CHAIRMAN & MEMBERS OF THE PLANNING COMMITTEE
PLANNING COMMITTEE MEETING - Monday, November 26, 1990

Kilally Road Area Study, lands bounded by the north branch of the Thames River on the north and west, Clarke Side Road on the east, and the limits of existing residential development on the south

R.W. Panzer

7:30 p.m.

Director of Planning and Development submitting the proposed Kilally Road Area Plan for consideration and RECOMMENDING:

i) that the Kilally Road Area Study be adopted as an Area Study pursuant to Section 19.2.1 of the New Official Plan insofar as it applies to the development of the west half of the subject area including all of the lands west of Webster Drive and a northerly extension thereof; and, that approval of the Area Study insofar as it applies to the east half of the subject area, including all of the lands east of Webster Drive and a northerly extension thereof, be deferred pending further study of arterial and collector road alignments and school and park allocations within this area.

BACKGROUND INFORMATION:

The Kilally Road Area is a largely undeveloped track of land, approximately 390 hectares (965 acres) in size, that, for the most part, was annexed from the Township of London in April of 1989. Portions of the Study Area are experiencing pressure for urban development and a number of applications for Official Plan and Zoning By-law amendments have been received. The longest-standing and most notable of these applications is a request by Matthews Group for the necessary approvals to proceed with a large residential and commercial development west of Highbury Avenue, referred to as Kilally Estates Phases I and II. Matthews Group also has substantial land holdings east of Highbury Avenue and has undertaken various studies and servicing initiatives to accommodate the urbanization of this area.

The purpose of the Area Study is to recommend appropriate land use designations for inclusion in the City's new Official Plan and to provide guidelines for zoning, subdivision design, collector road alignments, and school and park sites on an integrated, area-wide basis. This type of study is consistent with the policies in the New Official Plan which call for the preparation and adoption of "Guideline Documents" to assist in the implementation of the Plan.

In brief the Area Study proposes a mix of residential designations and housing types that should yield approximately 5,200 dwelling units housing a population of 12,000 people. Medium and high density uses, which would account for approximately 55% of the units to be built, would be focused in the Highbury Avenue corridor. Commercial uses would also be concentrated along Highbury Avenue. A small Community Shopping Area designation is proposed for the southwest quadrant of the Kilally - Highbury intersection, complemented by blocks of "Associated Shopping Area Commercial" development along the west side of Highbury Avenue. Restrictions on the scale of the community shopping centre would prevent the unnecessary duplication of the extensive commercial development located at Huron Street and Highbury Avenue. A block designated for Service Commercial development along the east side of Highbury Avenue would accommodate highway-oriented and space-intensive commercial uses for which there is an anticipated demand to serve increasing traffic volumes along Highbury Avenue as well as development that will occur in the area. Commercial designations account for less than 4% of the Study Area and would accommodate approximately 30,000 square metres (325,000 sq.ft.) of commercial floor area.
The Area Plan, which was prepared concurrent with the Public Utilities Commission's Kilally Open Space Management Plan, proposes the creation of a public open space system predominantly located in flood-plain lands, but also including fill-regulated areas and significant, environmentally-sensitive areas.

The whole of this Study Area is within the drainage area of the Adelaide Sewage Treatment Plant and development will generally proceed on a phased basis from west to east as trunk sewer services are extended. Although much depends on economic considerations, it is anticipated that development of the Study Area to substantial completion may extend over a fifteen year period.

The layout of school and park areas and the alignment of collector roads in the east half of the Study Area will require further study and discussion before the Area Plan can be finalized for this section. For this reason and so as to not unduly delay the consideration of applications in the west half of the Study Area, it is recommended that a two phase approach be take to adoptions of the Area Study.

Prepared by:

L.E. DRAHO
Director of Planning

Recommended by:

K.L. PERRY
Director of Planning and Development

November 15, 1990
# KILALLY ROAD AREA STUDY

## TABLE OF CONTENTS

1.0 Introduction ........................................ Page 1

2.0 Purpose ........................................ Page 1

3.0 Area Study Preparation and Review ............ Page 3

4.0 Background Information ......................... Page 4
   4.1 Study Area Boundaries and Existing Land Use ........ Page 4
   4.2 Physical Characteristics .......................... Page 6
      i) Topography and Vegetation .................... Page 6
      ii) Flood Plain Lands ............................ Page 7
      iii) Fill - Regulated Slopes .................... Page 7
      iv) Aggregate Resources ....................... Page 9
   4.3 Land Ownership .................................. Page 13
   4.4 Planning History ................................ Page 15
      i) Existing Official Plan ....................... Page 15
      ii) New Official Plan ............................ Page 17
      iii) Current Zoning .............................. Page 17
      iv) Current and Proposed Applications ........ Page 20
         v) Park Proposal .............................. Page 21
   4.5 Servicing Constraints .......................... Page 21
      i) Sanitary Sewers .............................. Page 21
      ii) Storm Sewers ............................... Page 22
      iii) Roads ...................................... Page 22

5.0 Land Use Objectives ............................... Page 23

6.0 Site Analysis ...................................... Page 24

7.0 Proposed Land Use Designations and Policy Considerations .................................. Page 26
   i) Low Density Residential ....................... Page 26
   ii) Multi-Family, Medium Density Residential .... Page 26
   iii) Multi-Family, High Density Residential .... Page 28
   iv) Convenience Commercial and Service Station Uses ..... Page 28
       v) Shopping Area Designations ................. Page 29
       vi) Service Commercial Designations .......... Page 30
       vii) Office Designations ....................... Page 30
       viii) Regional Facility Designation ............ Page 31
       ix) Open Space Designation .................... Page 31
       x) Housing Policies ............................ Page 32
       xi) Aggregate Resources ....................... Page 32
       xii) Parks and Recreation ...................... Page 33

7.1 Implementation .................................... Page 34

8.0 Proposed Area Plan and Guidelines .......... Page 34

9.0 Economic Impact ................................... Page 42
   Appendix I -Summary of Responses to Preliminary Report .................................. Page 43
   Appendix II -Description of Kilally Open Space Management Plan .......................... Page 47
MAPS

Map No.
1 Location Page 2
2 Existing Land Use Page 5
3 Flood and Fill Lines Page 8
4 Aggregate Resources Page 11
5 Property Ownership Page 14
6 Existing Official Plan Page 16
7 New Official Plan Page 16
8 Current and Proposed Applications Page 18
9 Proposed Land-Use Designations for the New Official Plan Page 27

TABLES

Table No.
1 Existing Land Use Page 4
2 Aggregate Area Page 10
3 Major Land Owners Page 13
4 Land Use Components Page 38
5 Projected Housing Units and Population Page 39
KILALLY ROAD AREA STUDY

INTRODUCTION

1.0 The Kilally Area Study applies to a largely undeveloped tract of land, approximately 390 hectares (965 acres) in size, located east and west of Highbury Avenue, south of the Thames River. Most of this area was annexed by the City of London from London Township in April of 1989. This is one of the few large vacant land areas in the City suitable for residential use and is therefore subject to mounting development pressure. All of the area west of Highbury Avenue is already subject to applications by the Matthews Group (Kilally Estates, Phases I and II) and Richleigh Investments (nursery lands) for Official Plan and Zoning By-law amendments and draft plan of subdivision approval. The lands west of Highbury Avenue have also been subject to a proposal by community residents for the establishment of a large public park encompassing all of the "valleylands" along the North Branch of the Thames River between Highbury Avenue and Adelaide Street. The McIlwraith Field Naturalists organization also has an interest in these valley lands and have had a biological study prepared in support of the protection of significant plant communities and aquatic and wildlife habitat.

East of Highbury Avenue, three land-owners have submitted applications for Official Plan and Zoning By-law amendments and several other owners have expressed an interest in development. Matthews Group, which owns or controls about 40% of the area east of Highbury Avenue, has undertaken servicing and transportation studies and prepared land use concepts in anticipation of its role as the lead developer in this area.

At present the Study Area is essentially in an "unplanned" state and the annexed lands carry with them the "Agriculture" and "Aggregate Resources" land use designations from the London Township Official Plan. The need to undertake an Area Plan as a pre-requisite to the determination of Official Plan land use designations, zoning and subdivision design, is reflected in the interim designation of most of the Study Area as "Urban Reserve" in the new Official Plan for the City of London.

PURPOSE

2.0 The purpose of the Kilally Road Area Study is to formulate a land-use concept and guidelines which will provide direction for the development of the subject lands. The Area Study will form the basis for assigning land-use designations from the new Official Plan and provide a framework for integrated subdivision planning and zoning among multiple land ownerships. It is also intended to provide for:

- an efficient road network with appropriate linkages to the existing transportation system;
- adequately sized and located community facilities including schools, parks and recreational facilities;
- an appropriate mix of housing types and densities including opportunities for affordable housing development;
- the protection of physical features such as floodplains, steep slopes and areas of significant natural vegetation and wildlife or aquatic habitat;
- the extraction of viable aggregate resources where it will not have a significant adverse impact on existing uses or natural features and will not unduly delay the development of the area;
KILALLY ROAD AREA STUDY - 3

- commercial development that is sized and located to efficiently serve the needs of the future resident population and the travelling public.

3.0 AREA STUDY PREPARATION AND REVIEW

Planning Process

The planning process for the Kilally Road Area Study is depicted in Figure No.1. In brief, the process is one of analyzing existing Study Area characteristics and development constraints and/or opportunities, and subsequently working through stages of progressively greater certainty and detail with regard to land use. Ongoing consultation with key City Departments and local agencies and commissions is provided for, as are opportunities for input by landowners and residents of abutting areas at both the plan formulation and plan review stages.

Following its review of the Area Study, Council will be requested to adopt it as a Guideline Document for the implementation of the new Official Plan and:

- an amendment to the new Official Plan to replace all or portions of the Urban Reserve designation with appropriate residential, commercial, institutional and open space designations; and,

- zoning amendments, amendments to the existing Official Plan, if necessary, and subdivision approvals for pending applications which conform with the Area Plan and Official Plan amendment(s).

The Kilally Road Area Study process started in January of 1990. The inventory and analysis stage extended over the first half of the year and concluded with the preparation of a Preliminary Area Study in June. The Preliminary Study was circulated for review and comment to all of the agencies and departments normally involved in the subdivision approval process as well as community representatives, applicants and special interest groups such as the McIlwraith Field Naturalists. A meeting with property owners within the Study Area was held on July 17, 1990 with approximately forty property owners in attendance. The Public Liaison notice for the Kilally Area Study was mailed out to area residents on August 14, 1990 and printed in the Civic Corner on August 18, 1990.

A summary of the responses received through the agency, public and property owner liaison processes is contained in Appendix I.

There has been frequent interaction with the staff members of the Public Utilities Commission and the Upper Thames River Conservation Authority who have been involved in the preparation of the P.U.C.'s Kilally Open Space Management Plan. The purpose and content of the Open Space Management Plan is summarized in Appendix II. Pursuant to City Council's resolution of July 4, 1989, the P.U.C.'s study has been given due consideration in the preparation of this Area Study.
KILALLY ROAD AREA STUDY - 4

4.0 BACKGROUND INFORMATION

4.1 Study Area Boundaries and Existing Land Use

The Study Area, as shown on Map No. 1, is bounded by Clarke Side Road to the east and the Thames River to the north and west. The south boundary coincides with the former City boundary east of Highbury Avenue, and with the north limit of developed residential lands west of Highbury Avenue. Approximately 70 hectares (160 acres) or 17% of the Study Area lies below the Fill Lines shown on Map No. 3 and generally have very limited potential for urban development.

Existing land uses within developable portions of the Study Area, as shown on Map No. 2, consist of agricultural land, scattered rural estate-type residential uses on private services, several mined-out gravel pits, a tree nursery and garden supply store on the west side of Highbury Avenue, a number of residences and small businesses fronting onto the east side of Highbury Avenue, smaller lot residential uses along the south side of Kilally Road east of Highbury Avenue and along the west side of Webster Street, and an auto salvage yard on the north side of Jensen Road.

Agriculture Canada maintains a 25 hectare (62 acre) agricultural research facility on the west side of Sandford Street adjacent to the Study Area boundary.

Table No. 1 below provides a breakdown of total area by land use:

Table No. 1

<table>
<thead>
<tr>
<th>Existing Land Use</th>
<th>Total Size (ha.)</th>
<th>% of Total Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floodplain/Hazard Land/Woodlot</td>
<td>80</td>
<td>21</td>
</tr>
<tr>
<td>Agricultural Land*</td>
<td>135</td>
<td>35</td>
</tr>
<tr>
<td>Active &amp; Abandoned Gravel Pits</td>
<td>105</td>
<td>27</td>
</tr>
<tr>
<td>Residential</td>
<td>50</td>
<td>14</td>
</tr>
<tr>
<td>Existing Roads</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Commercial</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>390</strong></td>
<td></td>
</tr>
</tbody>
</table>

* includes Agriculture Canada Research Station and Fanshawe Nursery lands
4.2 PHYSICAL CHARACTERISTICS

i) Topography and Vegetation

The south-west portion of the Study Area, to the west of Highbury Avenue and south of Kilally Road, contains a significant area of flood plain land located along an old meander of the Thames River. The floodplain area is predominantly wooded, with the most mature tree growth occurring in its southerly and westerly parts. A significant stand of Black Maple trees at the west end of the Study Area straddles the floodline. The remainder of this southwest quadrant consists of abandoned fields, some of which are heavily scarred as the result of aggregate extraction. Much of the area is overgrown with grasses, shrubs, and young tree growth. The boundary of the Study Area in this vicinity coincides with a steep, heavily wooded bank that varies between 10 metres (33 ft.) and 15 metres (49 ft.) in height. A small stream follows the alignment of the old river channel at the base of this embankment.

Topography to the west of Highbury Avenue and north of Kilally Road is relatively flat, with most of the area in agricultural use. Steep slopes along the south bank of the river delineate the southern limit of the flood plain and fill-regulated area. A portion of this slope along the outside bend in the river channel is actively eroding and requires stabilization to provide long-term protection to developable lands above the top of the bank. This stabilization work is currently being carried out by Matthews Group under the provisions of a permit issued by the Ministry of Natural Resources. Vegetation in this floodplain area consists of a mix of grasses and shrubs as well as a large area of deciduous tree cover. The area also contains two pine plantations at the west end of Kilally Road.

Landforms along the eastern portion of the river channel north of Kilally Road result from glacial meltwater channels, and consist of a series of multiple beach terraces separated by slopes that run parallel to the river. The resulting depressions have developed into a fairly large wetland area with associated vegetation, located parallel to the river bed and at the base of the valley slope which, in this area, is relatively high and steep. Vegetation surrounding the wetland area consists of mixed woodlots and associated understorey growth showing little evidence of disturbance.

The remainder of the Study Area east of Highbury Avenue and north of Kilally Road is predominantly level, with some undulation in areas adjacent to the flood plain. Parts of the area are now in agricultural use, and other large portions of the area (most notably a 35 hectare (86.7 acre) area located west of a line extending north from Sandford Street) consist of abandoned gravel pits which are now partially overgrown with a variety of grasses and scattered shrubs. The area also contains scattered marshy areas, some of which are due to aggregate extraction.

The area east of Highbury Avenue and south of Kilally Road is mainly flat and under cultivation for agricultural use. Three large water-filled depressions located east of Sandford Street are the result of abandoned gravel pits. The residential and commercial uses immediately to the east of Highbury Avenue have been developed above and below a wooded slope which curves to the south-west, from Kilally Road to Highbury Avenue.

The biology of various portions of the Study Area has been studied by consultants retained by Matthews Group (Gartner-Lee) and the McIlwraith Field Naturalists (Woodfern Research). A more detailed description of the flora and fauna in the area is available in their reports. An analysis of natural features in the valley lands along the north branch of the Thames River between Adelaide Street and Clarke Side Road including an evaluation of their significance and capability for recreational use has also been undertaken as part of the Public Utilities Commission's Open Space Management Plan. The recommendations from this plan, as summarized in Appendix II, have been a major consideration in the delineation of developable lands as proposed in this Area Study.
ii) Flood Plain Lands

The floodplain in London is defined by a regulatory flood standard based on the 1937 observed flood event. The floodplain is also divided into two zones - the floodway and the flood fringe. Within the floodway, or the area of the floodplain that is most susceptible to flooding, no development is permitted. Within the flood fringe, which is that portion of the floodplain outside of the floodway, some development may be permitted subject to applicable land use policies, floodproofing and safe access requirements, and the approval of the Upper Thames River Conservation Authority (U.T.R.C.A.). The floodway in London is generally defined by the 1:100-year flood standard; in some areas the U.T.R.C.A. may alternatively choose to delineate the floodway according to flood depth and velocity parameters.

For that portion of the Study Area to the north of Kilally Road, the regulatory and 1:100-year flood standards are essentially coincident, leaving only a negligible area at the west end of Kilally Road in the flood fringe (Refer to Map No. 3). The remainder of the floodplain lands in this area are within the floodway, and therefore cannot be developed. Floodplain lands to the north of Kilally Road total approximately 35 hectares (86.5 acres) in area.

The location of the regulatory and the 1:100-year flood lines to the south of Kilally Road and west of Highbury Avenue are shown on Map No. 3. Applications to the U.T.R.C.A. by Matthews Group for consent under the Authority's fill, construction and alteration to waterway regulations to allow fill on certain pockets of floodplain land in the proposed Kilally Estates Phase I development, have been approved in principle by the U.T.R.C.A. pending approval of the draft plan of subdivision. Approval in principle was based on hydraulic and floodplain management criteria only. The effect of these consents is to add approximately 2.5 hectares (6.1 acres) to the area available for development. The remaining floodplain area south of Kilally Road and west of Highbury Avenue totals approximately 22 hectares (55 acres).

The provincial Policy Statement on Flood Plain Planning, approved by Cabinet in August, 1988, established land use planning for floodplain lands as a matter of provincial interest under Section 3 of the Planning Act. In exercising its authority on land use planning matters, City Council is required to "have regard to" the principles contained in the Policy Statement. Specific matters addressed in the Policy Statement, which include use and application of the two-zone concept; floodproofing and safe access requirements; and issues of public safety, have been incorporated into the City's New Official Plan (Section 15.2). Policies of the Plan with respect to floodplain planning will apply to that part of the Study Area located within the floodplain.

iii) Fill - Regulated Slopes

Within the Upper Thames River watershed, the Upper Thames River Conservation Authority (U.T.R.C.A.) has the jurisdiction to identify steep slopes and to regulate fill and construction activities which may affect these areas. Steep slopes are delineated using a "fill line", which generally follows the top-of-bank where this is clearly definable, or the regulatory flood standard where there is no obvious top-of-bank. Lands within the fill line are subject to the U.T.R.C.A.'s Fill, Construction, and Alterations to Waterways Regulations, established under Section 28 of the Conservation Authorities Act. The intent of the regulations is to avoid filling on or near steep slopes which may lead to slope instability and accelerated erosion, and could eventually result in embankment failure, sedimentation, and reduction in the natural flood storage capacity of the waterway. Fill and construction activities within regulated areas require the prior approval of the U.T.R.C.A.
MAP NO. 3
FLOOD AND FILL LINES

LEGEND

- FILL LINE
- 1:100 YEAR FLOOD LINE
- REGULATORY FLOOD LINE

SOURCE: UPPER THAMES RIVER CONSERVATION AUTHORITY
APRIL, 1990

N.T.S.
Within the Kilally Road Study Area, fill-regulated lands extending beyond the flood plain take in approximately 25 hectares (61.8 acres) in both the north part of the Study Area east of Highbury Avenue, and to the south of Kilally Road, west of Highbury Avenue, (refer to Map No. 3). In most areas the fill line is located at the top of substantial slopes and lands below it are not suitable for development by reason of their physical characteristics. Lands within the fill line usually receive an Open Space designation in the City's Official Plan. There are areas between Highbury Avenue and Clarke Side Road, however, where the fill line is located a considerable distance beyond the flood line and where the fill-regulated lands have more moderate slopes. As more detailed geotechnical information is received in conjunction with development proposals in this area, the Conservation Authority may consider alterations to the fill line or regulations under which some limited form of development below the fill line may be allowed to proceed.

In addition to the restrictions applying to fill-regulated slopes, development proposals in close proximity to the fill line may be required to undergo a geotechnical evaluation to determine the potential impact of development on slope stability. Mitigating measures such as minimum setbacks from top of slope for lot lines and structures may be required in some cases.

iv) Aggregate Resources

Information concerning the extent and quality of aggregate resources within the Kilally Road Study Area can be obtained from the Aggregate Resources Inventory of London Township, 1983, produced by the Ontario Ministry of Natural Resources. The Aggregate Resources Inventory categorizes sand and gravel deposits within London Township as being of primary, secondary, or tertiary significance. All three categories are considered by the Ministry to be important in ensuring an adequate resource base for the future, however it is suggested that primary resource areas should be reserved wholly or partially for extraction or protection within the context of municipal Official Plans.

A significant portion of the Study Area east of Highbury Avenue has been identified by the Ministry as a sand and gravel resource area of primary significance (Refer to Map No. 4). Sand and gravel resources within the area are the result of a glacial outwash deposit forming part of the Fanshawe Delta, and are identified as being 6-9 metres (20-30 feet) thick, with a gravel content of over 35%. Preliminary findings have also indicated that the deposit may contain some clay and silt, along with oversize particles which could necessitate additional processing after extraction. The resource is generally suitable for a wide range of road building and construction projects.

Within the area, a considerable amount of extraction has already occurred as the result of two known licensed pits, and two known unlicensed pits which pre-dated the licensing requirements of the Pits and Quarries Control Act, (see Map No. 4). These pits have all been largely depleted. The licensed pit north of Kilally Road, as shown on Map No. 4, was rehabilitated during the early 1980's, while the licensed pit south of Kilally Road and east of Sandford Street is now undergoing rehabilitation.

The initial aggregate deposit occupied 230 hectares (568 acres) of the total 280 hectares (692 acres) east of Highbury Avenue. Of this area, approximately 105 hectares (260 acres) has been extracted, and the Ministry of Natural Resources classifies an additional 81 hectares (200 acres) of the deposit as unavailable for extraction due to the presence of cultural features. This leaves an approximate area of 44 hectares (110 acres) available for extraction (Refer to Table No. 2). The presence of flood plain, fill-regulated slopes, and other significant environmental features within the area may further reduce the total area available for extraction.
Based on an average depth of 6 metres (20 feet), the total amount of available primary aggregate within the Study Area, including aggregate which may be unavailable due to the presence of environmental features, is estimated to be 5 million tonnes (6 million tons). As of 1983, this amount comprised approximately 10% of the total available primary aggregate in London Township, however due to extraction which has occurred outside of the Study Area since 1983, this proportion can now be expected to be higher.

**TABLE No. 2**

**AVAILABLE AGGREGATE AREA**

<table>
<thead>
<tr>
<th></th>
<th>hectares</th>
<th>(acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INITIAL AREA OF RESOURCE</strong></td>
<td>230</td>
<td>(568)</td>
</tr>
<tr>
<td><strong>LICENSED AREA (EXTRACTED)</strong></td>
<td>52</td>
<td>(128)</td>
</tr>
<tr>
<td><strong>UNLICENSED AREA (EXTRACTED)</strong></td>
<td>53</td>
<td>(130)</td>
</tr>
<tr>
<td><strong>CULTURAL SETBACKS (UNAVAILABLE FOR EXTRACTION)</strong></td>
<td>81</td>
<td>(200)</td>
</tr>
<tr>
<td><strong>REMAINING AGGREGATE AREA (Available for extraction)</strong></td>
<td>44</td>
<td>(110)</td>
</tr>
</tbody>
</table>
Provincial requirements for the licensing, regulation, and rehabilitation of aggregate resource operations in Ontario are established through the Aggregate Resources Act, 1989. This statute, which took effect on January 1, 1990, replacing the Pits and Quarries Control Act, gives full control over the extraction of aggregate resources in Ontario to the Ministry of Natural Resources. The Act does, however, provide opportunity for municipal input into licensing, regulation, and rehabilitation.

In addition to the Aggregate Resources Act, provincial Cabinet, in 1986, approved the provincial Policy Statement on Mineral Aggregate Resources, which effectively identifies mineral aggregate resources as a provincial concern under Section 3 of the Planning Act, 1983. The Policy Statement recognizes mineral aggregate resources as essential, non-renewable natural resources, and provides for their identification, protection, and ultimate extraction through the land use planning process. The Policy Statement, in conjunction with Section 3(5) of the Planning Act, requires that all land use planning and resource management agencies within the Province have regard for the implications of their actions on the future availability of mineral aggregate resources.

The City of London new Official Plan also contains provisions regarding mineral aggregate resources. The Plan identifies the location of both aggregate resources and existing pits and quarries on Schedule "B" of the Plan- Flood Plain and Environmental Features. Under the new Official Plan, an Official Plan amendment is required in order to establish a new pit or quarry. Policies of the Plan also address the evaluation of applications to add or expand a pit or quarry, the rehabilitation of pits and quarries, and the establishment and rehabilitation of wayside pits and quarries. Applications to establish new pits or quarries within the Study Area will be evaluated in terms of the polices of Section 15.4 of the new Official Plan, regarding aggregate resources.
4.3 **LAND OWNERSHIP**

The land ownership pattern is shown on Map No. 5. Large ownerships (5 hectares (12.4 acres) or more) include:

<table>
<thead>
<tr>
<th>Major Landowner</th>
<th>Ha.</th>
<th>Ac.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATTHEWS GROUP LTD.</td>
<td>210</td>
<td>504</td>
<td>54.4</td>
</tr>
<tr>
<td>D. R. PETERSON</td>
<td>25.9</td>
<td>64.0</td>
<td>6.9</td>
</tr>
<tr>
<td>AGRICULTURE CANADA</td>
<td>25.2</td>
<td>62.2</td>
<td>6.7</td>
</tr>
<tr>
<td>LAPCHEVICH &amp; RADOICIC</td>
<td>20.5</td>
<td>50.6</td>
<td>5.5</td>
</tr>
<tr>
<td>H. JOHNSON</td>
<td>19.3</td>
<td>47.7</td>
<td>5.1</td>
</tr>
<tr>
<td>E.BERTSCH</td>
<td>18.4</td>
<td>45.5</td>
<td>4.9</td>
</tr>
<tr>
<td>A. J. HOODYDONK</td>
<td>14.0</td>
<td>34.6</td>
<td>3.7</td>
</tr>
<tr>
<td>S. J. AGATHOS</td>
<td>8.2</td>
<td>20.3</td>
<td>2.2</td>
</tr>
<tr>
<td>CITY OF LONDON</td>
<td>6.9</td>
<td>17.0</td>
<td>1.8</td>
</tr>
<tr>
<td>J. W. HESLOP</td>
<td>6.1</td>
<td>15.0</td>
<td>1.6</td>
</tr>
<tr>
<td>OTHERS (smaller holdings)</td>
<td>26.4</td>
<td>65.2</td>
<td>7.0</td>
</tr>
</tbody>
</table>

**TOTAL LAND AREA** 375 ha. 926 ac.
NOTE: PROPERTY OWNERSHIPS GREATER THAN 5 ACRES ARE SHOWN
Most of the smaller parcels have been developed for residential use. Properties which are subject to Official Plan amendment applications or development proposals for their owners are shown on the Map No. 8. The Imperial Oil-Sarnia Products Pipeline easement also transects the study area and development on or in the vicinity of the easement is subject to restrictions necessary to protect the pipeline. In nearby, recently developed residential subdivisions, these restrictions have included the establishment of the easement as a separate block(s) on the registered plan and subsequent conveyance of the block(s) to Imperial Oil. The pipeline corridor is further protected by fencing and increased building setback requirements and by agreements among the City, developer and Imperial Oil pertaining to any crossings of the easement for roads or services.

4.4 PLANNING HISTORY

i) Existing Official Plan

The portions of the Study Area east of Highbury Avenue and west of Highbury Avenue north of the Kilally Road allowance were annexed from the Township of London in April of 1989. The provisions of the Township Official Plan continue to apply to this area pending an amendment to the City's existing Official Plan to assign appropriate land use designations. Hence, the current land use designations applicable to the Study Area are "Agriculture" for the annexed area west of Highbury Avenue and east of Highbury Avenue to an approximate depth of 300 metres (1000 feet); and "Aggregate Resources" for the balance of the lands east of Highbury (see Map No. 6). The "Agriculture" designation permits a variety of farm activities, nurseries, existing one-family dwellings, small-scale commercial and industrial operations that process agricultural products, other farm-related services, and certain institutional uses such as schools, parks and churches. The predominant use of lands designated "Aggregate Resources" is the extraction and processing of sand and gravel. Agricultural uses are permitted on lands that have not yet been licensed for extraction. The processing of sand, gravel and stone in an extraction area is not permitted within 30 metres (100 feet) of the property boundary or 90 metres (300 feet) of any adjoining property designated for residential use, as is the case with all lands south of the former City boundary. The Aggregate Resources policies also stipulate that no pit is to be excavated closer than 30 metres (100 feet) to the limit of any road allowance or 15 metres (50 feet) from an adjoining property line. Comprehensive pit rehabilitation plans, including proposed land use for a significant area, would form the basis for Official Plan amendments to re-designate lands from "Aggregate Resources" to other appropriate designations.

The portion of the Study Area west of Highbury Avenue and south of Kilally Road has been part of the City since 1961. Lands above the flood and fill lines are designated "Residential" in the City of London Official Plan and lands below the flood and fill lines are designated "Major Open Space". The Official Plan also contains the following policy which is specific to these lands:

7.2.5.1 Notwithstanding anything else in this Plan the land west of Highbury Avenue and south of Kilally Road which is designated 'Residential' may be developed only in conjunction with the lands lying to the north thereof, and to the west of Highbury Avenue, so as to form a satisfactory neighbourhood pattern.

ii) New Official Plan

All of the lands recently annexed by the City are designated "Urban Reserve" in the new Official Plan (Refer to Map No. 7). The Urban Reserve designation is applied to large areas of mostly undeveloped and unserviced land where it is considered premature to apply individual land use designations until such time as an area study is completed. For this particular "Urban Reserve" area, the new Official Plan anticipates that long-term land use will be a mix of residential, commercial and open space.
KILALLY ROAD AREA STUDY - 17

The portion of the Study Area west of Highbury Avenue and south of Kilally Road is proposed to be designated "Low Density Residential" and "Open Space" in the new Official Plan with the flood line forming the approximate boundary between the two designations. Adoption of the "Low Density Residential" designation has been deferred by City Council, however, pending completion and adoption of the Area Study and the outcome of the application by Matthews Group for Official Plan and Zoning by-law amendments and plan of subdivision approval for the Kilally Estates-Phase I development.

The new Official Plan also identifies most of the Study Area east of Highbury Avenue as an "Aggregate Resource" area within which new gravel pits or substantial expansions of existing pits beyond the limits of existing licensed areas may be permitted by amendment to the Plan. Additional information on aggregate resource issues is contained in Section 4.2 (iv) of this report.

iii) Current Zoning

Lands north of Kilally Road and west of Highbury Avenue are currently zoned Agricultural - "A1" and "A2", which zones have been carried over from the London Township Zoning By-law. Permitted uses include agricultural activities, existing single family dwellings, wayside pits and, on the "A2" portion, nurseries and riding schools. The lands west of Highbury Avenue and south of Kilally Road are in a Development Holding - "D" zone.

Existing residential areas along the east side of Highbury Avenue and west side of Webster Street are zoned Rural Residential "RR" which permits single detached dwellings on half-acre lots. A small parcel of land on the northeast corner of Highbury Avenue and Kilally Road is zoned to allow a motor vehicle service establishment. The existing restaurant/dairy bar/ convenience store use, further north on the east side of Highbury Avenue, has a site-specific Farm Commercial "FC" zoning which permits a general retail store, warehouse, and a restaurant as an accessory use.

The balance of the Study Area east of Highbury is zoned as either Extractive Industrial - "M4" or Holding - "H". The "M4" zone permits agricultural and gravel pit uses while the "H" zone permits agricultural uses and existing dwellings.

iv) Current and Proposed Applications

Properties which are subject to current or proposed Official Plan amendment applications are shown on Map No. 8.

These applications are summarized as follows:

a) Matthews Group - Kilally Estates, Phases I and II

. an area of approximately 83 hectares (205 acres) located north (Phase II) and south (Phase I) of Kilally Road west of Highbury Avenue.

. Phase I consists of a small-scale shopping centre, free-standing office, service commercial and convenience commercial uses abutting Highbury Avenue; and an innovative residential community oriented to the housing and lifestyle preferences of "empty-nesters". Clusters of detached single-storey dwellings would be built on public laneways at a density in keeping with the Low Density Residential designation in the new Official Plan. Approximately 245 detached units are proposed. There are also three blocks of land proposed for multiple-attached dwellings which could accommodate up to 160 units. A range of recreational and social amenities would be provided to members of an association of private homeowners that would function in a manner similar to a condominium corporation.
MAP NO. 8
CURRENT AND PROPOSED
OFFICIAL PLAN AMENDMENT APPLICATIONS
Phase II consists of approximately 200 single detached dwelling lots arranged in a conventional subdivision design.

There are two blocks of land within the proposed development which would be appropriately zoned for the development of affordable townhousing or low-rise apartment dwellings.

The Kilally Estates Phase I and Phase II applications have been distributed to various agencies for review purposes. Significant issues that have been raised include the delineation and possible revision of floodlines, the dedication of flood plain lands as public open space, riverbank stabilization, the significance and protection of certain biological communities, the size and function of commercial blocks, and the integration of development with the abutting nursery lands. The processing of these applications has been co-ordinated with the Area Study and with the Open Space Study prepared for the Public Utilities Commission at City Council's request (see sub-section (V)).

b) **Richleigh Investments Limited (represented by Devlon Group)**

an area of approximately 14 hectares (35 acres) comprising the nursery lands (Hooydonk) on the west side of Highbury Avenue north of Kilally Road. Richleigh Investments has applied for Official Plan and Zoning By-law amendments to allow mix of retail commercial and medium and high density residential uses.

c) **Agathos**

an area of approximately 8.2 hectares (20.3 acres) located east of Highbury Avenue and north of Kilally Road.

the owner has applied for amendments and subdivision approval to allow a 98 lot, single-detached subdivision.

d) **Allen**

a long, narrow block of land, approximately 1.4 hectares (3.4 acres) in size fronting onto the east side of Highbury Avenue south of Kilally Road.

the owner has applied for amendments to allow low density residential and institutional uses.

e) **Marigold Developments**

a 5.6 hectare (15 acre) block of land that straddles the south boundary of the Study Area, having frontage on both Webster Street and Highbury Avenue. An application has been submitted to allow a 70 lot single detached subdivision in the south and east portions of the property fronting Jensen Road and Webster Street, and commercial or institutional uses on the westerly portion of the site fronting Highbury Avenue.

f) **Matthews Group - east of Highbury**

Land controlled by Matthews east of Highbury total 127 hectares (314 acres) in area. Servicing, transportation and environmental studies have been undertaken and a generalized land use concept has been prepared by Matthews in support of their intended role as the lead developer in the subdivision of lands east of Highbury Avenue.
v) **Park Proposal**

In anticipation of development applications for the lands west of Highbury Avenue, a large number of residents from the established neighbourhoods to the north and south have petitioned City Council to have all of the "valley lands" between Adelaide Street and Highbury Avenue, with the exception of the nursery property, acquired as public open space and established as a park area. The residents' request, along with input from the Planning and Development Department, Public Utilities Commission, and Upper Thames River Conservation Authority, was considered by City Council in July, 1989 and the following resolution was adopted:

"That, on the recommendation of the Director of Planning and Development, on the advice of the Director of Planning, and with the concurrence of the City Administrator, the following actions be taken in response to public requests to the City Council and to the London Public Utilities Commission for the creation of a park encompassing undeveloped lands along the North Branch of the Thames River between Adelaide Street and Highbury Avenue, namely:

a) the City of London continue to acquire, through land dedication requirements associated with development approvals, privately owned, flood plain and hazard lands within the subject area for public parkland and open space purposes;

b) the City of London not pursue the purchase of lands in the study area for parkland or open space purposes that are outside of the flood plain and are not part of the flood plain acquisition scheme; and that consideration be given to development proposals for these areas and that when such proposals are made, consideration be given to the City of London acquiring lands adjacent to flood plain lands; and further, that development proposals be considered in conjunction with the concept plan referred to in part (c) below as well as in conjunction with the site evaluation study being undertaken by the McIllwraith Field Naturalists of London Ontario Incorporated;

c) the London Public Utilities Commission be requested to prepare a development and management concept for existing and proposed public open space in the study area; and

d) the Upper Thames River Conservation Authority be requested to provide the City of London and the London Public Utilities Commission with an up-to-date detailed topographical map of the study area and that the Conservation Authority be requested to verify the existing elevations and the appropriateness of the previously established flood plain lines within the study area. (58.1.1) (10/15/CPSC)"

The acquisition by the City of privately-owned flood plain lands along the North Branch of the Thames River between Adelaide Street and Highbury Avenue has been the subject of ongoing discussions between the major private owner (Matthews Group) and the City Administration. It is Council's expectation that these areas will be dedicated to the City as public open space as a condition to the approval of development on abutting non-flood plain lands.

Matthews' applications for its lands west of Highbury Avenue have been reviewed by municipal departments and local agencies and have been scheduled for consideration by Council in conjunction with its consideration of this Area Study. Matthews has applied to the U.T.R.C.A. for permission to fill areas to elevate them above the regulatory flood level the floodline at certain locations and has received approval for alterations subject to the draft approval of their subdivision plan. As inferred by Council's resolution the final delineation of developable lands is also to have regard for any significant natural features and proposed recreational facilities along the fringes of the flood plain as identified through the P.U.C.'s Open Space Management Plan.
4.5 Servicing Constraints

i) Sanitary Sewers

The Study Area is not serviced with municipal sanitary sewers. Existing businesses and residences utilize private septic disposal systems.

The Kilally Road area is tributary to the Adelaide Pollution Control Plant. At present, a trunk sanitary sewer is under construction from the Adelaide Street area easterly on an alignment being the westerly projection of Kilally Road. This sewer will serve the Kilally Study Area and adjacent lands that may be annexed to the City.

The present pollution control plant is producing a treated effluent of high quality and well within the Ministry of the Environment requirements. As such, the plant is capable of handling additional flows.

A planned expansion is proposed for 1994 which would provide additional capacity for a population equivalent for approximately 15,000 persons. This scheduling would accommodate the projected growth in the watershed and will provide the necessary capacity to serve the projected Kilally Study Area population of 12,000 persons. A further planned expansion is projected beyond 1995.

The present plant expansion is in keeping with Council's present policy of expanding plant facilities as growth occurs. This policy has, over the years, successfully met the development needs of the City.

The Windermere to Kilally extension of the trunk sewer has been the subject of a Schedule "C" Environmental Assessment. The Assessment addressed the alternative alignments for the new sewer, their potential impacts, and the mitigation measures that may be required. The recommended alignment involves an extension to the east in line with the Kilally/Windermere road allowances to a point east of the river. From this point the alignment jogs to the south to eliminate the need for a second river crossing and to provide greater separation from the riverbank and riparian vegetation. Associated impacts include some vegetation removal and temporary displacement of fish and reptiles; however, these impacts are being reduced through detailed alignment selection, time restrictions on in-stream construction, and aquatic habitat restoration measures. This work started in August of this year and should be completed within the time period identified in the Environmental Assessment. Presumably, should Windermere and Kilally Roads be linked in the future, the new road would follow the same alignment.

From a point near the west end of the existing Kilally Road, the trunk sewer would split into two branches. The main branch, which would service most of the lands east of Highbury Avenue as well as the lands west of Highbury Avenue and north of Kilally Road, would follow an alignment generally parallel to the river and near the limits of the flood plain. The smaller south branch would service the area south of Kilally Road and west of Highbury Avenue as well as lands between Highbury Avenue and Webster Street, south of Kilally Road. Wherever possible, these trunk services will be constructed along road allowances.

ii) Storm Sewers

Storm drainage from developed lands within the Study Area will flow to the Thames River. For the larger part of the Study Area, storm drains will flow directly to the River. It has been proposed that a smaller drainage area, mostly comprised of lands south of Kilally Road east and west of Highbury Avenue, will flow to the small stream at the base of the steep slope along the south boundary of the Study Area. Combined with the existing drainage from lands south of the Study Area and east of Highbury Avenue, the storm flows into this channel may necessitate modifications to the channel to avoid erosion and improve its flow capacity. Any such modifications will have to be carefully designed and constructed to minimize the disruption to the vegetation that exists along this watercourse.
iii) Roads

Existing public roads extending through the Study Area include Highbury Avenue, Kilally Road west of Highbury Avenue, Webster Street, and Sandford Street (formerly Packs Lane). Chippewa Drive terminates in a stub at the south boundary mid-way between Sandford Street and Clarke Side Road and it is intended that Chippewa be extended northward to serve a limited portion of the Study Area.

Kilally Road between Highbury Avenue and Clarke Side Road has a 20 metre (66 foot) road allowance and a two-lane paved surface. It is designated as an arterial road in the Official Plan. The road allowance should be widened to 36 metres (120 feet) and the road re-constructed to an improved three-lane standard. West of Highbury Avenue, Kilally Road exists only as a gravel laneway providing access to the original farm residence. While designated in the new Official Plan as only a secondary collector road, it is proposed that this status be changed to Primary Collector in conjunction with the implementation of this Area Study. The road allowance will be widened to 36 metres to accommodate any future linkage with Windermere Road and upgrading to arterial road status. This action would be consistent with the following policy in the New Official Plan:

18.2.3. Review of Transportation Plan and Protection of Transportation Options.

...The road system shown as Schedule "C" of this Plan will be amended as required to meet the transportation needs of the City. Amendments to Schedule "C" may be undertaken for the upgrading of existing roads or rights-of-way, to serve a higher transportation function or for the protection of new road alignments, extensions or connections. To ensure that the City's long-term transportation needs can be met, the City will endeavour to protect its options for transportation alternatives by negotiating the protection of possible road alignments in its review of development applications.

Access from individual properties to Kilally Road will be restricted by ensuring that new low density residential uses back onto it. Existing residential uses fronting onto Kilally Road will continue to require direct access.

Highbury Avenue has already been upgraded to four lane arterial road standards within the Study Area. Minor widening to a full 36 metre (120 foot) road allowance will be required. To limit turning movements onto and off of Highbury Avenue and thus protect its traffic carrying capacity, it is proposed that new intersections with Highbury Avenue be limited to locations approximately mid-way between Kilally Road and the north and south limits of the Study Area.

Clarke Side Road on the east boundary of the study area is a higher speed arterial road which will eventually link with Airport Road and function as part of a ring road system. No new access from abutting properties to this stretch of Clarke Side Road should be permitted.
A traffic impact study prepared for Matthews Group in support of their development concept concluded that the traffic generated by the initial phases of development in the Study Area can be accommodated on the major roads serving this section of the City as they presently exist. By the end of the fifteen year study horizon, however, when the area is likely to be substantially developed and traffic is added from the development of proposed annexation areas to the north and east, traffic volumes are projected to exceed the existing capacity of several sections of Highbury Avenue and Adelaide Street. Development of the Study Area would account for 20% to 25% of the total traffic volume on the Huron Street and Fanshawe Park Road corridors. The consultants also considered the impact of a Windermere - Kilally Road connection and determined that, by attracting significant volumes of traffic from Fanshawe Park Road and Huron Street, it would be an effective means of providing additional capacity in the east-west corridors. It would also benefit traffic flow along Highbury Avenue by diverting significant volumes of traffic from Highbury to Adelaide Street, Richmond Street and Western Road.

5.0 Land Use Objectives

The following objectives are intended to guide the preparation of an Area Plan and the designation of lands within the Study Area for various generalized land uses in conformity with the new Official Plan:

i) allocate lands for residential development that will satisfy the City's housing mix and affordability policies;

ii) focus higher intensity commercial and residential development on the Highbury Avenue corridor;

iii) provide for the acquisition of hazard lands, including flood plain and areas below registered fill lines (generally aligned along the top of bank), as public open space through the subdivision approval process, floodplain acquisition program or other appropriate means;

iv) retain and protect significant biological communities within the Study Area;

v) provide for the short-term, sequential extraction of viable aggregate resources from lands proposed for development where existing residential uses and significant natural features can be adequately buffered from extraction operations, in accordance with the aggregate resources policies in the new Official Plan;

vi) allocate lands for school and park facilities that are adequately sized and located to meet the needs of future residents, and that provide linkages to the river valley open space system;

vii) provide for the upgrading of Kilally Road east of Highbury Avenue to arterial road standards and for the possible future linkage of Kilally and Windermere Roads;

viii) protect the traffic carrying capacity of Highbury Avenue and Clarke Side Road through access restrictions;

ix) minimize the extent to which roads and underground services encroach upon environmentally sensitive areas;

x) identify, assess, and protect or excavate any significant archaeological resources within the Study Area.
KILALLY ROAD AREA STUDY - 24

6.0 Site Analysis

From a land use planning perspective, some of the significant design considerations associated with the Study Area are as follows:

- large tracts of flat open land east of Highbury Avenue between Kilally Road and the former City boundary that are appropriate for the extension of the developing low density neighbourhood north of Huron Street;

- lands west of Highbury Avenue that are substantially separated from existing neighbourhoods and that are suitable for the type of self-contained community proposed by Matthews Group. This type of development would feature comprehensive site planning and should be more conducive to an effective and sensitive treatment of the interface between open space and developed areas than a conventional subdivision;

- opportunities in the Highbury Avenue corridor to allocate lands for medium and high density residential uses. These sites will have good access to an arterial road, existing (Huron and Highbury) and proposed (Highbury and Kilally) shopping facilities, and an extensive open space system. Since the area is predominantly undeveloped at present, appropriate measures can be taken to avoid any adverse impact on adjacent lower density residential development;

- increasing pressure for commercial development along Highbury Avenue. It is appropriate that some land along Highbury be allocated for commercial uses that will serve residential development in the Study Area and/or cater to the heavy traffic along this road. On the other hand, extended strip development would be both unnecessary and undesirable and a duplication of shopping facilities already existing a short distance to the south at Huron Street and Highbury Avenue should be avoided;

- in most of the Study Area, a very pronounced slope provides a natural delineation of valley lands and a reasonable boundary between areas suitable for development and areas that should be retained as open space. The top of bank generally coincides with the fill line established by the Upper Thames River Conservation Authority;

- in the westerly half of the valley lands between Highbury Avenue and Clarke Side Road there is a substantial tract of relatively flat and accessible land below the registered fill line which has been previously disturbed for cultivation and gravel extraction and which may be suitable for more active public parkland uses or as open space area associated with a school site. Portions of this open area may also be considered for low density residential uses requiring minimal alteration to existing grades, subject to approval of the required permits by the Upper Thames River Conservation Authority;

- in the easterly half of the valley lands between Highbury Avenue and Clarke Side Road, the valley lands are much more heavily vegetated, less distributed and less accessible because of a high, steep bank. There are a variety of forest and wetland communities in this area that are environmentally significant and sensitive and that are worthy of retention in their natural state;

- it is important that site planning and construction near the perimeter of the lands to be retained as open space in the Kilally Estates Phase I and II subdivisions be particularly sensitive to the protection of abutting natural features. The final delineation of this boundary as determined through the subdivision approval process will have regard for the results of the Open Space Study prepared for the Public Utilities Commission;
the Agriculture Canada research facility has been recently established (1987) and is likely to remain over the long term. Nevertheless, consideration should be given to how these lands may be integrated with surrounding uses at some point in the future;

while most of the lands east of Kilally Road are identified as a Primary Aggregate Resource Area, much of the resource has been previously extracted. Other portions are not available for extraction in the foreseeable future (Agriculture Canada lands), are located within areas that should be retained in a natural state, or are too close to existing residential uses. The location, quantity and quality of the remaining aggregate resources in the Study Area should be more precisely determined and areas delineated where resource extraction would be viable prior to urban development;

most of the Study Area is in large ownerships thereby facilitating the allocation of land use and co-ordination of subdivision development. One area of small ownerships, mostly comprised of residential properties, is located along the east side of Highbury Avenue north of Kilally Road. These relatively shallow properties front onto a major arterial road and are not suited to continued low density residential use over the long term. The consolidation of these properties with abutting land to the east to provide a greater depth from Highbury Avenue, and their redevelopment for commercial or higher density residential use would be appropriate. Other small residential properties, mostly located on the south side of Kilally Road east of Highbury Avenue and along the west side of Webster Street, are viable long-term uses and development on any abutting lands should provide buffering to protect their low density residential character;

measures required for protection of the Imperial Oil pipeline in conjunction with the development of abutting lands include:

- transfer of ownership of the lands subject to the easement to Imperial Oil where the pipeline traverses lands proposed for residential subdivision development,

- a minimum setback of 15 metres from the boundary of the easement or, alternatively, 20 metres from the pipeline itself, for any new dwellings,

- in commercial or multiple-unit residential blocks the pipeline easement may be utilized for parking purposes subject to an agreement between Imperial Oil and the landowner relating to any excavation and restoration that may be required in the future;

- any road or utility crossings must be approved by and built to the specifications of Imperial Oil and will be the subject of an agreement between Imperial Oil and the City and/or property owner.

- portions of the Study Area, by reason of their proximity to the River are likely to have a moderate to high potential for the identification of archaeological sites and will have to be assessed and excavated if necessary prior to their development.
PROPOSED LAND USE DESIGNATIONS AND POLICY CONSIDERATIONS

The new Official Plan has been reviewed to determine the land-use designations that may be appropriate for portions of the Study Area. The proposed allocation of these land-use designations in the Study Area is shown on Map No. 9. Key policies for these designations and considerations pertaining to their application to the Study Area are summarized below:

i) Low Density Residential

- primary permitted uses in areas of new development are single detached, semi-detached and duplex dwellings. Low-rise, low-coverage forms of multiple attached dwellings may be permitted to maximum densities of 30 units per hectare (12 units per acre) at appropriate locations.
- secondary permitted uses include community facilities such as schools, parks, churches, and libraries.

The Low Density Residential designation will be the most widely applied designation in the Study Area given the size of the area, pattern of development on adjacent lands, and development preferences of the major landowners. The "preferred lifestyle" residential community proposed by Matthews Group for the Kilally Estates Phase I development would conform to the Low Density Residential policies. More conventional forms of residential subdivision are anticipated in other areas of the Low Density Residential designation.

ii) Multi-Family, Medium Density Residential

- primary permitted uses are low profile apartment and townhouse dwellings; single detached, semi-detached and duplex dwellings; small-scale nursing homes, rest homes and homes for the aged are also permitted;
- secondary permitted uses include group homes, community facilities, funeral homes, commercial recreation facilities, small-scale office developments and office conversions;
- preferred locations for Medium Density Residential designations include lands in close proximity to Shopping Areas, Commercial Districts, designated Open Space areas or Regional Facilities; lands abutting Multi-Family, High Density Residential designations; and lands abutting an arterial, primary collector or secondary collector road.

Consideration must also be given to compatibility with neighbouring low density residential areas, the adequacy of municipal services, and the impact of traffic to and from the site. This designation is viewed as an appropriate transition between Low Density Residential areas and areas of commercial, industrial, or more intensive residential development.

- the general height and density maximums for this designation are four storeys and seventy-five units per hectare (30 units per acre) respectively.

Within the Study Area, the Medium Density Residential designation would serve as an appropriate transition between commercial and high density residential uses in the Highbury Avenue corridor and low density residential areas to the east and west. This type of development is also more appropriate for sites abutting Highbury Avenue and Clarke Side Road than low density residential uses as it can be more readily designed to achieve noise attenuation standards and is more likely to provide consistency in the treatment of the road allowance boundary, i.e. privacy fencing or landscaping.

A Medium Density Residential designation abutting Highbury Avenue would also be an appropriate location for secondary permitted uses such as specialized residential facilities or small-scale offices.
PROPOSED LAND USE DESIGNATIONS
FOR THE NEW OFFICIAL PLAN
Multi-Family, High Density Residential

- primary permitted uses include low-rise and high-rise apartment buildings, multiple-attached dwellings, emergency care facilities, nursing homes, and similar uses.

- secondary permitted uses include group homes, community facilities, funeral homes, commercial recreation facilities, small-scale office developments, and office conversions.

- preferred locations for the High Density Residential designations include lands in close proximity to designated Open Space areas and lands abutting or having easy access to an arterial or primary collector road. Consideration must also be given to compatibility with any neighbouring low density residential areas, the adequacy of municipal services, the impact of traffic to and from the site, and the availability of public transit, public open space and convenience shopping facilities.

- height and density limits are to be determined on the basis of the site characteristics, character and scale of adjacent land uses, and availability of services and amenities. At suburban locations maximum densities would not normally exceed 150 units per hectare (60 units per acre).

Within the Study Area, the lands best suited to high density residential use, according to Official Plan criteria, are those in the Highbury Avenue corridor in close proximity to the Thames River or to the Kilally-Highbury intersection. Municipal underground services proposed for the Study Area would be sufficient to accommodate high density development and the traffic impact on Highbury Avenue would be minimal. Where the lands surrounding high density residential uses are undeveloped at present, appropriate buffering can be required through the zoning and site planning processes. These areas should be considered for development up to 150 units per hectare (60 units per acre) in density and 12 storeys in height.

Where proposed high density designations would abut existing or proposed low density residential uses, consideration should be given to lower height and density limits.

High Density Residential lands along Highbury Avenue would also provide suitable locations for various specialized residential uses permitted by the New Official Plan, such as nursing homes and homes for the aged, as well as non-residential secondary uses including small-scale offices, funeral homes, and commercial recreation uses. Secondary commercial uses should only be allowed on a site specific basis where it can be demonstrated that they are small in scale and will not detract from the development of these areas for predominantly residential uses.

Convenience Commercial and Service Station Uses

Convenience commercial and service station centres, may be appropriate at certain locations within "Residential" areas. Such locations would have to be identified in the Official Plan and would be subject to a site-specific zoning amendment in response to a development proposal. Acceptable locations would be on arterial or primary collector roads, preferably at an intersection of major roads.

Within the Study Area, there will be opportunities to locate convenience commercial and automotive service station uses within the Commercial land-use designations proposed for portions of the Highbury Avenue corridor and at the Clarke Side Road - Kilally Road intersection. There may be some justification for a convenience commercial location at the intersection of Sandford Street and Kilally Road; however, it would not be advisable to consider the designation of this site as a convenience commercial location until such time as Kilally Road is developed to an arterial status and compatibility with existing or proposed adjacent uses can be demonstrated.
v) **Shopping Area Designations**

The "Community Shopping Area" designation is applied to predominantly retail commercial centres serving the frequent shopping needs of surrounding neighbourhoods within a convenient driving distance. Community Shopping Areas range in size from 6,000 square metres (64,585 sq.ft.) to 30,000 square metres (322,928 sq.ft.) gross leasable area, have a shopping centre focus, and are to be located at the intersection of two arterial roads or an arterial and primary collector road. Permitted uses include all types of retail outlets; a range of service, automotive, and entertainment uses; community facilities such as libraries and daycare centres; and professional, medical/dental, and service-oriented office uses.

Neighbourhood Shopping Areas are intended to provide for the daily or weekly convenience shopping and service needs of nearby residents, and, to a lesser extent, passing motorists. Permitted uses include small retail stores, food stores, convenience commercial uses, personal services, and limited ranges of automotive services, office uses and community facilities. A shopping centre focus is encouraged with the total size ranging from 1,000 square metres to 6,000 square metres (10,764 sq.ft. to 64,585 sq. ft.). Locations are limited to the intersection of two arterial roads or an arterial road and a primary collector road.

**Associated Shopping Area Commercial**

The Associated Shopping Area Commercial designation is applied to arterial road locations at the periphery of Regional or Community Shopping Areas and are intended to be developed for a limited range of retail, service and office uses which are complementary to the function of the designated Regional or Community Shopping Area but which have different access, site or exposure requirements. Permitted uses include convenience commercial, personal services, automotive services, retail stores, commercial recreation and entertainment uses, food stores, service and repair establishments and small-scale professional and service-oriented office uses.

Commercial land requirements for the Study Area have been evaluated by the Planning Division for the purposes of this Area Study. These estimates assume a future Study Area population of 12,000 and take into account the level of service provided by existing and planned commercial centres in the abutting Huron Heights, Carling and Stoneybrook Planning Districts.

It has been determined that Community Shopping Area lands in the abutting Planning Districts, in particular the large concentration of retail space at Huron Street and Highbury Avenue, can meet a large portion of the commercial needs of the projected population of the Study Area. It should be noted that Highbury/Kilally intersection is located only 1,300 metres (4,265 feet) from the centre of the Community Shopping Area at Huron Street and Highbury Avenue. While a large-scale shopping centre would unnecessarily duplicate the facilities at Huron and Highbury, there is a need for retail, personal service, medical/dental and service-oriented office uses to serve the short-term shopping and service needs of a fairly high density of population in close proximity to the Highbury/Kilally intersection. A small "Community Shopping Area" supported by a limited amount of "Associated Shopping Area Commercial" development would adequately serve these needs without approaching the scale of commercial development at Huron and Highbury. The southwest quadrant of the Highbury-Kilally intersection is considered to be an appropriate location for a small Community Shopping Area given its accessibility, single ownership and availability of services. The proponent for commercial development at this location (Matthews Group) would develop commercial uses in conjunction with residential development on abutting lands with an emphasis on design compatibility, thereby minimizing any impacts the Shopping Area may have on adjacent land uses. If, in the future, additional lands are annexed to the City north of the Study Area, a more appropriate location for a larger Community Shopping Area designation would be in the vicinity of the Fanshawe-Highbury intersection.
KILALLY ROAD AREA STUDY - 30

The Study Area could also support a small Neighbourhood Shopping Area to be developed in conjunction with the later phases of development at the intersection of Kilally Road and Clarke Side Road. This location would serve the east end of the Study Area as well as motorists using Clarke Side Road.

vi) **Service Commercial Designations**

There are two categories of Service Commercial land use:

- "Highway Service Commercial" areas are intended for uses that primarily cater to the travelling public including hotels, motels, automotive services, convenience commercial uses, personal services, restaurants, recreation and entertainment uses and similar activities.

- "Restricted Service Commercial areas accommodate space-extensive commercial uses that draw customers from a wide area and that require large sites, good exposure, or extensive display or storage areas, or that have potential adverse impacts which require separation from residential and other sensitive land uses. Examples of Restricted Service Commercial uses include food stores and supermarkets, automotive uses, building supply outlets and hardware stores, furniture and home furnishing stores, warehouse and wholesale outlets, large retail stores, nursery and garden stores, commercial recreation uses and assembly halls or private clubs.

Highway Service Commercial areas are to be located on sections of arterial roads which support high traffic volumes; Restricted Service Commercial areas must be of suitable size and configuration to accommodate their intended use and are to be located on major roads adjacent to industrial areas or where suitable separation or buffering can be provided to protect existing or planned residential development or other sensitive land uses;

- areas can be designated for both Highway and Restricted Service Commercial use;

- uncoordinated strip commercial development or the creation of small isolated Service Commercial designations is to be avoided. New Service Commercial designations are expected to develop according to a plan for the integration of access points, parking areas, landscaping, setbacks and buffering measures.

The Planning Districts adjacent to the Study Area are below City-wide average in the amount of land designated Highway Service Commercial. Furthermore, while there are extensive areas, designated for Restricted Service Commercial use along Clarke Side Road between Huron Street and Dundas Street; there is very little land allocated for this type of use along Highbury Avenue. Many of the types of uses allowed in the Service Commercial designations can be accommodated in the recommended Community Shopping Area and Associated Shopping Area Commercial lands located in the Highbury Avenue corridor. There remains a demand for sites to accommodate the more space extensive commercial uses allowed only in the Highway and Restricted Service Commercial designations. An appropriate location for these types of uses would be the east side of Highbury Avenue, north of Kilally Road. It is proposed that the existing tier of shallow residential lots along this frontage be merged with abutting lands to the rear to provide a much greater depth for commercial development. Extensive buffer requirements would be imposed to reduce the visual impact of service commercial development on the residential uses proposed for adjacent lands to the east.
vii) **Office Designations**

- the "Office Area" designation provides for the development of general office uses in small to medium-scale office buildings for businesses or professionals who would prefer locations outside of the Downtown;

- "Office Area" designations require frontage or flankage on an arterial road which serves as a major entryway to the City;

- office buildings to be constructed in these areas must be low to medium-size in height and of a scale which will have minimal impact on and can be integrated with surrounding uses.

There are suitable locations within the Highbury Avenue corridor for an "Office Area" designation including lands proposed for office use as part of Matthews Group - Kilally Estates Phase I application. There are no "Office Area" designations in the abutting Planning Districts at present. It should be noted that small-scale office development would also be permitted at arterial road locations within the Medium and High Density Residential designation.

viii) **Regional Facility Designation**

- the Regional Facility designation is primarily applied to large institutional type facilities which serve a regional function and normally comprise major employment and activity centres.

The portion of the Agriculture Canada Research Centre located within the former City boundary is designated "Regional Facility". It would be appropriate to expand this designation to include the whole of the Research Centre site.

ix) **Open Space Designation**

- the Open Space designation includes district, City-wide and regional parks; private open space uses such as cemeteries and golf courses; flood plain and hazard lands; and lands recognized as significant Natural Areas;

- public access to lands designated "Open Space" is encouraged except where public access may have a negative effect on natural features or the lands are privately-owned;

- Open Space lands may be acquired by the City through parkland or open space dedication requirements attached to subdivision or site plan approvals and through the City's Floodplain Acquisition Program;

- the inclusion of privately-owned lands in the "Open Space" designation does not imply that it is Council's intent to acquire them. If a proposal is made to re-designate privately-owned "Open Space" lands for uses not permitted in this designation, Council will consider the acquisition of these lands according to criteria set out in the Official Plan. If the City or other public authority has no intention of acquiring the property, the proposal to change the land use designation will be considered on the basis of applicable Official Plan policies;

- ravines and slopes that are considered by Council to be significant as components of the open space network or for natural drainage or buffer purposes, or that are subject to physical constraints that make them unsuitable for development, may be included in the Open Space designation;

- applications for development on lands adjacent to ravines or slopes designated as Open Space will be subject to evaluation in terms of their impact on the natural features of the ravine or slope and the mitigation measures that are proposed. Information required of the applicant may include soil and geotechnical reports, grading plans, and an assessment of the impact on natural drainage patterns.
The Open Space designation proposed for the Study Area should include flood plain lands and the valley slopes below the U.T.R.C.A.'s Fill Lines. It may also include areas at the fringe of the hazard lands that form part of a habitat or vegetation community which is deemed to be worthy of protection based on input received from the Open Space Study prepared by the Public Utilities Commission. One other land form which is worthy of protection as natural feature is the wooded slope which follows a curved alignment from Highbury Avenue near the south limit of the Study Area to a point near the intersection of Kilally Road and Webster Street.

x) **Housing Policies**

- the City of London's housing objectives as stated in the new Official Plan support the provision of a choice of dwelling types, encourage an adequate supply of affordable housing, and support the development, at appropriate locations, of residential facilities that meet the housing needs of persons requiring specialized care;

- as part of an agreement with the Ministry of Housing regarding joint housing initiatives, the City will monitor new residential development to ensure that at least 25% of the housing produced annually is affordable and that affordable housing is developed throughout the City. The City is also to establish a policy whereby developers of plans of subdivision and other residential developments will be encouraged to provide affordable housing, including sites for non-profit housing.

Planning for the Study Area is intended to provide the appropriate land use designations and to promote suitable forms of subdivision and site development that will allow the 25% affordable housing objective to be met. This can be achieved through the creation of sites for moderately-priced townhouse and apartment development, both rental and condominium; supporting the development of appropriately designated sites for non-profit projects; and requiring that portions of the areas proposed for low density subdivision development be allocated for small lot single and semi-detached dwellings.

xi) **Aggregate Resources**

- (refer to Section 4.2 (iv) for a description of the aggregate resources in the Study Area);

- the new Official Plan does not identify any licensed pits or quarries within the Study Area. Any proposal to establish a new pit or quarry will require an Official Plan amendment prior to licensing of the pit or quarry. Proposals for new pits will be evaluated in terms of their potential impact on surrounding land uses and on the basis of reports provided by the applicant describing the extent and quality of the resource, existing site conditions and potential impacts on adjacent uses. Site plans showing the staging of extraction, access points, circulation patterns, and impact mitigation measures, would be required as would a pit rehabilitation plan providing for an after-use in conformity to the Official Plan land-use designation of the site.

It is appropriate that the Area Study identify portions of the Primary Aggregate Resource Area that would be suitable for licensing for the sequential short-term extraction of viable aggregate resources prior to development. At this time, however, there is insufficient information to properly identify such areas.
Parks and Recreation

the hierarchy of public parks is comprised of neighbourhood, district, City-wide and regional parks. Neighbourhood parks are intended primarily for children's activities and are to be located so as to maximize their pedestrian accessibility from the neighbourhoods they serve. They usually include a substantial open area of suitable grade for active play and informal sports activities. Where practical and feasible they should be located and developed as part of a park/school campus to provide for the most efficient utilization of public open space. District parks are larger, sports-oriented facilities serving several neighbourhoods with primary access by automobile, bicycle or public transit. Flat, open terrain is generally required and preference is given to sites that can be developed in association with a high school. City-wide parks are large, multi-functional open spaces that are usually located to take advantage of natural landforms and features such as valley lands, ravines, significant tree stands or wetlands. They normally offer opportunities for active sports and recreational activities as well as areas intended for more passive uses. Regional parks, as the name implies, are large-scale or highly specialized parks that draw visitors from a broad area;

neighbourhood and district parks are permitted uses within the Residential land-use designations;

as a condition to residential subdivision of land within the Study Area, the City is entitled to a parkland dedication of up to 5% of the total area contained within a plan of subdivision. Alternatively, a density-based formula of one hectare per 300 dwelling units (1 acre per 120 dwelling units) can be used;

the City may accept cash in-lieu-of land dedication where the land area available in an individual plan would be too small or poorly located or where the area is already adequately served by parks and recreation facilities;

land to be conveyed to the City for parkland purposes must meet the requirements of the Public Utilities Commission for grading, drainage and general conditions. In most instances, sites that consist of mostly flat, open land will be required; however, where the needs for active recreational space can be met at other locations, lands containing natural features, such as ravines and woodlots, may be accepted at a rate which reflects their relative development potential;

flood plain and hazard lands are generally not accepted for parkland dedication purposes unless they have suitable size, terrain and accessibility for development as neighbourhood or district parkland. It is the usual requirement of the City that flood plain which is not accepted as parkland be dedicated to the City or the Conservation Authority for open space and conservation purposes.

Within or in close proximity to the Study Area there will be a need for district park space to accommodate active sports facilities. Neighbourhood park space will be required at locations central to future residential development between Highbury Avenue and Clarke Side Road. The exact location and amount of land required will be determined in consultation with the Public Utilities Commission based on the estimates of the future population to be served. Where feasible, proposed park locations should be situated so that land dedication requirements are split among several land owners.
The provision of active, district or neighbourhood parkland will generally require flat, tableland locations located outside of the valleyland corridor. One exception would be the possible location of a 2 to 3 hectare neighbourhood park on a parcel of open, mostly cultivated land below the fill line near the mid-point between Highbury Avenue and Clarke Side Road. The valley slope at this location is not high or steep and does not present a significant constraint to access. The provision of neighbourhood park space at this location, would form an attractive activity node in the development of a public open space system along the river valley.

7.1 Implementation

It is proposed that a two-stage approach be taken to the adoption of the recommended Official Plan land-use designations shown on Map No.9. The first stage would be a change to the new Official Plan to incorporate the recommended land use designations for the west half of the Study Area generally including all of the lands west of Webster Street and a northerly extension thereof. This is the area where development will be concentrated over the next five years and where there is a greater degree of certainty with regard to appropriate land use configurations and road alignments.

The portion of the Study Area west of Webster Street would be part of a second stage amendment to the new Official Plan to be adopted at a later date when a number of elements of the Proposed Area Plan, in particular the collector road alignments and the provision of school and park facilities, have been refined through further study and discussions with the agencies and landowners involved. Servicing of the Study Area will occur on a phased basis from west to east, therefore, a delay in the finalization of the Area Plan and adoption of changes to the new Official Plan for the east half of the Study Area will not unduly delay development. In the interim the proposed Area Plan as shown on Map No.10 will provide a focus for continuing discussions.

For as long as the existing Official Plan remains in effect, amendments to the existing Plan would be processed in conjunction with individual applications, since numerous special policies will be necessary to achieve consistency with the new Plan.

8.0 PROPOSED AREA PLAN AND GUIDELINES

The following sections provide a description and rationale for the land uses and features shown on the Proposed Area Plan appended to this report. These land uses will be developed in accordance with the policies of the new Official Plan and with regard for the specific guidelines listed below.

i) Transportation

The Proposed Area Plan shows three arterial road segments, all of which are appropriately designated in the new Official Plan. Highbury Avenue and Clarke Side Road are the major thoroughfares providing access to and through the Study Area. Kilally Road will be upgraded from its current rural standard to become the major east-west spine for Study Area development. All of these roads will be widened as necessary to their designated road allowance width of 36 metres (120 feet) and will be subject to access restrictions.
The Preliminary Concept Plan for the Kilally Study Area indicated a possible alternative alignment for Kilally Road between Highbury Avenue and Clarke Side Road. From a point mid-way between Webster Street and Sandford Street, the re-aligned Kilally Road would swerve to a more southerly alignment and intersect Clarke Side Road at a point closer to the south boundary of the Study Area, perhaps aligned with the entrance to the Fanshawe Conservation Area. The re-alignment is being promoted by the Matthews Group, which owns the majority of land that would be affected, on the grounds that it would provide a better location for the Kilally/Clarke Side Road intersection than the existing location which is at the top of the river valley slope, in close proximity to the bridge. The change would also facilitate subdivision design by providing a more even distribution of undeveloped lands to the north and south of the arterial road. On the other hand a re-alignment of Kilally Road would require the support and participation of other landowners and therefore introduces a greater degree of uncertainty as to the timing for the provision of an arterial road linkage between Highbury Avenue and Clarke Side Road. The re-alignment would have the effect of reducing the land area available for development and splitting large ownerships and therefore may not be acceptable to landowners other than Matthews Group.

The liaison response to the Preliminary Concept indicates that the alternative alignment is not supported by the Engineering Department and one of the major landowners whose property would be required. While the alternative alignment is not shown on the Proposed Area Plan, it would be premature to rule this possibility out. Further study of this re-alignment may be warranted prior to the adoption of a change to the New Official Plan to adopt land-use designations and road alignments for the east half of the Study Area if the City can be assured that the road alignment can be secured in a timely manner.

There are two primary collector road segments shown on the Plan. The section of Kilally Road west of Highbury Avenue is currently designated as a secondary collector and will require a change to the new Official Plan to upgrade its status. To accommodate the potential future linkage of Kilally and Windermere Roads and the further upgrading of this road section to arterial status, a 36 metre road allowance will be required through the subdivision approval process and access restrictions will be imposed. Sandford Street, which provides a direct connection between Huron Street and Kilally Road and serves as a primary access to a large network of local residential streets, is already designated as a Primary Collector with a planned road allowance width of 26 metres (86 feet). Subdivision design for undeveloped lands abutting Sandford Street should provide for the backlotting of residential lots so that the number of access points to Sandford Street are minimized.

The network of secondary collector roads includes a loop configuration through the proposed Kilally Estates development west of Highbury Avenue and continuing eastward to the point that it would align with the existing Kilally/Sandford intersection. Chippewa Drive would be extended northward and westward to intersect with Sandford Drive, thus forming a loop that would distribute and collect traffic from the existing and proposed low density residential development between Sandford Street and Clarke Side Road.

While the exact alignment of secondary collector roads cannot be finalized until subdivision plans are received and approved, it is important that there be general agreement on their approximate alignment so that school, park and transit services can be planned accordingly, non-local traffic can be directed away from existing or proposed local streets, and proper linkage between plans of subdivision can be achieved.

Local streets are not shown as the Proposed Area Plan since the alignment of these streets will be determined through individual subdivision plans.
Transportation Guidelines

1) The provision of access points to Highbury Avenue, Clarke Side Road, Kilally Road and Sandford Street will be minimized to the extent possible. Common access points will be required to serve redevelopment of the multiple land ownerships located along the west side of Highbury Avenue.

2) The Kilally Road allowance west of Highbury Avenue will be widened to 36 metres (120 feet) to accommodate a potential upgrading from primary Collector to arterial road status should the Official Plan be revised to include a linkage of Kilally and Windermere Roads.

3) To facilitate pedestrian access to Highbury Avenue and Clarke Side Road for purpose, walkways may be required at mid-block locations across lands designated for commercial or multiple-unit residential development.

Commercial

The location and configuration of the commercial lands along Highbury Avenue corresponds to the Land Use designations shown on Map No.9. This commercial corridor includes a Community Shopping Area in the south-west quadrant of Highbury Avenue and Kilally Road, and Associated Shopping Area and Service Commercial designations along Highbury Avenue in proximity to the Highbury - Kilally intersection.

A Neighbourhood Shopping Area of somewhat smaller size is also proposed in the east end of the Study Area at the intersection of Kilally Road and Clarke Side Road. This facility would likely not be warranted until the final phases of development of the Study Area, assuming that the area will develop in a west to east sequence as major services are extended.

There will also be opportunities for small-scale office development within the Shopping Area and Service Commercial designations and within the High and Medium Density Residential designations on sites abutting Highbury Avenue.

Commercial Guidelines

1) The development of the Associated Shopping Area and Service Commercial frontages along Highbury Avenue will proceed on the basis of a concept plan to show the integration of access points, driveways, parking areas, landscaping and buffer treatments along these frontages.

2) Consideration may be given to the creation of a convenience commercial centre at the intersection of Kilally Road and Sandford Street as part of the subdivision approval process for abutting lands.

3) Zoning for the Community Shopping Area will limit its gross floor area to a maximum of 10,000 m² (107,642 sq.ft.).

4) Service commercial development along the east side of Highbury Avenue shall be subject to substantial buffering requirements and open storage limitations to minimize the impact of development or adjacent lands proposed for residential development.

Residential

Low Density Residential uses, predominantly consisting of single family and semi-detached homes, are proposed for approximately 55% of the residential lands. Areas of higher density will be located in the Highbury Avenue corridor, with High Density Residential lands located near the open space system along the Thames River and near the Highbury - Kilally intersection.
The proposed residential land use allocations have been used to prepare housing unit and population projections for the Study Area. Based on the density and average household size assumptions indicated in Table No. 5 and approximate allocation of land use taken from Table No. 4, the Study Area would accommodate approximately 5,000 housing units and a population of 12,000 when fully developed. The housing units would be evenly split between low density (single and semi-detached) and higher density (apartment and townhouse) dwelling types.

Guidelines for Residential Development

1) Lands shown as "Low Density Residential" may be zoned to allow residential and secondary uses permitted by the new Official plan in conjunction with the approval of individual plans of subdivision. It is expected that the Study Area as a whole will provide a mix of lot sizes and low density housing forms so that a broad range of ownership housing preferences are satisfied.

2) Lands shown as "Medium Density Residential - D35" may be zoned to allow townhousing or cluster housing to a maximum density of 35 units per hectare (14 units per acre). These areas may also be zoned for specialized residential and community facilities in conformity with Section 3.6.4. of the new Official Plan.

3) Lands shown as "Medium Density Residential - D75" may be zoned to allow townhousing and cluster housing, to a maximum density of 35 units per hectare, stacked townhousing to a maximum density of 50 units per hectare, and apartments to a maximum density of 75 units per hectare and a maximum height of four storeys. Those areas may also be zoned to permit small-scale nursing homes, rest homes and homes for the aged, emergency care facilities and community facilities as described in Section 3.6.4. of the new Official Plan.

4) Lands shown as "High Density Residential" may be zoned to allow apartment development to a maximum density of 150 units per hectare and a maximum height of twelve storeys. Lower height and density limits may be set for sites in close proximity to existing or proposed low density residential uses. Development on sites that abut the river valley shall be sited and designed to minimize the visual impact on the trail corridor. Specific sites may also be zoned to allow any of the secondary uses permitted by the new Official Plan, including small-scale office uses, provided such uses will not substantially reduce the capacity of this area for apartment development.

5) The provision of sites for non-profit and co-operative housing projects and other forms of housing development shall be encouraged. Individual subdividers may be required to incorporate an affordable housing component within their plans so that there is a reasonable and equitable balance in the supply of lower-cost housing types. Over-all compliance with housing affordability criteria and policies will be monitored on an Area-wide basis.

iv) School and Park Sites

Based on the projected population and breakdown of housing types it is anticipated that a maximum of three elementary school sites (two for the Public School Board and one for Separate School Board) will be required to serve the fully developed Study Area.

The preferred location for each Board would be in the south-central portion of the Study Area between Highbury Avenue and Clarke Side Road, as part of a park-school campus if possible. A second public elementary school site, if required, should be located to the north of Kilally Road at a central location between Highbury Avenue and Clark Side Road.
<table>
<thead>
<tr>
<th>LAND USE</th>
<th>ha</th>
<th>ac</th>
<th>%</th>
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<tr>
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<td>530</td>
<td>55</td>
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<td>Include school and park sites</td>
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<td></td>
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<tr>
<td>Semi-detached</td>
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<td>295</td>
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<td>Single-detached</td>
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<td>Large Lot Cluster</td>
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<tr>
<td>Medium density Residential</td>
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<td>High density/Apt.</td>
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<td>390</td>
<td>965</td>
<td>100</td>
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</table>

Note: The above numbers are based on approximate measurements from the Concept Plan. These measurements will be refined to a greater degree as the study progresses.
### TABLE NO. 5 KILALLY AREA PLAN
PROJECTED HOUSING UNITS AND POPULATION

<table>
<thead>
<tr>
<th>Building type</th>
<th>Hectares (Acres)</th>
<th>Gross Density Unit/ha (Unit/ac)</th>
<th>Pers./unit</th>
<th>No. units (%)</th>
<th>Population</th>
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<tbody>
<tr>
<td>Low Density Residential</td>
<td>195 (480)</td>
<td>12 (5.0)</td>
<td>3.1</td>
<td>1200 (25)</td>
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<tr>
<td>Single-Detached/Semi-Detached</td>
<td>100 (250)</td>
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<td>75 (185)</td>
<td>7.5 (3.0)</td>
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<td>360 (7)</td>
<td>720</td>
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<tr>
<td>Single-Detached Cluster</td>
<td>20 (50)</td>
<td>18 (7.3)</td>
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</tr>
</tbody>
</table>

Medium density Residential
- Apartment 35 (86)
- Townhouse 20 (50)
- High density/Apt. 12 (30)

<table>
<thead>
<tr>
<th></th>
<th>Hectares (Acres)</th>
<th>Gross Density Unit/ha (Unit/ac)</th>
<th>Pers./unit</th>
<th>No. units (%)</th>
<th>Population</th>
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<tr>
<td></td>
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<td>750 (8)</td>
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<td>1.6</td>
<td>875 (18)</td>
<td>2275</td>
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<td>1.6</td>
<td>1500 (31)</td>
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<td>12,055</td>
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**Note:** These estimates are based on existing densities achieved in comparable areas and exclude development at the maximum allowable densities permitted by the New Official Plan would result in a significantly higher number of units and population. Not all of these areas are suitable for development at maximum densities, however. Furthermore, some Residential lands will be required for community facilities and other secondary non-residential uses permitted by the Official Plan.
There is a need for a district park to serve the Study Area and abutting lands in the north-east part of the City. A preferred location for district park development would be the open, flat flood plain lands immediately west of the Study Area, to the north of the river and to the east of Adelaide Street. These lands are privately owned at present, however, their acquisition is currently being pursued. If a district park cannot be developed at this location, the P.U.C. will require a district park site, on table land and a minimum of 8 hectares (20 acres) in size, within the Study Area at a central location between Highbury Avenue and Clarke Side Road. The Proposed Area Plan would have to be substantially revised to accommodate the provision of a district park if required.

The Proposed Area Plan calls for the creation of two neighbourhood parks, each 3 to 4 hectares (7.5 to 10 acres) in size, as well as a possible expansion to the existing Ted Early park which abuts the Study Area at its south-east corner. One neighbourhood park would be created as part of a park-school campus at a central location south of Kilally Road; the other would be created on a parcel of open, accessible land between the flood and fill lines at a central location north of Kilally Road. In addition to fulfilling typical neighbourhood park functions, this park area could serve as a major access point and activity node for the open space system along the valley corridor.

Additional neighbourhood parkland is not required in the Study Area west of Highbury Avenue. The proposed Kilally Estates Phase I development, with its orientation to "empty-nester" households, will not generate a significant demand for neighbourhood playground area and will be largely self-sufficient in the provision of active recreational facilities. Furthermore, there is an area of open, grassed land, approximately 2 hectares (5 acres) in size and located near the west end of the Kilally Road allowance which is already owned by the City and which would be suitable for neighbourhood park facilities to serve the balance of the lands west of Highbury Avenue.

v) Open Space

Areas shown as "Open Space" on the Proposed Area Plan include all flood plain and fill-regulated lands, lands identified as "environmentally sensitive areas" outside of the flood plain and fill-regulated area, and corridors above the top of bank that are necessary for buffering and walkway/bikeway purposes. The Open Space boundary reflects most of the findings and recommendations arising from the P.U.C.'s Kilally Open Space Management Plan and will accommodate the long-term development of a continuous public open space system along the north branch of the Thames River. Areas identified as "environmentally-sensitive" are based on the Management Unit Classification contained in the Open Space Plan, as summarized in Appendix II.

The boundary is not to be regarded as precise and inflexible since the final delineation will be determined on the basis of geotechnical studies and detailed site analysis on a development by development basis. One location in which a significant change to the boundary may be considered is the area of cultivated land and rehabilitated gravel pit between the flood and fill lines north of Kilally Road between Highbury Avenue and Clarke Side Road. These areas have little biotic significance and the valley slope in this area does not present a major obstacle to access or servicing and does not appear to be vulnerable to instability.
A portion of this area is proposed for neighbourhood park development; remaining areas above the flood line may be suitable for low density residential uses if it can be demonstrated to the satisfaction of the U.T.R.C.A. that the necessary permits for development within the fill-regulated area are warranted.

The Open Space system along the river and its tributary west of Highbury Avenue will provide a mix of active and passive recreational opportunities. A network of pedestrian and bicycle trails will link access points and activity nodes where picnic, parking and play facilities will be offered. These trails will offer the user the opportunity to view a wide range of different types of forest, wetland, river and successional communities.

The trail system will be mostly contained within the floodplain, however there are several areas, in particular to the east and west of the bridge on Highbury Avenue, where a narrow floodplain and steep river bank will make it necessary to route the trails along the top of bank. Where a top of bank route is necessary, the public open space corridor should be sufficiently wide to accommodate a landscaped buffer.

It should be noted that most of the "Open Space" lands, including the whole of the corridor between Highbury Avenue and Clarke Side Road, are privately owned at present. These lands will not be available for public use until they are acquired through; purchase under the floodplain acquisition program, dedication through the approval of subdivision development, or through lease of other long-term agreement with the landowners.

**Guidelines**

1. Lands shown as "Open Space" will be acquired for passive recreation and conservation purposes by the following means:
   
   a) the dedication of floodplain lands as a condition to the approval of adjacent lands in the same ownership above the regulatory flood line;
   
   b) the acceptance of Open Space lands above the regulatory flood line as parkland dedication at a rate which reflects their development potential;
   
   c) purchase through an open space acquisition program where development of abutting lands is unlikely in the foreseeable future or where the designated lands would exceed the parkland dedication requirement.

2. The precise determination of the Open Space boundary will be determined on a site specific basis in conjunction with the approval of development applications. The delineation of lot line setbacks from the top of bank will provide for the protection of slope stability and maintenance and will be based on geotechnical studies with consideration given to existing tree lines.

3. A bicycle and pedestrian path system will be developed, in accordance with the Kilally Open Space Management Plan, along the south shore of the river through flood plain areas to the extent possible. Where it is necessary to route these trails above the top of bank, an open space corridor sufficient in width to accommodate the trails and a landscaped buffer will be required. Trail corridors above the top of bank will be accepted as parkland dedication.
Areas identified as "Environmentally-Sensitive" should be protected from disturbance to the extent possible, with management limited to these activities which are necessary to promote the health and vigour of these biotic communities. The limit of the Black Maple forest environmentally-sensitive area located to the south of Kilally Road at the west limit of the Study Area includes lands above the flood and fill lines that would otherwise be suitable for development. Refinement of this boundary to allow some residential development in the periphery of this community may be considered if it can be demonstrated that a minimal amount of tree removal will be required and that the impact on surface drainage, grade and ground water levels and root systems will not detract from the long-term viability of this community.

Access points to Open Space areas from abutting lands will be provided in accordance with the Kilally Open Space Management Plan through the subdivision approval process.

9.0 **Economic Impact**

The construction or upgrading of roads and the extension of storm, sanitary, and water services will proceed in conjunction with the phased development of the Study Area. These works will be undertaken by developers through conditions imposed on subdivision or site plan approvals. Portions of this work, including improvements to arterial or collector boundary roads and the construction of underground services sized to accommodate additional lands may be subject to claims by the developer for re-imbursement from the City's Urban Works Reserve Fund. Based on estimates provided by the City Engineer's Department, claimable works within the Study Area will total approximately $8,100,000 in 1990 dollars. By comparison estimated revenues to the Urban Works Reserve Fund generated by development charges for the estimated residential units that the proposed Area Plan would yield total approximately $12,000,000. An equivalent amount of revenue from development charges would be directed to the Capital Growth Reserve Fund.

Development within the Study Area will contribute to the need for expansion of the Adelaide Sewage Treatment Plant. The Capital Budget includes almost $6,000,000 for a planned expansion in 1994. Treatment plant expansion requirements and cost estimates may be revised once the ongoing master plan study for all of the City's treatment plant is completed.

These will be a cost associated with the extension of transit service to this area as warranted by development. Estimated costs and revenues associated with the transit service extension would have to be determined through a study authorized by the London Transit Commission.

To date, a need for fire hall or branch library facilities has not been identified.
Summary of Responses to the Kilally Road Area Study - Preliminary Report.

A. Public Response

i) Mr. R.O. More, 55 Aponi Crescent (letter)
   -objecting to optional alignment for Kilally Road on the grounds that it would contribute to higher densities and lower cost housing in the areas south of the new alignment.

ii) Dr. S. Hicock, 503 Regal Court (letter)
   -Dr. Hicock is opposed to any development in the "valley lands" between Highbury Avenue and Adelaide Street on the grounds that lands proposed for development are only marginally above the flood line and there are unacceptable risks of basement flooding and sewer failures. The City may be assuming significant liability should development in this area be approved. Development would also damage the environment of the river valley through tree removal, increased runoff and pollution.

iii) Several other letters that have been received from the public specifically address the Matthews Group applications (OSZ-4030, OSZ-4074) but also have some bearing on the Area Study. Comments received may be summarized as follows:

   -opposition to any development of the "valley lands" west of Highbury Avenue;
   -concern over development on lands only marginally above the flood line;
   -servicing work (trunk sewer extension, river bank stabilization) being done prior to approval of Official Plan and zoning changes;
   -concern that environmentally sensitive areas, such as the black maple forest, may be encroached upon.

B. Agencies Response

i) London Board of Education

   -have identified a definite need for one elementary school site, preferably located in the south-central portion of the Study Area east of Highbury Avenue and adjacent to a park area. A second site may be required and if so, a location in the north-central portion of the Study Area, possibly abutting open space or park lands, would be acceptable. This position would change if Kilally Road were to be re-aligned to the south. The current size requirement for an elementary school site is 4 hectares (10 acres). The Board has also requested that consideration be given to a possible pedestrian bridge over the Thames River to provide access for students from the Kilally Estates Development to Northridge Public School.

ii) Separate School Board

   -one elementary school site will be required, also in a south-central location and preferably part of a park/school campus. The minimum acceptable size is 3.2 hectares (8 acres).

Both School Boards want to retain some measure of flexibility so that the precise determination of site location, size and shape will be made at a later date when better information regarding the timing and nature of development and enrolment trends is known.
iii) Public Utilities Commission

The P.U.C. does not support the potential district park site identified in the Preliminary Report on the basis that it does not have suitable terrain, drainage and soils for active park activities. A minimum 8 hectares (20 acres) district park on flat table land will be required. A portion of the open lands below the Registered Fill Line in the location previously proposed for a district park may be suitable for retention as a neighbourhood park area that would also act as an activity node for the open space system along the river valley. Other input from the P.U.C. is listed in Appendix II dealing with the Kilally Open Space Management Plan.

iv) City Engineering Department

The Engineering Department's response did not support the alternative alignment for Kilally Road and also recommended primary collector and secondary collector designations for the road alignments shown on the concept plan. It also requested an upgrade in the status of Kilally Road west of Highbury Avenue, from a secondary collector to a primary collector.

v) Upper Thames River Conservation Authority

The U.T.R.C.A. response stressed the importance of maintaining flexibility in the Area Plan so the recommendations of the P.U.C. Open Space Management Plan can be incorporated. Concern was expressed over the proposed location of a district park below the Registered Fill Line. It was suggested that the Area Study should clearly indicate that lands below the Registered Fill Line should be publicly-owned and generally left undisturbed. It was recommended that the black maple forest within Matthew's Kilally Estates Phase I lands should be left intact and recognized as an environmentally sensitive area in the Area Study. A 6 metre wide corridor of public open space above the top of bank was also requested so that encroachments over the top of slope would be reduced and adequate access for slope maintenance would be provided.

vi) McIlwraith Field Naturalists

The Conservation Committee of McIlwraith Field Naturalists requested a minimum 500 foot setback from the top of bank plus buffer zones adjacent to all sensitive natural areas. They also object to any presumption of the Kilally/Windermere Road linkage and the trunk sanitary sewer extension through flood plain lands. The lack of provision for streetside bicycle lanes was also noted.

Related responses to the Matthews Group development applications opposed any modification or reconstruction of the river bank because of potential impacts on aquatic habitat. Water quality concerns related to storm water drainage to the river were expressed and it was recommended that measures be taken to protect significant natural features including the black maple forest and several uncommon botanical species identified in the area.

vii) Councillor Metras

Councillor Metras objects to the alternate alignment of Kilally Road.
viii) Township of London

The Township expressed concern over the piecemeal development of lands within the Study Area without a complete study and an appropriate Official Plan amendment for the whole Study Area. The Township is of the view that individual applications should not be processed before the Area Plan is complete and is concerned about the impact that individual applications will have on the Township's future growth and on the development of abutting lands.

ix) London Transit Commission

"The design of the road network should be consistent with Section 18.2.12 of the (New) Official Plan. Road design should be viewed as part of the overall Concept Plan to ensure easy access to Transit."

x) Ministry of Culture and Communication - Heritage Branch

The Ministry notes that portions of the Study Area located north of Kilally Road and east of Highbury Avenue and not part of former quarries exhibit potential for archaeological resources and require assessment.

It should be noted that an archaeological assessment of Matthews Kilally Estates Phase I and II lands was carried out in the latter half of 1988. Two archaeological sites were identified one of which was considered to be of no significance. The other site contained a surface scatter of mid-19th century artifacts and was viewed as potentially significant. This finding was followed up by archival research in 1989 and site mitigation work this past summer.

C. Applicant/Land Owner Response

i) Matthews Group

Comments received from Matthews Group are as follows:

- lands between the flood line and registered fill line should be regarded as developable land;
- the P.U.C. should provide some commitment for the installation and timing of a trail system;
- the alternative alignment for Kilally Road east of Highbury Avenue should be retained in the Area Study as a matter for future consideration;
- the location of school and park sites east of Highbury Avenue should be on an equitable basis proportionate to land ownership;
- opportunities for non-profit housing development will be provided in the Phase I and Phase II lands west of Highbury Avenue;
- provision of a pedestrian bridge across the Thames River for school access purposes is neither reasonable nor feasible.

ii) Devlon Group (Richleigh Investments)

Concerns expressed by Mr. Rick Draker, Manager of Planning and Development for the Devlon Group, acting as the agent for Richleigh Investments for their application for Official Plan and Zoning By-law amendments for the nursery lands on the west side of Highbury Avenue, north of Kilally Road, are as follows:
the arrangement of proposed high density residential and medium density residential land uses should be reversed so that the high density allocation abuts the proposed commercial area and the medium density allocation abuts the River. This change would reduce the impact on apartment development proposed lower density uses to the west, help to preserve views to the River, and place the more intensive residential uses in areas abutting proposed commercial development.

- the slope and size of the proposed "Service Commercial" designation in the northwest quadrant of Highbury Avenue and Kilally Road is inappropriate. A rectangular rather than "L-shaped" block is required for functional and efficient site design for the purposes proposed by Richleigh Investments. Furthermore, Richleigh requests that the size be increased from approximately six acres to twelve acres. A twelve acre site would accommodate a small shopping centre anchored by a major food store, similar in nature to the Commissioners Court Plaza at the northeast corner of Commissioners Road and Wonderland Road. It is Devlon's opinion that the Planning Division has under-estimated commercial land requirements and that a Community Shopping Area designation at the Kilally/Highbury intersection would be warranted. This location is central to the Study Area and would support the development of additional lands proposed for annexation. Mr. Draker points out that the proximity of the Huron-Highbury Community Shopping Area should not be an over-riding consideration since it would not be any less than the separation between C.S.A.'s at Oxford/Highbury and Huron/Highbury.

iii) Mr. & Mrs. Johnson (owners of a 20 hectare (50 acre) parcel of agricultural land at the southeast corner of Kilally Road and Clarke Side Road).

The Johnson's operate a long-established dairy farm, part of which is located in the Study Area. They have no plans for their property other than continued agricultural use. They are concerned that the proposed alternative alignment for Kilally Road would split their farm and they are opposed to it. They are looking for some assurance that they will not be forced to sell their land or have any portion of it expropriated for the re-alignment of Kilally Road.
APPENDIX II

Public Utilities Commission -
Kilally Open Space Management Plan

As previously indicated, the Public Utilities Commission was requested by City Council to undertake the preparation of a development and management concept for existing and proposed public open space lands along the Thames River between Adelaide Street and Highbury Avenue. The study was initiated in response to a petition from community residents requesting the establishment of these valley lands as a public park and with the intent of providing guidance to Council and the P.U.C. for land acquisition and management and for the delineation of boundaries between areas to be developed and areas to be retained as open space. In its very early stages the study was expanded to include the valley lands between Highbury Avenue and Clarke Side Road so that valuable input would be provided to the Area Study process.

The terms of reference for the Open Space Management Plan are as follows:

- define the eventual boundary of public open space on the basis of recreational demand, habitat significance, floodplain management criteria and urban development requirements;
- assess the capability of the site to support recreational programs and activities;
- define the eventual boundary of public open space on the basis of recreational demand, habitat significance, floodplain management criteria and urban development requirements;
- assess the capability of the site to support recreational programs and activities;
- provide guidelines for the development of recreational, resource management and interpretive programs;
- provide guidelines for the management of lands developed for urban uses on the perimeter of proposed public open space;
- assess the impact of external initiatives, such as the extension of municipal roads and sewers, on land within public open space.

On September 15, 1990 the Open Space Management Plan was submitted to the Public Utilities Commission for review and adoption. Once it has been considered by the P.U.C. it will be presented to the Community and Protective Services Committee.

Some of the key finding contained in the Management Plan which have implications for the Area Study are as follows:

- most of the valley lands have been disturbed by land management activities since 1945; therefore, there is abundant representation of early-successional biotic communities and scarce representation of more biotically-complex, later successional states. This characteristic adds significance to the retention of the remaining mature deciduous forest communities, in particular, the Black Maple forest located near the west end of Kilally Estates Phase I development proposal and the mixed forest located at the bottom of the north-facing valley slope between Highbury Avenue and Clarke Side Road.

- on the whole, the floodplain lands along the valley corridor, because of their degree of prior human disturbance, are biotically less diverse than the "Significant Natural Areas" identified in the new Official Plan. (The inference is that, on the basis of its biological diversity alone, the valley corridor likely would not warrant "Significant Natural Area" status);
the north-east quadrant of the City lacks the type of formalized continuous public open space system that exists in other quadrants of the City, although the establishment of this type of system along the North Branch of the Thames River was initially advanced in the 1975, London Valley Lands Study.

A recreational and resource management concept has been formulated on the basis of a management unit classification. These units have been defined according to physical and biotic criteria and evaluated to determine their capability for sustaining varying levels of use and management. Management units are classed as Types 1 through 5.

Type 1 units contain significant earth or life science features that have limited representation in the valley corridor. These areas are sensitive to disturbance or management for development or recreational use and, where possible, should be left in a natural state. If a form of management or use is proposed it should be evaluated on the basis of site-specific impacts and necessary mitigation measures. Type 1 management units are shown on the proposed Area Plan (Map No. 10) as "Environmentally Sensitive Areas" and include naturally occurring marshes, wet meadow and certain deciduous forest areas.

Type II areas exhibit a high degree of biotic diversity in a relatively advanced successional state but are capable of supporting limited, low-impact recreational use. These areas include all riparian communities, certain bottomland deciduous forests, and upland deciduous forests.

Type III areas are mostly early successional communities that are somewhat tolerant of impacts and include shrub thickets, old field communities and conifer plantations. Type IV areas consist of abandoned gravel pits, pasture and cropland and can accommodate most impacts. Type V areas include proposed recreational corridors adjacent to certain stream and river edges.

The Management Unit classification has been utilized in the formulation of a recreational concept and recommendations for specific concept features. The overall concept is one of a system of pedestrian and, in some areas, bicycle trails that connect focal points throughout the corridor, maximize the user's exposure to different vegetation communities and scenic viewpoints, and mitigate the impact of human use on significant natural features. At certain points the corridor, which mostly provides passive recreation in a natural setting, will be broadened to include nodes of active recreation.

Specific recommendations or options that have been identified include:

**Eastern Corridor** (between Highbury Avenue and Clarke Side Road)

- pedestrian access to the trail system in at least three locations;
- walking trails through flood plain and fill-regulated areas offering river and forest-based experiences;
- a bikeway;
- a broader activity node (possibly a district park) at a mid-point in the corridor that will offer active recreational opportunities and facilities, car parking, and access to the trail system.

**Western Corridor** (between Highbury Avenue and Adelaide Street)

- the retention of existing access points and addition of three new access points;
- a continuous open space corridor along both the north and south sides of the river;
- a pedestrian bridge across the river at a mid-point in the corridor;
- a smaller bridge spanning the small tributary that flows near the south limit of the Study Area.