LANDSCAPE PLANS FOR THE DEVELOPMENT OF
A LARGE AMERICAN ESTATE IN THE ENGLISH STYLE

by

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INTRODUCTION

The purpose of the thesis is to determine the advisability of using the English style of landscape architecture in developing a large estate near Manhattan, Kansas.

No limitations, either structural or financial, were set; consequently the designer was given opportunity to include a great many landscape features that would usually seem extravagant in a midwest development.

Although the problem itself is purely hypothetical, it was designed from an accurate topography and many studies of the property were made directly in the field.

GENERAL METHOD

A modern landscape architect, in designing an estate, must choose some one prevalent style and then follow rather closely the requirements of that particular style.

The English style of architecture and landscape architecture was chosen because it is adaptable and is thought to lend itself particularly well to midwest conditions.

Architectural laws demand a certain amount of level
space immediately about the house and various features, such as the gardens and sports areas require fairly level ground farther away. The site which was finally selected is approximately one hundred fifty acres in size and fulfills as nearly as possible all of the requirements for such a problem. It lies to the west of Manhattan, Kansas and is bounded on the south by Highway South 40, on the west by Wild Cat Creek, on the east by Evergreen Avenue and on the north by Sunset Cemetery.

In general, the topography is rolling but the area is broken by deep ravines which are heavily wooded with oaks, elms and shrubby undergrowth. The total difference in elevation on the property is about 179 feet.

Four sketches of tentative layouts were made showing the location and orientation of the house, location of entrances, drives, service areas, gardens, recreational areas and the larger tree masses.

From these preliminary studies a general plan was made which was more accurate in detail and showed clearly the relationship of the house design to the grounds. The most important views from the house were to the southeast and southwest; consequently the house and gardens were so oriented as to have these views unobstructed and to give
them due emphasis (Plate I).

This preliminary study was then transferred to German ripple paper, traced in ink, and rendered in water color (Plate II).

The next step was to make an enlarged drawing of the area adjacent to the house in order to show more clearly the landscape development. The solution of this problem is shown in Plate V. Other plans such as the grading plan and planting plan of the same area were drawn on tracing cloth and rendered in ink. They are shown in Plates VI and VII.

Ninety varieties of trees and shrubs, deciduous and evergreen, were used in the planting plan. All are hardy and otherwise adapted to this section.

SUMMARY

From a utilitarian point of view such a problem as this would seem entirely too pretentious for this section to be of any great value. However, it has been a test to the designer to include so many different elements and still produce a harmonious effect.

This study has convinced the author that for a devel-
opment of this type the English style of landscape archi-
teecture, as revised to meet modern needs, is without
doubt superior to other styles and should be used exten-
sively in this section of Kansas.
Plate I.

General plan showing topography and landscape development. The original plan was submitted on German ripple paper drawn to the scale one inch equal to one hundred feet and rendered in ink.
GENERAL PLAN FOR
WINDELMERE HILLS ESTATE
MANHATTAN KANSAS

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Scale: One Inch Equals One Hundred Feet.
Plate II.

General plan rendered in full water color; brown and green tones predominating.
GENERAL PLAN FOR
WINDERMERE HILLS ESTATE
MANHATTAN KANSAS

Scale: One Inch Equals One Hundred Feet

[Diagram of Windermere Hills Estate]

DEPARTMENT OF AGRICULTURE
LANDSCAPE GARDENING
MANHATTAN, KANSAS, MAY 25, 1925
Plate III.

First floor plan of the house showing the rooms and their relation to the service yard, entrance court and garden terraces. The plan is drawn on tracing cloth to a scale one inch equals sixteen feet.
Plate IV.

First floor plans of the garage, garden houses and dressing rooms. Drawn on tracing cloth to the scale one inch equals sixteen feet.
Plate V.

Landscape design of the house and garden area. Drawing submitted on German ripple paper and rendered in full water color. Scale one inch equals sixteen feet. The section AB is taken along the major axis of the house and gardens and shows the differences in elevation of the gardens.
Grading plan of the house area. This plan, drawn on tracing cloth to the scale one inch equals sixteen feet, gives the existing contours as light lines and the proposed contours as heavy lines. Elevation of all the principal points are given directly on the plan.
Grading Plan For The
WINDERMERE HILLS ESTATE
MANHATTAN KANSAS
One inch equals seven feet
Plate VII.

Planting plan of trees and shrubs about the house and gardens. The original was drawn on tracing cloth, to the scale one inch equals sixteen feet, and rendered in ink.

Explanation of Planting Plan

The first figure in a planting bed refers to the numbered list of trees and shrubs which appears on pages 19 to 24 inclusive and indicates the kind of plants used.

The second figure gives the quantity of plants needed.

The circles show trees to be planted.
KEY TO PLANTING PLAN

Trees and Shrubs

1. Juniperus cannartii
   Cannart Juniper

2. Juniperus chinensis
   Chinese Juniper

3. Juniperus communis
   Common Juniper

4. Juniperus communis suecica
   Swedish Juniper

5. Juniperus pfitzeriana
   Pfitzer's Juniper

6. Juniperus sabina
   Savin Juniper

7. Juniperus sabina tamariscifola
   Tamarix Savin

8. Juniperus scopulorum
   Colorado Silver Juniper

9. Juniperus virginiana
   Red Cedar

10. Picea canadensis
    White Spruce

11. Picea excelsa
    Norway Spruce

12. Pinus banksiana
    Jack Pine

13. Pinus montana
    Swiss Mountain Pine
14. *Pinus montana mughus*
   Mugho Pine

15. *Pinus ponderosa*
   Western Yellow Pine

16. *Pinus strobus*
   White Pine

17. *Pinus sylvestris*
   Scotch Pine

18. *Acer campestre*
   English Maple

19. *Acer platanoides*
   Norway Maple

20. *Acer rubrum*
   Red Maple

21. *Catalpa speciosa*
   Western Catalpa

22. *Carpinus carolininiana*
   American Hornbeam

23. *Celtis occidentalis*
   Hackberry

24. *Cercis canadensis*
   American Redbud

25. *Crataegus crusgalli*
   Cockspur Thorn

26. *Gymnocladus dioica*
   Kentucky Coffeetree

27. *Koelreuteria paniculata*
   Goldenrain-tree

28. *Liriodendron tulipifera*
   Tulip tree

29. *Morus rubra*
   Red Mulberry
30. Ostrya virginiana
   American Hophornbeam

31. Platanus occidentalis
   American Plane tree

32. Quercus alba
   White Oak

33. Quercus imbricaria
   Shingle Oak

34. Quercus muhlenbergii
   Chinquapin Oak

35. Quercus palustris
   Pin Oak

36. Quercus rubra
   Common Red Oak

37. Quercus velutina
   Black Oak

38. Tilia platyphyllos
   Bigleaf European Linden

39. Ulmus americana
   American Elm

40. Ulmus campestris
    English Elm

41. Acanthopanax pentaphyllum
    Five-leaved Aralia

42. Aesculus arguta
    Texas Buckeye

43. Amorpha fruticosa
    Indigo Bush

44. Berberis thunbergii
    Japanese Barberry
45. Baltonia latisquama
   Pink Baltonia

46. Buxus sempervirens
   Common Box

47. Calycanthus floridus
   Common Sweetshrub

48. Caragana arborescens
   Siberian Pea-Tree

49. Cornus paniculata
   Gray Dog-wood

50. Cornus sanguinea
   Blood-Twig Dog-wood

51. Cornus stolonifera
   Red Osier Dog-wood

52. Cornus mas
   Cornelian Cherry

53. Cotoneaster acutifolia
   Pekin Cotoneaster

54. Cotoneaster divaricata
   Spreading Cotoneaster

55. Cotoneaster horizontalis
   Rock Cotoneaster

56. Cydonia japonica
   Flowering Quince

57. Daphne cneorum
   Rose Daphne

58. Deutzia scabra
   Fuzzy Deutzia

59. Elaeagnus angustifolia
   Russian Olive

60. Euonymus alatus
   Winged Euonymus
61. Euonymus atropurpureus
   Wahoo

62. Forsythia intermedia
   Border Forsythia

63. Hydrangea arborescens
   Smooth Hydrangea

64. Ilex glabra
   Inkberry

65. Kerria japonica
    Kerria

66. Ligustrum amurense
    Amur Privet

67. Ligustrum ibota
    Ibota Privet

68. Lonicera fragrantissima
    Winter Honeysuckle

69. Lonicera morrowi
    Morrow Honeysuckle

70. Lonicera tatarica
    Tatarian Honeysuckle

71. Philadelphus coronarius
    Sweet Mock Orange

72. Rhamnus cathartica
    Common Buckthorn

73. Rhodotypos kerricoides
    Jetbead

74. Rhus canadensis
    Fragrant Sumac

75. Rhus glabra
    Smooth Sumac
76. *Rhus cotinus*
   Common Smoketree

77. *Rosa rugosa*
   Rugosa Rose

78. *Spiraea arguta*
   Garland Spirea

79. *Spiraea billiardi*
   Billiard Spirea

80. *Spiraea bumalda*
   Anthony Waterer Spirea

81. *Spiraea thunbergii*
   Thunberg Spirea

82. *Spiraea vanhouttei*
   Vanhoutte Spirea

83. *Symphoricarpos racemosus*
   Common Snowberry

84. *Symphoricarpos vulgaris*
   Coralberry

85. *Syringa chinensis*
   Chinese Lilac

86. *Syringa persica*
   Persian Lilac

87. *Syringa vulgaris*
   Common Lilac

88. *Tamarix gallica*
   French Tamarix

89. *Viburnum dentatum*
   Arrowwood

90. *Viburnum opulus*
   European Cranberrybush
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REFERENCES


