KENTWOOD WEST NEIGHBOURHOOD AREA STRUCTURE PLAN



July 1998 (Bylaw 3217/98) Adopted July 13, 1998 Amended September 2000 Amended June 2003 Amended April 30, 2018 (Bylaw 3217/B-2018) Amended March 1, 2021 (Bylaw 3217/B-2021)

Prepared by:

Parkland Community Planning Services & City of Red Deer Engineering Services

KENTWOOD WEST NEIGHBOURHOOD AREA STRUCTURE PLAN

1.0	INTR	DDUCTION	1		
	1.1	Purpose	1		
	1.2	BACKGROUND	1		
	1.3	DEFINITION OF PLAN AREA	2		
<u>2.0</u>	SITE	CONTEXT AND DEVELOPMENT CONSIDERATIONS	2		
	2.1	NATURAL FEATURES	2		
	2.2	EXISTING LAND USES	3		
	2.3	EXISTING TRANSPORTATION NETWORK AND ACCESS	4		
	2.4	ENVIRONMENTAL CONSIDERATIONS	4		
	2.5	SERVICING	4		
<u>3.0</u>		LOPMENT OBJECTIVES	4		
	3.1	DEVELOPMENT OBJECTIVES	4		
	3.2	DEVELOPMENT PRINCIPLES	5 7		
	3.3	DEVELOPMENT CONCEPT			
		3.3.1 NEIGHBOURHOOD STRUCTURE	7		
		I) RESIDENTIAL LOW DENSITY DISTRICT (R1)	7		
		II) TWO STOREY RESIDENCES WITH WALKOUT BASEMENTS	7		
		III) RESIDENTIAL NARROW LOT	7		
		IV) RESIDENTIAL R1A (SEMI-DETACHED DWELLING)	8		
		V) RESIDENTIAL (MEDIUM DENSITY) DISTRICT	8		
		3.3.2. DENSITY	8		
		3.3.3 COMMERCIAL (NEIGHBOURHOOD CONVENIENCE) DISTRICT	9		
		3.3.4 OPEN SPACE AND PARKS	9		
		3.3.5 SOCIAL FACILITIES	10		
		3.3.6 TRANSPORTATION	10		
		3.3.7 MUNICIPAL RESERVE	11		
		3.3.8 NEIGHBOURHOOD PARK AND TREED RESERVE PLANS	12		
4.0	MUNICIPAL SERVICING		12		
	4.1	STORM SEWER SYSTEM	12		
	4.2	SANITARY SEWER SYSTEM	12		
	4.3	WATER DISTRIBUTION SYSTEM	13		
	4.4	SHALLOW UTILITIES	13		
<u>5.0</u>	STAG	ING OF DEVELOPMENT	13		
APP	APPENDICES 1				

Appendix A: Kentwood Natural Area – Ecological Profile

Appendix B: Kentwood natural Area – native treed area and wetland

Appendix C: Neighbourhood School and Park Site Map

List of Figures

- Figure 1: Location Map
- Figure 2: Existing Features

Figure 3: Development Concept

Figure 4: Major Drainage

Figure 5: Storm Sewers

Figure 6: Sanitary Sewers

Figure 7: Watermains

Figure 8: Staging

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Neighbourhood Area Structure Plan is to specify the land use development objectives for the western portion of the Kentwood neighbourhood in the City of Red Deer. This neighbourhood consists of a 55.6 hectare (137.3 acre) site located in the Northwest quadrant of the City at the intersection of Taylor Drive and 77th Street. The Kentwood neighbourhood sits next to existing residential development on the eastern and southern sides, industrial development to the north, and vacant lands to the west.

The site falls within and is subject to the Northwest Major Area Structure Plan (ASP). The Neighbourhood Area Structure Plan presented here is intended to augment the Major Area Structure Plan by identifying the size, location, and type of land uses found in the Kentwood West area as well as the density of these uses. Moreover, the Neighbourhood Area Structure Plan discusses the natural and cultural features of the site and possible environmental hazards. The Neighbourhood Area Structure Plan submits concepts for transportation design and the development of public and social facilities. The Plan also notes the proposed staging of development and servicing specification for the area.

1.2 Background

In 1998, an updated Northwest Major Area Structure Plan was adopted by Council. This plan incorporates and implements the City's new *Ecospace Management Plan*. The updated Major ASP also responds to recent roadway, park, and land use changes, which have occurred within the Northwest Area Plan boundaries. Prior to these most recent amendments, the plan underwent two other revisions in the years since its initial development. In 1980-81 the current Northwest Major ASP started as two separate plans, the Section 19 Area Structure Plan and the original Northwest Area Structure Plan. In 1989 these two plans were consolidated under the revised Northwest Area Structure Plan. In 1992 the plan was again updated in response to new growth, changes in school location, and railway relocation. The current Northwest Major Area Structure Plan allows for diversified residential development between a density of 12.35 units per hectare and 17.3 units per gross hectare. Other land uses highlighted in the plan include commercial, industrial, public service (school), park, trail, natural reserve, transportation, and service facility uses. The Northwest Major Area Structure Plan is implemented by way of Neighbourhood Area

Structure Plans for specific neighbourhoods including, this, the Kentwood West Neighbourhood Area Structure Plan.

1.3 Definition of Plan Area

The Kentwood Neighbourhood Area Structure Plan area is situated in the Northwest section of Red Deer. It refers to the western portion of Section 32, Township 38, Range 27, west of the 4th Meridian. The area covered by this plan is approximately 55.6 hectares (137.3 acres) in size. It is bounded to the north by the CPR line, to the east in part by the existing Kennedy Drive, to the south by 77th Street, and to the west by Taylor Drive. See Figure 1.

The Neighbourhood Area Structure Plan presented here is consistent with the goals and guidelines of the Northwest Area Structure Plan. Its overall objective is to provide a framework and series of guidelines for neighbourhood land use planning, leading to well organized and sustainable subdivision and land use development.

2.0 SITE CONTEXT AND DEVELOPMENT CONSIDERATIONS

2.1 Natural Features

The lands within the proposed Neighbourhood Area Structure Plan area are generally flat with elevations rising from 878.4 metres to 884 metres across the entire site, as shown in Figure 2. The plan site includes areas that are currently cleared and awaiting development, as well as forested tracts, wetland areas, and some previously developed residential properties.

The City of Red Deer's *Ecological Profile of the Kentwood Natural Area* identifies the Kentwood natural area found in the central portion of the Neighbourhood Area Structure Plan. The natural area is recognized as having five environmentally significant zones, as shown in Appendix A. The ecological profile strongly recommends that all five zones within the area be preserved due to their interconnected functioning. These five zones include:

A. Semi-Permanent Wetland

The semi-permanent wetland area is situated in the eastern portion of the natural area. It is comprised of a wetland, which receives seasonal surface drainage and acts as a link with the

natural area's larger and more westerly wetland. This zone also fosters several shrub and bush varieties.

B. Balsam Forest

The Balsam Forest zone makes up almost three fourths of the Kentwood natural area. It is comprised of balsam trees, shrubs, wildflowers, berry bushes, and at least one spruce tree. Several bird species have been identified within this zone. Recommendations of the *Ecological Profile of the Kentwood Natural Area* encourage a limited gravel path system be built through this area to provide neighbourhood access but, at the same time, to confine significant impacts. *C. West Wetland*

This wetland area is located in the western portion of the natural area. It is made up of a permanent wetland as well as semi-permanent wet to damp areas with seasonal fluctuation. Vegetation in this zone includes willow species, shrubs, and mosses. Recommendations in the *Ecological Profile of the Kentwood Natural Area* cite this wetland as crucial in maintaining balanced ecological functioning and micro-climatic stability within the reserve. The recommendations caution against disturbance to prevent degradation to the overall health of the natural area.

D. Aspen Forest Area

The aspen forest area sits in the northern portion of the Kentwood natural area. It hosts a thriving aspen forest and related shade tolerant species.

E. Fringe Area

Running adjacent to Kennedy Drive on the Northeast side of the natural area, the fringe area is made up of a blend of mixed shrubs, trees, and grasses. Vegetation found in this area is a result of ongoing recovery after successive intrusion by heavy machinery into this portion of the natural area. Several bird species use this zone for nesting and feeding.

A native treed area and wetland are also located in the extreme west portion of the Kentwood West neighbourhood along to 64th Avenue, as presented in Appendix B.

2.2 Existing Land Uses

The subject lands are currently districted as A1 Future Urban Development District. Some portions of the site, that is the southeast corner, have already been developed as residential with some low density dwellings as well as a church previously constructed. Remaining lands are currently vacant. The proposed natural reserve is forested.

2.3 Existing Transportation Network and Access

Existing access to the site is provided by the arterial roads of 77th Street and Taylor Drive and by Kennedy Drive, a collector road.

2.4 Environmental Considerations

A Level 1 Environmental Site Assessment was completed by UMA Engineering Ltd. and submitted to the City of Red Deer on April 30, 1998 under separate cover. The assessment indicated that there is no evidence nearby industrial or related activities have resulted in contamination of Kentwood West. The assessment does state, however, that based on the proximity of industrial uses, there is ongoing potential in the Kentwood area for environmental impact. No spills, control orders, or underground storage tanks are on record with either the City of Red Deer or with Alberta Environmental Protection. As regards Kentwood West, no mitigation activities are required nor recommended by the assessment. Further investigation is encouraged to monitor the impact of nearby industrial activities and to study the migration of contamination in nearby quarter sections.

In 1999, a noise assessment study was completed for the portions of the Kentwood West neighbourhood in closest proximity to the industrial uses in Edgar Industrial Park and adjacent to the rail line. This study is available under separate cover. The recommendations of this study have been thoroughly reviewed by the developer and the City of Red Deer. Implementation measures for noise attenuation have been agreed to.

2.5 Servicing

The site can be fully serviced with water, sewer, and storm water utilities.

3.0 DEVELOPMENT OBJECTIVES

In keeping with City policies, and based on the unique characteristics of the Kentwood West site, a Neighbourhood Area Structure Plan has been prepared for the subject properties. It contains information pertaining to: development objectives, proposed land use, density, open space, transportation, servicing, and development staging.

3.1 Development Objectives

The main objectives of the Neighbourhood Area Structure Plan are:

- to develop a plan consistent with the general goals and intent of the Northwest Major Area Structure Plan,
- to provide a framework for the delivery of a high quality and comprehensively planned residential neighbourhood; a neighbourhood which integrates built land uses, park and open space, a natural reserve, community facilities, and collector and local roadways,
- iii) to protect and synthesize the natural features of the area in a manner which is both environmentally sustainable and developmentally feasible,
- iv) to arrange for plan implementation in an efficient and well staged manner and to set out a plan with the adaptability to respond to changes in market conditions.

The Neighbourhood Area Structure Plan is based largely on the cluster concept, meaning the proposed development groups areas of housing through the use of a curvilinear roadway pattern.

3.2 Development Principles

Building upon these objectives, several development principles guide the designation of the various land uses proposed within the Kentwood West area:

Residential

- Facilitate a diversity of housing types including low and medium density development to meet the needs and preferences of the community and to meet municipal standards.
- ii) Identify proposed residential area zoning and secure ease of implementation and compatibility of lot sizes and housing forms within the Neighbourhood Area Structure Plan and with regard to existing residential development to the east of the subject site.
- iii) Set out densities compatible with effective provision of educational, recreational, and municipal service facilities including public transit.
- iv) Encourage development that makes the best use of natural and cultural features in the area including, but not limited to, the treed natural reserve, park space, and recreational trails.

Commercial

 Fulfill local convenience shopping and service needs through the provision of a neighbourhood commercial site, while allowing major shopping and service demands to continue to be met by City centre and City Centre West commercial, regional and district shopping centres, and major arterial commercial districts found in other areas of the City.

Transportation

 Address transportation needs of residents travelling to, from, and throughout the neighbourhood area in a safe, logical, and efficient manner. Consider the hierarchy of modes of transportation to be present in the neighbourhood such as pedestrian, bicycle, public transit, and private vehicle.

Parks and Open Space

- Preserve and harmonize the Kentwood natural area and its unique features into the neighbourhood's park-open space system to meet the demands of both ecological sustainability and resident recreational use.
- ii) Incorporate neighbourhood parks within the Kentwood Neighbourhood Area Structure Plan as well as open space linkages to meet the recreational and leisure demands of area residents. These parks may include playing fields, trails, some hard surface play areas, children's playgrounds, and community shelters.
- Design and designate trail systems through the neighbourhood school and park sites, natural reserve area, and utility easements for use by pedestrians and cyclists. These trails are to meet criteria for safety and ease of movement by all users.

Social Facilities

 Designate sites for a social care and a church facility in suitable locations within the Neighbourhood Area Structure Plan. These sites are to meet the requirements of the *Community Services Master Plan*.

3.3 Development Concept

The development concept for this plan has been prepared to respond to current residential land requirements within the City of Red Deer and at the same time to address anticipated market trends, see Figure 3. In doing so, this plan has also attempted to direct development in such a way as to enhance the natural features of the site, allowing the character of the community to reflect the unique ecosystem amenities located in the area. The Plan has been developed in conformity with the goals and objectives described in Section 3.0 of the Northwest Major Area Structure Plan.

3.3.1 Neighbourhood Structure

The Kentwood West Neighbourhood Area Structure Plan prescribes a strategically designed neighbourhood, which promotes a mix of housing options and opportunities. The bulk of land within the Neighbourhood Area Structure Plan is designated for residential development. This development combines a blend of low and medium density dwelling units including single family, semi-detached, and multiple family. The proposed zoning in the eastern section of the plan area has been designated in a similar manner as that of the previously constructed, abutting neighbourhood. This designation is made to ensure continuity of character and a smooth transition to the newer housing developments.

i) Residential Low Density District (R1)

Low density single detached housing, under the R1 designation has been generally located through out the neighbourhood in an effort to allow for free access to neighbourhood parks, the natural reserve, recreational trails, commercial development, the school site, and the variety of other amenities found in the neighbourhood.

ii) Two Storey Residences with Walkout Basements

A portion of the R1 area, which borders on the natural treed reserve, has been proposed to allow two storey residences with walkout basements.

iii) Residential Narrow Lot

Residential single family narrow lot homes will be located on approximately seven lots near the Kent Street / Kendrew Drive intersection. As shown on Figure 3, the alternate use of the social

care site, should it not be developed for social care or day care use, will be residential narrow lot development.

iv) Residential R1A (Semi-Detached Dwelling)

The R1A semi-detached dwellings are to be located within the Neighbourhood Area Structure Plan area in small clusters. In particular, semi-detached housing is provided in the southwestern corner of the neighbourhood, adjacent to 77th Street and Taylor Drive.

v) Residential (Medium Density) District

In the Neighbourhood Area Structure Plan, a 5.75 hectare (14.2 acre) block of medium density residential is suggested for the northwest corner of the neighbourhood. The existing Taylor Drive and the proposed collector provide traffic access. This medium density housing block is situated within close proximity to the local commercial site and the social care site. It is also adjacent to both the school/neighbourhood park and to the bicycle-pedestrian trails system traversing the neighbourhood. This site may accommodate a mix of medium density housing units including a condominium development or a blend of townhouses or other style medium density dwellings.

A second block of potential multiple family housing has been proposed in the south end of the Kentwood West Neighbourhood Area Structure Plan along 77th Street, a collector roadway. It is currently proposed as an alternate land use should a church not be constructed on this property.

3.3.2. Density

Due to the preservation of the major stand of trees within the Kentwood West area, the residential density of this Neighbourhood Area Structure Plan will be low in comparison with other parts of the City. The Neighbourhood Area Structure Plan can accommodate approximately 135 to 165 multi-attached units, approximately 50 semi-detached units, approximately 10 single detached residential narrow lots, and approximately 300 single-family lots. Calculating the above units with the Bylaw standard of 3.4 persons/unit for single detached, 3.3 persons/unit for semi-detached unit, and 3.0 persons/multi-attached unit, the total expected population would be approximately 1567 persons or 28 persons per hectare. This density is well within the design density of 45 persons per hectare. The alternative use of the church site as

multi-family units is included within this calculation, in the event that a church is not developed. However, should the site be developed as a church the overall density of the neighbourhood will be reduced.

3.3.3 Commercial (Neighbourhood Convenience) District

A 0.24 hectare (0.59 acre) commercially zoned site is proposed within the Neighbourhood Area Structure Plan. Referred to as neighbourhood convenience, this site is expected to serve local residents in the Kentwood West neighbourhood. Permitted uses on this site may include merchandise sales, rental sales, or services as defined in the City's by-law, and intended for sale/trade to the residents of the local neighbourhood only. Under the C3 Commercial District guidelines, and based on the actual site, a maximum of approximately 800 square metres (8,611.4 square feet) of gross leaseable floor space can be accommodated in this location.

Note: Any reference to a specific school authority in this plan is only an indication of a school authority's site preference. The allocation of identified school sites will be determined by the Joint Use Committee. (Bylaw 3217/B-2021)

3.3.4 Open Space and Parks

The proposed park and open space system includes a neighbourhood park/school site, a large treed natural area, neighbourhood parkettes, and linear open space areas.

i) Neighbourhood Park/School Site

Amendment April 30, 2018 (3217/B-2018)

A 4.19 hectare (10.35 acre) neighbourhood park combined with the area's school site is proposed in the northeast segment of the Neighbourhood Area Structure Plan area. This site will join with the treed reserve to the south through a trail system effectively creating a large linked central green space. The site makes use of the 0.35 hectare (0.86 acre) public utility lot located in this area. The school site is designated as a Francophone School, to accommodate students in kindergarten to grade 9. In order to effectively design the school and related parking facilities, and to best serve the needs of the neighbourhood, the recreational amenities planned as part of the overall school/park site design may require minor re-alignments as development progresses.

ii) Natural Treed Reserve

Considered an exceptional feature within this neighbourhood, the approximately 6.9 hectare (17.11 acre) treed reserve is positioned in what will be the core of the Kentwood West community. Contiguous to Kennedy Drive, this reserve is comprised of permanent and semi-permanent wetlands, balsam forest, aspen forest, and mixed shrubs and grass areas. It is home to several species of flora and fauna. The northern portion of this reserve is to be left in a natural

state. Shale pathways may be added to the reserve to make the site available to local residents for passive recreational use and to link the reserve with the school site. The wetland in the north east area of the treed reserve will function as a minor unconstructed detention pond facility.

iii) Neighbourhood Parkettes

Neighbourhood parkette area is also located in Kentwood West. Parkettes are intended to provide green tract/recreational space to residents. In Kentwood West the parkettes will incorporate natural features in their overall design, including the mature tract of trees preserved in the neighbourhood's southwest parkette.

iv) Linear Open Space

A 2.15 hectare (5.31 acre) east-west linear open space berm provides buffering between the residential housing proposed within this plan and existing industrial developments located to the north of the Kentwood West neighbourhood. This open space berm will be a low maintenance area, to be planted with native grasses, trees, and shrubbery. It will not be maintained to the same standard as the City's typical neighbourhood parks or school/park sites. Because of the noise and safety concerns relating to the proximity of these industrial uses particularly to the proposed residential and school site development abutting these lands, noise abatement studies have been undertaken and implementation of recommended mitigation techniques is underway.

3.3.5 Social Facilities

With regard to social facilities proposed for this Neighbourhood Area Structure Plan area, a 0.157 hectare (0.39 acre) social care site is designated in the north central portion of the neighbourhood. The site is situated along a main collector roadways for ease of access. A 1.62 hectare (4.0 acre) church site is designated at the intersection of 77th Street and the neighbourhood collector road (Kendrew Drive). The alternate use of this site is multi-family units. A further, a 1.26 hectare (3.12 acre) church site (existing) is located at the corner of Kennedy Drive and 77th Street. Both sites provide convenient access to the church building via a main arterial road and limits the amount of additional traffic travelling through the neighbourhood.

3.3.6 Transportation

A hierarchical system of roads is proposed for the Kentwood West Neighbourhood Area Structure Plan area to provide safe, convenient, and reliable access for residents as well as others travelling within the neighbourhood.

i) Arterial Roadways

The Neighbourhood Area Structure Plan area is bound on two sides by existing arterial roadways, namely Taylor Drive and 77th Street.

ii) Collector Roadways

In addition to arterial roadways, the Neighbourhood Area Structure Plan area contains a series of collector roadways; including Kennedy Drive, a proposed, as yet, unnamed roadway in the centre of the plan area, and a collector running eastwards from Taylor Drive and the west side of the school site. The collector road adjacent to the school site will provide a bus drop-off and pick-up lane built to City of Red Deer Transit standards. It is critical that this lane be able to accommodate three buses in order to safely provide transportation and busing services to the area school children.

iii) Local Roadways

The system of local roadways provides access to the individual lots throughout the Kentwood West community.

iv) Laneways

The neighbourhood has been planned with the majority of lots backing onto laneways, the only exceptions being those lots with rear yards adjoining park/open space.

v) Bicycle and Pedestrian Paths

Specific bicycle/pedestrian paths have been identified within Kentwood West, including those which will run along the eastern side of Taylor Drive, the West side of Kennedy Drive, and the south side of Kent Street. This latter trail will be located within the municipal reserve area that will include both Level I and II landscape design. Bicycle-pedestrian pathways are proposed through the school site as well as the treed reserve.

Planning and implementation of the overall trail/pathway system will occur with consideration of the input and opinions of future Kentwood West residents as well as the natural theme of the neighbourhood.

3.3.7 Municipal Reserve

The municipal reserve dedication for this Neighbourhood Area Structure Plan is unique and somewhat complex. The dedication is approximately as follows:

Treed reserve 6.92 ha

Total	13.11 ha
Local parkettes	0.20 ha
Sound berm for railway	2.15 ha
School Site	3.84 ha

The majority of this reserve is being acquired through deferred reserve caveats from the Industrial Park to the west; this means that additional reserve will be added to this neighbourhood over and above the normal 10% dedication required through the Municipal Government Act.

3.3.8 Neighbourhood Park and Treed Reserve Plans

The Neighbourhood Park and Treed Reserve are expected to provide several amenities to area residents, including various playing fields, playgrounds, a multi-use pad, a hockey rink, sliding hills, and shelters. These features are depicted in Appendix C.

4.0 MUNICIPAL SERVICING

The proposed municipal servicing design reflects the natural features of the Kentwood West area and responds to the need for effective and efficient service delivery.

4.1 Storm Sewer System

Based on the size of the proposed development and on the topography of the area, three storm water detention ponds will be required to service the neighbourhood. The first of the three ponds is located in the northern portion of the Neighbourhood Area Structure Plan area in the utility lot adjacent to the neighbourhood school site. This pond is being designed with an option to expand into the park/school sports field site should additional capacity be required. The second pond is located in the southwestern area of the plan next to Taylor Drive. The third, a minor unconstructed detention pond facility, will make use of the current wetland area found in the north east area of the natural treed reserve. The exact volume of the storm water detention ponds will be determined during actual construction phases. Major Drainage is depicted in Figure 4 and Storm Sewers are illustrated in Figure 5.

4.2 Sanitary Sewer System

The sanitary sewer system that is required to service the Kentwood West area is a direct extension of the existing main sanitary sewer system trunks running along the existing Kennedy

Drive and 77th Street at the intersection to Kennedy Drive. Figure 6 illustrates the sanitary service lines and future proposed trunks.

4.3 Water Distribution System

The water distribution system required to service the Kentwood West area is a direct extension of the existing water distribution system trunks running along Kennedy Drive and Taylor Drive, and those currently in place in the utility lots in the north portions of the plan area. Figure 7 illustrates the conceptual design for watermains, existing trunks, and proposed water servicing.

4.4 Shallow Utilities

Shallow utility providers, namely the City's Electric Light and Power Department, the telephone, cable, and natural gas companies, have been contacted regarding servicing to the Kentwood West area.

The developer needs to be aware that an aerial power line exists with in the Stage 6 area and will require relocation in conjunction with the development/sale of this land. Relocation would cost approximately \$35,000 in year 2000 dollars.

There is a lack of adequate telephone servicing for the remaining staging of Kentwood West. An additional temporary cable, at the developer's cost, is required (including removal costs). The developer is to contact Telus to discuss further.

For the other shallow utilities there is adequate capacity to provide servicing in the general area.

5.0 STAGING OF DEVELOPMENT

Figure 8 illustrates the anticipated development staging. The location of utilities dictates the order of inaugural phases, with the portions of the neighbourhood abutting the treed reserve and school site in the first phase. Market conditions may be expected to influence the actual staging of subsequent development.

APPENDICES





















