IOWA'S ARCHITECTURE:

AN HISTORICAL OVERVIEW AND GUIDE TO CERTAIN CITIES

by

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INTRODUCTION

The purpose of this paper is to provide a guide to the significant architecture of ten cities in Iowa and an overview of the forces and influences which have shaped Iowa's architecture. The overview synthesizes architectual developments with social and technological progress in order to understand better the historical atmosphere which affected the evolutionary process. The guide is designed so that the reader may preview buildings which he may wish to visit. The commentary offers a brief background on each building so that he might understand why the building assumed its particular form. With the general background from the overview and the specific background from the commentary, the reader is provided an insight into the social, economic, and architectural environment from which the building was born. The significant architecture of Iowa is by no means limited to the selected ten cities, but time does not permit an examination of a larger number. Therefore the cities with the greatest architectural value for the purposes of this paper were selected. Appendix A lists examples from other areas of the state, many of which are equally as valuable as those included here. The reader is aided in locating buildings which he wishes to visit by a map of each city. The buildings are located by numbers keyed to the commentary.

Several points are worth remembering when using this guide.

The architecture of the past should be viewed in the context of its time. Many influences acted upon its final form. To understand the architecture, then, one must examine these forces and their interaction. For example, the pyramids of Egypt could be built using today's technology

with comparable ease, but, in their own time, they were truly amazing feats, one of the "Seven Wonders of the World".

Many of the inventions, discoveries, and events cited had widespread results affecting much more than architecture. The process of interaction often brought secondary results. It is rewarding to trace and perceive the complex course of progress. Recently Marshall McLuhan (47) and Edward Hall (27) have been exploring how thought patterns, behavior, cultural differences, and innumerably more have been changed by our technological advances. For a stimulating look at our intricate civilization, both of these authors are highly recommended.

The buildings referred to in the text which are not located in Iowa are often prototypes or "form-makers", influential in the historical development of architecture. These are generally discussed in more detail in many of the reference works cited in the bibliography.

It is important to remember that the inclusion of a building in this paper does not imply that it is open to visitors. The privacy of all owners, especially homeowners, should be respected. Tours of commercial and public buildings are often possible, but tours of residences are rarely offered. The architect should be contacted for tour arrangements. The author and Iowa State University assume no legal responsibility for appreciation or depreciation in the value of any of the premises listed herein by reason of such inclusion.

Finally, it is helpful to have some understanding of what architecture is all about. Architecture is not an easy subject to grasp. Authorities in the profession will often disagree on its characteristics. In order to establish a set of values for this paper, the author has compiled

a generally accepted, broad definition and group of elements.

Some experts feel that architecture is as old as the first man-made structures. Others would say that it began when man built with permanence and pleasure in mind. The word "architecture" came into use around 1560. Sir Henry Wotton in 1624 defined the qualities of architecture as "commodite, Firmness, and Delight" (9, p. 16)--commodity in the sense of convenience, utility, and efficiency; firmness in the sense of solidly built; and delight in the sense of giving pleasure to the eye. John Burchard and Albert Bush-Brown in 1961 defined it as requiring three things: the building must serve its social needs; the building must be structurally sound and durable; and the building must be art (10, p. 3). Thus the definition that has survived four centuries will be adopted here.

In their book, The Architecture of America: a Social and Cultural History, Burchard and Bush-Brown elaborate ingeniously upon the values of architecture, and it is highly recommended as a comprehensive introduction.

"Architect" as a term for the designer of a building was used in Greek and Roman times. It derived from the Greek "architektōn", meaning chief craftsman. In medieval times the term disappeared, and, in its place, master, maestro, maistre, and burmeister were used. The title was revived in the sixteenth and seventeenth centuries by John Shute (ca 1500-ca 1570) and Inigo Jones (1573-1652) of England (9, p. 16). Sometime in the early 1800's the architect in America changed from a gentleman's preoccupation to a professional's occupation. Peter Harrison (1716-1775) of Newport has been called the first American architect. His first important work, King's Chapel in Boston, was completed in 1754.

Elements of architectural criticism are of two types, the objective and the subjective. In the measuring of objective merit, the three points of the definition, commodity, firmness, and delight, are the basic elements. There are many facets of each element. Commodity can be described in terms of serviceability, ease of circulation, soundness of planning, economy, sociological values, history, and much more. Firmness is structure, materials, mechanical and electrical technology, construction technology, and much more. Delight involves artistic units of line, color, texture, form, and space, and their arrangement, or design, includes such compositional terms as emphasis, balance, rhythm, and unity. The subjective element is intangible and therefore immeasureable. It is the interpretation by the viewer of the objective elements, and influences include prejudice, mood, past experience, and emotion, among others.

The selected buildings in this paper are the result of the author's values. Using the above accepted facts of architecture, the author applied his interpretation to choose those buildings which reflect his values. The reader will invariably question the merit of one building or another. In architecture a critical attitude is considered healthy, a means of sharpening the senses, and the reader is encouraged to decide for himself the "goodness" of a particular building.

The author feels that style, long a standard categorical tool of architecture, has lost its value in the communication-technology laden society of today. The use of style as an identification in architecture has its most legitimate application in architecture of the historic past. The Egyptians had early evidence of style with their lotus flower inspired

column carving. The Greeks definitely had a style; they had a general related character permeating their architecture. They had the Orders, the column decoration known as Doric, Ionic, and Corinthian. They had a tradition of columnar buildings and gabled roofs with entablatures, and their white marble and stone created a unity of color and texture. The Romans developed their own style based on the Greeks. They discovered the arch and space and town planning. Early Christian architecture developed into the Romanesque style, a style that for the first time varied with national character across Europe. Then the famous Gothic style with its pointed arch and tracery became the "international style" with national variations. Vaulting, ribbing, buttressing and decoration unified Gothic but still allowed variation. Finally the Renaissance, immersed in the new humanism, became the last great style. It was hardly more than a major revival of Greek and Roman architecture, but there was the major use of the dome. The social conditions were still such that the style was legitimate--it was not a crutch blindly copied, nor was it subject to the level of communication technology that would shorten its life. There was only moveable type to supplement man's tongue and his drawings.

All of these styles shared longevity--they varied from 500 to 1000 years in length. When the style spread, it was carried in the memories of traveling craftsmen and in paintings and etchings. But by the time Iowa was being explored in the early 1800's, style as a meaningful term was losing its validity. The Industrial Revolution was beginning to gather momentum. The age of revivals and eclecticism was, too. Eclecticism, the borrowing of various elements from different historic styles, was

especially the prevalent direction of architecture in the nineteenth century. Architects could not or would not cope with the new technology and emerging industrialism, choosing instead to rely on the past. But the past was inadequate to support the architecture of this new society. As the proliferation of mixed styles became common, style degenerated in meaning. One could not intelligently apply a pedigree to a mongrel, even if it was a handsome mongrel. One may hear a great many styles applied to Iowa architecture--Classic Revival, Federal, Colonial, Georgian, Romanesque Revival, Gothic Revival, Steamboat Gothic, Carpenter Gothic, Modified Renaissance, Victorian, Queen Anne, and even Egyptian Revival. Few if any of these are representative of their namesakes. How could they be, in a new era of technology, government, and society? How could a contemporary church be truly Greek in spirit when the Greeks knew only temples to their mythical gods? It was nonsense to design a building in old forms and details when the methods and innovations were two to twenty centuries newer. A new architectural environment requires a new response from architecture, subtle though it may be. In a time of ever-faster communication--first books, then photographs, architectural journals, telephones, radio and television--style as a tradition established over several generations, if not several centuries, could not exist.

How, then, can the contemporary architectural directions be categorized? In an address in early 1967, Edmund F. Martin, the chairman of Bethlehem Steel Corporation, stated that it has been estimated that human knowledge doubled in the 1750 years from Christ's birth to the Industrial Revolution, doubled four times since then, and will soon

be doubling every six months (48).

In this multiplying complexity, how can the matter of architecture be understood? For future generations, new ways to think and perceive will help. For today, Robin Boyd, a critic in Australia, seems to have the answer. In his exceptionally fine book, The Puzzle of Architecture (8), he has suggested that what is called Modern architecture may be seen as occupying three distinct phases. These phases are more than a mere substitution for the word style. They do not have established form; rather, they are frameworks within which innumerable forms may grow. They are a response to the rapid and divergent change inherent in today's society. Using the tool of phases, one may trace the major trends in architectural thought in the last seventy years.

Phase I began in the late nineteenth century with the work of Louis Sullivan as a transition. Then Frank Lloyd Wright, and later Le Corbusier of France, Mies van der Rohe and Walter Gropius of Germany, and a few others developed it. Its characteristics were emphasis of functional requirements and spatial relationships. The American Wright promoted natural materials, organic siting and form, and intricate ornamentation. The Europeans rejected ornamentation, emphasized structural honesty, worked in smooth plaster and box-like forms, and raised their buildings above the sites as symbol of man's triumph. The phase is still very much alive in the glass cubes and towers of today, such as the Seagram Building in New York and the Home Federal Building in Des Moines. Its leaders include Mies, Gropius, Philip Johnson, and Skidmore, Owings, and Merrill.

Phase II began in the early 1950's with the single dominant form into which all functions were injected. This often resulted in forced spaces for the less important functions, the form being derived from the major function. Eero Saarinen's TWA terminal at John F. Kennedy Airport in New York is a good example. It is characteristic of this type of building that it is difficult to add to it unless a similar form (Boyd calls them grapes) of proportional dimensions is connected to it. This phase, too, is still alive and is indeed a legitimate form in cases where there is a single dominant function, such as a church or auditorium.

Phase III started around 1960. Most experts would place the transition buildings as the Richards Medical Laboratories at the University of Pennsylvania, designed by Louis Kahn, and the Kurashiki City Hall in Japan, designed by Kenzo Tange. Both were designed in 1958, and both were completed in 1960. Chandigahr, the new capital city in India, and La Tourette, a monastery in France, were also important turning points in the establishment of the new phase. Both were designed by Le Corbusier, who was the only leader of the first phase to also lead the third phase. The first phase was a separate thing lacking unity. The second overcorrected the first--a whole at the expense of too few or left over parts. Phase III is an attempt to combine the best qualities of the first two. It has become a living architecture, expanding where its muscles bulge and its lungs inhale, breathing through its nose, eyes in search of light. It responds to its functions like the living body. It is usually strongly geometric. It often makes use of circulation, mechanical and human, in its expression. Its leaders today include Kahn, Tange, the late Le Corbusier, Paul Rudolph, and Jose Luis Sert, among many others of

lesser fame.

The recent past is difficult to assess and synthesize with historic trends. Judgement is prejudiced by the nearness of the recent. Boyd has accomplished the task exceptionally well, and much of this paper's discussion of architecture in the twentieth century is indebted to his perception.

This, then, is architecture. Its nature is only lightly touched on here. The close observer can spend a lifetime marveling at its intricacies and its achievements and lamenting its shortcomings.

AN HISTORICAL OVERVIEW

The United States of America was fifty-seven years old when President James K. Polk signed the bill admitting Iowa as the twenty-ninth state in the Union on December 28, 1846. This act climaxed a brief period of exploration and settlement by the white man and a long period of habitation by the red man.

Man is known to have lived within the present boundaries of Iowa at least 8500 years ago, as evidenced by the archaeological site known as Simonsen at Quimby, Iowa. Skeletal material of man and extinct bison found here have been dated by the carbon-14 process at 6470 B.C. In the Iowa region archaeological data suggests that man first arrived around 10,000 B.C., having come from Asia through Alaska and southward as much as twenty thousand years ago.

As man invented tools and food production methods, such as projectile points (arrow and spear heads), axes, clubs, gathering of berries, shells, and wild grains, and especially incipient agriculture, he was able to sustain larger population of his tribal group. Eventually, after invention of the semipermanent shelter by those involved in agriculture, these sedentary people formed villages of several houses. The hunters were of necessity migrants following the animal movements, and thus their housing was temporary and moveable. An example is the skin-covered tepee.

The most distinctive and permanent of the shelters in the Iowa area was that type used by the Indians of the Glenwood culture. The archaeological site excavated in Mills County uncovered twelve earth lodges dating from around 1500 A.D. There was no systematic village plan. The

shelter was built by stripping the sod from an area varying from fifteen to forty feet, more or less square in shape. Next the area was excavated to a depth of from two to four feet. Often a low bench of higher earth was left around the perimeter. Then a framework based on the independent invention (in the Americas) of post and beam was erected. Four large posts were set in the center in a square, and beams were lashed to these. In a perimeter trench, saplings were set and bent over, tied to the central structure. Finally, small branches were interwoven, mud was plastered over this crude lath, and the original sod was placed over the mounded house. The sod gave a good weathering surface and excellent insulation. A long narrow entrance extended in a southerly direction and sloped to the surface. This was four feet wide and from fifteen to thirty feet long, of similar structure and materials. A hole was left in the center of the main roof to allow smoke to escape and light to enter. A hearth, a shallow basin, was located in the center of the room. Storage and waste problems were both solved by pits in the floor, covered with large stones (46, p. 171-173).

Of the three major agricultural groups in Iowa, the Glenwood is the one of which we know most about housing. The Mill Creek shelter we know only as a similarly built, but surface, house arranged in groups of compact, defensible organization. The Oneota built impermanent bark-pole shelters.

In the historic period, which began with the exploration of Iowa territory in 1673 by Pere Marquette and Louis Joliet, another type of structure is mentioned. In the year 1817 a large Sauk village was noted near the present city of Davenport (46, p. 209). The village contained

more than one hundred lodges, each large enough for several families. They were forty to sixty feet long and twenty feet wide, constructed of post and beam framework covered with white elm bark.

The first white men to settle in the area were Julien Dubuque, 1788, near the present Dubuque, Louis Honore Tesson, 1799, in present Lee County, and Basil Giard, 1800, in present Clayton County. These and other early settlers were lead miners and fur traders and trappers, harvesting the rich resources of the Iowa country. Many of their camps and trading posts grew into towns later. Examples are Dubuque, Council Bluffs, Muscatine, Sioux City, Keokuk, and Davenport.

Another source of towns was the fort locations. The first fort in Iowa was Ft. Madison, built in 1808 where the present town of the same name is located. Due to poor siting and Indian pressure, the fort was abandoned and burned in 1813. Other forts which later became towns include Fort Croghan, 1842, (Council Bluffs), Fort Sanford, 1842, (Ottumwa), Fort Des Moines, 1843, (Des Moines), and Fort Clarke-Fort Dodge, 1850, (Fort Dodge). Most of the forts were in the frontier vernacular of log cabin construction and stockade enclosure.

Around 1820 white settlers began to move into the southeast corner of the Iowa country, known as the Half-Breed Tract because of their intermarriage with Indian women. At that time United States Army expeditions explored the Iowa area, looking for supply routes and fort locations.

Politically, the area, after being claimed by the French in 1673, was ceded to Spain in 1762 to avoid possible loss to the British. In 1764 St. Louis was founded by a fur-trading Frenchman.

In 1765 James Watt invented the first practical steam engine, and the Industrial Revolution was born. In 1783 man flew for the first time as the hot air balloon was invented. In 1785 the power loom was invented and in 1793 the cotton gin. Lithography and vaccination were discovered in 1796.

In 1801 Spain receded the area, now called Louisiana, to France, and in 1803 the United States, under the shrewd hand of Thomas Jefferson, purchased Louisiana for $15 million dollars. In 1804 Lewis and Meriwether began their historic exploration of the new acquisition, and traveled up the Missouri River, camping several nights in Iowa and Nebraska territory. In 1805 the creation of the Territory of Louisiana brought U.S. government to the area for the first time.

In 1803 John Dalton discovered the atomic theory. One year before Ft. Madison was established, Robert Fulton completed the first commercially successful steamboat, in 1807.

In 1812 Iowa government was shifted to the jurisdiction of the Territory of Missouri as Louisiana became a state. In 1821 Missouri became a state, and Iowa was left without an official government.

In 1830 the first school in the Iowa country was established in the Half-Breed Tract. Thirty thousand miles of railroad track existed in the United States. 1832 brought an end to the Black Hawk War. There was a white population in the Iowa country of fifty. Upon signing of the treaty known as the Black Hawk Purchase, the Indians ceded a fifty mile wide strip of land west of the Mississippi River to the United States (see Figure 1). Federal laws prohibited settlement in such an area, but lax enforcement soon resulted in settlers swarming into the area,

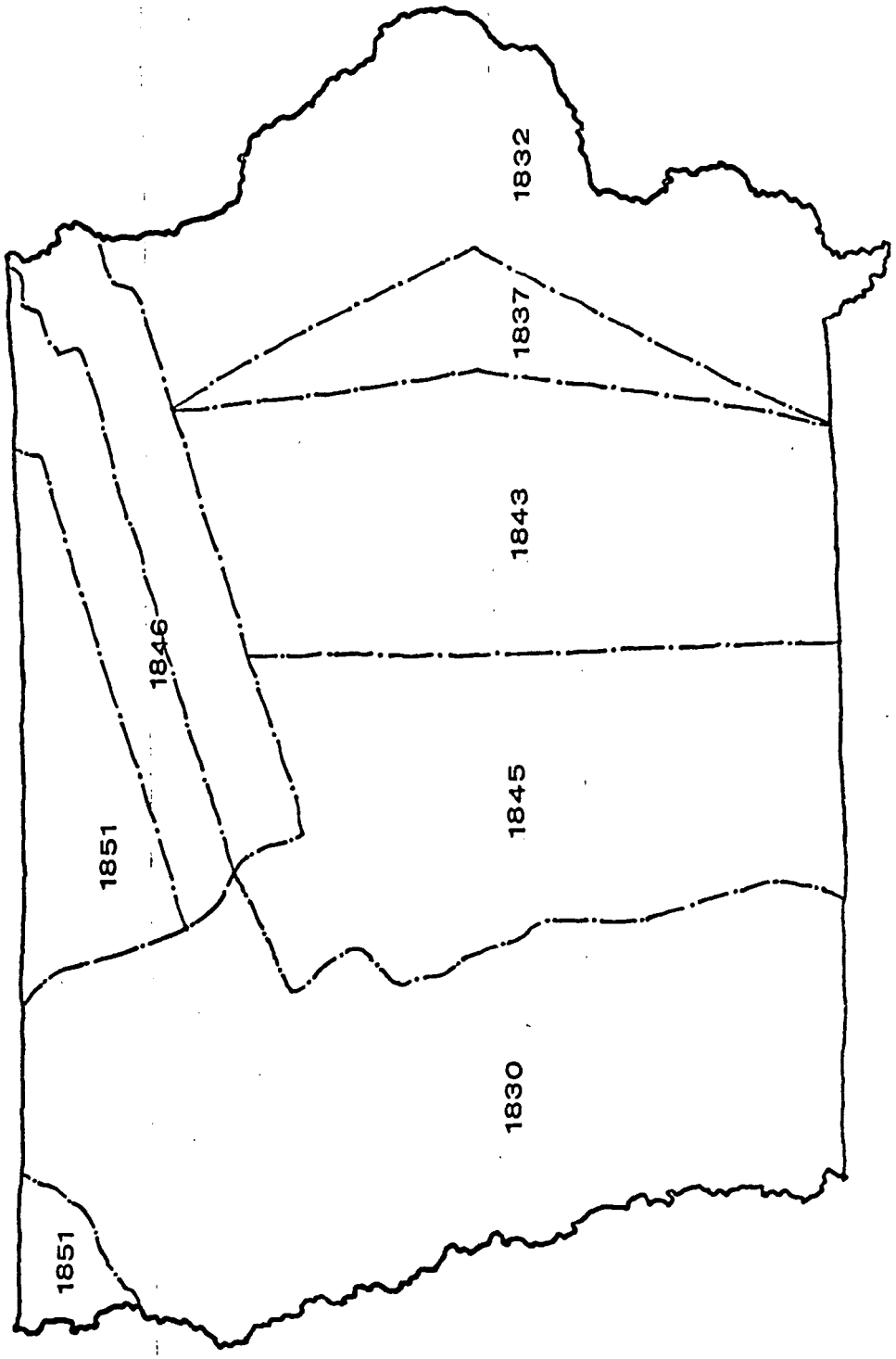

Figure 1. Map showing data of acquisition of land from Indians by treaty (46, p. 198)

establishing claims and building houses. They were attracted by furs, precious metals, farmsteads, speculative land profits and the pioneering spirit.

The structures that they built were in the traditional American frontier settlement form, the log cabin. The form had originated in the Northern European countries in medieval times. In the timber-rich areas of the new country it was natural for settlers from those countries to build in the manner that they knew. The Saxon cruck house was an early model, too, especially for the settlers of New England. But the log cabin was easy to build, relatively comfortable, and inexpensive. It became the symbol of the frontier. The French brought a vertical version of the log cabin up the Mississippi, but they were not interested in permanent settlements. The Spanish came for gold and converts, but they didn't venture out of the warm southern and southwestern climate. So it is the European settlers, with their four-square tradition, to whom we owe our heritage. The American way became an assimilation of European influences combined with new ideas. Between 1607 and the early 1800's, dormers appeared, the second story overhand disappeared, thatched roofs were lost, and clapboard siding became the American tradition.

The log cabin was often one story with a loft in the gable roof. The walls were of timber trimmed to logs, mortised and tenoned at their corners. The cracks between the logs were stuffed with mud and straw to keep out wind and moisture. The roof was of clapboarding or wood shingles or bark. The floor was of packed earth or puncheons (slabs of hardwood three to four inches thick pegged to stringers laid on foundation logs). Iron stoves usually heated and cooked for European settlers; "Yankee"

settlers preferred the stone fireplace. Many towns maintain a log cabin in their park, the most noteworthy being the group on the campus of Luther College at Decorah.

In 1833 Dubuque was founded. By 1834 the need for government was becoming apparent. A murder and subsequent hanging of the accused brought prompt action by Congress, and Iowa was attached to the Territory of Michigan. Two counties were formed--De Moine and Du Buque. In the same year the first church in Iowa was founded at Du Buque by the Methodists, and the first Fort Des Moines was established at the present town of Montrose on the Mississippi River. Other important events of that year include the invention of the reaper by Cyrus McCormick and the founding of the Royal Institute of British Architects. Architects in more developed areas were participating in a deadly struggle between Eclecticism and the emerging industrial society. It was recognized, at least by some, that classic and medieval styles of architecture were not appropriate for industry and its attendant new building types. Horatio Greenough, a sculptor and architectural critic, perceived the answer earlier than most. He recognized the need for function to determine the form of the building. He felt that the architects should study the past for its principles, like men, and not copy its forms like monkeys (25).

In 1835 United States Dragoons explored central Iowa. Resulting from this trip was a book by Albert M. Lea in which he christened the area with the name, the Iowa District. After this the name of Iowa became permanently associated with the area (19). At the same time Samuel Colt invented his famous revolver, the first successful repeating pistol and the symbol of the western frontier.

In 1836 the Iowa country was included in the new Territory of Wisconsin, and the Iowans engaged in a friendly battle for the capital location. Madison, in Wisconsin was awarded the permanent location, but Burlington, just four years old, was the site of the second legislative session in 1837. Also in 1836, the first newspaper, the Du Buque Visitor, was founded; Congress authorized the platting of Fort Madison, Burlington, Bellvue, and Du Buque; and the population of the district was 10,564.

In 1837 the Second Black Hawk Purchase added 1,250,000 acres to the territory. In 1838 Burlington and Ft. Madison became the first incorporated towns, and then on July 4, the Territory of Iowa was established by Congress. The area included all lands north of the state of Missouri lying between the Mississippi and Missouri Rivers. The population had more than doubled in the last two years, now 22,859. After considerable debate, a new town to be called Iowa City and located in Johnson County was selected as the capital of the territory in 1839. The cornerstone of the new capitol building was laid the next year. John Francis Rague designed the capitol building. He and Father Samuel Mazzuchelli were the first two skilled designers in the Iowa country, designing most of the important public buildings and churches. Both worked primarily in the recently fashionable Greek Revival style. This new style succeeded Georgian and Federal as the national favorite.

At about the same time the camera was made practical, and the beginning of a visual revolution was at hand. It had definite promise of influencing architecture in the future.

1840 saw the founding of Fort Atkinson, the doubling of the population again to 43,112, and the defeat of a proposal for statehood.

In 1841 John Chambers was appointed governor succeeding Robert Lucas, who in 1844 built Plum Grove in Iowa City (see Iowa City in the guide section). 1842 saw statehood defeated again, the Capitol Building opened, and the Sauk and Fox ceding all of their remaining Iowa lands.

The second Fort Des Moines was established at the mouth of the Raccoon River in 1843, later to become the city of Des Moines. Part of the Sauk-Fox lands were opened to settlement in this year, and the rest two years later. Settlers moving across the state found a different character in the western lands. Iowa is split geographically by drainage areas into two parts, plains and prairie. On a generally north-south line, the western one-third of the state drains to the Missouri River, and the eastern two-thirds drains to the Mississippi River. This same distinction exhibits treeless prairie in the western part and rolling plains with areas of timber in the eastern part. Originally there were five million acres of woodland, about one-seventh of the area of the state. Most of this was in the eastern part of the state.

In the west, prairie grass as high as the wheels of the prairie schooners, up to six feet high, greeted the settlers. Hundreds of wild flower varieties blossomed in the thick grass. The sod was thick and tough. There was no timber to build houses, so the Indian house was adapted to the white man's ways. It was often semi-subterranean with walls of stacked thick prairie sod. The roof was also sod, supported by whatever scarce timber might be found. These houses were smaller than the log cabins, and, after communications with the more developed areas improved, they disappeared as a building type. Freight wagons could travel on roads, and later the railroad, too, could bring building

materials from the east.

John Burchard and Albert Bush-Brown say that every town once on the frontier is an architectural mess, "from Keokuk, Iowa, to Placerville, California.

> The development of a university in a town as at Iowa City can work minor ameliorations; an unusual number of trees and minor buildings by Louis Sullivan and Walter Burley Griffin may add a little interest to Grinnell; Frank Lloyd Wright sometimes made small islands like the one he created in a miniature gorge at Mason City..." (10, p. 163)

In 1844 the population had increased to 75,152, and the majority of them defeated twice the statehood that Congress had by now approved. Finally in 1846, the Iowans' ideas on boundaries persisted, and both the voters and Congress approved Iowa's acceptance into the Union.

In 1846 and until 1848 the Mexican War was fought. It served to intensify national interest and to raise the economy from the doldrums of the Panic of 1837 and a seven year recession to war prosperity. Meanwhile the population reached 116,454, the State University of Iowa was established (it would not open its doors until 1855), and the importance of architecture was recognized by the founding in London of the Architectural Association, a school and society.

The direction of settlement in Iowa was naturally east to west. This, plus westward moving technology like the railroad, resulted in a chronological lag in Iowa. The eastern area was always more developed than western Iowa, and this remains true today.

Beginning in 1830 and reaching prominence now was the riverboat traffic. It was bringing settlers quickly to Iowa. The trip down the Ohio River and up the Mississippi took only eleven days from Philadelphia

to Dubuque. The first practical steamboat had been built by Robert Fulton in 1807, and in forty years it had become dominant in interior United States transportation. It brought people, goods, and ideas to Iowa. It brought cast iron fancywork up the Mississippi from New Orleans, where it had been delivered by the Spanish. The Spanish used cast iron for fences and gates; the French loved balconies. The two merged and became popular in many of the river towns of Iowa. It moved taste (most of it not the best) to the river towns and inspired more substantial and delightful buildings than the log cabins. The age of the frontier was passing from the river towns.

Another form of communication reached Iowa in 1848. The first telegraph line was laid between Bloomington, now Muscatine, and Burlington. It may have carried the news that, in New York, James Bogardus had built his Harper Building of cast iron columns and wrought beams, the ancestor of steel skeleton frame construction.

By 1849, with the aid of the Gold Rush to California, one-tenth of the national population lived west of the Mississippi. The 1850 population of Iowa reached 192,214.

In 1851 the possibilities of the new technology were displayed in the Crystal Palace in London, designed by Joseph Paxton. A huge structure of iron and glass, it opened many eyes around the world with its daring. In Iowa the Sioux were ceding their remaining lands in northern Iowa. Fort Des Moines was incorporated as a town in 1851.

In 1853 Elisha Otis invented the elevator, soon to help make possible another revolution in architecture, the high-rise building. Beginning in that same year and until 1856, the first bridge to cross the

Mississippi was built from Rock Island, Illinois to Davenport, Iowa. It was the beginning of the end for the ferry boats.

The Amana Society moved to Iowa, purchasing the town of Homestead and surrounding area in 1855. In the same year Gervase Wheeler's book, Homes for the People, described balloon construction. It had been invented by Augustine Taylor in Chicago in 1833. It was the use of lightweight studs with exterior siding and interior finish applied, not far different from the common construction of today. It was to completely revolutionize building, replacing heavy timber framing. It ended any chance of a regional development of architecture; it reinforced a national pattern of life in its speed of construction, ease of material transportation, and adaptibility to revival styles. The popularization of books on design and building had administered a mighty blow to regionalism; the new construction finished the task. It permitted overnight building of towns, all looking the same. It in turn was permitted only because of the invention of inexpensive machine-made nails in place of the hand-forged ones. The new construction made no demands of its own on building form; unfortunately it was adaptible to almost any style. With its introduction, Greek and Gothic Revival spread rapidly, often becoming Carpenter Gothic and wooden Greek in the process.

Another material began to be popular as it became economical to make and transport brick. Eventually the brick would come from Ohio and Illinois on the railroad, but for now it was locally made. The popular brick styles up to the Civil War were Federal and modified Greek Revival, but often the results were styleless and better for it.

The Industrial Revolution's effect on the national economy was now becoming apparent. People who once practiced self-production and self-sufficiency were now becoming specialists, dependent on others for production of food and goods, and buying with earned wages. It was to change society forever.

There was yet another event in the Iowa of 1855. The railroad, working its way west, entered Iowa with a line from Davenport to Muscatine. A year later it was able to cross the Mississippi on Davenport's new bridge. The railroad was bringing far-reaching effects in all areas of life. It banished the riverboat with but a brief skirmish. It could carry goods and people almost anywhere in the nation in a matter of days instead of months. But the time when the Guide to the Hawkeye State (19) could boast that no place in Iowa was more than twelve miles from a railroad was eighty years away yet.

For now, in 1857, there was the Third Constitutional Convention, the moving of the capitol of the state to Des Moines, and the Spirit Lake Massacre, the killing of thirty settlers in northern Iowa by the Sioux. It was the same year that the American Institute of Architects was founded, climaxing thirty years of efforts at being recognized as a profession.

The moving of the capitol to Des Moines primed that city for the growth that made it the major city that it is today. The building of hotels and major business buildings upon news of the capitol location sparked the economy and attracted new population.

The next revolution came in biology and man's thoughts of his beginnings: Charles Darwin published his Theory of Evolution in 1859.

The 1860 census showed that one-fifth of the population lived in cities of 5000 or more, that New York was a city of one million, and that there were ten other cities over 100,000. America had come a long way in the seventy-three years since its founding. Iowa's population was 674,913.

The economy of the country had been doing well with the exception of the Panic of 1857. Now came the secession recession followed by the tragic Civil War. The economy revived during the four year war, but the national spirit was shattered. There was not much architecture practiced during the war years; the energy went into the war and its consumption of supplies. On April 9, 1865 the war was over. The nation was shocked at the assassination of President Lincoln six days later.

A short post war depression soon changed to growing prosperity. The railroad, delayed in its westward movement by the war, reached Des Moines in 1866, and stretched across the state a year later. In two short years, it would stretch across the nation, transcontinental.

Around the Civil War, cast-iron foundaries began to transport their goods long distances, and a trend to national standardization was begun. This invoked a mechanical repetition which has become a parameter of today's architecture. Midwestern cities found inspiration in the cast-iron buildings of St. Louis and Minneapolis and Chicago, the start of a realistic design expression of industrial-age architecture (10).

Architecture became recognized by the universities as MIT became the first to include it in its curriculum in 1866, then the University of Illinois in 1868 and Cornell in 1871. By 1870 the architect was blossoming as a recognized and respected professional. William Foster arrived in Des Moines in 1867, to become one of its most talented early

architects. The population of Des Moines was 10,500, a small share of the state's 900,000. In 1871 the cornerstone was laid for the Capitol Building at Des Moines, designed by John Cochrane and A. Piquenard. The population of Iowa was 1,194,020.

By 1870 Gothic was becoming tiresome, at least for residences. In its place the "Queene Anne" was adopted. It was an eclecticism of Romanesque and Gothic: sharply pitched roofs, balconies, stained glass, and corner towers. It was easy to build in the balloon construction method, and it was easily adaptible to a wide range of economic sizes.

Most architects felt no need to question the continuance of the revivals; they applied themselves solely to the correctness of the copying. They ignored the industrial buildings and their concurrent housing problems, and the neglect was mutual.

Important to the heritage of the Midwest was the Great Chicago Fire of 1871. 17,450 buildings were destroyed, and 250 people died. The rebuilding in the next several years was to establish the roots of a new architecture, and the emergence of several talented architects.

In 1875 the first silo in the U.S. was built in Michigan, following the French concept of vertical green fodder storage.

A powerful national influence, and a detrimental one, was the Centennial Exposition at Philadelphia in 1876. Technological advances abounded at the exposition (steam-generated electricity, the infant telephone), but the architecture that housed them was historic. News reached America of the calamity in Calcutta, India; 215,000 people died in a cyclone and tidal wave. Six years later another 100,000 would die in Bombay under similar conditions.

In 1879 yet another invention, the electric light, promised future ramifications.

Now the urban scene was beginning to change. High-rise buildings were becoming possible due to the elevator and electricity and maturing transportation allowing more density. The form of the city itself changed as it stretched in linear or star shape, following the main transportation lines with housing and commercial trade to serve its occupants.

The peak of the Wild West was approaching by 1883, when the railroads requested and got a standardization of four time zones across the continent. The co-ordination of time was becoming important with three transcontinental railroads, a sign that hours rather then days were becoming the measure of communication. This was the year that William LeBaron Jenny built the Home Insurance Building in Chicago, the first multi-story steel-framed skeleton clad in non-bearing panels. This was the father of the modern skyscraper.

A secondary post war recession from 1873 to 1880 slackened building somewhat, and again in 1884 and 1885 a recession slowed the economy. Several years of prosperity were coming, to last until the Panic of 1893.

In 1887 Daimler is credited with inventing the automobile, a force that would reshape the city and the lifeway in two generations. Frank Lloyd Wright designed his first building that year, a Unitarian Chapel for Sioux City which was never built. It was Queen Anne in spirit, but its form hinted at the future.

By 1890 Iowa's population reached 1,912,297. A baseball world series was held at Sioux City in 1891, an assurance that the frontier

was gone, new maturity in its place. It was the same year that Louis Sullivan designed the Wainwright Building for St. Louis, a forward step in the derivation of a suitable architecture for the high-rise building.

The Columbian Exposition of 1893 was more disastrous to architecture than the Philadelphia show had been. It was a classic revival solution, and the people loved it. Only Louis Sullivan's Transportation Building escaped the white falsework. The Exposition set architectural progress back several years. Thomas Edison perfected the motion picture. Art Nouveau was on its way to sweeping Europe off its feet, but it was not to be so important here. There was a panic in 1893 and a severe drought in 1894; a severe depression was the result. True prosperity was not to reappear until 1905. Guglielmo Marconi gave birth to yet another future revolution with his invention of the radio in 1895.

The Spanish-American War of 1898 brought a short-lived and shallow prosperity. It was in 1899 that Louis Sullivan took another step toward a new architecture with his design of the Schlesinger and Meyer Building in Chicago (now the Carson Pirie Scott department store). The skeletal expression and the infill of glass were prophecy of things to come. That same year automobiles came to Iowa, displayed at the Linn County Fair.

At the turn of the century, Iowa's population numbered 2,231,853. The nation's cars numbered 8000. In 1903 there was one airplane, that of the Wright Brothers. In the next sixty years aircraft industry would have an unbelieveable growth, and far-reaching influence on the life-style. The nation was undergoing rapid growth through immigration. More than fifteen million would enter the country between 1890 and 1915. Theodore

Roosevelt was the new president in 1904, and America was immersed in an isolationist policy and trying to keep Big Business fair. There was a clamor for a national style in architecture, as well as a national art. Others longed for regionalism, the reflection of environment in architecture.

In 1908 Henry Ford built the first Model T, and, in Europe, Adolph Loos wrote Crime and Ornament. The latter insisted that ornamentation was immoral, a reaction to the recent Art Nouveau period. It was in that year that Louis Sullivan, unhappy in Chicago, was attracted west. He designed the National Farmer's Bank at Owatonna, Minnesota, a building that influenced many people, both architects and the public, in the Midwest. Frank Lloyd Wright designed another Iowa building after twenty-three years, and this time it was built. This was the "prairie-style" Stockham house in Mason City. It, together with his work in other states, had considerable influence on Iowa's architecture, as it did the nation's. The public was interested, and so were the architects. In the next year, 1909, Mason City received another Wright building, the City National Bank and Hotel. It was around this same time that Stickley's bungalows became popular in California. This was the forerunner of today's ranch house, as his Mission furniture was of today's four-square furniture.

In 1910 Sullivan designed the People's Savings Bank in Cedar Rapids. It was not as influential as the Owatonna bank but it served to introduce Iowa to Louis Sullivan, a friendship that was to produce four more buildings in the next four years. In 1911, completed in 1913, Sullivan designed the St. Paul's Methodist Church in Cedar Rapids. It was a complete change in form from previous Protestant churches; it combined a circular meeting

room with a religious function.

It was in 1912 that the Titanic sank in the Atlantic Ocean, killing 1513. Walter Burley Griffin, from Wright's office and very much a student of his, designed the J. G. Melson residence in Mason City. It was near Wright's Stockham house, and in the next year, he designed several more houses in the same area. All were grouped around an enchanting stream dammed to create a waterfall and lagoon and called Rock Glenn. It showed the potential of well-designed housing, but unfortunately the example made little impression on the speculative builders. 1913 brought the Druggists Mutual Building in Algona and the Van Allen Department Store in Clinton, both by Sullivan. It also brought the Armory Show in New York, an art exhibit that was to establish the acceptance of modern art in America.

In 1914 Sullivan completed his last Iowa building, the Merchant's National Bank in Grinnell. Wright had left for Japan in self-exile, and Griffin went to Australia to build his competition-winning plan for the new town of Canberra. This flourish of the new architecture over, Iowa and the nation were left to the Eclecticists. The nation was to be revived before World War II by Wright's Falling Water (1937) house in Pennsylvania and Johnson's Wax Company (1939) at Racine, Wisconsin, and by others such as George Fred and William Keck's University Building in Chicago (1937). But Iowa was to flounder until the post war renaissance.

The magazine Architectural Forum in 1914 recognized the railroad station as the second most important type of building after the skyscraper. The railroad had great influence on the public taste because of its station in every town and because of the design of its railroad cars. In

the same year in Peter Behren's office in Berlin, Mies van der Rohe, Walter Gropius, and Le Corbusier were apprenticing together, three of the future four great leaders of the new architecture.

In 1914 World War I shattered Europe. By 1917 the United States was forced into it and out of their isolationist policy. It was over by 1918, but America was changed for good. She was to become a world power. War prosperity ended in a deep post war depression reaching its peak in 1921.

Meanwhile technology was changing the way of American life faster than anyone realized. From 8000 automobiles fifteen years earlier, the transportation explosion had grown to two and one-half million automobiles. In 1911 the first transcontinental airplane trip was made from New York City to Pasadena, California. It took seven weeks to accomplish, although only 82 hours were spent in actual flying time. The remainder was devoted to repairs and inclement weather. Chicago, Boston, New York, and London now had booming urban transportation systems. Chicago made the poor choice of an elevated railroad contributing to visual blight and bothersome noise; the others wisely chose the subway.

In Sioux City the Woodbury County Courthouse was built during the heat of the war, and both were finished in 1918. The architect was William Steele, a former employee of Louis Sullivan, who joined with Purcell and Elmsley, also students of Sullivan.

In 1919 one of the first educational radio stations in the country began broadcasting. It was WSUI at the State University of Iowa. Two years later the second commercial broadcasting station and the first west of the Mississippi River, WOC in Davenport, went on the air. By 1922 there were 564 stations. In the early 1920's the first successful

demonstration of television was made. The new mass media carried the news to the people faster than ever before, that on September 1 of 1923, an earthquake struck Japan, killing 90,000 people.

The depression set in in 1921, and farm prosperity declined with the rest. Prosperity resumed in 1923, to boom until the disastrous fall of 1929. It was the Roaring 20's, prohibition, gangsters and all. In 1922 the transcontinental flight time was cut to twenty-two hours, and regular airmail flights across the continent were established by 1924. Trans-atlantic telephone service between New York and London was available after 1923. In 1924 the tallest building in the state was built in Des Moines. The Equitable Building, 318 feet of Gothic Revival, was very much in the mainstream of the day. Following the example of New York's 792 feet high Woolworth Building of 1913, the Revivalists once again dominated the architectural horizon.

In 1927 Henry Ford introduced the Model A, replacing the Model T. This innocent act was to grow to the shallow, planned obsolescence, the throw-away economy, of today. It would have come anyway--it is a natural derivation of the capitalist's machine age, requiring a continuous market to consume the vast production. Architecturally New York was setting the trends. Its new zoning law, requiring a series of setbacks as a building rose, was creating a new form in high-rise buildings. Raymond Hood did as good a job as anyone, and his McGraw-Hill Building was influential.

The next year Iowa shined in the reflected glory of its first President of the United States, Herbert Hoover from West Branch.

1929 is an infamous year in America's history. It was the year of the Great Crash of the stock market and the beginning of the severe

secondary post war depression. Understandably, architecture was at a low ebb in America. Europe, affected but not severely, was a brighter light. In fact, two of the most significant buildings in the course of development of our contemporary architecture were built that year. Mies van der Rohe built his German Pavillion at the Barcelona International Exposition and Le Corbusier built his Villa Savoye outside of Paris. The next year the Tugendhat House at Brno, Czechoslovakia continued the brillance of Mies.

The population of 1930 numbered 2,470,939 Iowans. Some of them might have attended the 1929 or 1932 exhibitions on the International Style by the Museum of Modern Art in New York. The work of Mies van der Rohe, Walter Gropius, Le Corbusier, and J. J. P. Oud was presented to the American public. It had fair acceptance mixed with much ridicule, but some believed in it enough to build. Even in Iowa, usually a victim of cultural lag, James Schramm in 1931 commissioned Holabird and Root of Chicago, nationally prominent architects, to design his house in that style at Burlington. And in Des Moines, the E. E. Butler house of 1936 introduced the International Style to central Iowa.

One of the finest buildings in Iowa was the First Church of Christ, Scientist in Des Moines by Brooks-Borg, in 1931. Somewhat romantic in character, it remains timelessly excellent today.

By 1930 Frank Lloyd Wright was considered as out-living his influence, and his work in the early century was looked at as a curious abberation. But he was by no means finished. He designed the unbuilt St. Marks Tower Project in 1929, later to become the Price Tower at Bartlesville, Oklahoma, and he built his own home, Talesin, in Wisconsin. Students flocked to his

home studio from abroad, where his reputation never wavered.

Elsewhere in the country, the Empire State Building would be completed in 1931, just eighteen months from drawing board to 1250 feet in the air, the tallest building in the world. Le Corbusier was completing his prophetic Swiss Pavillion in Paris. Sir Frank Whittle built the first jet-propelled aircraft.

Franklin Roosevelt defeated Hoover in 1932, and his New Deal tried to lead the way to recovery from the Great Depression. He would be President until his death in 1945, serving the longest and the hardest term of any American president.

1934 was a drought year. The western United States became the Dust Bowl. And the depression continued after a brief recovery.

Architecture was depressed just as much as the rest of the economy. Most of the construction that was carried on was government-sponsored, as was much else across the nation. The photographers, the film directors, and the musicians did well; they created some great work. The architects were less successful. The engineers created the magnificent Hoover Dam and the TVA projects. The architects were mired somewhere between Eclecticism and brighter works patterned after such buildings as Bertram Goodhue's Nebraska State Capitol of 1922.

While FDR was trying to pull the nation out of the depression, he was keeping a fearful eye on events in Europe. Adolf Hitler began in 1934 to rebuild Germany's power. Japan had begun in 1931 to invade its neighbors. In 1936 both of these countries signed a pact, and Italy joined the Axis powers. Japan invaded China in 1937; Germany invaded Poland in 1939. By 1941, Japan's attack on Pearl Harbor had forced the

United States into the war.

In 1940 Gunnar Asplund built his masterpiece near Stockholm, Sweden, the Woodland Crematorium. Station WNBT in New York became the first commercial television station in 1941.

World War II did one great thing for architectural America. It produced a flow of foreign architects, many of great talent, into the United States. Among them were Mies van der Rohe, Walter Gropius, Marcel Breuer, and Richard Neutra. It produced no great architecture; the nation was too busy arming and supplying itself. It did produce a curse, that of the ugly "temporary buildings", seemingly temporary only when compared to the pyramids.

The war lifted America from the clutches of the depression. The economy gained rapidly, and, after the war's end in 1945 hastened by the new Atom Bomb, a tremendous boom carried the nation to new heights. For architecture, it was a Modern butterfly emerging from an Eclectic cocoon at war's end. Somehow architecture had matured during the war, and the Revivalists never knew what happened. America came out building, and the building was contemporary. It was not all good; in fact, very little was refined enough to even be handsome. This made enemies for the new architecture, but there were many who were willing to see it through its infancy.

Since the early years of the twentieth century, one area of building had persisted as a forerunner of the coming architecture. That was the utilitarian building of the farm and factory, two otherwise unlikely bedfellows. No artificial style was necessary to these buildings, nor could it be afforded. Both therefore assumed that form and material

which would best enable it to do its job at the most economical cost. This principle would, after 1945, sweep America out of its Eclectic rut. Le Corbusier in 1923 recognized the grain elevators and factories of America as the first fruits of the new age. "The American engineers overwhelm with their calculations our expiring architecture" (35, p. 59). Today, the grain elevator and the farm remain much as they were fifty years ago. Modern conveniences have been adapted in an unassuming way: there is a blue cylindrical prefabicated silo today where there was a brick or wood or tile cylindrical silo before; there are truck and tractor tracks today where there were wagon tracks before. The rest remains a constant pleasure to behold: ever changing compositions of color and form and material; repetition with variation, both within the spread of one farm, and between that farm and the next; one great unity. The factories have become more vigorous in their pursuit of form. Many are seeking a corporate image. That goal, to become thought of as progressive, even beneficial, a patron of the arts, helped the new architecture immeasureably.

The Korean War struck in 1950. Although one-third as many Americans engaged in this as in World War II, and one million more than in World War I, it did not affect architecture nearly as much. By then the United States had become massively productive due to the vast industrial expansion during World War II, and architecture did not have to sacrifice itself for a war effort.

The economy also behaved differently after the world war. Before there had been deep depression in the post war period. Now there was only mild recession moving quickly to a record boom period. Since the

end of the war there have been five such recessions, none of which really harmed the prosperous trend.

In the beginning of the post war architectural boom, the mainstream of building was in what Robin Boyd (8) calls the first phase of modern architecture. It carried on the combined tradition of Wright, Mies and Gropius; that is, it was either a development of the Organic or of the International Style.

This was true of the skyscrapers, wrapped in the newly popular curtain wall of glass and metal panels, an outgrowth of the early Chicago work and of Mies and Gropius. At its best, it was the Illinois Institute of Technology campus by Mies, 1946 to 1956, the General Motors Technical Center by Eero Saarinen of 1948-1956, Philip Johnson's house for himself at New Canaan, Connecticut of 1949, the Farnsworth House at Plano, Illinois, 1950, by Mies, and the Lake Shore Drive apartments in Chicago by Mies in 1951. The first phase was crowned by two masterpieces, the Lever House in New York City by Skidmore, Owings, and Merrill in 1952 and the Seagram Building of 1955 to 1958 by Mies and Philip Johnson. The cultural lag brought maturation of the first phase International Style into Iowa later and with less intensity. Its early development was of poor quality and sparse. It needed the work of a master in Iowa, not for the architects to follow so much as for the public to believe. The Shoitz Memorial Hospital addition in Waterloo was an early example, 1951, by Skidmore, Owings, and Merrill. The Keokuk High School by Perkins and Will in 1953 was very influential in persuading the public to accept the new architecture. It won an honor that only three other Iowa buildings have shared: it received recognition from the national Honor Awards

Program of the American Institute of Architect, an Award of Merit in 1954. Iowa came of age in the International Style tradition when Eero Saarinen built Drake University's Women's Dormitories and Dining Hall in 1954. This group won for Iowa its highest architectural honor, that of the coveted Honor Award of the AIA in 1955. Saarinen had preceded this group with the fine science and pharmacy buildings in 1950, and he later added the Divinity School and Chapel in 1956. Later buildings that can count the International Style as a predecessor are the Tucker Residence in Cedar Rapids by Crites and Mc Connell in 1959, Mies' Home Federal Building in Des Moines, 1962, and Journalism Building at Drake University of 1965, the Osmundson Manufacturing Company in Perry by Hunter and Parks of 1964, and the Schramm House in Burlington and Buser House near Davenport, both by George and William Keck around 1965.

In the Organic tradition, the first phase is not as well represented nationally. This trend of architecture so dominated by Wright did not lend itself as readily to the new standardization, nor was it a philosophy that could be applied successfully by a large number of architects. A few were able to digest the principles without copying the highly personal character of Wright. Outstanding examples include Wright's Unitarian Church at Madison in 1947, the MIT dormitory by Alvar Aalto at Cambridge, Massachusetts in 1948, the continuation of Johnson's Wax at Racine, Wisconsin by Wright in 1949-1950, the Price Tower by Wright at Bartlesville, Oklahoma in 1955, and the Bavinger House by Bruce Goff at Norman Oklahoma from 1951 to 1957. In Iowa the Organic was much stronger than the International Style at first. This is understandable if it is remembered that there was considerable pre-war work by Wright and Sullivan

versus very little in the International Style. Also Iowa was an agricultural state, and the Prairie houses fit the Iowan's character well. Finally, while Iowa was fully tuned into the communications revolution, technologically, it culturally was a state without the values of the machine technology of older and more advanced states. There was a fine statement of the Organic with an International Style flavor in the Des Moines Art Center of 1948 by Eliel Saarinen, a guiding influence on the public to this day. Other examples include Wright's houses around 1950, the Walter House at Quasqueton and the Miller House at Charles City, the Unitarian Church in Des Moines by Amos Emery in 1958, and the Sunday House at Marshalltown by Wright in 1959. The Organic flavor can still be seen today in such work as the Christian Church Camp and Conference Center at Newton, completed in 1967 by Charles Herbert and Associates.

In Europe the rebuilding was also producing an architectural boom, although it was evolution there rather than revolution. The first phase could be seen dominant there too, in buildings such as the masterful Säynatsälo Community Center in Finland by Aalto in 1951-1952 and the Lijnbaan at Rotterdam by Bakema and Van den Broek in 1953. England, France, Germany, Italy, Scandinavia, all had their important buildings in the first phase. Le Corbusier was on the outer limits of the first phase and closing on the next major phase in Europe, turning out influential work like the Jaoul Houses at Neuilly-sur-Seine from 1952 to 1956.

Meanwhile, all was not architecture. The boom was on in all parts of the economy, and the standard of living had never been higher. Television emerged after the war in full regalia, bringing a change in the life of man that was startling. The war had sparked much research,

and, while weapon-oriented, it had resounding effects on the advance of technology. The airplane was especially affected. Going into the war, it had come a long way from 1903 at Kittyhawk, but it had no major influence on the economy and the lifeway. Emerging from the war period, its development raced with surprising speed. In 1948 the U.S. was strong enough in the air to successfully carry out the Berlin airlift for 11 months. In 1949 the first trip around the world flown non-stop was made in 94 hours. In 1950 the first non-stop transatlantic jet flight was made in 10 hours, and in the same year in Korea, the first jet plane battle was fought. There was other war technology progress, too, like the invention of the transistor in 1948 and the first atomic powered submarine, the Nautilus, in 1955.

World politics were changing too, In 1946 the League of Nations gave way to the United Nations. The spoils of Germany and Berlin were divided among the victors. And the strange allied relationship of Russia and the West gave way to antagonism, secrecy, and espionage.

The second phase of modern architecture was short-lived. It began in the 1950's, perhaps with Saarinen's auditorium at MIT of 1953. Other influences were Wright's Guggenheim Museum for New York, published in 1943 but not built until 1957-1959, and Buckminster Fuller's Dymaxion house of 1932. It was not a sudden departure from the first phase; in fact, the first phase was not seriously slowed in its progress. It was an attempt at all-at-once, all-encompassing, singular form, usually geometric and inherently structural, inside which all of the functions were sandwiched. It developed from the planning necessities of the high-rise building, where the functions had to be neatly and tightly packed

into a typical floor. It became the packing of functions into a preconceived form, an architectural revelation. It was oversimplification resulting in sterility and boredom. The downfall of this philosophy as a general architectural solution was obvious and ordained. In man's complex society of today, a singular concept will not suffice. This manner of architecture has legitimacy only when the architectural program presents an overwhelming demand for a single form, this usually a place of assembly. National examples include Saarinen's MIT chapel, 1953-1956, his TWA Terminal at New York from 1956 to 1962, his Yale Hockey Arena of 1956-1958, and his Dulles International Airport of 1958-1962, the Air Force Academy Chapel at Colorado Springs from 1956 to 1962 by Skidmore, Owings, and Merrill, the United States Pavillion at the Brussels Exposition in 1958 by Edward Stone, the Rare Books Library at Yale by Skidmore, Owings, and Merrill in 1962-1964, and the Lincoln Center group in New York by several architects in 1964-1966. Internationally, this was not an important movement. There were some buildings that fit into this phase, but they were for the most part natural results of their functional demands and not a purposive attempt for the sake of form. Some of these were influential to the American form-seeker though, such as the Notre-Dame-du-Haut at Ronchamp, France by Le Corbusier from 1950 to 1954, more a sculpture than a monoform, many of the buildings of the Italian engineer, Pier Luigi Nervi, such as the Sports Palace at Rome of 1957, and several of the buildings at Brazilia by Lucio Costa after 1960. In Iowa there were few notable second phase buildings due to at least two reasons. The chronological lag was again involved, and by the time it reached Iowa the movement was already losing popularity. The other reason is that

there were few large buildings suitable for this style commissioned while it might have been popular, and the small buildings that were attempted were mediocre in quality. The better examples might include the delightful 1956 Drake University chapel by Saarinen if taken out of its context (in context it seems more at home as a first phase geometric play of form), St. Paul's Presbyterian Church in Johnston in 1964 by Charles Herbert and Associates, and the American Republic Building in Des Moines by Skidmore, Owings, and Merrill in 1965.

The world at large was still one of accelerating change. There was the 3800 foot long Mackinac Straits Bridge in 1957 as well as Sputnik I, the first manmade satellite orbited by Russia. There was the United States' first satellite in 1958, Explorer I, as well as the first transatlantic jet passenger service by BOAC. Both were a part of the fantastic communications revolution. In the same year Alaska became the forty-ninth state in the union, and the next year Hawaii became the fiftieth. There was Castro's successful revolution in Cuba in 1958 and Russia's success in hitting the moon with a rocket.

1960 was a major turning point in the modern movement. It can be called the beginning of the third phase. The architects had realized the inadequacy of the second phase monoform, and they felt that the first phase was developed to its peak. Why change when you have the answer in the "perfected" first phase? Many felt that direction to be pure to the point of sterility, and that it was uninteresting. It didn't create an experience for the viewer; he could perceive its obvious and its subtleties in one glance. There was at least one unifying element of the first two phases, and it was an element worth keeping as they tried to combine

the best of the first two in the third phase. That element was the playing with space, the intentional arrangement and contrast to stimulate the experience. "The most important contribution of the twentieth century to this old art was the freeing of space from centre-lines and symmetry, the playing with space, pursuing it round corners and out of sight behind incomplete partitions" (8, p. 142). The third phase, then, has powerful, sometimes "brutal", character. It expresses diverse functions. It finds expression in many materials, concrete being the most dominant. It relies on harmonic shapes, colors, and textures to create a unity, a repetition, not sterile, but with variation and interest. The architect of the third phase bends over backwards in reacting against symmetry, unless the program strongly warrants it. It often exhibits bold forms reaching for light, or inhaling air, or housing a particular function which is articulated from without the space as well as from within. It is often still a singular thing, like the second phase, but it is rarely forced into a shape. It rejects ornamentation, may either float above or nestle into the ground, and searches for an expression of our machine technology like the first phase, but it is much more than that. It can demand many emotions, but its importance is that it does demand. It is making people take notice. It, with the new art and much else, is resensitizing the people. It has been manifested in many fine buildings in its short lifetime. There were first a few transition buildings, those that enabled the light to show. These were the design of Chandigahr from 1951 to 1956 by Le Corbusier, his monastery la Tourette near Lyon, France in 1960, the Kurashiki City Hall in Japan by Kenzo Tange in 1958-1960, and the work of the "New Brutalists" in England. The turning point, the

first building of the third phase, was Louis Kahn's great work, the Richards Medical Laboratories at Philadelphia, built from 1957 to 1961. There are other especially outstanding examples of the third phase in America: Kahn's Unitarian Church at Rochester, New York of 1959-1962, the Yale School of Architecture and Art at New Haven by Paul Rudolph in 1959-1963, the Boston City Hall by Kallman, McKinnell, and Knowles from 1961 to 1968, Sea Ranch, a group of condominiums by Moore, Lyndon, Turnbull, and Whitaker in California, 1965, the Holyoke Medical Center at Harvard University by Jose Luis Sert in 1963-1966, and the Salk Laboratories in California by Louis Kahn in 1966. There are equally as fine examples abroad: in England, Caius College at Cambridge University by Sir Leslie Martin and St. John Wilson in 1960-1962, the Engineering Laboratories at Leicester University by Stirling and Gowan from 1960 to 1963, the Park Hill housing at Sheffield under Womersley in 1961, the Royal College of Art in London by Cadbury-Brown in 1962-1963, and Sussex University at Brighton by Sir Basil Spence in 1963; in Japan, the Yamanashi Press Centre at Kofu City in 1964; in Switzerland, the Terrace Apartments by Fritz Stucky and Rudolf Meuli at Zug in 1962 and the Halen Development by Atelier 5 at Bern in 1961; in Italy, the Marchiondi Institute in 1959 by Vittoriano Vigano. Iowa was again not a leader, although it was to develop quickly and exert national influence by 1965. The third phase entered Iowa more quickly than any other architectural movement ever had. The first third phase building in Iowa was the 1963 First Methodist Church at Coralville by Crites and Mc Connell. Other excellent examples include the Shuttleworth Residence by Crites and Mc Connell in 1963, the Ingersoll Car Wash by Brooks-Borg in

Des Moines in 1965, the cafeteria at Iowa-Methodist Hospital in Des Moines by Brooks-Borg in 1965, Crites' own house in Cedar Rapids in 1965, for which that firm received a national Award of Merit from the American Institute of Architects in 1965, the two Brenton Banks, Northwest Des Moines and the National Bank of Des Moines, by Brooks-Borg in 1966, the Northcrest Retirement Community in Ames by Brooks-Borg in 1965, the Iowa-Des Moines National Bank office by Savage and Ver Ploeg in 1966, the Simpson Student Center at Indianola by Charles Herbert and Associates in 1967, the Bankers Trust office in Des Moines by Griffith and Kendall in 1967, the State College of Iowa Student Center by John Stephens Rice in 1966-1968, and the Ames City Hall from 1966 to 1969 by Charles Herbert and Associates.

The world has continued its progress and its calamities since 1960. In 1960 the first working model of the laser beam was completed. In 1961 the Russians orbited the first manned satellite, Vostok, and the U.S. duplicated that feat in 1962 with Friendship VII. 1962 also brought the Cuban Crisis. In 1963 2000 were killed in a Yugoslavian earthquake and 6000 died in Hurricane Flora in Haiti and Cuba. John Enders perfected his measles vaccine. 1963 was also the year of sadness, when John F. Kennedy was assassinated. In 1966 the laser beam was used in three-dimensional photography, possibly leading to three-dimensional television, and close photographs were taken of the moon by space vehicles. Soft landings were made on the moon in 1967, and by 1970 men are scheduled to land on the moon. By 1980 population will have increased greatly and mass housing will be a problem of the architects.

The third phase has a bright future in store. There are several talented leaders to carry on the work initiated by the late Le Corbusier. In the hands of talented Scandinavians like Arne Jacobsen, Sven Markelius, Jorgen Bo and Vilhelm Wohlert, the first phase has been carried to distinction and offers promise of variety for the third phase. Modern architecture is in full blossom, and its framework offers flexibility that should adapt to architectural problems for many years to come.

IOWA'S ARCHITECTURE: A GUIDE

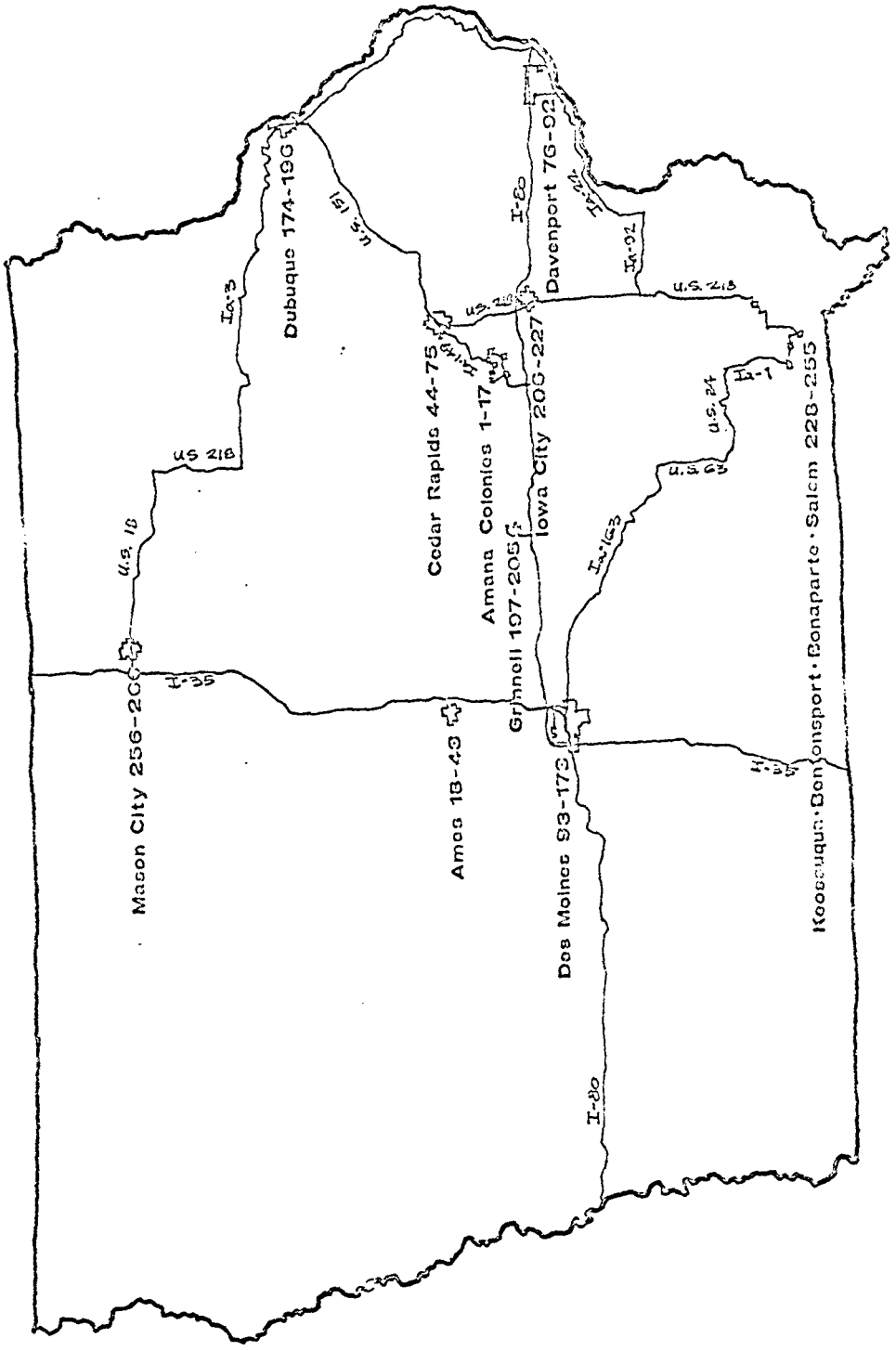

Figure 2. State map with included cities and guide numbers

Amana Colonies

The Amana Colonies were founded in Iowa in 1854 by the Society of True Inspiration. Led by Christian Metz, they had come from Germany to Buffalo, New York in the 1840's. The Society had encountered religious persecution in their homeland, and they came in search of freedom. In New York they established Ebenezer village and lived there ten years. By 1854 Buffalo was expanding to their boundaries, and they feared evil influence. As a result, Christian Metz and a committee selected a site in Iowa twenty miles west of Iowa City, purchasing 18,000 acres. It took ten years to move the people, during which they added 8,000 more acres. The first village, Amana, was established in 1855, and in the next six years, five more villages were built: High Amana, East Amana, West Amana, South Amana, and Low Amana. In 1861 when the Mississippi and Missouri Railroad reached Homestead nearby, they purchased that town.

The Society included carpenters, masons, and cabinetmakers. They adapted quickly to American materials and technology. Avoiding ornament as sinful, they sought an economical, styleless architecture. With the exception of the farm buildings, all of the buildings are similar in form and materials, distinguishable only by size. They are of masonry or wood construction. The earliest masonry buildings were of native brown limestone, while later buildings used brick. Characteristic are unpainted wood clapboarding, multipaned windows, gabled roofs, and gabled or shed roof dormers. The largest buildings were the factories. Other large buildings housed the communal kitchen and the meeting house. The smaller buildings were the communal houses, general store, bakery, inn, and shops.

Each village plan is similar, arranged like a German dorf. A long, gently winding, main street has factories at one end and farm buildings at the other end. In between are the shops, kitchens, meeting house, and some houses. At right angles to the main street, short irregular lanes lead to more houses. There is no typical Midwestern town square, and there is no "sacrilegious" steeple. The skyline is broken only by smoke house towers or early fire or bell towers. Farmland surrounds the village.

The barns and granaries at one end of town change in form and appearance. The form becomes the most suitable to its use. The appearance changes because the farm buildings use simpler vertical board siding, and because they are located randomly.

The Society was strict and puritan in its early life and communistic in organization. Through the early twentieth century the Society became more lenient. In the early 1950's the Society completely changed its organization. Shunning the austere life, they adopted a more normal pattern of life. They retained their business organization, and each family today is a stockholder in the Amana Corporation. (68)

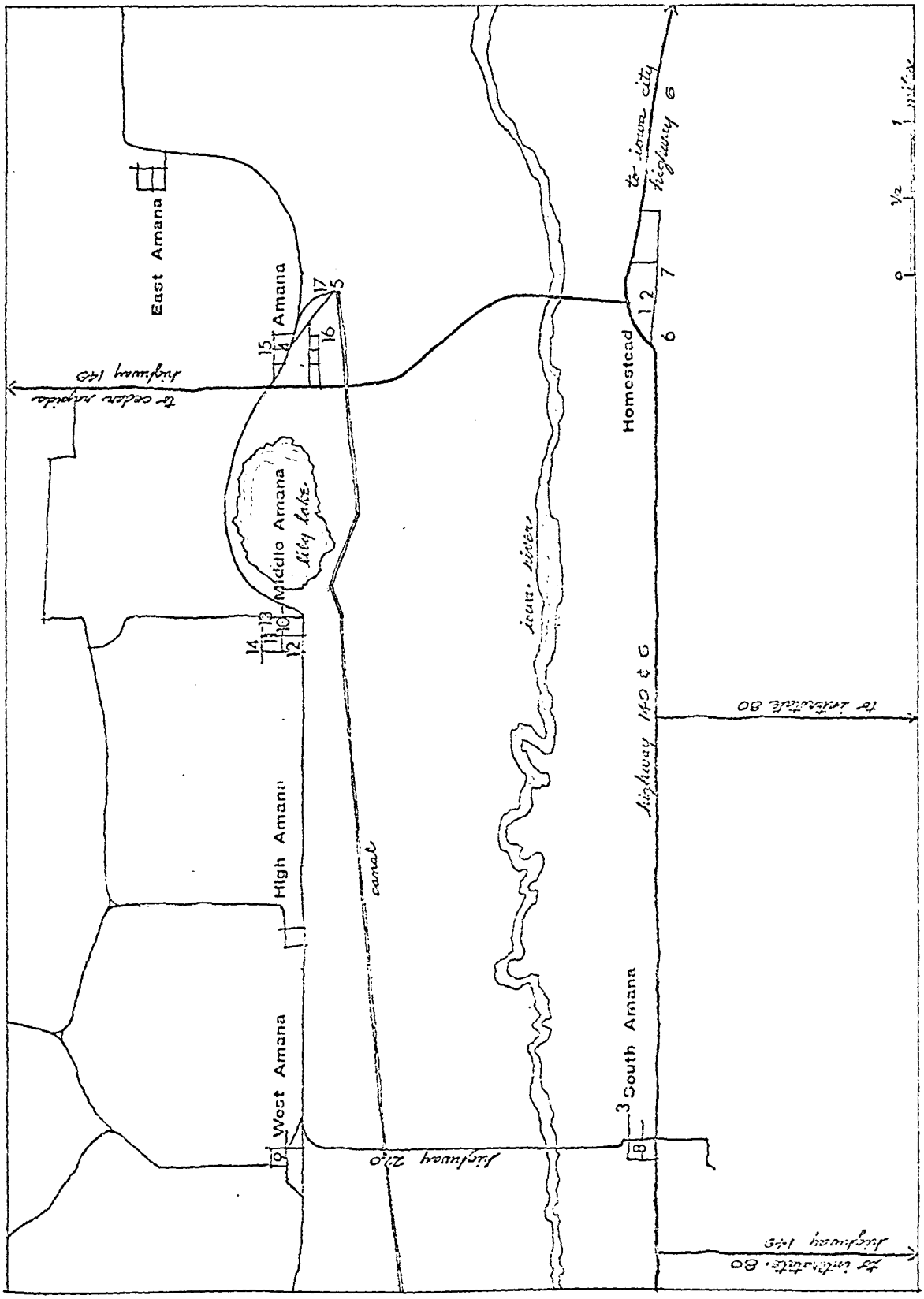

Figure 3. Guide map to the Amana Colonies

Figure 4. Amana Heim looking northwest with wash-house behind

1 Amana Heim
One block south of Highway 6 and Highway 149
Homestead
Architect unknown
ca. 1859

This is a restored house, now a museum open to the public. It was constructed of brick made from local clay and hewn timber, mortised and tenoned. It is furnished with furniture of the nineteenth century, including handmade toys, carpeting, and loom. The walls have been restored to their original light blue color, common to all of the colonies. In the basement are many antique tools and wine-making equipment. To the rear is a wash-house of weathered clapboarding.

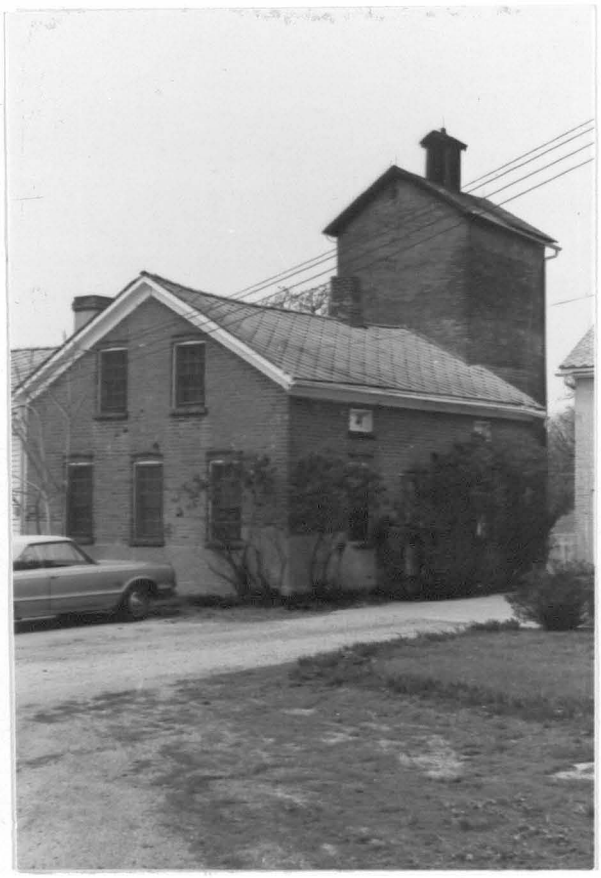

Figure 5. Smoke Tower looking northwest

2 Smoke Tower
Meat Shop
Homestead
Architect unknown
ca. 1858

The smoke tower and its adjacent storage room have been in continuous use since their construction. Here meat is saturated in brine and hickory smoked. The floor of the tower is slatted and partially open to the basement where the hickory is burned. The smoke rises through the floor and is drawn out through the cupola at rooftop. The interior of the tower is shiny black, caked with years of carbon deposits.

Figure 6. Factory looking east

3 Factory
West of Highway 220
South Amana
Architect unknown
Date unknown

In buildings like this the articles required for the colonies were manufactured. Furniture-making, blacksmithing, wine-making, and weaving were some of the necessities which were done by the self-sufficient Amanites. This brick building is easily recognized by its wandering walls and roof; the communal houses, shops, and church were always in regular rectangular structures like the other buildings here.

Figure 7. Metz House looking northeast

4 Christian Metz House
Highway 220
Amana
Architect unknown
ca.1856

The Metz House is of sandstone, the material commonly used during the first few years of the colonies' existence. Sandstone was succeeded by brick after a kiln was set up to process local clay. The stone here is smaller and more irregular than elsewhere.

Figure 8. Hydro-electric Plant looking east across canal

5 Hydro-electric Plant
South of woolen mill
Amana
Architect unknown
ca. 1860

At the head of a seven mile millrace, or canal, is this plant that furnishes power to the colonies. At one time its main function was to provide power to the woolen mill adjacent, power supplied by a water wheel utilizing the millrace. The canal was dug from Amana to the Iowa River in 1860.

6 Barn
West edge
Homestead
Architect unknown
Date unknown

Although wood was always left to weather naturally in the old Society, paint is now often used, as on this red barn. The ramped earth entrance to the second level recalls the barns of the Pennsylvania Dutch, from whom this method was probably obtained.

7 Church
Center of village on main street
Homestead
Architect unknown
Date unknown

The church is a typical Amana austere meeting hall with wooden benches as the only furnishing. It is distinguishable from the residences only by larger windows and larger size.

8 Residential area
West of Highway 220
South Amana
Architects unknown
Dates vary

A handsome two square blocks of brick houses presents an example of unity in material and form. Small service buildings are weathered gray contrasts. The small church is at the center of the area surrounded by a green.

9 Residential area
Northwest of Highway 220
West Amana
Architects unknown
Dates vary

This is an older village as evidenced by the many stone houses.

These houses are smaller than the brick houses. At the west edge of the village are some clapboard factories, weathered gray in decay.

10 Archives
East of church
Middle Amana
Architect unknown
Date unknown

This is the only sandstone building in this village, suggesting that it may be the earliest structure here.

11 Bakery
North edge of village
Middle Amana
Architect unknown
1865

This is the only survivor of seven original bake shops. The restored hearth is used to bake the famous Amana bread. The hearth, made of brick, is ten feet square and eight to fourteen inches high on the arched inside. Adjacent is a restored communal kitchen and cooperage.

12 Print Shop
North of high school
Middle Amana
Architect unknown
1873

This facility has been used for generations to print the hymnals for the churches of the Society. It is used for all printing needs of the colonies.

13 Residential area
North of Highway 220
Middle Amana
Architects unknown
Dates vary

Another group of anonymous brick buildings creates a unique atmosphere.

The rear of the house forms an open space where gardening is popular. Houses throughout the colonies which were once weathered clapboarding have unfortunately given way to asphalt siding of imitation stone and brick.

14 Winery
North edge of village
Middle Amana
Architect unknown
Date unknown

This winery was once a smoke tower and storage house, now remodeled into living quarters.

15 Meat Shop
North edge of village
Amana
Architect unknown
1858

Another smoke tower rises above the colonies. This one has been plastered to protect the soft brick from the weather.

16 Residence
Two blocks of Ox Yoke Inn
Amana
John Hix, architect
1962

Disregarding several builders' ranch houses, this is the only truly contemporary house in the colonies. A mansard-shaped second floor of clapboarding floats above a base of sandblasted concrete.

17 Woolen Mill
East edge of village
Amana
Architect unknown
Date unknown

Wool is taken from sheep to finished material here in a traditional occupation of the Amanas.

Ames

The site of Ames was a marshland when, in 1859, it was selected as the location of the State Agricultural College and Model Farm. In 1864 the Cedar Rapids and Missouri Railroad built a depot two miles east of College Farm. In January of 1866, when the station was completed, the new town site was named Ames in honor of the owner of the railroad, Oakes Ames.

One of the first homes in the area was the farmhouse now within the central campus of Iowa State University, the descendent of College Farm.

The railroad and the drainage of land stimulated development. The town was incorporated in 1870. In 1887 fire destroyed the business section, but it was rebuilt in the next four years. In 1891 a narrow gauge railroad was laid between the college and the town, now long disappeared. By 1896 Ames had a municipal waterworks and lighting system. The public library was built in 1903. In 1910, when most Iowa towns had dirt streets, Ames began a paving program. Its population was 6270 in 1920, 10,261 in 1930, and in 1960 it had grown to 27,003. Students at the university in 1967 totaled more than 14,000.

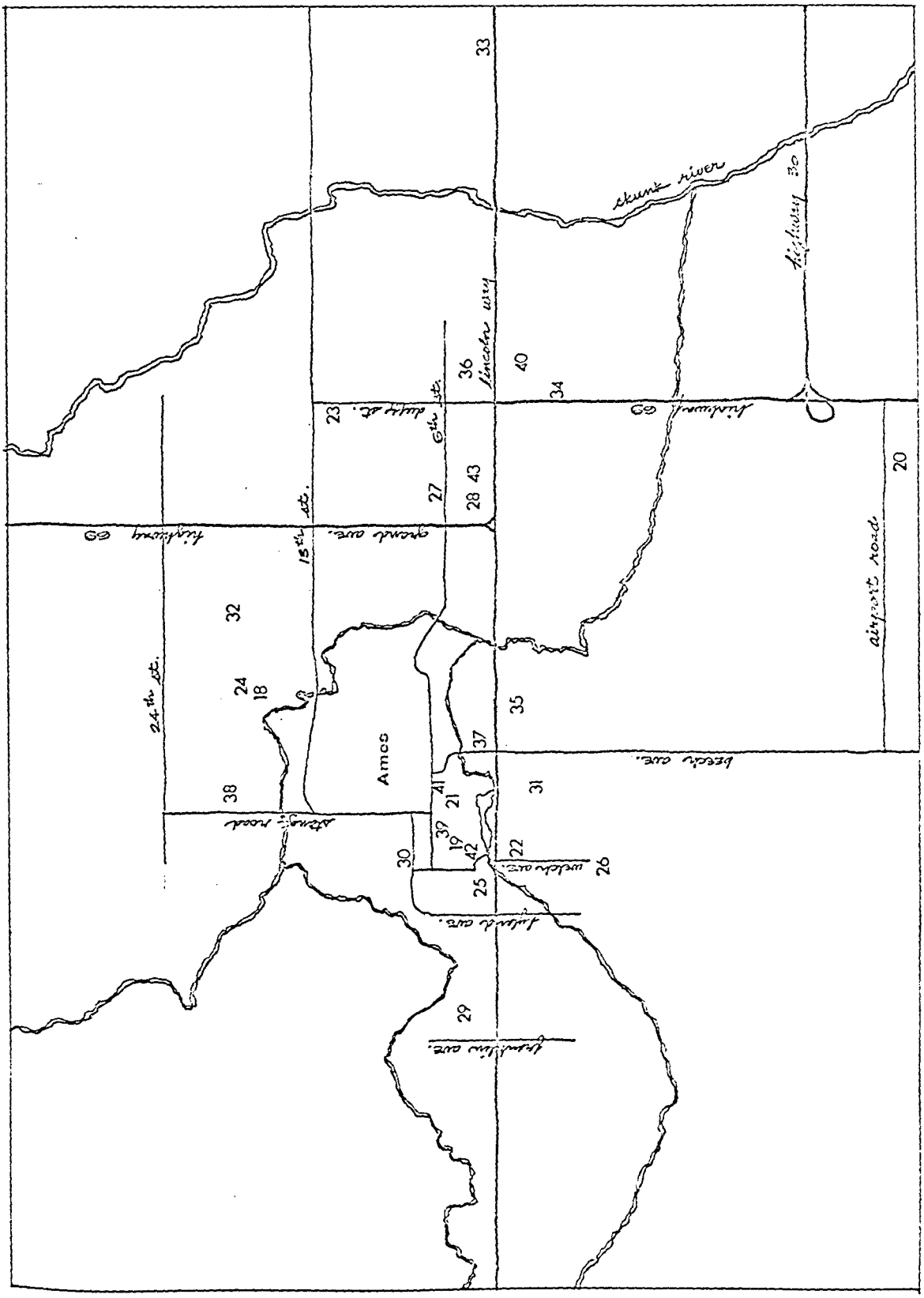

Figure 9. Guide map to Ames

Figure 10. Gymnasium looking southwest

18 Ames High School Gymnasium
Twentieth Street and Ridgewood Avenue
Ames
Charles Herbert and Associates, architects
1966

The Gymnasium was located in such a way as to connect the existing high school and swimming pool buildings. The connecting corridor acts as ticket sale and entry control to all athletic facilities, including the football field to the southwest. The basketball floor was depressed one level in order to achieve a roof height compatible with the other buildings. The roofing material is lead-coated copper, a material which requires no maintenance.

Figure 11. Beardshear Hall looking west

19 Beardshear Hall
Morrill Road
Iowa State University
Ames

Beardshear is the administrative center of the University and the heart of the campus. The design is in the Renaissance Revival character. At the center of the building all floors are open to the dome above the fourth level. Large formal stairs and wide corridors add to the spacious feeling.

Figure 12. Bourn's Manufacturing looking southwest with parking at left

20 Bourn's Manufacturing Company
Airport Road
Ames
Brooks-Borg, architects
1966

Walls of painted precast concrete create a simple enclosure for this factory. It is designed for ease of future expansion and flexibility within the space. The parking is effectively screened with an earth berm at its perimeter.

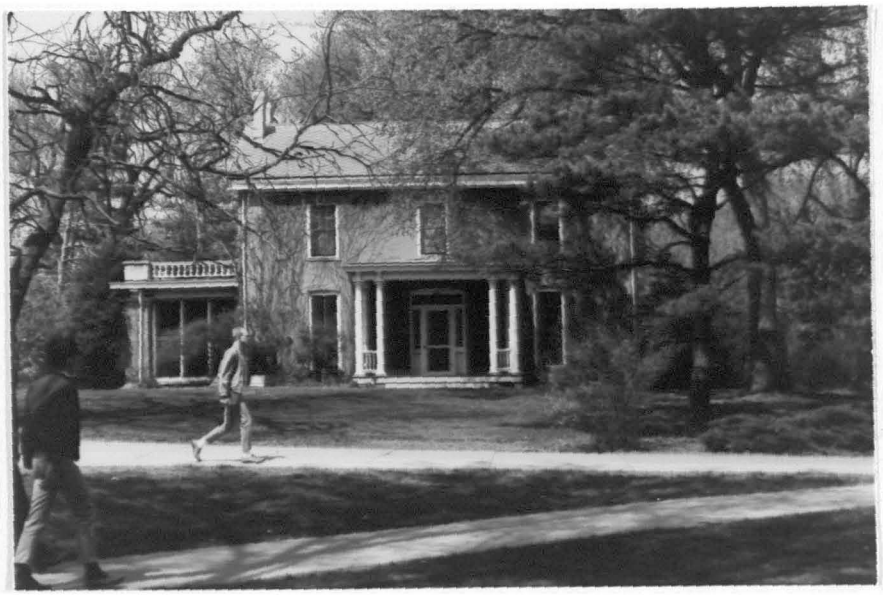

Figure 13. Farmhouse looking north

21 Farmhouse
Knoll Road
Iowa State University
Ames
Architect unknown
1861

After the state legislature provided for a State Agricultural College and Model Farm in 1858, the people of Story County gave land and money to help assure its establishment in Ames. The farmhouse was built by volunteer labor as part of their donation. For several years it was not only the headquarters of the farm, but the local inn as well. The stagecoach stopped here regularly, and famous guests who have stayed in its fourteen rooms include Ulysses Grant and Robert E. Lee. Features include eighteen inch brick walls, floor to ceiling windows, wooden pegged beams, and seven fireplaces. The soft brick was covered with protective stucco in 1909. Today a dean of one of the colleges lives here.

Figure 14. Fire Station looking northeast

22 Fire Station No. 2
200 Welch
Ames
James Lynch and Associates, architects
1966

This building shares a continuity of design expression with two other buildings in Ames by this architect. Similar brick and heavy roof lines are characteristic of the fire station, an elementary school, and a drive-up bank. The size and shape of the fire station result in its being the most successful of the three; its mass lends itself best to the particular design expression.

Figure 15. McFarland Clinic looking west

23 McFarland Clinic
Twelfth and Douglas Streets
Ames
Architects Crites and McConnell
1962

This award-winning clinic consists of a structural frame of precast concrete columns and beams which supports precast wall panels of quartz gravel exposed in concrete. The narrow panels allow flexible placement of windows as necessary to the interior use. An interior wood shutter, arched to fit the glass, is available to screen the window when needed. The separate element at the southwest is a mechanical tower. Interior air supply is carried in the hollow precast concrete floor slabs. An interior court open to both floors is topped by a concrete waffle slab "crown". Bright accent colors, wood furniture, and large plants warm the inside appearance of the concrete. This building won the 1963 Iowa Honor Awards' First Honor Award and the 1966 national Honor Award for Medical Clinics. (16)

Figure 16. Northcrest Community looking north

24 Northcrest Retirement Community
Twentieth Street and Ridgewood Avenue
Ames
Brooks-Borg, architects
1965

Looking like a minature village on the prairie, the many forms of this building create a play of light and shadow on a open hilltop. The approach is hide and seek, a winding, rolling road. Unity and a sculptural effect are achieved through the use of natural wood siding and natural wood shingled roofs. Although near regular in plan, the many roof levels and pitches give a random character. Most rooms have a sloping roof, angular plan and clerestory window. At the center a two-story unit features an unusual concrete angular stair. Future development will include similar clusters of apartments and one or two high-rise buildings. This building was given an Award of Merit by the Iowa Honor Awards program in 1966. (33)

Figure 17. Press Box looking southwest

25 Press Box
Clyde Williams Field
Iowa State University
Ames
Brooks-Borg, architects
1961

The Press Box won Honorable Mention from the 1962 Iowa Honor Awards jury. Two decks with glare-reducing sloping glass provide comfortable facilities for writers and broadcasters.

Figure 18. Towers dormitories looking north

26 The Towers
Hayward Avenue and Storm Street
Iowa State University
Ames
Architects Crites and McConnell
1965

The men's dormitories will eventually number four with two commons buildings. The location several blocks south of the campus was chosen because of lack of space on the main campus. A typical room has for its exterior wall two identical precast concrete panels with window. At both ends of the tower, recreation rooms cantilever in strong vertical form. The room floors cantilever at the third floor from a narrow base containing lounges and utility rooms. The distinctive roof form is a mechanical penthouse.

Connecting two towers is the Commons, housing kitchen and dining facilities. It has precast panels of unusually large exposed stone.

27 Ames City Hall
Sixth and Burnett Streets
Ames
Charles Herbert and Associates, architects
Pending successful bond issue vote

The Ames City Council in 1966 decided to hold an architectural competition to select the architect and design for their new city hall. Open only to Iowa architects, the two-stage competition resulted in a connected group of four buildings housing administration, council chambers, and police and fire stations. Scheduled to start construction in 1968, the dominant form will be a four-story concrete structure housing the council chambers at the top. Two-story buildings house the remaining functions. Pedestrian "streets" will carry foot traffic between walled parking areas. Surrounded by the buildings and relating to the pedestrian streets will be a central plaza unifying the site.

28 Des Moines Savings and Loan, Ames Office
Main Street
Ames
James Lynch and Associates, architects
1967

This is similar in character to the fire station.

29 Dr. Stafford House
Briarwood Place
Ames
Raymond Reed, architect
1967

Located in a grove of forty feet tall pines, the natural finish of this house reflects its surroundings. Brick floors and wood ceilings in the living areas contribute to the organic nature of the interior. The highlight of the house is the two-story kitchen with sloping glass ceiling and balconied bedroom corridor.

30 Communications Building
Pammel Drive
Iowa State University
Ames
Amos Emery and Associates, architects
1963

This building avoids windows because of its use as a radio and television broadcasting studio. Soundproofing problems are eased by the solid brick walls at the second level and exposed aggregate precast concrete panels at the first level.

31 Farm House Fraternity
311 Ash
Ames
Kohlmann-Eckman-Hukill, architects
1962

Rebuilding after a fire destroyed their first house, Farm House chose a contemporary character. The wood siding, naturally weathered for several years, has now been stained dark brown. The dining room, living room and game room are in the lower block, while the brick portion houses study and sleeping rooms.

32 Fellows Elementary School
1400 McKinley Drive
Ames
James Lynch and Associates, architects
1965

Brown brick and copper roof fascia combine to make a low-maintenance building.

33 Hach Chemical Company
Dayton Road and Old Highway 30
Ames
Architects McMullin and Miller
1968

Designed for precast concrete panels, this factory will be built in

two stages, to begin in 1967.

34 Home Furniture Store
400 South Duff
Ames
Amos Emery and Carl Hunter, architects
1963

Simplicity in materials and form make a quiet statement on a highway cluttered with chaos. Concrete columns and beams with glass walls allow the furniture to be visible and attract shoppers. This is an example of the first phase development in today's architecture.

35 Iowa State Center
Beech and Lincoln Way
Iowa State University
Ames
Architects Crites and McConnell and Brooks-Borg
1966-?

A fifteen million dollar fund drive has resulted in the present construction of the auditorium, first of four buildings planned on this site. Other facilities will be a theater, coliseum, and convention center.

36 Dr. Bevsely Loughran House
522 Carroll
Ames
Architect unknown
ca. 1884-1890

A two-story porch gives an unusual classic look to an otherwise styleless house.

37 Maple Hall
Wallace Road
Iowa State University
Ames
Charles Herbert and Associates
1967

This ten-story women's dormitory will be part of a complex of six towers and two commons buildings. The typical room is expressed on the exterior by a center window flanked on each side by an exposed aggregate section, the whole being one precast concrete panel. On the west a series of six windows gives light to the recreation rooms. The first two floors house lounges and utility rooms. The cantilevered structure is notable here, as is the integration of the site work.

38 Married Student Housing
Stange Road
Iowa State University
Ames
Savage and Ver Ploeg, architects
1965-?

These units are being built in several stages, and will eventually replace the twenty-five year old "temporary" housing. Wood shingled mansard roofs contain the second floors, while brick walls enclose the first floor. Community lodges are interspersed through the village and have a related but different form. Approaching from the south the housing assumes the flavor of an Italian hill town with many similar forms at varying elevations.

39 Morrill Hall
Morrill Road
Iowa State University
Ames
Architect unknown
1894

This Romanesque Revival is one of the oldest buildings on the campus.

40 The Octagon (Dr. Samuel Starr House)
128 Sumner Street
Ames
Dr. Samuel Starr, builder
ca. 1870

One of nine octagon houses in Iowa, this house was built by Dr. Starr to serve an astronomical hobby. The octagonal cupola, now removed, served as an observatory. Unfortunate remodelings have added a rectangular addition and replaced the clapboard siding with an imitation brick. The Ames Art Center is now housed here, and restoration is being considered.

41 Plant Sciences Building
Osborn Drive
Iowa State University
Ames
Durrant-Deininger-Dommer-Kramer-Gordon, architects
1967

The exterior walls are fabricated of smooth-finished cast stone panels. The repetitious window pattern lends a classical academic manner, and it fits well in the campus character. An unusual addition is a greenhouse occupying most of the top floor.

42 Technical and Applied Mechanics Laboratory
Union Drive
Iowa State University
Ames
Architect unknown
1885

Red brick, mansard roof, and arched dormers combine in a Victorian

character.

43 Union Story Trust and Savings Bank
405 Main Street
Ames
Germanson and Foss, architects
1962

The symbol of this bank is the barrel-vault concrete roof system, a cliche common to the second phase (see Overview). Colorful yellow and orange exterior wall panels make this a building dominating its neighbors. It received an Honorable Mention in the 1963 Iowa AIA Honor Awards program.

Cedar Rapids

Osgood Shepherd built a cabin at the rapids in the Cedar River in 1838. By 1841 the first survey was made, on the east side of the river, and called Rapids City. Soon after, a dam was constructed which furnished power for the grist mill and sawmill. These two industries drew many settlers and became an attraction for farmers in the surrounding area. The first frame house was built in 1842 by John Vardy. By 1844 brick from local kilns was used for construction. In 1848 a second replatting changed the name of the town to Cedar Rapids. The first newspaper was founded in 1851. In 1852 the town of Kingston was platted on the west side of the river, and a toll bridge was built. In 1858 the citizens sponsored and built a riverboat, The Cedar Rapids, but in the same year the railroad reached the city. The boat proved a poor investment as the powerful railroad replaced river traffic. In 1861 the river was first bridged for the railroad. In 1870 Kingston, across the river, was annexed. In the next decade the Stuart oatmeal mill was built, later to become the Quaker Oats plant; gas illumination was installed, and a horse-drawn streetcar system was established. In 1880 Greene's Opera House was built. In 1881 Coe College was founded, succeeding the Parsons Seminary. The Union Station railroad depot was built in the 1890's, but demolished in the 1960's. Electric streetcars were introduced in the 1890's, replacing horse-drawn vehicles.

Cedar Rapids today is a town of handsome residential areas and interesting buildings. Its rapid growth is causing a great deal of house building, and the present size of the city is allowing those houses to be built in wonderful wooded hills within easy distance of downtown.

Cedar Rapids, like Des Moines, is experiencing an exciting improvement in the quality of architecture.

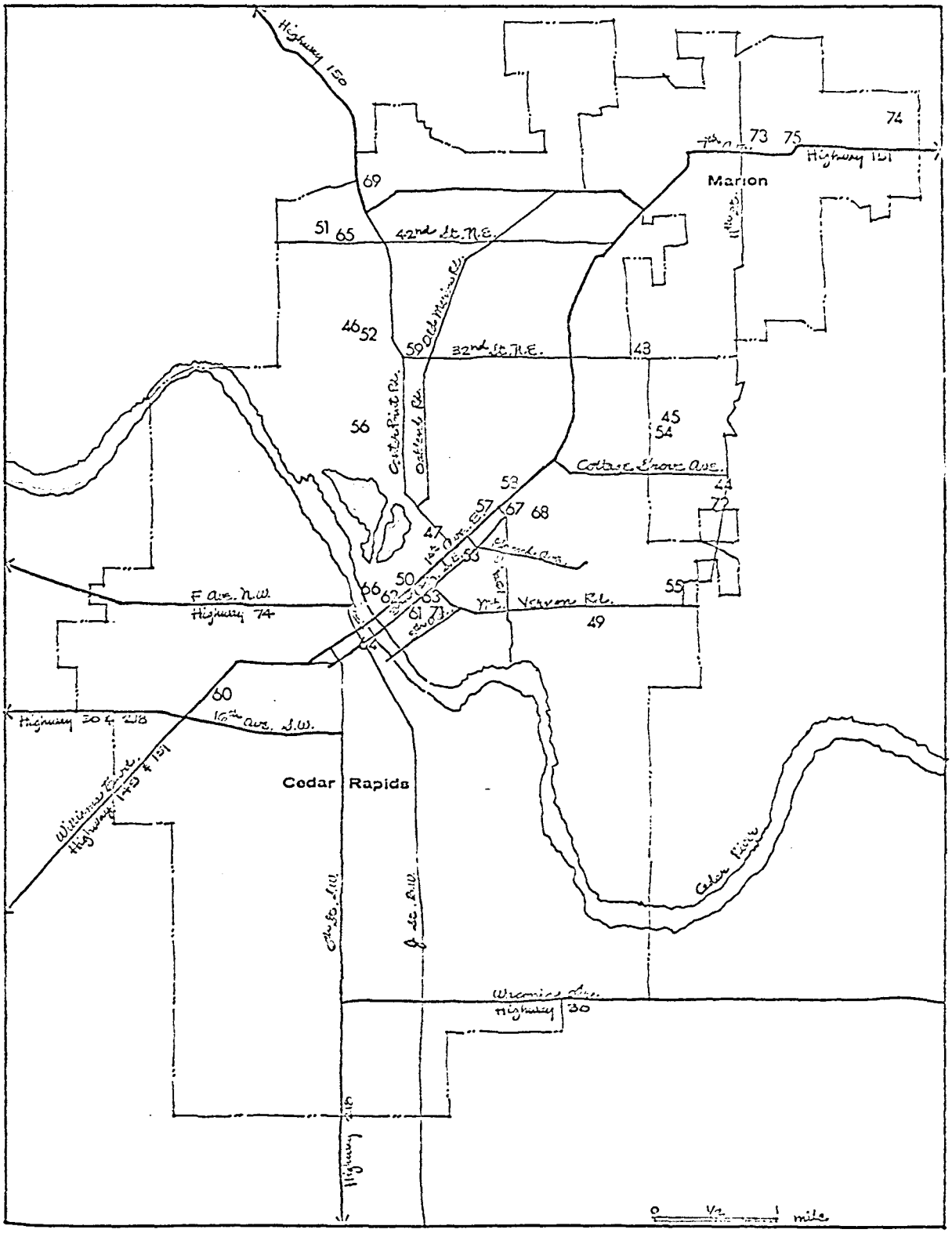

Figure 19. Guide map to Cedar Rapids

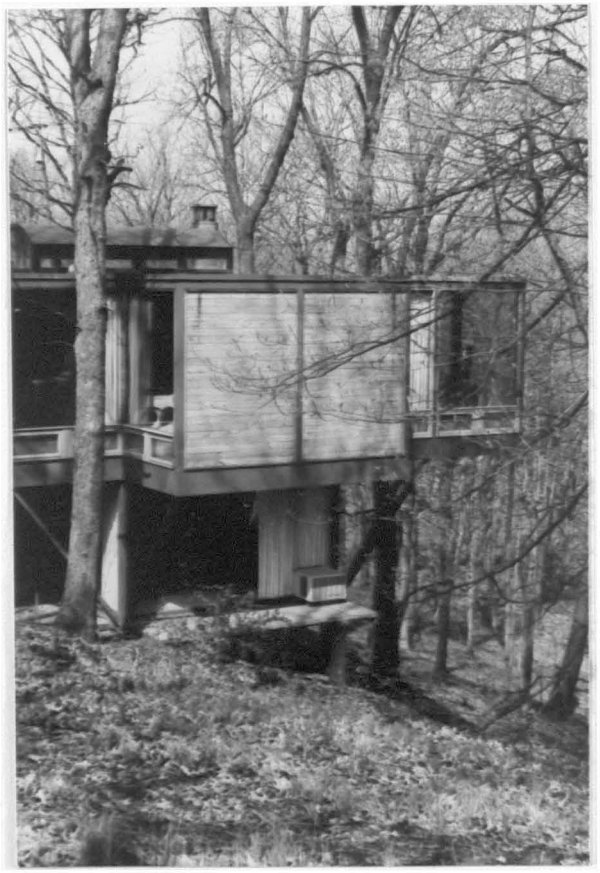

Figure 20. Crites House looking west

44 Crites House I (now Fenwick House)
4340 Eaglemere Drive
Cedar Rapids
Architects Crites and McConnell
1959

This house cantilevers from a narrow steel structure located high on a hillside. The bridged street entrance is flanked by kitchen and bedrooms. The living and dining rooms stretch across the rear of the house, all glass and thirty feet high in the trees. Natural weathered siding gives opaque walls where desired. This house in 1962 was awarded an Honorable Mention from House and Home Magazine and an Honorable Mention from the Iowa Honor Awards. (40)

Figure 21. Crites House looking northeast

45 Crites House II
2600 Indian Hills Road Southeast
Cedar Rapids
Architects Crites and McConnell
1964

This house won for its owner the 1965 First Honor Award of the Iowa AIA Honor Awards program and a coveted Award of Merit in the 1965 National American Institute of Architects Honor Awards program. It is intensely third phase. It bursts from its shell where it needs light or space. It is wrapped in vertical cedar box car siding. It has four levels including a basement. The living room is open two stories to a balconied corridor, and a second portion of the living room extends into the woods one and one-half stories high. A giant spherical light and a metal fireplace give scale to the two story space. Exterior decks open at several levels and with several orientations. The floor system is an economical tongue and groove decking which provides both ceiling and floor. (32)

Figure 22. Farris House looking north

46 Farris House
2148 Glass Road Northeast
Cedar Rapids
Thomas Reilly, architect
1967

This unusual three story house is located next door to its architect's house. Cedar horizontal siding and glass are the materials employed. Figure 22 shows the house under construction. Garage and utility rooms are on the lowest level, kitchen and living area are on the middle level, and bedrooms are on the top level. A deck will float at the middle level at left.

Figure 23. Gage Union looking north with coffee house at left

47 Gage Memorial Union
B Avenue and Center Point Road Northeast
Cedar Rapids
Brown, Healey and Bock, architects
1966

The Union wanders about its site as a group of connected forms. On the south is a two story element with a cantilevered roof system commanding attention. This houses a cafeteria and lounge. To the north a long, narrow wing houses offices and meeting rooms. To the northeast a separate building is connected by a second level glass bridge. This building has a prominent copper roof and broad, rounded terraces. Inside is a snack bar-coffee house with a central circular seating pit and skylight. The group creates several pleasant exterior spaces, the most important of which is formed by the coffee house, bridge, and main building.

Figure 24. Grant House looking west

48 Douglas Grant House
3400 Adel Street Southeast
Cedar Rapids
Frank Lloyd Wright, architect
1945-1951

The Grants quarried their own limestone for the house and helped build it. They also built the furniture according to Wright's design. The house is very much in the Wright tradition of organic siting and materials. It seems a part of the hillside, and its heavily textured stone and natural wood bring nature into the house itself. (24)

Figure 25. Hukill House looking north

49 Hukill House
Northwood Drive off of Mt. Vernon Road Southeast
Cedar Rapids
Kohlmann-Eckman-Hukill, architects
1967

This architect's home is in the developed tradition of the International Style, or first phase. An upper story of wood cantilevers on all sides from a sandblasted concrete base. The wall surfaces of the upper level are of diagonal wood siding, spaced by recessed sliding glass doors opening to decks. The site is a heavily wooded hillside.

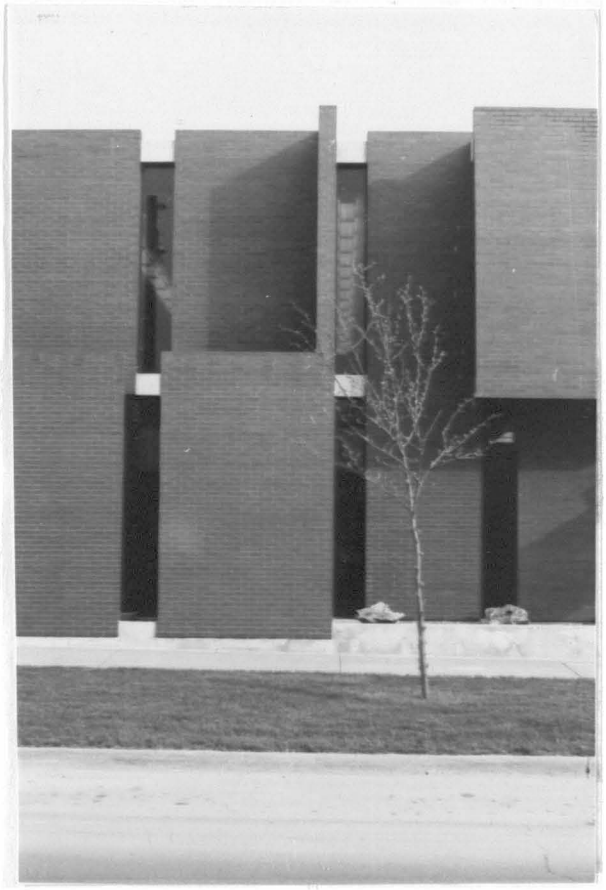

Figure 26. IBM Building looking northwest

50 IBM Building
830 First Avenue Northeast
Cedar Rapids
Leo C. Peiffer and Associates, architects
1965

Starting with a one story building dating from 1958, a second story was added and the whole unified. Brown brick, gray glass, and concrete create a subtle group of materials. Shade and shadow emphasize the strong sculptural effect of the juxtaposed walls. Bright accent colors relieve the interior spaces. The building remained fully occupied at all periods of remodeling.

Figure 27. Kennedy High School looking north

51 John F. Kennedy High School
Forty-second Street and Wenig Road Northeast
Cedar Rapids
Kohlmann-Eckman-Hukill, architects
1967

Dark colors of brown brick and black metal roofing make a large, rambling building seem less gigantic. The building forms range from a gymnasium and service at the south through classrooms and administration to a theater at the north. The massing and detailing have continuity except at the main entrance, where an arched portico seems forced academicism. A high school is often more utilitarian than aesthetic, but this one seems to be top quality in both.

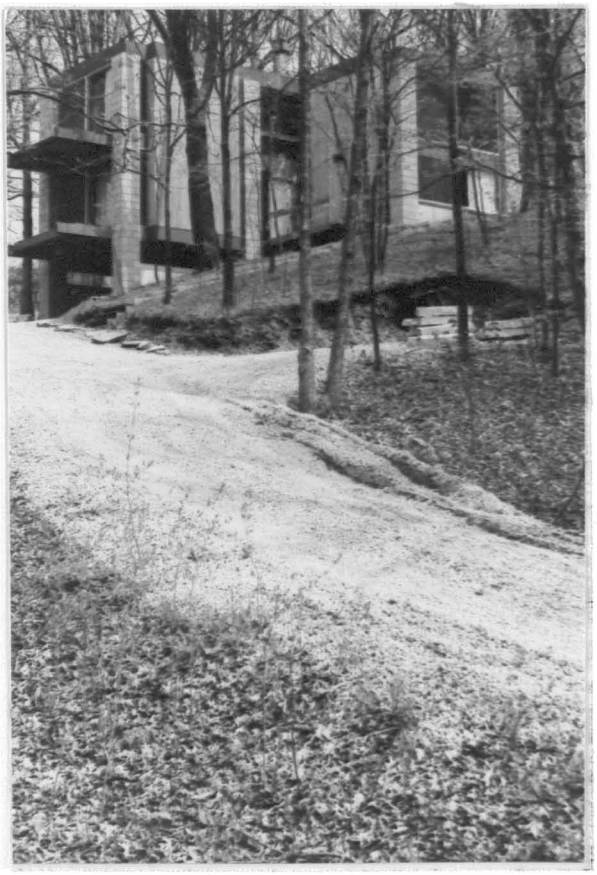

Figure 28. Reilly House looking north

52 Reilly House
2140 Glass Road Northeast
Cedar Rapids
Thomas Reilly, architect
1964

This architect's residence is one of the most outstanding houses in Iowa. Subtle, weathered-gray, wood siding and concrete block piers rise three stories on the forested and hilly site. The piers rise at the corners of the structure, and between them grasp the wood boxes that always form storage or seating units on the interior. On the top level are the kitchen, living room, and playroom; the middle level has bedrooms; and the lowest level is a carport and storage.

Figure 29. St. Paul's Church looking north

53 Saint Paul's Methodist Episcopal Church
Third Avenue and Fourteenth Street Southeast
Cedar Rapids
Louis Sullivan
1911-1913

In his second building for Cedar Rapids, Sullivan again made a break with traditional forms. For this church, traditionally a basilica, or long narrow sanctuary, he created a semi-circular meeting room fifty-six feet in diameter. A twenty-two foot square tower rises one-hundred and eight feet. Much of the original design in glass, woodwork and decoration was never completed due to cost. Sullivan resigned in protest in 1912, and Purcell and Elmslie, students of his work, finished the job, preserving the spirit of the original concept. (41)

Figure 30. Shuttleworth House looking north

54 Shuttleworth House
2403 Indian Hill Road Southeast
Cedar Rapids
Architects Crites and McConnell
1964

Sited in dense woods, the natural wood siding makes it seem part of its surroundings. Originally designed for concrete beams, economy forced the use of plywood box beams instead. It received an Award of Merit in the 1964 Iowa Honor Awards competition. It is the author's opinion that this is one of the best houses by this firm and one of the finest in Iowa.

Figure 31. Tucker House looking south

55 Tucker House
4051 Soutter Avenue
Cedar Rapids
Architects Crites and McConnell
1961

A high quality house in the tradition of the International Style, the Tucker House is a simple two-story cube, solid at the sides with glass front and rear. Living, dining, kitchen, and one bedroom are on the upper level; the lower has two bedrooms and utility space. The carport roof floats in front of the house and contains a recreation deck on its top. This house received the First Honor Award from House and Home Magazine's Homes for Better Living competition as well as an Honorable Mention in the 1962 Iowa Honor Awards Program. (42)

56 Adams Elementary School
Center Point Road
Cedar Rapids
Architects Crites and McConnell
1962

This school utilizes a folded plate roof system to leave the multi-purpose room column free. Concrete sun screens protect the classroom glass. It is well-fitted into a hilly site.

57 American Reinsurance Company
1820 First Avenue Northeast
Cedar Rapids
Brown, Healey and Bock, architects
1962

This building received an Honorable Mention from the 1962 Iowa Honor Awards jury. Its stone walls screen the busy street view and create a quiet courtyard, unusual site planning for a commercial building.

58 Blair House
2222 First Avenue Northeast
Cedar Rapids
Brooks-Borg, architects
1964

This is a ten story luxury apartment building. The closely spaced concrete columns taper from bottom to top. At intervals the space between the columns is left open to create balconies. There are two two-story townhouses at the lower ends of the building, and four penthouse apartments at the top. An Award of Merit was won for this apartment in the 1966 Iowa AIA Honor Awards competition. (33)

59 Fire Station No. 6
Forty-second Street and Council Street Northeast
Cedar Rapids
Architects Crites and McConnell
1960

60 Fire Station No. 8
Williams Boulevard Southwest and Tenth Avenue
Cedar Rapids
Architects Crites and McConnell
1960

These two fire stations were designed and built during the same time period. Both have a similar character, and they both use the same brick, dark trim, and window types. They differ in their adaption to their separate sites, although both sites drop away one full story. At Station No. 8 glass at both levels allows a view of a fire engine on the second floor with apparently little to hold it up. This condition does not occur at Station No. 6, where the second story is at the far corner from the engine room.

61 First Presbyterian Church
310 Fifth Street Southeast
Cedar Rapids
Brown, Healey and Bock, architects
1962

The church structure, seventy-seven years old, was retained in this remodeling, but its interior was completely replaced, including the floor structure. Walnut, travertine and gold and white furnishings and paint were used to renew the interior. The chancel screen is of walnut, designed by the architect. The walnut chancel sculpture is by Edmond Whiting, and the silver chalice and candle holders on the altar were executed in Switzerland to the architects' design.

62 Merchants National Motor Bank
Second Avenue and Third Street Southeast
Cedar Rapids
Brown, Healey and Bock
1964

This bank received a 1965 Award of Merit in the Iowa Honor Awards program. It combines a drive-up bank facility with four stories of parking and some rental space. The parking floors are screened with aluminum vertical fins while the first floor is primarily glass.

63 Northwestern Bell Telephone Company Addition
619 Third Avenue Southeast
Cedar Rapids
Architects Crites and McConnell
1966

Two bays at the west were added to the telephone company in the first stage of a remodeling program. Future plans allow for further addition as well as refacing of the existing building. Light brown brick is used here, as it will be in the future work.

64 Peoples Bank and Trust Company
101 Third Avenue West
Cedar Rapids
Louis Sullivan, architect
1910

Louis Sullivan's first building in Iowa has been unsympathetically remodeled more than once. It is a one and one-half story central gallery with clerestory windows, surrounded by one story offices. At the corners of the gallery, four towers are a chimney and ventilating ducts. One may gain an insight into the importance of this building in its own time by reading Montgomery Schuyler's essay (36) written for the Architectural Record in 1912. This was a forerunner of modern banking practice with its functional elements gathered about the main banking area, revolutionary

in its day. The original clients, formerly the Peoples Savings Bank, were daring to build such a new and different bank. (36)

65 Pierce Elementary School
Forty-second Street Northeast and Marilyn Drive
Cedar Rapids
Brown, Healey and Bock
1964

Dark brown brick and concrete roofs are used to enclose irregular clusters of classrooms, an administration area, and a multipurpose room. The only color introduced is the light blue in the exit doors of the classrooms and orange in the entrance doors.

66 Quaker Oats Plant
Third Avenue Northeast and B Avenue
Cedar Rapids
Architect varies
Date varies from 1905 on

Strictly utilitarian in design, this group of buildings and machinery create the kind of bold geometric forms Le Corbusier and others admired in early twentieth century American architecture. Huge concrete cylindrical elevators store the grain; horizontal conveyors move the grain; and smokestacks and concrete grid buildings combine in geometric composition. (19, p. 194)

67 Residence
Third Avenue and Nineteenth Street Southeast
Cedar Rapids
Architect unknown
Date unknown

The varied roof forms of this older house rest on a solid structure of half-timber at the second floor and rubble stone at the first. Arched openings in the stone contribute to the integrity of structure and

materials; it gives a forthright and honest feeling.

68 Residential Area
Blake Boulevard and Linden Drive, east of Nineteenth Street
Cedar Rapids
Architects vary
Dates vary

Many fine houses are located in this area of shaded, curving streets.

69 Restaurant Shorewood
Center Point Road Northeast and Highway 150
Cedar Rapids
Leo C. Peiffer and Associates
1963

This restaurant received Honorable Mention in the 1964 Iowa Honor Awards competition.

70 Number 5 Turner Alley
901 Second Avenue Southeast
Cedar Rapids
Loomis Brothers, builders
ca. 1870

This served as a studio for the artist, Grant Wood. He redesigned parts of it.

71 United States Post Office
Sixth Avenue and Sixth Street Southeast
Cedar Rapids
Architects Crites and McConnell and Amos Emery and Associates
1966

A series of interlocking buildings of light brown brick form the Post Office. A central public space is roofed with a concrete waffle slab supported on free-standing columns and enclosed by a glass wall. The work area to the south is enclosed by a high one story roof with clerestory windows continuous around the building. Simple brick walls of one story enclose the office areas to either side of the public space.

The separate building to the southeast is a service building for vehicles. Bronze window frames, lights, and letters give a rich finish.

72 Yarowski House
East Post Road and Fox Meadow Drive
Cedar Rapids
Architects Crites and McConnell
1967

Cedar left unfinished to weather gray encloses a simple, cube-shaped house. Roof fascias and window spandrels are painted black. Bold balconies of double two-by-tens give depth. Horizontal sliding windows leave a maximum of the window opening uncluttered. A living area projects to the east, where the wood walls carry above the roof line to give an interesting silhouette.

73 Farmers State Bank
Eighth Avenue and Twelfth Street
Marion
Architects Crites and McConnell
1967

A concrete fortress is the image of this bank. With vertically ribbed and sandblasted concrete walls continuous except for door openings, daylight is introduced only by the nearly continuous clerestory glass. The waffle slab roof hovers above this glass, supported on free-standing columns.

74 Lutheran Church of the Resurrection
Twenty-seventh Street and Eighteenth Avenue
Marion
Crites, Peiffer and McConnell, architects
1961

Winner of Honorable Mention in the 1962 Iowa Honor Awards competition, this church was built inexpensively to serve a growing congregation. This

will eventually become a fellowship hall serving a new sanctuary. A folded plate roof clear-spans the temporary sanctuary and introduces clerestory light. The materials are stained plywood and wood structure. (11)

75 Residential Area
Eighth Avenue from Thirteenth to Eighteenth Streets
Marion
Architects vary
Dates vary

Some handsome homes of past years are located on this street. A Greek Revival house in excellent condition may be seen, as well as Queen Anne and Victorian houses.

Davenport

Davenport developed from the location of Fort Armstrong on Rock Island in 1816. Colonel George Davenport came to the fort to manage the Army store. He established a trading post on the Iowa mainland shortly after. Antoinne Le Claire, a French halfbreed, spoke several languages and was a well known trader in the area. In appreciation for interpreting during a treaty in 1832, Le Claire was granted several sections of land, one of them the present site of Davenport. This latter he sold to Colonel Davenport and six others, and they founded Davenport in 1836. From 1850 to 1860 the population increased from 1,848 to 11,267. The railroad entered Iowa at Davenport in 1853 as the Mississippi and Missouri began building a line from there to Council Bluffs. The railroad cars and locomotive were ferried across the Mississippi and were in operation by 1855, able to travel to Iowa City by 1856. Working against steamboat opposition, the first bridge across the Mississippi was built at Davenport in 1856. Although the railroad affected the river traffic, it did not vanquish it as quickly from the Mississippi River. There was no north-south track, and the riverboat remained important here in through the 1880's. Limestone quarries were developed in the 1880's, leading to a cement industry. In 1888 the second electric streetcar in the United States was established here. Andrew Carnegie presented the public library to the city in 1902.

Davenport shares a large population with Bettendorf, Riverdale, Rock Island, and Moline. There is not a great deal of interesting new architecture, but the historic tradition of this river town is respected and preserved.

Le Claire, an adjoining town eight miles to the northeast, was named for Antoine Le Claire. It began as another of the sites granted to Le Claire. It was once a lively river town, a port for the Mississippi riverboats. Rapids downstream always called for a daylight trip on this area of the river. Skilled pilots from Le Claire were often called upon to take the boat through to Davenport. The town became a favorite home for river men because of its river spirit and its accessible views of the river. Colonel Thomas Eads was an early prominent citizen. His son, James, became famous for his engineering feats, including the iron clads and river monitors of the Civil War Mississippi flotilla, the Eads bridge at St. Louis, and the invention of a diving bell for salvage work.

There has been little new building in Le Claire, and its principle hope of survival in this day of disappearing small towns lies in its becoming an historic museum town.

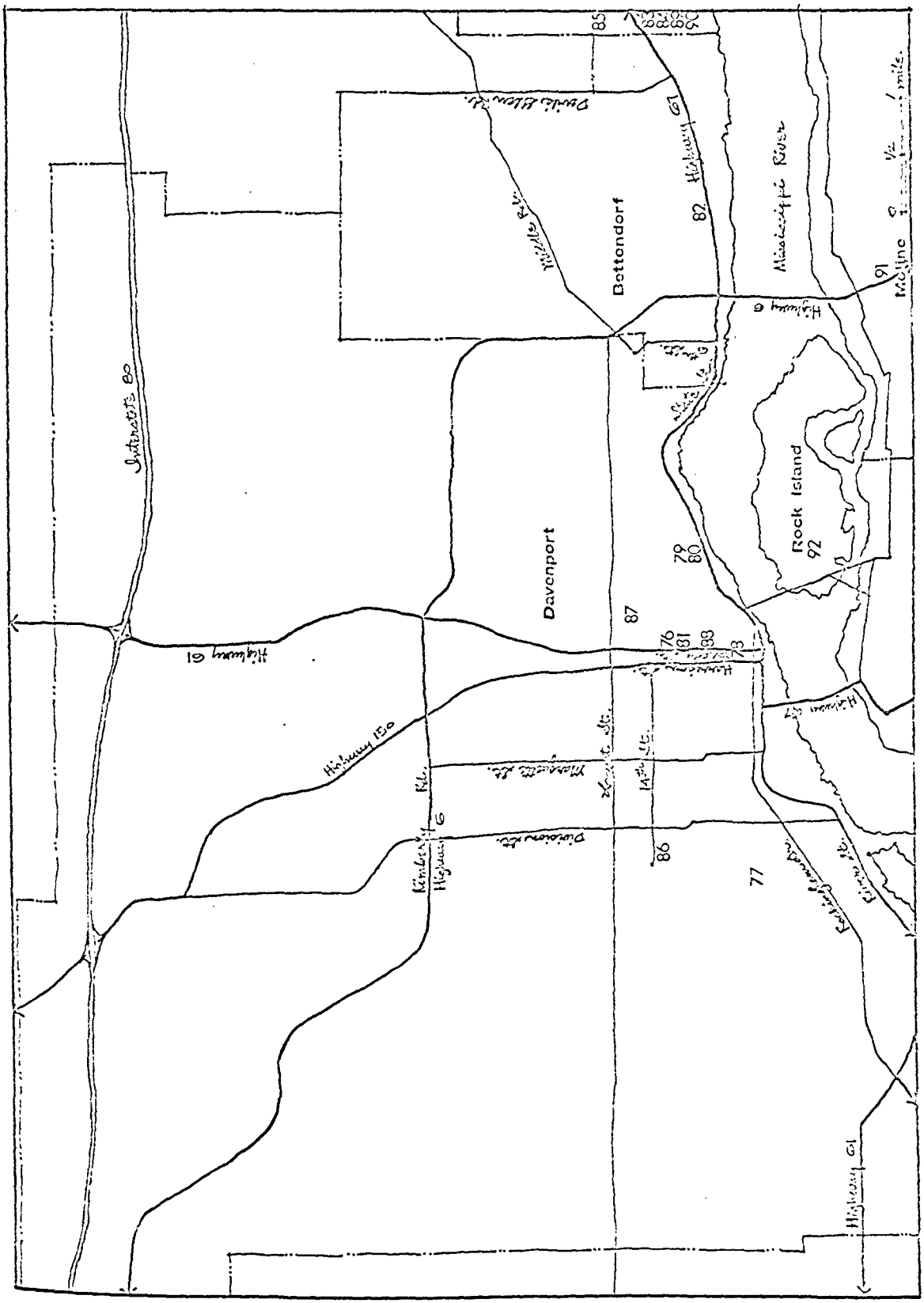

Figure 32. Guide map to Davenport

Figure 33. Ficke House looking northwest

76 Ficke Residence
West Twelfth and Main Streets
Davenport
Architect unknown
Date unknown

This Victorian house sets in an increasingly commercial area. C. A. Ficke was a prominent citizen in early twentieth century Davenport. His large art collection was a gift to the city to start the first art museum. The house is two stories of red brick with a third story mansard roof. Dormers of immense size cap the double bay windows on the south, and a tower tops the front elevation.

Figure 34. Miller House looking west at the barn

77 Severin Miller House
2200 Telegraph Road
Davenport
Architect unknown
ca. 1863

A delightful old house and barn grace this hillside in south Davenport. The house is of stone on three sides and brick on the fourth, as the original plan was to extend the house to a square shape eventually. It has its original wood shutters. The barn is of small rubble stone and weathered wood. The wood wing of the barn was added later.

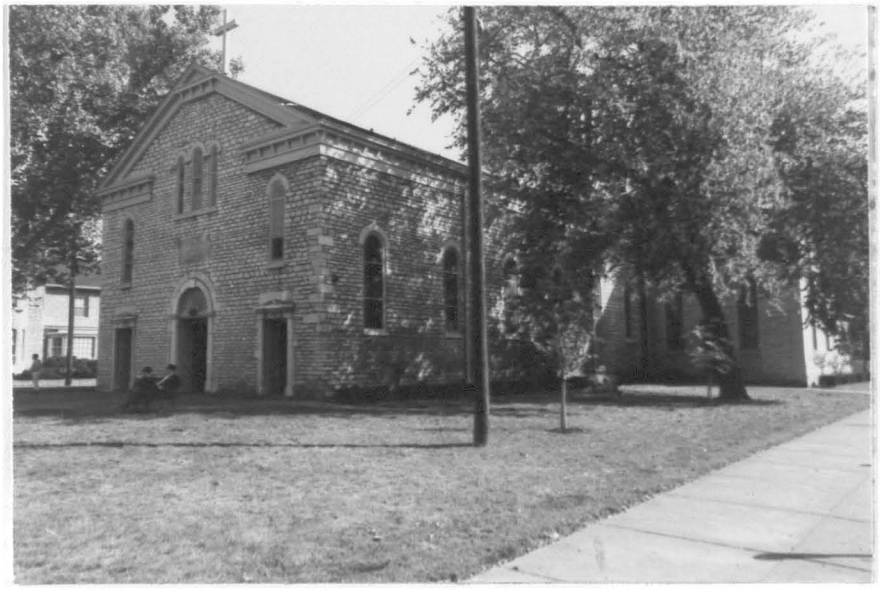

Figure 35. St. Anthony's Church looking northeast

78 Saint Anthony's Church
417 Main Street
Davenport
Architect unknown
1853

This stone church has been preserved on a busy downtown street corner. It shows some Greek Revival traits, but the broken horizontal line of the gable is unusual.

Figure 36. St. Katherine's Hall looking northwest

79 Saint Katherine's Hall
Saint Katherine's School
Tenth and Tremont Streets
Davenport
John Cochrane, architect
Date unknown

This was formerly the home of John Davies, who called it Cambria Place. Its cost was $75,000. It is a brick Victorian house of three stories now serving as dormitory and study space for this girls' school. The school was founded and acquired this house in 1884.

Figure 37. St. Margaret's Hall looking north

80 Saint Margaret's Hall
Saint Katherine's School
Tenth and Tremont Streets
Davenport
Architect unknown
Date unknown

The school acquired this house, formerly Renwick Place, in 1907. It is stone Victorian with iron fancywork around the central tower. A large open porch shelters the entrance. The administration of the school is now located here.

Figure 38. Trinity Episcopal looking west at the apse end

81 Trinity Episcopal Cathedral
1121 Main Street
Davenport
A. G. Potter, architect
1873

This stone church has an unusual roof that changes pitch, angling outward as it descends. A continuous band of tiny clerestory windows separates the two roof pitches. Iron lace cresting is especially prominent at the peak of the roof, as is the multicolored design in the slate roofing. The apse end of the church is rounded, and the roof becomes conical. The inside of the cathedral has been restored, and the original pews are still in place. The church still possesses the original drawings of the architect.

Figure 39. Capen House looking northeast at rear

82 Leo Capen House
9 Roberts Place
Bettendorf
Architect unknown
1929

Built in the style of a seventeenth century Norman chateau is this large house of aged white brick. There is even an artificial sag in the roof for authenticity. Inside, oak paneling and plaster relief ceilings provide a luxurious finish. This is a classic example of the revival of architecture of another age, almost like a permanent stage setting.

Figure 40. Dawley House looking southeast with the Mississippi beyond

83 Captain Art Dawley House
Second and Dodge Streets
Le Claire
Architect unknown
ca. 1865

This brick has been restored by the present owners and is in fine condition. It is relatively styleless except for the brackets which support the roof overhang. These plus the square shape and nearly flat roof give a spirit of the Federal Style. The house rests on a hilltop with an excellent view of the Mississippi River, a natural place for a riverboat captain to build.

Figure 41. Smith House looking northwest

84 Captain Orrin Smith House
Highway 67 (126 Cody Road)
Le Claire
Architect unknown
ca.1860

White-painted brick changed the appearance, but not the spirit, of this residence of a riverboat captain in an old river town. Ironwork is common here, as is the honeycomb-patterned foundation. Shutters are workable and possibly original. The house is relatively styleless except for the front porch, which recalls the verandas of New Orleans. With the riverboat so near, influence from downriver is understandable.

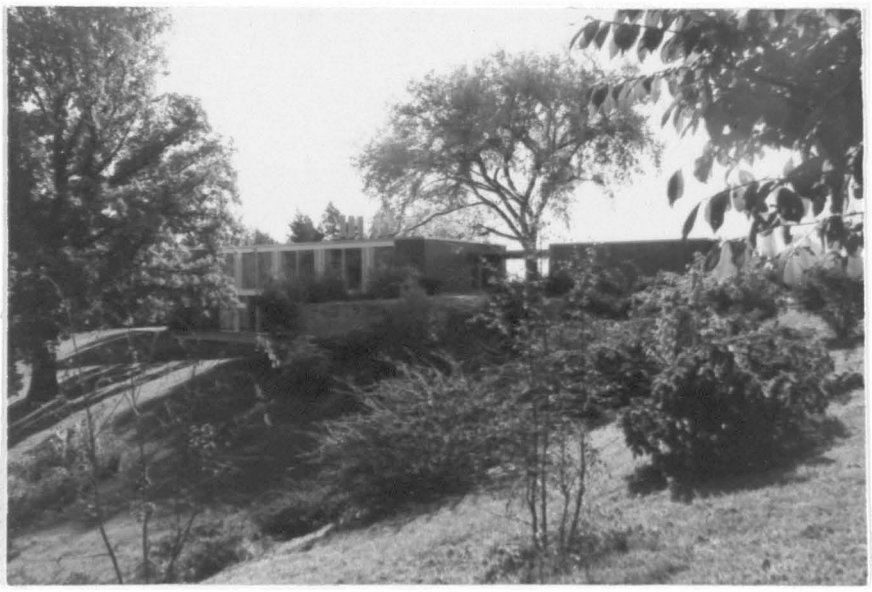

Figure 42. Buser House looking east

85 Buser House
62 Elmhurst Lane
Riverdale
George Fred and William Keck, architects
1959

A house by these well-known brother architects is usually interesting, and this is no exception. Sited on a bluff high above the Mississippi, this house and its landscaping are outstanding. The house is brick and glass and wood in the tradition of the first phase of modern architecture. It becomes two stories as the hill drops away. Refined detailing gives polish to the simple rectangular shape.

86 Art Gallery and Museum
West Twelfth Street and Division Street
Davenport
Swanson and Maiwald, architects
ca.1965

Two separate structures are sited side by side in Fejervary Park.

87 First Presbyterian Church
Davenport
Architect unknown
1899

A Romanesque Revival in pink stone is this towered and turreted church.

88 Antoine Le Claire House
704 Brady Street
Davenport
Antoine Le Claire, builder
1833

This pioneer home was moved from its original site to this site as an adjunct to the Davenport Museum in 1944. Originally a log cabin structure, the house was later covered with clapboard siding. The full width porch and dormer windows depart from a usual log cabin form. Le Claire gave this house to serve as the first railroad station in Iowa in 1855.

89 Gamble House
527 Wisconsin Street
Le Claire
Architect unknown
ca.1855

The first owner of this house was Le Claire's pioneer doctor. The square two story house has one story wings to the east and west, and it has an unusual balcony at front with a matching open porch below.

90 Residences
Le Claire
Architects vary
Dates vary in the 1850's

Several other houses of interest may be seen in Le Claire. The Captain Art Dawley house at the north end of town on Highway 67 is an old brick house with a patterned foundation and ironwork above the porch. The Mill House, once the property of Captain John Lancaster, is one story of stone with two stories of clapboard siding above.

91 John Deere Administration Building
John Deere Road
Moline, Illinois
Eero Saarinen, architect
1964

Across the Mississippi River in Illinois, one of the outstanding works of architecture in this country is the offices of the John Deere Manufacturing Company. Saarinen, influenced by a trip to Japan, chose steel and glass for this building. The steel is Cor-Ten, a steel which forms its own protective coating of dark brown oxidation and needs no painting. The glass is a mirror type which reflects the sun's radiation. Included is a warm brown brick for areas where glass is not desired. The main building sets in the center of a valley and reaches up both sides. To the east a building connected by a flying bridge contains exhibition space and a theater. A future building to the west will balance the composition. A small lake in the front, cooled by fountains, is a source of water for the cooling system. Inside, the furnishings were all designed by the architect. The executive offices are at the lower levels, luxuriously furnished in leather and teak. The executive dining room adjoins the lake, and the table tops are at the same height as the water level.

92 Colonel Davenport Residence
Rock Island Arsenal
Rock Island
Architect unknown
1833

This house would be plain if it were not for the symmetrically placed fireplaces and central entrance portico, which give it a Colonial spirit. It was the home of Colonel George Davenport, a military man and fur trader. He helped to establish the city of Davenport.

Des Moines

The city of Des Moines began as a fort in 1843. The Indian name for the main river which runs through central Iowa was Moingona, and the French had changed this to Des Moines at an early date. A fort on the Mississippi, a county, and at least one other town had used this name before it became Fort Des Moines.

The fort was built to protect the Sac and Fox Indians from early white settlement and from the troublesome Sioux Indians. The siting of the fort structures was a precedent for the later platting of the town, and the city plan today reflects that influence. The enlisted men's barracks were built paralleling the Raccoon River, facing Coon's Row, now Elm Street, and the officer's quarters were built paralleling the Des Moines River, where First Street is now. The fort was abandoned in 1846 after the territory had been opened to settlers in 1845. Many pioneers were attracted to the fort area due to the facilities already established there, and a village began.

In 1846, Polk County was organized, Fort Des Moines was platted, and it was selected as the county seat. More substantial building than the log cabins began with a frame house at Second and Market in 1846. The first brick building was built in 1849 on Court Avenue where the present Randolph Hotel stands. The first scheduled stage began in 1850. Business building began in earnest by 1855. There was the four story brick Savery House on Fourth Street, the Exchange Block at Third and Walnut, and the three-story brick Sherman Block at Third and Court.

The word Fort was dropped from the name in 1857 when Des Moines was selected as the new State Capital. At the same time East Fort Des Moines

across the river was merged with the west side. In 1858 the first solid bridge was built across the Des Moines River at Court Avenue. Three architects were listed in the city directory that year.

The riverboat was never important to Des Moines due to the shallowness of the rivers. In 1866 the first railroad reached Des Moines. In the next twenty years it completely changed the appearance of the old part of Des Moines. It erased all signs of the old fort and plowed through the original market. The attendant industrialization destroyed all of the earliest buildings in the area from Court Avenue to the Raccoon River.

In 1879 the State Fair Grounds were located at the present Forty-first Street and Ingersoll Avenue. By 1885 it had been moved to its present site at East Thirtieth and University.

Drake University was established in 1881. In 1882 Walnut Street was paved with wood blocks from First to Fifth Streets. In 1884 the present State Capitol was completed. In 1891 the city annexed eight suburbs, enlarging its area from eight to fifty-six square miles. In 1892 the Kirkwood Hotel was built, and in 1900 the Historical Building was completed. Des Moines was maturing now from an old frontier town to a new city. From a population of 3,965 in 1860 and 12,035 in 1870, it increased from 22,408 to 50,093 between 1880 and 1890. The population took another large jump between 1910 and 1920, increasing from 86,368 to 126,468. The Equitable Building, a symbol of the city and the tallest building in the state, was built in 1924.

Des Moines today is urban without being metropolitan. From a distance its landmarks are the State Capitol, the Equitable Building, and the KRNT communications tower, rising from a shallow valley of tree tops.

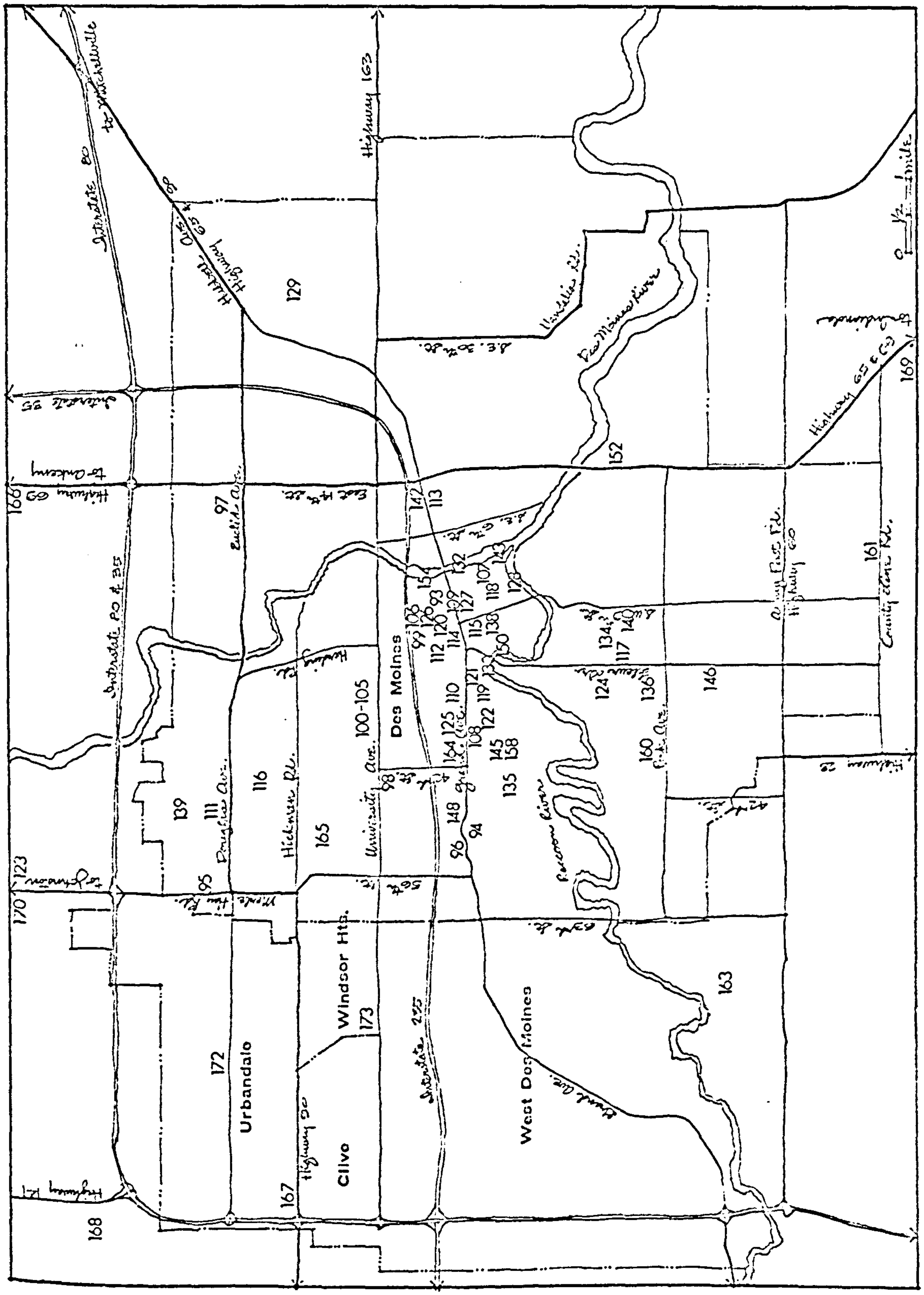

Figure 43. Guide map to Des Moines

Figure 44. American Republic looking south

93 American Republic Insurance Company
Sixth and Keosauqua Streets
Des Moines
Skidmore, Owings, and Merrill
1965

This architectural firm had become famous for severely simple grid buildings of concrete columns and beams with glass walls. This building was a departure for them, a new structural concept. All six office floors are supported on the east and west bearing walls, which are each in turn supported by four giant steel hinges on concrete piers. These bearing walls taper from bottom to top as the structural thickness required grows smaller. Reciprocally, a down-feed air distribution system located on the roof tapers from top to bottom, thus allowing vertical inside walls. An outstanding contemporary art collection is housed on the white walls of the interior, and a large steel sculpture, "The Spunk of the Monk", by Alexander Calder, stands in the open court-entrance. (6)

Figure 45. Art Center looking west

94 Art Center
Polk Boulevard and Grand Avenue
Des Moines
Eliel Saarinen and I. M. Pei
1948 and 1967

An early example of the modern architecture in Des Moines is this limestone structure by the noted Finnish architect, Eliel Saarinen. Meandering about the hilltop, the roof jumps up and down as the interior space requires. The exhibition area presents solid walls to the streets, opening occasionally to the interior court and sculpture pool. To the east the classrooms open to the north light and a small sunken courtyard. The interior gallery is two stories high at the entrance with a glass wall to the sculpture pool, and one and one-half stories in the main gallery space. This latter is anonymous and flexible, necessary to the successful display of the varieties of art.

Presently under construction is an addition by I. M. Pei which will add a new auditorium and two-story sculpture court.

Figure 46. Bankers Trust looking east

95 Bankers Trust, Plaza Office
3905 Merle Hay Road
Des Moines
Griffith and Kendall, architects
1967

Banks are becoming true patrons of architecture, as evidenced by this suburban office of a downtown bank. The plan is formal and symmetrical; the materials, brick, concrete, and bronze aluminum, are subtle. The result is a sculptural understatement on a busy street of chaotic forms and colors. Its strength lies in its refined contrast to its surroundings. The interior is a tall one-story open plan with a circular vault at the center of the building. At one end is the banking floor and at the other end are the offices.

Figure 47. Detail of portico carving, Temple B'Nai Jeshuran

96 Temple B'Nai Jeshuran
Fifty-first Street and Grand Avenue
Des Moines
Dougher, Rich, and Woodburn
1931

This smooth, white, stone temple forms a vista for the westward traveler on Grand Avenue as the street forks to the left and right. The main body of the temple is roofed with a copper-covered dome, and the entrance vestibule is a tall gabled structure with three arches. Rich carving decorates the arches, and handsome stained glass allows light to enter the sanctuary.

Figure 48. Dahl's Food Mart looking north

97 Dahl's Food Mart
East Thirteenth Street and Euclid Avenue
Des Moines
James Lynch and Associates, architects
1966

In view of the acrobatics of the usual supermarket, it is an outstanding accomplishment to arrive at a building of this refinement. Handsome field stone contrasts with red tile and a concrete vaulted structure. Graphics is handled briefly and well. The only glass is in the entrance doors and in a clerestory position at the office wing. The projection at the front is a drive-up delivery area.

Figure 49. Dentist's Clinic looking south

98 Dentists' Clinic and Apartments
4224 University Avenue
Des Moines
Architects Crites and McConnell
1966

Mixed zoning presents an unusual building to Des Moines' west side. Housing three dentists' offices and five apartments, light brown clay tile and dark brown stained wood unify a group of volumes that create a tiny village-like quality. The center court yard opens to the offices and a second story deck connecting the apartments. At the rear two two-story townhouses look south to a quiet, lightly wooded area.

Figure 50. Des Moines Lighting looking southwest

99 Des Moines Lighting Company
Twelfth and School Streets
Des Moines
Architects McMullin and Miller
1966

An understatement in the classical spirit is refreshing in an area of deteriorated houses, a junk car storage lot, a huge billboard, and a freeway. Four inch by twelve inch dark brown tile masonry is scored vertically to make four inch squares. Dark gray glass adds to the subtle character. Offices project toward the street while a work and storage area is incorporated at the rear. Inside walnut and white plaster walls are brightened by a few accent colors. This is the first Des Moines building by this promising new architectural firm.

Figure 51. Dining Hall looking south

100 Dining Hall and Women's Dormitories
Thirtieth Street and Forest Avenue
Drake University
Des Moines
Saarinen, Swanson, and Saarinen, architects
1954

Eliel Saarinen developed the master plan and Eero the buildings in this outstanding group. It received the national American Institute of Architects' Honor Award, the only Iowa building so honored. The dormitories are constructed of concrete panels fabricated on the ground, hoisted into place, and faced with brick. The two-story social rooms project from the five-story dormitory towers. Bridges at the second level of the social rooms span a lagoon and connect to the Dining Hall. The Dining Hall roof and parts of the second floor cantilever four feet past its columns, giving extra space to the eating area or sun control to the large glass areas. A huge colorful abstract mural brightens the dining area. (40)

Figure 52. Dormitories looking north with lounge projection at center

Figure 53. Dormitories and Dining Hall looking southwest

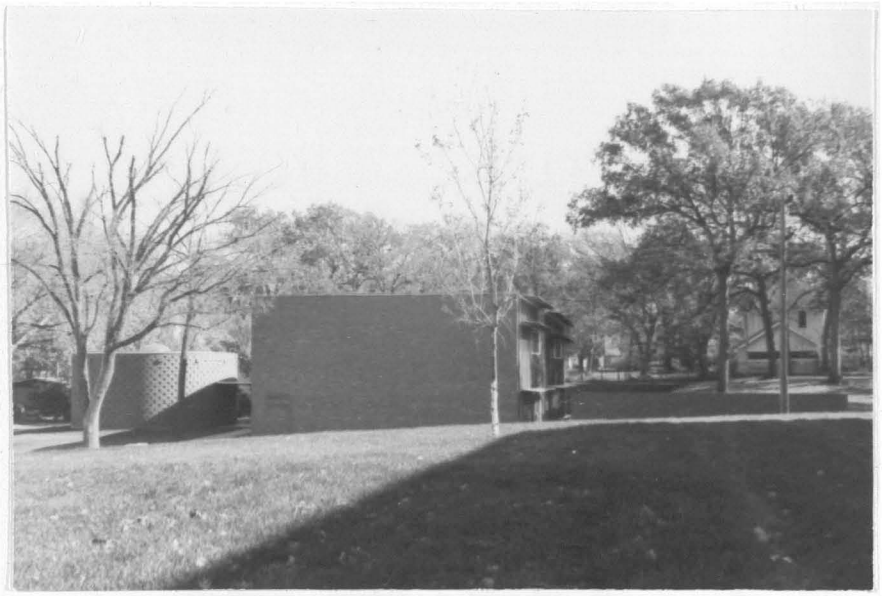

Figure 54. Chapel and Divinity School looking east

101 Divinity School and Chapel
Twenty-eighth Street and Forest Avenue
Drake University
Des Moines
Saarinen, Swanson, and Saarinen, architects
1956

These two buildings form a play of geometry: the Divinity Building is a simple rectangular two-story block; and the Chapel is a simple, small, circular building. The Divinity School is related to the Science and Pharmacy Buildings adjacent, with the addition of sun shades and a walled courtyard on the south. The Chapel is the "jewel in the anonymous setting." All patterned brick on the exterior, the interior has a center altar under a circular skylight. Heavy wood structure and high-backed wood chairs give a serene and protected atmosphere. (66)

Figure 55. Journalism Building looking southeast

102 Journalism Building
Twenty-eighth and Carpenter Streets
Drake University
Des Moines
Ludwig Mies van der Rohe, architect
1965

In Mies' personal style, the dark gray steel and gray glass building is at home on the outstanding Drake University campus. Surrounded by buildings by Eero Saarinen, the Journalism Building furnishes a machine-technology contrast to the red brick of the Divinity, Pharmacy, and Science Buildings. Offices and classrooms line the exterior walls. An auditorium occupies the south center of the building while an open interior court brings light into the north end.

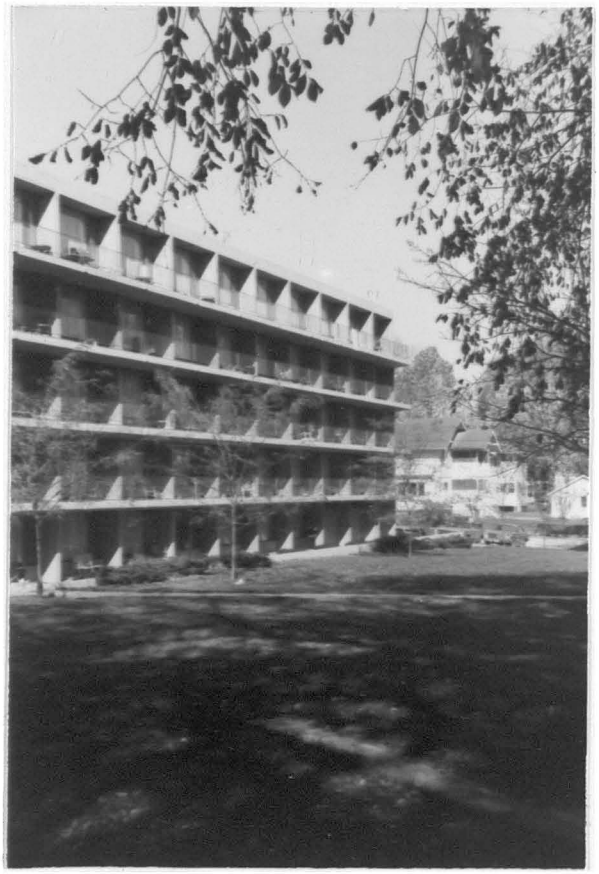

Figure 56. Married Student Housing looking northwest

103 Married Student Housing
Thirty-second Street and University Avenue
Drake University
Des Moines
Harry Weese, architect
1963

Five stories of apartments are reached by an open stair and balconies cantilevered from one side of a simple brick block. Vertical concrete walls at the balcony give a small degree of privacy, and wrought iron railings give protection. The apartments are small one and two bedroom units and have an efficiency kitchen off the living room.

Figure 57. Men's Dormitories looking west into courtyard

104 Men's Dormitories
Thirtieth and Carpenter Streets
Drake University
Des Moines
Harry Weese, architect
1964-1966

Prefabricated steel windows project rhythmically from a simple three story, brick mass resting on a one-story concrete base. The base is recessed on the courtyard side of the complex to form a protected arcade. The group of three buildings is connected by enclosed bridges at the upper levels to allow interior circulation.

Figure 58. Science and Pharmacy Buildings looking north

105 Science Building and Pharmacy Building
Twenty-eighth Street and Forest Avenue
Drake University
Des Moines
Saarinen, Swanson, and Saarinen, architects
1950

The Science Building, on the west, is three stories of classrooms with a free-form double lecture hall at the west end. Connected by a second-story pedestrian bridge, the Pharmacy Building to the east is two stories high. Both buildings utilize brick end walls and glass and metal panel side walls. (60)

Figure 59. Estes House looking northwest

106 John Estes, Jr. House
944 Ninth Street
Des Moines
Architect unknown
1869-1870

Thomas Naylor came from Yorkshire, England to Iowa in 1836 and built this house in two stages. The first stage, a wood-sided one story structure, now is the rear part of the existing house. The brick Victorian front portion was added in 1870. It is one of the few unaltered houses of its time remaining in Des Moines, and boasts its original woven iron fence. It has been restored in the hands of its present owner. Inside, plaster molded ceilings and wood shutters have been repaired. A tiny brick storehouse is at the rear.

Figure 60. Old Federal Building looking northeast

107 Old Federal Office Building
Fifth Street and Court Avenue
Des Moines
A. B. Mullett and M. E. Bell, architects
1868-1886

In a Renaissance Revival similar to many buildings in Paris, this mansard-roofed building presents an unusual flavor to downtown Des Moines. The original building was occupied in 1871, at a construction cost of $217,000. It was two stories, eighty feet by one hundred and twenty feet, and had a mansard roof. In 1889 a complete remodeling was finished, adding two stories, enlarging the width to one hundred and fourteen feet, and adding a one hundred and twenty foot tall tower. The courtroom is expressed on the exterior south side at the top floor with an arched and copper-covered roof. Some iron beams are still apparent inside. The yellow stone exterior is in good repair, but the interior is sub-divided and not well maintained.

Figure 61. First Church of Christ, Scientist looking south

108 First Church of Christ, Scientist
3750 Grand Avenue
Des Moines
Brooks-Borg, architects
1931

This is an example of timeless architecture. Although built in 1931, it remains intriguing among today's architecture. Its tower, cloisters, sanctuary, and office block offer variety in form unified by a regular, rough limestone masonry. The courtyard at the front is half closed by the sacristy, creating an inviting open space within. The needle steeple above the stocky stone base helps balance what might have become a top heavy solution. At night the chapel stained glass window is lighted, as is the courtyard and tower, and it becomes a colorful and pleasing composition in the darkness.

Figure 62. Home Federal looking northeast

109 Home Federal Building
Sixth Street and Grand Avenue
Des Moines
Ludwig Mies van der Rohe
1962

This is the first building by Mies in Iowa, and the first by a nationally prominent architect in downtown Des Moines. In his personal and refined tradition, this steel and travertine and glass structure assumes an elegance unusual in Des Moines' architectural surroundings. It uses only a part of its site; the remainder is devoted to a granite plaza with trees and pedestrian benches. It is a good neighbor and a welcome contrast to the surrounding "corridor" streets. The dark gray steel contrasts with its own light travertine and with the rough stone of St. Ambrose Cathedral to the north. It is elegantly furnished with handsome furniture, much of it designed by Mies, and with tapestries designed by Miro, Leger, and Braque, woven in France. (15)

Figure 63. Ingersoll Car Wash looking north

110 Ingersoll Car Wash
2525 Ingersoll Avenue
Des Moines
Brooks-Borg, architects
1965

A strong and progressive architectural statement is made by this car wash and gasoline station. A large canopy dominates the approach, supported on four large, round, tile columns. This protects the gasoline service area from the weather. To the rear, more round columns support the lower roof of the car wash. A playful, up and down wall of concrete block penetrates the building from the east, allowing views of the washing process. To the west a glass enclosed office area is covered by a roof spanning in the opposite direction from the car wash area, resulting in a thinner roof line recalling the form of the canopy. Graphics, in the form of a tower sign, are better than average.

Figure 64. Iowa-Des Moines National Bank looking north

111 Iowa-Des Moines National Bank, Douglas Office
4505 Douglas Office
Des Moines
Savage and Ver Ploeg, architects
1966

Two pavillions of light brown brick house the pedestrian bank and the motor bank for this suburban office. A deep roof overhangs the same distance as the formal base, or stylobate. The brick walls are grouped in piers, creating spaces both interior and exterior. Glass relieves the brick in protected areas. Inside, accent colors in the furnishings and carpet lend a cheerful relief to the monochromatic architecture. The smaller motor bank behind develops continuity with the main building through similar materials and a corresponding spatial exercise. Of particular note here are the handling of the graphics, the spherical street lights, and the careful handling of the rear entrance drive.

Figure 65. Looking west into first roof garden of Service Addition

112 Iowa Methodist Hospital Service Addition
1200 Pleasant Street
Des Moines
Brooks-Borg, architects
1964

Half submerged in the hillside adjacent to the old hospital is this cafeteria and service building. From the hospital and the east, the tiered roofs form a landscaped roof garden. The cafeteria looks out on the lower roof garden and is itself the upper roof garden. Plain concrete, textured only by the marks of the steel forms, becomes a handsome material in the bold forms of this structure. Very deep cantilevered roofs contain the earth depth necessary for the grass and trees above. A mechanical room at the southeast has giant louvers from bottom to top at its south wall. The character could be called brutal, but it is an exciting building to explore. It is the outstanding building in the third phase category of modern architecture in Des Moines.

Figure 66. State Capitol looking southeast

113 Iowa State Capitol
East Ninth and Locust Streets
Des Moines
A. H. Piquenard and John C. Cochrane, architects
1871-1886

The Capitol is in the vernacular of many other capitol buildings. It is generally a modified Renaissance design of the type popular for government buildings. Its cost was one and one-half million dollars. The basic building is three hundred and sixty-four feet long and two hundred and forty-seven feet wide, and its dome rises two hundred and seventy-five feet. The central dome is gold-gilded while the four smaller corner domes are copper trimmed in gold. The interior is highlighted by a sixty-four foot diameter rotunda open from basement to the dome. Monumental arched windows and ionic-columned porch entrances are balanced on each of the four sides. To the west formal steps, a fountain, and a sculpture group lend grandeur.

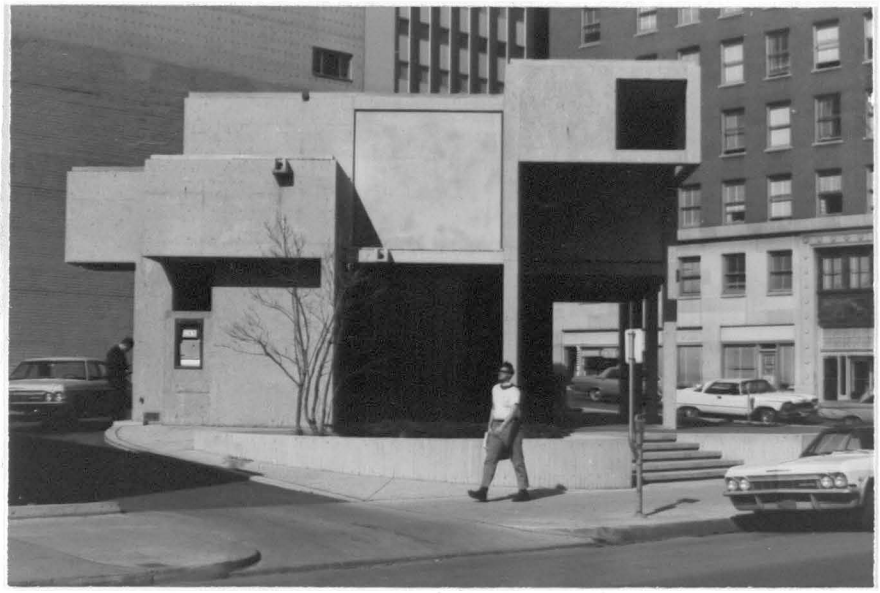

Figure 67. National Bank of Des Moines looking northeast

114 National Bank of Des Moines Motor Bank
Tenth Street and Grand Avenue
Des Moines
Brooks-Borg, architects
1966

This is a building in the third phase of modern architecture. It is symmetrical, although it at first does not seem so. The actual useable space is small, but a two-story banking floor and covered exterior spaces make it appear larger. The exterior materials are concrete, plaster, dark tinted glass, and brick paving. The concrete of the structure is sandblasted for texture, while the low exterior walls are board form-marked. Two giant hoods shield the two drive-up banking windows at the rear. Careful attention was paid to details such as the graphics and the chrome and rosewood furniture. The building is sited at an angle to its small corner site so that sufficient space is provided for vehicle movement.

Figure 68. National By-Products looking south

115 National By-Products
Eleventh and Locust Streets
Des Moines
Charles Herbert and Associates, architects
1965

This is a remodeling of an old building. The terra cotta facade was retained as were the basic window sizes. The old multi-paned windows were removed, and gray tinted glass set in black aluminum frames was substituted. Black opaque glass spans between the upper and lower windows. A black strip of aluminum runs continuous above the lower window, upon which graphics are placed. The lower floor is all rental space. The upper floor is occupied by the owner and is furnished in off-white walls, orange carpet, and teak and oak furniture.

Figure 69. Northwest Des Moines National Bank looking east

116 Northwest Des Moines National Bank
Beaver and Urbandale Avenues
Des Moines
Brooks-Borg, architects
1967

Brenton banks have become leaders in Iowa's architecture, and this is another example. The long bank has a two-story banking floor with clerestory glass continuous at both sides. On the south, flanking the main banking area, are offices, and on the north are the teller and drive-up stations. Entrance is gained at either end under hooded and louvered mechanical areas. Large concrete fins form a canopy over the north side drive-up windows. On the south side a paved circular plaza with a monumental concrete circular bench furnishes an attractive foreground for the building.

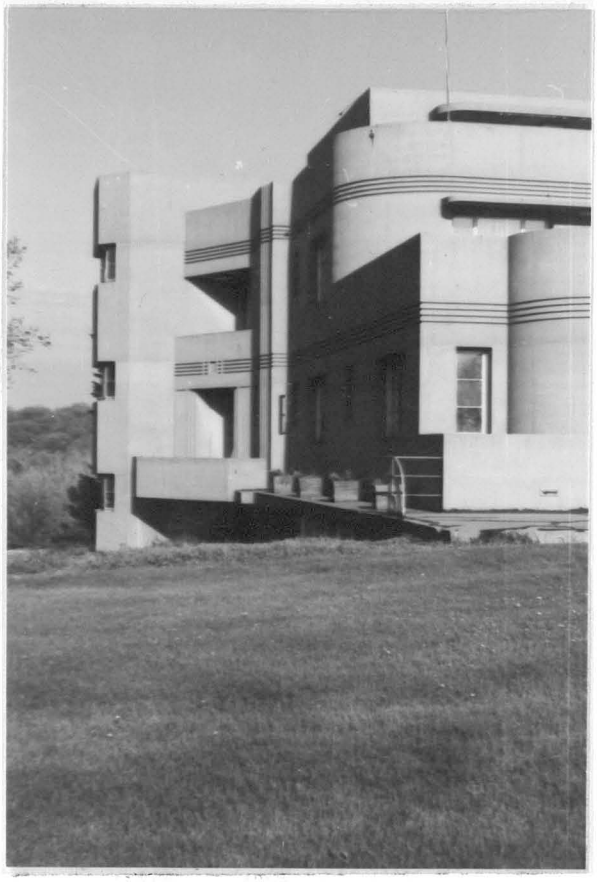

Figure 70. Open Bible College looking north

117 Open Bible College Administration Building
2633 Fleur Drive
Des Moines
E. E. Butler, designer
1936

Formerly the E. E. Butler residence until 1966, this house was designed by its owner in the International Style. Sited on a high hill above the Raccoon River valley, its fifteen acres offers a magnificent view. Its concrete construction, flat roof, and curving volumes are typical of the International Style of the 1920's and 1930's.

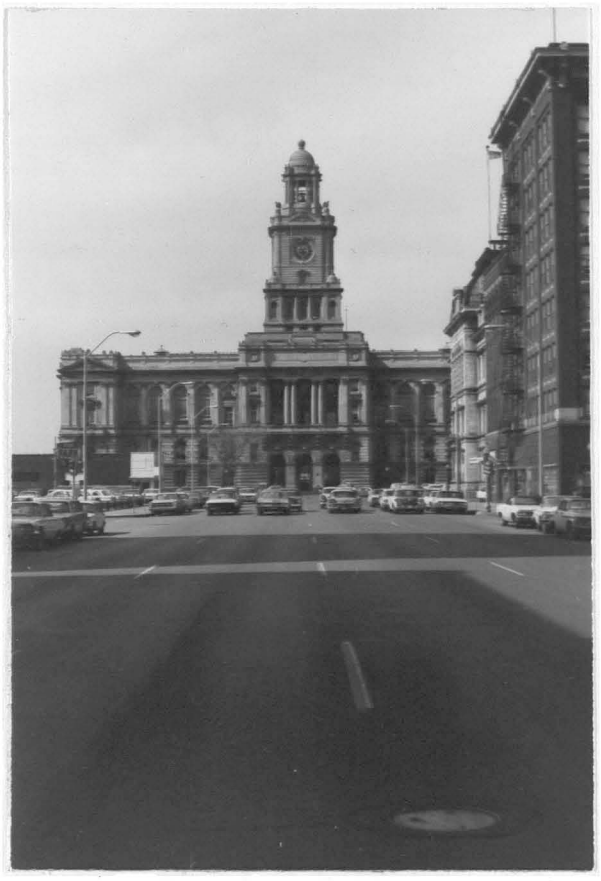

Figure 71. Polk County Courthouse looking west

118 Polk County Courthouse
Fifth Street and Court Avenue
Des Moines
Proudfoot and Bird, architects
ca.1901

The Courthouse is generally in a modified Renaissance style. The main building is four stories high and is surmounted by a tower. The center of the building is open at each floor to the roof. The exterior of the building is in good repair, but the interior is cluttered with storage.

Figure 72. Robertson House looking east

119 Albert Robertson House
331 28th Street
Des Moines
Nourse and Rasmussen, architects
1900

Originally the James Weaver House, it at first had pasture land to the east. To the rear of the coach entrance on the north are a barn and coachhouse. Carpenter Gothic carving in its gable fascias and diamond patterned windows decorate the house. The door is outstanding, a large Baroque shell decoration shielding the entrance. The house is three stories at the front and four at the rear. Carved panel doors and a top floor ballroom highlight the interior.

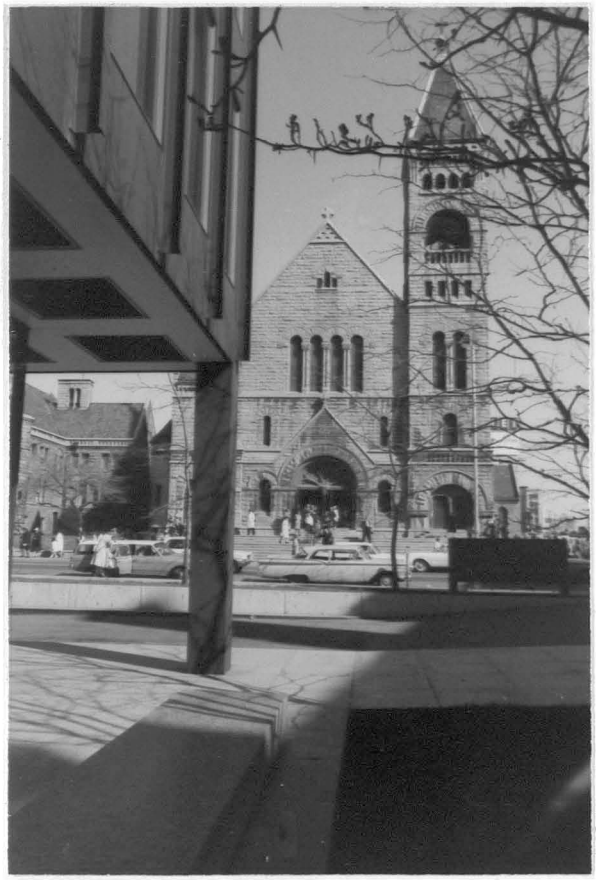

Figure 73. Saint Ambrose looking north

120 Saint Ambrose Cathedral
Sixth and High Streets
Des Moines
Architect unknown
ca. 1889

St. Ambrose is built in the Romanesque Revival style. Massive stone and large arches are dominant characteristics. To the west of the cathedral is the rectory, and between these two buildings there is a lovely intimate space, cloistered on the north and east and open to the Home Federal Building across the street on the south.

Figure 74. Terrace Hill looking west

121 Terrace Hill
2500 Grand Avenue
Des Moines
W. W. Boyington, architect
1867

The house now called the Hubbell Mansion was built by B. F. Allen, a local entrepreneur, at a cost of $250,000. After bankruptcy in 1874, he was forced to sell to F. M. Hubbell for $55,000. At first the grounds extended from Twenty-second to Twenty-eighth Streets and from Grand to the Raccoon River. Victorian, mansard-roofed, and towered, the house is now a semi-museum. A carriage house to the west sheltered horses in the walk-out basement.

Figure 75. 3660 Grand looking northeast

122 3660 Grand
3660 Grand Avenue
Des Moines
Brooks-Borg, architects
ca. 1957

This luxury apartment, known by its address, is a classic first phase building. High limestone walls form a base for nine residential floors. Each floor is a continuous ribbon of glass, while the structure is covered by a continuous ribbon of green slate. Drapery liners are supplied by the apartment to maintain an orderly exterior appearance.

Figure 76. Trier House looking southeast with carport at left

123 Trier House
6880 Northwest Beaver Drive
Johnston
Frank Lloyd Wright, architect
1957

This was Wright's only house in Des Moines, and one of the last he designed before his death in 1959. The materials are red tile and dark-stained wood. Two clear plexiglass domes introduce light into the main house and into a utility space. The living quarters are strung out in linear form, while, at a right angle, a carport roof carries over the utility space. The living room has a higher roof and presents clerestory glass to the north; the south exposure has long windows. A large masonry mass, the fire place, terminates the higher roof at the east. The lower bedroom wing recalls the clerestory windows to the north (and the road) and the larger windows to the south (and a long view).

124 Allied Construction Services
2122 Fleur Drive
Des Moines
Karl Keffer Associates, architects
1962

Brown brick and brown tile enclose an office and warehouse for this varied-service construction company. The office wing projects to the east at the second floor level, supported by rhymthic masonry piers. A horizontal ribbon of glass continuous except for the structural piers lights the offices. At the lower level, a recessed lobby of glass is open two stories and crowned by a large skylight. The landscaping is simple, but noteable. Circular gravel beds have a few large stones as sculptural features, and from the larger gravel circle, a handsome sign is the only graphics displayed.

125 Bambino's Restaurant Remodeling
2719 Ingersoll
Des Moines
Brooks-Borg, architects
1963

The facelifting of a small brick building was done by a series of three arches, the center one containing a wood door, and the flanking ones containing windows. White-painted brick is echoed by white ornamental iron gates in front of the windows.

126 Banker's Life Building
711 High Street
Des Moines
McBroom and Higgins, architects
1939

NO— gneiss below, limestone above

In rich materials of dark marble and gray granite, this building is typical of the form which resulted from an early exploration of the modern architecture. Its derivation can be traced to the International Style;

its stocky masses and grand entrance were influenced by buildings like Goodhue's Nebraska State Capitol and Hood's McGraw-Hill Building in New York.

127 Old Bankers Trust Building
607 Locust Street
Des Moines
Architect unknown
Date unknown

This building was originally eight stories high, with the top four stories added later. Granite on the street level becomes red brick above the second floor. Large rectangular windows are varied by arched windows at the seventh and twelfth floors.

128 Blue Line Storage Company
226 Elm Street
Des Moines
Architect unknown
Date unknown

An old brick warehouse has the flavor of Italian Romanesque with its crenellation at roof level and tower at northeast corner. Large arched windows at ground level are the only other variation in the plain brick walls.

129 Larnerd Case House (now Borg House)
3111 Easton Boulevard
Des Moines
Larnerd Case, builder
1847

This is reported to be the oldest house in Des Moines. The original house was four rooms and an attic. It has been added to several times: front dormer, 1880; east chimney, 1896; and west sleeping porch, 1924. The front door, side lights, and trim are original. Walnut from the

site was used in building the first house.

130 Brady Motorfrate
2150 Grand Avenue
Des Moines
Charles Herbert and Associates, architects
1967

A bold structure of cantilevered concrete is this trucking firm's administrative offices. The solid side walls are precast concrete slabs with hollow core inside, normally used as a structural floor. All north and south walls are dark glass. The front half of the ground floor is a graveled sculpture garden, extending out to the sidewalk on a raised platform.

131 Central Christian Church
Ninth and Pleasant Streets
Des Moines
Foster and Liebbe, architects
1889

This stone church was built in the Romanesque spirit at a cost of $100,000. Its stained glass windows are interesting.

132 City Library
First and Library Streets
Des Moines
Architect unknown
1904

A Greek Revival character executed in pink stone is Des Moines' Library, located on the bank of the Des Moines River. Huge arched windows introduce light into the second floor. The center of the building is open to the roof, with a grand staircase at the west side.

133 First Methodist Church
Tenth and Pleasant Streets
Des Moines
William Foster, architect
1905

Furnishing a handsome vista for the north of Tenth Street, this white stone building tops a hill with its Renaissance Revival. A Greek portico of four columns shelters the main entrance above monumental steps. A circular sanctuary is topped by a copper covered dome.

134 First Unitarian Church
Bell and Casady Drive
Des Moines
Amos Emery and Associates, architects
ca 1957

In the romantic character of Wright's Organic Style, this church lies on the border of a wooded residential area. Red brick and light stained wood are the materials. A large, gently sloping roof covers the sanctuary, whose north wall is diagonal wood and glass.

135 Foster Drive Residential Area
Foster Drive, south of Grand Avenue
Des Moines
Architects vary
Dates vary

One of Des Moines' loveliest residential areas is this shady, winding street on a bluff above the Raccoon River. Many large houses with spacious grounds are located here, with the predominate dark brick unifying the neighborhood.

136 Frank Glass House
Twenty-third and Willomere Streets
Des Moines
Frank Glass, architect
ca. 1960

Grooved plywood furnishes the siding for this cube-shaped house. A bridge reaches to the entrance, and a screened porch cantilevers to the west off of the living room. Bedrooms are at the lower level.

137 Great Western Freight House
Seventh and Cherry Streets
Des Moines
Architect unknown
1888

Brown brick and large, rhythmic arches combine to make one of downtown Des Moines' most charming buildings. A fifty foot addition was made on the west end in 1930. It is now used for paper storage by the Des Moines Register and Tribune newspapers.

138 Hawkeye Security Remodeling
Eleventh and Walnut Streets
Des Moines
Charles Herbert and Associates, architects
1964

Formerly two buildings of entirely different character, this insurance company was enlarged and the two buildings unified. A new ground floor face of cast stone windows and gray tile was added, and at the upper levels, limestone was added to the one brick building to unify that portion. Steel angles form a screen over existing windows at the upper levels, and a penthouse of gray tile is at rooftop. The entrance canopy has handsome graphics incorporated, and the quarry tile lobby material extends outside to the curb.

139 Hoover High School
Aurora and Forty-seventh Streets
Des Moines
Dougher-Frevert-Ramsey, architects
1967

Under construction at this writing is this school of brick and concrete.

140 Hotchkiss House
2615 Druid Hill Drive
Des Moines
Walter Hotchkiss, architect
1956

This architect's house nestles into a hillside, one story at the east and two at the west. A brick wall at the lower level extends past the house and becomes a retaining wall. The upper floor is a simple box of glass and weathered wood, presenting a solid face to the street and glass to the woods.

141 Hoyt Sherman Place
Fifteenth and Center Streets
Des Moines
Architect unknown
1877

Now the Des Moines Women's Club, an addition was made in the 1950's to furnish necessary space. The old Victorian house is still obvious, with its tower and arched windows.

142 Iowa Historical Building
East Twelfth Street and Grand Avenue
Des Moines
Architect unknown
1896-1899

Designed in the Italian Renaissance Revival style is this symmetrical white stone structure. At its top is a narrow dome, and all floors are

open to it. The entrance is monumentalized by a Greek portico.

143 Log Cabin
First and Elm Streets
Des Moines
Architect unknown
ca. 1837

This cabin was moved here and restored to commemorate the location of the first structures of Des Moines. Here mortised and tenoned joints and wood shutters and doors may be studied. The chimney is new and more refined than the original would have been, as is the foundation.

144 Market Building
Second and Court
Des Moines
Architect unknown
ca.1865

This is one of the oldest buildings in downtown Des Moines. Cast iron columns support the front elevation, and Victorian cast iron lintels span the windows. The building is in poor condition.

145 Miller House
127 Tonawanda Drive
Des Moines
Architect unknown
Date unknown

Built by an artist, this house is now owned by a bachelor architect. A reverse sloping roof opens a story and one-half of glass to the west. An open plan includes one bedroom and living room and kitchen.

146 Orchard Place
925 Porter Avenue
Des Moines
Charles Herbert and Associates, architects
1965, 1968

This is the Des Moines Children's Home for emotionally disturbed

children. Lying half in and half out of the hillside, a brick lower floor supports an upper floor of wood shingles. Square sloping roofs are also wood shingles as are the cantilevered boxes which contain storage. Sleeping, living, and eating facilities are on the upper floor, while classrooms and multi-purpose areas are on the lower floor. A second building will be completed in 1968.

147 Oxford Hotel
106 Fourth Street
Des Moines
Architect unknown
1881

A front elevation reminiscent of Paris faces the hotel. A Victorian mansard roof is the fourth and top floor. The irregularity of the front makes an interesting building.

143 Parkview Apartments
Forty-fifth Street and Grand Avenue
Des Moines
Brooks-Borg, architects
1962

A romantic solution to a small luxury apartment is furnished by balconies of arched steel, reminiscent of New Orleans wrought iron. Well-proportioned brick massing contrasts to the lacy steelwork in this five story structure.

149 Penn Mutual Life Building
2210 Grand Avenue
Des Moines
Charles Herbert and Associates, architects
1961

A simple building is made interesting by a textured brown brick, articulated design of the brickwork, dark glass and plaster spandrels.

150 Pioneer Hi-Bred Company Remodeling
1226 Mulberry Street
Des Moines
Amos Emery and Associates, architects
1966

Two buildings were unified to become one by covering the existing brick with dark gray tile on the first floor and light gray brick at the two upper levels. Dark glass is set in articulated openings in a new window pattern.

151 Polk County Welfare Building
Sixth and Park Streets
Des Moines
Amos Emery and Associates, architects
ca. 1957

This small building is another clear example of first phase development in modern architecture. Green mosaic tile closes the end walls of the main building, while the long walls are all glass. A separate wing extends to the south, of solid tile cantilevered over a low glass ribbon at ground level.

152 Robinson Brothers Steel Company
1500 Scott Street
Des Moines
Barancik, Conte, and Associates, architects
1954

On a visit to Des Moines in the middle 1950's, Philip Johnson, the well-known New York architect, called this building the best in Des Moines. Disregarding the office section to the east, which is not well integrated, the higher building is interesting. From a low brick base, the remainder of the walls is made up of small panes of glass.

153 Rock Island Railroad Depot
Fourth and Vine Streets
Des Moines
Architect unknown
Date unknown

The depot, behind the clutter of canopies, is a handsome brick building of Romanesque Revival character. A broad hip roof of tile covers a two story structure with large arches. An interesting old arched steel canopy covers the intersection of the street with the railroad tracks. Notice the steel and glass pattern in the south side of this canopy.

154 Ruan Company Building Remodeling
Third Street and Keosauqua Way
Des Moines
Griffith and Kendall, architects
1964

This structure was updated by introducing gray glass to the horizontal bands of windows and an exposed amber aggregate concrete panel to the spandrels. The wall at the sidewalk also became exposed aggregate.

155 Saddlery Building
311 Court Street
Des Moines
Architect unknown
Date unknown

This building has a cast iron front at the first of five stories. Victorian stone arch lintels span the upper windows.

156 Addition to Saint John's Lutheran Church
Sixth Street and Keosauqua Way
Des Moines
Griffith and Kendall, architects
1966

This addition was so successful that it is difficult to tell where the old stops and the new begins. A new wing to the southwest was added, as well as a new tower. The existing steeple was replaced on the new tower. A delightful interior courtyard was created by the construction of open cloisters of concrete.

157 Saint Paul's Episcopal Church
Ninth and High Streets
Des Moines
Foster and Liebbe, architects
1885

A well-proportioned church of pink granite, its parish house was added in 1951. An original tower was removed in 1939 due to deterioration, and a new steeple of Cor-Ten steel was added in 1963. A triangular rose window and interior wrought iron clustered columns are unusual features.

158 Salisbury House
4025 Tonawanda Drive
Des Moines
Ben Boyd and William Moore, architects
1923-1928

A replica of King's House in Salisbury, England, this house was built by Carl Weeks at a cost of over one million dollars. Much of the building materials and many of the furnishings were imported from England: the exposed beam ceiling in the Great Hall was taken from a sixteenth century inn in Salisbury. A Gothic porch is on the north; a flint and stone Tudor section makes the eastern part of the house; and a brick

section on the west is English Gothic. The house is open to the public, and it contains many antique and art treasures.

159 Shamrock Inn (now Heating Wholesalers)
107 Southwest Second Street
Des Moines
Architect unknown
1854

This building is reported to have once been the Shamrock Inn, an early Des Moines hotel. It has been extensively remodeled, and it is difficult to confirm this story.

160 Southern Hills Residential Area
Park Avenue and Southwest Thirty-fifth Street
Des Moines
Architects vary
Dates vary

This is Des Moines' newest area of luxury housing, overlooking the Raccoon River valley and the downtown skyline. Many of the houses here are interesting. One, the Goldman House at 3417 Southern Hills Drive, was designed by the internationally known Richard Neutra. The Glazer House at 3016 Southwest Thirty-seventh Street was designed by Amos Emery and Associates in 1966. The Stoner House at 3708 Southern Hills Drive was designed by Jack Bloodgood in 1965. The Zarley House at 3709 Southern Hills Drive was designed by James Lynch and Associates in 1966. The Anderson House at 3017 Southwest Thirty-seventh Street was designed by Wetherall, Harrison, and Wagner in 1963. The Gutfreund House at the southern tip of Onondaga Point was designed by Jack Bloodgood in 1967. The Kruidenier House at 3409 Southern Hills Drive was designed by John Normile in 1962. The Winberg House at 3500 Southern Hills Drive was designed by Wetherall, Harrison, and Wagner in 1963, and the Winberg House

at 3012 Southern Hills Drive was designed by Walter Hotchkiss in 1966.

161 Studebaker School
300 East County Line Road
Des Moines
Charles Herbert and Associates, architects
1965

Each classroom is expressed by its own pyramidal roof and skylight. The masonry is eight inch square tile of varying brown color. The school is designed for an addition on the north.

162 Tenth Street Parkade
Tenth and Walnut Streets
Des Moines
Architect unknown
ca.1958

A straightforward parking garage has sloping concrete floors which carry the cars up to a parking space. To come down to the exit, a car uses the helical ramp at the northwest corner. Pleasant landscaping and the simplicity of form make this an asset to downtown Des Moines.

163 Tibbs House
4804 Southwest Sixty-ninth Drive
Des Moines
Thomas Tibbs, designer
1965

The owner and designer is director of the Des Moines Art Center. The house has vertical wood siding and simple detailing. An entrance deck runs along the east side of the house.

164 West Grand Towers Apartments
3663 Grand Avenue
Des Moines
Roland Wilson and Charles Herbert and Associates, architects
1963

Standing across the street from another luxury apartment of the

same approximate mass, the Towers and its neighbor have become skyline landmarks on the west side of town. Precast concrete balcony panels contrast with light brown brick, and a handsome entrance is protected by a concrete waffle slab canopy.

165 Westside Library
5000 Franklin Street
Des Moines
James Lynch and Associates, architects
1966

The main building has brick end walls with a glass side wall to the north (and the street). Exposed concrete tees span a high ceiling. Inside, handsome furniture and walnut built-in desks give a pleasant place to study.

166 Ankeny State Bank
Third and Cherry Streets
Ankeny
Charles Herbert and Associates, architects
1965

A remodeling of an old brick building is similar in treatment to the remodeling of Hawkeye Security (Guide number 138). Two inch square wood strips form the window screen on this project. The graphics are also similarly handled, a subtle understatement of the bank's name.

167 Flynn Farm
Highway 90 and Interstate 80
Clive
Architect unknown
1868

A Victorian farmhouse is the center of a group of farm buildings. Development plans for the several hundred acre farm, formerly the Clive Prison Farm, have been drawn, and housing, commercial and industrial

development is scheduled.

168 Iowa Clay Pipe and Tile Company
Highway 141 and Interstate 80
Grimes
Charles Herbert and Associates, architects
1963

A small administration building for a tile manufacturing plant stands free of its auxiliary buildings. Of light brown brick and concrete, the two story building is entered at the second floor via a bridge.

169 Trustees Student Center
Simpson College campus
Indianola
Charles Herbert and Associates
1967

An exciting building of many forms and many levels, all opening to a full height gallery at the center, is topped by a series of skylights over the gallery. Sloping copper roofs contain clerestory glass.

170 Saint Paul's Presbyterian Church
6426 Merle Hay Road
Johnston
Charles Herbert and Associates
1963

Winner of a 1964 Merit Award from the Iowa Honor Awards program, this church is striking in its simplicity. A huge mansard roof of wood shingles covers the sanctuary, inside which the wood structure and wood deck are exposed. This is designed for a second stage which will be added at the west end of the building.

171 Universalist Church
Fourth and Market Streets
Mitchellville
Architect unknown
1870

A one story wood Colonial church was founded by Thomas Mitchell, prominent in the early history of Des Moines.

172 Weeks and Leo Company
4000 Northwest One-hundredth Street
Urbandale
Carl Hunter, architect
1966

A cosmetics manufacturing company is housed in this warehouse and office structure. Precast concrete "tees" (concrete slabs with a flange at a ninety degree angle) are set upright as exterior walls. Naturally weathered wood emphasizes the entrance at southwest and wraps a higher element to the north. The owners are to be congratulated for buying a four-sided building, rather than two or three cheap sides and a pretty face.

173 Magic Car Wash
Seventy-first Street and University Avenue
Windsor Heights
Charles Herbert and Associates
1962

Alternating concrete block projects to make a textured wall on the west wall of this car wash, while a glass viewing corridor cantilevers off the east side. A small office projects to the east.

Dubuque

The first claim by a white man in Iowa was that of Julien Dubuque in 1788. The city of Dubuque later grew out of his lead-mining operation and was named for him. After his death in 1810, there was no settlement until the area was opened in 1833. Then it became one of the first towns to be established in the Iowa country, and it had a school and several stores, saloons, and cabins by the end of 1833. In 1834 the first church in Iowa was built here, a log structure. The first bank in Iowa was chartered here in 1836, and in the same year the first newspaper was begun. It was the largest city in Iowa until the 1850's when Burlington surpassed it. The University of Dubuque, Wartburg Seminary, and Clarke College were all founded in the decade of 1850-1860. The Mississippi River was bridged in 1868. By 1860 Dubuque was again the largest town as many settlers were attracted to the fertile northeast of Iowa. Lumber mills replaced mining as the dominant industry by 1860. By 1915 that industry was succeeded by the wood working factories.

Dubuque today is an old city. Its downtown area has many aged buildings. The first floor has often been refaced, but the upper floors remain as they were, of Victorian brick or cast iron bay windows or many other varieties. In the residential sections in the surrounding bluffs, many fine old homes remain, several of which have been restored.

St. Donatus, eleven miles to the south, was founded by a group of settlers from Luxembourg in the 1850's. They built a stone village in the tradition of their European background. Today it is in a fair state of preservation, a tiny and loosely arranged group of houses.

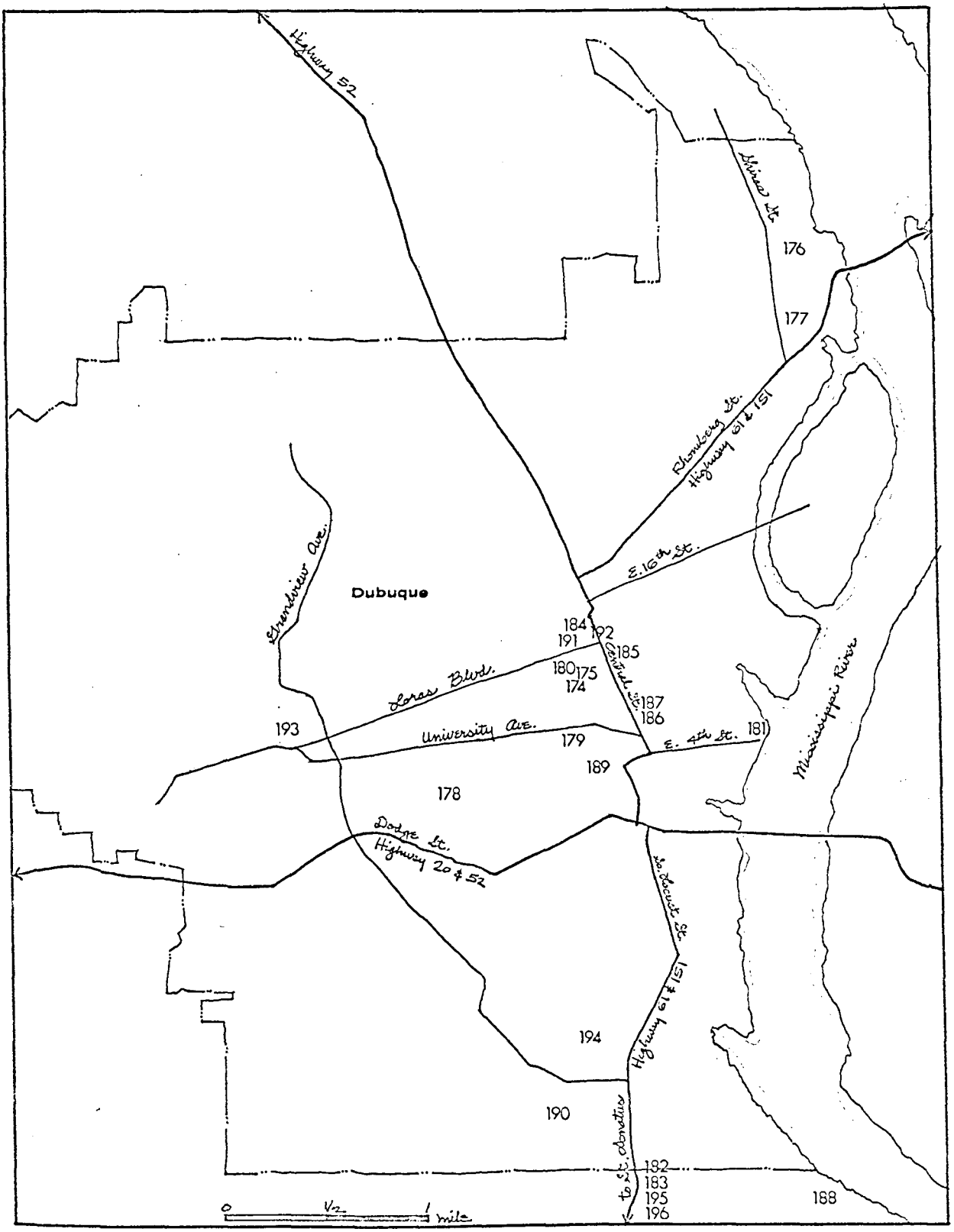

Figure 77. Guide map to Dubuque

Figure 78. Archbishop's Residence looking northwest

174 Archbishop's Residence
Eleventh and Locust Streets
Dubuque
Architect unknown
Date unknown

This red sandstone house was designed in a Romanesque Revival style. It was built by Frank Stout, a prominent lumberman in early Dubuque. The massive stone arches form a front portico terminated by a corner turreted tower.

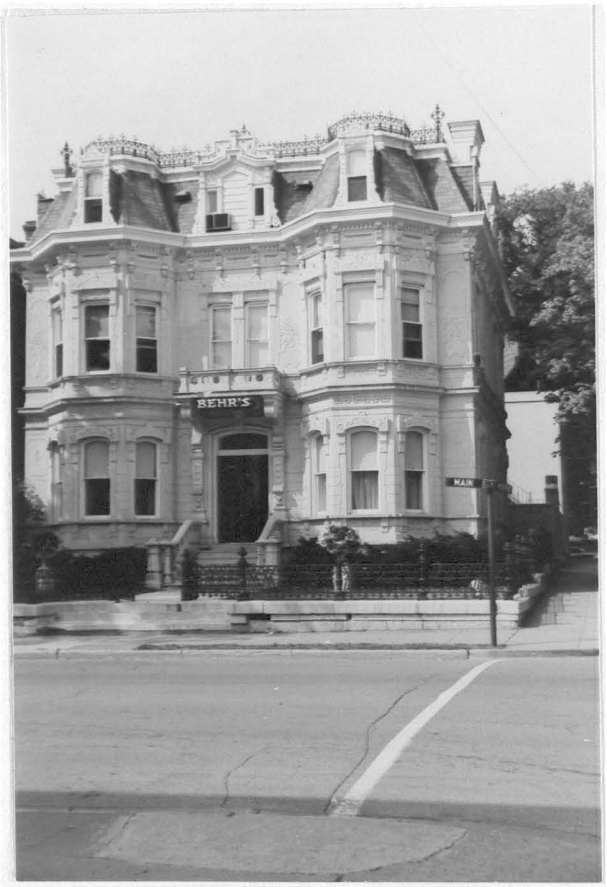

Figure 79. Behr's looking west

175 Behr's Funeral Home
Main and Fifteenth Streets
Dubuque
Architect unknown
Date unknown

This Victorian house has been restored and is in use as a funeral home. Mortuarys have been responsible for the preservation of many old homes in Iowa. Behr's is a symmetrical, stone, three story structure with the third floor a mansard roof. It is topped by cast iron lace cresting, and it is contained by wrought iron fencing. Two full height bays balance the front elevation to either side of the center entrance.

Figure 80. Old Pavillions looking southeast

176 Eagle Point Park Pavillions
Highway 61 and Shiras Boulevard
Dubuque
Architect unknown
ca.1935

The old pavillions here were WPA projects in the 1930's. The influence of Frank Lloyd Wright is immediately obvious in the forms and materials. Rough limestone, dark-stained wood, and plaster make several buildings connected by terraces. One series of buildings arches up and over the drive, and a pedestrian tunnel creates a minature space adjacent. Inside are shelters, rest rooms, concessions, and meeting rooms. The exploration of the buildings is a thoroughly delightful experience, as is the discovery of clever details like the built-in lanterns on the

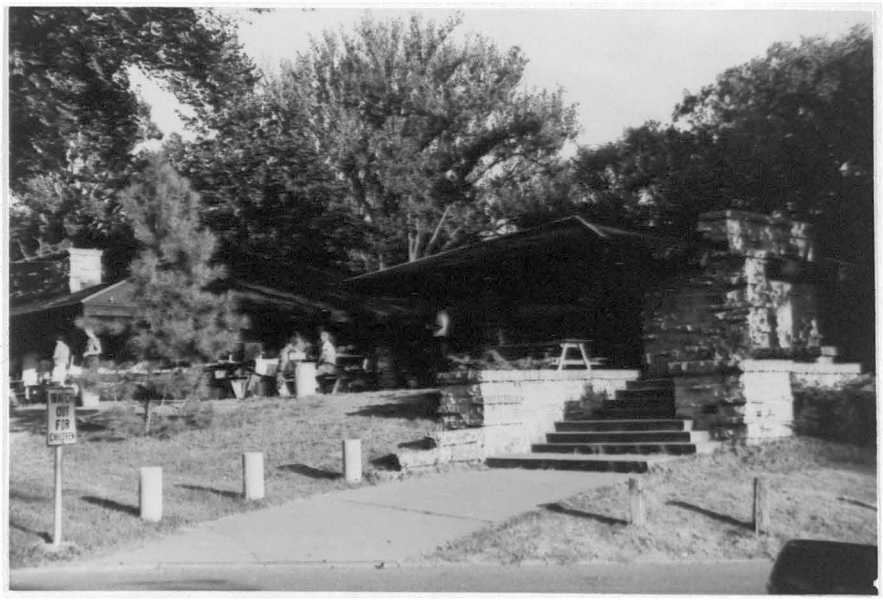

Figure 81. Old Pavillions looking south

Figure 82. New Pavillion looking east

terraces. The new pavillion at the top of the park was designed by Donald P. McGinn and Associates in 1965. A large, shingled roof floats above two massive stone piers, forming an open shelter.

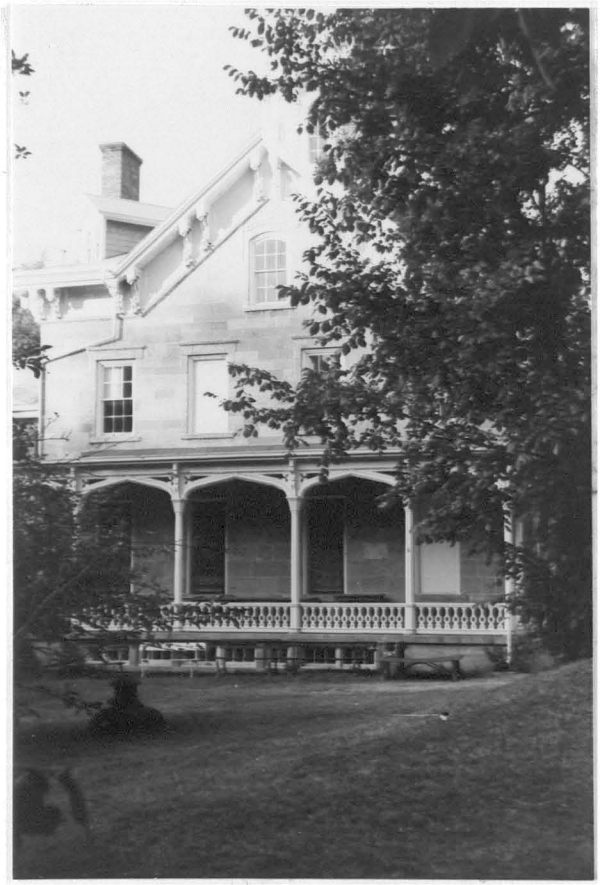

Figure 83. Ham Mansion looking northeast

177 Ham Mansion
Shiras Boulevard and Lincoln Avenue
Dubuque
Architect unknown
1838-1857

An eclectic design encompassing Gothic and Classic Revival with a southern plantation spirit is executed in yellow limestone and white-trimmed wood. The small wing to the northwest is the original house built in 1838. The main house is square in plan and is topped by an unusual roof with dormers at forty-five degree angles and an octagonal cupola. The house has twenty-three rooms and three stories. The house is now a museum open to the public. Adjacent is a "dog-trot" log cabin built in 1827.

Figure 84. Langworthy House looking northeast

178 Langworthy Octagon House
West Third and Alpine Streets
Dubuque
John F. Rague, architect
1847

This is the most outstanding octagonal house in Iowa and one of the finest in the United States. The red brick and ornamental iron contribute to a Victorian spirit. Bay windows project from first floor sides of the house and form balconies at the second floor. A servants' and kitchen wing extends from the rear of the house. A graceful two story portico on the south shelters the entrance and reflects the octagonal form. A low octagonal cupola with windows on four sides crowns the roof.

Figure 85. Lorenz Laundry looking south

179 Lorenz Laundry
461 West Eighth Avenue
Dubuque
Donald P. McGinn and Associates, architects
ca. 1964

The public side of this laundry presents an interesting face, but the rear is even more interesting. A series of narrow louvers from ground to roof provides exhaust for the laundering equipment. These louvers articulate a series of wall planes which push outward as they move eastward, taking maximum advantage of an angular site. A series of canopies cantilevered from the walls step up as the hill rises to the west, creating a protected loading area for the delivery trucks. The materials are concrete block walls and concrete structure.

Figure 86. Victorian house looking west

180 Residence
Fourteenth and Locust Streets
Dubuque
Architect unknown
Date unknown

This Victorian residence is a more usual type than Behr's, a block distant. It is not symmetrical, and its square mansard-roofed tower is common to larger homes. A bay window projects at the south, while the north part of the house recedes beyond the tower. Fanciful cast concrete arches typical of the Victorian era span the windows. Four elaborate chimneys protrude from the north roof.

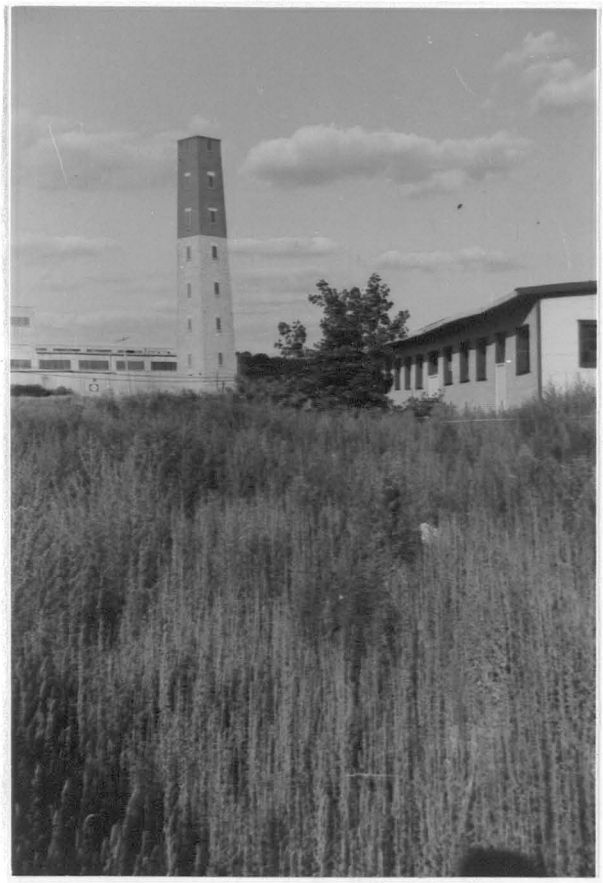

Figure 87. Shot Tower looking east

181 Shot Tower
East Fourth and Mississippi River
Dubuque
Architect unknown
1855

The tower, of stone and brick, rises one-hundred and fifty feet. Its walls are three feet thick at the base and twenty inches thick at top. The original use of the tower was to make lead shot. Molten lead was dropped through a screen from the top of the tower. The lead formed balls as it fell and hardened as it dropped into water at the tower base. It is one of two surviving examples of its kind in the United States.

Figure 88. Barn looking north

182 Stone barn
Behind Helmles' Store
St. Donatus
Architect unknown
ca. 1860

This barn is an excellent example of the European influence that was present in early St. Donatus. Small holes pierce the stone to allow light and ventilation to enter, and small windows under the roof line do the same. An irregular roof drops lower on the west as the ground falls in that direction. A wood timber lintel carrys the window opening, and wood timbers carry the roof load.

Figure 89. Residence looking north

183 Residence
East of Highway 52
St. Donatus
Architect unknown
1864

This four story stone building was built to house the first academy for girls in Iowa at a cost of $30,000. The academy was founded by Father Michael Flamming, who also helped establish St. Donatus. The fourth story is an attic space lighted by a series of seven dormers, and the roof is surmounted by a cupola. It is adjacent to a stone church built in 1857 with a tower one hundred and sixty feet high.

184 Assembly of God Church
Seventeenth and Iowa Streets
Dubuque
Architect unknown
Date unknown

A church with mixed character is this dark brown structure on the outskirts of the downtown area. The materials are brick and patterned shingles. An unusual brick chimney of careful design adds interest to the roofline. Angular pointed windows of Gothic influence repeat the angle of the roof.

185 Dubuque City Hall
Thirteenth and Central Streets
Dubuque
John F. Rague, architect
ca. 1857

A simple structure of styleless design is constructed of brick.

186 Dubuque County Court House
West Eighth and Central Streets
Dubuque
Fridolin Heer, architect
1890

This is a building not likely to be described as beautiful by anyone, but its distinctive design makes it of interest. It embraces elements of several styles in its brick and stone materials. It is basically a five story building with a central tower rising almost twice as high as its roof.

187 Dubuque County Jail
West Eighth and Central Streets
Dubuque
John F. Rague, architect
1857

This is a simple stone building with details borrowed from Egyptian

architecture. Columns and window heads are of cast iron and decorated with the Egyptian lotus blossom motif. In the basement is a dungeon, where the brick vaulted ceiling is only six feet high at the cell doors.

188 Julien Dubuque Grave
South of Dubuque overlooking Mississippi River
Architect unknown
1897

A circular tower of stone in a medieval crenellated design marks the grave of Dubuque's founder.

189 Residence
732 Fenelon Place
Dubuque
Architect unknown
Date unknown

A house in the brick Federal Style has been restored and is in excellent condition. Characteristic of this style are the long, narrow windows and the square shape of the house. A square cupola tops the low-pitched roof.

190 Residence
1133 Indian Ridge
Dubuque
Architect unknown
Date unknown

This unusual house was designed in the spirit of Wright's Organic Style. The brick house becomes two stories as the hillside falls away from the street. An unusual, low, square roof floats above the clerestory glass of the living room.

191 Residential Block
Main and West Sixteenth Streets
Dubuque
Architect unknown
Date unknown

A collection of apartment dwellings in the Victorian Style are brick with a mansard roof.

192 Saint John's Episcopal Church
Loras and Main Streets
Dubuque
Architect unknown
Date unknown

In a stone Gothic-influenced design, this church bears some similarity to the more elaborate Trinity Cathedral at Davenport. Two different roof pitches are articulated, and large dormers project from the upper roof. A circular rose window is over the main entrance.

193 Westminster United Presbyterian Church
2155 University Avenue
Dubuque
Perkins and Will
Date unknown

A steep-pitched roof rises from a stone base trimmed in copper. A triangular copper steeple rises from the peak of the roof. This is an example of the vernacular of church architecture in the 1950's, which has been termed an inadequate expression of religious architecture by many architects of the 1960's.

194 Wiedner House
Southern Avenue
Dubuque
John McMahon, builder
1835

One of the oldest houses in the city is this stone house which has

been restored.

195 Hilltop Chapel
Behind the Catholic Church
St. Donatus
Architect unknown
1885

This small stone chapel is a replica of the Chapel du Bilchen in Luxembourg, the country from which many settlers came to St. Donatus.

196 Residences
St. Donatus
Architects unknown
Dates vary

Many stone houses and barns remain from the days of the settlers from Luxembourg. The houses are two story and nearly styleless. Shuttered windows are functional and not decorative additions.

Grinnell

In 1853 Horace Greeley said, "Go West, young man, go West and grow up with the country." The person he said it to was Josiah Bushnell Grinnell, a Congregational minister in New York City. In 1854 Grinnell took the advice, and, with Dr. Thomas Holyoke and Rev. Homer Hamlin, he came West and founded the settlement that became Grinnell. Two rules were set by the founders: no liquor could be sold in the town under deed restriction; and land was to be set aside for a college campus. In 1855 Grinnell College was founded, to become one of the outstanding small colleges in the country. In 1882 the college and part of the town were destroyed in a cyclone, but they were soon rebuilt.

The town today is a small one of eight thousand population. It is unusual that it is distinguished by the work of several famous architects.

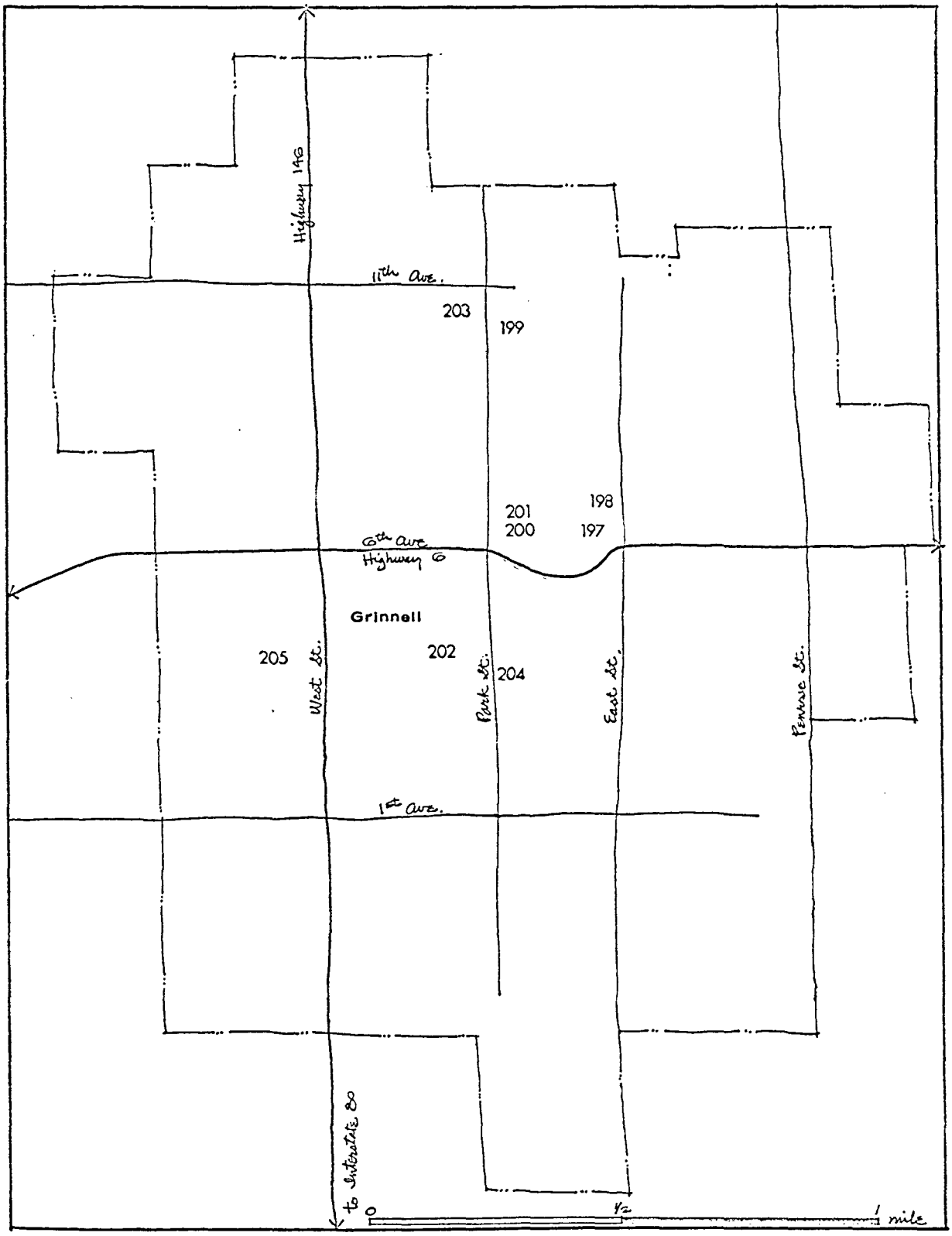

Figure 90. Guide map to Grinnell

Figure 91. Burling Library looking south with Forum at left

197 Burling Library
Sixty Avenue and High Street
Grinnell College campus
Grinnell
Skidmore, Owings, and Merrill, architects
1958

The Library's main entrance is from the campus side on the north, and it is reached by a bridge piercing the second floor, connecting to a cantilevered balcony continuous on the north side. A similar balcony on the south furnishes an outdoor study area. The north and south walls are two stories of glass above the entrance level, and the east and west walls are light brown brick. The roof at north and south overhands the same distance as the balconies, giving weather and sun protection. On the interior, a second floor stops short of the north and south walls, leaving two-story spaces at those exterior glass walls. Both floors are entirely open with the exception of the enclosed smoking room at second floor center.

Figure 92. The College Forum, looking north

193 The College Forum
Grinnell College campus
Grinnell
Skidmore, Owings, and Merrill
1964

The Grinnell student union is a quiet building of concrete, dark glass and mullions, and laminated wood, planned as a series of three square structural bays spaced by entrance lobbies. Inside, the building becomes a vibrant social center of up and down spaces and lively colors. At the first floor, which has a high ceiling, the three main bays house lounges and a grill, while the adjacent spaces are a billiards room, music and television parlors, card room, and a coffee house. Downstairs are offices and dining rooms. The furniture is outstanding; much of it was designed by the architect to fit the building. The roof structure is always exposed, cantilevered laminated beams and wood decking.

Figure 93. Norris Hall looking northwest

199 Norris Hall
Park Street and Tenth Avenue
Grinnell College campus
Grinnell
ca. 1959

This men's dormitory is in SOM's tradition idiom of exposed concrete structure with infill panels of brick and glass. The first floor is recessed to provide a covered arcade. Each dormitory room has one full wall of glass. There are two rooms to a structural bay.

Figure 94. Fine Arts Center looking west with Theater at right

200 Fine Arts Center
Sixth Avenue and Park Street
Grinnell College campus
Grinnell
Skidmore, Owings, and Merrill
1961

The Fine Arts Center is in the same idiom of design as Norris Hall, an exposed concrete structure with infill panels of brick and glass. Light brick of the same color as the Theater and Library creates unity among varying forms.

Figure 95. Roberts Theater looking south with Fine Arts at rear

201 Roberts Theater
Sixth Avenue and Park Street
Grinnell College campus
Grinnell
Skidmore, Owings, and Merrill, architects
1961

The Theater is a crescent-shaped building reflecting the natural form of the auditorium it contains. It is connected to the Fine Arts Center by a corridor. The roof structure is constructed of unusual, curving, precast concrete tees which are exposed above the light brown brick.

Figure 96. Merchant's National Bank looking northwest

202 Merchant's National Bank (now Poweshiek County National Bank)
833 Fourth Street
Grinnell
Louis Sullivan, architect
1914

Louis Sullivan's unusual banks are always eye-catching. This brick cube is trimmed with rich terra cotta carving at the front entrance, windows, and roof line. The dominating sculpture at the front contains a stained glass window. The brick is an unusual mottled brown. The interior was tastefully remodeled in 1964, preserving the spirit of Sullivan's design. The terra cotta trim is painted gold on the interior.

Figure 97. Voertman House looking northeast

203 Professor Robert Voertman House
1510 Broad Street
Grinnell
Walter Burley Griffin, architect
1915

Designed by a student and employee of Frank Lloyd Wright, this house recalls Wright's interest in Japanese architecture. The roof flares up at the edges of the gable, a Japanese form. Massive brick piers at the four corners become screened porches at the second level of each. Colored bricks make a design in stucco panels at intervals around the house. The symmetrical main building is balanced by a screened porch at the south and by a larger garage at the north. The house is well maintained and well landscaped.

204 Residence
828 Park Street
Grinnell
Architect unknown
Date unknown

An unusual little clapboard sided house has a mansard roof with bold, narrow, Greek Revival windows pushed through, giving a scalloped effect. The corners of the house are eased by short angled walls.

205 Spaulding Manufacturing Company
Fourth and Spring Streets
Grinnell
Architect unknown
Date unknown

This company was making buggies in the late nineteenth century when the automobile revolution struck. The switch was made to automobile construction briefly, but unsuccessfully. The product was then changed to bodies and cabs of vehicles. Now a seed company and the American Legion Hall, the original Spaulding name can still be seen on the buildings and on the tall chimney. The top of the latter has been removed, and the "SP" is missing.

Iowa City

Iowa City was established as a new town to become the capital of the Territory of Iowa. In 1839, three appointed commissioners selected this valley of the Iowa River as the site. The cornerstone of the Capitol, financed by sale of lands, was laid in 1840. In 1847, after Iowa had achieved statehood, the capital was awarded to Des Moines, more nearly the center of population. To pacify Iowa City, the new State University was located there. The first railroad reached the city in 1856. It was never a riverboat town as the river would not support river traffic, so the railroad succeeded only the stage coach as the major transportation means. In the 1870's the town had one of the largest breweries in the state. Around the turn of the century, a flint glass company was active, and Iowa City glass is a favorite antique item today.

The present Iowa City is a college town, active in social and cultural affairs, and presenting a favorable attitude to the art of architecture. Quality new architecture has been built in the last few years, and much old architecture has been well preserved. Strangely, no recent architecture on the campus of the State University of Iowa has been worthy of mention.

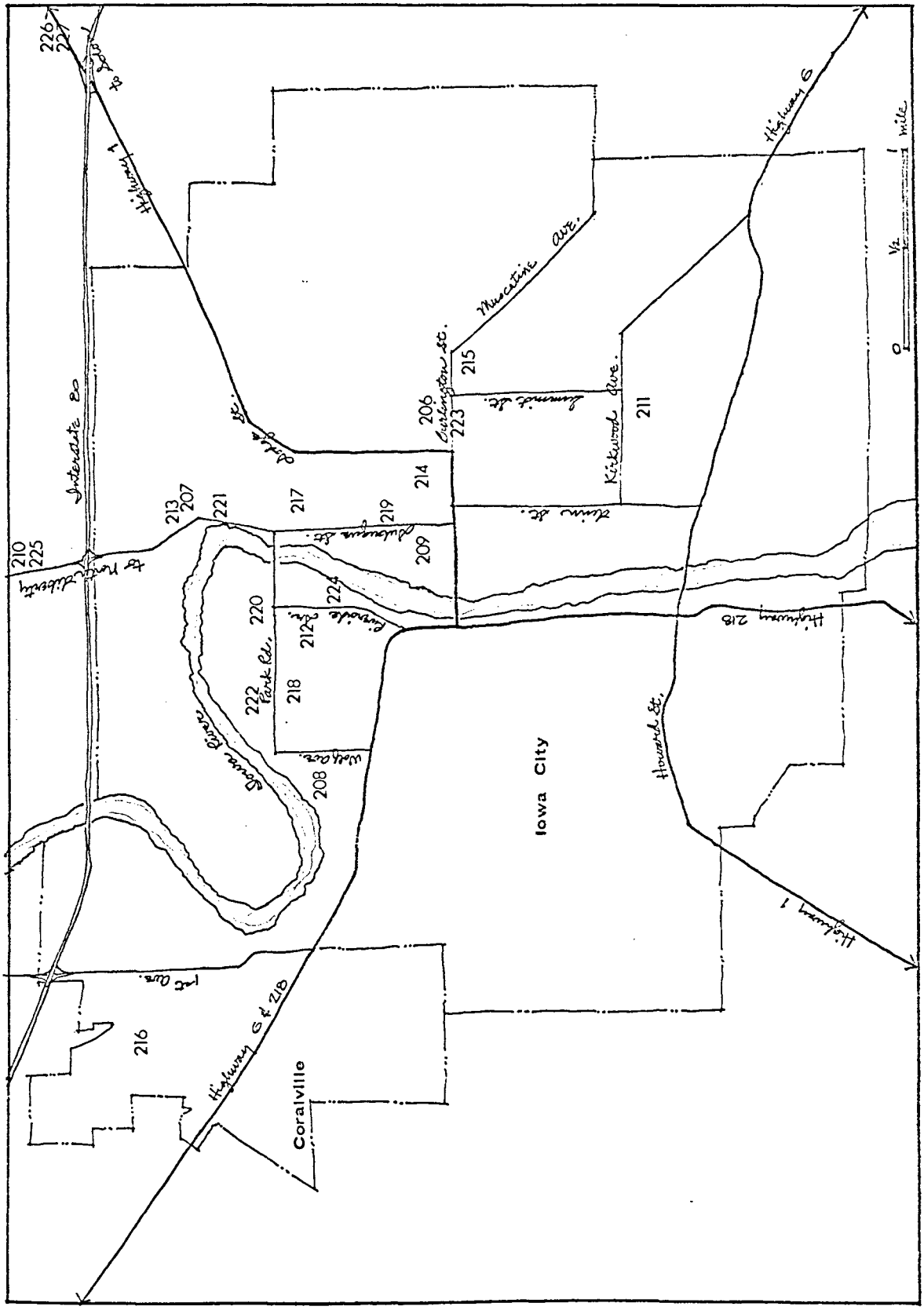

Figure 98. Guide map to Iowa City

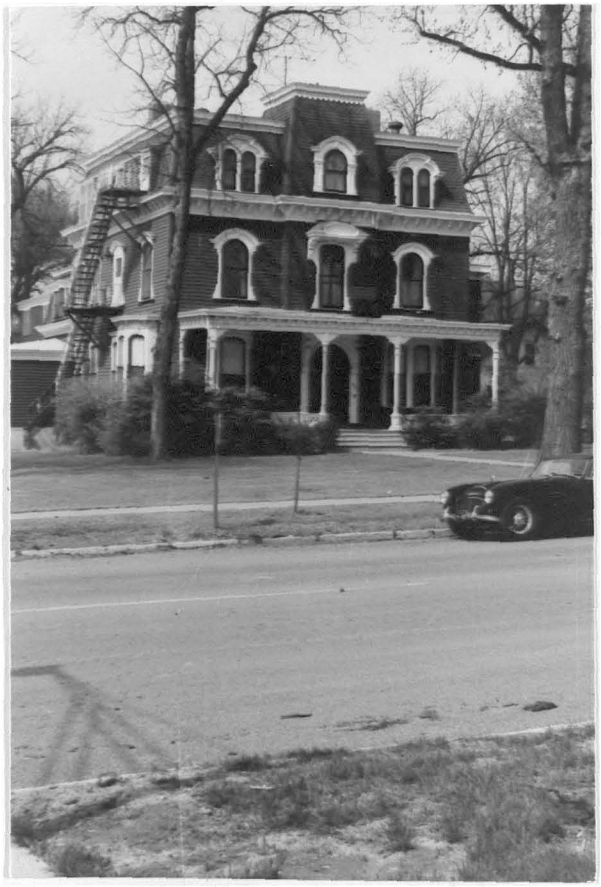

Figure 99. Alpha Phi House looking north

206 Alpha Phi Sorority House
College and Governor Streets
Iowa City
Architect unknown
ca. 1880's

This Victorian house has been restored during its ownership by the sorority. Dark gray painted clapboarding is trimmed in white and topped by a third story mansard roof of shingles. The wood arched windows are trimmed in white. Several of the fraternity and sorority houses in Iowa City have preserved large, interesting buildings.

Figure 100. Birch House looking east

207 Birch House
6 Forest Glen
Iowa City
Architects Crites and McConnell
1966

Sited on a hillside overlooking a beautiful wooded ravine is this wood and plaster house. At the front a narrow box reaches upward to trap clerestory light. The entrance deck on the south has a series of freestanding plaster planes for interest. Mostly closed to the street, the east exposure to the woods is opened up with much glass. One story becomes two as the hill drops away to the east.

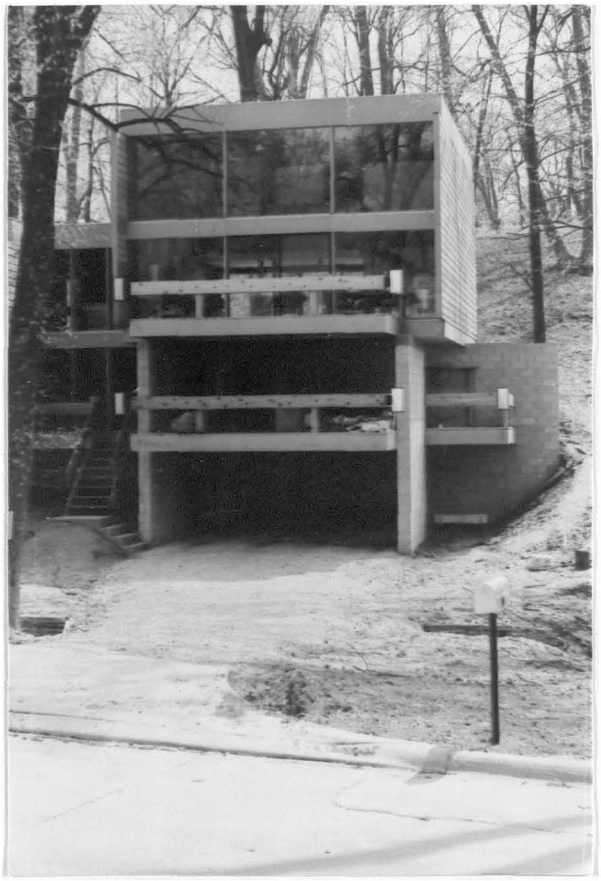

Figure 101. Braverman House looking south

208 Braverman House
River Street and Blackhawk Street
Iowa City
Architects Crites and McConnell
1967

On another sloping and wooded site, this house rises four stories above the street. The main portion is a two story wood cube resting on two story high concrete block walls. A large deck floats between the masonry walls and protects the carport. The upper floors have glass on the south and north exposures with a two story high living room. A wood sided wing to the east is three stories high.

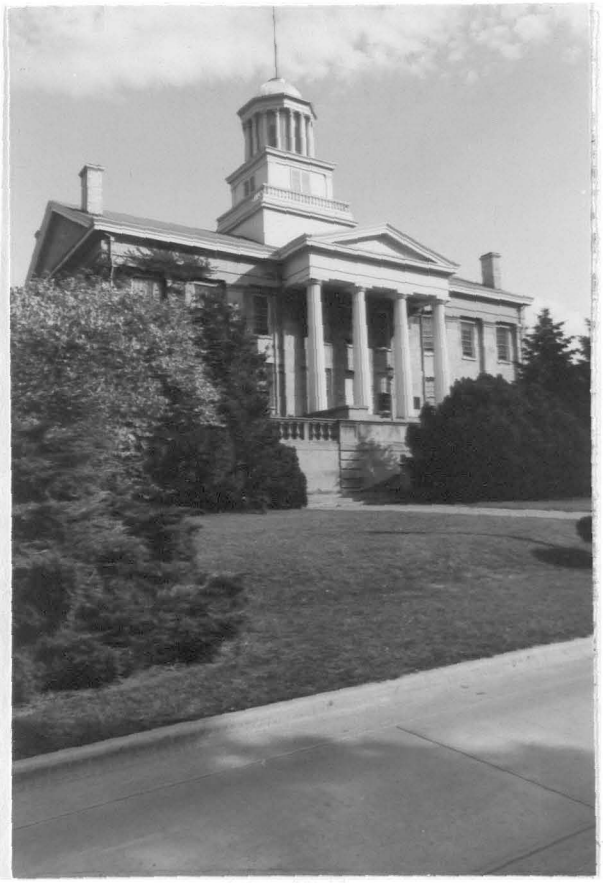

Figure 102. Old State Capitol looking east

209 Old State Capitol
Iowa Avenue and North Madison Street
Iowa City
John F. Rague, architect
1840-1842

This was built as the first Territorial Capitol for Iowa when Iowa City was founded as a new town. It became the first State Capitol upon statehood, until the capital was moved to Des Moines. To placate Iowa City, the new State University was established there, and the Capitol turned over to the University. It has an outstanding curving stairway at the interior center. With three foot thick walls and a gold-domed cupola, it adds Greek Revival features.

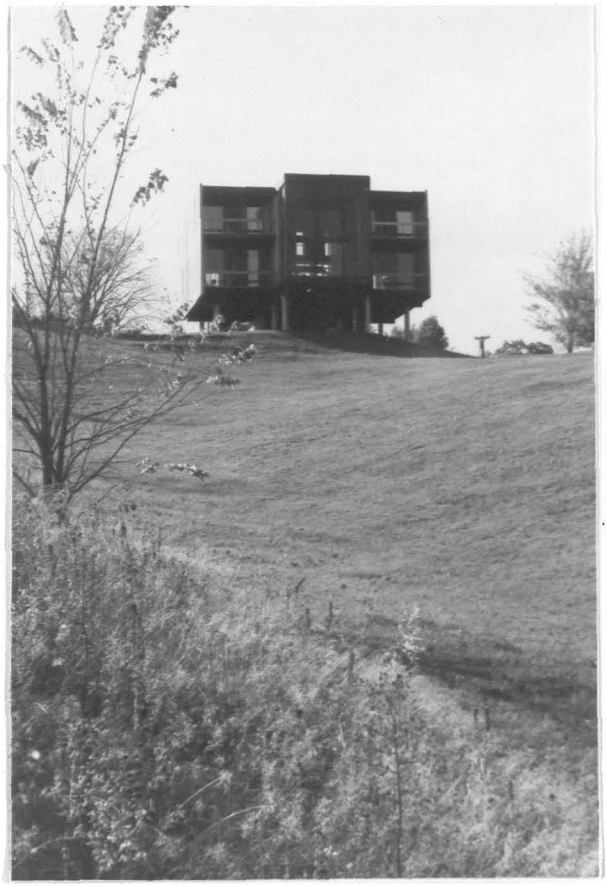

Figure 103. Kitzman House looking northwest

210 Kitzman House
12 Longview Knolls (off Highway 153)
Iowa City
Architects Crites and McConnell
1965

Grooved cedar plywood covers all walls, both inside and out, in this two story box raised on concrete legs. It is oriented to the southeast and a beautiful view out across the Iowa River valley. Built for a prominent Iowa artist, a two story living room is flanked by a studio and dining and sleeping rooms. A two story screened deck continues the living space outside. This was judged an Award of Merit winner in the 1966 Iowa Honor Awards program.

Figure 104. Plum Grove looking northeast

211 Plum Grove
Kirkwood and Carroll Streets
Iowa City
Architect unknown
1844

One of the oldest houses in Iowa City is this excellent home built by the first Governor of the Territory of Iowa, Robert Lucas. The brick two story house is almost styleless, with only the moldings and chimney showing some Greek Revival influence. It has been restored and opened to the public as a museum. Inside, it is furnished in the period of the 1850's. Each room has a fireplace, as that was the only method of heating other than Franklin stoves in those days.

Figure 105. St. Thomas More Chapel looking northwest

212 Saint Thomas More Chapel
North Riverside Drive
Iowa City
Leo C. Peiffer and Associates, architects
1967

Chapel is a deceiving name for this church seating several hundred people. Rising from the street, a twisting stair winds among ascending planes of concrete to an exterior deck and the main entrance. The church has siding of diagonal wood arranged in a triangular pattern and a roof curving upwards to the north. Inside, a crescent-shaped sanctuary focuses the eye on the altar, as does the rising roof. Laminated wood structure and wood decking are exposed on the interior, and well-chosen colors accent doors, a few walls, and the furnishings.

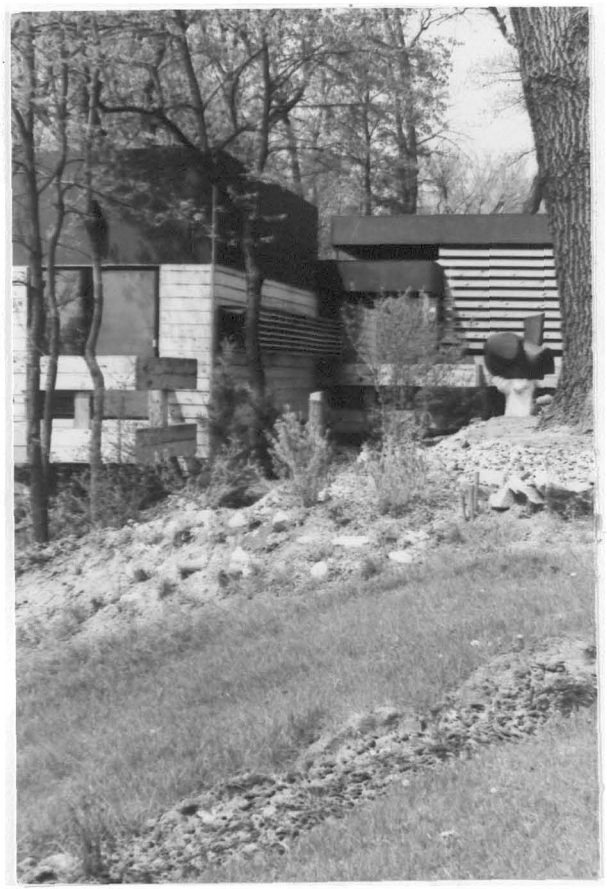

Figure 106. Schultz House looking north with sculpture at right

213 Schultz House
5 Forest Glen
Iowa City
Architects Crites and McConnell
1967

High on a bluff of the Iowa River, this wood-sided house steps down a forested hillside. Strong abstract planes create a series of planes from the house, balconies and carport. A horizontal screen at the carport is recalled in the smaller screen projected from the horizontal kitchen windows. A sculpture of related colors stands in the yard. Bold balcony lines are formed by double-wide beams and railings. It stands in contrast to another Crites house across the street.

Figure 107. Trinity Church looking northwest

214 Trinity Episcopal Church
College and Gilbert Streets
Iowa City
Architect unknown
1851

This Carpenter Gothic church is in an excellent state of preservation. A simple high-gabled roof is made more interesting by triangular dormers and gabled bays. The entrance is emphasized by a gabled roof rising from a shed roof vestibule. Gray-painted, batten-on-board wood siding makes a vertical pattern in which Gothic arched windows introduce light. The parsonage and offices extend to the left in handsome irregular forms.

Figure 108. Grant Wood House looking north

215 Grant Wood House
1142 East Court Street
Iowa City
Architect unknown
1858

In a beautifully restored house of Greek Revival ancestry, Iowa's most famous artist once lived. Hand-made brick and green arched shutters combine with white trim. The arched windows are recalled in the arched door. Fanciful brackets support the roof eaves, and three brick chimneys with corbeled brick tops rise from the sloped roof. The landscaping, including ivy vines on the house, is nature's contribution to a delightful home.

Figure 109. First Methodist Church looking southeast

216 First Methodist Church
Coralville
Architects Crites and McConnell
1963

This church of unusual form is wrapped in weathered wood siding and wood shingles. Projections of spaces make an interesting composition of the church and its auxiliary offices and meeting rooms to the north. The church can be seen from Interstate 80, and its powerful form dominates the skyline. An angular, low tower tops an equally angular sanctuary.

217 Black's Disneyland
424 Brown Street
Iowa City
Designers vary
Dates vary

A unique area is created at the rear of two old, large houses. Student housing has been built by the students themselves. Strange and unusual shapes and materials abound.

218 Davis House
Hutchison Avenue north off River Street
Iowa City
Architects Crites and McConnell
1965

This vertical wood-sided house received an Award of Merit in the 1966 Iowa Honor Awards program. Sited in a lightly wooded valley, the music room projects to the south, raised on concrete stilts.

219 First Presbyterian Church
26 East Market Street
Iowa City
Architect unknown
1856

This is the second oldest building of public assembly in Iowa City. The red brick structure had an addition in 1885 and was restored in 1932. A central square tower projects from the gabled sanctuary, emphasizing the entrance.

220 Log Cabin
City Park
Iowa City
Architect unknown
Date unknown

This log cabin, moved to the park, may have been the first structure in the city.

221 Mayflower Apartments
North Dubuque Street
Iowa City
A. Epstein, architect
1966

Co-educational student housing, privately owned, is sited on the bank of the Iowa River. A concrete structure of columns and beams is exposed, and the voids are filled with brown brick and glass. Facilities include a large lounge, recreation room, and swimming pool.

222 Residence
524 Park Road
Iowa City
Architect unknown
Date unknown

An unusual house of paving brick and natural wood has a garage in front. The main house has a steep chalet-like roof topped by three unusual chimneys. A wood-sided wing extends to the west.

223 Residential areas
College and Governor Streets
Iowa City
Architects vary
Dates vary

There are many interesting old houses in different areas of the town. Some of the finest are fraternity and sorority houses which have been preserved.

224 Theater
North Riverside Drive
State University of Iowa campus
Iowa City
Architect unknown
Date unknown

One of the outstanding university buildings is this building housing a theater and workshop for the dramatic arts. The exterior brick massing

reflects the function of the interior space. The fly gallery is the highest element, allowing space for scenery to be stored.

225 Seiberling Residence
North Liberty
Architects Crites and McConnell
1961

The roof of this house is made up of a series of hyperbolic paraboloids, an umbrella shape. The living room is two stories high with the single column supporting that geometric shape in the middle of the room. It received an Honorable Mention in the 1962 House and Home Magazine Awards program.

226 Shive House
Lake MacBride
Solon
Architects Crites and McConnell
1962

This lake home was built for less than $10 per square foot in a market which usually costs from $14 to $20 per square foot. This house is the prototype of several succeeding houses by this firm, such as the Kitzman House and the Davis House.

227 Stone Academy
Highway 1 north of Solon
Architect unknown
1842

This was an early permanent schoolhouse, now preserved in a small park. The stone building was used up to 1953.

Keosauqua-Bentonsport-Bonaparte-Salem

These four towns are in the same general area along the Des Moines River valley, and they share a common heritage and character.

Keosauqua means "great bend" in Indian language, and this describes the horseshoe bend of the river within which the town is located. The town was settled in 1836. Mistaking of the rapids here for some at the mouth of the Des Moines River, a bitter border dispute between Iowa and Missouri, known as the Honey War, resulted. Keosauqua today is a small town of 1,000 population. It has many historic buildings, several of which are in excellent repair.

Bentonsport and its "twin city", Vernon, lie eight miles downstream from Keosauqua. It was settled in the 1830's, and a ferry furnished transportation between the two towns, then known as Benton's Port. It is reportedly named for Thomas Hart Benton, later a United States Senator from Missouri. The Mormons passed through here on their trek westward, and many settled in the area. A promising future with the steamboat was cut short when the railroad moved across Iowa. It reached Bentonsport in 1851, but did not hurt the town until it moved on to Des Moines ten years later. Today Bentonsport has been discovered as the historic town that it is, and many people from other towns have purchased and restored buildings here as vacation houses.

Bonaparte, four miles on downriver, was settled in 1837 and named for the French Emperor by William Meek, founder of the town. The Meek Brothers built up a company town here, as they owned the flouring mill, woolen mill, a dam to furnish power, and, later, a pants factory. Bonaparte today is a tiny town of 57 (its population in 1938 was 678).

Salem was founded in 1837 as the first Quaker settlement in Iowa and the first west of the Mississippi. It is nearer the Skunk River than the Des Moines River. Quakers were opposed to violence and to slavery, and so this was prominent center of the Underground Railroad, the escape route for runaway slaves. Salem has a population of 450 now, and it is in decay. Several interesting houses are in fair to good condition.

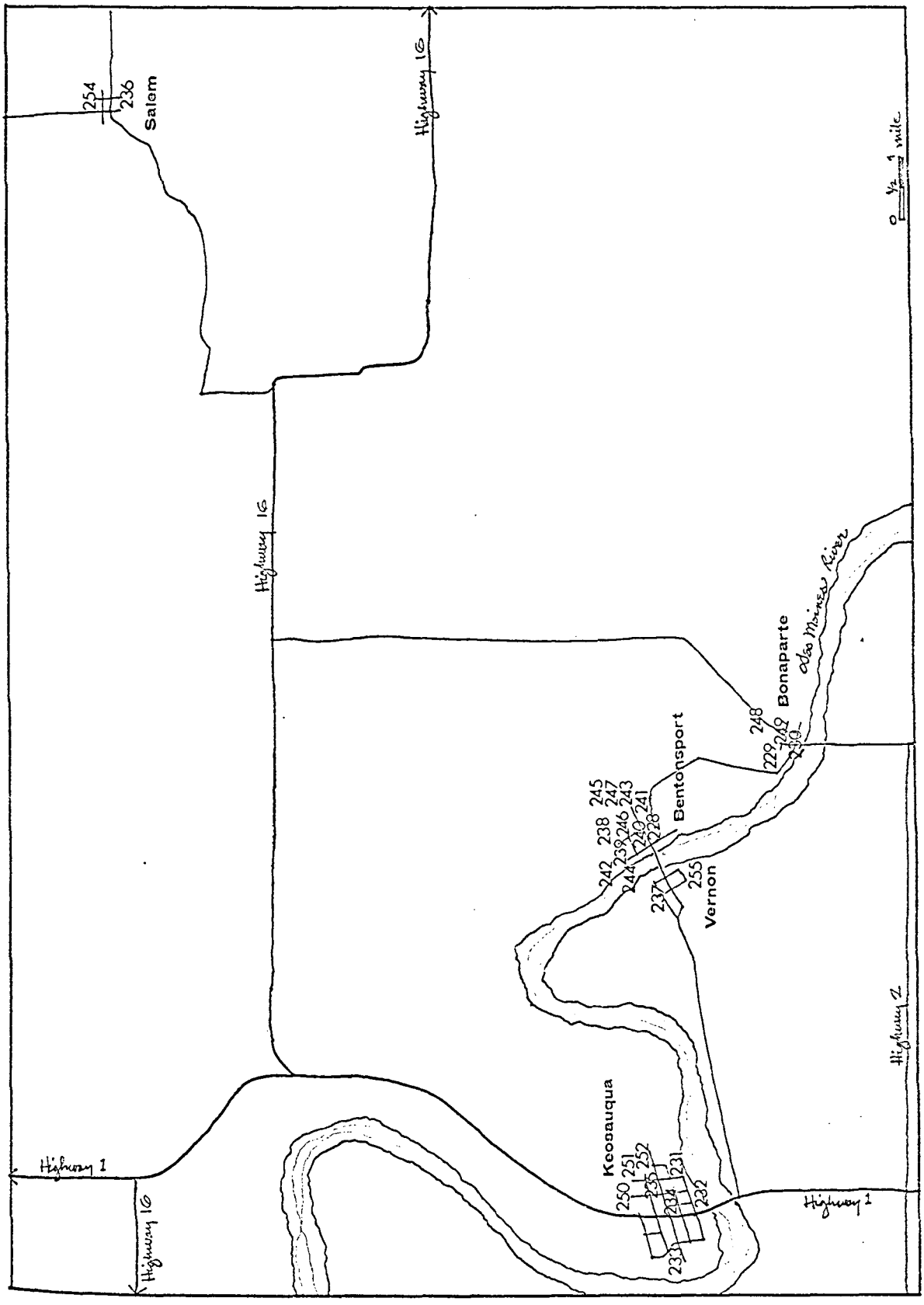

Figure 110. Guide map to Keosauqua-Bentonsport-Bonaparte-Salem

Figure 111. Mason House looking northeast

228 Mason House
Main Street
Bentonsport
Billie Roginson, builder
ca. 1848

In a styleless, or at most, modified Georgian, design, the old hotel sets by the Des Moines River. It was once, with Bentonsport, the center of riverboat activity. This hotel is restored, and it contains seventy-five percent of its original furnishings. It contains twenty-one rooms. On its grounds is the old Post Office, a Carpenter Gothic, or "Steamboat Gothic", building of batten-on-board solid walnut.

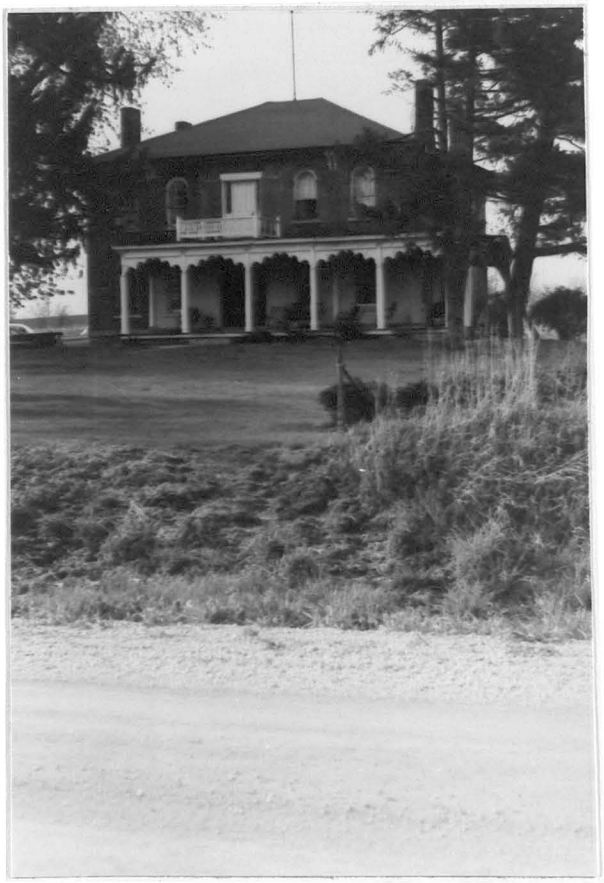

Figure 112. Meek House looking north

229 Meek House
Main Street West
Bonaparte
Architect unknown
ca.1870

One of the three houses of the Meek brothers, Isiah Meek lived in this brick, hip-roofed house. At the front is a long, open porch with scalloped fascia at the top. The windows are arched, and sculpted brackets are at the underside of the eaves.

Figure 113. Meek Mills looking northwest with woolen mill at left

230 Meek Woolen Mill and Flouring Mill
Main Street
Bonaparte
Architect unknown
1863 and 1878

The Meek Brothers own most of Bonaparte, and they built several factories here in addition to their houses. The Woolen Mill was converted to a community hall in 1938, and the top two of five stories were removed. It is of brick with a limestone first floor, brick piers at each corner, and gabled roof. The Flour Mill replaced an earlier 1844 structure. It is of brick with arched windows and gabled roof.

Figure 114. Bonneyview looking southeast

231 Bonneyview
Franklin and First Streets
Keosauqua
William Hadden, builder
1837-1840

The oldest house in Keosauqua, this house of white clapboard siding and green shingles remains in good condition. An addition was made on the west in 1856. The house was named for its site on a hill looking over the Des Moines River valley.

Figure 115. Hotel Manning looking east

232 Hotel Manning
First and Dodge Streets
Keosauqua
Edwin Manning, builder
1854, remodeled 1898

In its original form, this was a one story building containing a bank and a general store. In 1898 the second and third floors were added, and its use was changed to a hotel. It was owned by Edwin Manning. A brick building with high ceilings, the mansard roof with dormers makes a useable third floor. The two story veranda is reminiscent of New Orleans, and its form was probably influenced by buildings in that city.

Figure 116. Manning House looking west

233 Manning House
Oak and Fourth Streets
Keosauqua
Edwin Manning, builder
1884

This brick house was built by Edwin Manning, the owner of the Hotel Manning. It is now owned by John Manning, his great-grandson. In his hands, the Greek Revival-influenced house has been restored. It is the largest house in the town, boasting twelve rooms, including three imported marble fireplaces. The third story is a mansard-roofed space. The front was remodeled in the 1900's in a "Southern Colonial" character.

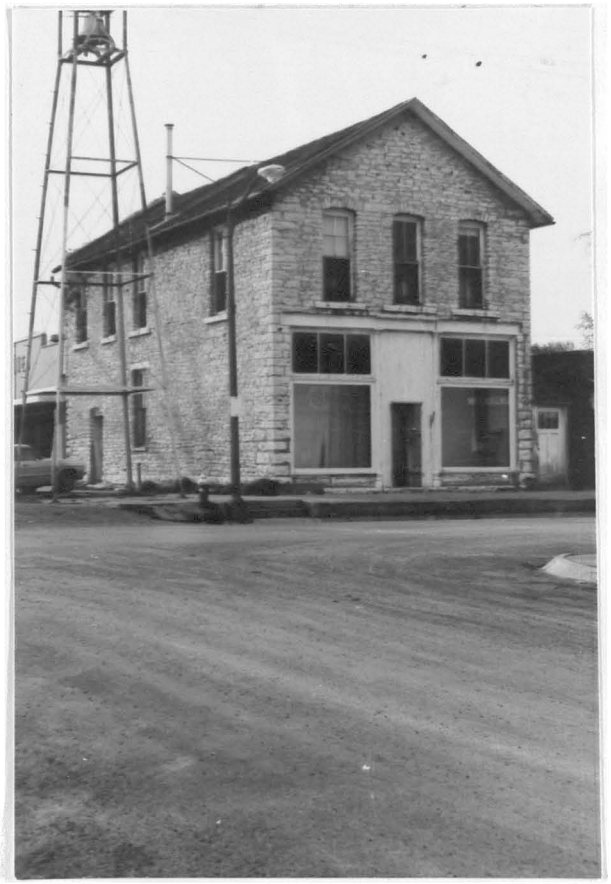

Figure 117. Old Post Office looking north

234 Old Post Office
Dodge Street
Keosauqua
Voltaire P. Twombly, builder
1876

This old stone, two story building stands next to the firebell. Rubble stone with larger stone quoins, or corner blocks, support an ancient metal roof, not the original.

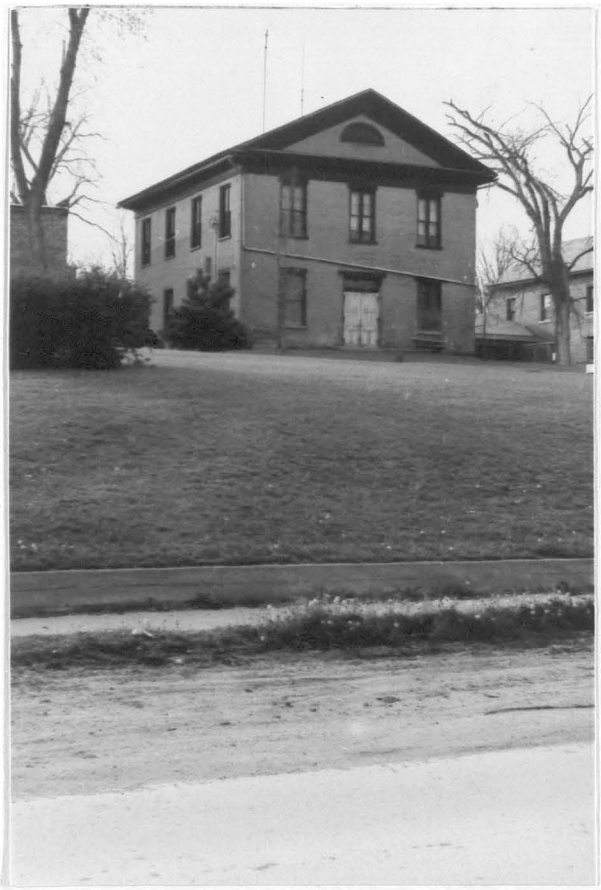

Figure 118. Van Buren County Court House looking north

235 Van Buren County Court House
Highway 1 and Dodge Street
Keosauqua
Edwin Manning, builder
1842

In a modified Greek Revival style, this yellowish brick and brown-trimmed building is Iowa's courthouse. It was built at a cost of $6,500, for which Manning was reimbursed. It once had a tower ten feet square and sixteen feet above the roof, but that was removed in 1865. Features of the building include twenty-two inch thick walls and oak timbers more than one foot square.

Figure 119. Lewelling House looking south

236 Henderson Lewelling House
Salem
Lewelling Brothers, builders
1840

One of the builders later became the governor of Kansas. They built this house in a Georgian, or Colonial, style. It has its original shutters, and the porch is also original. The stone walls are eighteen inches thick. Inside are seven fireplaces and a kitchen trap door used in the Underground Railroad. The house is now a Quaker Shrine, open to the public.

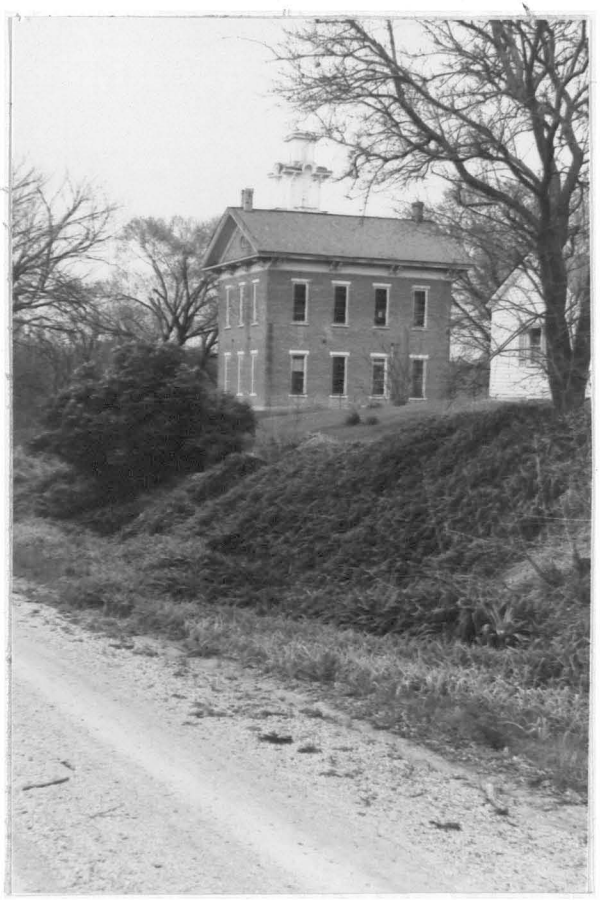

Figure 120. Vernon Schoolhouse looking north

237 Vernon Schoolhouse
Vernon
Architect unknown
1868

This red brick building in a modified Greek Revival style was used up until 1950 as a school. Located on a hill above the Des Moines River, it seems strangely sophisticated in a near ghost town.

238 Academy
Bentonsport
Architect unknown
Date unknown

The brick building now in decay was once a thriving school. Its spire, once echoing that of the Presbyterian Church, has been destroyed.

239 Dr. Cole House
Bentonsport
Architect unknown
Date unknown

This is an old brick house in good repair.

240 General Store and Bank
Bentonsport
Architect unknown
Date unknown

On the main street facing the river, this group of buildings, brick and wood, has been partially restored. The general store contains antique items of the middle nineteenth century.

241 H. Greef House
Bentonsport
Architect unknown
Date unknown

This brick house has been restored to excellent repair. Green shutters border the straight windows of a near-styleless architecture.

242 J. Greef House
Bentonsport
Architect unknown
Date unknown

This house, once owned by the local banker, is in excellent condition. Handsome arched, green shutters flank long windows with brick arches.

243 Hancock House
Bentonsport
Architect unknown
Date unknown

This house has been restored and is in fair shape. The chimneys have arched hoods.

244 IOOF Hall
Bentonsport
Architect unknown
Date unknown

This is one of the oldest IOOF halls in the Midwest, and it is open as a museum to the public.

245 Methodist Church
Bentonsport
Architect unknown
Date unknown

Still in use, this brick church has arched and circular brick patterns breaking up the plain front.

246 Morman House
Bentonsport
Architect unknown
Date unknown

This stone house was built by the Mormans in 1850's during their famous trek westward.

247 Presbyterian Church
Bentonsport
Architect unknown
Date unknown

The Presbyterian Church has retained its spire. Tall and narrow windows can be closed by shutters. A brick pattern at the eaves line is a stylistic element.

248 Meek Houses
Bonaparte
Architect unknown
Date unknown

The homes of two other Meek brothers, Joe and Robert, still stand in Bonaparte. Joe's is vacant, and Robert's is lived in and is in good repair.

249 Meek Pants Factory
Bonaparte
Architect unknown
1889

Manufacture of pants and suits was done in this building. Since 1920 it has been a part of the Fairfield Glove Company.

250 Chance House
Fourth Street north
Keosauqua
Benjamin Pearson, builder
ca 1840

Partially destroyed in a 1967 tornado, this restored house may survive. It is built of limestone and brick, with eighteen inch walls. It has walnut stairs, four fireplaces, and a secret cellar, probably used during the Underground Railroad days.

251 Residences
Keosauqua
Architects vary
Dates vary

Several other houses of interest may be seen by exploring the town and surrounding area. Many of these were built in the latter half of the nineteenth century.

252 Strong and Dorothy, Attorneys
Fourth Street north of Courthouse
Keosauqua
Rutledge Lea, builder
1868

One of three frame buildings, this one remains unchanged.

253 Watson House
One block south of Courthouse
Keosauqua
Architect unknown
Date unknown

This Gothic house has its original shutters.

254 Residences
Salem
Architects unknown
Dates vary

Several interesting houses, like the one off of the northwest corner of the town square and the one across from the Lewellyn House, remain in Salem.

255 Dr. Bailey House
Vernon
Architect unknown
Date unknown

This is a brick house which departs from the usual Bentonsport two story. It is one story.

Mason City

John B. Long and John L. McMillan founded Mason City in 1853. It was at first known as Masonic Grove, but when it was plotted in 1854, it was changed to the present name. The first mill and lime kiln were built on Lime Creek in 1855 by Elisha Randall. In 1869 the Milwaukee railroad reached Mason City, and by 1870 it went on through to Austin, Minnesota. The development of a brick and clay tile industry began in the 1880's. There was demand for drain tile, as much of northern Iowa had to be drained.

Mason City's architectural reputation today rests mainly on the work of Frank Lloyd Wright and Walter Burley Griffin done around 1910.

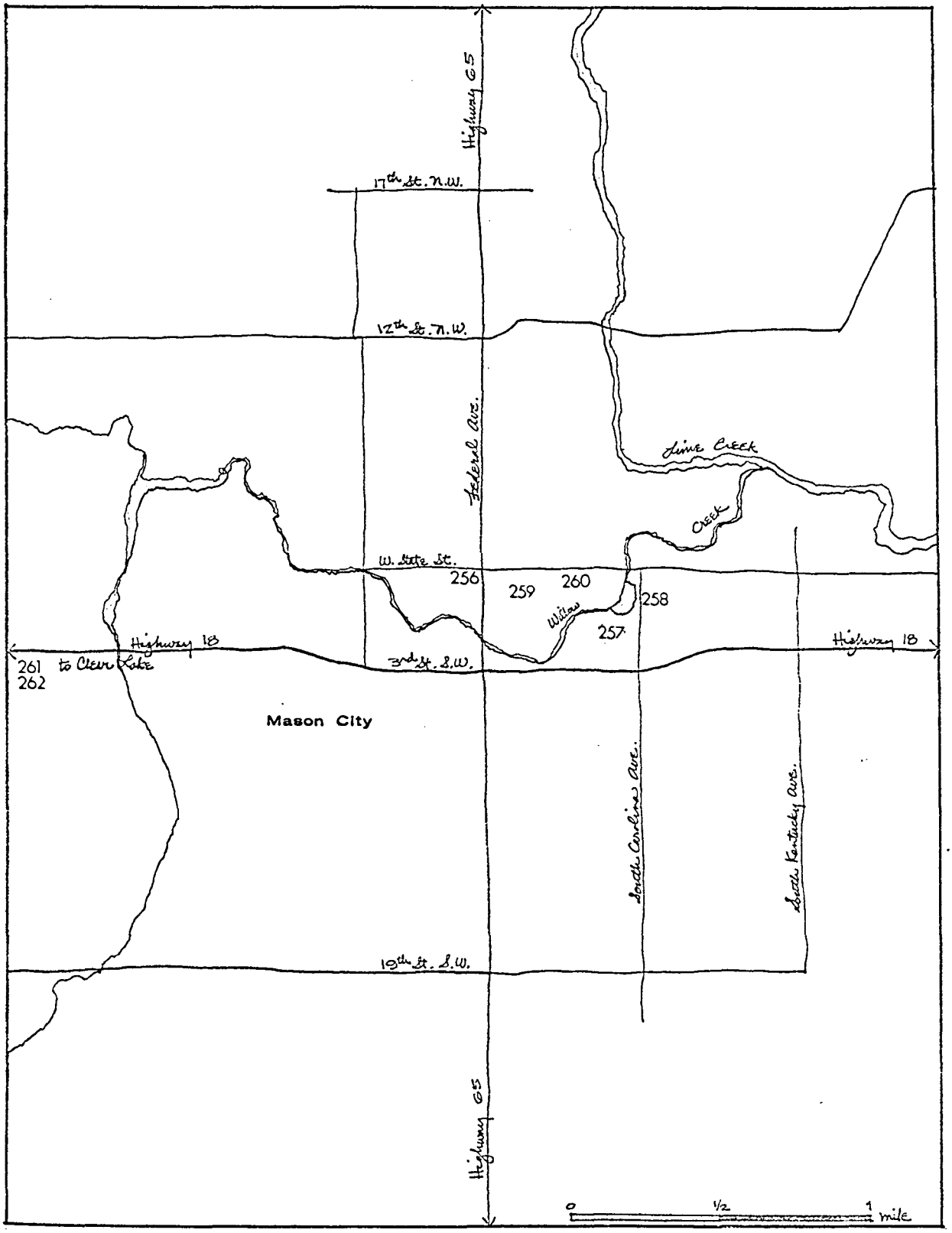

Figure 121. Guide map to Mason City

Figure 122. City National Bank and Hotel looking southwest

256 City National Bank and Hotel
West State Street and South Federal Avenue
Mason City
Frank Lloyd Wright, architect
1909

Articulation of mixed zoning in a single building was unusual in the time of this structure. Wright created a deep reveal between his bank, on the corner, and the hotel at mid-block. The bank has been remodeled extensively and is now offices and shops. A photograph of the original building is in Wright's A Testament (70, p. 169). The bank was once two stories high, but that space was closed in in the remodeling. Several signs of poor graphic quality are distracting, but the overall form and many details are discernible. Yellow Roman brick and dark trim are the characteristic materials. The hotel remains in use, but both are ill-maintained. Across the street is a city park of one square block, giving a pleasant view which Wright took advantage of with outdoor terraces.

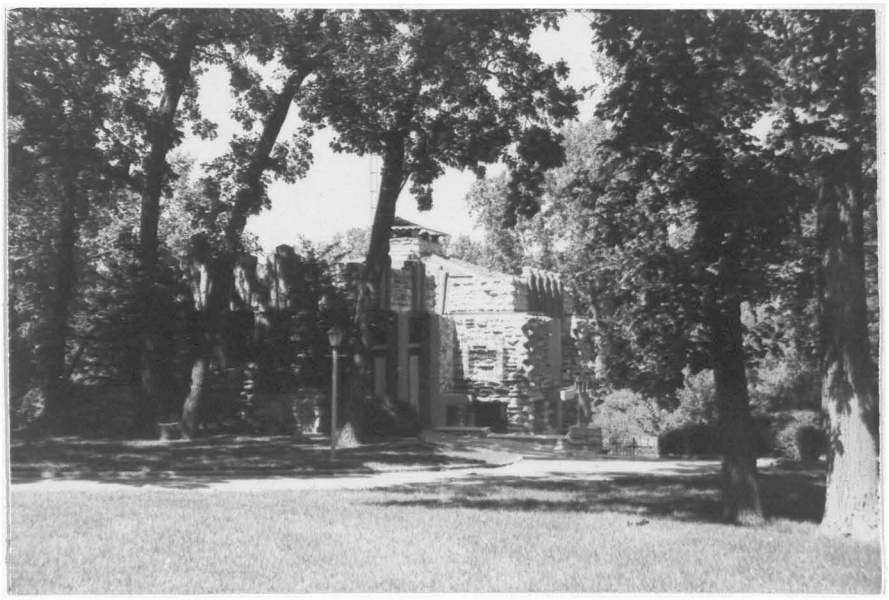

Figure 123. Melson House looking north with garage at left

257 J. G. Melson House
54 River Heights Drive
Mason City
Walter Burley Griffin, architect
1912

This stone house has reportedly been greatly altered in a remodeling (3, p. 236), but this is not apparent to one who has never seen the original. Large, rough stones, quarried from the site, in an unusual form makes a highly unique house. Huge, concrete keystones span the window openings. The site slopes downward to the north, and the one story becomes two at the rear. It sets on a bluff above the Rock Glenn area, with a wonderful view of trees and the river. Wayne Andrews feels that this is "one of the irreplaceable houses of the twentieth century" (3, p. 237), and he also feels that Griffin's stone work predates in quality that of Wright's by several years.

Figure 124. 28 South Carolina Avenue looking west

258 Rock Glenn Area Houses
East State from South Carolina to South Rock Glenn Streets
Mason City
Walter Burley Griffin and Frank Lloyd Wright, architects
1910-1916

This residential community was sponsored by the owners of the City National Bank Building, Melson and Markey, as a business venture. They chose a potentially beautiful eighteen acre site of rocks and hills, then a dumping grounds. Willow Creek runs through the site, and it was dammed to create a waterfall and lagoon. At the center of the area a large communal park was created, with each house oriented to look into the area. The original plan called for twenty houses, of which eight were built. This project culminated Griffin's American career, as he then left to build his competition-winning new city of Canberra, Australia. Barry Byrne, a fellow employee of Wright's, completed the last few houses.

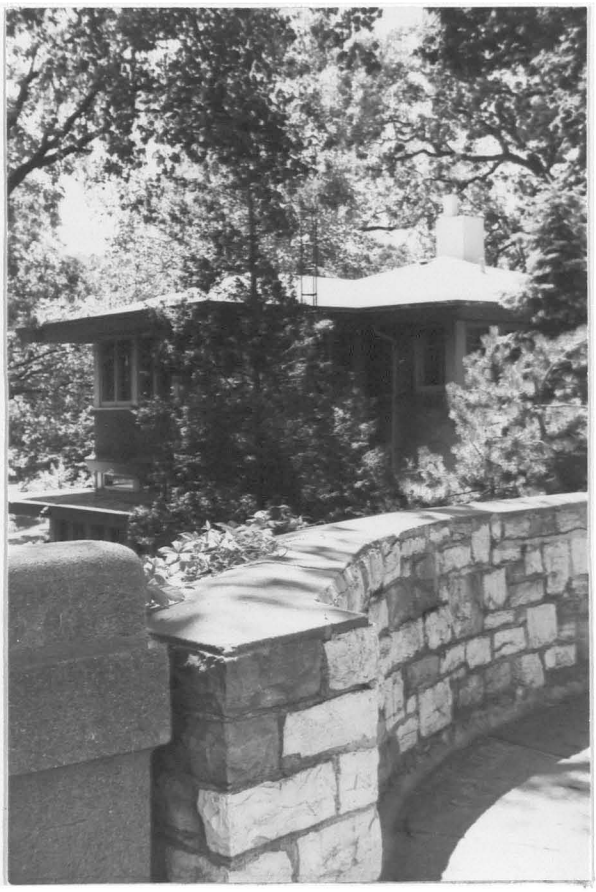

Figure 125. 525 East State Street

The house at 28 South Carolina is the only one by Griffin on the east bluff of the area. It is large, of plaster, and has a garage projecting out towards the street.

525 East State Street is located adjacent to the point where Willow Creek leaves the site. Apparently one story from the street, it becomes two stories at the sides and rear. A low stone wall at the sidewalk is shared with its neighboring houses at 515 and 507 East State Street.

11 South Rock Glenn is a two story house of Stucco and dark brown trim. It continues the stone wall mentioned above. It becomes three stories at the rear.

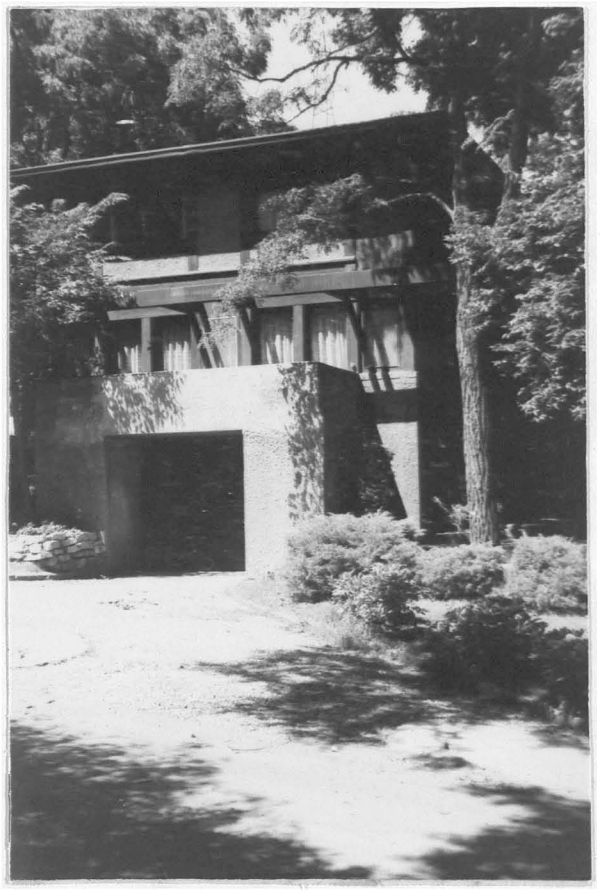

Figure 126. 11 South Rock Glenn looking south

Figure 127. 15 South Rock Glenn looking southeast

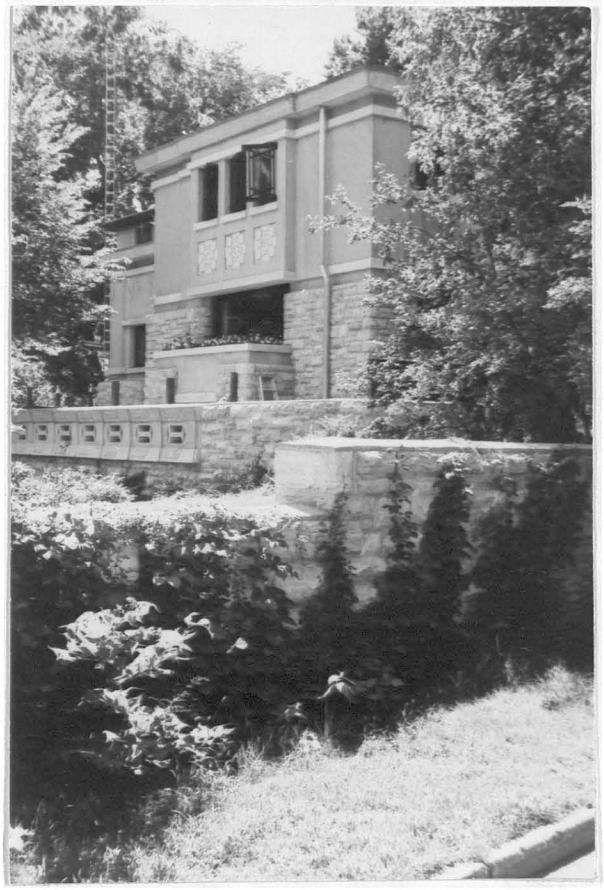

Figure 128. 431 Southeast First Street looking south

15 South Rock Glenn is a new house designed by Bergland and Bianco in the spirit of the Griffin houses. Long concrete block supports a low sloping roof on a narrow site. The house runs very deep on its site.

The house at 431 Southeast First Street is in excellent condition. A low two story wing containing a garage has the higher two story two story house behind. The materials are stucco and stone.

Across the street, 428 Southeast First Street, is another house designed to fit the character of the area, this by an unknown Kansas City architect.

259 Public Library
225 Second Street Southeast
Mason City
Holabird and Root, architects
1939

Designed by a well-known architectural firm from Chicago, this crescent-shaped building rests in a park-like setting. A two story portico faces the entrance. Above, an interplay of brick volumes creates interest.

260 Stockman House
311 First Street Southeast
Mason City
Frank Lloyd Wright, architect
1908

This was Wright's first house in Iowa. Near the Rock Glenn area, which would have been his commission if he had stayed in the United States, this house is typical of his early stucco houses with broad overhang and intricate detail.

261 Clear Lake Community High School
Main and Twentieth Streets
Clear Lake
Karl Keffer Associates
1960

A series of volumes expressive of the interior spaces is connected by protected passages. The entrance has a courtyard off of the multi-purpose room and twin whimsical chimneys. Stone relieves the brick at intervals, and a vaulted roof varies the roof forms.

262 Lake Shore Hotel
Clear Lake
Architect unknown
1870

This began as a six room house. By 1898 it had forty-eight rooms. There was once a pleasure pier with a domed dance floor and bowling alleys, but it was destroyed by flood in 1906.

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The academic production of the thesis began, progressed, and was completed under the guidance of the Head of the Department of Architecture, Professor Raymond Reed. Thanks to his efforts and to those of my graduate committee, Professor Harriet Adams and Professor Rodney Fox, the thesis has come to completion. Many other faculty members also aided and encouraged me, especially Professor Robert Johnson of Technical Journalism and Professor Lawton Patten and Professor Vernon Stone of Architecture.

My typist, Mrs. Carolyn Brunkan, did an excellent job of interpreting my notes at a distance of forty miles.

Finally, my wife, Susan, was a constant source of inspiration and aid. Without her help, the thesis would never have been realized, and the work is lovingly dedicated to her.

APPENDIX A

The following are examples of interesting architecture in other towns and cities in Iowa. The list is not complete, nor are all buildings necessarily of high quality. Many were not personally visited and are included due solely to recommendation by reference materials, correspondence, or interviews. Buildings known to be particularly outstanding are marked with an asterisk: * .

Algona

Druggists Mutual Insurance Building*, 123 East State. Louis Sullivan, architect. 1913.

Anamosa

Men's Reformatory. Architect unknown. 1880 and 1891.

Andrew

Butterworth Inn and Barn, one-half mile north of Andrew. Nathaniel Butterworth, builder. Barn, 1838, and Inn, 1852.

Boone

Dr. Wall House, 745 Park Avenue. Architects Crites and McConnell. 1962.

Booneville

D. M. Flinn Farm (now C. C. Cook), two and one-half miles east of Booneville. D. M. Flinn, builder. 1863.

Brighton

Burnett Smith House (formerly Robert Griffith House), three miles north of Brighton. Robert Griffith, builder. 1856.

Burlington

Dr. Winston Ditto House, 1847 Sunnyside. Architect unknown. ca 1875.

W. S. Gardner House (Century House), 521 Court. Architect unknown. 1854.

Burlington (Continued)

Saint Paul Roman Catholic Church, 502 North Fourth. Architect unknown. 1892.

James Schramm House I*, Holabird and Root, architects. 1931.

James Schramm House II*, 2700 South Main. George Fred and William Keck, architects. 1965.

O. W. Smith House, 1800 River Street. Architect unknown. ca 1880.

Charles City

Dr. Alvin Miller House*, Court and Joslyn Streets. Frank Lloyd Wright, architect. 1950.

Clermont

Governor William Larrabee House* (Montauk), one mile north of Clermont. Architect unknown. 1874.

Clinton

Clinton Women's Club (George Curtis House), 420 Fifth Avenue South. Architect unknown. ca 1885.

Grace Episcopal Church*, 2100 North Second Street. Architect unknown. Date unknown.

Residence, 318 Fifth Avenue South. Architect unknown. Date unknown.

Saint Irenaeus Church, North Second Street and Twenty-eighth Avenue. Architect unknown. 1864-1871.

Dwight Seaman House, 516 Fifth Avenue South. Architect unknown. 1903.

Railroad Depot*, Eleventh Avenue South and South Fourth Streets. Architect unknown. Date unknown.

Van Allen Department Store*, Fifth Avenue South and South Second Street. Louis Sullivan, architect. 1914.

Council Bluffs

General Grenville Dodge House* (National Historic Landmark), 605 Third Street. Architect unknown. 1869-1874.

Croton

Lewis Crow House (now Edward Sprouse), First and Walnut Streets. Architect unknown. 1845.

Decorah

Octagon House, Mechanic Street and West Broadway. Architect unknown. Date unknown.

Pioneer Museum* (log cabin group), Luther College campus. Architect unknown. 1853.

A. F. Porter House, River Street and West Broadway. Architect unknown. 1867.

Residence, 309 West Broadway. Architect unknown. Date unknown.

Residence*, 1503 West Broadway. Architect unknown. Date unknown.

Student Union, Luther College. Altfillisch, Olson, Gray, and Thompson, architects. 1961.

Winneshiek County Court House. Kinny and Detweiler, architects. 1903.

Delta

Covered Bridge*, two miles southeast of Delta. Maxon Randall, builder. 1869.

Denison

Midwestern College Campus. Caudill, Rowlett, and Scott, architects. 1965.

Dexter

Mount Vernon Methodist Church, four miles south and two miles west of Dexter. Architect unknown. 1890 (chimney 1953).

Eddyville

J. R. Davidson House. Architect unknown. ca 1865.

Elkader

Bridge (largest keystone bridge west of Mississippi River). Architect unknown. 1889.

Clayton County Courthouse. Architect unknown. Date unknown.

Elkader (Continued)

Motor Mill* (also tavern and cooperage), five miles southeast of Elkader. John Thompson, builder. ca. 1864.

Opera House, 209 North Main Street. Architect unknown. 1903.

Floris

Mars Hill Log Church. Architect unknown. 1857.

Forest City

B. A. Plummer House (now Music Hall), Waldorf College campus. Architect unknown. 1885.

Jacob Tanner Hall, Waldorf College campus. Gjelten and Schellberg, architects. 1962.

Waldorf Hotel. Clarence Johnson, architect. 1902.

Fort Atkinson

Fort Atkinson* (partially restored), Highway 24. Architect unknown. 1840-1842.

Fort Dodge

Tara Stagecoach House, seven miles west of Fort Dodge. Architect unknown. Date unknown.

Fort Madison

Joseph Eberhardt House, 903 Avenue East. Architect unknown. Date unknown.

John Keenan House, High Point. Architect unknown. Date unknown.

Lee County Courthouse*, Seventh Avenue and Avenue F. Father Samuel Mazzuchelli?, architect. 1842.

Franklin

Franklin Independent School. Architect unknown. 1872.

James McCleary House. Architect unknown. Date unknown.

Garner

Saint Boniface School, Bush and Seventh Streets. Architect unknown. ca. 1964.

Glidden

Octagonal Barn, three miles east and four miles north of Glidden. Architect unknown. 1883.

Guttenberg

Pioneer Rock Church*, three miles north on Highway 52. Architect unknown. 1858.

Town buildings (with iron balconies), River Park Drive. Architect varies. Town established 1837.

Jefferson

Octagon House. Architect unknown. Date unknown.

Keokuk

Keokuk High School*, 2235 Middle Road. Perkins and Will, architects. 1953.

Old Fire Station. Architect unknown. ca 1855.

South Lee County Court House, Fifth and Concert Streets. W. A. Rice, architect. 1857.

Klondike (west of Rock Rapids)

Kruger Mill. Christian Kruger, builder. 1883.

Lansing

Old Courthouse (now a residence). Architect unknown. ca 1855.

Le Mars

First National Bank Building, 11 Central Avenue Southwest. Architect unknown. 1892.

Opera House. H. L. Hoyt and John Draudt, builders. 1883.

Lineville

Octagon House. Architect unknown. Date unknown.

McGregor

Baptist Church. Architect unknown. 1861.

German Presbyterian Church. Architect unknown. 1862.

McGregor (Continued)

Methodist Church. Architect unknown. 1869.

Saint Mary's Catholic Church, 311 Seventh Street. Architect unknown. 1880.

Marshalltown

Binford House, 110 North Second Avenue. Architect unknown. 1873.

Fisher Community Center*, 709 South Center Street. Architects Crites and McConnell. 1961.

Marshall County Courthouse, town square. John Cochrane, architect. 1886.

Robert Sunday House*, Woodfield Road. Frank Lloyd Wright, architect. 1959.

Tallcorn Hotel. Architects Crites and McConnell. 1963.

Monroe

Jacob Kipp Octagon House (now Kenneth Simpson). Architect unknown. 1870-1874.

Montrose

Saint Barnabus Episcopal Church. Architect unknown. 1867.

Mount Pleasant

Crane Funeral Home (formerly Edward Penn House). Architect unknown. 1856?

Dormitories*, Cornell College campus. Harry Weese, architect. 1962.

Mount Vernon

King Memorial Chapel, Cornell College. Cass Chapman, architect. 1876.

Muscatine

Benjamin Hershey Mansion. Josiah Walton, architect. 1870.

Pine Creek Mill, Wild Cat Den State Park. Benjamin Nye, builder. 1850.

Residence (now Church of Christ), 606 West Third Street. Architect unknown. Date unknown.

Muscatine (Continued)

Residence*, Cherry and Third Streets. Architect unknown. Date unknown.

Trinity Episcopal Church, 411 East Second Street. Josiah Walton, architect. 1851.

Lee Wainscot Octagon House*, north on Highway 61. Architect unknown. ca 1863.

Dr. Weed House. Josiah Walton, architect. 1855.

Newton

Thomas Arthur House, North Eighth Avenue East. Thomas Arthur, builder. 1852-1855.

Camp and Conference Center, three miles south at County Roads F and W. Charles Herbert and Associates, architects. 1967.

Maytag Company Office, 403 West Fourth Street North. Brooks-Borg, architects. 1960.

Maytag Foundation Interstate Highway Beautification*, Interstate 80 in Newton area. William Heard, landscape architect. 1965.

Okoboji

Rowland Gardner Cabin, Arnold's Park. Rowland Gardner, builder. 1856.

Lutheran Camp. East Okoboji. Karl Keffer Associates, architects. 1960.

Oskaloosa

Carroll Alsop House, 1907 Avenue E. Frank Lloyd Wright, architect. 1948-1951.

James B. Clow and Sons Office Building*, South Second Avenue. Architects McMullin and Miller. 1967.

Jack Lambertson House, 117 North Park. Frank Lloyd Wright, architect. 1947-1951.

Daniel Nelson Homestead, three miles northeast on Glendale Road. Thomas Binns, builder. 1852.

Panora

Lennon Mill. Architect unknown. Date unknown.

Pella

Central College Women's Dormitory, Central College campus. Savage and Ver Ploeg, architects. 1965.

Old Firehouse. Architect unknown. ca 1882.

Holland House, four and one-half miles southeast of Pella. Architect unknown. 1856.

Scholte Mansion. Architect unknown. 1848.

John Smith House, three miles southeast on Highway 163. Architect unknown. 1869.

John Voorhees, three miles southeast on Highway 163. Architect unknown. 1871.

Perry

Osmundson Manufacturing Company*, 1523 Fourth Street. Carl Hunter and Russ Parks, architects. 1964.

Plainfield

First Methodist Church*. Schweikher and Elting, architects. 1952.

Quasqueton

Lowell E. Walter House*, one mile north on Highway 282. Frank Lloyd Wright, architect. 1950.

Sac City

Carlson House Restaurant* (formerly Judge Early House), Highway 20. Architect unknown. 1864-1872.

Perkins House, Main Street. George Barker, architect. 1913.

Selma

Saylor Cabin (now Baldwin), one mile southeast of Selma. Thomas Saylor, builder. 1835.

Sioux City

Fairmount Park Branch Library, 220 South Fairmount. William Steele, architect. 1924.

Grandview Music Pavillion. Henry Kamphoefner, architect. ca 1935.

Sioux City (Continued)

John Pierce Mansion, 2901 Jackson. Architect unknown. 1891.

Residence. Richard Neutra, architect. Date unknown.

Tredway House (Elmwood), 3715 Lowell. Architect unknown. 1875.

Woodbury County Courthouse*, Seventh and Pearl Streets. William Steele and Purcell and Elmslie, architects. 1916-1918.

Spillville

Mill. Joseph Spillman, builder. 1851.

Saint Wenceslaus Church*. Architect unknown. 1860.

Stennett

Jason Packard Hexagonal House, north of Stennett. Jason Packard, builder. ca 1856.

Stone City

B. Porter House. Architect unknown. Date unknown.

Viola

George Matsell Estate (now Fred Witousek), three miles north of Viola. Architect unknown. Date unknown.

Waterloo-Cedar Falls

Black House, 500 Park Avenue, Waterloo. Architect unknown. Date unknown.

Russell Lamson House, 524 West Third Street, Waterloo. Rensselair Russell, builder. 1860.

Shoitz Memorial Hospital, Waterloo. Skidmore, Owings, and Merrill, architects. 1951.

Church, Cedar Falls. Architects Crites and McConnell. Date unknown.

T. J. Knapp House, Cedar Falls. Architect unknown. 1880-1885.

Student Union*, State College of Iowa campus, Cedar Falls. John Stephens Rice, architect. 1968.

Uhl Barn*, one and one-half miles west of Cedar Falls on Highway 57. William and Charles Fields, builders. 1875.

Winterset

Andrew Bennett Cabin, City Park. Andrew Bennett, builder. 1852 (rebuilt 1917).

Caleb Clark House and Barn, South Eighth Avenue. Caleb Clark, builder. 1854.

Covered Bridges* (seven in Madison County). Architects vary. Dates vary from 1871 to 1884.

Frank Davis House, South Fourth Avenue. Architect unknown. Date unknown.

Edwards Barns, one mile east on Saint Charles road and one mile south. John Holmes, builder. 1875.

Evans House (Hogan Queen House), four miles east on Saint Charles Road. Architect unknown. 1869.

Dr. Gaff House (now part of Arcade Hotel). Caleb Clark, builder. Date unknown.

Ruth Hattle House (Hornblack House), north of courthouse and east side of Highway 169. Architect unknown. ca 1870.

Madison County Court House, town square. A. H. Piquenard, architect. 1876-1878.

Wesley Smith House, South Ninth Avenue. Architect unknown. 1861-1868.

M. R. Tidrick House (now C. D. Butterfield House), northwest corner of Fourth and Washington. Architect unknown. 1856, 1866, 1874.

J. G. Vawter House*, east side of Highway 169 and south of courthouse. Architect unknown. 1856.

Wyoming

R. S. Williams House. R. S. Williams, builder. 1857.

APPENDIX B

It is recognized, with a degree of understanding, that the Iowa State University Library must demand certain standards of theses. However, it should be mentioned that the extent of these requirements has greatly affected the form and content of this paper, weakening its importance.

The original design for this paper included a system of small photographs and chronological and explanatory notes located in the right margin for both the Overview and the Guide. In this way, the text of the Overview would have been concerned only with Iowa's influences and architecture, while the marginal notes would explain national trends and related events. The Guide would have allowed more photographs of a given building and a cross reference to contemporary events. The graphics would have been much more carefully coordinated.

It is hoped that a way might be found for future theses to satisfy the Library requirements in such a way that creativity and content are not affected.