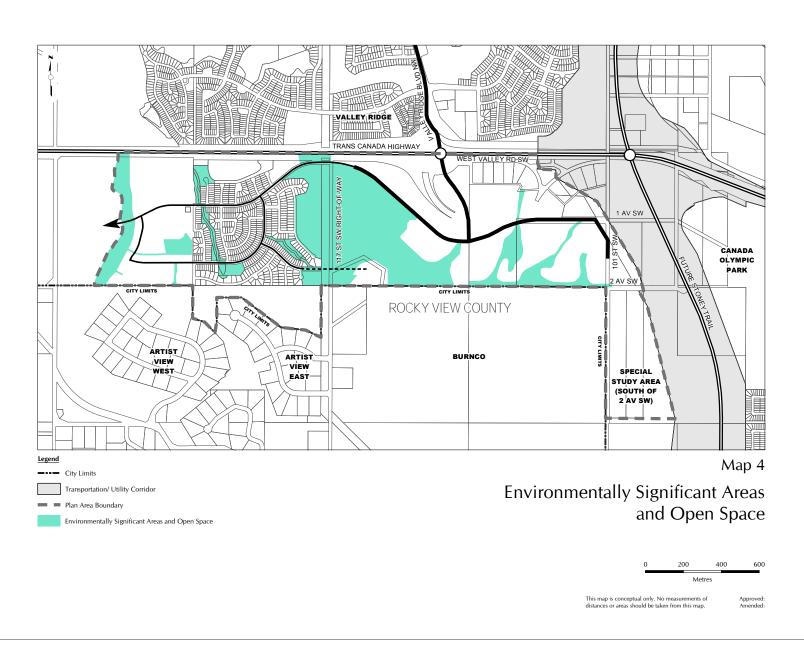
3.1 Open Space

3.1.1 Environmentally Significant Areas

The ESAs are defined by a combination of factors, including the ecological function and quality of the biotic community, anticipated long-term viability, uniqueness of the area, its landform and a variety of biophysical criteria. In the Plan Area, the ESAs include the steep north- and west-facing slopes, much of the Benchlands, and all the ravines, as shown in **Map 4: Environmentally Significant Areas and Open Space.**

- a. A substantial portion of the ESAs in the Plan Area can be protected as part of the open space system. It is anticipated that the majority can be acquired as Environmental Reserve (ER). Acquisition by The City of ESAs may also be by means of Municipal Reserve (MR) as well as by purchase. Voluntary dedication of ER, use of Environmental Reserve Easements, and donations by individuals and corporations to acquire or protect more lands will also be encouraged.
- b. The exact boundaries of the ESAs to be protected as open space shall be established at the Outline Plan stage and should closely approximate the boundaries shown on Map 4.
- c. To the extent possible, MR dedication shall be used to protect additional ESAs, which otherwise would be developable, in a manner similar to the protection provided by the ER dedication.

- d. The means of acquiring the ESAs to be protected as open space shall be established at the Outline Plan stage. Any necessary land purchase by The City or of the Joint Use Coordinating Committee (JUCC) to supplement reserve lands must be approved prior to Outline Plan and/or Land Use Amendment approval.
- e. Portions of the ESAs which are part of the open space system will be managed in accordance with the provisions of the *Water Act, Public Lands Act, Environmental Protection and Enhancement Act, Municipal Government Act, Municipal Development Plan, Open Space Plan, Calgary Wetland Conservation Plan* and any other legislation, regulations, and policies applicable at the time of development.
- To maintain the ecological quality of the ESAs the drainage pattern should not be significantly altered as a result of development. Site-specific geotechnical studies shall take this requirement into consideration, and shall be reviewed by the Approving Authority at such a time as Outline Plan/Land Use Amendment application decisions are considered.
- g. Within the developable portions of the ESAs, significant tree stands and native fescue prairie should be retained, where appropriate, and incorporated into the development.



- h. Crossing of the ESAs by roads and utility lines may be allowed provided that ecological and recreational connectivity is maintained. Mitigation measures to minimize the impact of development on the ESAs shall be addressed by the applicant at the Outline Plan/Land Use Amendment stage to the satisfaction of the Director of Parks.
- Where a road crosses any of the ravines, the continuity of the water stream should be maintained (by constructing a bridge, or the placement of a culvert). Consideration should be given to the most appropriate technique to maintain the character of the area.
- j. Any re-grading adjacent to a ravine shall not encroach into the escarpment, as defined by top of the slope line or slope stability line. Other escarpments in the open space system shall be similarly protected. Furthermore, any drainage scheme which directs surface runoff to a ravine shall be subject to approval by the Approving Authority. Under no conditions will stormwater runoff be directed to any of the ravines, escarpments, water streams and springs during construction.
- k. Any environmental damage to the ESAs caused by adjacent development, placement of utilities, etc, should be rehabilitated in accordance with policies of The City's *Natural Area Management Plan*. The use of native grass, shrub and tree species is encouraged.
- Fire truck access shall be maintained to all natural areas for fire-fighting purposes.

3.1.2 Joint Use Sites

- a. A Calgary Board of Education or a Calgary Separate School Board site is not required in the Plan Area due to the population threshold. Schools in adjoining communities will serve the Plan Area.
- b. A community centre will be required to serve the needs of the Plan Area residents at a location to be determined at the Outline Plan stage. The centre may also incorporate, if appropriate, with other public facilities.

3.1.3 Multi Use Pathways

- a. The regional multi-use pathways for the Plan Area are shown conceptually in Map 3. In addition, local pathways may be required. If required, specifications for these pathways shall be established at the Outline Plan stage.
- The pathway system should incorporate significant viewpoints from the higher elevations in the Plan Area, taking into consideration potential environmental impacts, at sites to be determined to the satisfaction of the Subdivision Authority.
- c. Any portion of the regional pathway to be located within a road right-of-way should be constructed as a separate pathway (as opposed to being accommodated on the road pavement). Tree planting is highly desirable along the road to ensure a park-like setting for pathway users.

3.2 Transportation

3.2.1 Mobility

- a. Connectivity and mobility will be facilitated by walkable streets fronted by Street-Oriented Development. Alignment of the higher order streets has been conceptually shown on Map 3. All street alignments, classifications, access locations and design will be determined through future development permit and/or subdivision applications.
- b. Upgrading of the Valley Ridge Boulevard interchange along the Trans Canada Highway will be required to facilitate further development within the Plan Area. At future Outline Plan, Land Use Amendment, development permit and/or subdivision stages an applicant may be required to provide a detailed transportation impact assessment that identifies:
 - The on and off-site transportation infrastructure improvements required to serve the subject site and ensure mobility is maintained in and through the area into the future;
 - Provincial, municipal and developer financial obligations for these infrastructure improvements;
 - The projected phasing and timing of on and off-site transportation infrastructure improvements as they relate to the development of the subject site; and
 - iv. The construction or development thresholds for the provincially and municipally financed transportation infrastructure improvements.

- c. 101 Street SW together with West Valley Road SW, currently provides access to and from the existing lands within the eastern portion of the Plan Area. The portion of 101 Street SW and West Valley Road SW within the TUC will eventually be closed when Stoney Trail is extended south of the Trans Canada Highway. Outline Plan submissions in the eastern portion of the Plan Area shall demonstrate how permanent access will be provided to the portion of 101 Street SW outside of the TUC boundary.
- d. 101 Street SW is currently designated a regional truck route, and is being utilized by gravel trucks to access the Burnco gravel mining site immediately south of the Plan Area. The road connection to the Burnco gravel pit should be closed once development commences within the Community Core Area. Outline Plans for adjacent residential areas shall provide an appropriate interface with 101 Street SW to reduce the noise impact. See Figure 1.
- e. Aesthetics should be an important consideration in designing the noise barriers, where noise attenuation is required. The use of an earth berm accompanied by landscaping and a greater setback is the preferred option for noise attenuation.
- f. Any transportation infrastructure improvements found to be required to support development at future development permit and/or subdivision stages will be at the sole expense of the developer unless alternative financing arrangements can be determined.

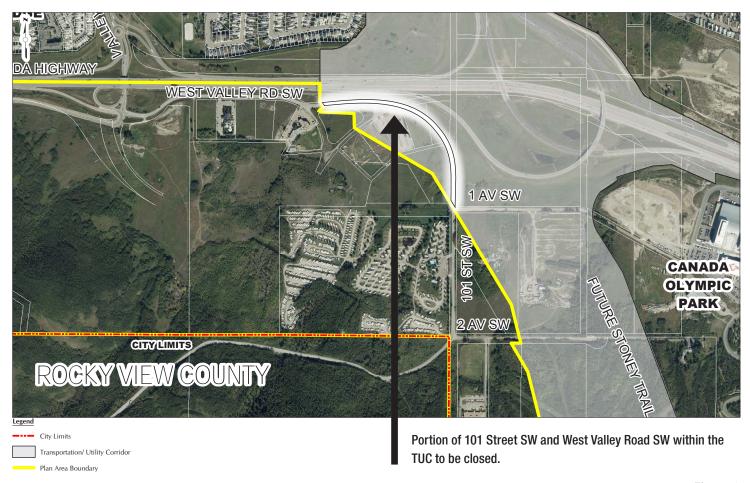


Figure 1

3.2.2 Transit Service

- a. Transit service requirements should be achieved through the provision of:
 - direct and convenient pedestrian and, cyclist street connections and transit stops;
 - ii. transit stops located to facilitate direct and convenient pedestrian access;
 - iii. transit stops within a five-minute walk (400m walking distance) of 90% of homes to promote transit ridership; and
 - iv. transit facility location and design that adheres to the principles contained within The City's *Transit Friendly Design Guide*.
- b. To improve transit service to the Plan Area, a future transit and active modes only connection across Stoney Trail to Canada Olympic Park will be required and is conceptually shown on Map 3.
- c. Outline Plan/Land Use Amendment applications should show transit stops equipped with suitable amenities such as benches, shelters and other amenities deemed necessary by the Approving Authority.

3.2.3 Transportation/Utility Corridor

A portion of the TUC is located along the east boundary of the Plan Area. The future extension of Stoney Trail south will be located within the TUC.

- a. The Approving Authority shall ensure that provision is made for pedestrian and vehicular access to the TUC lands. This access is required for the installation and maintenance of utilities and for any other potential uses on these lands.
- Development on lands within the TUC is under the jurisdiction of The Province of Alberta and requires Ministerial consent.
- c. Any surplus TUC lands should, where possible, be incorporated with adjacent development.
- d. Where Residential Uses share a property line with the TUC, buffering methods such as vegetation screening, fence screening, berm treatment and/ or setbacks in excess of the requirements of the Land Use Bylaw may be incorporated into the site design.

3.3 Servicing and Utilities

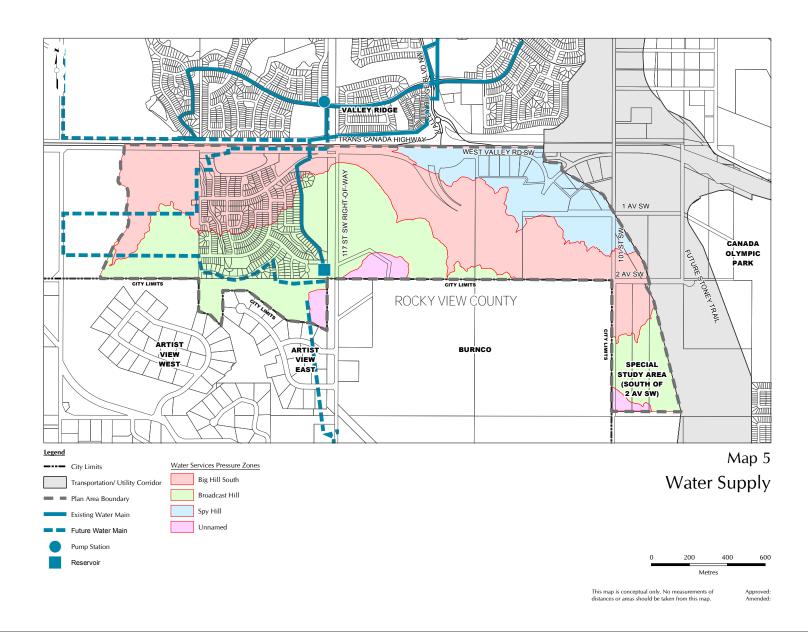
These policies ensure that utility infrastructure adequately, safely and efficiently services the ultimate development within the Plan Area.

3.3.1 Municipal and Shallow Utilities

- a. Urban development in the Plan Area shall be serviced with municipal water and sanitary sewer in accordance with the requirements of the Municipal Governmental Act, R.S.A. 2000, c. M-2, as amended, a stormwater system, and shallow utilities (i.e., gas, cable, electricity, telephone) as determined necessary by the utility providers.
- The provision, alignment and capacity of water distribution mains and water mains, sanitary sewer mains and trunks and stormwater mains and trunks shall be in accordance with The City's standards, based upon utility servicing studies and analysis.
- c. The location of all utilities and the provision of rights-of-way and easements and related line assignments should be addressed to the mutual satisfaction of The City, the applicant and the utility companies.
- d. Utility rights-of-way and easements shall be provided as required to accommodate municipal utilities at the discretion of the Approving Authority, and shallow utilities as determined necessary by utility providers.
- e. Utility rights-of-way and easements, public utility lots and road rights-of-way shall be required as determined necessary to facilitate orderly and sequential urban development.
- f. Utility rights-of-way should be designed to reduce the setback of buildings from the street wherever possible, with particular attention on the Commercial/Mixed Use Area and other higher density areas where the pedestrian environment is paramount.
- g. Utility rights-of-way and easements should be located to ensure the long-term viability of street trees in the Plan Area.

3.3.2 Utility Alignments

- a. Utility alignments should be refined at the Outline Plan / Land Use Amendment approval stage without an amendment to this Plan.
- b. Alternative and more cost effective alignments and locations can be considered at the Outline Plan / Land Use Amendment stage at the discretion of the Approving Authority.
- c. Prior to Outline Plan / Land Use Amendment approval, an applicant shall submit studies and information determined necessary to identify the location and alignment requirements for utilities within the development.
- d. An applicant should provide, or enter into an agreement to provide when required, the utility rights-of-way or easements necessary to accommodate the extension of municipal utilities through or adjacent to a site to allow for the servicing of a site.
- e. Utilities should be aligned to avoid ER and MR lands to be retained as natural open space in the approved Outline Plans, unless otherwise approved by the Director of Parks. Temporary disturbance to ER and MR for utility installation shall be reclaimed to the satisfaction of the Director of Parks.

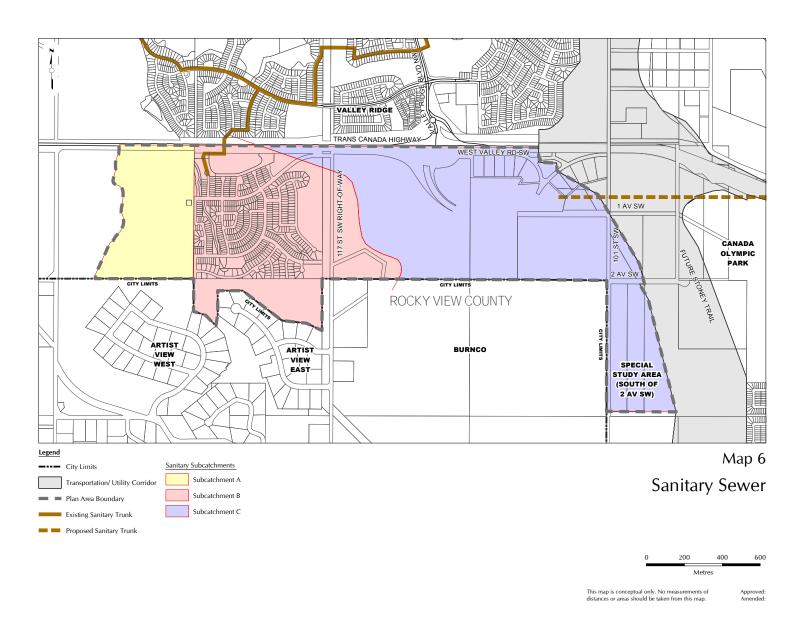


3.3.3 Design and Review of Water Distribution System

- a. The water distribution system for the Plan Area shall be designed to adequately and efficiently serve the ultimate development of the Plan Area. The proposed distribution system for an Outline Plan/Land Use Amendment area shall be reviewed and, if required, modeled by The City as part of an Outline Plan/Land Use Amendment application.
- b. The Plan Area will be serviced by extensions to existing watermains from Crestmont and across the Trans-Canada Highway. The Crestmont pump station is currently under construction and is expected to provide necessary service up to 1,248m in the Plan Area. The servicing scheme will be confirmed by further modeling at the Outline Plan/Land Use Amendment application.

3.3.4 Design and Analysis of Sanitary Sewer System

- a. The sanitary sewer system for the Plan Area shall be designed to adequately and efficiently serve the ultimate development of the Plan Area. As part of an Outline Plan/Land Use Amendment application, an applicant shall submit a sanitary sewer servicing study to demonstrate that the subject land can be serviced in accordance with the overall design of the sanitary sewer system for the Plan Area.
- b. The Plan Area is within the West Memorial sanitary catchment and will be serviced by the connections to the Valley Ridge sanitary trunk. The existing sanitary system is at full capacity; therefore, no increased flow can be accommodated until the system upgrades are completed. In applications, where it can be demonstrated to the satisfaction of Water Services that the new development will not contribute additional net flow to the sanitary system, the application may be considered. Water Services is undertaking an upgrade of the sanitary system, estimated to be complete in late 2016.

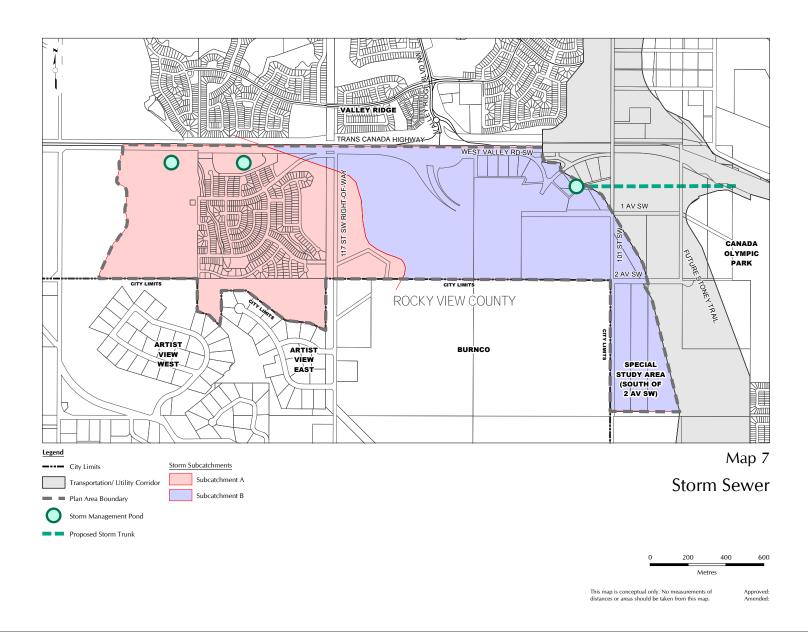


3.3.5 Design of Stormwater Management System

- a. The Plan Area is within the Bow River Watershed and is governed by two approved Master Drainage Plans (Master Drainage Plan Calgary West Concept Plan, 1993 and Westview Stormwater Master Drainage Plan, 2011). The stormwater management system for the Plan Area shall be designed to adequately and efficiently serve the ultimate development of the area. As part of an Outline Plan/Land Use Amendment application, an applicant shall submit a Staged Master Drainage Plan consistent with the Master Drainage Plan as approved by The City.
- b. A Staged Master Drainage Plan shall demonstrate that the site can be serviced in accordance with the overall design of the stormwater management system for the area. The Staged Master Drainage Plan will also be required to comply with all approved stormwater management policies.

3.3.6 Best Management Practices for Staged Master Drainage Plans

- a. As part of the preparation of Staged Master Drainage Plans, "Best Management Practices" and alternatives for stormwater quality and quantity enhancement should be assessed with a view to introducing:
 - stormwater facilities with a preference for source controls as opposed to end-of-pipe solutions;
 - ii. naturalized methods, such as wetlands, to mitigate the effects of stormwater run-off into watercourses as opposed to hard engineering measures; and
 - stormwater measures that reduce impermeable surface runoff and correspondingly increase the permeable area such as permeable pavement, rain gardens, etc.
- b. Where appropriate, the stormwater management system should be designed to:
 - operate on a gravity basis and utilize the existing wetlands in an environmentally compatible manner; and
 - ii. introduce mitigation measures to address the potential impact of water quality on existing wetlands and waterways including the Bow River.



Revised Calgary West Area Structure Plan

GLOSSARY

4.0 GLOSSARY

4.1 General Definitions

Amenity Space: A space designed for active or passive Recreational Use.

Approving Authority: The Subdivision Authority, Development Authority or Subdivision and Development Appeal Board of The City of Calgary, as the context implies.

Benchlands: Is a long, relatively narrow strip of relatively level or gently inclined land that is bounded by distinctly steeper slopes above and below it.

Child Care Facilities: A place where temporary care and supervision is provided to seven or more children for periods of less than 24 consecutive hours.

Crime Prevention Through Environmental Design (CPTED): Promotes design principles in planned environments that encourage safe behavior and reduce the opportunities for crime to occur.

Cultural Uses: A use of land, buildings or structures for the purpose of arts, educational or recreational activities. Cultural Uses may include, but are not limited to, galleries, museums, libraries and recreation centres.

Density: A measure of the number of dwelling units on a parcel of land, expressed in units per hectare (calculated using GDHa).

Employment Uses: A use of land that is employment intensive and compatible and appropriate in the context of Employment Areas such as Activity Centres and Industrial/ Employment Areas. Employment Uses may include, but are not limited to, offices, manufacturing plants, colleges and laboratories. Retail Uses are not included.

Environmental Reserve (ER): From the Municipal Government Act, section 664(1) Subject to section 663, a subdivision authority may require the owner of a parcel of land that is the subject of a proposed subdivision to provide part of that parcel of land as environmental reserve if it consists of (a) a swamp, gully, ravine, coulee or natural drainage course,(b) land that is subject to flooding or is, in the opinion of the subdivision authority, unstable, or (c) a strip of land, not less than 6 metres in width, abutting the bed and shore of any lake, river, stream or other body of water for the purpose of (i) preventing pollution, or (ii) providing public access to and beside the bed and shore.

Environmental Reserve Easement: From the Municipal Government Act, section 664(2) If the owner of a parcel of land that is the subject of a proposed subdivision and the municipality agree that any or all of the land that is to be taken as environmental reserve is instead to be the subject of an environmental reserve easement for the protection and enhancement of the environment, an easement may be registered against the land in favour of the municipality at a land titles office.

Environmentally Significant Area (ESA): A natural area site that has been inventoried prior to potential development and which, because of its features or characteristics, is significant from an environmental perspective to Calgary, and has the potential to remain viable in an urban environment. A site is listed as an ESA on the basis of meeting one or all of the criteria listed in Appendix C of the The City's *Open Space Plan*.

Gross Developable Acre / Hectare (GDac/GDHa): Gross developable acre/hectare is calculated by starting with the gross area of land and deducting non-developable lands such as but not limited to storm ponds..

Home-Based Business: The operation of a business or occupation within a dwelling and/or its accessory building(s) or on a parcel on which a dwelling is located and where one or more residents of the parcel is/are involved in the occupation or business.

Institutional Use: A use of land, buildings or structures for the purpose of religious, charitable, educational, health, welfare or correctional activities. Institutional Uses may include, but are not limited to, Places of Worship, public or private schools, post-secondary institutions, hospitals, reformatory or correctional facilities, medical clinics, cemeteries and Child Care Facilities.

Intensity: A measure of the concentration of people and jobs within a given area (Gross Developable Area) calculated by totaling the number of people either living or working in a given area.

Joint Use Coordinating Committee: A committee consisting of members from the Calgary Board of Education, the Calgary Catholic School District, Federation of Calgary Communities and The City of Calgary that make decisions on Joint Use Sites.

Joint Use Site: Lands set aside for or including a school building, a location for a school building or a school playing field and community playing fields with facilities and grounds which are accessible to both school and non-school users.

Land Use Bylaw: Refers to the *City of Calgary Land Use Bylaw*, as it may be amended from time to time.

Live—Work Unit: A land use where the resident of a dwelling unit operates a business from the dwelling unit.

Local Commercial Use: The use of land, buildings or structures for the purpose of providing retail goods and services on a limited scale, primarily to employees or residents in the area. Local Commercial Uses may include, but are not limited to, restaurants, convenience stores, service stations, gas bars and financial institutions.

Master Drainage Plan: A stormwater drainage plan prepared for a large drainage area, usually serviced by one or more outfalls.

Mixed Use: Land, buildings or structures with two or more types of uses, such as residential, office and retail.

Municipal Reserve: From the Municipal Government Act, section 661(b) Subject to section 663, the owner of a parcel of land that is the subject of a proposed subdivision must provide, without compensation land for municipal reserve as required by the subdivision authority. The City's Municipal Development Plan requires that 10% of lands that are the subject of a proposed subdivision be dedicated for the purposed of providing municipal reserve, school reserve and/or municipal and school reserve.

Municipal Development Plan: The planning policy document guiding growth and development within The City of Calgary, as may be amended from time to time. It reflects the kinds of communities Calgarians would like to see in the future. It is visionary, strategic and long term, and it provides the basis for actions and decisions both to protect and improve quality of life for all Calgarians, present and future.

Neighbourhood Area: The Neighbourhood Area is the residential catchment area. It consists of primarily residential uses with a variety of housing type and a street network that connects residents, jobs and commercial services through direct automobile, transit, bicycle and pedestrian routes.

Outline Plan/Land Use Amendment: Detailed planning and design of new communities, or the redevelopment of large areas of existing communities. This involves design details such as the preservation of environmental areas, open space locations and reserve dedications, development patterns, land use mixes and local street networks.

Place of Worship: A place where people assemble for religious or spiritual purposes.

Recreational Use: The use of land, buildings or structures for the purpose of active or passive leisure pursuits, cultural activities, sporting activities and other customary recreational pursuits which may include, but is not limited to, golf courses and driving ranges, ice skating rinks, sport fields, recreational centres, and parks and playgrounds.

Residential Use: The use of land, buildings or structures for the purpose of providing for a primary residence by one or more persons.

Residential Densities: Within the Plan Area, Residential Densities may be defined as Low, Medium or High Density.

a. Low Density (up to 35 units per hectare)

Low-Density residential development consists of grade-oriented housing forms, including:

- Single-detached;
- Single-detached with secondary suites;
- Semi-detached;
- Duplex;
- Rowhouses:
- Townhouses; and
- Manufactured homes.

b. **Medium Density** (up to 148 units per hectare)

Medium-Density residential development consists of grade-oriented and low-profile multi-residential development forms, including:

- At-grade multi-dwelling housing forms with a minimum of three units per building; and
- Low-profile multi-dwelling buildings.
- c. **High Density** (over 150 units per hectare)

High-Density residential development includes High-Density multi-residential development forms with a minimum Density of 150 units per hectare (60 units per acre). These include low-, medium- and high-rise building forms that meet the Density criteria.

Retail, Large Format: Retail units over 6,000 m² (60,000 ft²) in floor area.

Retail, Medium Format: Retail units ranging in size from 1,200 m² to 6,000 m² (12,000 to 60,000 ft²) in floor area.

Retail, Small Format: Retail units less than 1200 m² (12,000 ft²) in floor area.

Retail Uses: The use of land, buildings or structures for the purpose of selling retail goods and services to the final consumer, and may include, but is not limited to convenience food stores, supermarkets, restaurants, auto service centres, theatres and financial institutions.

Staged Master Drainage Plan: A stormwater drainage plan prepared for a large area that may or may not be serviced by an outfall. The Staged Master Drainage Plan generally covers a portion of the area served by the Master Drainage Plan.

Street-Oriented Development: Design that supports orienting building frontages and primary entranceways towards the street rather than internal to a site.