

# Integrating Cultural and Natural Landscape Values in Louisville's Olmsted Parks and Parkways

*Editor's Note: In 1991 the multi-disciplinary team of Andropogon Associates and LANDSCAPES was hired by the Louisville Olmsted Park Conservancy and others to develop a comprehensive master plan for three large parks and a parkway system designed by the Olmsted firm in the late 19th—early 20th century which would preserve the parks' legacy for future generations.*

*In order to achieve this goal, the team had to meet the challenge of identifying and integrating the cultural and natural landscape issues and values inherent in a hundred year old park network designed by an influential firm.*

*The following paper addresses the integrated planning process and steps the team undertook over a several year period to meet the challenge.*

## Introduction

*The Olmsteds have built our parks and are responsible for all of their marvelous beauty; we neither plan, construct nor destroy without the advice of the Olmsteds... They have the most marvelous ability and wonderful foresight as to future results of constructive work.”<sup>1</sup>*

What we know as historic designed landscapes are natural environments that have been altered by planned human interactions. The Louisville Parks and Parkways have value both as artistic and cultural landscapes, designed by recognized landscape architecture masters Frederick Law Olmsted, Sr., John Charles Olmsted and members of the Olmsted firm, and as natural landscapes and ecological resources, which provide important green environments for wildlife habitat and recreational activities in a dense urban setting.

The Olmsted work in Louisville began in 1890 and continued consistently through 1916 with some later advice in the 1930s. The comprehensive system developed under the Olmsted firm at Louisville was the final park and parkway vision brought to form under the guidance of Frederick Law Olmsted, Sr.

Olmsted's design were inspired by

the unique natural qualities of three areas, each park providing entirely different kinds of public landscape for Louisville's citizens. Shawnee Park is sited along the Ohio River frontage. Iroquois Park contains the scenic promontory, forests and park-like surrounds of Burnt Knob or Jacob's Park; and Cherokee Park is centered on the pastoral, rolling valley sur-

rounding Bear Grass Creek. The firm planned park improvements to enhance access, provide scenic experience and develop diverse recreational opportunities based on the character of each area. Each park was planned as a unified composition, organized for a complete landscape experience as stated in a letter dated May 24 1899: *"Everything that is done, that is visible from the surface at any rate, should be in harmony with a comprehensive, sensible general plan."*<sup>2</sup>

### **Master Planning for Louisville Olmsted Parks and Parkways**

These three large parks and the parkway system were the subject of comprehensive planning efforts undertaken in 1991 and completed in 1994. Led by the Louisville Olmsted Parks Conservancy the planning process included broad participation of groups and individuals in Louisville and a multi-disciplinary consultant team. Andropogon Associates, known for their work in the natural resource field, functioned as team leader. As a starting point Andropogon Associates investigated the indigenous, native landscape and pre-design condition of the three parks, the existing natural resources, landscape cover types, areas and nature of disturbances, current uses and existing landscape management. By contrast, LANDSCAPES initial data gathering related closely to our role as historic resources specialist. We developed an understanding of the Olmsted design intent, as-built condition and historic landscape charac-

ter and compared these to the existing conditions, current park landscape character and remaining Olmsted era features. Other team members contributed local ecology expertise, civil engineering skills and landscape history.<sup>3</sup> On the client side, the Louisville Olmsted Parks Conservancy (LOPC), the Louisville and Jefferson County Parks Department (Metro Parks), the Louisville Friends of Olmsted Parks, three park stewardship councils, neighborhood representatives, and citizens all brought a plethora of ideas, desires, demands, feelings and hopes to the planning process. In addition, the conditions of the parks and parkways communicated dire needs- failing drainage systems, partially lost circulation systems, degraded natural systems, lost historic character and features and other problems. From these varied positions, a comprehensive planning process moved forward.

This paper is written from the perspective of a cultural landscape architect working toward the preservation of historic resources in rehabilitation planning for Louisville's urban parks and parkways. As the project proceeded, the role of the author was to frame preservation concepts, articulate their detailed applications, hear and understand natural resource concepts and their detailed applications and work together with Andropogon Associates and LOPC to find the balance that would fulfill both cultural and natural resource agendas. The process undertaken was not one where dogma and entrenched

positions would hold sway. Rather, a spirit of mutual respect, interest and willingness to engage in dialogue was required to undertake this planning challenge.

### **Disciplines and Division of Responsibility**

The issues facing the Olmsted Parks and Parkways of Louisville are broad and far-reaching. The team members experience in urban parks, as well as ecological restoration and historic preservation comes together effectively to address the myriad issues facing our public landscapes of the nineteenth century as they complete their first century of use and service to urban populations.

Philosophical guidance was drawn from two disciplines, natural resource restoration and cultural landscape preservation. As we proceeded, it was apparent that conventional application of each discipline often turned on a blind eye to the other seeking results that on the surface were incompatible. Take, for example, the issue of "period of significance." In the field of preservation the important time span is the era of human interventions that created a designed landscape. On the contrary, in the field on ecological restoration the pre-contact period when the landscape was in a state of ecological balance is the important time and the reestablishment of lost structure, function and integrity of the indigenous ecosystem is the goal. These are very different perspectives that are in greatest conflict at the garden scale

since horticulturally and aesthetically driven design and ecologically driven restoration are in direct opposition. The implementation of each would potentially obliterate the other. These perceived incompatibilities necessitated movement to a deeper level, return to principles, revisitation of project objectives and avid pursuit of overlap and compatibility. At the scale of the larger landscape there is room for a rich dialogue about approaches and options.

Once each team member was grounded in their data base, project guiding principles were crafted collaboratively, used as a touchstone in each task and refined over the course of the project. The published guiding principles are included here as a sidebar, Figure 1. These principles address values and balance, integrating the cultural, natural and sustainable. As the project proceeded communication and testing did as well. The debate, heated at times, eventually led to the development of comprehensive vision that achieves a balance of cultural and natural resource values and approaches and is enriched by both.<sup>4</sup>

The first step is to begin sharing knowledge and achieve some understanding of each others specialization. In undertaking a historic preservation treatment a sequence of steps is followed in order to develop sound recommendations for the future of these historic landscapes. The steps in the preservation planning process, followed in the Louisville master planning project are:

- Historic research for the site with historic context provided by comparable properties nationwide;
  - Detailed inventory of the existing conditions;
  - Analysis of the character-defining features of the landscape over time;
  - Exploration of treatment alternatives and selection of a treatment followed by treatment implementation;
  - Landscape management of natural and built elements to address ongoing preservation;
  - Interpretation of landscape to the public.
- Based on all relevant factors--research findings, existing conditions, Conservancy and community goals, etc.--treatments to preserve the character-defining elements of these historic landscapes are indicated. These elements include topography, vegetation, circulation, spatial relationships, structures, site furnishings, ob-

- All actions must be guided by respect for the inherent landscape quality of each park and the parkway system. The historic Olmsted design shaped places for public enjoyment, guided by the unique qualities of each park. Current and future efforts must respect this legacy.
- Natural processes are the foundation of these resources. All decisions must sustain these processes so that natural systems are preserved and enhanced.
- These parks and parkways form a unique component of the city fabric, a contributing factor to the quality of life for all citizens. Future efforts must understand the parks system's larger setting, both in terms of community perception and physical environment.
- People of all ages and abilities should be able to enjoy a variety of recreational opportunities that can be supported by the landscape and facilities.
- Ultimately, the character and quality of these parks and parkways will depend on how they are managed. Skills, training, staffing, volunteer coordination, and a stable funding base are needed to ensure the fulfillment of these principles over time.
- Three key objectives permeate this Master Plan and are perceived as the crux of its program for renewal. If these are met, the mission will be fulfilled.
- Build an ethic of stewardship for the public landscape as a community based partnership.
- Integrate ecological restoration and historic preservations to shape the future vision.
- Upgrade the staffing and expertise of Metro Parks to bring skills and resources to the management of the living and built landscapes.

Figure 1. Guiding Principles from the Louisville Olmsted Parks Master Plan, (Andropogon Associates and LANDSCAPES.)

jects, natural systems and setting. Overall, the primary treatment for the Louisville Parks and Parkways is:

**Rehabilitation** which brings the historic landscape to a fully useful condition, preserving historic character, while incorporating additions and alterations for contemporary and future use and management.<sup>5</sup>

The use of a different terminology in the natural resource field complicates the issues. A definition of ecological restoration is drawn from the Society for Ecological Restoration newsletter, summer 1993 states:

**Ecological restoration** is the process of reestablishing to the extent possible the structure, function, and integrity of indigenous ecosystems and the sustaining habitats that they provide.

In this master plan, restoration is used as an umbrella term to describe the interventions undertaken to return a disturbed landscape to a sound ecological balance. Other terms are also used to describe the bringing back lost of ecological functions or reinstating of failed processes. The restoration of indigenous communities and ecosystem function would be as do-able as this description sounds if it were known precisely how natural systems work and all the component pieces were at hand. The concept of a restoration presumes that it is possible to replace missing pieces and or remove added elements.

While removal of invasive exotics is possible, removal of all new elements, such as changes in the atmosphere and alterations to nutrient availability, is not. With complex living systems a range of interventions can be undertaken, some of which seek to restore something, others which rehabilitate some aspect and others which simply safeguard what remains. The cumulative result moves toward a healthier system. It is also assumed that this is a process where all the participants learn by doing. A commitment to sustaining indigenous systems and a hands-on approach, will over time lead to the discovery of new tools and techniques that are unforeseen. The underlying intent is that this generation make as great a contribution the renew and sustain these public places as did the generation that created the Louisville Olmsted Parks and Parkways.

Recommendations for historic preservation and ecological restoration are incorporated in the planning process, alongside the information and issues pertaining to infrastructure, user needs, management objectives and maintenance capabilities as a part of the overall master planning considerations. Rather than focusing on terms which vary in usage and understanding, the reasons for the recommendations are set forth.

With the project basis and understanding of the breadth of issues at hand, Andropogon Associates took the lead in developing guidelines for the living landscape while LAND-

SCAPES took the lead in parallel guidelines for the built landscape. LANDSCAPES' role in the living landscape was to provide our assessment of historic designed landscape cover types, provide documentation of historic landscape character, articulate the role of vegetation in the Olmsted spatial organization role, analyze historic planting lists and correspondence for species mix and intent and comment on the proposed direction set by Andropogon from these perspectives.

Principles were developed for the built elements within the parks and parkways that are applied in each decision. It is necessary to achieve a balanced solution and some aspects may have more importance than others in a given situation but all must be considered. The principles are: *historic precedent and value, respect for natural resources, harmony, function, diverse use, safety, durability and maintainability and universal access*. The first two topics are most relevant to this discussion and are:

1. *Historic precedent is based in the Olmsted design intent, described in detail for each park and the parkways earlier. The historic character of the each element in its setting is considered and remaining historic features are valued. The Olmsted approach to built elements was to provide serviceability and aesthetic quality, simultaneously blending these items into the park and parkway environment.*

2. *Respect for natural resources is primarily an issue of proper siting of built elements within the landscape and care during the construction of new elements or repair of existing ones. The inclusion of built elements or the provision of utilities should not degrade environmental quality and if impacts are unavoidable they should be minimized and mitigated.*

The issues that are generally applicable to the renewal of built elements throughout the parks and along the parkways address the repeating factors of dysfunction, conflict and lack of optimal use. A series of priorities address full function, resolution of conflict and full use of the built landscape, to include infrastructure and circulation drives, paths, and parking, drainage, utilities, facilities and furnishings. As a parallel, Andropogon Associates developed principles of landscape sustainability, which they have expounded in the companion presentation and paper in detail.

Drawing from the parkways and each of the three parks project examples are used to demonstrate the decision-making process. In each case the historic basis for the cultural resource is briefly described, the area and issues identified and finally the results are presented and discussed.

### Parkways

The Louisville parkways were developed in the late nineteenth and early twentieth century as a connect-

ing system of wide, tree-lined streets. Figure 2 shows the Olmsted intent for the planting along Southern Parkway with bands alternating trees in three pairs of rows along the six row corridor of main central drive, planted medians, service drives and planted frontages. Predominantly residential in character, the 14.5 mile, three-part system includes the 150 foot wide, Southern Parkway (2.6 miles) accessing Iroquois Park, the 120 foot wide, Eastern Parkway and Cherokee Parkway (4.3 miles) accessing Cherokee Park and the 120 foot wide, Western Parkways (7.6 miles) accessing Shawnee Park, including Algonquin, Southwestern and Northwestern parkway segments. The central linkage between these three corridors was never appropriately carried out, as seen in Figure 2. Olmsted plans and correspondence document the parkway design and intent while 1928 aerial photographs and historic postcards and photographs identify the as-built character and details of the parkways. Early problems with achieving desired widths, getting clear rights-of-way, losing tree plantings and the variations implicit in construction over an extended period of time comprise a complex historic record. In addition upgrading of sewer and utility lines along parkways have caused extensive root damage in some areas.

Changes over time have led to varied existing conditions along the parkways that express their intended historic character, their more recent engineering and the degradation of

parkway trees and built elements. Existing parkway trees, of mixed species with a predominance of Pin Oak, are inconsistent in pattern, with notable gaps and are of varying ages. There are various places along the parkways where loss of trees, degradation of turf, increased pavement width and other changes have altered the character of the parkways. Losses in character need to be reversed. The master plan goal for the parkways is renewal of intended character with multi-use corridors provided consistently along the parkway length. The parkway system requires more complete linkage to develop greater continuity. Both parkways and the proposed city street links should be the green corridors of Louisville. This proposed linkage is seen in Figure 3. The four to five tree rows, large setbacks for adjacent structures and expanses of green lawn all contribute to the character of the parkways. In addition, pedestrians and bicyclists should be afforded continuous routes along the parkways.

Renewal of the spatial organization of the parkway was a critical objective. The formal rows of parkway trees and green medians and frontages are the natural and cultural resource elements that defined the space. As noted previously, although the Olmsted firm recommended mixed species in a formal arrangement of sequence, no evidence of that arrangement was found today and historic correspondence noted changes made in Louisville as plantings were initially placed and as they

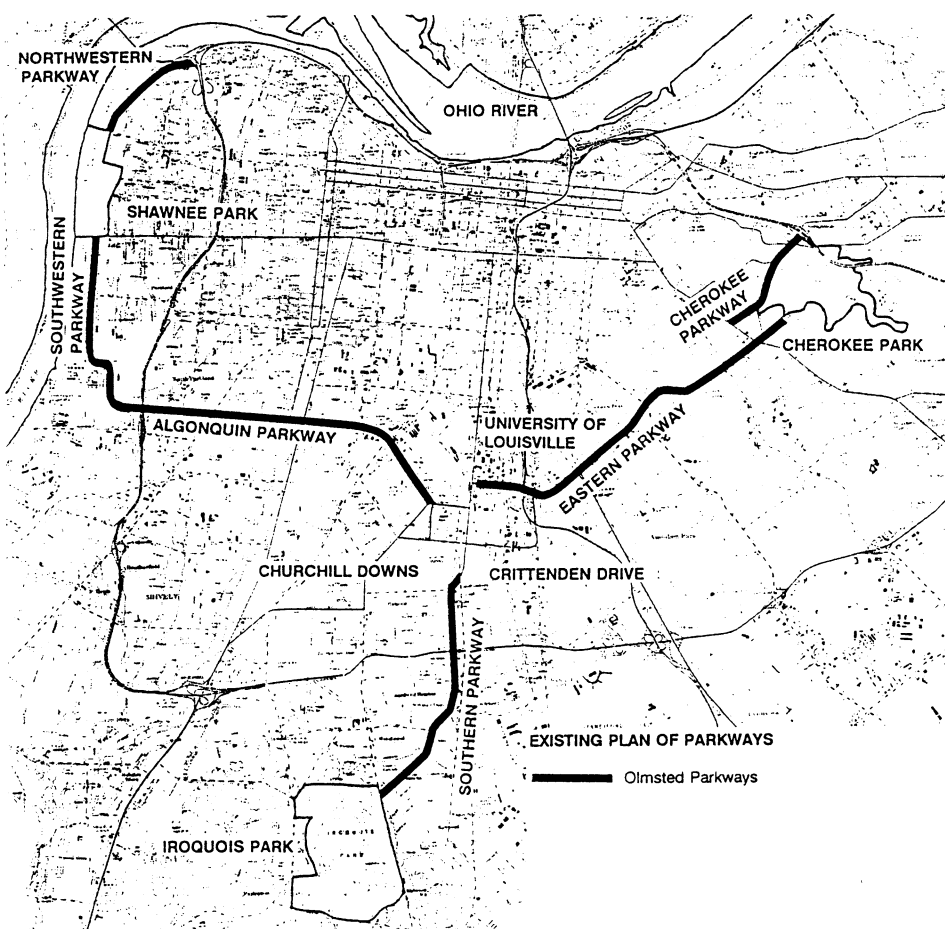


Figure 2. Existing plan of parkways, on a drawn over USGS base. (LANDSCAPES, 1992)

were replaced. Over 5,100 trees grow on the parkways today with Pin oak comprising 23.7%, Sugar maple 20.4%, White ash (10%) Green ash (7.7%) and Red maple 7.2%, three species at about 3% are Sycamore, Dogwood and Yellow Poplar. Self-sown tree-of-heaven and black locust are also found as are recent plantings of Japanese maple and Mountain ash. Over 1500 trees have been removed and not replanted in recent

years and an additional 500+ trees will require removal in the near future. The current predominance of Pin oak has developed into the spread of obscure scale infestations and chlorosis from the generally alkaline soil pH in Louisville.

From a historic perspective the following of the Olmsted design is not defensible because the as-built condition and the existing evidence do



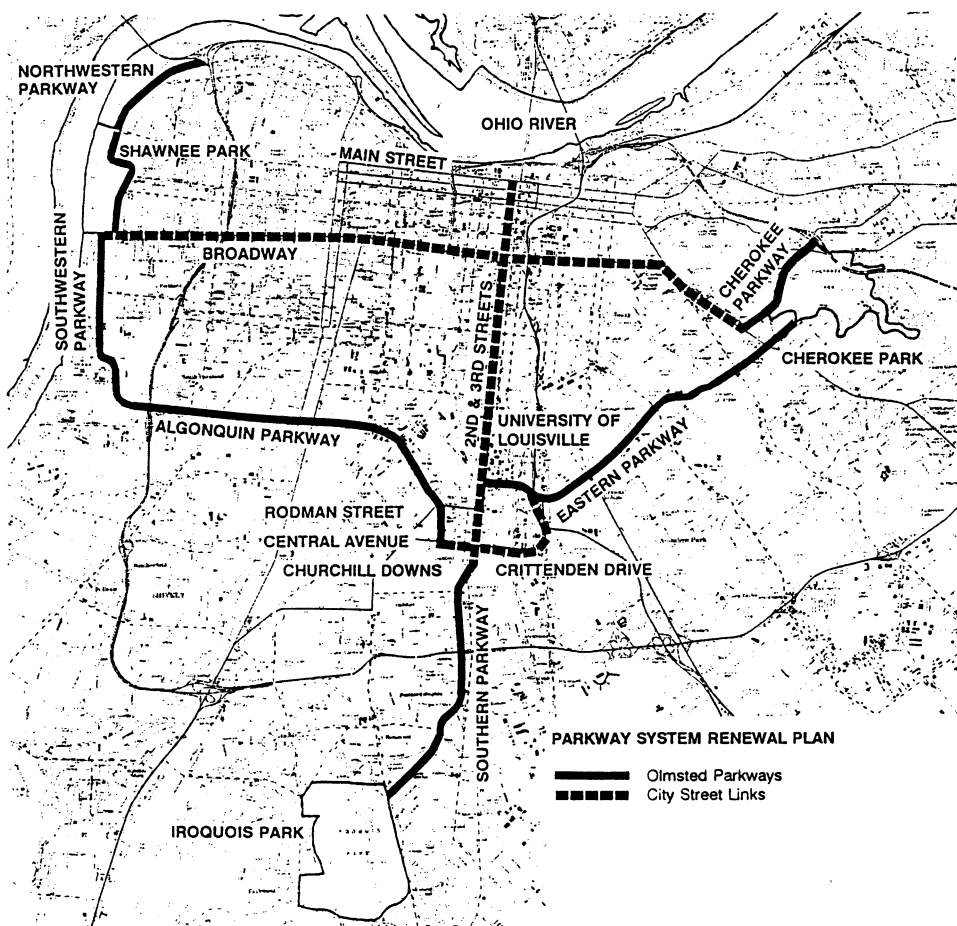


Figure 3. Key projects of the Olmsted Parkways Master Plan, Louisville, Kentucky. (LANDSCAPES, 1993)

not support that approach. About 25% of the remaining trees are the original parkway plantings and a recent inventory project makes replacement in-kind possible as these are removed. Historic views show same aged tree stands along some portions of the early parkways. The length of these parkways (14.5 miles overall), the number of trees and their mixture of ages makes wholesale removal of existing trees to replant in

same aged stands undesirable and not capable of gathering city and public support. The importance of the parkway environment can be simplified to the presence of tall maturing deciduous trees in double and triple rows, along each side of the parkways. The trees are a vertical element that create shade and dappled light, provide an overarching canopy and give a park-like quality to these broad, green corridors. Hence, the devel-

opment of proposed, typical cross-sections that reinstated the continuity of the trees along the park corridors, as shown for Eastern Parkway in Figure 4.

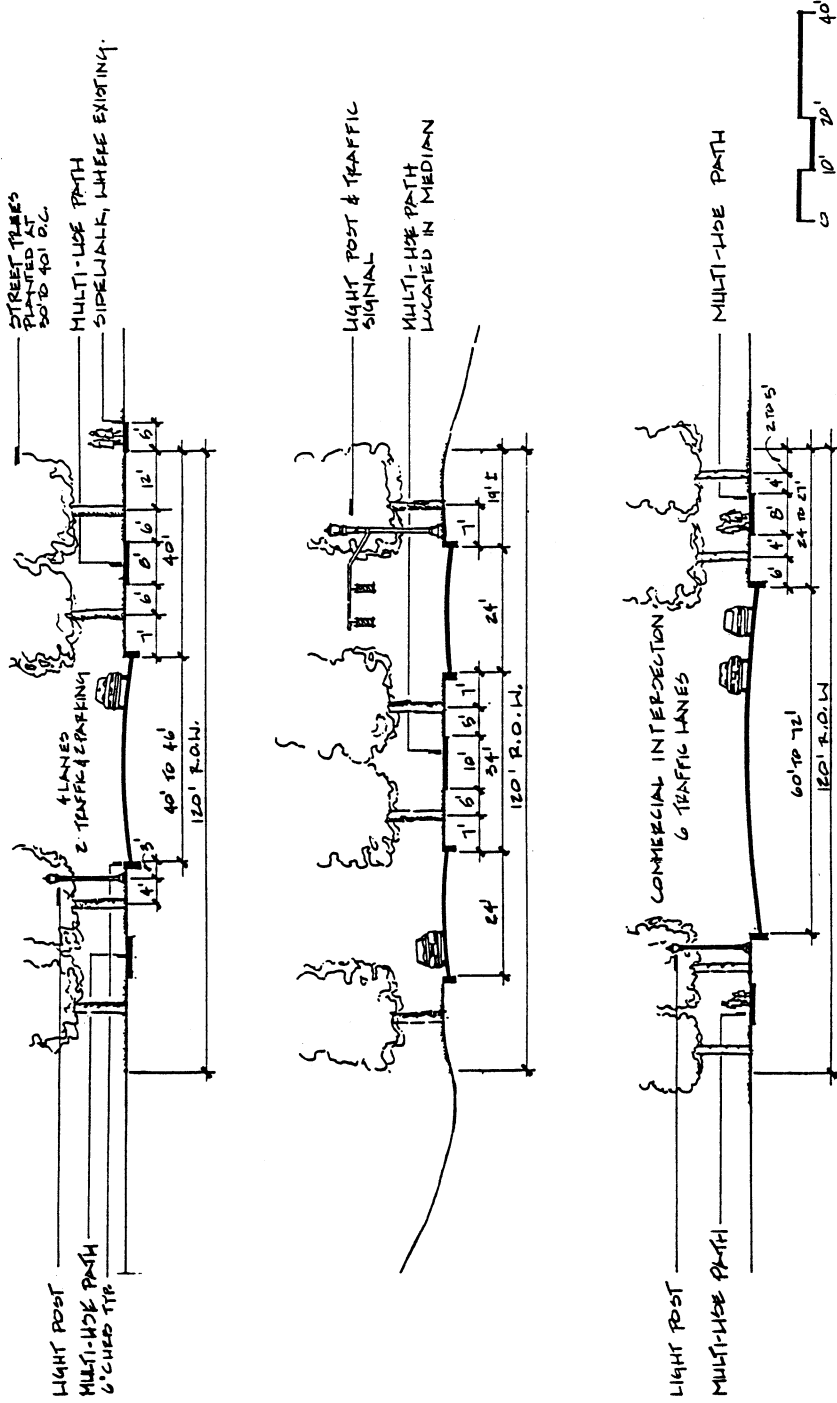
From a natural resource perspective native trees from the region that thrive in limestone based, alkaline soils should be chosen for the parkways, monoculture stands should be discouraged and mixed ages are acceptable. Both disciplines share the desire to preserve and effectively care for existing trees. The resolution of these issues in the master plan recommendations for parkway trees are:

- Trees should line all the parkway corridors in rows reflecting the current pattern on each parkway segment;
- Trees should be replaced where lost to street widenings, in the same rows with compressed spacing and additional widening should be avoided;
- Replacement trees should be of a mixture of native, tall maturing deciduous trees species suited to the soil and urban street edge conditions;
- Existing trees should be cared for effectively to control disease and promote longevity;
- Construction techniques should be developed to avoid significant tree root damage.

Large, high-branching canopy trees are used for their grandeur when mature as a scale element, for their large canopy to provide shade and to be in concert with the original parkway tree recommendations. Recommended Parkway and street trees are shown in Figure 5. A number of these trees are not included on the current City of Louisville recommended street tree list because they have fallen out of favor over time or more popular cultivars are available. Along the Olmsted parkways it is important to replant the range of recommended trees that were originally used and that will be well suited for parkway conditions, in their true species form. These recommendations reflect a blending of natural and cultural resources perspectives, providing a broadly defensible basis for renewing Louisville's parkway trees.

### **Shawnee Park**

The 1893 Olmsted, Olmsted & Eliot Plan for Shawnee Park uses the riverfront setting and topography to develop a series of descending river overlook terraces and an upper, nearly level, great lawn. The overlook promenades were designed to be partially shaded walks above shrub planted slopes with a series of paths leading to the river edge for boating and swimming. Figure 6 shows the historic zones of Shawnee Park, one of three analysis plans developed over the Olmsted General Plan in order to understand the design intent.



EASTERN PARKWAY PROPOSED SECTIONS:

Figure 4. Eastern Parkway proposed sections.

<i>Acer rubrum</i> *	Red maple
<i>Acer saccharum</i> *	Sugar maple
<i>Acer saccharinum</i> *	Silver Maple
<i>Aesculus glabra</i> **	Ohio buckeye
<i>Carya cordiformis</i> **	Bitternut hickory
<i>Carya glabra</i> **	Pignut hickory
<i>Carya lacinosa</i> **	Shellbark hickory
<i>Carya ovata</i> **	Shagbark hickory
<i>Carya tomentosa</i> **	Mockernut hickory
<i>Celtis occidentalis</i>	Hackberry
<i>Fraxinus americana</i>	White ash
<i>Fraxinus pennsylvanicus</i>	Green ash
<i>Gymnocladus dioica</i> **	Kentucky coffee tree
<i>Juglans cinerea</i> **	Butternut
<i>Juglans nigra</i> **	Walnut
<i>Liquidambar styraciflua</i>	Sweetgum
<i>Nyssa sylvatica</i>	Sourgum
<i>Platanus occidentalis</i>	Sycamore
<i>Quercus prinus</i>	Chestnut oak
<i>Quercus velutina</i>	Black oak
<i>Quercus bicolor</i>	Swamp white oak
<i>Quercus alba</i>	White oak
<i>Quercus coccinea</i>	Scarlet oak
<i>Quercus laurifolia</i>	Laurel oak
<i>Quercus lyrata</i>	Overcup oak
<i>Quercus macrocarpa</i>	Bur oak
<i>Quercus michauxii</i>	Swamp chestnut oak
<i>Quercus rubra</i>	Red oak
<i>Quercus palustris</i>	Pin oak
<i>Quercus phellos</i>	Willow oak
<i>Quercus shumardii</i>	Shumard oak
<i>Tilia americana</i>	Basswood
<i>Ulmus americana</i>	American elm

\* Salt intolerant

\*\* Nut/Pod bearing

Figure 5. Recommended Parkway and street trees, Louisville Olmsted Parkways and City Street Links.

Shawnee Park today has a varied vegetation cover, with a predominance of open lawn and shade trees in lawn but also contains substantial areas of indigenous river edge vegetation, remnants of early forest associations and invasive vegetation.

The future treatment of the river slopes was a matter of interest. Currently overgrown with invasive species, views of the river are blocked by a mass of vegetation. A recent slope clearing effort in one area that was not monitored and had no follow-up resulted in immediate regrowth with a greater concentration of undesirable species. The Olmsted intent for the park as a scenic river overlook has been significantly altered through the vegetative growth closing river views. While the original plan shows shrub massing along the riverfront, correspondence indicates that shrub plantings failed and early views reveal tall grass on a relatively open slope. The master plan seeks to reopen river views. The replacement of invasive herbaceous and woody plants on these slopes with a savannah responds both to preservation and sustainable landscape objectives.

A mixed woody border planting along park boundaries was recommended in the Olmsted plan. Edged by parkways and residences the park boundaries were designed to be thickly planted. The range of native and exotic plants included herbaceous groundcovers, shrubs, understory trees and canopy trees that were fast growing, aggressive and had a generally open and coarse texture. In

a letter dated May 6, 1896 the firm remarked on border plantings indicating their purpose and intended management:

*"As parks are laid out in the main with regard to agreeable interior scenery and as they are in time apt to be surrounded with streets and houses which are out of harmony with the more natural scenes of the park, it is necessary to the enjoyment of park scenery to exclude from sight generally everything outside. For this reason thick plantations of shrubs and trees have been formed about the borders of the park. For economy they have been planted mostly with trees and very thickly. They should be thinned out from time to time to such an extent that the long-lived trees only will be left, and these must be given room to grow with full, dense tops. At the same time shade enduring shrubbery should be maintained in good health. As the outer trees spread, shrubbery and low growing trees should be added, especially where the trees show a tendency to lose their lower branches."*

The consultants discussed the intent and quality of these border plantings in detail. Ecologically this narrow strip plantings were deemed to be unsustainable and management intensive. In addition, the boundaries of the park had grown up over time to a mixed stand of mature trees. The design intent, clearly stated in the Olmsted correspondence, was the screening of the surrounding park

ways and residences. The discussion moved to the issue of screening. While partial vegetative screening in contemporary society, dense screen-

ing is not because it blocks surveillance. To address the intent and to some extent the spatial organization of the Olmsted plan, the master plan

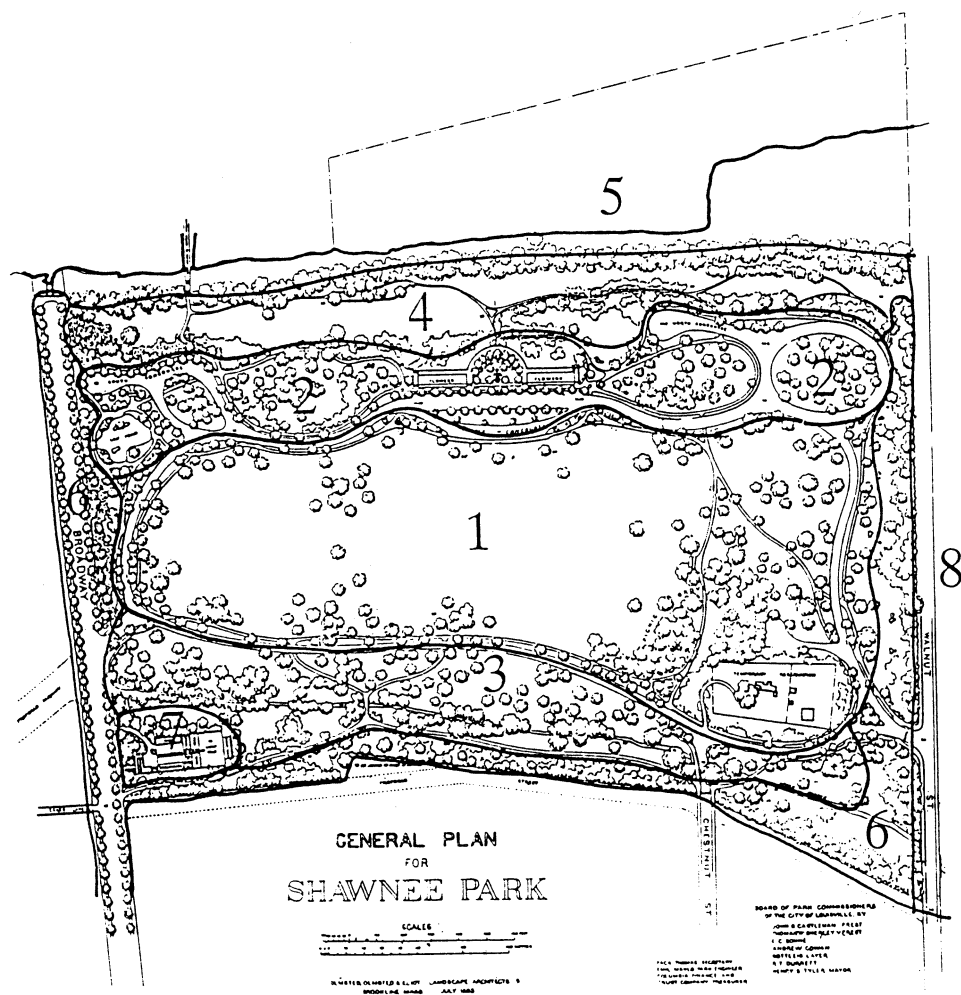


Figure 6. Shawnee Park historic zones, prepared by LANDSCAPES, 1993, shown on General Plan for Shawnee Park. 1=Great Lawn, 2=Middle Concourse, 3=Paddy's Run, 4=Slope & Bench, 5=River Edge, 6=Park Perimeter, 7=Administration, and 8=1911 Addition.

seeks to add canopy trees, some understory trees and herbaceous ground covers in a light woodland community along some of the park boundaries.

### **Iroquois Park**

The 1897 General Plan for Iroquois Park shows a nearly square area of park land with the open center of Summit Field at the top of the domed knob. The sloping forests and open summit, with several scenic vistas over the city, are the essential components of these preserved lands which were developed for public use.

The sloping forests of Iroquois Park, varying in species with sun exposure and soil type are old growth and have never been cleared, with the exception of the areas below the scenic outlooks. The level beech forest to the north is old of high ecological value. Iroquois Parks' forest communities are seen on the plan in Figure 7. Important shale barren communities are also found on some forest slopes. The geology of New Albany shale with a mantle of highly erodible loess soils was disturbed by the original construction of Uppill Road and over time a number of drainage and erosion problems have developed. The large, open knob with undulating topography channels runoff to specific areas. Storm flows from the top of the knob create deep erosion gullies, fast moving water and flooding in areas of the park and surrounding neighborhoods at the base of the slopes.

The drainage challenge is the most compelling problem in Iroquois Park that threatens portions of the forests, Uppill Road and the surrounding community. The solution to these drainage problems begin at the top of the knob. Andropogon put forward a bioengineering approach that would slow runoff by developing a system of detention basins in existing swales shaped naturalistically and planted with wet meadow and intermittent wetland woody plants. The entire knob is currently mown with the exception of a few areas that are covered with goldenrod and little bluestem grass. The first project calls for the shaping and planting of the detention basins, the release and amendment plantings of a substantial area of meadow, substantial tree planting on the knob including the Olmsted recommended White oak grove.

From an historical perspective the spatial quality of openness of the knob grass area is the first consideration. The development of the basins adds a new element that will have a different visual quality that is seen today. No visual evidence of the open knob has been found and we do not know if in the past the swales were mown or unmown. If unmown they may have contained a number of the native species to be planted in the basins. Here the compelling need is to slow the water. The basin approach, driven by natural resource and infrastructure degradation, favors natural resources over cultural ones. However, the basins are kept to the

# Legend



Forest Communities

①

Blackjack Oak-Post Oak Forest

②

Chestnut Oak

③

Oak-Hickory Forest

④

Sugar Maple-Beech

⑤

Mixed Forest-Yellow Poplar, Sugar Maple, Beech

⑥

Beech-Yellow Poplar



Park-Like Trees



Mowed



Wetland Remnant

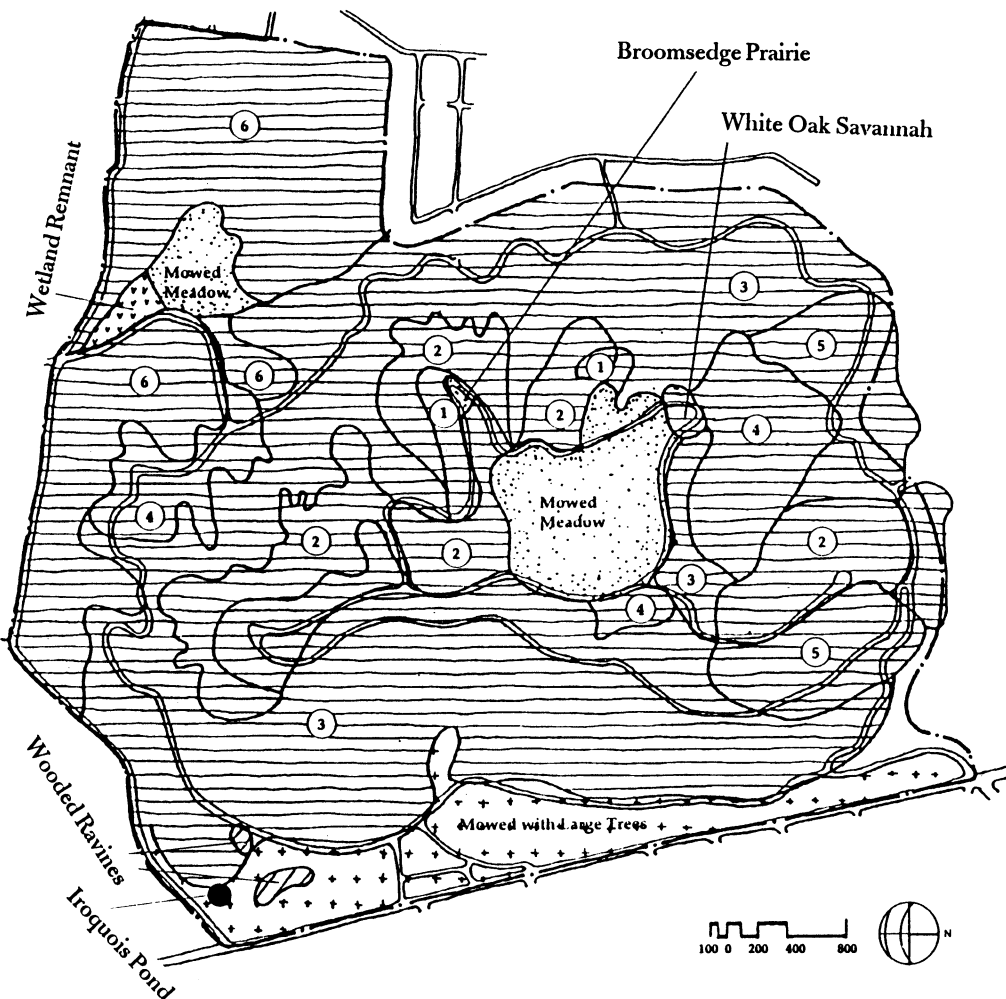


Figure 7. Plant communities of Iroquois Park.



knob margins to the greatest extent possible. The center of the meadow will be mown mixed turf. Basins closest to the center will have herbaceous wet meadow species only while those near the perimeter will contain woody species as well. The tall meadow areas, beyond the turf, will be managed to encourage species that are well below eye level so that the desired openness remains.

### **Cherokee Park**

Cherokee Park is a public landscape that captured the Bear Grass Creek Valley with the rolling topography of blue grass, open pasture lands rising up from the creek bottom. The Olmsted design provided for augmenting park plantings with additional shade trees, areas of shrub and tree planting on steep slopes and varied open and dense planting along Bear Grass Creek. A botanical collection of native Kentucky woody plants was integrated into the park scenery as a unique regional expression and educational aspect of the landscape. The topography and vegetation of the park created a spatial organization that provided visual access throughout most of the landscape from the drives that often followed higher ground. Cherokee Parkway created a formal edge along the east side, while a boundary drive was proposed on the south. The park is still handicapped by the lack of a complete frontage drive that was hoped for but never achieved. The Cherokee Park Spatial Organization Plan, shown in Figure 8, indicates the

breadth of the internal views from drives and paths and the areas of enclosure created by vegetation. Unlike Iroquois and Shawnee Parks, broad vistas of land or water beyond the park do not exist in Cherokee Park. For Cherokee Park views are internalized ones from hilltops to valleys or along valleys. These five broad internal views of rolling topography, were punctuated by large, native trees. For example, the view from Barringer Hill consisted of an open grass foreground with a few shade trees, and a mid-ground of dappled light and shade with views to the creek, and light behind the groves hinting of the greensward beyond. The vegetation of the park was intended to frame spaces with indefinite edges allowing views through--a play of light and shade.

Historically, internal circulation provided varied experiences of the park from drives and paths that included movement through shaded valleys, open greensward and hillside overlooks that is altered today by radically changed vegetation caused by the 1974 tornado. The loss of a large number of park trees in the tornado and the resulting disturbance of plant communities allowed a high level of invasive exotic plants to enter the park landscape. Exponential increases in storm flows over the years have resulted from surrounding development and the Bear Grass Creek banks are eroded. The severe disturbance problems of park plantings and creek directed toward a natural res-



Figure 8. Spatial Organization Plan for Cherokee Park, prepared by *Landscapes*, 1993, overlaid on 1897 General Plan.

toration approach while preservation concepts looked toward recaptured spatial organization and the pursuit of the Olmsted "Woody Plants of Kentucky" concept, seen in the plan in Figure 9.

The arboretum approach, proposed on Olmsted planting plans and documented in plant lists and orders, was organized within the park in plant families. This simplistic nineteenth century idea, used in arboreta worldwide, placed a number of plants in environmental situations that were unsuitable, with lowland and upland species planted together in a low lying area for example. Olmsted's "Woody Plants of Kentucky" were also drawn for throughout the state with plants native to more northern or southern regions and varied soils all to be placed within on inland, pastoral creek valley park. A few exotic plants of European and far eastern origins were also curiously placed on the Olmsted lists.

Extensive discussion has surrounded this issue. From an historic restoration perspective, the Olmsted plan can be replaced in-kind, however, rehabilitation is the preservation treatment and the development of an intensively maintained arboretum is well beyond the means of the parks' stewards. However, the idea of incorporating a number of species into the landscape of all three parks as component of landscape restoration and an educational element is a compelling one. The intent is to compare and contrast the simplistic family

grouping approach of the Olmsted arboreta with our current ecological knowledge and group plant in their appropriate locations and associations using the spatial organization of the Olmsted plan as the design guide but substituting ecologically appropriate plantings. Overall the Olmsted list has been reduced in breadth and native species that prefer alkaline soils will be used. The process will begin with the first project which provides a 5% graded walk, partially following the Olmsted alignment, through the Barringer Hill section of the woodland along Barringer spring. Plantings will mimic the Olmsted organization. While a few trees will replace lost historic ones in-kind, the organization and ecological appropriateness of the plantings of trees, shrubs and herbaceous understory will guide the project. Interpretive signage addressing the "Woody Plants of Kentucky" will be incorporated into a wayside shelter along the spring.

### Conclusion

This complex project is the result of a willingness to engage in a collaboration of disciplines to address natural and cultural resources in a manner that values both. The integrated planning process upon which it is built gives it a greater opportunity for lasting success. As the construction documents for phase one projects proceed, clarification of cultural and natural resource issues and the balancing of outcomes continues. The mission of the Louisville Olmsted

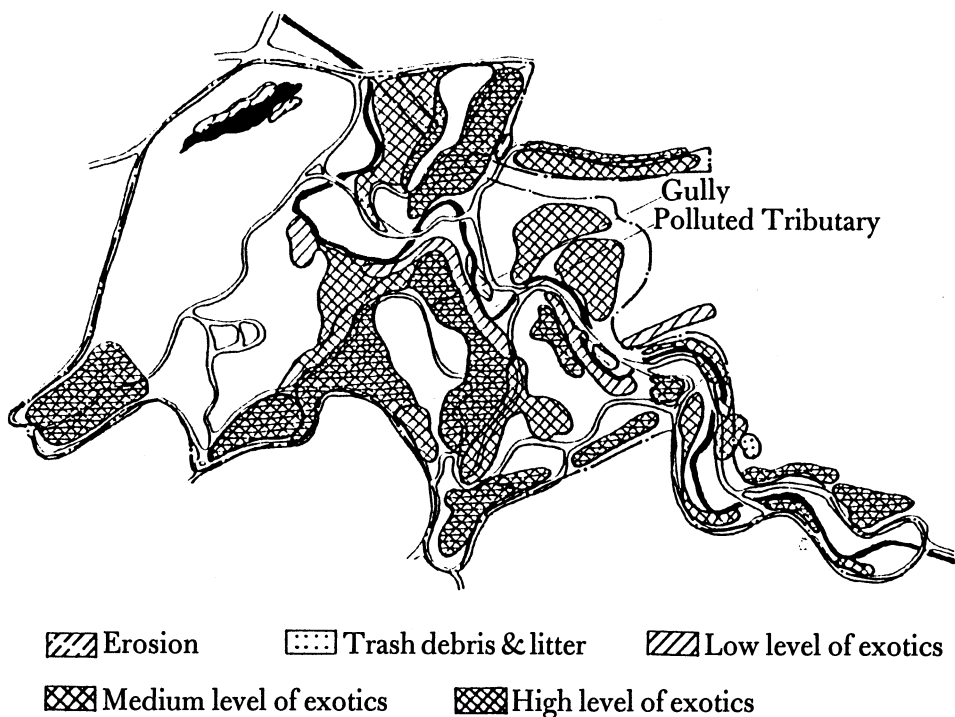


Figure 9. Plan of Cherokee Park, showing disturbance factors.

Parks Conservancy, “*To preserve the legacy of the Louisville Olmsted Parks and Parkways for all generations to come,*” is a work in progress.

Interventions selected to improve the quality and function of the public landscapes of Louisville's Olmsted system are important decisions that must consider the parks and parkways holistically, as cultural and natural resources. Existing conditions, user

needs, maintenance and management capabilities, as well as the role of both the Louisville Olmsted Parks Conservancy and Metro Parks, now and in the future, are addressed. The master plan results from the synthesis of all these bodies of information to provide for the framing of a vision that will bring the Louisville Olmsted Parks and Parkways into their second century of service and enjoyment.

### Endnotes

1. Charles Beveridge and Arleyn Levee, compilers. “Olmsted Documentary Resource for Louisville’s Park Legacy: Cherokee, Iroquois and Shawnee Parks and the Parkways,” prepared for the Louisville Olmsted Parks Conservancy, 1992.
2. Charles Beveridge and Arleyn Levee, compilers. “Olmsted Documentary

Resource for Louisville's Park Legacy: Cherokee, Iroquois and Shawnee Parks and the Parkways," prepared for the Louisville Olmsted Parks Conservancy, 1992.

3. The Louisville Olmsted Parks & Parkways Master Plan Team includes: Andropogon Associates, Ltd., Rolf Sauer, team leaders; LANDSCAPES, historic resources; Eco-Tech, Inc. regional ecology; Proctor/Davis/Ray Engineers, civil engineering; Charles Beveridge and Arleyn Levee, Olmsted historians; for the Louisville Olmsted Parks Conservancy and Metro Parks, with the cooperation of many local citizens and groups.
4. The product of the planning effort is the *Louisville Olmsted Parks and Parkways Master Plan: A Guide to Renewal & Management*, a large format, 297-page document that is available through the Louisville Olmsted Parks Conservancy, PO Box 37280, Louisville, KY 40233-7280. A few paragraphs in this paper are edited from the report.
5. Treatment terms for all or part of a park or parkway are defined in the draft *Guidelines for the Treatment of Historic Landscapes*, prepared by the USDO, National Park Service, Preservation Assistance Division and other preservation literature.



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