COMPREHENSIVE PLAN
Village of Barrington Hills





Amended August 25, 2008

THE 2030 COMPREHENSIVE PLAN FOR THE VILLAGE OF BARRINGTON HILLS

Preface

There is a recurring recognition in judicial decisions that land use regulations must be linked to, and implement, well-considered goals and objectives for the future development and growth of the community. This process of forethought about future use and development of land in a community is called "comprehensive planning", and it is provided for in Illinois statutes. Without it there can be no rational allocation of land uses and resources, and local government would have no guidance for the growth and development of the community. Similarly, residents and landowners in the community would have no assurance that ad hoc decisions with respect to their land, or their neighbor's land, would not materially alter the character of an area and impair the value and use of land. Thus, land use decisions should follow a calm and deliberate consideration of the goals and objectives of the community.

This document is known as "The Official Comprehensive Plan" ("Comprehensive Plan" or "Plan") of the Village of Barrington Hills. First adopted on September 23, 1957, it was originally adopted in this format by the Board of Trustees on August 28, 1978 pursuant to the authority conferred by State Statutes. The 1978 plan provided guidance for decisions on growth and change in the community for more than 15 years. After an extensive review and public hearings before the Plan Commission, the Plan was updated and adopted in December of 1995.

Comprehensive planning for Barrington Hills has been coordinated with planning of the Barrington Area Council of Governments (BACOG) since its inception. Though each of the BACOG communities are autonomous municipalities, their roles and relationships form a strong interdependence. BACOG's Comprehensive Plan was adopted on July 29, 1975, The Village of Barrington Hills adopted the BACOG Plan by reference in Ordinance No. 76-5, which was approved on May 24, 1976. The BACOG Plan is part of this Comprehensive Plan, except in case of conflict between the two plans. In such a case the Comprehensive Plan of the Village of Barrington Hills shall be controlling.

Within the Comprehensive Plan the Village of Barrington Hills articulates its goals and objectives and its plans for the future. At the same time the Village recognizes that planning must be an ongoing process and that reducing goals, objectives, and plans to writing in an adopted document does not terminate the obligation of the Village to plan for its future. The Plan does, however, give the officials of the Village a set of policies and principles to be implemented by regulations such as the zoning and subdivision ordinances. The Plan also gives Village officials a touchstone against which later specific proposals for land use changes or development may be tested and measured.

Development pressures, regional changes, new technologies and new data motivate cities and villages to reconsider their comprehensive plan. Beginning in the summer of 2004, the Village instituted a formal process of updating its Plan. The Plan Commission met monthly to reevaluate the assumptions, direction, and language of the Plan; the Village retained planning consulting services to prepare draft text and supporting exhibits/graphics; and the Plan Commission, at the direction of the Village Board, held a public hearing to consider this document on November 7, 2005. Since its adoption in 2005, amendments to the Plan have been approved in 2008.

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Introduction

Nest: A place to rest, retreat, or lodging
Nestle: To lie in an inconspicuous or sheltered manner

Barrington Hills has been a nesting place for a myriad of wildlife for its 4,216 residents, and for the Potawatomi, Macoutin, Miami, and Fox Native Americans before them. Each species and each community nestled here amidst the beauty and abundance of nature's resources left by the "Wisconsin" glaciation. So the Village is today, as evidenced by a special relationship between man and nature. The Comprehensive Plan for the Village of Barrington Hills is intended to help perpetuate this balance.

The Origin of Barrington Hills

In 1833, the Indian Treaty with Chief Blackhawk was signed, and the Native Americans agreed to move across the Mississippi River. The first settlers came to this area bearing the familiar names of Miller, Otis, Bucklin, Waterman, and Jencks. Barrington Center, first called Miller's Grove, was established where Old Sutton Road crosses Dundee Road/Route 68. It was one of three small settlements which inspired what we know today as the Barrington area.

Rich soils and ample water were the attractions to early migrants who settled this area for farming at the same time that closer-in suburbs such as Oak Park and Evanston were being settled for commuter residences. Since most settlers were from Vermont and Massachusetts, the familiar New England name of Barrington was chosen when it came time to organize a town government in 1850. The first schoolhouse was built at Barrington Center, followed by nearby churches in the 1850's.

The Chicago & North Western Railroad (now Union Pacific) tracks were built in 1854 and a station was located in the Village of Barrington. From this time on there were many changes in the Barrington area, but the countryside environment remained paramount.

Early residents assumed the responsibility for stewardship in this portion of the area by forming the Countryside Property Owners Association in 1938. It was this group, presently known as the Barrington Countryside Association, which later provided the nucleus for the eventual incorporation of the Village of Barrington Hills in 1957. The neighboring Village of Middlebury (incorporated in 1953) was annexed to Barrington Hills in December, 1962. Today, the Village covers approximately 28 contiguous square miles in Cook, Lake, Kane, and McHenry Counties.

Historic features within the Village are significant and enhance its character. Among these are the Dickinson School, the Civil War Union Cemetery, Barrington Center Church and Cemetery, the Haeger's School and Cemetery, the Cooke site (originally owned by the Helm family) which continues to yield numerous Indian artifacts, and several residences of historic value – some of which were part of the "underground railroad" during the Civil War. In the more recent past, residences of architectural merit have been constructed under the direction of such noteworthy individuals as Frank Lloyd Wright, Edward Dart, David Adler, and Robert Work.

Outside the Village, but within its planning jurisdiction, much of the unincorporated lands are undeveloped or in transitional use. For example, land to the southeast that had been occupied by commercial nurseries is now developing for residential uses; lands to the south are occupied by gravel quarries, and land to the west is occupied by farms and more gravel quarries. Much of this property is currently the subject of planning for development by its owners.

Existing Conditions

As of 2004, the population of Barrington Hills was estimated as 4,216 compared with 4,202 in 1990, 3,616 in 1980 and 2,712 in 1970. Dwelling types range from new, detached single-family units to historic homesteads on farms of several hundred acres. Most residences are located on individual lots of five (5) or more acres, many for an equestrian lifestyle and for the appreciation of tradition of equestrian activities associated with these five acre lots.

The following table summarizes the population trends within the Village between the years 1960 and 2000. Chicago Metropolitan Agency for Planning, or CMAP, (formerly Northeastern Illinois Planning Commission) forecasts for the year 2030 have also been included.

	Official US Census Bureau Figures					CMAP Forecast
	1960	1970	1980	1990	2000	2030
Population	1,726	2,712	3,616	4,202	3,915	5,060
Percent Change	-	57.13%	33.33%	16.21%	-6.83%	29.25%

Source: US Census Bureau and CMAP, 2006

The following table summarizes the existing land use patterns within the Village limits (as they relate to zoning):

Land Use Classification	As % Total
Residential (5 acres & over) and Agriculture	*72.3%*
Forest Preserve, Open Space, and Recreation	*24.6%*
Residential (less than 5 acres)	*2.1%*
Institutional	*0.7%*
Business and Light Industrial	*0.4%*

It should be noted that due to limited data resources, the proportionate distinction between residential (5 acres and over) and agricultural uses was not made. Based upon 1995 Comprehensive Plan land use figures, as much as 3,000 acres (or 16% of total land) within the Village limits were devoted to agricultural uses. Due to limited large-scale development within the Village, it is likely that the overall percentage of agricultural land has remained constant. It should be further noted that all residential land use classifications include the adjacent rights-of-way (where applicable). Additionally, the *Forest Preserve, Open Space, and Recreation* classification includes Helm Forest Preserve, Crabtree Nature Center, Spring Creek Nature Preserve, Grigsby Prairie and the Barrington Hills Country Club.

The largest percentage of land within the Village is devoted to "Residential (5 acres and over)" use, or residential uses in excess of five (5) acres. Many of these properties are used in equestrian activities. The Forest Preserve District, which owns approximately 4,000 acres within the Village limits (or an approximate total of 6,000 acres within the Village's designated Planning Area) is the second largest use. Virtually all of the Forest Preserve's holdings are set aside for conservation of wildlife and other natural resources, rather than for active recreation. Along with this, the Forest Preserve District contains an extensive equestrian trail system that ties into the equestrian trail system that runs throughout the Village. Currently, the Kane County Forest Preserve District is restoring its holdings of 125 acres on the south side of Helm Road. Other large, open, environmentally sensitive properties have been protected by individuals and agencies, including the Grigsby Prairie by Citizens for Conservation , and substantial lands have been donated to or protected by, through permanent conservation easements, the Barrington Hills Conservation Trust. Such efforts by these countywide agencies to preserve and protect the existing natural resources within the Barrington area is indicative of the importance they have to much of the region.

As previously stated, agricultural uses and working farms still exist within the village limits. Such farms are primarily dispersed throughout the community and many of the larger farms are operated by a limited number of farm managers. As owners retire or pass away, any change in use of these farms should be consistent with Village policies and this Plan.

Portions of the Village east of Old Sutton Road were among the first to be residentially developed because of accessibility and scenic qualities, and because area soils were not among the best for agriculture. However, recent subdivision activity has not been concentrated in any particular portion of the Village.

Building permits for residences issued since 1990 have fluctuated widely from year to year, the least being 12 in 1998 and the highest being 53 in 2002. The Village averaged 26.5 residential building permits per year from 2003 to 2006, before dropping significantly in 2007 and 2008. Since the Village was founded in 1957, it has averaged 200 residential building permits per decade. Other permit activity, such as for demolitions, accessory structures, new wells, and home renovations and additions, average about 125 per year.

Year	New Single Family Buildings	Avg. Construction Cost
1996	13	552,000
1997	14	$607,700
1998	12	$508,000
1999	23	$637,600
2000	36	$627,400
2001	21	$720,600
2002	53	$469,600
2003	27	$896,300
2004	29	$822,322
Jan. - Sept. 2005	24	$998,233

Source: US Census Bureau, 2005

Area Wide Trends and Relationships

The Village of Barrington Hills, once well removed from the mainstream of Chicago suburban development, is now surrounded by actively growing areas. Growth pressure not only continues outward throughout the second ring suburbs to the east, but also in the Fox Valley communities and suburbanizing McHenry and Kane Counties to the west. The Barrington Area Council of Governments (BACOG) municipal membership area, which is comprised of Barrington, Barrington Hills, Deer Park, Lake Barrington, North Barrington, South Barrington, and Tower Lakes, has experienced a substantial population increase since 1970 - an overall increase of 111%. CMAP's year 2030 population figures forecast a continuation in the overall growth for the area. The following table reflects the historical, current, and future growth forecasts for the BACOG area:

Municipality	1970	1980	1990	2000	2030
Barrington	7,701	9,029	9,504	10,168	10,429
Barrington Hills	2,712	3,631	4,202	3,915	5,060
Deer Park	834	1,368	2,887	3,102	3,846
Lake Barrington	347	2,320	3,855	4,757	5,695
North Barrington	1,411	1,475	1,787	2,918	3,542
South Barrington	341	1,168	2,937	3,760	4,657
Tower Lakes	863	1,177	1,333	1,310	1,442
Totals:	*14,209*	*20,168*	*26,505*	*29,930*	34,671

The BACOG municipal area saw its largest percent increase in population (a 42% growth rate) between the years 1970 and 1980. This was followed by the 31% increase between 1980 and 1990, and a 13% increase between the years 1990 and 2000. Given CMAP's forecasts, by 2030, the area is anticipated to increase by an additional 16%, or a population increase of 4,741 persons. Although each BACOG community is wholly autonomous, each is affected by the changes that occur in the others, and the roles and relationships of these communities is one of interdependence in which each community relies on the others to maintain its own balance while contributing to the overall balance of BACOG.

Barrington Hills experienced similar growth trends to the BACOG municipal area, experiencing its largest growth of 34% between the years 1970 and 1980. This was followed by a 16% increase between the years 1980 and 1990, and a 7% decline between 1990 and 2000. Between 2000 and 2030, CMAP forecasts a 29% increase in Barrington Hills population, resulting in an overall increase of 1,145 persons. Given this forecasted increase, the Village should take measures to adequately plan for the anticipated housing, community service, and infrastructure needs of the future population.

Water Resources

Recent studies prepared for the Northeastern Illinois Planning Commission (now CMAP) and separately for BACOG have indicated that groundwater quantity continues to be the most limited natural resource that will influence the use and character of development in Barrington Hills and surrounding BACOG area. In a paper titled *Developing Water Resource Baseline Conditions For Planning*, Agnoletti, Thomsen and Peters concluded:

> "Groundwater is the lifeblood of the BACOG area. Residents are dependent primarily on the shallow aquifer, and within that, primarily the shallower layers of the shallow aquifer, for all water needs. Only the central "hub" village of Barrington, Tower Lakes, and small sections of the other communities offer public water or sewer, again with the water supply coming primarily from the shallow aquifers. The countryside communities require well and septic systems that utilize the shallow aquifer and large lot zoning (one or more acres) that are necessary for proper functioning of those systems....Concerns about groundwater supply and quality have been prominent for some time because of the dependence of BACOG's more than 35,000 residents on groundwater. There is virtually no possibility of obtaining water from Lake Michigan. Other northeastern Illinois communities are using the maximum allocation, governed by a Supreme Court ruling and international treaty. Regardless, the cost of providing infrastructure from so far away would be very high, and the cost of providing new infrastructure to serve homes in the countryside communities would be exorbitant. Available allocation and infrastructure costs would also be impediments to obtaining water from the Fox River, where there also are restrictions on diversion of water. As water quality and quantity in the deep aquifer have declined over past decades, fewer deep wells have been developed, and in fact, numerous municipalities have abandoned their deep wells. Areas within and adjacent to BACOG have been identified by the Northeastern Illinois Planning Commission's (NIPC's) water management plan (NIPC, 2001) as having the potential for water shortages in the future. Developing trends towards higher usage of the shallow aquifer, the vulnerability of the shallow aquifer to contamination, and constraints on alternative water supplies have resulted in concern for the sustainability of groundwater in the BACOG area."

This issue is so critically important to each of the BACOG communities that BACOG has established a "Water Resources Committee" which will continue to study groundwater and sustainability in more detail, releasing findings, as they are made, over the next several years. The next report will estimate water volumes, projected growth and population, water consumption, and groundwater sustainability, and will try to determine whether the supply and demand of this essential resource is in equilibrium. In order to do so, however, BACOG will need current data, regular monitoring and public cooperation.

McHenry County and Kane County have conducted aquifer mapping projects in conjunction with the Illinois State Water survey. In both cases, the townships which include Barrington Hills are listed as having a projected shortfall of groundwater supply based on a comparison of modeled groundwater resources and projected groundwater demand resulting from growth in population and development. The Village's response to these studies is to increase awareness among community members of the limitations on the availability of ground water; to encourage water conservation and development practices which minimize the use of water; and to continue its effort of planning and development review to reduce demand and maintain low density development practices.

BACOG Water Resources Initiative and Committee What is our most important natural resource in the BACOG area? Many people would probably answer "open space" or perhaps "the residents." What about our natural resources or our drinking water? Now imagine, what if the aquifers were contaminated or diminished from overuse? Water from the local aquifers is the lifeblood of the Barrington area. Residents are totally dependent on local natural resources to supply all their water needs. Any threat to the quantity or quality of water in the aquifers— through overuse of wells or contamination from septic systems or high intensity uses—would threaten the public health, safety and welfare and our community structure. Knowing this raises many questions. How much water do we have? How deep are the shallow aquifers in the region? What is the economic value of our water resources?

The Barrington Area Council of Governments recently created a "Water Resources Initiative and Committee" (WRI) to answer these questions and to analyze the relationship of development to water resources. WRI will the study ground water of the Barrington region. The goal of WRI is to develop the technical data and community resources needed to support the linkage between land use and natural resources that has been the basis for planning for the past 30 years. It has become increasingly important to inventory, document, analyze and articulate the capacity of the region's water supply. The Initiative should produce: test well sites; mapping of surface waters, wetlands and aquifers; conservation/education materials; and policy recommendations.

...excerpt taken from BACOG's website (www.bacog.org)

The Barrington Area

Barrington Hills is an autonomous municipality under State Statutes, and both a politically and structurally independent community. At the same time, it is also a member of the larger "Barrington Area" community, represented by the Barrington Area Council of Governments (BACOG), making a unique contribution to the complex interdependence within which this larger community flourishes. The success and sustainability of Barrington Hills depends both on its own ability to support development that respects the land and natural features, and on the ability of the other BACOG communities to protect their own special character. The other BACOG communities, and communities beyond BACOG, each benefit and rely on Barrington Hills to protect the natural environment and character of Barrington HIlls as a resource to their own character and sustainability.

In response to developmental trends in the area, and pursuant to the goal of conserving countryside resources, the Barrington Area Council of Governments was formed in 1970. The Village of Barrington Hills was a charter member, and two Village Presidents have served as the Chairman of BACOG. This seven-village body has provided a forum in which heterogeneous growth can be

accommodated in BACOG's 90 square-mile area in harmony with natural resources. Each village provides a uniquely different environment. For example, the Village of Barrington is designated as the service, employment, transportation, and multi-family residence center of the area, and the Village of Barrington Hills is designated as the most rural of the countryside environments.

What one independent BACOG community cannot provide in terms of services, activities or special features which support a richly complex community environment, the greater "Barrington Area" community can. Over 30 years ago, community and municipal leaders joined together to develop the first regional comprehensive plan for BACOG. The BACOG plan was based on the relationship of land uses to natural resources, and the resources available to support development. The concept of development being limited to naturally sustainable levels has been steadfastly maintained since 1970 through the BACOG comprehensive plan, the municipal comprehensive plans, and other planning policies. The BACOG plan recognizes, as does this plan for Barrington Hills, that groundwater, stormwater, wildlife, and regional open-space-demand respect no boundaries. The decision of one community or one property owner may affect the public health and utility and enjoyment of property in other jurisdictions. It is therefore incumbent upon these interdependent communities to work together in planning for future impact on the built environment and on watersheds, aquifers and regional open space.

This interdependence and intentional intergovernmental process has been endorsed by CMAP and has been acknowledged nationwide.

Thus, the natural resources and residential character of Barrington Hills are both of metropolitan and area-wide importance. The responsibility of stewardship over this unique and sensitive environment is not simply for the enjoyment of the current residents of the Village, but more broadly, an obligation to future generations and to the metropolitan area.

Policy Framework

The Planning Process

The Village of Barrington Hills adopted its "The Official Comprehensive Plan" ("Comprehensive Plan" or "Plan") by Ordinance on September 23, 1957 with subsequent revision in Title 6 of the Village Code. On May 23, 1976, the Village adopted the "BACOG Area Land-Use Policies Map" and the "BACOG Area Environmental Analyses and Policies Map" except to the extent that the maps differ from the most current edition of the Barrington Hills Official Map or the Barrington Hills Road Network Map. Whenever the BACOG maps and the Barrington Hills Official Maps differ, the Barrington Hills Official Map or Barrington Hills Road Network Map remains in full force and is controlling.

Concurrently, Village representatives contributed input to county-wide planning processes in Lake, Cook, Kane, and McHenry Counties, and to the regional planning process of CMAP.

The Comprehensive Plan from 1995 was prepared in the participatory tradition, involving a special Comprehensive Plan Committee of the Village Plan Commission and Board of Trustees, assistance and review from the staff of BACOG and other units of government (including the U. S. Soil Conservation Service), numerous public meetings, and extensive coverage by local newspapers.

At the direction of the Village Board of Trustees, beginning in July of 2004, the Plan Commission began a review and update of the Comprehensive Plan. In response to growth pressures, the Plan has been amended in 2008. It is intended that this updated plan will endure for the foreseeable future, subject to minor amendments, in response to community objectives and area changes.

Vision

This comprehensive plan continues the long established practice of building on the past, recognizing that present property owners must work to assure that they leave a stronger community and a healthy environment to their heirs. The vision that guides the preparation of this plan recognizes that:

> Barrington Hills is a community of residents acting as stewards for a quiet, secure and natural environment, unique within the Chicago metropolitan area, which supports the long term, sustainable use of property for equestrian-oriented, open countryside living.
>
> One characteristic which distinguishes Barrington Hills from other BACOG communities is its equestrian tradition and the interrelationship with the natural environment in which the keeping of horses and the maintenance of the equestrian community requires the large-lots and interwoven trail system which, in turn, supports the long term sustainability of the sensitive natural environment. Without the gentle use, the natural environment could not be maintained; without the natural environment, the use cannot be maintained. The balance between the 5 acres density residential use and the limited groundwater resources is not simply a quality of life issue, but a conscious decision focusing on the protection of water quality and water quantity. Though most current property owners do not keep horses, they are attracted to the community, in part, due to this symbiotic natural/equestrian environment.

Policy Framework:

In order to advance the Vision, the Village of Barrington Hills establishes its goals, sets objectives and pursues a strategy under a unified policy framework. Its objectives are focused on issues related to four overall goals: Ecology, Community Character, Community Services, and Finance.

Ecology

Retain a balanced and healthful relationship between people and nature's life support systems. Act as the current stewards of the environment which future generations will want to inherit.

Objectives are:

1. Recognize and respect the limitations to development inherent in the reliance on the limited groundwater resources which underlie the land in Barrington Hills.
2. Conserve groundwater supplies and protect underground aquifers from contamination, overuse, and misuse.
3. Respect the natural topography, soils, and geology.
4. Encourage groundwater recharge and protect recharge areas.
5. Protect lakes, rivers, streams, watersheds, and wetlands from pollution and degradation. Implement recommendations contained in the Flint Creek Watershed Plan.
6. Maintain adequate stormwater drainage capacities of drainage basins, fl oodplains, and waterways. Introduce detention basin retrofits, flood mitigation measures, lake shoreline and streambank restoration, stream maintenance activities, and regional storage locations per the Flint Creek Watershed Plan.
7. Conserve and enhance native trees and plants, especially those in woodlands, prairies and wetlands, as well as other compatible vegetative cover.
8. Protect native and specimen heritage trees through tree preservation regulations.
9. Nurture endangered wildlife and aquatic species, and enhance their habitats.
10. Respect the balance of indigenous wildlife population with appropriate management techniques.
11. Mitigate the adverse impact of air pollutants, pesticides and fertilizers, odors, sounds, and artifi cial lights.
12. Encourage the conservation of energy in site planning and building design, and support alternative and renewable energy sources and conservation measures.
13. Evaluate the impact of new development on the environment and the sustainability of the community.
14. Encourage reduction in the reliance on chemical and synthetic compounds in building materials, operations, products, and services.
15. Encourage local food production to support local agriculture and limit the need for long-distance transport of food.
16. Encourage alternatives to impervious paving materials and reduce use of impervious materials.

17. Promote the use of conservation easements to preserve natural areas.

18. Monitor on a twice-annual or greater basis water levels and water chemistry in selected public, private and abandoned wells at a variety of depths and at a variety of locations throughout the Village.

19. Educate residents on well and septic maintenance; water contamination, consumption and conservation; and water's link to health and sustainability.

Community Character

Restore, retain, and promote the unique qualities of a countryside community.

Objectives are:

1. Assure that the predominant scale, arrangement, and appearance of development will be compatible to and consistent with a semi-rural countryside of existing residential estates and the equestrian trail system.
2. Encourage further development of and natural conditions which are necessary to the Village's equestrian trail system.
3. Support the continuation of appropriate agricultural, equestrian, and ancillary land uses.
4. Encourage a natural character for lakes, shorelines, and waterways.
5. Respect and protect the heritage of historical, architectural, and archeological landmarks.
6. Encourage "human-scaled", community-building development that is consistent with the desired countryside environment of the community.
7. Give special attention to the level of safety, function, and design of all roads, highways, rail lines, bridges, and utility rights-of-way so as to be consistent with the desired countryside environment.
8. Establish a program to protect scenic rural roads and vistas of the rural countryside.
9. Locate, install, design, and construct utilities, and ensure that rail and road infrastructure is not constructed in a way that causes hazards, so as not to disrupt land uses, create hazards, or adversely impact the semi-rural countryside.
10. Route through-traffic (especially heavy trucks) on existing major regional arterials.
11. Protect the semi-rural countryside character from disruption which would result from the creation of a fixed-rail commuter and/or freight line.
12. Protect the semi-rural countryside character from disruption which would result from the creation of a bypass through the Village.
13. Encourage maintenance of the country environment by private contribution of lands, developmental rights, or conservation easements to appropriate public or quasi-public organizations like Citizens for Conservation and the Barrington Area Conservation Trust.
14. Consider reasonable and creative means of protecting existing village character, including adopting light control standards to preserve dark skies and rural atmosphere.

15. Assure the sustainability of natural resources by linking development density to the carrying capacity of the land and the context of surrounding property.

16. Encourage design and land use that limits overdependence on gas-powered vehicles, reduces traffic congestion and promotes sustainable transportation patterns.

17. Encourage development patterns that enhance the open space and equestrian-based character of the community and avoid encroachment on natural resources.

18. Preserve the tree canopy to maintain the attractive, natural quality of the Village.

Community Services

Provide essential services for the health, safety, and general welfare of the residents.

Objectives are:

1. Pursue annexation and discourage disconnection of properties consistent with the Village's ability to serve such properties adequately and with the desired character of the community.

2. Protect the extensive system of public and private equestrian trails from the intrusion of other conflicting use, and encourage the long term maintenance and preservation of the system which benefits property owners and riders throughout the community.

3. Coordinate planning and decision-making with the Barrington Countryside Park District, Unit School Districts 220 and 300, Barrington Area Council of Governments, adjacent villages, the Counties of Cook, Lake, McHenry and Kane, and the Regional Planning Agency.

4. Limit the number and extent of support services to be provided by the Village to those which are essential to a countryside community; in turn, promote private initiative and personal responsibility for other services. A recent example is the installation of fiber optic infrastructure provided by AT&T to local customers. Clearly identify the community services provided by the Village, recognizing that those essential services change over time in response to real community needs.

5. Work with the service clubs and other organizations including equestrian clubs, the Barrington Area Conservation Trust, and other existing organizations, that, in lieu of an aggressive government administered service system, provide for the needs and desires of Village residents

6. Encourage individual on-site water supply and wastewater systems consistent with sound health standards, as may be promulgated by the representative County's Board of Health.

7. Encourage practices and forms of development that reduce water use.

8. Encourage safe and attractive maintenance of roads, utility rights-of-way, and other public properties.

9. Provide for law enforcement of high quality including support services offered through the Village's Emergency Telephone Number System (911).

10. Encourage effective fire protection through Fire Protection Districts servicing the community.

11. Provide responsive and efficient administrative services.

11. Enter into intergovernmental agreements with adjacent municipalities to enhance the provision of services, such as the Village's existing intergovernmental agreement with Cuba Township that covers snow plowing and ice control services.

12. Encourage "on-site" recycling of household waste products including reuse of landscape and construction debris.

13. Create an open planning process to provide equal protection and access to opportunities regardless of income, race, gender, or ethnicity.

14. Encourage research and data collection to provide best economic, social, and environmental indicators on community health and sustainability.

15. Encourage the creation and implementation of an Emergency Management Plan for all rail lines that pass through the Village.

Finances

Maintain sound and equitable Village finances.

Objectives are to:

1. Coordinate growth of the Village with the level of public services that can be provided at reasonable cost.

2. Maintain sound standards and procedures of fiscal management. Accordingly, starting January 1, 2007, the Village altered its fiscal year to coincide with the calendar year.

3. Commit to the use of best practices on the management of Village affairs.

4. Maintain cost-effective, competitive hiring and retention practices, including compensation and benefit offerings, to assure residents of a quality Village staff and police department.

5. In this vein the Village established by referendum on April 1, 2004 the Downstate Police Pension Fund, to be self-directed by the Village.

6. Avoid deficit spending.

7. Consider means to share costs for essential services with other communities and units of government.

8. Consider incentives and other economic tools to promote sustainable development that does not overburden Village resources.

9. Develop a future-oriented vision, which looks beyond current needs.

10. Encourage public awareness of issues related to sustainability and stewardship of land.

11. Consider opportunities to partner with non-government organizations and other advocacy groups.

Overall Strategy

The overall strategy for achieving these goals and objectives is to preserve critical natural resources, groundwater in particular; to support the keeping of horses and the use and expansion of the interwoven equestrian trail system; to work in cooperation with the other BACOG communities to assure the long term stability and environmental quality of the entire area; to partner with Citizens for Conservation, the Barrington Area Conservation Trust, the Flint Creek Watershed Partnership, and any other similar organizations in the long-term protection of natural and scenic resources; and to accept only new residential development which sustains the sensitive natural environment consistent with the Village's own population forecast which has been adopted by CMAP (i.e., 5,060 or fewer residents in the year 2030, which represents an average increase of approximately 1 percent per year).

In addition to the historic and desired character associated with an equestrian community, the fundamental limits to development remain the reliance on very limited and environmentally vulnerable groundwater supply. An additional and significant limiting influence is the impact that development and vehicular traffic associated with development would have on the considerable amount of flora and fauna sustained by the Village's open space (forest preserves, nature centers, and significant open areas on private large lot residential properties). The interest in protecting the Village from the destructive intrusion of roadways, traffic congestion and other secondary development impacts is shared by the wildlife and the residents.

The Village recognizes the special nature of some properties on the periphery of the community, where the context and supporting features of nearby communities may have more influence on the utility, character and use of the property. For example, the Abbey Woods development, located on the northeast corner of Barrington Road and Palatine Road on the southeast portion of the Village, will feature one- and two-acre lots. Abbey Woods incorporates positive environmental benefits, such as significant tree preservation resulting from the provision of public sewer lines rather than holding individual septic fi elds on-site. The Village will encourage the use of these special properties in a way that ensures the preservation of the predominant character of the balance of the Village as a very low density, ecologically sensitive environment supporting "equestrian-friendly" residential living.

A large part of the effectiveness of this plan will depend on the private initiative of Village residents and upon coordination with other communities in the Barrington area. A new boundary agreement between Barrington Hills and Inverness, which went into effect on January 23, 2006, is one example of the Village's proactive and future-oriented approach to its external relations. New residents may become aware of this obligation of personal stewardship in the pamphlets and reference material available through the Village on a variety of subjects. In this way, implementation of the Plan will internalize many costs which would otherwise be borne by the Village.

A Context for Planning

The process of comprehensive planning for Barrington Hills has taken into consideration those factors which influence the amount, type, and location of development to be accommodated by the Village in accordance with its goals and objectives. These factors fit four basic categories – land suitability, accessibility, community character, and community services.

Over the years, a wealth of well-documented information related to the Barrington area has been assembled and analyzed by BACOG and other governmental agencies. In fact, the Metropolis 2020 plan for the Chicago area shows the Barrington Area as being a recommended resource protection area for the entire region. The Village endorses the open space and ecology statements contained in the Metropolis 2020 plan. That information has been incorporated into the analysis for developmental factors contained herein. This chapter summarizes these factors as they apply to the Village and its 1-1/2 mile extraterritorial planning jurisdiction, as provided in State Statute.

Land Suitability

The suitability of land for conservation or development is influenced by topography, geology, and soils; surface water and ground water resources; wildlife and its habitat; flood hazards; and air quality. One is related to the other – hence, this Village's emphasis on its fragile ecological balance.

The Village is located amidst the attractive natural morainic system created by Wisconsin glaciation. The rolling topography is characterized by glacial lakes and wetlands, woodlands and prairie remnants, and a broad outwash plain adjacent to the Fox River. Bedrock exists from 100 to 200 feet below the unconsolidated glacial drifts.

Groundwater Resources

Residential water supply in the Barrington Hills area is obtained by private wells from shallow aquifers of high quality. Shallow aquifers, which represent the primary source of water for the Village, can be relied on by individual property owners in low density areas as an economically feasible water supply. This source is vulnerable to overuse or misuse. The effects of negative impacts to the quality and quantity of water resources are not limited to human beings: plant and animal life too depend on groundwater supplies, and lower water levels can result in negative ecological change, particularly in Nature Preserves. The shallow aquifers extend far beyond the boundaries of the Village, and are therefore subject to use and overuse by others outside the control of property-owners or the Village of Barrington Hills. Excessive land development, even in nearby communities, threatens the ability of these areas to recharge. Since most of the Village and surrounding communities are located in a critical recharge area for the shallow aquifer system, water conservation in Barrington Hills is vital to its future well-being.

Studies indicate that localized well-water problems have occurred around the periphery of Barrington Hills, typically adjacent to higher urban densities. This is even evident where density and use is managed by control of lot size and development density commensurate with the groundwater capacities and flow rates. Well drillers servicing Barrington Hill's residents claim that the water table may drop due to increased demand in the greater Barrington area. In the adjacent Village of Algonquin, high demand for water induced by suburban density development

has outstripped groundwater resources, causing a recent failure of one of its municipal wells.

A report by the Village of Inverness noted that the Spring Creek watershed in Barrington Hills is the primary recharge area for Inverness, because of its porous characteristics and the slope of underlying rock formations. This is evidence that the balance between future development and resource protection of Barrington Hills is critical to the future of its neighbors.

A similar case can be made for air quality. Prevailing westerly winds and breezes in northeastern Illinois are such that the water and vegetative cover of Barrington Hills act as a natural fi lter and air conditioner for a large segment of the metropolitan area.

Vegetation and Ecology

The vegetative ecology of this area can be divided into three basic communities: wetland, woodland, and prairie.

Perhaps the most significant natural feature in Barrington Hills is the wetlands, most of which are located along Flint and Spring Creeks. These wetlands are where cattails, wild iris, and water hemlock line the water's edge. Muskrats, beavers, mink, raccoons, Canada geese, mallard ducks, herons, egrets, and redwing blackbirds live amid this rich resource. Water retained by wetlands seeps back into the surrounding land and air during dry seasons, replenishing water resources upon which much of the region depends.

The woodlands throughout the Village are dominated by a variety of oaks and hickories with the White Oak as the dominant tree. One also finds smaller numbers of Maple, Black Walnut, Hackberry, American Elm, Black Cherry, Willow, and White Ash. Of these trees, the oak family is most susceptible to injury and elimination by urban development. The root structure of this tree lies close to the surface and is easily damaged by ground leveling and soil compaction by heavy construction equipment. Dense-growing lawn grasses also impact the well-being of these trees by competing for and receiving precipitation and soil nutrients first.

The secondary layer, or understory, in the woodlands consists of younger trees and shrubs which rarely reach much stature. They include some of the less dominant trees mentioned above, plus Wild Grape, Virginia Creeper, Gray Dogwood, and Elderberry. Each tree is a valuable resource of nest sites, food, shade, and protection from the elements for wildlife – including white-tailed deer, red and gray foxes, coyotes, squirrels, great horned owls, and a wide variety of songbirds, including threatened and endangered species.

Common wildflowers of this community include the Trout Lily, Shooting Star, Prairie Trillium, Wild Geranium, Solomon's Seal, and, in mesic (moderately moist) areas, the Great White Trillium.

The prairie community of Barrington Hills, in its primeval state, was dominated by tall grasses which are said to have grown at least to four feet in height. The vast majority of this community has been destroyed by urban development, agricultural cultivation, grazing, and gravel mining. What remains of native prairie is exemplified by two types: the hill prairies, appearing on the west side of glacial moraines and kames along the west ridge of Spring Creek watershed, and the alkaline fen prairies.

A typical hill prairie would support such plants as the Little Bluestem Grass, Side-oats Grama Grass, Silky Aster, Stiff Aster, and the Cylindrical Blazing Star. An alkaline fen would support the Ohio Goldenrod, Grass-of-Parnassus, Turtlehead, White Lady's Slipper, and Small Fringed Gentian. Typical wildlife includes hawks, wrens, pheasants, prairie mice, and woodchucks.

Of the few prairies which do exist today in Barrington Hills, two examples are under the protection of the Cook County Forest Preserve District in conjunction with the Illinois Nature Preserves Commission. Other existing dry hill prairies on private property are endangered by gravel extraction and construction.

Maintenance activities of existing prairies and woodlands are controlled by burning, which replaces the natural fire burn-off of years past. Fire serves to destroy encroaching nonnative shrubs and trees and also clears away matted grasses and forbs which die each year, thus enriching the soil. Under an Illinois Environmental Protection Agency (IEPA) permit, controlled burning is performed yearly by the Cook County Forest Preserve District upon its prairies and woodlands located within Barrington Hills. Land is managed similarly by Citizens for Conservation on their Grigsby Prairie at Oak Knoll Road as well as by individuals on their own properties.

The prairie wetlands of Barrington Hills resulted from grasslands having poor drainage. These may hold water permanently or only in Spring. The characteristic vegetation of the area is Cattail, Blue-Joint Grass, Swamp Milkweed, Prairie Cord Grass, and a variety of sedges and forbs.

Steep slopes of over 12 percent are especially sensitive to erosion, and tend to be found in the northern half of Barrington Hills. Often coinciding with woodlands, these areas are among the most attractive natural settings.

Finally, the lake waters of the Village also provide a habitable environment for wildlife. In addition to providing feeding and breeding grounds for a myriad of amphibians and insects, local water bodies, most notably Spring Lake, support many fish, including Brook Silversides (90% of the Spring Lake fish population), Black Bullhead, White Crappie, Largemouth Bass, Yellow Perch, Pumpkinseed Sunfish, Orange-Spotted Sunfish, Northern Pike, and Black Crappie.

Soils

Soil characteristics in Barrington Hills result from glacial activity during the Pleistocene Period 13,500 years ago. During that period, the land was repeatedly covered by continental ice sheets which scraped and deposited as much as 300 feet of glacial drift composed of till and outwash soils. Till is an unsorted, ice-deposited sediment composed of silt, clay and sand. Outwash refers to poorly-sorted to well-sorted sand and gravel deposited by glacial meltwater taking on a variety of forms: conical hills (kames); elongated ridges (eskers) formed by streams in, on, or under the ice; sheet-like deposits (outwash plains) formed by meltwater running off the front of the glacier; deposits in valleys (valley trains) formed by debris-laden meltwater.

Generally speaking, Barrington Hills can be divided into two large Corridors defined by soil characteristics. The eastern half of the Village, or the Flint Creek Corridor, can be described as broad, rolling uplands and plains created by bulldozing effects and sedimentary deposits of glacial activity. The basic soil type of this sector is silty-clay till (such as Markham and Morley silt loams) which provides good load-bearing capacities, but is relatively impermeable to water. As

a result, the lowlands of this sector, being at or near the water table, hold water and sedimentary runoff, creating peat and muck soil conditions. In contrast to the silt loams, these soils, because of their structure and high organic content, are highly compressible, have a high shrink-swell potential, and have a poor load-bearing capacity. Such lowland soils are scattered throughout the eastern half of the Village and are identified by standing water and hydrophytes.

On the other hand, the western half of the Village, the Spring Creek Corridor, is underlain by sandy till and extensive deposits of glacial outwash. This difference in soil character can be attributed to glacial streams and rivers that deposited these sand and gravel materials. These soils are relatively permeable and provide a good load-bearing capacity for the construction of buildings. These same features make them valuable as construction material for roadbeds and aggregate for asphalt and concrete.

Dominated by those of the Drummer, Pella, and Ashkune series, other soils in the Spring Creek Corridor provide the proper combination of slope, moisture, and nutrient levels to merit the U.S. Soil Conservation Service prime agricultural rating.

The soils of both Corridors present problems when required to accept the demands placed by urban development. For example, the till soils of eastern Barrington Hills present problems when used for septic seepage fields, due to soil impermeability, low percolation, and proximity to open surface water drainage systems. Fortunately, the present five-acre residential zoning which exists in Barrington Hills generally is adequate for septic seepage fields in these critical areas. The use of septic systems at residential densities greater than presently exist would warrant close study to establish whether a specific proposed use or density would unduly burden the soil and endanger the health of the community. Wet peat and muck soils present further complications, because they do not handle septic effluent well. When built upon, these compressible, unstable soils often shift, causing cracks in foundations and walls.

Problems also exist in the drier soils of the western portion of the Village. While offering good building platforms with appropriate drainage, local sands and gravels have the disadvantage of proximity and accessibility to shallow and deep water aquifers. These water resources are vulnerable to pollutants which might quickly percolate down to contaminate water supplies not only in Barrington Hills, but in other nearby communities as well.

Water Quality

Water quality has been the subject of extensive research by CMAP in response to the Federal Clean Water Act. The quality of Spring Creek, having a mean average flow of 24.6 cubic feet per second, is considered “good”. Pollution is insignificant relative to ammonia, nitrate, and lack of dissolved oxygen; but phosphate is a potential problem, especially if water along the stream is to be impounded.

A primary reason for good water quality in Spring Creek, in addition to the absence of major wastewater dischargers, is the natural ground cover in the area. Wetlands and native vegetation help cleanse runoff and curtail algae growth in the Creek.

Flint Creek, the mean average flow of which is 41.3 cubic feet per second near its mouth at the Fox River, is less clean and is considered only “fair” to “poor” in quality. One principal discharger of pollutants has been the Barrington Sewage Treatment Plant. There are periods when wastewaters exceed sewer system capacity, untreated and partially treated effluents are discharged directly into Flint Creek east of Old Hart Road.

The Villages of Barrington Hills and Barrington entered into an intergovernmental agreement dated June 26, 1978 which provided for substantial protection of Flint Creek in Barrington Hills. The Barrington Sewage Treatment Plant continues to expand its service area with ongoing monitoring to meet all required Federal and State standards. However, phosphates and sediments entering the Creek from properties within Barrington Hills also require attention.

Accessibility

The Village of Barrington Hills is located 35 miles from Chicago's Loop in the low-density wedge between high-accessibility developmental Corridors described by CMAP. Although reasonably accessible to high-capacity transportation facilities (I-90, U.S. 12), and the Union Pacific Railroad (formerly Chicago & North Western), these and other major transportation facilities are located at or beyond the periphery of the community. Most areas of the Village are accessible only by highways and countryside roads of limited capacity and continuity. Any change to the EJ&E rail line that increases freight and/or passenger rail traffic would impact traffic flow on area roads with at-grade crossings over the line.

Residents of Barrington Hills are dependent on the automobile and on the supporting services of the Village of Barrington and other nearby communities. For a broader variety of goods and services, they may frequent such regional shopping centers as Woodfield Mall and the Deer Park Town Centre to the east or Spring Hill Mall and Algonquin Commons to the west. The industrial employment centers of the northwest suburbs are also accessible to Barrington Hills by automobile, as is O'Hare International Airport.

Residents who work in Chicago's Loop may utilize the Union Pacific Railroad (formerly Chicago & North Western) commuter stations in Barrington and Fox River Grove. Peak hour service is frequent and dependable, and travel time approximates 50 minutes on express trains and 1 hour on non-express trains, excluding driving time to and from the station.

By comparison with other northwest suburbs, the level of accessibility to and from Barrington Hills ranges from low (for general purposes) to moderate (for specific trip purposes). The BACOG Comprehensive Plan and the 2030 Regional Transportation Plan for Northeastern Illinois envision no change in this assessment.

Community Character

Living with nature and adjusting to a relatively low level of accessibility and municipal services are conscious choices for those who reside in Barrington Hills. Residents have selected a more remote countryside life as an alternative to more intense urban and suburban life. Recognizing this, the Village supports a safe, secure, and functional nighttime environment free from clutter, light trespass, and light pollution, and will continue to take measures to retain this "community feature". Additionally, Barrington Hills is an intentionally open countryside oasis within a more chaotic urban metropolitan area. The BACOG plan, the plans of Cook, Lake, McHenry and Kane Counties, and the NIPC plan all provide for this alternative as being integral to the full range of opportunities available to residents of metropolitan Chicago.

The Comprehensive Plan for the Village of Barrington Hills recognizes the desirable heterogeneity of residential opportunities within

The International Dark-Sky Association (IDA) is a non-profit organization committed to "preserve and protect the natural night environment and our heritage of dark skies through quality outdoor lighting." Formed in 1988, IDA has been very active in research on technology and applications of outdoor lighting. "IDA's goals are to be effective in stopping the adverse environmental impact on dark skies by building awareness of the problem of light pollution and of the solutions, and to educate everyone about the value and effectiveness of quality nighttime lighting." They promote using specific lamps sources and fixtures as well as regulations to enforce their use to reduce the sky glow now common over urban and suburban areas, as well as light trespassing onto other's property. The IDA's website (www.darksky. org) serves as a clearinghouse of relevant resources, publications, and model ordinances that the Village may consider consulting.

2030 Comprehensive Plan Barrington Hills and nearby communities. Through cooperative planning and intergovernmental agreements, the Village and its interdependent BACOG neighbors are actively pursuing a pluralistic composite of living and built environments. Responsibility for stewardship of natural resources is an obligation which the residents of Barrington Hills are willingly to accept in return for this quality of life.

Community Services

The Village of Barrington Hills is a Home Rule municipality. Its Village Hall, located on Algonquin Road, was first occupied in 1975 and expanded in 1994. As a predominantly residential community, its need for municipal services as well as its financial resources is limited.

The three principal activities of the Village are law enforcement including 911, road maintenance, and land-use guidance (including planning, zoning, subdivision, building, and health administration). The first two activities account for almost two-thirds of the annual budget. Regarding the third, the Village contributes annually to the Barrington Area Council of Governments, the Chicago Metropolitan Agency for Planning and its own funded efforts.

The residents of Barrington Hills have chosen to assume many responsibilities and costs themselves. For example, water supply, wastewater disposal, and solid waste collection including recycling are all provided privately as are many recreational facilities. The decision to establish and maintain the community without public water supply and wastewater disposal was and is a conscious, intentional decision made by community leadership and regularly supported by village voters and property-owners. It should be noted that the Village of Barrington provides public water and sanitary service in the Paganica Subdivision and public sanitary service to the Barrington Hills Country Club.

The Barrington Countryside Park District was established in 1967. With minor exceptions its borders are coterminous with the Village. Its primary asset is a 15-acre equestrian center (the "Riding Center") which is on Bateman Road near its intersection with Algonquin Road and which provides the primary gateway to Cook County's Spring Creek Forest Preserve's equestrian and walking trails. The Riding Center is used extensively by Village Residents and others, both equestrians and non-equestrians, and is the home base to the Riding Club of Barrington Hills and the Fox River Valley Pony Club. The Park District also maintains a softball field at the School District 220 Countryside School on County Line Road and tennis facilities on land leased from the School District 220 adjacent to that school.

The Village has many common goals with the Park District. Cooperation and coordination of manpower, intellectual property, management, planning, and funding resources is necessary to reach common goals of the governmental units. Areas of cooperation between the Village and Park District include:

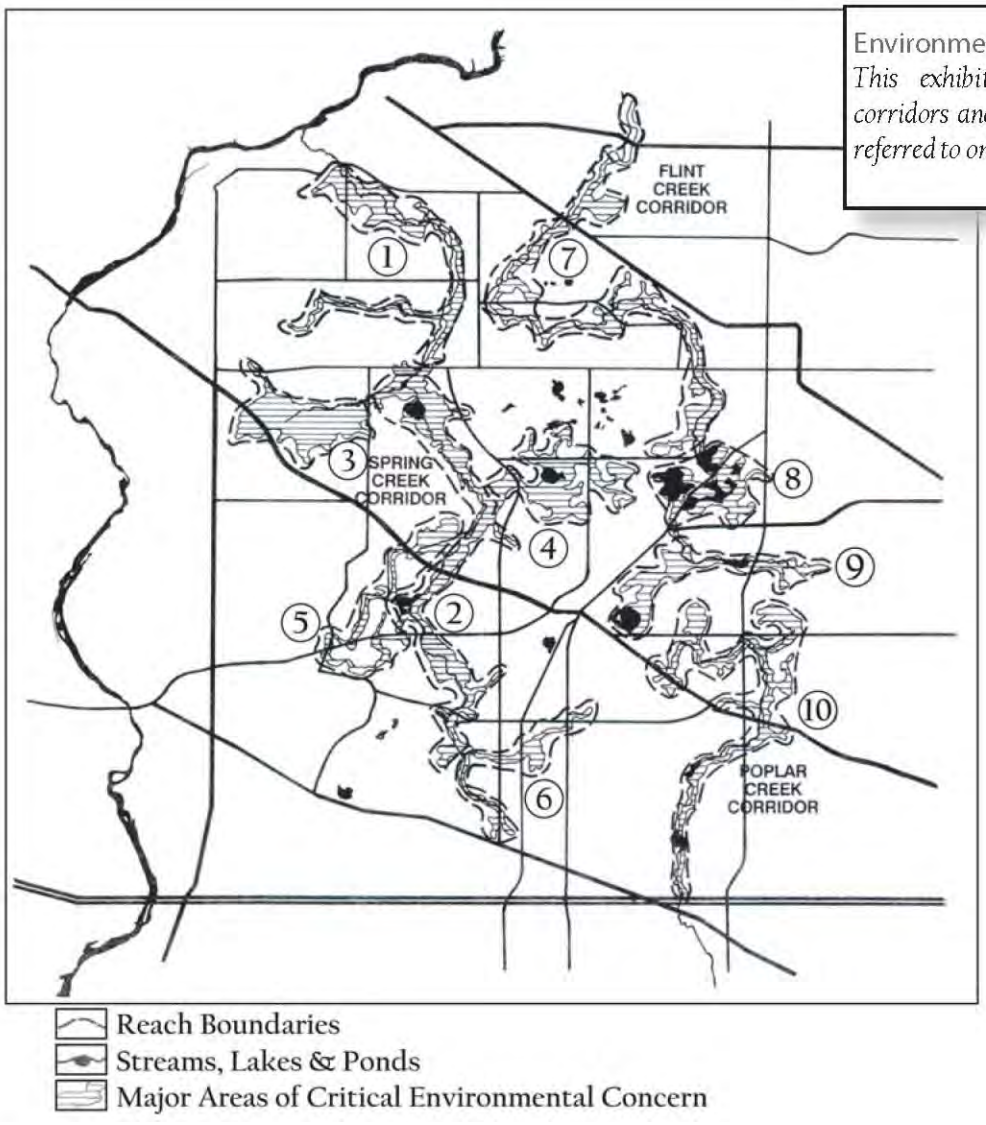
- Land acquisition;
- Land conservation and preservation;
- The Spring Creek Forest Preserve;
- Preservation of our unique rural character;
- Preservation of the equestrian heritage;
- Cooperation in future projects of interest to the Village and Park District Residents;
- Cooperation regarding zoning and planning issues which impact the Village and the Park District; and
- Park District impact assessments for new commercial and residential development.

The Village is almost wholly served by the Barrington Library District and Barrington Unit School

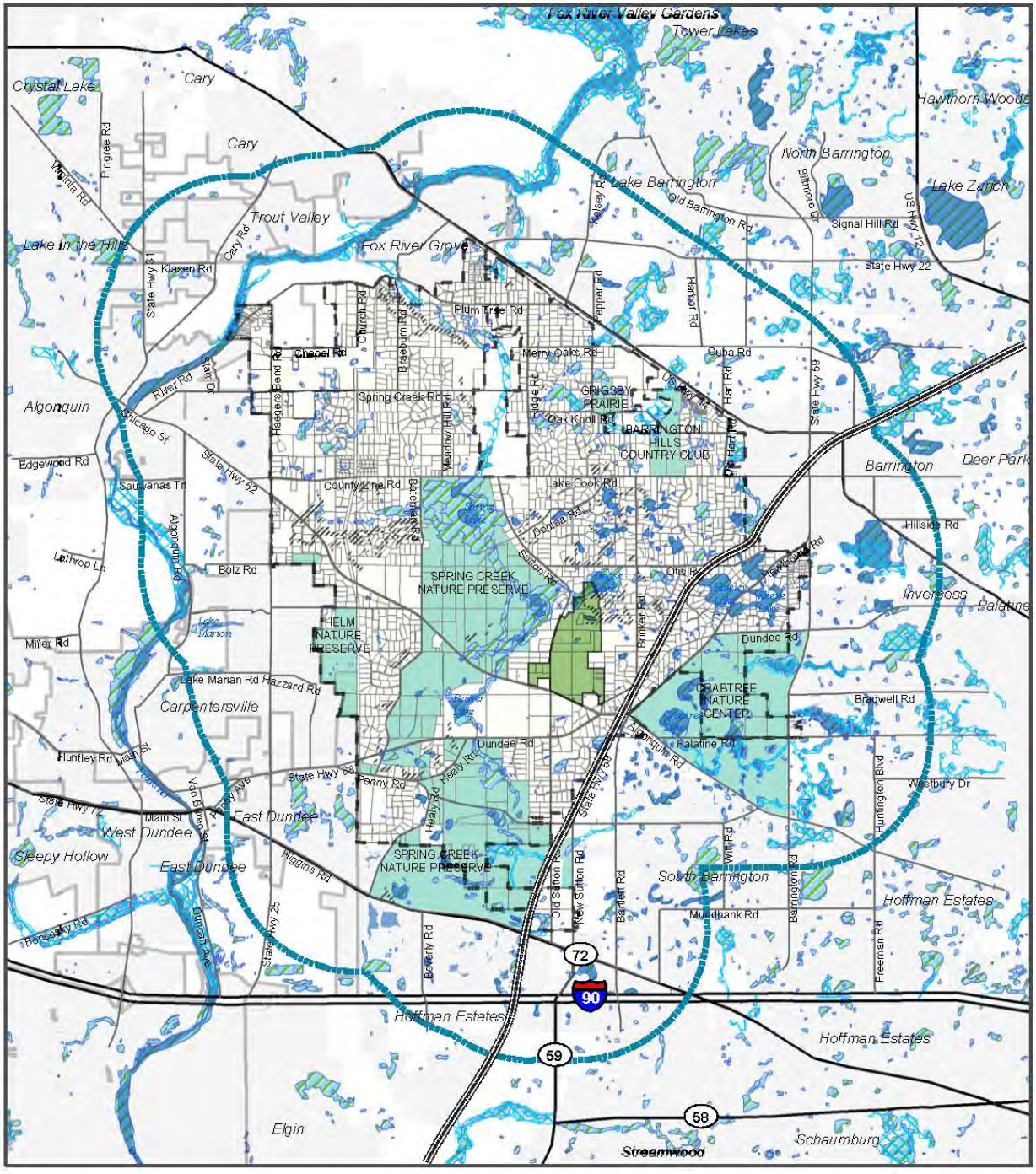
District 220. However, the far northwestern portion of the Village is served by School District 300. Fire protection is provided by five special districts: Barrington Countryside, Algonquin/Lake in the Hills, Carpentersville, East Dundee Countryside, and Fox River Grove.

Overall Concept

Based on the foregoing developmental factors, the goals and objectives for Barrington Hills can be achieved by a concept of land use which has six fundamental components: (1) protecting scarce and critical environmental resources - especially groundwater - most of which are located in corridors adjacent to waterways; (2) maintaining limited municipal services supplemented by individual responsibilities; (3) preserving a community character which provides personal opportunities consistent with a countryside environment, including the preservation of scenic and wildlife corridors; (4) perpetuating the keeping of horses and agricultural activities as a viable element of the community, along with the expansion of the interwoven open space and equestrian trail system; (5) protecting property from vehicular and train traffic, noise, equestrian/vehicular and equestrian/train conflicts by limiting road capacity and arterial road penetration through the open countryside; and (6) preserve the five acre lot pattern with the exception of properties located on the village periphery where density and development in adjoining communities has the predominant influence on use and character.



Environmental Corridors Map:
This exhibit reflects the environmental corridors and watershed sub-areas that are referred to on the following pages.



Environmental Features

Comprehensive Plan

Village of Barrington Hills

Environmental Corridors

In many planning processes, a dominant element or character can be identified to serve as a framework from which a plan can be built. Whereas Chicago focuses on the Loop and the lakefront, it is appropriate for the Village of Barrington Hills to focus on its own dominant characteristics; i.e., waterways, limited shallow aquifers, wooded rolling countryside, inter-related ecosystems, and the reliance on individual wells as the sole available source of water throughout the Village.

An "environmental corridor" is a linear geographic area of interdependent natural features. These features include waterways, soils, geology, topography, sub-surface hydrology, vegetation and wildlife. The key to the natural balance of these elements is the minimum intervention of "man" and his minimized development activities. But where man-made impacts are unavoidable, it is wise to identify how and where the corridor's natural balance might be threatened and to mitigate adverse impacts if possible.

Four environmental corridors exist within the planning jurisdiction of the Village. They focus on Spring Creek, Flint Creek, Poplar Creek, and other unnamed subsets of watersheds off the Fox River including Chapel, Church and Haegers Bend roads. The natural features and man-made elements of each corridor have been inventoried and divided into segments, or "watershed sub-areas". Environmental corridors are not land use designations; even though they effect the use of land. The recommendations for these corridors should be considered an overlay to the land use recommendations, providing a link to the characteristics of the underlying land and natural resources.

Common Recommendations

Because of the proximity and similarity of the three Fox River environmental corridors (*Spring Creek Corridor*, *Flint Creek Corridor*, *and Poplar Creek Corridor*), conditions exist which would generate common planning recommendations. These overall recommendations include:

- Protect and maintain the natural character of stream channels.
- Use natural measures to control the erosion of stream banks.
- Control stormwater runoff and associated pollutants.
- Regulate development in flood plains and on steep slopes (12% or more).
- Protect sensitive woodlands, native prairies and wetlands.
- Protect the shallow aquifers from over-mining and from contamination.

More specific recommendations relating to particular watershed sub-areas of each corridor are included in the following pages.

Spring Creek Corridor

The Spring Creek corridor is the major environmental element in the Village of Barrington Hills. The Creek extends the length of the Village, from its headwaters near Higgins Road at the southern limits to the most northern boundary at Plum Tree Road. Although water volume in the Creek is not substantial, the ecosystem it supports is significant.

The Spring Creek corridor is comprised of woodlands, wetlands, prairies, streams, and lakes. Included within this corridor are the Spring Lake Nature Preserve (dedicated as an Illinois Nature Preserve) and the Spring Creek Valley Forest Preserve. These two preserves, controlled by the Illinois Nature Preserves Commission and the Forest Preserve District of Cook County, respectively, occupy approximately 3,150 acres of the total area of the Village. Pursuant to Illinois law, they are legislated to be protected in perpetuity.

Watershed sub-area One (R1)

R1 extends from the northern-most portion of the corridor near Plum Tree Road through the Hill 'n Dale Farm to County Line Road, including the western tributary of the Creek south of Spring Creek Road. The natural features of R1 consist of a narrow floodplain, a mixture of steep slopes (12% or more), woodlands, open fields and pastures. Land use is predominately agricultural, although residential impact is increasing. Scenic pasture land exists in the northern-most portion, while cultivated fields exist to the south. Residential development along the western tributary of the Creek is mature in character and nestles well within the surrounding natural features.

The 221-acre Foxmoor Subdivision just north of Plum Tree Road in Fox River Grove presents the greatest single threat to water quality in Watershed sub-area One, because of its relatively high density of 2.6 dwelling units per acre. New subdivisions in Barrington Hills are also of concern, because they include areas of floodplains and steep slopes. Potential problems associated with residential development in this watershed sub-area include road debris carried into the Creek by stormwater runoff, soil erosion from steep slopes, sedimentation from exposed soils during the construction process, and changes in wildlife habitat as the result of developmental encroachment.

Agricultural areas also pose threats to water quality. Where soil-conserving tillage practices are not implemented, stormwater run-off can erode topsoil, decreasing the productivity of farmland. Such erosion can also pollute the Creek waters, not only with sediments, but with chemicals used as fertilizers, pesticides and herbicides. Where agricultural land is used for the raising of animals, waste by-products may be washed off the land into the Creek. In addition to the common recommendations expressed at the beginning of this chapter, the following specific recommendations are made in order to preserve and enhance environmental quality in R1.

1. Strongly encourage land management practices which induce groundwater recharge and which minimize the burden on shallow aquifers and other limited capacity resources.

2. Encourage the preservation of open spaces through land conservancy; efforts should be coordinated with the Barrington area Conservation Trust and Citizens for Conservation.

3. Regulate development in the floodplain and on steep slopes.

4. Prohibit stream channel modification and encourage bank stabilization by various accepted means of conservation.

5. Pursue intergovernmental agreement with Fox River Grove to protect the headwaters of Spring Creek.

Watershed sub-area Two (R2)

R2 is the largest and best protected watershed sub-area in the Village because it consists of the Spring Lake Nature Preserve south of County Line Road, between Sutton Road and Bateman Road, and north of the abandoned portion of Donlea Road, and the entire Spring Creek Valley Forest Preserve, which extends south from the abandoned portion of Donlea Road to Illinois Route 72. The outstanding natural features of Watershed sub-area Two include prime examples of glacial lakes, wetlands, native prairies, and woodlands. All of these natural features combine to support a wide variety of plants and animals.

Potential man-made threats are nonexistent from within the Spring Lake Nature Preserve. According to the Illinois Nature Preserves Commission rules, "No measures shall be taken to alter the natural growth or features for the purpose of enhancing the beauty, neatness, or amenities of the preserve." Specific objectives for the Nature Preserve are delineated in the list of objectives included in its master plan. They include the following:

1. Preserve and enhance the natural quality of the vegetation, wildlife, and other natural features of the nature preserve.

2. Assure perpetuation of the nature preserve in as nearly a natural condition as possible.

3. Facilitate observation and study for education and pleasure in such a manner and to such a degree as will not modify natural conditions or adversely affect use of the preserve as a wildlife refuge.

4. Provide perpetual protection of the nature preserve against intrusions and incompatible uses.

For those natural features of R2 which are located within the Spring Creek Valley Forest Preserve, protection is provided by Cook County Forest Preserve District policy aimed at "protecting and preserving the flora, fauna, and scenic beauty within (the preserve) and to restore, restock, protect, and preserve the natural forests and said land together with their flora and fauna, as nearly as may be, in their natural state and condition, for the purpose of the education, pleasure and recreation of the public..."

Management techniques being utilized to achieve these objectives include reforestation, prairie restoration and management.

Watershed sub-area Three (R3)

R3 extends west of Bateman Road between County Line Road to the north and Algonquin Road to the southwest. Among this area's unique features is its stream which flows directly into Mud Lake in the Spring Lake Nature Preserve. Upstream drainage places an added emphasis on the need for protection of the watershed sub-area's water quality. The combination of natural features and undulating topography makes R3 one of the most scenic watershed sub-areas of the corridor. Numerous homes are nestled among the wooded slopes overlooking the wetlands and floodplain of the tributary. The potential of animal-waste pollution exists from horses that are stabled in the lower portion of the watershed sub-area.

Recommendations for R3 include the following:

1. Encourage the preservation and maintenance of scenic vistas overlooking all of the lowland of Spring Creek.

2. Maintain wetlands in their natural conditions.

3. Regulate further residential development in areas which have historically exhibited water drainage problems.

4. Control pollution from animal wastes.

Watershed sub-area Four (R4)

R4 is located east of the Spring Creek Valley Forest Preserve and consists of the natural features generally bounded by Donlea Road to the north, Dundee Road to the south, the Elgin, Joliet and Eastern Railroad tracks to the east, and Old Sutton Road to the west.

Land uses in R4 include residential development north and south of Otis Road. Environmentally, R4 is one of the most sensitive watershed sub-areas in the corridor. Its dominant natural feature is Goose Lake, located south of Otis Road. Along with numerous small lakes north of Otis Road R4 also contains the 420-acre Horizon Farms. Through the desire of the land owner(s) and efforts of the Barrington Area Conservation Trust (BACT), the farm is the first property in the Village to be protected through a conservation easement held by BACT that keeps most of the farm free from development. The long-term maintenance of the Horizon Farms conservation easement is subject to a natural areas management plan, with oversight by BACT.

Throughout the remainder of R4 are scattered steep slopes and large areas of fl at woodland. Goose Lake and its surrounding wetlands serve as a significant wildlife habitat for aquatic life as well as for small fur-bearing animals and birds. The Lake provides a daytime feeding area for the Giant Canada Geese which visit it from the Crabtree Nature Center.

The presence of Goose Lake introduces a special set of concerns. Whereas soil erosion and stream sedimentation present problems in other watershed sub-areas, they are particularly acute where water enters this Lake, because soil particles settle out and begin to fill up the lakebed. This infilling process is often accompanied by an increase in algae blooms and eventual eutrophication of the Lake's life support system.

To ensure against the occurrence of these and other problems, the following objectives are recommended:

1. Encourage the preservation and maintenance of the shoreland and wetlands associated with Goose Lake so as to protect wildlife habitats, minimize erosion, and control lake sedimentation.

2. Protect and maintain woodlands and associated wildlife habitat.

3. Preserve vistas of Spring Creek from Sutton Road.

Watershed sub-area Five (R5)

R5 is located east of Bateman Road; it crosses Algonquin Road to the north and extends to Penny Road on the south. The dominant feature of R5 is a tributary and wetland of Spring Creek, most of which lies within the Spring Creek Valley Forest Preserve.

Another of the unique features in this watershed sub-area is that it has one of the few remaining examples of native prairie (which once dominated Northeastern Illinois). This prairie remnant is located approximately one mile west of the point where Spring Creek flows under Dundee Road. Fortunately, the northerly portion of this natural feature is under the jurisdiction of the Cook County Forest Preserve District. Periodically, the District burns this parcel of land as part of a maintenance program intended to simulate the periodic natural fires which repeatedly swept across the prairies of the Midwest, serving to eliminate invasive species. The easterly portion of the prairie remnant is on privately owned property and is subject to developmental pressures. The preservation of such a unique landscape is an important link to the natural history of Northeastern Illinois.

The following recommendations are made for R5:

1. Protect prairie remnants from development or other adverse impacts.

2. Establish continuity within the forest preserve along Spring Creek.

3. Regulate development in the floodplain and associated waterways.

Watershed sub-area Six (R6)

R6 consists of the tributary areas east of New Sutton Road near the intersection of Bartlett and Penny Roads. It contains the headwater areas for the Spring Creek corridor, so that activities here impact the entire downstream corridor to the north. Accordingly, appropriate land use in R6 becomes critical.

Developmental pressure is encroaching upon the watershed sub-area from the southeast, mostly from the Villages of Hoffman Estates and South Barrington. The Woods of South Barrington, an approximate 400 unit single-family residential and commercial development on the former Klemm Nursery site, is currently being developed by Toll Brothers in the R6 subarea. In order to minimize the potential impacts of this development on the Spring Creek corridor and the overall R6 watershed, the Village must assure proper maintenance and management of the two (2) existing stormwater facilities located within the development site – located east of Illinois Route 59. For example, long-term exposure of disturbed earth on the development site might fill the drainageway with silt.

The dominant land uses in R6 are agricultural which, if not preserved, may succumb to developmental pressure. Therefore, it is recommended that the following objectives be considered and applied whenever feasible:

1. Protect Spring Creek headwaters from the degrading impacts of development and construction by intergovernmental agreement with South Barrington.

2. Encourage the use of soil-conserving agricultural practices.

3. Encourage the retention of open space surrounding the headwaters of Spring Creek.

4. Encourage the use of conservation easements.

FLINT CREEK CORRIDOR

The Flint Creek corridor traverses the northeastern portions of the Village. A second branch of Flint Creek drains Baker's Lake and then traverses the eastern and northern portions of the Village of Barrington. The Barrington sewage treatment plant is located on this branch. Both branches meet near Old Hart Road and Oak Knoll Road.

The corridor includes the Crabtree Nature Center at the intersection of Palatine and Algonquin Roads. Following the Corridor to the north, the Creek fills a series of glacial depressions in the vicinity of Otis and Dundee Roads which have become Hawley, Keene, and Hawthorne Lakes. Further north, the Creek meanders back and forth across the Barrington Hills/Barrington municipal boundary between the Elgin, Joliet and Eastern Railroad tracks and New Hart Road. The Creek turns west in the vicinity of Old Hart and Oak Knoll Roads and flows through areas of residential development, agriculture, and the Barrington Hills Country Club. The Creek bends sharply northeast near the intersection of Oak Knoll and Ridge Roads and flows underneath the Union Pacific Railroad (formerly Chicago & North Western) tracks and Route 14, between Cuba and Kelsey Roads. All steps should be taken to preserve, protect and improve the Flint Creek watershed as outlined in the Flint Creek Watershed Plan.

Watershed sub-area Seven (R7)

R7 extends from the southern edge of the wetland on Cuba Road, across Route 14 and the Union Pacific Railroad (formerly Chicago & North Western) tracks, through the northeast sector of the Village, and southerly along the common boundary of Barrington and Barrington Hills to a point just north of Hawthorne Lake.

Threats to the environment include the Barrington sewage treatment plant. Although the expansion of the plant promised to improve downstream water quality, it must be monitored closely as population increases. The proper operation of the private sewage disposal systems in the industrial park located north of Route 14 in the Village of Lake Barrington is also of concern with respect to water quality.

In the eastern portion of the watershed sub-area, along the common municipal boundary, the quality of stormwater run-off from urban Barrington presents a hazard. Potential problems relating to the remainder of R7 include soil erosion, sedimentation, and chemical pollution of the Creek which may be introduced into the stream by stormwater running off residential and agricultural land and fertilized open space.

Recommendations for R7 include the following:

1. Ensure the cleanliness of Barrington sewage treatment plant effluent by frequent and rigorous water quality monitoring.

2. Protect Flint Creek from any industrial septage (seepage) which might escape treatment.

3. Encourage the use of stormwater detention and irrigation techniques to minimize the impacts of chemical pollutants entering Flint Creek.

Watershed sub-area Eight (R8)

R8 includes Hawley, Keene, and Hawthorne Lakes and the tributary which extends from Keene Lake to the east across Barrington Road. R8 marks the highest concentration of open bodies of water within the Village and focuses attention upon problems peculiar to lakes as opposed to streams.

Potential lake-oriented problems include possible septic infiltration, sedimentation, and the growth of undesirable aquatic plants which tend to visibly change the appearance of the lake. Algae blooms also tend to appear in lake waters as biological balances change. Ultimately, the process of eutrophication could end recreational use of lake waters prematurely unless controlled.

In order to prevent such an occurrence, the following objectives are recommended:

1. Maintain flow of fresh water through the lake system.

2. Encourage the practice of soil conservation and shoreline stabilization to minimize the amount of sediments which enter the water bodies.

3. Protect and enhance the shoreline of the lakes in order to maintain their visual quality.

4. Encourage the use of native plants which have deeper, more extensive root systems.

5. Closely monitor the operation of septic systems in close proximity to lake shores.

6. Monitor water quality in lakes and encourage appropriate lake management programs.

Watershed sub-area Nine (R9)

R9 includes the Crabtree Nature Center and the area to its east. The watershed sub-area is bounded by Illinois Route 68 on the north, the eastern extent of the Village's planning jurisdiction, Bradwell and Palatine Roads to the south, and Barrington Road to the east. The Cook County Forest Preserve District, through the Crabtree Nature Center, offers the same protection to the natural environment as mentioned in the District's policy statement in the narrative concerning R2. The Center emphasizes the educational aspects of the directive through environmental research made available to the public. The Center's principal feature is Crabtree Lake, home of the Giant Canada Geese and many other species of waterfowl which inhabit the area permanently and during migration. The Lake is a critical link in the fl yway and is worthy of extraordinary protection. Upland oak and hickory woodlands and wetlands, restored prairie, and associated wildlife are also open to observation by the general public. The area to the east of the Center is characterized by the narrow floodplain of Flint Creek and one small lake. Encroaching residential development from the east promises to have significant impact upon the area in the near future.

Given the value of the Nature Center and vulnerability of R9's eastern sector, the following objectives are recommended:

1. Whenever feasible, and to the greatest extent, minimize developmental encroachment and environmental threats against the vulnerable natural resources of the Crabtree Nature Center.

2. Encourage the implementation of soil-conserving site preparation techniques throughout the developmental process.

3. Support Cook County Forest Preserve District efforts of environmental enhancement via vegetational sampling, prairie and creek restoration, and reforestation of the Nature Center.

Poplar Creek Corridor

Located in the southeast corner of the Village's planning jurisdiction, the Poplar Creek corridor consists of only a portion of Poplar Creek and its associated natural features.

Watershed sub-area Ten (R10)

R10 portion of the Poplar Creek corridor is very significant. Two large wetlands along Palatine Road on either side of Barrington Road mark the headwaters of Poplar Creek, and opposing land-use philosophies are being applied to them. The western wetland is located in the southern portion of the forest preserve within which the Crabtree Nature Center is located. This 30-acre wetland has been identified by the U. S. Department of the Interior, Fish and Wildlife Service as an inland, shallow freshwater marsh. The surrounding land use, both north and south of Palatine Road, is devoted to feed grain and experimental agriculture and enjoys the protection and enhancement of the policies established by the Cook County Forest Preserve District.

The second wetland to the east of Barrington Road is called the Palatine Road Marsh. It is designated as an inland, freshwater, deep marsh. The Palatine Road Marsh is one of the last important wetlands to remain unprotected from developmental encroachment. It is a mature marsh and it supports a diverse plant population and abundant wildlife. Residential development which is occurring throughout the surrounding area poses an immediate threat to the environmental quality of the marsh and the Corridor in general. Permanent changes have already occurred in its ecosystem as a result of the filling of the marsh's east end.

The remainder of the Poplar Creek corridor, as it extends south to the Northwest Tollway near Higgins Road, has as its major natural feature the Creek itself and its narrow floodplain. The Creek is bordered by willow and cottonwood trees providing good habitat for a variety of small mammals, songbirds, and waterfowl. The Corridor, interspersed with small wetlands and lakes among residential and agricultural uses, includes additional idle land. Therefore, the greatest threat to the environment is continual development.

The following objectives are offered to help insure continued environmental quality in this watershed sub-area:

1. Encourage the acquisition by an appropriate entity of the Palatine Marsh as recommended in the Poplar Creek Watershed Environmental Assessment and Floodwater Management Plan prepared under the authority of the Watershed Protection and Flood Prevention Act.

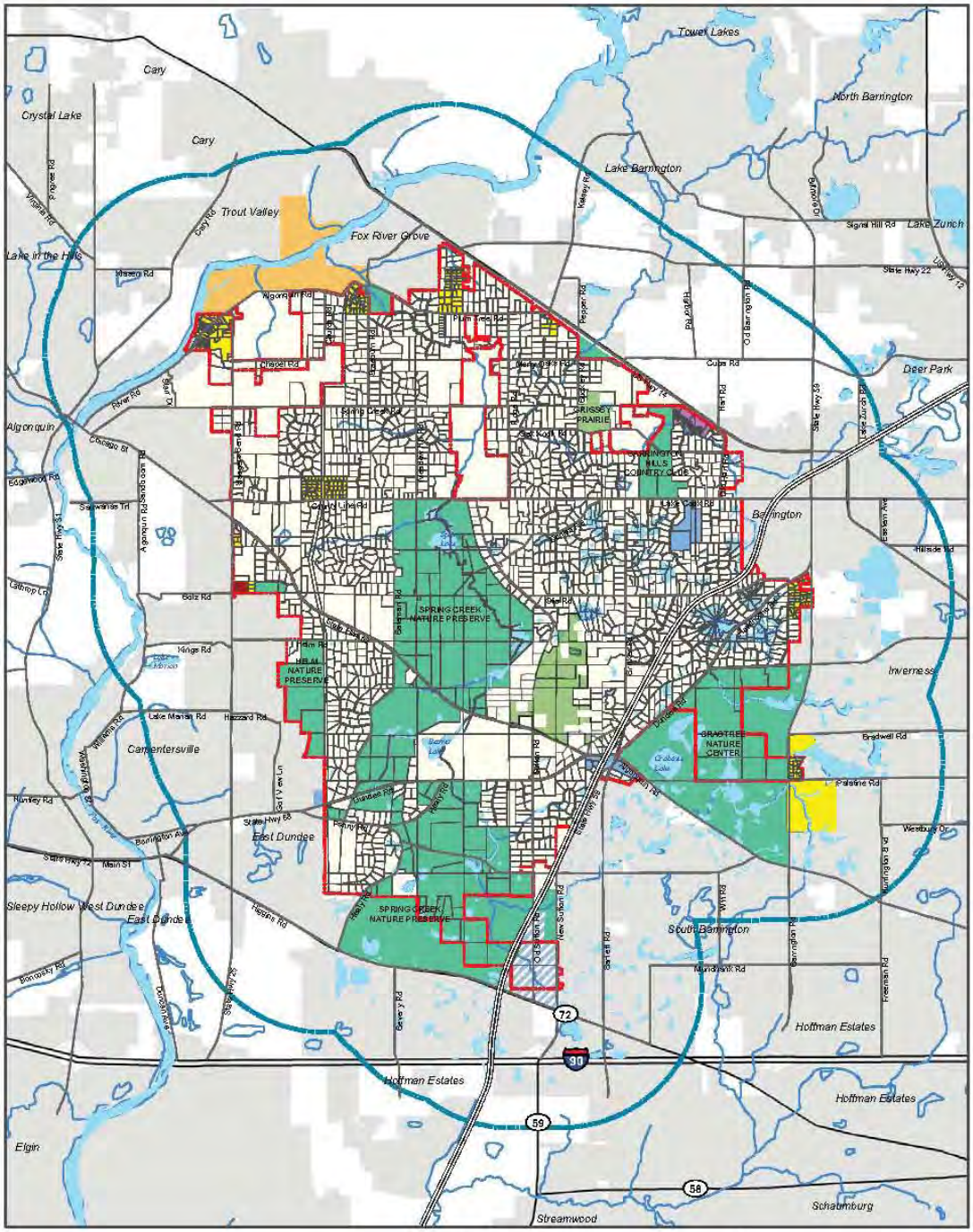
2. Protect existing mature vegetation along creek banks so as to perpetuate an adequate wildlife habitat.

3. Maintain continuous stream flow to control undesirable levels of aquatic plants.

4. Encourage the use of native plants which have deeper, more extensive root systems.

5. Require adequate soil conservation practices during the construction process.

6. Pursue intergovernmental agreements with Inverness and South Barrington to protect headwaters of Poplar Creek.



Future Land Use Plan

Comprehensive Plan

Village of Barrington Hills

- Residential (5 acres and more)
- Residential (Less then 5 Acres)
- Suburban Residential
- Institutional/Civic
- Conservation, Open Space, and Recreation
- Business
- Planned Mixed District
- Light Industry
- Conservation/Land Trust
- Incorporated Municipalities
- Unincorporated Property
- Village Limits
- EJ&E Railroad

NORTH

0 0.5 1 2

Scale in Miles

Base Map Data Provided by Gewalt Hamilton Associates, Inc.

Date: April 2008

Land Use

Focus Areas

From a planning perspective, Barrington Hills may have more in common with fi rst ring suburbs than it does with the communities which form the suburban/rural growing edge of the metropolitan area. It is, for the most part, a mature community where change may occur as infill and redevelopment. Many mature communities recognize the existing conditions of the majority of properties as the likely conditions of the future, and through their planning process focus on a limited number of properties most likely to be subject to redevelopment pressure. The Barrington Hills planning area encompasses four general areas, listed below in an increasing order of vulnerability to change:

- Areas within the Village boundaries, including existing residential (five acres and over) uses that are, in near term and long term, the most appropriate use of such property.
- Forest Preserves and environmentally sensitive sites and open water governed by permanent conservation easements.
- Areas outside the Village which fall within the joint planning jurisdiction of Barrington Hills, adjacent municipalities, or the surrounding county.
- Property of a size and geography which make them subject to development pressures.

This plan for the future use of property cannot anticipate all of the influences on land use decisions made by property owners, but it can foresee patterns of use most likely to yield long term compatibility and continuity of the existing attractive village character and quality of life. This plan, as initially adopted, includes a broad characterization of land use for all properties in the "Future Land Use Plan" (see page 34). The land use designations reflected in the "Future Land Use Plan" are amplified by the recommendations of the environmental corridor overlay described previously in this document. Over time, the Village will evaluate each of the properties most vulnerable to change, and where appropriate, may adopt amendments to the plan which supplement this land use plan with greater detail. In the appendix, two such more specifi c plans are included for Focus Area Seven and Nine. These two focus areas on the periphery of the Village have been subject to significant development pressure, motivating their owners to seek de-annexation and development outside the Village. The land use plans for these two focus areas show how their development can be accommodated while compatible and supportive of Barrington Hills community character and quality of life.

Focus Area One: Nearly 670 acres straddling Spring Creek, directly north of the Spring Creek Nature Preserve, these lands are predominantly outside the Village boundary though wholly surrounded by the Village. The property is maintained as equestrian facilities by a family well known for its connections to the equestrian community. Proximity to the creek, its floodplain, tributaries and wetlands make the site both visually attractive and particularly sensitive.

Focus Area Two: Nearly 535 acres, also straddling Spring Creek and Beaver Lake, sandwiched between the large expanses of the Spring Creek Nature Preserve and the fork formed by Highways 62 and 68. The property is currently under active agricultural use.

Focus Area Three: Approximately 110 acres, south of Healy Road, toward the southwest corner of the village, adjacent to ComEd rights-of-way and near the gravel mining areas in East Dundee.

Focus Area Four: Approximately 200 acres, north of Highway 62, directly west of the Spring Creek Nature Preserve, and lying east of the ComEd rights-of-way.

Focus Area Five: Generally bound by State Highway 62 to the north and east, Bolz Road to the south, and State Highway 25 to the west, this approximate 215 acre focus area may be affected by the potential Bolz Road Bridge over the Fox River and the resultant realignment of Bolz Road.

Focus Area Six: Just under 185 acres, at the intersection of County Line Road and State Highway 62. Along with multiple properties adjacent to School District 220's property, this property may be affected by a potential Bolz Road Bridge, if constructed.

Focus Area Seven: On approximately 565 acres of rural land in the Northwest periphery of the community, this site has been the subject of court action to permit de-annexation from the Village of Barrington Hills and potential development within McHenry County. It includes properties outside the Village and property south of Spring Creek road that is still within the village. The Villages of Barrington Hills and Algonquin opposed a petition to develop the property (within the village, and later outside the village) at suburban densities with lot sizes of less than one acre. The property is within an area of McHenry County which is subject to very heavy development pressure, and where water supply is limited and threatened by continued mining of the shallow aquifer at rates which exceed their capacity. As proposed by the property owner, the development would have placed a burden on existing school and road capacity not sized or suitable to accept the stresses of suburban density.

The village supports the reasonable use of the property for residential uses, but considers the environmental features of the site and the capacity to support development as important influences on the most appropriate use of the property. The site is shown (in the appendix depicted as the "Duda Properties") in a plan reflecting a "conservation design" concept of 86 single-family home sites arranged to enhance and maintain the existing wetlands, woodland, fl oodplain, subsurface aquifer, and other natural features as site amenities. As has become the desired practice within the village, the lots are in a layout which leaves no "common area" ownership. However, private open spaces with an interwoven equestrian trail system with equestrian access easements and links to the larger village of Barrington Hills trail system would enhance the marketability and utility of the property as an extension of the equestrian community. The Village has identified this site as an example on the periphery of the community in which the deviation from minimum lot size can be accommodated yet still maintaining the average density of one lot per fi ve acres.

Key features of the successful development of this site would include:

- Protection of the ground water resources.
- Incorporation of the existing wetlands, floodplain, woods, and other natural features as site amenities.
- Maintain an overall density of not exceeding one dwelling per five acres of land
- Interconnection to existing equestrian trails on the periphery of the site with supporting private equestrian easements.
- Stewardship of natural areas.

Focus Area Eight: Oak Knoll Planned Unit Development. Directly east of the Barrington Hills Country Club and south of the Union Pacific railroad, the approximate 85 acre property is a mixed use district subject to an existing Planned Unit Development ordinance within the Village of Barrington Hills. By nature of the light industrial uses, its limited accessibility and other conditions make it vulnerable to change.

Focus Area Nine is generally located at the Northwest corner of Illinois Route 72 and Illinois Route 59, between the Forest Preserve of Cook County and the former Klehm Nursery with portions of the property currently being developed for residential and commercial uses in the Village of South Barrington. This approximate 340 acre property, more than any other in the village, is influenced by its accessibility, its proximity to regional shopping, nearby employment, and rapid growth in the adjacent urbanizing Metropolitan Chicago, to the southeast. It is also less influenced by the residential and equestrian community than most properties in the village. Across the EJ&E RR right-of-way to the west, the Cook County Forest Preserve is adjacent to the site, providing potential transition between a more intense use oriented to Illinois Route 59 and Illinois Route 72 and the core of the community. Illinois Route 59 is a principal gateway into Barrington Hills, enhanced by high capacity interchange with Interstate 90, just ½ mile south of the site. Redevelopment of the more than 900 acre Poplar Creek (Neiderlander) property as part of the Sears Headquarters/ Prairie Stone Business Park has accelerated with recent additions of "big box" retailing, a proposed arena, and continued employment and distribution centers. The Klemm Nursery property immediately east of the site on Illinois Route 59 is being subdivided for higher density single family homes and a "lifestyle" retail center. Each of these surrounding uses provide both a connection to the pattern of the greater metropolitan area and a distinction from the pattern of five acre minimum lot size and predominant land use of the core of the Village of Barrington Hills.

Rather than disassociate the site and use from the Village, this site presents an opportunity to encourage a mixed commercial retail and residential development in the context of the Village, and of a quality and character reflective of the high standards of the Village of Barrington Hills. If developed solely responsive to trend of development and proximity to the Interstate interchange, the site is likely to yield a conventional strip retail use and potentially high density housing that, at best, will be indistinguishable from development in other corridors; at worst, an unattractive, disruptive entry to the Village. In preparing a concept plan for Focus Area Eight, shown in the appendix as "The Stables of Barrington Hills", the Village attempts to integrate key natural features of the site and surroundings in an effort to leverage the greatest village character and quality. Dubbed "the Stables of Barrington Hills", the concept integrates equestrian facilities including paddocks, trail access, and equestrian social spaces into a retail lifestyle center of over 450,000 square feet of retail floor area. The site is mixed use, integrating office, residential and multiple forms of retail uses into the natural physical features of the site.

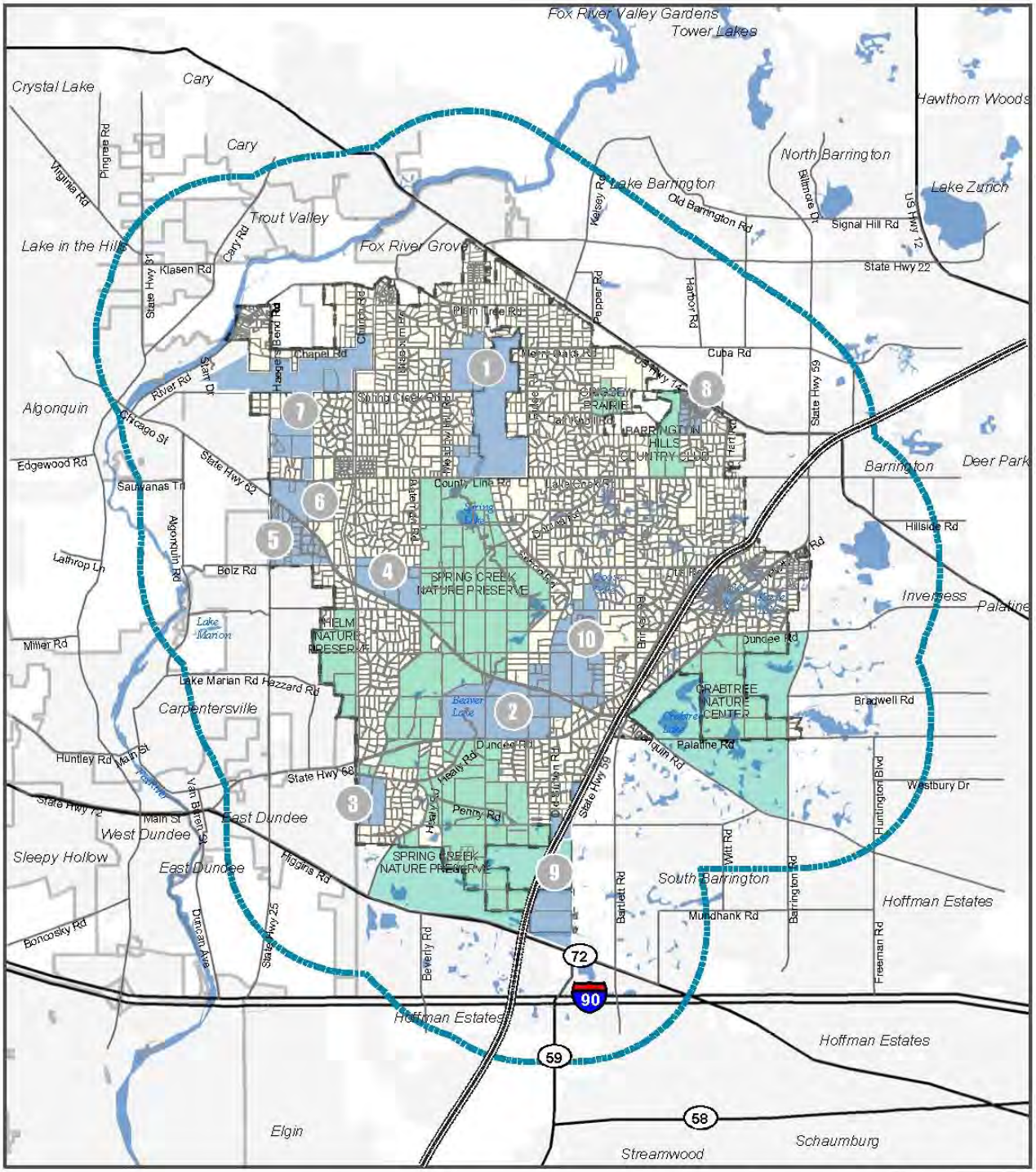
Key features of the successful development of this site would include:

- Incorporation of the two unnamed Spring Creek tributaries, and on-site detention as natural amenities in the site and use.
- Connection, extension and incorporation of the equestrian trail system and equestrian activities into the design of the facility.
- Controlled and convenient access to Illinois Route 59, with the diversion of Old Sutton Road into the site so as to minimize through traffic.

Focus Area 10, Horizon Farms, a 420-acre agricultural property located in the heart of the Village, north of Algonquin Road (Route 62) and straddling Sutton Road, is the first property in Barrington Hills to be protected from development through the use of a "conservation easement". Through the desire of the land owners working in partnership with the BACT, most of the farm will be preserved as natural areas in consideration for very limited development rights (eight homesites located on 40 acres). Horizon Farms will be privately owned with oversight of the easement administered by BACT. Long-term maintenance of the Horizon Farms conservation easement will be subject to a natural areas management plan. The "conservation easement" program provides land owners the opportunity to preserve natural and scenic areas by forgoing development rights in return for savings accrued through lower tax rates, property assessments, and income tax adjustments. This program serves as a model for the other Focus Areas.

Focus Area 11, the Cook County Forest Preserves, at over 4,000 acres is more than 20% of the total area of the village, and has a significant influence on the health and quality of the natural environment throughout the village. At the present time there are no clear long term plans for further development of the forest preserve district property within Barrington Hills. Because the forest preserve district is such a large landholder whose open space is critical to the character of the area, the village should work closely with the Forest Preserve District to ensure that long term plans for the forest preserves are in keeping with the village's comprehensive plan.

Focus Area 12, unincorporated property within one and one half miles of the Village Boundary.



Planning Focus Areas

Comprehensive Plan

Village of Barrington Hills

- Planning Focus Areas
- 1.5 Mile Planning Limits
- Incorporated Land
- Unincorporated Land
- Village Limits
- EJ&E Railroad

NORTH

0 0.5 1 2

Scale in Miles

Base Map Data Provided by Gewalt Hamilton Associates, Inc.

Date: March 2008

Conservation Design Practices

Application of Conservation Design

The use of conservation design practices is not intended to be widely applicable throughout the community, nor modify the predominant 5 acre character of the community. Only under exceptional and unique circumstances would the Village support or encourage deviation from the traditional large lot subdivision pattern. Such exceptional conditions might be found on parcels at the periphery of the Village where the character of development in adjoining communities affects the potential to protect the natural features of the property with large lots.

On its own, this Comprehensive Plan cannot enable the establishment of conservation design. Follow-up through the adoption of amendments to the zoning, stormwater management, and subdivision ordinances would be necessary in order to fully implement these tools.

The fabric of Barrington Hills is woven into the five acre minimum lots that have supported both an attractive, sustainable living environment and the equestrian activities that are fundamentally different from other low density communities. As it looks to support this five acre pattern, the Village recognizes that there are certain physical conditions on a very few properties and certain market forces which may work to undermine the stability of this fabric. As it looks at these few properties, the Village is not intending to deviate from the existing pattern of single-family detached dwellings in a way that would encourage townhouses, condominiums, multi-family dwellings, zero lot line homes, or other deviations from that single-family detached pattern. The Village looks to use those planning practices that might support the appropriate uses of these properties, particularly those on the periphery of the community adjacent to higher intensity uses, in a way that further enhances the continued enjoyment of the larger sustainable community environment. One of these planning practices is the use of a development strategy known nationally as "conservation design". This label may be new to the Village, but the concept is not. Inherent in the practice of "platting to the center" of lakes and other natural features which guarantee property-owner responsibility for maintenance and oversight of critical natural features, the Village has had considerable experience in property development that specifically respects natural features. Finally, the Village should encourage participation in Conservation@Home, a program from BACT and Citizens for Conservation that teaches homeowners the importance of native landscaping.

Conservation Design Principles

Conservation design is a design system that takes into account the natural landscape and ecology of a development site and facilitates development while maintaining the most valuable natural features and functions of the site. Conservation design includes a collection of site design principles and practices that can be combined to create environmentally sound development. The main principles for conservation design are:

Flexible Lot Design Standards Protect and Create Natural Areas and Drainage Systems Reduce Impervious Surface Areas Implement Sustainable Stormwater Management Techniques

Along with a description of each principle, this section will highlight and discuss the specific site design practices that should be considered to implement these principles. The site design practices are taken from the *Conservation Design Resource Manual*, which was produced by the Northeastern Illinois Planning Commission (now CMAP) and Chicago Wilderness.

Practice 1: Lot Size and Open Space

Rather than controlling density by increasing lot size requirements, conservation design looks to implement standards for overall density on a given site without rigid lot size standards. By modifying minimum lot size requirements, communities encourage creative developments designed to be both profitable and sensitive to the pre-development character of the development site and community at large.

The basic principle underlying the practice of conservation design is the protection of natural and cultural resources through design flexibility. This flexibility involves the reduction of lot sizes in a development in exchange for setting aside the remainder of the property as significant amounts of natural, open space land.

In addition to allowing design flexibility, some experts argue that communities should mandate ambitious open space set asides as well. For example, to meet the definition of conservation design, a development in Lake County is required to have a substantially higher percentage of the development site set aside as open space.

Practice 2: Arranging the Development Site

The process of laying out lots, roads, and natural areas is one of the most important aspects of conservation design. Conservation design advocates for a sensitive approach to the landscape, an approach which treats each development site as a unique challenge to be approached with the complementary goals of developing the maximum allowable number of lots and conserving natural lands and processes to the greatest possible extent.

The following four-step process for arranging the development site are: (Arendt 1996).

Identify all Potential Conservation Areas. This will include all inherently unbuildable areas (floodplains, wetlands, steep slopes) and also buildable areas that are sensitive environmentally (natural areas, stream and wetland buffer areas, woodlands, etc.), significant historically and culturally, or important for conservation for some other reason. The developer will be responsible for identifying the conservation areas; a community resource inventory or comprehensive plan can be a valuable tool in monitoring the protection of conservation areas.

Locate the House (or other building) Sites. At this point, only the specific sites for buildings to be constructed should be located. To maximize the revenue potential of the sites, the developer will take care to locate the sites to maximize views and access to natural areas and other amenities.

Design the Street and Trail Systems. Determine how to most efficiently lay out the street system to access every home. Similarly, homes should have easy access to walkways and equestrian trail systems within the development and throughout the remainder of the Village.

Draw in the Lot Lines. This is the final step and should be fairly straightforward once the building sites and street system have been identified.

Practice 3: Natural Area Protection and Conservation

Conservation design encourages the dedication of open space on a site that will protect and restore natural areas and resources, and provide for passive recreation where appropriate. Through a conscientious site design process, the development can be configured to maximize the areas that are protected and conserved.

Possible areas to evaluate for protection include hydric soils, streams, lakes, wetlands, floodplains, steep slopes, significant wildlife habitats, remnant prairies, woodlands, farmland, and sensitive aquifers and their recharge areas. Certain sensitive areas, including floodways, flood fringes, non-isolated wetlands, isolated wetlands, and threatened and endangered species habitats may be protected by federal, state, and/or local statute.

Natural area buffers are an important strategy for protecting sensitive natural areas. The following list enumerates several benefits resulting from the use of buffers:

- Slows water runoff.
- Removes up to 50% or more of nutrients and pesticides in runoff.
- Removes up to 60% or more of pathogens in runoff.
- Removes up to 75% or more of sediment in runoff.
- Reduces noise and odor.
- Serves as a source of food, nesting cover, and shelter for wildlife.
- Stabilizes streambanks and reduce water temperature in stream.
- Reduce downstream flooding.

Greenways, or linear corridors of green, can function to preserve natural resources and in some cases define or link a trail system. Linking and providing connections to existing and proposed trails and greenways provides additional benefits to natural resource protection. Existing local greenways may be protected by municipal, park, forest preserve, or conservation districts, and county transportation departments. Communities also may decide to include significant historic and cultural assets in designated open space areas. Through the comprehensive planning process, communities will determine which of these areas are most relevant and important for conservation.

Practice 4: Natural Landscape Sensitivity

Excess stormwater runoff, and the resultant possible flooding and erosion, arise from development and alteration of the natural landscape. For this reason, it is highly desirable to preserve or restore features of the natural, pre-development landscape whenever possible. Careful consideration of the pre-development landscape can vastly improve the drainage and stormwater runoff performance of a development.

On sites that have been altered through grading, engineered drainage systems, and agricultural conversions, developers should be encouraged to study the original landscape and design the landscape using the original as a guide. On sites that have not been substantially altered from their natural form, developers should be encouraged to preserve this form.

Generally, substantial alteration of the existing site landscape is discouraged. Special consideration should be given, however, to proposals which seek to restore a site to its original natural form through careful and conscientious study. Restoration of the natural landscape will not be appropriate in all cases, but should be permitted unless there is a compelling agricultural or ecological reason to avoid it.

Practice 5: Natural Landscaping

Natural landscaping is the design, construction, and maintenance of landscapes that provide the beneficial natural functions that are lost through installation of conventional lawns or agriculture. Natural landscaping stresses the preservation and reintroduction of plants native to our area. The native plants used in natural landscaping are hardy and attractive. They can be used to stabilize soil, reduce flooding, absorb pollutants, and sustain wildlife.

Native landscaping has been defined as the use of plants – for example, prairie, woodland and wetland plants – that flourished in northeastern Illinois prior to settlement. Natural landscaping is a more popular and broader concept because it implies the use of native plants but also suggests landscaping to give the "look" of the landscape that existed before the mid-1800s. In addition, there also may be an attempt to restore or reconstruct the landscape to look and function more as it did before settlers, other than Native Americans, lived here.

Presently, the predominant landscaping material of the Chicago region is the turf grass lawn. The lawn is borrowed from the heavily grazed, short grass pastures and formal gardens of Europe, and provides aesthetic appeal and recreational space. This modern landscape contrasts sharply with the predominant landscape prior to European settlement. Then, prairies were interspersed with woodlands, savannas, and wetlands. Hundreds of species of plants could be found on every acre of land. It should be noted that, while turf grass lawn is an option, the Village encourages the return of open space to natural prairie.

Practice 6: Open Space Management

Planning for open space and natural resource protection in conservation design must include short and long term management for both routine and remedial maintenance. The maintenance responsibility should be detailed as part of an agreement between the property owners.

In Barrington Hills, the two preferred approaches to managing natural areas are:

- The natural area may remain in the private ownership of the property owner, a homeowner's association, or another appropriate entity.
- A conservation easement can be granted to the government (local, state or federal) or to a not-for-profit whose primary purpose is in keeping with conservation development and design, such as the Citizens for Conservation or the Barrington Area Conservation Trust. The benefits of a conservation easement are its flexibility, the potential for income tax reduction, estate tax reduction, and property tax reduction for homeowners.

Practice 7: Roadway Design

Wherever practical, the Village of Barrington Hills has worked to limit the establishment of an extensive network of public streets. The nature of roadway design in conservation design is compatible with existing Barrington Hills' practices that scale the design and responsibility to the nature of the traffic that will use it. While streets and roadways often are viewed primarily as transportation facilities, conservation design recognizes that streets are a major element of the built environment. For this reason, conservation design seeks to maximize the functional effectiveness of roadways without overbuilding, and while considering the aesthetics of the street. Narrower streets not only reduce overall impervious surface area, leading to improved stormwater management, but also encourage slower traffic speeds. Village road standards, for both public and private roads, should reflect an appropriate balance between aesthetics, maintenance, traffic management, and public safety.

The conservation design model naturally shortens road lengths by grouping developed areas where feasible. Care should be taken to carry on this natural reduction of road area through the road design process. Minimizing paved surface area is important; a second important consideration in roadway design is the conservation of scenic views and vistas. This is especially relevant in rural, conservation development communities.

Conventional developments generally include curb-and-gutter edging for new roads. Alternative edge construction and vegetated swales are other ways not only to reduce overall imperviousness but also to support the goals of impervious surface area reduction and improved stormwater management.

Practice 8: Vegetated Swales

The term "swale" (a.k.a., grassed channel, dry swale, wet swale, biofilter) refers to a series of vegetated, open channel practices that are designed specifically to treat and attenuate stormwater runoff for a specified water quality volume. As stormwater runoff flows through the channels, it is treated through filtering by the vegetation in the channel, filtering through a subsoil matrix, and/or infiltration into the underlying soils. Maintenance of grassed channels mostly involves maintenance of the grass or wetland plant cover. Swales may be used in the street right-of-way and throughout the site.

Most jurisdictions require that curb and gutter systems be installed along residential streets to convey stormwater runoff. Curb and gutter systems, however, provide no stormwater treatment and quickly discharge stormwater directly into streams. By contrast, open vegetated swales that could provide better treatment are usually discouraged or prohibited. Unlike curb and gutter systems, which move stormwater with virtually no treatment, open vegetated swales remove pollutants by allowing infi ltration and filtering to occur. Open swales encourage groundwater recharge, and can reduce the volume of stormwater runoff generated from a site.

Practice 9: Driveway Design

Like roadways in general, driveway lengths are naturally shortened by the form of conservation design. Homes are located closer together and closer to roads and streets. As a result, long driveways are rarely necessary to provide adequate access to homes and garages. Thoughtful techniques can be employed to further reduce driveway surface areas. In many cases, common residential drives serving two to five housing units are appropriate. Because driveways can be constructed to reduced standards with regard to design speed, alignment, compaction, and pavement or gravel surfaces, this is a low impact way to save on impervious surface area.

Since conservation design encourages the use of on-street parking, it is less important to provide overflow parking in private driveways.

While permeable paving blocks are only sometimes appropriate for parking areas and public roadways, they are nearly always appropriate for driveways. Allow the use of permeable pavers, gravel, or other pervious surfaces for driveways in conservation subdivisions.

Practice 10: Roof Runoff Management

Roofs are one of the most important sources of concentrated runoff from developed sites. One of the best ways to decrease the need for stormwater management systems is to manage rooftop runoff on site, instead of moving stormwater through a conveyance system. Along with reducing downstream impacts and decreasing annual runoff volumes, it can also significantly reduce the annual pollutant load.

The practice most often used to infiltrate rooftop runoff is the dry well. In this design, the storm drain is directed to underground rock-filled trenches. French drains or Dutch drains also can be used for this purpose. In these designs, the relatively deep dry well is replaced with a long trench with a perforated pipe within the gravel bed to distribute the flow throughout the length of the trench.

Run off can be diverted to a pervious area or to a treatment area using site grading, channels, and berms. Treatment options include grassed swales, bioretention, or filter strips. Alternatively, rooftop runoff can simply be diverted to pervious lawn areas, as opposed to flowing directly to the street, and thus storm drain system.

Practices that store rooftop runoff, such as cisterns and rain barrels, are the simplest in design of all rooftop runoff treatment systems. Some of these practices are available commercially and can be applied in a wide variety of site conditions.

Other practices include vegetated roof covers, also called green roofs, and extensive roof gardens, which involve blanketing roofs with a veneer of living vegetation. These systems can reduce roof runoff as well as provide an aesthetic benefit to homeowners and communities.

Best Equestrian Practices

The Village's objectives call for a reliance on the individual responsibilities of land owners as a primary approach to the achievement of community goals. Not the least of those goals are found in the area of the natural ecology of the village. As significant land holders, the equestrian community of Barrington Hills may have the greatest opportunity to assure that horse raising, riding and associated activities have a positive impact on the environmental condition of land and water in the village. Safeguarding surface water (creeks, rivers, ponds, etc.) and groundwater must be an important everyday part of horse keeping. Without voluntary adherence to good horse keeping practices, surface and groundwater are subject to pollution from:

- Sediment from eroding areas such as overgrazed pastures, roads and trails, and bare soil in paddocks turnouts, corrals and arenas
- Polluted water draining from manure piles and horse wash areas
- Excessive nutrients (from horse waste) that wash off pastures during storms
- Removal of tramped vegetation at streamside areas that can lead to streambank erosion
- Removal of vegetation which filters and absorbs water and pollutants from runoff

The three basic objectives for good horse keeping include:

1. *Control erosion – keep soil in place*

- Keep areas well vegetated and restore bare areas with vegetation. Plant roots, especially those of grasses, hold soil in place and help water infiltrate into the ground rather than run off. Vegetation also dissipates the force of rainwater hitting the ground, which detaches soil particles.
- Avoid concentrating water. Concentrated runoff can be highly erosive. Try to disperse runoff by spreading it out in a thin, shallow "sheet." Areas to watch are roads, roofs, compacted soil, and other impermeable surfaces that shed water quickly and increase the amount and velocity of runoff.
- Control horse access and human activities in vulnerable areas such as wetlands, creek banks, meadows and steep hillsides. Limit access, especially during wet periods.
- Manage pastures to prevent heavy grazing. Avoid soil compaction and excessive removal of vegetation by timing the use of pastures and controlling the number of horses. Rotate pastures to allow them to rest from grazing, to allow grasses to regrow and mature so they will reseed.
- Use filter strips and riparian buffers near creeks. Maintain a strip of dense grass downslope on bare areas such as paddocks and turnouts to help trap sediment. Riparian buffers provide valuable wildlife habitat and should contain a variety of plants including grasses, forbs, shrubs and trees.
- Keep creek banks vegetated to hold soil in place, trap sediment, and provide valuable wildlife habitat. Grasses have fibrous roots that hold the soil in place. A good indicator of root mass in grasses is the above ground growth generally equals the below ground root system. Shrubs and trees have deeper roots that are either fibrous or taproots that will anchor the soil in place.
- Install kick boards or lay railroad ties or telephone poles around arena perimeters. These will help hold footing material in place and keep it from washing away.

- Properly construct and maintain roads, trails and parking areas. Protect earthen surfaces and drainage ditches from erosion by using properly designed drainage systems, including diversions and culverts. Use appropriate surfacing materials and techniques.

- Use proper construction techniques. Revegetate areas disturbed by construction. During construction install and maintain silt fences or straw bale sediment barriers to trap sediment and slow the movement of water. Avoid soil disturbing activities just before and during the rainy season.

2. *Keep "clean" water clean*

- Divert "clean" water around areas with pollutants. Use berms, grassed waterways, underground pipes, culverts, or other methods. Consider where water will be diverted to, so as not to create new problems on the diverted path.

- Locate buildings and confinement areas away from creeks, steep slopes, and floodplains.

- Minimize disturbance to wetlands, riparian areas and meadows.

- Limit impacts of grading, runoff from roofs and other impermeable surfaces.

- Maintain vegetation and replant bare areas.

- Control potential runoff from water troughs.

3. *Manage "polluted" water*

- Keep the size of intensively used areas small to help reduce the volume of polluted water.

- Manage Manure. Remove manure regularly – daily is best. Cover stored manure with a roof, tarp or other cover, and direct runoff away from the manure storage area.

- Use filter strips to trap sediment and waste that washes off high-use and manure storage areas.

- Maintain soil moisture during the dry season by sprinkling with water to enhance bacterial decomposition of nutrients. When soil moisture is maintained in arenas, paddocks, feeding areas and even pastures, the natural breakdown of urea will occur. If areas are maintained as absolutely dry, this discourages the natural process.

- A waste pond can be designed to store water for safe distribution at a later time.

Roads and Trails

The roads and trails of Barrington Hills are an integral part of daily life and of the countryside environment. They serve six basic functions:

1. They accommodate the employment, shopping, and other travel needs of local residents.
2. They accommodate travel between origins and destinations outside the community; in fact, the majority of traffic in the Village is non-local traffic.
3. They accommodate the delivery of goods and services including life safety such as police, fire and emergency medical services.
4. They accommodate recreational activity; i.e., bicycling, hiking, horseback riding, and cross-country skiing.
5. They contribute visually to the countryside setting.
6. They unify the community through the connection of people and places, for example, in equestrian activities.

Existing Travel Patterns

Local traffic generation is light in relationship to the capacity of roadways in the Village. The direction of travel to employment, shopping, and other activities is generally east to southeast. Residents are comfortable with the two-lane, undulating roads of Barrington Hills. Slow speeds on local roads contributes to the tranquility of the rural atmosphere. Accordingly, the Village reduced the speed limit from 30mph and 35 mph to 25mph on all Village-maintained roads as of December 18, 2006. Residents are accustomed to the discontinuity of many local roads and the additional time required to travel to distant places.

Most traffic utilizing highways and roads in Barrington Hills is non-local, and is increasing as nearby municipalities grow and change. Motorists are likely to use the state highways that pass through Barrington Hills, because other routes are congested or yet to be constructed. Whereas other options may be considered, the Village continues to oppose future road scenarios that include a bypass through the Village. Such a system would severely disrupt the semi-rural countryside character and ecology of the Village.

In 2003, IDOT statistics revealed that approximately 36,000 vehicles per day passed through the community in a northwest-southeast travel corridor; 20,000 vehicles per day in an east-west corridor; and 20,000 vehicles per day in a north-south corridor. By 2020 these figures may grow to 40,000, 69,000, and 36,000 vehicles per day, respectively.

Problems resulting from such trends are already evident. Increased traffic volumes in the Barrington Hills area over the past ten years have been dramatic. The three greatest increases were experienced on Barrington, County Line, and Algonquin Roads.

Problems are also evident in traffic safety records. Traffic accidents (crashes) have increased from approximately 450 in 1990 to 483 in 2004. It should be noted that the year 2004 figure does reflect a 22% decrease from the 580 total accidents reported on 2003. Most of the reported accidents are located along Algonquin Road/Illinois Route 62. Secondary clusters of accidents have occurred along Illinois Route 59, County Line Road, Illinois Route 68, and Illinois Route 25. Of the 483 total accidents in 2004, these five (5) roads accounted for approximately 68% of all reported accidents within the Village.

Accidents are distributed throughout the day and night, but they tend to occur more often in the late afternoon and early evening. The primary cause is speeding. Normal hazards are complicated by an estimated 1,500 gravel truck trips on Illinois Route 62 daily. Discussions on the proposed widening of Route 62 should focus on improving the safety of this busy highway, particularly in wooded areas and where the road curves and dips. In addition, speed limits may need to be reduced along certain stretches of the highway.

Roadway Functions and Improvements

A system of roadways capable of accommodating traffic needs in the Barrington Hills area should reflect these basic principles:

1. Peripheral traffic should be routed on improved regional highways, including Illinois Route 53 and Quentin Road on the east, Illinois Route 22 on the north, Higgins Road on the south, and Randall Road west of the Fox River.

2. All roadways within and adjacent to Barrington Hills should provide designated functions as a part of a network which is coordinated by agencies.

3. Strategic Regional Arterials (SRA) should permit the continuation of intersecting local service roads with grade separation and dedicated lanes for turning movements.

4. Internal roadways should be improved for traffic safety purposes, but not for the purpose of increased speed capacity.

5. Traffic control and law enforcement will require interagency assistance as volume increases.

Roadway functions shall be similar to those in the BACOG Comprehensive Plan. They are:

Expressways – to accommodate long-distance, high-speed traffic beyond the BACOG area; examples:

- *Northwest Tollway (I-90)*
- *Illinois Route 53*

Arterials – to accommodate medium distance through traffic beyond individual villages; examples:

- *Illinois Route 22*
- *Illinois Route 25*
- *Illinois Route 59 (New Sutton Road)*
- *Illinois Route 62 (Algonquin Road)*
- *Illinois Route 72 (Higgins Road)*
- *County Line Road*
- *Quentin Road*
- *U.S.14 (Northwest Highway)*

Collectors – to accommodate relatively high volumes of local and non-local traffic over short to medium distances at slower speeds; examples:

- *Barrington Road*
- *Ela Road*
- *Illinois Route 68 (Dundee Road)*
- *New Hart Road*
- *Palatine Road*

Local/Service Roads – to accommodate local traffic between minor access roads and area service roads; examples:

- *Bartlett Road*
- *Bateman Road*
- *Braeburn Road*
- *Brinker Road*
- *Donlea Road*
- *Dundee Lane*
- *Haeger's Bend Road*
- *Healy Road*
- *Meadow Hill Road*
- *Merri-Oaks Road*
- *Old Sutton Road*
- *Otis Road*
- *Penny Road*
- *Plum Tree Road*
- *Ridge Road*
- *River Road*
- *Spring Creek Road*
- *Sutton Road*

Continued transportation planning and traffic engineering is essential. To the extent feasible, it will be effective for the Village of Barrington Hills to carry out such activities in coordination with BACOG and the appropriate State, County, and Township Highway Departments.

It should also be noted that Barrington Hills has a road program that, among other things, identifies road construction and maintenance issues. The Village is currently reviewing the proposed 10-year road program for 2006 through 2015.

Scenic Roadways and Heritage Corridors

In Barrington Hills, the environmental character of public roadways is as critical as their traffic-carrying capability. In certain areas, the scenic roadside character may be of fi rst priority. Barrington Hills owes much of its beauty to what lies within 100 feet of the roadway pavement. It is essential, therefore, that care and attention be given to these assets.

In 1971, as background for the BACOG Comprehensive Plan, a detailed inventory of roadway visual characteristics was conducted. Each segment of roadway was classified in accordance

with its "response to the environment" and its "adaptability to improvement." An analysis was conducted for the Village of Barrington Hills in 1977 and has served as a reference ever since.

As a result, the Village should continue to consider the roadway environment and corridor character in the planning and execution of all roadway and subdivision improvements and maintenance. Furthermore, the Village should enter into agreements with the Illinois Department of Transportation and the various county highway departments to implement environmentally sensitive design standards for highways and roads as presently enjoyed in Barrington Hills. These standards would deal with such features as grades and curves, pavement widths, landscaping, vistas, noise control, drainage, signs, lighting, and maintenance. The Village formulates and implements a roadway maintenance program and in the process should encourage the planting of native trees and plant materials.

In addition, the Village should work with the BACT to designate certain rural residential roads of visual, historical and/or cultural significance as Heritage Corridors with the intent of protecting the appearance or character of these roadways. The first roads to be considered for such designation will be Brinker Road and Sutton Road. Each Heritage Corridor will be a preservation district encompassing the road right-of-way, including the road pavement, easement, bridges, signs, shoulders and vegetation. The Heritage Corridor (see the Appendix for pertinent Illinois State Statutes) will be jointly held by the Village and the BACTrust. This program will protect these special roadways for future generations. These roads should be slow speed areas only.
In line with the Village's approach to individual responsibility and participation, and in lieu of regulatory responses, the Village may campaign for and accept the dedication of scenic easements along public and private roads as a means of protecting the landscape features which contribute to the countryside character and the view from the road. The Village is pursuing tools to designate scenic roadways for preservation of existing scenic character.

Rails

The EJ&E rail line passes through Barrington Hills from north to south. The Village grew, expanded and planned for its future based on the historic light train volumes on this Class II short-line railroad. If train volumes were to increase on this line, due either to freight and/or passenger service, then the Village would face various impacts, ultimately affecting local service provisions, transportation and quality of life.

The rail line crosses most major roadways in and around Barrington Hills. From north to south, such crossings occur at County Line Road (at-grade), Otis Road (at-grade), Route 62/Route 68 (grade separated), Penny Road (at-grade) and Old Sutton Road (at-grade). The existing at-grade crossings are of greatest concern to the Village in the event of higher train volumes, since traffic back-ups would be more frequent due to stopped, slow-moving and potentially derailed trains. Delayed motorists would likely proceed to smaller collector roads and local streets, which are not designed and constructed to accommodate the additional traffic weight and volume which would be forced upon them. School buses, which cross this rail line nearly 400 times daily, would experience more frequent delays and more safety issues arising from the transportation

of children to school. In addition, increased train traffic would cause disruptions in emergency vehicle response time for police, fire and ambulatory services. An Emergency Management Plan should be created pertaining to the rail line.

The rail line runs through environmentally sensitive areas, including the Spring Creek Nature Preserve and the Spring Creek and Flint Creek environmental corridors. Increased pollutants from stormwater runoff and potential contamination from spills would harm soils and water quality for local aquifers and creeks. Increased vibrations from trains would negatively impact structural integrity, enjoyment of residential dwellings, and wildlife habitat associated with nearby forest preserves and conservation areas. Increased traffic backups and more idling motor vehicles would significantly increase local emissions and noxious fumes, impacting public health and quality of life. Potential mitigation measures include noise walls, landscape buffers and vegetated swales along the rail right-of-way.

The Village is working with the communities along the western and northern segment of the rail line to plan for the creation of Quiet Zones. A Quiet Zone, if properly established according to the rules set forth by the Federal Railroad Administration, prohibits trains from blowing their horns at each at-grade crossing within the community. To establish a new Quiet Zone the active grade crossing must have warning devices, which may consist of flashing lights, gates, constant warning circuitry and power off indicators, and an advance warning sign that advises motorists that train horns are not sounded at the crossing, depending on the road classification. The costs of preparing the at-grade crossing(s) to the standards required are generally born by the local community. Together with its member communities, the Village of Barrington Hills will share the cost of the necessary improvements. Of the two at-grade crossings in the Village, only Penny Road is planned for improvements given the low average daily traffic and width limitations of Otis Road. Of the potential Supplemental Safety Measures that may be used to mitigate the silencing of locomotive horns at railroad at-grade crossings, gates with medians or channelization devices (traffic separators) are the recommended improvements to limit the ability of vehicles by-passing the gates at the Penny Road crossing. However, improvements to the Otis Road crossing may also be warranted if other major road crossings are blocked due to increased derailments resulting from more freight train traffic.

Noise Control

Noise generated by vehicular traffic intrudes on the countryside. This problem is recognized by the IDOT which prepares a noise impact analysis for State roadway improvement projects. In those situations where local municipalities have carried out their responsibility to control land use in relation to roadways, usually by setback regulations, IDOT will refine the design of a roadway improvement to include noise control features such as landscape berms.

Therefore, it is recommended that the Village continue to establish noise control setback lines along all State roadways, regional highways, rail lines and area service roads in coordination with IDOT noise impact data. Given the inordinate volume of truck and train traffic with its associated noise, consideration should be directed to implement physical features to provide long-term mitigation. Earthen berms and landscaping, which are consistent with the prevailing community character, should be encouraged.

Lighting

Light pollution is a broad term typically associated with three major areas of potential concern. These include *light trespass*, *glare*, and *urban sky glow*. A few of the more minor but related problems consist of confusion caused by light sources, adverse aesthetic effects caused by clutter and abundant landscape/tree uplighting, energy waste, and general annoyance. All of these problems can have adverse effects not only on the general public, animals, and vegetation, but also can affect the safety of driving motorists. The Village should promote a low-lit rural atmosphere where artificial light is minimized and where the natural darkness of night is maximized. The International Dark Sky Association provides a listing of recommended light fixtures used in the illumination of residences, landscaping, roadways and other elements of the built environment. The Village should disseminate this information to all residents of Barrington Hills.

Besides light pollution, the installation of roadway lighting has several other negative side effects which can be loosely associated with environmental impacts. These include color of the lighting sources used, visual intrusion associated with the lighting structures, and the roadside hazards the structures impose on the highways.

In order to minimize the negative impacts associated with roadway lighting and assure a safe transportation network, it is recommended that the Village discourage the excessive over-lighting of the existing and planned transportation network. Roadway lighting should not only be designed to be energy efficient, but should provide for direction and intensity control. In most applications, the minimum amount of lighting necessary to assure adequate safety should be used. Common practices include the use of pavement markings and refl ection obstruction markers with a lighting scheme in order to accomplish a "less is more" strategy and to fulfi ll the safety need of the motoring public while permitting the flourishing landscape backdrop of the roadway.

Trails and Pathways

Nonmotorized transportation continues to be an integral part of the character of Barrington Hills. Bicycling, hiking, horseback riding, and cross-country skiing are enjoyed by many residents over the course of the year, taking advantage of the scenic qualities and the open space throughout the community.

Since the release in 1978 of the BACOG bikeway system report, the Barrington area has considered ways to link activity centers by another and more pleasant means than the automobile. Recently IDOT has incorporated a bike path with its improvement of Algonquin Road, linking Crabtree Nature Center and the points eastward. Similar linkages have been proposed toward the Village of Barrington and outwardly in County transportation plans.

An even more extensive and popular system of trails is that which currently exists for horseback riding. This system radiates from the Barrington Countryside Park District Riding Center, located on Bateman Road, and includes about 210 miles of trails through public Forest Preserve and over private property as designated by license, easement, or other form of agreement from the property owner. These equestrian trails are mapped and maintained by the Riding Club of Barrington Hills, a function they have continuously provided since 1937. A map that generally outlines the known equestrian trail network that exists within the Village is provided in the Appendix of this document. The network includes both public and private trails.

With such indigenous information the Village has examined the use of trails during the subdivision process and property owners have preserved their existence by recording equestrian easements on the plats.

Establishment of the Equestrian Commission
In June of 2005, the Village of Barrington Hills established the Equestrian Commission with the following purpose: "...to protect the public health and welfare of residents of the Village and to provide expertise in the area of equestrian activities with the Village to the Village Board, various Village committees and Village staff."

Equestrian activity is not a recent phenomenon to Barrington Hills or to the countryside area of the Village of Barrington. Since before World War I, equestrian farmers supplied the region with carriage or riding horses, and their names survive today in such roads as Otis, Buckley, and Hart. Similar support existed when in 1994 the Riding Club of Barrington Hills conducted a survey of residents, over 90% of whom responded that equestrian activity is an important part of the community character. Such sentiment is borne out that, since 1957, the Village has issued more building permits for stables for personal use than tennis courts, swimming pools, or other outdoor recreational structures. It is often been said that on horseback one can appreciate the environmental character of Barrington Hills, one tree at a time.

Enjoyment of the trails on public land has been possible in a large part by the limited number of users, the seasonal nature of the use, and a common respect of the environment, even to the extent of voluntarily avoiding those areas too fragile or sensitive for recreational incursions. The Village should support the continuation of this practice of self-regulation. The gentle use of the landscape for equestrian activities, and the public and individual environmental ethic that sustains sensitive conservation of the lands supporting those equestrian activities, are conditions which go hand-in-hand with the protection of the character and value of the place and the community of Barrington Hills.

A quantitative understanding of the natural environment within which these trails are used may provide direction and guidance for the future. Given the relatively vast holdings of public land, intricate drainageways, and scenic roadways, the Village and other governmental entities would benefit from an inventory upon which certain agreed strategies of trail usage and land management could be based. In order to further advance Village goals and policies related to the advancement and preservation of equestrian activities, Barrington Hills formed the Equestrian Commission. As the Village existing equestrian trail network continues to expand in the Village and relevant issues related to the impacts of development on the Village's equestrian character must be dealt with, the Commission will be called upon to provide insight and recommendations to the community and Village officials.

It is recommended that this system of trails and pathways be preserved, enhanced and extended, and that it remain a permanent asset of the community. The Village should participate in this process by requiring that all subdivision developers maintain and enhance existing equestrian trails on their properties. In cases where no trails exist, developers can be required, in consultation with the Equestrian Commission and the Equestrian Ordinance, to establish them. It is the Village's policy to encourage private and public efforts to expand the system in a safe and sensitive manner.

Appendix

Glossary

Agriculture
The use of land for farming, dairying, pasturage, horticulture, floriculture, viticulture, and animal and poultry husbandry (including the breeding and raising of horses as an occupation) and the necessary accessory uses for handling or storing the produce.

Aquifer
An underground stratum of porous material, even rock, that contains water usually put to drinking purposes.

Arterials
Arterials are intended to provide a high degree of mobility and function as the primary travel routes for vehicles entering, leaving, and passing through urban areas. They are generally located about a mile apart to form a grid street system and are intended to carry high volumes at high operating speeds (35-45 mph) and have adequate capacity to operate at high levels of service.

Berm
An earthen ridge, attributable to glacier activity, but also a technique used in landscape design or stormwater management.

Bog
A low wet area covered with native vegetation that is characterized by an acidic water supply.

Collectors
The collector street system is designed to support the arterial network. Collector streets are generally located at the ½-mile points within the grid system and consist of medium-capacity, medium volume streets that serve to link high-level arterial streets to lower level local streets. Operating speeds are typically lower on collectors than non-minor arterials and should have limited continuity so as to not encourage through traffic but still provide for local movement of vehicles between residential, commercial and industrial areas of the community. The collector system provides for some direct land access, but to a more limited degree than local streets. Minor Arterials/Major Collectors tend to be located on the edges of residential neighborhoods, while minor collectors penetrate the neighborhoods and may permit curbside parking.

Conservation Easement
"A conservation easement is a legal agreement between a landowner and a land trust or government agency, that permanently limits uses of the land in order to protect its conservation values. It allows landowners to continue to own and use their own land, and they can also sell it or pass it on to heirs" (Land Trust Alliance).

Dry Hydrant
A constructed facility to draw surface water by means of a pump for fi re suppression.

Easement
A legal interest in property permitting a defined use or restriction, the former being for access and the later in terms of conservation.

Equestrian Trail
A travelway, sometimes an easement, dedicated for horse riding; also known as a bridle path.

Eutrophication
The process by which a body of water becomes enriched in dissolved nutrients (as phosphates) that stimulate the growth of aquatic plant life usually resulting in the depletion of dissolved oxygen.

Fen
A low wet area covered with native vegetation that is characterized by a high calcium content in the water supply.

Floodplain
An area within a watershed which includes the stream, floodway, and beyond to a point that will be covered with water after a severe storm.

Flyway
The aerial path repetitively taken by migratory birds including land areas for rest and feeding.

Forb
Any herbaceous plant, excluding grasses.

Ground Water Recharge Area
A point of access to the aquifer generally within the immediate area of a shallow well.

Historic Homestead
A grouping of buildings of a common architectural theme or purpose usually attributed to a time prior to World War II.

Hydrophyte
Any plant that can grow only in water or very wet soil.

Home Rule
The authority of general units of government derived directly from the State constitution as opposed to the State legislation.

Kettle
A depression or cavity left by glacial drift.

Local/Service Roads
Local service roads provide direct land access. Movement on local streets is incidental and involves traveling to or from a collector facility. Therefore, trip lengths on local streets are typically short and, as a result, volumes and speeds on these streets are typically low. The local street system is also typically planned to ensure that all neighborhoods are accessible by at least two (2) routes for emergency and service vehicles. The principal role of the local street system is to carry traffic and provide for safe and convenient access to housing areas and other land uses.

Moraine
A mass or ridge or rocks, dirt, and other natural debris deposited at the side or end of a glacier or beneath the ice as the glacier melts. The debris is scraped up by the glacier as it moves along.

Prairie
A type of grassland containing few trees and characterized by mixed species of native forbs and dominated by native grasses.

Seepage Field
An element of a septic system that is after the tank where the effluent flowing through tiles comes in contact with the soil and is treated by evapotranspiration.

Stormwater Runoff
A precipitation component (including snow melt) in a hydrological model for the analysis of a watershed.

Strategic Regional Arterial (SRA)
A roadway(s) which adjoins and contributes to the operational efficiency of the Federal Highway System as so designated by the passage of the Federal Intermodal Surface Transportation Enhancement Act.

Till
Glacial drift or deposit of stiff clay, gravel, sand, and boulders.

Watershed
A specific geographical area defined by topography within which the surface water gathers or accumulates.

Wetland
A transitional area between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. A wetland generally includes but is not limited to areas with hydrophytes in hydric soils such as those commonly known as marshes, swamps, bogs, and fens.

Woodland
A type of forest containing scattered-to-many trees depending on past disturbances. A woodland usually has a well developed shrub layer and a diverse herbaceous flora.

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Heritage Corridors

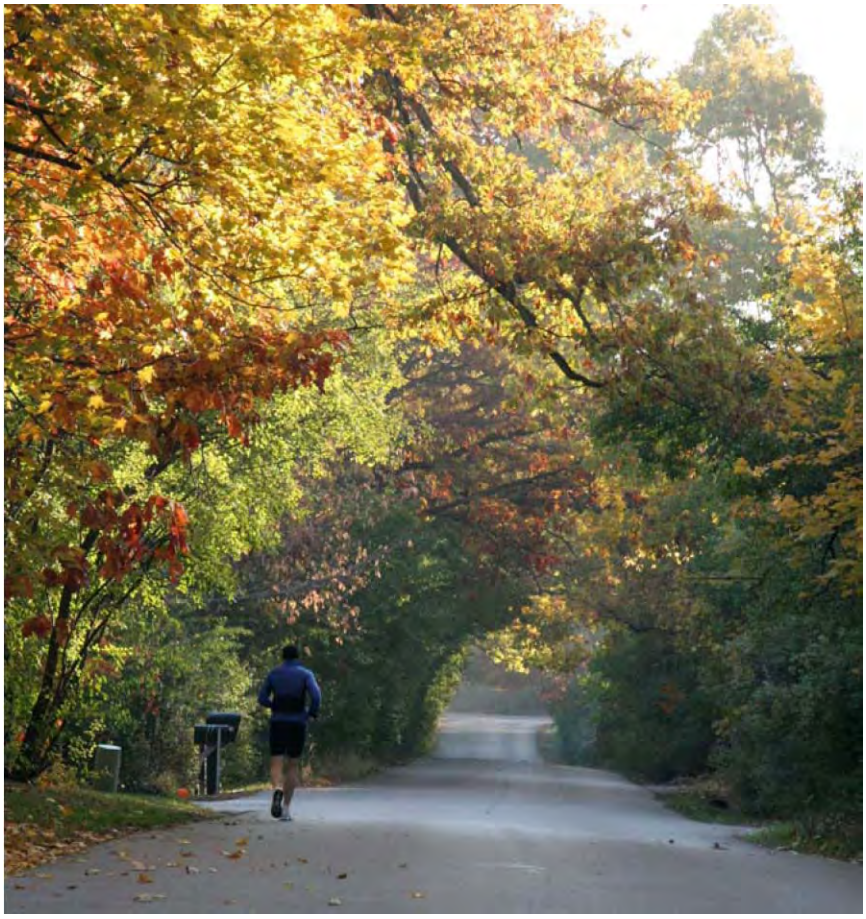


Photo by Bob Lee

A program of:

Barrington Area Conservation Trust

Heritage Corridors

Definitions:

Heritage Corridors define the rural character of the greater Barrington area. These roads maintain the visual, historical, and cultural significance of the communities. This program encourages them to be maintained in their natural scenic condition for the benefit of the public.

Heritage Corridors:

These roadways are defined as the roads that represent the rural character of the Barrington Communities. They were originally designed to be rural residential routes that connected neighbors and weaved through the community. The significance of the corridor protection is that as a result of this protection, the appearance or character will remain relatively unchanged and embody the essential character related to the local culture from earlier historic periods as a result of the location, appearance or physical aspects of the corridor.

The *Heritage Corridor* will be a preservation district in which the geographic area is identified with a designated road. This area minimally will include the right-of-way including the road pavement, 10-20 feet of easement held by the local Village government and the BACTrust. This easement may also include any structures such as bridges, signs, shoulders and vegetation.

Requirements:

Primary requirements that must be fulfilled:

- Designated roadways connect major thoroughfares, but were designed for local residential use.
- The rural character of the area would be altered if the road was altered

Secondary requirements; (Roads must fulfill two or more of the following conditions):

- They have scenic value and/or possess public vistas
- They are two-lane residential roads with minimal shoulders
- They pass through or are adjacent to environmentally sensitive areas and/or habitats
- They are parallel to or are crossed by historic riding trails
- They have a documented historical value to the community
- They possess archeological features
- The possess distinct expressions of local community life

Benefits:

This program will protect the roads for future generations in the following ways:

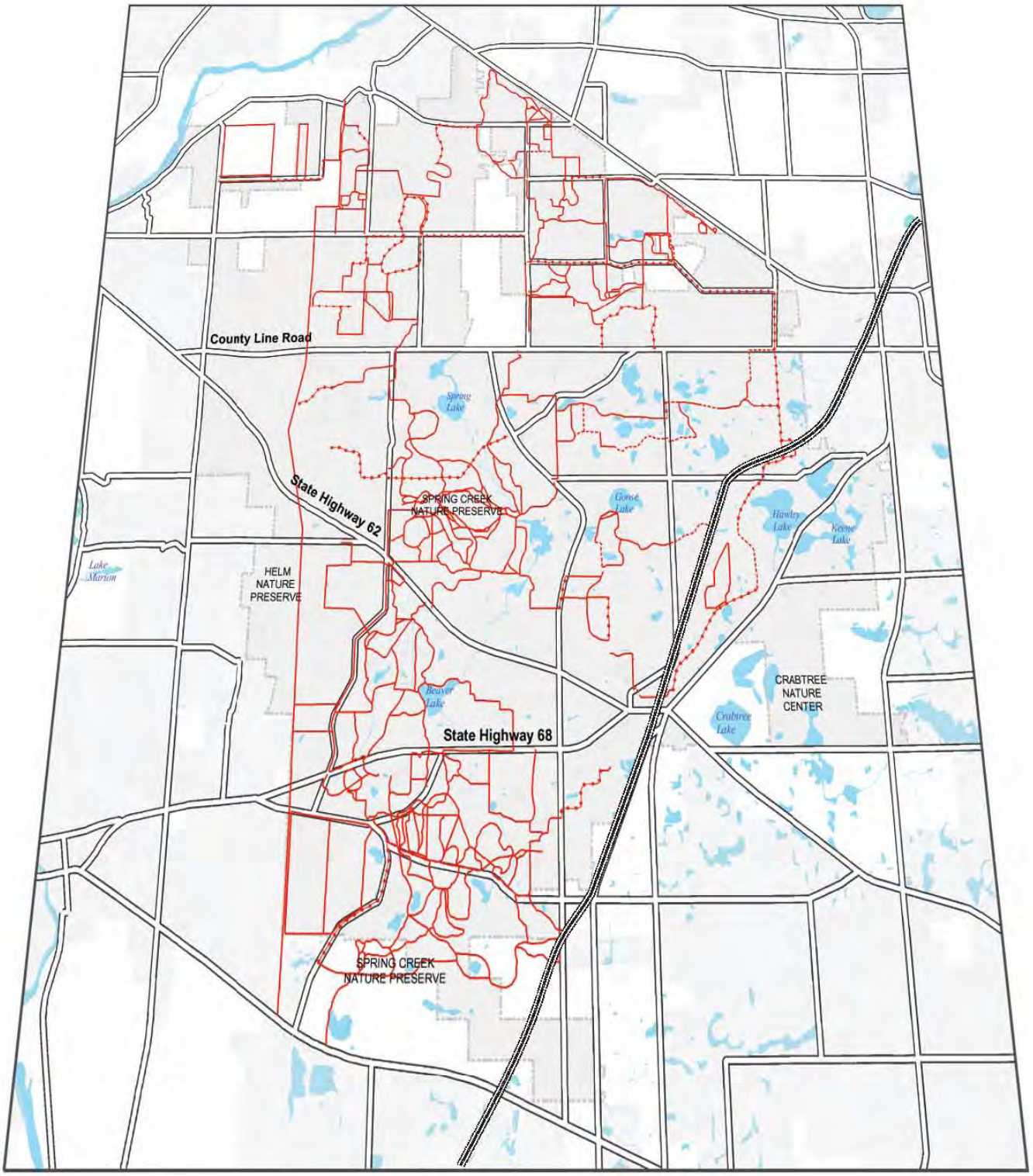
- By promoting a sense of place
- By protecting scenic, natural and historic resources in the road corridors
- By protecting recreational value of roads that encourage walking, biking, riding horses, or a drive in the countryside for pleasure

Additional benefits of Heritage Corridors:

- Expansive views
- Unusual land forms
- Woodlands
- Wetlands
- Prairies
- Autumn color
- Rolling Farmland

Architectural features

- Churches and old cemeteries
- Farmsteads
- Historically significant buildings
- Historical markers
- Rail lines
- Landscapes
- Roadway features, bridges, tunnels, etc…



Equestrian Trail Network*

Comprehensive Plan

Village of Barrington Hills

Driveway Trail
Ground Trail
Roadside Trail
EJ&E Railroad

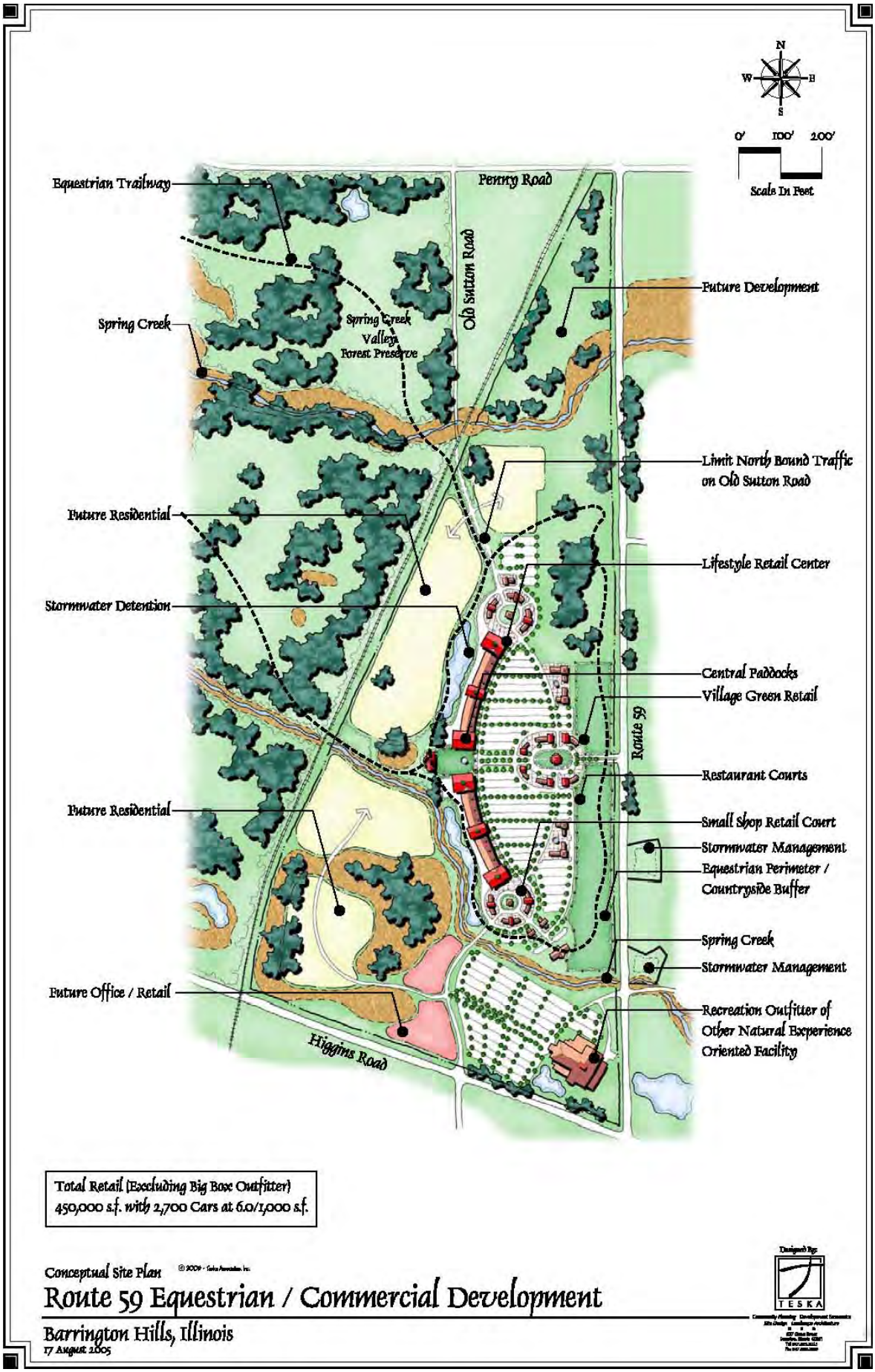
NORTH

TESKA

Date: March 2008

** Exhibit represents current knowledge of public and private equestrian trails and is subject to change.*
*** Private trails on private property are for use by riding club members on horseback only.*

Base Map Data Provided by
Gewalt Hamilton Associates, Inc.


N
W
E
S
0'
100'
200'
Scale In Feet
Equestrian Trailway
Penny Road
Old Sutton Road
Future Development
Spring Creek
Spring Creek Valley Forest Preserve
Limit North Bound Traffic on Old Sutton Road
Future Residential
Lifestyle Retail Center
Stormwater Detention
Central Paddocks
Village Green Retail
Route 59
Restaurant Courts
Future Residential
Small Shop Retail Court
Stormwater Management
Equestrian Perimeter / Countryside Buffer
Spring Creek
Stormwater Management
Future Office / Retail
Recreation Outfitter of Other Natural Experience Oriented Facility
Higgins Road
Total Retail (Excluding Big Box Outfitter)
450,000 s.f. with 2,700 Cars at 6.0/1,000 s.f.
Conceptual Site Plan
© 2009 - Teska Associates, Inc.
Route 59 Equestrian / Commercial Development
Barrington Hills, Illinois
17 August 2005
Designed By:
TESKA

Insert Plat of Horizon Farm