

DESIGN!NG

New Neighbourhoods

Guidelines for
Edmonton's Future
Residential Communities

Document Overview

About the Document

This performance-based guidelines document establishes a collective vision for Edmonton's future residential communities. This vision is comprised of twelve desired outcomes, each of which is accompanied by a set of principles that are intended to be applied with flexibility to the planning and design of new neighbourhoods. Samples of design ideas and approaches are illustrated in the document to offer some practical examples of how principles could be realized. Outcomes, principles and design ideas are captured in Section 3 *Neighbourhood Outcomes and Principles*.

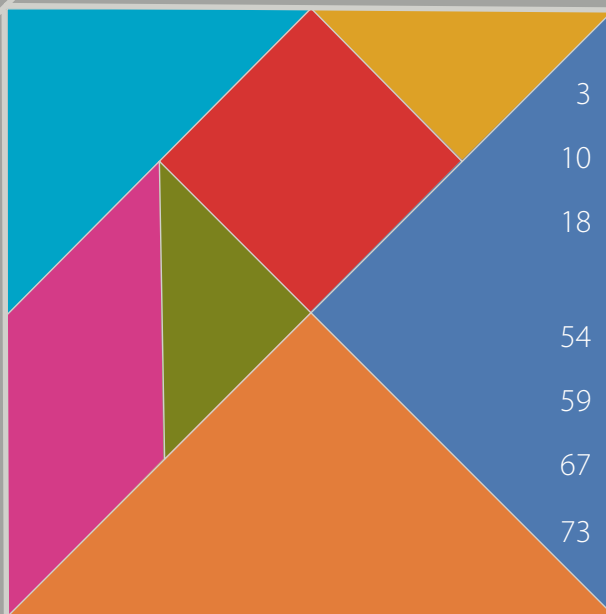
Using the Document

All principles are to be addressed in the planning and design of a new neighbourhood in Edmonton's Urban Growth Areas. New Neighbourhood Structure Plans must demonstrate how this has been accomplished using planning and design policies specific to the neighbourhood. See Sections 2 and 4, *Where and How the Guidelines Apply* and *Communicating Plan Performance* for more information on how to use the document.

Beyond the Document – A Collaborative City-Building Approach

This document provides the guiding framework and impetus for changes to other standards, regulations and plans that influence the development of new neighbourhoods in Edmonton. Ongoing collaboration, partnership and innovation among city-builders will be required to realize the unique and adaptable neighbourhoods that the guidelines seek to achieve. Recommended changes and implementation actions are outlined in Section 5, *Working Together: Next Steps*.

Table of Contents



3

1. Introduction

10

2. Where and How the Guidelines Apply

18

3. Neighbourhood Outcomes and Principles

54

4. Communicating Plan Performance

59

5. Working Together: Next Steps

67

6. Glossary

73

7. Acknowledgements

77

Appendix A – Principles by Planning Category

Introduction



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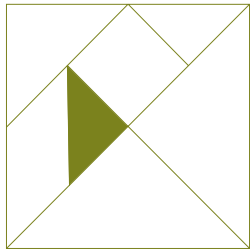
1. Introduction

Edmonton is a young, growing and diverse city. Great new neighbourhoods contribute to its vibrancy and prosperity. They provide an exceptional quality of life for residents, offering a diversity of housing and local amenities, good access to transportation options and a strong sense of place and belonging. Building upon our legacy of providing livable, sustainable, innovative and integrated neighbourhoods demonstrates leadership in planning and design and will ensure that our city is well positioned to attract new residents and new talent and sustain economic growth and competitiveness over the coming decades.

Guiding Neighbourhood Development and Change

This document helps position Edmonton for continued creativity, responsiveness and adaptability. It has been developed to both shape and respond to neighbourhood change and innovation. It outlines a shared vision for our new neighbourhoods and provides a flexible planning approach that can readily respond to demographic, economic, social and environmental change over time. It also reflects many existing practices in new neighbourhood design in Edmonton and pushes us to continue to innovate and collaborate to build an even better city.





1. Introduction

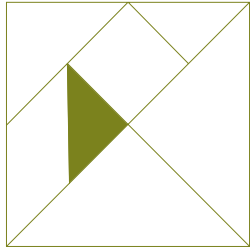
■ Building Great New Neighbourhoods

New neighbourhoods come in all shapes and sizes. Some of the factors that impact the configuration of a new neighbourhood include: natural topography and geographic features; land ownership patterns; existing land use; proximity to and relationship with major infrastructure; market demand; and the location and function of a new neighbourhood within its larger planning area.

Any new neighbourhood can be a great neighbourhood and there are many ways to achieve success. At the foundation of this document is a clear understanding that no two neighbourhoods are alike, nor should they seek to be. Demand for new housing, services and amenities, and the particular neighbourhood forms designed to meet the needs of our growing population are as varied as our residents.

As new communities grow, neighbourhood populations rapidly increase and then may slow, decrease or even rise again over the decades. Lifestyles and public priorities also change over time, as do markets, economies and technologies. All of these changes influence the way we strategically build, and re-build, our neighbourhoods. Meeting the needs of residents in the near term, addressing the changing life cycle needs of communities in the medium term, and thinking ahead about neighbourhood transformation and adaptation over the long term is critical to planning great new neighbourhoods that are welcoming, long-lived and resilient.





1. Introduction

Supporting Edmonton's Vision – *The Way Ahead*

The spirit and content of this document is aligned with the four guiding principles of Edmonton's Strategic Plan, *The Way Ahead*:

Integration

"A holistic view of strategic planning that acknowledges the interrelated and interdependent reality of complex urban environments."

Sustainability

"A way of living that meets the needs of the present and does not compromise the ability of future generations to meet their own needs."

Livability

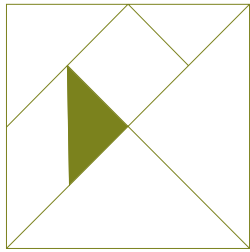
"A set of interrelated factors that influence people in choosing where they live and reinforce their sense of well-being."

Innovation

"A planning approach and operational culture within a municipality that encourages and enables continuous improvement and the exploration or adoption of new techniques, technologies, products and ways of operating in order to improve results and lead to progressive change."

The design guidelines also support the goals of the City's Municipal Development Plan (*The Way We Grow*), Transportation Master Plan (*The Way We Move*), Edmonton's People Plan (*The Way We Live*), Edmonton's Environmental Strategic Plan (*The Way We Green*), and Edmonton's Economic Development Plan (*The Way We Prosper*).





1. Introduction

About this Document: A Performance-Based Approach to Neighbourhood Design

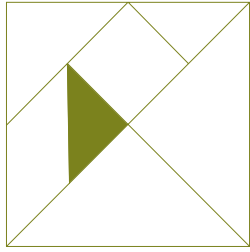
By guiding the preparation of new Neighbourhood Structure Plans, this guidelines document applies a performance-based approach to new neighbourhood design in Edmonton.

A performance-based approach at this conceptual stage of neighbourhood planning:

- Focuses on outcomes instead of prescriptive standards;
- Promotes innovation, not status quo, by providing a sampling of design ideas for discussion and consideration without precluding ways in which desired outcomes are achieved; and
- Provides flexibility by enabling a variety of design responses to differing conditions, priorities, markets, and changes in planning best practice and technology over time.

By communicating expectations without predetermining how a new neighbourhood will be planned in detail, this approach provides clarity around desired results without assuming in advance how they will be translated on the ground.





1. Introduction

The following 12 outcomes are detailed in [Section 3](#) of this document, along with principles that support them. Together these will guide the planning and design of great new neighbourhoods in our city.

Outcome 1

Neighbourhoods are connected.

Outcome 2

Neighbourhoods are unique and inviting.

Outcome 3

Neighbourhoods are inclusive.

Outcome 4

Neighbourhoods provide residents with convenient access to a full range of transportation options.

Outcome 5

Neighbourhoods support viable uses, services and facilities.

Outcome 6

Neighbourhoods are cost effective.

Outcome 7

Neighbourhoods conserve and enhance ecosystems and biodiversity.

Outcome 8

Neighbourhood amenities and facilities support the social and recreational needs of residents.

Outcome 9

Neighbourhoods embrace all seasons.

Outcome 10

Neighbourhoods are safe and secure.

Outcome 11

Neighbourhoods are flexible and adaptable.

Outcome 12

Resources are used efficiently and responsibly in neighbourhoods.

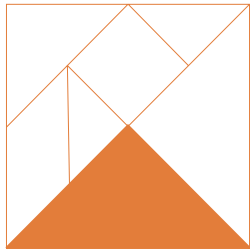


"Building upon our legacy of providing livable, sustainable, innovative and integrated neighbourhoods demonstrates leadership in planning and design and will ensure that our city is well positioned to attract new residents and new talent and sustain economic growth and competitiveness over the coming decades."

Where and How the Guidelines Apply



2



2. Where and How the Guidelines Apply

This document is used to inform the preparation of new Neighbourhood Structure Plans (NSPs). NSPs provide neighbourhood-level planning and design direction in alignment with a parent Area Structure Plan (ASP). ASPs and NSPs are approved as statutory bylaws by City Council. For more information on NSPs and the sequence of neighbourhood planning and development in Edmonton, see pages 15 and 16.



Applying a performance-based approach to the planning and design of new neighbourhoods requires the City, Development Industry and other stakeholders to work closely together to prepare plans. These city-builders are encouraged to take advantage of the flexibility that this approach affords to achieve desired neighbourhood outcomes and respond to the unique context of and vision for a new neighbourhood.

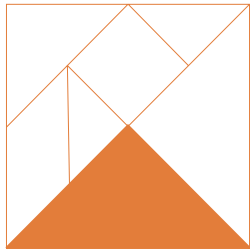
Where the Guidelines Apply

This document applies to the preparation of new NSPs in Urban Growth Areas (Figure 1). These areas are identified for future growth in Edmonton's Municipal Development Plan, *The Way We Grow*. Before NSPs are prepared for new communities, the general pattern of future development in each area will be outlined at a high level in an Area Structure Plan. ASPs provide planning direction for groups of neighbourhoods and are themselves informed by policies of *The Way We Grow* and the City's other strategic plans.

■ How To Use the Guidelines - at a Glance

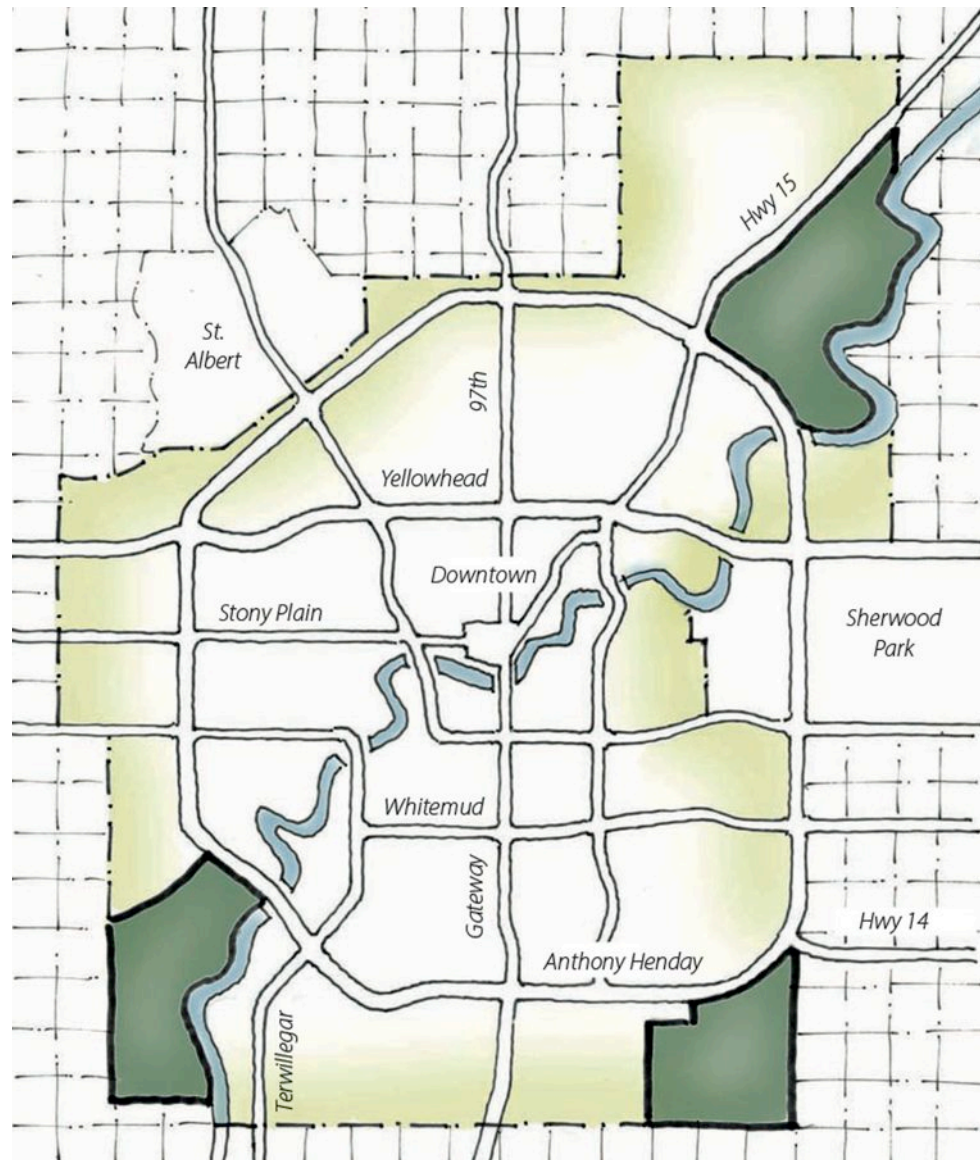
1. Consult Neighbourhood Outcomes and Principles to inform the collaborative planning and design of a new neighbourhood.
(See Section 3)

2. Clearly demonstrate in the content of the Neighbourhood Structure Plan how outcomes will be achieved and how principles have been addressed, using planning and design policies specific to the neighbourhood.
(See Section 4)

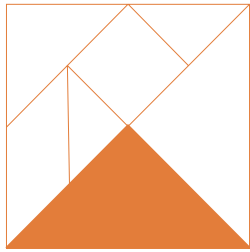


2. Where and How the Guidelines Apply

■ **Figure 1: Edmonton's Urban Growth Areas**



Urban Growth Areas are identified in dark green. Area Structure Plans prepared for these parts of the city will outline the general pattern of development for groups of neighbourhoods and along with this document will inform the preparation of Neighbourhood Structure Plans.



2. Where and How the Guidelines Apply

■ Detailed information on the process, information and format requirements of NSPs are outlined in the *City's Terms of Reference for the Preparation and Amendment of Residential Neighbourhood Structure Plans*.

Using the Guidelines to Inform Neighbourhood Structure Plans

When a new NSP is being prepared, plan proponents and the City will work together to ensure that the principles outlined in this document are addressed through planning and design policies specific to the new neighbourhood. This is to ensure that desired outcomes are realized within the context of the unique vision for the community.

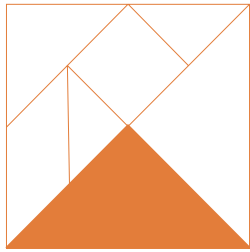
Addressing Principles

A new NSP must address each principle established in this document. All subsequent amendments to an NSP must do the same. The NSP will describe (using text and images as appropriate) how this has been accomplished through neighbourhood planning and design policies. Section 4 of this document (*Communicating Plan Performance*) and the *City's Terms of Reference for the Preparation and Amendment of Residential Neighbourhood Structure Plans* outline how this is to be described in the content of a plan in greater detail.

It is critical that all principles are addressed for two key reasons – 1) each uniquely contributes to and supports one of the twelve neighbourhood outcomes and 2) many principles are mutually dependent. Because of this interdependence it is possible that key strategic design elements could support multiple principles and outcomes in a neighbourhood at once. However, it is also possible that in some circumstances the unique context and characteristics of a future neighbourhood will make it unfeasible to respond to all principles. In this event, the NSP must describe why a principle could not be met and outline any steps taken to mitigate the impact of its omission on the achievement of the relevant neighbourhood outcome.

Working Together to Identify Design Features and Approaches for the New Neighbourhood

This guidelines document does not prescribe any single way of reflecting the principles in a new neighbourhood. Instead it illustrates a sampling of design ideas and approaches to offer some practical and tangible examples of how principles could be addressed. These are intended to serve as a starting point and to generate discussion as plans are developed. The City and plan proponent(s) will work together to determine what specific design features and approaches are most desirable and appropriate for a new neighbourhood.



2. Where and How the Guidelines Apply

Reinforcing the New Neighbourhood's Vision

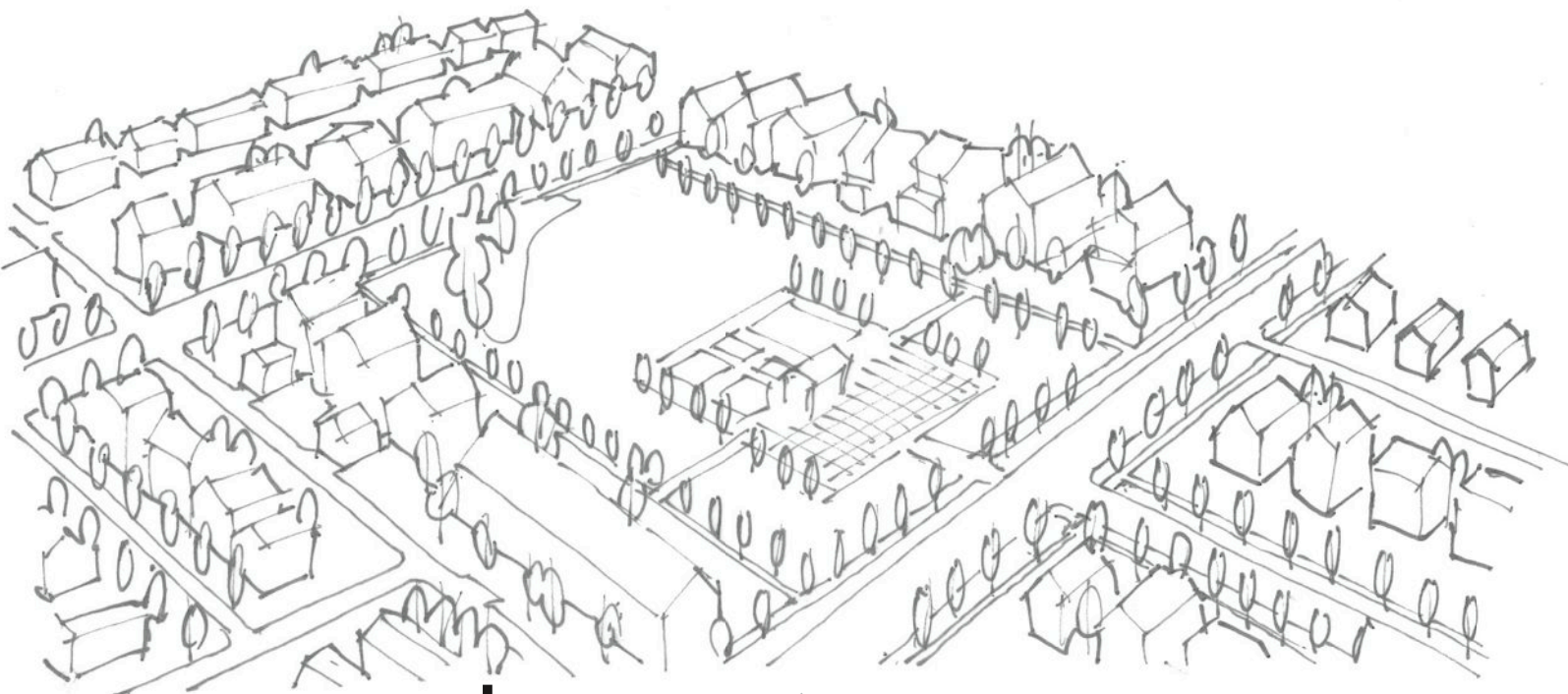
While it is expected that new neighbourhoods achieve all outcomes by addressing each principle, having more emphasis placed on certain principles is one way to ensure that neighbourhoods are unique and are able to effectively respond to market demand and public priorities. An emphasis on a particular collection of principles may be a keystone of the neighbourhood's vision and placemaking approach.

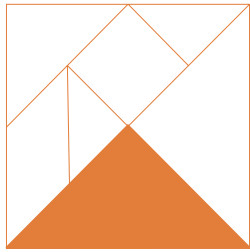
Aligning with Existing Neighbourhood Planning Requirements and Policies

This document does not remove requirements to adhere to existing relevant municipal, provincial and federal requirements and statutes as outlined in the *City's Terms of Reference for the Preparation and Amendment of Residential Neighbourhood Structure Plans*.

Changes to Neighbourhood Planning Requirements and Standards

This document establishes a shared vision for new neighbourhoods and provides a foundation for the review and establishment of supporting neighbourhood planning policies and standards across the City's Administration. Section 5, *Working Together: Next Steps*, outlines 17 recommended implementation actions in support of this vision. New and revised City of Edmonton policies and standards should align with this document's strategic direction to enable the development of tomorrow's great neighbourhoods.





2. Where and How the Guidelines Apply

The Purpose of a Neighbourhood Structure Plan

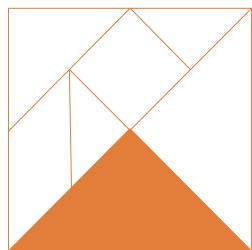
The purpose of a Neighbourhood Structure Plan (NSP) is to describe the general pattern of development and subdivision in a new neighbourhood by: defining a design vision; designating the type and location of land uses; establishing a roadway and transit network; identifying the pedestrian network and top-of-bank walk/roadways (if applicable); identifying schools, parks, open space systems and natural areas; providing general servicing schemes and a staging pattern for development; identifying the location and size of neighbourhood facilities; and addressing any other matters that City Council deems necessary. The policies of these plans guide subsequent stages of neighbourhood development such as zoning, subdivision, infrastructure design and construction. Figure 2 illustrates the place of NSPs within the broad sequence of neighbourhood planning and development in our city.

■ Who prepares a new NSP?

New neighbourhood plans are initiated by the private sector and prepared in cooperation with the City's Administration and other agencies and service-providers. The Current Planning Branch of Sustainable Development takes a leadership role on behalf of Edmonton's Administration to coordinate and facilitate the preparation of new NSPs. The Branch also enables coordinated and consistent decision-making within the Corporation and advances plans for Council approval.

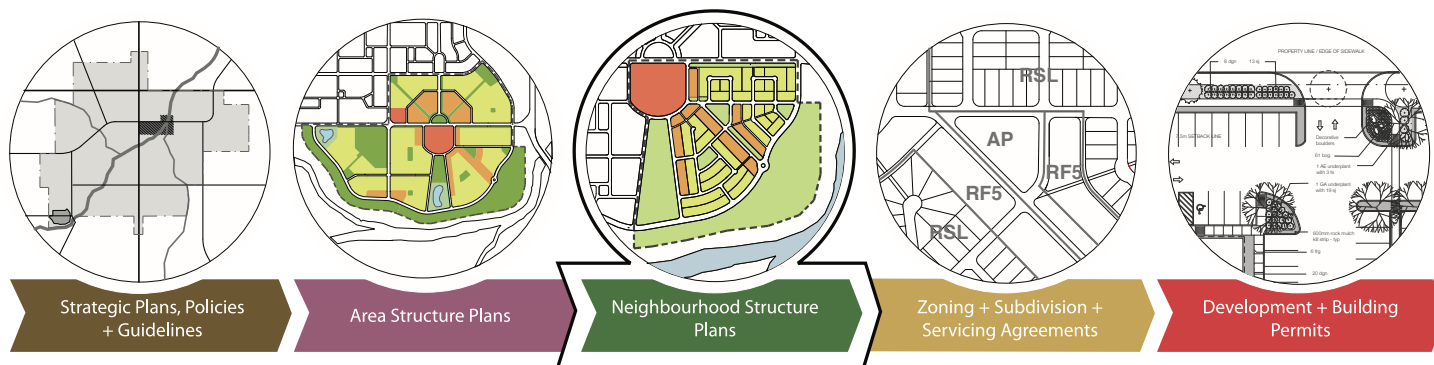
Planning a great new neighbourhood requires the collaboration and investment of many organizations and agencies (city-builders) including:

- The City
 - Development Industry and Home Builders
 - Utility Providers
 - School Boards
 - The Province
 - Community Agencies
-

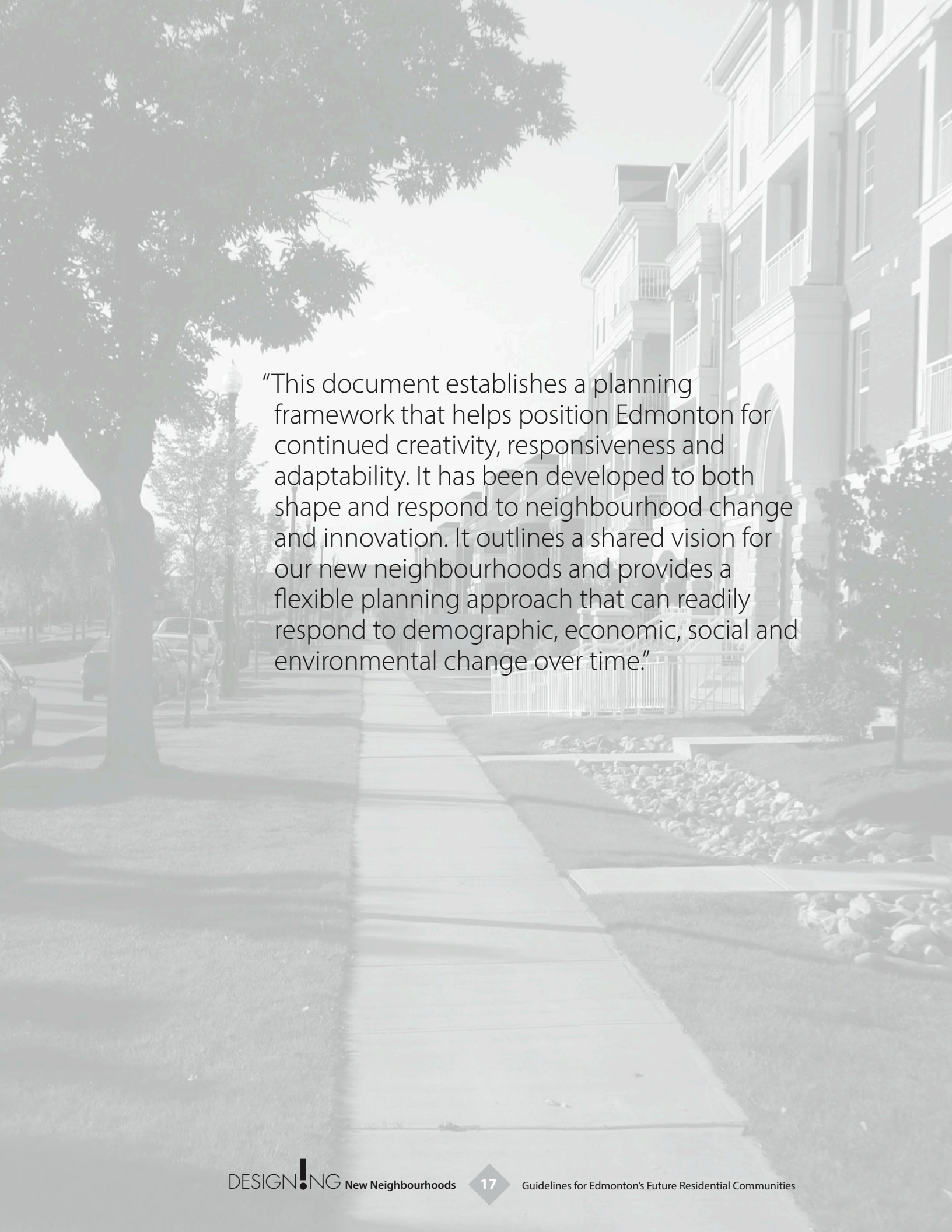


2. Where and How the Guidelines Apply

■ Figure 2: The Sequence of Neighbourhood Planning and Development



- *Strategic Plans* outline high level goals and objectives to guide physical, economic, social growth and development of the entire city.
- *Planning Policy and Guidelines* provide detailed direction about how specific strategic goals and objectives will be achieved.
- May apply to all or specific areas of the city.
- High level outline of how an area / group of neighbourhoods will develop.
- Locate major facilities, arterial roads and land uses by general category.
- **Detail size, configuration, location of future land use and densities, roads, municipal services, and staging for a neighbourhood.**
- **Policies guide planning and design of buildings, streets, parks, community facilities, transit service and other infrastructure as neighbourhoods develop.**
- *Zoning* establishes development rights for a parcel or area of land including permitted land uses, building heights, forms, densities, site layout, landscape and parking.
- Must be consistent with Municipal Development Plan policies.
- *Subdivision* divides land into smaller parcels.
- Guided by zoning, policies of NSPs and City engineering standards.
- Sets pattern of development by determining location, size, shape of lots and roads.
- *Servicing Agreements* identify municipal improvements (sewers, water, roads, etc) to be built by the developer and responsibilities for them once complete.
- Allow construction and operation of new homes, buildings, parks and facilities according to the Edmonton Zoning Bylaw and Alberta Building Code.

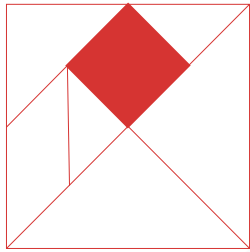


"This document establishes a planning framework that helps position Edmonton for continued creativity, responsiveness and adaptability. It has been developed to both shape and respond to neighbourhood change and innovation. It outlines a shared vision for our new neighbourhoods and provides a flexible planning approach that can readily respond to demographic, economic, social and environmental change over time."

Neighbourhood Outcomes and Principles



3



3. Neighbourhood Outcomes and Principles

Twelve sets of outcomes and principles provide a vision

for the planning and design of Edmonton's future neighbourhoods and define the results that they will achieve. Together they foster the creation of integrated and diverse new communities. They also support long term sustainability and design innovation, and lay the basis for new neighbourhoods that are designed for life in all seasons. The realization of this vision will result in a city whose varied communities stand the test of time, provide a high quality of life and attract new residents for years to come.



This section includes:

Outcomes

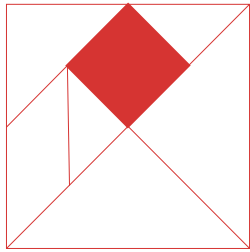
Outcomes are statements that define and describe desired end results. Twelve outcomes for Edmonton's new neighbourhoods are confirmed on the following pages. They provide a comprehensive and coordinated vision of what we can collectively expect new neighbourhoods to deliver for individual residents and families, local communities, home builders, developers and the City. Each outcome is supported by a set of neighbourhood design principles.

Principles

Principles are performance criteria that provide clarity around and guide the achievement of outcomes. To achieve all 12 outcomes, each principle must be addressed in the design of a new neighbourhood and this must be reflected in the content of the Neighbourhood Structure Plan (NSP). The way these principles are brought to life on the ground will be flexible and adaptive. Plan proponents and the City are encouraged to be creative in how the principles are addressed and to come up with alternative design solutions that will enable the development of tomorrow's great new neighbourhoods.

Design Ideas

A sampling of design ideas and corresponding images and illustrations are provided for each principle to kick-start discussions and creativity, and for consideration as neighbourhood plans are prepared. The use of these ideas in a plan is not mandatory; they are merely illustrative of some of the many ways in which principles could be addressed in a new neighbourhood.



3. Neighbourhood Outcomes and Principles

Outcome

1

Neighbourhoods are connected.

All new neighbourhoods should contribute to and be part of a larger integrated network of streets, paths and transit routes that link people, destinations and communities. Good connections make our neighbourhoods and our city accessible, easy to navigate and efficient. Strong multi-modal linkages should be provided between the places that people want to travel to and accommodate the different transportation modes they want to use to get there.

Principles

- 1.1** Create neighbourhoods that are easy to move within and navigate using all modes of transportation.
- 1.2** Provide efficient multi-modal transportation linkages between residential development and destinations within and outside the neighbourhood.
- 1.3** Connect roads, paths and trails with those in adjacent neighbourhoods.

Outcome

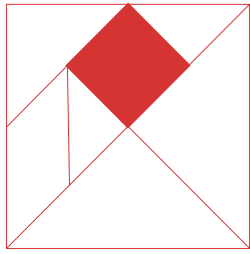
2

Neighbourhoods are unique and inviting.

Each new neighbourhood should be distinct, convey a sense of place and provide a welcoming human-scaled environment. Distinct communities and niche neighbourhoods add interest to our city and provide variety and choice for home buyers and residents. Their identities should be built around the special context of and vision for a neighbourhood, and should be reflected in appropriate and innovative infrastructure, community amenities, design and landscape features.

Principles

- 2.1** Provide for and/or build attractive and inviting streets, buildings, parks and open spaces.
- 2.2** Create a special character and connection to place by respecting, and where possible, using the historical, natural and cultural context of an area.
- 2.3** Provide for and/or build infrastructure and amenities that support the unique identity and context of a neighbourhood.



3. Neighbourhood Outcomes and Principles

Outcome

3

Neighbourhoods are inclusive.

Inclusive neighbourhoods are diverse and strong communities where people of a wide variety of backgrounds, ages and abilities can live and access basic daily needs. Strong communities are essential to a livable and sustainable city. New neighbourhoods should provide a range of housing and access to a mix of services and amenities to support a diverse population. Infrastructure should be designed to be universally accessible and age-friendly to accommodate a wide range of user needs and abilities.

Principles

- 3.1** Provide for a wide variety and choice of housing within the neighbourhood.
- 3.2** Provide for affordable housing opportunities.
- 3.3** Plan for a mix of land uses and amenities within walking distance of neighbourhood residents.
- 3.4** Design neighbourhood infrastructure, parks and civic facilities to accommodate people of all ages and abilities.

Outcome

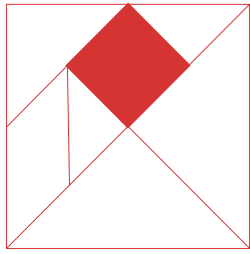
4

Neighbourhoods provide residents with convenient access to a full range of transportation options.

Designing to accommodate all forms of transportation in new neighbourhoods provides residents with mobility and lifestyle choice, and enables the use of alternative and active modes. Walking, cycling and transit should be practical transportation options in all neighbourhoods and encouraged through neighbourhood design. Streets should be designed to reflect their neighbourhood context, surrounding land use and intended users.

Principles

- 4.1** Create a walkable neighbourhood.
- 4.2** Accommodate accessible and effective transit service for the neighbourhood and beyond.
- 4.3** Provide for cycling opportunities within the neighbourhood with connections to existing and future networks.
- 4.4** Apply *Complete Streets Principles* within the neighbourhood.



3. Neighbourhood Outcomes and Principles

Outcome

5

Neighbourhoods support viable uses, services and facilities.

Housing, commercial development, employment areas, parks and community facilities best serve new neighbourhoods and our city when they are sited to reflect user needs and market viability, and to provide convenient access. Uses should be located where they are supported by and accessible to consumers and residents through multiple transportation modes. They should be integrated with compatible development, services and transit to create synergies and focal points for public life and activity. Transitions should be provided between different uses and activity areas to support cohesive and coordinated development.

Principles

- 5.1** Coordinate the location of commercial and employment areas, parks, natural areas and civic facilities to provide convenient access for residents by multiple modes of transportation.
- 5.2** Cluster compatible and complementary services, housing types and amenities to create activity centres or neighbourhood hubs that serve the greatest number of residents and can be supported by consumers within and between neighbourhoods.
- 5.3** Locate school sites to facilitate pedestrian, bus and vehicular access for neighbourhood residents and/or residents of adjacent neighbourhoods.

Outcome

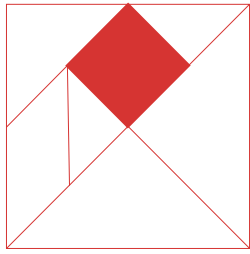
6

Neighbourhoods are cost effective.

Cost effective neighbourhoods are critical to the overall economic well-being of our city. New neighbourhoods should enable short and long-term affordability for those who build, service, maintain, renew and live in them. The services that are provided to residents in a neighbourhood, and the infrastructure that supports them, should efficiently serve the community and be built to last, reducing overall life cycle costs.

Principles

- 6.1** Consider the costs and benefits for building all types of neighbourhood infrastructure, including the optimal timing of delivery of infrastructure as the neighbourhood builds out.
- 6.2** Create neighbourhoods that are affordable for residents and citizens by partnering to deliver amenities effectively and manage risk.
- 6.3** Plan for infrastructure that is cost efficient to build, operate, maintain and renew over the life cycle of the neighbourhood.



3. Neighbourhood Outcomes and Principles

Outcome

7

Neighbourhoods conserve and enhance ecosystems and biodiversity.

Our city has a rich natural heritage. Conserving and enhancing ecosystems and biodiversity in new neighbourhoods stewards and builds on this legacy, and provides residents with access to nature close to home. Natural areas and features should be accommodated and connected, and urban biodiversity in new neighbourhoods should be supported and enhanced to benefit plant, animal and human communities alike.

Principles

- 7.1** Plan to conserve natural areas and features, landscapes and views within the neighbourhood.
- 7.2** Plan to conserve and enhance ecological networks and connectivity within and between neighbourhoods.
- 7.3** Foster opportunities for habitat and naturalized spaces that encourage urban biodiversity.

Outcome

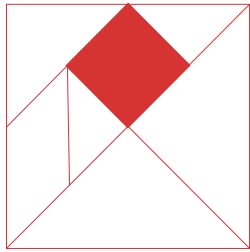
8

Neighbourhood amenities and facilities support the social and recreational needs of residents.

Recreational, social and cultural amenities encourage vibrant and healthy neighbourhoods. They foster a sense of community, support educational opportunities and enable active living. Amenities and facilities should successfully serve residents as their needs change over time. Parks and open spaces should provide for active and passive recreation, and be accessible, adaptable and functionally designed. Places for public gathering and community engagement should be available for residents, as should opportunities for local food production and access.

Principles

- 8.1** Plan for flexible, visible, accessible and functional parks and open spaces to meet life cycle needs of residents.
- 8.2** Plan for community gathering places and neighbourhood focal points.
- 8.3** Plan for local food production and access opportunities within the neighbourhood.



3. Neighbourhood Outcomes and Principles

Outcome

9

Neighbourhoods embrace all seasons.

Edmonton is a winter city. New neighbourhoods should embrace this special season and be designed with the rewards and challenges of our winter climate in mind. Public spaces, buildings and streets should encourage year-round use, enjoyment, comfort, safety, fun and interest. They should also ensure that municipal services can be provided effectively in winter, spring, summer and fall.

Principles

- 9.1** Plan for weather and all seasonal conditions through street, building and open space design.
- 9.2** Plan for parks and open spaces that can be used and enjoyed year-round.
- 9.3** Ensure that municipal services, including the maintenance and operation of infrastructure, can be effectively provided in all seasons.

Outcome

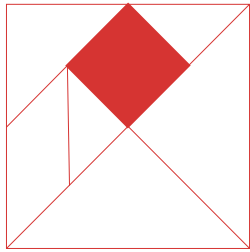
10

Neighbourhoods are safe and secure.

All neighbourhoods should be safe and secure. A sense of personal and social well-being is a key contributor to quality of life. To provide this, new neighbourhoods should enable effective protective services, safe coexistence with energy facilities, and include streets, buildings and public spaces that are designed to promote individual and public safety. Residents should not only be safe in their neighbourhoods, they should feel safe as well.

Principles

- 10.1** Design streets, buildings and public and private spaces to promote safety and security, and to mitigate risk.
- 10.2** Plan for emergency and protective services.
- 10.3** Provide for the safe coexistence of new development with energy facilities in alignment with municipal, provincial and federal requirements.



3. Neighbourhood Outcomes and Principles

Outcome

11

Neighbourhoods are flexible and adaptable.

Neighbourhoods are evolutionary. Community needs change over time and through the neighbourhood's life cycle. To enable their evolution, neighbourhoods should be planned and developed in innovative ways that make them flexible and adaptable to shifts in public priorities and needs, demographics, markets, economics, technologies and climatic conditions. Innovative and alternative technologies and infrastructure standards should be embraced.

Principles

- 11.1** Provide opportunities to address changes in land use, infrastructure, demographics, market conditions, emerging technologies and the climate over time.
- 11.2** Pursue innovative approaches and embrace the best available standards for community and infrastructure design.

Outcome

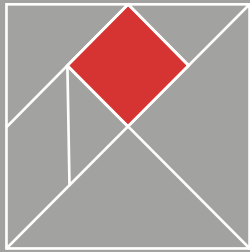
12

Resources are used efficiently and responsibly in neighbourhoods.

Efficient and responsible use of our collective resources in developing and maintaining new neighbourhoods is critical to their long term success and to the long term sustainability of our city. New development and infrastructure should achieve multiple objectives, be cutting edge and low impact. Design should minimize water, land and energy requirements of neighbourhoods today and into the future to mitigate the impacts of development, reduce our carbon footprint, and contribute to the creation of a compact city.

Principles

- 12.1** Explore opportunities to capitalize on the joint use of space and other land use efficiencies without compromising the intended use or maintenance and operations needs of the site.
- 12.2** Minimize energy use and energy requirements of buildings and infrastructure.
- 12.3** Encourage Low Impact Development Best Management Practices to manage stormwater runoff and improve water quality.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Sampling of Design Ideas

The following pages present a sampling of design ideas which illustrate some of the many ways in which the principles could be addressed in a new neighbourhood.

These design ideas are not required neighbourhood features. They are intended instead to kick-start discussions and creativity as Neighbourhood Structure Plans are prepared.

Understanding the Design Ideas







Design ideas are associated with particular principles. As an additional aid to the user, principles are linked through the use of symbols to commonly understood planning categories: Transportation; Land Use; Urban Design; Parks and Amenities; Ecology and Environment; Infrastructure and Servicing. These symbols and other wayfinding features found on the following pages are illustrated in Figure 3. Appendix A provides a quick reference of principles by planning category.

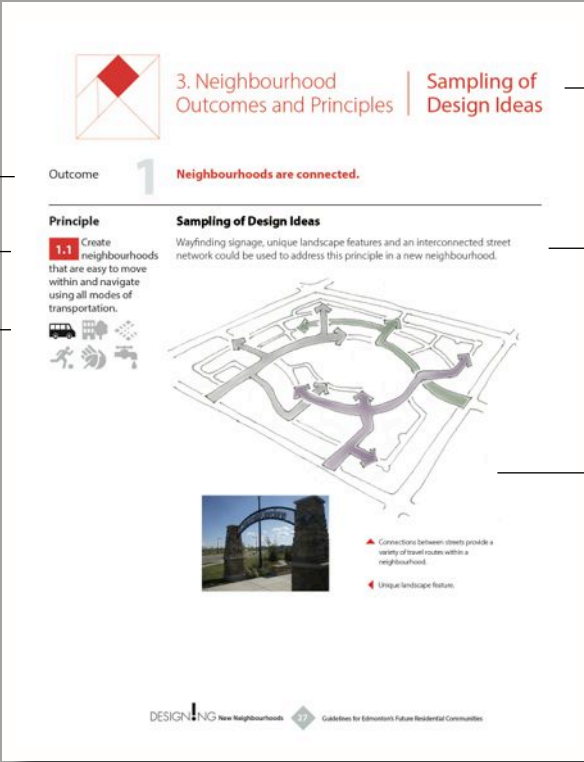
Figure 3: Key Elements of 'Sampling of Design Ideas' Pages

Outcomes

Principles

Symbols tie each principle to commonly used planning categories:

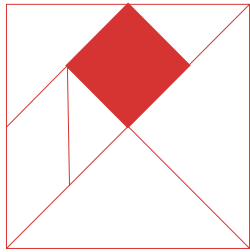
-  Transportation
-  Urban Design
-  Land Use
-  Parks and Amenities
-  Ecology and Environment
-  Infrastructure and Servicing



Tabs are provided for easy navigation.

A sample of possible design features and approaches is outlined for each principle.

Photos and illustrations are provided for some design ideas.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

1

Neighbourhoods are connected.

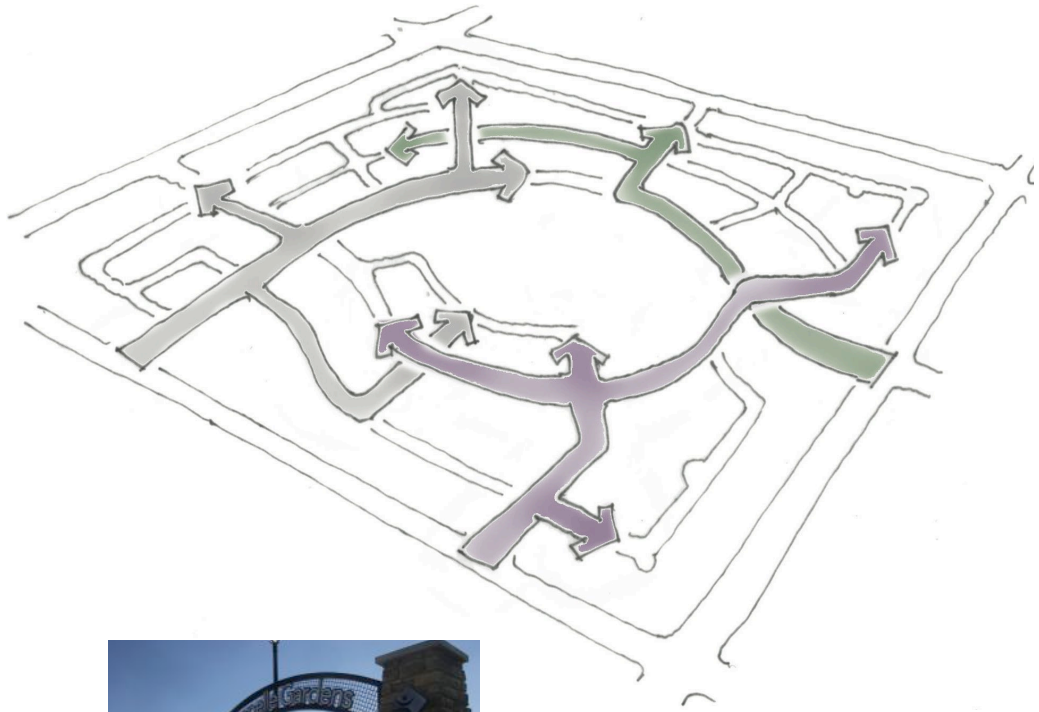
Principle

1.1 Create neighbourhoods that are easy to move within and navigate using all modes of transportation.



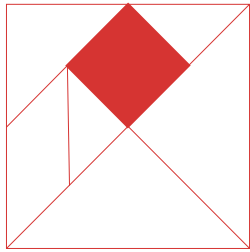
Sampling of Design Ideas

Wayfinding signage, unique landscape features and an interconnected street network could be used to address this principle in a new neighbourhood.



▲ Connections between streets provide a variety of travel routes within a neighbourhood.

◀ Unique landscape feature.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

1

Neighbourhoods are connected.

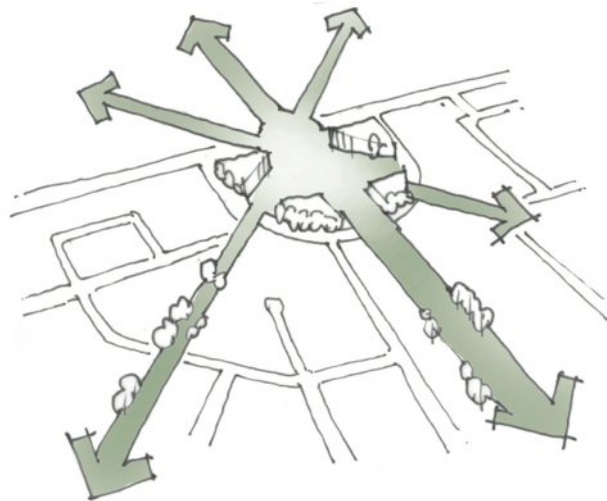
Principle

1.2 Provide efficient multi-modal transportation linkages between residential development and destinations within and outside the neighbourhood.



Sampling of Design Ideas

Direct pathway and roadway connections to neighbourhood facilities and commercial areas, an integrated and dedicated active transportation network, and the alignment of different transportation modes could be used to address this principle in a new neighbourhood.



- ▲ Loading a bike onto a transit bus.
- ▲ Connections to neighbourhood facilities.

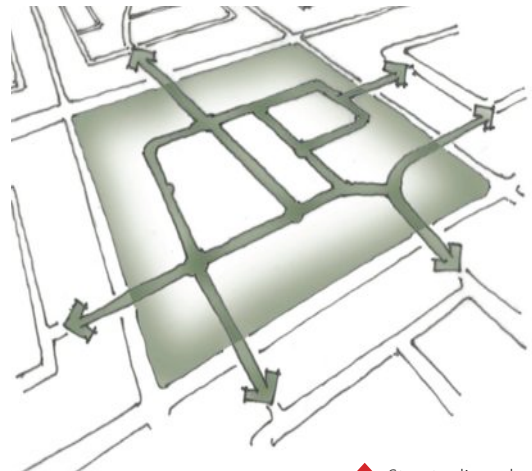
Principle

1.3 Connect roads, paths and trails with those in adjacent neighbourhoods.

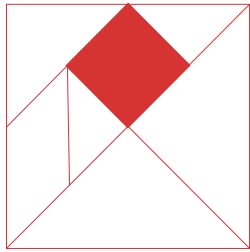


Sampling of Design Ideas

Aligning streets, paths and trails with those in existing adjacent neighbourhoods, extending them to the boundaries of future neighbourhoods, and planning different types of transportation routes to connect efficiently with city-wide networks are some of the many ways this principle could be addressed in a new neighbourhood.



- ▲ Streets aligned with those in adjacent neighbourhoods.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome 2

Neighbourhoods are unique and inviting.

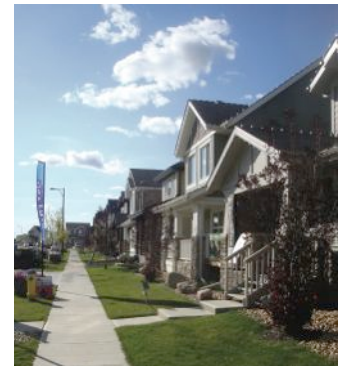
Principle

2.1 Provide for and/or build attractive and inviting streets, buildings, parks and open spaces.

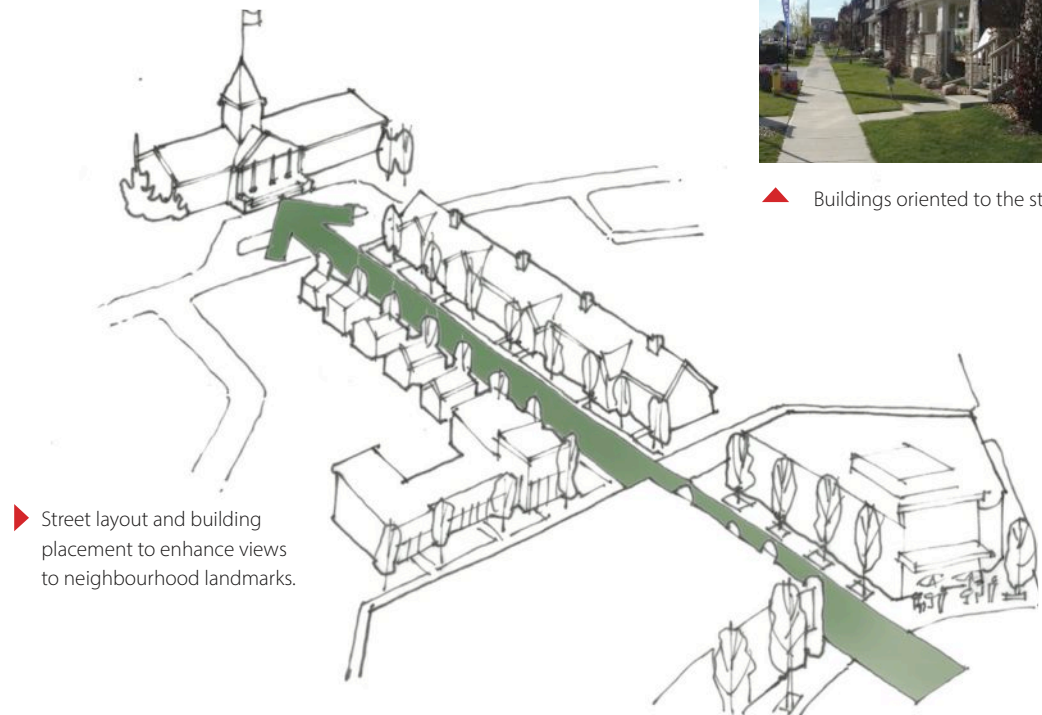


Sampling of Design Ideas

The integration of different scales and forms of housing throughout a new neighbourhood, the orientation of buildings and open spaces towards streets, and the creation of new views and vistas could be used to address this principle in a new neighbourhood.



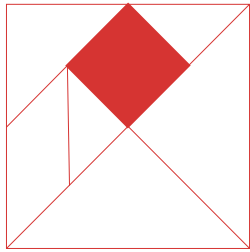
▲ Buildings oriented to the street.



▶ Street layout and building placement to enhance views to neighbourhood landmarks.



▲ A variety of housing forms integrated along a street.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

2

Neighbourhoods are unique and inviting.

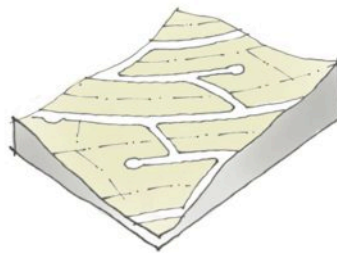
Principle

2.2 Create a special character and connection to place by respecting, and where possible, using the historical, natural and cultural context of an area.



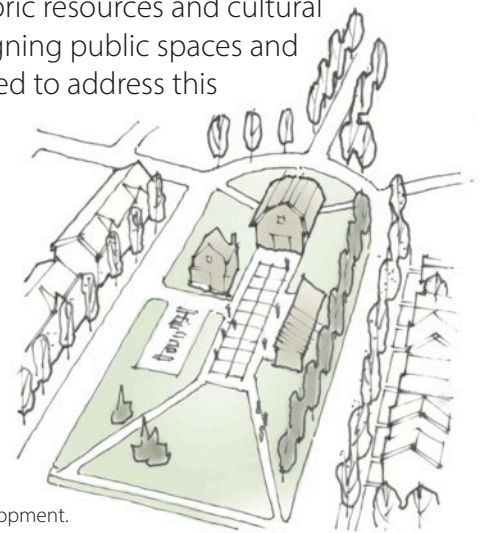
Sampling of Design Ideas

Using natural topography and natural features to guide the layout of streets and blocks, integrating existing historic resources and cultural features into the neighbourhood, and designing public spaces and streets to reflect these features could be used to address this principle in a new neighbourhood.



▲ Streets laid out to align with topography.

▶ Historic building and landscape integrated with new development.



Principle

2.3 Provide for and/or build infrastructure and amenities that support the unique identity and context of a neighbourhood.



Sampling of Design Ideas

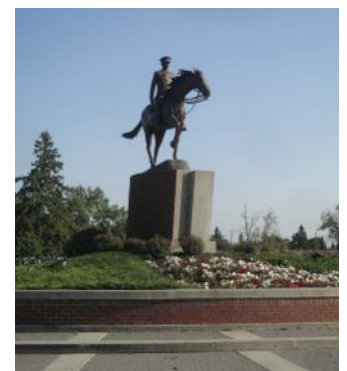
Parks designed to reflect a neighbourhood's character, public art, community focal points, and new landmark buildings and features could be used to address this principle in a new neighbourhood.



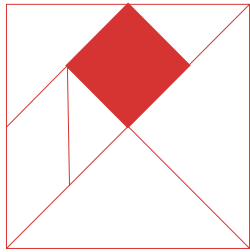
▲ Park as community focal point.



▲ Landmark building.



▲ Neighbourhood art reflects local character.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

3

Neighbourhoods are inclusive.

Principle

3.1 Provide for a wide variety and choice of housing within the neighbourhood.

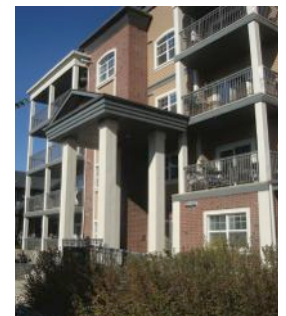
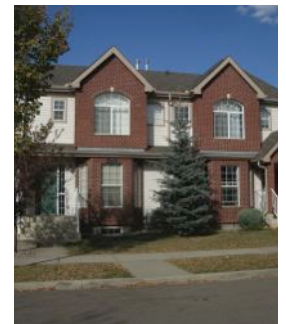


Sampling of Design Ideas

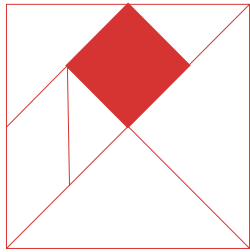
A range of housing types and densities, opportunities for live-work uses, and housing forms that meet the needs of different demographic groups could be used to address this principle in a new neighbourhood.



▲ Variety of lot type, housing form and density.



▲ Range of housing forms to accommodate different residents.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

3

Neighbourhoods are inclusive.

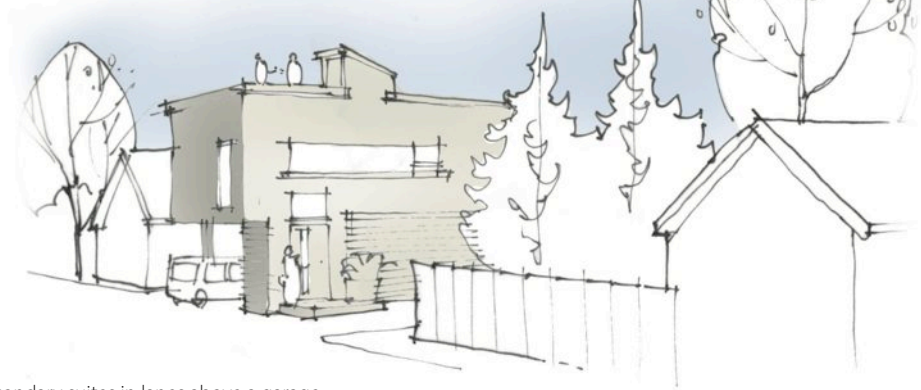
Principle

3.2 Provide for affordable housing opportunities.



Sampling of Design Ideas

Providing opportunities for rental housing, secondary suites and other dwellings that support options for housing affordability could address this principle in a new neighbourhood.



▲ Secondary suites in lanes above a garage.

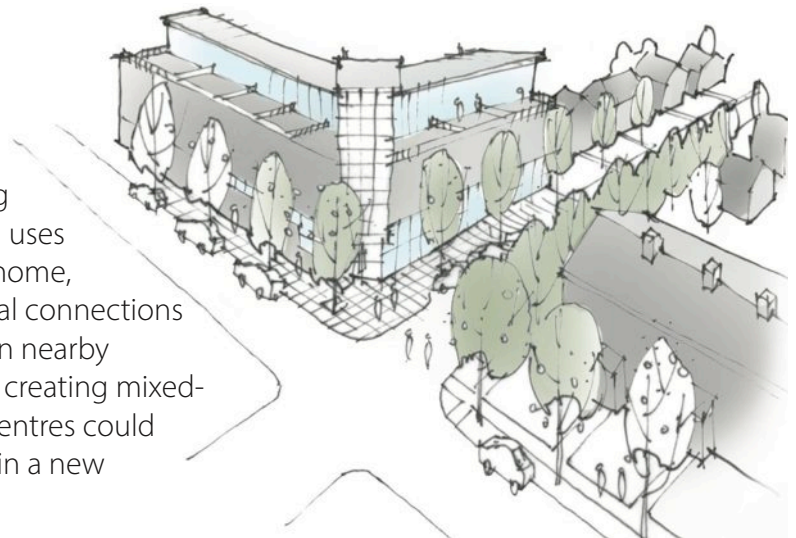
Principle

3.3 Plan for a mix of land uses and amenities within walking distance of neighbourhood residents.

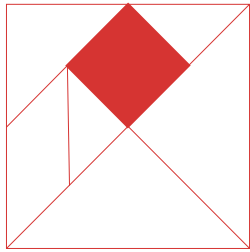


Sampling of Design Ideas

Opportunities for commercial development near residential development, locating parks and institutional uses and services close to home, facilitating multi-modal connections to employment uses in nearby neighbourhoods, and creating mixed-use neighbourhood centres could address this principle in a new neighbourhood.



▲ Mixed use neighbourhood development close to housing.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

3

Neighbourhoods are inclusive.

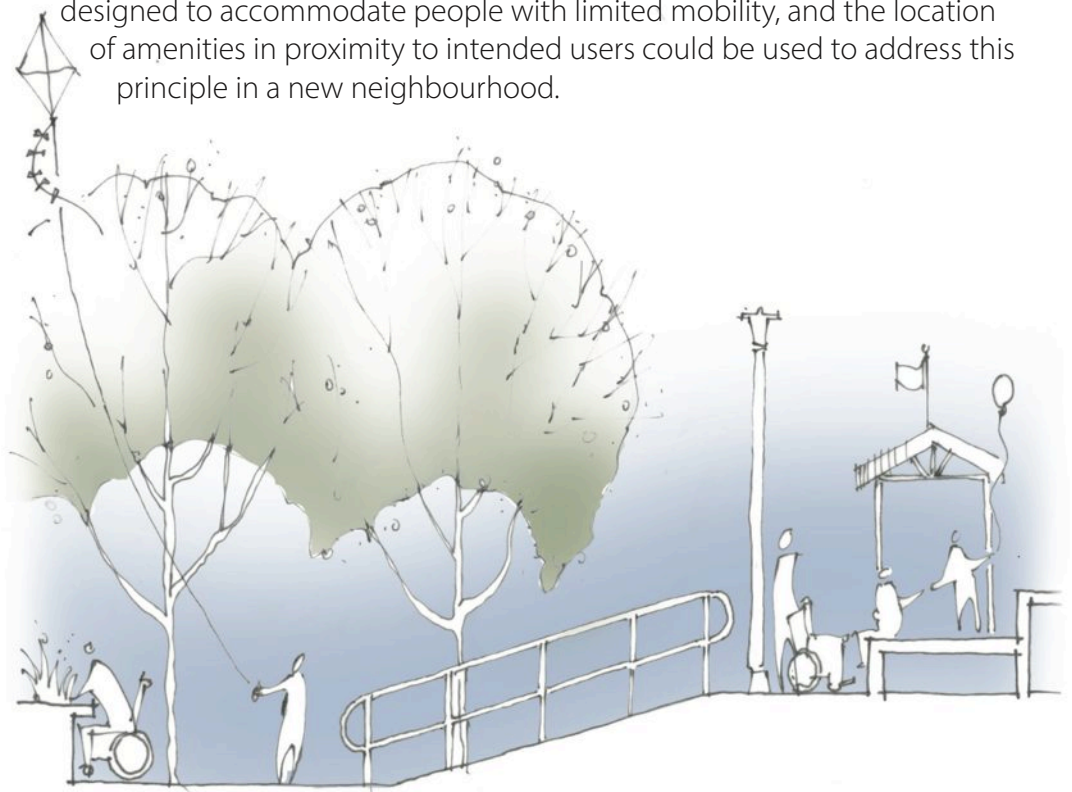
Principle

3.4 Design neighbourhood infrastructure, parks and civic facilities to accommodate people of all ages and abilities.



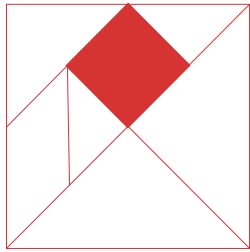
Sampling of Design Ideas

Universally designed parks and public spaces, streets and pedestrian paths designed to accommodate people with limited mobility, and the location of amenities in proximity to intended users could be used to address this principle in a new neighbourhood.



- ▲ Neighbourhood park and playground featuring universally accessible amenities.
- ▶ Rest area along a walking path.





3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

4

Neighbourhoods provide residents with convenient access to a full range of transportation options.

Principle

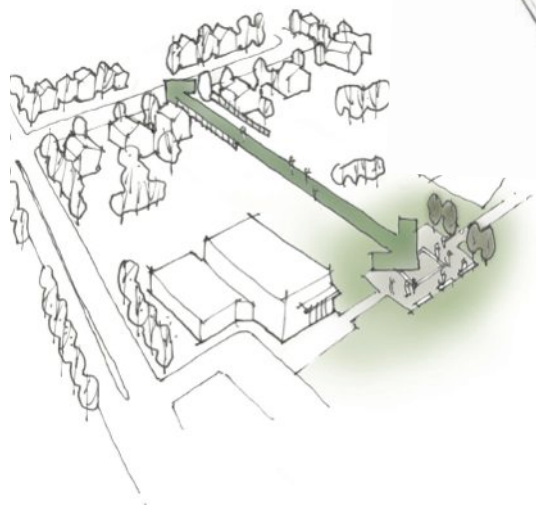
4.1 Create a walkable neighbourhood.

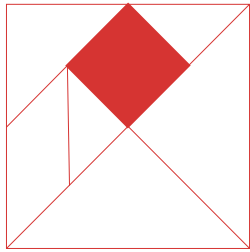


Sampling of Design Ideas

Direct pedestrian connections between housing and local destinations, an integrated transportation network, and pedestrian friendly building and streetscape design could be used to address this principle in a new neighbourhood.

- ▶ Pedestrian friendly streetscape.
- ▼ Pedestrian connection to school and park.





3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

4

Neighbourhoods provide residents with convenient access to a full range of transportation options.

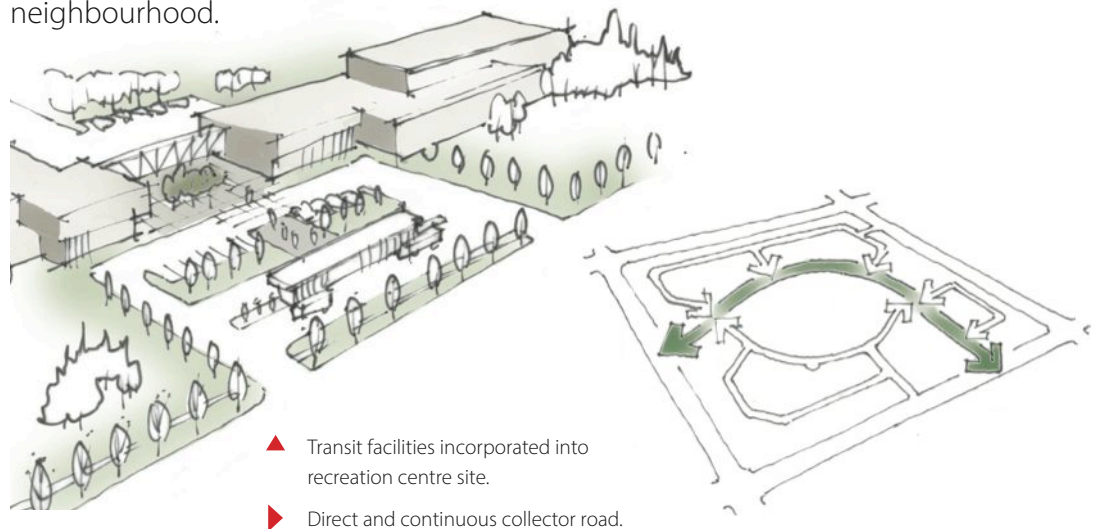
Principle

4.2 Accommodate accessible and effective transit service for the neighbourhood and beyond.



Sampling of Design Ideas

Integrating transit facilities with neighbourhood amenities, development densities that support transit service, and the provision of direct and continuous collector roadways for bus access could be used to address this principle in a new neighbourhood.



Principle

4.3 Provide for cycling opportunities within the neighbourhood with connections to existing and future networks.

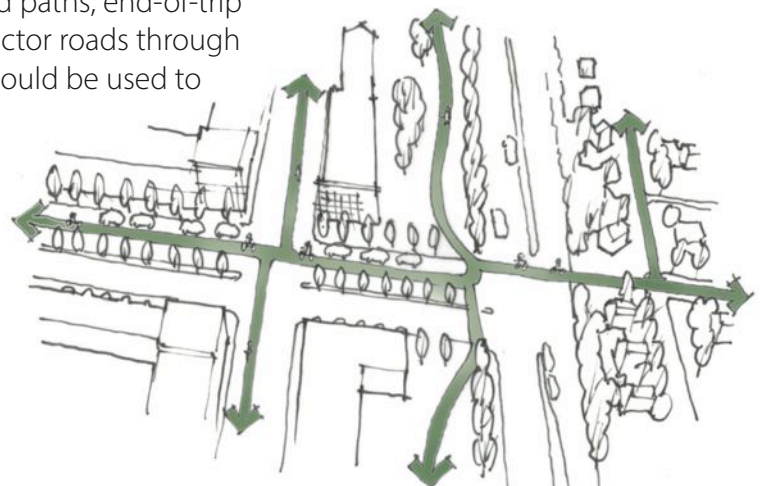


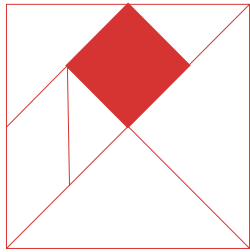
Sampling of Design Ideas

Dedicated bike lanes and paths, end-of-trip facilities, and direct collector roads through a new neighbourhood could be used to address this principle.



- ▲ Bike rack at transit centre.
- ▶ Bike network comprised of off- and on-street pathways and lanes.





3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

4

Neighbourhoods provide residents with convenient access to a full range of transportation options.

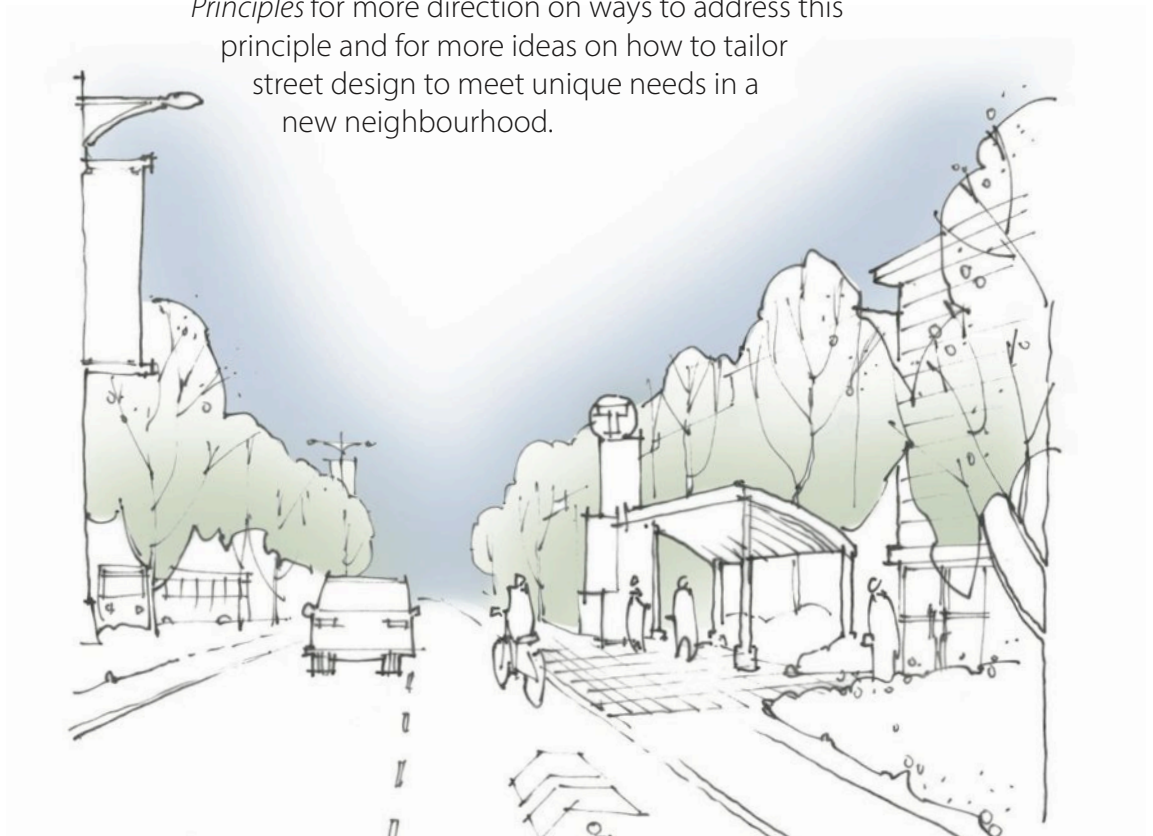
Principle

4.4 Apply *Complete Streets Principles* within the neighbourhood.

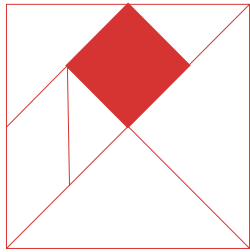


Sampling of Design Ideas

A complete street is designed for safe travel by a variety of modes; it reflects the needs of all users, the context of the surrounding land use, and provides continuity within the larger multi-modal street network as a whole. Please refer to the *City of Edmonton's Complete Streets Principles* for more direction on ways to address this principle and for more ideas on how to tailor street design to meet unique needs in a new neighbourhood.



▲ Complete street integrating multiple transportation modes.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

5

Neighbourhoods support viable uses, services and facilities.

Principle

5.1 Coordinate the location of commercial and employment areas, parks, natural areas and civic facilities to provide convenient access for residents by multiple modes of transportation.

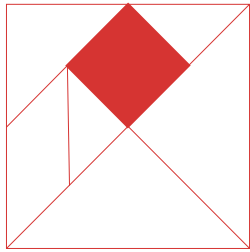


Sampling of Design Ideas

Locating amenities on key transportation corridors, direct pedestrian connections to residential areas, the integration of transit facilities and commercial development, and commercial sites with multiple frontages and access points are some ways this principle could be addressed in a new neighbourhood.



▲ Transit centre integrated with surrounding neighbourhood development.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

5

Neighbourhoods support viable uses, services and facilities.

Principle

5.2 Cluster compatible and complimentary services, housing types and amenities to create activity centres or neighbourhood hubs that serve the greatest number of residents and can be supported by consumers within and between neighbourhoods.

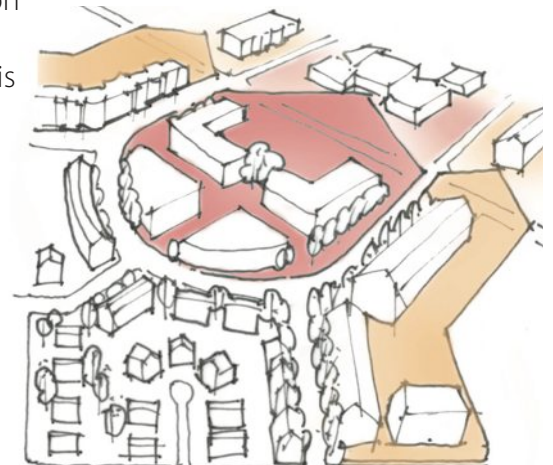


Sampling of Design Ideas

Higher residential densities near services and amenities, the co-location of community facilities and institutional uses, and the coordination of land uses with those in adjacent communities could be used to address this principle in a new neighbourhood.



▲ School and recreation facility adjacent to one another.



▲ Coordination of land uses with those in adjacent neighbourhoods.

Principle

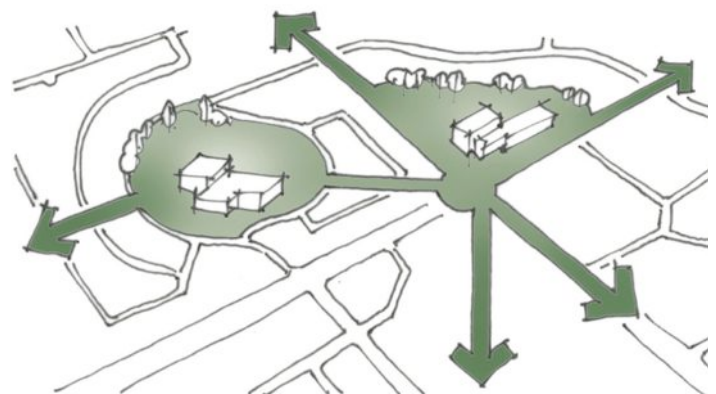
5.3 Locate school sites to facilitate pedestrian, bus and vehicular access for neighbourhood residents and/or residents of adjacent neighbourhoods.

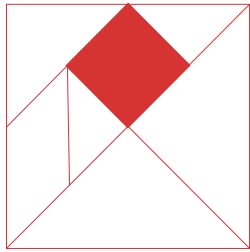


Sampling of Design Ideas

School sites with street frontage, sites located on collector roads and at key intersections, and the provision of safe and direct walking routes between schools and housing are some ways this principle could be addressed in a new neighbourhood.

▶ School sites with street frontages and connections to the neighbourhood and beyond by direct walking routes.





3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome 6

Neighbourhoods are cost effective.

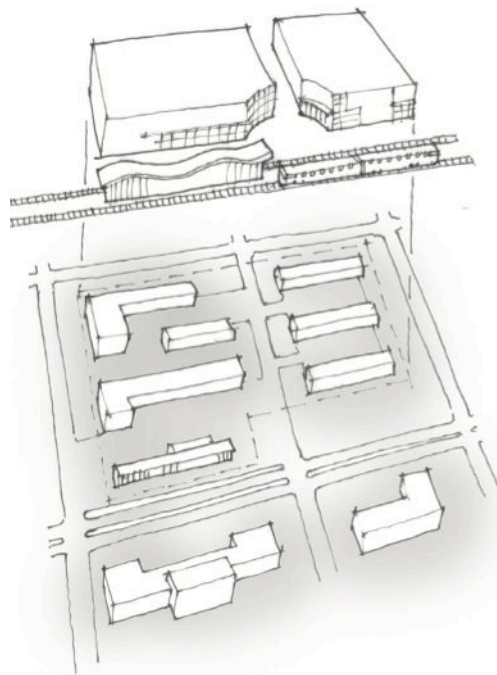
Principle

6.1 Consider the costs and benefits for building all types of neighbourhood infrastructure, including the optimal timing of delivery of infrastructure as the neighbourhood builds out.

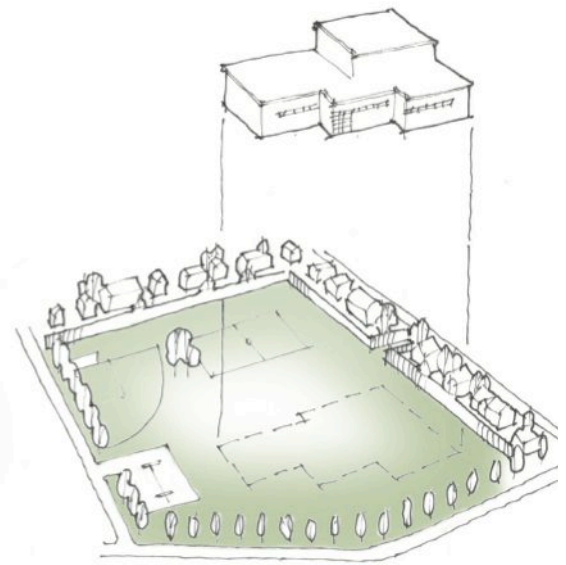


Sampling of Design Ideas

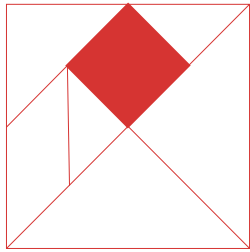
The logical extension of servicing from adjacent neighbourhoods, identification of interim uses for sites likely to build-out at a later stage of development, and the application of alternative infrastructure standards could be used to address this principle in a new neighbourhood.



▲ Interim low-density use around future LRT station and later densification.



▲ Early site use and later build-out on school site.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

6

Neighbourhoods are cost effective.

Principle

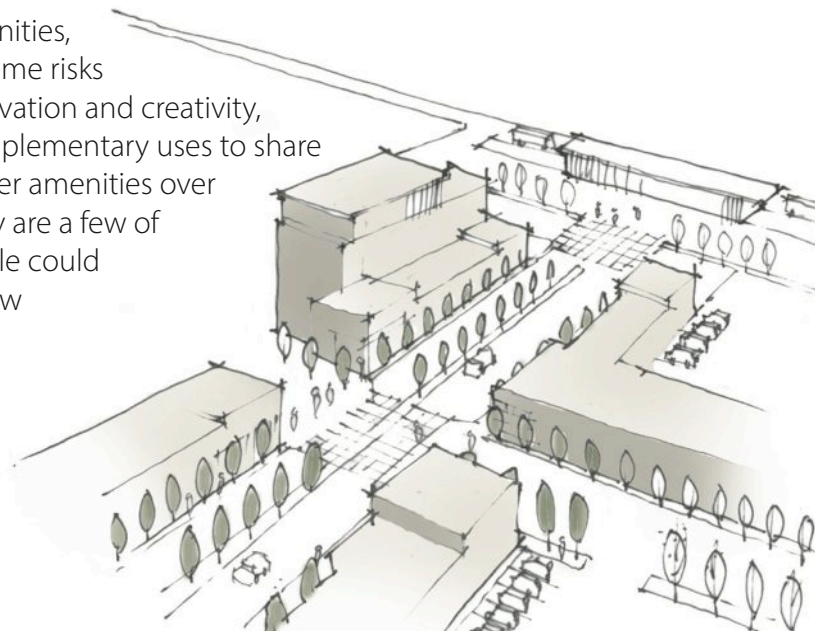
6.2 Create neighbourhoods that are affordable for residents and citizens by partnering to deliver amenities effectively and manage risk.



Sampling of Design Ideas

Exploring creative partnership opportunities, collaborating to assume risks associated with innovation and creativity, and co-locating complementary uses to share parking and other amenities over the course of the day are a few of the ways this principle could be addressed in a new neighbourhood.

▶ Transit centre integrated with commercial development to share parking facilities.



Principle

6.3 Plan for infrastructure that is cost efficient to build, operate, maintain and renew over the life cycle of the neighbourhood.

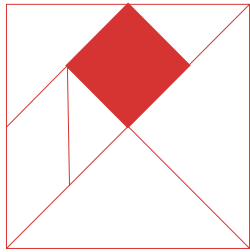


Sampling of Design Ideas

Minimizing hard infrastructure requirements, optimizing the use of infrastructure by providing / planning for multi-purposes facilities, and ensuring that infrastructure is not duplicative are just a few of the ways this principle could be addressed in a new neighbourhood.



▶ Narrow roadway design to minimize hard infrastructure needs.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

7

Neighbourhoods conserve and enhance ecosystems and biodiversity.

Principle

7.1 Plan to conserve natural areas and features, landscapes and views within the neighbourhood.

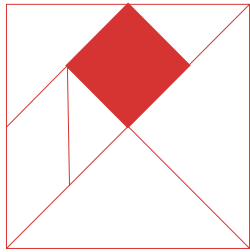


Sampling of Design Ideas

Integrating priority tree stands and wetlands into parks and open space, retaining an area's natural topography, and creating view corridors into natural areas are some ways that this principle could be addressed in a new neighbourhood.



▲ Preservation of native tree stand.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

7

Neighbourhoods conserve and enhance ecosystems and biodiversity.

Principle

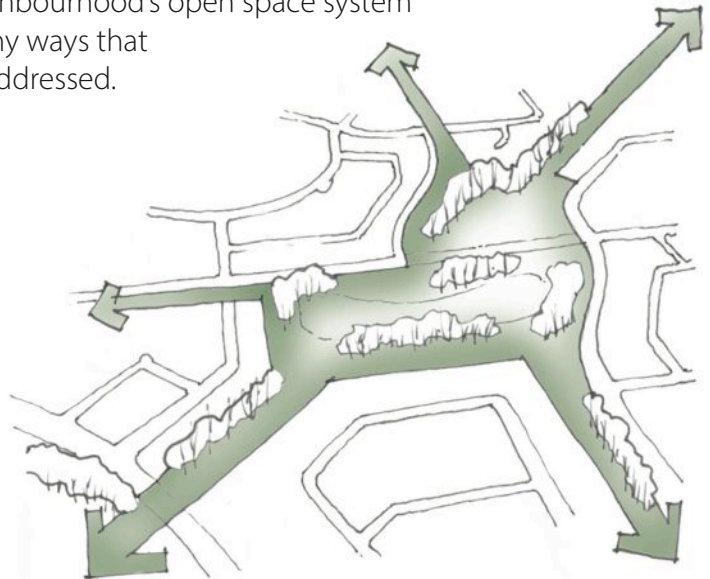
7.2 Plan to conserve and enhance ecological networks and connectivity within and between neighbourhoods.



Sampling of Design Ideas

Linking natural areas to allow for wildlife movement, minimizing interruptions (such as roads) to the ecological network, and using existing natural areas as the backbone of a new neighbourhood's open space system are just some of the many ways that this principle could be addressed.

► Network of natural areas and corridors within the neighbourhood.



Principle

7.3 Foster opportunities for habitat and naturalized spaces that encourage urban biodiversity.



Sampling of Design Ideas

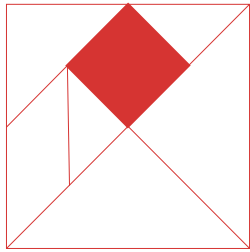
Creating and enhancing existing plant and wildlife habitat using naturalized storm water management facilities, open spaces and low impact development features on public and private lands are just some of the many ways that this principle could be addressed in a new neighbourhood.



▲ Lighting that directs light downwards is sensitive to wildlife.



▲ Stormwater management facility with naturalized landscape.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

8

Neighbourhood amenities and facilities support the social and recreational needs of residents.

Principle

8.1 Plan for flexible, visible, accessible and functional parks and open spaces to meet life cycle needs of residents.

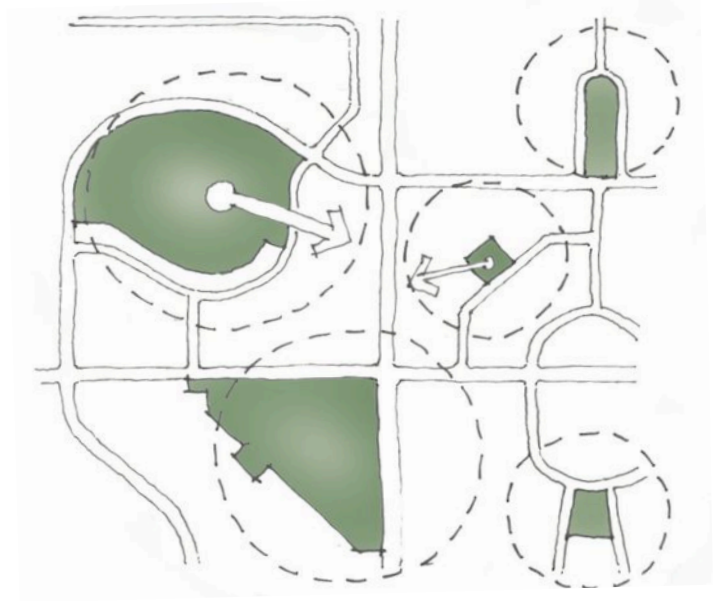


Sampling of Design Ideas

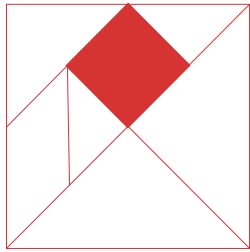
Distributing parks throughout a neighbourhood, locating them where they can best serve their intended users, and providing a variety of park sizes, amenity and programming levels to meet the particular needs of the community are just some of the ways this principle could be addressed in a new neighbourhood.



▲ Variety of open space functions to address a range of community needs.



▲ Parks within walking distance of neighbourhood residents.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

8

Neighbourhood amenities and facilities support the social and recreational needs of residents.

Principle

8.2 Plan for community gathering places and neighbourhood focal points.

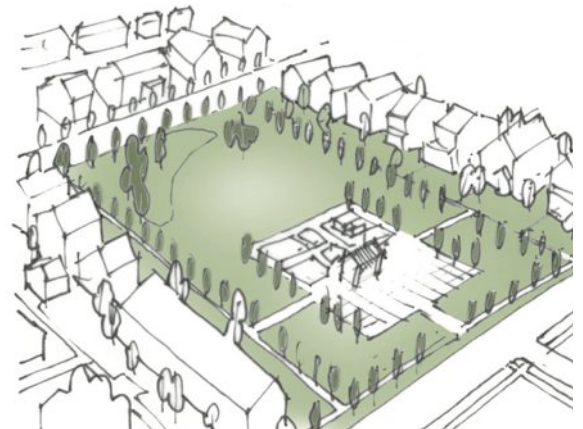


Sampling of Design Ideas

Organizing residential development around neighbourhood parks and amenities, planning for unique forms of housing that provide communal areas for residents, and identifying space for community facilities are just some of many ways this principle could be addressed in a new neighbourhood.



- ▲ Common area in multi-family site.
- ▶ Park incorporated into residential area.



Principle

8.3 Plan for local food production and access opportunities within the neighbourhood.



Sampling of Design Ideas

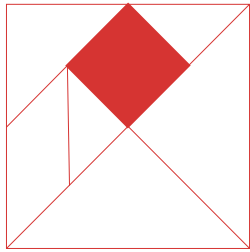
Please refer to a new neighbourhood's governing Area Structure Plan and *fresh: Edmonton's Food and Urban Agriculture Strategy* for further direction and ideas on how to address this principle.



- ▲ Neighbourhood fruit orchard.



- ▲ Community garden.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

9

Neighbourhoods embrace all seasons.

Principle

9.1 Plan for weather and all seasonal conditions through street, building and open space design.

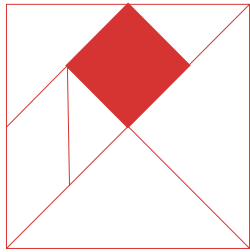


Sampling of Design Ideas

A street pattern that impedes prevailing winds, public spaces framed and sheltered by surrounding development, and blocks oriented to optimize solar access for future buildings are some of the ways this principle could be addressed in a new neighbourhood.



▲ Park design takes advantage of building placement to block winter winds and create pleasant south-facing seating areas.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

9

Neighbourhoods embrace all seasons.

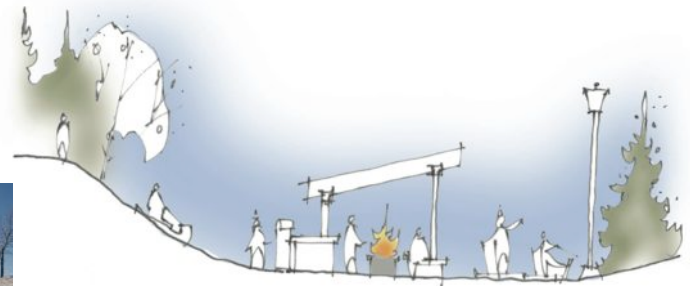
Principle

9.2 Plan for parks and open spaces that can be used and enjoyed year-round.



Sampling of Design Ideas

A multi-use trail or greenway system that accommodates active transportation year round (walking, cycling, cross-country skiing) and infrastructure / amenities in parks that encourage winter use could be used to address this principle in a new neighbourhood.



- ▲ Park for winter use incorporating toboggan areas, ski trails and warming shelters.
- ▲ Tobogganing.

Principle

9.3 Ensure that municipal services, including the maintenance and operation of infrastructure, can be effectively provided in all seasons.



Sampling of Design Ideas

The identification of snow storage facilities, streets laid-out and designed to accommodate operating equipment, and naturalization through the introduction of drought tolerant and low maintenance native vegetation are some of many ways this principle could be addressed in a new neighbourhood.



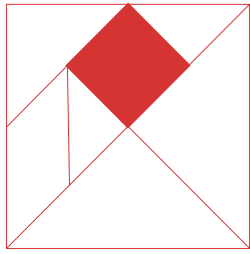
- ▲ Waste collection.



- ▲ Residential blading.



- ▲ Snow storage on residential boulevards.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

10

Neighbourhoods are safe and secure.

Principle

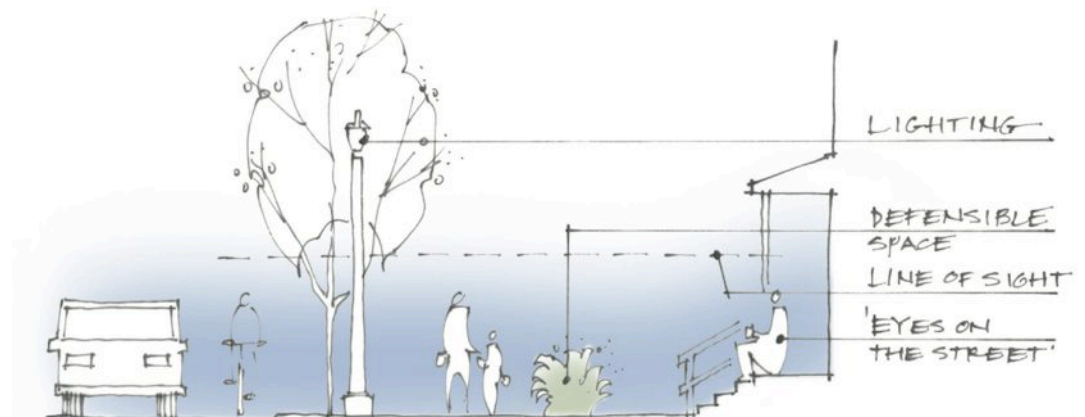
10.1 Design streets, buildings and public and private spaces to promote safety and security, and to mitigate risk.

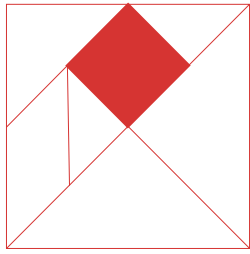


Sampling of Design Ideas

Using traffic calming measures on neighbourhood roads, the application of Crime Prevention Through Environmental Design (CPTED) principles to the planning and design of public and private spaces, and using an area's natural drainage pattern to minimize the risk of flooding are just some of the ways this principle could be addressed in a new neighbourhood.

- ▶ Bulb-out at intersection to calm traffic, improve pedestrian safety and shorten crossing distance.
- ▼ Creation of safe streetscapes by providing lighting, creating defensible space, preserving sightlines and encouraging 'eyes on the street'.





3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

10

Neighbourhoods are safe and secure.

Principle

10.2 Plan for emergency and protective services.

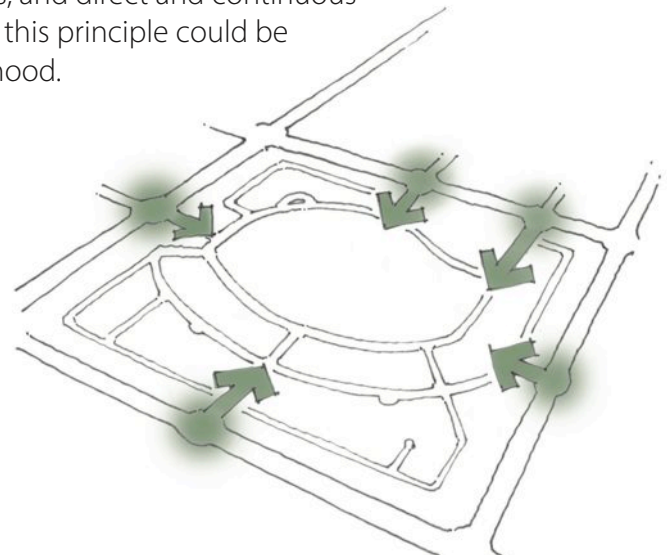


Sampling of Design Ideas

Multiple vehicular entry and exit points into a neighbourhood, sites identified for protective services, and direct and continuous roadways are some of the ways this principle could be addressed in a new neighbourhood.



- ▲ Fire hall.
- ▶ Multiple neighbourhood access points.



Principle

10.3 Plan for the safe coexistence of new development with energy facilities in alignment with municipal, provincial and federal requirements.

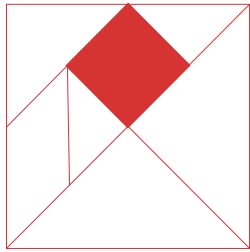


Sampling of Design Ideas

Setbacks and buffers between development and energy facilities are typical ways to address this issue. Please refer to relevant municipal, provincial and federal guidelines and requirements for more direction on how to address this principle in a new neighbourhood.

- ▶ Utility right-of-way with multi-use trail.





3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome 11

Neighbourhoods are flexible and adaptable.

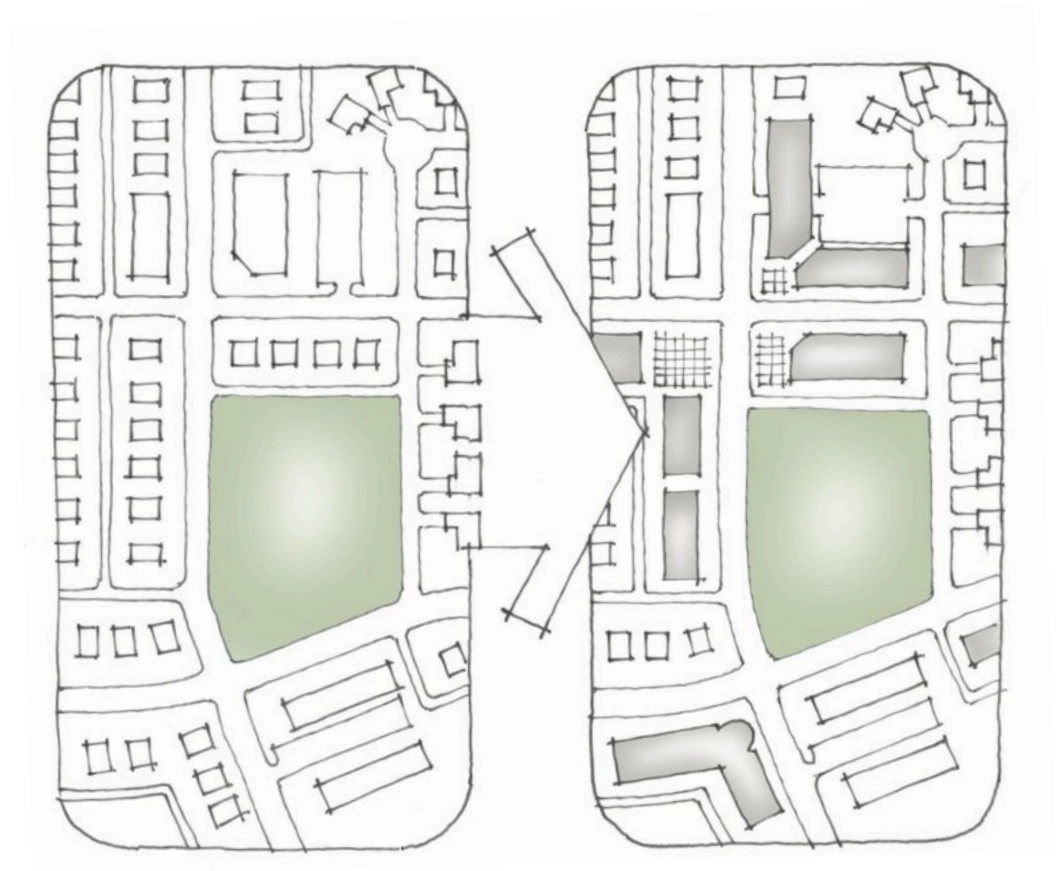
Principle

11.1 Provide opportunities to address changes in land use, infrastructure, demographics, market conditions, emerging technologies and the climate over time.

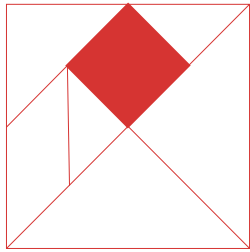


Sampling of Design Ideas

Designating land for alternative or interim uses, organizing roads and blocks to readily accommodate future redevelopment opportunities, and providing infrastructure that can be easily adapted to alternative energy sources and servicing are some of the ways this principle could be addressed in a new neighbourhood.



▲ Street and block pattern enables future neighbourhood growth and transformation.



3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome

11

Neighbourhoods are flexible and adaptable.

Principle

11.2 Pursue innovative approaches and embrace best available standards for community and infrastructure design.



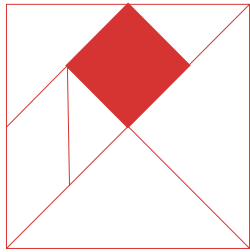
Sampling of Design Ideas

Ways to address this principle will necessarily evolve over time. Consider creative and forward-thinking planning and design approaches for all elements of a new neighbourhood to raise the bar on design in our city.



- ◀ Street pattern oriented to block northwest winds (blue) and enhance solar access (red).
- ▼ Constructed wetland.





3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome 12

Resources are used efficiently and responsibly in neighbourhoods.

Principle

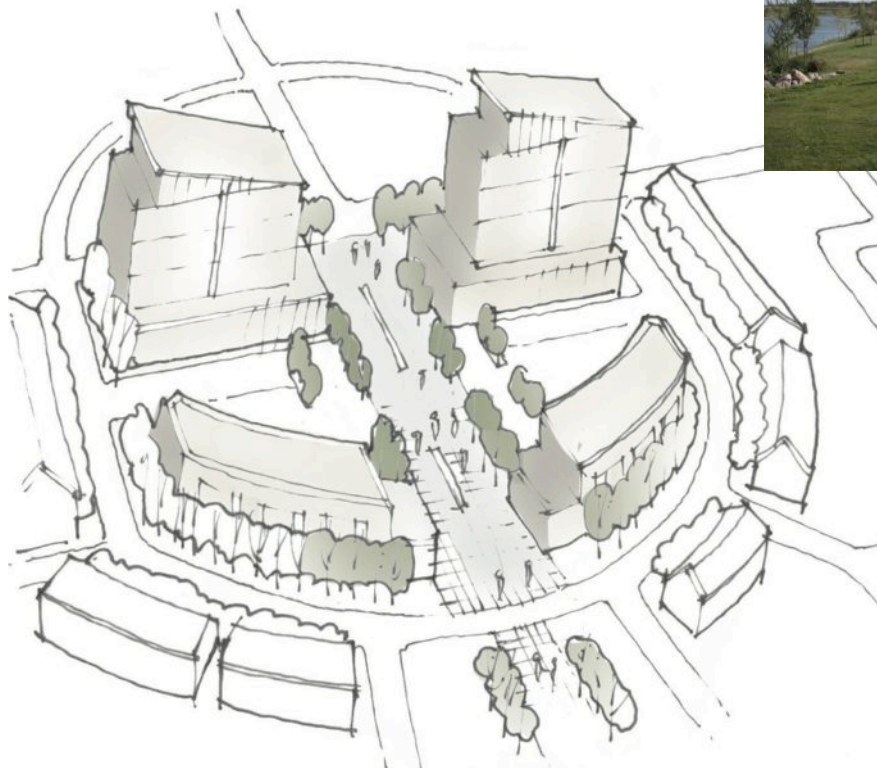
12.1 Explore opportunities to capitalize on the joint use of space and other land use efficiencies without compromising the intended use or maintenance and operations needs of the site.

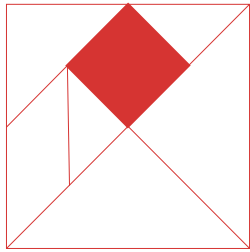


Sampling of Design Ideas

Planning for multi-purpose open space and public facilities, mixed-use development, and higher land use densities are some of the many ways this principle could be addressed in a new neighbourhood.

- ▶ Narrow lots encourage more compact development.
- ▶ Pathway along stormwater management facility.
- ▼ Mixed use neighbourhood development with residential, commercial and office uses, and public open space.





3. Neighbourhood Outcomes and Principles

Sampling of Design Ideas

Outcome 12

Resources are used efficiently and responsibly in neighbourhoods.

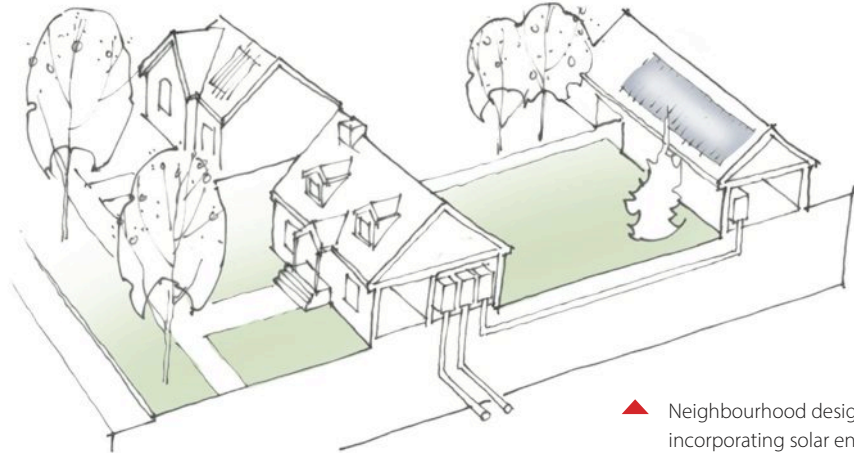
Principle

12.2 Minimize energy use and energy requirements of buildings and infrastructure.



Sampling of Design Ideas

Exploring opportunities for district energy and geothermal heating, infrastructure that can accommodate or be adapted to alternative energy sources, and the placement of tall buildings to minimize shade impacts on surrounding areas are some of the many ways this principle could be addressed in a new neighbourhood.



▲ Neighbourhood design incorporating solar energy opportunities and district energy systems.

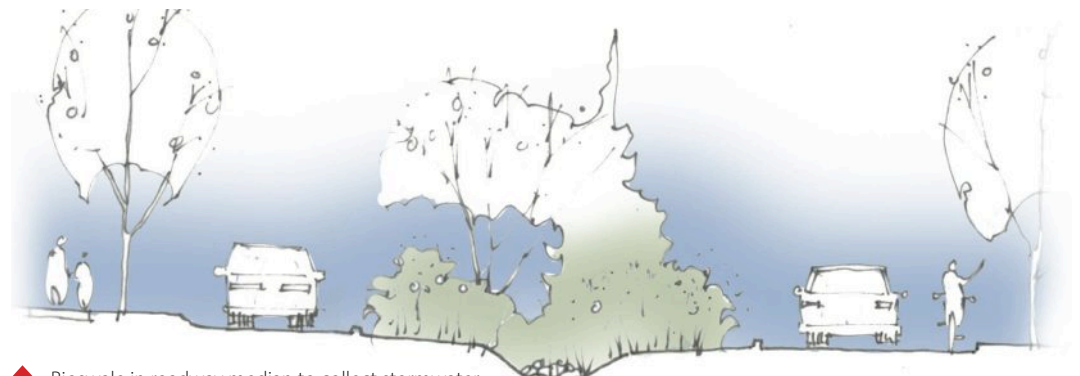
Principle

12.3 Encourage Low Impact Development Best Management Practices to manage stormwater runoff and improve water quality.




Sampling of Design Ideas

Naturalized drainage ways, bioswales, bioretention areas and permeable pavement practices are some of the many ways this principle could be addressed in a new neighbourhood.



▲ Bioswale in roadway median to collect stormwater.



“Taken together, the twelve sets of outcomes and principles foster the creation of integrated and diverse suburban neighbourhoods where a mix of people, uses, services and amenities co-exist and support one another to create and sustain local life and vibrancy.”

Communicating Plan Performance



4



4. Communicating Plan Performance

Planning a great new neighbourhood is both an art and a science; achieving the right balance relies upon the creativity, innovation, technical expertise and the forward-thinking aspirations and unique implementation strategies of city-builders.

The fundamental building blocks provided at the very beginning of a neighbourhood's life – the Neighbourhood Structure Plan (NSP) stage – create a shared understanding of desired neighbourhood results and the means through which they will be achieved. The NSP establishes a strong foundation for the realization of effective implementation in subsequent and more detailed design stages of neighbourhood planning and development.

A collaborative process to prepare new plans and communication of key directions is central to this task. These enable all city-builders to effectively advance new approaches and to take calculated risks together to continually raise the bar.



One of an NSP's primary functions is to clearly communicate the intent of subsequent planning stages and to set the stage for implementation by:

1. Building a shared understanding of how a neighbourhood responds to planning policy;
2. Providing a focus for discussions between city-builders during plan preparation and review;
3. Providing a strong basis to effectively champion new approaches together;
4. Helping city-builders to monitor neighbourhood development trends, understand the demographic and land use implications of an NSP, and make informed decisions related to future public investments; and
5. Guiding neighbourhood development after the adoption of an NSP (See Figure 2).



4. Communicating Plan Performance

Communicating How an NSP Aligns with Neighbourhood Design Principles

It is critical for a new NSP to communicate to all stakeholders that it addresses neighbourhood principles and supports neighbourhood outcomes. It is also essential for it to communicate how it does so. Those preparing and reviewing plans will ensure that a new NSP demonstrates alignment with this guidelines document and clearly communicates the vision for the new neighbourhood by including the following elements:

1. Images, Photos and Maps

A plan will use images, photographs and maps to help communicate the proposed character of the neighbourhood and illustrate key design features and concepts. This will build a shared understanding of how principles may be translated on the ground through the implementation of plan policies and directions.

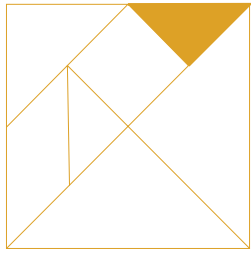
2. Descriptions of How Principles are Addressed

An NSP will describe how each principle has been addressed through relevant plan policies, design elements and approaches, and implementation actions. It will also flag innovative features and explain why they have been used. If one design element or a collection of design elements address a number of principles at once, these may be described together. In the event that the specific context of a new neighbourhood does not permit every principle to be addressed, an explanation will be provided to justify the omission of related design elements and to outline how the impacts of their omission will be mitigated.

3. Identification of Key Statistics

A statistical summary of key land use and population statistics will be provided in an NSP, along with a brief written analysis of the data it contains. The purpose of the summary is to provide critical at-a-glance information about a new neighbourhood; the written analysis facilitates a deeper understanding of this raw data. Some of the neighbourhood plan statistics that can be realistically calculated and reported at the NSP stage – and which are meaningfully aligned with neighbourhood principles outlined in this document – include: projected development densities; land use mix; housing mix; amount of natural area conserved; and percentage of the neighbourhood's population in proximity to a variety of destinations and amenities.

The required content and structure of an NSP, including the statistical summary, is outlined in more detail in the City's *Terms of Reference for the Preparation and Amendment of Residential Neighbourhood Structure Plans*.



4. Communicating Plan Performance

A Touchstone for Plan Implementation

Achievement of the desired outcomes for new neighbourhoods depends on the clarity of policy direction in the NSP and the plan's ability to effectively inform detailed design work through subsequent stages of the planning and development process. It also depends on the collaboration of stakeholders through each stage of neighbourhood development, as well as new processes and standards that facilitate the flexible, adaptive and unique communities that are envisioned in this guidelines document. This document and new NSPs will together guide the collaborative planning and development process and provide a platform for enabling regulatory change going forward.

■ A Place for Regulations and Standards

A performance-based approach to the preparation of a new NSP does not mean a regulation or standard-free approach to new neighbourhood design. It means a commitment to plan preparation that is focused on the achievement of outcomes through the application of principles in support of the unique vision of the neighbourhood. It also means exploring innovative approaches to the existing standards and regulations that govern how an NSP is translated on the ground by opening the door to further detailed discussions as new plans are prepared. As a starting place, preliminary recommendations on some key areas for revisions and updates to existing processes and practices are provided in the following section.

It should also be noted that changes to current City servicing standards and alternate forms of servicing new neighbourhoods are beyond the scope of this document. While they may be encouraged, this work needs to be reviewed and accepted by the responsible departments and agencies.



"A performance-based approach provides design flexibility and pushes city-builders to raise the bar on creativity and best practice. It recognizes that there are many routes to design excellence and provides a high level roadmap for the design of tomorrow's great new neighbourhoods."

Working Together: Next Steps



5



5. Working Together: Next Steps

This document provides a platform to both initiate and see innovative ideas through. It represents a shared commitment and willingness among city-builders to explore fresh approaches to designing new neighbourhoods as well as new ways of working together to create a better city.



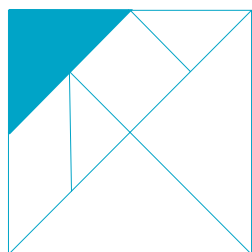
It also provides momentum and rationale for changes to other standards, regulations and plans to enable creative approaches to new neighbourhood design going forward. The full realization of the guidelines' vision for new communities will occur through subsequent and more detailed planning stages as new communities are built-out and as services to residents are ultimately provided.

Seventeen recommended actions – or next steps – that will foster improved collaboration and creativity are outlined below. Some are, in fact, already underway. While these actions represent an important starting point, additional and unforeseen steps will almost certainly be required over the coming years. Investments in continually improving working relationships, a willingness to explore joint efforts and take calculated risks, openness to new ideas and approaches, and a shared commitment to change will also be critical to the long term realization of this document's vision for new neighbourhoods.

Next steps are organized into five categories:

1. City Regulations, Policies and Guidelines
2. City Development Standards
3. Plan Review Process and Administrative Procedures
4. Strategic Partnerships and Collaboration
5. Pilot Projects and Continuous Learning

Anticipated time horizons have been provided for each recommended step.



5. Working Together: Next Steps

City Regulations, Policies and Guidelines

These next steps relate to updates to City of Edmonton planning policies, guidelines and regulations that inform new neighbourhood design.

Next Steps

Anticipated Time Horizon

Lead

Update and revise Neighbourhood Structure Plan Terms of Reference

The City's *Terms of Reference for the Preparation and Amendment of Residential Neighbourhood Structure Plans* must be aligned with the *Designing New Neighbourhoods* document to operationalize the design guidelines. The update should provide clarity around how new plans are to demonstrate their alignment with the guidelines, the level of planning detail expected at the NSP stage, and technical report requirements. Additional updates may be required over time.

Short Term
(0-1 years)

Current Planning
Branch, COE*

Educate and communicate with all stakeholders on this design guidelines document

Actions to broadly communicate this document and its use are required to ensure that it serves its intended purpose of enabling the design of tomorrow's great new neighbourhoods. Public and private sector city-builders should be engaged and communication with operational staff within the City's Administration should be a priority.

Short Term
(0-1 years)

Current Planning
Branch, COE
+
Urban Planning &
Environment Branch,
COE

Update and revise the City of Edmonton Zoning Bylaw

Opportunities to advance enabling, adaptive and flexible zoning regulations should be explored. This could reduce a reliance on Direct Control and neighbourhood specific zoning for innovative design approaches and create a more efficient process. Zoning changes should be advanced as required over time (for example, as new ideas are proposed or as resources allow) to enable ongoing innovation and creativity, and to reduce inconsistencies where they may exist.

Medium Term
(2-4 years)

Current Planning
Branch, COE

Revise and update the Urban Parks Management Plan

This action is recommended to enable a broader diversity of park spaces and configurations as well as varied open space programming opportunities within new neighbourhoods.

Medium Term
(2-4 years)

Urban Planning &
Environment Branch,
COE

Review and update this design guidelines document

Reviewing this document on a five to ten year term is recommended to ensure it remains current and effective.

Long Term
(5-10 years)

Current Planning
Branch, COE
+
Urban Planning &
Environment Branch,
COE

*COE = City of Edmonton



5. Working Together: Next Steps

City Development Standards

These next steps relate to the City of Edmonton's engineering, construction and design standards.

Next Steps

Anticipated Time Horizon

Lead

Revise and update Roadways Design and Construction Standards

Changes should be initiated in the short term (and ongoing changes contemplated over time as required) to enable the transportation connectivity, multi-modal travel options, and cost efficiencies envisioned by the design guidelines. More specifically, updates to implement the City's Complete Streets Guidelines will provide opportunities to tailor roadway design in ways that improve travel for all modes and improve costs.

Short to Medium Term
(0-4 years)

Transportation
Planning Branch,
COE*

Revise and update Drainage Design and Construction Standards

These should be updated to facilitate Low Impact Development Best Management Practices to improve stormwater management and ecological health in a cost effective manner within a new neighbourhood. Changes to engineering construction standards should be initiated in the short to medium term and ongoing changes contemplated over time as required.

Short to Medium Term
(0-4 years)

Drainage Services
Branch, COE

Revise and update other Design and Construction Standards

Changes to enable alternative and adaptive design for other neighbourhood infrastructure (lighting, landscaping, servicing, etc.) should be explored as new ideas are considered and advanced by plan proponents and city-builders. Standards may also require review and re-evaluation over time based on new or improved knowledge.

Medium Term
(2-4 years)

Current Planning
Branch, COE
+
Urban Planning &
Environment Branch,
COE

Review and update maintenance and operations standards

City standards related to infrastructure and park maintenance and operations should be reviewed as new design ideas are considered and advanced by plan proponents and city-builders. This would serve to identify and eliminate barriers to flexible and innovative design related to all aspects of new neighbourhoods that require public maintenance and operations over time.

Medium Term
(2-4 years)

City of Edmonton

*COE = City of Edmonton



5. Working Together: Next Steps

Plan Review Process and Administrative Procedures

These next steps relate to the way city-builders work together to ensure efficient and effective neighbourhood planning.

Next Steps

Business process improvements

A project management approach to timelines, milestones and deliverables associated with new NSP preparation and approval should be established to ensure an efficient and effective process, improved plan stewardship and consistency, and more transparent decision-making.

Anticipated Time Horizon

Short Term
(0-1 years)

Lead

Current Planning
Branch, COE*

Collaborative Neighbourhood Structure Plan preparation

New NSPs should be prepared collaboratively by the private and public sectors. This will foster the development of creative design approaches, as well as shared ownership for a new neighbourhood's vision and specific design approaches tailored to address the planning principles outlined in this document.

Short to Long Term
(0-10 years)

Private Development
Industry
+
Current Planning
Branch, COE

*COE = City of Edmonton



5. Working Together: Next Steps

Strategic Partnerships and Collaboration

These next steps relate to advocacy and/or work with other agencies, service providers, orders of government, governance bodies and non-governmental organizations (NGOs) that have direct and indirect impacts on the planning, design, implementation and maintenance of new neighbourhoods.

Next Steps

Anticipated Time Horizon

Lead

Collaborate with utility providers on alternative utility provision

City-builders should work with utility companies to facilitate alternative energy generation and transmission in new neighbourhoods, as well as more flexible shallow utility placement.

Medium Term
(2-4 years)

City of Edmonton
+
Private Development
Industry

Explore additional joint and alternative use opportunities for school sites and buildings

The City should continue to explore and expand innovative joint-use opportunities for school sites with relevant partners (school boards, community leagues and community organizations). Joint use opportunities should be explored for both land and buildings. Alternative or interim use opportunities should also be explored to provide additional flexibility through the neighbourhood life cycle.

Medium Term
(2-4 years)

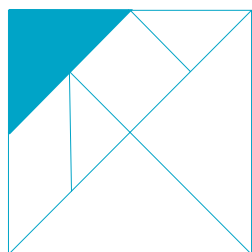
School Boards
+
City of Edmonton
+
Edmonton
Federation of
Community Leagues

Work with other orders of government on key issues

City-builders should continue to work with the provincial and federal governments on land planning issues that affect the development of new neighbourhoods in Edmonton. This will help to enable the alternative and adaptive infrastructure and communities envisioned by this guidelines document. Two specific items that could be explored with the Government of Alberta include opportunities for greywater reuse and small scale electrical generation.

Medium to Long Term
(2-10 years)

City of Edmonton
+
Private Development
Industry



5. Working Together: Next Steps

Pilot Projects and Continuous Learning

These next steps relate to ongoing continuous learning and recognition initiatives to both pilot and celebrate innovative new neighbourhood design.

Next Steps

Create learning opportunities

City-builders should organize formal learning symposiums, sessions, conferences, workshops and working committees, and foster more frequent informal engagement opportunities to expand ongoing dialogue and mutual understanding between private, public and non-governmental sector city-builders.

Anticipated Time Horizon

Short, Medium and
Long Term
(0-10 years)

Lead

Sustainable
Development, COE*
+
Private Development
Industry
+
Public Sector Agencies
+
Non-governmental
Organizations

Showcase and explore incentives for design innovation

City-builders should develop awards and consider incentive programs for the application of innovative design ideas, and communications and marketing campaigns for Edmonton's new neighbourhoods within the context of a livable and attractive capital city. These would also serve to disseminate creative approaches and best practices.

Medium Term
(2-4 years)

Sustainable
Development, COE
+
Private Development
Industry
+
Local Academic
Institutions


Initiate pilot projects in innovative neighbourhood design

Pilot projects and/or monitoring programs should be undertaken for implementation of new and recent initiatives such as Low Impact Development, Winter City design, and *fresh: Edmonton's Food and Urban Agriculture Strategy*. Projects could also be undertaken for other alternative development and engineering standards where there is a desire to test out new ideas and applications prior to their formal adoption and endorsement.

Medium and Long Term
(2-10 years)

City of Edmonton
+
Private Development
Industry

*COE = City of Edmonton

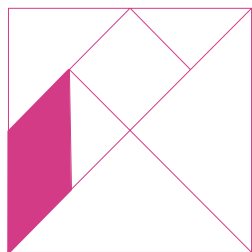


“Unique suburban neighbourhoods add character and value to our city and provide an exceptional quality of life for residents. Neighbourhoods celebrate and leverage Edmonton’s special natural, cultural and historical contexts to establish an authentic identity and sense of place.”

Glossary



6



6. Glossary

This glossary defines some words and phrases found in the Neighbourhood Outcomes and Principles section to establish a common understanding of certain concepts and terms. Most definitions have been drawn from existing City of Edmonton strategic planning documents

Accessible

Having ease of access.

Active and Passive Recreation

Active recreation activities are those which require physical exertion (e.g. jogging, bicycling, rowing, skating, etc.), and passive recreation activities are those which require limited physical exertion (e.g. bird watching, walking, photography, etc.).

Active Living

A way of life in which physical, social, mental, emotional and spiritual activities are valued and are integrated into daily living.

Active Transportation

Any mode of transportation by which people use their own energy to power their motion and includes walking, running, cycling, cross-country skiing, skateboarding, snowshoeing, roller blading, and use of a manual wheelchair.

Affordable Housing

Housing that requires no on-going operating subsidies and that is targeted for occupancy by households who earn less than the median income for their household size and pay more than 30 percent of that income for housing and require no in-situ support services.

Age Friendly Design

An age friendly built environment includes a safe pedestrian environment, safe street crossings, easy to access shopping centres, a mix of housing choices, nearby health centres and recreational facilities. Additional age friendly urban design features could include non-slip materials on footpaths, adequate street and park furniture and awnings for weather protection, legible and pedestrian scale signage, well-lit walking areas, and the incorporation of *Crime Prevention Through Environmental Design* principles.

Amenities

Neighbourhood features that contribute to residents' quality of life, such as parks and natural areas, recreational facilities, schools, shopping opportunities and services.

Area Structure Plan

A statutory plan that identifies future neighbourhoods and where residential, commercial, institutional and recreational sites will be located in a previously undeveloped area and how essential municipal services such as water and sewer systems, roads and fire protection will be provided. These plans also describe the number of people that are expected to live in the new area and how development will be staged over time.

Biodiversity

The number and variability of organisms found within a specified geographic region; this includes diversity within species, between species and of ecosystems.

Bioretention Areas

Bioretention areas (also referred to as rain gardens) are storm-water management and treatment facilities, within a shallow depression, using vegetation and amended topsoil. They provide water quality treatment, reduce runoff and allow for infiltration near where runoff originates, such as roofs, driveways and sidewalks.

Bioswales

Open channels with dense vegetation specifically designed to attenuate, treat, and convey stormwater runoff.

Carbon Footprint

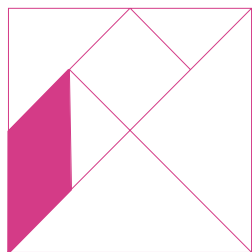
A measure of the greenhouse gas emissions produced by human activities.

Civic Facility

Fire station, police station, recreation facility, library, ambulance station, district park, playground, light rail transit station and/or transit centre.

Community Garden

A shared garden space where groups or individuals grow and raise food. Community gardens are often located on public lands or undeveloped private land and are the result of a group of people coming together to make land available for gardening. Community gardens often contain raised bed allotment plots, tool sheds, water access, public art and educational signage, among other features.



6. Glossary

Complete Streets Principles

Complete Streets are intended to:

1. Provide safe, accessible, context sensitive travel options for all users and trip purposes.
2. Form a network of streets and intersections that together accommodate all users and allow for efficient and high quality travel experiences.
3. Be adaptable by accommodating the needs of the present and future through the design, effective space allocation and use of appropriate technology.
4. Contribute to the environmental sustainability and resiliency of the city.
5. Be economical and consider the direct and indirect costs, value of the roadway and the adjacent real estate.
6. Be vibrant and attractive people places in all seasons that contribute to an improved quality of life.

Crime Prevention Through Environmental Design

CPTED is a pro-active crime prevention strategy that focuses on an analysis of how the features of the environment and the policies that govern its management and use can constrain criminal activity. CPTED strategies are based on the premise that the proper design and effective use of the built environment can lead to a reduction in the incidence and fear of crime and improve the quality of life. Emphasis is placed on the physical environment, productive use of space, and behaviour of people to create environments that are absent of environmental cues that cause opportunities for crime to occur.

District Energy System

A system that shares energy between multiple buildings or properties to make the best use of the energy available. This is often done by pumping heat between multiple buildings, but can also be done for cooling and electricity as well. These systems work well with cogeneration and tri-generation plants and are often paired together.

Ecological Network

A coherent system of natural and/or semi-natural landscape elements that is configured and managed with the objective of maintaining or restoring ecological functions as a means to conserve biodiversity.

End-of-Trip Facilities

Infrastructure and amenities for bicycles and bicyclists that enable and encourage cycling as a viable mode of transportation, including short- and long-term secure bicycle parking, lockers, showers, and change rooms.

Energy Facilities

Infrastructure used to extract or distribute electricity, oil and gas such as wells, transmission lines and pipelines.

Focal Point

A grouping of facilities and infrastructure within a common geographic location which acts as a destination point for a variety of purposes to serve a neighbourhood or community.

Greenway

Linear corridor for pedestrians and cyclists that connects parks, natural areas, other neighbourhood destinations and destinations outside of the neighbourhood.

Healthy (Neighbourhood) Community

A community that is continuously creating and improving those physical and social environments and expanding those community resources that enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential.

Historic Resources

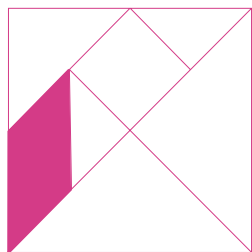
Structures, manmade or natural sites or areas of historical, cultural and/or architectural significance to the history of Edmonton which contribute to the city's unique sense of time and place.

Infrastructure (Municipal)

The physical assets developed and used by a municipality to support its social and economic activities. The City of Edmonton's infrastructure inventory includes such diverse assets as drainage, roads and right-of-way infrastructure, parks and green spaces, buildings, fleet vehicles, LRT and transit facilities, buildings, traffic control infrastructure, recreation facilities, computer networks, affordable housing and library resources.

Life Cycle of the Neighbourhood

See: Neighbourhood Life Cycle.



6. Glossary

Life Cycle Costing

A method of expressing costs in which both capital costs and operations and maintenance costs as considered over the expected service life of an asset.

Livable

See: Livability.

Livability

The environmental and social quality of an area as perceived by residents, employees, customers and visitors. This includes safety and health (traffic safety, personal security, and public health), local environmental conditions (cleanliness, noise, dust, air quality, and water quality), the quality of social interactions (neighbourliness, fairness, respect, community identity and pride), opportunities for recreation and entertainment, aesthetics, and existence of unique cultural and environmental resources (e.g., historic structures, mature trees, traditional architectural styles).

Low Impact Development Best Management Practices

An ecosystem-based approach to managing and treating storm water runoff.

Maintain

See: Maintenance.

Maintenance

The set of activities required to keep a component, system, infrastructure asset or facility functioning as it was originally designed and constructed. Maintenance refers to all actions necessary for retaining an asset as near as possible to its original condition, including repair but excluding renewal (rehabilitation or replacement).

Manage Risk

See: Risk Assessment and Risk Management

Mixed-Use Development

Development that includes a mixture of different land uses such as: residential, commercial, institutional, recreational and public spaces. It generally refers to development where different uses are not only combined on the same site but also within buildings themselves. An example might include residential apartments located above a commercial space located on the lower floors of a building.

Municipal Development Plan (MDP)

A statutory plan which guides the future growth and development of a municipality.

Municipal Services

All manner of services provided by the municipality for residents and visitors including water and drainage, transportation infrastructure development and maintenance (roads, paths, transit, etc.), protective services (fire, police, etc.), waste removal and disposal, snow clearing and cleaning, parks and facilities maintenance, recreational centres, attractions and community amenities, etc.

Native Vegetation

Plant species that are indigenous to Edmonton's natural region.

Natural Areas and Features

An area of land or water that is dominated by native vegetation in naturally occurring patterns. Such areas could include grasslands, forests, wetlands, peatland, or riparian areas. Areas such as groomed parks, sports fields and schoolyards are not natural areas. Natural features may include tree stands, water bodies, geologic formations, peatlands and grasslands that are representative of Edmonton's natural history.

Naturalized Spaces

See: Naturalization.

Naturalization

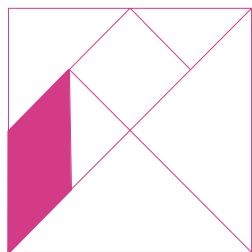
An alternative landscape management technique to conventional high-maintenance landscapes. Natural processes of growth and change are less restricted and areas are allowed to return to a natural state. Naturalization projects utilize native plant materials requiring low or no maintenance.

Naturalized Drainage Ways

Surface stormwater conveyance features that use wetland zones, drop structures and natural materials and vegetation to replace storm sewer mains or prevent erosion of existing drainage ways.

Neighbourhood

A residential area with an appropriate mix of housing types with convenience-type commercial facilities and where appropriate, schools or park facilities.



6. Glossary

Neighbourhood Life Cycle

Neighbourhoods go through population, socio-economic and demographic cycles. The nature of the change over time depends upon the neighbourhood's characteristics and location. In general, neighbourhoods go through four major cycles:

1. New development – the population of the neighbourhood is increasing through the development of vacant lands. New housing generally attracts young families with children.
2. Growth – after the neighbourhood has been fully built out, additional growth occurs as families grow and the number of individuals per dwelling unit increases.
3. Decline – generally, the families who moved into the neighbourhood continue to live in the neighbourhood and the neighbourhood's composition is fairly stable; however there is a general decline in the population as the children in the area mature and move out of the family home and the prevalence of "empty nesters" in smaller households increases.
4. Mature – generally, the population is stable, but net migration may impact whether the population declines, stays the same, or grows. Growth can be encouraged through redevelopment, especially if densities increase.

Operate

See: Operations.

Operations

The set of on-going activities and expenses that allow the use of an asset for its intended function. Operations refer to the use of an asset that consumes resources such as manpower, energy, chemicals and materials.

Operations (Asset)

The set of on-going activities that allow the use of the asset for its intended function.

Operations (Service delivery)

The set of activities and resources required to deliver the service or program related to the use of the infrastructure asset.

Open Space

Areas of land and water that is semi-natural in composition. Such spaces could include active recreation parks, schoolyards, conventional stormwater management facilities and some boulevards.

Pedestrian Friendly

See: Walkable.

Pedestrian Oriented

See: Walkable.

Permeable Pavement

Paving treatments that reduce the effective impervious area of a development. Examples include porous asphalt, porous concrete, permeable unit pavers and open grid pavers.

Public Art

Artwork which is accessible to the general public and has aesthetic qualities. Typically this art takes into consideration site and context.

Public Space

Space on public or private property within an establishment or outside an establishment, which is open to the public.

Renewal (Renew)

Investment in existing infrastructure to restore to its former condition and may extend its service life, which may include replacement of individual components as they age or become obsolete. Capital investment in renewal extends the period of service potential but does not change the replacement value, and so does not increase the size of the infrastructure asset portfolio.

Risk Assessment

The evaluation of the likelihood of undesired events and damage being caused together with the significance of the events.

Risk Management

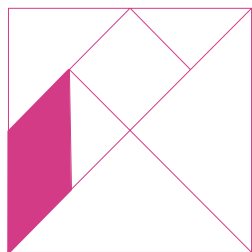
A framework that uses an integrated approach for assessing whether a risk is acceptable. It considers the risk and benefits of the development and requires the agreement of stakeholders on the acceptability of the risk involved.

Services

See: Municipal Services.

Streetscape

All the elements that make up the physical environment of a street and define its character, including: the road, boulevard, sidewalk, building setbacks, height and style. It also includes paving treatments, trees, lighting, pedestrian amenities and street furniture.



6. Glossary

Sustainable

See: Sustainability.

Sustainability

A way of living which meets the needs of the present and does not compromise the ability of future generations to meet their own needs. Urban planning takes an integrated, holistic view of urban environments and defines sustainability in the context of interrelated ecosystems encompassing economic, social, environmental and cultural sustainability. The principle of sustainability also includes financial sustainability, ensuring urban planning recognizes and addresses resource constraints and capacities.

Universally Accessible Design

Design of the built environment in a way that increases the accessibility, safety, mobility and independence for people of all ages and abilities.

Urban Agriculture

The practice of cultivating, processing, and distributing food in and around towns and cities. It involves applying intensive production methods and (re)using natural resources and urban wastes to yield a diversity of crops and livestock. Urban agriculture could be undertaken in backyard gardens, rooftop gardens, community gardens and urban farms.

Urban Growth Area

An area identified for future urban growth.

Utilities

Facilities for gas, electricity, telephone, cable television, water, storm and sanitary sewer.

View Corridor

A three dimensional area extending out from a viewpoint, encompassing one or more scenic resources which may have many environmental, cultural, agricultural, historic, recreational or economic resources and themes of significance to the city or community.

Walkable

A built environment designed to make travel on foot convenient, attractive and comfortable for people of various ages and abilities. Considerations include the directness of the route, safety, amount of street activity, mix of land uses, local destinations, separation of pedestrian and auto circulation, street furniture, surface material, sidewalk width, prevailing wind direction, intersection treatment, curb cuts, ramps and landscaping.

Wayfinding

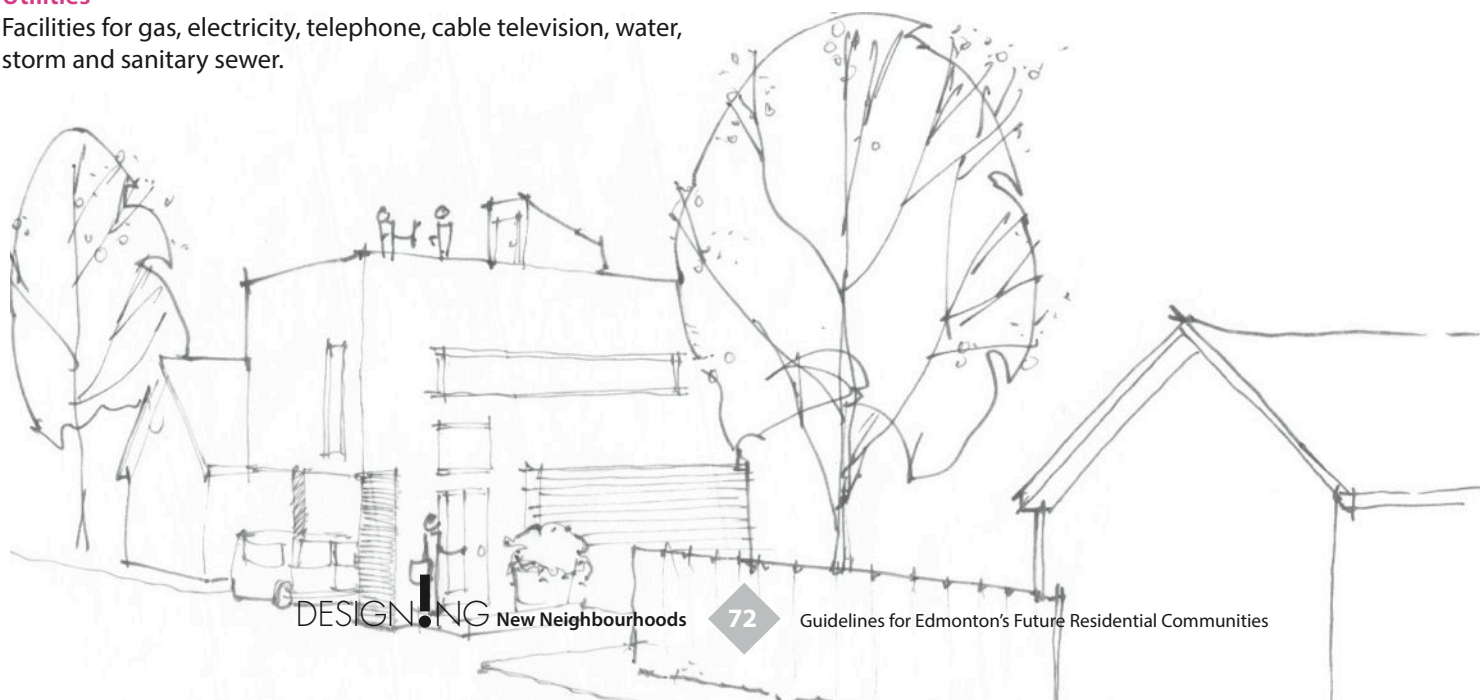
The process of using spatial and environmental information to navigate oneself within the built or natural environment.

Wetland

Land having water at, near or above the surface, or which is saturated with water long enough to promote wetland or aquatic processes, as indicated by poorly drained (hydric) soils, hydrophytic vegetation, and various kinds of biological activity that are adapted to the wet environment.

Winter City

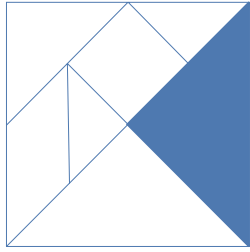
A concept for communities in northern latitudes that encourages them to plan their transportation systems, buildings and recreation projects around the idea of using their infrastructure during all four seasons, rather than just two seasons (summer and autumn).



Acknowledgements



7



7. Acknowledgements

This project was led by the City of Edmonton's Sustainable Development Department and was co-chaired by the Urban Planning & Environment and Current Planning Branches.

The guidelines were developed collaboratively and grounded in a commitment to work together effectively both now and in the future. This document was prepared by a multi-disciplinary public/private Design Team who collectively developed new neighbourhood outcomes, principles, potential design ideas and the implementation recommendations for the plan. The Design Team was comprised of 2 co-chairs and 30 members of Edmonton's Administration, local businesses and key organizations (see below for a full list of members).

Support for the Design Team's work was provided by the City's Project Team with external consulting resources in the areas of facilitation and consultation, communications and design, and scenario development and modeling. Public consultation and stakeholder feedback was sought over the course of the guidelines development process, and incorporated into this document by the Design Team.

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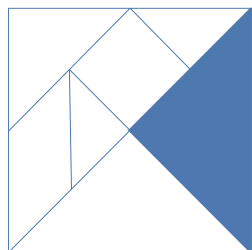
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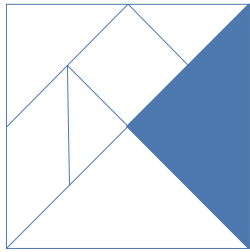




7. Acknowledgements

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7. Acknowledgements

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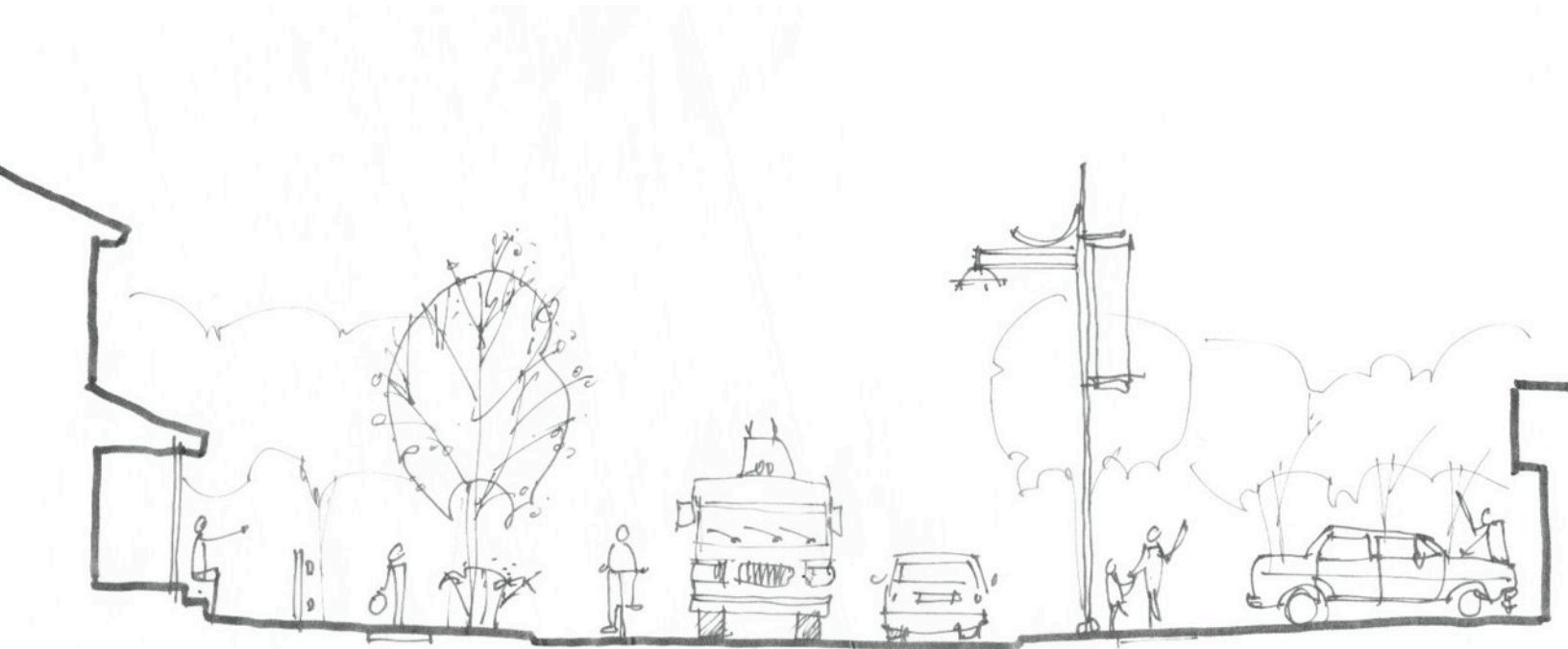
Beth Sanders POPULUS Community Planning Inc. (Facilitation Support)

EIDOS Consultants with PICEA Landscape Architecture Inc. and Bob Robertson – Visual Communication Design + Consulting (Design Support)

O2 Planning & Design with UrbsWorks (Scenario Development and Modeling)

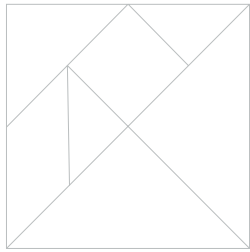
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Appendix A – Principles by Planning Category





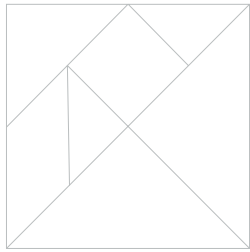
Appendix A – Principles by Planning Category

All principles generally fall into six broad categories. These include transportation, land use, urban design, parks and amenities, ecology and environment, and infrastructure and servicing. Some principles fall into more than one of these categories. They are grouped into these categories below for easy reference.



Transportation

- 1.1** Create neighbourhoods that are easy to move within and navigate using all modes of transportation.
- 1.2** Provide efficient multi-modal transportation linkages between residential development and destinations within and outside the neighbourhood.
- 1.3** Connect roads, paths and trails with those in adjacent neighbourhoods.
- 4.1** Create a walkable neighbourhood.
- 4.2** Accommodate accessible and effective transit service for the neighbourhood and beyond.
- 4.3** Provide for cycling opportunities within the neighbourhood with connections to existing and future networks.
- 4.4** Apply *Complete Streets Principles* within the neighbourhood.
- 5.1** Coordinate the location of commercial and employment areas, parks, natural areas and civic facilities to provide convenient access for residents by multiple modes of transportation.
- 5.3** Locate school sites to facilitate pedestrian bus and vehicular access for neighbourhood residents and/or residents of adjacent neighbourhoods.
- 10.2** Plan for emergency and protective services.
- 11.1** Provide opportunities to address changes in land use, infrastructure, demographics, market conditions, emerging technologies and the climate over time.
- 11.2** Pursue innovative approaches and embrace the best available standards for community and infrastructure design.

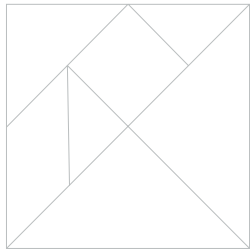


Appendix A – Principles by Planning Category



Land Use

- 3.1** Provide for a wide variety and choice of housing within the neighbourhood.
- 3.2** Provide for affordable housing opportunities.
- 3.3** Plan for a mix of land uses and amenities within walking distance of neighbourhood residents.
- 4.1** Create a walkable neighbourhood.
- 5.1** Coordinate the location of commercial and employment areas, parks, natural areas and civic facilities to provide convenient access for residents by multiple modes of transportation.
- 5.2** Cluster compatible and complementary services, housing types and amenities to create activity centres or neighbourhood hubs that serve the greatest number of residents and can be supported by consumers within and between neighbourhoods
- 5.3** Locate school sites to facilitate pedestrian, bus and vehicular access for neighbourhood residents and/or residents of adjacent neighbourhoods.
- 7.1** Plan to conserve natural areas and features, landscapes and views within the neighbourhood.
- 7.2** Plan to conserve and enhance ecological networks and connectivity within and between neighbourhoods.
- 7.3** Foster opportunities for habitat and naturalized spaces that encourage urban biodiversity.
- 8.3** Plan for local food production and access opportunities within the neighbourhood.
- 10.3** Plan for the safe coexistence of new development with energy facilities in alignment with municipal, provincial and federal requirements.
- 11.1** Provide opportunities to address changes in land use, infrastructure, demographics, market conditions, emerging technologies and the climate over time.
- 11.2** Pursue innovative approaches and embrace the best available standards for community and infrastructure design.
- 12.1** Explore opportunities to capitalize on the joint use of space and other land use efficiencies without compromising the intended use or maintenance and operations needs of the site.

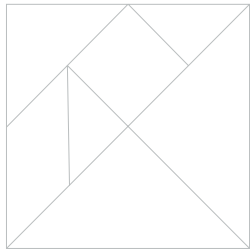


Appendix A – Principles by Planning Category



Urban Design

- 2.1** Provide for and/or build attractive and inviting streets, buildings, parks and open spaces.
- 2.2** Create a special character and connection to place by respecting, and where possible, using the historical, natural and cultural context of an area.
- 2.3** Provide for and/or build infrastructure and amenities that support the unique identity and context of a neighbourhood.
- 3.4** Design neighbourhood infrastructure, parks and civic facilities to accommodate people of all ages and abilities.
- 4.1** Create a walkable neighbourhood.
- 4.4** Apply *Complete Streets Principles* within the neighbourhood.
- 8.2** Plan for community gathering places and neighbourhood focal points.
- 9.1** Plan for weather and all seasonal conditions through street, building and open space design.
- 9.2** Plan for parks and open spaces that can be used and enjoyed year-round.
- 10.1** Design streets, buildings and public and private spaces to promote safety, security, and to mitigate risk.
- 11.1** Provide opportunities to address changes in land use, infrastructure, demographics, market conditions, emerging technologies and the climate over time.
- 11.2** Pursue innovative approaches and embrace the best available standards for community and infrastructure design.



Appendix A – Principles by Planning Category



Parks and Amenities

3.4 Design neighbourhood infrastructure, parks and civic facilities to accommodate people of all ages and abilities.

5.2 Cluster compatible and complementary services, housing types and amenities to create activity centres or neighbourhood hubs that serve the greatest number of residents and can be supported by consumers within and between neighbourhoods

8.1 Plan for flexible, visible, accessible and functional parks and open spaces to meet life cycle needs of residents.

8.2 Plan for community gathering places and neighbourhood focal points.

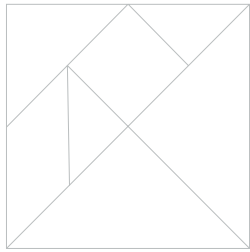
8.3 Plan for local food production and access opportunities within the neighbourhood.

9.1 Plan for weather and all seasonal conditions through street, building and open space design.

11.1 Provide opportunities to address changes in land use, infrastructure, demographics, market conditions, emerging technologies and the climate over time.

11.2 Pursue innovative approaches and embrace the best available standards for community and infrastructure design.

12.1 Explore opportunities to capitalize on the joint use of space and other land use efficiencies without compromising the intended use or maintenance and operations needs of the site.

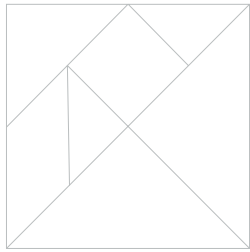


Appendix A – Principles by Planning Category



Ecology and Environment

- 7.1** Plan to conserve natural areas and features, landscapes and views within the neighbourhood.
- 7.2** Plan to conserve and enhance ecological networks and connectivity within and between neighbourhoods.
- 7.3** Foster opportunities for habitat and naturalized spaces that encourage urban biodiversity.
- 8.3** Plan for local food production and access opportunities within the neighbourhood.
- 11.1** Provide opportunities to address changes in land use, infrastructure, demographics, market conditions, emerging technologies and the climate over time.
- 11.2** Pursue innovative approaches and embrace the best available standards for community and infrastructure design.
- 12.2** Minimize energy use and energy requirements of buildings and infrastructure.
- 12.3** Encourage Low Impact Development Best Management Practices to manage stormwater runoff and improve water quality.



Appendix A – Principles by Planning Category



Infrastructure and Servicing

2.3 Provide for and/or build infrastructure and amenities that support the unique identity and context of a neighbourhood.

6.1 Consider the costs and benefits for building all types of neighbourhood infrastructure, including the optimal timing of delivery of infrastructure as the neighbourhood builds out.

6.2 Create neighbourhoods that are affordable for residents and citizens by partnering to deliver amenities effectively and manage risk.

6.3 Plan for infrastructure that is cost efficient to build, operate, maintain and renew over the life cycle of the neighbourhood.

9.3 Ensure that municipal services, including the maintenance and operation of infrastructure, can be effectively provided in all seasons.

10.2 Plan for emergency and protective services.

10.3 Plan for the safe coexistence of new development with energy facilities in alignment with municipal, provincial and federal requirements.

11.1 Provide opportunities to address changes in land use, infrastructure, demographics, market conditions, emerging technologies and the climate over time.

11.2 Pursue innovative approaches and embrace the best available standards for community and infrastructure design.

12.1 Explore opportunities to capitalize on the joint use of space and other land use efficiencies without compromising the intended use or maintenance and operations needs of the site.

12.2 Minimize energy use and energy requirements of buildings and infrastructure.

12.3 Encourage Low Impact Development Best Management Practices to manage stormwater runoff and improve water quality.

