Bylaw 12001, was adopted by Council in April 1999. In September 2010, this document was consolidated by virtue of the incorporation of the following bylaws:

- **Bylaw 12001**: Approved April 26, 1999 (to adopt the Carlton Neighbourhood Structure Plan)
- **Bylaw 12561**: Approved May 1, 2001 (to reallocate the medium density residential sites in the Carlton Neighbourhood to accommodate the development of increased density in the vicinity of the Stormwater Lake)
- **Bylaw 13580**: Approved February 11, 2004 (to create an institutional area to provide for the development of a religious assembly)
- **Bylaw 13861**: Approved December 6, 2004 (to add a paragraph to Section 4.5 of the plan for alternative noise attenuation, physical separation and visual screening options)
- **Bylaw 15448**: Approved June 7, 2010 (to realign the proposed collector intersection located at 139 Street and 165 Avenue, add three neighbourhood parks, and adjust the location and configuration of low density residential and medium density residential uses in the northern portion of the neighbourhood)

**Editor’s Note:**
This is an office consolidation edition of the Carlton Neighbourhood Structure Plan, Bylaw, as approved by City Council on April 26, 1999. This Plan is an amendment to 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 12001.

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
Planning and Development Department
Carlton Neighbourhood
Neighbourhood Structure Plan
Bylaw No. 12001
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(Amended by Editor)
(Bylaw 13580, February 11, 2004)

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Appendix "A"   Land Use Statistics Carlton Neighbourhood Structure Plan
1.0 INTRODUCTION

This document describes the Neighbourhood Structure Plan for the Carlton Neighbourhood. The lands are situated within The Palisades Area Structure Plan area.

This document describes the land development and servicing concepts for these lands.

This plan has been prepared by IBI Group Architects, Engineers, Planners on behalf of a private corporation.
2.0 DEVELOPMENT CONTEXT

2.1 Plan Area

The Carlton Neighbourhood is located in the northwest sector of the City of Edmonton as shown in Exhibit 1. This Neighbourhood is defined as Neighbourhood 2 in The Palisades Area Structure Plan and is located within SW36-53-25-4 and NW36-53-25-4. As also shown on Exhibit 1, the Carlton Neighbourhood is bounded on the east by the Oxford Neighbourhood, on the north of 167 Avenue and on the west by 142 Street and the railway. The south boundary of the Neighbourhood is defined by the proposed alignment of 153 Avenue. The Restricted Development Area (RDA) abuts the Neighbourhood at the northwest corner.

The Neighbourhood Structure Plan comprises approximately 118 hectares of land.

The Neighbourhood is currently accessible via the Oxford Neighbourhood at 155 Avenue to the east and from 142 Street to the west. Access to the north portion of the Neighbourhood is available via 167 Avenue, the north boundary.

2.2 Existing Land Uses

As shown in Exhibit 2, the south portion of the Neighbourhood lands (South 1/2 SW36-53-23-4) at one time temporarily accommodated a private corporation which operated a prefabrication facility for pipes, vessels, and construction equipment for the a private corporations’ Oil Sands Processing Plant. This prefabrication facility was in operation from 1975 to 1976. When operations ceased, some of the lands were returned to agricultural use while others have been vacant since that time. A paved bus turn-around is located at the edge of the plan area at the terminus of 155 Avenue.

The north half of SW36-53-25-4 is used mainly for agricultural crop cultivation. The south portion of NW36-53-25-4 (Plan 5392AE and Plan 932 3138) is an area known as Imperial Gardens which contain a number of small parcels that are in country residential and storage use. Most of the parcels are currently vacant. North of Imperial Gardens to 167 Avenue, are lands mainly in cultivation.

The northwest corner of the Neighbourhood has lands in the Redistricted Development Area (RDA) which are in cultivation. These lands are expected to be surplussed and removed from RDA status and are incorporated into the Neighbourhood for future development.
Exhibit 1: Local Context
(Bylaw 12001, April 26, 1999)
Exhibit 2: Existing Conditions *
(Bylaw 12001, April 26, 1999)

*Amended by Editor
2.3 Surrounding Land Uses

A 36.5 metre wide power transmission right-of-way abuts the Neighbourhood to the south. The adjacent property to the west of 142 Street / Railway, is in agricultural use except for those areas which contain wetlands. To the north of the proposed Neighbourhood boundary are lands in the Redistricted Development Area (RDA) which are currently used for agriculture.

The lands to the east (Oxford Neighbourhood) are being developed into urban residential uses. The south portion of the Oxford Neighbourhood is nearing development completion. Further development of these lands is proceeding northward.

The Cumberland Neighbourhood is located to the south of 153 Avenue and the power transmission right-of-way. Approximately half of this Neighbourhood is developed and development is proceeding in a westerly direction.

2.4 Topography, Vegetation & Natural/Environmentally Sensitive Areas

The topography of the plan area is flat with some minor drainage courses being apparent.

As a result of past agricultural practices and the land's previous and existing land uses, most of the natural vegetation within the boundaries of the Neighbourhood has been eliminated. Scattered trees are located along the west edge of the Neighbourhood and there are a number of vegetated areas adjacent to the low lying areas of the Neighbourhood.

The City of Edmonton's Inventory of Environmentally Sensitive & Significant Natural Areas (1993), identifies four sites in the plan area.

A site identified as a Local Environmentally Sensitive Area, has a small representation in the plan area. The Henry Singer Sports Field site (NW7060), totalling 18.5 hectares, is defined as a locally environmentally sensitive area. Local Environmentally Sensitive Areas are defined in the inventory as "...undisturbed or relatively undisturbed sites which, because of their natural features, have value to society and ecosystems worth protecting but are susceptible to further disturbance...". This site is comprised of five wetlands of variable sizes. A 1.3 hectare portion of this site (NW7060B); is located in the southwest corner of the Neighbourhood and is separated from the remainder of the Environmentally Sensitive Area by 142 Street and railway line. This wetland consists primarily of intermittent open water with sedge meadows. Water levels fluctuate in this wetland.
seasonally. The lowest elevation of this wetland is in the TransAlta right-of-way, south of the Neighbourhood. This portion of the wetland complex has been significantly altered by the development of 142 Street, the presence of the railway track and previous industrial development on the Carlton Neighbourhood lands. The wetland will be further affected by the eventual development of 153 Avenue. Therefore, this site is not viable in the context of suburban development.

A remnant of another wetland is located in the east central area of the Neighbourhood. It is not listed in the City's Inventory of Environmentally Sensitive & Significant Natural Areas. This wetland was once part of a wetland of significant size, but its size was greatly reduced and its viability impacted when portions of it were reclaimed through the development of the Oxford Neighbourhood. This Plan does not contemplate the retention of this remnant wetland.

The City's inventory identifies three sites in the plan area that are described as Natural Areas. Natural areas in this inventory are defined by the "presence of vegetation, or natural features". NW43 is a remnant woodlot and wetland complex totalling approximately 4.0 hectares, located in the west-central portion of the Neighbourhood. This woodlot contains primarily aspen and balsam poplars and wetland species such as sedge. As with site NW7060B, the water levels fluctuate seasonally, with open water being found very infrequently. The wetland complex has been impacted by adjacent development through altered drainage patterns. Therefore, this site is not viable in the context of suburban development.

NW44 and NW45 are remnant woodlots totalling approximately 5.0 hectares, located in the Imperial Gardens area of the Neighbourhood. These woodlots contain primarily aspen and balsam poplars. These woodlots are currently impacted by existing development and will be further impacted by urban development. In reviewing the size, location and configuration of these woodlots, they have limited viability in the context of suburban residential development due to changes in drainage patterns, grading and the future impacts of road construction. Retention of selected trees may be possible and is dependent upon the design of future subdivisions.

2.5 Pipelines

A private corporation has a 323mm high pressure gas line in a 12.2 metre right-of-way running from southwest to northeast, just south of the Transportation Utility Corridor as shown in Exhibit 2.
2.6  Land Ownership

As presented in Exhibit 3, *a private corporation* is the largest owner with approximately 60.0 hectares (52%) of the lands.

The next largest land holding is the Province of Alberta with 14.7 ha (12.6%). The rest of the land owners hold parcels ranging in size from 0.35 ha to 8.1 ha.

2.7  Planning History

The Palisades Area Structure Plan (as amended) Bylaw No. 7464 was approved by City Council in April 1984. This most recent amendment to the ASP (Bylaw No. 12000) was approved in Spring 1999.

2.8  Environmental Site Assessment

A Phase 1 Environmental Site Assessment has been completed for the lands within the NSP.

While the Phase 1 Environmental Site Assessment did not discover any documented contamination problems, it was concluded that there is a potential risk of soil contamination from the previous industrial use (*a private corporation’s plant*) of the lands. In light of this conclusion, a Phase II Environmental Site Assessment was conducted for this site (South 1/2 of SW36-53-25-4) which included soil testing for contaminants related to the previous industrial land use. The study found for all contaminants tested, that all results were within acceptable CCME guidelines.
Exhibit 3: Land Ownership*
(Bylaw 12001, April 26, 1999)

*Amended by Editor
## Land Ownership (Amended by Editor)

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3.0 POLICY CONTENT

This NSP was adopted in conjunction with an amendment to the Palisades Area Structure Plan and in the context of the applicable development policies and objectives governing this area. These policies are identified below.

3.1 EDMONTON MUNICIPAL DEVELOPMENT PLAN

The Edmonton Municipal Development Plan sets out a strategy to accommodate the development of the City. The following are strategic objectives and policies specific to development in the Carlton Neighbourhood:

Priority: Managing Resources Wisely

Strategy 1.1.12 - Place a high priority on the effective and efficient use of land.

The NSP promotes effective and efficient use of the land and infrastructure. The lands are contiguous to existing development to the east and south. Infrastructure is in place which has been built to accommodate these lands.

Priority: Use of Effective Planning Processes

Strategy 1.1.17 - Plan for and protect transportation corridors required to implement the City of Edmonton Transportation Master Plan.

The NSP protects the transportation corridors required to implement the Transportation Master Plan including major arterials. It also utilizes existing road right-of-ways so as to not disrupt existing traffic and land holdings.

Priority: Utilization of Existing Infrastructure

Strategy 1.3.3 - Support contiguous development that is adjacent to existing development in order to accommodate growth in an orderly and economical fashion.

The NSP facilitates the continuing sequential development of Palisades area. Development ties into existing roads and pipes which have been previously sized and built to accommodate this development. New infrastructure will be developed as required.

Priority: Managing Suburban Growth

Strategy 1.7.1 - Accommodate growth in an orderly, serviced and cost-effective manner.
Strategy 1.7.2 - Provide for a range of housing types and densities in each residential neighbourhood.

Strategy 1.7.3 - Encourage flexibility in creating attractive and functional residential neighbourhoods and business areas.

Strategy 1.7.4 - Ensure availability and access to recreational opportunities and open spaces.

The NSP accommodates contiguous orderly, serviced and cost effective growth. Development is a continuation of surrounding development east (Oxford) and south (Cumberland).

Development facilitates the completion of such facilities as 153 Avenue, thereby reducing internal traffic in Oxford and Carlton Neighbourhoods.

The NSP allows for development of a range of housing product within the single family/multi family guidelines of Council. The target split in the Neighbourhood is 75% low density residential units and 25% medium density units. This is within Council guidelines for residential development.

The NSP identifies recreational opportunities and the hierarchies of open spaces and access to open space. Pedestrian and bicycle access is accommodated through a network of walkways and open spaces.

Municipal Reserves

Strategy 1.9.2 - Land or money dedicated as municipal reserve will be dedicated to the City of Edmonton to be used for schools, parks and other public recreation purposes.

Strategy 1.9.5 - The amount of municipal reserve to be dedicated will be equivalent to ten percent (10%) of the gross developable area of a parcel of land that is the subject of a proposed subdivision, which is the minimum amount necessary to augment other city resources to provide the basic levels of schools, parks and public recreational facilities acceptable to the citizens of Edmonton.

The NSP identifies school/park sites which are to be developed on municipal reserves. The Plan does not preclude cash-in-lieu of the statutory land dedication.
3.2 ED蒙TON SUBURBAN DESIGN PRINCIPLES

The suburban neighbourhood design principles were developed as an initiative of the City of Edmonton to help guide the development of Neighbourhood future suburban areas of the City. The following are design principles applicable to the proposed amendment:

**Principle 1** - Design neighbourhoods with the intent of sharing common infrastructure and neighbourhood facilities among neighbourhoods.

**Principle 2** - Design and locate school and community facilities to provide inter-neighbourhood focal points.

**Principle 3** - Design arterial and central collector roads along a grid pattern.

**Principle 5** - Provide convenient pedestrian and bicycle access throughout the neighbourhood and especially between destination points within and outside the neighbourhood.

**Principle 10** - Optimize the use of land and capital requirements for facilities such as churches, schools, community leagues and storm water management.

**Principle 11** - Create a linked open space system through open spaces created by stormwater management facilities, some utility rights-of-way, preservation of appropriate natural areas and drainage courses, and school and park open spaces.

**Principle 12** – Locate multi-family uses toward the edge of new neighbourhoods and close to the community and neighbourhood focal point.

**Principle 16** - Use current population projections and student generation formulas when planning facilities for a neighbourhood. The proposed NSP meets the above noted design principles as follows:

- Principles 1, 2 & 10 - the school site has been located with the agreement of the Public School Board and maximizes the opportunity for intra and possibly inter-neighbourhood catchment and access.

  The stormwater management lake location reflects the City's Master Drainage Plan and the Carlton Neighbourhood Drainage Report.

- Principle 3 - the major arterials are orientated in a grid running east/west. The collector intersects the arterials and generally follows a grid orientation.

Bylaw 12561
May 1, 2001
- Principles 5 & 11 - pedestrian/bicycle access are conveniently provided through the open space system through the Neighbourhood, with opportunities to link to points outside the Neighbourhood.

- Principle 12 - The proposed increase in density adjacent to the stormwater facility and internal collector roadway will ensure that there is greater opportunity for more residents to have direct access to the open space system and the neighbourhood focal point. In addition, locating the multi-family uses in close proximity to the bus route along the collector roadway will provide more residents with greater access to public transit.

- Principle 16 - current population projections and student generation formulas have been applied.

3.3 REDISTRICTED DEVELOPMENT AREA (RDA)

The northwest boundary of the NSP abuts the Transportation Utility Corridor (TUC). Lands surplus to the needs of the TUC have been identified by the Government of Alberta and are included in the Neighbourhood Structure Plan concept.

3.4 Guidelines for Pipeline Corridors

Development abutting the gas utility ROW will be in accordance with the City of Edmonton Guidelines for Pipeline Corridors pertaining to development setbacks, fencing, surface disturbance, etc.
4.0 DEVELOPMENT CONCEPT

4.1 DEVELOPMENT OBJECTIVES/PLAN RATIONALE

The primary objectives for this Neighbourhood Structure Plan are as follows:

- provide a framework for development of an attractively and efficiently designed residential community, responding to current and anticipated market conditions, and current City policies and guidelines;

- to define in detail a functional and comprehensive development program, such that the orderly approval and development of these lands may proceed.

The intent of this plan is to guide the development of a residentially focussed neighbourhood that can be successfully integrated with the existing development in the Oxford Neighbourhood to the east. The plan will use such facilities as the open space/pedestrian and road networks to achieve linkages to the east. Another intent of this plan is to efficiently use infrastructure and facilities of both Carlton and Oxford Neighbourhoods.

4.2 DEVELOPMENT CONCEPT

The development concept for the Carlton Neighbourhood Structure Plan is presented in Exhibit 4. Land use statistics for the plan are presented in Appendix "A".

The primary land use in this Neighbourhood will be low density residential. Multiple family residential sites are located in the southwest and northwest and northcentral portions of the plan area.

The Imperial Gardens subdivision with its large lots will remain compatible with development and over time will have the opportunity to be developed as urban low density residential.

The stormwater management facility forms a focal point of the open space amenity for the Neighbourhood. An open space system, comprised of walkways in the local road system, public utility lots, and walkways links the residential areas together. The school park site, a second focal point, is also easily accessed by pedestrian linkages (walkways, sidewalks and bike paths) and vehicles along the Neighbourhood collector road (Exhibit 5).
Exhibit 4: Development Concept*
(Bylaw 15448, June 7, 2010)

*Note: Configuration of parks is subject to minor revisions during subdivision and rezoning of the neighbourhood and may not be developed exactly as illustrated.
4.3 RESIDENTIAL DEVELOPMENT

The plan lends itself to the creation of a number of residential precincts, each of which can be developed with its own character and image. These precincts are defined by a combination of perimeter boundaries, including local and collector roads, green spaces, walkways and the stormwater management system.

Low density housing forms will predominate and be developed to reflect the range of densities permitted in the City of Edmonton Land Use Bylaw. Low density residential development will tend to be located on local roads, providing a more quiet and private residential environment.

Multiple family housing is identified for the southwest, south-central and north central sectors of the Neighbourhood. Row housing and walk-up apartment development are expected to comprise the multiple family component of the housing in this Neighbourhood. These housing forms are proposed at the edges of the Neighbourhood in locations where good transportation access is available, as well as pedestrian/bicycle access to the area's amenities.

The existing Imperial Gardens subdivision is compatible with its low density residential designation under the plan. Roads shown on the development concept map follow existing rights of ways and existing access to the subdivision is maintained. As most of the subdivided lots are vacant, resubdivision compatible with emerging development is expected and will not be curtailed under the Plan.

All residential areas are to be within walking distance of transit service as defined in current City policy. Pedestrian and bicycle networks are proposed within the Neighbourhood to link residential areas to each other and to open space features.

The dwelling unit type proportions proposed in this plan will conform to the current City policy for low density/medium density unit mix. Low density residential is to comprise 76% and medium density residential is to comprise 24% of the total dwelling units.

4.4 SCHOOLS, PARKS, OPEN SPACE & PEDESTRIAN/BICYCLE CIRCULATION

Based on a needs assessment by Edmonton Public Schools and Edmonton Catholic Schools, one public school (K-6) is to be developed in the Carlton Neighbourhood.

The school is to be located in the central sector of the Neighbourhood. The 3.2 hectare site will accommodate a K-6 public elementary school, and associated play fields. A 2.63
hectare neighbourhood park is co-located with the school.

An additional park site may be identified in future NSP amendment opportunities if it is felt necessary to meet community requirements. There is the opportunity to do this within the 10% Municipal Reserve owing.

Subdivision design abutting school sites will optimize opportunities for on-street parking opportunities to serve the school/park site.

Student generation figures for the proposed Neighbourhood are presented in Appendix "A".

Pedestrian access is provided to connect all portions of the Neighbourhood and the adjacent Oxford Neighbourhood through local and collector roads and walkways to the school/park site.

Public access through the provision of pedestrian walkways is provided to the stormwater management facilities in accordance with City policy.

Walkways to the school/park site and the stormwater management facility are provided as open space linkages, allowing for pedestrian/bicycle access. Exhibit 5 highlights the park, open space and pedestrian/bicycle circulation system.

4.5 RESIDENTIAL/RAIL BUFFER

The Neighbourhood is bounded on the west by the Canadian National Railway (Sangudo Rail Line).

Noise attenuation/visual screening east of the rail line will be comprised of the following:

- 2m height berm;
- 1.8m height wood screen fence;

increased lot depths adjacent to the berm to accommodate the berm development.

These measures provide physical separation and visual screening for adjacent residential development.

Alternative options for noise attenuation, physical separation and visual screening other than that described in Section 4.5 may be considered for non-residential developments that, by virtue of their building mass, location and site design, provide equivalent noise attenuation, physical separation and visual screening as demonstrated by a Noise Study completed by a certified engineer to the satisfaction of the Planning and Development Department and the Transportation and Streets Department.
Exhibit 5: Pedestrian / Bicycle Circulation Plan*

(Bylaw 12561, May 1, 2001)

*Amended by Editor
If an alternative buffer is to be used, it shall be implemented through a Direct Control Provision to ensure that the alternative form of buffering is incorporated into the design of the development.

4.6 INSTITUTIONAL DEVELOPMENT

A 5.46 ha site in the northwest portion of the plan is designated as institutional. The intended use is for a religious assembly (Exhibit 4).

The location of the institutional site offers the opportunity to gain access directly from 167 Avenue. This direct access will limit the potential traffic impact on the adjacent residential areas as shortcutting through the community will be less likely, and potential congestion at the future collector entrance would be eliminated.

Interim services can be provided for the institutional site as follows:

- Water – direct connection can be made to the existing water line in 167 Avenue,
- Stormwater – the site will have onsite stormwater retention and will drain into the existing ditches until permanent storm sewers are extended to this region
- Sanitary – temporary sanitary services will be provided onsite, and will ultimately tie into a future sanitary line, most likely in 167 Avenue.

4.7 NATURAL AREAS / ENVIRONMENTALLY SENSITIVE AREAS

As discussed in Section 2.4 of this document, four sites have been identified in the City of Edmonton's Inventory of Environmentally Sensitive & Significant Natural Areas (1993) (Exhibit 2).

Environmentally Sensitive Area - NW7060B

This small wetland area is severed from the main wetland area (NW7060A) by 142 Street and the railway track. The future development of 153 Avenue on the south perimeter of this Neighbourhood and the development of a residential buffer for this Neighbourhood will alter the drainage pattern of this area and negatively affect the plant communities of the small wetland. This site cannot be maintained and conserved due to its small size and proximity to existing development (142 Street/railway tracks) and future development (alignment of 153 Avenue). Therefore, this plan does not provide for the retention of this site.

Natural Area - NW43

Due to the woodlot/wetland's size and configuration, it has been determined that this site is not sustainable. No specific provisions have been made to retain this woodlot/wetland,
other than the opportunity to retain trees on private lands. The wetland portion of the site cannot be maintained and conserved due to existing and proposed altered drainage patterns as a result of urban development.

**Natural Areas - NW44 & NW45**

Due to the impacts of the proposed urban development and the configuration of these sites, it has been determined that these tree stands are not sustainable, however, there is an opportunity to retain some selected individual trees on private lands in existing and future subdivisions.

**4.8 PIPELINE CORRIDOR**

Development will follow the City's Pipeline Guidelines with respect to setbacks, fencing, etc. A 12.2m right of way will have an impact on the pattern of development in the northwest sector of the Neighbourhood. Low density and medium density residential development abuts the corridor, located to reflect the opportunities/constraints associated with the resulting parcel shapes. Measures to mitigate the impact of the pipeline on development include use of the right-of-way as part of the open space system; identifying pedestrian and bicycle linkage in the right-of-way and extending vehicular circulation across the *gas utility* right-of-way.

**4.9 TRANSPORTATION**

**Roadway Network**

A looped roadway system, comprised of 155 Avenue and 139 Street, will be developed.

Due to the high traffic volumes identified in the Traffic Impact Assessment, capacity increases will be required for following sections of the collector roadway network.

- 137 Street Between 153 Avenue and 155 Avenue will be a 4-lane divided urban collector, with backing-on lane use format that does not allow front drive access to 137 Street.

- 155 Avenue between 137 Street and the medium density residential site access will be a 4-lane, 14.5-metre wide undivided urban collector.

- North of the medium density residential site access, 155 Avenue/139 Street will transition to a 2-lane 11.5 metre wide undivided urban collector.

- All of the collector roadways in the Carlton neighbourhood must be designated as bus routes in Exhibit 6.
Exhibit 6: Transportation Network*
(Bylaw 12561, May 1, 2001)

*Amended by Editor
Neighbourhood roadway entrances are proposed at 139 Street from 153 Avenue and at 139 Street from 167 Avenue. Also, a neighbourhood connection is proposed at 162 Avenue from 142 Street.

The balance of the Neighbourhood's internal road network will be made up of local streets. These will define the sub-neighbourhood residential areas and play a major role for pedestrian circulation.

A Traffic Impact Assessment has been approved by the City of Edmonton Transportation & Streets Department.

**Public Transportation**

The Carlton Neighbourhood will be served with public transit via the 155 Avenue/139 Street neighbourhood collector loop road (Exhibit 6). All arterials and collectors are sized for transit service. Public transit exists to the east edge of the Carlton Neighbourhood at 155 Avenue.

### 4.10  MUNICIPAL ENGINEERING SERVICES

The following is a description of the servicing systems for the proposed Neighbourhood Structure Plan.

**Water Supply & Distribution**

A Water Network Analysis for Carlton Neighbourhood has been approved by Epcor. As shown in Exhibit 7, water for the Carlton Neighbourhood is supplied from a 600mm water line along 153 Avenue with a connection at 137 Street. Water supply is also accomplished by connections to the Oxford Neighbourhood east of Carlton. Connection to an existing 300mm water line will be completed at 155 Avenue and connection to a 200mm water line south of 161 Avenue will be completed. The 300mm water line will continue north on 139 Street to connect to a future watermain within 167 Avenue.

Water within the Neighbourhood will be supplied by 300mm and 250mm water lines along the internal collector roadways with local distributions of looped 200mm watermains. *Medium density sites will have water servicing off the 300mm watermain on 155 Avenue / 139 Street.*

Amended by Editor

Bylaw 12561
May 1, 2001
Exhibit 7: Water Network*
(Bylaw 12561, May 1, 2001)

*Amended by Editor
Sanitary Services

A Neighbourhood Drainage Report has been approved by the City of Edmonton Drainage Branch for this Neighbourhood. The following describes briefly the sanitary and storm servicing concepts for the Neighbourhood. In January 1994, the City of Edmonton Drainage Branch completed a study which outlined the areas contributing to, and the proposed alignment for the North Edmonton Sanitary Trunk (NEST). Carlton Neighbourhood is in The Palisades Area Master Plan that was identified to be serviced by the NEST system. A 900mm sanitary trunk line is to be constructed within the 153 Avenue right-of-way that will service the southern portion of Carlton Neighbourhood. A 250mm onsite sanitary line will connect to the 900mm sanitary trunk at 137A Street. Gravity sewer consisting of 200mm and 250mm lines flowing south to the 250mm line will internally service the Neighbourhood. The Neighbourhood north of 162 Avenue will be serviced via a 250mm sanitary line along 139 Street, connecting to 167 Avenue via a future sanitary trunk line. Exhibit 8 presents the proposed sanitary servicing concept.

Storm Services/Stormwater Management

Existing surface features provide/dictate that Carlton is to be divided into two drainage basins with 162 Avenue being the approximate boundary separation. The stormwater management facility for the drainage basin north of 162 Avenue is to be located north of 167 Avenue. This future lake will be connected to a 4.19 hectare stormwater management facility (the existing northwest Annex Lake 6) in the Oxford Neighbourhood which in turn will connect to the Kennedale Storm Trunk System via 127 Street.

Neighbourhood stormwater management for the south portion will consist of a stormwater facility that will be constructed in the south central portion of the Neighbourhood. The ultimate configuration of the stormwater management system requires a lake to be approximately 4.58 hectares in area at the high water level. This facility will be connected by 600mm and 1200mm storm pipes to the existing N.W. Annex Lake 6 located in the west central portion of Oxford Neighbourhood.

Surface drainage will be collected in roadway gutters and collected by catchbasins connected to lateral storm sewers for rainfall events up to the 5 year storm event. Surface drainage above the 5 year event will be handled as overland drainage with major drainage routes being collector and local roadways, public utility lots and walkways. These major flows will be directed to the stormwater management facilities. Exhibit 9 presents the proposed storm servicing concept.
Exhibit 8: Sanitary Sewer*
(Bylaw 12561, May 1, 2001)

*Amended by Editor
Exhibit 9: Storm Sewer*
(Bylaw 12561, May 1, 2001)

*Amended by Editor
5.0 DEVELOPMENT STAGING/IMPLEMENTATION

Based on the logical location and extension of municipal services, development will progress in a westerly direction as shown on Exhibit 10.

Ultimate construction of 137 Street between 153 Avenue and 155 Avenue and the first two lanes of the divided arterial on 153 Avenue between 131 Street and 137 Street will be required when one of the following conditions is met:

- 200 additional units taking access along 155 Avenue between 131 and 132 Street have been built

  OR

- Development reaches the future location of the intersection of 155 Avenue and 137 Street.

The timing of subsequent stages of development will depend on market conditions in the City of Edmonton and will be developed as demand dictates.

Following the adoption of this Neighbourhood Structure Plan, redistricting and subdivision will occur in accordance with the City of Edmonton planning process and the Municipal Government Act.
Exhibit 10: Development Staging*
(Bylaw 12001, April 26, 1999)

*Amended by Editor
Appendix "A"

Land Use Statistics
Carlton Neighbourhood
Neighbourhood Structure Plan
### THE CARLTON NEIGHBOURHOOD STRUCTURE PLAN
### LAND USE AND POPULATION STATISTICS
### BYLAW 15448, June 7, 2010
### (Amended by Editor)

#### Gross Area

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (ha)</th>
<th>% of GDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Area</td>
<td>121.91</td>
<td></td>
</tr>
<tr>
<td>Utility Right-of-Way (Private Corporation)</td>
<td>1.64</td>
<td></td>
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<tr>
<td>167 Avenue Road Widening</td>
<td>0.46</td>
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</table>

#### Gross Developable Area

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (ha)</th>
<th>% of GDA</th>
</tr>
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<tbody>
<tr>
<td>Public Elementary School Site</td>
<td>3.20</td>
<td>2.67</td>
</tr>
<tr>
<td>Neighbourhood Park</td>
<td>6.03</td>
<td>5.03</td>
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<tr>
<td>Stormwater Management Facility</td>
<td>4.60</td>
<td>3.84</td>
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<tr>
<td>Circulation</td>
<td>23.96</td>
<td>20.00</td>
</tr>
<tr>
<td>Institutional</td>
<td>5.46</td>
<td>4.56</td>
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#### Net Residential Area

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (ha)</th>
<th>% of GDA</th>
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</thead>
<tbody>
<tr>
<td>Net Residential Area</td>
<td>76.56</td>
<td>63.90</td>
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</tbody>
</table>

#### Residential Land Use

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (ha)</th>
<th>Dwelling Units</th>
<th>% of Total</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Density Residential</td>
<td>67.25</td>
<td>1,177</td>
<td>73.6%</td>
<td>4,120</td>
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<tr>
<td>Medium Density Residential (RF5)</td>
<td>8.93</td>
<td>375</td>
<td>23.5%</td>
<td>1,166</td>
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<tr>
<td>Medium Density Residential (RA7)</td>
<td>0.38</td>
<td>47</td>
<td>2.9</td>
<td>146</td>
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<tr>
<td><strong>Total Residential</strong></td>
<td><strong>76.56</strong></td>
<td><strong>1,599</strong></td>
<td><strong>100.0</strong></td>
<td><strong>5,432</strong></td>
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</tbody>
</table>

Density: 39.6 persons per gross developable hectare

#### Residential Density

- Low Density Residential: 17.5 units/hectare
- Medium Density Residential (RF5): 42.0 units/hectare
- Medium Density Residential (RA7): 125.0 units/hectare

#### Population Density

- Low Density Residential: 3.5 persons/unit
- Medium Density Residential (RF5): 3.11 persons/unit
- Medium Density Residential (RA7): 3.11 persons/unit

#### Student Generation

<table>
<thead>
<tr>
<th>Type</th>
<th>Elementary</th>
<th>Junior High</th>
<th>Senior High</th>
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<tbody>
<tr>
<td>Public</td>
<td>240</td>
<td>120</td>
<td>120</td>
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<tr>
<td>Catholic</td>
<td>120</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>2 students/gdh</td>
<td>1 student/gdh</td>
<td>1 student/gdh</td>
</tr>
<tr>
<td></td>
<td>0.5 students/gdh</td>
<td>0.5 students/gdh</td>
<td>0.5 students/gdh</td>
</tr>
</tbody>
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