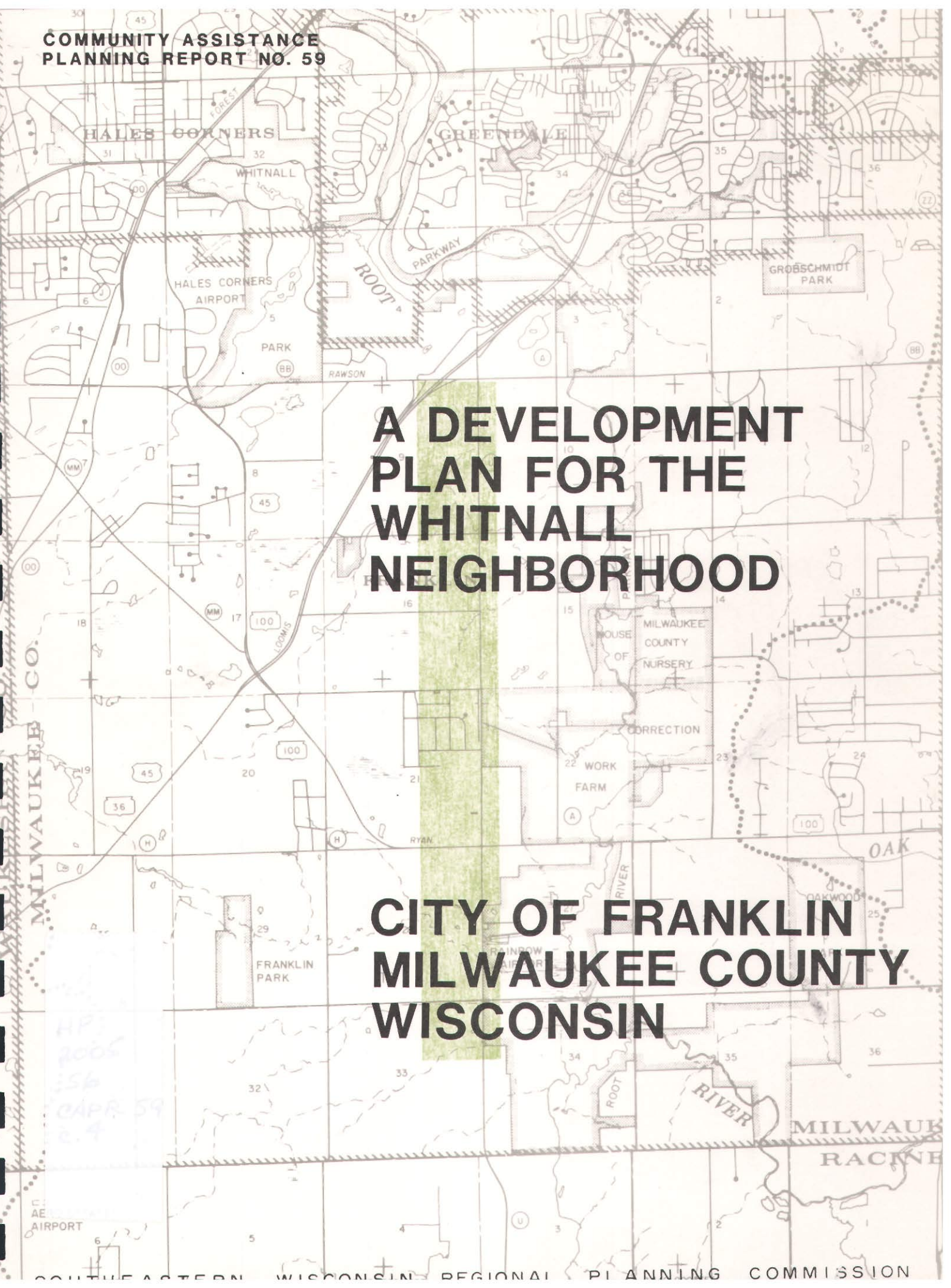
COMMUNITY ASSISTANCE
PLANNING REPORT NO. 59



A DEVELOPMENT PLAN FOR THE WHITNALL NEIGHBORHOOD

CITY OF FRANKLIN MILWAUKEE COUNTY WISCONSIN

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Special acknowledgement is due Mr. Curtis J. Lypek, SEWRPC Planner, for his contribution to the preparation of this report.

COMMUNITY ASSISTANCE PLANNING REPORT
NUMBER 59

A DEVELOPMENT PLAN FOR THE WHITNALL NEIGHBORHOOD

City of Franklin
Milwaukee County, Wisconsin

Prepared by the
Southeastern Wisconsin Regional Planning Commission
P. O. Box 769
Old Courthouse
916 N. East Avenue
Waukesha, Wisconsin 53187-1607

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September 1985

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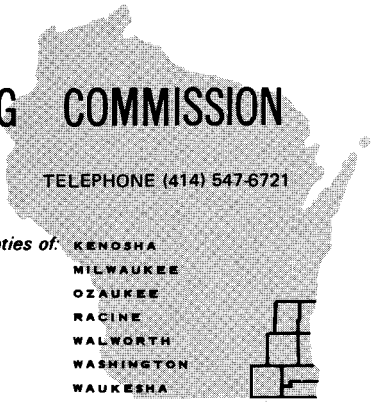

September 21, 1985

The Honorable Theodore J. Fadrow
Mayor
City of Franklin
Municipal Building
9229 W. Loomis Road
Franklin, Wisconsin 53132

Dear Mayor Fadrow:

As you know, the Southeastern Wisconsin Regional Planning Commission agreed to prepare a series of neighborhood unit development plans for the City of Franklin. The Commission staff, working with the City Plan Commission, has delineated 14 residential and two industrial neighborhood units for which such plans should eventually be prepared. This report presents a plan for one of these 16 neighborhood units, the unit known as the "Whitnall Neighborhood."

This report presents basic information on the present stage of development of the Whitnall Neighborhood, including information on the existing real property boundary and land use patterns; the existing sanitary sewerage, water supply, and storm water drainage facilities; and the topography, drainage pattern, soils, woodlands, and wetlands of the neighborhood area, all of which constitute important considerations in any neighborhood planning effort. Based on the findings of these inventories and on recommended neighborhood development standards, the report sets forth a recommended neighborhood unit development plan which is consistent with both regional and local development objectives, along with certain alternatives to that recommended plan.

Upon its adoption by the City Plan Commission, the plan presented in this report is intended to be used by city officials as a point of departure in the making of development decisions affecting the Whitnall Neighborhood.

The Regional Planning Commission staff is appreciative of the assistance provided by elected and appointed city officials in the preparation of the plan. The Commission staff stands ready, upon request, to assist the City in presenting the plan documented in this report to the public for review and evaluation prior to local adoption and to assist in subsequent implementation of the plan over time.

Sincerely,

Kurt W. Bauer
Executive Director

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Chapter I

INTRODUCTION

The Southeastern Wisconsin Regional Planning Commission, since its inception in 1960, has urged local plan commissions to consider the preparation of detailed neighborhood unit development plans as an important means of guiding and shaping urban land use development and redevelopment in the public interest. SEWRPC Planning Guide No. 1, Land Development Guide, published in November 1963, discussed the importance of neighborhood unit planning to the attainment of good residential land subdivision. This guide indicated that effective public regulation of the important process of land subdivision--a process through which much of the form and character of a community are determined--requires the preparation of detailed neighborhood unit development plans. The regional land use plan originally adopted by the Commission in December 1966 more specifically recommended that local plan commissions identify neighborhood units within areas of existing or proposed urban use and prepare detailed plans for the development of these units.

The City of Franklin on August 15, 1967, formally requested project planning services from the Regional Planning Commission and entered into an agreement with the Commission on May 20, 1969, wherein the Commission staff would assist the City in the delineation of neighborhood units as defined in this report, and in the design of precise development plans for these units. The Commission staff, working with the Plan Commission of the City of Franklin, initially identified 23 neighborhood units for which proper planning could help to meet the development objectives of the City of Franklin. Subsequent changes in the regional land use plan as it applies to the City of Franklin and realignment of some of the neighborhood boundaries with an attendant consolidation of several neighborhoods has resulted in the identification and delineation of 14 residential neighborhood units. In addition, two industrial neighborhoods, the County Line Industrial Park Neighborhood and the Franklin Industrial Park Neighborhood, are proposed.

The purpose of this report is to describe the precise development plan prepared for one of these 14 delineated residential neighborhood units--the Whitnall Neighborhood within the City of Franklin. The plan suggests future collector and land access street alignments and attendant block configurations, and identifies the locations within the neighborhood best suited for institutional, commercial, and recreational uses, as well as for various kinds of residential use. The plan identifies areas that should be protected from intensive development for environmental protection and enhancement purposes, and indicates the needed reservation of land for major drainageway and utility easements.

GENERAL SETTING

The City of Franklin is located in the southwestern portion of Milwaukee County in U. S. Public Land Survey Township 5 North, Range 21 East. The City is bordered on the east by the City of Oak Creek, on the north by the Village of Greendale and the Village of Hales Corners, on the west by the City of

Muskego, and on the south by the Town of Raymond in Racine County. Map 1 shows the location of the City of Franklin in the Southeastern Wisconsin Region and the pattern of historic urban development in the Region.

HISTORY OF THE CITY OF FRANKLIN[1]

The Town of Franklin, much of which is now the City of Franklin, was formed out of the original Town of Kinnickinnic by the territorial legislature on December 20, 1839. The name Franklin was given to the town in honor of the American statesman, diplomat, and philosopher, Benjamin Franklin. The town was originally covered with a heavy growth of timber, mostly of the hardwood varieties such as walnut, butternut, hickory, oak, beech, maple, yellow poplar, whitewood, white ash, and elm. The town was noted for its abundance of game and was a favorite hunting ground for the Indians for many years even after the cession of the land to European settlers.

The Town of Franklin was among the earliest towns settled in Milwaukee County, with the first homesteader, William Shehan, arriving in 1834, and the initial sale of the public lands occurring in 1838. Among early purchasers of land in the Town were Byron Kilbourn and Martin O. Walker, two early settlers of Milwaukee. The majority of the earliest settlers in Franklin were of Irish descent, with a large number of German settlers in later years.

During the early twentieth century, Franklin was one of the most wealthy and prosperous towns in Milwaukee County. Agriculture was the principal industry, and principal agricultural pursuits included stock raising and fruit growing. Farming remained of primary importance until the early 1960's, with farms occupying more than 80 percent of the total area of the Town. By the early 1970's, approximately 35 percent of the land area of the original civil town had been converted to residential, commercial, and industrial uses.

In 1938, Franklin was the only civil town in Milwaukee County which retained its original 36.03-square-mile area intact, and was therefore coterminous with the U. S. Public Land Survey Township 5 North, Range 21 East. On November 1, 1938, the Village of Greendale was incorporated to the north of Franklin, and the incorporation included approximately 1.4 square miles of area in Franklin, with the remaining 34.6 square miles of land remaining unincorporated. On April 11, 1955, the Village of Hales Corners to the north annexed approximately 20 acres of the Town of Franklin. On August 15, 1956, the remaining approximately 34.6-square-mile area of the Town was incorporated as a fourth class city. The present government is of the mayor-council type, with the mayor presiding over six aldermen elected by ward.

The population of the Franklin area remained almost entirely rural from 1840 to 1940. A small urban population existed in the unincorporated village of St. Martins, a community within the Town of Franklin which was settled around

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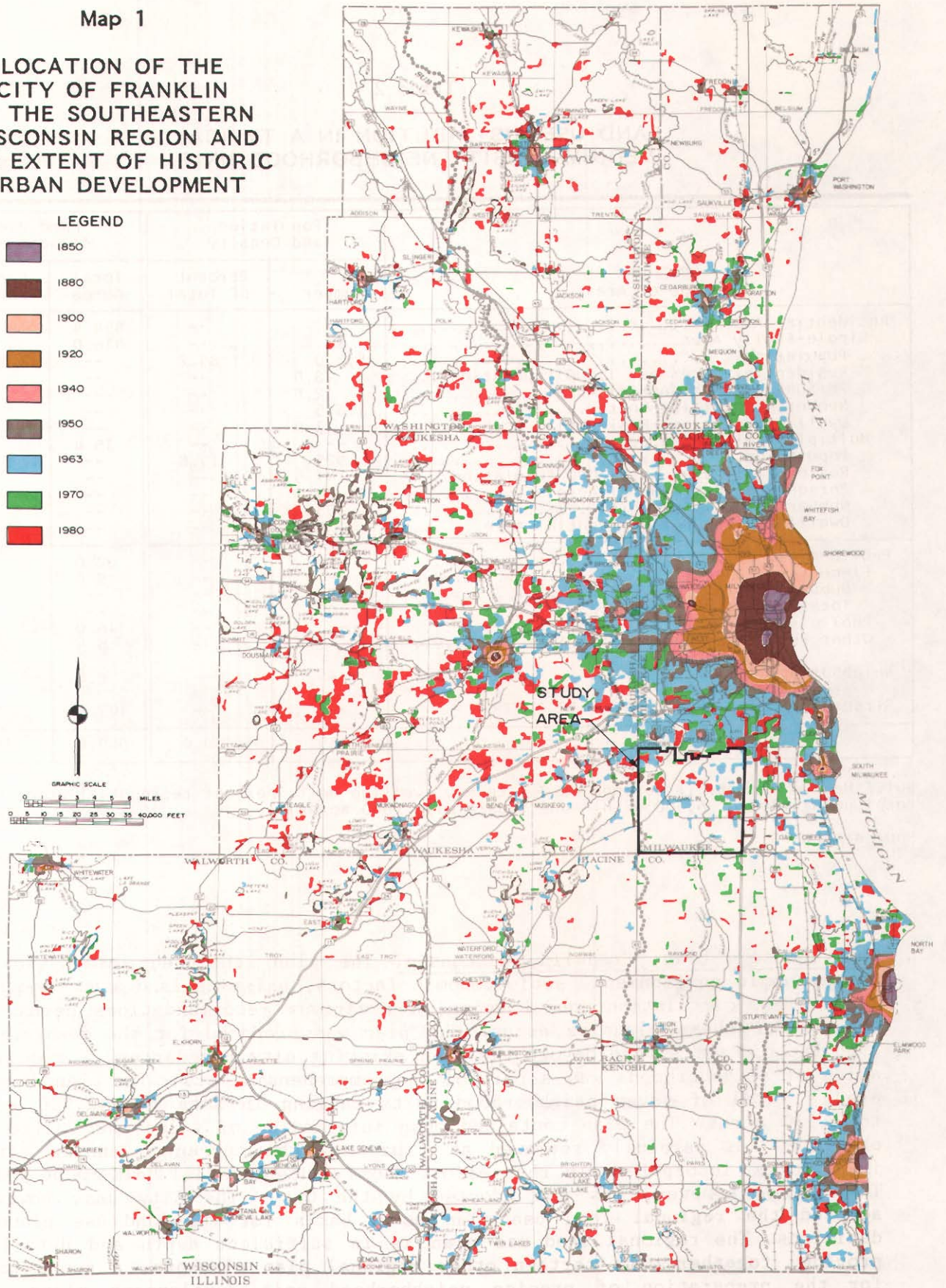
[1]Frances Beverstock and Robert P. Stuckert, eds., Metropolitan Milwaukee Fact Book: 1970, Milwaukee Urban Observatory, Milwaukee, Wisconsin, 1972, p. 319; and Lieutenant Colonel Jerome A. Watrous, ed., Memoirs of Milwaukee County, Western Historical Association, Madison, Wisconsin, 1909, pp. 211-218.

Map 1

LOCATION OF THE CITY OF FRANKLIN IN THE SOUTHEASTERN WISCONSIN REGION AND THE EXTENT OF HISTORIC URBAN DEVELOPMENT



Source: SEWRPC.

Table 1

HISTORIC AND FORECAST POPULATION LEVELS FOR THE TOWN AND CITY OF FRANKLIN: 1840-2000

Year	Population	Percentage of Population Change From Previous Period
1840	250[a]	--
1850	1,176	370.4
1860	1,773	50.8
1870	2,090	17.9
1880	1,819	-13.0
1890	1,868	2.7
1900	1,738	-7.0
1910	1,770	1.8
1920	1,712	-3.3
1930	2,012	17.5
1940	2,304	14.5
1950	3,886	68.7
1960	10,006[b]	157.5
1970	12,247	22.4
1980	16,750	36.8
1990	20,900[c]	24.8
2000	38,600[c]	84.7

[a] Lieutenant Colonel Jerome A. Watrous, ed., Memoirs of Milwaukee County, (Western Historical Association, Madison, Wisconsin, 1909), p. 220.

[b] The City of Franklin was incorporated from the Town of Franklin on August 15, 1956.

[c] Forecasts based upon regional land use plan.

Source: SEWRPC.

a Roman Catholic mission in about 1848. The resident population of the Franklin area grew slowly during the first 100 years following European settlement, as shown in Table 1. The last 40 years, from 1940 to 1980, have been characterized by major changes in land use and population. Much of the increase in the population of the Franklin area over this later period was due to the development of residential areas occupied by persons who worked in commercial and industrial centers located elsewhere in the greater Milwaukee area.

The 1980 U. S. Bureau of the Census preliminary resident population count of the City stood at 16,750 persons. The 1980 population already exceeds the 1985 forecast population for the City, as prepared by the Regional Planning Commission, by 550 persons, or by about 3 percent. This rapid growth of the City dictates the need for a local planning program to provide a sound basis for development decision-making by local officials on a day-to-day basis.

THE NEIGHBORHOOD UNIT CONCEPT

The Regional Planning Commission's recommendation concerning the preparation of detailed neighborhood unit development plans by local plan commissions is based upon the concept that an urban area should be formed of, and developed in, a number of individual cellular units and not as a single, large, formless mass. These cellular units may be categorized by their primary or predominant land use and, as such, may be industrial, commercial, institutional, or residential. The latter type of unit--herein termed a neighborhood unit--is the concern of this report.

Insofar as possible, each neighborhood unit should be bounded by arterial streets; major park, parkway, or institutional lands; bodies of water; or other natural or cultural features which serve to clearly and physically separate each unit from the surrounding units. Each residential neighborhood unit should provide housing for that population for which, by prevailing local standards, one public elementary school of reasonable size is required. The unit should further provide, within established overall density limitations, a broad range of lot sizes and housing types; a full complement of those public and semipublic facilities needed by the family within the immediate vicinity of its dwelling, such as church, neighborhood park, and neighborhood shopping facilities; and ready access to the arterial street system and, thereby, to those urban activities and services which can not as a practical matter be provided in the immediate vicinity of all family dwellings--namely, major employment centers, community and regional shopping centers, major recreational facilities, and major cultural and educational centers.

The internal street pattern of the residential neighborhood unit should be designed to facilitate vehicular and pedestrian circulation within the unit, but to discourage penetration of the unit by heavy volumes of through traffic. Each residential neighborhood unit should have a central feature, or focal point, around which the unit is developed to promote a sense of physical unity. In this respect, the elementary school should be located adjacent to the neighborhood park so that the school and park together may function as a neighborhood center and thus provide a focal point for the neighborhood design. The school and park should be located within walking distance of the rest of the neighborhood unit.

The neighborhood unit is intended to provide a good setting for family life, providing healthy, safe, convenient, and attractive housing areas together with supporting commercial and institutional facilities. The neighborhood should be designed to promote stability and the preservation of amenities, and should be large enough to maintain and protect its own environment. The neighborhood concept is intended to promote convenience in living and traveling within an urban area, to promote harmony and beauty in residential development, to bring the living area of the urban family into a scale that allows the individual to feel at home, and to encourage residents to take a more active part in neighborhood and community affairs. Importantly, in developing areas, the neighborhood unit concept is intended to facilitate the difficult task of good land subdivision design. The proper relationship of individual subdivisions to areawide features, to existing and proposed land uses, and to other subdivisions can best be achieved through a precise plan for neighborhood unit development.

The neighborhood unit concept also provides a means for more actively and directly involving citizens in the local planning process. A neighborhood is that area most closely associated with the daily activities of family life, such as elementary education or convenience shopping. Residential neighborhoods, however, depend on the larger community for basic employment, comparison shopping, higher education, cultural activities, and certain personal services. A group of neighborhoods which function as a unit, and which are provided with the necessary level of external services and facilities required by the neighborhoods in the group, may be described as a community. By identifying neighborhood units and grouping them into communities, public sentiment can be constructively focused on the communities of interest so created. Because of its emphasis on the day-to-day needs and concerns of the family, neighborhood planning is particularly "people-oriented."

Unlike the community comprehensive, or master, plan--which is necessarily quite general--the plan developed for a neighborhood is quite precise. It explicitly depicts alternative development patterns which are practicable to meet such needs as traffic circulation, storm water drainage, sanitary sewerage, water supply, and a sound arrangement of land uses. Neighborhood planning, therefore, must involve careful consideration of such factors as soil suitability, land slopes, drainage patterns, flood hazards, and woodland and wetland cover; existing and proposed land uses in and surrounding the neighborhood unit; and real property boundaries. Although the neighborhood unit concept is most readily applicable to medium- and high-density residential areas, it can be successfully applied in low-density areas with some modifications of the design standards. Table 2 illustrates a typical land use distribution in a medium-density planned neighborhood unit and is intended to provide a basis of comparison for the specific neighborhood unit designs presented herein.

The neighborhood unit development plan, while precise, must nevertheless also be flexible. The plan is intended to be used as a standard for evaluating developmental proposals of private and public agencies, as such proposals are advanced over time. It should not be presumed that private developers cannot present development plans harmonious with sound development standards, nor that any development plans which are privately advanced and at variance in some respect with adopted neighborhood plan are necessarily unacceptable. Local planning officials should remain receptive to proposed plan changes which can be shown to be better than the adopted plan, while remaining compatible with the overall objectives for the development of the neighborhood and the community as a whole, as expressed in the adopted plan. The adopted plan thus becomes an invaluable point of departure for development decision-making, subject to improvement as changing conditions may dictate.

COMMUNITY PLANNING IN THE CITY OF FRANKLIN

A community should have an adopted comprehensive plan as a basis for the preparation of precise neighborhood unit development plans. Sound planning practice dictates that, just as neighborhood plans should be prepared within the framework of community plans, community plans should be prepared within the framework of regional plans. In October of 1965, Wm. S. Lawrence and Associates, Inc., and the North American Research Corporation, both consulting firms in Chicago, prepared a land use plan for the City of Franklin entitled

Table 2

LAND USE DISTRIBUTION IN A TYPICAL MEDIUM-DENSITY NEIGHBORHOOD UNIT

Type of Area	Population and Density		Land Use Allocations	
	Number	Percent of Total	Total Acres	Percent of Total
Residential Area	--	--	454.4	71.0
Single-Family Area	--	--	416.0	65.0
Population	5,330	85.2	--	--
Residential Acres per 1,000 Population	78.0	--	--	--
Persons per Residential Acre	12.8	--	--	--
Number of Dwelling Units	1,615	--	--	--
Dwelling Units per Residential Acre	3.9	--	--	--
Multiple-Family Area	--	--	38.4	6.0
Population	925	14.8	--	--
Residential Acres per 1,000 Population	41.5	--	--	--
Persons per Residential Acre	24.1	--	--	--
Number of Dwelling Units	355	--	--	--
Dwelling Units per Residential Acre	9.2	--	--	--
Public Area	--	--	32.0	5.0
Elementary School	--	--	9.6	1.5
Number of Classrooms	20	--	--	--
Total Number of Pupils	500	--	--	--
Public Park Area	--	--	16.0	2.5
Other Public and Quasipublic Area	--	--	6.4	1.0
Neighborhood Commercial Area	--	--	6.4	1.0
Street Area	--	--	147.2	23.0
Total	6,255	100.0	640.0	100.0

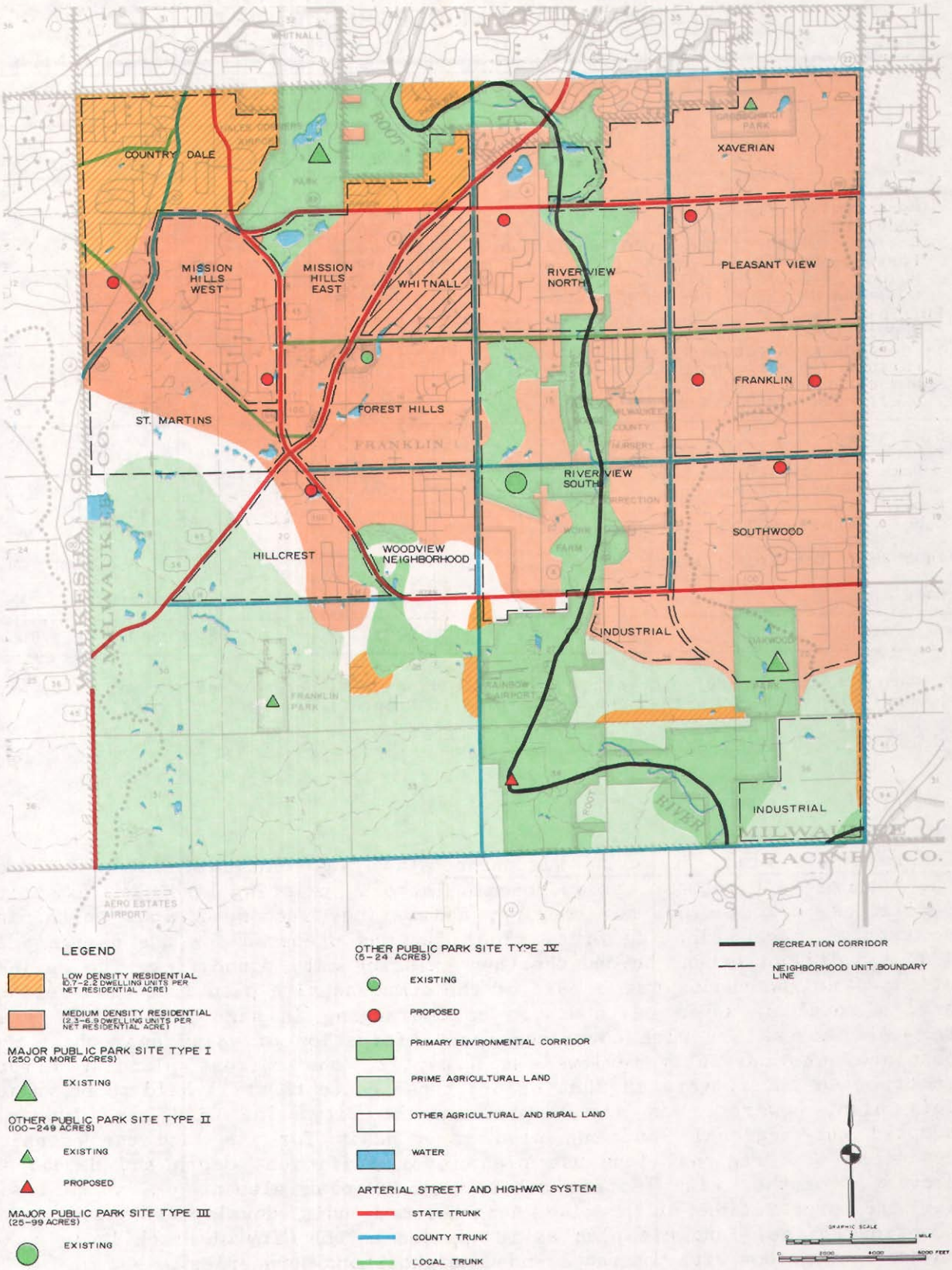
NOTE: Medium density is defined as 2.3 to 6.9 dwelling units per net residential acre, with a total population of 6,500 within one square mile (640 acres).

Source: SEWRPC.

Comprehensive Plan: Franklin, Wisconsin. The plan included information on the economic environment, socioeconomic factors, existing land use, community facilities, circulation, and housing, and various recommendations pertaining to each of these planning areas. The plan was prepared for the design year 1980 and did not extend beyond the then existing city boundaries. The delineation of neighborhoods was a part of the comprehensive plan. The plan delineated a total of seven neighborhood units ranging in size from 1,900 acres to 4,530 acres. The plan contained much information of value and, while now obsolete, was carefully reviewed as a part of the current planning effort in order to incorporate in that effort those concepts still held to be valid. This plan, however, was not adopted by the City. The City has, however, adopted the regional land use plan as a basis for its land use planning decisions. The regional land use plan is in sufficient depth and detail to provide, together with certain other regional plan elements, a sound basis for the preparation of precise neighborhood unit development plans. The adopted regional land use plan as it applies to the City of Franklin is shown on Map 2, together with the recommended neighborhood boundaries.

Map 2

SELECTED ELEMENTS OF THE REGIONAL LAND USE, PARK AND OPEN SPACE, AND TRANSPORTATION PLANS FOR THE CITY OF FRANKLIN PLANNING AREA: 2000



Source: SEWRPC.

Several of the adopted regional plan elements are particularly important to the preparation of a general plan for the City of Franklin and, therefore, to the development of precise neighborhood unit development plans within the City. These elements are described in the following Regional Planning Commission reports: SEWRPC Planning Report No. 9, A Comprehensive Plan for the Root River Watershed; SEWRPC Planning Report No. 11, A Jurisdictional Highway System Plan for Milwaukee County; SEWRPC Planning Report No. 16, A Regional Sanitary Sewerage System Plan for Southeastern Wisconsin; SEWRPC Planning Report No. 20, A Regional Housing Plan for Southeastern Wisconsin; SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000; SEWRPC Planning Report No. 27, A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000; and SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000. The findings and recommendations of these adopted regional plan elements are reflected in the neighborhood unit development plan presented herein.

In preparation for its overall planning program, and in support of other planning and engineering programs, the City of Franklin undertook for much, although not all, of the area of the City, the preparation, to National Map Accuracy Standards, of large-scale (1" = 100' scale, two-foot contour interval) topographic maps in May 1963, and companion cadastral maps in September 1973. The maps and attendant control surveys were completed in accordance with specifications prepared for the City by the Regional Planning Commission and involved the relocation, monumentation, and placement on the Wisconsin State Plane Coordinate System of all U. S. Public Land Survey corners within the areas to be mapped, and the determination of the grid lengths and bearings of all quarter-section lines. The resulting topographic and cadastral information was essential to the conduct of the precise neighborhood development planning program documented herein.

NEIGHBORHOOD DELINEATION

The Plan Commission of the City of Franklin has identified 14 residential neighborhood units for which detailed neighborhood plans should eventually be developed. As shown on Map 2, these are the Country Dale, Forest Hills, Franklin, Hillcrest, Mission Hills East, Mission Hills West, Pleasant View, Riverview North, Riverview South, St. Martins, Southwood, Whitnall, Xaverian, and Woodview Neighborhoods. The 14 neighborhoods were delineated based on the neighborhood unit concept described above, and on the general standards set forth in Table 2. The neighborhood boundaries were located along strong transportation and environmental barriers such as Loomis Road, Rawson Avenue, S. 76th Street, S. 27th Street, STH 100, and the Root River Parkway.

NEIGHBORHOOD LOCATION AND BOUNDARIES

The Whitnall Neighborhood, one of the 14 residential neighborhoods delineated for the City of Franklin, is located in the north-central portion of the City. The neighborhood is bounded on the west by Loomis Road (STH 36); on the east by S. 76th Street; and on the south by Drexel Avenue. Also, the Whitnall Neighborhood is bounded on the west by the delineated Mission Hills East

Neighborhood; on the east by the delineated Riverview North Neighborhood; and on the south by the delineated Forest Hills Neighborhood. The area of the Whitnall Neighborhood totals approximately 417 acres.

HISTORY OF THE WHITNALL NEIGHBORHOOD

Development for urban purposes of the area now known as the Whitnall Neighborhood began in 1978, with the platting of the Tuckaway Green Subdivision and subsequent additions. The history of residential development in the Whitnall Neighborhood is summarized in Table 3.

Table 3

HISTORY OF URBAN LAND SUBDIVISION IN THE WHITNALL NEIGHBORHOOD

Subdivision	Platting Date	Lots	Number of Units	Total Area (gross acres)	Average Lot Size (net square feet)	Developed Units[a]	Undeveloped Units[a]
Tuckaway Green.....	May 1978	23	23	9.5	11,950	21	2
Tuckaway Green Addition No. 1....	May 1978	22	27	22.2	13,000	17	10
Tuckaway Green Addition No. 2....	November 1978	18	18	6.9	11,200	7	11
Tuckaway Green Addition No. 3....	November 1978	18	18	6.1	11,250	8	10
Tuckaway Green Addition No. 4....	July 1979	16	16	5.6	12,450	4	12
Tuckaway Green Addition No. 5....	July 1979	15	15	5.2	10,450	2	13
Total	--	112	117	55.5	11,700	59	58

[a]As of February 1981.

Source: SEWRPC.

Chapter II

INVENTORY FINDINGS AND ANALYSIS

INTRODUCTION

Reliable basic planning and engineering data are essential to the formulation of workable development plans. Consequently, inventory becomes the first operational step in any planning process. Factual information is particularly crucial to good neighborhood planning because of the precision of the plan to be produced. The formulation of a neighborhood plan requires that factual data be developed on the existing characteristics of the neighborhood area, including the topography and surface drainage pattern, the existence of any areas subject to special hazards such as flooding, the extent of woodlands and wetlands, the existing land use pattern, the real property ownership pattern, the community utilities and facilities, the street and highway facilities, and the soils.

TOPOGRAPHY AND SURFACE DRAINAGE

Map 3 shows the topography, surface drainage, wetlands, and flood hazard areas of and in the Whitnall Neighborhood unit. The area consists of gently rolling terrain, with maximum local relief of approximately 56 feet. Large-scale topographic maps do not exist for a small area of the neighborhood located to the north of Rawson Avenue. The subbasin drainage boundaries shown for this area were delineated using the best small-scale topographic maps available.

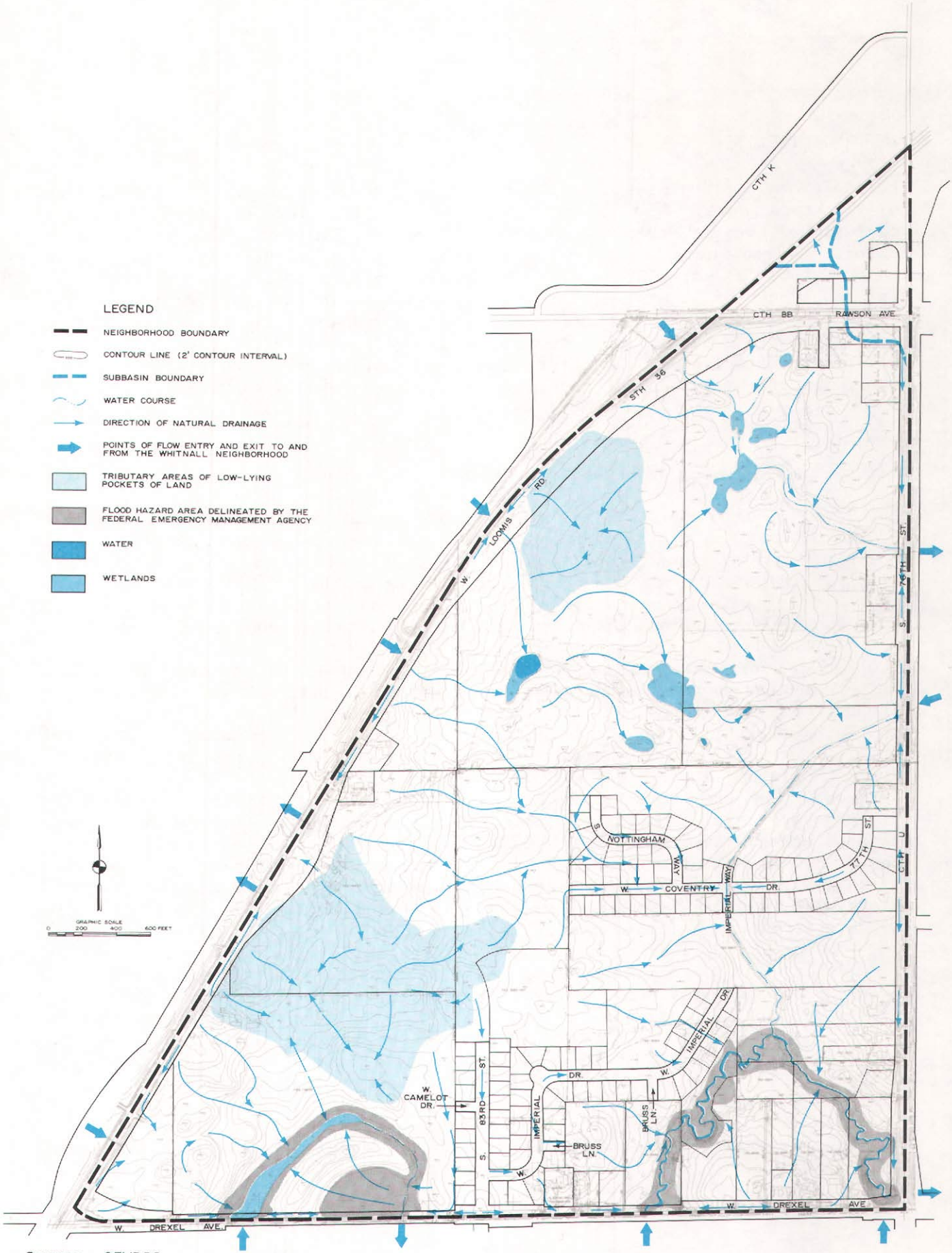
Two natural drainageways are located in the Whitnall Neighborhood area, one being situated in the southern portion of the neighborhood and the other in the northern and eastern portions of the neighborhood. The drainageway located in the southern portion of the neighborhood collects storm water runoff from the southern part of the neighborhood, and conveys runoff from the adjoining Forest Hills and Mission Hills East Neighborhoods, as well as from the nearby Mission Hills West, St. Martins, Hillcrest and Woodview Neighborhoods. This drainageway enters the western part of the neighborhood through a culvert located under Drexel Avenue, and exits the neighborhood approximately 900 feet to the east of this culvert, through a culvert under Drexel Avenue. The drainageway re-enters the neighborhood by means of yet another culvert under Drexel Avenue, and eventually exits the neighborhood through a culvert under S. 76th Street, near Drexel Avenue, as shown on Map 3.

The other natural drainageway, located along the eastern portion of the neighborhood, collects and conveys storm water runoff from the northern part of the neighborhood and portions of the adjoining Riverview North and Mission Hills East Neighborhoods. The drainageway flows through a storm sewer system located in the Tuckaway Green Addition No. 3 Subdivision, and eventually discharges to the previously described drainageway through the southern portion of the neighborhood.

Storm water runoff from the Tuckaway Green Subdivision is collected by means of a storm sewer system and is discharged into the previously described drainageways.

Map 3

TOPOGRAPHY, SURFACE DRAINAGE, WETLAND, AND FLOOD HAZARD AREAS, AND WATERSHED FEATURES IN THE WHITNALL NEIGHBORHOOD



Source: SEWRPC.

Wetlands

Wetlands are defined as areas that are inundated or saturated by surface or groundwater at a frequency and with a duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include swamps, marshes, bogs, and similar areas. Precipitation provides water to wetlands directly as falling rain or snow, and indirectly as surface water runoff or as groundwater seepage. Wetlands may receive mostly surface water--direct precipitation and surface runoff--or mostly groundwater--precipitation that infiltrates and percolates through the soil. Surface water inflow is usually intermittent, whereas groundwater inflow is usually continuous. The location and situation of the wetland in the landscape affects the type of water it receives. Wetlands can occur in elevated locations and on slopes, as well as in depressions.

In 1981 there were approximately five acres of water and wetland area in the Whitnall Neighborhood area, covering about 1 percent of the total area of the neighborhood. Slightly more than one-half of this water-wetland area occurs in the vicinity of the natural drainageways, with the remaining area occurring in small, scattered pockets throughout the central part of the neighborhood.

The Whitnall Neighborhood is located entirely within the Root River watershed. The neighborhood, however, contains two pockets of low-lying land, as shown on Map 3, which have no surface drainage outlets, and which receive runoff from a combined tributary area of about 45 acres. or about 11 percent of the total area of the neighborhood. The larger area consists of four distinct pockets which together receive drainage from approximately 32 acres, and is located in the southern part of the neighborhood along Loomis Road. The other area, receiving drainage from approximately 13 acres, is located in the northern part of the neighborhood, also near Loomis Road. These pockets collect water which eventually returns to the atmosphere through evapotranspiration or infiltrates into the soil. Map 3 shows the location of the various drainage basins, or catchment areas, in the neighborhood, together with the pattern of surface flow. All the area within these drainage basins, with the exception of the previously described pockets, eventually discharge into unnamed creeks which are tributary to the Root River.

Floodlands

The floodlands of a river or stream are the wide, gently sloping areas contiguous with, and usually lying on both sides of, a river or stream channel. Rivers and streams occupy their channels most of the time. However, during even minor flood events, stream discharges increase markedly so that the channel is not able to convey all the flow. As a result, stages increase and the river or stream spreads laterally over the floodlands. The periodic flow of a river onto its floodlands is a normal phenomenon, and in the absence of major, costly structural flood control works, will occur regardless of whether urban development is permitted on the floodlands. More specifically, for planning and regulatory purposes, floodlands are normally defined as the areas, excluding the channel, subject to inundation by the 100-year recurrence interval flood event. This is the event that may be expected to be reached or

exceeded in severity once on the average of every 100 years. Stated another way, there is a 1 percent chance that this event will be reached or exceeded in severity in any given year. The 100-year recurrence interval floodland contains within its boundaries areas inundated by floods of less severity but of more frequent occurrence such as the 50-, 25-, and 10-year recurrence interval events. Floodland areas are generally not well suited to urban development because of the flood hazards, high water tables, and inadequate soils. These floodland areas are, however, generally prime locations for needed park and open space lands.

Within the Whitnall Neighborhood, 100-year recurrence interval floodlands have been delineated along the natural drainageway located in the southern part of the neighborhood. These floodlands are shown on Map 3.

Slopes

Provided other development characteristics are favorable, slopes of less than 12 percent generally lend themselves well to urban-type development. Slopes of 12 percent and greater present difficulties for urban development, generally requiring extensive grading in order to prepare the lands for development, a practice which may destroy the natural resource base-related amenities of the area. There are no areas within the Whitnall Neighborhood where slopes exceed 12 percent.

SOILS

Soil properties act as a significant constraint on the development potential of an area. A need exists, therefore, to examine the soils in the Whitnall Neighborhood in terms of their influence on development. This examination requires a soils suitability study which maps the geographic location of the various soils and provides information on the suitability of each of the various soil types for a variety of uses, including residential, commercial, and industrial uses.

Limitation of Soils

Eight identified types of soils occur within the Whitnall Neighborhood area. The most prevalent types of soils are the Morley silt loam, which covers over 40 percent of the total area of the neighborhood, and the Blount silt loam, which covers about 38 percent of the total area of the neighborhood.

Table 4 lists all the soils found in the Whitnall Neighborhood area and indicates the suitability of these soils for residential development with public sanitary sewer service, with onsite soil absorption sewage disposal systems on lots less than one acre in area, and with onsite soil absorption sewage disposal systems on lots one acre or more in area, and for light industrial and commercial development. The term "moderate limitation" indicates that the soil has limitations for the indicated use, but ones that can normally be overcome with proper planning, careful design, and average management. The term "severe limitations" indicates that the soil has limitations that are difficult and costly to overcome and which require above average planning, design, and

Table 4

LIMITATIONS OF SOILS FOR RESIDENTIAL, LIGHT INDUSTRIAL, AND COMMERCIAL DEVELOPMENT FOR THOSE SOILS SERIES FOUND IN THE WHITNALL NEIGHBORHOOD

Soil Number and Name	Limitations of Soil for: Onsite Soil Absorption Sewage Disposal Systems on Lots				Area Covered (acres)	Percent of Neighborhood
	Residential Development with Public Sewer Service	Less Than One Acre	One Acre or More	Light Industrial and Commercial Buildings		
Sanitary Landfill, loam substratum	--	--	--	--	4.1	1.0
11W Alluvial Land, wet	Very severe--high water table; frequent overflow	Very severe--high water table; frequent overflow	Very severe--high water table; frequent overflow	Very severe--high water table; frequent overflow	11.1	2.7
297 Morley silt loam	Moderate on 0-12 percent and severe on steeper slopes; erosive on slopes; low bearing capacity; high shrink-swell potential	Severe--high water table; slow permeability; systems will not operate	Moderate--high water table; slow permeability; systems will not operate	Moderate on 0-6 percent and severe on steeper slopes; low bearing capacity; high shrink-swell potential; erosive on slopes	168.9	40.5
299 Blount silt loam	Moderate--low bearing capacity; high shrink-swell potential; high water table	Very severe--high water table; slow permeability; systems will not operate	Very severe--high water table; slow permeability; systems will not operate	Severe--high water table; high shrink-swell potential; low bearing capacity; erosive on slopes; frost heave	160.1	38.4
328 Pistakee silt loam	Severe--low bearing capacity; frost heave; high water table; occasional overflow	Very severe--high water table; systems will not operate	Very severe--high water table; systems will not operate	Severe--high water table; low bearing capacity; piping occasional overflow	1.0	0.2
338 Ashkum silty clay loam	Severe--low bearing capacity; high shrink-swell potential; high water table	Very severe--high water table; slow permeability; systems will not operate	Very severe--high water table; slow permeability; systems will not operate	Severe--low bearing capacity; high shrink-swell potential; high water table	4.6	1.1
398 Ashkum silty clay loam	Severe--low bearing capacity; high shrink-swell potential; high water table	Very severe--high water table; slow permeability; systems will not operate	Very severe--high water table; slow permeability; systems will not operate	Severe--low bearing capacity; high shrink-swell potential; high water table	59.9	14.4
450 Houghton muck	Very severe--erosive; subject to shrinkage; low bearing capacity; high water table	Very severe--high water table; systems will not operate	Very severe--high water table; systems will not operate	Very severe--erosive high compressibility and instability; high water table	7.3	1.7
Total	--	--	--	--	417.0	100.0

Source: SEWRPC.

management. The term "very severe limitations" indicates that development of the soil for the uses indicated will entail costs that are generally prohibitive, and major soil reclamation work will generally be required.

Map 4 shows the location of those soils with severe and very severe limitations for residential development with public sanitary sewer service including the Alluvial land, Pistakee silt loam, Ashkum silty clay loams, and Houghton muck soils. Poorly drained soils such as these have particularly severe limitations for residential use because development on these soils usually results in wet basements, and requires costly measures to prevent water from seeping into basements. The soils having severe and very severe limitations for urban development with sanitary sewer service cover 84 acres, or about 20 percent of the total area of the neighborhood, with most of these soils occurring in the northern part of the neighborhood. Soils with very severe limitations for urban development with sanitary sewer service cover about 18 acres, or about 4 percent of the total area of the neighborhood, consisting of alluvial soils and muck, and are located mostly along the natural drainageways. Characteristics of these soils include a high water table, low bearing capacity, and high shrink-swell potential. Soils having severe limitations for urban development with sanitary sewer service cover almost 66 acres, or about 16 percent of the total area of the neighborhood. These soils consist almost entirely of silty clay loams scattered mostly throughout the northern portion of the neighborhood. Characteristics of these soils include a low bearing capacity, a high shrink-swell potential, and a high water table.

Map 5 shows the location and extent of the soils which have severe or very severe limitations for residential development without public sewers on lots one acre or more in area. Much of the neighborhood area is covered by soils unsuitable for such use, indicating the need for, and importance of, sanitary sewer service to the proper development of the neighborhood.

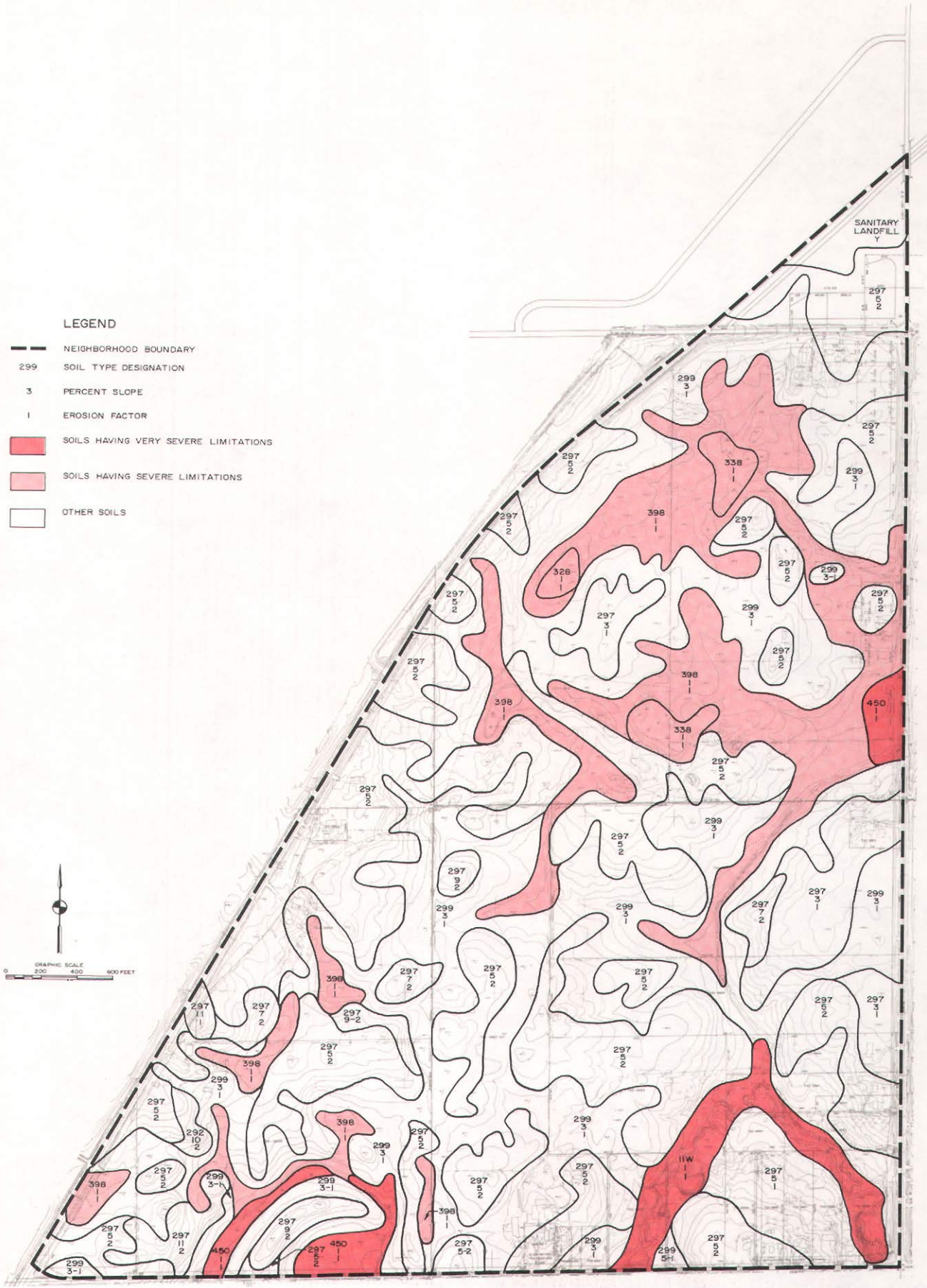
WOODLANDS

Woodlands have important values beyond any potential monetary return from associated forest products. With good management, woodlands can serve a variety of uses and provide a number of important benefits. In addition to contributing to clean air and water, the maintenance of woodlands can contribute to the scenic beauty of an area and to the maintenance of a diversity of plant and animal life in association with human life. Importantly, woodlands can add substantial value to residential areas, and their preservation should, therefore, be carefully considered in the design of such areas. The existing woodlands of the neighborhood area, which required a century or more to develop, can be destroyed through mismanagement within a comparatively short time. Such deforestation increases storm water runoff, contributes to flooding and the siltation of lakes and streams, and destroys wildlife habitat. Woodlands can and should be maintained for their total values: scenic, wildlife habitat and open space areas, educational and recreational uses, and air and water quality protection and enhancement.

Woodlands in the Whitnall Neighborhood, as delineated in Appendix C, occupy a combined area of approximately 19 acres, or only about 4.6 percent of the total area of the neighborhood. Because of the very limited area remaining in

Map 4

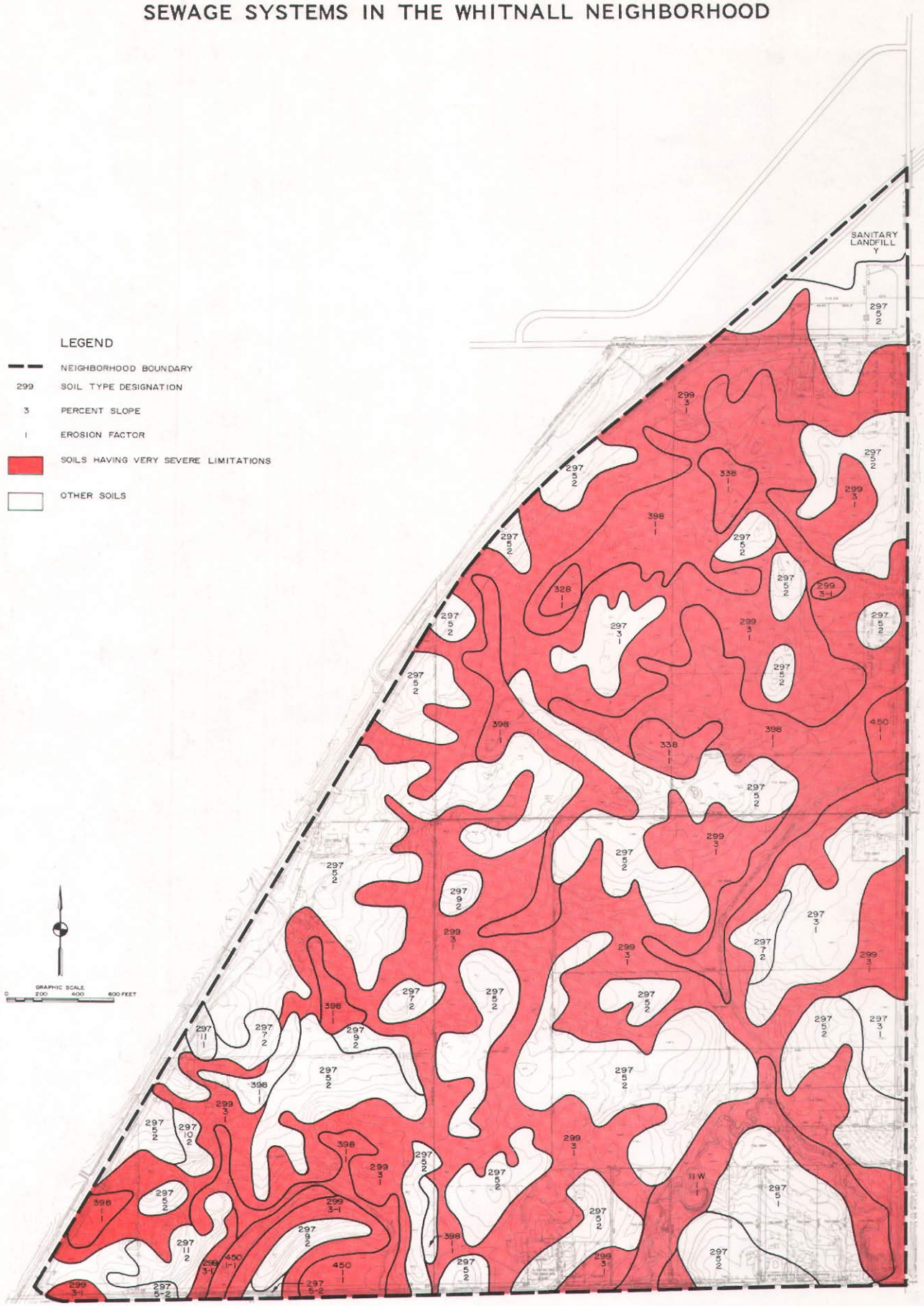
SOIL LIMITATIONS FOR RESIDENTIAL DEVELOPMENT ON LOTS SERVED BY PUBLIC SANITARY SEWER SERVICE IN THE WHITNALL NEIGHBORHOOD



Source: SEWRPC.

Map 5

SOIL LIMITATIONS FOR RESIDENTIAL DEVELOPMENT ON LOTS ONE ACRE OR MORE IN AREA SERVED BY PRIVATE ONSITE SEWAGE SYSTEMS IN THE WHITNALL NEIGHBORHOOD



Source: SEWRPC.

the neighborhood area, the woodlands are a particularly valuable resource, and their preservation and wise use should be carefully considered in any planning for the development of the neighborhood.

OTHER NATURAL RESOURCE RELATED ELEMENTS

In addition to the more basic elements of the underlying and sustaining natural resource base, existing and potential sites having scenic, scientific, historic, and recreational value should be considered in the neighborhood planning process. Although these elements are not strictly a part of the natural resource base, they are so closely linked to that base that it is convenient to consider them along with that base. There are no sites of historic value nor sites of scenic or scientific value within the neighborhood. No significant prairie areas remain in the neighborhood.

ENVIRONMENTAL CORRIDOR DELINEATION

Environmental corridors are defined by the Regional Planning Commission as linear areas in the landscape which contain concentrations of high-value elements of the natural resource base. Preservation of the natural resource base and natural resource-related elements, especially where these elements are concentrated in identifiable geographic areas, is essential to the maintenance of the overall environmental quality of an area, to the continued provision of certain amenities that provide a high quality of life for the resident population, and to the avoidance of excessive costs associated with the development, operation, and maintenance of urban land uses in the area.

Seven elements of the natural resource base are considered by the Regional Planning Commission to be essential to the maintenance of the ecological balance and overall quality of life in an area. These elements include: 1) lakes, rivers, streams, and their associated undeveloped shorelands and floodlands; 2) wetlands; 3) areas covered by wet, poorly drained, and organic soils; 4) woodlands; 5) prairies; 6) wildlife habitat areas; and 7) rugged terrain and high-relief topography having slopes exceeding 12 percent. Five of these seven elements of the natural resource base as they occur in the neighborhood have been described earlier in this chapter. Good wildlife habitat is related to wetlands and woodland areas and need not, for neighborhood planning purposes, be considered separately from such areas.

Scenic areas and vistas or viewpoints are defined as areas with a local relief greater than 30 feet, slopes of 12 percent or more, a ridge of at least 200 feet in length, and a view of at least three natural resource features--including surface water, wetlands, woodlands, and agricultural lands--within approximately one-half mile of the ridge. No such scenic areas and vistas were identified within the Whitnall Neighborhood.

The environmental corridors in the neighborhood were delineated, using the following criteria:

1. Point values between 1 and 20 were assigned to each natural resource and natural resource-related element. These point values were based on the premise that those natural resource elements having intrinsic natural

Table 5

POINT VALUE DESIGNATIONS FOR ELEMENTS OF PRIMARY AND SECONDARY ENVIRONMENTAL CORRIDORS AND OTHER ENVIRONMENTALLY SIGNIFICANT LANDS

Resource Base or Related Element	Point Value
Natural Resource Base	
Lake	
Major (50 acres or more)	20
Minor (5-49 acres)	20
Rivers or Streams (perennial)	10
Shoreland	
Lake or Perennial River or Stream	10
Intermittent Stream	5
Floodland (100-year recurrence interval)	3
Wetland	10
Wet, Poorly Drained, or Organic Soil	5
Woodland	10
Wildlife Habitat	
High Value	10
Medium Value	7
Low Value	5
Steep Slope Land	
20 Percent or More	7
13-19 Percent	5
Prairie	10
Natural Resource Base Related	
Existing Park or Open Space Site	
Rural Open Space Site[a]	5
Other Park and Open Space Sites	2
Potential Park Site	
High Value	3
Medium Value	2
Low Value	1
Historic Site	
Structure	1
Other Cultural	1
Archeological	2
Scenic Viewpoint and Vista	5
Scientific Area	
State Significance	15
County Significance	10
Local Significance	5

[a] Includes publicly owned forests and wildlife management areas.

Source: SEWRPC.

resource values and a high degree of natural diversity should be assigned relatively high point values, whereas natural resource-related elements having only implied natural values should be assigned relatively low point values. These values for each element of corridor are shown in Table 5.

2. Each element was then depicted on 1" = 400' scale, ratioed and rectified aerial photographs or on 1" = 400' scale base maps of the study area.

3. Cumulative point values were totaled for all areas containing natural resource and natural resource-related elements. These areas of the Whitnall Neighborhood are shown in Appendix C.

Table 6

MINIMUM REQUIREMENTS FOR CLASSIFICATION OF PRIMARY ENVIRONMENTAL CORRIDOR, SECONDARY ENVIRONMENTAL CORRIDOR, AND OTHER ENVIRONMENTALLY SIGNIFICANT LANDS

Classification	Minimum Cumulative Point Value	Minimum Area (acres)	Minimum Length (miles)
Primary Environmental Corridor.....	10	400	2
Secondary Environmental Corridor[a]....	10	100	1
Other Isolated Natural Areas.....	10	5	--

[a]Secondary environmental corridor values may serve to connect primary corridor segments or be linked to primary environmental corridor segments, particularly when such secondary corridors are related to surface drainage (no minimum area or length requirements).

Source: SEWRPC.

4. Environmental corridors were then delineated based on the following criteria, as also shown in Table 6:

   a. Areas having a point value of 10 or greater, with a minimum area of 400 acres and a minimum length of two miles, were designated as primary environmental corridors.

   b. Areas having point values of 10 or greater, with a minimum area of 100 acres and a minimum length of one mile, were designated as secondary environmental corridors.

   c. Isolated areas having point values of 10 or greater, with a minimum area of five acres, were designated as isolated natural areas.

   d. For separate areas with corridor values, linking segments were identified to establish corridor continuity when such areas met the qualifications set forth in Table 7.

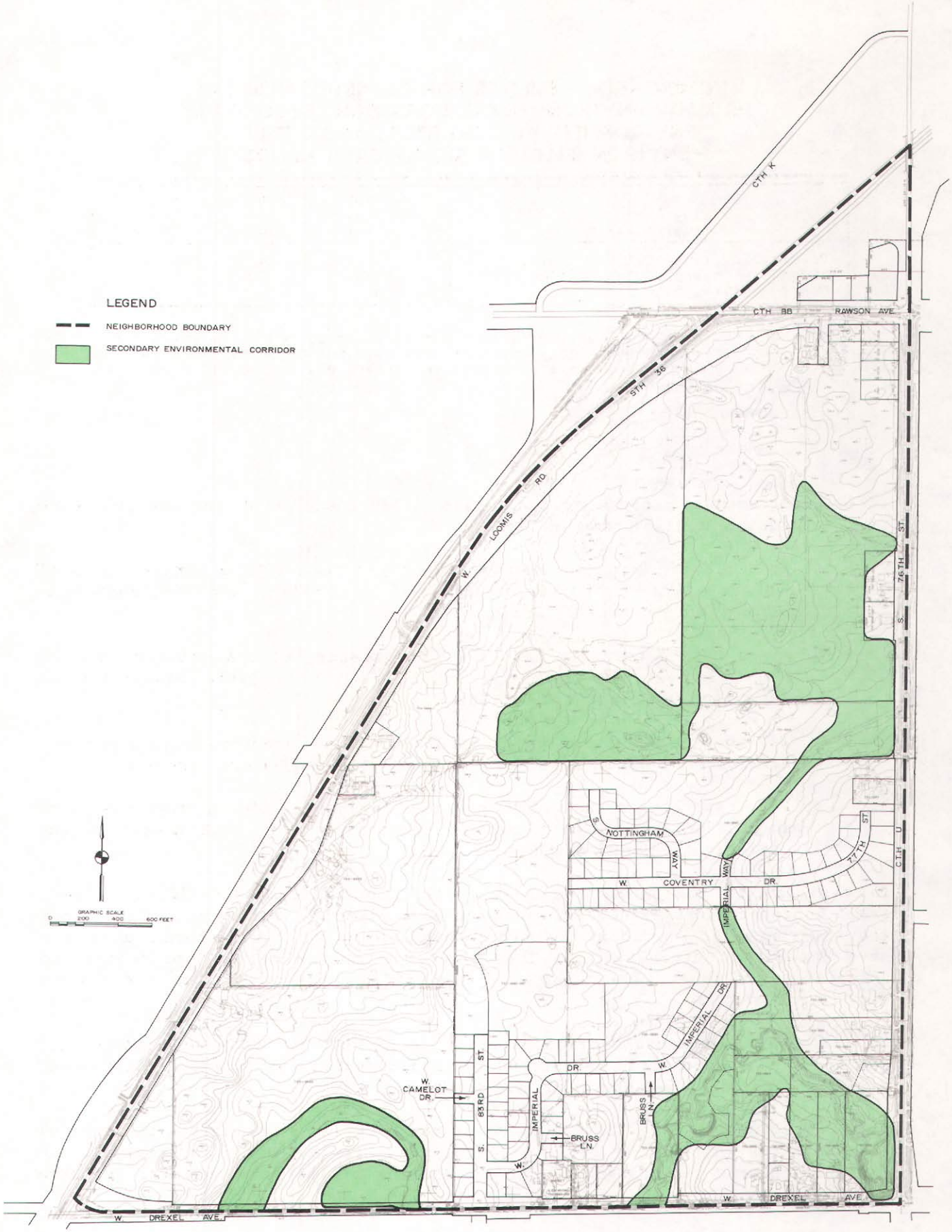
In addition to the primary and secondary environmental corridors, other, small concentrations of natural resource base elements which are isolated from the environmental corridors by urban development or agricultural uses may have important natural value. These isolated natural areas are delineated using the same criteria set forth for the delineation of primary and secondary corridors.

No primary environmental corridors or isolated natural areas were identified in the neighborhood area. The secondary environmental corridors, as delineated within the Whitnall Neighborhood, are shown on Map 6.

It is important to note that, because of the many interlocking and interacting relationships which exist between living organisms and their environment, the destruction or deterioration of any one element of the total natural resource

Map 6

ENVIRONMENTAL CORRIDORS IN THE WHITNALL NEIGHBORHOOD



Source: SEWRPC.

Table 7

REQUIREMENTS FOR LINKING SEPARATED AREAS WITH CORRIDOR VALUES

Acres of Separated Corridor Value Lands	Maximum Continuity Distance Between Separated Areas With Corridor Values
640+	2,640 feet (1/2 mile)
320-639	1,760 feet (1/3 mile)
160-319	1,320 feet (1/4 mile)
80-159	880 feet (1/6 mile)
40-79	660 feet (1/8 mile)
20-39	440 feet (1/12 mile)
5-19	220 feet (1/24 mile)

Source: SEWRPC.

base may lead to a chain reaction of deterioration and destruction. The draining and filling of wetlands, for example, may destroy fish spawning grounds, wildlife habitat, groundwater recharge areas, and the natural filtration action and floodwater storage functions which contribute to maintaining high levels of water quality and stable stream flows and lake stages in a watershed. The resulting deterioration of surface water quality may, in turn, lead to the deterioration of the quality of the groundwater which serves as a source of domestic, municipal, and industrial water supply and on which low flows in rivers and streams may depend. Similarly, the destruction of woodland cover may result in soil erosion and stream siltation and more rapid storm water runoff and attendant increased flood flows and stages, as well as the destruction of wildlife habitat. Although the effects of any one of these environmental changes may not in and of itself be overwhelming, the combined effects will eventually create serious environmental and developmental problems. These problems include flooding, water pollution, deterioration and destruction of wildlife habitat, loss of groundwater recharge, and destruction of the unique natural beauty of an area. The need to maintain the integrity of the remaining environmental corridors and environmentally significant lands thus becomes apparent.

The adopted regional land use plan accordingly recommends that all remaining primary environmental corridors be maintained in essentially natural, open uses, which may, in some cases, include limited agricultural and low-density residential uses. As noted previously, no primary environmental corridor areas are present in the Whitnall Neighborhood.

The adopted regional land use plan also recommends that all remaining secondary environmental corridors be considered, as the urban planning process proceeds at the local level, for preservation as may be needed in essentially open uses for drainageways and neighborhood parks. Thus, the consideration of potential open space uses for the identified secondary environmental corridors in the neighborhood area was an important consideration in the neighborhood plan design process.

Table 8

EXISTING LAND USE IN THE WHITNALL NEIGHBORHOOD

Land Use Category	Number of Acres	Percent of Neighborhood
Residential		
Single Family	27.9	6.7
Single Family Under Development	15.1	3.6
Two Family	2.7	0.6
Farmsteads	4.1	1.0
Multiple Family	--	--
Subtotal	49.8	11.9
Commercial		
Neighborhood Retail and Service	--	--
Community Service	5.2	1.3
Subtotal	5.2	1.3
Industrial	--	--
Governmental/Institutional		
Public	--	--
Private	--	--
Subtotal	--	--
Park and Recreational		
Neighborhood Parks	--	--
Community Parks	--	--
Drainageways and Walkways	2.8	0.7
Other Recreational	--	--
Subtotal	2.8	0.7
Transportation and Utilities		
Arterial Streets	46.1	11.0
Collector Streets	1.8	0.4
Minor Land Access Streets	8.2	2.0
Utilities and Easements	0.7	0.2
Subtotal	56.8	13.7
Agricultural, Woodlands, Wetlands, Open and Unused Lands	302.4	72.5
Total	417.0	100.0

Source: SEWRPC.

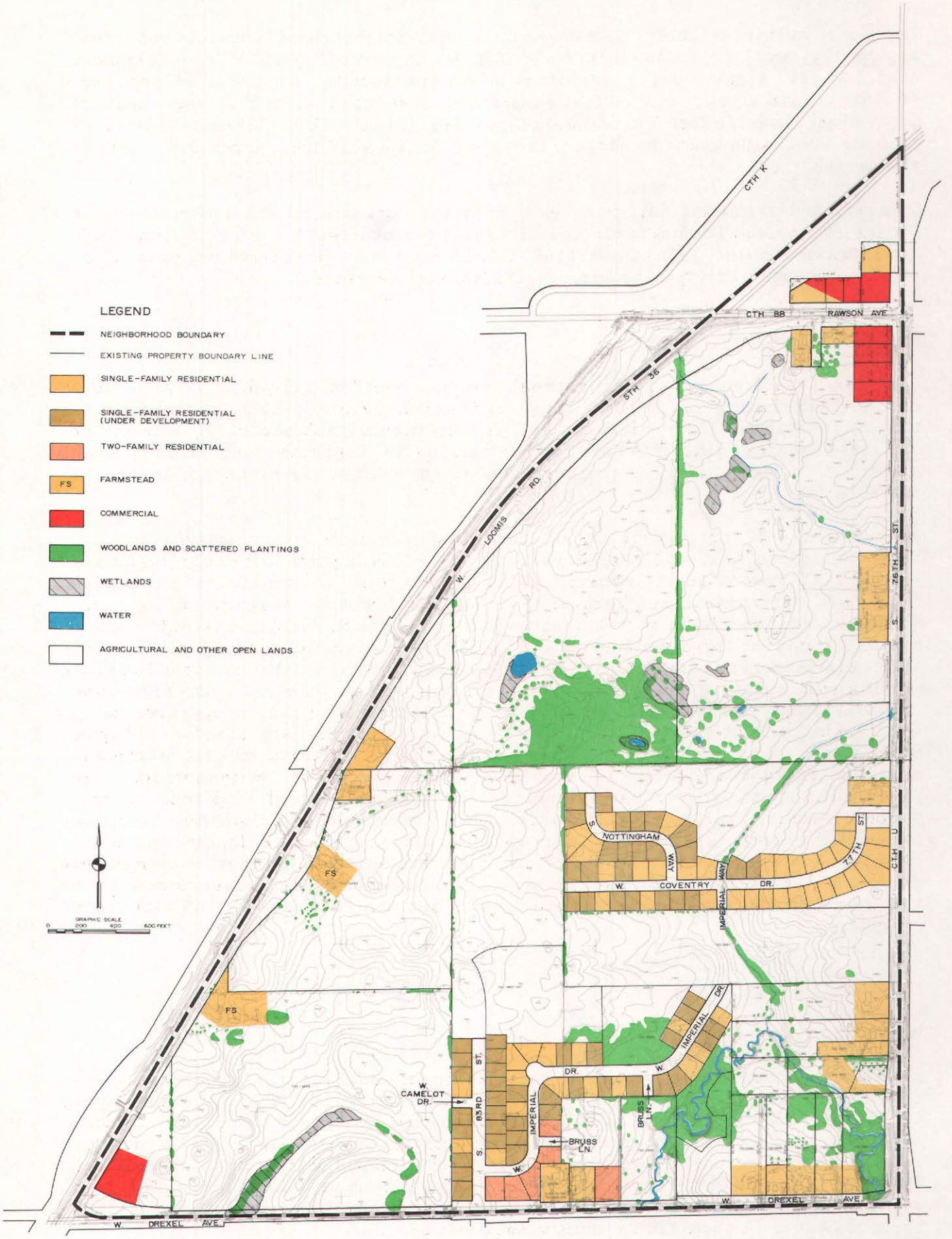
EXISTING LAND USE

The existing land uses within the Whitnall Neighborhood, as of February 1981, are set forth in summary form in Table 8 and on Map 7. Agricultural, open, and unused land accounted for about 73 percent of the total area of the neighborhood, while existing residential and residential lands under development accounted for about 11 percent. About 95 percent of the residential lands consist of lands used for single-family dwelling units.

Existing urban development is concentrated in the southern part of the neighborhood. This development consists almost entirely of single-family dwelling units in the Tuckaway Green subdivisions, along with several older single-family units in the vicinity of these subdivisions. Much of the area within these subdivisions was only partly developed in 1981.

Map 7

EXISTING LAND USE IN THE WHITNALL NEIGHBORHOOD: 1981



Source: SEWRPC.

The only multiple-family development in the neighborhood consists of five, two-family dwelling units located in the south-central part of the neighborhood. A few single-family dwelling units are located in the northern part of the neighborhood, and a few farmsteads are located in the west-central part along Loomis Road. As of February 1981, plans for a 372-unit apartment complex are being considered for the area located in the northeast part of the neighborhood.

Commercial development in the neighborhood is located near the intersection of Drexel Avenue and Loomis Road, and also at the intersection of S. 76th Street and Rawson Avenue. This commercial development within the neighborhood provides for community-type shopping facilities and services.

EXISTING ZONING

Land use development in the Whitnall Neighborhood is regulated by the City of Franklin Zoning Ordinance. Eight of the 22 zoning districts provided in the city ordinance have been applied within the neighborhood. The boundaries of these zoning districts are shown on Map 8. Pertinent information concerning the regulations governing these eight zoning districts is set forth in Table 9.

Approximately 89 percent of the Whitnall Neighborhood is currently zoned for residential use, with 72 percent of this area being zoned for single-family residential use. About 5 percent of the neighborhood is zoned for commercial use, with the remaining 6 percent of the neighborhood being zoned for conservancy and floodland use. The Whitnall Neighborhood, despite recent developments, remains largely undeveloped. Much of the neighborhood area is zoned for single-family residential use. Development for such use at this time would require onsite sewage disposal systems, since municipal sanitary sewer service is not yet available to all of the neighborhood. This excessive zoning can result in land prematurely coming onto the housing market before adequate urban services can be programmed and provided in an orderly and cost-effective manner. Early development of the lands before adequate urban services, and particularly sanitary sewerage service, are available could lead to the creation of serious public health hazards. The recommended neighborhood unit plan presented herein is intended to provide a basis for rezoning the neighborhood unit into districts which are more suitable to achieving the long-range regional, community, and neighborhood development objectives expressed in the recommended plan, appropriately locating new development in both time and space.

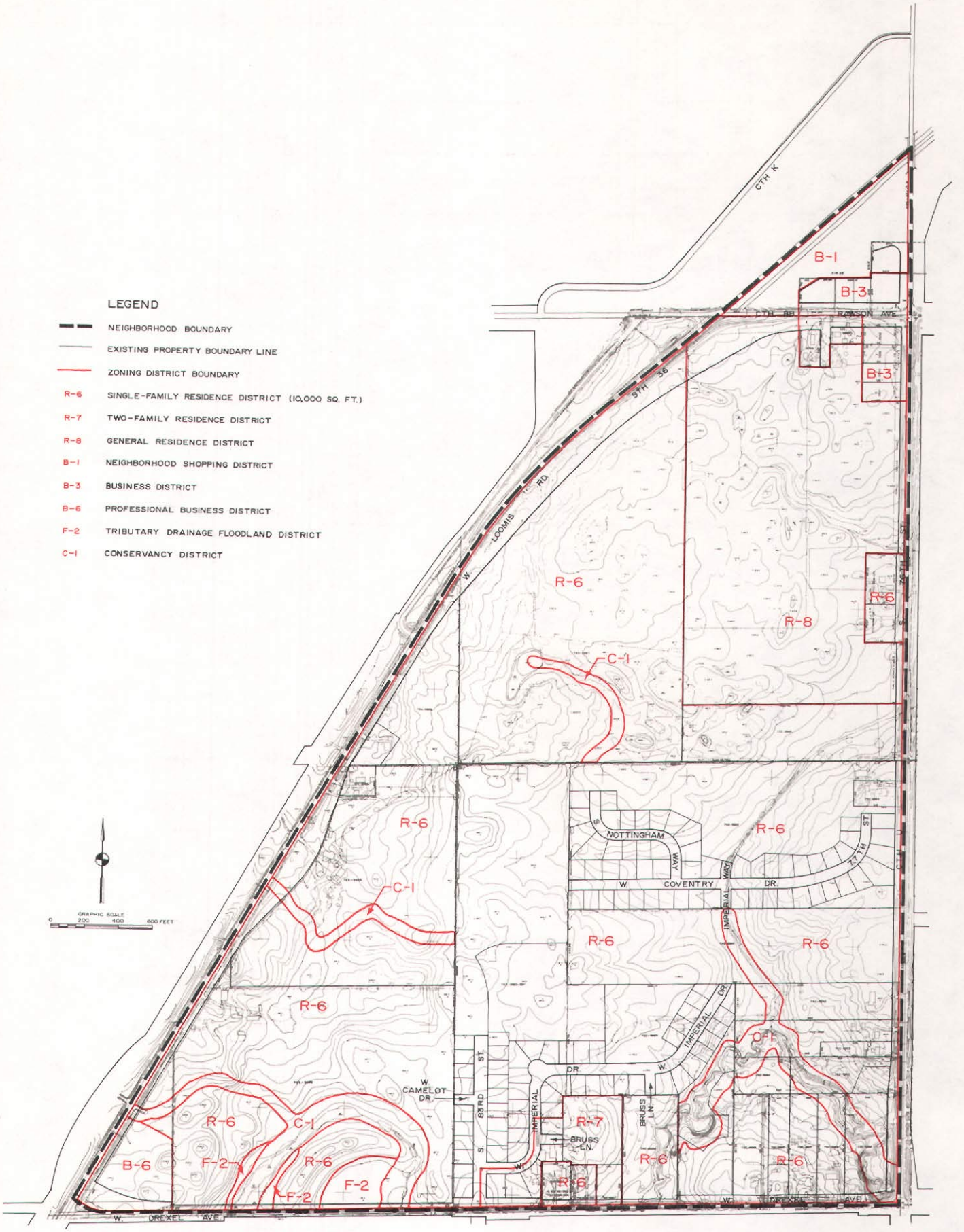
COMMUNITY UTILITIES

Water Supply

In 1981, approximately 34 acres in the Whitnall Neighborhood, or about 8 percent of the total area of the neighborhood, were served by public water supply facilities, as shown on Map 9. This area includes lands which are capable of being readily served by existing municipal water supply facilities, as well as lands actually served by such facilities. The source of supply for the existing system is an eight-inch, 1,600-foot-deep well, located in the adjoining Forest Hills Neighborhood to the south. In other areas of the neighborhood, water is supplied by individual onsite wells.

Map 8

EXISTING ZONING IN THE WHITNALL NEIGHBORHOOD: 1981



Source: City of Franklin and SEWRPC.

Table 9

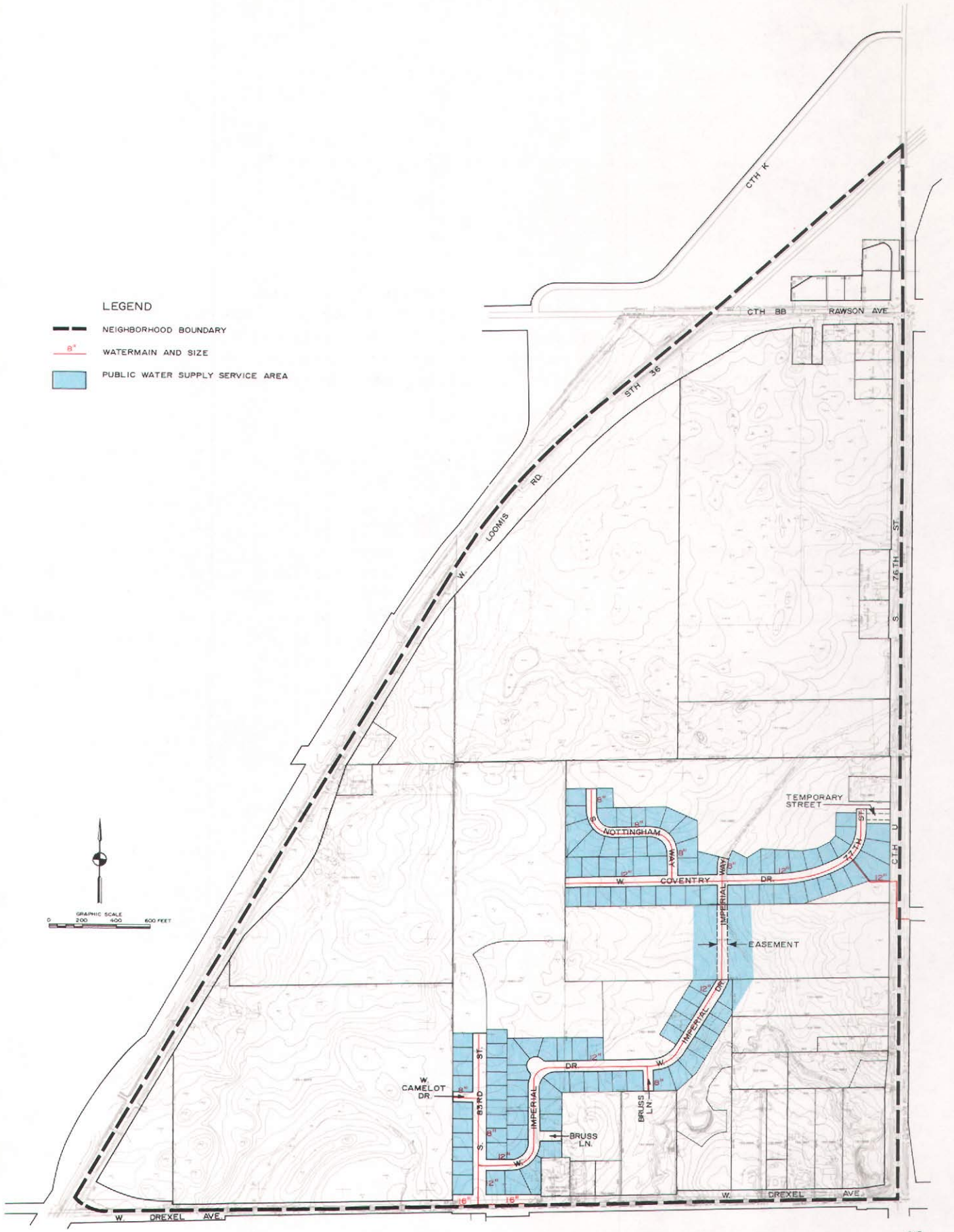
EXISTING CITY OF FRANKLIN ZONING DISTRICTS AS APPLIED IN THE WHITNALL NEIGHBORHOOD: 1981

Zoning District	Permitted Uses		Special Uses	Maximum Residential Density (dwelling units per net acre)	Minimum Lot Size			Minimum Yard Requirements			Minimum Building Size			Additional Bedrooms, Add:		Maximum Building Height (feet)	Maximum Lot Coverage (percent)	Maximum Floor Area Ratio	Area of Neighborhood in District (acres)	Percent of Total
	Principal	Accessory			Total Area	Area per Family	Width at Setback (feet)	Front Yard (feet)	Side Yard (feet)	Rear Yard (feet)	One Story Three or Fewer Bedrooms (square feet)	Multi-Story Three or Fewer Bedrooms (square feet)	Multi-Story Total Living Area (square feet)	One Story (square feet)	Multi-Story (square feet)					
R-6 Single-Family Residence	Single-family detached dwellings, parks, home occupations	Off-street parking facilities	Religious institutions, schools, parks, agricultural buildings	4.4	10,000 square feet	10,000 square feet	85; 100 corner	30	10; 19 corner	30	1,250	950	1,550	150	100	30 or 2½ stories (whichever is lowest)	25	--	301.7	72.4
R-7 Two-Family Residence	Two-family dwellings, single-family detached dwellings, parks, home occupations	Off-street parking facilities	Religious institutions, schools, parks, agricultural buildings	7.0	12,500 square feet	6,250 square feet	100	30	10; 30 corner	25	1,150	1,150 each unit	1,150 each unit	250 each unit	250 each unit	30 or 2½ stories (whichever is lowest)	35	--	7.2	1.7
R-8 General Residence	None	None	Any use permitted in the R-1 District, two-family dwellings, motels and hotels, apartments	7.0	12,500 square feet	6,250 square feet	100	25 plus one additional foot of front yard for each two feet over 35 feet in building height	10 for two-family and multiple-family dwellings plus five feet for each story over two or 30 corner; or 12 for a non-residential building with a combined total of two side yards of not less than 30 feet except 30 feet required on the street side of corner lots	25	1) Two-family dwellings: One-story buildings a) Living area per unit, three bedrooms or fewer: 1,150 square feet b) Add for each additional bedroom: 250 square feet c) Add if basement for each unit is less than 600 square feet: 250 square feet Two-story buildings a) Same as above b) Same as above c) Add to each unit if total basement area is less than 600 square feet: 150 square feet 2) Multiple-family dwellings:			--	--	100	35	0.4 Two-family; 1.0 Multiple-family; 2.0 Permitted nonresidential use	61.9	14.8
											Dwelling Units per Building	One-Bedroom Apartment (square feet)	Add for Additional Bedroom (square feet)							
											3-4 5-10 11 or more	800 700 560	200 150 250							
B-1 Neighborhood Shopping	Drugstores, food stores, hardware stores, offices, restaurants, parking lots	Business signs, off-street parking and loading	Churches, clothing stores, hospitals, public utility and governmental service establishments	--	--	--	--	25	10; 25 corner	20	--	--	--	--	--	35	--	--	8.8	2.1
B-3 Business	Banks, department stores, food stores, motels, offices, restaurants	Off-street parking and loading	Banks (drive-in), churches, health centers, public utility and governmental service uses	--	--	--	--	25	10; 25 corner	20	--	--	--	--	--	--	--	2.0	6.8	1.6
B-6 Professional Business	Accounting services, dental services, legal services, medical services, real estate services, governmental offices	Off-street parking and loading	Businesses similar to permitted uses	--	--	--	--	25	10	20	--	--	--	--	--	35	--	--	5.7	1.4
C-1 Conservancy	Fishing, wildlife preserves, soil and water conservation	--	Drainage, grazing, orchards, utilities	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21.6	0.8
F-2 Tributary Drainage Floodland	Drainage, movement of water, flood overflows, public recreational areas	--	Bridges, utilities, storage yards public and private recreational uses	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.3	5.2
																			417.0	100.0

Source: SEWRPC.

Map 9

EXISTING PUBLIC WATER SUPPLY SERVICE IN THE WHITNALL NEIGHBORHOOD: 1981



Source: SEWRPC.

Sanitary Sewer

In 1981, about 41 acres, or about 10 percent of the total area of the neighborhood, was served by centralized sanitary sewer facilities or was comprised of areas under development which will be so served in the near future, as shown on Map 10. The treatment and disposal of wastewater in other parts of the neighborhood was provided by onsite soil absorption sewage disposal systems.

Storm Sewer

In 1981, approximately 44 acres of urbanized area, or about 11 percent of the total area of the neighborhood, were served by urban storm sewer facilities, as shown on Map 11. Another 135 acres of rural lands within the neighborhood were tributary to these facilities. These storm sewer systems discharge to open drainage channels located in the eastern and southern parts of the neighborhood.

COMMUNITY FACILITIES

The Whitnall Neighborhood is located within Franklin Public School District No. 5. Primary educational services are provided by the Ben Franklin Elementary School, located approximately one-quarter mile south of the neighborhood along S. 76th Street. Middle level educational services are provided by the Forest Park Middle School, located approximately three-quarters of a mile to the south. Secondary educational services are provided by Franklin High School, located on the east side of the City approximately one and three-quarter miles away.

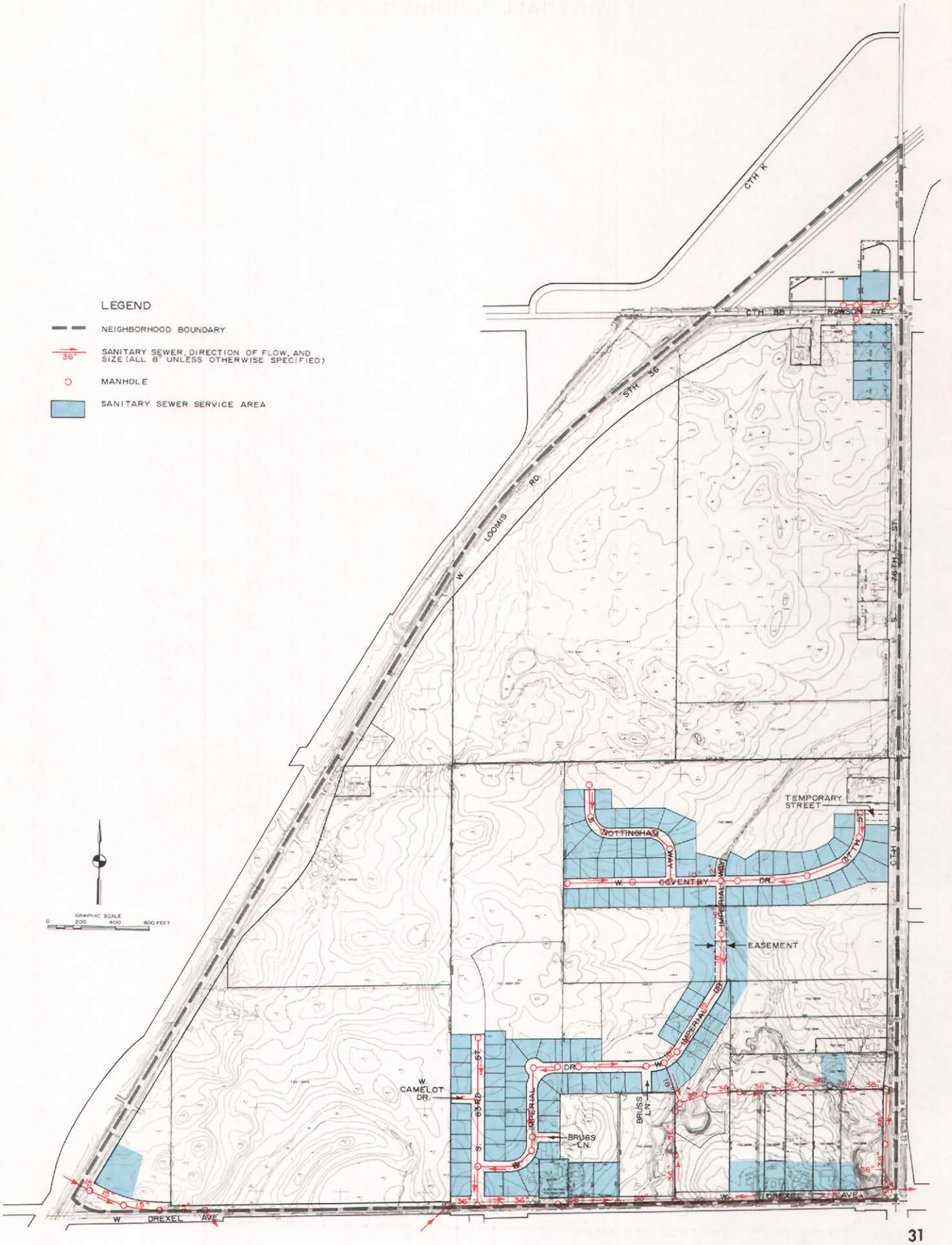
The Civic Center area for the City of Franklin is located near the southwestern portion of the Whitnall Neighborhood in the adjoining Forest Hills Neighborhood. Situated within the Civic Center is the City Hall, which provides facilities for general government, the police department, and a temporary public library. Also located within the Civic Center is a City of Franklin fire station and Lions Legend Park, a community facility.

Active recreational facilities are provided at all of the above-mentioned school sites, with the Forest Park Middle School providing softball and basketball facilities. Franklin High School provides track and football facilities. Ben Franklin Elementary School provides basketball, softball, and playground facilities. Lions Legend Park provides picnic facilities and also contains historic buildings related to Franklin's origin. Franklin National Little League Park, located to the southeast of the neighborhood, provides baseball facilities. Croatian Park, a private facility which is also located southeast of the neighborhood, provides soccer and picnic facilities. Tuckaway Country Club, another private facility located to the southeast of the neighborhood, provides golf facilities.

Also located within the vicinity of the Whitnall Neighborhood are three large Milwaukee County parks. Whitnall Park, located approximately three-quarters of a mile to the northwest of the neighborhood, provides golf, picnic, and nature

Map 10

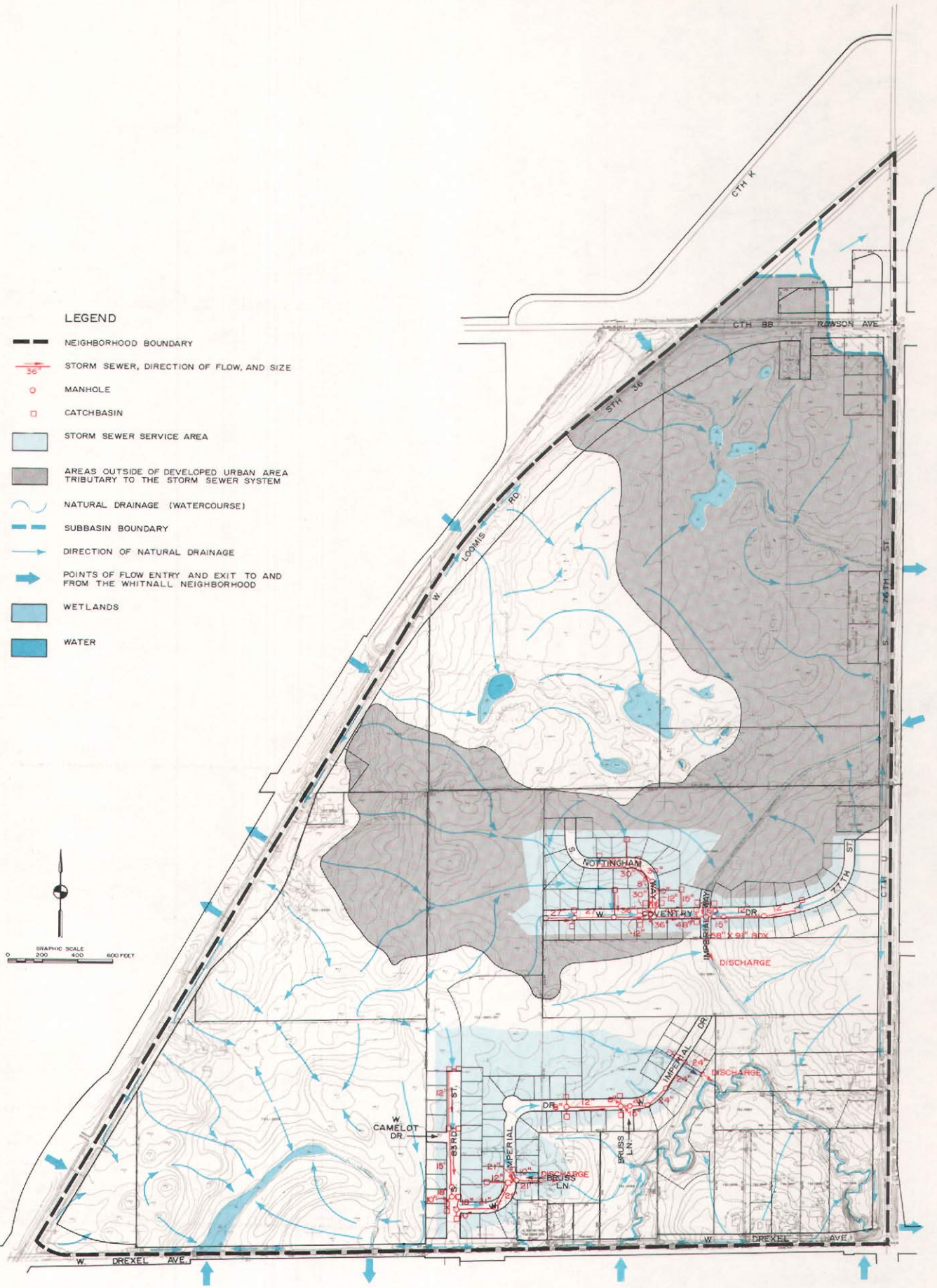
EXISTING SANITARY SEWER SERVICE IN THE WHITNALL NEIGHBORHOOD: 1981



Source: SEWRPC.

Map 11

EXISTING STORM SEWER SERVICE IN THE WHITNALL NEIGHBORHOOD: 1981



Source: SEWRPC.

study facilities; Franklin Park, located approximately 2.75 miles to the southwest, is presently undeveloped; and Oakwood Park, located approximately 3.75 miles to the southeast, provides golf facilities. Approximately two miles to the southeast lies a smaller county park within the Root River Parkway, Froemming Park, which provides softball, baseball, tennis, and shelter facilities. These public and private recreational facilities, however, will not be adequate to serve the Whitnall Neighborhood when fully developed, and provisions should be made within the delineated neighborhood for an elementary school and attendant neighborhood park facility.

Fire and police protection are provided by the City of Franklin, with stations for both departments located within the Civic Center area which is situated directly south of the neighborhood.

General commercial facilities are currently provided by scattered commercial sites throughout the City, and by community shopping and service facilities located near the intersection of Drexel Avenue and Loomis Road and near the intersection of S. 76th Street and Rawson Avenue. The Southridge Shopping Center, a major regional facility, is located approximately two miles to the north of the Whitnall Neighborhood.

STREET AND HIGHWAY FACILITIES

The existing streets and highways within and adjacent to the neighborhood are shown on Map 7. Pertinent information concerning the existing streets and highways is set forth in Table 10. Streets and highways, including one-half of the boundary arterial streets and highways, presently account for about 13 percent of the total area of the neighborhood. Arterial streets and highways in the Whitnall Neighborhood total 3.79 miles, collector streets 0.18 mile, and minor streets 1.15 miles. A temporary street connecting W. Imperial Drive provides for access between the Tuckaway Green Subdivisions. Another temporary street located along S. 76th Street provides for access to the Tuckaway Green Subdivisions from the east.

REAL PROPERTY OWNERSHIP

As of February 1981, 157 separate parcels of real property existed within the Whitnall Neighborhood, ranging in size from 0.23 acre to 57.3 acres. The boundaries of these parcels are shown in their correct location and orientation on Map 7.

LAND USE CONSTRAINTS IN THE WHITNALL NEIGHBORHOOD

Several constraints on good land use development are evident in the Whitnall Neighborhood, as shown on Map 12. Several long, narrow parcels of land that exist along Drexel Avenue and also along S. 76th Street are wasteful, resulting in excessively large lots and unusable pockets of land. The layout and size of these parcels inhibit, to a certain degree, the eventual creation of a sound neighborhood development pattern.

Table 10

EXISTING STREETS AND HIGHWAYS IN THE WHITNALL NEIGHBORHOOD: 1981

Street Classification	Name	Direction	Existing Right-of-Way (feet)	Length in Miles
Arterial Streets or Highways	W. Loomis Road (STH 36)....	Southwest-northeast	100 to 210 ($\frac{1}{2}$)	1.52
	W. Rawson Avenue.....	East-west	150 to 165	0.20
	S. 76th Street (CTH U).....	North-south	60 to 80 ($\frac{1}{2}$)	1.18
	W. Drexel Avenue.....	East-west	40 to 120 ($\frac{1}{2}$)	0.89
Subtotal	--	--	--	3.79
Collector Streets	S. 83rd Street.....	North-south	80	0.18
Subtotal	--	--	--	0.18
Minor Land Access Streets	W. Imperial Drive.....	North-south-east-west	66	0.45
	W. Imperial Drive.....	North-south	66 (easement)	0.09
	S. Nottingham Way.....	North-south	60	0.17
	S. 77th Street.....	North-south	60	0.07
	W. Coventry Drive.....	East-west	60	0.30
	W. Camelot Drive.....	East-west	60	0.02
	Bruss Lane.....	North-south, east-west	60	0.05
Subtotal	--	--	--	1.15
Total	--	--	--	5.12

Source: SEWRPC.

Several odd-shaped or landlocked parcels exist in the southeast part of the neighborhood and may have to be acquired by adjacent property owners if they are to be properly developed.

Insufficient rights-of-way exist along most of Drexel Avenue and parts of S. 76th Street. As areas adjoining these streets are developed, sufficient areas should be acquired to provide a uniform and adequate right-of-way for these arterial streets. An area located in the northernmost part of the neighborhood contains remnant highway right-of-way which is presently used for storage of highway maintenance materials.

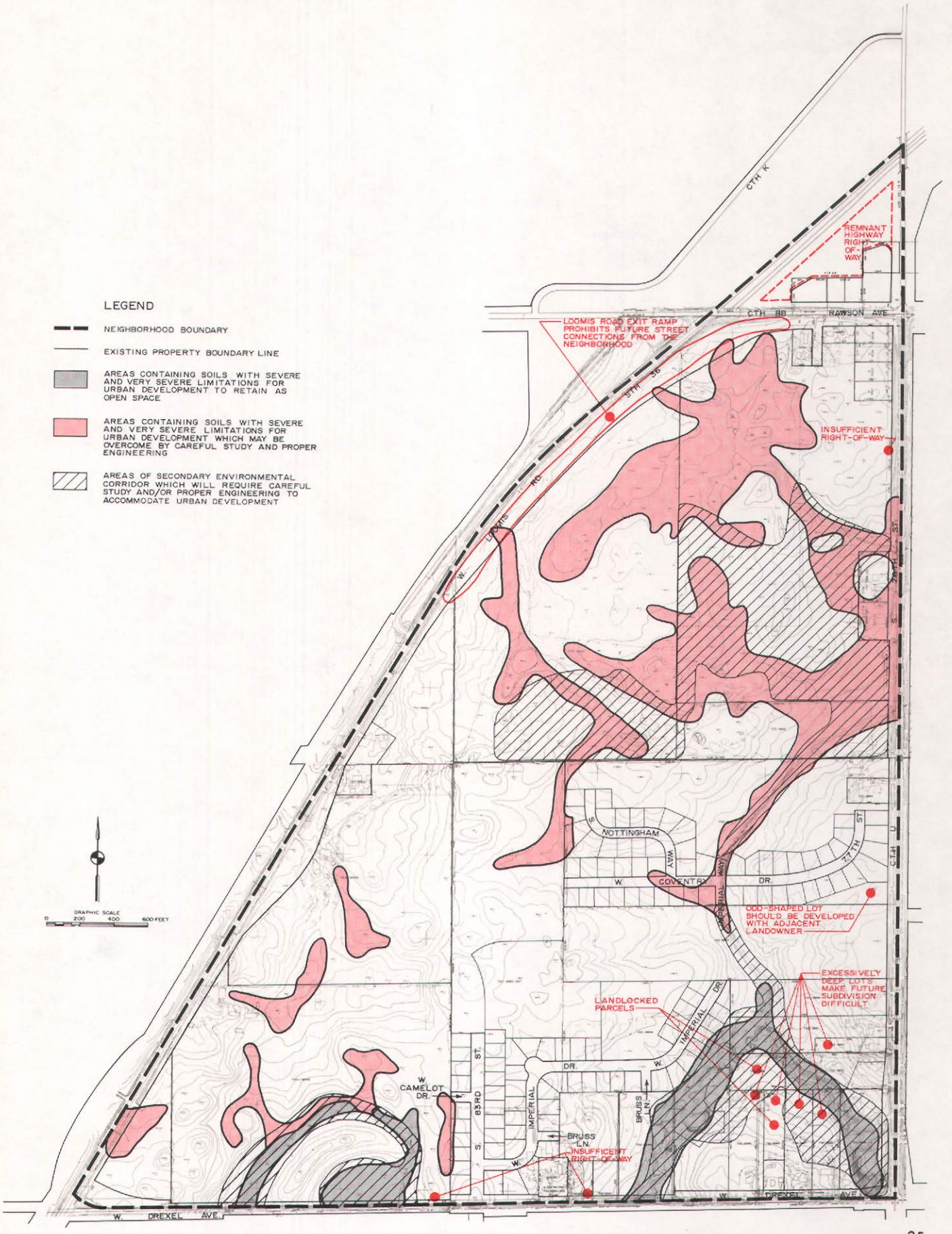
A Loomis Road exit ramp located along the northern part of the neighborhood prohibits the possibility of future street connections from the neighborhood to Loomis Road in this area.

Soils having severe and very severe limitations for sewered urban development exist in scattered locations throughout the neighborhood. Areas covered by these soils, as well as pockets of blind drainage, will have to be carefully dealt with as the neighborhood develops if the creation of developmental and environmental problems is to be avoided. The areas shown in red on Map 12 are covered by soils which have very severe limitations, and which should, therefore, be retained in open space use.

Areas of secondary environmental corridor which will require careful study and/or proper engineering to accommodate urban development are shown in the cross-hatched areas on Map 12.

Map 12

EXISTING PROPERTY BOUNDARIES AND SUMMARY OF CONSTRAINTS AFFECTING NEIGHBORHOOD DESIGN IN THE WHITNALL NEIGHBORHOOD



Source: SEWRPC.

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Chapter III

RESIDENTIAL NEIGHBORHOOD URBAN DESIGN CRITERIA

INTRODUCTION

Urban design criteria may be defined as a body of information which can be applied in the development of a solution or solutions to a specific urban design problem or set of problems. Decisions concerning urban development and redevelopment should be based in part upon urban design criteria. Urban design criteria must be of a relatively high level of specificity in order to assist in the development of detailed solutions to urban development problems. Accordingly, urban design criteria are herein proposed with respect to environmental preservation; neighborhood recreation facilities; service areas of neighborhood facilities; street, block, and lot layouts and arrangements; general landscaping; utility easements; and storm water drainage and erosion/sedimentation control. The recommended neighborhood plan discussed in Chapter IV is based, in part, upon these various urban design criteria.

URBAN DESIGN CRITERIA

Environmental Preservation

Environmental Corridors: Primary environmental corridors are, by definition, a composite of the best individual elements of the natural resource base. Through the preservation of these corridors, flood damage can be reduced, soil erosion abated, water supplies protected, air cleansed, wildlife populations enhanced, and opportunities provided for scientific, educational, and recreational pursuits. Accordingly, all remaining undeveloped lands within the designated primary environmental corridors should be preserved in essentially natural, open uses.

Secondary environmental corridors, while containing important elements of the natural resource base, do not necessarily contain the variety of such elements that the primary corridors do, nor are the secondary corridors equivalent in extent to the primary corridors. Nevertheless, such corridors may facilitate surface water drainage, maintain "pockets" of natural resource features, and provide for the movement of wildlife, as well as for the movement and dispersal of seeds for a variety of plant species. Accordingly, such secondary corridors should also be preserved in essentially open, natural uses as urban development proceeds within an area, particularly when the opportunity is presented to incorporate such corridors into urban storm water storage areas, associated drainageways, and neighborhood parks and open spaces.

Isolated Natural Features: In addition to the primary and secondary environmental corridors, other, small concentrations of natural resource base elements exist within the neighborhood. These elements are isolated from the environmental corridors by urban development or agricultural uses. Although separated from the environmental corridor network, such "isolated" natural features also have important natural value. Isolated natural features may provide the only available wildlife habitat in an area, provide good locations

for local parks and nature study areas, and lend aesthetic character and natural diversity to an area. Accordingly, high-value isolated natural features should be protected from urban development.

Lakes and Streams: Inland lakes and streams contribute to the atmospheric water supply through evaporation, provide a suitable environment for desirable forms of plant and animal life, provide the resident population with opportunities for wholesome recreational areas, provide a desirable aesthetic setting for certain types of land use development; serve to receive, store, and convey floodwaters; and provide certain water supply needs. Accordingly, inland lakes and streams and their associated undeveloped shorelands and floodlands should be protected from urban development and from the deleterious effects of such development.

Wetlands: Wetlands support a wide variety of desirable and sometimes unique plant and animal life; assist in the stabilization of lake levels and streamflows; trap and store plant nutrients in runoff, which reduces the rate of enrichment of surface waters and thus slows noxious weed and algae growth; contribute to the atmospheric oxygen supply; reduce storm water runoff by providing areas for floodwater impoundment and storage; trap soil particles suspended in runoff and thus reduce stream sedimentation; and provide the population with opportunities for certain scientific, educational, and recreational pursuits. Accordingly, high-value wetlands should be protected from urban development.

Woodlands and Vegetation: Woodlands assist in maintaining unique natural relationships between plants and animals; reduce storm water runoff; contribute to the atmospheric oxygen supply; contribute to the atmospheric water supply through transpiration; aid in reducing soil erosion and stream sedimentation; provide the population with opportunities for certain scientific, educational, and recreational pursuits; and provide a desirable aesthetic setting for certain types of land use development. Accordingly, high-value woodlands should be protected from urban development.

Wildlife Habitat: Wildlife, when provided with a suitable habitat, will supply the population with opportunities for certain scientific, educational, and recreational pursuits; constitutes an integral component of the life systems which are vital to beneficial natural processes, including the control of harmful insects and other noxious pests and the promotion of plant pollination; offers an economic resource for the recreation industries; and serves as an indicator of environmental health. Accordingly, high-value wildlife habitat areas should be protected from urban development.

Soils: Properly relating urban land use development to soil type and distribution can serve to avoid the creation of costly environmental problems and promote the wise use of an irreplaceable resource. Urban development should not be located in areas covered by soils identified in the regional, detailed, operational soil survey as having severe or very severe limitations for such development.

Neighborhood Recreational/Educational Facilities

Recreational land at the neighborhood level should provide a focal point for neighborhood activities and should be located and developed in conjunction

with a neighborhood elementary school. The elementary school and recreational facilities should be provided on a common site available to serve the recreation demands of both the school student and resident neighborhood population. Using a neighborhood park site standard of 1.7 acres per thousand residents and an elementary school site standard of 1.6 acres per thousand residents, a total site area of 3.3 acres per thousand residents should be provided; however, the joint site should have a minimum area of 10 acres. The recreational facility requirements should be based upon the standards set forth in Table 11.

Walking Distances to Neighborhood Facilities

Residents of the neighborhood should be afforded convenient access to existing and proposed commercial, educational, transportation, recreation, and community facilities by locating such facilities to meet the maximum walking distance and travel time criteria shown in Table 12.

Table 11

OUTDOOR RECREATION FACILITY REQUIREMENTS IN A TYPICAL MEDIUM-DENSITY RESIDENTIAL NEIGHBORHOOD UNIT

Facility	Minimum Public Facility Requirement Standard		Total Land Requirement (acres per facility)
	Facility per 1,000 Urban Residents	Number of Facilities	
Active Recreation			
Baseball Diamond	0.09	1	4.5
Basketball Goal	0.91	6	0.42
Ice-Skating Rink	0.15	1	0.35 minimum
Playfield	0.39	3	4.95 minimum
Playground	0.35	2	1.24 minimum
Softball Diamond	0.53	2	5.36
Tennis Court	0.50	3	0.96
Subtotal	--	--	17.78 minimum
Passive Recreation Area	Add 10 percent of total active recreation area		1.8
Other Recreation Area[a]	Add 10 percent of total active recreation area		1.8
Subtotal	--		3.6
Total	--	--	21.38 minimum

NOTE: Medium density is defined as 2.3 to 6.9 dwelling units per net residential acre, with a total population of 6,500 within an area of one square mile (640 acres).

[a]Picnicking facilities should be provided in a neighborhood park.

Source: SEWRPC.

Table 12

MAXIMUM WALKING DISTANCE AND TRAVEL TIME STANDARDS FOR A MEDIUM-DENSITY NEIGHBORHOOD UNIT

Facility	Optimum One-Way Walking Distance (miles)	Maximum One-Way Walking Distance (miles)	Maximum One-Way Automobile Travel Time (minutes)
Shopping Facilities			
Local Retail and Service Center	1/2	1	5
Community Retail and Service Center	1 1/2	3	15
Major Retail and Service Center	--	--	20
Industrial Employment Facilities			
Community Industrial Center	--	--	15
Major Industrial Center	--	--	30
Local Transit Facilities	1/2	3/4	--
Educational Facilities			
Elementary School (K-6)	1/2	1	--
Junior High (7-9)	1	1 1/2	10
Senior High (10-12)	1 1/2	3	20
Vocational and Higher Education	--	--	30
Outdoor Recreational Facilities			
Subneighborhood Recreation	1/4	1/2	--
Neighborhood Recreation	1/2	1	--
Community Recreation	1 1/2	3	20
Major Recreation	--	--	30

NOTE: Medium density is defined as 2.3 to 6.9 dwelling units per net residential acre.

Source: SEWRPC.

Streets

Limitation of Access to Arterial Streets: Whenever proposed residential land uses abut an arterial street or highway, the character of the residential uses and the capacity and safety of the arterial facility should be protected by limiting access from the abutting land uses, and by separating through and local traffic, where possible, by reversed frontage. In addition, a planting screen should be provided in a nonaccess reservation along the rear property line.

Street Cross-Sections: Table 13 lists the design criteria for arterial streets, collector streets, minor streets, cul-de-sacs, and pedestrian ways used in the preparation of the neighborhood unit plan. The respective cross-sections are shown graphically in Figure 1.

Street Grades: Unless necessitated by exceptional topography, the maximum grade of any street should not exceed the following: arterial streets, 6 percent; collector streets, 8 percent; minor streets, alleys, and frontage streets, 12 percent; and pedestrian ways, 12 percent unless steps of acceptable design are provided. In addition, the grade of any street should not exceed 12 percent or be less than 0.5 percent. Street grades should be established so as to avoid excessive grading, the promiscuous removal of ground cover and tree growth, and unnecessary leveling of the topography.

Street Intersections: Streets should intersect each other at as near to right angles as topography and other limiting factors of design permit. In addition, the number of streets converging at one intersection should be held to a minimum, preferably to not more than two streets at one intersection; the number of intersections along arterial streets and highways should be held to a minimum; and the distance between such intersections should generally not be

Table 13

STREET DESIGN CRITERIA FOR THE WHITNALL NEIGHBORHOOD

Type of Street	Minimum Right-of-Way to be Dedicated	Minimum Dimensions
Arterial Streets (four lane)	130 feet	Dual 36-foot pavement (face of curb to face of curb) 26-foot median 10-foot tree banks (curb lawn) 5-foot sidewalks 1-foot outside sidewalks
Collector Streets	80 feet	40-foot pavement (face of curb to face of curb) 14-foot tree banks (curb lawn) 5-foot sidewalks 1-foot outside sidewalks
Land Access or Minor Streets Multiple-Family Area	66 feet	36-foot pavement (face of curb to face of curb) of curb) 9-foot tree banks 5-foot sidewalk 1-foot outside sidewalk
Land Access or or Minor Streets Single-Family Area	60 feet	28-foot pavement (face of curb to face of curb) 16-foot tree bank (one side of street) 10-foot tree bank (curb lawn) 5-foot sidewalk 1-foot outside sidewalk
Cul-de-sac (turnaround)	60-foot radius	48-foot outside face of curb radius 24-foot inside pavement radius (island) 6-foot tree banks (curb lawn) 5-foot sidewalks (if required) 1-foot outside sidewalks
Pedestrian Ways	20-foot average	To be determined by the City of Franklin on a site-specific basis

Source: SEWRPC.

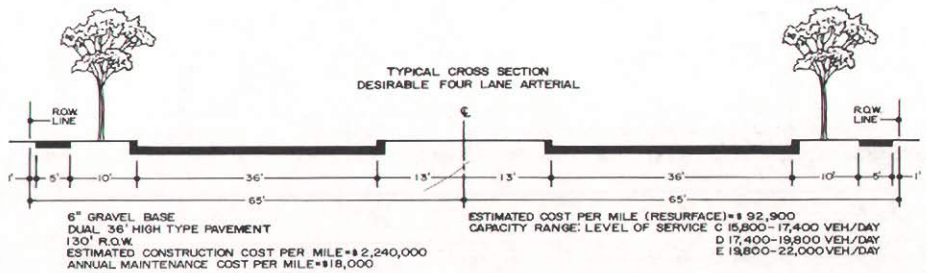
less than 1,200 feet; and property lines at street intersections should be rounded with a minimum radius of 15 feet or should be cut off by a straight line through the joints of tangency of an arc having a radius of 15 feet.

Street Alignment: When a continuous street centerline deflects at any point by more than 10 degrees, a circular curve should be introduced having a radius of curvature on the street centerline of not less than the following: arterial streets, 500 feet; collector streets, 300 feet; and minor streets, 100 feet. A tangent at least 100 feet in length should be provided between reverse curves on arterial and collector streets. In addition, minor and collector streets should not necessarily continue across arterial streets. If the distance between the centerline intersections of any street and any other intersecting street is less than 250 feet measured along the centerline of the intersecting streets, then the street location should be adjusted so that the distance is increased or the adjoinment across the intersecting street is continuous, thus avoiding a jog in the flow of traffic.

Half Streets: The platting of half streets should be avoided. Half streets put an unrealistic reliance on the chance that adjacent property owners will develop their adjacent properties at the same time. If half streets are allowed and then improved, their narrow width may result in street maintenance as well as traffic circulation problems.

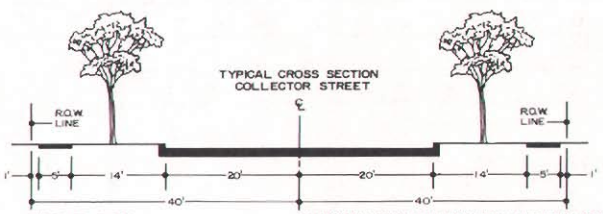
Figure 1

TYPICAL URBAN STREET AND HIGHWAY CROSS-SECTIONS FOR THE WHITNALL NEIGHBORHOOD



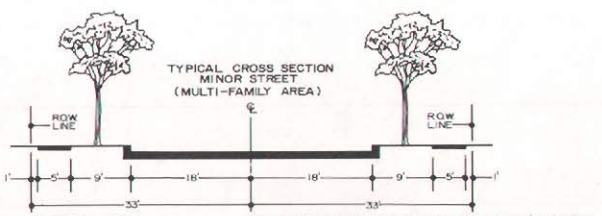
6" GRAVEL BASE
DUAL 36' HIGH TYPE PAVEMENT
130' R.O.W.
ESTIMATED CONSTRUCTION COST PER MILE = $ 2,240,000
ANNUAL MAINTENANCE COST PER MILE = $ 18,000

ESTIMATED COST PER MILE (RESURFACE) = $ 92,900
CAPACITY RANGE: LEVEL OF SERVICE C 15,800-17,400 VEH/DAY
D 17,400-19,800 VEH/DAY
E 19,800-22,000 VEH/DAY



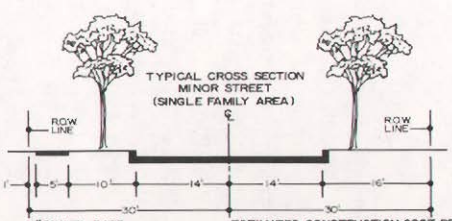
6" GRAVEL BASE
40' HIGH TYPE PAVEMENT
80' R.O.W.

ESTIMATED CONSTRUCTION COST PER MILE = $ 660,000
ANNUAL MAINTENCE COST PER MILE = $ 8,700 (AV)
ESTIMATED COST PER MILE (RESURFACE) = $ 41,700



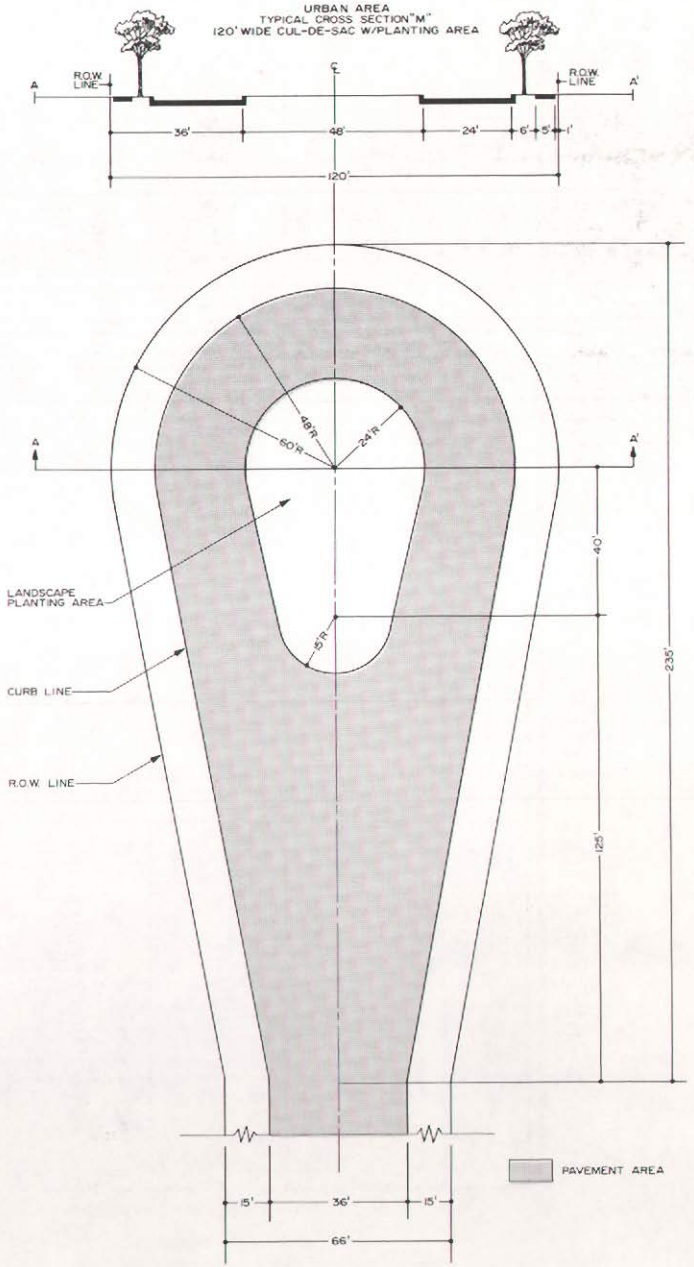
6" GRAVEL BASE
36' HIGH TYPE PAVEMENT
66' R.O.W.

ESTIMATED CONSTRUCTION COST PER MILE = $ 560,000
ANNUAL MAINTAINCE COST PER MILE = $ 7,800 (AV)
ESTIMATED COST PER MILE (RESURFACE) = $ 37,500



6" GRAVEL BASE
28' HIGH TYPE PAVEMENT
60' R.O.W.

ESTIMATED CONSTRUCTION COST PER MILE = $ 498,000
ANNUAL MAINTENCE COST PER MILE = $ 6,100 (AV)
ESTIMATED COST PER MILE (RESURFACE) = $ 29,200



NOTE: ESTIMATED COSTS ARE IN CONSTANT 1978 DOLLAR AMOUNTS.

Source: SEWRPC.

Cul-de-Sac Streets: Cul-de-sacs which are designed to have one end permanently closed should generally not exceed 600 feet in length. Such cul-de-sac streets should terminate in a circular turnaround having a design as described in Table 13.

Handicap and Bicycle Access: Wheelchair and bicycle curb ramps should be installed at street intersection crosswalks pursuant to Section 66.616 of the Wisconsin Statutes.

Blocks

The widths, lengths, and shapes of blocks should be suited to the planned use of the land; the zoning requirements; the need for convenient access to, and control and safety of, street traffic; and the limitations of, and opportunities provided by, topography.

Length: Blocks in residential areas should not be less than 600 feet nor more than 1,200 feet in length unless otherwise dictated by exceptional topography or other limiting factors of good design.

Pedestrian Ways: Pedestrian ways of not less than 20 feet in width may be required near the center and entirely across any block more than 900 feet in length to provide adequate pedestrian circulation or access to schools, parks, shopping centers, churches, or transportation facilities.

Width: Blocks should be wide enough to provide for two tiers of lots of appropriate depth except where required to separate residential development from through traffic. Width of lots or parcels reserved or designated for commercial or industrial use shall be adequate to provide for the off-street service and parking areas required by the use contemplated as well as meeting the area zoning restrictions for such use.

Utilities: Telephone and electric power lines should, where practical, be placed on mid-block easements of not less than 20 feet in width centered on the property line and, where possible, along rear lot lines for underground construction.

Lots

The size, shape, and orientation of lots shall be appropriate for the location of the subdivision and for the type of development and use contemplated. The lots should be designed to provide an aesthetically pleasing building site and a proper architectural setting for the building contemplated.

Side Lots: Side lot lines should be at right angles to straight street lines or radial to curved street lines on which the lots face. Lot lines should follow municipal boundary lines rather than cross them.

Double Frontage: Double frontage or "through" lots should be prohibited except where necessary to provide separation of residential development from arterial traffic or to overcome specific disadvantages of topography and orientation.

Access: Every lot should front or abut a public street for a distance of at least 40 feet.

Lot Size: Area and dimensions of all lots should conform to the requirements of the City of Franklin Zoning Code for subdivisions within the neighborhood.

Lot Depth: Excessive depth of lots in relation to width should be avoided, and a proportion of two to one should be considered a maximum depth-to-width ratio. The depth of lots or parcels designated for commerical or industrial use should be adequate to provide for the off-street service and parking areas required by the use contemplated.

Lot Width: Lots within the interior of a block should have the minimum average width required in the proposed zoning districts for the City of Franklin as contained in Table 21.

Corner Lots: Corner lots should have an additional width of 10 feet to permit adequate building setbacks from side streets.

General Landscaping

Every effort should be made to protect and retain all existing trees, shrubbery, vines, and grasses not actually lying in public roadways, drainageways, paths, and trails. Trees should be protected and preserved during construction in accordance with sound conservation practices, including the preservation of trees by the use of wells, islands, or retaining walls whenever abutting grades are altered.

Soils and Landscape Tree Planting: A general landscape guide for the planting and selection of various trees to perform a variety of functions such as shade, street landscaping, lawn landscaping, hedges, screens, and windbreaks for the Whitnall Neighborhood is given in Appendix B. The landscape guide table is based upon soil types found in the neighborhood and shows the various types of trees which can be accommodated for a variety of landscape planting uses. The various soils found in the neighborhood have been grouped into categories termed "woodland suitability groups," based upon their response and suitability to the same or similar tree species. The woodland suitability groups have been numbered according to a statewide classification system.

Cutting and Clearing: Tree cutting and shrubbery clearing should not exceed 30 percent of the lot or tract and should be conducted so as to prevent erosion and sedimentation and preserve and improve scenic qualities.

Paths: Paths and trails in wooded and wetland areas should not exceed 10 feet in width unless otherwise approved by the City of Franklin, and should be designed and constructed so as to result in the least removal and disruption of trees and shrubs and the minimum impairment of natural beauty.

Street Trees: At least one street tree of an approved species and of at least six feet in height should be planted for each 50 feet of frontage on all proposed dedicated streets. However, the placement and selection of

street tree species should not hamper or interfere with access to natural light and air for nearby lots. Tree species should be selected, in part, based upon soil conditions and species hardiness to soil conditions, as set forth in Appendix B.

Wind and Landscape Planting: With respect to wind, landscaping should be done in such a way so as to minimize winter wind and promote summer wind effects on structures; winter wind protection is afforded by planting landscaping of an adequate height to the west of structures. However, if access to sunlight would be blocked, low shrubs should be used to divert or enhance winds.

Sunlight and Landscape Planting: With respect to sunlight, landscaping planted to the south of structures should be short, broad, deciduous species with open twig patterns, affording the passage of light through the branch structure in the winter.

Sunlight and Open Space: In residential areas, the location of open space should be such that whenever possible it acts as a buffer between short structures and the shadows cast by neighboring structures or landscape materials.

Easements

Utility easements of widths adequate for the intended purpose but not less than 20 feet on each side of all rear lot lines and on side lot lines or across lots may be required by the City of Franklin where necessary or advisable for electric power and communication wires and conduits; storm and sanitary sewers; and gas, water, and other utility lines. Where a subdivision is traversed by a watercourse, an adequate drainageway or easement should be provided as may be required by the City Engineer.

Storm Water Drainage and Erosion/Sedimentation Control

Storm water drainage facilities should be adequate to serve the subdivision and may include curbs and gutters, catch basins and inlets, storm sewers, road ditches, culverts, open channels, water retention structures, and settling basins. The facilities should be of adequate size and grade to hydraulically accommodate the maximum potential volumes of water flowing through and from the subdivision and shall be so designed as to prevent and control soil erosion and sedimentation and to present no hazards to life or property.

Where feasible, storm water drainage should be provided in landscaped, open channels of adequate size and grade to hydraulically accommodate maximum potential volumes of flow. These design details are subject to review by the City Engineer.

Earth-moving activities, such as grading, topsoil removal, mineral extraction, road cutting, waterway construction or enlargement, excavation, channel clearing, ditching, drain tile laying, dredging, and lagooning, should be so conducted as to prevent erosion and sedimentation and to least disturb the natural fauna, flora, watercourse, water regimen, and topography. Cut and filled lands outside of street rights-of-way should be graded to a maximum slope of 25 percent or to the angle of repose of the soil.

The subdivider should plant those grasses, trees, and vines--the species and size of which are to be determined by the City, or in the case of trees, those shown in Appendix B--necessary to prevent soil erosion and sedimentation. The City of Franklin may require the subdivider to provide or install certain protection and rehabilitation measures, such as fencing, slopes, seeding, trees, shrubs, riprap, wells, revetments, jetties, clearing, dredging, snagging, drop structures, brush mats, willow poles, and grade stabilization structures.

Chapter IV

THE RECOMMENDED NEIGHBORHOOD UNIT PLAN

INTRODUCTION

In accordance with the community development objectives and neighborhood unit design principles set forth in Chapter I of this report, and the residential neighborhood urban design criteria set forth in Chapter III of this report, a recommended neighborhood unit development plan was prepared for the Whitnall Neighborhood. The recommended unit plan is shown on Map 13. The recommended plan incorporates and refines the best features of a number of preliminary designs. The plan was prepared at a scale of 1" = 200', using topographic maps having a vertical contour interval of two feet, to which cadastral data were added. All of the basic data pertinent to good land subdivision design, including data on soil characteristics, topography and drainage patterns, real property boundaries, existing land uses, and utilities, were carefully considered in the design.

THE RECOMMENDED PLAN

Land Use Description

An area located near the south-central part of the neighborhood provides a site for a proposed neighborhood elementary school and an adjoining neighborhood park. The land for this neighborhood park has been purchased by the Milwaukee County Park Commission. Access to the school site is provided by a collector street along the north and west sides. Access to the park is provided by a collector street along the north side and by a local access street along the south side. The site encompasses approximately 17 acres, with approximately 9 acres proposed to be devoted to the proposed elementary school, and 8 acres proposed to be devoted to the adjoining neighborhood park site. This park would provide opportunities for both active and passive recreation to the residents of the neighborhood. The park would be located within a maximum walking distance of one mile from the farthest part of the neighborhood.

An area in the north-central part of the Whitnall Neighborhood is proposed to be retained in open space for storm water detention/retention, as shown on Map 13. Two areas located in the southern part of the neighborhood are to be retained as open channels for storm water conveyance purposes. The specific characteristics of the reservoirs and open channels should be determined by further engineering studies. Much of the area of the sites proposed for these drainage-related facilities is covered by soils having very severe limitations for urban development. The drainage areas can be maintained in a combination of public and private ownership as further engineering studies may indicate to be desirable.

Neighborhood commercial facilities are proposed to be located on a 6.5-acre site in the southwest corner of the neighborhood, along with the existing

Map 13

RECOMMENDED PRECISE NEIGHBORHOOD DEVELOPMENT PLAN FOR THE WHITNALL NEIGHBORHOOD

Source: SEWRPC.

commercial office area. Existing community commercial facilities, consisting of a mixture of office and retail businesses, are located in the northernmost part of the neighborhood.

Multiple-family residences are proposed to be located in the north and southwest parts of the neighborhood. A 56-acre site in the northern part of the neighborhood is proposed for multiple-family use at a density of about eight units per net acre. Approximately 25 acres of the southern portion of this parcel lie within a delineated secondary environmental corridor, consisting of a wetland area. On June 5, 1980, at the request of the City Engineer, the Regional Planning Commission staff undertook an initial investigation of this parcel. It was determined from this investigation that portions of the northern and southeastern portions of this parcel could be developed for multiple-family residential purposes, while the southwestern portion of this parcel should be retained in its natural wetland state. As of March 1981, an apartment complex consisting of 372 units is proposed to be developed on this parcel. A smaller parcel located immediately to the west will provide a site for 26 units at a density of about eight units per acre. Conversion of areas along Rawson Avenue and along S. 76th Street from single-family residential use to multiple-family residential use would provide for 26 units at a density of eight units per acre. The area located in the southwest part of the neighborhood provides sites for 116 multiple-family units at a density of eight units per acre. Two-family residences are proposed to be located in an area along Loomis Road and in a small area along Drexel Avenue.

The remaining area of the neighborhood is proposed to be developed for single-family residential uses. Because of the relatively small size of the neighborhood--417 acres--and the attendant need to maintain a reasonable overall development density in the neighborhood, the area proposed for single-family residential development is recommended to consist of lots zoned in the highest density single-family residential zoning district permitted by the city zoning ordinance--R-6. Special consideration should be given to the design of any land subdivisions lying to the southwest of the proposed storm water detention/retention pond in order to preserve as much of the existing woodlands as possible.

Factors that must be taken into account in the implementation of the recommended plan include construction of sanitary and storm sewers, minor earthwork in some areas, and cooperation among some adjacent landowners in order to obtain optimal development of their land. Since the entire neighborhood falls within an area of the City proposed for urban development by the year 2000, it is recommended that sanitary and storm sewers be included in any new development proposed in the neighborhood. A few low-lying areas in the neighborhood may require earth fill in order to avoid ponding of storm water and to facilitate positive drainage. Areas of concern in this respect are located in the northern and southern parts of the neighborhood situated near Loomis Road. All of these areas are located in proposed residential areas.

The plan in some areas proposes the development of lots lying in two or more existing property ownerships. Many of these lots are necessitated by the irregularly shaped existing property ownerships, and represent an attempt to provide an economical means of developing the property concerned. Cooperation among owners by means of trade-offs or purchases will be required for proper development.

The existing land uses, as of February 1981, shown on Map 7 and the proposed land uses shown on Map 13 are compared in Table 14. The table indicates the number of acres in the neighborhood devoted to each land use category and the proportion of the neighborhood comprised of each land use. Residential land use represents the single largest proposed land use category in the neighborhood, constituting slightly more than one half of the total area of the neighborhood when fully developed.

Traffic Circulation

The proposed street system for the neighborhood is organized on a functional basis and consists of arterial, collector, and land access streets. Arterial streets are arranged so as to facilitate ready access from the neighborhood to centers of employment, governmental activity, shopping and services, and recreation both within and beyond the boundaries of the neighborhood and community. The arterial streets are properly integrated with, and related to, the existing and proposed regional system of major streets and highways and are continuous in alignment with the existing or planned arterial streets and highways with which they are to connect.

Four arterial streets or highways are shown on the recommended plan for the Whitnall Neighborhood: existing W. Loomis Road (STH 36) along the western boundary of the neighborhood, extending in a northeast-southwest direction; existing S. 76th Street (CTH U) along the eastern boundary of the neighborhood, extending in a north-south direction; existing W. Drexel Avenue along the southern boundary of the neighborhood, extending in an east-west direction; and existing W. Rawson Avenue, extending through the northern part of the neighborhood. Presently, these arterials, with the exception of W. Loomis Road, are all two-lane streets. W. Loomis Road is a four-lane divided arterial highway. W. Drexel Avenue, S. 76th Street, and W. Rawson Avenue are recommended to ultimately be converted to divided four-lane arterial highways. In order to meet the minimum recommended right-of-way width for the arterials, an additional five-foot strip of land along parts of the eastern edge of the neighborhood will have to be acquired for right-of-way purposes for S. 76th Street. Along portions of W. Drexel Avenue, an additional 15 to 25 feet of right-of-way will have to be acquired for arterial street use. A total of 3.79 miles of arterial streets or highways are contained in the recommended plan. This represents no increase over the existing mileage of such streets and highways.

In order to promote traffic safety and to protect the capacity of the arterial street system, the plan proposes to limit direct access of building sites to arterial streets by backing lots against the arterials where possible. The depth of the lots backed against the arterials has been increased over the generally prevailing lot depth within the neighborhood unit to provide room for a planting strip to buffer the residential uses from the arterial streets. Alternative suggested landscape planting designs for planting screens are shown in Figure 2. A minimum planting screen width of 20 feet is recommended for each alternative. Although Alternative A is the most widely used design, it is monotonous, consisting of two plant types, offering little plant variety, and requiring more planting material than the other alternatives. Alternative B uses a minimum amount of deciduous species, requires less

Table 14

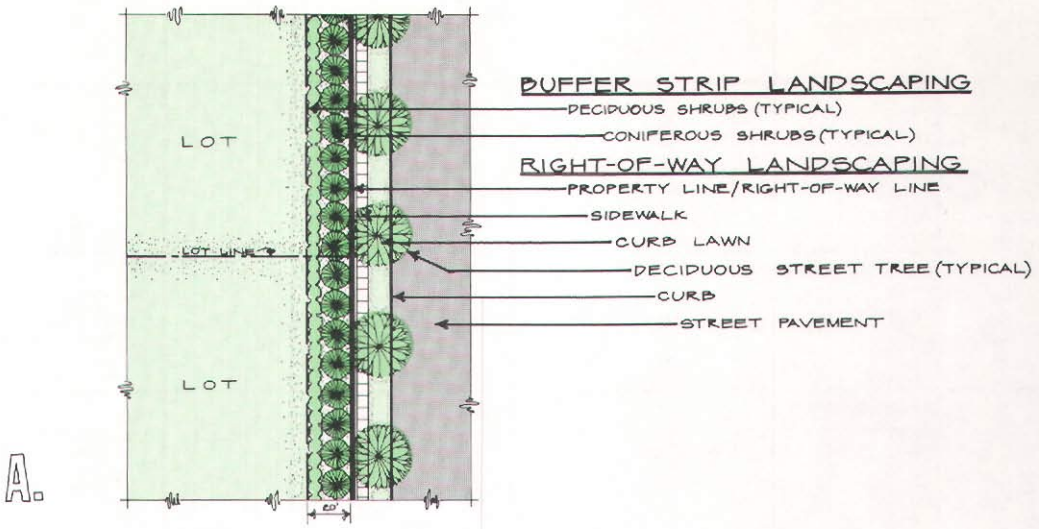
EXISTING AND PROPOSED LAND USE IN THE WHITNALL NEIGHBORHOOD

Land Use Category	Existing Land Use 1981		Plan Increment		Planned Ultimate Land Use	
	Acres	Percent of Total	Acres	Percent Increase	Area	Percent of Total
Residential						
Single Family	27.9	6.7	76.8	18.4	104.7	25.1
Single Family Under Development	15.1	3.6	-15.1	-3.6	--	--
Farmsteads	4.1	1.0	-4.1	-1.0	--	--
Two Family	2.7	0.6	61.0	14.6	63.7	15.3
Multiple Family	--	--	67.1	16.1	67.1	16.1
Subtotal	49.8	11.9	185.7	44.5	235.5	56.5
Commercial						
Neighborhood Retail and Service	--	--	6.7	1.6	6.7	1.6
Community Retail and Service	5.2	1.3	1.0	0.2	6.2	1.5
Subtotal	5.2	1.3	7.7	1.8	12.9	3.1
Industrial	--	--	--	--	--	--
Governmental/Institutional						
Public	--	--	9.3	2.2	9.3	2.2
Private	--	--	--	--	--	--
Subtotal	--	--	9.3	2.2	9.3	2.2
Park and Recreational						
Neighborhood Parks	--	--	7.8	1.9	7.8	1.9
Community Parks	--	--	--	--	--	--
Drainageways and Walkways	2.8	0.7	35.7	8.5	38.5	9.2
Other Recreational	--	--	--	--	--	--
Subtotal	2.8	0.7	43.5	10.4	46.3	11.1
Streets and Other Public Ways						
Arterial Streets	46.1	11.0	2.0	0.5	48.1	11.5
Collector Streets	1.8	0.4	17.2	4.2	19.0	4.6
Land Access Streets	8.2	2.0	37.7	9.0	45.9	11.0
Utility and Easements	0.7	0.2	-0.7	-0.2	--	--
Subtotal	56.8	13.6	56.2	13.5	113.0	27.1
Agricultural, Open Lands, and Unused Lands	302.4	72.5	-302.4	-72.5	--	--
Total	417.0	100.0	--	--	417.0	100.0

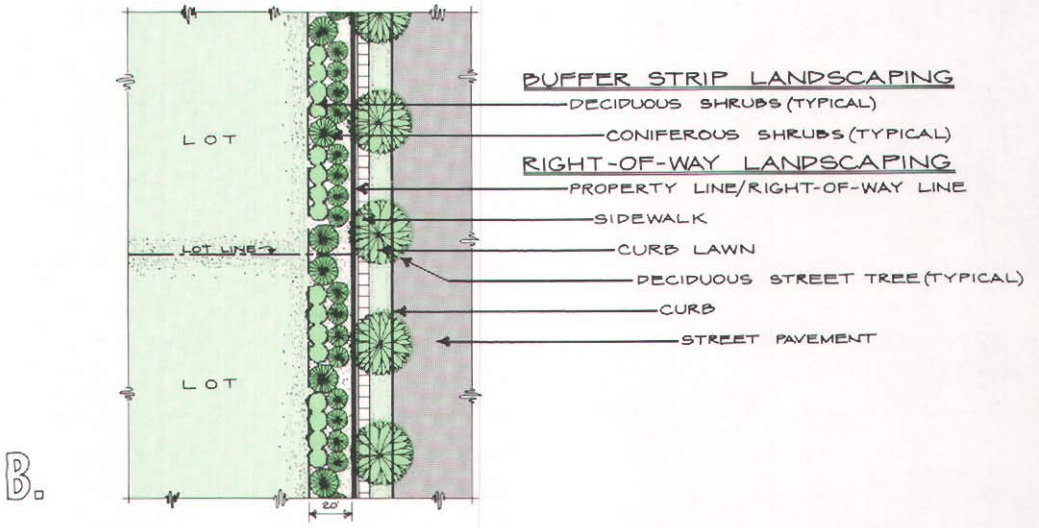
Source: SEWRPC.

Figure 2

ALTERNATIVE SUGGESTED DESIGNS
FOR LANDSCAPED PLANTING SCREENS



A.



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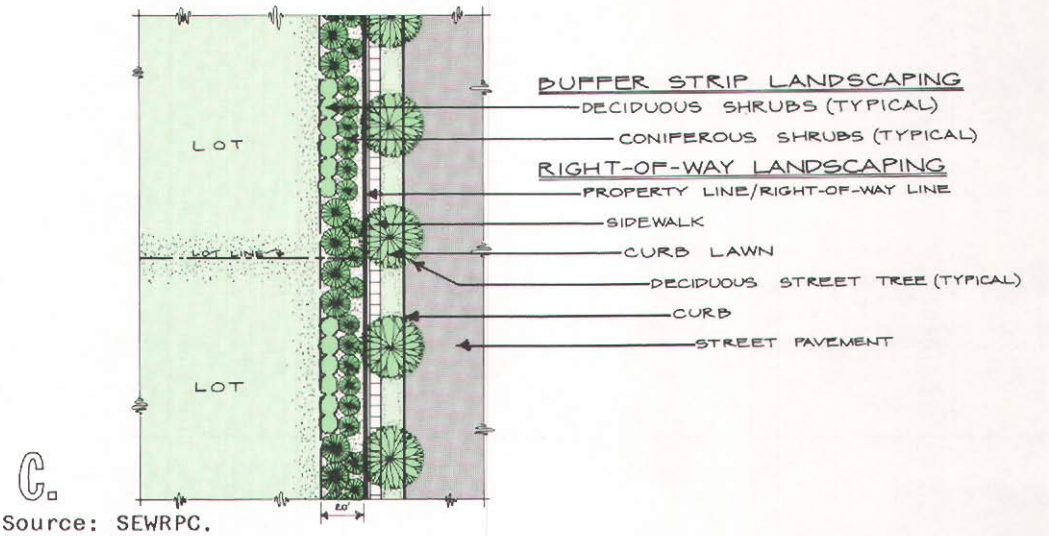


C.

Source: SEWRPC.

planting material than Alternative A, and offers a greater variety of form. Alternative C is similar in design to Alternative B, except that larger plant species are used, thus requiring less planting material.

Collector streets are arranged so as to provide for the ready collection and distribution of traffic to and from residential areas and for the conveyance of this traffic to and from the arterial street and highway system. These collector streets also serve special traffic generators such as schools, churches, and shopping centers and certain other proposed concentrations of population or activities in the neighborhood, connecting these traffic generators to the arterial street network. The existing S. 83rd Street, a partially completed collector street, will extend in a northerly direction from W. Drexel Avenue through the southern portion of the neighborhood. A collector street which will connect with S. 83rd Street and extend in a northwesterly direction, eventually intersecting with Loomis Road, is proposed. A proposed collector street to be located in the southern part of the neighborhood will extend in a westerly direction from S. 76th Street, and eventually intersect with the previously described collector street. Another proposed collector street, which will serve the northern and western parts of the neighborhood, will extend in a westerly direction from S. 76th Street, and will wind through the western part of the neighborhood, eventually intersecting with the collector street in the southern part of the neighborhood. Under the recommended plan, a total of 1.90 miles of collector streets would serve the Whitnall Neighborhood, an increase of 1.72 miles of such streets over the existing system.

The recommended plan proposes the eventual development of 5.97 miles of land access streets, or an increase of 4.91 miles over the existing mileage of such streets in the neighborhood. The proposed land access street network is designed and located to achieve the most efficient use of land; discourage use by through traffic; minimize street area and cost; provide an aesthetic setting for residential development; facilitate the provision of efficient storm water drainage, sewerage, and public water supply facilities; and complement the natural terrain, thereby minimizing the need for grading during the development process. The street locations are based upon careful consideration of a number of factors, including soil characteristics, topography, property boundaries, the hierarchy within the total street system, land use, the principles of neighborhood planning, and the design criteria presented earlier in this report.

Selected data on the proposed street system for the Whitnall Neighborhood are set forth in Table 15, which indicates the classification, existing right-of-way, proposed right-of-way, typical cross-section, and length in miles of all streets proposed in the recommended plan.

Relationship of Population Growth Trends and the Plan

Tables 16 through 19 summarize pertinent data on total resident population and density, school-age population, population distribution by age, and residential development density within the Whitnall Neighborhood unit for the base year 1980 and for ultimate development in accordance with the recommended plan. In June 1980, the number of dwelling units in the Whitnall Neighborhood

Table 15

STREETS AND HIGHWAYS IN THE WHITNALL NEIGHBORHOOD: 1981 AND UPON ULTIMATE DEVELOPMENT

Classification	Name	Existing		Proposed		Typical Ultimate Cross-Section	Ultimate Total Length (miles)
		Right-of-Way Width (feet)	Existing Length (miles)	Right-of-Way Width (feet)	Additional Length (miles)		
Arterial Streets or Highways	W. Loomis Road (STH 36).....	100 to 210 (½)	1.52	100 to 210 (½)	--	--	1.52
	W. Rawson Avenue.....	150 to 165	0.20	150 to 165	--	Desirable four lane	0.20
	S. 76th Street (CTH U).....	60 to 80 (½)	1.18	65 to 80 (½)	--	Desirable four lane	1.18
	W. Drexel Avenue.....	40 to 120 (½)	0.89	65 to 120 (½)	--	Desirable four lane	0.89
Subtotal	--	--	3.79	--	--	--	3.79
Collector Streets	S. 83rd Street.....	80	0.18	80	0.08	Urban collector	0.26
	Unnamed Collector Streets....	None	--	80	1.64	Urban collector	1.64
Subtotal	--	--	0.18	--	1.72	--	1.90
Land Access or Minor Streets	Brüss Lane.....	60	0.05	60	0.13	Urban minor	0.18
	Coventry Drive.....	60	0.30	60	0.10	Urban minor	0.40
	S. 77th Street.....	60	0.07	60	0.10	Urban minor	0.17
	Nottingham Way.....	60	0.17	60	0.28	Urban minor	0.45
	Camelot Drive.....	60	0.02	60	0.17	Urban minor	0.19
	Camelot Drive.....	None	--	66	0.21	Urban minor	0.21
	Imperial Drive.....	66	0.45	66	0.34	Urban minor	0.79
	Unnamed Minor Streets.....	None	--	60	2.99	Urban minor	2.99
	Unnamed Minor Streets.....	None	--	66	0.59	Urban minor	0.59
Subtotal	--	--	1.06	--	4.91	--	5.97
Total	--	--	5.03	--	6.63	--	11.66

Source: SEWRPC.

Table 16

ULTIMATE POPULATION, DEVELOPED ACREAGE, AND RESIDENTIAL DENSITY IN THE WHITNALL NEIGHBORHOOD

Item	1980	Planned Increment	Ultimate Development
Population	147	3,195	3,342
Dwelling Units	47	1,185	1,232
Average Family Size	3.13	--	2.71
Developed Residential Land (net acres)	23.3	211.9	235.5
Residential Density (persons per net developed acre)	6.3	--	14.19

Source: SEWRPC.

Table 17

ULTIMATE PRIMARY AND SECONDARY SCHOOL-AGE POPULATION BY GRADES AND BY SCHOOL TYPE IN THE WHITNALL NEIGHBORHOOD

School Grades	All Enrollment	Private School Enrollment		Public School Enrollment	
		Students	Percent	Students	Percent
K-6	508	51	10.0	457	90.0
7-8	207	21	10.0	186	90.0
9-12	191	13	7.0	178	93.0
Total	906	85	9.4	821	90.6

Source: SEWRPC.

Table 18

ESTIMATED POPULATION DISTRIBUTION BY AGE GROUP IN THE WHITNALL NEIGHBORHOOD: 1980 AND UPON ULTIMATE DEVELOPMENT

Age Group	1980 Population[a]		Ultimate Population	
	Persons	Percent of Total	Persons	Percent of Total
Under 5	15	10.2	234	7.0
5	4	2.7	67	2.0
6-11	16	10.9	441	13.2
12-13	8	5.5	207	6.2
14-17	3	2.0	191	5.7
18 and older	101	68.7	2,202	65.9
Total	147	100.0	3,342	100.0

[a] Based on the June 1980 school census data provided by the City of Franklin School District No. 5.

Source: City of Franklin School District No. 5 and SEWRPC.

Table 19

DISTRIBUTION OF ULTIMATE RESIDENTIAL DEVELOPMENT IN THE WHITNALL NEIGHBORHOOD

Dwelling Type	Developed Residential Acres	Dwelling Units	Net Density (dwelling units per acre)	School-Age Children per Dwelling Unit	Total School-Age Children	Population per Dwelling Unit	Total Population
Single Family.....	104.7	346	3.3	1.35	467	3.25	1,124
Two Family.....	63.7	346	5.4	1.05	363	2.90	1,003
Multiple Family...	67.1	540	8.0	0.14	76	2.25	1,215
Total	235.5	1,232	5.2	0.74	906	2.71	3,342

Source: SEWRPC.

was 47, and the resident population totaled 147 persons. Upon ultimate development of the neighborhood in accordance with the plan, the number of dwelling units would total about 1,230 and the resident population would approximate 3,350 persons, of which about 900 may be expected to be of primary and secondary school age.

If land use development within the Region occurs in accordance with the adopted regional land use plan, the resident population of the City of Franklin may be expected to approximate 38,600 persons by the year 2000, more than doubling the 1980 population estimate of 16,800 persons. Although these forecasts indicate a continued substantial rate of increase in the population of the City, it is highly unlikely that the Whitnall Neighborhood will be fully developed by the turn of the century. The neighborhood plan presented herein should thus be considered as an "ultimate end stage" plan. The "ultimate end stage" is considered to be that point in time when the neighborhood is fully developed in accordance with the recommended plan.

The recommended neighborhood unit plan is intended to be used as a point of departure in making development decisions over the years in order to avoid mistakes that could create serious and costly developmental or environmental problems and to guide actual piecemeal development over time into a coordinated and harmonious whole. In this respect, it must be recognized that over long periods of time, socioeconomic and related cultural conditions, and, therefore, development standards and practices, may change, and such change may dictate changes in the adopted neighborhood unit plan. The responsible public officials must accordingly remain flexible in the use and application of the plan, and the plan itself should be updated on a periodic basis. Future changes in the primary means of transportation may alter the concepts embraced in the preparation of the Whitnall Neighborhood plan. Similarly, significant socioeconomic changes could occur which would result in a public desire for housing types and styles different from those now prevalent, thus requiring a change in the plan.

Nevertheless, at present and for the near future, the proposed neighborhood unit plan, as presented herein, offers a sound guide to the rational physical development of the delineated neighborhood. Proper utilization of the plan by city officials can provide many benefits, including:

1. The plan provides a framework upon which proposed land uses can be properly related to other existing and probable future land uses in the area and to supporting transportation, utility, and storm water drainage needs and facilities. The plan provides for the development of a basic street network able to efficiently and safely move traffic into and out of, as well as within, the neighborhood. The proposed street pattern also provides the basic public rights-of-way necessary to efficiently accommodate needed utilities and storm water drainage.

2. The plan can accommodate a diversity of housing types and styles and can accommodate a wide range of land subdivision proposals.

3. The plan identifies areas containing significant natural resources which should be permanently preserved in essentially open, natural uses and which can serve to enhance other land uses in the area.

4. The plan recognizes soil types and accommodates their associated limitations on development in order to avoid the creation of serious and costly developmental and environmental problems.

5. The plan presents proposals for zoning district changes together with an outline, in tabular form, for zoning text changes which can assist in implementing the plan.

6. The plan provides for the identification and preservation of sites for such desirable neighborhood facilities as an elementary school and a neighborhood park.

As already noted, the plan should be applied over time in a thoughtful, flexible manner, and the City Plan Commission must assume the final responsibility of determining when, where, and how future development is to take place in the neighborhood. The plan, however, provides the Plan Commission with a broad view of how individual development proposals may be fit into the neighborhood as a whole without creating problems.

Plan Evaluation in Terms of Lot Yield

One of the factors affecting the cost of improved building sites is the economic efficiency of the land subdivision design; that is, the yield in terms of the number of lots per acre which can be obtained from a particular piece of land. This yield is affected by many factors. Some factors directly affect the yield--such as lot size, block length, and street width--and some factors indirectly affect the yield--such as street pattern, topography, the size and shape of the parcel to be subdivided, and the amount and location of common open space. The net effect of these factors on lot yield can be determined only through an analysis of individual sites and completed subdivision designs.

Subdivision Lot Yield Efficiency Factors: The subdivision of land normally results in the creation of a series of blocks composed of lots, the size of both depending in part upon local zoning and land subdivision regulations. The lot size is primarily determined by zoning regulations in the form of a

Table 20

LOT YIELD EFFICIENCY FACTORS FOR THE WHITNALL NEIGHBORHOOD

Zoning District	Lot Size (square feet)	Lot Width (feet)	Lot Depth (feet)	Zoned Area in the Neighborhood (gross acres)	Number of Lots	Actual Yield in Lots per Acre	Theoretical Maximum Yield in Lots per Acre	Theoretical Maximum Number of Lots	Efficiency Factor (percent)
R-6	10,000	85	120	141.0	346	2.45	3.17	447	77.4
R-7	12,500	100	125	96.0	173	1.80	2.68	257	67.3
Total	--	--	--	237.0	519	2.19	2.97	704	73.7

Source: SEWRPC.

minimum lot area and a minimum lot width, along with a corresponding minimum lot depth. As part of the Regional Planning Commission's study of historic land subdivision within the Region from 1920 through 1969, as documented in SEWRPC Technical Report No. 9, Residential Land Subdivision in Southeastern Wisconsin, theoretical maximum lot yields were developed for a full range of urban lot widths and depths.

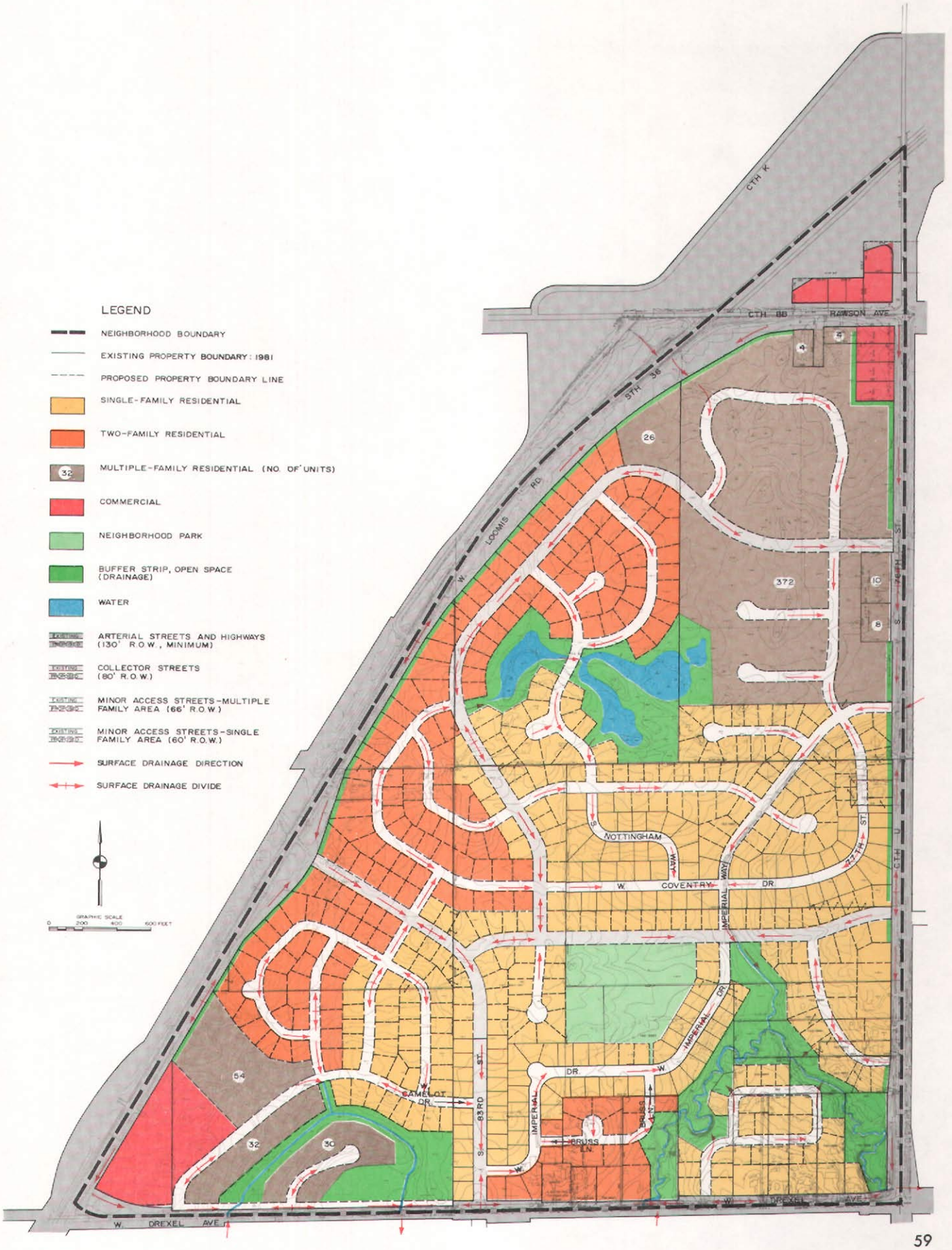
Lot Yield Efficiency Analysis: After a subdivision has been designed, the actual yield of lots per gross residential acre can be computed. The lot yield efficiency factor for the design can then be computed by dividing the actual yield by the theoretical maximum yield for the same size lot. The larger this factor, the more efficient the design. The theoretical maximum and actual yields were determined for the lot sizes created in the neighborhood design, and the efficiency factor was computed. This factor is compared in Table 20 with historic (1920-1969) design efficiency data. The resulting 73.7 percent efficiency factor is somewhat low because of the arrangement of some existing long, narrow lots in the neighborhood, making it difficult to fully divide the lots into smaller, more economical parcels. Also, large areas of arterial street and highway rights-of-way within these zoning districts decrease the efficiency of the design.

Alternative Plan

The alternative plan, as presented on Map 14, provides an alternative development plan for that portion of the neighborhood within the area of the proposed neighborhood elementary school. Because of the relatively small size of the neighborhood and the low estimated school-age population, it may not be economically feasible to provide for a neighborhood elementary school. The alternative plan provides for another means of developing this site. The plan provides for an additional 22 single-family residential lots over the number in the recommended plan. This added development would increase the neighborhood population by about 71 persons, or 2.1 percent, and would increase the school-age population by about 30 students, or about 3.3 percent. The plan also provides for a net addition of 2 acres of proposed neighborhood parkland to provide for the loss of play area which will occur should the school not be built. Also, an additional 460 feet of street will have to be added to the recommended plan to accommodate the proposed cul-de-sac.

Map 14

ALTERNATIVE PRECISE NEIGHBORHOOD UNIT DEVELOPMENT PLAN FOR THE WHITNALL NEIGHBORHOOD



Source: SEWRPC.

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Chapter V

IMPLEMENTATION OF THE NEIGHBORHOOD PLAN

INTRODUCTION

The design of a neighborhood unit development plan is only the first in a complex series of public and private actions required for the ultimate development of the neighborhood in accordance with the plan. The major steps necessary to formally adopt and implement the Whitnall Neighborhood plan include: public informational meetings and a formal hearing, formal adoption by the City of Franklin Plan Commission, zoning, official mapping, and careful and consistent subdivision plat review over time, in light of the plan recommendations.

PUBLIC INFORMATIONAL MEETINGS AND HEARINGS

Although the Wisconsin city planning enabling legislation does not require local plan commissions to hold hearings on proposed plan elements prior to adoption of those elements, it is, nevertheless, recommended that in order to provide for, and promote, more active citizen participation in the planning process, the Franklin City Plan Commission hold one or more public informational meetings and a formal public hearing to acquaint neighborhood residents and landowners with the details of the proposed plan and to solicit public reaction to the plan proposals. The plan should then be modified to incorporate any desirable new ideas which may be advanced at the informational meetings and hearing.

PLAN ADOPTION

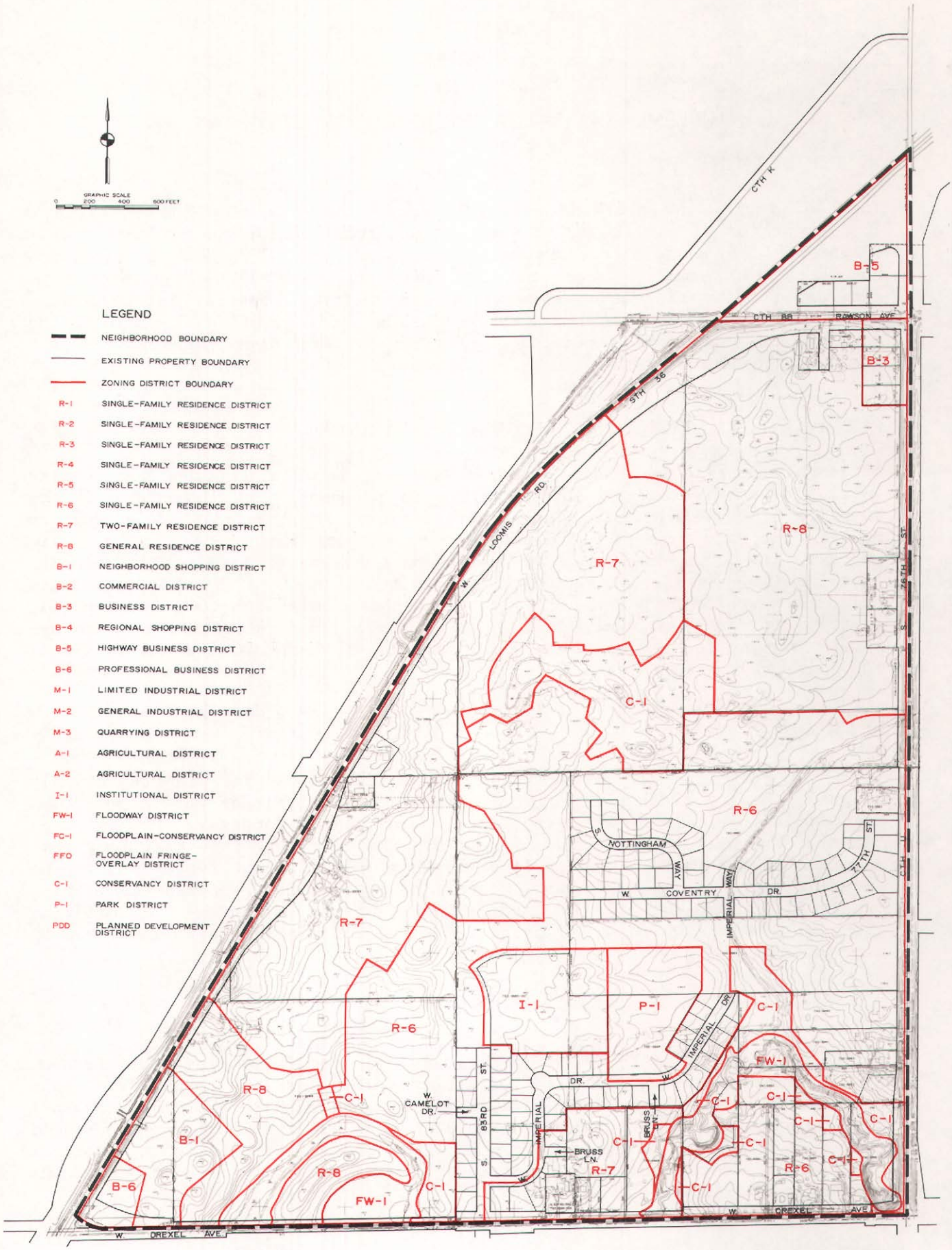
It is important to plan implementation that the recommended plan be formally adopted, thereby clearly expressing the plan as an official public policy. A suggested resolution to adopt the plan is presented in Appendix D. Upon adoption of the plan by the Plan Commission, the secretary should certify such adoption to the Common Council in accordance with Wisconsin's city planning enabling act. A suggested Common Council resolution for adopting the plan is presented in Appendix E. Upon such adoption, the plan becomes the official guide to the making of development decisions concerning the neighborhood by city officials.

ZONING

Following adoption of the plan by the City Plan Commission and certification to the Common Council, the Plan Commission should initiate amendments to the city zoning district map to bring that map into conformance with the proposals advanced in the adopted neighborhood unit plan as presented herein. Map 15 shows the ultimate zoning districts required to implement the plan. Table 21 provides a summary of the recommended zoning district regulations to be applied to the Whitnall Neighborhood.

Map 15

PROPOSED ULTIMATE ZONING MAP FOR THE WHITNALL NEIGHBORHOOD



Source: SEWRPC.

Table 21

SUMMARY OF CITY OF FRANKLIN ZONING DISTRICTS: 1982

Zoning District	Permitted Uses		Special Uses	Maximum Residential Density (dwelling units per net acre)	Minimum Lot Size			Minimum Yard Requirements			Minimum Building Size[a]			Additional Bedrooms, Add:		Maximum Building Height (feet)	Maximum Lot Coverage (percent)	Maximum Floor Area Ratio
	Principal	Accessory			Total Area	Area per Family	Width at Setback (feet)	Front Yard (feet)	Side Yard (feet)	Rear Yard (feet)	One Story Three or Less Bedrooms (square feet)	Multi-Story Three or Less Bedrooms (square feet)	Multi-Story Total Living Area (square feet)	One Story (square feet)	Multi-Story (square feet)			
R-1 Single-Family Residence District	Single-family detached dwellings, parks, home occupations	Off-street parking facilities	Religious institutions, schools, parks, agricultural buildings	0.5	2 acres	2 acres	200	100	30; 75 corner	30	1,600	1,100	1,900	250	100	30 or 2½ stories (whichever is lowest)	7.5	–
R-2 Single-Family Residence District	Single-family detached dwellings, parks, home occupations	Off-street parking facilities	Religious institutions, schools, parks, agricultural buildings	1.1	40,000 square feet	40,000 square feet	150	60	20; 45 corner	30	1,600	1,100	1,900	200	100	30 or 2½ stories (whichever is lowest)	10	–
R-3 Single-Family Residence District	Single-family detached dwellings, parks, home occupations	Off-street parking facilities	Religious institutions, schools, parks, agricultural buildings	2.2	20,000 square feet	20,000 square feet	100; 110 corner	45	10; 35 corner	30	1,400	1,100	1,700	150	100	30 or 2½ stories (whichever is lowest)	15	–
R-4 Single-Family Residence District	Single-family detached dwellings, parks, home occupations	Off-street parking facilities	Religious institutions, schools, parks, agricultural buildings	2.7	16,000 square feet	16,000 square feet	95 110 corners	40	10; 30 corner	30	1,350	1,050	1,650	150	100	30 or 2½ stories (whichever is lowest)	20	–
R-5 Single-Family Residence District	Single-family detached dwellings, parks, home occupations	Off-street parking facilities	Religious institutions, schools, parks, agricultural buildings	3.3	13,000 square feet	13,000 square feet	90; 105 corner	35	10; 25 corner	30	1,300	1,000	1,600	150	100	30 or 2½ stories (whichever is lowest)	20	–
R-6 Single-Family Residence District	Single-family detached dwellings, parks, home occupations	Off-street parking facilities	Religious institutions, schools, parks, agricultural buildings	4.4	10,000 square feet	10,000 square feet	85; 100 corner	30	10; 19 corner	30	1,250	950	1,550	150	100	30 or 2½ stories (whichever is lowest)	25	–
R-7 Two-Family Residence District	Two-family dwellings, single-family detached dwellings, parks, home occupations	Off-street parking facilities	Religious institutions, schools, parks, agricultural buildings	7.0	12,500 square feet	6,250 square feet	100	30	10; 30 corner	25	1,150	1,150 each unit	1,150 each unit	250 each unit	250 each unit	30 or 2½ stories (whichever is lowest)	35	–
R-8 General Residence District	None	None	Any use permitted in the R-1 District, two-family dwellings, motels and hotels, apartments	7.0	12,500 square feet	6,250 square feet	100	25 plus one additional foot of front yard for each two feet over 35 feet in building height	10 for two-family and multiple-family dwellings plus five feet for each story over two or 30 corner or 12 feet for a nonresidential building with a combined total of two side yards of not less than 30 feet except 30 feet required on street side of corner lots	25	1) Two-family dwellings One-story buildings a) Living area per unit, three bedrooms or less: 1,150 square feet b) Add for each additional bedroom: 250 square feet c) Add if basement for each unit is less than 600 square feet: 250 square feet Two-story buildings a) Same as above b) Same as above c) Add to each unit if total basement area is less than 600 square feet: 150 square feet 2) Multiple-family dwellings:			–	–	100	35	0.4 Two-family; 1.0 Multiple-family; 2.0 Permitted nonresidential use

Dwelling Units per Building	One-Bedroom Apartment (square feet)	Add for Additional Bedroom (square feet)
3-4	800	200
5-10	700	150
11 or more	560	250

Table 21 (continued)

Zoning District	Permitted Uses: Principal	Permitted Uses: Accessory	Special Uses	Maximum Residential Density (dwelling units per net acre)	Minimum Lot Size: Total Area	Minimum Lot Size: Area per Family	Minimum Lot Size: Width at Setback (feet)	Minimum Yard Requirements: Front Yard (feet)	Minimum Yard Requirements: Side Yard (feet)	Minimum Yard Requirements: Rear Yard (feet)	Minimum Building Size[a]: One Story Three or Less Bedrooms (square feet)	Minimum Building Size[a]: Multi-Story Three or Less Bedrooms (square feet)	Minimum Building Size[a]: Multi-Story Total Living Area (square feet)	Additional Bedrooms, Add.: One Story (square feet)	Additional Bedrooms, Add.: Multi-Story (square feet)	Maximum Building Height (feet)	Maximum Lot Coverage (percent)	Maximum Floor Area Ratio
PDD Planned Development District	Individual use and structures in a Planned Development District shall comply with the specific building location, height, building size, floor area, lot size, and open space requirements as set forth by the City Plan Commission as conditions and restrictions of approval				Minimum Site Area: Residential and open space 5 acres; Commercial uses 5 acres; Industrial uses 40 acres; Mixed compatible uses 40 acres													
B-1 Neighborhood Shopping District	Drugstores, food stores, hardware stores, offices, restaurants, parking lots	Business signs, off-street parking and loading	Churches, clothing stores, hospitals, public utility and governmental service establishments	–	–	–	–	25	10; 25 corner	20	–	–	–	–	–	35	–	–
B-2 Commercial District	Banks (drive-in), book stores, clothing stores, drugstores, food stores, offices, theaters	Off-street parking and loading	Automobile sales, banks, churches, hospitals, hotels, motels, parking lots	–	–	–	–	25	10; 25 corner	20	–	–	–	–	–	–	–	2.0
B-3 Business District	Banks, department stores, food stores, motels, offices, restaurants	Off-street parking and loading	Banks (drive-in), churches, health centers, public utility and governmental service uses	–	–	–	–	25	10; 25 corner	20	–	–	–	–	–	–	–	2.0
B-4 Regional Shopping District	Banks, appliance stores, food stores, furniture stores, offices, theaters	Off-street parking and loading	Hospitals, automobile sales and repair, public utility and governmental service uses	–	–	–	–	150	150	150	–	–	–	–	–	–	–	1.0
B-5 Highway Business District	None	Off-street parking and loading	Restaurants, motels, banks (drive-in), places of entertainment	–	–	–	–	100	20; 50 corner	40	–	–	–	–	–	35	–	–
B-6 Professional Business District	Accounting services, dental services, legal services, medical services, real estate services, governmental offices	Off-street parking and loading	Businesses similar to permitted uses	–	–	–	–	25	10	20	–	–	–	–	–	35	–	–
M-1 Limited Industrial District	Banks, bakeries, offices, wholesaling and warehousing, fire and police stations, sanitary landfills	Off-street parking and loading	Motor freight terminals, stadiums, churches, health centers, public utility and governmental service uses	–	–	–	–	30	10 percent of lot width, but not less than 10 feet	None	–	–	–	–	–	–	–	1.5
M-2 General Industrial District	Banks, automobile services, machine shops, wholesaling and warehousing, parks, fire stations	Off-street parking and loading	Motor freight terminals, stadiums, churches, health centers, public utility and governmental service areas	–	–	–	–	30	10 percent of lot width, but not less than 10 feet	None	–	–	–	–	–	–	–	1.5

Table 21 (continued)

Zoning District	Permitted Uses		Special Uses	Maximum Residential Density (dwelling units per net acre)	Minimum Lot Size			Minimum Yard Requirements			Minimum Building Size [a]			Additional Bedrooms, Add:		Maximum Building Height (feet)	Maximum Lot Coverage (percent)	Maximum Floor Area Ratio
	Principal	Accessory			Total Area	Area per Family	Width at Setback (feet)	Front Yard (feet)	Side Yard (feet)	Rear Yard (feet)	One Story Three or Less Bedrooms (square feet)	Multi-Story Three or Less Bedrooms (square feet)	Multi-Story Total Living Area (square feet)	One Story (square feet)	Multi-Story (square feet)			
M-3 Quarrying District	Mineral extraction operations, concrete products, manufacturing presently in existence, concrete ready mix plants	Offices, parking areas, stockpiles	Manufacturing operations, utilities, manufacture of concrete or concrete products	–	–	–	–	75	75	75	–	–	–	–	–	–	–	–
C-1 Conservancy District	Fishing, wildlife preserves, soil and water conservation	–	Drainage, grazing, orchards, utilities	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
P-1 Park District	Forest and reserve areas, parks, playgrounds, athletic fields	Off-street parking	Golf courses, swimming pools, recreational centers	–	–	–	–	50	50	50	–	–	–	–	–	–	–	–
I-1 Institutional District	Public administrative offices, schools, churches	Off-street parking	Utilities, airports, penal institutions, rest homes, hospitals	4.4	10,000 square feet	10,000 square feet	85; 100 corners	30	10; 19 corners	30	1,250	950	1,550	150	100	30	35	–
FW Floodway District	Drainage, movement of water, stream bank protection, impoundments, wildlife preserves	–	Bridges, utilities, public water measuring and control facilities, recreation facilities	–	–	–	–	–	–	–								–
FC Floodplain Conservancy District	Drainage, movement of water, flood overflows, public recreational areas	–	Bridges, utilities, public and private recreational uses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
FFO Floodplain Fringe Overlay District	Land Uses (not including buildings) permitted in the underlying basic use district	–	Utilities, structures placed on fill or floodproofed	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
A-1 Agricultural District	Crop and tree farming, dairy farming, stock raising, single-family detached dwellings	Parking and loading areas	Temporary roadside stands for selling agricultural products, mining, loading, and hauling of sand, gravel, etc.	–	–	3 acres single-family detached dwellings; 2 acres all other permitted uses; 20,000 square feet special uses	200	50	25; 50 corners	30	–	–	–	–	–	30 dwelling; 80 other farm structures	–	0.05
A-2 Prime Agricultural District	Crop and tree farming, dairy farming, stock raising, single-family detached dwellings	Parking and loading areas	Housing for farm laborers; second single-family dwelling	–	–	35 acres single-family detached dwellings;	300	50	25; 50 corners	30	–	–	–	–	–	30 dwelling; 80 other farm structures	–	–[b]

[a] If basement area is under 600 square feet, add:

For one-story—250 square feet
For multiple story—100 square feet
For two-story building in R-7—150 square feet per unit

[b] *The maximum floor area ratio for permitted uses shall be as follows:*

a. Principal farm dwelling—0.05
b. Second farm dwelling (when permitted)—0.05
c. Other farm structures (including housing for farm laborers)—0.10

Source: SEWRPC.

Pursuant to Wisconsin Statutes, the zoning map changes recommended by the Plan Commission may be enacted by the Common Council only after a formal public hearing.

OFFICIAL MAPPING

Following adoption of the Whitnall Neighborhood development plan by the Plan Commission and Common Council, the existing and proposed streets, highways, parks, parkways, and playgrounds shown on the plan should be incorporated into an official map for the City. Section 62.23(6) of the Wisconsin Statutes provides that the Common Council of any city may establish an Official Map for the precise designation of right-of-way lines and site boundaries of streets, highways, parkways, parks, and playgrounds. Such a map has all the force of law and is deemed to be final and conclusive with respect to the location and width of both existing and proposed streets, highways, and parkways, and the location and extent of existing and proposed parks and playgrounds.

The Official Map is intended to be used to implement the community and neighborhood plans with respect to proposed streets, highways, parkways, parks, and playgrounds. One of the basic purposes of the Official Map is to prohibit the construction of buildings or structures and their associated improvements on land which has been designated for current or future public use. The Official Map is the only plan implementation device that operates on an areawide basis in advance of land development, and can thereby effectively ensure the integrated development of the street and highway system. Thus, unlike subdivision control which can operate only on a plat-by-plat basis as development proposals are advanced, the Official Map can operate over a wide planning area well in advance of development proposals. The Official Map is, therefore, a useful device to achieve public acceptance of long-range plans in that it serves legal notice of the government's intention to all parties concerned well in advance of any actual improvements. It thereby avoids the altogether too common situation of development being undertaken without knowledge of, or regard for, the long-range plan, and thereby does much to avoid local resistance when plan implementation becomes imminent. Since the City does not have an official map for the City, with the exception of Section 17 and a portion of Section 16, it is recommended that the City adopt an accompanying Official Map for each completed and adopted neighborhood plan.

SUBDIVISION PLAT REVIEW

Following adoption of the neighborhood unit plan, the plan should serve as a basis for the preparation of preliminary and final land subdivision and certified survey plats within the neighborhood. In this respect, the neighborhood plan should be regarded as a point of departure against which all proposed land division plats are evaluated. Developers should be required to fully justify any proposed departures from the plan, demonstrating that such departures are an important improvement to, or a proper refinement of, the adopted plan.

CAPITAL IMPROVEMENTS PROGRAM

A municipal capital improvements program should consist of a listing of proposed major public capital expenditures in order of priority of need. The capital improvement program can serve as a major catalyst to the implementation of the neighborhood plan by including such public works projects as may be necessary to promote development of the neighborhood in accordance with the plan in a timely manner.

LOCAL FINANCING

Wisconsin's Tax Increment Law provides for a funding arrangement whereby cities and villages share redevelopment costs with overlying tax jurisdictions, including the county and the State. When a Tax Incremental District is created, a "Tax Incremental Base" is established; this base is the aggregate value of all taxable property in the district as of the date of creation (equalized by the Department of Revenue). Any subsequent growth in the Tax Incremental District base is then "captured" so that as property value increases, levies on this growth represent positive dollar increments used for financing redevelopment. These increments are generated not only from municipal taxes, but also from taxes of overlying jurisdictions.

The Tax Increment Law has been developed to encourage development by allowing the municipality to recover the project costs before the surrounding municipalities benefit from the additional values created. When the project costs are paid off, the added value is then utilized in the apportionment process and every municipality gains. The effect of the Tax Incremental Law, then, is to put off reflecting to general government the increase in values due to improvements financed by the Tax Incremental District until the costs of generating the development are paid for.

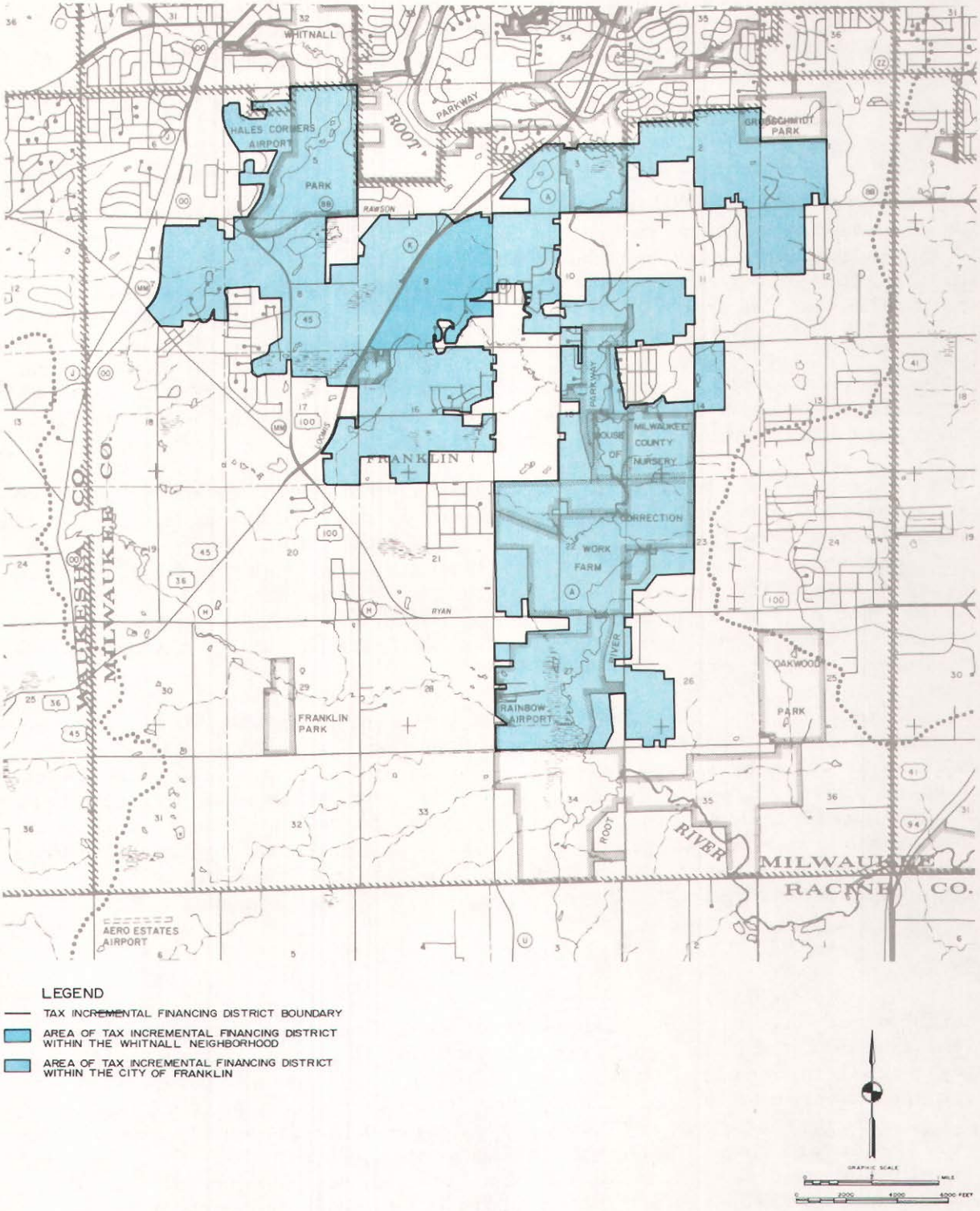
It is important to note that the underlying assumption of the Tax Increment Law is that without the Tax Incremental Finance as a vehicle for development, no development would have taken place. The effect of this would be that there would be no increase in property values in the Tax Incremental District area other than normal economic increases. Therefore, there would be no shift in the relationship between municipalities and no advantage to any municipality. The Tax Incremental Financing District for the City of Franklin, and for the district area pertaining to the Whitnall Neighborhood, is shown on Map 16.

SUMMARY

The neighborhood unit plan implementation process should include public informational meetings and hearings, plan adoption by the City, zoning, official mapping, subdivision plat review, and capital improvements programming as appropriate to promote sound, timely development of the neighborhood. All require a strong commitment by the city government to implementation of the adopted plan over time. There should be a strengthening of the planning and development review procedure in the City to assure that all development proposals are properly evaluated against the plan recommendations contained herein. It is recommended that in these matters, the City continue to seek and utilize the assistance from the Southeastern Wisconsin Regional Planning Commission.

Map 16

TAX INCREMENTAL FINANCING DISTRICT FOR THE CITY OF FRANKLIN AND THE WHITNALL NEIGHBORHOOD



LEGEND

- TAX INCREMENTAL FINANCING DISTRICT BOUNDARY
- AREA OF TAX INCREMENTAL FINANCING DISTRICT WITHIN THE WHITNALL NEIGHBORHOOD
- AREA OF TAX INCREMENTAL FINANCING DISTRICT WITHIN THE CITY OF FRANKLIN

Source: City of Franklin and SEWRPC.

APPENDICES

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Appendix A

A SUMMARY OF PROPOSED ULTIMATE DEVELOPMENT IN THE WHITNALL NEIGHBORHOOD

Land Use Category	Area (acres)	Percent of Primary Use	Percent of Total Area	Residential Lots		Dwelling Units		Estimated Population		Estimated School-Age Population		Estimated Employment	Percent of Total
				Number	Percent of Lots	Number	Percent of Total	Persons	Percent of Total	Public	Private		
Residential													
Single Family	104.7	44.5	25.1	346	66.7	346	28.1	1,124	33.6	423	44	--	--
Two Family	63.7	27.0	15.3	173	33.3	346	28.1	1,003	30.0	329	34	--	--
Multiple Family	67.1	28.5	16.1	--	--	540	43.8	1,215	36.4	69	7	--	--
Subtotal	235.5	100.0	56.5	519	100.0	1,232	100.0	3,342	100.0	821	85	--	--
Commercial													
Neighborhood Retail and Service	6.7	51.9	1.6	--	--	--	--	--	--	--	--	67	51.9
Community Retail and Service	6.2	48.1	1.5	--	--	--	--	--	--	--	--	62	48.1
Subtotal	12.9	100.0	3.1	--	--	--	--	--	--	--	--	129	100.0
Industrial	--	--	--	--	--	--	--	--	--	--	--	--	--
Subtotal	--	--	--	--	--	--	--	--	--	--	--	--	--
Governmental/Institutional													
Public	9.3	100.0	2.2	--	--	--	--	--	--	--	--	--	--
Private	--	--	--	--	--	--	--	--	--	--	--	--	--
Subtotal	9.3	100.0	2.2	--	--	--	--	--	--	--	--	--	--
Park and Recreational													
Neighborhood Parks	7.8	16.8	1.9	--	--	--	--	--	--	--	--	--	--
Community Parks	--	--	--	--	--	--	--	--	--	--	--	--	--
Drainageways and Walkways	38.5	83.2	9.2	--	--	--	--	--	--	--	--	--	--
Other Recreational	--	--	--	--	--	--	--	--	--	--	--	--	--
Subtotal	46.3	100.0	11.1	--	--	--	--	--	--	--	--	--	--
Streets and Other Public Ways													
Arterial Streets	48.1	42.6	11.5	--	--	--	--	--	--	--	--	--	--
Collector Streets	19.0	16.8	4.6	--	--	--	--	--	--	--	--	--	--
Minor Land Access Streets	45.9	40.6	11.0	--	--	--	--	--	--	--	--	--	--
Subtotal	113.0	100.0	27.1	--	--	--	--	--	--	--	--	--	--
Total	417.0	--	100.0	519	100.0	1,232	100.0	3,342	100.0	821	85	129	100.0

Gross Neighborhood Density: 11.82 persons per acre
4.35 dwelling units per acre
Net Neighborhood Density: 14.19 persons per acre
5.23 dwelling units per acre

Source: SEWRPC.

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Appendix B

LANDSCAPE TREE PLANTING GUIDE FOR SOILS FOUND IN THE WHITNALL NEIGHBORHOOD

SEWRPC Soil Type		Woodland Suitability Group[a]	Brief Description of Soils	Suggested Trees for Landscape Planting[b]			
Soil Number	Soil Name			Shade Trees	Street Trees	Lawn Trees	Hedges, Screens, and Windbreaks
					For Sunny Sites		
297	Morley silt loam	2	Moderately deep to deep, moderately well- to well-drained fine textured soils	Sugar Maple (LO) Red Maple (MO) Basswood (LO) American Beech (LO) White Oak (LR) White Ash (LO) Bur Oak (LR) Sycamore (LO) Hackberry (MR) Silver Maple (LO)	Southern Pin Oak (MP) Thornless Honey Locust (MO) Norway Maple (MR) Hackberry (MR) White Ash (LO) Sugar Maple (LO) Red Maple (MO) Basswood (LO)	Flowering Crab (SR) Paper Birch (MO) Blue Beech (SR) Mountain Ash (SO) Black Cherry (LO) White Pine (LP) White Cedar (MC) Southern Pin Oak (MP) White Spruce (MP) Russian Olive (SR)	White Cedar (MC) Red Cedar (SP) Lombardy Poplar (LC) White Spurce (MP) Russian Olive (SR) Upright Yew (SP)
					For Partial Shade		
				American Beech (LO) Sugar Maple (LO) Red Maple (MO) Basswood (LO) White Ash (LO) Hackberry (MR)	White Ash (LO) Norway Maple (MP) Sugar Maple (LO) Basswood (LO)	Blue Beech (SR) White Pine (LP) White Spruce (MP) Blue Spruce (MP) Mountain Ash (SO)	White Cedar (MC) White Spruce (MP) Upright Yew (SP)
					For Sunny Sites		
299 328 338 398	Blount silt loam Pistakee silt loam Ashkum silty clay loam Ashkum silty clay loam	7	Somewhat poorly to very poorly drained upland mineral soils, medium textured	Swamp White Oak (LR) Hackberry (MR) Red Maple (MO) Basswood (LO) Green Ash (MO) White Ash (LO) Silver Maple (LO) Cottonwood (LO)	Green Ash (MO) Basswood (LO) Red Maple (MO) Southern Pin Oak (MP)	White Spruce (MP) Paper Birch (MO) Mountain Ash (SO) Weeping Willow (MPe) White Cedar (MP) River Birch (MO)	White Cedar (MC) White Spruce (MP) Lombardy Poplar (LC) Laurel Willow (MO)
					For Partial Shade		
				Swamp White Oak (LR) Hackberry (MR) Red Maple (MO) Basswood (LO) Green Ash (MO) White Ash (LO)	Green Ash (MO) Basswood (LO) Red Maple (MO)	White Spruce (MP) Mountain Ash (SO)	White Cedar (MC) White Spruce (MP)

Appendix B (continued)

SEWRPC Soil Type		Woodland Suitability Group[a]	Brief Description of Soils	Suggested Trees for Landscape Planting[b]			
Soil Number	Soil Name			Shade Trees	Street Trees	Lawn Trees	Hedges, Screens, and Windbreaks
				For Sunny Sites			
11W	Alluvial land, wet	9	Somewhat poorly to very poorly drained alluvial or flood plain soils	Swamp White Oak (LR) Red Maple (MO) Basswood (LO) Hackberry (MR) Green Ash (MO) Sycamore (LO) Cottonwood (LO)	Southern Pin Oak (MP) Red Maple (MO) Green Ash (MO) Basswood (LO)	Paper Birch (MO) White Cedar (MC) White Spruce (MP) Mountain Ash (SO) Weeping Willow (MPe)	White Cedar (MC) Laurel Willow (MO) Lombardy Poplar (LC)
				For Partial Shade			
				Swamp White Oak (LR) Hackberry (MR) Red Maple (MO) Basswood (LO) Green Ash (MO)	Red Maple (MO) Basswood (LO) Green Ash (MO)	White Cedar (MC) White Spruce (MP) Mountain Ash (SO)	White Cedar (MC) Lombardy Poplar (LC)
				For Sunny Sites			
450	Houghton muck	10	Organic soils, peats, and mucks	Silver Maple (LO) Red Maple (MO)	Red Maple (MO) Laurel Willow (MO)	White Cedar (MC) White Spruce (MP) Weeping Willow (MPe)	White Cedar (MC) Laurel Willow (MO)
				For Partial Shade			
				Red Maple (MO)	None	White Cedar (MC) White Spruce (MP)	White Cedar (MC)

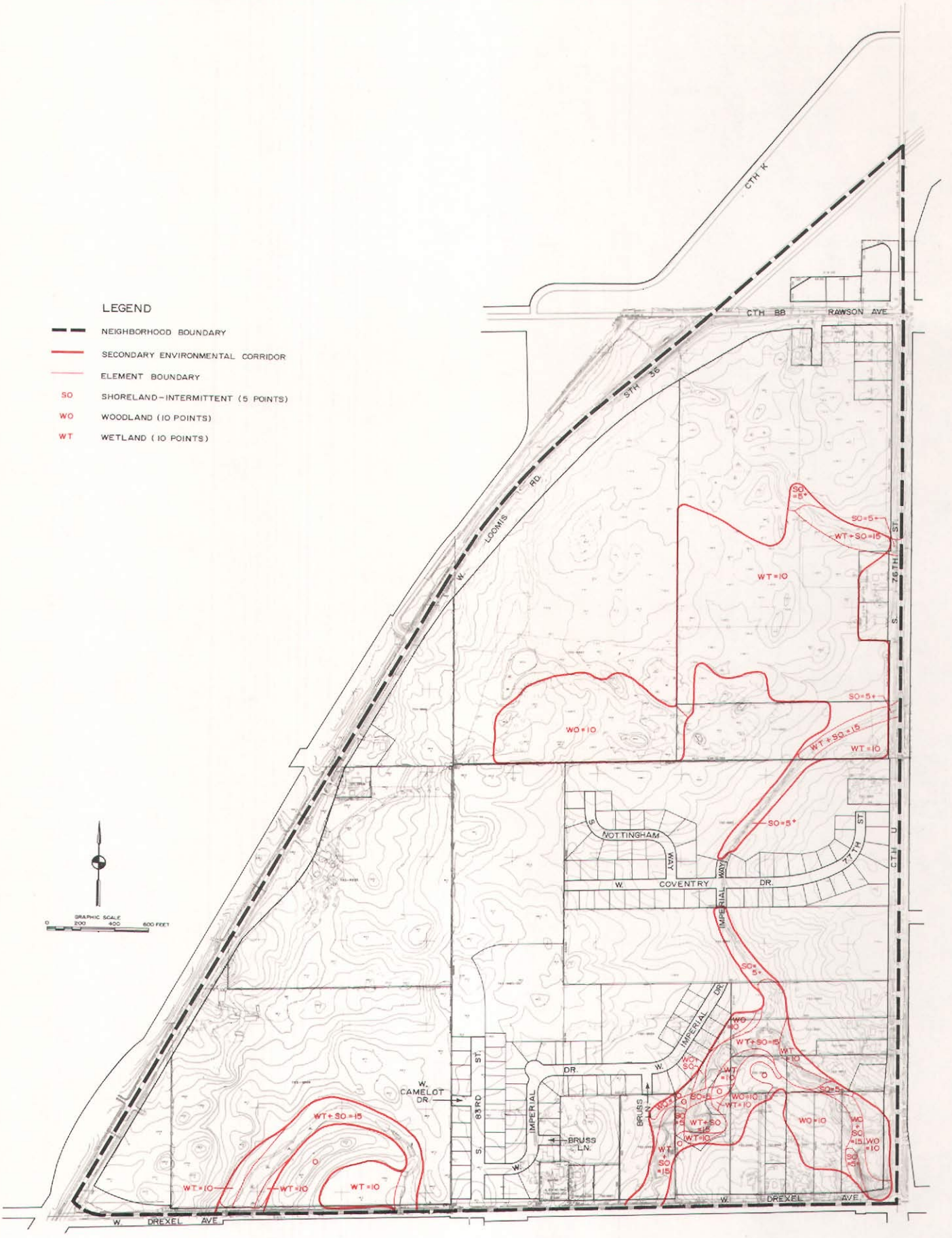
[a] Woodland suitability groupings have been numbered according to a statewide classification system. In this classification system, soils which respond similarly to use and management and are suitable for the same tree species have been grouped together.

[b] Following the common name of the suggested tree species, the first letter in parentheses indicates height at maturity: S = less than 30 feet; M = 30 feet to 60 feet; and L = more than 60 feet; and the second letter in parentheses indicates the general shape of the tree foliage at maturity: C = columnar form; O = oval form; P = pyramidal form; Pe = pendulus form; R = round form; and U = umbrella form.

Source: SEWRPC.

Appendix C

POINT VALUE DESIGNATIONS AND DELINEATION OF ELEMENTS OF ENVIRONMENTAL CORRIDOR IN THE WHITNALL NEIGHBORHOOD



Source: SEWRPC.

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Appendix D

CITY OF FRANKLIN PLAN COMMISSION RESOLUTION ADOPTING THE WHITNALL PRECISE NEIGHBORHOOD UNIT DEVELOPMENT PLAN

WHEREAS, the City of Franklin Plan Commission, pursuant to the provisions of Section 62.23 of the Wisconsin Statutes, has the function and duty of making and adopting a master plan for the physical development of the City; and

WHEREAS, the City of Franklin Plan Commission has:

1. Adopted the regional land use and transportation plans for southeastern Wisconsin as prepared by the Southeastern Wisconsin Regional Planning Commission.

2. Prepared and adopted a detailed master plan for land use in the City of Franklin.

3. Prepared and adopted a zoning district map for the City of Franklin.

4. Prepared and adopted an official map ordinance for the City of Franklin.

5. Adopted a plan for the delineation of 14 residential neighborhoods and two industrial park neighborhoods for the City of Franklin; and

WHEREAS, the City of Franklin Plan Commission, with the assistance of the staff of the Southeastern Wisconsin Regional Planning Commission, has proceeded to prepare precise plans to guide the future development of one of the 14 delineated neighborhoods within the City known as the Whitnall Neighborhood, a neighborhood generally bounded by Drexel Avenue on the south; 76th Street (County Trunk Highway U) on the east; and Loomis Road (State Trunk Highway 36) on the west; and

WHEREAS, the City of Franklin Plan Commission has held a public informational meeting to acquaint residents and owners within the Whitnall Neighborhood with the recommendations contained in the plan as described in SEWRPC Community Assistance Planning Report No. 59; and

WHEREAS, the City of Franklin Plan Commission has considered the plan, together with the statements and requests of individual landowners within the neighborhood, and has proceeded to incorporate, where deemed advisable, their requests into the plan.

NOW, THEREFORE, BE IT RESOLVED THAT:

Pursuant to Section 62.23 of the Wisconsin Statutes, the City Plan Commission on the _____ day of _____, 198_, hereby adopts the precise neighborhood unit development plan described in SEWRPC Community Assistance Planning Report No. 59 as a guide for future development of the Whitnall Neighborhood; this plan shall be further deemed to be a part of the master plan of the City of Franklin.

BE IT FURTHER RESOLVED THAT:

The Secretary of the Plan Commission transmit a certified copy of this Resolution to the Common Council of the City of Franklin and the Southeastern Wisconsin Regional Planning Commission.

_____

City of Franklin Plan Commission Chairman

ATTESTATION:

_____

Secretary, City of Franklin Plan Commission

Appendix E

A SUGGESTED COMMON COUNCIL RESOLUTION FOR ADOPTING THE WHITNALL NEIGHBORHOOD LAND USE PLAN

WHEREAS, the City of Franklin, pursuant to the provisions of Section 62.23(1) of the Wisconsin Statutes, has created a City Plan Commission; and

WHEREAS, the City Plan Commission has prepared, with the assistance of the Southeastern Wisconsin Regional Planning Commission, a plan for the physical development of the Whitnall Neighborhood, said plan embodied in SEWRPC Community Assistance Planning Report No. 59, A Land Use Plan for the Whitnall Neighborhood, City of Franklin, Milwaukee County, Wisconsin; and

WHEREAS, the City Plan Commission did on the __ of _____, 198_, adopt SEWRPC Community Assistance Planning Report No. 59 and has submitted a certified copy of that resolution to the Common Council of the City of Franklin; and

WHEREAS, the Common Council of the City of Franklin concurs with the City Plan Commission and the objectives and policies set forth in SEWRPC Community Assistance Planning Report No. 59.

NOW, THEREFORE, BE IT RESOLVED that the Common Council of the City of Franklin on the __ day of _____, 198_, hereby adopts SEWRPC Community Assistance Planning Report No. 59 as a guide for the future development of the Whitnall Neighborhood; and

BE IT FURTHER RESOLVED that the City Plan Commission shall annually review the Whitnall Neighborhood plan and shall recommend extensions, changes, or additions to the plan which the Commission considers necessary. Should the Plan Commission find that no changes are necessary, this finding shall be reported to the Common Council.

_____

Mayor
City of Franklin

ATTESTATION:

_____

Clerk
City of Franklin