

PLANS FOR THE LANDSCAPE DEVELOPMENT
OF A LARGE NATURALISTIC PARK

by

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INTRODUCTION

The purpose of the study underlying this thesis was to design a park having the facilities that should be included in the development of a large naturalistic park for a city. It has been designed to conform to a definite area under known climatic conditions. Certain limitations were set by the selection of a definite style, by the size of the city for which it was designed, and by the city-owned recreational facilities already in existence.

GENERAL METHOD

It has been assumed that the city for which this park was designed has on other publicly owned grounds, recreational facilities which should not be duplicated in this park design. These recreational areas are athletic parks, playgrounds and golf courses. The playgrounds are equipped for most kinds of organized play and the school grounds with a variety of playground equipment.

This park has been designed to fulfill all of the outdoor recreational needs of a city of 40,000 inhabitants located in east central Kansas.

Naturalistic rather than formal treatment of this park was chosen. Naturalistic areas provide ideal conditions for those who wish to get away from city turmoil and formality and enter into closer contact with nature.

Hubbard and Kimball (13) support the use of the naturalistic style for the development of large city parks in these words: "The large landscape park, or 'Country Park' should be designed to give all the sense of freedom that the unspoiled country gives, as this is the nearest thing to unspoiled country that most city dwellers can commonly take time to enjoy. Large out-of-town parks and reservations should be selected for their landscape beauty, present or possible.

"It is seldom that a city is so lucky as to have near at hand really notable natural scenery; but even where it has not, its landscape parks may still heighten and perfect the type of natural character which they have so that they not only give pleasure by their own beauty, such as it may be, but also give some subtler inspiration by their naturalness."

L. H. Wier (24) expresses this idea in the following words: "While there may be spaces here and there in large city recreation parks treated after a formal design, the

predominating characteristic of the large park areas of American cities is their naturalness. This naturalness has been attained through the skill of the designers in utilizing already existing natural features or in more or less transforming, topographically and botanically, given areas of ground.

"The Committee on Recreation Problems in City Planning of the National Recreation Congress has suggested that this type of property should range from one hundred to two hundred and fifty acres.

"It has been suggested by experts in park and city planning that there should be one such park for every forty thousand inhabitants and that it should be located tangent to or near the city limits of such population."

For this type of park it was necessary to select an area of sufficient size and variation in topography to provide the necessary features and interest. The area must be readily accessible but should not interfere with major traffic ways or be traversed by them.

The site chosen has an area of 170 acres, a variation in elevation of 190 feet, and includes deep ravines and numerous natural rock outcrops. A heavily wooded creek bounds it on the west and there are many native trees and

shrubs throughout the area. These natural features make this a desirable area in which to develop a large naturalistic park. The area is located south and west of Manhattan, Kansas, and is bounded on the north by Sunset Cemetery, on the west by Wildcat Creek, on the south by the Rock Island Railroad and on the east by U. S. Highway 40.

Features to be included in this park are: an outdoor theatre, botanical and zoological gardens, a museum, promenade, children's natural play areas, picnic areas, a small body of water, drives, foot and bridle paths, parking areas, shelters, comfort stations, and the maintenance group.

Several preliminary sketches of varied development were made showing the location and orientation of the various park structures and facilities. Planting studies were also made.

An accurate plan was then made by combining the more desirable solutions of the various units of the preliminary sketches. This adopted plan is shown in Plate I. This plate shows the landscape treatment of the entire area. The rendering is on Schoellers Parole water color paper and is drawn to the scale one inch equals one hundred feet. A key to the various park features is also given. The

existing contours are shown at intervals of five feet.

Plate II is a detail plan of a portion of the park showing the museum, promenade, gardens, a large overlook, and the outdoor theatre. The section AB is taken along the central axis of the museum and adjacent gardens, and the section CD along the central axis of the outdoor theatre.

It was drawn on Schoellers Parole water color paper to the scale one inch equals twenty feet and rendered in water color.

Plate III is a grading and planting plan of the area shown in Plate II. The original was drawn on Vellum tracing paper to the scale one inch equals twenty feet and drawn in India ink.

By referring the first number in any planting to the corresponding number in the Planting Key the name of the plant or plants may be found. The second number indicates the number of plants to be planted in that group. The trees are indicated by a number near the center of each tree.

Existing contours are shown by solid lines and proposed contours by dotted lines.

A written report to the Mayor and City Commission was made setting forth the need for such a park. It also described the development and suggested the probable use of such a park.

Native plant materials were used as extensively as possible but, due to varying soil and moisture conditions of the area, the use of other plant materials which were readily adaptable to existing conditions was thought advisable.

SUMMARY

The development of large naturalistic parks in east central Kansas would be quite desirable, especially in the more densely populated areas. The topographic and geologic forms of this part of the state lend themselves readily to the naturalistic style of park development. The designer feels that more parks of this style should be developed and that due consideration should be given the landscape design of both new and existing parks of this type to make them serve to the fullest extent their intended purpose.

A REPORT TO THE MAYOR AND CITY COMMISSION

Gentlemen:

In compliance with your request regarding the advisability of establishing a large park near your city, we wish to submit the following report.

Parks exert a great influence upon the cultural, social, physical, economic and general welfare of those who live in the city. They help preserve the beauty of nature's handiwork, and have an insistent appeal to man's sense of beauty and culture.

The preservation near our homes for all time to come of an entrancing landscape would manifestly increase our enjoyment of nature's environment which we can make our own.

To the residents of the unpretentious quarters of our congested city, deprived of contact with nature, a park would speak a language attuned to their deep yearning for out-of-doors, pure air, and sunshine in an environment unsurpassed. Frequent association with the beauties of a park and its health-giving facilities would produce citizens who are scunder in mind and body. Waifs of the streets

and vagrancy would be lessened as surveys by various cities have shown. It would insure the permanence of essential open play and recreational spaces against the encroachment of commercial enterprise. No city can develop the full measure of livability and cultural environment without an adequate park system.

Present day tendencies are toward shorter working hours and consequently more leisure time. The people of your city should have available in the near future, recreational facilities to meet these demands so they will not have to continue under the increasingly undesirable conditions now existing. We sincerely hope that the present and future residents of this city will not be without proper park facilities because of indifference and lack of financial support.

In comparing the recreational facilities of your city with the minimum standards, they are found to be far below the minimum.

The survey has revealed the fact that the city is indeed fortunate in having available an area well suited to park development. This area can be secured at a very reasonable cost and would be readily accessible to all. A more opportune time for acquiring and developing this land

area could not be found. In the near future we shall undoubtedly see this natural beauty and character destroyed unless it is purchased for public use. It is by far the most desirable area for park development near this city that is still available.

This area, so highly recommended to you, joins the city on the south and west. It is bounded on the north by Sunset Cemetery, on the west by Wildcat Creek, on the south by the Rock Island Railroad and on the east by U. S. Highway 40. It has an area of 170 acres with a variation in elevation of 180 feet. With its beautiful watercourse bordered by graceful elms and silvery sycamores, its rugged hillsides studded with sturdy oaks, its cedar clad bluffs and its variety of native flora and shrubbery, this is truly a delightful area.

By additional plantings and the incorporation of a variety of recreational facilities in this area it would become a haven to all in the community.

There would be a place for those who desire to picnic, view gardens, attend a band concert, hike, horseback ride, study nature, rest, play and indulge in many other out-of-doors recreational activities. The introduction of facilities for the more highly organized forms of recreation,

such as competitive sports, is not advisable in this type of park.

Respectfully submitted

C. B. Billings
L. A.

Plate I
General Plan



Plate II
Detail Plan

Plate II

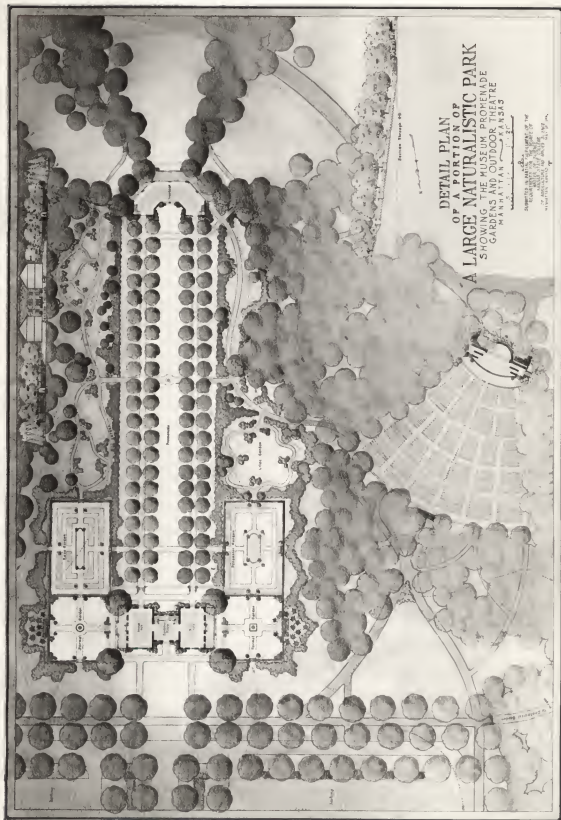
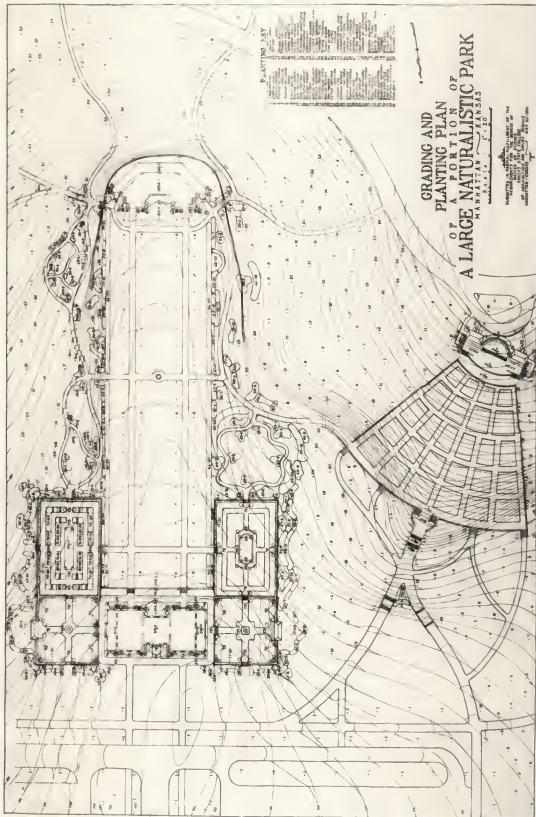


Plate III

Planting and Grading Plan

Plate III



PLANTING KEY

Trees and Shrubs (Numerically)

1. *Ulmus americana*
2. *Quercus palustris*
3. *Celtis occidentalis*
4. *Fraxinus lanceolata*
5. *Fraxinus americana*
6. *Quercus macrocarpa*
7. *Quercus rubra*
8. *Ulmus pumila*
9. *Gleditsia triacanthos*
10. *Acer dasycarpum*
11. *Pinus ponderosa*
12. *Elaeagnus angustifolia*
13. *Crataegus crusgalli*
14. *Pinus nigra*
15. *Quercus muhlenbergi*
16. *Platanus occidentalis*
17. *Juniperus virginiana*
18. *Gymnocladus dioica*
19. *Populus deltoides*

20. *Acer negundo*
21. *Catalpa speciosa*
22. *Catalpa bignonioides*
23. *Juglans nigra*
24. *Quercus stellata*
25. *Quercus parilensis*
26. *Cercis canadensis*
27. *Sassafras californica*
28. *Cornus mas*
29. *Euonymus alatus*
30. *Ribes aureum*
31. *Cornus paniculata*
32. *Calycanthus floridus*
33. *Kerria japonica*
34. *Rhus cotinus*
35. *Spiraea billardi*
36. *Cornus stolonifera*
37. *Rhodotypos kerrioides*
38. *Rhus aromatica*
39. *Kolkwitzia amabilis*
40. *Forsythia viridissima*
41. *Rhus glabra*
42. *Cydonia japonica*

43. *Syringa vulgaris*
44. *Syringa japonica*
45. *Philadelphus coronarius*
46. (*Spiraea vanhouttei*)
47. *Lonicera heterica*
48. *Spiraea prunifolia*
49. *Geranium erborescens*
50. *Hibiscus syriacus*
51. *Lonicera scroovi*
52. *Philadelphus grandiflorus*
53. *Symphoricarpos racemosa*
54. *Hobnia hispida*
55. *Forsythia suspensa*
56. *Lonicera fragrantissima*
57. *Crataegus tomentosa*
58. Thompson Privet
59. *Berberis thunbergii*
60. *Spiraea arguta*
61. *Rosa setigera*
62. *Rosa hugonis*
63. *Rosa rugosa*
64. *Symphoricarpos vulgaris*
65. *Cotoneaster acutifolia*

66. *Amorpha fruticosa*
67. *Euclymus atropurpurea*
68. *Amorpha canescens*
69. *Ceanothus americanus*
70. *Spiraea bumalda*
71. *Rhus canadensis*
72. *Juniperus chinensis pfitzeriana*
73. *Juniperus sabina tamariscifolia*
74. *Mahonia aquifolium*

Roses

75. E. G. Hill
76. Etoile de Hollande
77. Radiance
78. Talisman
79. White Ensign
80. Golden Dawn
81. Betty Uprichard
82. Red Radiance (standard)

PLANTAS EX

Trees and Shrubs (Alphabetically)

1. *Acer dasycarpum*
2. *Acer negundo*
3. *Amorpha canescens*
4. *Amorpha fruticosa*
5. *Berberis thunbergii*
6. *Catalpa bignonioides*
7. *Catalpa speciosa*
8. *Celtis occidentalis*
9. *Crataegus crusgalli*
10. *Crataegus tomentosa*
11. *Calycanthus floridus*
12. *Caragana arborescens*
13. *Ceanothus americanus*
14. *Cercis canadensis*
15. *Cornus mas*
16. *Cornus paniculata*
17. *Cornus stolonifera*
18. *Cotoneaster scutifolia*
19. *Cydonia japonica*

20. *Eleagnus angustifolia*
21. *Euonymus alatus*
22. *Euonymus atropurpurea*
23. *Forcythia suspensa*
24. *Forcythia viridissima*
25. *Fraxinus americana*
26. *Fraxinus lanceolata*
27. *Gleditsia triacanthos*
28. *Gymnocladus dioica*
29. *Hibiscus syriacus*
30. *Juglans nigra*
31. *Juniperus chinensis pfitseriana*
32. *Juniperus sabina tamariscifolia*
33. *Juniperus virginiana*
34. *Kerria japonica*
35. *Kolkwitzia amabilis*
36. *Lonicera fragrantissima*
37. *Lonicera morrowi*
38. *Lonicera tatarica*
39. *Mahonia aquifolium*
40. *Philadelphus coronarius*
41. *Philadelphus grandiflorus*
42. *Pinus nigra*

43. *Pinus ponderosa*
44. *Platanus occidentalis*
45. *Populus deltoides*
46. *Quercus macrocarpa*
47. *Quercus marilandica*
48. *Quercus muhlenbergi*
49. *Quercus palustris*
50. *Quercus rubra*
51. *Quercus stellata*
52. *Rhamnus cathartica*
53. *Rhodotypos kerrioides*
54. *Rhus aromatica*
55. *Rhus canadensis*
56. *Rhus cotinus*
57. *Rhus glabra*
58. *Ribes aureum*
59. *Robinia hispida*
60. *Rosa hugonis*
61. *Rosa rugosa*
62. *Rosa setigera*
63. *Spiraea arguta*
64. *Spiraea billardi*
65. *Spiraea bumalda*

66. *Spiraea prunifolia*
67. (*Spiraea vanhouttei*)
68. *Symphoricarpos racemosus*
69. *Symphoricarpos vulgaris*
70. *Syringa japonica*
71. *Syringa vulgaris*
72. Thompson Privet
73. *Ulmus americana*
74. *Ulmus pumila*

Roses

75. Betty Uprichard
76. E. G. Hill
77. Etoile de Hollande
78. Golden Dawn
79. Radiance
80. Red Radiance (standard)
81. Talisman
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