

Palisades Area Structure Plan

Office Consolidation September 2011

*Prepared by:
Current Planning Branch
Sustainable Development
City of Edmonton*

Bylaw 7464, as amended, was adopted by Council in April 1984. In September 2011, this document was consolidated by virtue of the incorporation of the following bylaws:

- Bylaw 7464* Approved April 24, 1984 (to adopt the Palisades Area Structure Plan)
- Bylaw 9822* Approved June 25, 1991 (to reconfigure Neighbourhood 2, 3, and 4 as a result of the realignment of 163 Avenue and the deletion of 135 Street)
- Bylaw 11518* Approved June 17, 1997 (to combine Neighbourhoods 5 and 6 and reconfigure related land uses)
- Bylaw 11936* Approved January 11, 1999 (to revise the boundary of the Hudson Neighbourhood)
- Bylaw 12000* Approved April 26, 1999 (to reconfigure neighbourhood boundaries due to road network revisions; delete incompatible industrial land designations; and rationalize the location of school and park sites)
- Bylaw 13203* Approved November 6, 2002 (to increase the depth of the remaining commercial site in the southern most portion of the plan area)
- Bylaw 13224* Approved December 5, 2002 (to facilitate a change of land uses within the southeast portion of the plan area from commercial to low rise apartment)
- Bylaw 13351* Approved May 5, 2003 (to designate an institutional area to provide for the development of a religious assembly)
- Bylaw 13579* Approved February 11, 2004 (to designate an institutional area to provide for the development of a religious assembly)
- Bylaw 14286* Approved May 16, 2006 (to amend the land use of two properties in the southeast portion of the Palisades ASP from mixed use business/commercial to residential)
- Bylaw 14685* Approved August 21, 2007 (to amend the land use of a property located in the southwest portion of the Palisades ASP from Business Industrial to Mixed Use Business/Commercial uses)
- Bylaw 14714* Approved September 5, 2007 (to consolidate two stormwater management facilities into one in the southwest portion of the Hudson Neighbourhood)
- Bylaw 14878* Approved July 21, 2008 (to correct The Palisades Area Structure Plan map to accurately show the land use change approved by Council on May 16, 2006)
- Bylaw 14850* Approved January 19, 2009 (to amend the land use of a property south of Cumberland road and west of 127 Street from Business mixed use / commercial uses to residential uses)
- Bylaw 15290* Approved October 28, 2009 (to reconfigure and modify land uses in the Albany neighbourhood to reflect the new Albany Neighbourhood Structure Plan)
- Bylaw 15447* Approved June 7, 2010 (to realign a collector and add three neighbourhood parks to the Carlton neighbourhood)
- Bylaw 15453* Approved June 7, 2010 (to relocate the School and Neighbourhood Park uses, redesignate the former School and Neighbourhood Park sites for Residential uses, eliminate a commercial site, and reconfigure the proposed Stormwater Management Facility in the North portion of the Oxford Neighbourhood)
- Bylaw 15849* Approved August 29, 2011 (to amend the land use of a portion of property located south of Cumberland road and west of 127 Street from Residential uses to Mixed Use Business / Commercial uses)

Editor's Note:

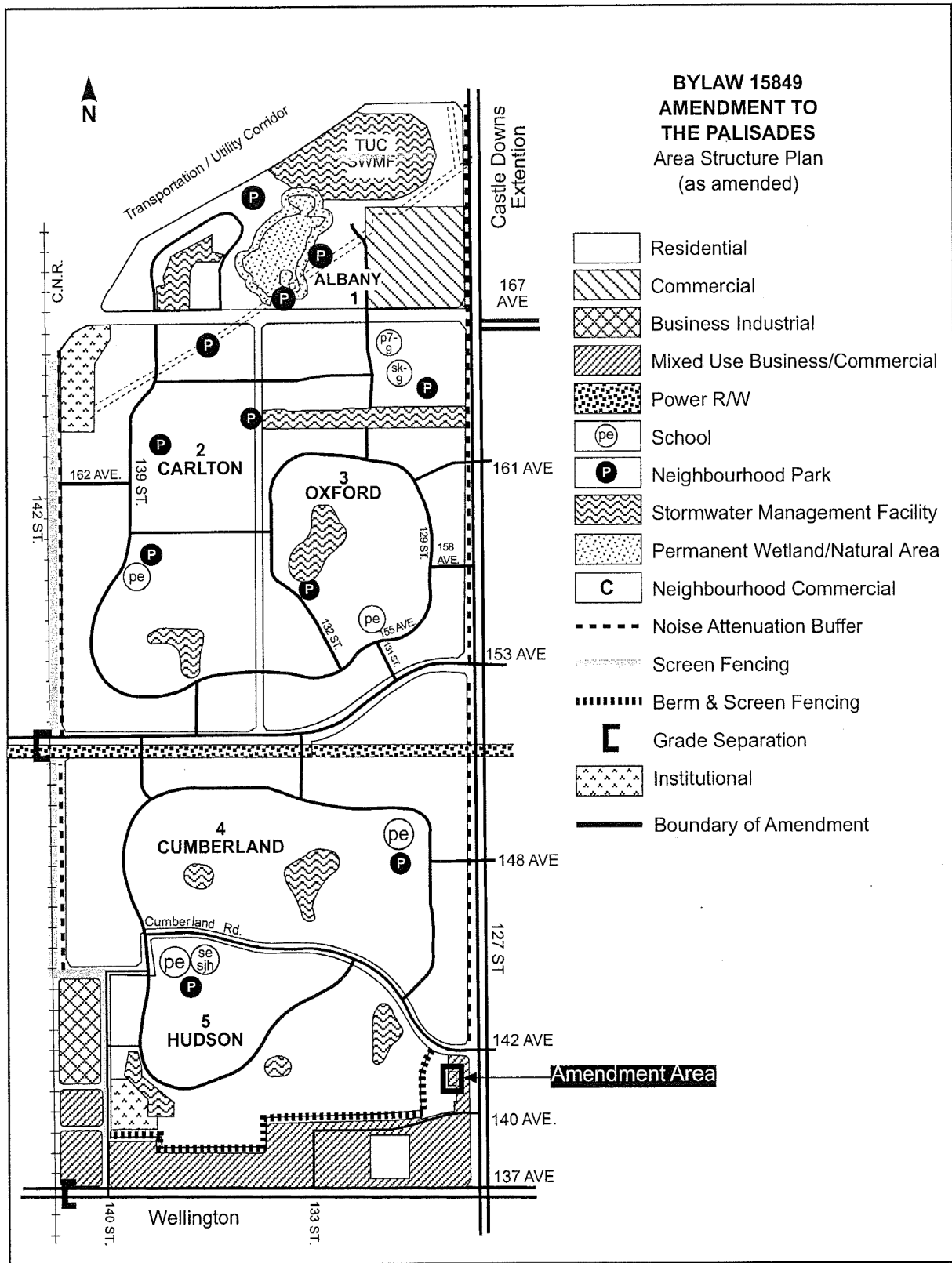
This is an office consolidation edition of the Palisades Area Structure Plan, Bylaw 7464, as approved by City Council on April 24, 1984. This edition contains all amendments and additions to Bylaw 7464.

For the sake of clarity, new maps and a standardized format were utilized in this Plan. All names of City departments have been standardized to reflect their present titles. Private owners' names have been removed in accordance with the Freedom of Information and Protection of Privacy Act. Furthermore, all reasonable attempts were made to accurately reflect the original Bylaws. All text changes are noted in the right margin and are italicized where applicable.

This office consolidation is intended for convenience only. In case of uncertainty, the reader is advised to consult the original Bylaws, available at the office of the City Clerk.

City of Edmonton
Sustainable Development

(Bylaw 15849, Approved August 29, 2011)



**THE PALISADES AREA STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 15849 (Approved August 29, 2011)**

LAND USE	Area (ha)	% of GDA		
Gross Area	590.00			
Natural Area	10.87			
Utility Right of Way (Private Corporation)	6.28			
Pipeline Right of Way (Private Corporation)	4.81			
167 Avenue	3.52			
153 Avenue	6.56			
Gross Developable Area	557.96	100.00	Units	Population
Parks and Schools	48.67	8.72		
Net Developable Area	509.67			
Business Commercial	44.86	8.04		
Business Industrial	5.47	0.98		
Neighbourhood Commercial	4.05	0.73		
Residential*	444.65	79.70	6,641	22,048
Institutional	10.26	1.83		
Total	509.29	100.00		

Density: 41.1 persons per gross developable hectare

*Includes stormwater management facilities, collector and local roads

TABLE OF CONTENTS

(Amended by Editor)

I. INTRODUCTION	1
1. GENERAL	1
2. PURPOSE	1
3. LOCATION	1
4. PLANNING HISTORY AND PLAN AUTHORIZATION	3
II. THE URBAN SETTING AND PLANNING CONTEXT	5
1. GENERAL	5
2. URBAN CONTEXT	5
a. Regional Perspective	5
b. North Edmonton Context	7
3. REGIONAL PLAN — METROPOLITAN PART (PRP — Metro Part)	8
4. THE GENERAL MUNICIPAL PLAN	8
5. LAND USE BYLAW	8
6. CONCLUSION	9
III. EXISTING SITE DEVELOPMENT CONSTRAINTS AND OPPORTUNITIES	10
1. NATURAL FEATURES	10
a. Topography and Drainage	10
b. Soils	10
c. Vegetation and Climate	12
d. <i>Environmentally Sensitive Natural Areas</i>	12
2. BUILT ENVIRONMENT AND LAND OWNERSHIP PATTERN	13
a. Existing Land Use	13
b. Land Ownership	16
c. The Restricted Development Area (R.D.A.)	16
d. Pipelines and Utility Corridors	17
3. TRANSPORTATION	19
a. Roads	19
b. <i>Railway Tracks</i>	19
c. Light Rail Transit (L.R.T.)	20
4. SERVICING CONSTRAINTS	20

a. Water Distribution	20
b. Sanitary Sewage	20
c. Storm Water	20
IV. DEVELOPMENT OBJECTIVES	22
1. GENERAL OBJECTIVES	23
2. RESIDENTIAL	23
3. COMMERCIAL	23
4. INDUSTRIAL/BUSINESS	23
5. TRANSPORTATION	24
6. RECREATIONAL AND OPEN SPACE	24
7. INSTITUTIONAL	24
8. ENGINEERING SERVICES	25
9. NATURAL ENVIRONMENT	25
V. THE DEVELOPMENT CONCEPT	26
1. INTRODUCTION	26
2. THE GENERAL CONCEPT	26
3. RESIDENTIAL	27
4. BUSINESS INDUSTRIAL	30
5. COMMERCIAL LAND USE	31
a. Mixed Use Business Commercial	31
b. Neighbourhood Convenience Centres	32
6. INSTITUTIONAL LAND USE	32
a. Schools	32
b. Other	33
7. PARKS AND OPEN SPACE SYSTEM	33
a. External Recreation Use	33
b. Parks and Open Space System	34
8. THE CIRCULATION SYSTEM	36
a. General	36
b. Vehicular Mode	36
c. Pedestrian Activity Mode	37
9. ENGINEERING SERVICES AND UTILITIES	37

a. Introduction	37
b. Sanitary Drainage System	38
c. Storm Drainage System	38
d. Water Distribution	38
e. Franchise Utilities	40

VI. PLAN IMPLEMENTATION 41

1. Introduction	41
2. Staging	41
3. Plan Approval Process	41

LIST OF FIGURES

1. General Location Map	2
2. Urban Context	6
3. Natural Features & Site Development Constraints	11
4. Aerial Photograph	14
5. Existing Land Use	15
6. Ownership	18
7. Development Concept	28
8. Open Space System	35
9. Servicing Concept	39
10. General Staging Sequence	43

I INTRODUCTION

1. GENERAL

As a result of the annexation by the City of Edmonton on 1982-01-01, large tracts of land, particularly on the fringes of existing development, have the potential for urban development. The recommendation of the Urban Growth Strategy Report to allow Area Structure Plan preparation to commence in early 1982 for certain areas recognized this development potential, and identified the Edmonton Northwest as one such area.

2. PURPOSE

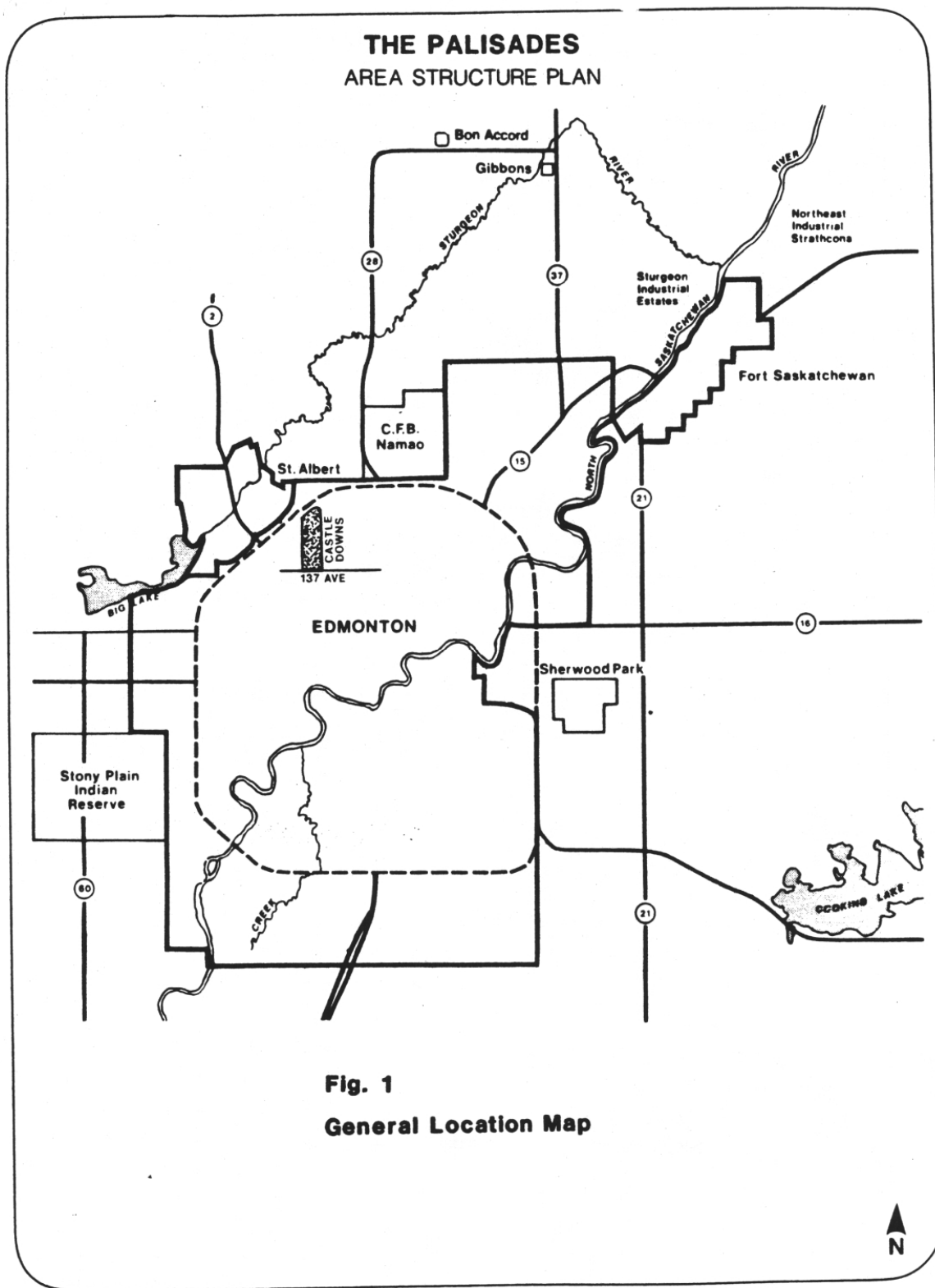
The purpose of this Area Structure Plan is to provide a comprehensive, rational land use plan which will be used to guide the orderly and efficient development of approximately 583 hectares (1440.5 acres) of land within the Northwest sector of the City of Edmonton. Based on an examination of the major factors which have, and will continue to influence development of the Plan area, the proposed land use pattern and concomitant infrastructural linkages and implementation strategy which have evolved, are intended to ensure the Plan's full integration into the urban mosaic of north Edmonton.

3. LOCATION

The Plan area is geographically located west and north of the developed communities of Castle Downs and Wellington, respectively, involving all of Section 25-53-25-W4M, Section 36-53-25-W4M and portion of Section 1-54-25-W4M. More specifically, the Plan area encompasses the lands west of 127 Street, north of 137 Avenue, east of the railway right-of-way and south of the rationalized boundary of the *Edmonton Transportation and Utility Corridor* within the Restricted Development Area (R.D.A.) (see Figure 1).

Amended by Editor

Figure 1: General Location Map (Bylaw 7464, April 24, 1984)



4. PLANNING HISTORY AND PLAN AUTHORIZATION

Prior to the annexation of the Plan Area to the City on 1982-01-01, planning and development activity, which resulted in the existing land use pattern, fell under the jurisdiction of the M.D. of Sturgeon.

Following annexation and the approval by City Council of the Urban Growth Strategy Report Phase I on 1982-02-23, Mackenzie Spencer Associates on 1982-03-17 submitted an Area Structure Plan for the Edmonton Northwest Area, as defined in the Urban Growth Strategy report, for the City's consideration. The initial plan had made provisions for a substantial portion of the Plan area to be developed as industrial uses and included as well, a regional shopping centre as the primary focus for the Edmonton Northwest-Castle Downs community. In response to the submission, two other major landowners submitted alternative proposals which represent major deviations from the Mackenzie Spencer proposal with respect to commercial land uses.

While these submissions were being evaluated by the City and other affected agencies, property owners east of 127 Street requested a formal separation from the Edmonton Northwest planning area and proceeded to have a residential area structure plan (Castle Downs Extension) approved by City Council on 1983-11-15.

On 1982 08 05 the Regional Planning Commission approved a regional amendment for Edmonton Northwest which designated those lands approximately west of the *rail line* from Low Density Agricultural to General Industrial and those lands east from Low Density Agricultural to General Urban specifically for residential development.

Amended by Editor

On 1982 11 24, City Council approved Bylaw #6904 incorporating the Northwest Area, among other planning areas into the policy framework of the General Municipal Plan.

As a consequence of Council's deliberation, the Area Structure Plan proposal by Mackenzie Spencer and Associates was rejected and the accompanying bylaw (#7213) was struck from Council's agenda of 1983-04-13. Council, however, directed that a new plan be prepared by the Planning Department eliminating the regional town centre and providing for business industrial uses east along the *rail* tracks and along major arterial roadways, including truck routes.

Amended by Editor

On 1983-12-13, City Council further directed that separate Area Structure Plans be

prepared for the residential and industrial sector of the Northwest Area having as their common boundary, the *railway* tracks. In addition to the above, Council stated that the plan east of the *railway* tracks must incorporate business industrial uses along the *rail line* in Neighbourhood 5, business commercial usage along 137 Avenue and neighbourhood commercial uses distributed appropriately throughout the plan area.

Amended by Editor

Given the above mandate and directives, this Area Structure Plan is prepared in accordance with the Revised Area Structure Plan Terms of Reference, and conforms with the policies set out in the General Municipal Plan.

As a prerequisite to developing an understanding of the basis of the plan, Chapter II reviews the planning context for the Plan Area including its regional/urban context in which the plan is structured. Chapter III examines the major site development constraints and influences, including the natural and built environment and land ownership pattern. Chapter IV outlines the development objectives and underlying principles which will serve to guide the various components of the Plan to attain a high quality urban mixed use development. Chapter V describes the development concept which has evolved; examining its various elements in terms of clarifying the planning principles employed and formulating the plan in context with the required utility and transportation linkages of the urban system. The final Chapter contains an implementation strategy for the Plan, including the staging of development. A statistical summary identifying the breakdown of land uses, population, reserve allocation, etc. is also provided.

On 1984-02-28 this Area Structure Plan (now officially named "The Palisades") was presented to City Council as Bylaw #7464 and was given First and Second Readings. It was also concurred by Council on 1984-02-28 that the business Commercial Areas in Neighbourhood 7 would be expanded to include areas east along 127 Street to 145 Avenue and west along the *rail line*, among other amendments, as illustrated in amended Figure 7, The Development Proposal.

Amended by Editor

II THE URBAN SETTING AND PLANNING CONTEXT

1. GENERAL

This Chapter seeks to highlight the plan area in its urban setting and review the administrative policy plans which will affect the major elements of the development concept. The intent is to identify those features of the surrounding communities which will serve to successfully integrate the plan area into the urban structure and provide the basis upon which the concept will evolve into development reality.

2. URBAN CONTEXT

a. Regional Perspective

With the Edmonton Utilities and Transportation Corridor (including the proposed outer ring road) forming an effective barrier, the inter urban linkages to St. Albert and other small communities in the Region will only be attained via 142 and 127 Streets and other east-west arterials to St. Albert Trail and 149 Street. The construction of the proposed *Anthony Henday Drive* and the continued use of the *railway* tracks will strengthen this transportation linkage but should not significantly increase the impact on this area.

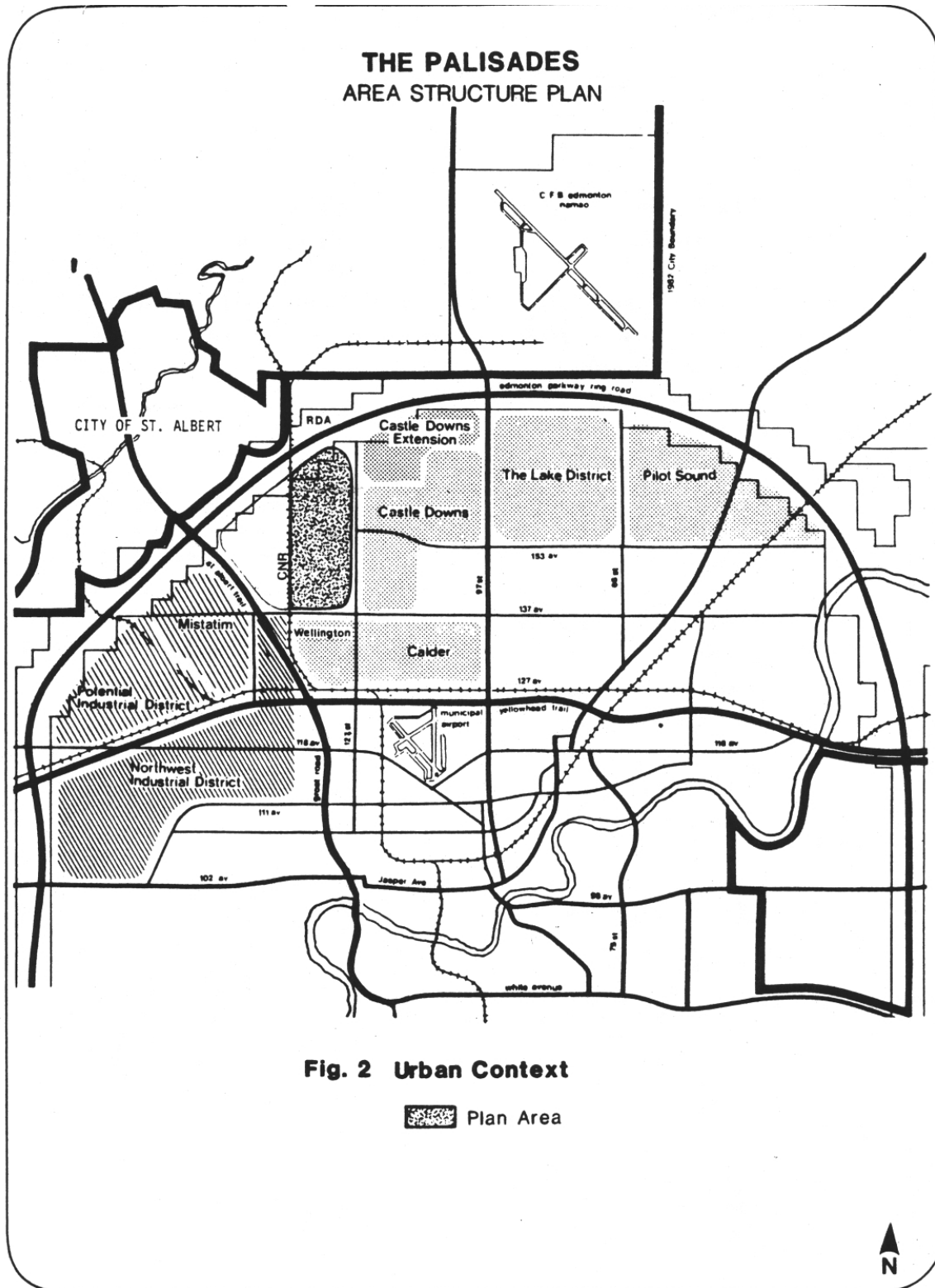
Amended by Editor

The Region will also influence the servicing of the area. Storm and sanitary services may be handled by the regional system now under construction within the R.D.A.

Major regional recreational opportunities exist within several lakes of the Sturgeon River Basin and to a lesser extent, within the R.D.A.

In general, the Plan area will likely be the northern limit of urban expansion for quite some time, thereby providing a stable area for planning.

Figure 2: Urban Context (Bylaw 7464, April 24, 1984)



b. North Edmonton Context

As noted earlier, and illustrated in Figure 2, the Plan Area is located between the existing residential developments of Castle Downs and Castle Downs Extension and Wellington on the east and south, respectively, and the proposed industrial area and the Edmonton Utilities and Transportation Corridor to the west and north, respectively.

The most significant effects on the land use plan will be the adjacent existing and designated uses of the surrounding communities and to a lesser extent, Council's direction of 1983-12-13.

In late 1977, the Castle Downs Outline Plan was amended such that the area (Baranow) originally intended for the proposed Northwest Freeway was designated largely for light industrial uses. The proposed industrial portion extends from the *utilities* right-of-way, south of 153 Avenue to approximately 140 Avenue. Since then, planning and development in Castle Downs have designated or produced commercial development adjacent to the northeast corner of 127 Street and 137 Avenue, the southeast corner of 127 Street and 153 Avenue and residential uses north of 153 Avenue, along 127 Street. In addition, the Castle Downs Town Square, a community shopping centre was constructed in the Beaumaris Neighbourhood at its intersection of 153 Avenue and 113 A Street. The presence of these commercial developments (existing and proposed) will influence the planning for commercial and related facilities in the Plan area. The transportation linkages afforded by 137 and 153 Avenues and the creation of other collector roads will provide the inter community link with Castle Downs and enable the future residents within the Plan area to benefit from major commercial, social and recreational opportunities.

Amended by Editor

North of 167 Avenue, the area which was formerly part of the original Northwest Area was approved by City Council on 1983-11-15 for residential development. However, with no roadway access onto 127 Street except at 167 Avenue for the Castle Downs Extension Area, the influence on the Plan area appears minimal.

The established residential neighbourhood of Wellington south of 137 Avenue

will also have minimal impact on the land use of the Plan area, particularly in view of Council's directive to provide business industrial uses on 137 Avenue.

The significance of the proposed industrial development east of the *rail line* lies largely in its potential to provide employment and recreational opportunities and to impose the creation of a complementary land use which can be designed to act as a noise buffer against the *rail line* activity.

Amended by Editor

The R.D.A., to the north of the plan area is currently devoted to agriculture or is vacant, but ultimately the development of the corridor will affect the developments of both Neighbourhoods 1 and 2.

3. REGIONAL PLAN - METROPOLITAN PART (PRP - Metro Part)

Under the current Regional Plan, the greater portion of the Plan Area is designated GU - General Urban. The only exception being an area which is designated as GI (General Industrial) in the southwest portion of the Plan area. Under this plan, any extension of industrial uses within the Plan would necessitate an amendment to the Regional Plan.

4. THE GENERAL MUNICIPAL PLAN

Subsequent to the approval of the Urban Growth Strategy, Council approved an amendment incorporating the Plan area under the General Municipal Plan. The General Municipal Plan designates this area for suburban residential development. Approval and implementation of this Area Structure Plan will further the General Municipal Plan objectives and policies relating to the enhancement of employment and business opportunities, strengthening and diversifying the economic base, ensuring the orderly, phased and economic development of the annexed lands to urban uses and the creation of a high quality environment.

5. LAND USE BYLAW

At this time, the City's Land Use Bylaw has not been amended to include this portion of the annexed area, although efforts are being made to realize this. In the interim, the M.D. of Sturgeon Land Use Bylaw 388/81 is in effect until the amendment from AG (Sturgeon Land Use Bylaw) to AGU (City of Edmonton Land Use Bylaw) is approved. As a result of utilizing this policy approach, several development permits have been issued which will serve to influence the plan preparation in the recognition and location

of such uses, specifically light industrial and commercial uses.

6. CONCLUSION

Given the objectives of the Urban Growth Strategy for this area as incorporated under the General Municipal Plan and the factors considered in the preceding sections it is apparent that the development concept for the Plan area should provide for a predominance of residential development with a combination of industrial and commercial uses structured to meet the development opportunities and locational requirements of the area. This residential development would complete the urban structure of north Edmonton as it relates to Castle Downs, Castle Downs Extension Area and Wellington Neighbourhood and provide a labour force located conveniently with respect to employment opportunities.

III EXISTING SITE DEVELOPMENT CONSTRAINTS AND OPPORTUNITIES

Sound physical planning involves an understanding of all existing site conditions and factors with a view to determining the natural potential or constraints of an area for future development. The following sections outline the natural and built environment of the plan area and their implications. These features are illustrated in Figure 3.

1. NATURAL FEATURES

a. Topography and Drainage

The topography of the plan area is relatively flat to gently undulating with no significant aesthetic views. The maximum topographic variation across the area is approximately 6 metres (20 feet). There are a number of depressions or 'sloughs' dispersed throughout the area, some of which are subject to seasonal flooding. The largest of these with permanent surface ponding and the natural drainage pattern may present opportunities for the construction of man made lakes to complement the storm water management system and exploit its features for secondary recreation.

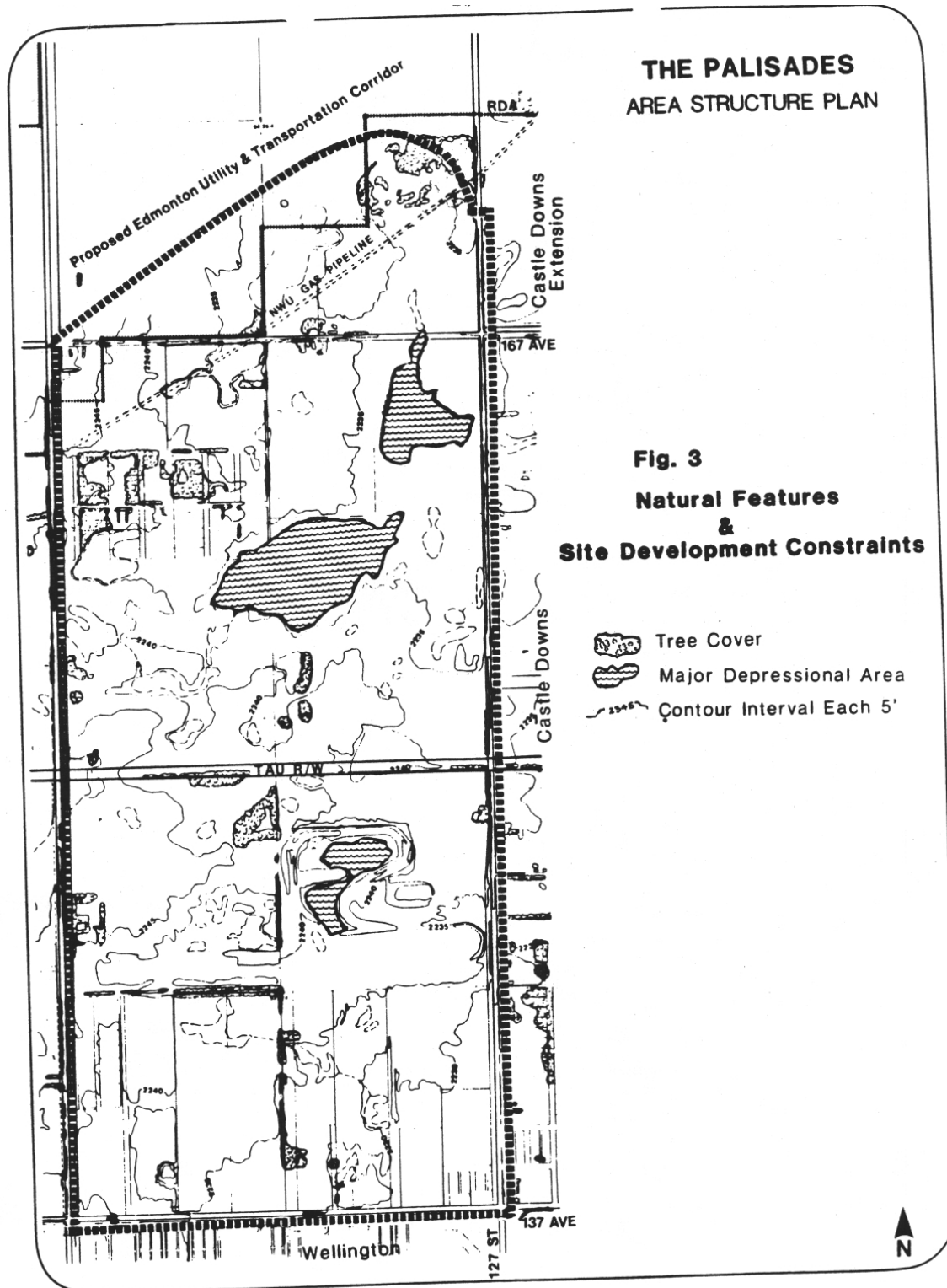
b. Soils

According to the Alberta Soils survey classification, all soils within the Plan area can be described as Malmo Silty Clay Loam, Wetaskiwin Silty Clay Loam and Prestville Silty Clay Loam of the Chernozemic and Solonetzic Soil Orders. The Prestville Silty Clay Loam is characterized by an upper layer of 7.6 cm to 30.5 cm of peat with low permeability. With regard to productivity, the Canada Land Inventory has classified these soils into two basic classes; class 1 having no significant limitations for crop useage and class 2 which are subject to moderate limitations.

Except for the special engineering attention which will be required for the slough areas, the soils do not present any serious constraint to urban development. It is recommended, however, that schools, commercial development and such related

Figure 3: Natural Features & Site Development Constraints

(Bylaw 7464, April 24, 1984)



large scale structures be located away from such areas.

c. Vegetation and Climate

Past agricultural practices have practically eliminated most of the mature vegetation within the area. Significant stands of woodlots still occur in the northeast and northwest within the Imperial Gardens country acreage subdivision, and as wind-breaks. Given the adverse regional climate, including the prevailing winds and the exposed nature of the site, every effort should be made to retain and incorporate healthy trees in the successive design and development of the area.

d. Environmentally Sensitive Natural Area

Bylaw 12000
April 26, 1999

There are seven natural area sites and two environmentally sensitive sites in the plan area. As described in the "Inventory of Environmentally Sensitive and Significant Natural Area" 1993, the two environmentally sensitive sites are:

- *Site NW 7024 natural area is approximately 10.87 hectares in size and is located at 167th Avenue within the south-central area of the Albany Neighbourhood. This area is composed of a relatively large wetland complex including a fresh water marsh, wet meadow and upland forest area.*
- *Site NW 7060B, located east of the railway tracks along the proposed 153 Avenue alignment, a 1.3 ha site. It is non-suitable because it is cut off from the main wetland complex west of the tracks.*

Bylaw 15290
October 28, 2009

The Public Lands Act (Section 3) gives the Crown, in the right of the Province, the title to any and all permanent, naturally occurring water bodies or water courses in the Province. The ASP assumes the Province will take ownership of NW7024 site. The site is excluded from the Gross Developable Area (GDA).

The Water Act (Section 38) gives the Province the right to approve or refuse the commencement or continuation of an activity which has an impact on a permanent naturally occurring water body or water course.

Stage 1 and 2 Natural Site Assessments and a Wetland Area Management Plan

Bylaw 15290
October 28, 2009

have been prepared in support of retaining the NW 7024 natural area in the Albany Neighbourhood. The incorporation of the wetland area into the neighbourhood as a naturalized stormwater influenced wetland provides opportunities for habitat preservation and increased biodiversity as well as a natural amenity for the community.

The seven natural area site are distributed in Neighbourhoods 1 (3 sites), Neighbourhood 2 (3 sites) and Neighbourhood 3 (1 site). They will be assessed in the NSP process for reach Neighbourhood.

2. BUILT ENVIRONMENT AND LAND OWNERSHIP PATTERN

a. Existing Land Use

The majority of the land within the Plan area is developed for a variety of residential, commercial and ancillary uses with the northern portion remaining undeveloped. Existing residences and commercial and industrial uses are situated within the western portion of the undeveloped Plan area. An aerial view of the area is provided by Figure 4, while Figure 5 illustrates the generalized land use pattern.

Bylaw 15290
October 28, 2009

Adjacent to the *railway* tracks, in the southwest portion of the Plan area is a large furniture warehouse. Other commercial facilities exist on 167 Avenue/127 Street and on 133 Street/137 Avenue. The majority of these uses do not pose a serious constraint to development as they can be incorporated into larger commercial areas designed to maximize their locations. Moreover, the recent consideration of an amendment to construct a large grocery outlet (Bylaw 7417) on 137 Avenue and 133 Street further influences the location of commercial development on 137 Avenue.

Amended by Editor

As shown on Figure 5, existing industrial uses are located north of 137 Avenue and east of the railway within an area north of the *utilities* right-of-way; and to a lesser extent in the Imperial Gardens Subdivision. To minimize the area devoted to industrial uses and taking advantage of the function of the *railway* tracks, industrial uses, to an acceptable depth may be appropriate in this location. This form of land use will, however, depend on appropriate access and circulation requirements. If light industrial uses do not fit within the development scheme,

Amended by Editor

Figure 4: Aerial Photograph (Bylaw 7464, April 24, 1984)

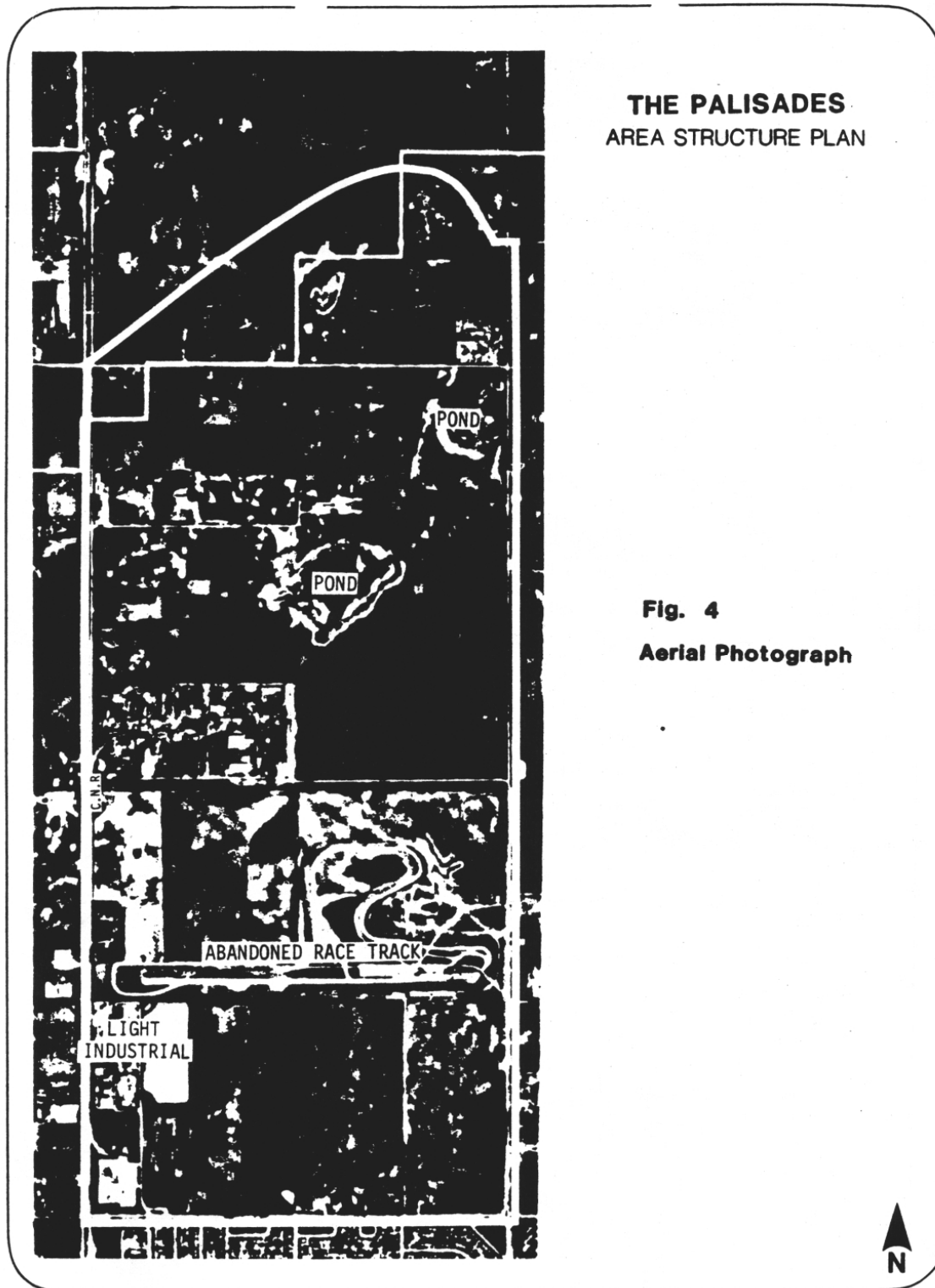
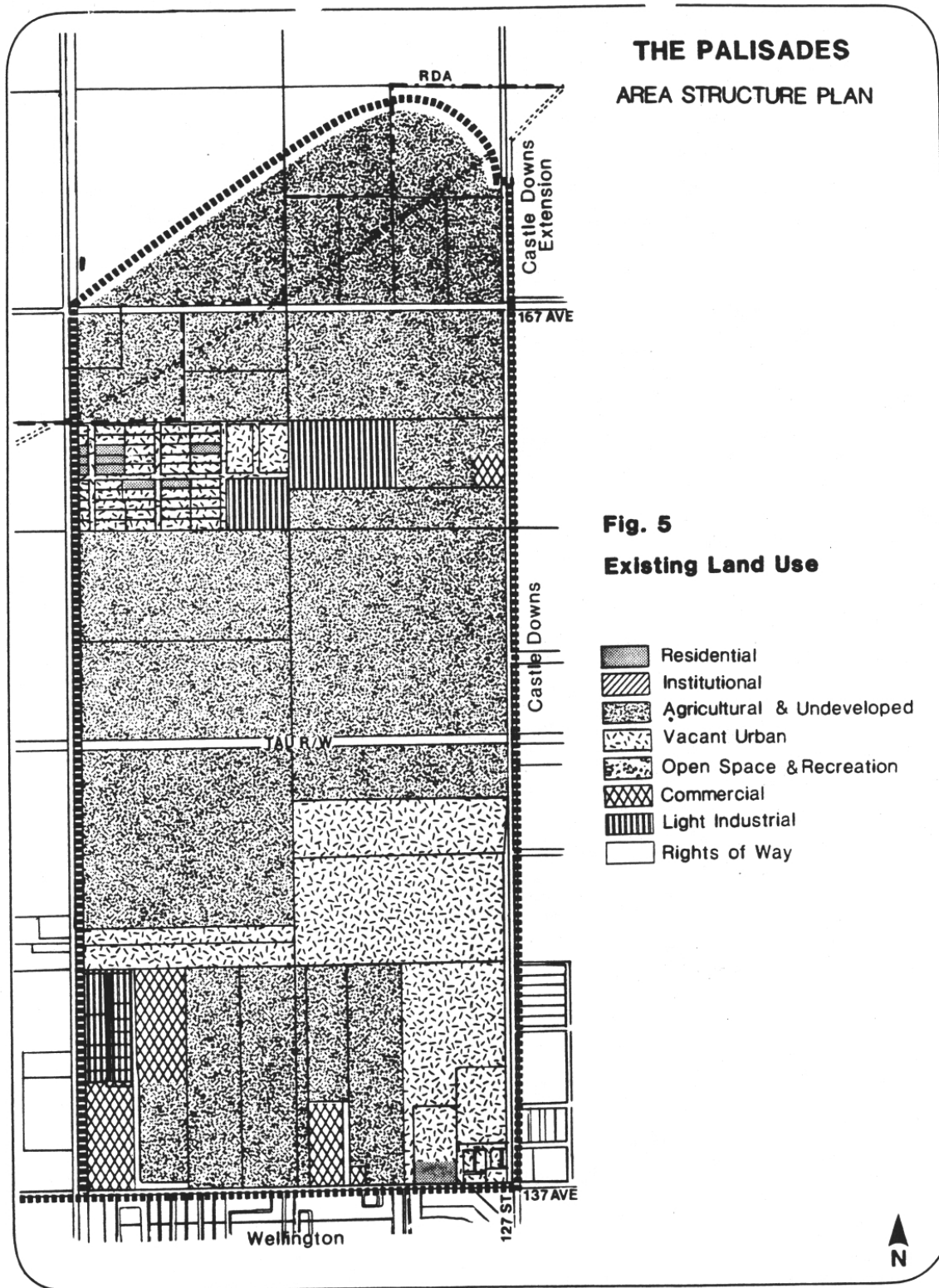


Figure 5: Existing Land Use

(Bylaw 7464, April 24, 1984)



the implication is that these industrial developments would have to be relocated.

Every attempt should be made at the Neighbourhood Structure Plan and subdivision stages to incorporate the Residential developments dispersed throughout the area into the plan if the situation warrants it. The intent is to relocate as few of these developments as possible. This is particularly applicable to the Imperial Gardens acreage subdivision as well.

Alberta Culture advised that, based on preliminary archeological investigation of adjacent areas, there appears to be historical resources in the area which could affect urban development. However, this conclusion will have to be verified by an archeological survey at the subdivision stage.

b. Land Ownership

Approximately 80% of the Plan area is owned by four property owners, including Her Majesty the Queen and *two private corporations*, the latter two are major land developers/realtors. The balance of the area, particularly the acreage subdivision - the Imperial Gardens - and the areas north of 137 Avenue are fragmented and owned by numerous owners (see Figure 6).

Amended by Editor

The implications of this imbalanced pattern are, as other development experience in Edmonton indicates, that areas of fragmented ownership can be expected to be brought on for development quite late in the development process unless a land consolidation occurs or the affected owners reach a consensus as to how best to develop the area. This may involve a private or City initiated replot.

c. The Restricted Development Area (R.D.A.)

As noted earlier, the plan area includes some lands reserved by the Province for the establishment of the Edmonton Utility and Transportation Corridor (including the construction of *Anthony Henday Drive* around the City). Since the specific utility corridors or *Anthony Henday Drive* were not fully defined at the time land assembly for the R.D.A. was occurring, acquisition of properties followed section lines or property boundaries. By 1980, however, the rights-of-way of the proposed uses had been determined such that the south boundary of

Amended by Editor

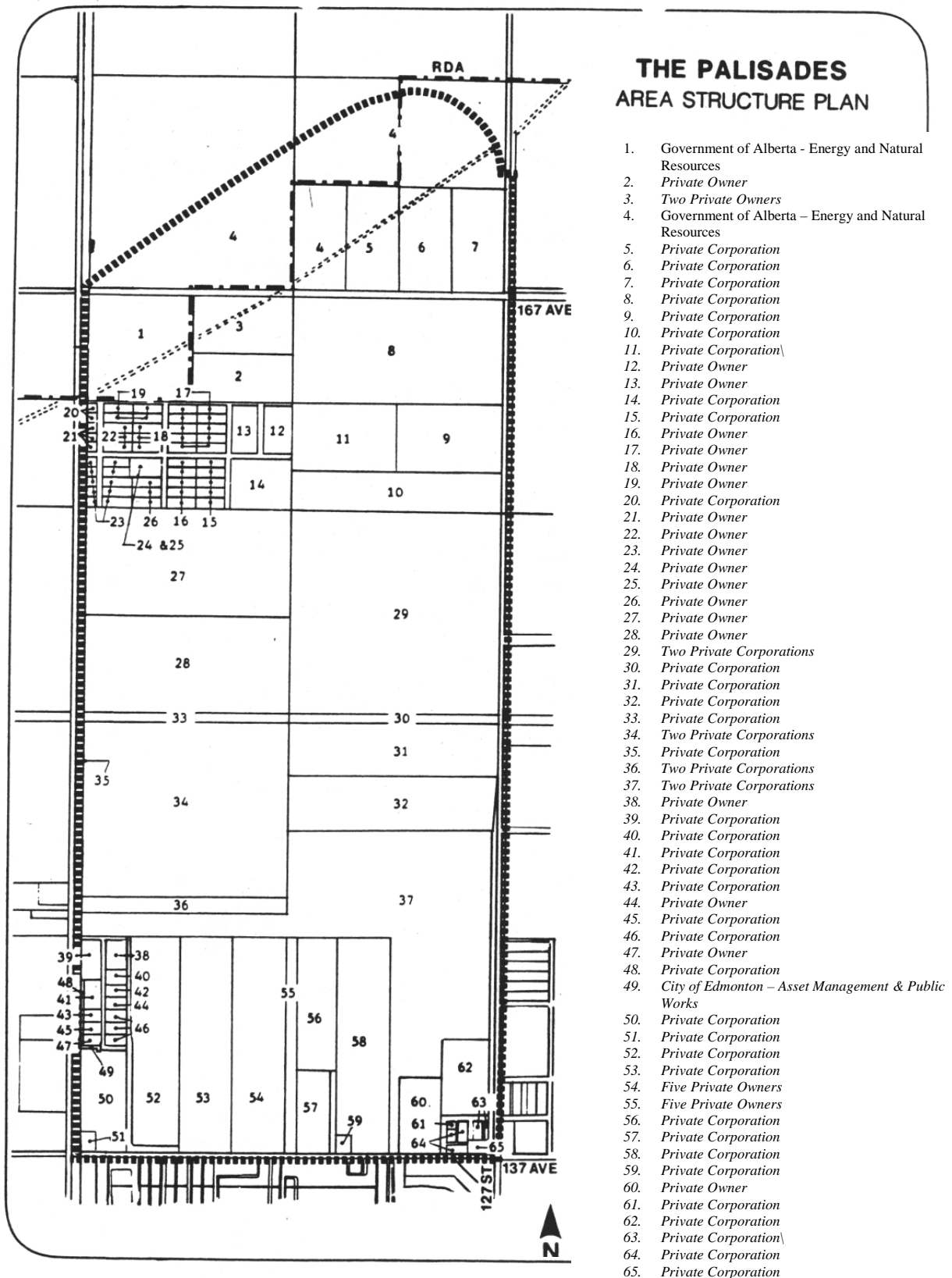
the Corridor could be tentatively plotted, simultaneously revealing the lands that can be classified as surplus to the R.D.A.'s purpose. Actual release of the R.D.A. lands for urban development requires an Order in Council signed by the Minister of Environment. In the interim, the conditions described in a "blanket" ministerial consent for Area Structure Plans with regard to plan review and clarification of plan boundaries must be adhered to. The effect of this means that the north boundary of the plan will be more precisely defined at the Neighbourhood Structure Plan stage.

d. Pipelines and Utility Corridors

A major power transmission corridor, *a private corporations'* 36.6 metre (120 feet) *utility* right-of-way, traverses the Plan area from east to west to connect to a major switching station at 156 Street/St. Albert Trail. Given the location in the centre of the Plan area, and to minimize the environmental impact of the transmission tower and powerlines, the concept plan should be designed such that the corridor aligns with transportation rights-of-way to form neighbourhood boundaries or act as part of the open space system, possibly in the separation of incompatible uses.

Amended by Editor

Figure 6: Ownership* (Bylaw 7464, April 24, 1984)



* Amended by Editor

Other rights-of-way, mainly gas, also exist in the area. A *private corporation* has a 323 mm, high pressure gas line in a 12.2 metre right-of-way running from southwest to northeast, just south of the Edmonton Utility and Transportation Corridor. A second 6 metre right-of-way connects the major line to serve the developments east of the *railway* tracks, in addition to minor service lines. The impact of the major 12.2 metre right-of-way appears to be quite significant as it relates to the planning of neighbourhoods and subdivisions.

Amended by Editor

3. TRANSPORTATION

In the previous Chapter, the external transportation linkages to the plan area were highlighted to set the plan within its urban context. This Section reviews the implications of the existing transportation internal to the Plan.

a. Roads

Extension of the major roadways within the area, and access to the adjacent arterials, must recognize City and Provincial road design standards where applicable. The alignment of 153 Avenue with the *utility* right-of-way to form a transportation corridor separating the area into manageable communities can be achieved.

Amended by Editor

b. Railway Tracks (Private Corporation)

Amended by Editor

The implications of the *railway* tracks for influencing the adjacent land use has been stated previously. However, the *railway* tracks will also influence the location and alignment of industrial collector roads by restricting the number and location of rail crossings.

c. Light Rail Transit (L.R.T.)

Although the General Municipal Plan has identified the Plan area as suitable for future expansion of the Light Rail Transit System, recent evaluations by the Transportation Management Department has indicated that the alignment on 127 Street to 153 Avenue may not be required. The *utility*/153 Avenue corridor has the right of way to accommodate any future L.R.T. extension from Castle Downs when and if the L.R.T. is built to service north Edmonton.

Amended by Editor

Overall the existing or proposed transportation system should not present major problems for the Plan area. The expansion of the transportation system in the Northwest can accommodate the expected development in both industrial and residential areas.

4. SERVICING CONSTRAINTS

An understanding of the location and capacity of existing and future engineering services for the Plan is required in order to implement development phasing and to accommodate the specific utilities within the neighbourhoods. Since gas, telephone, power, and cable service, extensions can be provided in accordance with the type of development, only water, storm and sanitary services will be reviewed.

a. Water Distribution

With the construction of water mains on 127 Street in 1983, and the existence of transmission mains south of 137 Avenue, the possibility exists that for the abutting areas, water distribution can be effected for small subdivisions in the future. On a long term basis, water supply will originate from the Castle Downs Reservoir upon completion of the 1050 mm Transmission Main along the 167 Avenue alignment from the Akinsdale Meter chamber.

b. Sanitary Sewage

The Plan area, will be serviced through an extension of the existing interceptor sewer along 123 Street at 132 Avenue. However, it may be possible, depending on negotiations by the City, that this area may be serviced the Regional System which will parallel St. Albert Trunk sewers in the R.D.A.

Effective implementation of any proposed servicing scheme requires upgrading of the existing down stream sewer within the next 5 years. Water and Sanitation advises that the cost for upgrading the system will be received through an off site development levy charged against all new developments.

c. Storm Water

Servicing schemes for most of the annexation areas have been finalized through water shed plan studies. This area is no exception.

A system of *ten* interconnected storm water lakes will be developed on or adjacent to the slough areas identified in Figure 3 to handle storm water flow. Controlled run off from these ponds will be discharged to existing trunks in Castle Downs and Wellington. Thus, it is anticipated that the site constraints will have the potential to benefit the neighbourhoods by providing secondary active and passive recreational opportunities as well.

Bylaw 13351
May 5, 2003

Based on engineering studies of the Northwest area, it would appear that there are no major physical servicing constraints that will affect the development of this area for urban use.

IV DEVELOPMENT OBJECTIVES

Based on the preceding review and analysis of the major factors influencing the Plan area, it has been determined that the Plan should be designed as a mixed use, but predominantly residential area structure plan. It was also recognized that the plan should contain business industrial, commercial and associated recreational and institutional uses typical of communities of this size.

To achieve the high quality, comprehensive urban development required of the area, this Chapter outlines appropriate development objectives which will be used to formulate the development concept proposed.

1. GENERAL OBJECTIVES

- a. To develop a rational integrated high quality urban structure to fit within the communities of northwest Edmonton through the provision of appropriate land uses, and integrated transportation and open space systems.
- b. To provide a mix of different land use which will expand and diversify the City's economic base.
- c. To provide energy efficient, orderly and economic development of lands within the plan area.
- d. To evolve a conceptual plan, which, while remaining flexible with respect to detailed planning and design, optimizes the functional relationships of the existing and proposed land uses and integrates the infrastructural features of the plan.
- e. To maintain a continuous and adequate supply of serviced land in close proximity to living and working areas.

2. RESIDENTIAL

- a. To utilize the neighbourhood planning concept to create several, aesthetically pleasing residential neighbourhoods, linked to form an accessible community.
- b. To provide a broad range of housing types and forms catering to a wide socioeconomic cross section of people, and to encourage the use of innovative techniques in lotting and housing development.
- c. To locate higher density residential subneighbourhoods in close proximity to major access routes and amenity areas. This implies an increase in residential density from peripheral areas to activity centres such that travel times and distances are minimized.

3. COMMERCIAL

- a. To provide neighbourhood shopping centres appropriately located to serve the daily needs of the neighbourhoods (Council's directive of 1983-12-13).
- b. To accommodate business commercial uses along 137 Avenue and 127 Street west to 145 Avenue (Council's directives of 1983-12-13 and 1984-02-28).
- c. To ensure that negative impacts of commercial development on adjacent residential neighbourhoods are minimized.
- d. To exercise strict control over the expansion of commercial uses in industrial areas so as to preserve the supply of land for industrial use (Objective 6.1 of the General Municipal Plan).

4. INDUSTRIAL/BUSINESS

- a. To allow for the continued use of light industrial uses adjacent to the *railway* tracks (Council's directive of 1983-12-13) so as to act as a noise buffer and simultaneously providing a transition from the medium industrial areas to the west.

Amended by Editor

- b. To ensure that the light industrial uses proposed are adequately buffered from the adjacent residential areas.

5. TRANSPORTATION

- a. To develop a clear, efficient and safe, hierarchical circulation system which reinforces and integrates the functional elements within and external to the Plan area.
- b. To provide the development of a pedestrian, cycle path system which will serve to connect areas of relative importance.
- c. To use the collector roads to integrate several neighbourhoods into a predominantly residential community.

6. RECREATIONAL AND OPEN SPACE

- a. To ensure the adequate provision of land in suitable locations for active and passive recreation, according to a hierarchical concept ranging from neighbourhood parks to view point parks adjacent to storm water lakes.
- b. To promote the development of a cycle path/walkway system at the Neighbourhood Structure Plan stage using the streets, utility corridors and public utility lots adjacent to the storm water lakes proposed.
- c. To provide access to the R.D.A. lands for potential recreation use of the utility and transportation corridor.
- d. To integrate the neighbourhood parks with the school system to form the primary open space focus for each neighbourhood.

7. INSTITUTIONAL

- a. To establish locations for the various types of schools which meet the requirements of the School Boards within the context of each neighbourhood.
- b. To identify other institutional uses which may be required to serve the population projected for this area.

8. ENGINEERING SERVICES

- a. To provide an economical and efficient servicing system which optimizes on site conditions and possible extension of the adjacent servicing systems.
- b. To provide a logical phasing programme related directly to the economical and progressive extension of utility services to the site, simultaneously discouraging "leapfrogging" development.
- c. to utilize the concept of storm water management lakes not only to provide an economical method of accommodating storm water flow but to use them for secondary and tertiary recreational opportunities to improve the aesthetic, recreational and environmental features of the Plan area.

9. NATURAL ENVIRONMENT

- a. To plan and design the neighbourhoods and subsequent development in harmony with the unique natural features of the Plan area, particularly with respect to the alignment of roadways, location of schools, storm water lakes and utilities services.
- b. To retain and incorporate where feasible, healthy mature stands of vegetation or windbreaks as natural amenities into the development of the neighbourhood.
- c. Bearing in mind the development constraints and opportunities for the area, the next section translates the above objectives into the development concept.

V THE DEVELOPMENT CONCEPT

1. INTRODUCTION

The generalized land use development concept prepared for this area and illustrated on Figure 7, responds to the development constraints and opportunities inherent in the site; the physical and functional relationship of the area to the surrounding communities and the desire to provide additional living and working environments to accommodate future growth in north Edmonton.

The following sections present the development concept and then proceed to discuss the specific components of the plan which will serve to guide development in the Plan area. A summary of the land use is provided in *the Palisades ASP Land Use and Population Statistics*.

Amended by Editor

2. THE GENERAL CONCEPT

To achieve the objectives set out in the previous Chapter, and ultimately a rational, comprehensive urban structure for this area, the overall concept calls for the development of seven neighbourhoods linked by arterial and collector roads and designed to accommodate approximately **22,048** people. The proposed land use, then is primarily residential, not unlike other suburban areas in Edmonton. However, due to the influences of the *railway* tracks, the Rampart Industrial Area Structure Plan which received First and Second Readings at Council on 1984-02-28 and the need to provide a buffer and transition between incompatible land uses, business industrial uses are proposed east of the tracks, *in the southern most portion of the plan area. In areas where residential parcels abut the railway tracks a noise attenuation buffer will be put in place. This measure will provide visual screening and noise abatement for adjacent residential development. It will be defined in greater detail in the Neighbourhood Structure Plan for Neighbourhood 2 (Carlton).*

Amended by Editor

Bylaw 15447
June 7, 2010

Bylaw 12000
April 26, 1999
Amended by Editor

On the southern edge of the Plan area, mixed business and commercial uses, reflecting existing or approved developments are proposed. Similar uses are proposed for an 8.5 hectare triangle between *a private corporations'* right-of-way and 153 Avenue to resolve the design constraints of the site and minimize the impact of both 153 Avenue

Amended by Editor

and the proposed Community Shopping Centre proposed east of 127 Street, opposite the site. These business industrial and mixed use business/commercial areas will provide employment (approximately 5,300 jobs) and will serve to integrate the working and living environment through appropriate circulation linkages and thereby realize some measure of energy efficiency. As shown on the plan, these areas will be buffered from the residential areas, through the determination of appropriate landscape and screening methods at the Neighbourhood Structure Plan stage. This buffering technique, though not of a noise attenuation variety, will be employed along truck routes and further help to segregate the area as a distinct local planning unit.

Due to the segregating influence of the 153 Avenue Arterial and the *private corporations'* Utility Corridor, two sub-communities of three and four neighbourhoods have evolved, with transportation linkages. The neighbourhood collector, central to the Plan area, provides the integrative linkage between the north and south neighbourhoods.

Amended by Editor

The development concept also proposes a hierarchical circulation system to serve the area, identifies engineering and social services and facilities which are necessary for an area of this size and outlines development strategy which will implement the uses proposed for the Area Structure Plan.

The following sections identify in greater detail the principal land uses, transportation and servicing components of the plan.

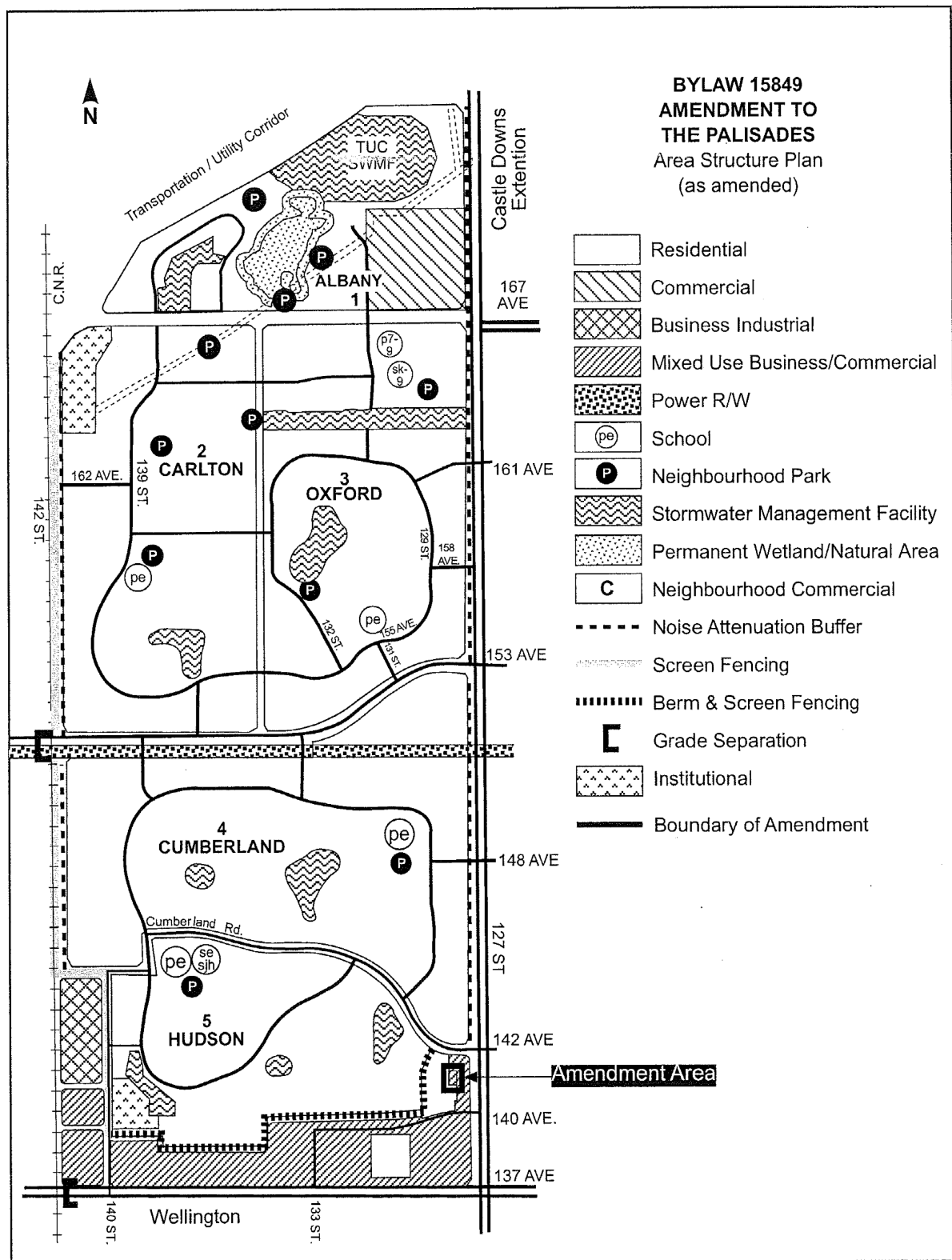
3. RESIDENTIAL LAND USE

The residential portion of the Plan area, including 36 hectares within the R.D.A., encompasses approximately 444 hectares distributed over five neighbourhoods, three of which are located south of 153 Avenue. The residential areas are served by a hierarchical system of transportation designed to optimize energy savings by linking residential and employment areas quite directly and providing access to other amenities and areas safely, quickly and efficiently. Coupled with a community pedestrian circulation system which is to be more refined at the Neighbourhood Structure Plan level, the transportation system also plays an essential role in the successful implementation of the recreational aspect of the storm water lakes and consequently the neighbourhoods.

Bylaw 15290
October 28, 2009
Bylaw 15447
June 7, 2010

Residential land uses would be buffered from truck routes and the business industrial

Figure 7: Development Concept (Bylaw 15849, August 29, 2011)



and the mixed use business commercial areas west and south in the plan area.

Neighbourhoods 2 and 4 will require a more effective form of noise and visual buffer against the *railway* tracks. The design details of the buffers will be established at the Neighbourhood Structure Plan approval stage.

Bylaw 12000
April 26, 1999
Amended by Editor

Each neighbourhood is defined according to its ability to support a standard sized public elementary school and the alignment of the arterial or collector roads. Collectively these neighbourhoods will accommodate a mean population of approximately **22,048** at a gross density of **approximately 37** persons per gross hectare. Individually, these neighbourhoods range in size from 82 to 134 hectares with population ranging from approximately 2,877 to 6,620 people and densities from approximately 33.3 to 50.5 persons per gross hectare. A statistical summary of each neighbourhood land use and population profile is provided in *the Neighbourhood Structure Plans*. In keeping with objective 5.C. of the General Municipal Plan and according to the stated objective in this Plan the residential design has projected higher density figures than traditionally proposed in the late 1970's.

Bylaw 15447
June 7, 2010
Amended by Editor

Bylaw 12000
April 26, 1999

Amended by Editor

There are five school sites located within four of the five neighbourhoods. The school site within Neighbourhood 1 (Albany) has been removed due to the small size of the neighbourhood, low enrolment projections and a lack of a suitable site. Neighbourhood parks are located within each of the 5 neighbourhoods. Moreover, the neighbourhood is to be adequately served by transit, convenience retail outlets and social amenities to serve the residents daily/weekly needs. Separate elementary, separate elementary/junior high and public junior high schools have been situated central to their specific service area. These facilities reinforce the distinct, self contained nature specific to each neighbourhood.

Bylaw 15290
October 28, 2009

A mixture of housing types is proposed, including conventional single and semi-detached, planned lot residential, row housing, stacked row housing and low rise apartment units. The approximate split in areas devoted to aggregate forms of residential development for the plan area is anticipated to be 65% low density (RF1, RF4, RPL) 25% multiple family (RF5, RF6) and 10% low rise apartments, depending on market demands at the subdivision stage.

While the final distribution of multiple dwelling units will be determined at the Neighbourhood Structure Plan stage and shall conform to the City's guidelines for the

Design and Distribution of neighbourhood densities, it is expected that higher density residential development would be located to take advantage of transit routes, access to neighbourhood facilities and amenities such as the commercial areas, lakes, public open space or adjacent to the non residential land uses west and south in the Plan area.

In appropriate areas within the neighbourhoods, a planned unit development approach may be employed to provide successful mixing of different but related forms of land use. Neighbourhoods should also be designed with an attempt to incorporate energy saving concepts, defensible space techniques to reduce crime, and residential subdivision innovations and ideas to reduce servicing costs, among other concepts, to create unique residential environments.

To maintain the flexibility of the Area Structure Plan, the various components indicated on the Plan are schematic and are subject to detailed design at the neighbourhood planning stage.

4. BUSINESS/INDUSTRIAL

The industrial component of the Plan is comprised of approximately 5.47 hectares of land located on the western edge of the planning area, commencing 202 metres north of 137 Avenue to the *south end of Neighbourhood 4 (Cumberland)*.

Bylaw 15290
October 28, 2009

The location and extent of the proposed industrial use reflects several factors outlined in earlier Chapters: the existing business industrial development of Leon's Furniture Warehouse, and those located north of Leon's and in the Imperial Gardens subdivision; the proposed medium industrial development proposed in an Area Structure Plan now under preparation by the Planning Department of the City of Edmonton; the presence and activity of the *railway* tracks and the need to provide an appropriate transition to the adjacent proposed residential development. Paramount in the analysis and in recognition of the noted factors, is Council's directive of 1983-12-13 to include Business Industrial uses east of the *railway* tracks.

Amended by Editor

By placing the business industrial uses between the *railway* tracks and the residential area, an effective transition from the proposed medium industrial in the industrial Area Structure Plan now under preparation is realized. The use of a landscaped berm east of the industrial access road and *railway* tracks will further buffer the residential areas.

Amended by Editor

It is recommended that in order not to impair the effective provision of services and amenities in the residential areas, further expansion of the business industrial areas eastward should not be entertained. Expansion north and adjacent to the tracks in neighbourhood 2 would depend on appropriate access to the site from the industrial collector road.

The existing industrial uses not falling within this Business/Industrial area should be relocated or phased out over time.

The combination of excellent access from the future Ring Road, the expectation of high quality light industrial uses and a substantial pool of potential labour force make future development viable. Based on approximately 78 employees per net hectare, this area has the potential when fully developed to provide employment for approximately 2,194 persons.

5. COMMERCIAL LAND USE

Approximately 48.8 hectares or 8.7% of the Plan area is proposed for commercial uses. *Basically, these retail uses fall into two categories; the mixed business commercial oriented to the traveling public and larger retail-trade area and the neighbourhood convenience shopping centre which provides for the daily needs of the neighbourhood(s) residents.*

Bylaw 15290
October 28, 2009

a. Mixed Use Business Commercial

This type of commercial land use is specifically concentrated in *a single* area of the Plan: along 137 Avenue and 127 Street, at the southwest corner of the Plan. The Plan also recognizes the approval of a Site Specific Development Control District for the establishment of general retail uses east of 133 Street and north of 137 Avenue involving 3.84 ha of land.

Bylaw 12000
April 26, 1999

Since it is the objective of Council that no Regional Shopping Centre shall be developed on any of these areas, it is the intent of the Area Structure Plan, without restricting the generality of the foregoing that:

i. – iii. *Deleted*

Bylaw 11936
January 11, 1999

iv. The business commercial areas shall not be expanded without an Area

Structure Plan amendment.

The 137 Avenue strip development, including the area west of the industrial collector road (140 Street) is approximately 30.33 hectares ranging in parcel depth from approximately 152.4 m (500 feet) to 304.8 metres (1000 feet) facing onto 137 Avenue and 127 Street, and separated from the residential development to the north by at least a 2.5 metre landscaped berm and fence. An east/west road connecting 133 Street and located south of the berm would also add to this buffer. This area provides a unique opportunity to establish and manage a strip commercial development to ensure the negative connotations of traffic congestion and aesthetic blight are eliminated or minimized and to reduce the impact, through landscaping, on the existing single family residential south of 137 Avenue.

Bylaw 14850
January 19, 2009

The 127 Street/153 Avenue business commercial site – *Section Deleted*

Bylaw 12000
April 26, 1999

b. Neighbourhood Convenience Shopping Centres

(Deleted)

Bylaw 15453
June 7, 2010

6. INSTITUTIONAL LAND USE

The institutional uses proposed in the Plan are primarily the education-al facilities required to serve this Area, together with the tentative location of churches.

a. Schools

In the planning and design of neighbourhoods in Edmonton, schools are generally found to be one of the most dominant factors in establishing the size and configuration of residential neighbourhoods. Based on the projected residential land use mix, population and student generation, the Area Structure Plan proposes 7 schools for the 5 *neighbourhoods*, as shown in Figure 7.

Bylaw 15290
October 28, 2009

Five public elementary school sites are shown on the Plan associated with the neighbourhood park or a separate elementary school site. These schools are to be located on a bus route, and central to the neighbourhood(s) school service area.

A public junior high school site is provided central to the Plan area on the major neighbourhoods collector in *Neighbourhood 5*. It is anticipated that parts of the southeast portion of the plan will be served by the Wellington Junior High School south of 137 Avenue.

Bylaw 12000
April 26, 1999

As separate elementary and separate junior high school sites serve a larger area or population than the public system, centrality and accessibility for designated sites may become a primary concern in the design. *One* separate elementary and *one* separate elementary/junior school sites have been designated as shown on the Plan.

Bylaw 12000
April 26, 1999

The combination of elementary and junior high school sites reflect the small size of the neighbourhoods in question. The actual configuration and specific location of the school sites will be determined at the Neighbourhood Structure Plan stage.

b. Other Institutional Uses

The provision of other institutional uses will depend to a large degree on the respective policies and programmes of the City and the Province.

Uses such as a fire hall, police station, library, social or health service centres are best located at or adjacent to the 153 Avenue/127 Street Business Commercial area or other areas with a high degree of accessibility, and will be determined at the Neighbourhood Plan stage.

In addition two institutional sites have been identified to provide for the development of religious assemblies in the plan area. The first site is 4.8 ha in size and is located in Neighbourhood 5 (Hudson) at 140 Avenue and 140 Street. The second site is 5.5 ha in size and is located in northwest corner of Neighbourhood 2 (Carlton).

Bylaw 13351
December 5, 2002
Bylaw 13599
February 11, 2004

7. PARKS AND OPEN SPACE SYSTEM

a. External Recreational Use

Recreational opportunities for the future residents within the Plan area will be provided by existing and proposed facilities in the industrial area west of the

railway tracks, the R.D.A. and Castle Downs and the system of inter connected parks, schools, storm water lakes and utility corridors existing or proposed for the area.

Amended by Editor

"City-level athletic fields and open space are proposed to be developed east of the Holy Cross Cemetery in the Industrial Area Structure Plan. In association with the passive district park in Dunluce and the proposed pool-arena complex/athletic fields on Castle Downs Campus, this City-level park will provide recreation opportunities for the residents of Edmonton Northwest".

b. Parks and the Open Space System

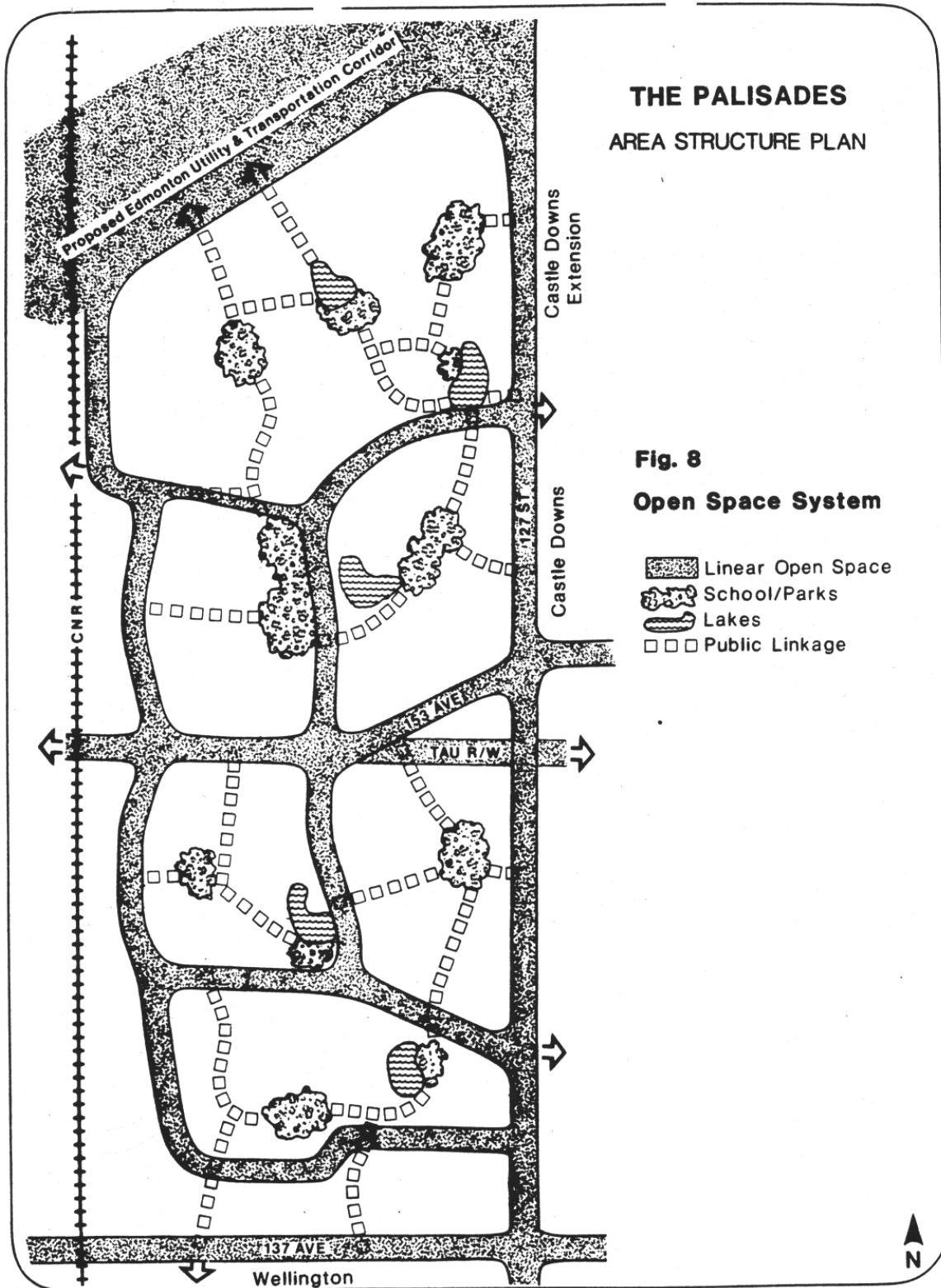
The major open space system of the Plan area, illustrated on Figure 8, includes neighbourhood parks schools, storm water lakes, utility corridors, buffers and roadways, integrated to form a network of recreational space with access to other amenities of the community.

Based on the Neighbourhood Planning Concept employed for the design of the Area, each neighbourhood contains a neighbourhood park, ranging from 2.3 to 3.13 hectares, as part of the centralized neighbourhood park/school system used by the School Boards and the *Community Services Department*.

Amended by Editor

In accordance with the City's Stormwater Management policy, small viewpoint park (.5 ha) are provided adjacent to the retention ponds, connected to the pedestrian system by 'public access areas' and walkways. It is expected that the locations of these parks and the extent of the public access area will vary to suit the particular neighbourhood design.

Figure 8: Open Space System (Bylaw 7464, April 24, 1984)



8. THE CIRCULATION SYSTEM

a. General

The circulation system is comprised of the vehicular and pedestrian activity modes as illustrated in Figures 7 and 8. The system arises out of a consideration to develop an efficient, clear heirarchical circulation pattern which effectively integrates and supports the derived land uses and activities within the neighbourhoods; integrates the neighbourhoods within the Plan area and on a broader level "completes" the urban structure of North Edmonton west.

b. Vehicular Mode

On the vehicular level, efficient movement is provided from the abutting properties via the local and subcollector streets to the neighbourhood collector roads. The local and subcollector streets will be designed at the Neighbourhood Structure Plan level according to the specification of the Servicing Standards Manual. The neighbourhood collectors provide traffic connections between the local and subcollector streets to the major neighbourhood collector roads and adjacent arterials (*167 Avenue*, 153 Avenue, 137 Avenue and 127 Street). Sub connectors to the industrial and commercial areas integrate the work and living environments. At the recommendation of Council on 1984-02-28, an east/west collector road has been introduced in the north portion of the 137 Avenue commercial strip, between 133 Street and 127 Street, to further separate the residential and the large block of commercially designated areas. The exact location of this road will be determined at the Neighbourhood Structure Plan stage to meet intersection spacing requirements and promote the policy of excluding the emergence of a regional town centre in the south east portion of the plan.

Bylaw 12000
April 26, 1999

While it is desirable to provide discontinuous routes across neighbourhoods to reduce the number of four way intersection, location of community facilities or intersection spacing standards may preclude this in certain neighbourhoods (1 and 3 and 5 and 6). Noise attenuation devices are required along arterial roads such as 153 Avenue and 127 Street, adjacent to the residential areas, and will be designed to the specifications of the City Engineer at the subdivision stage.

Bylaw 12000
April 26, 1999
Bylaw 11518
June 17, 1997
Bylaw 9822
June 25, 1991

As a final link in the Vehicular system, the arterial roadways are designed to move high volumes of traffic City wide. According to a Transportation Impact

Study carried out by Delcan, De Leuw Cather Canada Ltd., for the Northwest, the following arterials improvements are recommended: 127 Street to 4 lane divided; 137 Avenue to 6 lane divided, with an underpass at the *railway* tracks; and, 153 Avenue to 4 lane divided.

Amended by Editor

With regard to the proposed Outer Ring Road it is expected that ultimately it will be a 4 lane divided freeway with controlled crossings and interchanges being grade separated.

As an alternative to the private transportation mode, the Plan area will be serviced by a bus network using the collector and arterial streets and originating initially from the Transit Centre on 153 Avenue and 113 A Street; and later as capacity increases, from a Centre at 153 Avenue and 127 Street.

c. Pedestrian Activity Mode

The pedestrian activity system is designed to separate vehicular and people oriented traffic as far as practical, using in addition to the local road pattern, the public open space system identified in Figure 8. In the design of Neighbourhoods, special attention should be made to the connection of facilities, bus stops, recreation areas and other open space areas to achieve an optimum separation of circulation modes. Due to the function and location of the various types of schools every effort should be made to make them more accessible to students and the public.

9. ENGINEERING SERVICES AND UTILITIES

a. Introduction

Despite the uncertainties surrounding the formulation and operation of the Regional Services Commission, which under the Regional Municipal Services Act of 1981 would allow the Commission to control water, sewer, storm drainage and waste disposal on a regional basis, the Edmonton Water and Sanitation Department concludes that this Plan area can be provided with the basic services required for urban development. Specific engineering studies with regard to the provision of these services will be undertaken at the Neighbourhood Structure Plan stage.

b. Sanitary Drainage System

Based on a recently completed study by the Edmonton Water and Sanitation Department, it is envisaged that sanitary sewage for the Northwest area (including Castle Downs Extension) will be drained by gravity east to a 750 mm trunk sewer flowing south through an extension of the existing sewer along 123 Street and 132 Avenue to interceptor trunks on the inner City (see Figure 9).

Effective implementation of the proposed sanitary servicing scheme requires upgrading of the existing sewer systems downstream of this area.

c. Storm Drainage System

It has been determined by Edmonton Water and Sanitation that the existing storm trunk sewer systems do not have adequate spare capacities to conventionally serve this area. Therefore, to accommodate post development runoff peak volumes to an acceptable level, a system of five storm water retention ponds connected to the existing storm trunks will be provided, as the approximate size and location of these storm water retention areas as recommended in the North West Annexation Water Shed Plan are shown on Figure 9. Controlled runoff from these retention ponds will be discharged at 161 Avenue and Dunluce Road, 137 Avenue and 127 Street via new storm trunks to the existing trunk system.

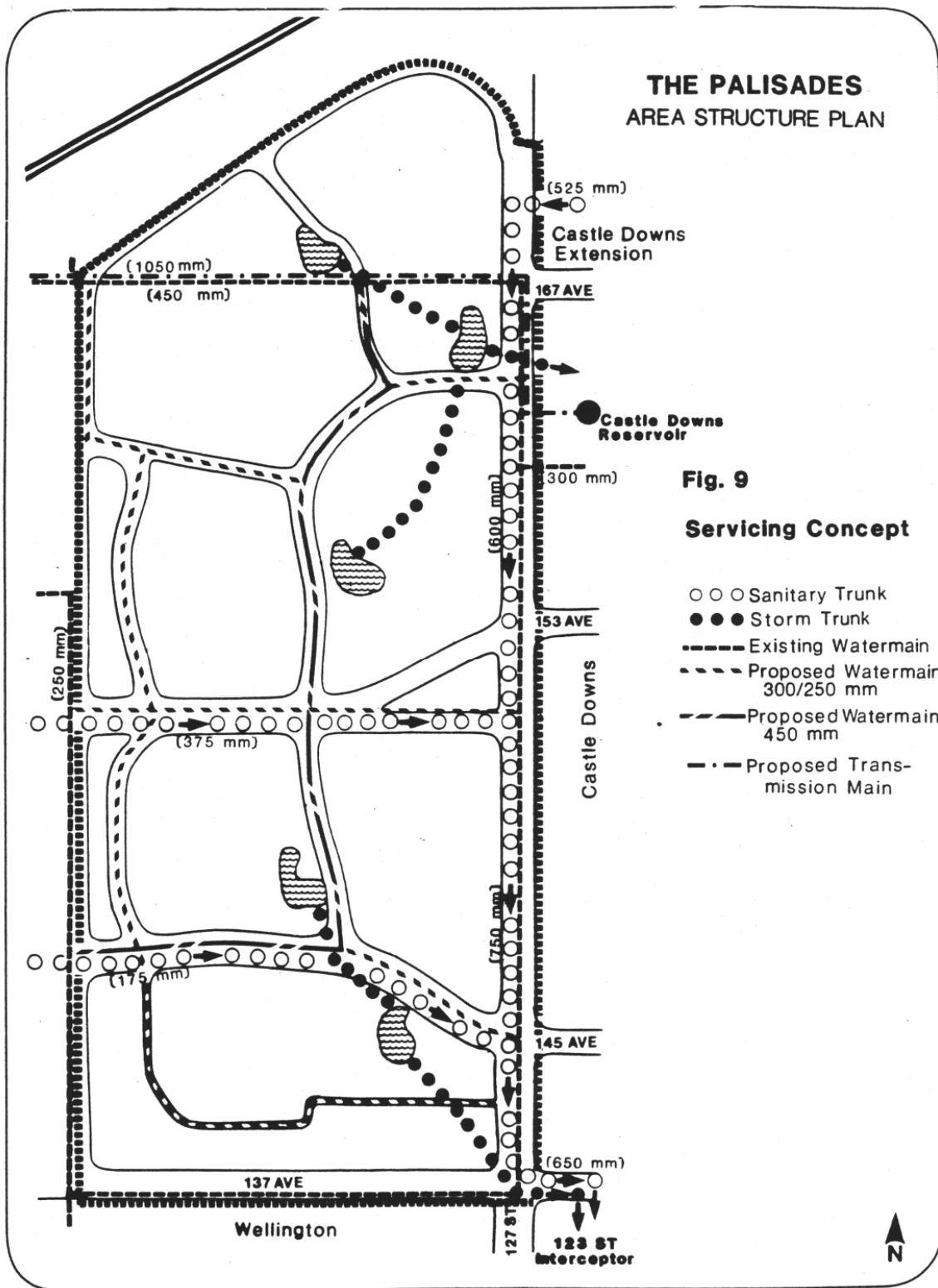
At the Neighbourhood Structure Plan Stage, detailed storm water management plans, including sediment control and computer simulation of the storm water systems for each neighbourhood containing a lake, will be required for Water and Sanitation's approval.

The effect of the storm water management technique is to allow development to proceed on a phased basis earlier than the establishment of a conventional system and to provide recreational and aesthetic value to the community.

d. Water Distribution

Full development of the Plan area is contingent upon expansion of the E.L. Smith Water Treatment Plant and the construction of a reservoir at about 170 Street and 137 Avenue and a booster station on the existing 1050 mm main line on 184 Street at 124 Avenue.

Figure 9: Servicing Concept (Bylaw 7464, April 24, 1984)



With the completion of the 1050 mm main to supplement the existing 450 mm line that transmits water from the Akinsdale meter chamber in St. Albert to the Castle Downs Reservoir at 167 Avenue and 123 Street, temporary servicing to areas in the eastern portion of the plan may be feasible. Development in the industrial sector may still continue to use the existing 250 mm (10 inch) line along the existing alignment of 142 Street. The proposed internal servicing concept is as shown on Figure 9.

e. Franchise Utilities

Gas, power, telephone and cable services will be available through extensions into the plan area. The detailed requirements for easements alignments and public utility lots other than the existing gas and *utility* corridor will be identified at the Neighbourhood Structure Plan and subdivision stages.

Amended by Editor

VI PLAN IMPLEMENTATION

1. INTRODUCTION

The preceding sections set out the general objectives and "blue print" upon which further planning, design and subsequently development will be based. Implementation of the Plan to realize actual development and construction depends on several major factors, the most significant areas being the approvals at different stages of the Planning process and the development aspirations of the property owners in effecting the staging of development. It is expected that the Plan area could take between 15 to 20 years to fully develop.

2. STAGING

The rate of development in the Plan will be influenced by many factors, particularly real estate conditions, ownership and the status of the economy. Regardless, development will commence at the point where services can most economically be extended. Given the servicing scheme outlined for the area in the previous section, and indications from the major developers, development (staging) will likely begin from 127 Street, extending westward and south, as illustrated in Figure 10. This assumes that the reservoir and the booster station is constructed in the R.D.A., or that there is spare capacity to provide water services from the Castle Downs Reservoir. Stage II will proceed east from the *railway* tracks as part of the industrial consolidation of existing uses. Stage 3, involves several owners, but due to its location and servicing potential may be developed concurrently with Phase I on a limited basis. Stage IV involves lands owned by the Crown (including the R.D.A.) lands that are scheduled for servicing at a later date.

Amended by Editor

3. PLAN APPROVAL PROCESS

As noted earlier, the implementation of the Plan can only be accomplished if the relevant planning approaches are secured. This begins with the premise that the Area Structure Plan will be approved by Council as a Bylaw, ensuring the implementation of the General Municipal Plan policies regarding orderly, efficient development of land. There is also the requirement to convert the present AG (Agricultural District) zoning to

AGU (Urban Reserve District) to enable the Edmonton *Zoning* Bylaw to take effect.

Amended by Editor

Subsequent to the approval of the Area Structure Plan, the City may undertake or require the preparation of Neighbourhood Structure Plan's for Council's approval, as amendments to the Area Structure Plan Bylaw, as a basis for approving detailed subdivision and *rezoning*. These plans will provide more detailed information on the land use, housing use, detailed staging, internal circulation pattern and the like.

Amended by Editor

Prior to the approval of the Neighbourhood Structure Plan, storm water management studies for each lake, conforming to the Master Drainage Plan must be approved by Water and Sanitation Department. At this stage an historical/archeological impact study will also have to be finalized for Alberta Culture's approval.

Once the Neighbourhood Structure Plan is approved, the subdivision and development process will be accelerated, at which time release of lands within the R.D.A. through an Order in Council for affected neighbourhoods must occur and Development and Servicing agreements must be executed before development can proceed.

Figure 10: General Staging Sequence (Bylaw 7464, April 24, 1984)

