



2009 | The City of Leduc **Neighbourhood Design Guidelines**

A supplement to the City of Leduc Neighbourhood Design Strategy



The City of Leduc is committed to ensuring residents enjoy a high quality of life through the development of well-designed and sustainable neighbourhoods. This means neighbourhoods that have the right mix of housing, good transportation networks, quality park spaces and trail system, and which create a "sense of place" for area residents.

The guidelines contained within this document represent the collective vision of the City of Leduc community, council and administration for new residential areas, and collectively form the design framework by which new residential areas will be developed within the City of Leduc.

1.1 Primary Objectives

Through two community workshops and the involvement of over 30 community members, a general vision of residential neighbourhoods has been established. The basis of this vision is the desire to create "livable" and "vibrant" neighbourhoods that provide a *sense of place*. This vision will be achieved through the implementation of the following primary objectives:

Quality public places: create accessible, meaningful and useful public places that protect the natural environment.

Housing opportunity and choice: provide a variety of housing types, ownership options and interesting architecture to attract a diversity of people to each neighbourhood.

Distinctive and attractive communities: create a sense of place and unique neighbourhood identity through the use of interesting design and attention to the public realm.

Walkable communities: create communities that are well connected and which are designed to encourage walking to daily goods and services.

Safe and integrated transportation network: create a safe and well-connected transportation network for all modes of travel—including future public transit and active transportation.



Leduc (source: City of Leduc)

Edmonton (source: Cory Labrecque) Leduc (source: Jennifer Cardiff) Leduc (source: Jennifer Cardiff

1.2 Purpose

The guidelines found within this document are based on the 2009 City of Leduc Neighbourhood Design Strategy, and represent the City of Leduc's expectations with regard to the development of new residential areas. Collectively, the guidelines represent an overarching vision and design framework intended to ensure residential areas continue to be livable, vibrant and create a sense of place.

Residential developers and home builders are required to implement the guidelines contained within this document, though unique and creative application is encouraged. As will be noted, the guidelines contained within this document are broad in nature, and thus allow for flexibility and creativity in their application.

These guidelines will be the basis upon which area structure plans, area re-development plans, and plans of subdivision are considered by the City of Leduc department of planning and development services.



Leduc reservoir (source: City of Leduc)

1.3 Review and Updating

These guidelines will be updated as needed to reflect changes in development trends, local demographics and the community's vision for the City. At a minimum, these guidelines will be reviewed and updated alongside the Municipal Development Plan review process, which is traditionally undertaken every five years.

1.4 Definitions

To ensure clear communication of ideas and intents, definitions of technical, new, commonly confused and misunderstood terms as they are intended in this report are provided:

Active transportation

The transportation of people and/or goods using human muscle power; usually in the form of walking, running or cycling.

Down-casted Light

Lighting sources on buildings or infrastructure that are directed downwards to street level to prevent unintentional light impacts on neighbouring properties and/or to prevent waste and increase energy efficiency.

Environmental Reserve (ER)

According to the *Municipal Government Act RSA 2000*, land that is under the jurisdiction of the municipality and consists of: (a) a swamp gully, ravine, coulee, or natural drainage course; (b) land that is subject to flooding or is considered unstable; and (c) land abutting a bed and shore of a water body. Environmental reserve land must be left in its natural state or be used as a public park.

Municipal Reserve (MR)

According to the *Municipal Government Act RSA 2000*, land that is provided to the municipality for the purposes of: (a) providing a public park; (b) providing a public recreation area; (c) school authority purposes; and (b) to provide a buffer or transition between differing land uses.

Natural vegetation/planting

Plants, such as trees, scrubs, groundcover and grasses, that are indigenous to the geographic area. Such landscaping material tends to be hardier and require less maintenance than non-indigenous species.

Parks

Designated public areas under the jurisdiction of the municipality, which are set aside for human recreation and enjoyment, and which include: (a) sport fields and recreation areas; (b) landscaped public areas; and (c) dog walking facilities/parks.

Public Art

Permanent or temporary physical works of art that are situated in the public domain, usually outside and accessible to all. Examples include sculptures, murals on building walls, lighting effects, unique street furniture and paving.

Storm Water Management Facilities (SWMF)

Specifically designed areas, typically ponds, intended to retain stormwater runoff for the purposes of controlling the rate of runoff and/or to improve the stormwater quality through natural filtering systems. These include both dry and wet ponds and are considered an urban-service, similar to other infrastructure, within the City of Leduc. According to current City of Leduc policy, 15% of such facilities are required to be provided as public access.

Section 2

The guidelines contained within this section represent the City of Leduc community's, council and administration's vision for new residential areas. Residential developers and home builders are required to implement these guidelines, though unique and creative application is encouraged. The City of Leduc department of planning and development services will use these guidelines as a basis for their review of area structure plans, area redevelopment plans, and plans of subdivision.

2.1 NEIGHBOURHOOD STRUCTURE

2.1.1 Defined edge: residential neighbourhoods should have well-defined edges that are obvious to area residents. Common neighbourhood edges are urban infrastructure (i.e: arterials roads or rail lines) and natural areas (i.e: ravines or major tree stands).

2.1.2 Walkable: neighbourhoods should be compact and typically have a radius of 400 metres, which represents a reasonable walking distance from the centre of the neighbourhood to services and amenities.

2.1.3 Complete neighbourhoods: residential neighbourhoods should include (1) housing; (2) places for gathering, playing and enjoying nature; and (3) daily goods and services that are within easy walking distance of residences

2.1.4 Housing options: residential neighbourhoods should provide
(1) a range of housing types and sizes (ie: single-detached, multiplexes, townhomes and apartments); (2) a variety in housing styles and



Example of a mixed-use, walkable area; note the interesting, human scale architecture, signage and landscaping, and wide walkway. Edmonton (source: Cory Labrecque)



Example of unique street signage to create a neighbourhood theme. Leduc (source: Cory Labrecque)



Example of a decorative entrance feature. Leduc (source: Jennifer Cardiff)

entry-level to executive housing; and (4) both homeownership and rental opportunities.

architecture; (3) the full spectrum of housing affordability, from affordable

2.1.5 Neighbourhood themes: creation of a consistent neighbourhood character or theme is encouraged. For example, similar landscape material, public art, decorative signage and/or street lighting, and other streetscape elements may be used.



Example of community focal point and gathering area; gazebo located in central park area. Edmonton (source: Jennifer Cardiff).

2.1.6 Entrance features: decorative entrance features should be located at main neighbourhood access points, which are typically located at major collector and arterial street intersections. Small scale entrance features are encouraged at secondary neighbourhood access points, which are typically located along major roadways.

2.1.7 Focal points: neighbourhood focal points are encouraged, such as park spaces, urban plazas, mixed-use developments, multiway access features or decorative islands.

2.1.8 Energy-efficient design: street orientation in relation to the sun, the strategic placement of buildings, incorporation of energy efficient technology—such as LED lighting, and lighting (street lights and private signage) designed to reduce light pollution—and the strategic use of landscaping material should be implemented to contribute to the energy efficiency of the community.

2.2 NATURAL FEATURES & ENVIRONMENTAL SENSITIVE DESIGN

2.2.1 Natural areas & wildlife corridors: natural areas, such as ravines and tree stands, and known wildlife corridors shall be protected using appropriate municipal reserve and environmental reserve allocations.



Example of buffer adjacent to a natural area. Edmonton (source: Cory Labrecque)

2.2.2 Protect natural features: a buffer area is encouraged around existing natural features, such as tree stands or ravines, to minimize the impacts of development and to help conserve the feature. Provide public access where appropriate.

2.2.3 Reduce water dependence: efficient use of water through the use of natural drainage, use of permeable surfaces and drought tolerant landscaping, where appropriate, is encouraged.

2.3 LAND USE DISTRIBUTION

2.3.1 Compact building form: increased land efficiency and a reduced urban footprint are encouraged. Housing diversity (multifamily, 2-stories, bungalows, etc) and a range of housing types (ie: entry-level, move-up and executive housing) must be provided within each neighbourhood.

2.3.2 Mixed-use: mixed-use buildings, blocks and/or village centres are encouraged in appropriate locations in all residential neighbourhoods. Consideration should be given to providing good vehicle, pedestrian and future public transit access, high quality urban design features, and appropriate parking in such areas.



Example of higher density development located near open space. Edmonton (source: Cory Labrecque)



Example of retail services located in a residential neighbourhood. Edmonton (source: Cory Labrecque)

2.3.3 Density: higher-density developments should be located in close proximity to future transit routes, neighbourhood entranceways, major roadways, planned commercial and mixed-use areas, and park space.

2.3.4 Walkability: housing should be located within 400 meters or a reasonable walking distance of daily goods and services, such as parks, convenience stores, schools and identified future transit stops. Consideration should be given to providing direct pedestrian routes to destination points. Secure bike parking and storage space should be provided at all retail and service locations.

2.3.5 Noise mitigation: noise mitigation measures, such as berms and noise attenuation fences, are to be implemented when locating residential land uses near major sources of noise. The type and style of such noise mitigation measures chosen should fit with and enhance the neighbourhood theme.

2.4 STREET NETWORK

2.4.1 Connectivity: the residential street pattern should promote pedestrian and vehicle connectivity, allow for long-term flexibility in land use, and aim to reduce road infrastructure. Consideration should be



Example of walkway and street designed for pedestrian safety and enhanced aesthetics. Edmonton (source: Cory Labrecque)

given to traditional, modified or fused grid street designs. Cul-de-sacs and dead-end streets must provide for and enhance pedestrian connectivity throughout the neighbourhood and access to services. Smaller block faces are encouraged, as they allow for better continuity for both pedestrians and vehicles, break up on-street parking, and provide for an interesting streetscape. **2.4.2 Public transit:** potential transit routes and key transit stops must be considered in all neighbourhood plans. Most households should have a potential transit stop located within 400 meters. Consider locating appropriate and supportive land uses along potential transit routes, such as mixed-use and higher density developments. To minimize the impact on residents, potential bus stops should be located adjacent to parks, open spaces or commercial sites. If necessary, potential bus stops may be located along the flanking side of a corner lot.

2.4.3 Design focused: street alignments should reinforce focal points and distinctive neighbourhood features. Decorative islands can be both a neighbourhood focal point, as well as provide for the efficient and safe movement of traffic.



Example of a dedicated bike lane. Edmonton (source: Cory Labrecque)

2.4.4 Integrated: road infrastructure should be integrated with the multiway to create a fully-connected transportation system that allows for diversity in transportation options and provides interesting and multiple routes options for pedestrians and cyclists. Consider dedicated bicycle lanes along primary collector roads.

2.4.5 Traffic control: consideration must be given to the safe integration of pedestrians, cyclists and vehicles in the



Example of special pavement treatments to designate pedestrian crossings. Edmonton (source: Jennifer Cardiff)

design of a residential street network. Consider the appropriate location of crosswalks, four-way stops and other traffic control mechanisms.



Example of an attractive tree lined pedestrianfriendly streetscape. Edmonton (source: Jennifer Cardiff)



Example of an innovative on-street parking solution. Edmonton (source: Cory Labrecque)



Example of a wide pedestrian friendly walkway. Edmonton (source: Cory Labrecque)

2.4.6 Safety: traffic calming should be provided at major pedestrian intersections and crossings. Consider curb extensions, decorative islands or special pavement treatments. Traffic-calming technique should be consistent through the neighbourhood to promote driver familiarity.

2.5 STREETSCAPE

2.5.1 Attractive streets: create an attractive streetscape through urban design. Consider landscaped boulevards and decorative fencing.Enhanced landscape boulevard treatments and the use of hardy, large canopy trees are encouraged along primary collector roads.

2.5.2 On-street parking: the appearance of on-street parking should be addressed. Consider integrating parking spaces in landscaped cul-de-sac islands, using landscaped curb extensions and/or shorter blocks to break up on-street parking. Snow storage must be considered in any streetscape design.

2.5.3 Walkability: sidewalks should be provided along all street frontages and be free of obstructions such as light standards, fire hydrants and trees.

2.5.4 Pedestrian-friendly streets: create pedestrian-friendly streets through attractive building façades, interesting and varied landscaping, appealing human-scale architecture, and interesting streetscape elements.

2.5.5 Residential streetscapes: reinforce residential streetscapes by locating buildings close to the street, particularly at main neighbourhood entrances. Comprehensively planned townhouse developments should include front-facing units along the public street and institutional and commercial uses should be located close to the street, with parking provided in the rear.

Example of on-street parking incorporated in a central island. Leduc (source: Jennifer Cardiff)

2.6 PARKS, PUBLIC SPACES & MULTIWAY

2.6.1 Integrated: an interconnected open-space system should be implemented, which integrates the multiway, parks and natural areas within neighbourhoods and adjacent to neighbourhoods.

2.6.2 Year-round use: design main pedestrian routes for year-round use. Consider appropriate plantings and pathway locations that provide windbreaks and allow for winter sun exposure.

2.6.3 Native and/or low maintenance plantings: the use of native and/or low maintenance vegetation, and landscape design is encouraged. Consider clustering plantings or placing plantings in beds to allow for the efficient maintenance of vegetation and the surrounding grassed areas.

2.6.4 Public art: the incorporation of public art in parks and public spaces is encouraged.



Example of a pathway through a naturalized area. Leduc (source: Jennifer Cardiff)



Example of public art. Leduc (source: Jennifer Cardiff)



Example of a highly visible and safe pathway trail head. Leduc (source: Jennifer Cardiff)



Example of a gathering place/focal point and great public access. Edmonton (source: Cory Labrecque)

2.6.5 Timely development: multiway and parks are to be installed early in the development process and alongside residential development to ensure residents of a developing neighbourhood have access to park space and the multiway.

2.6.6 Accessible parks: parks and other public places are to be highly visible and easily and safely accessible by pedestrians and cyclists.
Vehicle access and parking should be considered for community parks and larger neighbourhood parks and public areas. Most homes should be located within 400 meters of a park or open space.

2.6.7 Accessible multiway: multiway access points are to be highly visible and easily and safely accessible by pedestrians and cyclists. Consideration should be given to increased pathway widths, higher quality landscape features, and/or decorative paving patterns at trail heads and access points.

2.6.8 Diversity: a diversity of public places is encouraged in each neighbourhood, which may include squares, plazas, multiway, passive parks, active parks and natural areas.

2.6.9 Gathering places: main gathering spaces should be specifically designed and provided in each neighbourhood. Such areas should be highly visibility, provide good accessibility, be aesthetically pleasing and be the main focal points of the neighbourhood. Consideration should be given to seating, shade, windbreaks and play structures. School sites are encouraged to be the main gathering places of neighbourhoods and be integrated with other public spaces, such as parks, to increase their size and prominence.

2.6.10 SWMF: Storm Water Management Facilities (SWMF) should be designed as usable, attractive and prominent public spaces within neighbourhoods. It is encouraged that such places be integrated with parks to increase their size and functionality. Consideration should be given to creating the SWMF as a neighbourhood focal point, providing appropriate park infrastructure, integrating with the multiway system and providing opportunities for parking.

2.6.11 Public access: public access to open space features of a neighbourhood—such as natural areas, parks and SWMFs—must be provided. When homes back onto such areas, consider providing multiway or clearly designated public park space around the feature. Such public accesses must be clearly indicated on all marketing material for the subdivision to ensure lot purchasers are aware of public accessible areas.

2.6.12 Playgrounds: to increase visibility, accessibility and safety, playground structures are to be located with clear visibility to public streets.

2.6.13 Plazas and squares: plazas or squares are encouraged adjacent to or within neighbourhood mixed use centres and higher density developments. Consideration should be given to including decorative street furniture, a combination of interesting landscaping features, signage and decorative lighting.

Example of a Storm Water Management Facility designed as a usable park space and focal point. Edmonton (source: Cory Labrecque)



Example of a pathway located in a public park behind homes. Leduc (source: Cory Labrecque)



Example of a public plaza and gathering area. Edmonton (source: Cory Labrecque)

2.7 SITING, SIZING & BUILDING DESIGN



Example of a varying housing types, styles and rooflines. Edmonton (source: Cory Labrecque)



Example of individualized row housing. Edmonton (source: Cory Labrecque)



Example of a front-attached garage integrated into the façade of the single-detached home. Edmonton (source: Jennifer Cardiff)

2.7.1 Lot diversity: a mixture of different lot sizes and dimensions that will accommodate a variety of dwelling types is encouraged. Continuous rows of small frontage lots are strongly discouraged.

2.7.2 Housing Style: a variety in housing style and design is encouraged. Consider providing a variation in rooflines, window placement, materials, colour and porches. Significant and abrupt changes in building height are, however, discouraged. Repetition of a similar housing designed is also discouraged. A minimum of three dwellings between the same housing style is suggested.

2.7.3 Transitioning: appropriate transitioning between high, medium and low density housing is required to provide for a logical neighbourhood form and structure.

2.7.4 Multifamily individuality: emphasizing individual units of townhouses and multi-plex buildings in a way that contributes to the overall character of the neighbourhood is encouraged. Consider off-setting alternating units, using varying exterior fixtures or defining different roof forms.

2.7.5 Views and vistas: views and vistas from private dwellings to prominent site features—such as natural areas, parks or focal points—are encouraged.

2.7.6 Porches: front porches, low-profile courtyards (patios) and verandas are encouraged.

2.7.7 Garages: front-attached garages should not dominate the front façade of dwellings. Consider off-setting individual doors on homes with double or triple car garages or aligning or recessing the garage with the front façade of the home.



Example of residential scale retail uses. Edmonton (source: Cory Labrecque)

2.7.8 Energy efficiencies: incorporation of energy-efficient technologies and building design is encouraged. Consider high-efficiency building materials (insulation and windows) and appliances, as well as positioning the building and using appropriate landscaping to take advantage of passive solar opportunities. Technologies that are visible and may impact the buildings appearance, such as solar panels, must be appropriately incorporated into the overall house design.

2.7.9 Integrating non-residential uses: the façade of non-residential and mixed-use buildings should be designed to blend with the surrounding residential neighbourhood. Consider the building architecture, colour, materials and landscaping. Building signage should be compatible with the surrounding neighbourhood and respect the building form and architectural features. Down-casted lighting is encouraged to limit potential impacts to surrounding properties.



For more information or clarification on the guidelines contained within this document, please contact the City of Leduc Department of Planning and Development Services as follows:

The City of Leduc

Department of Planning and Development Services, Long-range Planning Branch

1 Alexandra Park, Leduc Alberta, T9E 4C4

Phone: 780.980.7177 Fax: 780.980.7127

Email: planning@leduc.ca Web: www.leduc.ca

