

South Edmonton Common and Edmonton Research and Development Park Area Structure Plan

Office Consolidation July 2005

Prepared by:

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Bylaw 11786 was adopted by Council in July 1998. In July 2005, this document was consolidated by virtue of the incorporation of the following bylaws, which were amendments to the original Bylaw 11786.

Bylaw 11786	Approved July 13, 1998 (To adopt the South Edmonton Common and Edmonton Research and Development Park ASP and repeal Bylaw 6981, the Edmonton Research and Development ASP)
Bylaw 13614	Approved March 30, 2004 (Various text changes; replace figures 1-9)
Bylaw 13935	Approved March 23, 2005 (Various text changes and elimination of the Open Space and Recreational designation from the Core Area, replace figures 1-9)

Editor's Note:

This is an office consolidation edition for the South Edmonton Common and Edmonton Research and Development Park ASP, as approved by City Council on July 13, 1998. For the sake of clarity a standardized format was utilized in this Plan. Private owner's names have been removed in accordance with the Freedom of Information and Protection of Privacy Act. All text changes are noted in the right margin and are italicized where applicable. Furthermore, all reasonable attempts were made to accurately reflect the original Bylaw.

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
Planning and Development Department**

TABLE OF CONTENTS

SECTION 1	INTRODUCTION
1.1	Purpose
1.2	Background
1.3	Plan Area
1.4	Land Ownership
SECTION 2	STATUTORY PLAN & POLICY CONTEXT
2.1	Edmonton Municipal Development Plan
2.2	Major Commercial Corridors Overlay
SECTION 3	SITE CONTEXT & DEVELOPMENT CONSIDERTIONS
3.1	Existing Development & Surrounding Land Uses
3.2	Topography & Natural Drainage
3.3	Vegetation & Soils
3.4	Pipeline Corridors
3.5	Environmental Contamination
3.6	Historic Resources
3.7	CP Rail Main Line
3.8	Transportation and Utilities Corridor
SECTION 4	DEVELOPMENT OBJECTIVES
4.1	Edmonton Research & Development Park
4.1.1	General Development
4.1.2	Industrial Development
4.1.3	Open Space
4.1.4	Public Utility Development
4.1.5	Building Design & Climate Control
4.2	South Edmonton Common
4.2.1	Commercial
4.2.2	Interaction of the Edmonton Research & Development Park and South Edmonton Common
4.2.3	Environmental
4.2.4	Servicing

SECTION 5	DEVELOPMENT CONCEPT
5.1	Plan Area
5.2	Edmonton Research & Development Park
5.2.1	Research & Development
5.2.2	Light Industrial Ancillary Uses
5.2.3	Core Area
5.2.4	Urban Design
5.2.5	Open Space
5.2.6	Circulation
5.3	ERDP Environmental Performance Standards
5.3.1	General
5.3.2	Vibration
5.3.3	Glare or Heat
5.3.4	Radioactive Materials
5.3.4	Electrical Radiation
5.4	South Edmonton Common
5.4.1	Rationale for Commercial Development
5.4.2	South Edmonton Common Market / Impact Study
5.4.3	Calgary Trail Parcel
5.4.4	Central Parcel
5.4.5	Southeast Parcel
5.5	South Edmonton Common / Research Park

SECTION 6.0	TRANSPORTATION
6.1	Access & Circulation
6.2	Roadway Improvements
6.3	Pedestrian & Bicycle Circulation
6.4	Public Transit

SECTION 7.0	ENGINEERING
7.1	Storm Servicing
7.2	Sanitary Servicing
7.3	Water Servicing

SECTION 8.0	IMPLEMENTATION
8.1	ERDP Development Staging
8.2	SEC Development Staging

APPENDIX	
A.1	South Edmonton Common And Edmonton Research & Development Park Area Structure Plan - Land Use Statistics

Section 1

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Area Structure Plan is to describe the land use framework and development objectives for South Edmonton Common and the Edmonton Research & Development Park. The plan area is a 262 hectare parcel of land in south Edmonton on the east side of Calgary Trail/*Gateway Boulevard* south of 23 Avenue (see Figure 1.0 - Location Plan).

*Bylaw 13614
March 30, 2004 and
Editor*

The Area Structure Plan (ASP) will provide general guidelines to facilitate the orderly and efficient development of the plan area in terms of proposed land uses, location of major roads and facilities and sequence of development. The ASP Amendment will also provide a framework for the subsequent *rezoning* and subdivision of land.

The Area Structure Plan has been prepared on behalf of *a private corporation*, owners of most of the west half of the plan area. The ASP also respects and integrates the City of Edmonton's partially built and long-standing commitment to the concept of a Research & Development Park intended to foster the advancement of leading edge, high tech companies.

Amended by Editor

1.2 Background

The original Area Structure Plan for the Edmonton Research & Development Park was approved by City Council on 17 August 1982 under Bylaw No. 6981. The ASP was subsequently amended on 17 June 1996 under Bylaw No. 11278 to substantially revise the plan to accommodate the development of the first phase of South Edmonton Common. This amendment converted 83 ha of the western portion of the plan area to commercial uses.

A limited amount of development has taken place within the Edmonton Research & Development Park in the northeast quarter of the ASP and the Alberta Research Council has developed facilities in a portion of the southeast quarter. Servicing of commercial parcels in South Edmonton Common began in the spring of 1997 and development is ongoing.

Although the nature of proposed land uses and configuration of roadways within the ASP has changed substantially since the original 1982 plan, wholesale revisions and updates to the ASP have not been carried out. This current document is intended to revise and update the ASP on a more comprehensive basis. The Plan is hereafter referred to as the South Edmonton Common and Edmonton Research & Development Park (SECERDP) Area Structure Plan.

The ASP aims to balance the requirements of an emerging power centre retail environment in South Edmonton Common with the research-oriented, high-tech campus environment in the Research & Development Park.

1.3 Plan Area

The South Edmonton Common and Edmonton Research & Development Park Area Structure Plan includes all of Section 33-51-24-W4M. The gross area of the ASP is 262.25 hectares.

As shown on Figure 2.0 - Context Plan & Land Ownership, the SECERDP ASP is defined by the following boundaries:

- **Northern Boundary** - 23 Avenue (from *Gateway Boulevard* to Parsons Road) and 25 Avenue (from Parsons Road to 91 Street).
- **Eastern Boundary** - 91 Street
- **Western Boundary** – *Gateway Boulevard*
- **Southern Boundary** - Northern edge of the Transportation & Utilities Corridor.

*Bylaw 13614
March 30, 2004*

The SECERDP ASP constitutes a logical planning unit with respect to identifiable plan boundaries and servicing considerations.

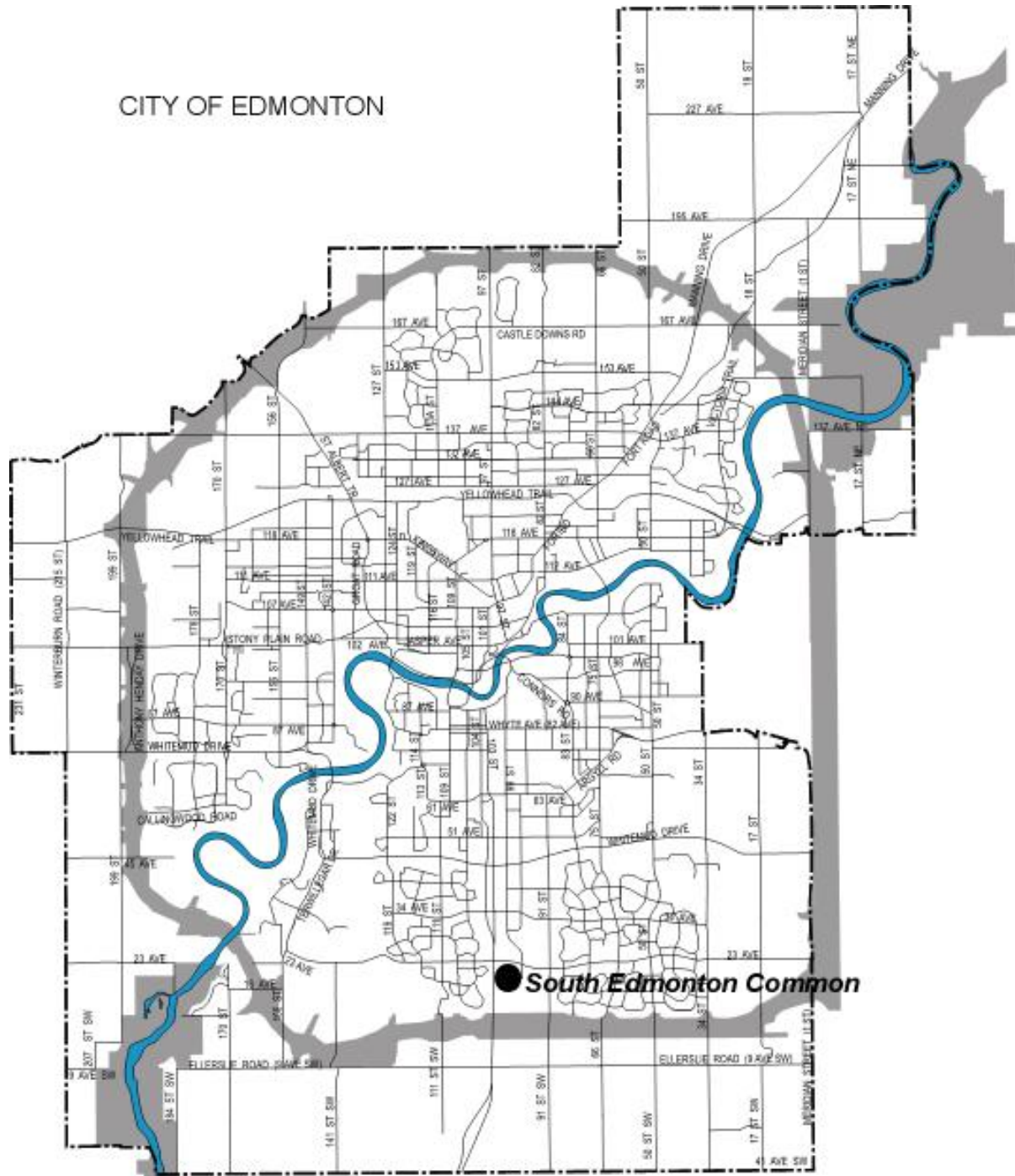
1.4 Land Ownership

The majority of the west half of the ASP is owned by *a private corporation* who is in the process of subdividing commercial parcels for development and for sale to individual tenants of South Edmonton Common. Parcels of land within the northeast quarter are owned by tenants of the Research Park and The City of Edmonton. The southeast quarter is owned by *the Provincial Government* and is home to the Alberta Research Council.

Amended by Editor

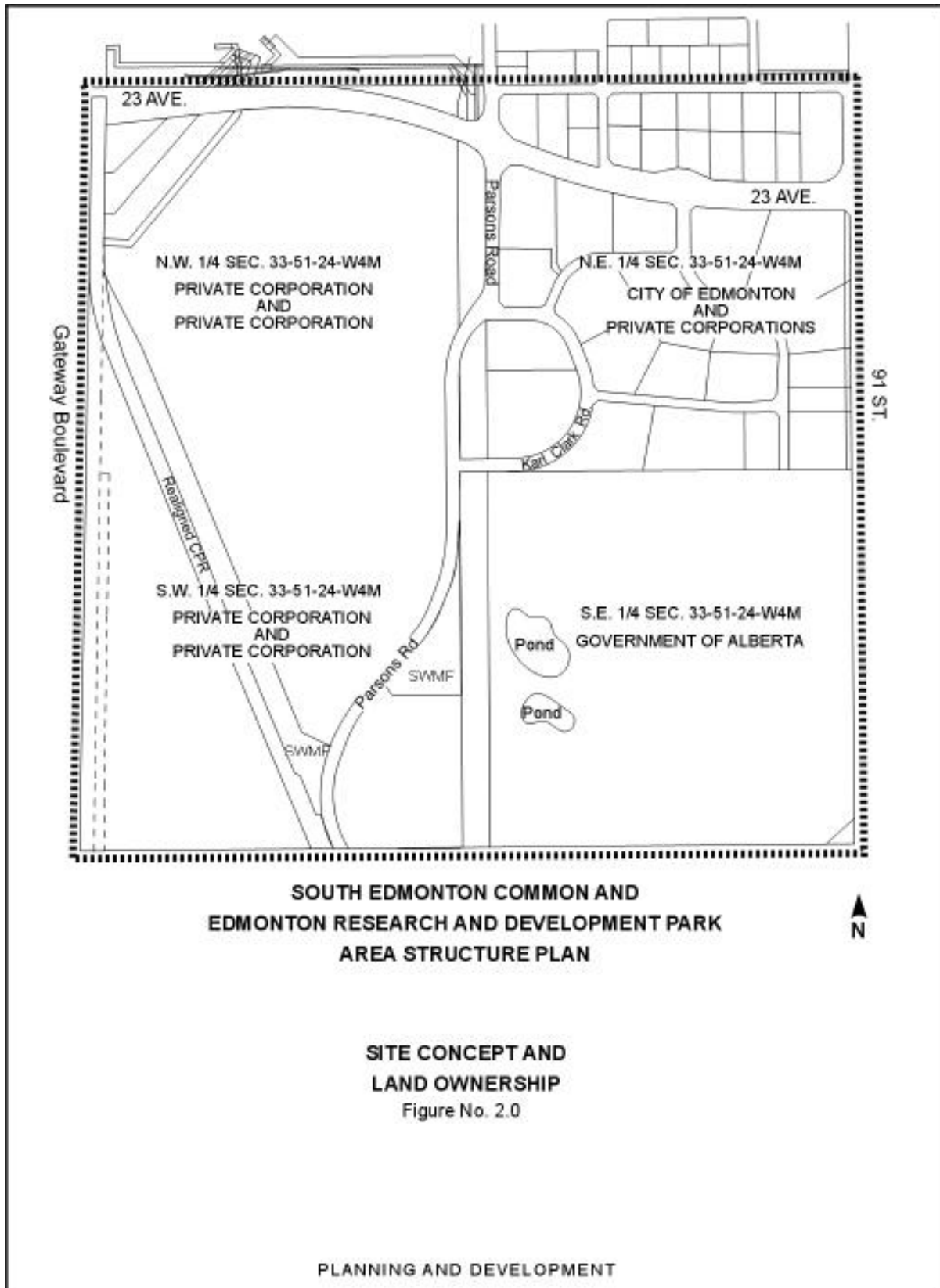
The general pattern of current land ownership is shown on Figure 2.0 - Context Plan & Land Ownership.

Figure 1 Location Plan (As amended by Bylaw 13935, March 23, 2005)



Location Plan
Figure No. 1

Figure 2 Site Concept and Land Ownership (As amended by Bylaw 13935, March 23, 2005 and Editor)



Section 2

2.0 STATUTORY PLAN & POLICY CONTEXT

2.1 Edmonton Municipal Development Plan

The land within the South Edmonton Common and Edmonton Research & Development Park ASP is designated in the City of Edmonton Municipal Development Plan (MDP) as a Business & Employment Area. The SECERDP ASP is consistent with the relevant Business & Employment Area policies and objectives of the MDP specifically:

Policy 3.A.1 Identify and utilize appropriate land use zoning which allows for a variety of land uses in business and employment areas including manufacturing, commercial and service areas.

The Plan provides a variety of land use opportunities that will encourage new types of commercial and industrial land uses in Southeast Edmonton. Specifically, the plan identifies the western portion of the Plan area for emerging commercial and service uses while maintaining the eastern portion for research and high technology type uses. The Plan facilitates development opportunities for high technology industries and corporate head office locations associated with these industries by providing a research/industrial area.

Policy 3.A.2 Identify and designate adequate lands required for existing and future industrial needs based on proximity to similar uses; compatibility with adjacent areas; appropriate road and rail access; adequate separation distances in the case of heavy industrial types of uses; and the need for flexibility to accommodate future industrial employment growth.

The Plan, through the Research Park component continues to facilitate the development of high technology industries and corporate head offices, which is vital to the assurance of sustainable employment opportunities for Edmonton and the surrounding Region. The increasing significance of an innovative based economy and high knowledge-manufacturing industries will form the future of the Edmonton and Alberta economies.

Policy 3.A.5 Encourage a hierarchy of shopping centres of varying sizes and functions ranging from the larger regional centres to community centres to the smaller neighbourhood centres to serve suburban residential areas.

The SECERDP ASP provides for a wide variety of manufacturing, commercial, industrial and service uses under the Site Specific Development Control (DC2) Provisions in South Edmonton

*Bylaw 13614
March 30, 2004*

Common on the west half. High quality research and development uses are fostered through the Industrial Business (IB) *Zone* in the Research Park on the east half.

*Bylaw 13614
March 30, 2004*

Policy 3.A.5 Encourage a hierarchy of shopping centres of varying sizes and functions ranging from the larger regional centres to community centres to the smaller neighbourhood centres to serve suburban residential areas.

South Edmonton Common represents the latest retail form in large scale regional power centres serving a broad base of customers from within and outside the Edmonton metropolitan area.

Policy 3.C.1 Provide for major retail concentrations with one or more large scale retail facilities which develop along arterial corridors.

South Edmonton Common is a major commercial development consisting of approximately 1.2 - 1.3 million square feet of commercial floor space. In keeping with current retail trends, South Edmonton Common consists of stand-alone, big-box pad development complimented by smaller retail/commercial uses and some specialized entertainment related complexes. The proximity to Calgary Trail provides South Edmonton Common with a very visible location along a major corridor.

Policy 3.C.2 Identify corridors and provide specific land use policies and land use *zones* for each corridor recognizing their unique development characteristics including: variety of uses, regional function, likely expansion, lengthy phasing of development, the need for compatibility with adjacent uses and the desire for attractive urban design along arterial roads.

*Bylaw 13614
March 30, 2004*

All of the commercial land within South Edmonton Common is governed by Site Specific Development Control (*DC2*) *Provisions* which specify uses and development criteria including landscaping and setbacks.

*Bylaw 13614
March 30, 2004*

Land within the Research Park is also subject to specific development objectives to enhance the character and research/industrial purpose of the area. Both halves of the ASP have a regional character and function.

2.2 Major Commercial Corridors Overlay

The general purpose of the Major Commercial Corridors (MCC) Overlay is to establish development criteria for the purpose of ensuring that the development along Major Commercial Corridors is visually attractive and that due consideration is given to pedestrian and traffic safety.

The MCC Overlay regulations are applied to all of the commercial land within the west half of the SECERDP ASP through Site Specific Development Control (*DC2 Provisions and conventional zoning*) governing South Edmonton Common. Overlay considerations establish development criteria for the purpose of ensuring that development along major commercial corridors is visually attractive and due consideration is given to pedestrian and traffic safety.

*Bylaw 13614
March 30, 2004*

In respect of the MCC, development in South Edmonton Common will be guided by architectural themes paying respect to appearance of facades, roof lines, exterior finishing, setbacks, landscaping, parking, etc.

Section 3

3.0 SITE CONTEXT & DEVELOPMENT CONSIDERATIONS

3.1 Existing Development & Surrounding Land Uses

The SECERDP ASP encompasses 262.25 hectares of land. Prior to the initial stages of construction of South Edmonton Common in 1997, all development was high technology and research industries located in the eastern half of the plan. The Alberta Research Council facilities occupy a portion of the southeast quarter and the Research Park and its tenants occupy the northeast quarter.

Adjacent to and north of the ASP is *an ethane extraction facility*. West of the ASP and Calgary Trail are the developed residential neighbourhoods of Keheewin and Bearspaw. East of the ASP is the developed Mill Woods neighbourhood of Satoo and to the south is the Transportation and Utilities Corridor.

Amended by Editor

3.2 Topography & Natural Drainage

The topography of the site is generally flat, sloping gently from the northeast to the south and west (see Figure 3.0 - Site Features) with an elevation change of approximately 12 m over the plan area. The relatively high ground in the northeast quarter creates an opportunity through site design and building orientation within the Research Park to take advantage of the available views.

The plan area has limited surface water features. A wetland area in the south-central portion of the plan area provides a wildlife habitat for species of small mammals, water fowl and migratory birds. The City of Edmonton's Community Services Department has evaluated the site and due to the lack of unique or significant wildlife and vegetation, the wetland will not be preserved.

There are a few low lying open water bodies located south of the Alberta Research Council in the site's southeast quadrant. These landscaped ponds accommodate seasonal ponding and have landscaped open areas surrounding them.

Overall, the topography and drainage pattern within the ASP present no serious constraints to the development of South Edmonton Common and the Research & Development Park.

3.3 Vegetation & Soils

An Environmental Assessment for the Highway 2 Facility Planning Study was prepared by Spencer Environmental Management Services in 1991. Although the study was initiated to determine the environmental impacts associated with proposed developments south of Anthony Henday Drive, the report includes virtually all of

the SECERDP ASP plan area.

Tree cover within the plan area is relatively sparse since the land has been previously cleared for agricultural purposes. Exceptions include two stands of aspen and poplar in the central and southeasterly portion of the plan area. A small hedgerow of aspen and black poplar parallels the western boundary and serves as a natural screen from *Gateway Boulevard*.

*Bylaw 13614
March 30, 2004*

The largest percentage of the plan area is underlain with black chernozemic soils ranging from low to high salinity. For the most part, the soils are fairly well drained and pose no hindrance to future development.

There are no significant natural areas identified within the Plan area. The vegetation and soils in the area will pose no constraint on development.

3.4 Pipeline Corridors

Three pipeline corridors cross the plan area transporting a variety of petroleum products. The most significant corridor runs north-south bisecting the plan area and separating South Edmonton Common from the Research Park. Within this 38 m pipeline right-of-way are three main conduits *for oil/gas pipelines and a telephone ductline*.

Amended by Editor

The second corridor is in the northwest corner of the ASP and contains a number of conduits in smaller right-of-ways *for oil/gas pipelines*.

Amended by Editor

The third corridor is in the very southeast corner of the ASP and contains three pipeline right-of-ways *for oil/gas pipelines*.

Amended by Editor

The presence of pipeline right-of-ways in the central portion presents opportunities to develop the corridors for recreation, surface parking and open space purposes. Extensive discussions have taken place with the various pipeline operators in the central portions of the plan area regarding pipeline crossing agreements to facilitate the initial stages of development in South Edmonton Common. Such dialogue will continue as lands in the vicinity of the transmission pipelines are subdivided and developed.

3.5 Environmental Contamination

A Phase I Environmental Site Assessment (ESA) was performed by the Environmental Branch of CP Rail System in 1992. The ESA included research from a number of sources, including personal interviews, CP Rail System plan and records, City information, government publications and site visits.

All significant environmental concerns were resolved in 1994 and

as such there *are* no outstanding environmental concerns or development constraints.

Amended by Editor

3.6 Historical Resources

The Historical Resources Branch of Alberta Culture undertook a review of the plan area and has indicated that there are no features of historic significance.

3.7 CP Rail Main Line

For many years, the CP Rail Main Line ran north-south along the western boundary of the plan area adjacent to *Gateway Boulevard*. In 1994, Alberta Transportation & Utilities relocated the rail line to its present location bisecting the southwest quarter of the ASP and segmenting a triangular portion of the plan east of *Gateway Boulevard*. The rail line converges with the alignment of Parsons Road as it travels south. It is anticipated that the rail line and Parsons Road will share a common underpass beneath Outer Ring Road in the TUC.

*Bylaw 13614
March 30, 2004*

3.8 Transportation & Utilities Corridor

The TUC forms the southern boundary of the SECERDP ASP and was established to provide a corridor for the proposed Outer Ring Road, power lines, oil and gas transmission pipelines and other utilities. Crossings of the TUC area planned for Calgary Trail, Parsons Road/CP Rail Main Line and 91 Street. As the ultimate configurations of the various interchanges at these locations are determined, additional land may be returned (or required) within the plan area.

Figure 3 Existing Site Features (As amended by Bylaw 13935, March 23, 2005)



Section 4

4.0 DEVELOPMENT OBJECTIVES

The South Edmonton Common and Edmonton Research & Development Park Area Structure Plan has been prepared as a comprehensively planned commercial and research/industrial precinct. The main objectives of the ASP are:

- develop a plan consistent with the general intent and purpose of the City of Edmonton Municipal Development Plan and its policies as identified in Section 2.1.
- provide a framework to deliver a high quality, comprehensively planned commercial and research/industrial area by defining the collector and arterial roadway network, the type, size and location of land uses, linkages, servicing designs and development staging.
- provide for suitable buffering and integration between commercial and research/industrial land uses to ensure that the integrity of both the Research & Development Park and South Edmonton Common is maintained.
- provide a logical, safe and efficient hierarchy of transportation systems within the plan area to address the pedestrian, bicycle, public transit and automobile transportation needs of businesses and patrons of the Edmonton Research & Development Park and South Edmonton Common.
- allow implementation of the plan on an orderly, staged basis with flexibility to adapt to changing market conditions.

Given the diverse nature and character of commercial development relative to a research park development, development objectives for the ASP have been segmented into the respective components.

4.1 Edmonton Research & Development Park

The original 1982 ASP for the Edmonton Research & Development Park ASP identified the following objectives for the plan area. At that time, these objectives applied to the entire section of land whereas they now apply only to the lands within the East 1/2 Section 33-51-24-W4M.

Some revisions have been made to the various objectives where they are no longer relevant or require updating to reflect current land use and market conditions. The referred development principles for the Edmonton Research and Development component of the ASP are as follows:

4.1.1 General Development

- create a high quality, high amenity development which embraces the highest standards of industrial park planning and design suited to knowledge based industries and businesses.
- attract a specific tenant group engaged primarily in scientific research and development so as to augment and broaden the industrial base of the City of Edmonton.
- create an environment best described as a "place to think." A campus like complex including areas for reflection and thought as well as sections where the free flow and exchange of ideas can take place.
- ensure that development takes place in an orderly and economic manner.

4.1.2 Industrial Development

- attract firms involved in research and development within high technology and leading edge light manufacturing industries.

4.1.3 Open Space

- create an open space network for passive and active pursuits and to provide a variety of recreational opportunities to meet the needs of the Research & Development Park employees.

4.1.4 Public Utility Development

- provide safe, adequate, economic and reliable utility systems to serve the needs of the projected industrial population within the Research & Development Park.

4.1.5 Building Design & Climate Control

- ensure external building design is in harmony and conformity with neighbouring buildings in terms of colour and texture
- provide covered and sheltered walkways between groups of buildings and encourage off street parking to offer protection in winter months.
- encourage energy conservation through building design

4.2 South Edmonton Common

The development principles for the South Edmonton Common component are as follows:

4.2.1 Commercial

- create a high quality commercial development to serve the retail, commercial and entertainment needs of the Edmonton region.
- respect and apply the requirements of the Major Commercial Corridors (MCC) Statutory Plan Overlay for the Calgary Trail area where applicable within South Edmonton Common.
- locate various commercial uses within South Edmonton Common in a logical fashion with respect to the transportation network, proximity to visible entrance routes (Calgary Trail, Parsons Road, 23 Avenue and Anthony Henday Drive) and the existing uses with the Edmonton Research & Development Park.

4.2.2 Interaction of the Edmonton Research & Development Park & South Edmonton Common

- provide for buffering, physical linkages and transition zones which foster the coexistence of the commercial development in South Edmonton Common with the research oriented operations in the Edmonton Research & Development Park.
- *ensure that the pipeline corridor acts as a suitable buffer/transition zone between South Edmonton Common and the Edmonton Research and Development Park.*
- ensure that commercial development within South Edmonton Common and its attendant impacts (traffic, noise, appearance, etc.) do not negatively affect the tenants and ongoing operation of the Edmonton Research & Development Park.

*Bylaw 13614
March 30, 2004*

4.2.3 Environmental

- undertake risk assessments where appropriate to determine the impact of the Amoco Ethane Extraction Plan on commercial development within South Edmonton Common.
- integrate natural features into the plan area where appropriate and/or economically and environmentally sustainable.

4.2.4 Servicing

- provide efficient and cost effective permanent servicing to commercial sites within SEC and extended in a logical manner.

Section 5

5.0 DEVELOPMENT CONCEPT

The development concept for the South Edmonton Common and Edmonton Research & Development Park ASP is in response to the parameters outlined in the previous sections with respect to land ownership, statutory plans and policy documents site features and development objectives.

5.1 Plan Area

The SECERDP ASP is comprised of 262.25 hectares of land and is bound on all sides by either a utility corridor or major roadway to create a logical planning unit. Running north-south through the ASP, the pipeline corridor and Parsons Road provide a logical transition between South Edmonton Common on the west and the Research Park on the east allowing them to function with relative independence in spite of their close proximity and respective land uses.

5.2 Edmonton Research & Development Park

As shown on Figure 4.0 – Development Concept, the lands in the eastern portion of the plan area are designated for Research/Industrial land uses. More specifically, the areas for Research/Industrial uses consist of those lands which will be devoted to research and development activities (all lands south of 23 Avenue) and an area north of 23 Avenue which is intended for light industrial users who will provide support services to the research and development firms. The two areas are described in more detail below:

5.2.1 Research & Development

Development within this portion of the ASP shall be restricted to research and high technology industry including light manufacturing related primarily to prototypical fabrication. Such research and development activities will include experimentation and investigation in industrial, commercial and agricultural techniques, methods, materials and products. This may also include the headquarters or administrative offices of firms engaged in research and development.

High standards of architecture shall be encouraged with climate control and energy conservation being important considerations in the planning and design of facilities within the Research Park.

In order to achieve the high quality image that a Research Park is intended to convey, visual interest and area identity shall be promoted through the design of distinctive signature entrances, provision of views of open space and landmark features, and

encouragement of uniformity in streetscapes.

A restrictive application of the uses permitted by and the regulations contained in the Industrial Business (IB) *Zone* will not ensure that the objectives and development concept defined above are fulfilled.

*Bylaw 13614
March 30, 2004*

Therefore, an additional set of regulations and guidelines entitled "Development Standards and Design Guidelines for the Edmonton Research and Development Park" shall be employed in all of the above described research and development park lands that are municipally owned. These guidelines are not intended to supersede the IB *Zone* standards expressed in the Land Use Bylaw; rather, they are designed to complement them.

5.2.2 Light Industrial Ancillary Uses

The area north of 23 Avenue is proposed for uses ancillary to the research and development activities. Typical uses might include machine shops, instrumentation and electronics design/assembly as well as convenience services. The success of this area will be its availability to accommodate the typical industrial user whose primary locational criteria will be to serve the unique requirements of research park tenants.

The land use controls identified in the IB *Zone* should be implemented to their fullest extent to ensure compatibility between industrial users and to complement the high development standards proposed for the Research Park.

*Bylaw 13614
March 30, 2004*

5.2.3 Core Area

The original Edmonton Research & Development Park ASP designated a centrally located Core Area straddling the north-south pipeline corridor to provide a site for common services and facilities and to serve as a focal point for the Research Park.

Based on the original design, Parsons Road would have bent around the Core Area before continuing further south. A decision by the Transportation & Streets Department to have Parsons Road in a straighter north-south alignment effectively bisected the Core Area and impacted its viability to function as a central node.

Furthermore, given the limited amount of development within the Research Park to date, the Core Area has not achieved its original intent. With the introduction of commercial uses in South Edmonton Common coupled with the alignment of Parsons Road, the western half of the original Core Area was eliminated altogether.

Lands within the Core Area on the east half of the plan were zoned

(AP) Public Parks Zone and were leased for use as rugby fields. Future development options for the remaining portion of the Core Area include maintaining it as open space or redeveloping all or a portion of the parcels as part of the Research Park.

*Bylaw 13614
March 30, 2004
Bylaw 13935
March 23, 2005*

In 2005, continuing commercial development in South Edmonton Common resulted in the elimination of the balance of the Core Area and the site being incorporated in the Research Park. The site was rezoned to facilitate development of research/industrial land uses.

*Bylaw 13935
March 23, 2005*

5.2.4 Urban Design

The intended functional use and purpose of the individual buildings will be an important consideration in the design of the building form. Of equal importance, given the high standards that the Research Park is intended to convey, are design elements that employ aesthetic, security and climatic considerations. This shall be achieved through building design and siting as well as careful attention to landscaping, buffering and overall relationship between the individual building and the streetscape.

Detailed design guidelines are contained in a handbook entitled "Development Standards and Design Guidelines for the Edmonton Research and Development Park". These standards have been accepted as development guidelines by Economic Development Edmonton and they will consider these guidelines when entering into an agreement of lease or sale of municipally owned land to potential park tenants.

5.2.5 Open Space

An open space network is proposed within the Edmonton Research & Development Park portion of the ASP. The proposed open space concept is intended to promote a "campus-like" atmosphere which has been identified as being an objective of the area.

*Bylaw 13935
March 23, 2005*

Detailed design guidelines for the open space network are provided in the "Development Standards and Design Guidelines for the Edmonton Research and Development Park".

The pipeline corridor will serve as a buffer and transition zone between South Edmonton Common and the Research & Development Park. The physical separation it provides will be enhanced with appropriate buffering mechanisms such as landscaping. Linkages will be provided at various locations within the corridor to provide both vehicular and pedestrian access between South Edmonton Common and the Research & Development Park.

*Bylaw 13614
March 30, 2004*

Specific detail regarding buffering along and within the pipeline corridor will be determined at *rezoning* and implemented upon

subdivision where applicable. For lands which may not be the subject of further subdivision (such as the ARC property), other agreements will be necessary and may be determined at the time of development.

5.2.6 Circulation

The Research Park will be accessed with a network of collector and local roadways as shown on Figure 4.0.

A number of possible access opportunities across the pipeline corridor as well as to 91 Street are identified in the plan and discussed in more detail in Section 6.0.

A discussion of the transportation network for the entire ASP is provided in Section 6.0 - Transportation and in the Transportation Impact Assessment (TIA) submitted under separate cover.

5.3 ERDP Environmental Performance Standards

Due to the proximity of surrounding residential uses, it is of great importance to protect adjacent residents and the environment, as well as industrial users within the Research Park from objectionable or dangerous emissions.

5.3.1 General

No principal or accessory use shall be established or carried on which is or is likely to become a nuisance by reason of the emission of odor, dust, smoke, particulate matter or radiation, the glare of lights, electrical interference, gas fumes, refuse material, waste or water carried waste; or by reason of vibration or noise, or is likely to create a hazard to persons or property. Standards relating to the emission of air and water contaminants, noise and fire and explosion hazards shall comply with the relevant provisions in the Land Use Bylaw.

5.3.2 Vibration

Maximum permitted vibration from any cause shall not exceed the following when measured at the lot line:

Frequency (cycles/second)	Displacement (inches)
10 and below	0.0008
10-20	0.0005
20-30	0.0003
30-40	0.0002
40-50	0.0001
50 and over	0.0001

Vibration shall not be discernible at any property line to the human sense of feeling for three minutes or more duration in any one hour. Building and other structures shall be constructed and machinery and equipment installed and insulated on each site so that the ground vibration inherently and recurrently generated is not perceptible without instruments at any point along any of the exterior lot lines.

5.3.3 Glare or Heat

Any operation producing intense glare or heat shall be performed only within an enclosed or screened area and then only in such manner that the glare or heat emitted will not be discernible from any exterior lot line.

5.3.4 Radioactive Materials

The handling of radioactive materials, the discharge of such materials into the air or water, and the disposal of radioactive wastes shall be in conformance with relevant Federal and Provincial regulations.

5.3.5 Electrical Radiation

Any electrical radiation shall not adversely affect at any point any operations or equipment other than those of the creator of the radiation. Avoidance of adverse effects from electrical radiation by appropriate single or mutual scheduling of operations is permitted.

5.4 South Edmonton Common

Commercial uses were introduced in to the plan area with the 1996 amendment to the ASP to accommodate the first portions of South Edmonton Common. The redesignation of land from Research/Industrial to Commercial facilitated the development of this commercial centre providing opportunities for big-box retail development and associated retail/commercial/highway commercial development.

In a move away from more traditional, enclosed retail development, South Edmonton Common is planned for a variety of sizes of commercial pads ranging in size up to 200,000 square feet. This commercial centre is connected with a series of local and collector roadways providing access throughout the site.

5.4.1 Rationale for Commercial Development

A Commercial Development Assessment was prepared in 1995 by CP Rail System to assess the potential implications of commercial

development in the south-central sector of the City. The Assessment concluded that by the Year 2006, at least 1.18 million square feet of retail will be required in this sector. The Calgary Trail corridor has been absorbing land at an annual rate of approximately 6-7 hectares per year over the past seven years. At present, only a few hectares of land remain undeveloped.

The growth of commercial development in South Edmonton Common is and will continue to have an impact on the price of land within the ASP. Current servicing costs plus land costs have made industrial development much less feasible than commercial development.

Residential development within the south, southwest and southeast areas of the City has been very strong over the past few years with new development occurring or about to begin in Twin Brooks, Blackbume, The Meadows, Heritage Valley, Terwillegar Towne, Haddow, Leger and Ellerslie bringing an attendant increase in population and growth in the south Edmonton trade area.

Response to the initial stages of South Edmonton Common has been very positive with a number of big-box anchor tenants opting for sites in the area including Home Depot and Wal-Mart. These high profile tenants only serve to strengthen the attraction for other retailers and businesses.

A major multi-screen theatre/leading edge entertainment complex is proposed for the southern portion of South Edmonton Common on the west side of Parsons Road.

Unique in its presentation and form, this complex will serve as the southern anchor for SEC and will attract complementary business operations such as restaurants and innovative/leading edge retail outlets.

5.4.2 South Edmonton Common Market / Impact Study

A Commercial Market Assessment to support the incorporation of the entertainment complex into South Edmonton Common has been prepared by Urbanics Consultants Ltd. and submitted under separate cover.

The purpose of the study is twofold, namely to determine the market support and project viability of the proposed development plan and to determine the major impacts that the development will have on existing or proposed commercial developments in the south Edmonton Area. The report's objectives are as follows:

- provide a concept assessment of the proposed project;
- outline the current and projected economic environment that

occupants of the project will face;

- provide a brief site assessment of the project;
- examine the current and future market demand for the project;
- examine the state of current and anticipated retail supply;
- develop the total warranted "new" floorspace created by growth in population and real incomes within the trade area over the duration of the study period;
- examine the expected market demand and warranted floorspace for the entertainment facilities and various retail categories that will likely locate in South Edmonton Common.

Key findings and conclusions from the Market / Impact Study include:

- Given the significant absence of a comprehensively planned entertainment facility in southern Edmonton, the expected population growth, the expected employment growth, the expected retail trade growth, it has been conservatively estimated that the site could accommodate as much as 427,000 square feet of mixed commercial entertainment facilities. Estimates suggest that as much as 320,000 square feet is sustainable in 2002.
- Similarly, a non-automotive related conventional retail floorspace of at least 947,000 square feet is likely to be supportable by 2014. As much as 600,000 square feet may be warranted by 2002.

Virtually all of the negative impacts of the SEC development concern existing commercial areas. These include the following:

- Given its relative proximity to both Southgate Mall and the emergence over the past few years of the Calgary Trail retailing "couplet," and as evidenced by recent closures by both major tenants and other commercial retail units, some questions arise as to whether or not Heritage Mall's "highest and best use" should be oriented to retail commercial activity.
- To the extent that certain portions of Mill Woods undeveloped town centre's area are earmarked for retail purposes, some delay in build out, as probably already evidenced by commercial development in the Calgary Trail "couplet," can continue to be expected over the short term.

- Outlying communities may experience a slow down in big-box retail development (in particular, Leduc).
- Some retail categories may experience some transference of sales to SEC situated businesses.

The positive impacts of the proposed entertainment shopping complex include:

- The emergence of a comprehensively planned, well merchandised entertainment shopping complex, serving predominantly the south Edmonton market will attract many rural customers to Edmonton that will not only patronize the entire SEC project but also retailing facilities in other commercial *zones*.
- Based on the Province of Alberta's Input Output Industry Multiplier series, the estimated \$120 million development will generate a further indirect effect in the order of \$90 million in indirect spending within the Province (i.e. construction supply, downrange spending by employees of construction and development companies). Approximately 1,800 direct (i.e. on-site) and indirect (i.e. suppliers) temporary jobs should be created during the various phases of construction of the entertainment shopping complex.
- Once completed, the entertainment shopping centre will create, on average, one job every \$32,300 (\$1997) of retail spending. This would create in the order of 950 full and part-time operational jobs by 2008.

*Bylaw 13614
March 30, 2004*

These facts and findings underlie the need for commercial development within South Edmonton Common and result in the western half of the SECERDP ASP being designated primarily for a wide range of Commercial uses. These lands can be segmented into three main parcels as described below:

5.4.3 Calgary Trail Parcel

The realignment of the CP Rail Main Line through the southwest quarter created a separate parcel west of the Line adjacent to *Gateway Boulevard*. Although the possibility of a railway crossing exists in the future, the triangular parcel is effectively separate from the main portion of South Edmonton Common.

*Bylaw 13614
March 30, 2004*

Given this parcel's proximity to Calgary Trail, the site has been planned for a variety of highway commercial and commercial uses through the Site Specific Development Control (*DC2*) Provision applied to it in 1996.

*Bylaw 13614
March 30, 2004*

One access point to this parcel of land exists from Calgary Trail/Gateway Boulevard at 19 Avenue. This access allows a left in

*Bylaw 13614
March 30, 2004*

from Calgary Trail and right in / right out movements to Gateway Boulevard. This intersection will be partially replaced with a grade separated crossing in conjunction with an interchange project at 23 Avenue.

5.4.4 Central Parcel

The central parcel of South Edmonton Common is located east of the CP Rail Main Line and west of Parsons Road and accounts for the majority of the commercial area within the ASP.

Similar to the Calgary Trail parcel, the central parcel is planned for a variety of commercial uses including several big-box retail pads adjacent to the CP Rail Main Line and along Parsons Road south of 23 Avenue. The sites for big-box store locations have been selected for their high visibility along these major corridors. Planned for the internal areas of the parcel are locations for smaller scale retail/commercial development.

DC2 Provisions for the north and south halves of the central parcel allow for a wide range of commercial uses with various site development requirements (landscaping, building setbacks, etc.) Although a variety of schematic designs have been prepared for the area, market conditions and tenant demands will play a key role in the final configuration of commercial development on the parcel.

*Bylaw 13614
March 30, 2004*

Access to the central site will be gained from several roadway intersections along 23 Avenue and Parsons Road. Access points to individual commercial pad will be determined at the time of development with the appropriate City Departments.

5.4.5 Southeast Parcel

The alignment of Parsons Road creates a parcel of land in the southeast portion of South Edmonton Common, east of the roadway. This parcel is designed for Commercial uses. Roadway access to this parcel is gained from Parsons Road.

*Bylaw 13614
March 30, 2004*

5.5 South Edmonton Common / Research Park Interface

*Bylaw 13614
March 30, 2004*

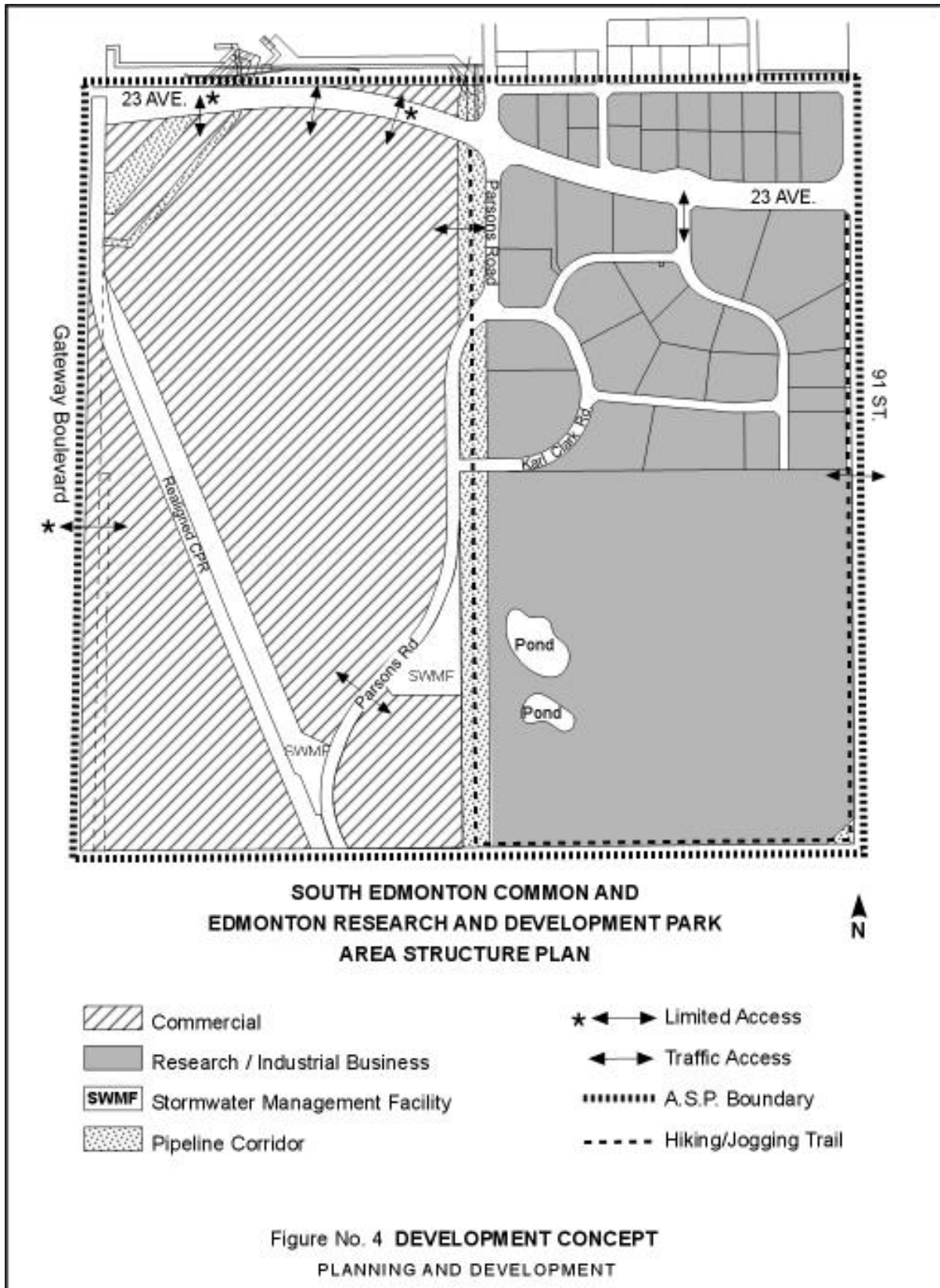
The pipeline corridor serve as the interface between South Edmonton Common and the Research & Development Park. Attention must be given to the appearance of these shared links and the adjoining land uses to ensure a smooth transition and complimentary relationship between the east and west halves of the plan.

The impact of South Edmonton Common on the Research Park or the impact of the Research Park on South Edmonton Common will be mitigated by the provision of landscaping requirements along Parsons Road and the pipeline corridor, with controls on signage and lighting and appropriate development setbacks.

*Bylaw 13614
March 30, 2004*

These provisions can be identified at the *rezoning* stage in the *DC2 Provisions* and implemented through subdivision conditions.

Figure 4 Development Concept (As amended by Bylaw 13935, March 23, 2005)



Section 6

6.0 TRANSPORTATION

A Transportation Impact Assessment (TIA) was prepared by IMC Consulting Group Inc. (now Stanley Transportation) in 1996 in support of the first phase of South Edmonton Common. A subsequent TIA was undertaken by Reid-Crowther & Partners Ltd. in 1998 in support of the second phase of development in SEC. The following sections provide a brief overview of the existing and proposed transportation network for the SECERDP ASP.

A TIA was prepared in 2003 in support of an amendment to the Area Structure Plan by Bunt and Associates. This TIA reflects current traffic conditions on roadways adjacent to SEC and also includes a more detailed analysis of the internal roadway system. The TIA also takes into account recent roadway improvements including the extension of Parsons Road to Ellerslie Road, the anticipated opening of the southwest leg of Anthony Henday Drive, and future interchange at 23 Avenue and Gateway Boulevard. Table 8-1 in this TIA includes several required roadway improvements that are to be made to support the plan amendment and majority of remaining development potential in SEC. These are described in Section 6.2.

*Bylaw 13614
March 30, 2004*

6.1 Access & Circulation

As shown on Figure 5.0 - Access & Circulation, access to the SECERDP ASP is taken primarily from 23 Avenue at 99 Street, Parsons Road and 96 Street. As development progresses in both South Edmonton Common and the Research Park, access points will be added at Calgary Trail, Parsons Road (from the south) and potentially 91 Street.

Within and adjacent to the site, a hierarchy of arterial and collector roadways and improvements are planned:

Parsons Road - This north-south arterial roadway provides access off of 23 Avenue into the Research Park and then west across the pipeline corridor into South Edmonton Common before continuing south to align with the CP Rail Main Line to share an underpass of the future east leg of Anthony Henday Drive.

*Bylaw 13614
March 30, 2004 and
Editor*

99 Street - This north-south collector provides an access point into South Edmonton Common midway between Parsons Road and Calgary Trail. A number of local roadways will intersect with 99 Street within the plan area as it continues south to ultimately intersect with Parsons Road.

*Bylaw 13614
March 30, 2004*

ERP Collector Loop - As shown on Figure 5.0, a looping collector roadway is identified in the northern portion of the Research Park connecting to Parsons Road at two locations. The northern

connection to Parsons Road to the west across the pipeline right-of-way *is constructed*. The southern connection is not currently built but will provide additional access opportunities and flexibility for the further development of the Alberta Research Council lands to the south if deemed to be required by the ARC. Costs associated with this link will be the responsibility of the ARC.

*Bylaw 13614
March 30, 2004*

A further connection to 91 Street from the Research Park is possible at approximately 17 Avenue. It is proposed that this connection be constructed in conjunction with the widening of 91 Street from 23 Avenue to Anthony Henday Drive, currently planned to occur in conjunction with the opening of Anthony Henday Drive.

*Bylaw 13614
March 30, 2004*

Gateway Boulevard – *A limited access connection to Gateway Boulevard is available at 19 Avenue. This access allow left in/right in movements from Gateway Boulevard and right out movements to northbound Gateway Boulevard. This intersection will be partially replaced with a grade separated crossing in conjunction with the 23 Avenue and Gateway Boulevard interchange project.*

6.2 Roadway Improvements

A TIA prepared in 2003 by Bunt and Associates, which includes details of a roadway improvement program attached to future development of South Edmonton Common. Table 8-1 in the report includes items such as the construction of major roadways, intersection improvements, and installation of traffic signals as follows:

*Bylaw 13614
March 30, 2004*

- Widening of 23 Avenue from 4 lanes to 6 lanes from Gateway Boulevard to Parsons Road, including restricting traffic movements at the 23 Avenue/98 Street intersection to left-in and right-in/right-out movements.*
- Installation of a sidewalk on 23 Avenue from 101 Street to Parsons Road. The City will construct the section from 101 Street to the new 23 Avenue and Calgary Trail interchange.*
- Installation of double left turn lanes at 23 Avenue and Parsons Road for the westbound to southbound and northbound to westbound left turns.*
- Widening of Parsons Road to a 4 lane divided roadway from 21 Avenue to at least 19 Avenue, plus any additional channelization for critical intersections further to the south.*
- Construction of 101 Street from 23 Avenue to 21 Avenue including restricting the intersection of 23 Avenue and 101 Street to right in / right out movements. The City will grade 101 Street south from 23 Avenue as part of the interchange.*

*Bylaw 13935
March 23, 2005*

- *Lengthening the northbound left turn lane at 23 Avenue and 99 Street.*
- *Installation of traffic signals at the intersections of 21 Avenue and Parsons Road, 19 Avenue and 99 Street, 19 Avenue and Parsons Road, 12 Avenue and Parsons Road and 99 Street and Parsons Road as warranted.*
- *Various signing and operational improvements to public roadways within the SEC development.*

Costs for the above improvements will be borne by the developers and landowners in SEC with the exception of the following: that will involve cost sharing with the City of Edmonton:

- *23 Avenue widening – City to fund westbound lanes, developer eastbound lanes*
- *23 Avenue and Parsons Road turn bays*
- *Parsons Road Widening*

6.3 Pedestrian & Bicycle Circulation

Development within South Edmonton Common is primarily vehicle oriented although opportunities will exist for pedestrian and bicycle circulation on sidewalks/roads and along the pipeline corridor through the center of the ASP.

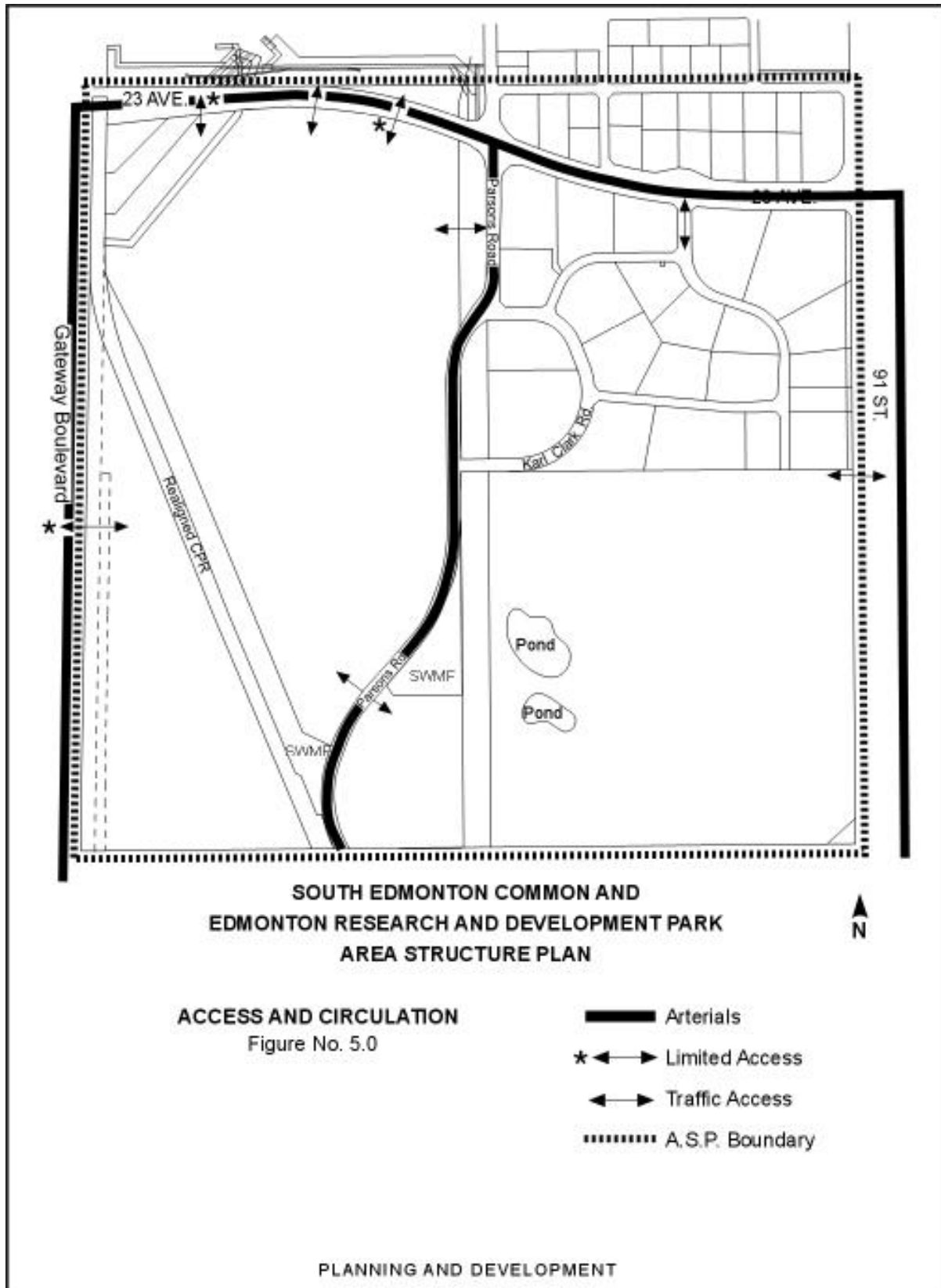
Walkways are proposed around the perimeter of the Research Park and will connect with the pipeline corridor.

6.4 Public Transit

Transit service *currently exists within* the ASP generally along the arterial and collector roadway network. Details as to the amount and extent of transit service will be *further extended throughout the SEC area* as demand warrants. As this is a commercial/industrial development, all roads will be built to handle bus traffic, therefore routing will follow development as service becomes justified.

*Bylaw 13614
March 30, 2004 and
Editor*

Figure 5 Access and Circulation (As amended by Bylaw 13935, March 23, 2005)



Section 7

7.0 ENGINEERING

7.1 Storm Servicing

As shown on Figure 6.0 - Storm Servicing, the general storm drainage scheme for the SECERDP ASP is based on a separate storm drainage system for the eastern and western halves of the plan area.

The Research Park lands will be drained to an existing 1,650 mm storm pipe located on Parson's Road extending south from 23 Avenue to the mid-section line. This pipe will provide for approximately 6.0 cms of storm run-off which is more than sufficient for the area. This line from 23 Avenue will connect to the new storm pipe in Calgary Trail.

Major flows from land within South Edmonton Common will be retained by a combination of on-site storage and a small stormwater management facility immediately east of the CP Rail Main Line and contribute these flows to a new storm pipe running north on *Gateway Boulevard*. This line will in turn connect to an existing 3000 mm storm tunnel at 30 Avenue.

*Bylaw 13614
March 30, 2004*

7.2 Sanitary Servicing

As shown on Figure 7.0 - Sanitary Servicing, the Research Park is currently served by an existing 375 mm sanitary trunk extending south on Parsons Road from 23 Avenue to the mid-section line. This trunk is only sized to accommodate sanitary flows from the eastern half of the plan area.

Sanitary flows from South Edmonton Common will ultimately be directed to the South Edmonton Sanitary Sewer (SESS). However, until SESS is built, it is proposed that SEC drain to the Capital Region Trunk Sewer. Flows into this sewer from SEC have been restricted to a maximum of 0.1 cms.

7.3 Water Servicing

As shown on Figure 8.0 - Water Servicing, the Research Park will be supplied with water by an existing 450 mm trunk water main that enters the area at Parsons Road and extends south. It is proposed that this trunk water line be extended further south and then west to connect with the major trunk main located in the Calgary Trail utility corridor.

The internal distribution will consist of 250-300 mm loops following the road system and connecting with the proposed major water trunks.

Water servicing for South Edmonton Common will be provided by extension of adjacent water mains along Calgary Trail, 23 Avenue and Parsons Road.

Figure 6 Storm Servicing (As amended by Bylaw 13935, March 23, 2005)

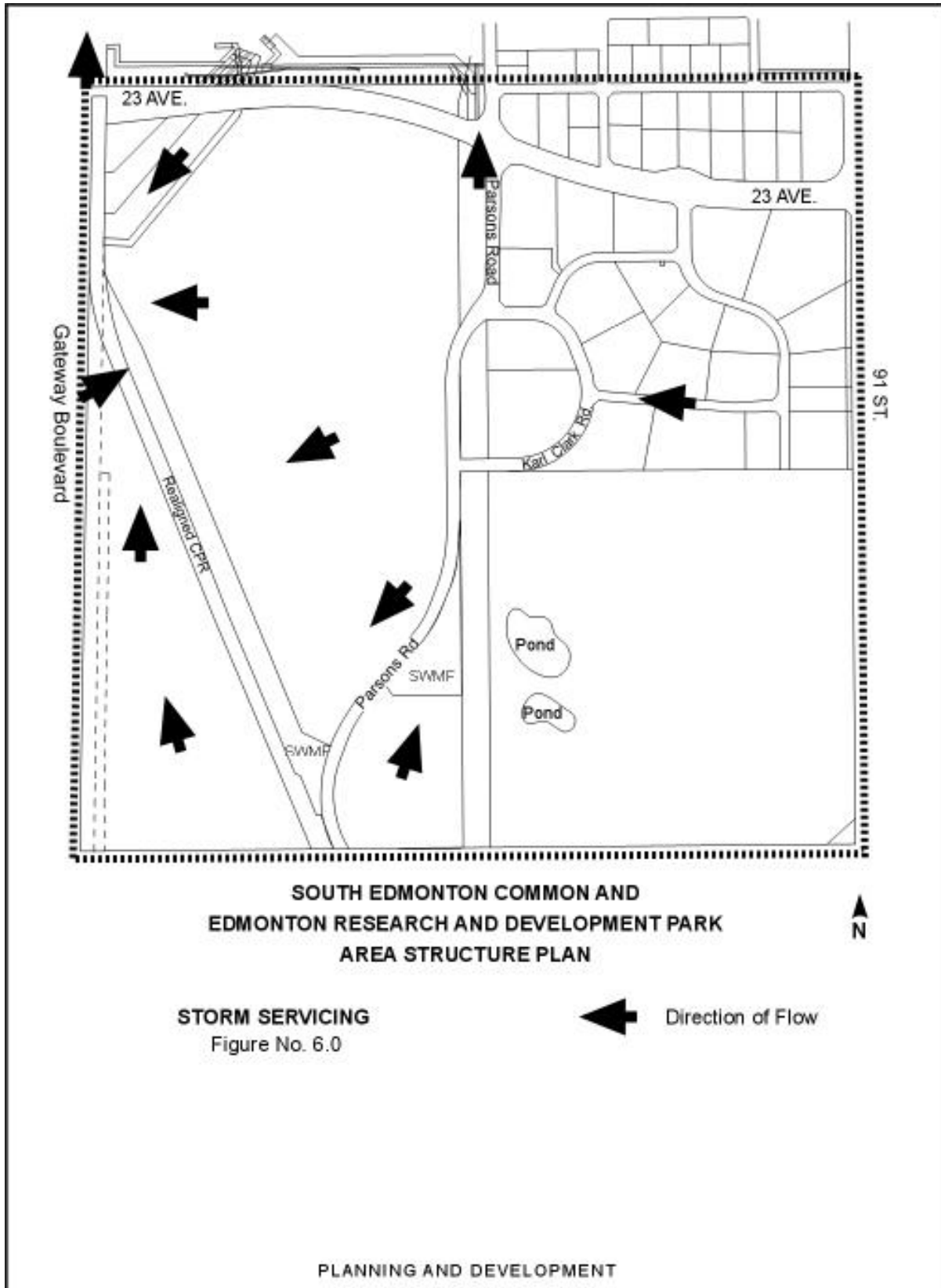


Figure 7 Sanitary Servicing (As amended by Bylaw 13935, March 23, 2005)

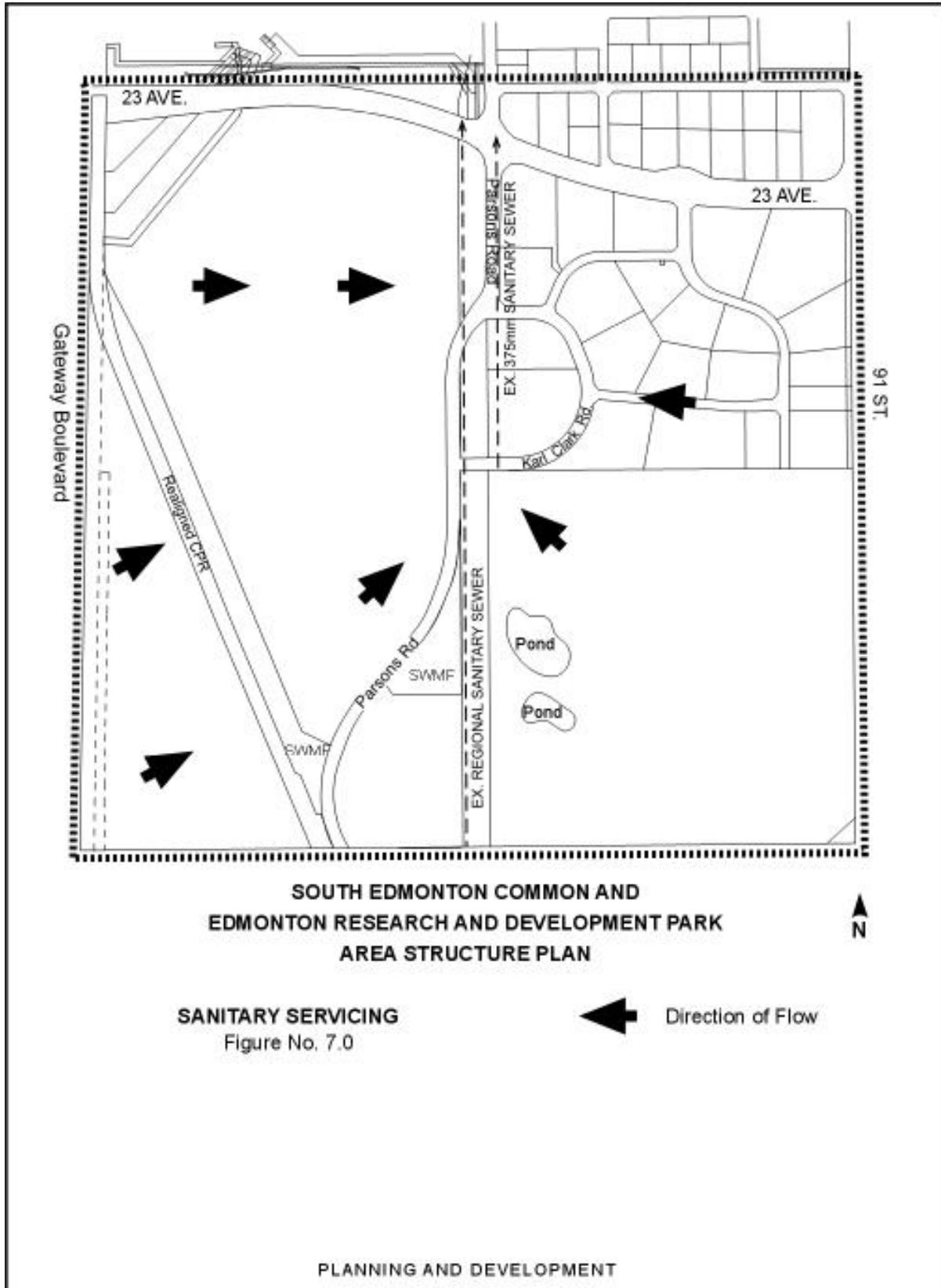
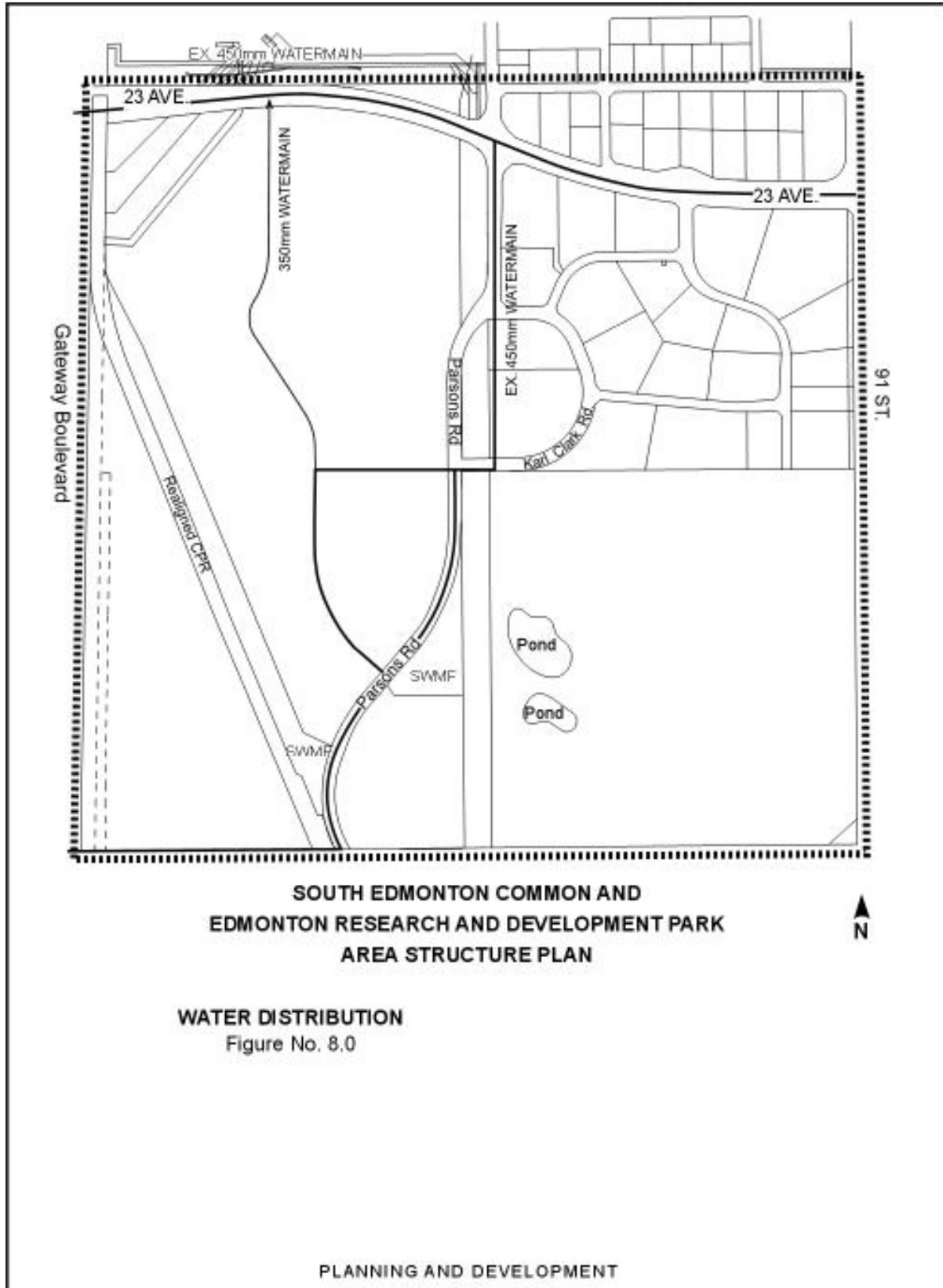


Figure 8 Water Distribution (As amended by Bylaw 13935, March 23, 2005)



Section 8

8.0 IMPLEMENTATION

Development within South Edmonton Common and the Edmonton Research & Development Park will respond to similar, but not identical, market demand factors. As such, development within one half will not necessarily move in step with the other.

Based on this fact, separate staging plans for South Edmonton Common and the Research Park have been prepared and are shown on Figure 9.0 - Development Staging.

8.1 ERDP Development Staging

Development within the Research Park began with the construction of the Alberta Research Council in the southeast quarter and followed shortly thereafter with servicing of the northeast quarter in the Research Park. Further development in the southern half adjacent to the Alberta Research Council will depend on the objectives of *the Provincial Government* but is anticipated to follow a west to east pattern.

Amended by Editor

All of the land within the Research Park is *zoned* as Industrial Business (IB) *Zone* so development can proceed with subdivision.

*Bylaw 13614
March 30, 2004
Bylaw 13935
March 23, 2005*

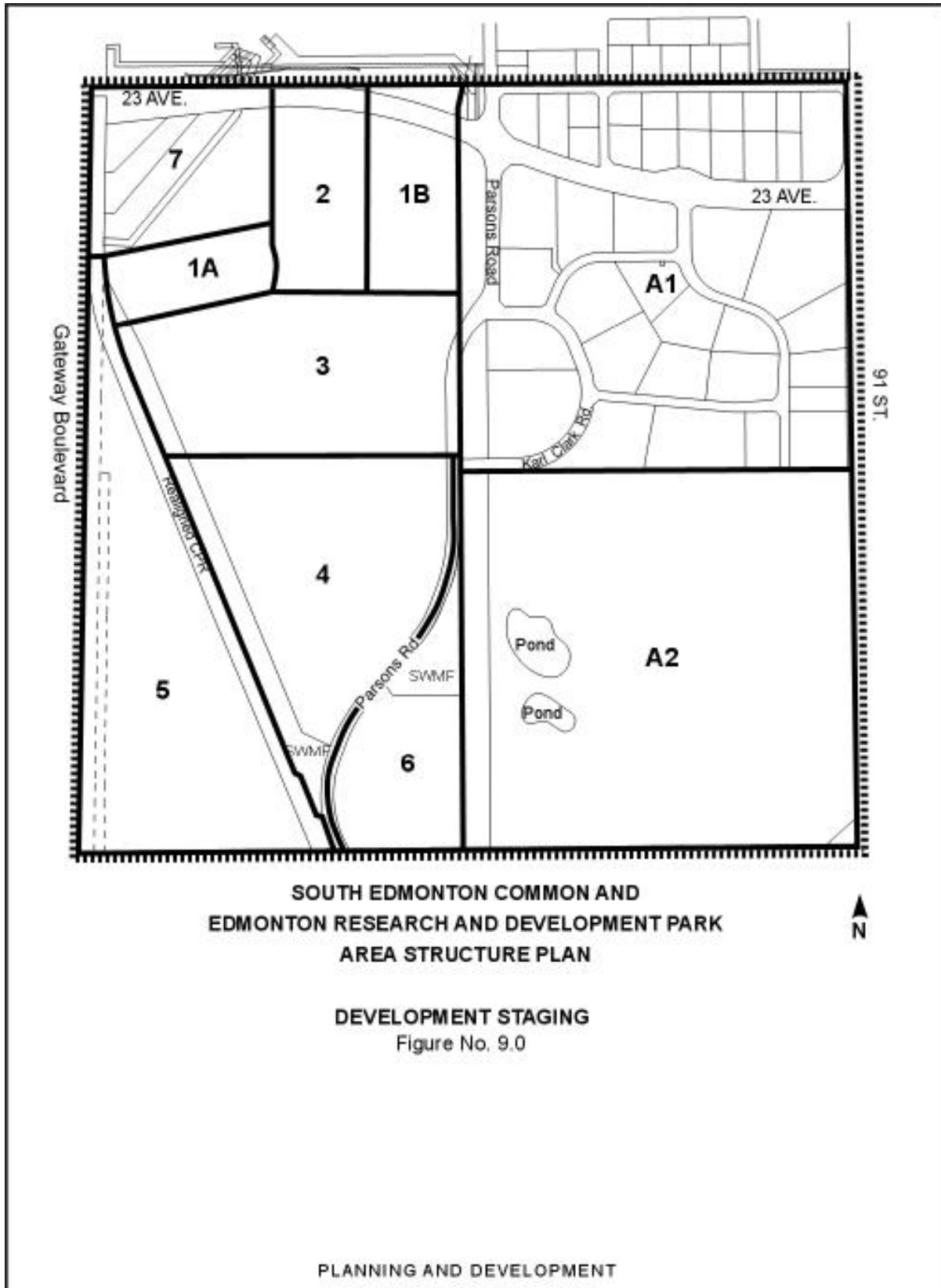
8.2 SEC Development Staging

The timeframe for development in South Edmonton Common is entirely dependent on market conditions. Development of the main parcel is underway and will progress in the manner shown on Figure 9.0.

All of the land within South Edmonton Common (with the exception of the small parcel south and east of Parsons Road) is *zoned* under three separate, but similar Site Specific Development Control (DC2) *Provisions*. Subdivision of individually serviced commercial pads will continue based on market conditions.

*Bylaw 13614
March 30, 2004*

Figure 9 Development Staging (As amended by Bylaw 13935, March 23, 2005)



Appendix A.1

**South Edmonton Common and Edmonton Research Development Park
Area Structure Plan - Land Use Statistics**

(As amended by Bylaw 13935, March 23, 2005)

GROSS AREA		262.25
23 Avenue	7.80	
Parsons Road	4.70	
CP Rail Main Line	5.60	
Pipeline Corridor	10.20	
	<hr/>	
	28.30	
GROSS DEVELOPABLE AREA		233.95
SWM Facilities	5.26	
Landscaped Pond	1.90	
	<hr/>	
<i>Total Deductions from GDA</i>	<i>7.16</i>	
Research & Industrial Business	125.50	
Commercial		
Retail Related	87.09	
Entertainment Centre	14.20	
	<hr/>	
	<i>101.29</i>	